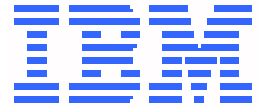


S/390



Console Installation and User's Guide

9032 Model 3 ESCON Director

9033 Model 4 ESCON Director

9032 Model 5 Director

9037 Model 2 Sysplex Timer

Note

Before using this information and the product it supports, read the general information under "[Notices](#)" on page xi.

Third Edition (July, 1999)

This is the third edition of GA22-7291.

This edition applies to the 9032-003 and 9033-004 Enterprise Systems Connection (ESCON) Directors, the 9032-005 Director, the 9037-002 Sysplex Timer, and to all subsequent releases and modifications until otherwise indicated in new editions or technical newsletters.

Order IBM publications through your IBM representative, the IBM branch office serving your locality, or call IBM at 1-800-879-2755 (select option 1). Publications are not stocked at the address listed below.

A form for your comments is provided at the back of this publication. If the form was removed, address comments to:

International Business Machines Corporation
Department 55JA, Mail Station P384
522 South Road
Poughkeepsie, NY 12601-5400
USA

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

If you have a fax machine, send your comments to the following number:

1-914-432-9405

In countries other than the United States, Canada, and Puerto Rico, dial the appropriate international access code before the above fax number. To send a fax from within IBM, use the IBM tie-line number:

292-9405

© **Copyright International Business Machines Corporation 1999. All rights reserved.**

Note to U.S. Government Users - Documentation related to restricted rights - Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corporation.

Contents

Notices	xi
Electronic Emission Notices.....	xi
Federal Communications Commission (FCC) Statement	xi
Avis de conformité aux normes du ministère des Communications du Canada.....	xi
Canadian Department of Communications Compliance Statement.....	xii
Japanese Voluntary Control Council for Interference Statement	xii
United Kingdom Telecommunications Safety Requirements Notice to Customers	xii
European Community for Information Technology Equipment (ITE) Statement.....	xii
European Community Electromagnetic Compatibility Directive (All Countries)	xiii
Trademarks and Service Marks	xiii
About This Publication	xv
Who Should Use This Publication.....	xv
How to Use This Publication.....	xv
What Is Included in This Publication	xv
Notational Conventions.....	xvi
Related Publications.....	xvi
Chapter 1. General Information.....	1
The ESCON Director Console	1
Console Platforms.....	1
PS/2 Director Console.....	2
PS/2 Director Console Specifications	3
Model PC-330 Director Console	4
PC-330 Director Console Specifications	4
Model PC-365 Director Console	5

PC-365 Director Console Specifications	6
Model PC 300PL Director Console	6
PC 300PL Director Console Specifications	7
Backup or Replacement Director Console	8
Backup Console	8
Replacement Console	8
The Sysplex Timer Console	8
Console Platforms.....	9
Model PC-330 Sysplex Timer Console	9
PC-330 Timer Console Specifications	10
Model PC-365 Sysplex Timer Console	11
PC-365 Timer Console Specifications	11
Model PC 300PL Sysplex Timer Console	12
PC 300PL Sysplex Timer Console Specifications.....	13
Standby Timer Console	13
Shared Console.....	14
 Chapter 2. Win-OS/2 Basics	 15
The OS/2 Desktop	15
Launch Pad.....	16
Desktop Objects.....	17
OS/2 Windows	19
Standard OS/2 Procedures.....	20
Transfer Between a Console Application and the OS/2 Desktop	21
From the Director Console Application	21
From the Sysplex Timer Console Application	21
From the OS/2 Desktop	22
Shut Down and Restart a Console Application	23
Director Console Application.....	24
Sysplex Timer Console Application.....	25
Shut Down and Restart the OS/2 Operating System and Console.....	26

Working in Win-OS/2	27
Definitions of Terms	27
The Mouse	27
Window Components	28
Minimize, Restore, and Maximize Windows	29
Moving and Resizing Windows	29
Closing a Window	29
Using Scroll Bars	30
Menu Bars.....	30
Organizing Windows	30
Dialog Boxes	30
Edit Field	31
Operation Button	31
List Box	31
Radio Button	32
Minimizing and Restoring Application Windows	32
 Chapter 3. Hardware Management Console Support.....	 33
Information that Does Not Apply	33
Install the Director or Sysplex Timer Console Application.....	33
Install the Director Console Application	34
Install the Timer Console Application.....	34
Start and Shut Down the Director or Sysplex Timer Console Application.....	34
Start the Director Console Application	35
Shut Down the Director Console Application	35
Start the Timer Console Application	36
Shut Down the Timer Console Application	37
Back Up Critical Data.....	39
ESCON Director Tools Folder	39
Data Collection Procedure (Director)	39
Migrate Director Definitions.....	42
Create Director Definitions Diskette	42
Migrate Definitions to the Hardware Management Console.....	44

Back Up the Director System Library	45
Restore the Director System Library	46
Sysplex Timer Tools Folder	47
Data Collection Procedure (Sysplex Timer)	48
Back Up the Sysplex Timer System Library	49
Restore the Sysplex Timer System Library	50
Uninstall the Director or Sysplex Timer Console Application	51
Uninstall the Director Console Application	51
Delete Console Application	52
Delete Director Console Icons	53
Delete Extra Applications Folder (Optional)	54
Uninstall the Timer Console Application	54
Delete Console Application	54
Delete Timer Console Icons	56
Delete Extra Applications Folder (Optional)	56
Chapter 4. Remote Access Console Support.....	59
LAN Configurations	59
Configure and Use a Console for Remote Access by TCP/IP.....	61
Local Console Configuration	62
Remote Console Configuration and Session Start	64
Terminate a Session with the Local Console	68
Console Application Session Parameters for Remote Access Console	68
Set Win-OS/2 Window Session Parameters (Director)	69
Set Win-OS/2 Full Screen Session Parameters (Director)	71
Set Win-OS/2 Window Session Parameters (Sysplex Timer)	73
Set Win-OS/2 Full Screen Session Parameters (Sysplex Timer)	75
Chapter 5. PS/2 Console Procedures	79
General Administrative Tasks	79
Perform Data Collection Procedure	79
Director Data Collection	79
Sysplex Timer Data Collection	82

Clear the Address Resolution Protocol Table	83
Migrate Director Definitions.....	85
Create Director Definitions Diskette	86
Migrate Definitions to a Director Console.....	87
Change Token Ring Adapter Card Data Rate	89
Create a Console Diagnostic Diskette	93
Backup and Restore Functions	95
Backup Options.....	95
Back Up the System Library to Tape	96
Enable Automatic Backup	96
Backup on Demand.....	99
Restore the System Library from Tape	103
Back Up the Console Fixed Disk to Tape	106
Enable Automatic Backup	106
Backup on Demand.....	109
Restore the Console Fixed Disk from Diskettes and Tape	114
Customize the Console Operating Environment	117
Set Date and Time	118
Change Date and Time Format	121
Enable Screen Saver	124
Keyboard Layout and Country Code Page (International Users Only)	127
Change Win-OS/2 Keyboard Settings	132
Token Ring Adapter IP Address and Subnet Mask	135
Token Ring Adapter MAC Address.....	139
Display MAC Address	140
Change MAC Address	142
Set or Change Default Printer.....	145
Chapter 6. Model PC-330 Console Procedures	149
General Administrative Tasks	149
Perform Data Collection Procedure	149
Director Data Collection	149
Sysplex Timer Data Collection	152

Clear the Address Resolution Protocol Table	153
Migrate Director Definitions.....	155
Create Director Definitions Diskette	156
Migrate Definitions to a Director Console.....	157
Change Token Ring Adapter Card Data Rate	159
Create a Console Diagnostic Diskette	164
Backup and Restore Functions	166
Backup Options.....	167
Back Up the System Library to Tape	167
Enable Automatic Backup	167
Backup on Demand.....	170
Restore the System Library from Tape	175
Back Up the Console Fixed Disk to Tape	178
Enable Automatic Backup	178
Backup on Demand.....	180
Restore the Console Fixed Disk from Diskettes and Tape	185
Customize the Console Operating Environment	189
Set Date and Time	190
Change Date and Time Format	193
Enable Screen Saver	196
Keyboard Layout and Country Code Page (International Users Only)	199
Change Win-OS/2 Keyboard Settings	204
Token Ring Adapter IP Address and Subnet Mask	207
Token Ring Adapter MAC Address.....	211
Display MAC Address	212
Change MAC Address	214
Set or Change Default Printer.....	217
Chapter 7. Model PC-365 Console Procedures	221
General Administrative Tasks	221
Perform Data Collection Procedure	221
Director Data Collection	221
Sysplex Timer Data Collection	224

Clear the Address Resolution Protocol Table	226
Migrate Director Definitions.....	228
Create Director Definitions Diskette	228
Migrate Definitions to a Director Console.....	230
Change Token Ring Adapter Card Data Rate	231
Create Console Diagnostic Diskettes	237
Backup and Restore Functions	240
Back Up the System Library to ROC	240
Enable Automatic Backup at Default Time.....	240
Change Backup Settings.....	243
Backup on Demand.....	245
Restore the System Library from ROC	247
Restore the Console Fixed Disk from CD-ROM and ROC.....	250
Customize the Console Operating Environment	254
Set Date and Time	254
Change Date and Time Format	257
Enable Screen Saver	261
Keyboard Layout and Country Code Page (International Users Only)	264
Change Win-OS/2 Keyboard Settings	269
Token Ring Adapter IP Address and Subnet Mask	272
Token Ring Adapter MAC Address.....	276
Set or Change Default Printer.....	281
Chapter 8. Model PC 300PL Console Procedures	285
General Administrative Tasks	285
Perform Data Collection Procedure	285
Director Data Collection	285
Sysplex Timer Data Collection	288
Clear the Address Resolution Protocol Table	290
Migrate Director Definitions.....	292
Create Director Definitions Diskette	292
Migrate Definitions to a Director Console.....	294

Change Token Ring Adapter Card Data Rate	295
Create Console Diagnostic Diskettes	299
Backup and Restore Functions	301
Back Up the System Library to ROC	302
Enable Automatic Backup at Default Time.....	302
Change Backup Settings.....	304
Backup on Demand.....	307
Restore the System Library from ROC	309
Restore the Console Fixed Disk from CD-ROM and ROC.....	312
Customize the Console Operating Environment	315
Set Date and Time	316
Change Date and Time Format	319
Enable Screen Saver	323
Keyboard Layout and Country Code Page (International Users Only)	326
Change Win-OS/2 Keyboard Settings	331
Token Ring Adapter IP Address and Subnet Mask	334
Token Ring Adapter MAC Address.....	338
Set or Change Default Printer.....	343
Glossary.....	347
Index.....	371

Notices

References in this publication to IBM® products, programs, or services do not imply IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program, or service is not intended to state or imply only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe on intellectual property rights of IBM may be used instead of the IBM product, program, or service. The evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, are the responsibility of the user.

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing by IBM of this document does not give you any license to these patents. Send license inquiries in writing to the IBM Director of Commercial Relations, IBM Corporation, Purchase, NY 10577, U.S.A.

Electronic Emission Notices

Federal Communications Commission (FCC) Statement

Note: This equipment is tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. The limits are designed to provide reasonable protection against harmful interference when the equipment operates in a commercial environment. The equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of the equipment in a residential area is likely to cause harmful interference, in which case the user is required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used to meet FCC emission limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors, or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications can void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions: (1) the device may not cause harmful interference, and (2) the device must accept any interference received, including interference that may cause undesired operation.

Avis de conformité aux normes du ministère des Communications du Canada

Cet équipement ne dépasse pas les limites de Classe A d'émission des bruits radioélectriques pour les appareils numériques, telles que prescrites par le Règlement sur le brouillage radioélectrique établi par le ministère des Communications du Canada. L'exploitation faite en milieu résidentiel peut entraîner le brouillage des réceptions radio et télé, ce qui obligerait le propriétaire ou l'opérateur à prendre les dispositions nécessaires pour en éliminer les causes. Voir le Guide d'instructions.

Canadian Department of Communications Compliance Statement

This equipment does not exceed Class A limits per radio noise emissions for digital apparatus, set out in the Radio Interference Regulation of the Canadian Department of Communications. Operation in a residential area may cause unacceptable interference to radio and television reception, requiring the owner or operator to take steps necessary to correct the interference. Refer to the instruction manual.

Japanese Voluntary Control Council for Interference Statement

この装置は、第一種情報装置（商工業地域において使用されるべき情報装置）で商工業地域での電波障害防止を目的とした情報処理装置等電波障害自主規制協議会（VCCI）基準に適合しております。

従って、住宅地域またはその隣接した地域で使用する、ラジオ、テレビジョン受信機等に受信障害を与えることがあります。

取扱説明書に従って正しい取り扱いをして下さい。

United Kingdom Telecommunications Safety Requirements Notice to Customers

This apparatus is approved under approval number NS/G/1234/J/100003 for indirect connection to public telecommunications systems in the United Kingdom.

European Community for Information Technology Equipment (ITE) Statement

This device meets the following regulatory requirements set forth by the European community for Information Technology Equipment (ITE).

- EN55022, ITE-Generic Emission standard for domestic, commercial, and light industrial environments (CISPR 22 Class A).
- EN55082-1, ITE-Generic Immunity standard for domestic, commercial, and light industrial environments (IEC 801-2 through 801-6). The device meets European Community Mark Immunity Performance Criteria **A**, with the exception being IEC 801-2, *Electrostatic Discharge Immunity*, which meets Performance Criteria **B**. The software automatically restores the device to full operation if performance degradation occurs, with no operator intervention required.

Attention!

This is a Class A device. In a domestic environment the product may cause radio interference, in which case the user may be required to take adequate corrective measures.

European Community Electromagnetic Compatibility Directive (All Countries)

This product conforms with all protection requirements of European Community Council Directive 89/336/EEC, on the approximation of the laws of the Member States relating to electromagnetic compatibility.

IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification to the product, including the fitting of non-IBM option cards.

Trademarks and Service Marks

The following terms, indicated by a registered trademark symbol (®) or trademark symbol (™) on first use in this publication, are trademarks of the IBM Corporation in the United States or other countries or both:

Registered Trademarks

IBM®

ESCON®

Operating System/2®

OS/2®

S/390®

Sysplex Timer®

System/390®

Win-OS/2®

Trademarks

DCAF™

LANAID™

PS/2™

SA OS/390™

System Automation for OS/390™

Windows®, indicated by a registered trademark symbol on first use in this publication, is a registered trademark of Microsoft Corporation in the United States or other countries or both.

Intel®, i486®, and Pentium®, indicated by registered trademark symbols on first use in this publication, are registered trademarks of Intel Corporation in the United States or other countries or both.

About This Publication

This publication provides information about Console installation and administrative functions for the IBM 9032-003 Enterprise Systems Connection (ESCON®) Director, 9033-004 ESCON Director, 9032-005 Director, and 9037-002 Sysplex Timer®. You should be familiar with:

- Operation of Directors and/or the Sysplex Timer.
- Director and/or Sysplex Timer status codes, messages, and indicators that appear at the Console.
- Navigating in the Operating System/2® (OS/2®) environment.

Who Should Use This Publication

Use this publication as an introduction to the operating system interface for the Director or Sysplex Timer Console or as a guide to performing administrative tasks at the Director or Sysplex Timer Console.

How to Use This Publication

This publication is used as a tutorial for those who are trained but need a refresher before resuming work with a Director or Sysplex Timer Console or as a reference manual for operation of the Director or Sysplex Timer Console.

What Is Included in This Publication

This publication includes eight chapters organized as follows:

- **Chapter 1 - General Information.** This chapter discusses the ESCON Director and Sysplex Timer Consoles. Console platforms and specifications are described.
- **Chapter 2 - Win-OS/2 Basics.** This chapter provides an overview of the Windows®-Operating System/2 (Win-OS/2®) environment and describes the OS/2 desktop, standard OS/2 procedures, and working in Win-OS/2.
- **Chapter 3 - Hardware Management Console Support.** This chapter describes use of the Director or Sysplex Timer Console application on a Hardware Management Console. Installation, operation, and administrative procedures are provided.
- **Chapter 4 - Remote Access Console Support.** This chapter describes how to configure and use a modem or Local Area Network (LAN) connection between the Director or Sysplex Timer Console and a remote access Console.
- **Chapter 5 - PS/2 Console Procedures.** This chapter describes administrative, backup, restore, and console customization tasks for a Personal System/2 (PS/2™) platform configured as a Director or Sysplex Timer Console.

- **Chapter 6 - Model PC-330 Console Procedures.** This chapter describes administrative, backup, restore, and console customization tasks for a PC-330 platform configured as a Director or Sysplex Timer Console.
- **Chapter 7 - Model PC-365 Console Procedures.** This chapter describes administrative, backup, restore, and console customization tasks for a PC-365 platform configured as a Director or Sysplex Timer Console.
- **Chapter 8 - Model PC 300PL Console Procedures.** This chapter describes administrative, backup, restore, and console customization tasks for a PC 300PL platform configured as a Director or Sysplex Timer Console.

A **Glossary** and **Index** are provided at the back of the publication.

Notational Conventions

The following table lists notational conventions used in this publication.

Function	How Shown	Example
Menu options	Italics	<i>Passwords</i> menu option
Keys and key combinations	Bold	Enter or Alt+H keys
Menu names	Italics	<i>Help</i> menu
Dialog boxes	Italics	<i>Select Timer Network</i> dialog box
Buttons on dialog boxes	Italics	<i>OK</i> button on the <i>Select Timer Network</i> dialog box
Console input or output	Courier Font	Type <code>c:\prtdrvs</code> and click the <i>OK</i> button

Related Publications

The following publications relate to ESCON Directors:

- *Planning for the 9032 Model 3, 9033 Model 4, and 9032 Model 5 Enterprise Systems Connection Director* (SA22-7295).
- *Planning for the 9032 Model 5 Director with FICON Converter Feature* (SA22-7415).
- *Using the 9032 Model 3 ESCON Director, 9033 Model 4 ESCON Director, and 9032 Model 5 Director* (SA22-7296).
- *User's Guide Reference Summary for the 9032 Model 3 ESCON Director, 9033 Model 4 ESCON Director, and 9032 Model 5 Director* (SA22-7298).
- *Operator Panel Reference Summary for the 9032 Model 3 Enterprise Systems Connection Director* (SA26-6103).

- *Operator Panel Reference Summary for the 9033 Model 4 Enterprise Systems Connection Director* (SA22-7211).
- *Operator Panel Reference Summary for the 9032 Model 5 Director* (SA26-7297).
- *Maintenance Information for the 9032 Model 3 Enterprise Systems Connection Director* (SY27-3601).
- *Maintenance Information for the 9033 Model 4 Enterprise Systems Connection Director* (SY27-2638).
- *Maintenance Information for the 9032 Model 5 Director* (SY28-1158).
- *Install and Maintain the ESCON Director Console Application on the Hardware Management Console* (Feature #5901). Order this feature to obtain the publication.

The following publications relate to the Sysplex Timer:

- *Planning for the 9037 Model 2 Sysplex Timer* (SA22-7233).
- *Using the 9037 Model 2 Sysplex Timer* (SA22-7230).
- *User's Guide Reference Summary for the 9037 Model 2 Sysplex Timer* (SA22-7231).
- *Operator Panel Reference Summary for the 9037 Model 2 Sysplex Timer* (SA22-7232).
- *Maintenance Information for the 9037 Model 2 Sysplex Timer* (SY27-2641).
- *Install and Maintain the 9037 Model 2 Sysplex Timer Console Application on the Hardware Management Console* (Feature #4910). Order this feature to obtain the publication.

For additional information about the OS/2 Warp 4.0 operating system, refer to *Up and Running OS/2 Warp V4* (S84H-3090).

For additional information about the Hardware Management Console, refer to the *Hardware Management Console Guide* (GC38-0453).

Chapter 1. General Information

This chapter describes the dedicated Console shipped with the Model 9032-003, 9033-004, or 9032-005 Enterprise Systems Connection (ESCON) Director and the Model 9037-002 Sysplex Timer. The Console is an IBM personal computer (PC) running the Director or Sysplex Timer Console application. Both applications run in a Windows-Operating System/2 (Win-OS/2) environment.

This publication also describes use of a remote access Console and operation of the Director or Sysplex Timer Console application on a Hardware Management Console.

The ESCON Director Console

A Console is required to install and configure an ESCON Director, change Director configurations without the use of System Automation for OS/390™ (SA OS/390™), and access utility logs. The Console connects to a Director through a 4/16 megabit per second (Mbps) Token Ring Local Area Network (LAN) using shielded, twisted-pair cable. The Console can simultaneously communicate with 16 Console sessions, consisting of up to 16 Directors and up to two Sysplex Timer networks (total sessions cannot exceed 16).

The Director may have a session with only one Console. However, a Console failure does not cause the operating Director to fail. After the Director is configured and operational, it can perform all connection tasks without Console intervention. For maximum availability, a backup or replacement Console should be available to provide access to critical system or application data.

Director Consoles described in this publication do not support Model 9032-002 or 9033-001 Directors. Consoles for the Model 9032-003 and 9033-004 Directors (PS/2 and PC-330) do not support the Model 9032-005 Director.

Console Platforms

It is recommended the Director Console application be installed on a dedicated PC shipped with the ESCON Director. The dedicated PC platform changes as PC technology evolves. Platform models are periodically changed to take advantage of faster processor speed, more random-access memory (RAM), and higher-capacity fixed disks. The following platforms are supported and described in this publication:

- **Personal System/2 (PS/2)** - uses OS/2 Warp Connect 3.0 and supports Model 9032-003 and 9033-004 Directors.

- **Model PC-330** - uses OS/2 Warp Connect 3.0 and supports Model 9032-003 and 9033-004 Directors.
- **Model PC-365** - uses OS/2 Warp 4.0 and supports Model 9032-003, 9033-004, and 9032-005 Directors.
- **Model PC 300PL** - uses OS/2 Warp 4.0 and supports Model 9032-003, 9033-004, and 9032-005 Directors.

The Director Console application can also be installed on a:

- Customer-supplied PC that meets the minimum Console hardware and software requirements. Console administrative, backup, restore, and customization tasks *are not* supported.
- Sysplex Timer Console (9032-003 or 9033-004 application on the Model PC-330, all applications on the PC-365 or PC 300PL). Console administrative, backup, restore, and customization tasks are supported and described in this publication.
- System/390® (S/390®) server's Hardware Management Console. Console administrative, backup, and restore tasks are supported. For additional information, refer to Chapter 3, "[Hardware Management Console Support](#)" on page 33.

Remote access for the Director Console is also supported. A customized version of Distributed Console Access Facility (DCAF™) software (included with the Console feature) allows an operator at a remote PC to access the Console and perform administrative and operator tasks. For additional information, refer to Chapter 4, "[Remote Access Console Support](#)" on page 59.

PS/2 Director Console

The PS/2 Director Console ([Figure 1](#)) is shipped with the OS/2 Warp Connect 3.0 operating system and supports Model 9032-003 and 9033-004 Directors. The Console also supports the Model 9037-002 Sysplex Timer. For access to removable storage media, the platform includes a 3.5-inch diskette drive and a tape cartridge drive.

Note: The PS/2 platform does not support the Model 9032-005 Director.

PS/2 Console administrative, backup, restore, and customization tasks are supported and described in this publication. For additional information, refer to Chapter 5, "[PS/2 Console Procedures](#)" on page 79. The information applies to both the Director and Sysplex Timer Consoles.

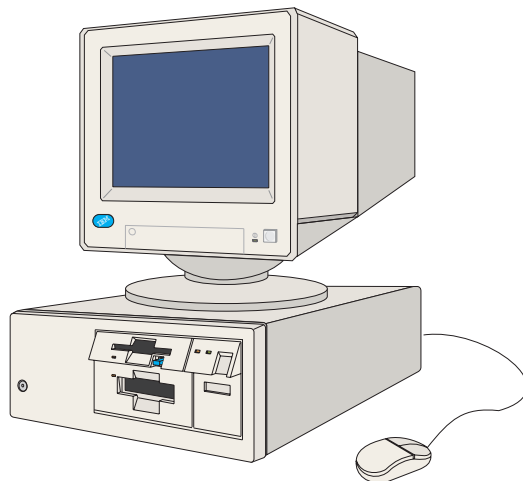


Figure 1. PS/2 Director Console

PS/2 Director Console Specifications

The PS/2 Director Console ordered from IBM meets the following specifications:

- PC system unit with:
 - Intel® i486® microprocessor with a 25 megahertz (MHz) or greater clock rate.
 - 16 megabytes (MB) RAM.
 - 1.44 MB diskette drive (3.5-inch).
 - 150 MB or larger fixed disk.
 - Tape cartridge drive.
 - 4/16 Mbps Token Ring Controller Adapter card.
- 15-inch color display monitor.
- Keyboard.
- Pointing device (mouse) and pad.
- 6.1-meter (20-foot) Token Ring adapter cable.
- Ac power cables (for the system unit and color monitor) configured for length and plug type according to site requirements. Minimum length is 1.8 meters (6 feet).

Model PC-330 Director Console

The Model PC-330 Director Console ([Figure 2](#)) is shipped with the OS/2 Warp Connect 3.0 operating system and supports Model 9032-003 and 9033-004 Directors. The Console also supports the Model 9037-002 Sysplex Timer. For access to removable storage media, the platform includes a 3.5-inch diskette drive and a tape cartridge drive.

Note: The Model PC-330 platform does not support the Model 9032-005 Director.

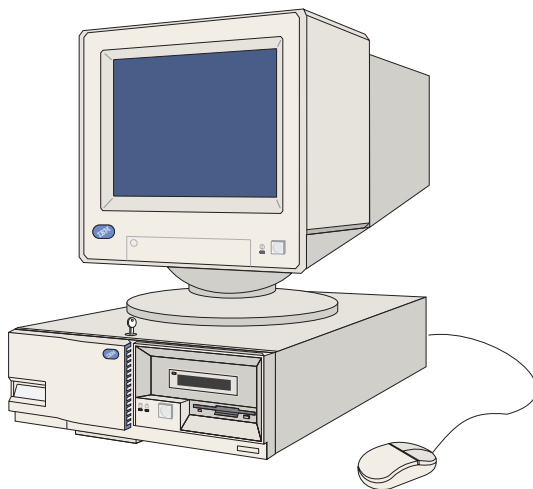


Figure 2. Model PC-330 Director Console

Model PC-330 Console administrative, backup, restore, and customization tasks are supported and described in this publication. For additional information, refer to Chapter 6, "[Model PC-330 Console Procedures](#)" on page 149. The information applies to both the Director and Sysplex Timer Consoles.

PC-330 Director Console Specifications

The Model PC-330 Director Console ordered from IBM meets the following specifications:

- PC system unit with:
 - Intel i486 microprocessor with a 50 MHz or greater clock rate, or Intel Pentium® microprocessor with a 75 MHz or greater clock rate.
 - 16 MB RAM.
 - 1.44 MB diskette drive (3.5-inch).

- 250 MB or larger fixed disk.
- Tape cartridge drive.
- 4/16 Mbps Token Ring Controller Adapter card.
- 15-inch color display monitor.
- Keyboard.
- Pointing device (mouse) and pad.
- 6.1-meter (20-foot) Token Ring adapter cable.
- Ac power cables (for the system unit and color monitor) configured for length and plug type according to site requirements. Minimum length is 1.8 meters (6 feet).

Model PC-365 Director Console

The Model PC-365 Director Console ([Figure 3](#)) is shipped with the OS/2 Warp 4.0 operating system and supports Model 9032-003, 9033-004, and 9032-005 Directors. The Console also supports the Model 9037-002 Sysplex Timer. For access to removable storage media, the platform includes a 3.5-inch diskette drive, compact disc read-only memory (CD-ROM) drive, and rewriteable optical cartridge (ROC) drive.

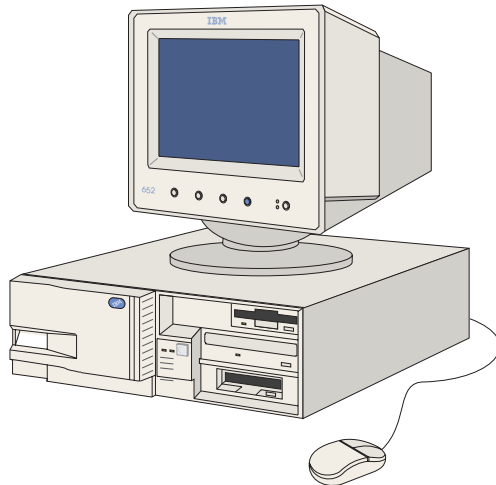


Figure 3. Model PC-365 Director Console

Model PC-365 Console administrative, backup, restore, and customization tasks are supported and described in this publication. For additional information, refer to Chapter 7, “[Model PC-365 Console Procedures](#)” on page 221. The information applies to both the Director and Sysplex Timer Consoles.

PC-365 Director Console Specifications

The Model PC-365 Director Console ordered from IBM meets the following specifications:

- PC system unit with:
 - Intel Pentium Pro microprocessor with a 200 MHz or greater clock rate.
 - 32 MB RAM.
 - 1.44 MB diskette drive (3.5-inch).
 - 1.6 GB or larger fixed disk.
 - CD-ROM drive.
 - ROC drive.
 - 4/16 Mbps Token Ring Controller Adapter card.
- 15-inch color display monitor.
- Keyboard.
- Pointing device (mouse) and pad.
- 6.1-meter (20-foot) Token Ring adapter cable.
- Ac power cables (for the system unit and color monitor) configured for length and plug type according to site requirements. Minimum length is 1.8 meters (6 feet).

Model PC 300PL Director Console

The Model PC 300PL Director Console ([Figure 4](#)) is shipped with the OS/2 Warp 4.0 operating system and supports Model 9032-003, 9033-004, and 9032-005 Directors. The Console also supports the Model 9037-002 Sysplex Timer. For access to removable storage media, the platform includes a 3.5-inch diskette drive, CD-ROM drive, and ROC drive.

Model PC 300PL Console administrative, customization, backup, and restore tasks are supported and described in this publication. For additional information, refer to Chapter 8, “[Model PC 300PL Console Procedures](#)” on page 285. The information applies to both the Director and Sysplex Timer Consoles.

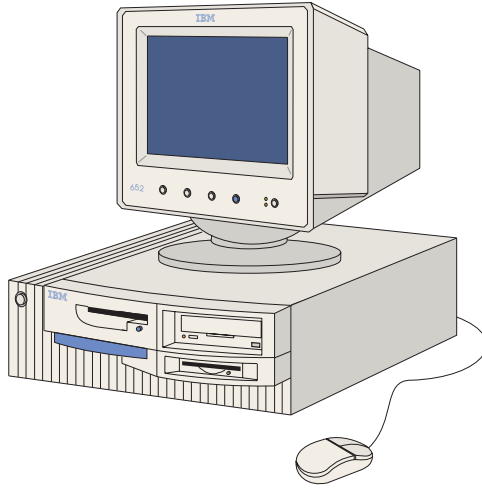


Figure 4. Model PC 300PL Director Console

PC 300PL Director Console Specifications

The Model PC 300PL Director Console ordered from IBM meets the following specifications:

- PC system unit with:
 - Intel Pentium II microprocessor with a 266 MHz or greater clock rate.
 - 32 MB RAM or greater.
 - 1.44 MB diskette drive (3.5-inch).
 - 4.2 GB or larger fixed disk.
 - CD-ROM drive.
 - ROC drive.
 - 4/16 Mbps Token Ring Controller Adapter card.
- 15-inch color display monitor.
- Keyboard.
- Pointing device (mouse) and pad.
- 6.1-meter (20-foot) Token Ring adapter cable.
- Ac power cables (for the system unit and color monitor) configured for length and plug type according to site requirements. Minimum length is 1.8 meters (6 feet).

Backup or Replacement Director Console

It is recommended an additional Console be configured and maintained to take over administrative and operator tasks if the Director Console fails. The Console can be a backup Console or replacement Console.

Backup Console

The backup Console can be installed on the same LAN as the Director Console, subject to the following constraints:

- The backup Console must have a different Internet Protocol (IP) address than the Director Console.
- The Console application cannot be open on the backup Console and Director Console at the same time.

Refer to *Using the 9032 Model 3 ESCON Director, 9033 Model 4 ESCON Director, and 9032 Model 5 Director* (SA22-7296) for instructions about configuring, maintaining, and using a backup Console.

Replacement Console

A replacement Console can be maintained separate from the LAN to which the Director Console is connected. The replacement Console has the same IP address as the Director Console. If the Director Console fails, it is disconnected from the LAN and the replacement Console is connected to the LAN in its place.

Refer to *Using the 9032 Model 3 ESCON Director, 9033 Model 4 ESCON Director, and 9032 Model 5 Director* (SA22-7296) for instructions about configuring, maintaining, and using a replacement Console.

The Sysplex Timer Console

A Console is required to install a Sysplex Timer network, manage and monitor the network, define or change External Time Reference (ETR) connection definitions, manage and monitor the ETR, display, set, and adjust the time and date, and access utility logs. The Console connects to a Timer through a 4/16 Mbps Token Ring LAN using shielded, twisted-pair cable.

The Timer network is comprised of one Timer (Basic or Expanded Basic configuration) or two Timers (Expanded Availability configuration). The Console can simultaneously communicate with two Timer networks. Only one instance of the Console application may be open on the PC.

The Timer may have sessions with up to two Consoles. One of these Consoles is the active Console, and the other is an optional standby Console. For maximum availability, a standby Console should be connected. A Timer network can be controlled by only one active Console. If the active Console fails, the standby Console can be manually reconfigured as the active Console.

Console Platforms

It is recommended the Sysplex Timer Console application be installed on a dedicated PC shipped with the Timer. The dedicated PC platform changes as PC technology evolves. The platform models are periodically changed to take advantage of faster processor speed, more RAM, and higher-capacity fixed disks. The following platforms are supported and described in this publication:

- **Model PC-330** - uses OS/2 Warp Connect 3.0 and supports the Model 9037-002 Sysplex Timer.
- **Model PC-365** - uses OS/2 Warp 4.0 and supports the Model 9037-002 Sysplex Timer.
- **Model PC 300PL** - uses OS/2 Warp 4.0 and supports the Model 9037-002 Sysplex Timer.

The Sysplex Timer Console application can also be installed on a:

- Customer-supplied PC that meets the minimum Console hardware and software requirements. Console administrative, backup, restore, and customization tasks *are not* supported.
- ESCON Director Console (Model PS/2, PC-330, PC-365, or PC 300PL). Console administrative, customization, backup, and restore tasks are supported and described in this publication.
- S/390 server's Hardware Management Console. Console administrative, backup, and restore, tasks are supported. For additional information, refer to Chapter 3, "[Hardware Management Console Support](#)" on page 33.

Remote access for the Sysplex Timer Console is also supported. A customized version of DCAF software (included with the Console feature) allows an operator at a remote PC to access the Console and perform administrative and operator tasks. For additional information, refer to Chapter 4, "[Remote Access Console Support](#)" on page 59.

Model PC-330 Sysplex Timer Console

The Model PC-330 Timer Console ([Figure 5](#)) is shipped with the OS/2 Warp Connect 3.0 operating system and supports the Model 9037-002 Sysplex Timer. The Console also supports Model 9032-003 and 9033-004 ESCON Directors. For access to removable storage media, the platform includes a 3.5-inch diskette drive and a tape cartridge drive.

Note: The Model PC-330 platform does not support the Model 9037-001 Sysplex Timer.

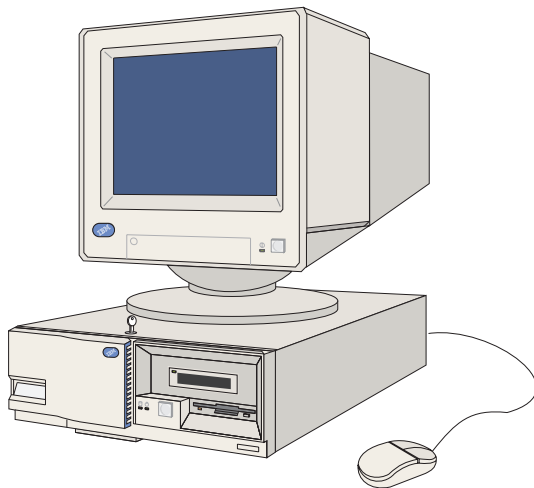


Figure 5. Model PC-330 Sysplex Timer Console

Model PC-330 Console administrative, backup, restore, and customization tasks are supported and described in this publication. For additional information, refer to Chapter 6, “[Model PC-330 Console Procedures](#)” on page 149. The information applies to both the Director and Sysplex Timer Consoles.

PC-330 Timer Console Specifications

The Model PC-330 Timer Console ordered from IBM meets the following specifications:

- PC system unit with:
 - Intel i486 microprocessor with a 50 MHz or greater clock rate, or Intel Pentium microprocessor with a 75 MHz or greater clock rate.
 - 16 MB RAM.
 - 1.44 MB diskette drive (3.5-inch).
 - 250 MB or larger fixed disk.
 - Tape cartridge drive.
 - 4/16 Mbps Token Ring Controller Adapter card.
- 15-inch color display monitor.
- Keyboard.
- Pointing device (mouse) and pad.
- 6.1-meter (20-foot) Token Ring adapter cable.

- Ac power cables (for the system unit and color monitor) configured for length and plug type according to site requirements. Minimum length is 1.8 meters (6 feet).

Model PC-365 Sysplex Timer Console

The Model PC-365 Timer Console ([Figure 6](#)) is shipped with the OS/2 Warp 4.0 operating system and supports the Model 9037-002 Sysplex Timer. The Console also supports Model 9032-003, 9033-004, and 9032-005 Directors. For access to removable storage media, the platform includes a 3.5-inch diskette drive, CD-ROM drive, and ROC drive.

Note: The Model PC-365 platform does not support the Model 9037-001 Sysplex Timer.

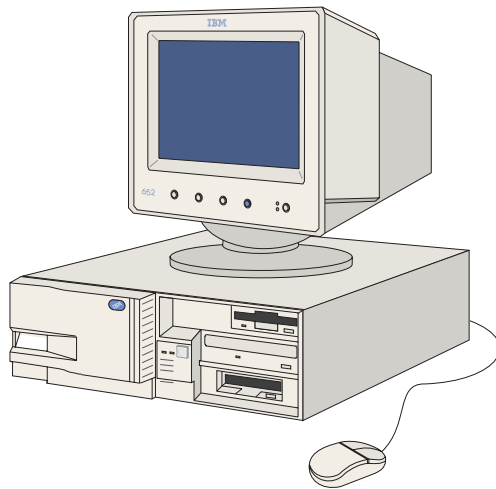


Figure 6. Model PC-365 Sysplex Timer Console

Model PC-365 Console administrative, backup, restore, and customization tasks are supported and described in this publication. For additional information, refer to Chapter 7, “[Model PC-365 Console Procedures](#)” on page 221. The information applies to both the Director and Sysplex Timer Consoles.

PC-365 Timer Console Specifications

The Model PC-365 Timer Console ordered from IBM meets the following specifications:

- PC system unit with:
 - Intel Pentium Pro microprocessor with a 200 MHz or greater clock rate.
 - 32 MB RAM.

- 1.44 MB diskette drive (3.5-inch).
- 1.6 GB or larger fixed disk.
- CD-ROM drive.
- ROC drive.
- 4/16 Mbps Token Ring Controller Adapter card.
- 15-inch color display monitor.
- Keyboard.
- Pointing device (mouse) and pad.
- 6.1-meter (20-foot) Token Ring adapter cable.
- Ac power cables (for the system unit and color monitor) configured for length and plug type according to site requirements. Minimum length is 1.8 meters (6 feet).

Model PC 300PL Sysplex Timer Console

The Model PC 300PL Timer Console ([Figure 7](#)) is shipped with the OS/2 Warp 4.0 operating system and supports the Model 9037-002 Sysplex Timer. The Console also supports Model 9032-003, 9033-004, and 9032-005 Directors. For access to removable storage media, the platform includes a 3.5-inch diskette drive, CD-ROM drive, and ROC drive.

Note: The Model PC 300PL platform does not support the Model 9037-001 Sysplex Timer.

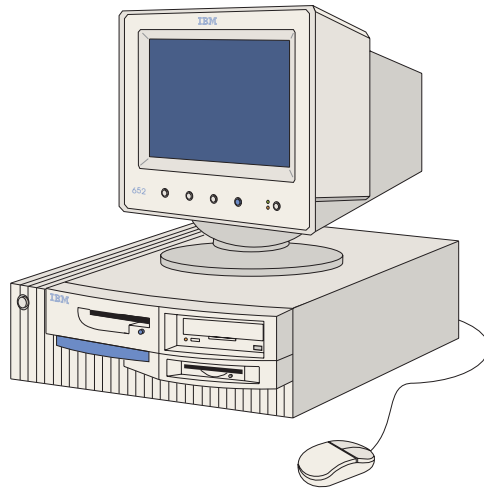


Figure 7. Model PC 300PL Sysplex Timer Console

Model PC 300PL Console administrative, customization, backup, and restore tasks are supported and described in this publication. For additional information, refer to Chapter 8, “[Model PC 300PL Console Procedures](#)” on page 285. The information applies to both the Director and Sysplex Timer Consoles.

PC 300PL Sysplex Timer Console Specifications

The Model PC 300PL Timer Console ordered from IBM meets the following specifications:

- PC system unit with:
 - Intel Pentium II microprocessor with a 266 MHz or greater clock rate.
 - 32 MB RAM or greater.
 - 1.44 MB diskette drive (3.5-inch).
 - 4.2 GB or larger fixed disk.
 - CD-ROM drive.
 - ROC drive.
 - 4/16 Mbps Token Ring Controller Adapter card.
- 15-inch color display monitor.
- Keyboard.
- Pointing device (mouse) and pad.
- 6.1-meter (20-foot) Token Ring adapter cable.
- Ac power cables (for the system unit and color monitor) configured for length and plug type according to site requirements. Minimum length is 1.8 meters (6 feet).

Standby Timer Console

It is recommended that a standby Console be installed and configured to take over administrative, operator, and maintenance tasks if the active Timer Console fails. The Console application can be open on both Consoles at the same time.

Refer to *Maintenance Information for the 9037 Model 2 Sysplex Timer* (SY27-2641) for instructions about installing, configuring, and using a standby Console.

Shared Console

It is recommended the ESCON Director Console application or Sysplex Timer Console application be installed on a dedicated PC. However, both applications can be installed on the same PC platform for use as a shared Console. Use of a shared Console is subject to the following constraints:

- The 9032-003 or 9033-004 Director Console application can be installed on a Model PC-330 Sysplex Timer Console.
- All Director Console applications can be installed on a Model PC-365 or PC 300 PL Sysplex Timer Console.
- The Sysplex Timer Console application can be installed on a Model PS/2, PC-330, PC-365, or PC 300 PL Director Console.
- The Director Console and Sysplex Timer Console applications can be installed on an S/390 server's Hardware Management Console.

Chapter 2. Win-OS/2 Basics

This chapter provides an introduction to working with the Enterprise Systems Connection (ESCON) Director or Sysplex Timer Console application in a Windows-Operating System/2 (Win-OS/2) environment.

The chapter describes:

- The OS/2 desktop.
- Standard OS/2 procedures.
- Working in Win-OS/2.

The OS/2 Desktop

This section describes the OS/2 desktop and its components (including the launch pad and desktop objects), and OS/2 windows. The OS/2 desktop (Figure 8) shows the Director Console and Sysplex Timer Console applications installed (application icons appear on the desktop as objects), and is customized for working with either or both applications.

Note: The OS/2 desktop may look different, depending on the OS/2 version (Warp Connect 3.0 or Warp 4.0) installed on the Console.

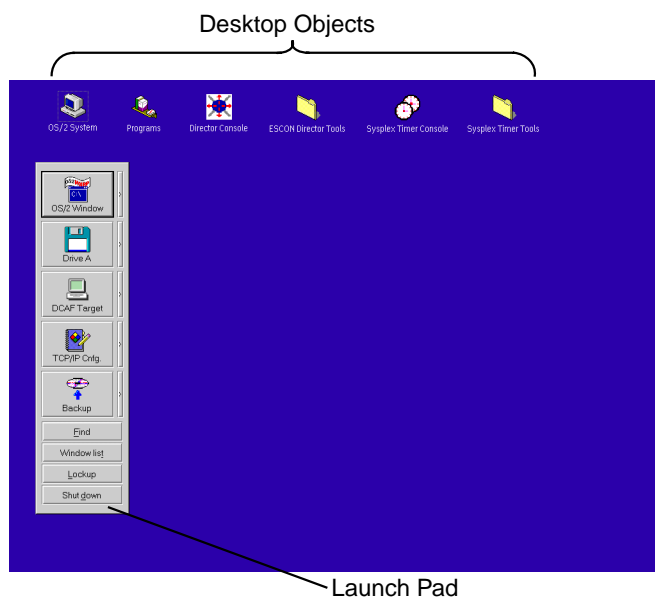


Figure 8. OS/2 Desktop

Launch Pad

The launch pad (Figure 9) contains a set of object drawers that are accessed and used to perform OS/2 administrative tasks related to the Director and Sysplex Timer Console applications. Click the drawer arrow (to the right of each drawer) to open a drawer and access a series of buttons to perform the desired Director or Sysplex Timer Console administrative task.

The functions of buttons accessed through launch pad drawers are not described in detail in this chapter. Launch pad functions are described in procedural steps elsewhere in this publication when applicable to a specific Director or Sysplex Timer administrative task.

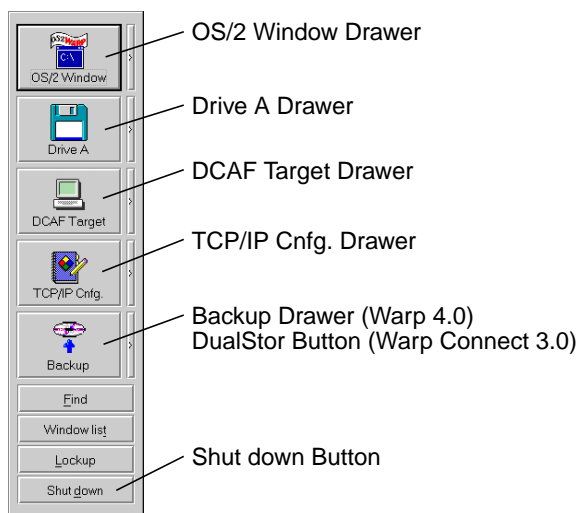


Figure 9. Launch Pad

The following drawers appear on the launch pad:

- **OS/2 Window** - This drawer accesses the OS/2 window, disk operating system (DOS) window, set date and time, and program manager functions.
- **Drive A** - This drawer accesses the Console's **A:** drive, **C:** drive, and a build diagnostic diskette function.
- **DCAF Target** - This drawer accesses Distributed Console Access Facility (DCAF) target, DCAF controller, remote setup, Communication Manager/2 (CM/2) setup, start CM/2, and stop CM/2 functions.
- **TCP/IP Cnfg.** - This drawer accesses Transmission Control Protocol/Internet Protocol (TCP/IP) configuration, LAN Adapter and Protocol Support (LAPS) for OS/2 Warp Connect 3.0 applications, Multi-Protocol Transport Services (MPTS), Address Resolution Protocol (ARP), and LANAIID™ functions.

- **Backup** - This drawer accesses backup, restore, set default backup time, and modify backup schedule functions for OS/2 Warp 4.0 applications. The drawer does not appear on the Warp Connect 3.0 launch pad.
- **DualStor** - This button accesses IBM-licensed software to perform backup and restore functions for OS/2 Warp Connect 3.0 applications. The button does not appear on the Warp 4.0 launch pad.

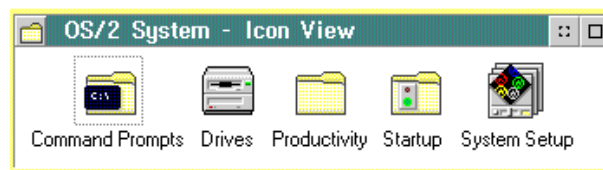
The launch pad also contains a **Shutdown** button. Click this button to shut down the OS/2 operating system and the Director or Sysplex Timer Console.

Desktop Objects

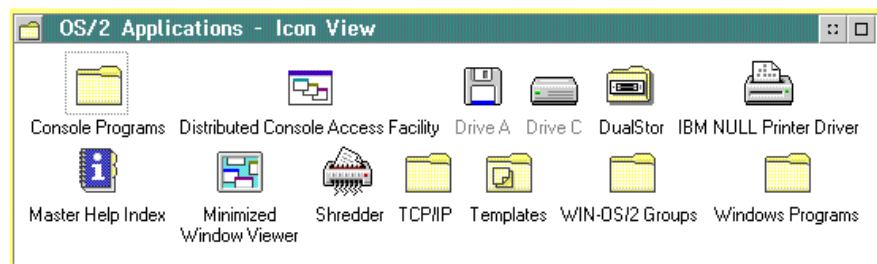
The top portion of the OS/2 desktop contains a set of objects (icons) used to start the Director Console application, start the Sysplex Timer Console application, or open tool folders and windows to perform OS/2 administrative tasks.

The functions of all the desktop objects are not described in detail in this chapter. Object functions are described in procedural steps elsewhere in this publication when applicable to a specific Director or Sysplex Timer administrative task. The following objects (icons) appear on the OS/2 desktop:

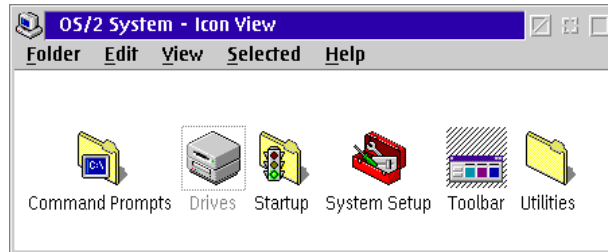
- **OS/2 System (Warp Connect 3.0)** - Double-click the *OS/2 System* icon to open the *OS/2 System - Icon View*. Icons in this window access disk drives, system setup utilities, and the *Startup*, *Command Prompts*, and *Productivity* folders. Refer to your Win- OS/2 documentation for additional information.



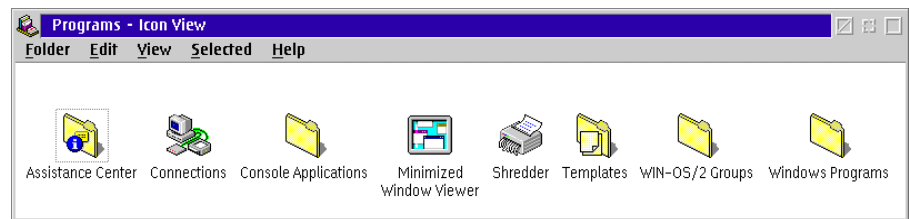
- **OS/2 Applications (Warp Connect 3.0)** - Double-click the *OS/2 Applications* icon to open the *OS/2 Applications - Icon View*. Icons in this window access a variety of OS/2 applications. Icons also access DCAF, DualStor, and TCP/IP functions. Refer to your Win-OS/2 documentation for additional information.



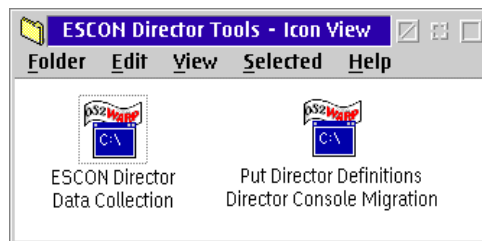
- **OS/2 System (Warp 4.0)** - Double-click the *OS/2 System* icon to open the *OS/2 System - Icon View*. Icons in this window access disk drives, system setup utilities, the toolbar, and the *Command Prompts*, *Startup*, and *Utilities* folders. Refer to your Win-OS/2 documentation for additional information.



- **Programs (Warp 4.0)** - Double-click the *Programs* icon to open the *OS/2 Programs - Icon View*. Icons in this window access the assistance center, peripheral connections, minimized window viewer, shredder, and the *Console Applications*, *Templates*, *Win- OS/2 Groups*, and *Windows Programs* folders. Refer to your Win- OS/2 documentation for additional information.

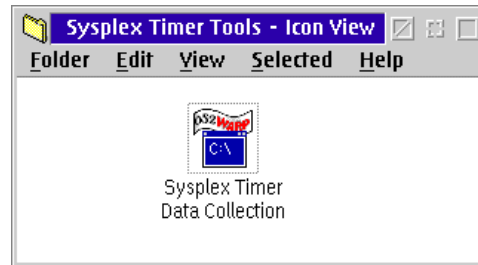


- **Director Console** - Double-click the *Director Console* icon to open the Director Console application.
- **ESCON Director Tools** - Double-click the *ESCON Director Tools* folder to open the *ESCON Director Tools - Icon View*. Icons in this window migrate Director definitions to another Console and collect Director maintenance data.



- **Sysplex Timer Console** - Double-click the *Sysplex Timer Console* icon to open the Sysplex Timer Console application.

- **Sysplex Timer Tools** - Double-click the *Sysplex Timer Tools* folder to open the *Sysplex Timer Tools - Icon View*. The icon in this window collects Sysplex Timer maintenance data.



OS/2 Windows

An OS/2 window is a bounded area of the screen that contains application icons, utility icons, or other information. A window can be smaller than or the same size as the screen. Warp Connect 3.0 windows appear slightly different than Warp 4.0 windows.

An OS/2 Warp Connect 3.0 window ([Figure 10](#)) contains the following components:

- At the top of the window is a title bar that displays the title of the window.
- On the title bar are three buttons; the *Control Box Menu* button on the left, and the *Minimize* and *Maximize* buttons on the right.
 - Click the *Control Box Menu* button to display a pull-down menu of window utility functions. Double-click the *Control Box Menu* button to close the window.
 - Click the *Minimize* button to minimize the window to an icon.
 - If the window is partial-screen size, click the *Maximize* button to change the window to full-screen size. If the window is full-screen size, click the *Maximize* button to change the window to partial-screen size.
- The space inside the window contains icons or other information.

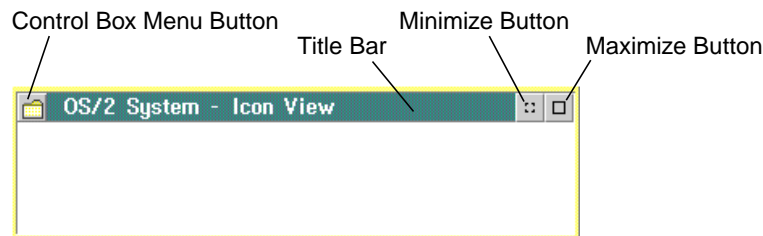


Figure 10. OS/2 Warp Connect 3.0 Window Components

An OS/2 Warp 4.0 window (Figure 11) contains the following components:

- At the top of the window is a title bar that displays the title of the window.
- On the title bar are four buttons: the *Control Box Menu* button on the left, and the *Close*, *Minimize*, and *Maximize* buttons on the right.
 - Click the *Control Box Menu* button to display a pull-down menu of window utility functions. Double-click the *Control Box Menu* button to close the window.
 - Click the *Close* button to close the window to an icon.
 - Click the *Minimize* button to minimize the window to an icon.
 - If the window is partial-screen size, click the *Maximize* button to change the window to full-screen size. If the window is full-screen size, click the *Maximize* button to change the window to partial-screen size.
- Below the title bar is a menu bar that contains menu pull-down options pertaining to the window.
- The space inside the window contains icons or other information.

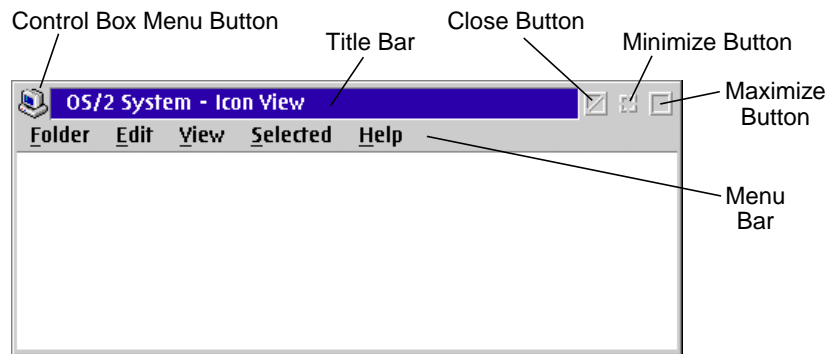


Figure 11. OS/2 Warp 4.0 Window Components

Standard OS/2 Procedures

This section describes standard OS/2 procedures that are referenced in other chapters in this publication. The procedures include:

- Transferring between a Console application and the OS/2 desktop.
- Shutting down and restarting a Console application.
- Shutting down and restarting the OS/2 operating system and Console.

Transfer Between a Console Application and the OS/2 Desktop

Use the following procedures to transfer from a Console application to the OS/2 desktop or to transfer from the desktop to a Console application.

To transfer from the Director Console application to the OS/2 desktop, refer to "[From the Director Console Application](#)" below. To transfer from the Sysplex Timer Console application to the OS/2 desktop, refer to "[From the Sysplex Timer Console Application](#)" below. To transfer from the OS/2 desktop to a Console application, refer to "[From the OS/2 Desktop](#)" on page 22.

From the Director Console Application

To transfer from the Director Console application to the OS/2 desktop:

1. At the *Startup* or any active matrix window, simultaneously press the **Ctrl** and **Esc** keys. The *Window List* appears.



2. Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

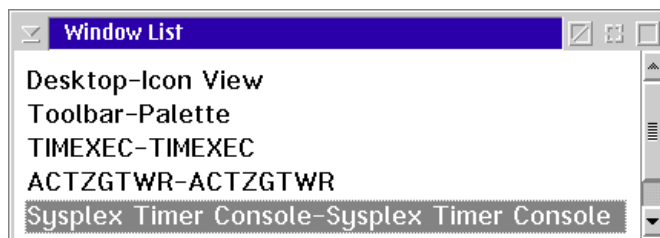
Note: The OS/2 desktop may look different, depending on the OS/2 version (Warp Connect 3.0 or Warp 4.0) installed on the Director Console.

3. If you were directed to this task from another procedure, return to that procedure.

From the Sysplex Timer Console Application

To transfer from the Sysplex Timer Console application to the OS/2 desktop:

1. At the *Startup* or *Sysplex Timer Network Console* window, simultaneously press the **Ctrl** and **Esc** keys. The *Window List* appears.



2. Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

Note: The OS/2 desktop may look different, depending on the OS/2 version (Warp Connect 3.0 or Warp 4.0) installed on the Director Console.

3. If you were directed to this task from another procedure, return to that procedure.

From the OS/2 Desktop

To transfer from the OS/2 desktop to the ESCON Director or Sysplex Timer Console application:

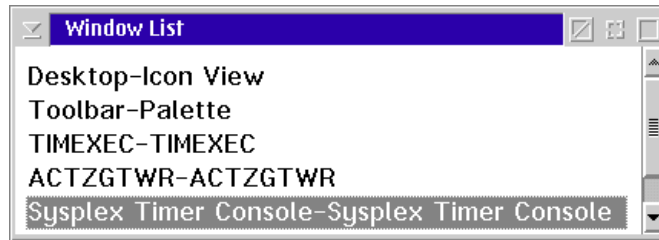
1. Perform one of the following:
 - To transfer to the Director Console application, simultaneously press the **Ctrl** and **Esc** keys at the OS/2 desktop. The *Window List* appears.



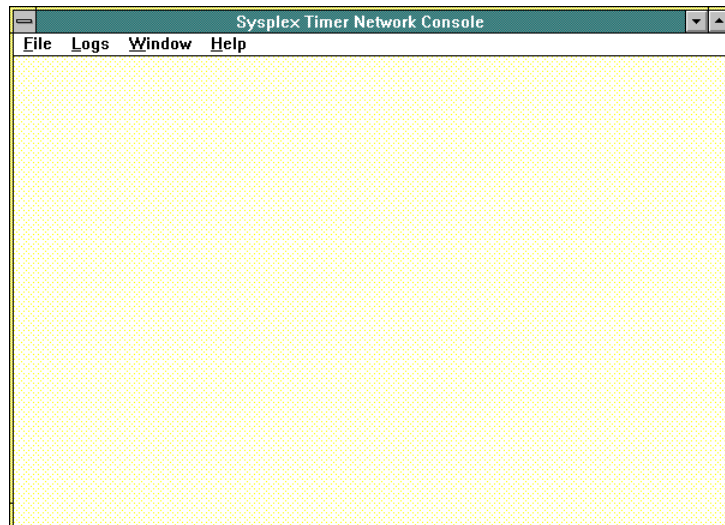
Double-click the *Director Console - Director Console* selection. The *Startup* or an active matrix window appears when the Console application is open and running. It may take up to 30 seconds for the Director Console application to open.



- To transfer to the Sysplex Timer Console application, simultaneously press the **Ctrl** and **Esc** keys at the OS/2 desktop. The *Window List* appears.



Double-click the *Sysplex Timer Console - Sysplex Timer Console* selection. The *Startup* or *Sysplex Timer Network Console* window appears when the Console application is open and running. It may take up to 30 seconds for the Sysplex Timer Console application to open.



2. If you were directed to this task from another procedure, return to that procedure.

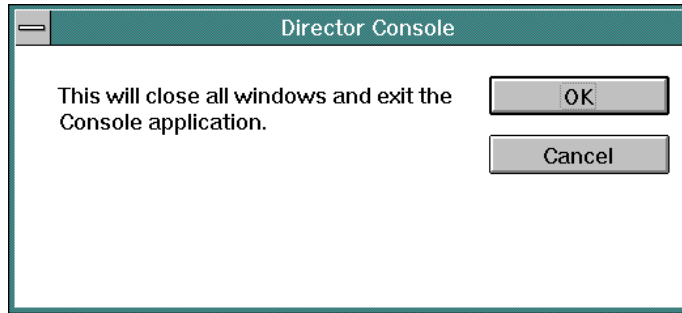
Shut Down and Restart a Console Application

To shut down and restart the ESCON Director Console application from the OS/2 desktop, continue to "[Director Console Application](#)" on page 24. To shut down and restart the Sysplex Timer Console application from the OS/2 desktop, refer to "[Sysplex Timer Console Application](#)" on page 25. Both procedures initiate changes to software options.

Director Console Application

To shut down and restart the ESCON Director Console application:

1. From the *Startup* window or any active matrix window, select the *Exit* option from the *File* menu. The following dialog box appears.



2. Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.
3. At the OS/2 desktop, double-click the *Director Console* icon to start the Console application. The *Startup* window appears when the Console application is open and running. It may take up to 30 seconds for the Director Console application to open.

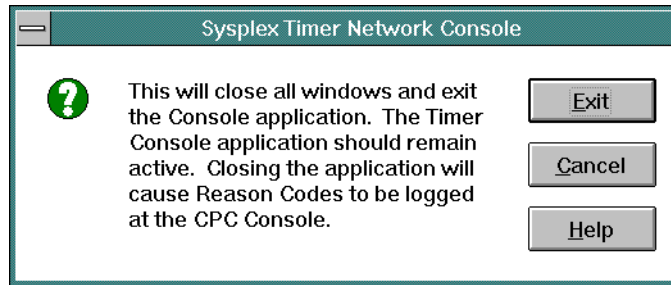


4. If you were directed to this task from another procedure, return to that procedure.

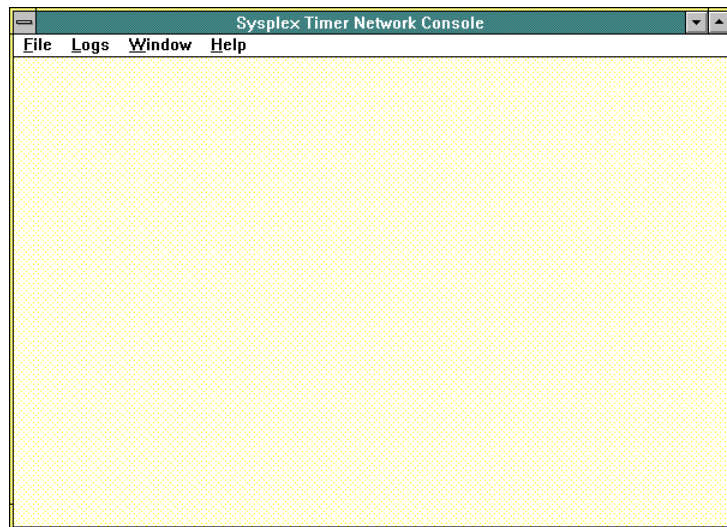
Sysplex Timer Console Application

To shut down and restart the Sysplex Timer Console application:

1. From the *Startup* or *Sysplex Timer Network Console* window, select the *Exit* option from the *File* menu. The following dialog box appears.



2. Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.
3. At the OS/2 desktop, double-click the *Sysplex Timer Console* icon to start the Console application. The *Startup* window appears when the Console application is open and running. It may take up to 30 seconds for the Sysplex Timer Console application to open.



4. If you were directed to this task from another procedure, return to that procedure.

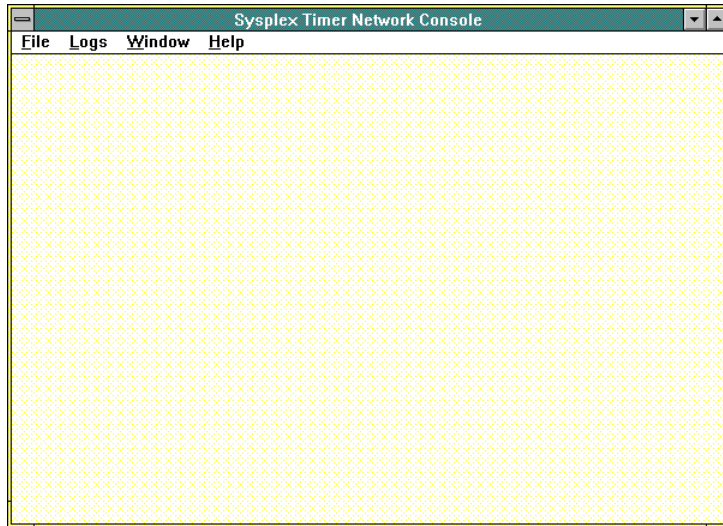
Shut Down and Restart the OS/2 Operating System and Console

Use this procedure to shut down and restart the OS/2 operating system and Console and to initiate changes to software options. This procedure also shuts down the Director and Sysplex Timer Console applications (if the applications are running). To shut down and restart the Console:

1. At the OS/2 desktop, click the *Shutdown* button at the bottom of the launch pad. Dialog boxes appear for each active application (and the operating system), asking if you want to close the application without saving data.
2. Click the *OK* or *Yes* button (as applicable) as each dialog box appears. Eventually a *Shutdown Has Completed* message box appears, explaining it is now safe to turn off the computer or restart.
3. Switch off power on the PC Console, wait 10 seconds, then switch power back on. The Console performs POSTs and loads the operating system. Upon completion, the OS/2 desktop appears.
4. Perform one of the following:
 - Double-click the *Director Console* icon to start the Console application. The *Startup* window appears when the Console application is open and running. It may take up to 30 seconds for the Director Console application to open.



- Double-click the *Sysplex Timer Console* icon to start the Console application. The *Startup* window appears when the Console application is open and running. It may take up to 30 seconds for the Sysplex Timer Console application to open.



5. If you were directed to this task from another procedure, return to that procedure.

Working in Win-OS/2

This section describes how to work in a typical Win-OS/2 application, and discusses general terms, windows components, dialog boxes, edit fields, and other features. Refer to your Win-OS/2 documentation for additional information.

Definitions of Terms

In the Win-OS/2 environment, tasks are performed in rectangular areas of the screen called windows. These windows appear on a background called the desktop. There are two types of windows; application and document.

- An application window contains a running program.
- A document window is contained inside an application window and can usually be edited.

Applications (executable programs) are represented by graphic symbols called icons. Information is entered or actions are acknowledged using dialog boxes.

The Mouse

Most actions performed in the Win-OS/2 environment involve the mouse. A mouse is used to point at and select objects, and to execute commands (instead of typing the commands). To select an item (such as an icon), place the mouse cursor over the item and click the left mouse button. To start an application, place the mouse cursor over the application icon and double-click the left mouse button.

The mouse cursor assumes several different shapes:

- On the desktop or along the top of the screen in an application, it assumes the shape of a pointer arrow.
- Along the side or corner of a window, it assumes the shape of a double arrow, allowing the window to be resized in the directions of the arrow.
- In an edit field in a dialog box, it assumes the shape of a capital I, sometimes called an I-beam.
- After initiating an action, the it assumes the shape of an hourglass during the processing time for the action.

Window Components

Win-OS/2 windows (Figure 12) contain the following components:

- At the top of the window is a title bar that displays the title of the document or application.
- On the title bar are three buttons; the *Control Box Menu* button on the left, and the *Minimize* and *Maximize* buttons on the right.
- Below the title bar is a menu bar that contains menu pull-down options pertaining to the application.
- At the right and bottom sides of the window are horizontal and vertical scroll bars, scrolling indicators, and scroll arrows.
- The space inside the window is the workspace.

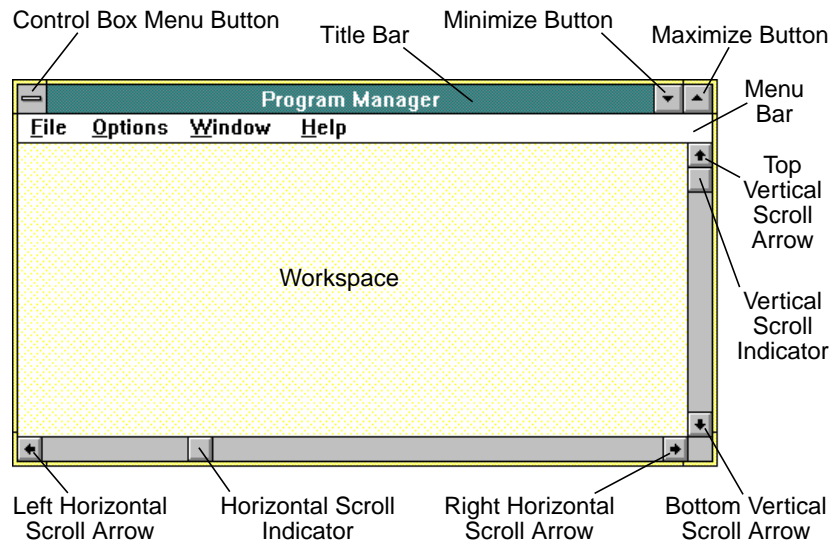


Figure 12. Win-OS/2 Window Components

Minimize, Restore, and Maximize Windows

The *Minimize* and *Maximize* buttons are at the right corner of the title bar. Use these buttons to change the size of a window from a full screen to a partial screen or an icon. This process is useful to compare the contents of one window to another, or to shrink a window to an icon.

The button with the down arrow is the *Minimize* button. Click the button to shrink a window to an icon. To restore a minimized icon, double-click the icon or click and hold until the *Control Box* menu appears, and then select the *Restore* option.

The button with the up arrow is the *Maximize* button. Click the button to enlarge a window to full screen. In full-screen mode, the *Maximize* button has an up and down arrow to switch between windowed and full-screen modes.

Moving and Resizing Windows

To move a window:

1. Place the mouse cursor on the window's title bar.
2. Click anywhere on the title bar, hold the left mouse button, and move (drag) the window to the desired position.
3. Release the mouse button.

To resize a window:

1. Click anywhere in a window with the left mouse button to make the window active.
2. Place the mouse cursor on a top, bottom, or side edge (to resize horizontally or vertically), or on a corner (to resize diagonally). The mouse pointer changes to a double arrow, indicating the direction of change.
3. Drag the edge or corner to the desired size.
4. Release the mouse button.

Closing a Window

To close a window:

- Double-click the *Control Box Menu* button,
or
- Single-click the *Control Box Menu* button and select either the *Exit* or *Close* option.

Exiting Windows also closes any open windows and applications.

Using Scroll Bars

Scroll bars allow you to view the contents of a window when the contents exceed the displayed area. Along the right side is the vertical scroll bar, and along the bottom is the horizontal scroll bar. To use the scroll bar:

- Place the cursor over a scroll bar arrow and click the left mouse button once to scroll one unit in the direction of the arrow.
- Place the cursor over the box in a scroll bar, click and hold the left mouse button, and drag the box through the scroll bar.
- To make large jumps, place the cursor anywhere in a scroll bar above or below the box and click the left mouse button.

Menu Bars

To perform a menu command in Windows, click the command on the menu bar with the left mouse button to display a pull-down menu. Menus can also be opened by pressing the **Alt** key and the underlined letter representing the menu option.

When a pull-down menu is open, click the left mouse button to perform the menu command selected. To cancel a selection, move the cursor off the menu selection and press the left mouse button, or press the **Esc** or **Alt** key.

Organizing Windows

When several windows are open, it may be hard to find information or icons. To rearrange the windows or open hidden icons, click the *Windows* option on the menu bar. From this menu:

- **Cascade** - This option stacks open windows one on top of the other with the title bars showing.
- **Tile** - This option places open windows into side-by-side tiles showing a portion of each window.
- **Arrange Icons** - This option arranges program icons in the selected window or minimized icons on the desktop.
- Numbered groups show all program groups and allow you to select them.

Dialog Boxes

Dialog boxes ([Figure 13](#)) are used to enter information or to acknowledge an action performed by an application. Information is typed in an edit field, selected by clicking items in a list box, or selected with an operation button, radio button, or check box.

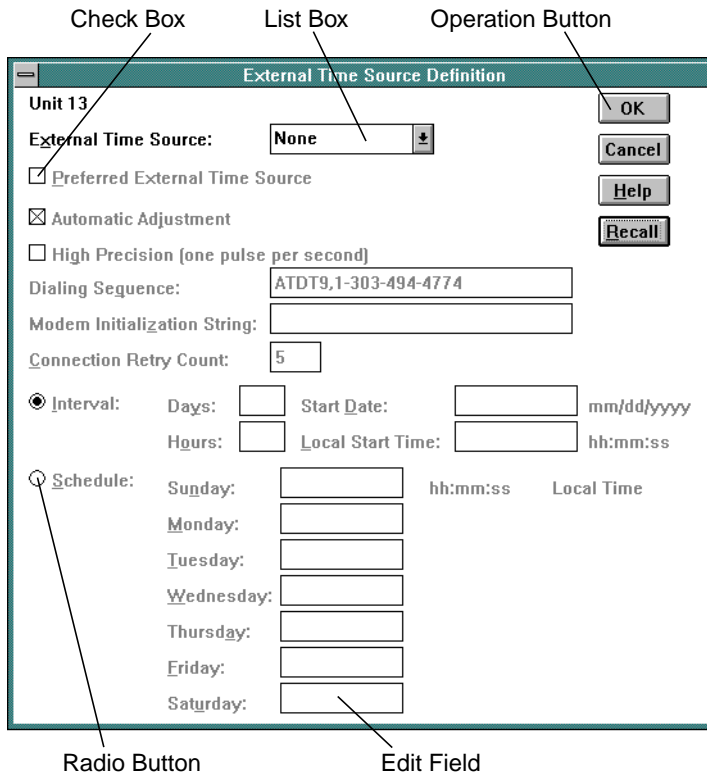


Figure 13. Dialog Box Components

Edit Field

Information such as passwords and network addresses is entered in an edit field. When an edit field is selected, the cursor appears at the beginning of the field. After entering information, press the **Tab** key to move the cursor out of the edit field.

Operation Button

Click an operation button to select or acknowledge an action. Most dialog boxes contain at least one operation button to exit or close the dialog box. If an operation button is light gray, the operation is inactive and cannot be selected.

List Box

A list box contains a list of selectable options. The list may be open (all options appear) or hidden. A hidden list box is identified by a down arrow adjacent to the list. A selection is made by clicking the down arrow and selecting the desired list option.

Radio Button

Click a radio button to enable or disable a selection. Radio buttons are used for selectable items (usually two or three) with clearly defined and mutually exclusive alternatives.

Minimizing and Restoring Application Windows

To minimize a window to a desktop icon, click the *Minimize* button. To restore a minimized application:

- Double-click the application icon.
- Simultaneously press the **Ctrl** and **Esc** keys to display the *Window List*, then double-click the application name.
- Simultaneously press the **Alt** and **Esc** keys to toggle through the minimized icons.
- Simultaneously press the **Alt** and **Tab** keys to display a box with the minimized application name. Release the **Alt** key to restore the application window.

Chapter 3. Hardware Management Console Support

The Hardware Management Console is a dedicated PC platform running the Hardware Management Console application (HWMCA). The Console is designed as an operations and management platform for System/390 (S/390) servers.

This chapter provides instructions to:

- Install the Enterprise Systems Connection (ESCON) Director Console or Sysplex Timer Console application on the Hardware Management Console.
- Start or close the Director or Sysplex Timer Console application.
- Back up critical Hardware Management Console data.
- Perform data collection, backup, restore, and other procedures accessed from the *ESCON Director* or *Sysplex Timer Tools* folders.
- Delete the Director or Sysplex Timer Console application from the Hardware Management Console.

Information that Does Not Apply

Information in the following sections of this publication does not apply to the Hardware Management Console:

- The "[Back Up the Console Fixed Disk to Tape](#)" procedures in Chapters 5 and 6.
- The "[Back Up the System Library to Tape](#)" procedures in Chapters 5 and 6.
- The "[Back Up the System Library to ROC](#)" procedure in Chapters 7 and 8.
- The "[Set or Change Default Printer](#)" procedures in Chapters 5, 6, 7 and 8.

Install the Director or Sysplex Timer Console Application

To install the Director Console or Sysplex Timer Console application (or both) on the Hardware Management Console, contact your IBM service representative and order the appropriate feature (Feature Number 5901 for the Director Console application or Feature Number 4910 for the Sysplex Timer Console application).

Before adding a feature to the base Hardware Management Console, read "Use of Other Applications and Features" in the *Hardware Management Console Guide* (GC38-0453).

Attention!

You cannot install the Director or Timer Console application on a Hardware Management Console that is already controlling the maximum number of Console sessions (16). The 16 Console sessions may include up to 16 Director sessions and up to two Timer network sessions.

Install the Director Console Application

To install the Director Console application on the Hardware Management Console, order *Install and Maintain the ESCON Director Console Application on the Hardware Management Console* (Feature #5901). This miscellaneous equipment specification (MES) instruction includes:

- Procedures to verify prerequisites are met.
- Bill of materials for installation.
- Installation details.
- Test procedures.
- Post-installation maintenance information.

Install the Timer Console Application

To install the Timer Console application on the Hardware Management Console, order *Install and Maintain the 9037 Model 2 Sysplex Timer Console Application on the Hardware Management Console* (Feature #4910). This MES instruction includes:

- Procedures to verify prerequisites are met.
- Bill of materials for installation.
- Installation details.
- Test procedures.
- Post-installation maintenance information.

Start and Shut Down the Director or Sysplex Timer Console Application

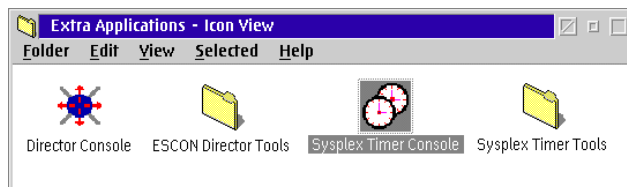
Before closing the HWMCA or powering off the Hardware Management Console, you must shut down the ESCON Director Console application or Sysplex Timer Console application (or both). Conversely, if you closed the HWMCA, you must restart the HWMCA before you restart either the ESCON Director or Sysplex Timer Console applications.

The following paragraphs describe how to start and shut down the Director Console application and the Sysplex Timer Console application.

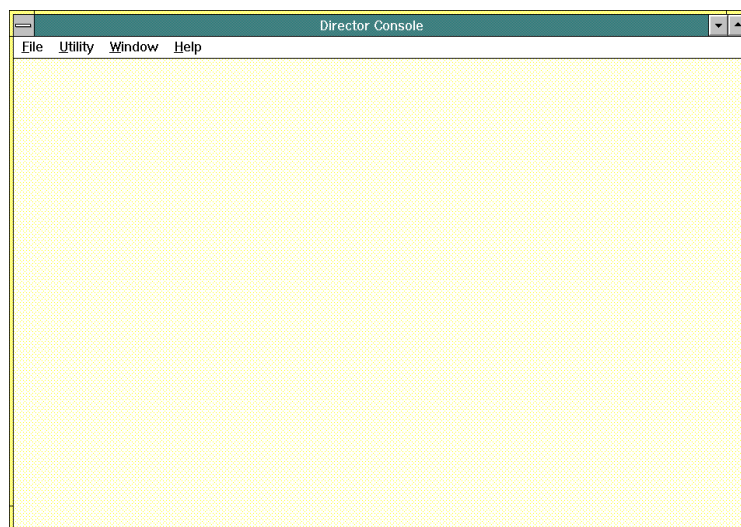
Start the Director Console Application

To start the Director Console application:

1. At the Hardware Management Console's Operating System/2 (OS/2) desktop, double-click the *Extra Applications* folder. The *Extra Applications - Icon View* appears.



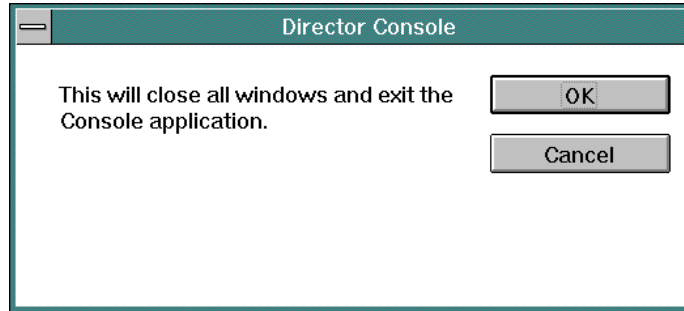
2. In the *Extra Applications - Icon View*, double-click the *Director Console* icon. The Director Console *Startup* window appears. It may take up to 30 seconds for the Console application to open.



Shut Down the Director Console Application

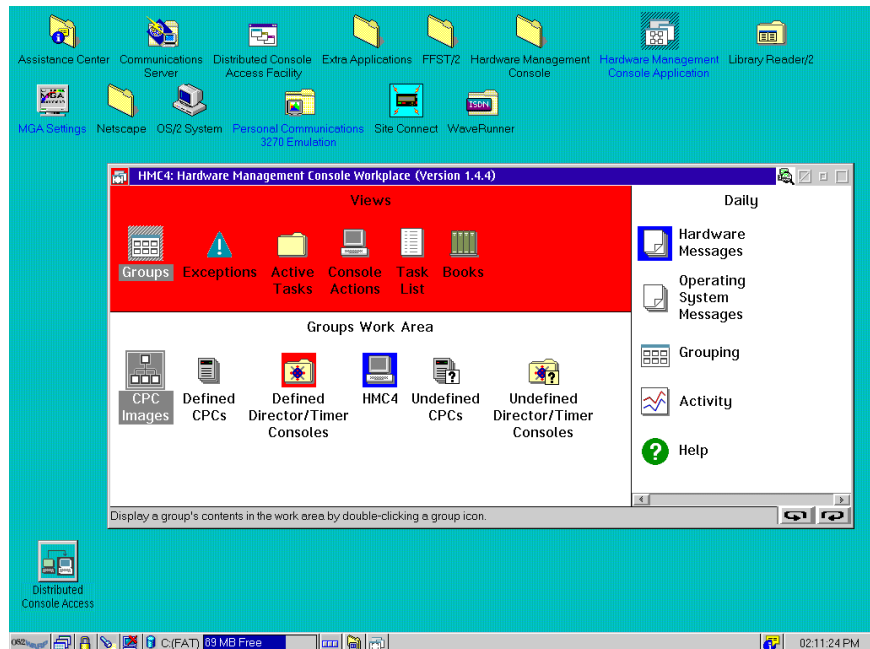
To close the Director Console application:

1. Select the *Exit* option from the *File* menu. The dialog box on the following page appears.



2. Click the *OK* button to close the dialog box. The *Extra Applications - Icon View* appears.
3. Double-click the upper left corner of the *Extra Applications - Icon View* to close the view and return to the OS/2 desktop.

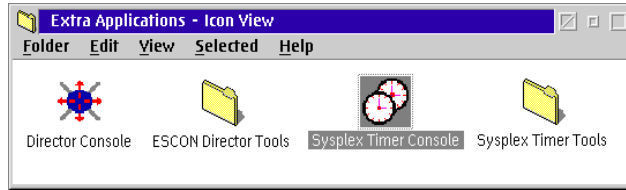
Note: The OS/2 desktop may look different, depending on the OS/2 version installed on the Hardware Management Console.



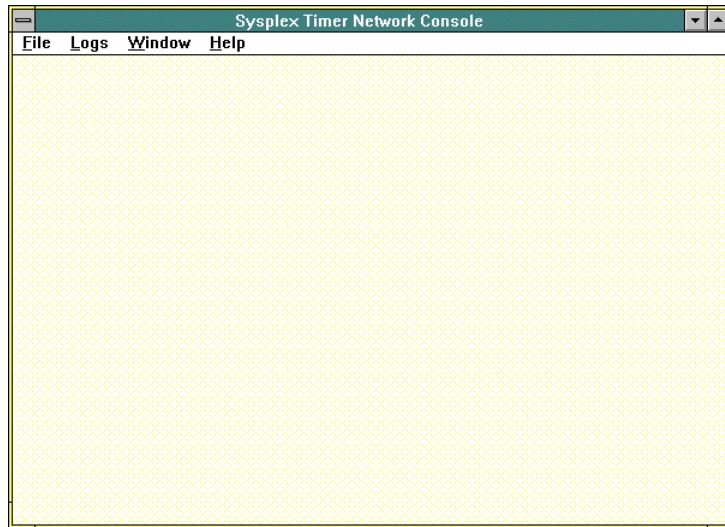
Start the Timer Console Application

To start the Sysplex Timer Console application:

1. At the Hardware Management Console's OS/2 desktop, double-click the *Extra Applications* folder. The *Extra Applications - Icon View* appears.



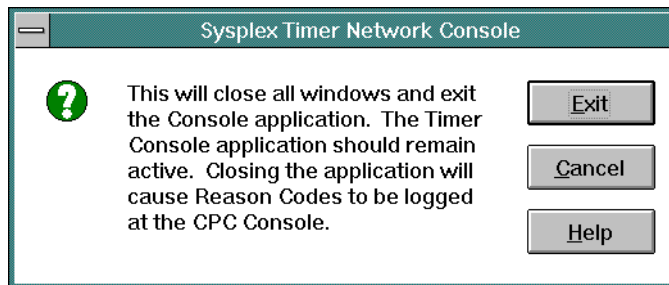
2. In the *Extra Applications - Icon View*, double-click the *Sysplex Timer Console* icon. The *Timer Console Startup* window displays.



Shut Down the Timer Console Application

To close the Sysplex Timer Console application:

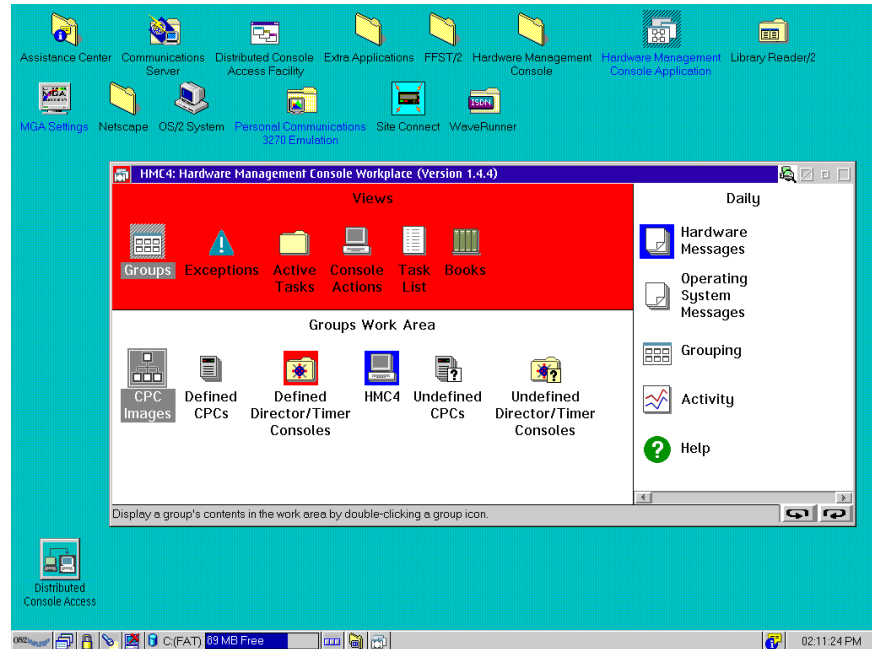
1. Select the *Exit* option from the *File* menu. The following dialog box appears.



2. Click the *Exit* button to close the dialog box. The *Extra Applications - Icon View* appears.

3. Double-click the upper left corner of the *Extra Applications - Icon View* to close the view and return to the OS/2 desktop.

Note: The OS/2 desktop may look different, depending on the OS/2 version installed on the Hardware Management Console.



4. If possible, leave the Timer Console application active and operational for the following reasons:
 - Certain Timer events and associated reason codes are transmitted only to the Event log maintained at the Timer Console. The events are not transmitted through attached processors to the System Control Program (SCP) Console. If the Console application is closed and a Timer network failure occurs, reason codes and other information required for fault isolation may not be recorded.
 - Closing the Console application causes an **ETR Service is Requested** message to be reported to the SCP Console with reason code **40** (communication lost with active Console) or reason code **41** (communication lost with standby Console). This may result in an unnecessary service call.

- Starting the Console application causes an **ETR Service is Requested** message to be reported to the SCP Console, with reason code **8** (communication established with active Console) or reason code **9** (communication established with standby Console). This may result in an unnecessary service call.

Back Up Critical Data

If required by the customer, follow procedures for backing up critical data in the “Backup Critical Data (Hardware Management Console and Support Element)” section of Chapter 4 of *S/390 9672 Parallel Enterprise Server S/390 9674 Coupling Facility; Installation Manual For R2 and R3 Based Models* (SY24-6152).

This procedure backs up critical data for the Hardware Management Console and associated mainframe support elements. The procedure *does not* back up system libraries for the Director Console or Sysplex Timer Console applications. To back up data for the Director or Timer Console applications, refer to procedures in Chapters 5, 6, 7, and 8 of this guide.

ESCON Director Tools Folder

The *ESCON Director Tools* folder (accessed from the *Extra Applications - Icon View*) contains program-executable icons that allow a user to:

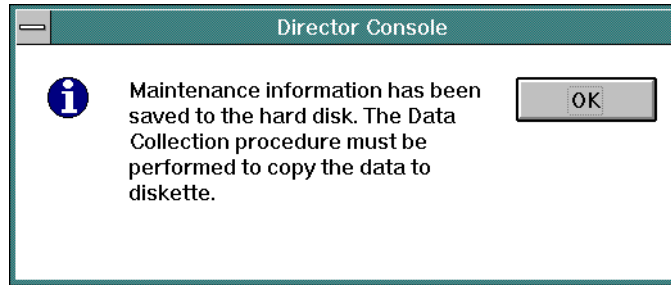
- Perform the data collection procedure after a system problem occurs or when a field-replaceable unit (FRU) is removed and replaced.
- Migrate Director Console definitions to the Hardware Management Console.
- Back up the Director Console library to a rewriteable optical cartridge (ROC).
- Restore the Director Console library from a ROC.

The following sections provide instructions to perform the administrative procedures listed above.

Data Collection Procedure (Director)

The data collection procedure transfers maintenance information to the Hardware Management Console's fixed disk, then to a 3.5-inch diskette. The diskette is mailed to the original equipment manufacturer (OEM) for problem analysis and resolution. Perform the data collection procedure after a Director problem occurs or when a FRU is removed and replaced.

1. With the Director's active matrix window open, select the *Collect Maintenance Information* option from the *Maintenance* menu. The *Collect Maintenance Information* dialog box appears showing files being transferred and the transfer status. When all files are transferred to the fixed disk, the following dialog box appears.

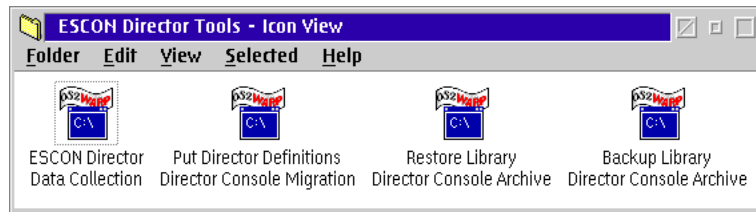


2. Click the *OK* button to close the dialog box. The Director's active matrix window reappears.
3. Record the Director name. The name (up to eight characters in length) appears on the title bar at the top of the active matrix window.
4. Simultaneously press the **Ctrl** and **Esc** keys to transfer to the Hardware Management Console's OS/2 desktop. The *Window List* appears.

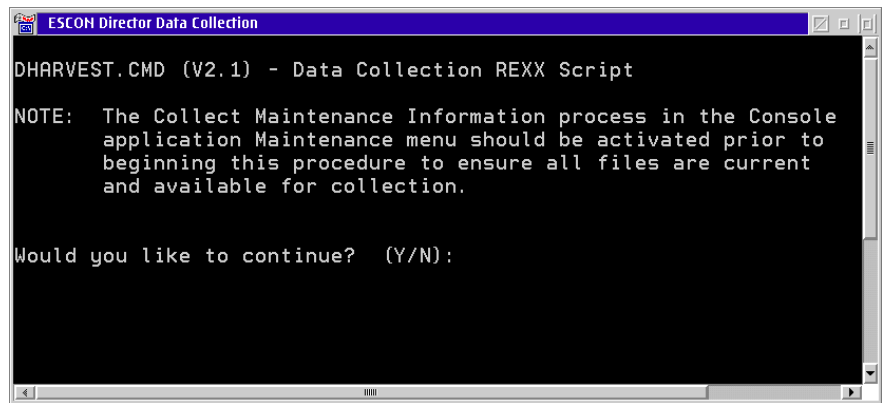


5. Double-click the *Desktop-Icon View* selection. The Hardware Management Console's OS/2 desktop appears.
6. If the *Extra Applications - Icon View* is not open, double-click the *Extra Applications* folder to open it.
7. Insert a data collection diskette into drive **A:** of the Hardware Management Console in accordance with one of the following steps:
 - If you are removing and replacing a FRU in the 9032 Model 3 ESCON Director, use the data collection diskette shipped with the replacement FRU. The diskette is labeled *Data Collection Diskette*.
 - If you are removing and replacing a FRU in the 9032 Model 5 ESCON Director or collecting data for another purpose (such as fault isolating problems), use a data collection diskette shipped with the Director. The diskette is labeled *Data Collection Utility Version XX.YY.ZZ*, where *XX.YY.ZZ* is the Licensed Internal Code (LIC) version number.
 - If a labeled data collection diskette is not available, a blank, DOS-formatted diskette may be used.

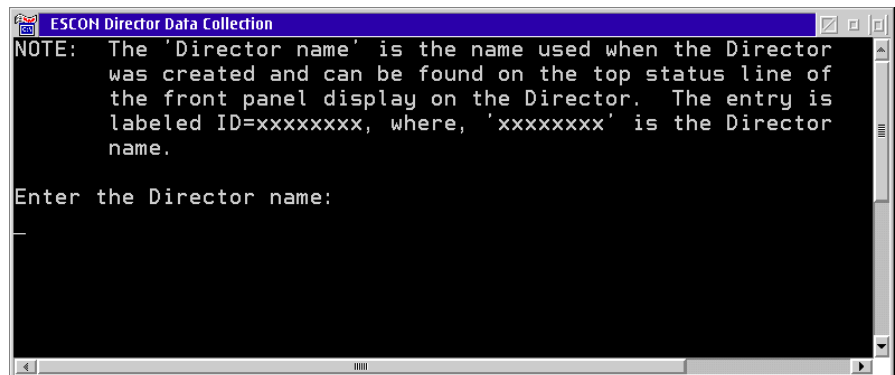
8. At the *Extra Applications - Icon View*, double-click the *ESCON Director Tools* folder. The *ESCON Director Tools - Icon View* appears.



9. Double-click the *ESCON Director Data Collection* icon. The first *ESCON Director Data Collection* window appears.



10. Type **Y** and press the **Enter** key. The second *ESCON Director Data Collection* window appears.



11. Type the Director name recorded in [step 3](#) and press the **Enter** key. Messages appear in the window showing files transferring from the fixed disk to diskette. The process is complete when the *Enter* prompt appears.

12. Press the **Enter** key. The *ESCON Director Data Collection* window closes.
13. Double-click the upper left corner of the *ESCON Director Tools - Icon View* to close the view and return to the OS/2 desktop.
14. Remove the data collection diskette from drive **A:** of the Hardware Management Console. Record the following information on the diskette label.
 - Director serial number.
 - Quality Service Activity Reporting (QSAR) number.
 - Problem Management - Hardware (PMH) number.
 - Current date.
15. Insert the data collection diskette in the pre-addressed envelope provided and mail the envelope to the OEM.

Migrate Director Definitions

If the Director Console application is discontinued at a Console (Director or Hardware Management) and installed on a new Console (Director or Hardware Management), Director definitions must be recorded on a 3.5-inch diskette and migrated to the new Console. Director definitions include Internet Protocol (IP) addresses, Director names, model numbers, and matrix configuration files.

If the Console application is discontinued at the Hardware Management Console and installed on a Director Console, a definitions diskette must be created at the Hardware Management Console. Refer to "[Create Director Definitions Diskette](#)" below for instructions.

If the Console application is discontinued at the Director Console and installed on a Hardware Management Console, Director definitions must be migrated. For instructions, refer to "[Migrate Definitions to the Hardware Management Console](#)" on page 44.

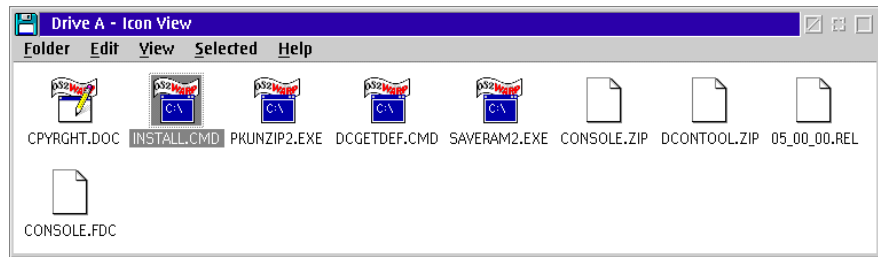
Create Director Definitions Diskette

Perform this procedure to create a Director definitions diskette at the Hardware Management Console.

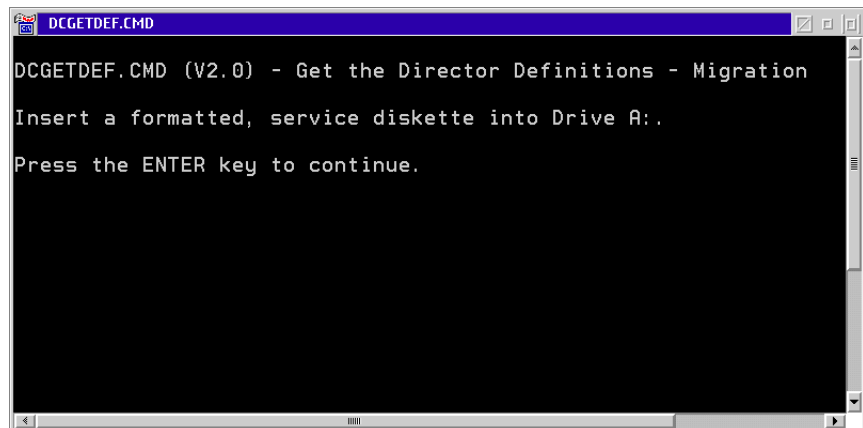
1. If the Director Console application is closed and the Hardware Management Console's OS/2 desktop appears, go to [step 4](#).
2. If the Director Console application is open, simultaneously press the **Ctrl** and **Esc** keys to transfer to the Hardware Management Console's OS/2 desktop. The *Window List* appears.



3. Double-click the *Desktop-Icon View* selection. The Hardware Management Console's OS/2 desktop appears.
4. Insert the Console application diskette (labeled *Console Version XX.YY.ZZ*) into drive **A:** of the Hardware Management Console.
5. Double-click the *OS/2 System* icon. The *OS/2 System - Icon View* appears.
6. Double-click the *Drives* icon. The *Drives - Icon View* appears.
7. Double-click the *Drive A* icon. The *Drive A - Icon View* appears.



8. Double-click the *DCGETDEF.CMD* icon. The *DCGETDEF.CMD* window appears.



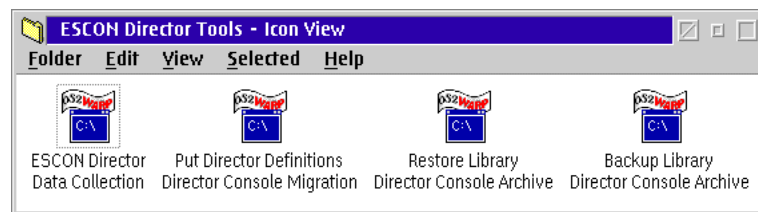
9. Remove the Console application diskette from drive **A:** of the Hardware Management Console and insert a blank, DOS-formatted diskette (provided with the Director).
10. Press the **Enter** key. Director definitions are copied to the diskette, and the copy progress appears in the *DCGETDEF.CMD* window. When the process is complete, the *DCGETDEF.CMD* window closes.
11. Double-click the upper left corner of the *Drive A - Icon View*, *Drives - Icon View*, and *OS/2 System - Icon View* to close the views and return to the OS/2 desktop.
12. Remove the Director definitions diskette from drive **A:** of the Hardware Management Console.
13. Label and store the Director definitions diskette as appropriate. The diskette can now be used to transport definitions to a new Console.

Migrate Definitions to the Hardware Management Console

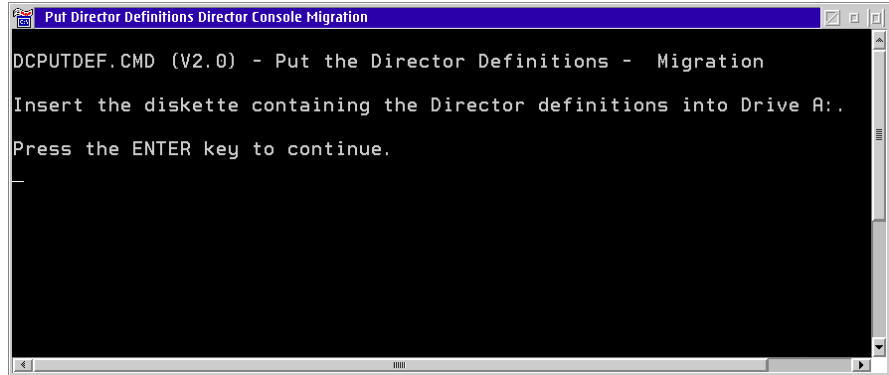
Perform this procedure to migrate Director definitions from a Director Console to the Hardware Management Console.

Note: This procedure does not work if the Director Console application is open or if the Director Console library already contains definitions.

1. If required, close the Director Console application. Refer to "[Shut Down the Director Console Application](#)" on page 35 for instructions.
2. Double-click the *Extra Applications* folder to open the *Extra Applications - Icon View*.
3. At the *Extra Applications - Icon View*, double-click the *ESCON Director Tools* folder. The *ESCON Director Tools - Icon View* appears.



4. Double-click the *Put Director Definitions Director Console Migration* icon. The *Put Director Definitions Director Console Migration* window appears.



Note: If a warning appears indicating migration was terminated because Director definitions exist in the Console library, press the **Enter** key to close the *Put Director Definitions Director Console Migration* window and exit the utility.

If a warning appears indicating migration was terminated because the Console library was not initialized, press the **Enter** key to close the *Put Director Definitions Director Console Migration* window and exit the migration utility. Open and close the Director Console application, then perform this procedure again.

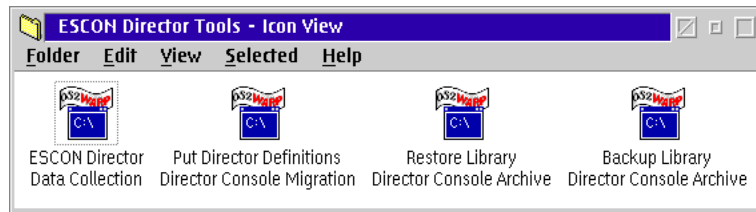
5. Insert the Director definitions diskette (created at the Console from which the definitions are migrated) into drive **A:** of the Hardware Management Console.
6. Press the **Enter** key. Director definitions are copied to the Hardware Management Console's fixed disk to be used to initialize the Director Console library. When the process is complete, the *Put Director Definitions Director Console Migration* window closes.
7. Double-click the upper left corner of the *ESCON Director Tools - Icon View* to close the view and return to the OS/2 desktop.
8. Remove the Director definitions diskette from drive **A:** of the Hardware Management Console. Store the Director definitions diskette as appropriate.
9. At the *Extra Applications - Icon View*, double-click the *Director Console* icon to restart the Console application.

Back Up the Director System Library

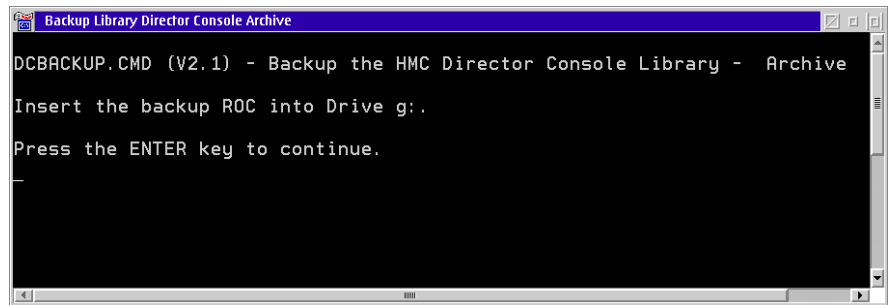
Before updating the Hardware Management Console code, configuration files associated with the Director must be saved on a backup ROC. Perform the following procedure to back up the Director configuration files.

1. If required, close the Director Console application. For instructions, refer to "[Shut Down the Director Console Application](#)" on page 35.

2. Double-click the *Extra Applications* folder to open the *Extra Applications - Icon View*.
3. At the *Extra Applications - Icon View*, double-click the *ESCON Director Tools* folder. The *ESCON Director Tools - Icon View* appears.



4. Double-click the *Backup Library Director Console Archive* icon. The *Backup Library Director Console Archive* window appears.



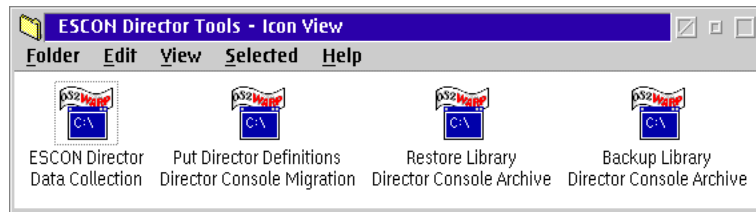
5. Insert a backup ROC into the optical drive and press the **Enter** key. When the backup operation completes, the *Backup Library Director Console Archive* window closes.
6. Double-click the upper left corner of the *ESCON Director Tools - Icon View* to close the view and return to the OS/2 desktop.
7. Remove the backup ROC from the optical drive. Label and store the backup ROC as appropriate.

Restore the Director System Library

After updating the Hardware Management Console code, configuration files associated with the Director must be restored from the backup ROC. Perform the following procedure to restore the Director configuration files.

1. If required, close the Director Console application. For instructions, refer to ["Shut Down the Director Console Application"](#) on page 35.
2. Double-click the *Extra Applications* folder to open the *Extra Applications - Icon View*.

3. At the *Extra Applications - Icon View*, double-click the *ESCON Director Tools* folder. The *ESCON Director Tools - Icon View* appears.



4. Double-click the *Restore Library Director Console Archive* icon. The *Restore Library Director Console Archive* window appears.



5. Insert the ROC that was used to back up the Director files into the optical drive and press the **Enter** key. When the restore operation completes, the *Restore Library Director Console Archive* window closes.
6. Double-click the upper left corner of the *ESCON Director Tools - Icon View* to close the view and return to the OS/2 desktop.
7. Remove the backup ROC from the optical drive. Replace the backup ROC in its original storage location.

Sysplex Timer Tools Folder

The *Sysplex Timer Tools* folder (accessed from the *Extra Applications - Icon View*) contains program-executable icons that allow a user to:

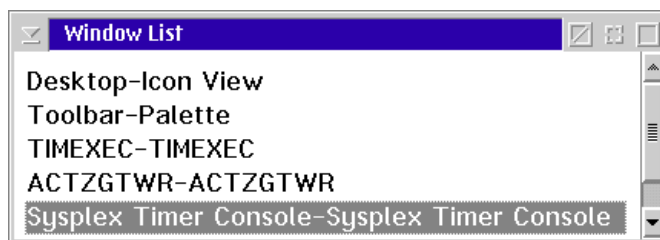
- Perform the data collection procedure after a system problem occurs or when a FRU is removed and replaced.
- Back up the Sysplex Timer Console library to a ROC.
- Restore the Sysplex Timer Console library from a ROC.

The following sections provide instructions to perform the administrative procedures listed on the preceding page.

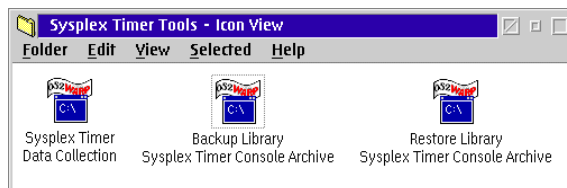
Data Collection Procedure (Sysplex Timer)

The data collection procedure transfers maintenance information to a 3.5-inch diskette. The diskette is mailed to the OEM for problem analysis and resolution. Perform the data collection procedure after a Sysplex Timer problem occurs or when a FRU is removed and replaced.

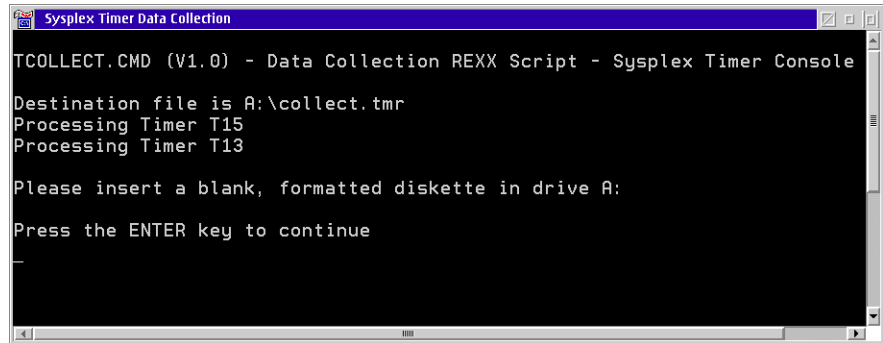
1. At the *Sysplex Timer Network Console* window, simultaneously press the **Ctrl** and **Esc** keys to transfer to the Hardware Management Console's OS/2 desktop. The *Window List* appears.



2. Double-click the *Desktop-Icon View* selection. The Hardware Management Console's OS/2 desktop appears.
3. If the *Extra Applications - Icon View* is not open, double-click the *Extra Applications* folder to open it.
4. At the *Extra Applications - Icon View*, double-click the *Sysplex Timer Tools* folder. The *Sysplex Timer Tools - Icon View* appears.



5. Double-click the *Sysplex Timer Data Collection* icon. The *Sysplex Timer Data Collection* window appears.



6. Insert a data collection diskette into drive **A:** of the Hardware Management Console. The diskette is labeled *Data Collection Diskette*.

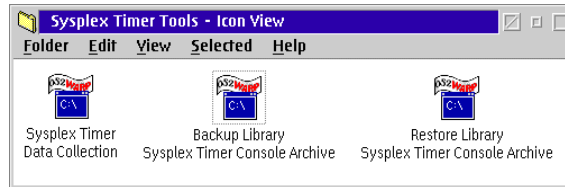
Note: If a labeled data collection diskette is not available, a blank, DOS-formatted diskette may be used.
7. Press the **Enter** key. Messages appear in the window showing files transferring from fixed disk to diskette. The data collection process is complete when the *Enter* prompt appears.
8. Press the **Enter** key. The *Sysplex Timer Data Collection* window closes.
9. Double-click the upper left corner of the *Sysplex Timer Tools - Icon View* to close the view and return to the OS/2 desktop.
10. Remove the data collection diskette from drive **A:** of the Hardware Management Console. Record the following information on the diskette label.
 - Timer serial number.
 - QSAR number.
 - PMH number.
 - Current date.
11. Insert the data collection diskette in the pre-addressed envelope provided and mail the envelope to the OEM.

Back Up the Sysplex Timer System Library

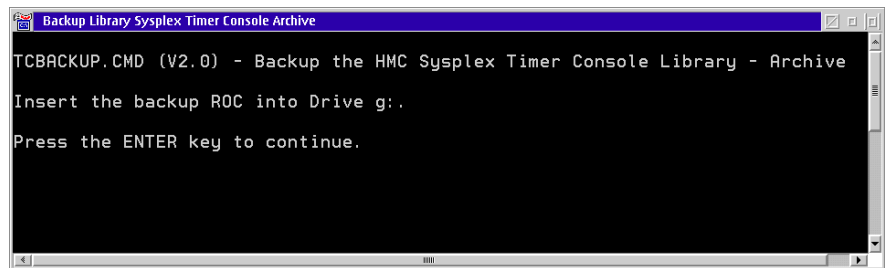
Before updating the Hardware Management Console code, configuration files associated with the Sysplex Timer must be saved on a backup ROC. Perform the following procedure to back up the Sysplex Timer configuration files.

1. If required, close the Timer Console application. For instructions, refer to "[Shut Down the Director Console Application](#)" on page 35.

2. Double-click the *Extra Applications* folder to open the *Extra Applications - Icon View*.
3. At the *Extra Applications - Icon View*, double-click the *Sysplex Timer Tools* folder. The *Sysplex Timer Tools - Icon View* appears.



4. Double-click the *Backup Library Sysplex Timer Console Archive* icon. The *Backup Library Sysplex Timer Console Archive* window appears.

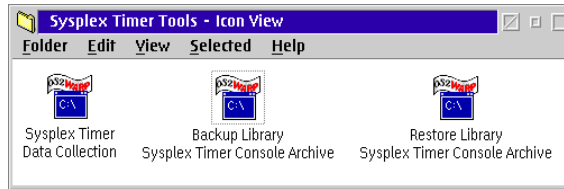


5. Insert a backup ROC into the optical drive and press the **Enter** key. When the backup operation completes, the *Backup Library Sysplex Timer Console Archive* window closes.
6. Double-click the upper left corner of the *Sysplex Timer Tools - Icon View* to close the view and return to the OS/2 desktop.
7. Remove the backup ROC from the optical drive. Label and store the backup ROC as appropriate.

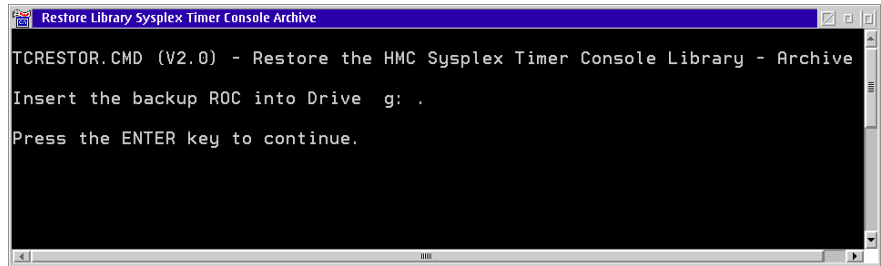
Restore the Sysplex Timer System Library

After updating the Hardware Management Console code, configuration files associated with the Sysplex Timer must be restored from the backup ROC. Perform the following procedure to restore the Timer configuration files.

1. If required, close the Timer Console application. Refer to "[Shut Down the Timer Console Application](#)" on page 37 for instructions.
2. Double-click the *Extra Applications* folder to open the *Extra Applications - Icon View*.
3. At the *Extra Applications - Icon View*, double-click the *Sysplex Timer Tools* folder. The *Sysplex Timer Tools - Icon View* appears.



4. Double-click the *Restore Library Sysplex Timer Console Archive* icon. The *Restore Library Sysplex Timer Console Archive* window appears.



5. Insert the ROC that was used to back up the Timer configuration files into the optical drive and press the **Enter** key. When the restore operation completes, the *Restore Library Sysplex Timer Console Archive* window closes.
6. Double-click the upper left corner of the *Sysplex Timer Tools - Icon View* to close the view and return to the OS/2 desktop.
7. Remove the backup ROC from the optical drive. Replace the backup ROC in its original storage location.

Uninstall the Director or Sysplex Timer Console Application

To discontinue operations and delete the Director Console or Sysplex Timer Console application (or both) from the Hardware Management Console, perform the procedures described in the following paragraphs.

Uninstall the Director Console Application

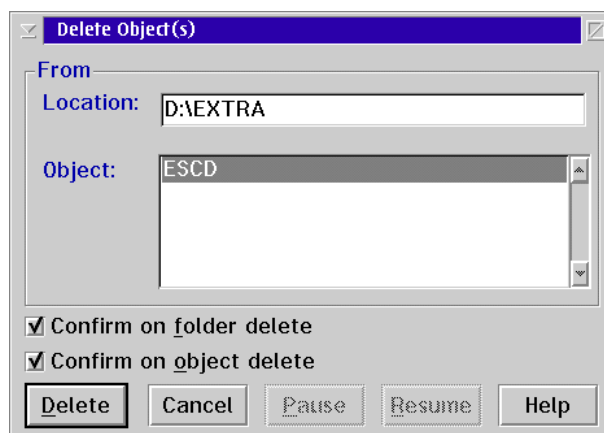
If the Director Console application is to be uninstalled from the Hardware Management Console, perform the following procedures:

- Delete the Console application from the Hardware Management Console's fixed disk
- Delete the *Director Console* icon and *ESCON Director Tools* folder from the *Extra Applications* folder
- If there are no other application icons (such as the Sysplex Timer Console application) in the *Extra Applications* folder, delete the folder.

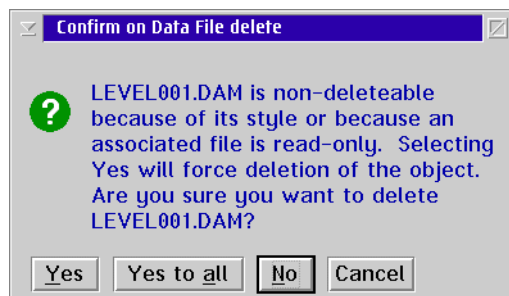
Delete Console Application

Perform the following procedure to delete the Director Console application from the Hardware Management Console's fixed disk.

1. If required, close the Director Console application. For instructions, refer to "[Shut Down the Director Console Application](#)" on page 35.
2. At the Hardware Management Console's OS/2 desktop, double-click the *OS/2 System* icon. The *OS/2 System - Icon View* appears.
3. Double-click the *Drives* icon. The *Drives - Icon View* appears.
4. Double-click the *Drive D* icon. The *Drive D - Tree View* appears.
5. Double-click the *EXTRA* folder. The *EXTRA - Icon View* appears.
6. Single-click (highlight) the *ESCD* folder, then select the *Delete* option from the *Edit* menu. The *Delete Object(s)* dialog box appears with *ESCD* displayed in the *Object* list box.



7. Click (uncheck) the *Confirm on folder delete* and *Confirm on object delete* check boxes, then click the *Delete* button. The *Confirm on Data File delete* dialog box appears.

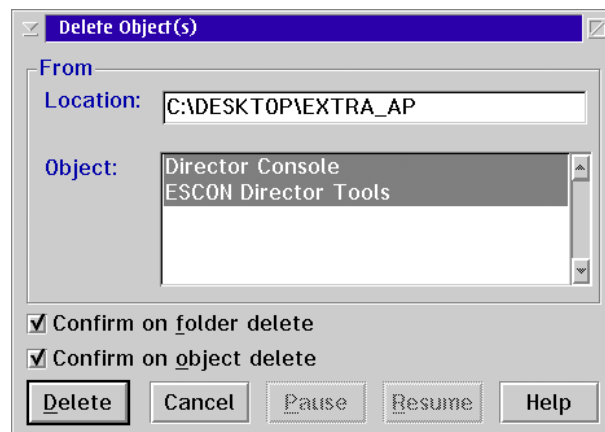


8. Click the *Yes to all* button. The Director Console application is deleted from the Hardware Management Console's fixed disk.
9. Double-click the upper left corner of the *EXTRA - Icon View*, *Drive D - Tree View*, *Drives - Icon View*, and *OS/2 System - Icon View* to close all views and return to the OS/2 desktop.

Delete Director Console Icons

Perform the following procedure to delete the *Director Console* icon and *ESCON Director Tools* folder from the *Extra Applications* folder.

1. At the Hardware Management Console's OS/2 desktop, double-click the *Extra Applications* folder to open the *Extra Applications - Icon View*.
2. At the *Extra Applications - Icon View*, select the *Director Console* icon and the *ESCON Director Tools* folder (click and hold the left mouse button, and drag the cursor over both icons).
3. Select the *Delete* option from the *Edit* menu. The *Delete Object(s)* dialog box appears with *Director Console* and *ESCON Director Tools* displayed in the *Object* list box.

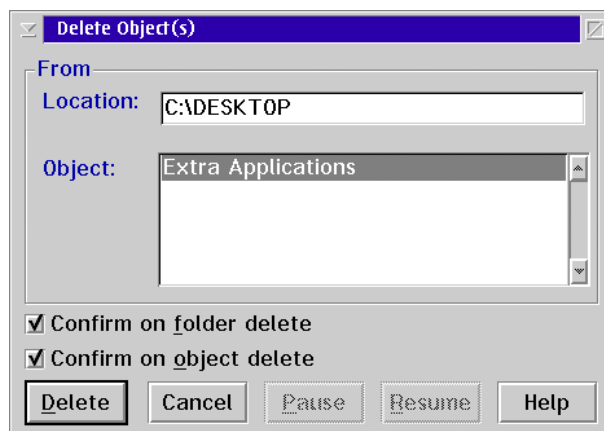


4. Click (uncheck) the *Confirm on folder delete* and *Confirm on object delete* check boxes, then click the *Delete* button. The Director Console icons are deleted from the *Extra Applications* folder.
5. Double-click the upper left corner of the *Extra Applications - Icon View* to close the view and return to the OS/2 desktop.

Delete Extra Applications Folder (Optional)

Perform the following procedure to delete the *Extra Applications* folder.

1. At the Hardware Management Console's OS/2 desktop, double-click the *Extra Applications* folder to open the *Extra Applications - Icon View*.
2. Select the *Delete* option from the *Folder* menu. The *Delete Object(s)* dialog box appears with *Extra Applications* displayed in the *Object* list box.



3. Click (uncheck) the *Confirm on folder delete* and *Confirm on object delete* check boxes, then click the *Delete* button. The *Extra Applications* folder is deleted from the OS/2 desktop.

Uninstall the Timer Console Application

If the Timer Console application is to be uninstalled from the Hardware Management Console, perform the following procedures:

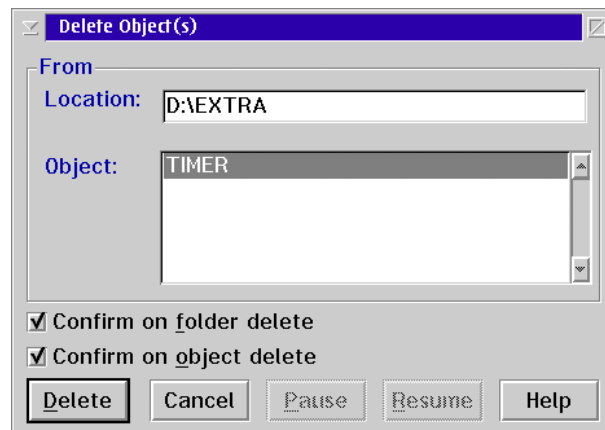
- Delete the Console application from the Hardware Management Console's fixed disk.
- Delete the *Sysplex Timer Console* icon and *Sysplex Timer Tools* folder from the *Extra Applications* folder.
- If there are no other application icons (such as the Director Console application) in the *Extra Applications* folder, delete the folder.

Delete Console Application

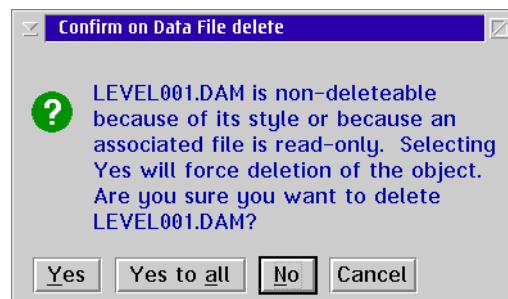
Perform the following procedure to delete the Sysplex Timer Console application from the Hardware Management Console's fixed disk.

1. If required, close the Timer Console application. For instructions, refer to "[Shut Down the Timer Console Application](#)" on page 37.

2. At the Hardware Management Console's OS/2 desktop, double-click the *OS/2 System* icon. The *OS/2 System - Icon View* appears.
3. Double-click the *Drives* icon. The *Drives - Icon View* appears.
4. Double-click the *Drive D* icon. The *Drive D - Tree View* appears.
5. Double-click the *EXTRA* folder. The *EXTRA - Icon View* appears.
6. Single-click (highlight) the *TIMER* folder, then select the *Delete* option from the *Edit* menu. The *Delete Object(s)* dialog box appears with *TIMER* displayed in the *Object* list box.



7. Click (uncheck) the *Confirm on folder delete* and *Confirm on object delete* check boxes, then click the *Delete* button. The *Confirm on Data File delete* dialog box appears.

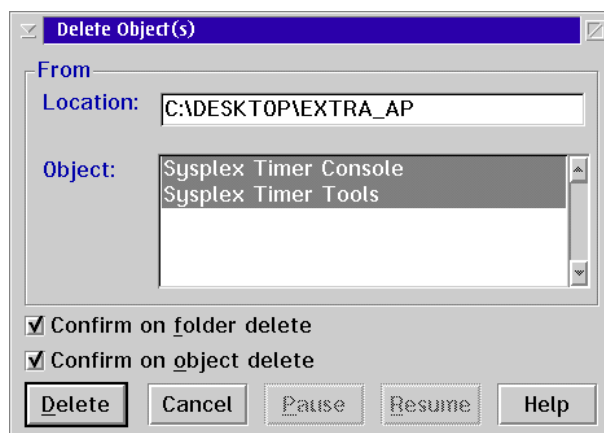


8. Click the *Yes to all* button. The Timer Console application is deleted from the Hardware Management Console's fixed disk.
9. Double-click the upper left corner of the *EXTRA - Icon View*, *Drive D - Tree View*, *Drives - Icon View*, and *OS/2 System - Icon View* to close the views and return to the OS/2 desktop.

Delete Timer Console Icons

Perform the following procedure to delete the *Sysplex Timer Console* icon and *Sysplex Timer Tools* folder from the *Extra Applications* folder.

1. At the Hardware Management Console's OS/2 desktop, double-click the *Extra Applications* folder to open the *Extra Applications - Icon View*.
2. At the *Extra Applications - Icon View*, select the *Sysplex Timer Console* icon and the *Sysplex Timer Tools* folder (click and hold the left mouse button, and drag the cursor over both icons).
3. Select the *Delete* option from the *Edit* menu. The *Delete Object(s)* dialog box appears with *Sysplex Timer Console* and *Sysplex Timer Tools* displayed in the *Object* list box.

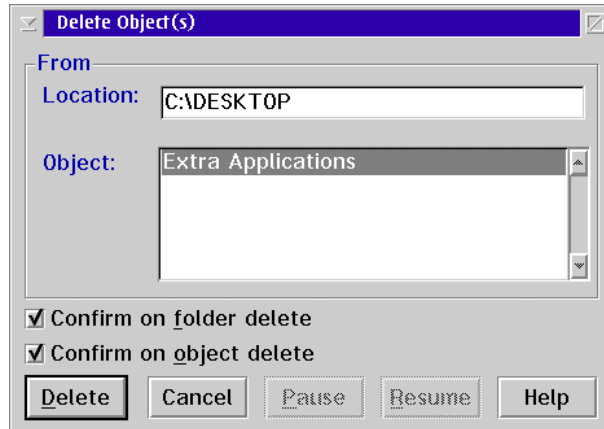


4. Click (uncheck) the *Confirm on folder delete* and *Confirm on object delete* check boxes, then click the *Delete* button. The Timer Console icons are deleted from the *Extra Applications* folder.
5. Double-click the upper left corner of the *Extra Applications - Icon View* to close the view and return to the OS/2 desktop.

Delete Extra Applications Folder (Optional)

Perform the following procedure to delete the *Extra Applications* folder.

1. At the Hardware Management Console's OS/2 desktop, double-click the *Extra Applications* folder to open the *Extra Applications - Icon View*.
2. Select the *Delete* option from the *Folder* menu. The *Delete Object(s)* dialog box appears with *Extra Applications* displayed in the *Object* list box.



3. Click (uncheck) the *Confirm on folder delete* and *Confirm on object delete* check boxes, then click the *Delete* button. The *Extra Applications* folder is deleted from the OS/2 desktop.

Chapter 4. Remote Access Console Support

This chapter describes the procedures to enable and use a remote access Console. With a remote Console, an operator assumes functional control of a local Console running the Enterprise Systems Connection (ESCON) Director Console application or Sysplex Timer Console application.

The *remote access* Console refers to the PC platform installed physically distant from the Director or Sysplex Timer Console. The remote access Console is also called the *controller* Console. The remote Console can be a 9032-003, 9033-004, or 9032-005 ESCON Director Console, a 9037-002 Sysplex Timer Console, or a Hardware Management Console.

The *local* Console refers to the PC platform locally running the Director or Sysplex Timer Console application. The local Console is also called the *target* Console. The local Console can be:

- A Director Console (including either a backup or replacement Console). The Sysplex Timer application can also be installed on this Console.
- A Sysplex Timer Console (active or standby). The Director application can also be installed on this Console.
- A System/390 (S/390) Hardware Management Console running the Director or Timer Console application (or both).

The remote Console communicates with the local console over a bridged or routed local area network (LAN), using a customized version of Distributed Console Access Facility (DCAF) software and Transmission Control Protocol/Internet Protocol (TCP/IP) software.

To enable and use a remote access Console, an operator activates the DCAF software at both the remote and local Consoles, and starts the Director or Sysplex Timer Console application on the local Console.

Note: The customized version of DCAF is supported only for the Director Console or Sysplex Timer Console applications.

LAN Configurations

This section illustrates Director and Sysplex Timer configurations that connect a remote Console (controller) to a local Console (target) through a Token Ring LAN connection and TCP/IP software. A customized version of DCAF communication software is installed and resident on the fixed disk of the 9032-003, 9033-004, 9032-005, 9037-002, and Hardware Management Consoles.

Note: The remote Console can be installed on a separate LAN connected to the local LAN (containing Directors or Timers) through a bridge or router.

The following figures show the local Console as a:

- Dedicated Director Console.
- Dedicated Sysplex Timer Console.
- Hardware Management Console running the Director and Timer Console applications.

Figure 14 shows a remote Console attached to a dedicated Director Console through a remote LAN and TCP/IP connection. The Console controls Directors (Models 9032-003, 9033-004, and 9032-005) through a DCAF session with the Director Console application. The session can control up to 16 Directors.

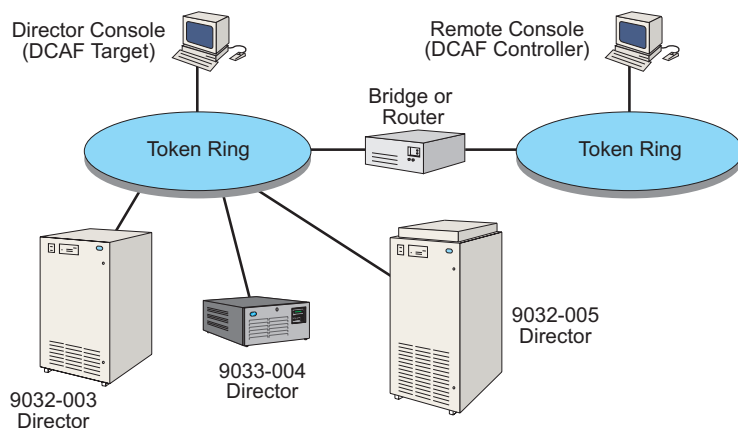


Figure 14. Remote Console LAN Connection to ESCON Director Console

Figure 15 shows a remote Console attached to a dedicated Timer Console through a remote LAN and TCP/IP connection. The Console controls both Sysplex Timers in an Expanded Availability (EA) network through a DCAF session with the Timer Console application. The session can control up to two Sysplex Timer networks.

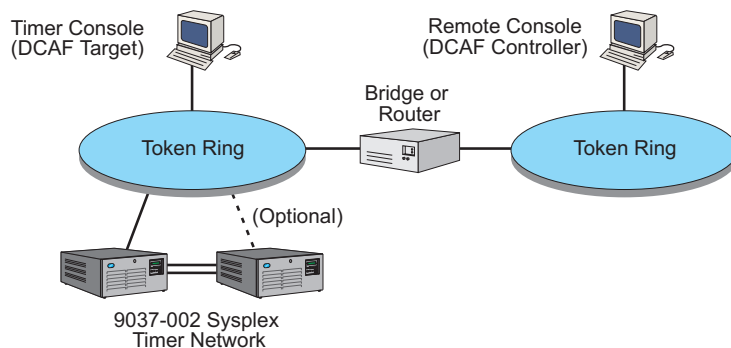


Figure 15. Remote Console LAN Connection to Sysplex Timer Console

Figure 16 shows a remote access Console attached to a Hardware Management Console through a remote LAN and TCP/IP connection. The remote Console controls Directors (Models 9032-003, 9033-004, and 9032-005) and an EA Sysplex Timer network through a DCAF session with the Director and Timer Console applications. Both Console applications reside on the Hardware Management Console fixed disk. The session can control up to 16 Directors and two Sysplex Timer networks.

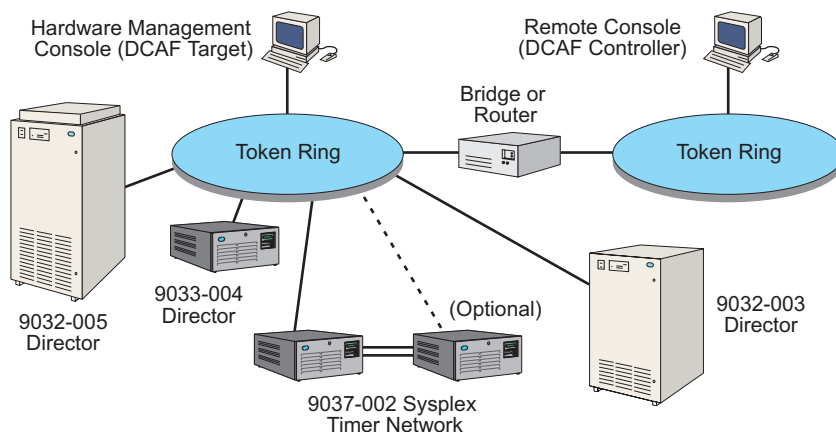


Figure 16. Remote Console LAN Connection to Hardware Management Console

Configure and Use a Console for Remote Access by TCP/IP

This section describes the steps to configure and use a remote Console that communicates with a local Console through a Token Ring LAN (bridged or routed) and TCP/IP connection. The remote Console controls the Director Console application or Timer Console application (or both) through a DCAF session.

Ensure the remote Console is correctly installed on the same Token Ring LAN with the local Console, or on a separate LAN connected to the local Console's LAN through a bridge (not a router). If required, install the remote Console. Refer to Chapter 6 in one of the following publications for installation instructions.

- *Maintenance Information for the 9032 Model 3 Enterprise Systems Connection Director* (SY27-3601).
- *Maintenance Information for the 9033 Model 4 Enterprise Systems Connection Director* (SY27-2638).
- *Maintenance Information for the 9032 Model 5 Director* (SY28-1158).
- *Maintenance Information for the 9037 Model 2 Sysplex Timer* (SY27-2641).

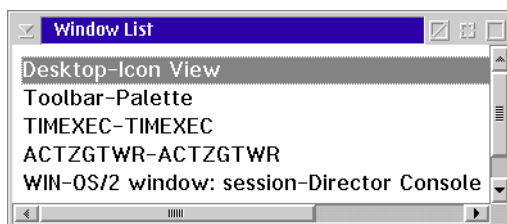
Local Console Configuration

Perform the following steps to configure the local (target) Console for remote access through a LAN and TCP/IP connection.

1. Perform the “[Set Win-OS/2 Window Session Parameters \(Director\)](#)” procedure on page 69 and return to this step.
2. Perform one of the following steps to transfer to the Operating System/2 (OS/2) desktop.

Note: The OS/2 desktop may look different, depending on the OS/2 version installed on the Console.

- If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



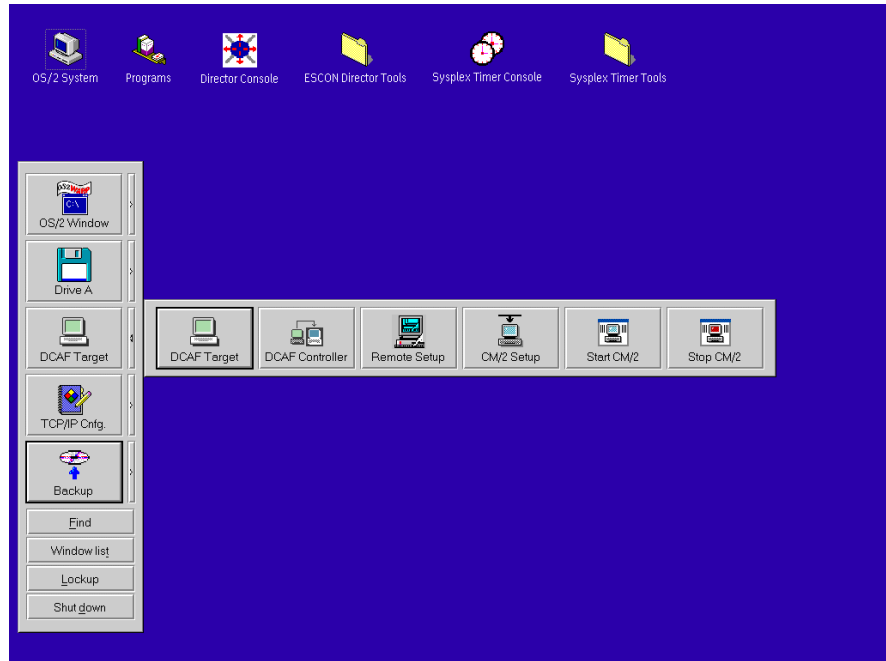
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.



Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

3. Open the *DCAF Target* drawer by clicking the drawer arrow on the launch pad.



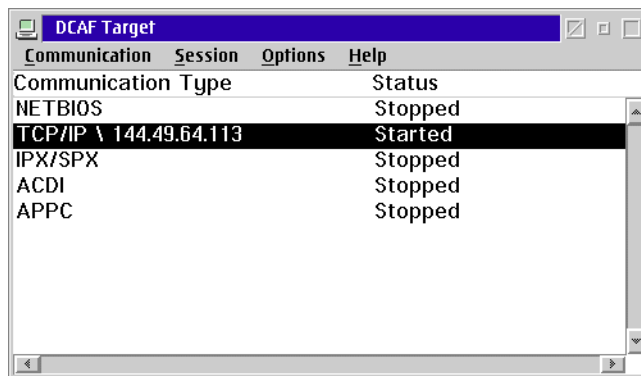
4. Click the *Remote Setup* button. The *Remote Setup* window appears.



5. Type the Internet Protocol (IP) address of the remote Console and press the **Enter** key. The OS/2 desktop reappears.

Note: Ensure the IP address of the remote Console is different from the IP address of the local Console.

6. Click the *DCAF Target* button. The DCAF Target window appears.
7. Double-click the *TCP/IP* entry. The IP address of the local (target) Console appears and *Started* appears in the right column.

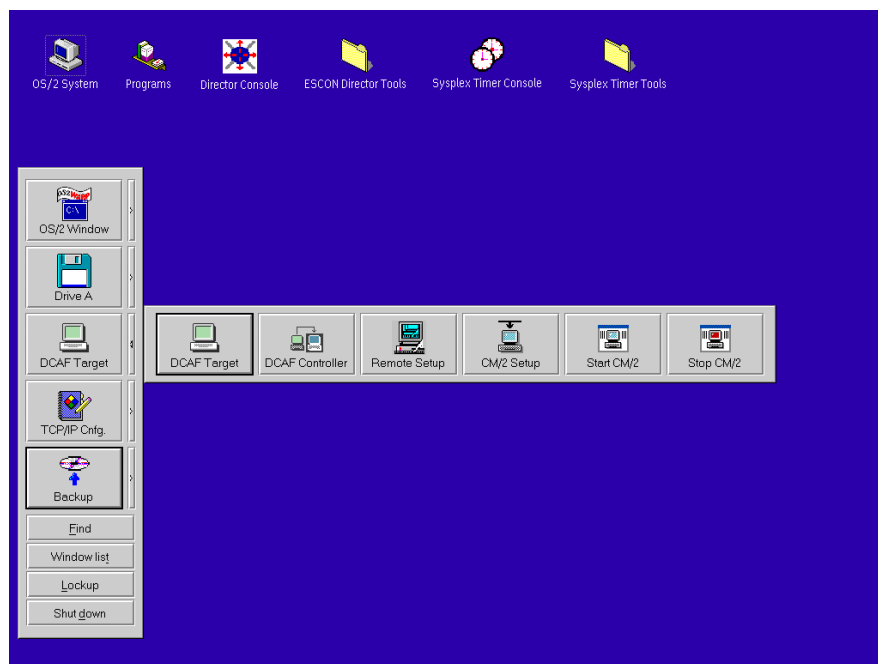


8. Double-click the minimize button at the upper right corner of the *DCAF Target* window to minimize it.

Remote Console Configuration and Session Start

Perform the following steps to configure the remote (controller) Console and start a DCAF session with the local (target) through a LAN and TCP/IP connection.

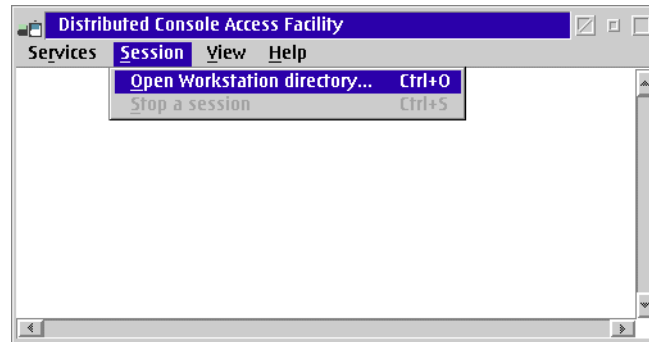
1. At the OS/2 desktop of the remote Console, open the *DCAF Target* drawer by clicking the drawer arrow on the launch pad.



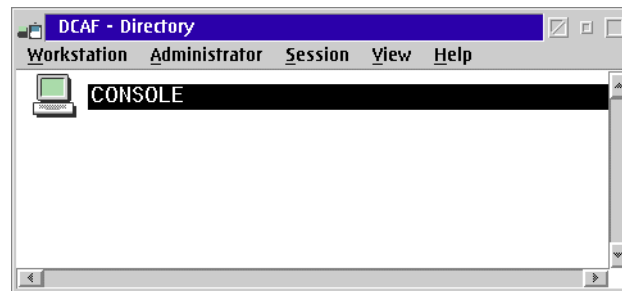
Note: When using a Hardware Management Console at application level 1.4.4 as the controller, refer to the *Hardware Management Console Guide* (GC38-0453) to define the Director or Timer Console.

Note: The OS/2 desktop may look different, depending on the OS/2 version installed on the Console.

2. Click the *DCAF Controller* button. A screen with the IBM logo appears briefly, then the *Distributed Console Access Facility* window appears.

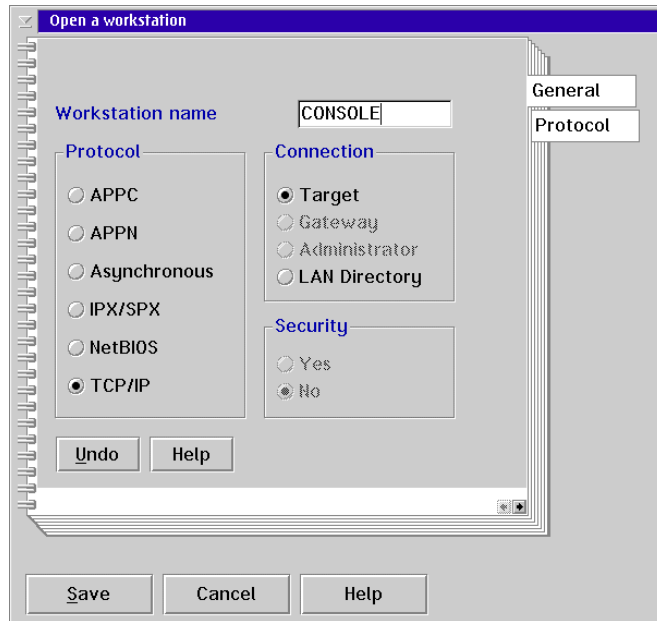


3. Select the *Open Workstation Directory* option from the *Session* menu. The *DCAF - Directory* window appears, displaying an icon for the Console.

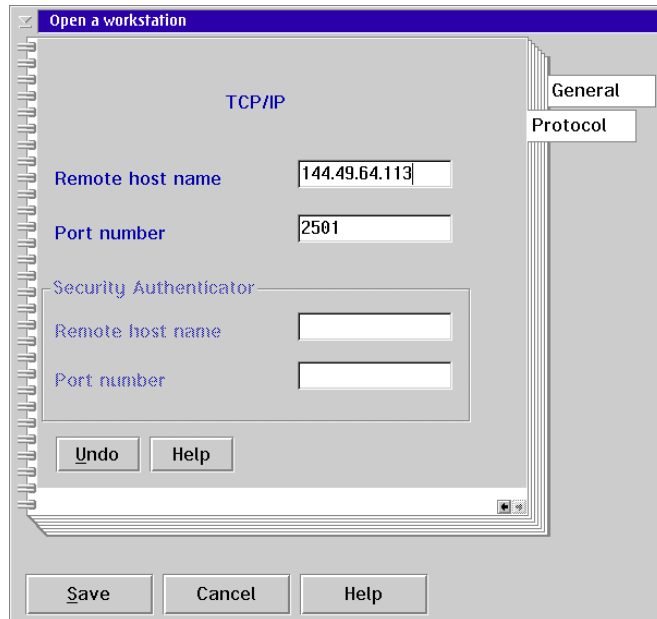


Note: If the *Distributed Console Access Facility* message box appears, click the *OK* button to clear the message.

4. Select the *Open* option from the *Workstation* menu. The *Open a workstation* notebook appears, displaying the *General* page.

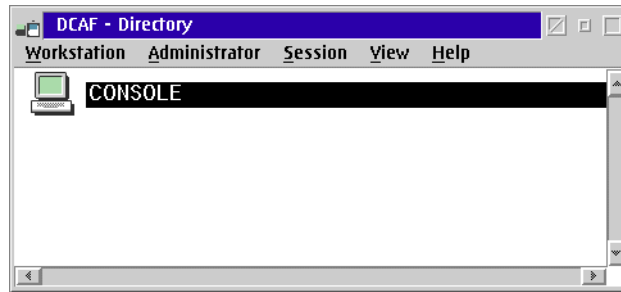


5. Click the *Protocol* tab to open the *TCP/IP* page.

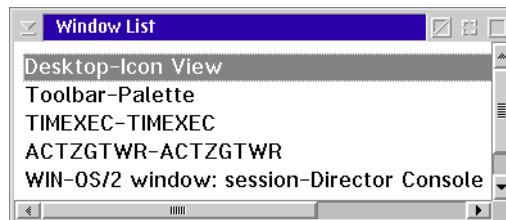


6. Click in the *Remote host name* field and type the IP address of the local (target) Console.

7. Click the *Save* button. A dialog box appears asking if you want to save changes. Click the *Yes* button.
8. Double-click the upper left corner to close the notebook. The *DCAF - Directory* window reappears.



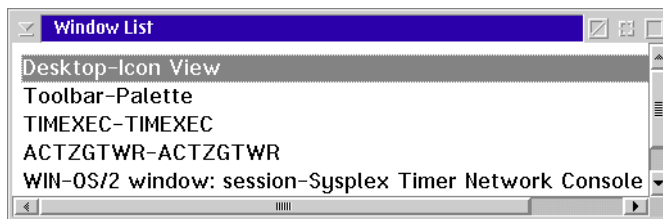
9. Double-click the *Console* icon. The desktop of the local (target) Console appears in the *Distributed Console Access Facility* window.
10. Perform one (or both, if required) of the following steps to access the Director Console or Timer Console application:
 - At the *Distributed Console Access Facility* window, access the Timer Console application by selecting the *Ctrl - Esc* option from the *Keystrokes* menu. The *Window List* appears.



Double-click the *WIN-OS/2 window: session-Director Console* entry. The Director Console's *Startup* window appears in the *Distributed Console Access Facility* window.

Note: If a *WIN-OS/2 window: session-Director Console* entry does not display in the *Window List*, click the *Console* icon at the top of the target Console's OS/2 desktop in the *Distributed Console Access Facility* window. The Director Console's *Startup* window appears.

- At the *Distributed Console Access Facility* window, access the Timer Console application by selecting the *Ctrl - Esc* option from the *Keystrokes* menu. The *Window List* appears.



Double-click the *WIN-OS/2 window: session-Sysplex Timer Network Console* entry. The Timer Console's *Startup* window appears in the *Distributed Console Access Facility* window.

Note: If a *WIN-OS/2 window: session-Sysplex Timer Network Console* entry does not display in the *Window List*, click the *Console* icon at the top of the target Console's OS/2 desktop in the *Distributed Console Access Facility* window. The Timer Console's *Startup* window appears.

Terminate a Session with the Local Console

Perform the following steps to terminate a DCAF session (LAN and TCP/IP connection) with the local Console.

1. At the *Distributed Console Access Facility* window of the remote Console, select the *Terminate a Session* option from the *Session* pull-down menu.
2. At the local Console, return to the full-screen Win-OS/2 configuration for using the Director Console or Timer Console application. For instructions, refer to "[Set Win-OS/2 Full Screen Session Parameters \(Director\)](#)" on page 71.

Console Application Session Parameters for Remote Access Console

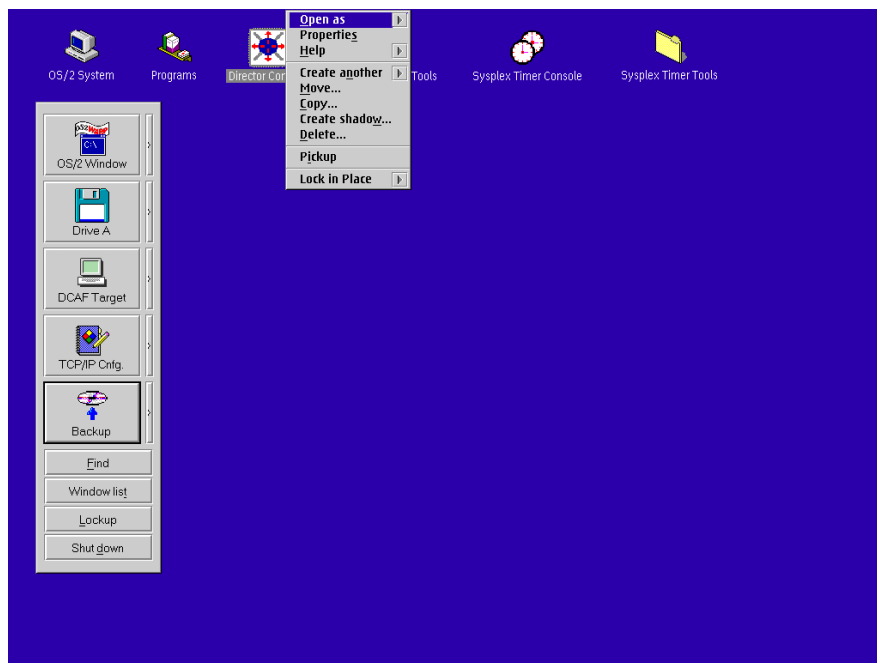
Perform the following procedures to:

- Set Win-OS/2 window session parameters for the local (target) Console to allow it to operate as the target of a Console application DCAF session. Perform this procedure when configuring the local Console for a DCAF session.
- Reset Win-OS/2 full screen session parameters for the local (target) Console. Perform this procedure after terminating Console application DCAF session.

Set Win-OS/2 Window Session Parameters (Director)

The Director Console application is normally configured as a full-screen application, but must be configured as a windowed application to run as a DCAF target. Perform the following procedure to configure the Console to operate in a Win-OS/2 window and allow the local (target) Console to operate during a DCAF session.

1. At the local Console, shut down the Console application. For instructions, refer to [“Director Console Application”](#) on page 24.
2. At the OS/2 desktop, click the *Director Console* icon once with the left mouse button and once with the right mouse button to display the *Console Application* menu.

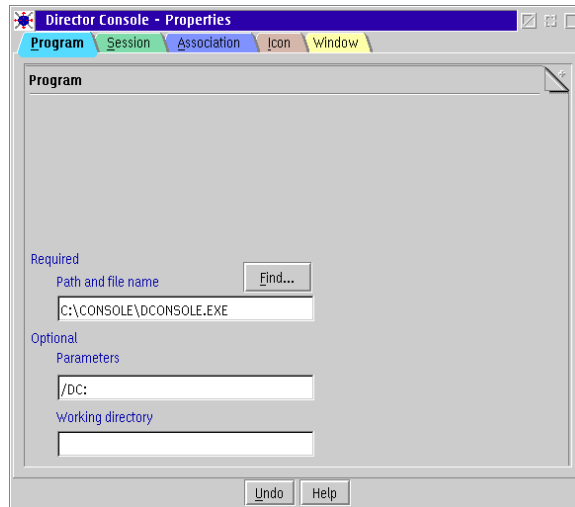


Note: Clicking both mouse buttons ensures the correct application menu is displayed.

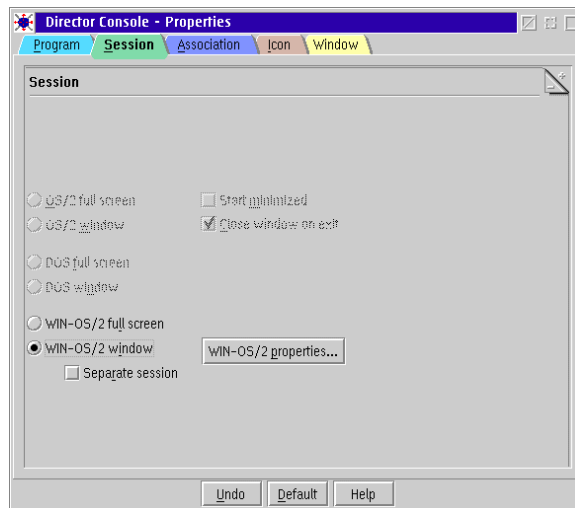
Note: The OS/2 desktop may look different, depending on the OS/2 version installed on the Console.

3. Click the *Properties* option. The *Director Console - Properties* dialog box appears with the *Program* page open.

Note: For older versions of OS/2, click the *Settings* option from the *Console Application* menu. The *Settings* and *Properties* options are equivalent in function.



4. Click the *Session* tab to display the *Session* page.



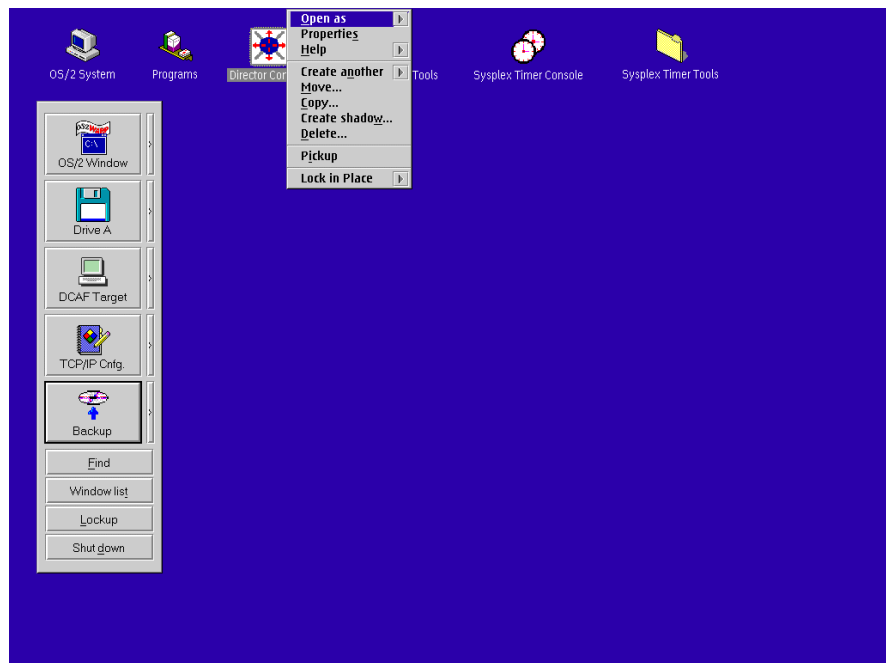
5. Click the *WIN-OS/2 window* radio button.

6. Double-click the upper left corner of the *Director Console - Properties* dialog box to close it.
7. Double-click the *Director Console* icon on the OS/2 desktop to start the Console application. The *Startup* window appears when the Console application is running.

Set Win-OS/2 Full Screen Session Parameters (Director)

The default configuration for the Director Console application is Win-OS/2 full screen mode. When the remote access Console feature is disabled on the local (target) Console, reconfigure the Director Console application for Win-OS/2 full screen mode.

1. At the local Console, shut down the Console application. For instructions, refer to [“Director Console Application”](#) on page 24.
2. At the OS/2 desktop, click the *Director Console* icon once with the left mouse button and once with the right mouse button to display the *Console Application* menu.

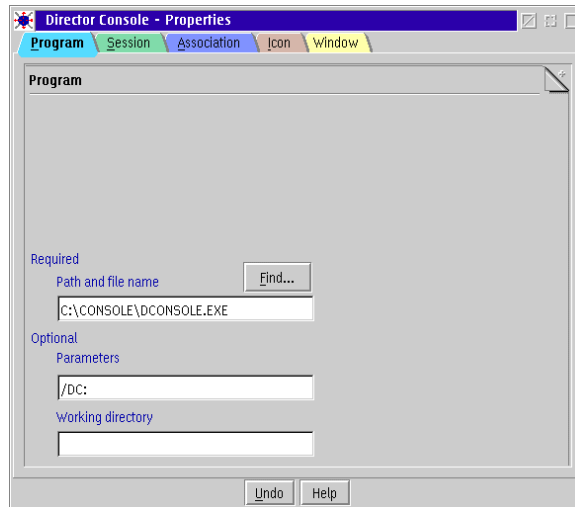


Note: Clicking both mouse buttons ensures the correct application menu is displayed.

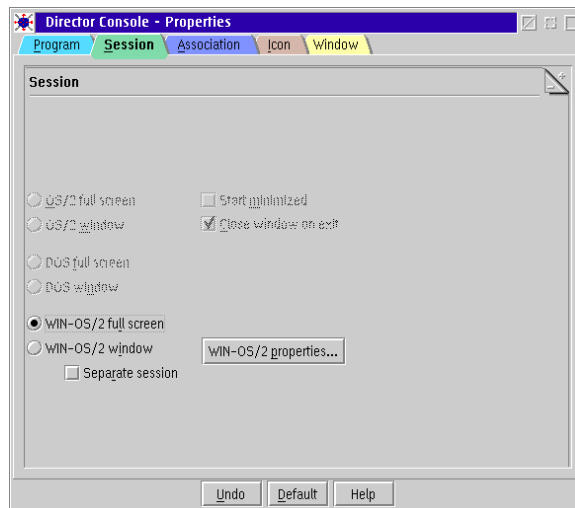
Note: The OS/2 desktop may look different, depending on the OS/2 version installed on the Console.

3. Click the *Properties* option. The *Director Console - Properties* dialog box appears with the *Program* page open.

Note: For older versions of OS/2, click the *Settings* option from the *Console Application* menu. The *Settings* and *Properties* options are equivalent in function.



4. Click the *Session* tab to display the *Session* page.



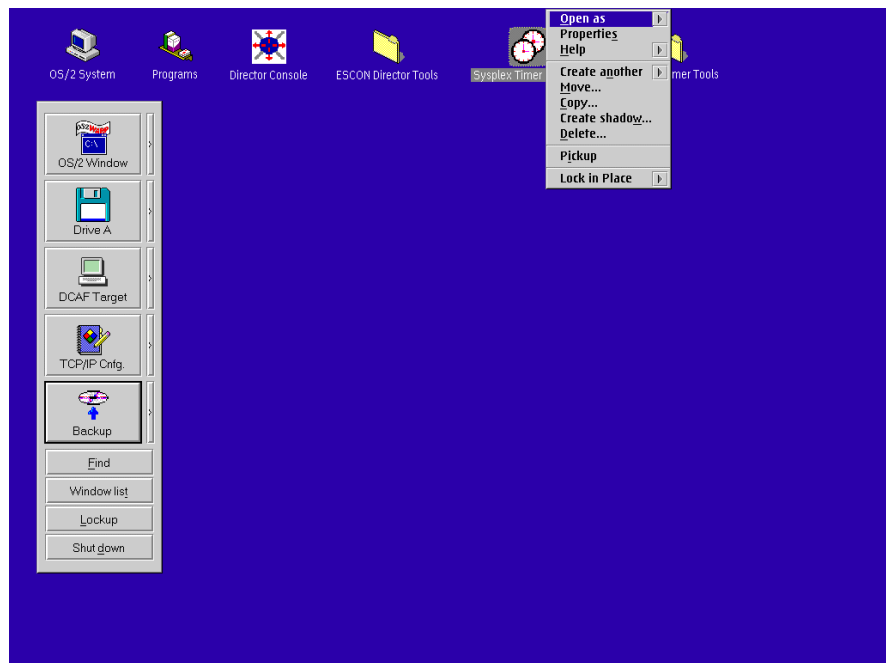
5. Click the *WIN-OS/2 full screen* radio button.

6. Double-click the upper left corner of the *Director Console - Properties* dialog box to close it.
7. Double-click the *Director Console* icon on the OS/2 desktop to start the Console application. The *Startup* window appears when the Console application is running.

Set Win-OS/2 Window Session Parameters (Sysplex Timer)

The Timer Console application is normally configured as a full screen application, but must be configured as a windowed application to run as a DCAF target. Perform the following procedure to configure the Console to operate in a Win-OS/2 window and allow the local (target) Console to operate during a DCAF session.

1. At the local Console, shut down the Console application. For instructions, refer to [“Sysplex Timer Console Application”](#) on page 25.
2. At the OS/2 desktop, click the *Sysplex Timer Console* icon once with the left mouse button and once with the right mouse button to display the *Console Application* menu.

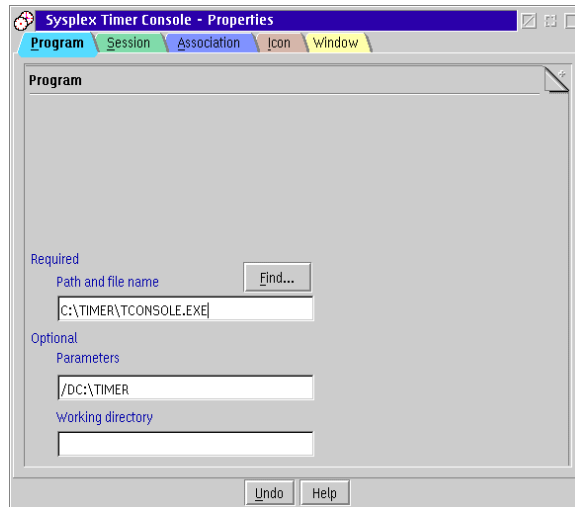


Note: Clicking both mouse buttons ensures the correct application menu is displayed.

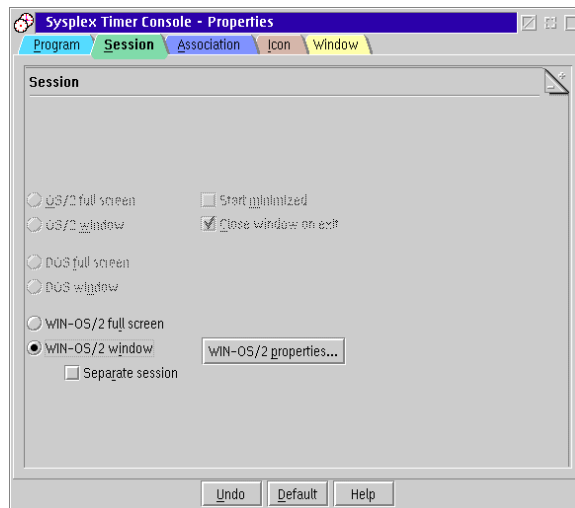
Note: The OS/2 desktop may look different, depending on the OS/2 version installed on the Console.

3. Click the *Properties* option. The *Sysplex Timer Console - Properties* dialog box appears with the *Program* page open.

Note: For older versions of OS/2, click the *Settings* option from the *Console Application* menu. The *Settings* and *Properties* options are equivalent in function.



4. Click the *Session* tab to display the *Session* page.



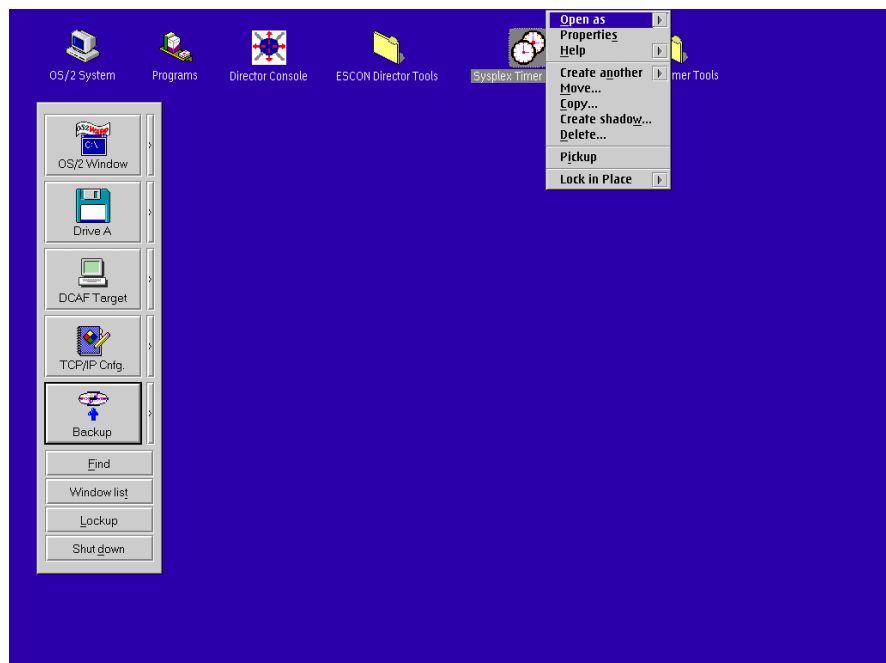
5. Click the *WIN-OS/2 window* radio button.

6. Double-click the upper left corner of the *Sysplex Timer Console - Properties* dialog box to close it.
7. Double-click the *Sysplex Timer Console* icon on the OS/2 desktop to start the Console application. The *Startup* window appears when the Console application is running.

Set Win-OS/2 Full Screen Session Parameters (Sysplex Timer)

The default configuration for the Timer Console application is Win-OS/2 full screen mode. When the remote access Console feature is disabled on the local (target) Console, reconfigure the Timer Console application for Win-OS/2 full screen mode.

1. At the local Console, shut down the Console application. For instructions, refer to [“Sysplex Timer Console Application”](#) on page 25.
2. At the OS/2 desktop, click the *Sysplex Timer Console* icon once with the left mouse button and once with the right mouse button to display the *Console Application* menu.

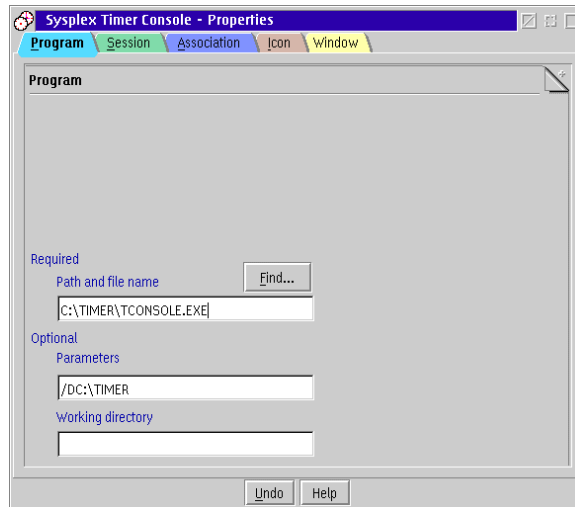


Note: Clicking both mouse buttons ensures the correct application menu is displayed.

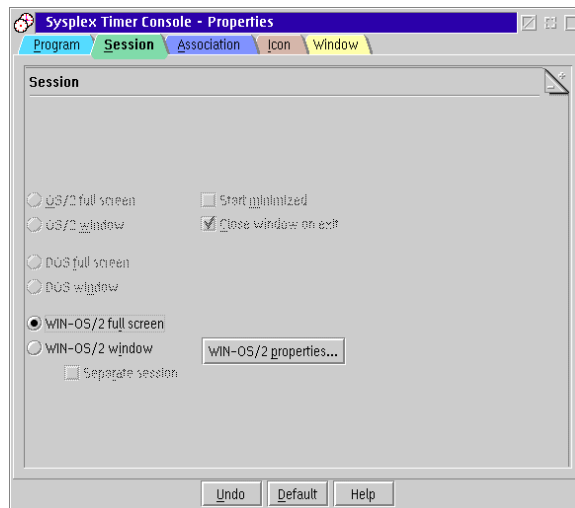
Note: The OS/2 desktop may look different, depending on the OS/2 version installed on the Console.

3. Click the *Properties* option. The *Sysplex Timer Console - Properties* dialog box appears with the *Program* page open.

Note: For older versions of OS/2, click the *Settings* option from the *Console Application* menu. The *Settings* and *Properties* options are equivalent in function.



4. Click the *Session* tab to display the *Session* page.



5. Click the *WIN-OS/2 full screen* radio button.

6. Double-click the upper left corner of the *Sysplex Timer Console - Properties* dialog box to close it.
7. Double-click the *Sysplex Timer Console* icon on the OS/2 desktop to start the Console application. The *Startup* window appears when the Console application is running.

Chapter 5. PS/2 Console Procedures

This chapter describes Operating System/2 (OS/2) Warp Connect 3.0 procedures for an IBM Personal System/2 (PS/2) computer used as an Enterprise Systems Connection (ESCON) Director Console or as a Director Console with the Sysplex Timer Console application installed. The procedures are Director and Timer-specific and include:

- Performing general administrative tasks.
- Performing backup and restore functions.
- Customizing the Console operating environment.

General Administrative Tasks

This section describes general administrative tasks for the ESCON Director Console or Sysplex Timer Console. The section provides instructions to:

- Perform the data collection procedure for the Director or Sysplex Timer.
- Clear the address resolution protocol (ARP) table for the local area network (LAN) on which a Director or Timer is installed.
- Migrate a Director database to another Console (excluding a Hardware Management Console).
- Change the Token Ring adapter data rate for the Console PC.
- Create Console diagnostic diskettes.

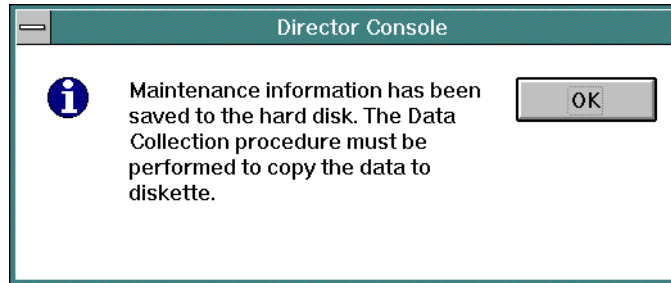
Perform Data Collection Procedure

Perform the data collection procedure for the Director or Sysplex Timer after a system problem occurs or when a field-replaceable unit (FRU) is removed and replaced.

Director Data Collection

The data collection procedure transfers maintenance information to the Director Console's fixed disk, then to a 3.5-inch diskette. The diskette is mailed to the original equipment manufacturer (OEM) for problem analysis and resolution.

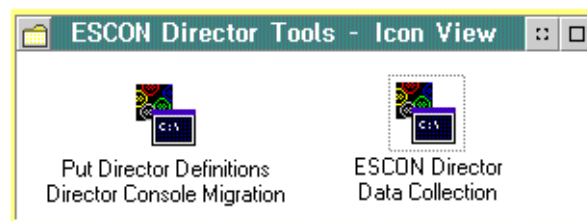
1. With the Director's *Active Matrix* window open, select the *Collect Maintenance Information* option from the *Maintenance* menu. The *Collect Maintenance Information* dialog box appears showing files being transferred and the transfer status. When all files are transferred to the fixed disk, the following dialog box appears.



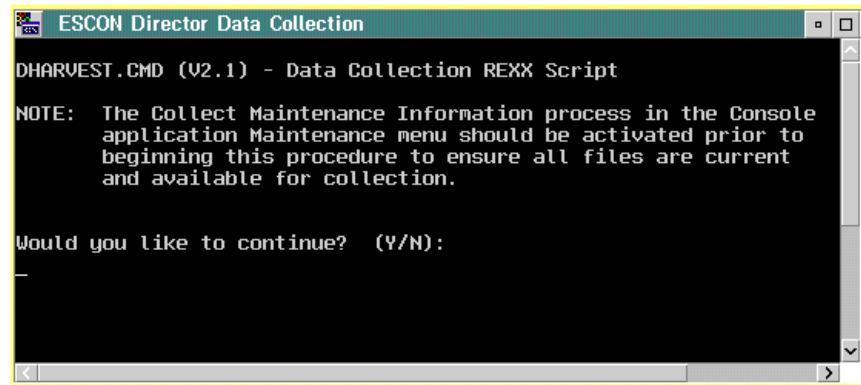
2. Click the *OK* button to close the dialog box. The Director's *Active Matrix* window reappears.
3. Record the Director name. The name (up to eight characters in length) appears on the title bar at the top of the active matrix window.
4. Simultaneously press the **Ctrl** and **Esc** keys to transfer to the Director Console's OS/2 desktop. The *Window List* appears.



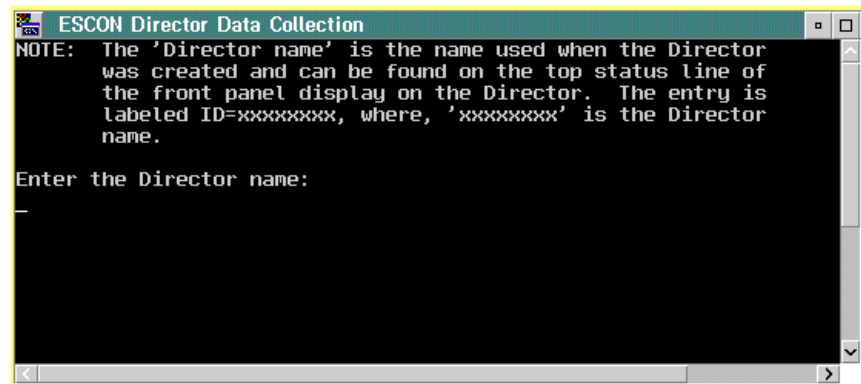
5. Double-click the *Desktop-Icon View* selection. The Director Console's OS/2 desktop appears.
6. Insert a data collection diskette into drive **A:** of the Director Console in accordance with one of the following steps:
 - If you are removing and replacing a FRU in the 9032-003 or 9033-004 ESCON Director, use the data collection diskette shipped with the replacement FRU. The diskette is labeled *Data Collection Diskette*.
 - If a labeled data collection diskette is not available, a blank, DOS-formatted diskette may be used.
7. At the OS/2 desktop, double-click the *ESCON Director Tools* folder. The *ESCON Director Tools - Icon View* appears.



8. Double-click the *ESCON Director Data Collection* icon. The first *ESCON Director Data Collection* window appears.



9. Type **Y** and press the **Enter** key. The second *ESCON Director Data Collection* window appears.



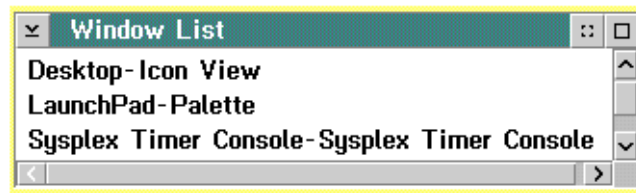
10. Type the Director name (recorded in [step 3](#) of this procedure) and press the **Enter** key. Messages appear in the window showing files transferring from the fixed disk to diskette. The data collection process is complete when the *Enter* prompt appears.
11. Press the **Enter** key. The *ESCON Director Data Collection* window closes.
12. Double-click the upper left corner of the *ESCON Director Tools - Icon View* to close the view and return to the OS/2 desktop.
13. Remove the data collection diskette from drive **A:** of the Director Console. Record the following information on the diskette label.

- Director serial number.
 - Quality Service Activity Reporting (QSAR) number.
 - Problem Management - Hardware (PMH) number.
 - Current date.
14. Insert the data collection diskette in the pre-addressed envelope provided and mail the envelope to the OEM.
 15. At the OS/2 desktop, open the Director Console application by double-clicking the *Director Console* icon. The Console application opens to the window closed in [step 4](#) of this procedure.

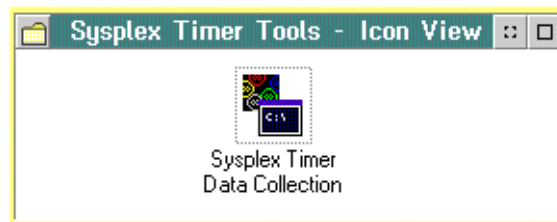
Sysplex Timer Data Collection

The data collection procedure transfers maintenance information from the Timer to a 3.5-inch diskette. The diskette is mailed to the OEM for problem analysis and resolution.

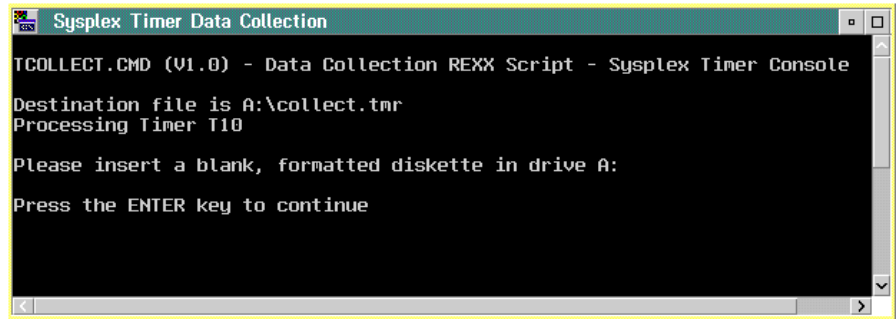
1. At the *Sysplex Timer Network Console* window, simultaneously press the **Ctrl** and **Esc** keys to transfer to the Timer Console's OS/2 desktop. The *Window List* appears.



2. Double-click the *Desktop-Icon View* selection. The Timer Console's OS/2 desktop appears.
3. At the OS/2 desktop, double-click the *Sysplex Timer Tools* folder. The *Sysplex Timer Tools - Icon View* appears.



4. Double-click the *Sysplex Timer Data Collection* icon. The *Sysplex Timer Data Collection* window appears.



```
Sysplex Timer Data Collection

TCOLLECT.CMD (V1.0) - Data Collection REXX Script - Sysplex Timer Console

Destination file is A:\collect.tmr
Processing Timer T10

Please insert a blank, formatted diskette in drive A:

Press the ENTER key to continue
```

5. Insert a data collection diskette into drive **A:** of the Timer Console. The diskette is labeled *Data Collection Diskette*. If a labeled data collection diskette is not available, a blank, DOS-formatted diskette may be used.
6. Press the **Enter** key. Messages appear in the window showing files transferring from fixed disk to diskette. The data collection process is complete when the *Enter* prompt appears.
7. Press the **Enter** key. The *Sysplex Timer Data Collection* window closes.
8. Double-click the upper left corner of the *Sysplex Timer Tools - Icon View* to close the view and return to the OS/2 desktop.
9. Remove the data collection diskette from drive **A:** of the Timer Console. Record the following information on the diskette label.
 - Timer serial number.
 - QSAR number.
 - PMH number.
 - Current date.
10. Insert the data collection diskette in the pre-addressed envelope provided and mail the envelope to the OEM.
11. At the OS/2 desktop, open the Sysplex Timer Console application by double-clicking the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Clear the Address Resolution Protocol Table

This procedure clears the ARP table for a LAN with a Director or Timer installed. The procedure clears old Internet Protocol (IP) or Media Access Control (MAC) addresses so the ARP table can rebuild with new addresses. The procedure prevents new Console, Director, or Timer addresses from conflicting with old, unused addresses. Clear the ARP table if:

- The IP or MAC address of a Director, Director Console, Timer, or Timer Console was changed after operating previously on the LAN.
- The Director, Director Console, Timer, or Timer Console are installed on a public (nondedicated) LAN.

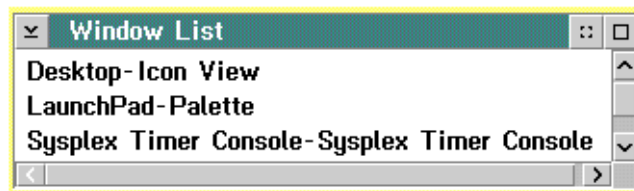
To clear the ARP table:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



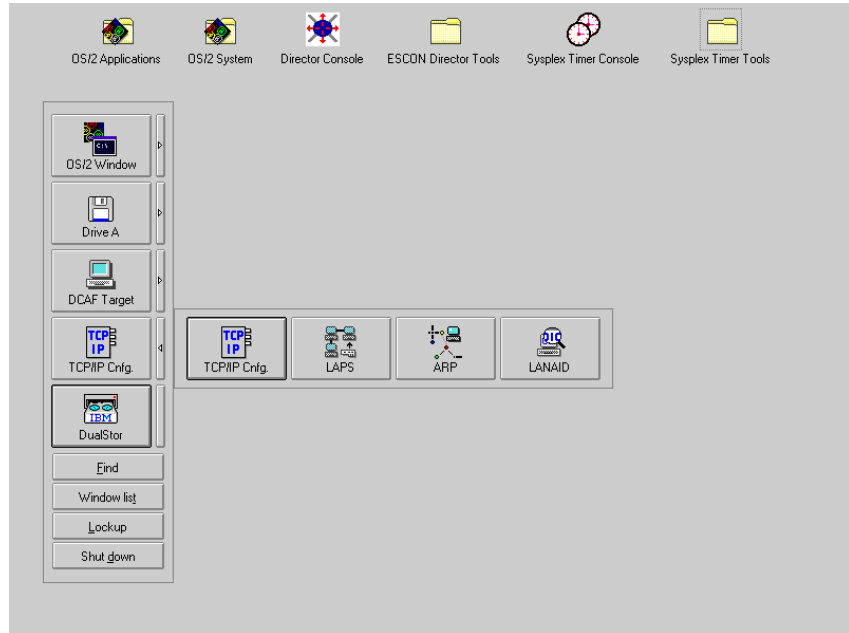
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.



Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Click the arrow on the *TCP/IP Cnfg.* drawer to open the drawer.



3. Click the *ARP* button to clear the table. The *ARP* window appears briefly and closes, indicating all the IP and MAC addresses cleared by the procedure.
4. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
5. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Migrate Director Definitions

If the Director Console application is uninstalled at a Console (Director, Sysplex Timer, Hardware Management, or other nondedicated Console) and installed on a new Console, Director definitions must be recorded on a 3.5-inch diskette and migrated to the new Console. Definitions include IP addresses, Director names, model numbers, and matrix configuration files.

If the Console application is discontinued and installed on a another Director Console, a Director definitions diskette must be created. Refer to "[Create Director Definitions Diskette](#)" below for instructions. If the Console application is installed on a new Director Console, Director definitions must be migrated. For instructions, refer to "[Migrate Definitions to a Director Console](#)" on page 87.

Create Director Definitions Diskette

Perform this procedure to create a Director definitions diskette.

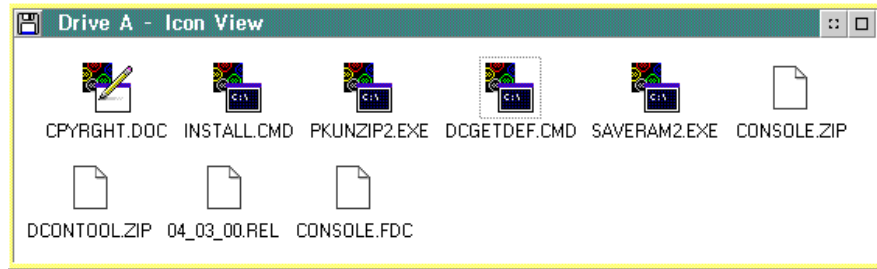
1. Ensure the Director Console application is closed, not just reduced to an icon. If the Console application is open (*Startup* or *Matrix* window appears), continue to [step a](#). If the OS/2 desktop appears, go to [step b](#).

Note: OS/2 screens may look slightly different depending on the level of operating system installed on the Director Console.

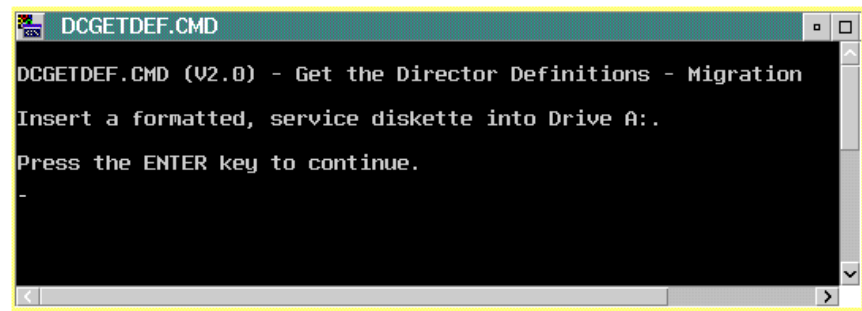
- a. At the *Startup* or *Matrix* window, select the *Close Window* option from the *File* menu. The Director Console application closes and the OS/2 desktop appears. Go to [step 2](#).
- b. At the OS/2 desktop, simultaneously press the **Ctrl** and **Esc** keys. The *Window List* appears.



- If the *Director Console - Director Console* selection **does not** appear, the Console application is closed. Double-click the *Desktop - Icon View* selection to return to the OS/2 desktop, and go to [step 2](#).
 - If the *Director Console - Director Console* selection **appears**, the Console application is open and minimized. Double-click the selection to maximize the application. At the *Startup* or *Matrix* window, select the *Close Window* option from the *File* menu. The Console application closes and the OS/2 desktop appears.
2. Insert the Console application diskette (labeled *Console Version XX.YY.ZZ*) into drive **A:** of the Director Console.
 3. Double-click the *OS/2 System* icon. The *OS/2 System - Icon View* appears.
 4. Double-click the *Drives* icon. The *Drives - Icon View* appears.
 5. Double-click the *Drive A* icon. The *Drive A - Icon View* appears.



6. Double-click the *DCGETDEF.CMD* icon. The *DCGETDEF.CMD* window appears.



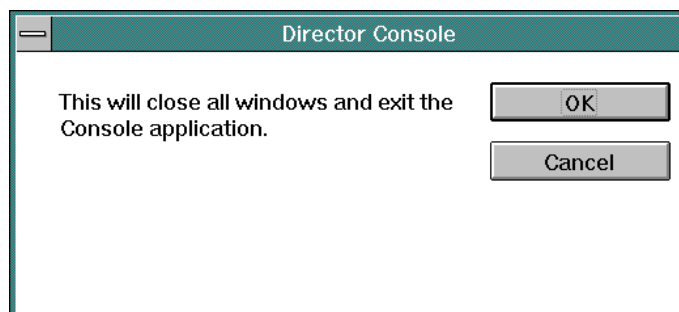
7. Remove the Console application diskette from drive **A:** of the Director Console and insert a blank, DOS-formatted diskette (provided with the Director).
8. Press the **Enter** key. Director definitions are copied to the diskette, and the copy progress is displayed in the *DCGETDEF.CMD* window. When the process is complete, the *DCGETDEF.CMD* window closes.
9. Double-click the upper left corner of the *Drive A - Icon View*, *Drives - Icon View*, and *OS/2 System - Icon View* to close the views and return to the OS/2 desktop.
10. Remove the Director definitions diskette from drive **A:** of the Director Console.
11. Label and store the Director definitions diskette as appropriate. The diskette can now be used to transport definitions to a new Console.

Migrate Definitions to a Director Console

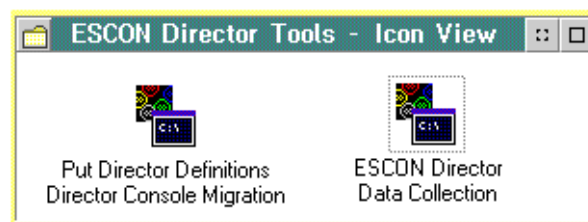
Perform this procedure to migrate Director definitions to a Director Console.

Note: This procedure does not work if the Director Console application is open or if the Director Console library already contains definitions.

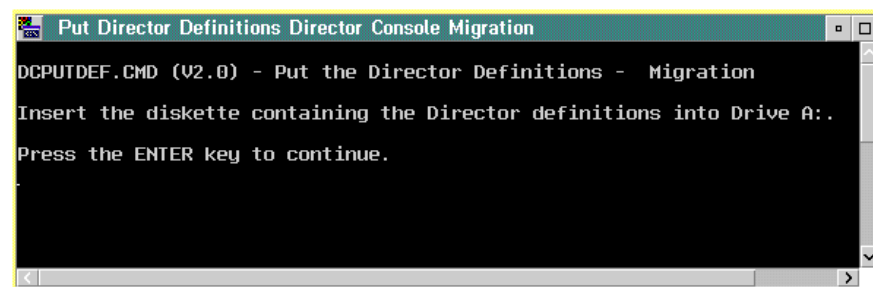
1. If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



2. Click the *OK* button to close the dialog box. The OS/2 desktop appears.
3. At the OS/2 desktop, double-click the *ESCON Director Tools* folder. The *ESCON Director Tools - Icon View* appears.



4. Double-click the *Put Director Definitions Director Console Migration* icon. The *Put Director Definitions Director Console Migration* window appears.



Note: If a warning appears indicating migration was terminated because Director definitions exist in the Console library, press the **Enter** key to close the *Put Director Definitions Director Console Migration* window and exit the utility.

If a warning appears indicating migration was terminated because the Console library was not initialized, press the **Enter** key to close the *Put Director Definitions Director Console Migration* window and exit the migration utility. Open and close the Director Console application, then perform this procedure again.

5. Insert the Director definitions diskette (created at the Console from which the definitions are migrated) into drive **A:** of the Console.
6. Press the **Enter** key. Director definitions are copied to the Console fixed disk for initializing the Director Console library. When the process is complete, the *Put Director Definitions Director Console Migration* window closes.
7. Double-click the upper left corner of the *ESCON Director Tools - Icon View* to close the view and return to the OS/2 desktop.
8. Remove the Director definitions diskette from drive **A:** of the Console. Store the Director definitions diskette as appropriate.
9. At the OS/2 desktop, start the Director Console application by double-clicking the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.

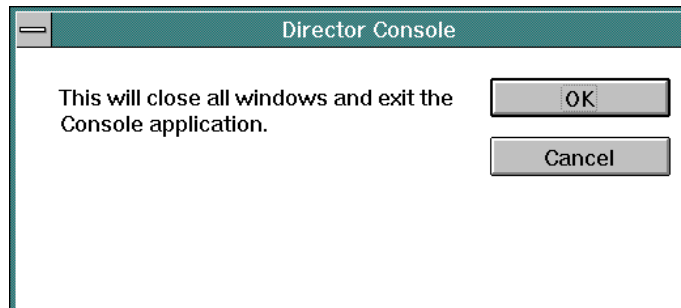
Change Token Ring Adapter Card Data Rate

Perform this procedure to change the data rate of the Micro-Channel Token Ring adapter card for the Director or Sysplex Timer Console. The procedure changes the default rate of 16 megabits per second (Mbps) to 4 Mbps.

Note: The data rate is set at the factory. Do not change the data rate unless required because of LAN or other system requirements.

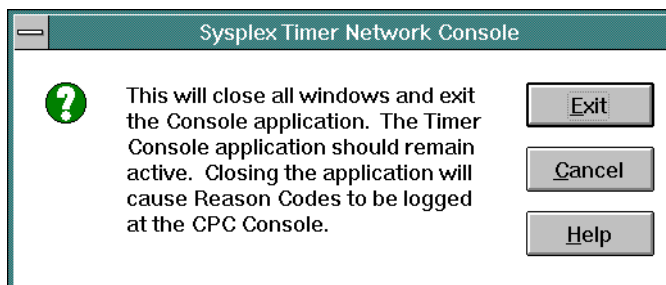
To change the Token Ring adapter card data rate:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

2. Shut down and restart the operating system and Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
3. The Console performs power-on self tests (POSTs). If the PS/2 is not connected to an isolated multistation access unit (MAU), the following message appears. A message may also appear to call the next level of support. These messages are normal.

LT20029: A lobe wire fault has been detected. The adapter will be closed.

Press Enter to continue.

4. Press the **Enter** key to continue.
5. Inspect the flashing cursor at the upper left corner of the screen. When the memory check KB counter stops and the cursor moves to the upper right corner of the screen, simultaneously press the **Ctrl**, **Alt**, and **Ins** keys. The IBM logo screen appears, followed by the configuration program *Main Menu*.

```

Main Menu

Select one:

1  Start operating system
2  Backup/Restore system programs
3  Update system programs
4  Set configuration
5  Set features
6  Copy an option diskette
7  Test the computer
8  More utilities

Enter      F1=Help      F3=Exit

```

6. Use the up or down arrow keys (↑ or ↓) to highlight and select the *Set Configuration* option, then press the **Enter** key. The *Set Configuration* menu appears.

```

Set Configuration

Select one:

1  View Configuration
2  Change Configuration
3  Backup configuration
4  Restore configuration
5  Run automatic configuration
6  Set and view SCSI device configuration
7  Display memory map

Enter      F1=Help      F3=Exit

```

7. Use the up or down arrow keys (↑ or ↓) to highlight and select the *Change Configuration* option, then press the **Enter** key. The first *Change Configuration* menu appears.

```

Change Configuration

Total System Memory
  Installed Memory.....16384KB (16.0MB)
  Usable Memory.....15936KB (15.6MB)
Built In Features
  Installed memory.....16384KB (16.0MB)
  Diskette Drive 0 Type.....[2.88MB 3.5"]
  Diskette Drive 1 Type.....[Not Installed]
  Diskette Drive 2 Type.....[Not Installed]
  Math Coprocessor.....[Not Installed]
  First Serial Port.....[SERIAL 1, IRQ4]
  Second Serial Port.....[SERIAL 1, IRQ4]
  Parallel Port.....[Parallel 1]
  Parallel Port DMA Arbitration Level....[Disabled]
  Video I/O Address.....[Instance 6:2160h-216-Fh]

  1 MB VRAM Aperture Base Address.....[Disabled]

F1=Help      F3=Exit      F5=Previous      F6=Next      F8=Fwd
F10=Save

```

8. If the configuration entry for *Slot 1 - IBM Token-Ring Network 16/4 Adapter/A* does not appear, press the **F8** key to advance to the second *Change Configuration* menu.

```

Change Configuration

Video ROM Address.....[DE000-DFFFF]
1 MB VRAM Aperture Base Address.....[Disabled]
Video Arbitration Level.....[Level 13]
Video Fairness.....[On]
SCSI Address (ID).....[7]
SCSI DMA Arbitration Level.....[Level 8]

Slot 1 - IBM Token-Ring Network 16/4 Adapter/A
Primary or Alternate adapter.....[Primary]
Adapter Data Rate.....[16 Mbps]
ROM Address Range.....[DA000-DBFFF]
RAM Size and Address Range.....[16 KB/C000-C3FFF]
Internet Level.....[Interrupt 2]

F1=Help      F3=Exit      F5=Previous      F6=Next      F8=Fwd
F10=Save

```

9. Use the up or down arrow keys (↑ or ↓) to highlight and select the *Adapter Data Rate* option for the Token Ring Adapter card.
10. Press the **F6** key to toggle the rate from *16 Mbps* to *4 Mbps*.
11. Press the **F10** and **Enter** keys to save the new configuration data.
12. Press the **F3** key to exit to the *Set Configuration* menu.
13. Press the **F3** key again to exit to the *Main Menu*. A message box appears indicating you must restart the Console to initiate changes.
14. Press **Enter** to restart the Console and initiate changes. The Console performs POSTs. If the PS/2 is not connected to an isolated MAU, the following message appears. A message may also appear to call the next level of support. These messages are normal.


```

LT20029: A lobe wire fault has been detected. The adapter
will be closed.

Press Enter to continue.

```
15. Press the **Enter** key to continue.
16. The Console finishes POSTs and loads the OS/2 operating system. The IBM logo screen appears, followed by the OS/2 desktop.
17. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

- To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Create a Console Diagnostic Diskette

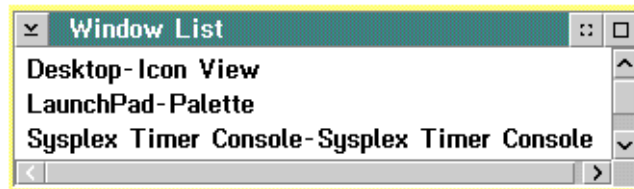
Perform this procedure to create a diagnostic diskette for the Console PC. Keep the diskette with the Console, and use it under direction from the next level of support to fault isolate problems with the PC. To create the diagnostic diskette:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



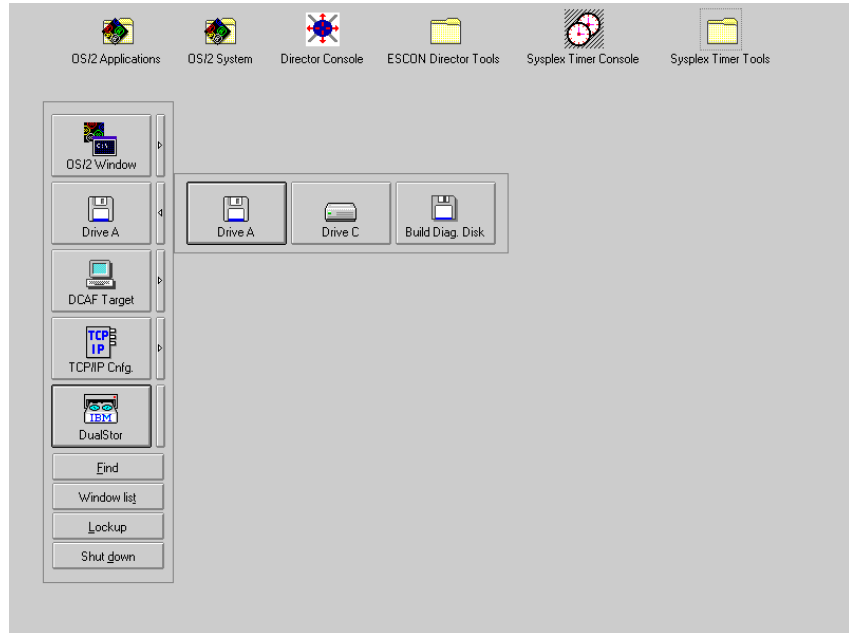
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

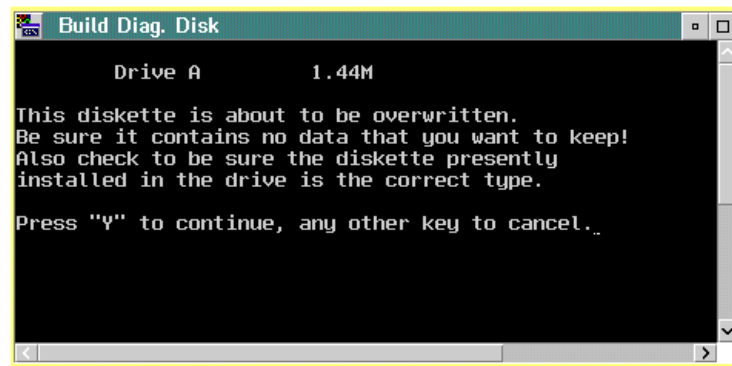


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Insert a blank, formatted diskette (labeled **For Use By Service Personnel Only** and shipped with the Console) into the diskette drive.
3. Click the arrow on the *Drive A* drawer to open the drawer.



4. Click the *Build Diag. Disk* button. The *Build Diag. Disk* window appears.



5. Press the **Y** key to continue. A message appears at the bottom of the window showing the percentage of files written to the diskette.
6. When the percentage reaches 100, the diagnostic diskette is created and the OS/2 desktop reappears. Remove the diskette from the drive. Label the diskette *Reference Diskette*.
7. Close the *Drive A* drawer by clicking the drawer arrow.
8. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.

- To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
9. Keep the diskette with the Console and use it under direction from the next level of support to fault isolate PC problems.

Backup and Restore Functions

The PS/2 Console contains a tape cartridge drive to perform backup and restore functions. Backups of the Console fixed disk and the Director or Sysplex Timer system libraries are routinely performed. Library data is restored using a tape cartridge containing the most recent backup version of the Director or Timer system library. The entire Console fixed disk is restored using:

- Three 3.5-inch Console stand-alone restore (SR) diskettes.
- A tape cartridge with the most recent backup version of the Console fixed disk (includes both the Director or Timer Console application and the Director or Timer system library).

This section describes:

- Backup options.
- Backing up the Director or Sysplex Timer system library to tape.
- Restoring the Director or Sysplex Timer system library from tape.
- Backing up the Console fixed disk to tape.
- Restoring the Console fixed disk from diskettes and tape.

Backup Options

When performing procedures to set automatic backup parameters or back up data on demand, two backup options are available from the *AutoTape Event Schedule* or *Load Job File* dialog boxes:

- **CONSOLE.TPF** - This is the default option. This option backs up the entire Console fixed disk to tape.
- **CLIBBKUP.TPF** - This option backs up the system library. The file contains all information about Timers on the Console, including LIC files, logs, and Timer configuration data.

Back Up the System Library to Tape

Routine backups of the Director or Sysplex Timer system library to a tape cartridge ensure critical data can be restored if required. The data is also required when migrating the Director Console application to a backup or replacement Console.

Critical data for the Director Console includes Console settings, LIC files, logs, IP addresses, Director configuration files, and Director matrices. Critical data for the Sysplex Timer Console includes Console settings, IP addresses, configuration files, logs, and identification information for the Timer network.

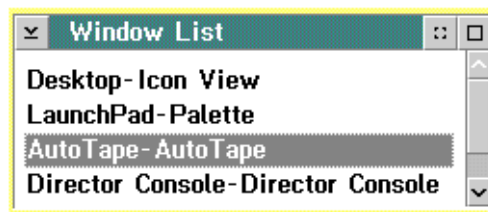
This section describes procedures to enable automatic back up of the system library to tape, or to back up the system library on demand.

Enable Automatic Backup

If enabled, DualStor software installed on the Console automatically backs up the system library to a tape cartridge at a specified or default time. Perform this procedure to enable automatic backup of the system library to tape at the default backup time (daily at 12:00 midnight) and announcement time (five minutes), or to specify a new backup time and announcement time. Because changing default parameters ([Table 1](#) on page 114) disables automatic backup and requires shutting down the OS/2 operating system, it is recommended that this procedure be performed during Console installation and setup.

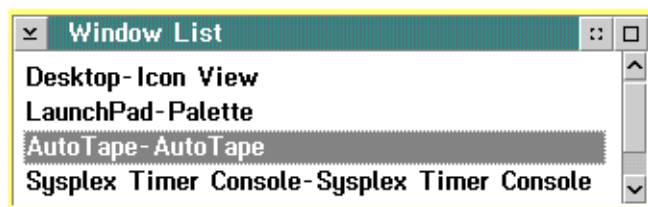
This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). If either or both applications are running on a Hardware Management Console, refer to [Chapter 3](#) for system library backup procedures. To enable automatic backup of the system library:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.

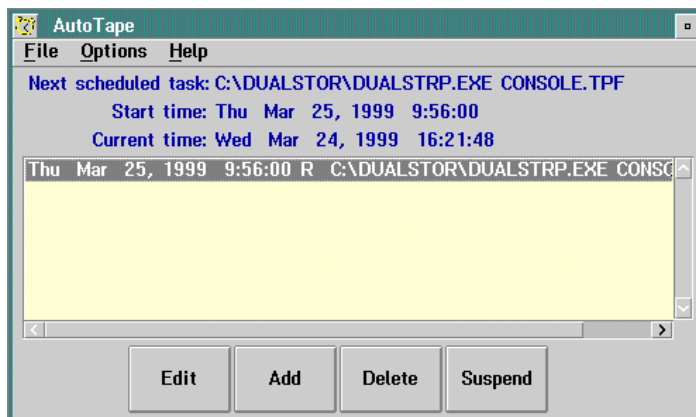


Double-click the *AutoTape-AutoTape* selection. The *AutoTape* dialog box appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.



Double-click the *AutoTape-AutoTape* selection. The *AutoTape* dialog box appears.



2. To toggle between enabled and disabled for automatic backup (default is disabled), click the *Suspend* button.
3. To change the backup time, day, and pre-dispatch announcement, click the *Edit* button. The *AutoTape Event Schedule* dialog box appears.

AutoTape Event Schedule

Command C:\DUALSTOR\DUALSTRP.EXE CONSOLE.TPF

Dispatch

Time 9:56:00 ☒ Recurring event

Date 03-24-99 ☐ Announce event

Frequency: Daily Weekly Weekdays 1st day of Month

Days: Sun Mon Tue Wed Thu Fri Sat

Pre dispatch announcement: 1 Min 2 Min 5 Min 10 Min 15 Min 30 Min

Change backup settings as follows:

- a. To change the backup time from the default value of 00:00:00 (midnight), click the *Time* field in the *Dispatch* area. Type a new time. Use the left and right (← and →) arrow keys and the **Backspace** key to change or delete characters.
 - b. To change from daily backups (default), click the *Weekly*, *Weekdays*, or *1st day of Month* buttons as desired.
 - c. To change the pre-dispatch announcement from five minutes (default), click the appropriate button (*1 Min* to *30 Min*) in the *Pre-dispatch announcement* area.
4. Click the scrolling arrow on the right of the *Command* field, then select the **CLIBBKUP.TPF** option. This option backs up the Director or Sysplex Timer system library as desired.
 5. Click the *OK* button after completing the changes. The *AutoTape* dialog box reappears.
 6. Double-click the upper left corner of the *AutoTape* dialog box to close the dialog box and return to the OS/2 desktop.
 7. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

8. Ensure a blank, QD2120 1/4-inch backup tape (QIC 80 format) is installed in the Console tape drive when the automatic backup feature is enabled. The backup tape is provided with the Console. Ensure the sliding tab on the tape is set to record mode.

Backup on Demand

Perform this procedure to back up the Director or Sysplex Timer system library on demand. This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). If either or both applications are running on a Hardware Management Console, refer to [Chapter 3](#) for system library backup procedures. To back up the system library on demand:

1. Install a blank, QD2120 1/4-inch backup tape (QIC 80 format) in the Console tape drive as shown in [Figure 17](#). The tape is provided with the Console. Ensure the sliding tab on the tape is set to record mode.



CAUTION

Do not use the Console restore tape to back up the fixed disk. This is the master tape for restoring the Console fixed disk to the factory default settings.

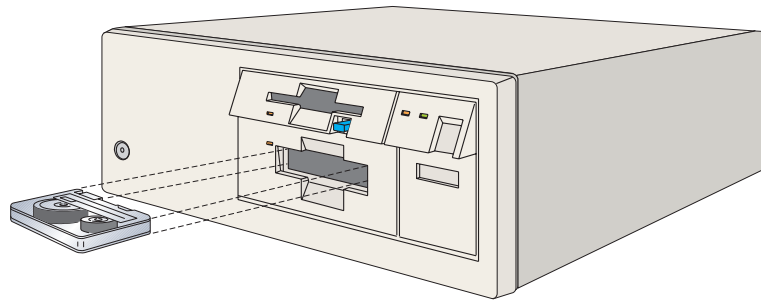


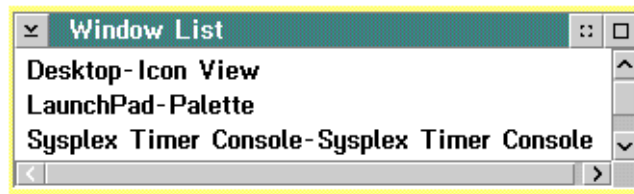
Figure 17. Install Tape Cartridge in PS/2 Console

2. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.

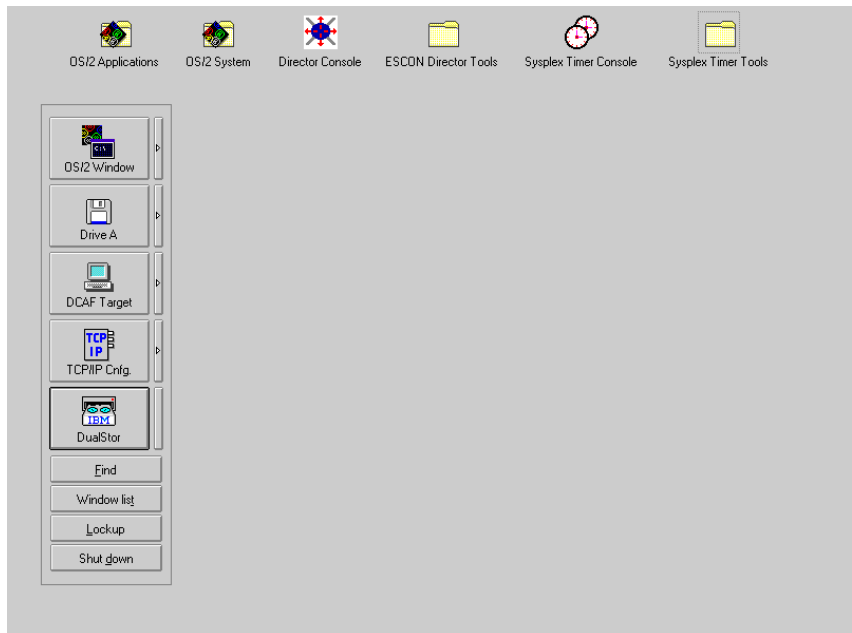


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

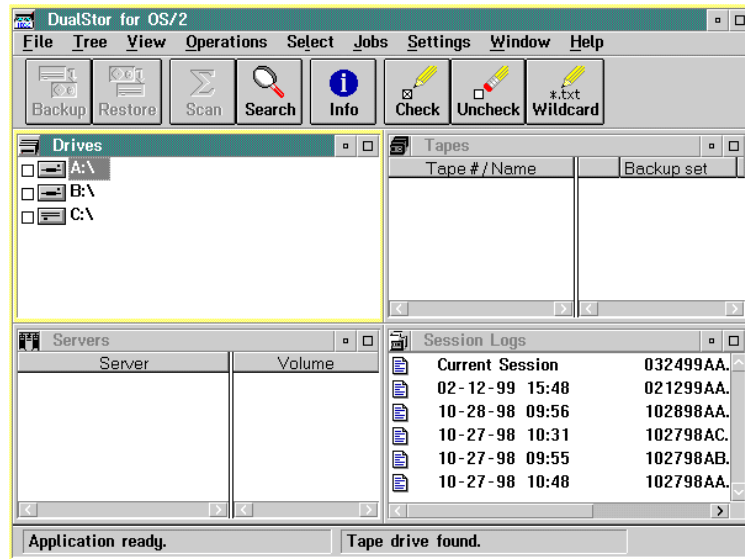


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

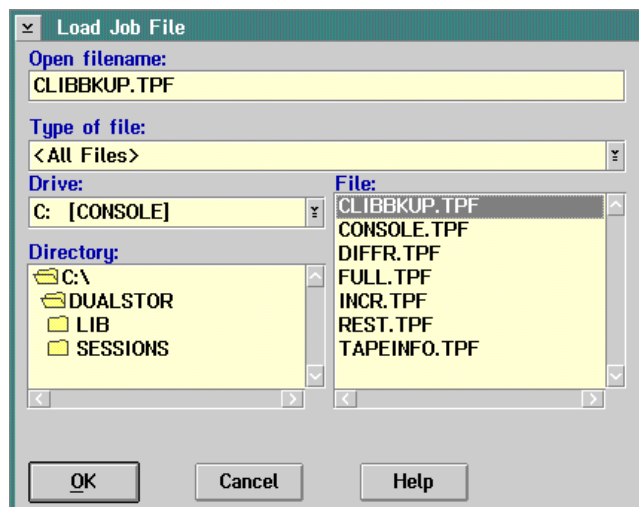


3. Click the *DualStor* button on the launch pad. The *DualStor for OS/2* window appears.

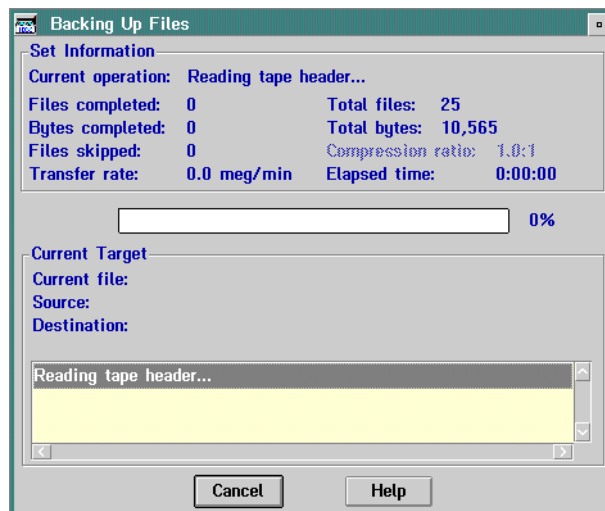
Note: If the IBM logo appears and remains on the Console screen, press **Enter** to display the *DualStor for OS/2* window.



4. If a new tape is used for the backup, retension the tape before performing the backup. A tape currently being used in the Console or a newly-formatted tape does not need to be retensioned. For these cases, continue to [step 5](#). To retension the tape:
 - a. Wait until a **Tape Ready** message appears on the bottom line of the *DualStor for OS/2* window. Select the current tape in the *Tapes* section of the window.
 - b. Select the *Operations* option to open the *Operations* menu.
 - c. At the *Operations* menu, select the *Retension Tape* option. The *Retension Confirmation* dialog box appears.
 - d. Click the *Yes* button to begin tape retensioning. This operation may take up to five minutes. When the tape is retensioned, the *DualStor for OS/2* window reappears.
5. Select the *Load Job File* option from the *Jobs* menu. The *Load Job File* dialog box appears.



6. At the *File* list box, click (select) the **CLIBBKUP.TPF** option. Wait for the **QIC Tape Ready** message to display on the bottom line of the *DualStor for OS/2* window, then click the *OK* button in the *Load Job File* dialog box.
7. Click the *Yes* button when the confirmation dialog box appears. The *Backing Up Files* dialog box appears. All selected files are scanned (*Scan Checked Files* dialog box), and a message box appears. The message box indicates the system will erase the contents of the installed tape. Click the *OK* button to continue. The *Backing Up Files* dialog box reappears and displays the backup statistics as the backup occurs. The system library copies to tape in approximately five to ten minutes.



Note: When a new QIC formatted tape is used, a message box appears indicating the tape is in QIC 40/80 format and asking if you want to continue the backup. Click the *Continue* button to proceed with the backup.

8. When the backup completes, click the *OK* button to exit the *Backing Up Files* dialog box.

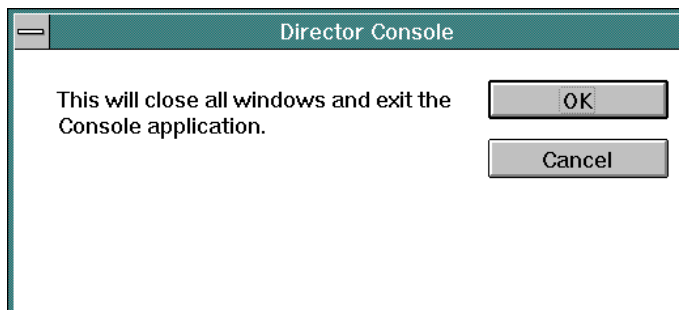
Note: When a backup is performed using DualStor, a log file is created. This log file contains error, verification, and status messages created during the backup. The log file may contain a sharing violation error message. This is a normal condition. The file **<filename>.DIR** contains the header information currently in use for the backup session and is skipped by DualStor.

9. Double-click the upper left corner of the *Load Job File* dialog box and *DualStor for OS/2* window to return to the OS/2 desktop.
10. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 2](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 2](#) of this procedure.

Restore the System Library from Tape

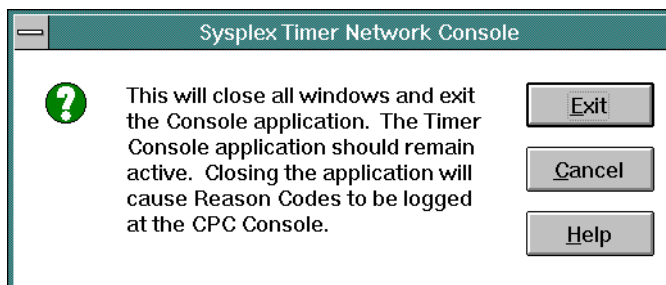
Perform this procedure to restore the Director or Sysplex Timer system library from a backup tape cartridge to the Console fixed disk. To restore the system library:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



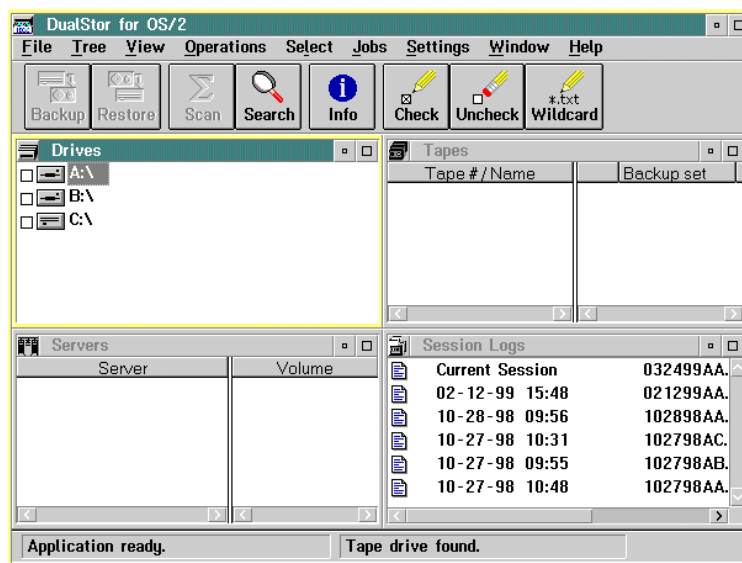
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



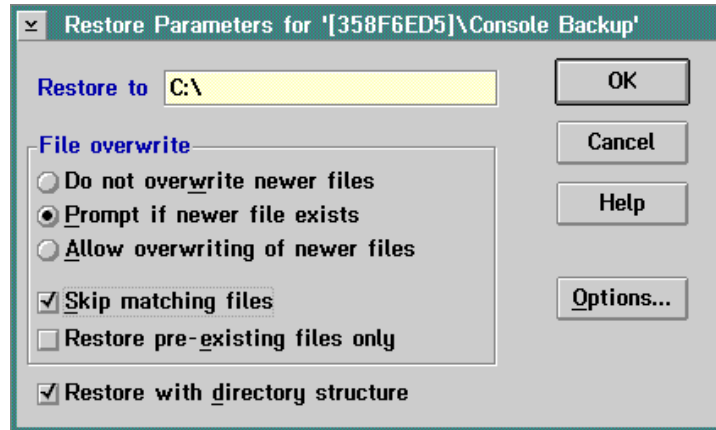
Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

2. Insert the backup tape containing the system library in the tape drive.
3. Click the *DualStor* drawer on the launchpad. The *DualStor for OS/2* window appears.



Note: If the IBM logo appears and remains on the screen, press the **Enter** key to display the *DualStor for OS/2* window.

4. When DualStor finishes reading the tape header and directory information, click the box by the *Tape* icon in the *Tapes* area under *Tape#/Name* at the top right portion of the window. An **X** appears in the box. The *Restore* button and other buttons activate at the top of the window.
5. Click the *Restore* button. The *Restore Parameters for Tape/Library Backup* dialog box appears.



6. If not selected in the dialog box, select the following by clicking the appropriate radio button or check box.
 - *Prompt if newer file exists.*
 - *Skip matching file.*
 - *Restore with directory structure.*
7. Click the *OK* button to initiate a restore to the fixed disk (**C:**). A message box appears displaying the progress of the restore process. When the **Elapsed Time xx:xx:xx** message appears, the restore is complete.
8. Close all windows by double-clicking the upper left corner of each window.
9. Perform a full backup of the Console fixed disk. For instructions, refer to “[Back Up the Console Fixed Disk to Tape](#)” on page 106.
10. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.

- To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational. The Console application should remain active and operational for the following reasons:
 - a. Certain Timer events and associated reason codes are transmitted only to the Event log maintained at the Timer Console. The events are not transmitted through attached processors to the System Control Program (SCP) Console. If the Console application is closed and a Timer network failure occurs, reason codes and other information required for fault isolation may not be recorded.
 - b. Closing the Console application causes an **ETR Service is Requested** message to be reported to the SCP Console with reason code **40** (communication lost with active Console) or reason code **41** (communication lost with standby Console). This may result in an unnecessary service call.
 - c. Starting the Console application causes an **ETR Service is Requested** message to be reported to the SCP Console, with reason code **8** (communication established with active Console) or reason code **9** (communication established with standby Console). This may result in an unnecessary service call.

Back Up the Console Fixed Disk to Tape

Routine backups of the entire Console fixed disk to a tape cartridge ensure critical data can be restored if the fixed disk fails or requires replacement. This section describes the procedures to enable automatic back up the fixed disk or back up the fixed disk on demand.

Note: The procedure requires approximately one hour to back up the Console controlling a fully-configured cluster of Directors or a Sysplex Timer network.

Attention!

Under normal operating conditions, automatic backup of the entire fixed disk is enabled for the Director or Sysplex Timer Console.

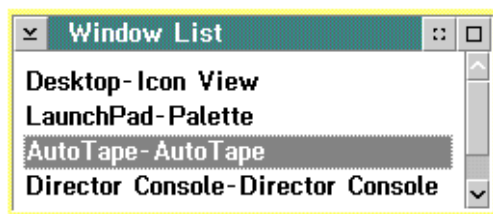
Enable Automatic Backup

If enabled, DualStor software installed on the Console automatically backs up the fixed disk to a tape cartridge at a specified or default time. Perform this procedure to enable automatic backup of the fixed disk to tape at the default backup time (daily at 12:00 midnight) and announcement time (five minutes), or to specify a new backup and announcement time.

Because changing default parameters (Table 1 on page 114) disables automatic backup and requires shutting down the OS/2 operating system, it is recommended that this procedure be performed during Console installation and setup.

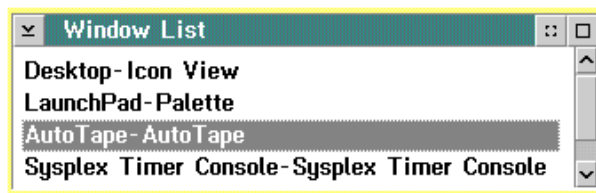
This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). To enable automatic backup of the fixed disk:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.

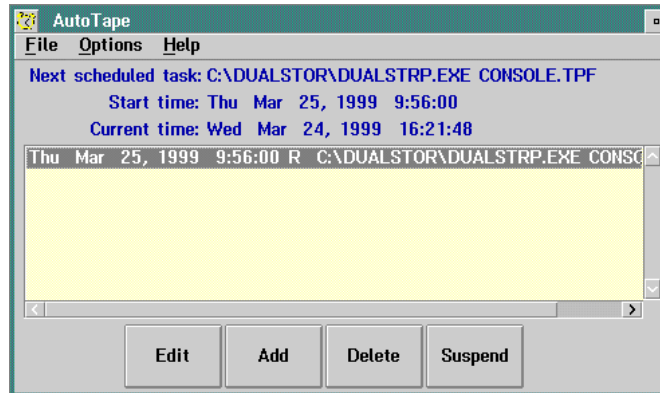


Double-click the *AutoTape-AutoTape* selection. The *AutoTape* dialog box appears.

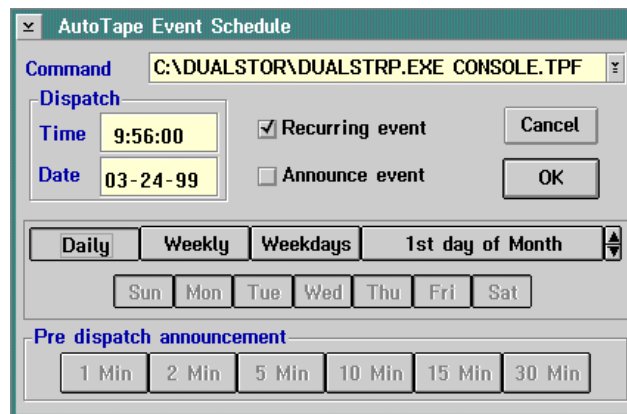
- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.



Double-click the *AutoTape-AutoTape* selection. The *AutoTape* dialog box appears.



2. To toggle between enabled and disabled for automatic backup (default is disabled), click the *Suspend* button.
3. To change the backup time, day, and pre-dispatch announcement, click the *Edit* button. The *AutoTape Event Schedule* dialog box appears.



Change backup settings as follows:

- a. To change the backup time from the default value of 00:00:00 (midnight), click the *Time* field in the *Dispatch* area. Type a new time. Use the left and right (← and →) arrow keys and the **Backspace** key to change or delete characters.
- b. To change from daily backups (default), click the *Weekly*, *Weekdays*, or *1st day of Month* buttons as desired.
- c. To change the pre-dispatch announcement from five minutes (default), click the appropriate button (*1 Min* to *30 Min*) in the *Pre-dispatch announcement* area.

4. Click the scrolling arrow on the right of the *Command* field, then select the **CONSOLE.TPF** option. This option backs up the Director or Sysplex Timer Console fixed disk as desired.
5. Click the *OK* button after completing the changes. The *AutoTape* dialog box reappears.
6. Double-click the upper left corner of the *AutoTape* dialog box to close the dialog box and return to the OS/2 desktop.
7. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
8. Ensure a blank, QD2120 1/4-inch backup tape (QIC 80 format) is installed in the Console tape drive when the automatic backup feature is enabled. The backup tape is provided with the Console. Ensure the sliding tab on the tape is set to record mode.

Backup on Demand

Perform this procedure to back up the Console fixed disk on demand. This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). To back up the fixed disk on demand:

1. Install a blank, QD2120 1/4-inch backup tape (QIC 80 format) in the Console tape drive as shown in [Figure 18](#). The tape is provided with the Console. Ensure the sliding tab on the tape is set to record mode.



CAUTION

Do not use the Console restore tape to back up the fixed disk. This is the master tape for restoring the Console fixed disk to the factory default settings.

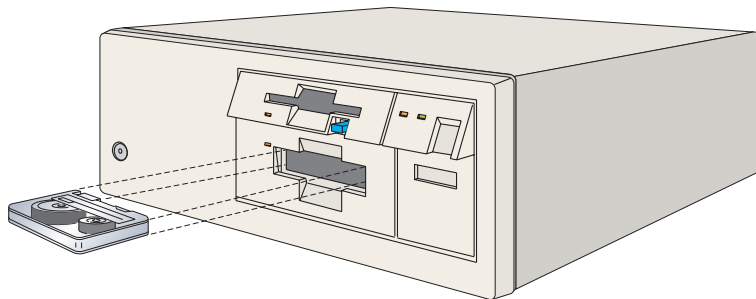


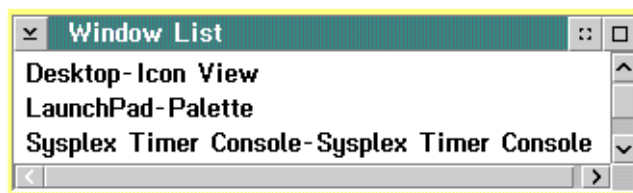
Figure 18. Install Tape Cartridge in PS/2 Console

2. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.

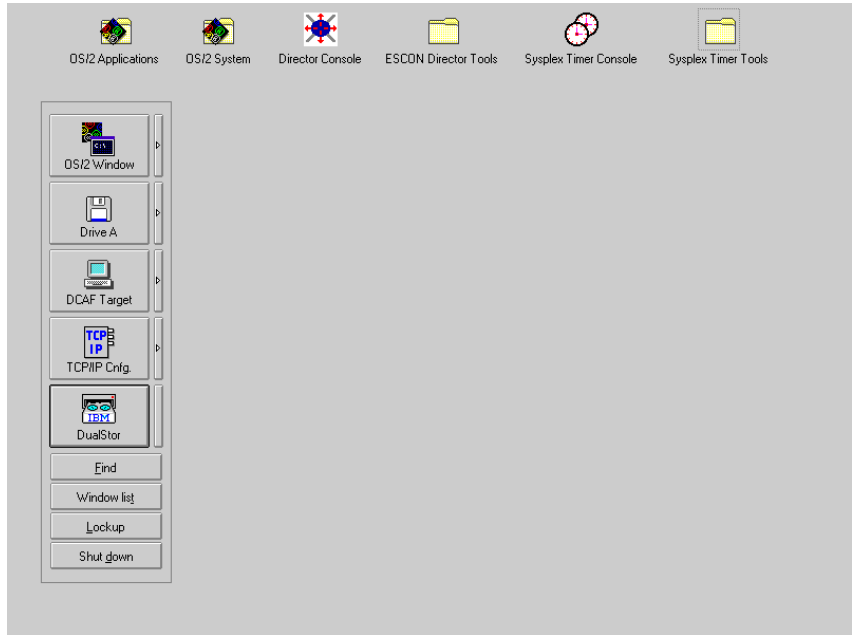


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

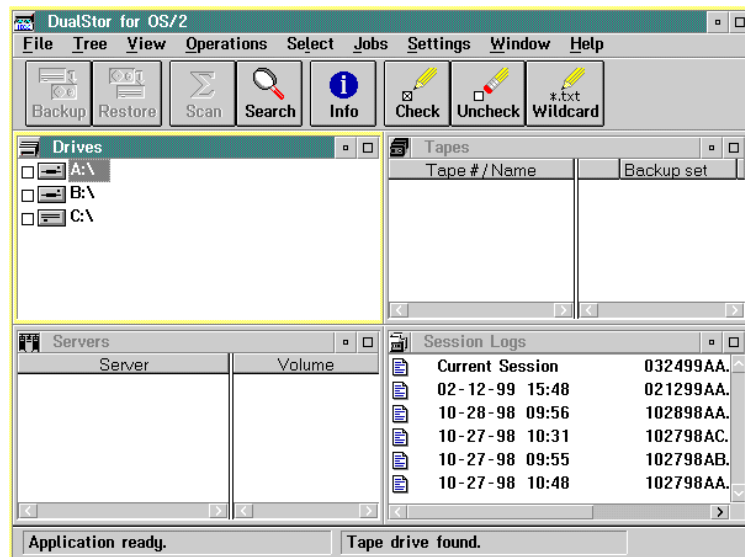


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

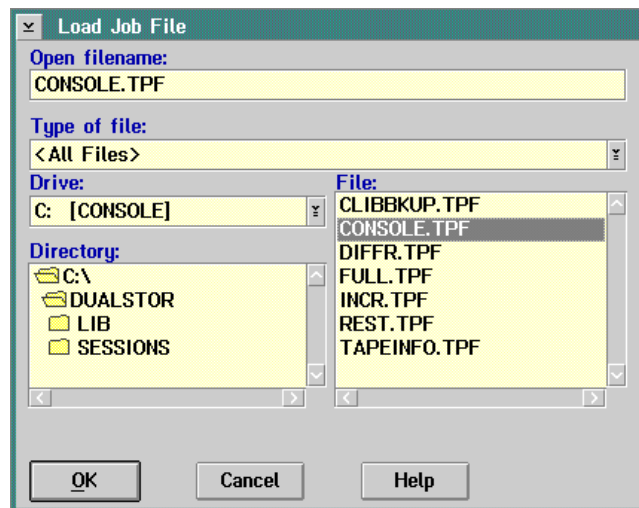


3. Click the *DualStor* button on the launch pad. The *DualStor for OS/2* window appears.

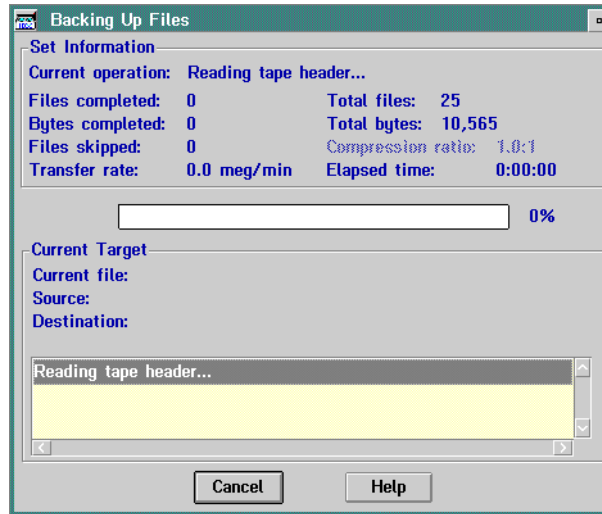
Note: If the IBM logo appears and remains on the Console screen, press **Enter** to display the *DualStor for OS/2* window.



4. If a new tape is used for the backup, retension the tape before performing the backup. A tape currently being used in the Console or a newly-formatted tape does not need to be retensioned. For these cases, continue to [step 5](#). To retension the tape:
 - a. Wait until a **Tape Ready** message appears on the bottom line of the *DualStor for OS/2* window. Select the current tape in the *Tapes* section of the window.
 - b. Select the *Operations* option to open the *Operations* menu.
 - c. At the *Operations* menu, select the *Retension Tape* option. The *Retension Confirmation* dialog box appears.
 - d. Click the *Yes* button to begin tape retensioning. This operation may take up to five minutes. When the tape is retensioned, the *DualStor for OS/2* window reappears.
5. Select the *Load Job File* option from the *Jobs* menu. The *Load Job File* dialog box appears.



6. At the *File* list box, click (select) the **CONSOLE.TPF** option. Wait for the **QIC Tape Ready** message to display on the bottom line of the *DualStor for OS/2* window, then click the *OK* button in the *Load Job File* dialog box.
7. Click the *Yes* button when the confirmation dialog box appears. The *Backing Up Files* dialog box appears. All selected files are scanned (*Scan Checked Files* dialog box), and a message box appears. The message box indicates the system will erase the contents of the installed tape. Click the *OK* button to continue. The *Backing Up Files* dialog box reappears and displays the backup statistics as the backup occurs. The entire Console fixed disk copies to tape in approximately 45 minutes to one hour.



Note: When a new QIC formatted tape is used, a message box appears indicating the tape is in QIC 40/80 format and asking if you want to continue the backup. Click the *Continue* button to proceed with the backup.

8. When the backup completes, click the *OK* button to exit the *Backing Up Files* dialog box.

Note: When a backup is performed using DualStor, a log file is created. This log file contains error, verification, and status messages created during the backup. The log file may contain a sharing violation error message. This is a normal condition. The file **<filename>.DIR** contains the header information currently in use for the backup session and is skipped by DualStor.

9. Double-click the upper left corner of the *Load Job File* dialog box and *DualStor for OS/2* window to return to the OS/2 desktop.
10. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 2](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 2](#) of this procedure.

Restore the Console Fixed Disk from Diskettes and Tape

Perform this procedure to format and restore the Console fixed disk from stand-alone restore (SR) diskettes and a backup tape cartridge. Use the instructions after installing a new unformatted fixed disk. This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). Default parameters when the fixed disk is restored are listed in [Table 1](#).

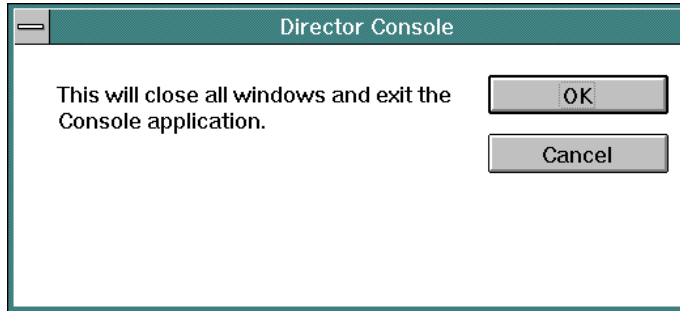
Table 1. Default Parameters for Console Support Software (Tape Restore)

Feature	Default Parameters
Set Time and Date	Time and date for manufacturing location
Change Time and Date Format	Time: 12-hour clock Date: Month-Day-Year
Console Screen Lock	Disabled
Keyboard Layout	United States
IP Address	1.1.1.1
MAC Address	Set on adapter card
Subnet Mask	255.0.0.0
Automatic Backup	Disabled
Default Printer	Generic/Text Only on LPT1 Generic/Text to File

To reformat and restore the Console fixed disk from diskettes and a backup tape:

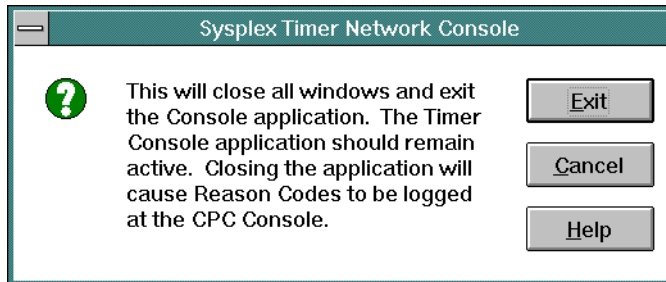
1. Obtain the following (XX.YY.ZZ indicates the software version, release, and patch numbers):
 - The 3.5-inch Console restore diskette labeled *Console Restore/SR1 of SR3, Version XX.YY.ZZ* (shipped with the Director or Sysplex Timer)
 - The 3.5-inch Console restore diskette labeled *Console Restore/SR2 of SR3, Version XX.YY.ZZ* (shipped with the Director or Sysplex Timer)
 - The 3.5-inch Console restore diskette labeled *Console Restore/SR3 of SR3, Version XX.YY.ZZ* (shipped with the Director or Sysplex Timer)
 - The tape cartridge containing the most recent backup version of the Console fixed disk (includes both the Director or Sysplex Timer Console application and associated system library).

2. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

3. At the OS/2 desktop, click the *Shutdown* button at the bottom of the launch pad. A dialog box appears, asking if you want to close the application without saving data.
4. Click the *OK* button. A *Shutdown Has Completed* message box appears, explaining it is now safe to turn off the computer or restart.
5. Power off the Console PC.

6. Insert the *Console Restore/SR1 of SR3* diskette in the diskette drive and power on the Console PC. Verify the memory test completes and the system powers on.
7. When prompted for OS/2 Diskette 2, insert the *Console Restore/SR2 of SR3* diskette and press the **Enter** key. Install and load messages appear.
8. When the following message appears, insert the *Console Restore/SR3 of SR3* diskette.

```
Place SR Disk #3 in Boot Drive
for following operations:

    FDISK.COM      Partitioning Disk
    FORMAT.COM     High Level Format
    SR.EXE         Restore Your DualStor Backup
```

9. To format the fixed disk, type `FDISK` at the `[A:]` prompt and press the **Enter** key.
10. When the *FDISK* screen appears, press the **Enter** key to display the *Options* menu.
11. Select the *Create Partition* option. The maximum disk size appears.

Note: If the *Create Partition* option is not available, a partition may exist. The *FDISK* screen displays the Console hardware configuration status as **Startable**, access as **C:primary**, FS Type as **Fat**, and MB between **150** and **500** (depending on the PC model and fixed disk size). If this appears, go to [step 14](#). If these specifications do not appear, select *Delete Partition* from the *Options* menu, then select *Create Partition* and continue to [step 12](#).
12. Press the **Enter** key. The *Partition* dialog box appears.
13. Select the *Primary Partition* option and press the **Enter** key.
14. Press the **F3** key twice to exit the *FDISK* utility.
15. Insert the *Console Restore/SR1 of SR3* diskette, and simultaneously press the **Ctrl**, **Alt**, and **Del** keys twice to reboot the Console PC.
16. When prompted, insert the *Console Restore/SR2 of SR3* diskette and press the **Enter** key.
17. When prompted, insert the *Console Restore/SR3 of SR3* diskette (this diskette must be in the diskette drive for [step 18](#) through [step 20](#)).
18. At the `[A:]` prompt, type `Format C:/FS:FAT` and press the **Enter** key.

19. When a message appears warning that all data on hard disk **C** will be lost, type **Y** (Yes) and press the **Enter** key to proceed with the format utility. Percentages of formatting completed appear.
20. When prompted for a volume label for drive **C**, type `Console` and press the **Enter** key.
21. Insert the *Console Restore/SR1 of SR3* diskette.
22. Power off the Console PC, wait at least 10 seconds, then power the Console PC back on.
23. Insert the tape cartridge that contains the most recent backup version of the Console fixed disk in the tape drive. The indicator to the left of the tape drive illuminates as the PC reads the tape header.
24. Insert the *Console Restore/SR2 of SR3* diskette when prompted.
25. Insert the *Console Restore/SR3 of SR3* diskette when prompted.
26. When the indicator to the left of the tape drive extinguishes, type `SR` at the `[A:]` prompt and press the **Enter** key. The indicator illuminates.
27. When the indicator extinguishes, press the **Enter** key. Ensure the light extinguishes *before* pressing the **Enter** key. The following prompt appears when installation is complete:


```
Do you want to restore backup set 'Console Backup'?
```
28. Type **Y** (Yes) and press the **Enter** key. The following prompt appears:


```
Enter logical disk letter to be the restore target of
backup set 'Console Backup' (default=C:).
```
29. Press the **Enter** key. The following prompt appears:


```
Begin restore operation?
```
30. Type **O** (OK) and press the **Enter** key. This starts installation from the tape to the fixed disk. Complete installation takes approximately one hour. The restore process completes as messages appear indicating bytes restored.
31. When the `[A:]` prompt appears, remove the tape cartridge and *Console Restore/SR3 of SR3* diskette, and simultaneously press the **Ctrl**, **Alt**, and **Del** keys twice to reboot the Console PC.

Customize the Console Operating Environment

This section describes procedures to change ESCON Director or Sysplex Timer Console operating parameters from default values listed in [Table 2](#). If you restore the PS/2 Console's fixed disk, all the parameters (including the IP address of the Console) are reset to default values.

Note: Do not enable the screen saver or automatic lockup function (password protection) through the OS/2 desktop *Settings* option. Enable the screen saver using instructions in this section.

Table 2. Procedures and Default Parameters for Console Operating Environment

Procedure	Default Parameter	Page
Set Date and Time	Set to date and time for manufacturing location	118
Change Date and Time Format	Time: 12-hour clock Date: Month-Day-Year	121
Enable Screen Saver	Disabled	124
Change Keyboard Layout and Country Code Page	United States	127
Change IP Address	1.1.1.1	135
Change Subnet Mask	255.0.0.0	135
Change MAC Address	Set on adapter card	142
Change Default Printer	Generic/Text Only on LPT1 Generic/Text to File	145

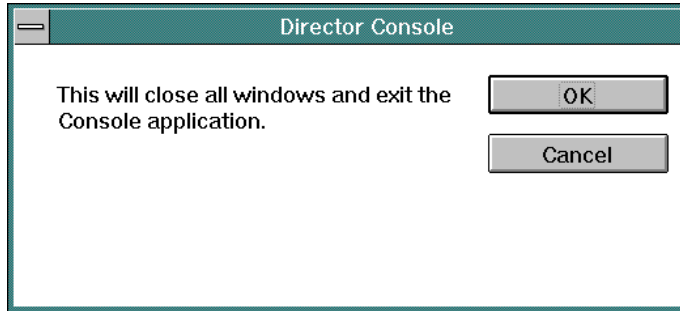
Set Date and Time

This procedure sets the date and time for the Console PC's operating environment. Although the date and time are set, the parameters may require change for an installation location. Use this procedure to display or change the Console date and time or synchronize the Console date and time with a Sysplex Timer network.

In the Director Console application, *Console Audit Log* and *Console Error Log* events are time stamped with the PC date and time. All other date and time entries in the application are time stamped with parameters derived from the Director.

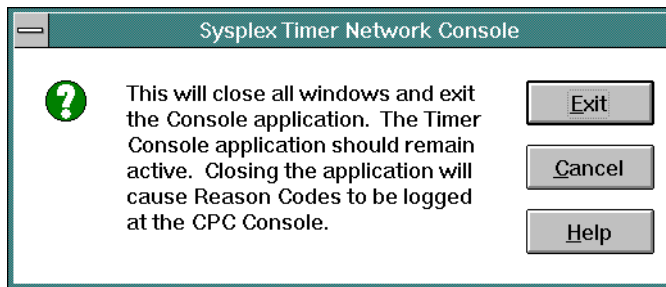
In the Sysplex Timer Console application, *Console Audit Log* events are time stamped with the PC date and time. All other date and time entries in the application are time stamped with Coordinated Universal Time (UTC) derived from the Timer.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



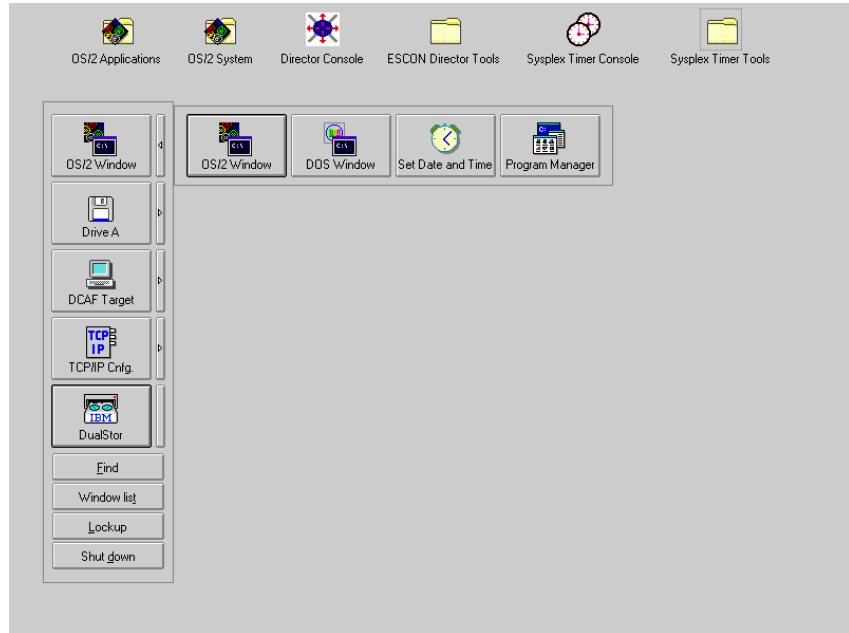
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

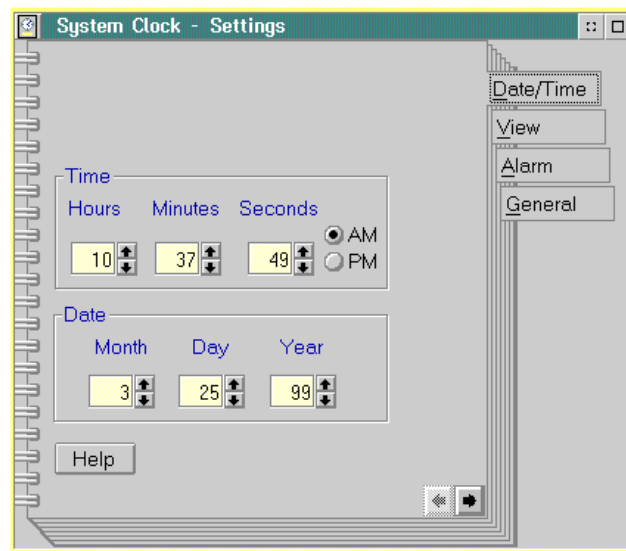


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



3. Click the *Set Date and Time* button. The *System Clock - Settings* notebook appears with the *Date/Time* page open.



4. To adjust the Console time, click the up or down arrows by the *Hours*, *Minutes*, and *Seconds* fields as required. Click the *AM* or *PM* radio button as required.

5. To adjust the Console date, click the up or down arrows by the *Month*, *Day*, and *Year* fields as required.
6. Close the *System Clock - Settings* notebook by double-clicking the icon in the upper left corner of the notebook.
7. Close the *OS/2 Window* drawer by clicking the drawer arrow.
8. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 2](#) on page 118), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
9. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Change Date and Time Format

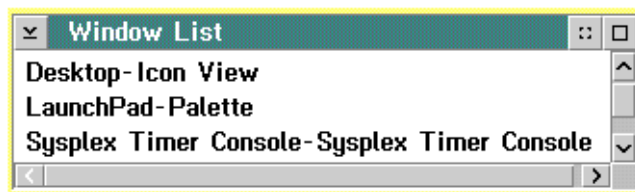
This procedure changes the time format between a 12-hour and 24-hour clock, and the date format between a month-day-year, day-month-year, or year-month-day format.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



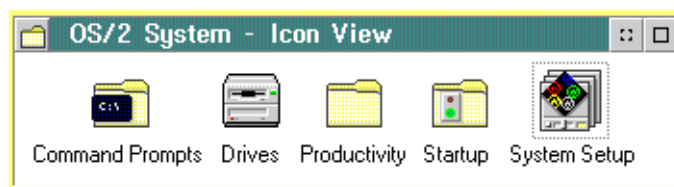
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

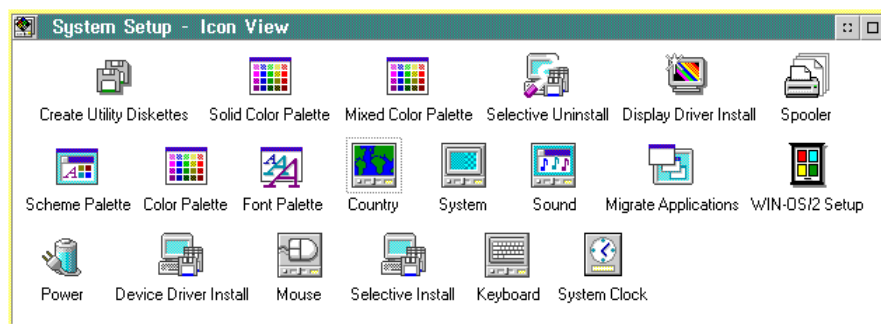


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

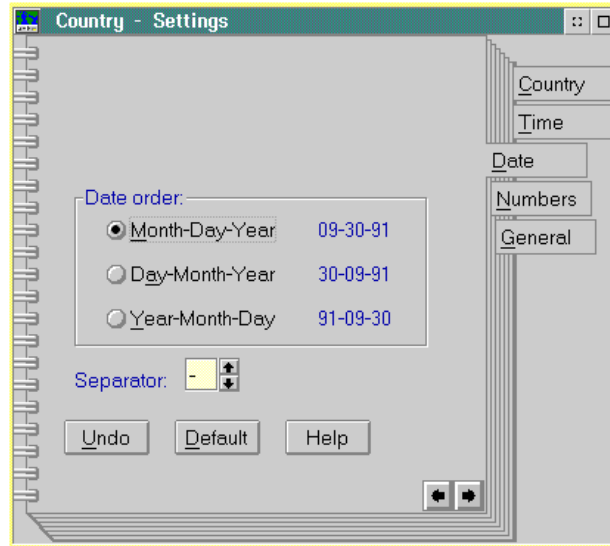
2. Double-click the *OS/2 System* icon at the top of the OS/2 desktop. The *OS/2 System - Icon View* appears.



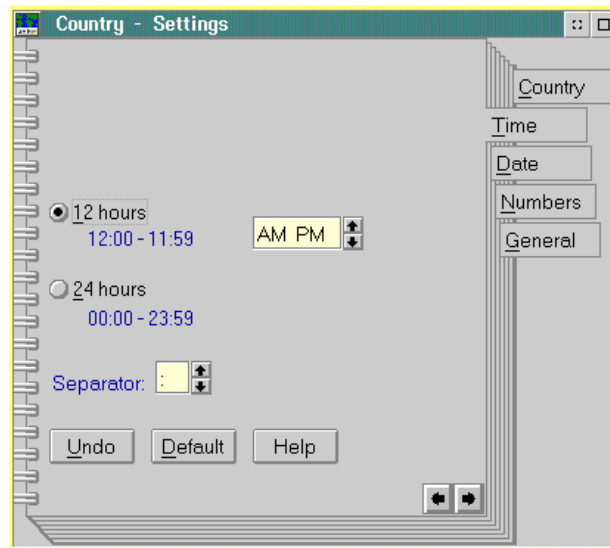
3. Double-click the *System Setup* icon. The *System Setup - Icon View* appears.



4. Double-click the *Country* icon. The *Country - Settings* notebook appears with the *Country* page open.
5. Perform one or both of the following to adjust the format:
 - Click the *Date* tab to display the *Date* page. Click the desired radio button to select between *Month-Day-Year*, *Day-Month- Year*, or *Year-Month-Day* display formats.



- Click the *Time* tab to display the *Time* page. Click the desired radio button to select between *12 hours* or *24 hours* display formats. If the *12 hours* format is used, select between AM or PM display by scrolling through the list box to the right of the radio button.



6. Double-click the upper left corner of the *Country - Settings* notebook box to close the notebook.

7. Double-click the upper left corner of the *System Setup - Icon View* to close the view.
8. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 2](#) on page 118), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
9. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Enable Screen Saver

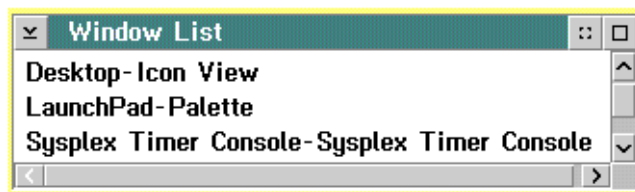
Perform this procedure to enable the Win-OS/2 screen saver or modify screen saver operation. Do not enable the screen saver or automatic lockup (password protection) function available through the OS/2 desktop *Properties* option.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



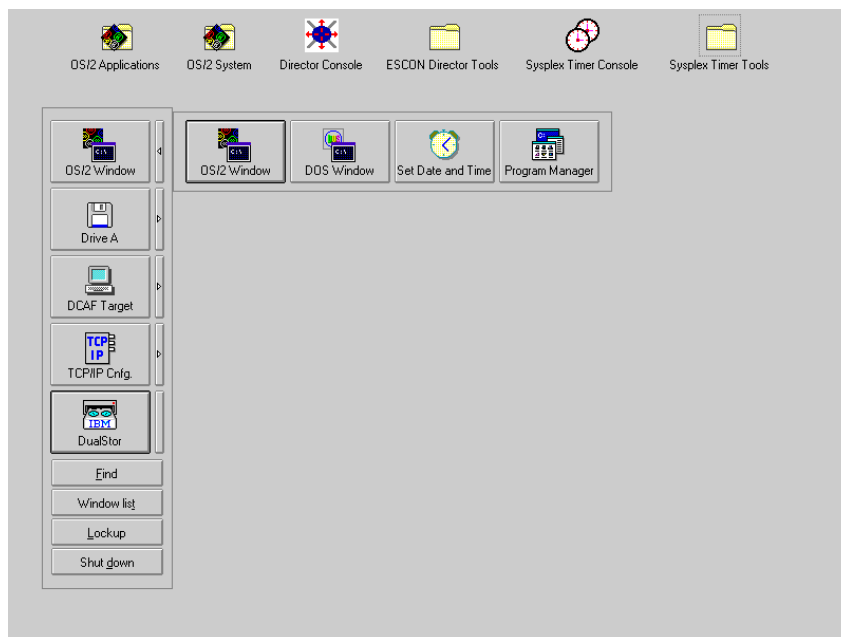
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

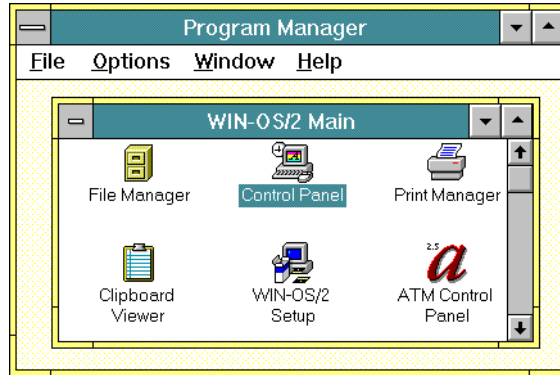


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

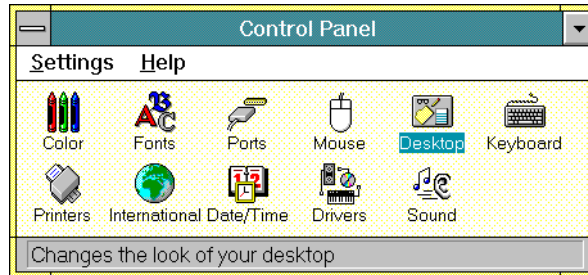
2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



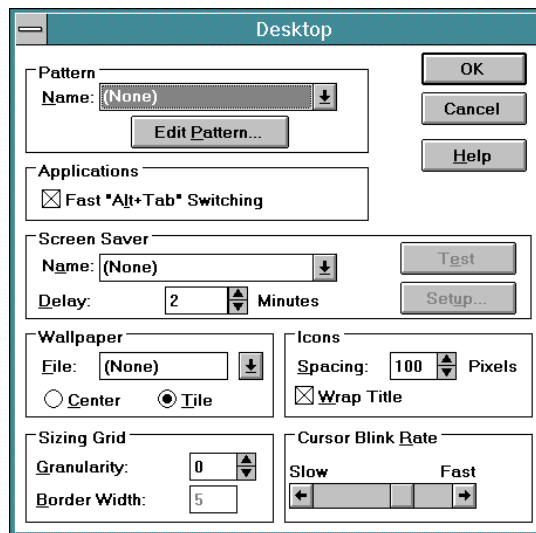
3. Click the *Program Manager* button. The *Program Manager* window appears.



4. At the *Win-OS/2 Main* window, double-click the *Control Panel* icon. The *Control Panel* window appears.



5. Double-click the *Desktop* icon. The *Desktop* dialog box appears.



6. Modify the screen saver function as required. Enable the screen saver by scrolling to a desired screen (other than *None*) in the *Name* field in the *Screen Saver* section. Set the time delay for the screen saver to enable by scrolling to the desired time in the *Delay* field. The password function for the Console is not required. To enable the password function, select a screen saver and the *Setup* button. Click the *Password* check box, enter a password, and click *OK*.
7. When finished, click the *OK* button on the *Desktop* dialog box.
8. Double-click the top left corner of the *Control Panel* and *Program Manager* windows to close the windows.
9. When the *Exit Win-OS/2* dialog box appears, click the *OK* button to exit Win-OS/2, close the dialog box, and return to the OS/2 desktop.
10. Close the *OS/2 Window* drawer by clicking the drawer arrow.
11. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 2](#) on page 118), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
12. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Keyboard Layout and Country Code Page (International Users Only)

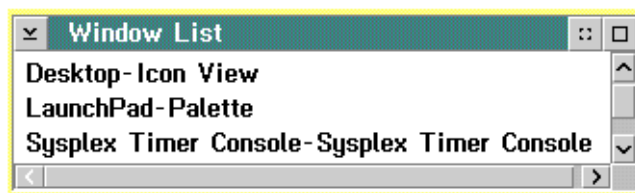
Perform this procedure to change the keyboard layout and country information. This allows keyboards to be customized for international users (outside of the United States). You must also change options for Win-OS/2 windows and the OS/2 operating system.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



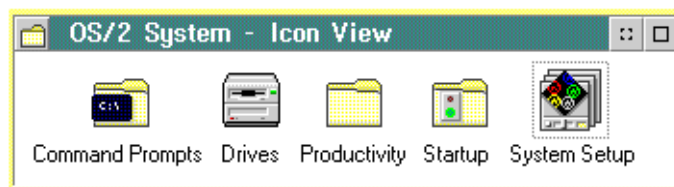
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

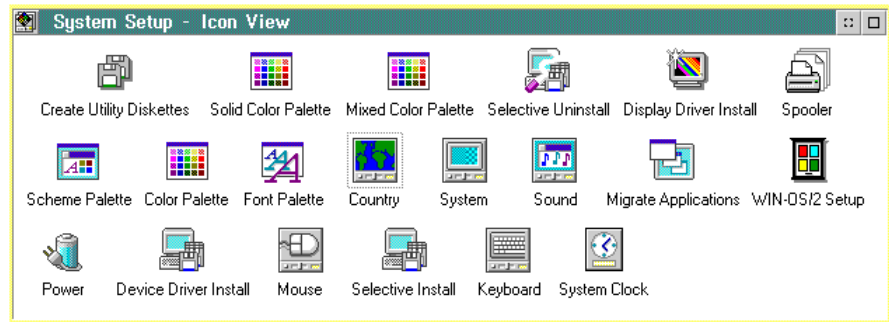


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

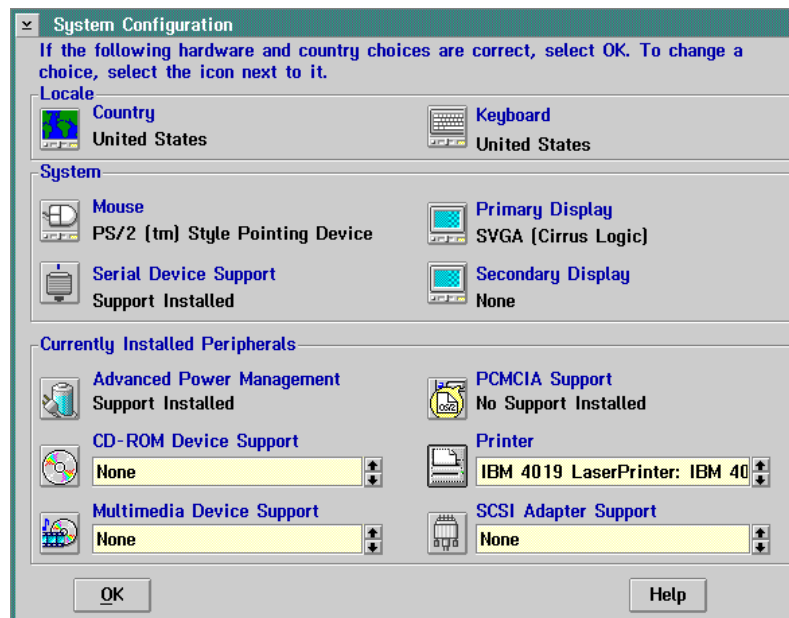
2. Double-click the *OS/2 System* icon at the top of the OS/2 desktop. The *OS/2 System - Icon View* appears.



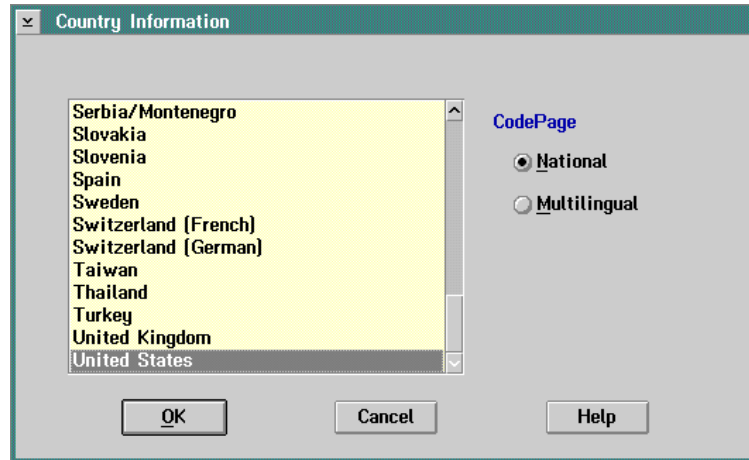
3. Double-click the *System Setup* icon. The *System Setup - Icon View* appears.



4. Double-click the *Selective Install* icon. A message box appears indicating the installation program is initializing. After a few seconds, the *System Configuration* dialog box appears.



5. At the *Locale* area of the *System Configuration* dialog box, click the *Country* icon. The *Country Information* dialog box appears.

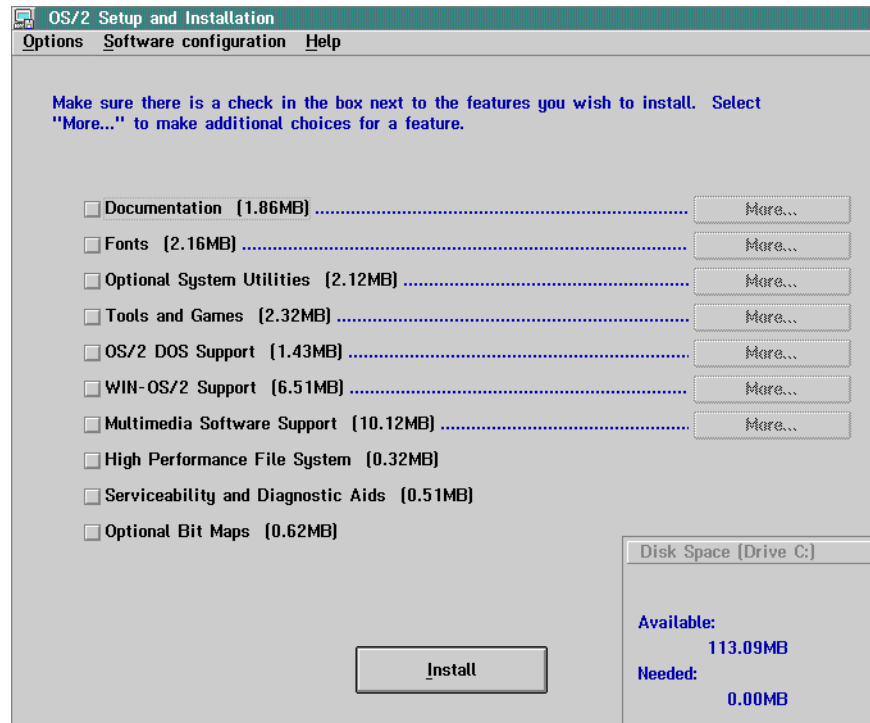


6. Click (select) the desired country name and click the *OK* button. The *System Configuration* dialog box appears again.
7. At the *Locale* area of the *System Configuration* dialog box, click the *Keyboard* icon. The *Keyboard* dialog box appears.

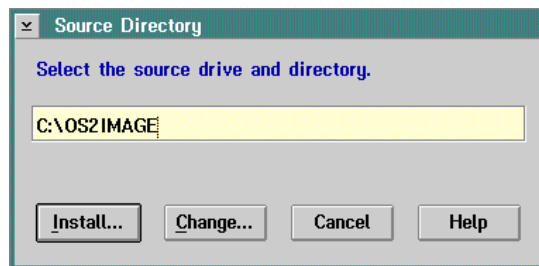


8. Click (select) the desired country name and click the *OK* button. The *System Configuration* dialog box appears again.

- Click the *OK* button. The *OS/2 Setup and Installation* dialog box appears.



- Click the *Install* button to continue. The *Source Directory* dialog box appears.



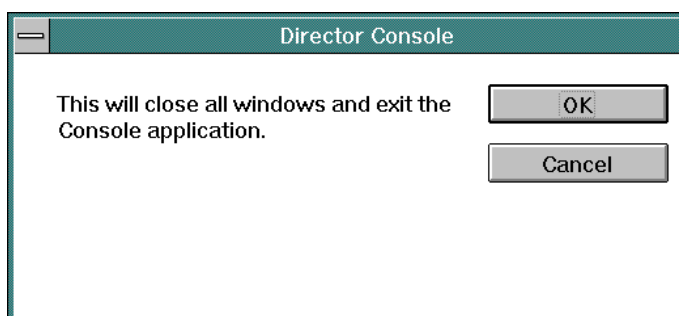
- Click the *Install* button. A message box appears explaining that the OS/2 setup is completing the configuration change. After a few seconds, a message box appears telling you to shut down and restart the system.
- Click the *OK* button. The *System Setup - Icon View* appears again.
- Double-click the upper left corner of the *System Setup - Icon View* and *OS/2 System - Icon View* to close the views and return to the OS/2 desktop.

14. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 2](#) on page 118), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
15. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Change Win-OS/2 Keyboard Settings

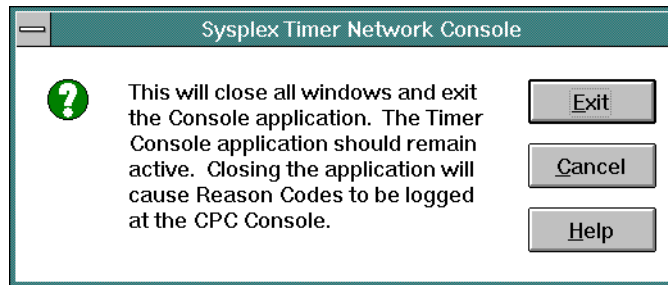
Perform this procedure to change the keyboard layout for Win-OS/2 windows and the OS/2 operating system. This allows keyboards to be customized for international users (outside of the United States).

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



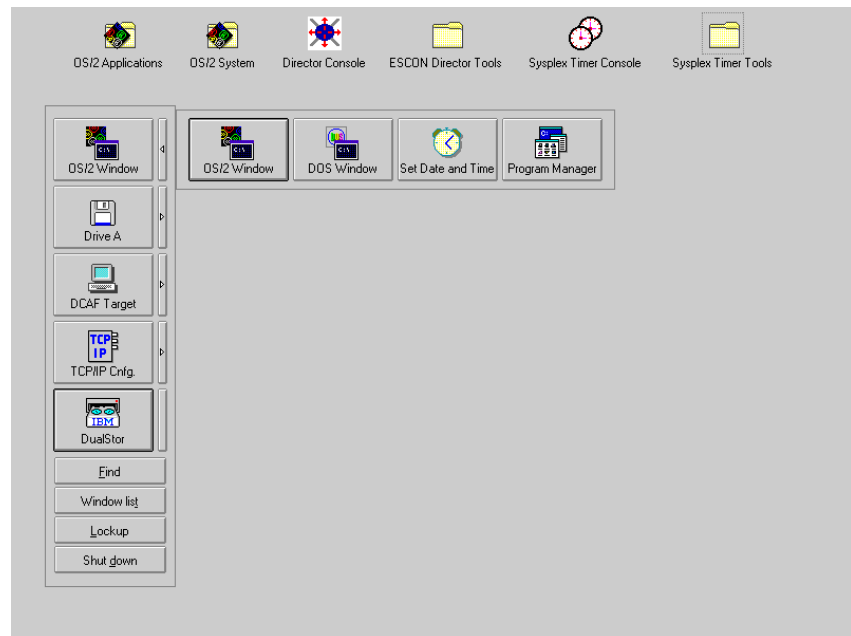
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

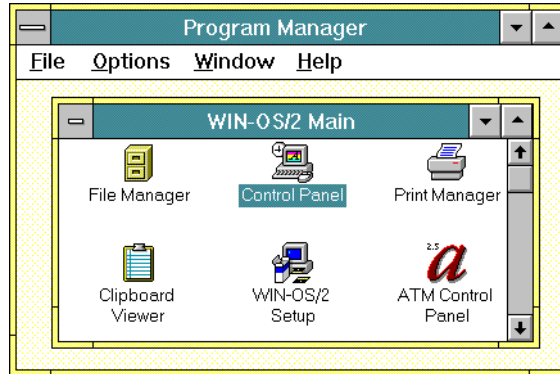


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

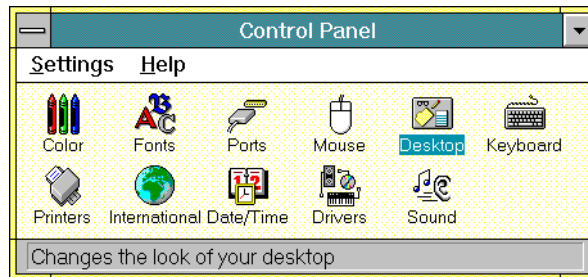
2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



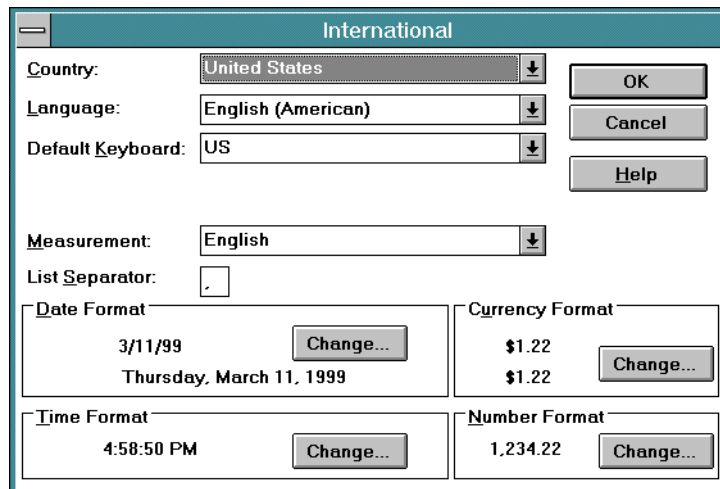
3. Click the *Program Manager* button. The *Program Manager* window appears.



4. At the *Win-OS/2 Main* window, double-click the *Control Panel* icon. The *Control Panel* window appears.



5. Double-click the *International* icon. The *International* dialog box appears.



6. Click the arrow button for the *Country* field and select the desired country from the drop-down list.

7. Click the arrow button for the *Language* field and select the desired language from the drop-down list.
8. Click the arrow button for the *Default Keyboard* field and select the desired keyboard layout from the drop-down list.
9. Double-click the top left corner of the *Control Panel* and *Program Manager* windows to close the windows.
10. When the *Exit Win-OS/2* dialog box appears, click the *OK* button to exit Win-OS/2, close the dialog box, and return to the OS/2 desktop.
11. Close the *OS/2 Window* drawer by clicking the drawer arrow.
12. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 2](#) on page 118), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
13. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Token Ring Adapter IP Address and Subnet Mask

The default IP address for the Console Token Ring adapter card is 1.1.1.1, and the default subnet mask is 255.0.0.0. If you wish to change either or both these values, obtain a unique Console IP address or subnet mask from the LAN administrator.

The IP address must be in the form *nnn.nnn.nnn.nnn*, where *nnn* is a decimal byte in the range 0 through 255. The IP address may not be all zeros or all 255s.

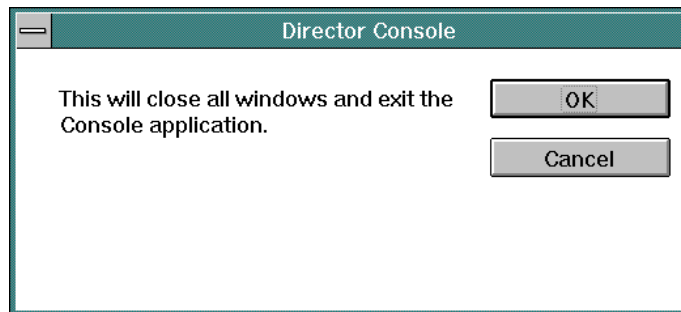
Change default IP address and subnet mask values if:

- The Console is not on an isolated Token Ring LAN.
- There is more than one Console on the Token Ring LAN.

- The subnet mask does not conform to the network to which the Console is connected.
- The IP address conflicts with the address of another device on the ring or does not conform to the LAN addressing scheme.
- The IP address does not conform to the LAN addressing scheme.

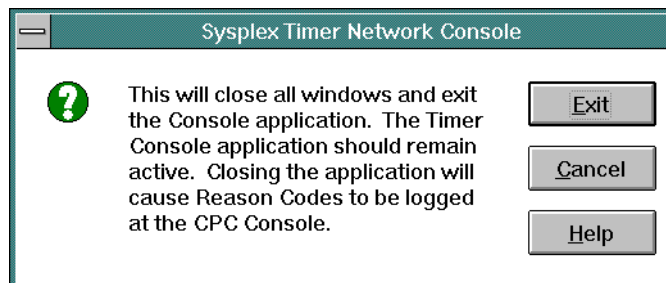
Perform the following procedure to display and change the Director or Sysplex Timer Console's IP address and subnet mask.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



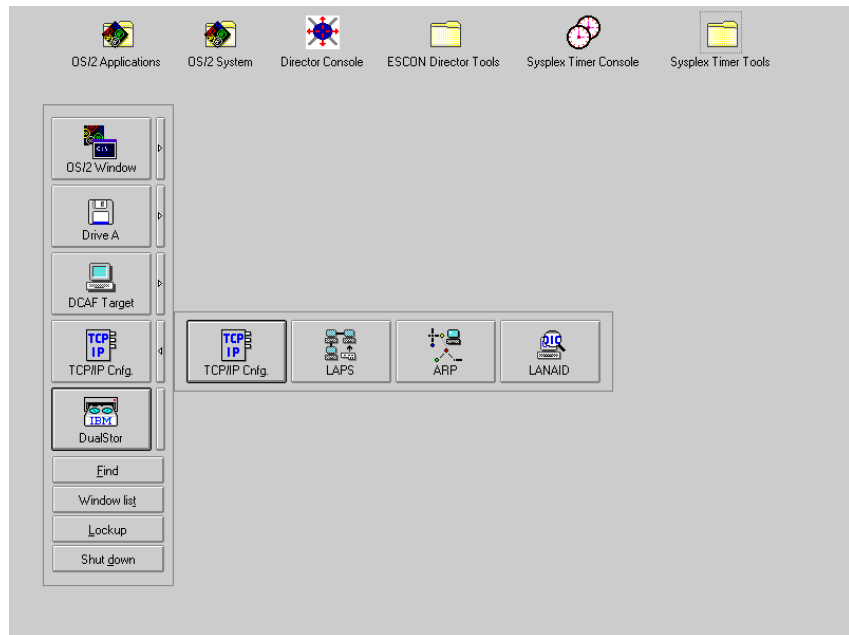
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

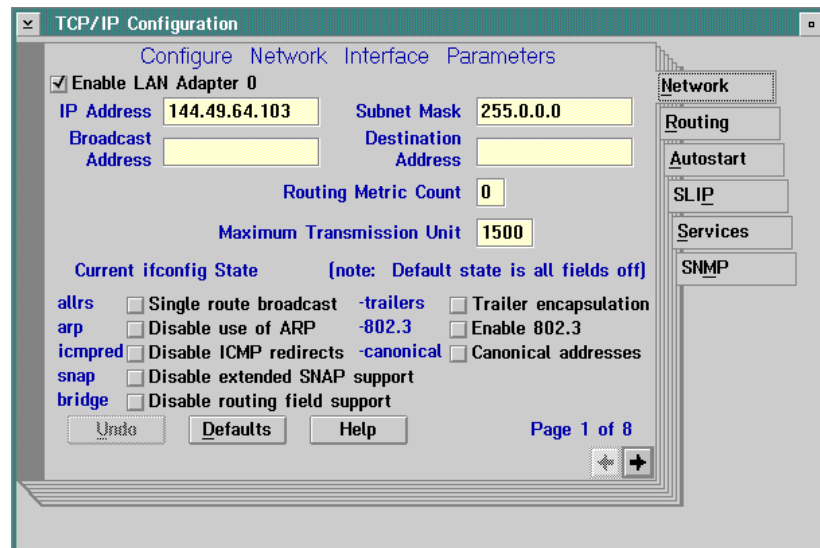


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

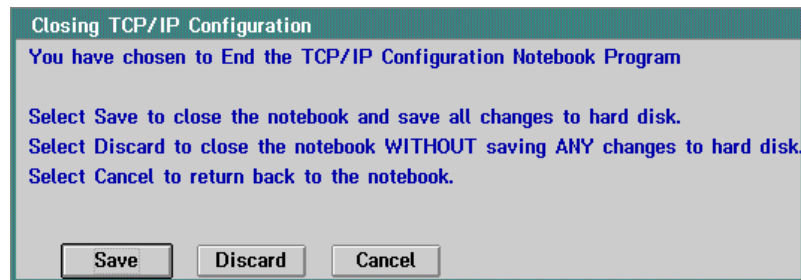
- At the OS/2 desktop, click the *TCP/IP Cnfg.* drawer arrow on the launch pad to open the drawer.



- Click the *TCP/IP Cnfg.* button. The *TCP/IP Configuration* notebook appears with the *Network* page open.



4. To change the IP address, click in the *IP Address* field. Type the new IP address as necessary. Move within the field by using the left and right arrow keys (← and →). Use the **Backspace** key to delete characters.
5. To change the subnet mask, click in the *Subnet Mask* field. Type the new subnet mask as necessary. Move within the field by using the left and right arrow keys (← and →). Use the **Backspace** key to delete characters.
6. Close the *TCP/IP Configuration* notebook by double-clicking the upper left corner of the notebook. The *Closing TCP/IP Configuration* dialog box appears.

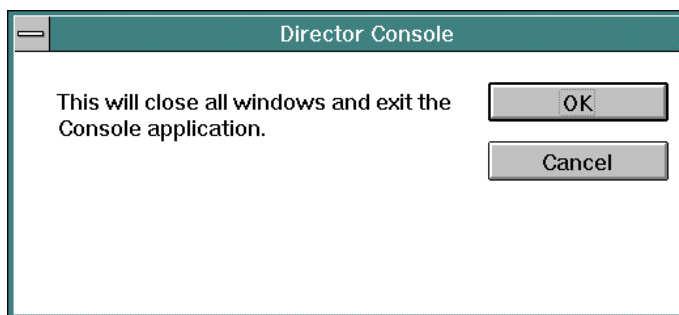


7. Click the *Save* button. The OS/2 desktop appears.
8. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
9. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 2](#) on page 118), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
10. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Token Ring Adapter MAC Address

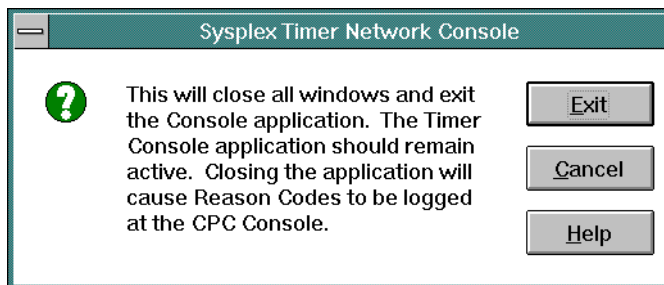
Change the Console Token Ring adapter's Media Access Control (MAC) address if the address does not conform to the locally-administered LAN addressing scheme. Perform the following procedure to display and change the Director or Sysplex Timer Console's MAC address.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



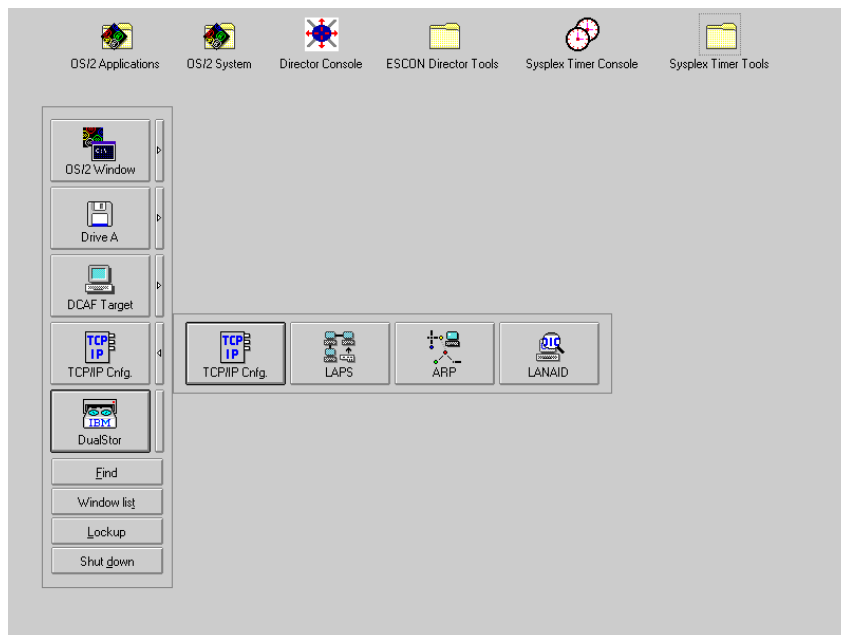
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

2. At the OS/2 desktop, click the *TCP/IP Cnfg.* drawer arrow on the launch pad to open the drawer.

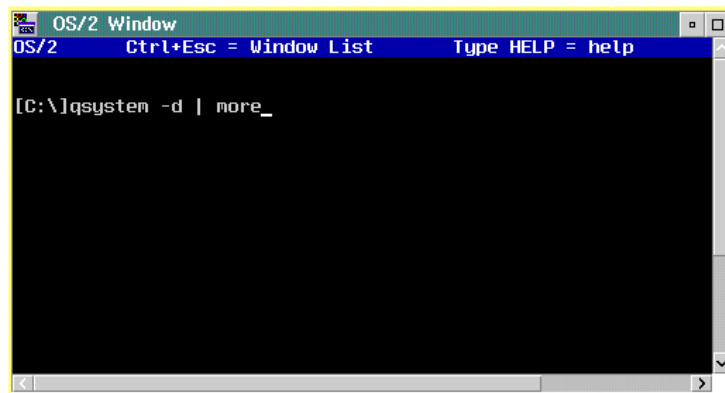


3. To display the MAC address, continue to ["Display MAC Address"](#) below. To change the MAC address, refer to ["Change MAC Address"](#) on page 142.

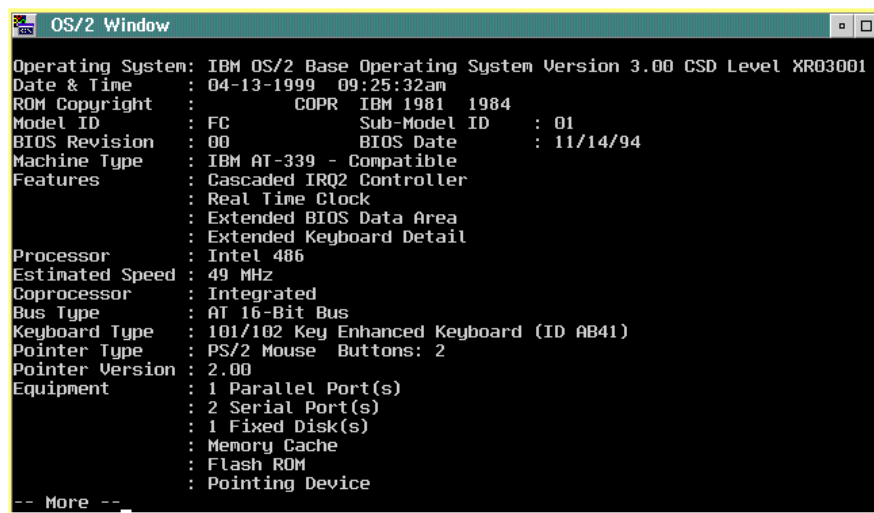
Display MAC Address

To display the MAC address:

1. At the OS/2 desktop, close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
2. Click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.
3. Click the *OS/2 Window* button on the *OS/2 Window* drawer. The *OS/2 Window* appears.



4. Type `qsystem -d | more` (as shown above) and press the **Enter** key. A second *OS/2 Window* appears showing system data.



5. Press the **Enter** key to display a continuation of the *OS/2 Window* data. Record the MAC address. The address appears under *Primary Token Address*:. The MAC address is **0004AC9540C7** in the following example.

```

OS/2 Window
OS/2      Ctrl+Esc = Window List      Type HELP = help
: Flash ROM
: Pointing Device
-- More --
: Math Coprocessor
Serial Port 1 : COM1: 03F8
Serial Port 2 : COM2: 02F8
Parallel Port 1 : LPT1: 03BC
Token Ring : 1 Adapter(s)
Primary Token : Port A20-A23 ROM: DA00 Int Level: 11 Address: 0004AC9540C7
Fixed Disk 1 : 257MB ( 264,040KB) ( 270,376,960 bytes)
: Cylinders 943 Heads/Cyl 14 Sectors/Head 40
Logical Drive C : Size 263,872KB ( 257.6MB) Avail 115,208KB ( 112.5MB)
: Total Units 32,984 Sectors/Unit 16 Bytes/Sector 512
: Avail Units 14,401 Total Sectors 527,744
: Local Drive - File System is FAT
: Volume Label is CONSOLE
Total Memory : 16,000KB (15.6MB)
Conventional : 640KB
Extended Memory : 15,360KB
Adapter ROM 1 : Addr C0000-C7FFF Cirrus Quadtel VIDEO
QSYSTEM V2.22 (Apr 25 1995) N Couch/J Muir (c) Copyright IBM Corp. 1989, 1994
[C:\]

```

6. Close the *OS/2 window* by double-clicking the top left corner. When the *OS/2 Window* dialog box appears, click the *Yes* button to close without saving data. The OS/2 desktop appears.
7. Close the *OS/2 Window* drawer by clicking the drawer arrow.

Change MAC Address

To change the MAC address:

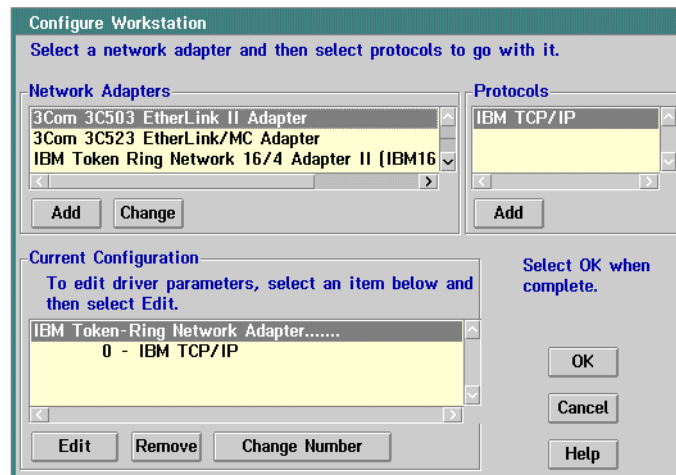
1. Click the *LAPS* button on the *TCP/IP Cnfg.* drawer. The *IBM LAN Adapter and Protocol Support* window appears.



2. Click the *Configure* button. The *Configuration* dialog box appears.



3. Ensure the *Configure LAN transports* radio button is selected, then click the *Continue* button. The *Configure Workstation* dialog box appears.



4. Use the scrolling arrows to scroll through the *Current Configuration* list box and click (select) the *IBM Token-Ring Network Adapters* entry.
5. Click the *Edit* button. The *Parameters for IBM Token-Ring Network Adapter* dialog box appears.

Parameters for IBM Token-Ring Network Adapter
 Edit the parameters as needed.

Early release	NO
Adapter Mode	PRIMARY
Network adapter address	
Shared RAM address	
Maximum number of queued transmits	6
Number of receive buffers	2
Receive buffer size	1160
Number of transmit buffers	1
Transmit buffer size	4400
Enable bridge	NO
Bridge transmit control ram	

OK Cancel Range Help

6. Click the *Network adapter address* field. Enter the new hexadecimal MAC address (12-digit) as required.
7. Click the *OK* button. The *Configure Workstation* dialog box reappears.
8. Click the *OK* button. The *IBM LAN Adapter and Protocol Support* dialog box reappears.
9. Click the *Exit* button. The *CONFIG.SYS Updates* dialog box appears. The letter **C** should appear in the *Drives to update* field. If it does not, use the scrolling arrows to select **C**.
10. Click the *Continue* button. A *CONFIG.SYS Updated* dialog box appears explaining the **CONFIG.SYS** file was successfully updated.
11. Click the *OK* button. The *Exiting LAPs* dialog box appears.
12. Click the *Exit* button to return to the OS/2 desktop.
13. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
14. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.

- If you are performing other customization tasks (refer to [Table 2](#) on page 118), perform the tasks and shut down and restart the Console. For instructions, refer to “[Shut Down and Restart the OS/2 Operating System and Console](#)” on page 26.
15. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Set or Change Default Printer

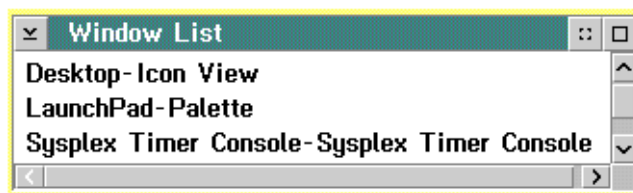
Perform the following procedure to set or change the default printer for the Director or Sysplex Timer Console.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



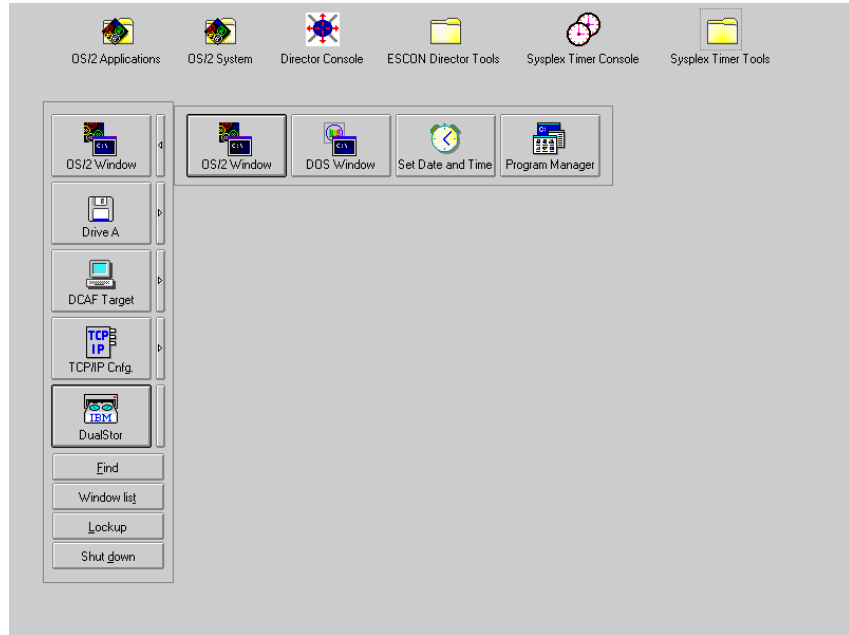
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

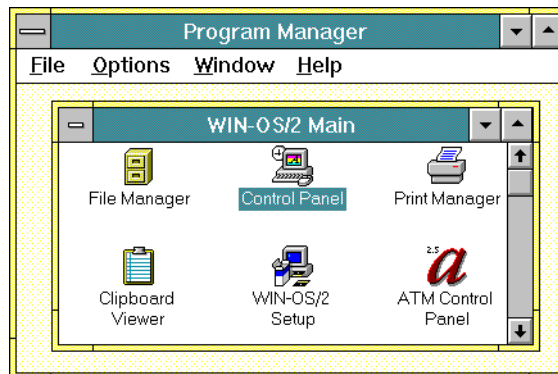


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

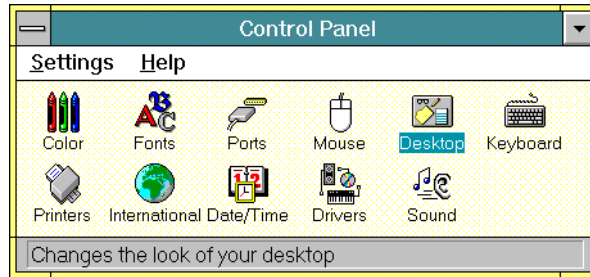
2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



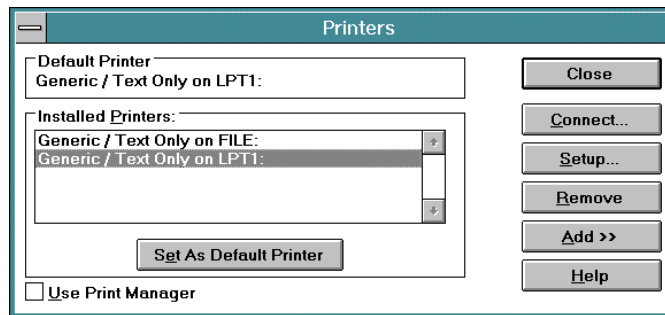
3. Click the *Program Manager* button. The *Program Manager* window appears.



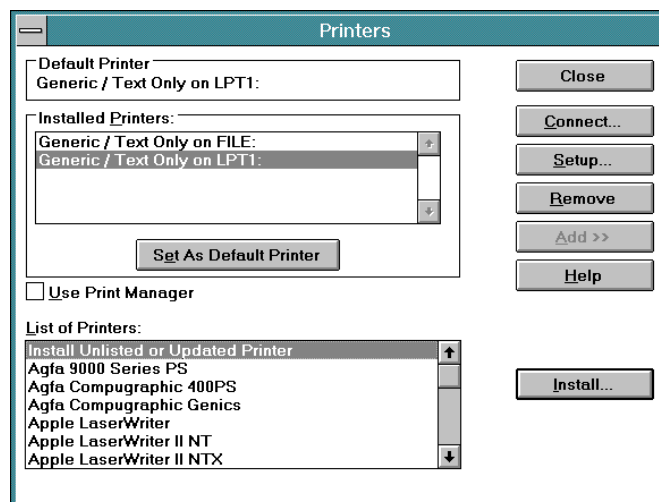
4. At the *Win-OS/2 Main* window, double-click the *Control Panel* icon. The *Control Panel* window appears.



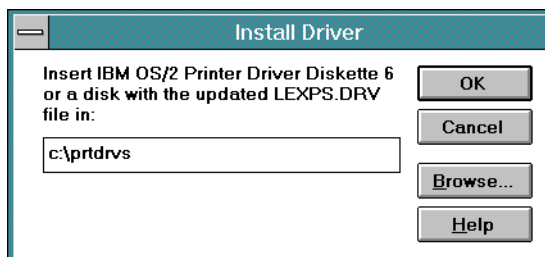
5. Double-click the *Printers* icon. The *Printers* dialog box appears.



6. Click (select) a driver displayed in the *Installed Printers* field and click the *Set as Default Printer* button.
7. To add a driver not listed in the *Installed Printers* field, perform the following:
 - a. Click the *Add* button. The *Printers* dialog box reappears with a list of available printers.



- b. Scroll through the list of printers and select the desired printer.
- c. Click the *Install* button to display the *Install Driver* dialog box.



- d. Type **C:\prtdrvs** and click the *OK* button. The driver loads and appears under the list of installed printers in the *Printers* dialog box.
8. Close all open windows by double-clicking the upper left corner of each window. When the *Exit Win-OS/2* dialog box appears, click the *OK* button to exit Win-OS/2, close the dialog box, and return to the OS/2 desktop.
 9. Close the *OS/2 Window* drawer by clicking the drawer arrow.
 10. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 2](#) on page 118), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 11. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Chapter 6. Model PC-330 Console Procedures

This chapter describes Operating System/2 (OS/2) Warp Connect 3.0 procedures for an IBM Model PC-330 computer used as an Enterprise Systems Connection (ESCON) Director Console or Sysplex Timer Console. The procedures are Director and Timer-specific and include:

- Performing general administrative tasks.
- Performing backup and restore functions.
- Customizing the Console operating environment.

General Administrative Tasks

This section describes general administrative tasks for the ESCON Director Console or Sysplex Timer Console. The section provides instructions to:

- Perform the data collection procedure for the Director or Sysplex Timer.
- Clear the address resolution protocol (ARP) table for the local area network (LAN) on which a Director or Timer is installed.
- Migrate a Director database to another Console (excluding a Hardware Management Console).
- Change the Token Ring adapter data rate for the Console PC.
- Create Console diagnostic diskettes.

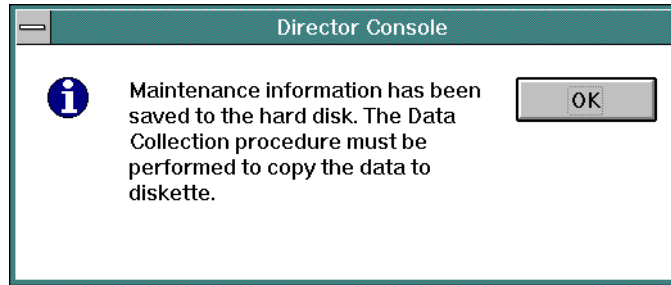
Perform Data Collection Procedure

Perform the data collection procedure for the Director or Sysplex Timer after a system problem occurs or when a field-replaceable unit (FRU) is removed and replaced.

Director Data Collection

The data collection procedure transfers maintenance information to the Director Console's fixed disk, then to a 3.5-inch diskette. The diskette is mailed to the original equipment manufacturer (OEM) for problem analysis and resolution.

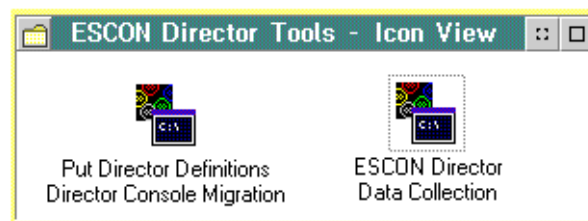
1. With the Director's *Active Matrix* window open, select the *Collect Maintenance Information* option from the *Maintenance* menu. The *Collect Maintenance Information* dialog box appears showing files being transferred and the transfer status. When all files are transferred to the fixed disk, the following dialog box appears.



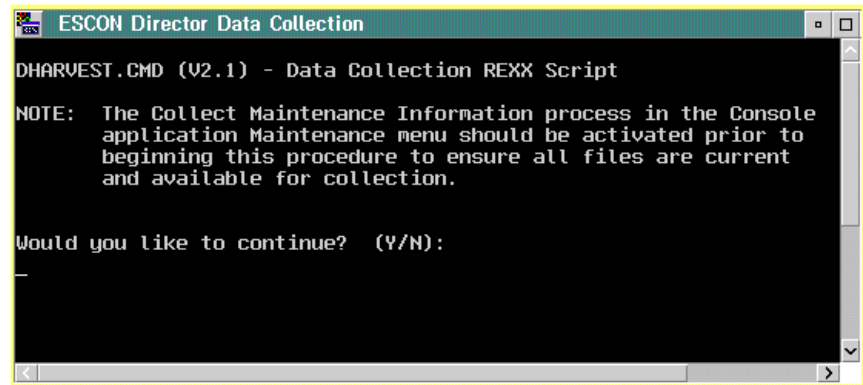
2. Click the *OK* button to close the dialog box. The Director's *Active Matrix* window reappears.
3. Record the Director name. The name (up to eight characters in length) appears on the title bar at the top of the active matrix window.
4. Simultaneously press the **Ctrl** and **Esc** keys to transfer to the Director Console's OS/2 desktop. The *Window List* appears.



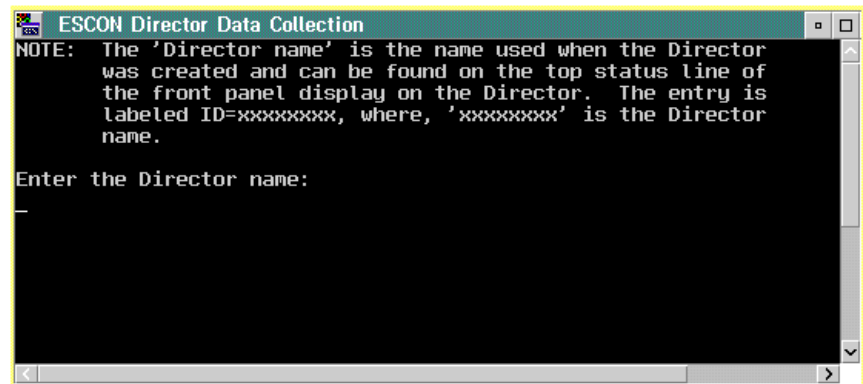
5. Double-click the *Desktop-Icon View* selection. The Director Console's OS/2 desktop appears.
6. Insert a data collection diskette into drive **A:** of the Director Console in accordance with one of the following steps:
 - If you are removing and replacing a FRU in the 9032-003 or 9033-004 ESCON Director, use the data collection diskette shipped with the replacement FRU. The diskette is labeled *Data Collection Diskette*.
 - If a labeled data collection diskette is not available, a blank, DOS-formatted diskette may be used.
7. At the OS/2 desktop, double-click the *ESCON Director Tools* folder. The *ESCON Director Tools - Icon View* appears.



8. Double-click the *ESCON Director Data Collection* icon. The first *ESCON Director Data Collection* window appears.



9. Type **Y** and press the **Enter** key. The second *ESCON Director Data Collection* window appears.



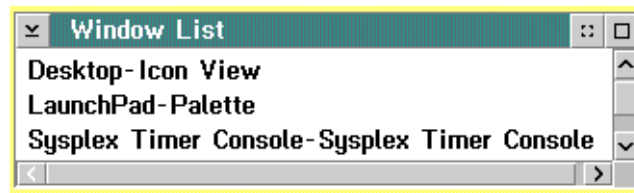
10. Type the Director name (recorded in [step 3](#) of this procedure) and press the **Enter** key. Messages appear in the window showing files transferring from the fixed disk to diskette. The data collection process is complete when the *Enter* prompt appears.
11. Press the **Enter** key. The *ESCON Director Data Collection* window closes.
12. Double-click the upper left corner of the *ESCON Director Tools - Icon View* to close the view and return to the OS/2 desktop.
13. Remove the data collection diskette from drive **A:** of the Director Console. Record the following information on the diskette label.

- Director serial number.
 - Quality Service Activity Reporting (QSAR) number.
 - Problem Management - Hardware (PMH) number.
 - Current date.
14. Insert the data collection diskette in the pre-addressed envelope provided and mail the envelope to the OEM.
 15. At the OS/2 desktop, open the Director Console application by double-clicking the *Director Console* icon. The Console application opens to the window closed in [step 4](#) of this procedure.

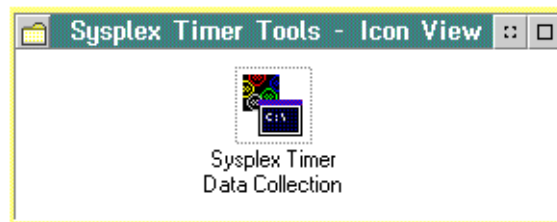
Sysplex Timer Data Collection

The data collection procedure transfers maintenance information from the Timer to a 3.5-inch diskette. The diskette is mailed to the OEM for problem analysis and resolution.

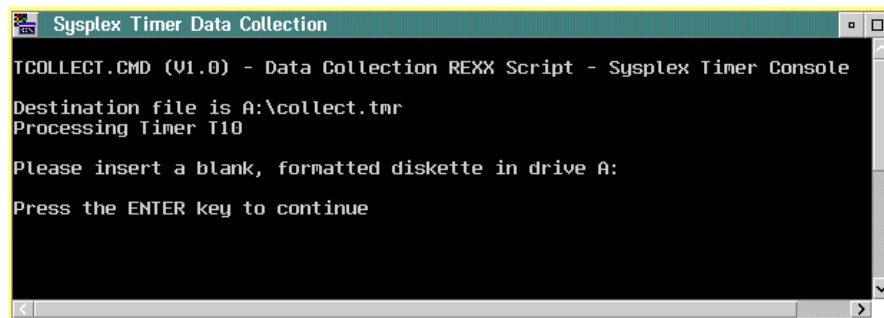
1. At the *Sysplex Timer Network Console* window, simultaneously press the **Ctrl** and **Esc** keys to transfer to the Timer Console's OS/2 desktop. The *Window List* appears.



2. Double-click the *Desktop-Icon View* selection. The Timer Console's OS/2 desktop appears.
3. At the OS/2 desktop, double-click the *Sysplex Timer Tools* folder. The *Sysplex Timer Tools - Icon View* appears.



4. Double-click the *Sysplex Timer Data Collection* icon. The *Sysplex Timer Data Collection* window appears.



```
TCOLLECT.CMD (V1.0) - Data Collection REXX Script - Sysplex Timer Console
Destination file is A:\collect.tmr
Processing Timer T10

Please insert a blank, formatted diskette in drive A:

Press the ENTER key to continue
```

5. Insert a data collection diskette into drive **A:** of the Timer Console. The diskette is labeled *Data Collection Diskette*. If a labeled data collection diskette is not available, a blank, DOS-formatted diskette may be used.
6. Press the **Enter** key. Messages appear in the window showing files transferring from fixed disk to diskette. The data collection process is complete when the *Enter* prompt appears.
7. Press the **Enter** key. The *Sysplex Timer Data Collection* window closes.
8. Double-click the upper left corner of the *Sysplex Timer Tools - Icon View* to close the view and return to the OS/2 desktop.
9. Remove the data collection diskette from drive **A:** of the Timer Console. Record the following information on the diskette label.
 - Timer serial number.
 - QSAR number.
 - PMH number.
 - Current date.
10. Insert the data collection diskette in the pre-addressed envelope provided and mail the envelope to the OEM.
11. At the OS/2 desktop, open the Sysplex Timer Console application by double-clicking the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Clear the Address Resolution Protocol Table

This procedure clears the ARP table for a LAN with a Director or Timer installed. The procedure clears old Internet Protocol (IP) or Media Access Control (MAC) addresses so the ARP table can rebuild with new addresses. The procedure prevents new Console, Director, or Timer addresses from conflicting with old, unused addresses. Clear the ARP table if:

- The IP or MAC address of a Director, Director Console, Timer, or Timer Console was changed after operating previously on the LAN.
- The Director, Director Console, Timer, or Timer Console are installed on a public (nondedicated) LAN.

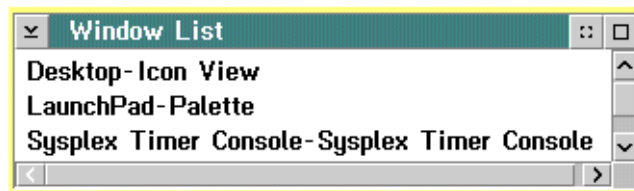
To clear the ARP table:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



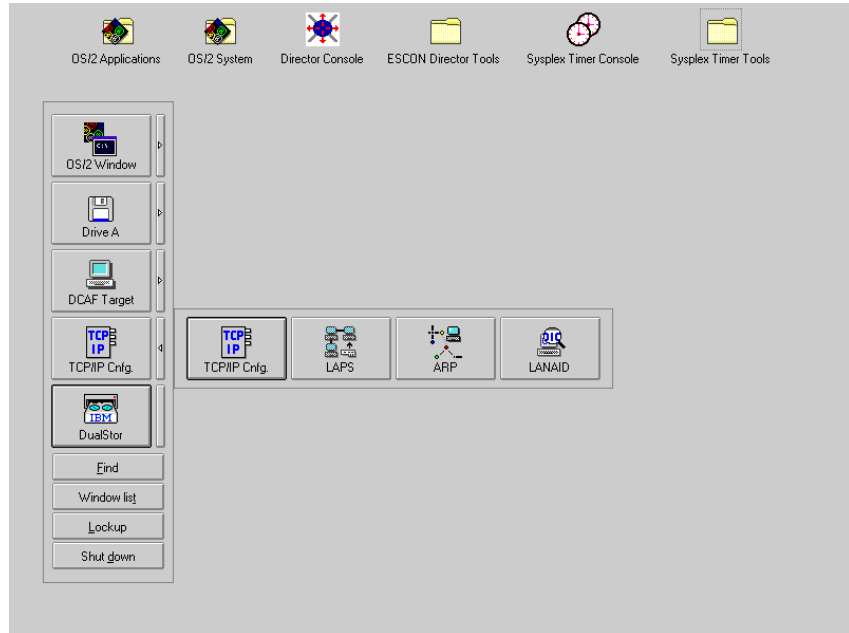
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.



Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Click the arrow on the *TCP/IP Cnfg.* drawer to open the drawer.



3. Click the *ARP* button to clear the table. The *ARP* window appears briefly and closes, indicating all the IP and MAC addresses cleared by the procedure.
4. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
5. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Migrate Director Definitions

If the Director Console application is uninstalled at a Console (Director, Sysplex Timer, Hardware Management, or other nondedicated Console) and installed on a new Console, Director definitions must be recorded on a 3.5-inch diskette and migrated to the new Console. Definitions include IP addresses, Director names, model numbers, and matrix configuration files.

If the Console application is discontinued and installed on a another Director Console, a Director definitions diskette must be created. Refer to "[Create Director Definitions Diskette](#)" below for instructions. If the Console application is installed on a new Director Console, Director definitions must be migrated. For instructions, refer to "[Migrate Definitions to a Director Console](#)" on page 157.

Create Director Definitions Diskette

Perform this procedure to create a Director definitions diskette.

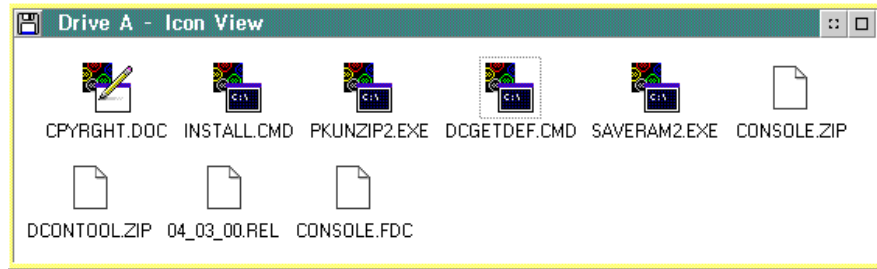
1. Ensure the Director Console application is closed, not just reduced to an icon. If the Console application is open (*Startup* or *Matrix* window appears), continue to [step a](#). If the OS/2 desktop appears, go to [step b](#).

Note: OS/2 screens may look slightly different depending on the level of operating system installed on the Director Console.

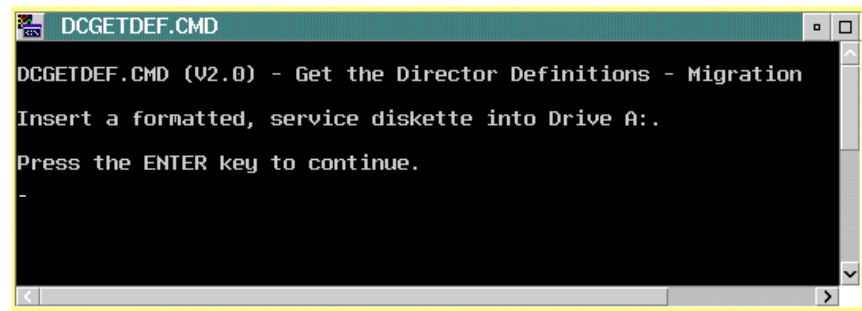
- a. At the *Startup* or *Matrix* window, select the *Close Window* option from the *File* menu. The Director Console application closes and the OS/2 desktop appears. Go to [step 2](#).
- b. At the OS/2 desktop, simultaneously press the **Ctrl** and **Esc** keys. The *Window List* appears.



- If the *Director Console - Director Console* selection **does not** appear, the Console application is closed. Double-click the *Desktop - Icon View* selection to return to the OS/2 desktop, and go to [step 2](#).
 - If the *Director Console - Director Console* selection **appears**, the Console application is open and minimized. Double-click the selection to maximize the application. At the *Startup* or *Matrix* window, select the *Close Window* option from the *File* menu. The Console application closes and the OS/2 desktop appears.
2. Insert the Console application diskette (labeled *Console Version XX.YY.ZZ*) into drive **A:** of the Director Console.
 3. Double-click the *OS/2 System* icon. The *OS/2 System - Icon View* appears.
 4. Double-click the *Drives* icon. The *Drives - Icon View* appears.
 5. Double-click the *Drive A* icon. The *Drive A - Icon View* appears.



6. Double-click the *DCGETDEF.CMD* icon. The *DCGETDEF.CMD* window appears.



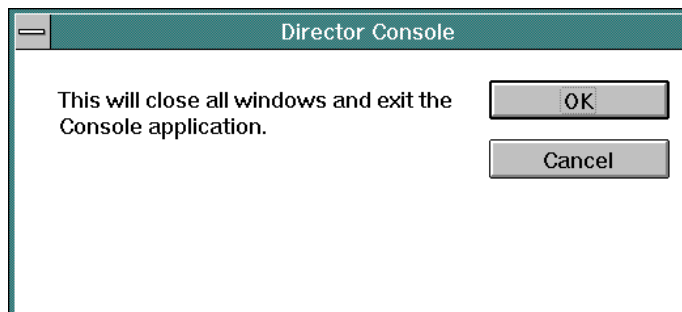
7. Remove the Console application diskette from drive **A:** of the Director Console and insert a blank, DOS-formatted diskette (provided with the Director).
8. Press the **Enter** key. Director definitions are copied to the diskette, and the copy progress is displayed in the *DCGETDEF.CMD* window. When the process is complete, the *DCGETDEF.CMD* window closes.
9. Double-click the upper left corner of the *Drive A - Icon View*, *Drives - Icon View*, and *OS/2 System - Icon View* to close the views and return to the OS/2 desktop.
10. Remove the Director definitions diskette from drive **A:** of the Director Console.
11. Label and store the Director definitions diskette as appropriate. The diskette can now be used to transport definitions to a new Console.

Migrate Definitions to a Director Console

Perform this procedure to migrate Director definitions to a Director Console.

Note: This procedure does not work if the Director Console application is open or if the Director Console library already contains definitions.

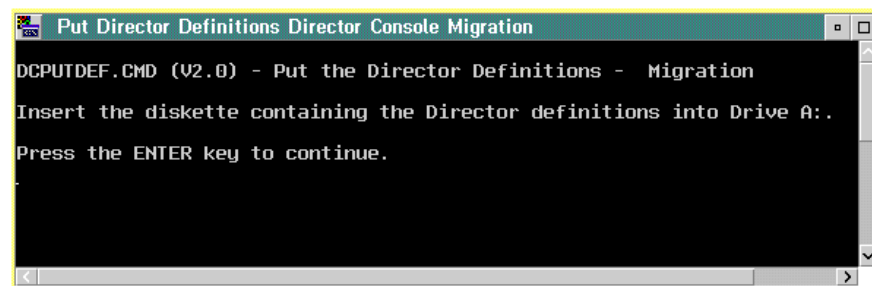
1. If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



2. Click the *OK* button to close the dialog box. The OS/2 desktop appears.
3. At the OS/2 desktop, double-click the *ESCON Director Tools* folder. The *ESCON Director Tools - Icon View* appears.



4. Double-click the *Put Director Definitions Director Console Migration* icon. The *Put Director Definitions Director Console Migration* window appears.



Note: If a warning appears indicating migration was terminated because Director definitions exist in the Console library, press the **Enter** key to close the *Put Director Definitions Director Console Migration* window and exit the utility.

If a warning appears indicating migration was terminated because the Console library was not initialized, press the **Enter** key to close the *Put Director Definitions Director Console Migration* window and exit the migration utility. Open and close the Director Console application, then perform this procedure again.

5. Insert the Director definitions diskette (created at the Console from which the definitions are migrated) into drive **A:** of the Console.
6. Press the **Enter** key. Director definitions are copied to the Console fixed disk for initializing the Director Console library. When the process is complete, the *Put Director Definitions Director Console Migration* window closes.
7. Double-click the upper left corner of the *ESCON Director Tools - Icon View* to close the view and return to the OS/2 desktop.
8. Remove the Director definitions diskette from drive **A:** of the Console. Store the Director definitions diskette as appropriate.
9. At the OS/2 desktop, start the Director Console application by double-clicking the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.

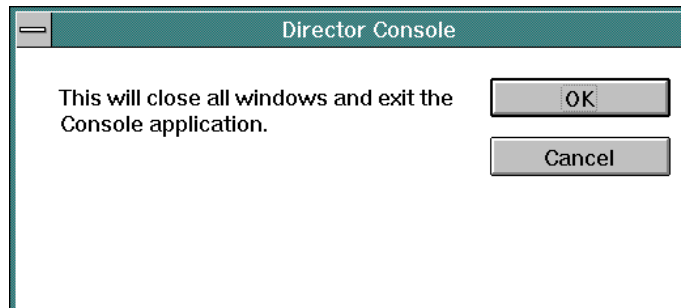
Change Token Ring Adapter Card Data Rate

Perform this procedure to change the data rate of the Token Ring adapter card for the Director or Sysplex Timer Console. The procedure changes the default rate of 16 megabits per second (Mbps) to 4 Mbps.

Note: The data rate is set at the factory. Do not change the data rate unless required because of LAN or other system requirements.

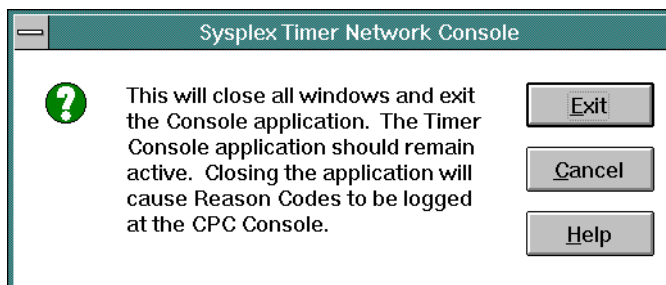
To change the Token Ring adapter card data rate:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



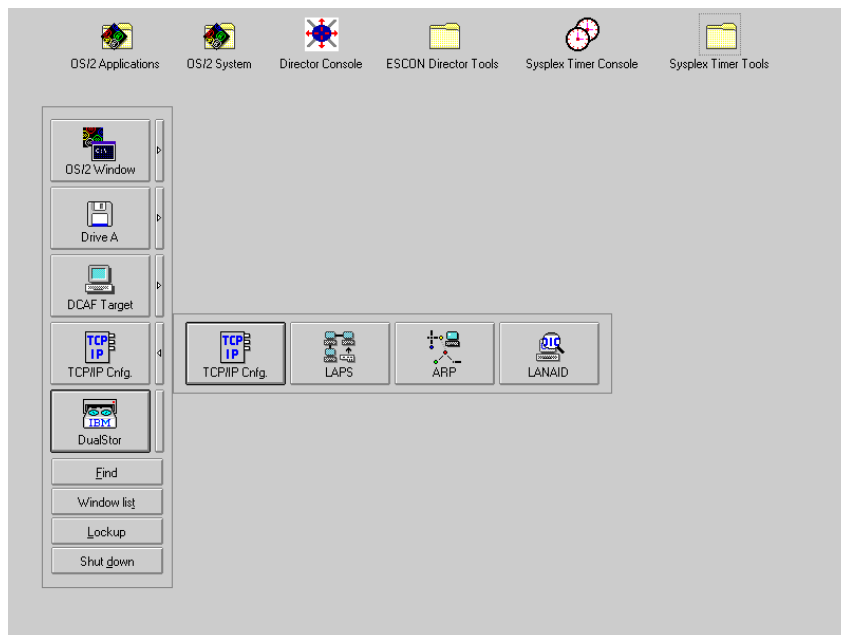
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

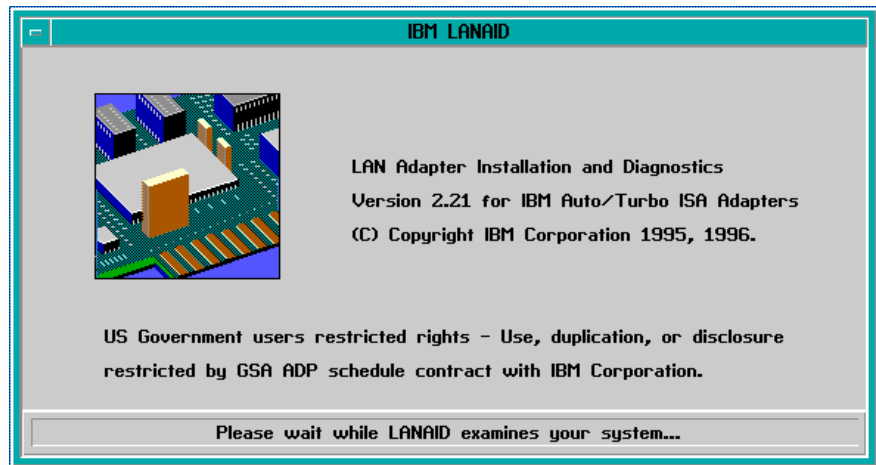


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

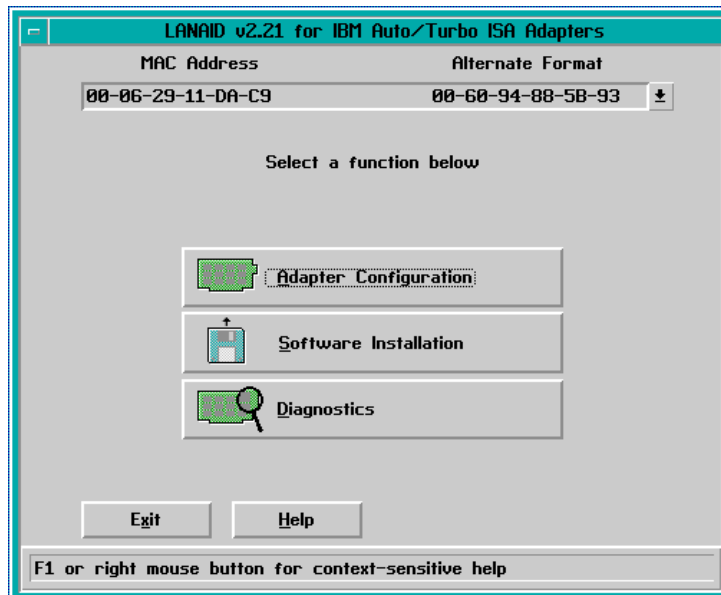
2. At the OS/2 desktop, click the arrow on the *TCP/IP Cnfg.* drawer to open the drawer.



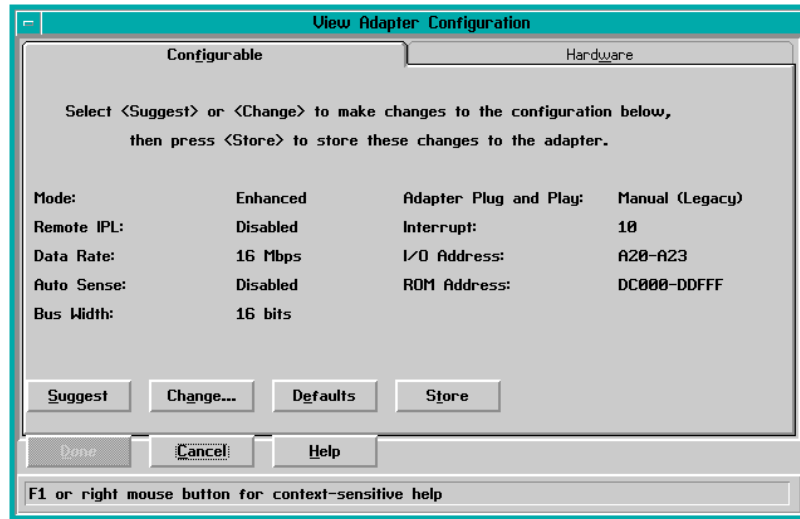
3. Click the *Lanaid* button. The *IBM LAN AID* message box appears briefly while the system configuration is queried.



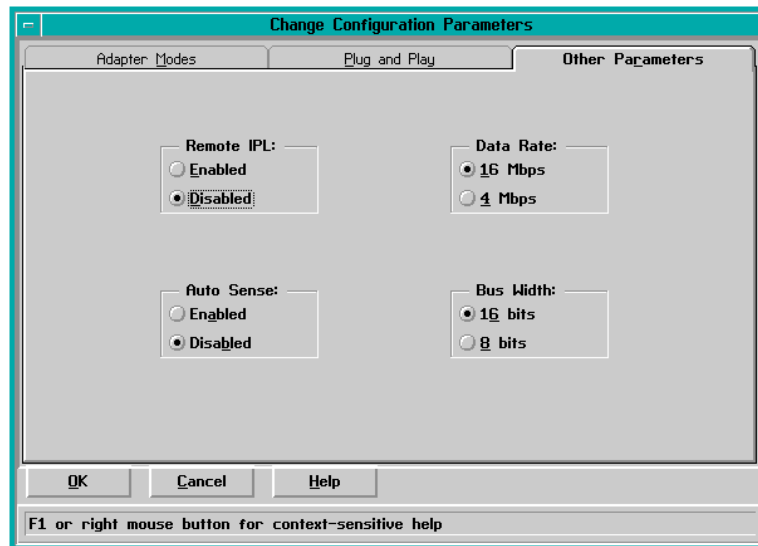
The *IBM LAN AID* message box closes, and the *LAN AID v2.21 for IBM Auto/Turbo ISA Adapters* window appears.



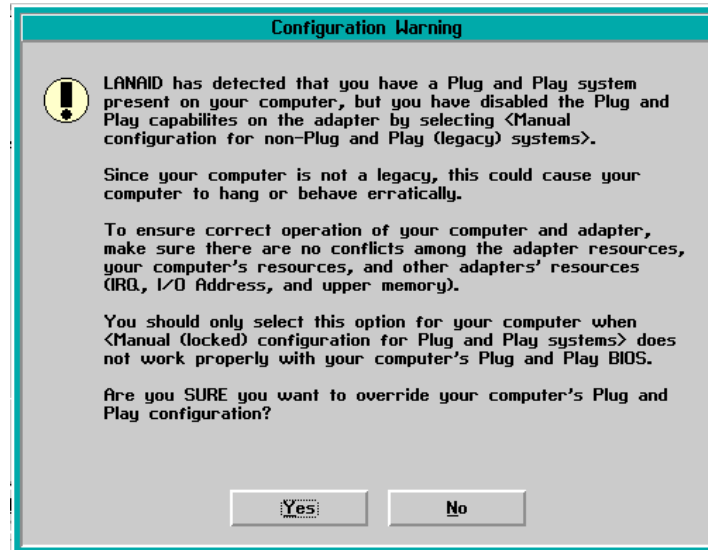
4. Click the *Adapter Configuration* button. The *View Adapter Configuration* dialog box appears with the *Configurable* page open.



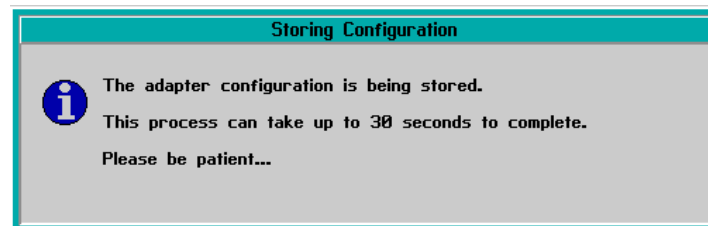
5. Click the *Change* button at the bottom of the dialog box. The *Change Configuration Parameters* dialog box appears with the *Adapter Modes* page open.
6. Click the *Other Parameters* tab at the top of the dialog box. The *Other Parameters* page appears.



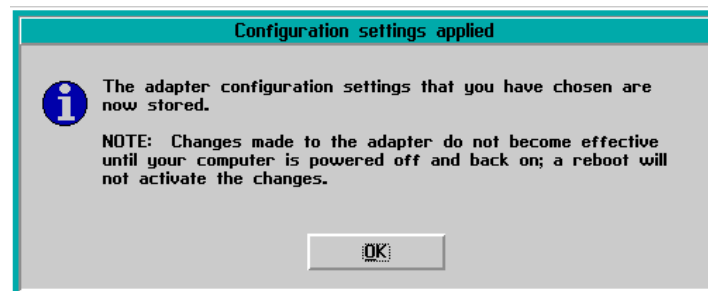
7. To change the data rate from 16 Mbps (default), click the *4 Mbps* radio button in the *Data Rate* box.
8. Click the *OK* button. The *Configuration Warning* message box appears.



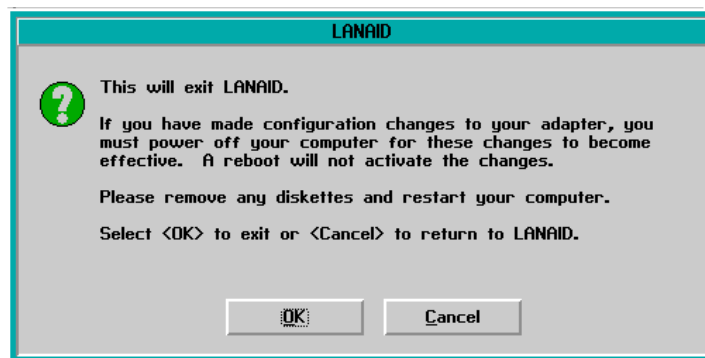
9. Click the *Yes* button. The *Configuration Warning* message box closes and the *View Adapter Configuration* dialog box reappears.
10. Click the *Store* button at the bottom of the dialog box to save the parameters. The *Storing Configuration* message box appears for approximately 30 seconds.



When the configuration change is stored, the *Storing Configuration* message box closes and the *Configuration settings applied* message box appears.



11. Click the *OK* button. The *Configuration settings applied* message box closes.
12. Click the *Done* button. The *View Adapter Configuration* dialog box closes and the *LANAID v2.21 for IBM Auto/Turbo ISA Adapters* dialog box reappears.
13. Click the *Exit* button. The *LANAID* dialog box appears.



14. Click the *OK* button. The OS/2 desktop appears.
15. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
16. Shut down and restart the operating system and Console to initiate changes. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.

Create a Console Diagnostic Diskette

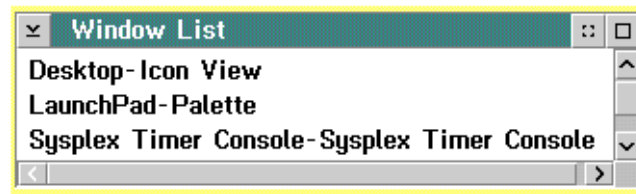
Perform this procedure to create a diagnostic diskette for the Console PC. Keep the diskette with the Console, and use it under direction from the next level of support to fault isolate problems with the PC. To create the diagnostic diskette:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



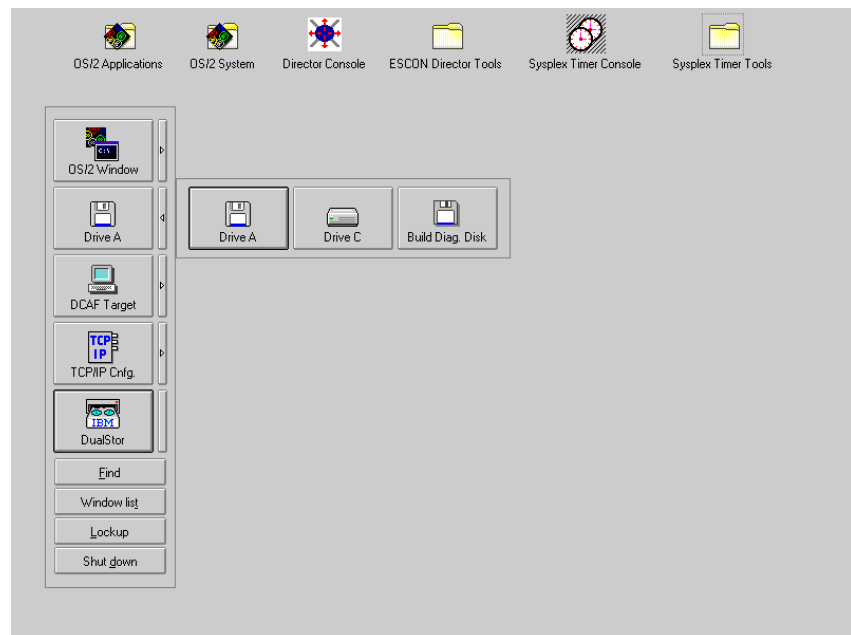
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

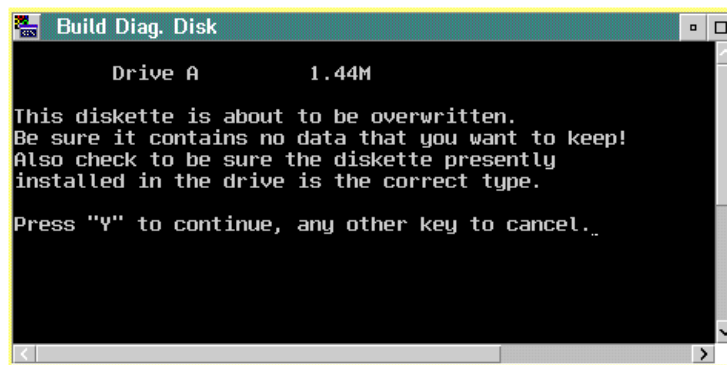


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Insert a blank, formatted diskette (labeled **For Use By Service Personnel Only** and shipped with the Console) into the diskette drive.
3. Click the arrow on the *Drive A* drawer to open the drawer.



4. Click the *Build Diag. Disk* button. The *Build Diag. Disk* window appears.



5. Press the **Y** key to continue. A message appears at the bottom of the window showing the percentage of files written to the diskette.
6. When the percentage reaches 100, the diagnostic diskette is created and the OS/2 desktop reappears. Remove the diskette from the drive. Label the diskette *Reference Diskette*.
7. Close the *Drive A* drawer by clicking the drawer arrow.
8. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
9. Keep the diskette with the Console and use it under direction from the next level of support to fault isolate PC problems.

Backup and Restore Functions

The Model PC-330 Console contains a tape cartridge drive to perform backup and restore functions. Backups of the Console fixed disk and the Director or Sysplex Timer system libraries are routinely performed. Library data is restored using a tape cartridge containing the most recent backup version of the Director or Timer system library. The entire Console fixed disk is restored using:

- Three 3.5-inch Console stand-alone restore (SR) diskettes.
- A tape cartridge with the most recent backup version of the Console fixed disk (includes both the Director or Timer Console application and the Director or Timer system library).

This section describes:

- Backup options.
- Backing up the Director or Sysplex Timer system library to tape.
- Restoring the Director or Sysplex Timer system library from tape.
- Backing up the Console fixed disk to tape.
- Restoring the Console fixed disk from diskettes and tape.

Backup Options

When performing procedures to set automatic backup parameters or back up data on demand, two backup options are available from the *AutoTape Event Schedule* or *Load Job File* dialog boxes:

- **CONSOLE.TPF** - This is the default option. This option backs up the entire Console fixed disk to tape.
- **CLIBBKUP.TPF** - This option backs up the system library. The file contains all information about Timers on the Console, including LIC files, logs, and Timer configuration data.

Back Up the System Library to Tape

Routine backups of the Director or Sysplex Timer system library to a tape cartridge ensure critical data can be restored if required. The data is also required when migrating the Director Console application to a backup or replacement Console.

Critical data for the Director Console includes Console settings, LIC files, logs, IP addresses, Director configuration files, and Director matrices. Critical data for the Sysplex Timer Console includes Console settings, IP addresses, configuration files, logs, and identification information for the Timer network.

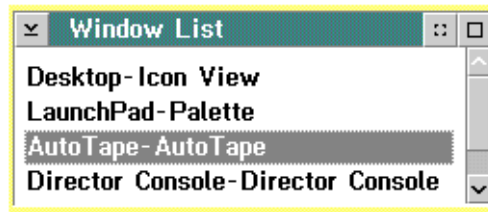
This section describes procedures to enable automatic back up of the system library to tape, or to back up the system library on demand.

Enable Automatic Backup

If enabled, DualStor software installed on the Console automatically backs up the system library to a tape cartridge at a specified or default time. Perform this procedure to enable automatic backup of the system library to tape at the default backup time (daily at 12:00 midnight) and announcement time (five minutes), or to specify a new backup time and announcement time. Because changing default parameters ([Table 3](#) on page 186) disables automatic backup and requires shutting down the OS/2 operating system, it is recommended that this procedure be performed during Console installation and setup.

This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). If either or both applications are running on a Hardware Management Console, refer to [Chapter 3](#) for system library backup procedures. To enable automatic backup of the system library:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.

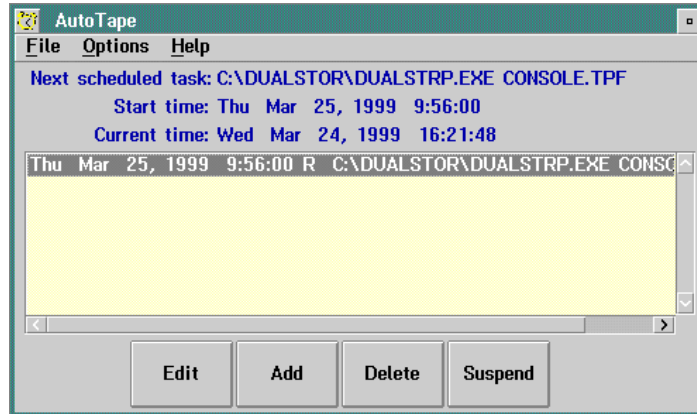


Double-click the *AutoTape-AutoTape* selection. The *AutoTape* dialog box appears.

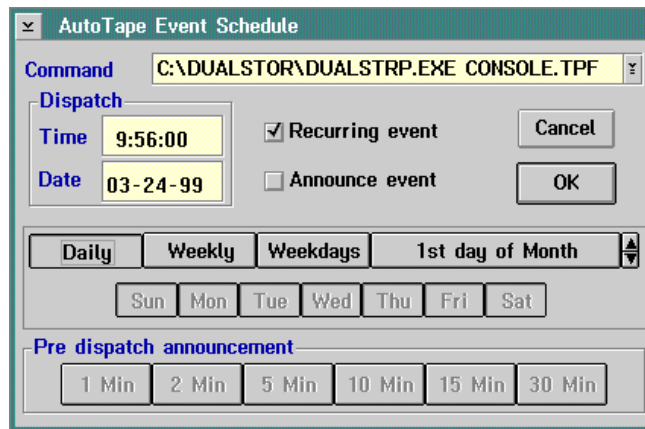
- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.



Double-click the *AutoTape-AutoTape* selection. The *AutoTape* dialog box appears.



2. To toggle between enabled and disabled for automatic backup (default is disabled), click the *Suspend* button.
3. To change the backup time, day, and pre-dispatch announcement, click the *Edit* button. The *AutoTape Event Schedule* dialog box appears.



Change backup settings as follows:

- a. To change the backup time from the default value of 00:00:00 (midnight), click the *Time* field in the *Dispatch* area. Type a new time. Use the left and right (← and →) arrow keys and the **Backspace** key to change or delete characters.
- b. To change from daily backups (default), click the *Weekly*, *Weekdays*, or *1st day of Month* buttons as desired.
- c. To change the pre-dispatch announcement from five minutes (default), click the appropriate button (*1 Min* to *30 Min*) in the *Pre-dispatch announcement* area.

4. Click the scrolling arrow on the right of the *Command* field, then select the **CLIBBKUP.TPF** option. This option backs up the Director or Sysplex Timer system library as desired.
5. Click the *OK* button after completing the changes. The *AutoTape* dialog box reappears.
6. Double-click the upper left corner of the *AutoTape* dialog box to close the dialog box and return to the OS/2 desktop.
7. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
8. Ensure a blank, QD2120 1/4-inch backup tape (QIC 80 format) is installed in the Console tape drive when the automatic backup feature is enabled. The backup tape is provided with the Console. Ensure the sliding tab on the tape is set to record mode.

Backup on Demand

Perform this procedure to back up the Director or Sysplex Timer system library on demand. This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). If either or both applications are running on a Hardware Management Console, refer to [Chapter 3](#) for system library backup procedures. To back up the system library on demand:

1. Install a blank, QD2120 1/4-inch backup tape (QIC 80 format) in the Console tape drive as shown in [Figure 19](#). The tape is provided with the Console. Ensure the sliding tab on the tape is set to record mode.



CAUTION

Do not use the Console restore tape to back up the fixed disk. This is the master tape for restoring the Console fixed disk to the factory default settings.

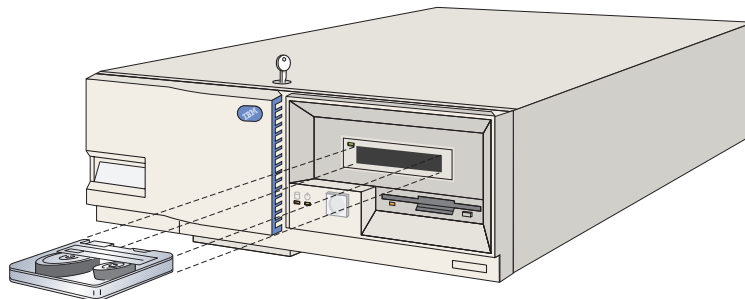


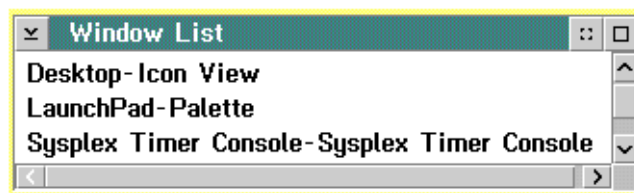
Figure 19. Install Tape Cartridge in Model PC-330 Console

2. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.

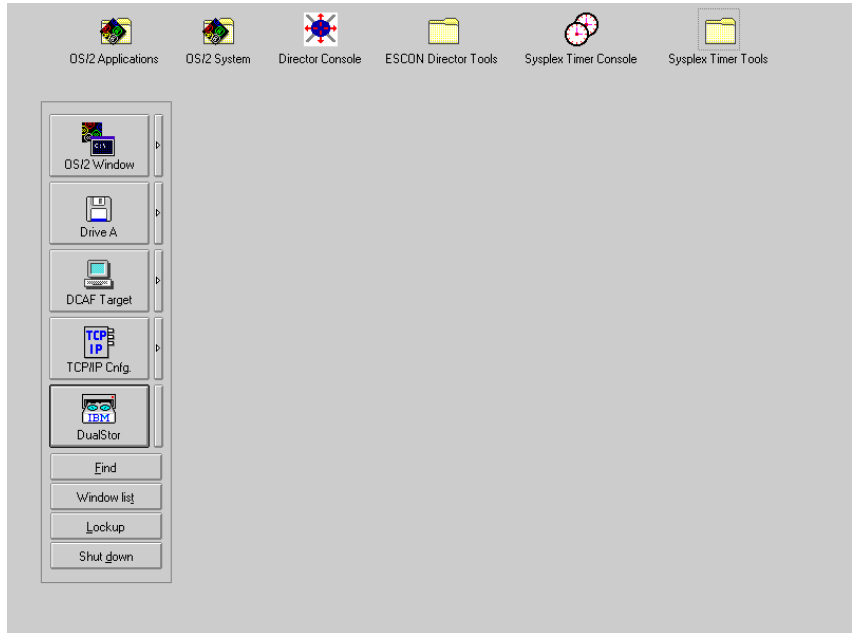


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

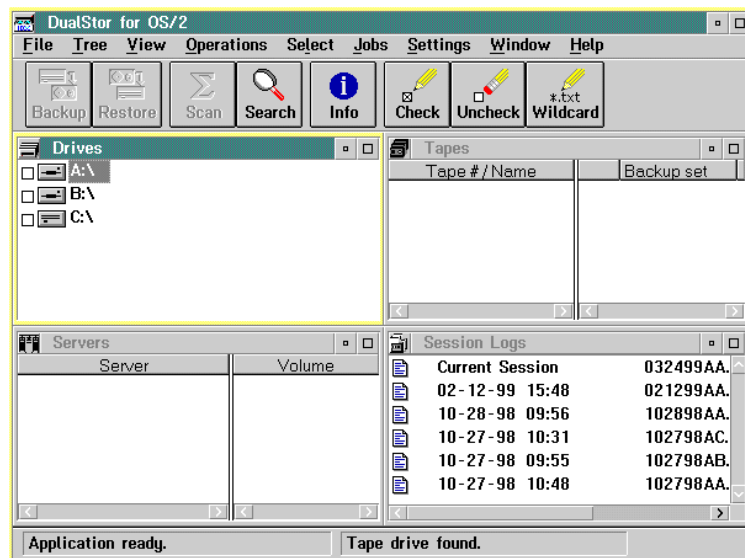


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

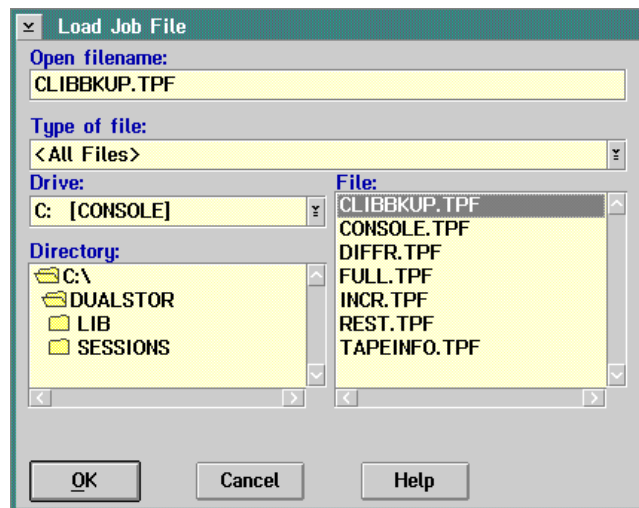


3. Click the *DualStor* button on the launch pad. The *DualStor for OS/2* window appears.

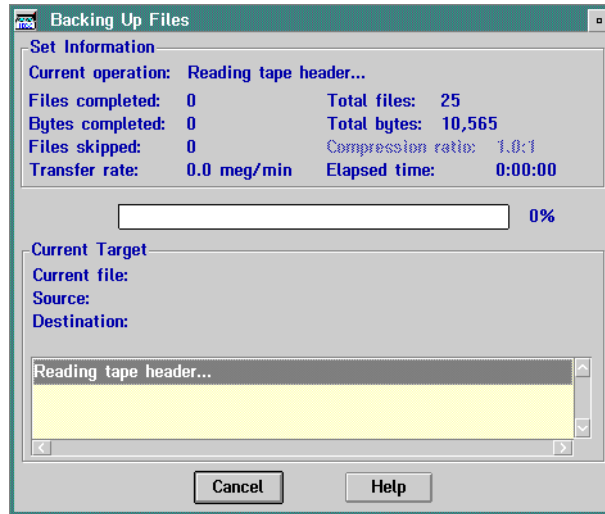
Note: If the IBM logo appears and remains on the Console screen, press **Enter** to display the *DualStor for OS/2* window.



4. If a new tape is used for the backup, retension the tape before performing the backup. A tape currently being used in the Console or a newly-formatted tape does not need to be retensioned. For these cases, continue to [step 5](#). To retension the tape:
 - a. Wait until a **Tape Ready** message appears on the bottom line of the *DualStor for OS/2* window. Select the current tape in the *Tapes* section of the window.
 - b. Select the *Operations* option to open the *Operations* menu.
 - c. At the *Operations* menu, select the *Retension Tape* option. The *Retension Confirmation* dialog box appears.
 - d. Click the *Yes* button to begin tape retensioning. This operation may take up to five minutes. When the tape is retensioned, the *DualStor for OS/2* window reappears.
5. Select the *Load Job File* option from the *Jobs* menu. The *Load Job File* dialog box appears.



6. At the *File* list box, click (select) the **CLIBBKUP.TPF** option. Wait for the **QIC Tape Ready** message to display on the bottom line of the *DualStor for OS/2* window, then click the *OK* button in the *Load Job File* dialog box.
7. Click the *Yes* button when the confirmation dialog box appears. The *Backing Up Files* dialog box appears. All selected files are scanned (*Scan Checked Files* dialog box), and a message box appears. The message box indicates the system will erase the contents of the installed tape. Click the *OK* button to continue. The *Backing Up Files* dialog box reappears and displays the backup statistics as the backup occurs. The system library copies to tape in approximately five to ten minutes.



Note: When a new QIC formatted tape is used, a message box appears indicating the tape is in QIC 40/80 format and asking if you want to continue the backup. Click the *Continue* button to proceed with the backup.

8. When the backup completes, click the *OK* button to exit the *Backing Up Files* dialog box.

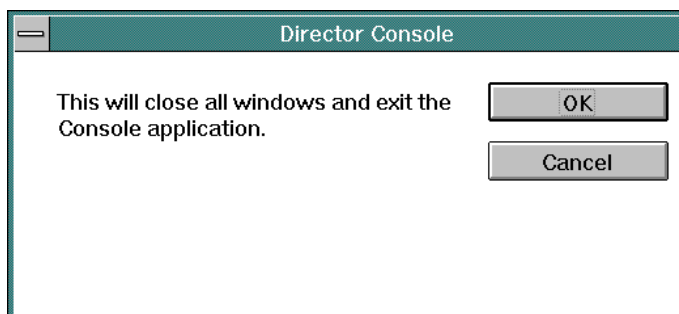
Note: When a backup is performed using DualStor, a log file is created. This log file contains error, verification, and status messages created during the backup. The log file may contain a sharing violation error message. This is a normal condition. The file **<filename>.DIR** contains the header information currently in use for the backup session and is skipped by DualStor.

9. Double-click the upper left corner of the *Load Job File* dialog box and *DualStor for OS/2* window to return to the OS/2 desktop.
10. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 2](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 2](#) of this procedure.

Restore the System Library from Tape

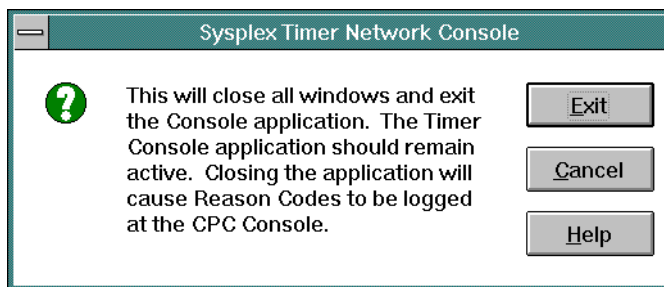
Perform this procedure to restore the Director or Sysplex Timer system library from a backup tape cartridge to the Console fixed disk. To restore the system library:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



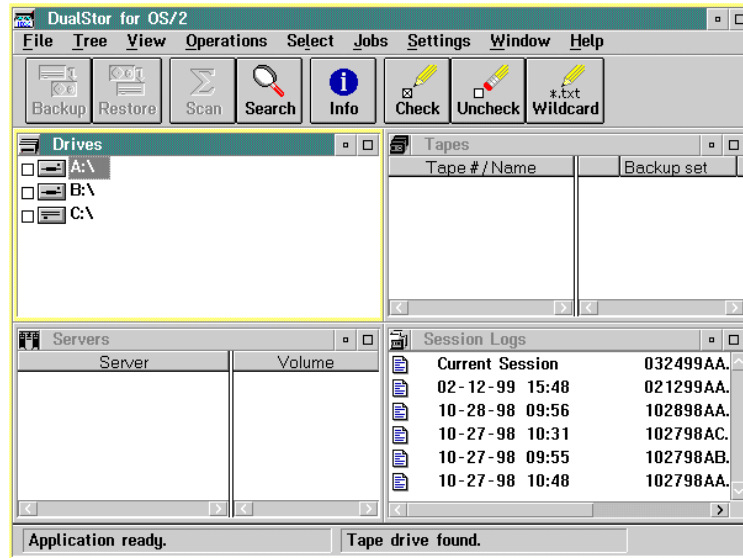
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



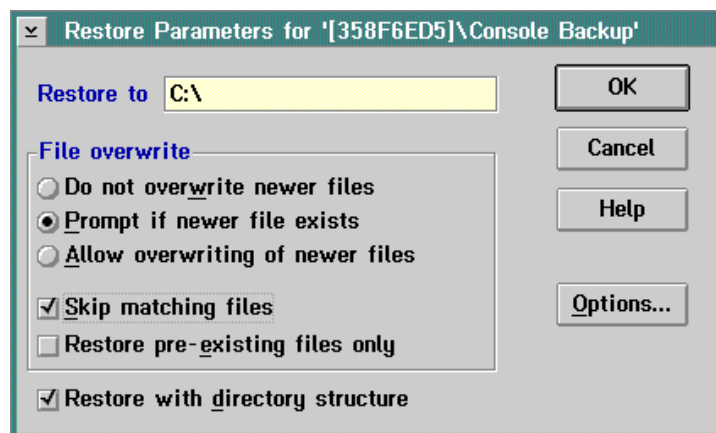
Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

2. Insert the backup tape containing the system library in the tape drive.
3. Click the *DualStor* drawer on the launchpad. The *DualStor for OS/2* window appears.



Note: If the IBM logo appears and remains on the screen, press the **Enter** key to display the *DualStor for OS/2* window.

4. When DualStor finishes reading the tape header and directory information, click the box by the *Tape* icon in the *Tapes* area under *Tape#/Name* at the top right portion of the window. An **X** appears in the box. The *Restore* button and other buttons activate at the top of the window.
5. Click the *Restore* button. The *Restore Parameters for Tape\Library Backup* dialog box appears.



6. If not selected in the dialog box, select the following by clicking the appropriate radio button or check box.
 - *Prompt if newer file exists.*
 - *Skip matching file.*
 - *Restore with directory structure.*
7. Click the *OK* button to initiate a restore to the fixed disk (**C:**). A message box appears displaying the progress of the restore process. When the **Elapsed Time xx:xx:xx** message appears, the restore is complete.
8. Close all windows by double-clicking the upper left corner of each window.
9. Perform a full backup of the Console fixed disk. For instructions, refer to [“Back Up the Console Fixed Disk to Tape”](#) on page 178.
10. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational. The Console application should remain active and operational for the following reasons:
 - a. Certain Timer events and associated reason codes are transmitted only to the Event log maintained at the Timer Console. The events are not transmitted through attached processors to the System Control Program (SCP) Console. If the Console application is closed and a Timer network failure occurs, reason codes and other information required for fault isolation may not be recorded.
 - b. Closing the Console application causes an **ETR Service is Requested** message to be reported to the SCP Console with reason code **40** (communication lost with active Console) or reason code **41** (communication lost with standby Console). This may result in an unnecessary service call.
 - c. Starting the Console application causes an **ETR Service is Requested** message to be reported to the SCP Console, with reason code **8** (communication established with active Console) or reason code **9** (communication established with standby Console). This may result in an unnecessary service call.

Back Up the Console Fixed Disk to Tape

Routine backups of the entire Console fixed disk to a tape cartridge ensure critical data can be restored if the fixed disk fails or requires replacement. This section describes the procedures to enable automatic back up the fixed disk or back up the fixed disk on demand.

Note: The procedure requires approximately one hour to back up the Console controlling a fully-configured cluster of Directors or a Sysplex Timer network.

Attention!

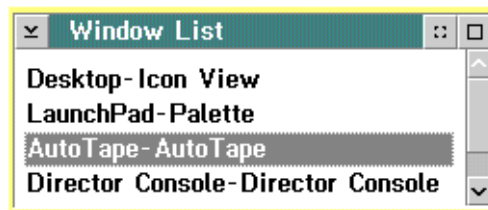
Under normal operating conditions, automatic backup of the entire fixed disk is enabled for the Director or Sysplex Timer Console.

Enable Automatic Backup

If enabled, DualStor software installed on the Console automatically backs up the fixed disk to a tape cartridge at a specified or default time. Perform this procedure to enable automatic backup of the fixed disk to tape at the default backup time (daily at 12:00 midnight) and announcement time (five minutes), or to specify a new backup and announcement time. Because changing default parameters ([Table 3](#) on page 186) disables automatic backup and requires shutting down the OS/2 operating system, it is recommended that this procedure be performed during Console installation and setup.

This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). To enable automatic backup of the fixed disk:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.

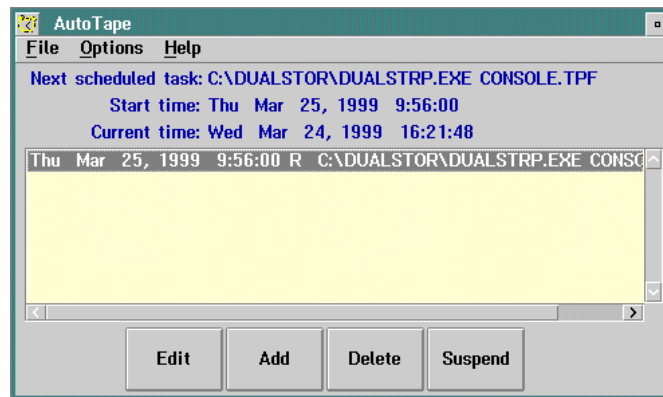


Double-click the *AutoTape-AutoTape* selection. The *AutoTape* dialog box appears.

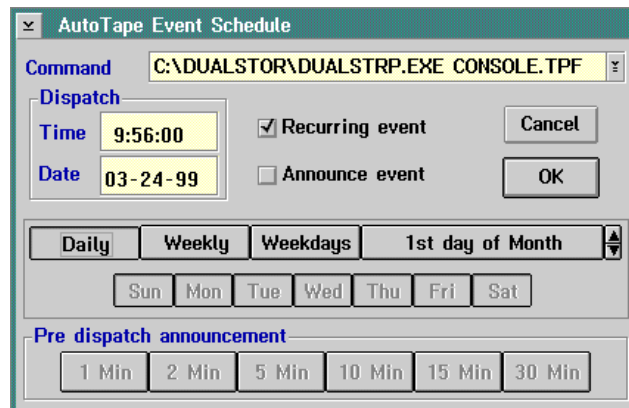
- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.



Double-click the *AutoTape-AutoTape* selection. The *AutoTape* dialog box appears.



2. To toggle between enabled and disabled for automatic backup (default is disabled), click the *Suspend* button.
3. To change the backup time, day, and pre-dispatch announcement, click the *Edit* button. The *AutoTape Event Schedule* dialog box appears.



Change backup settings as follows:

- a. To change the backup time from the default value of 00:00:00 (midnight), click the *Time* field in the *Dispatch* area. Type a new time. Use the left and right (← and →) arrow keys and the **Backspace** key to change or delete characters.
 - b. To change from daily backups (default), click the *Weekly*, *Weekdays*, or *1st day of Month* buttons as desired.
 - c. To change the pre-dispatch announcement from five minutes (default), click the appropriate button (*1 Min* to *30 Min*) in the *Pre-dispatch announcement* area.
4. Click the scrolling arrow on the right of the *Command* field, then select the **CONSOLE.TPF** option. This option backs up the Director or Sysplex Timer Console fixed disk as desired.
 5. Click the *OK* button after completing the changes. The *AutoTape* dialog box reappears.
 6. Double-click the upper left corner of the *AutoTape* dialog box to close the dialog box and return to the OS/2 desktop.
 7. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 8. Ensure a blank, QD2120 1/4-inch backup tape (QIC 80 format) is installed in the Console tape drive when the automatic backup feature is enabled. The backup tape is provided with the Console. Ensure the sliding tab on the tape is set to record mode.

Backup on Demand

Perform this procedure to back up the Console fixed disk on demand. This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). To back up the fixed disk on demand:

1. Install a blank, QD2120 1/4-inch backup tape (QIC 80 format) in the Console tape drive as shown in [Figure 20](#). The tape is provided with the Console. Ensure the sliding tab on the tape is set to record mode.



CAUTION

Do not use the Console restore tape to back up the fixed disk. This is the master tape for restoring the Console fixed disk to the factory default settings.

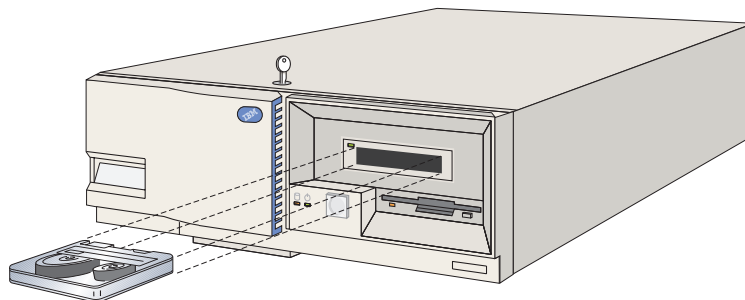


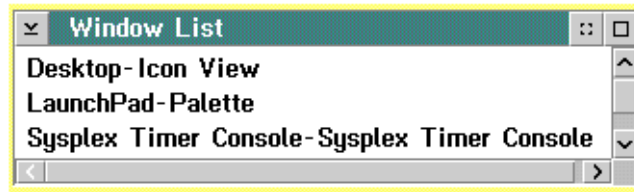
Figure 20. Install Tape Cartridge in Model PC-330 Console

2. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.

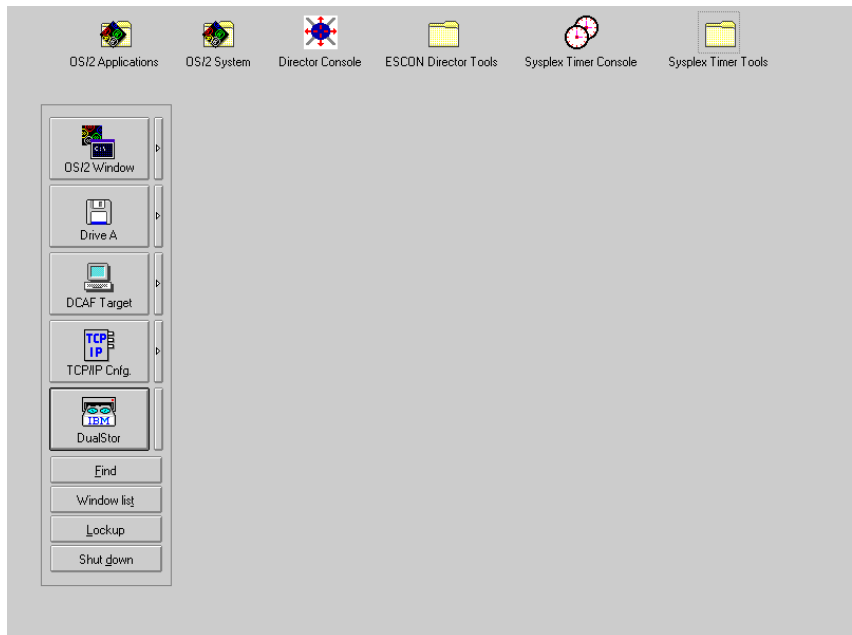


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

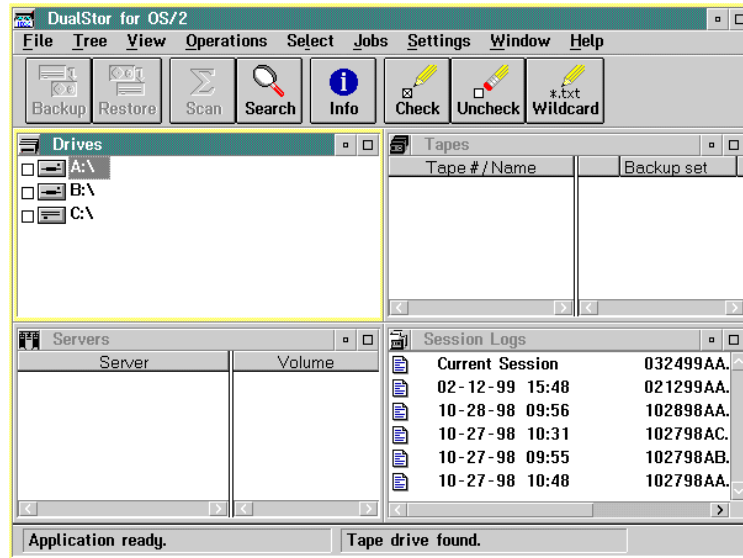


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

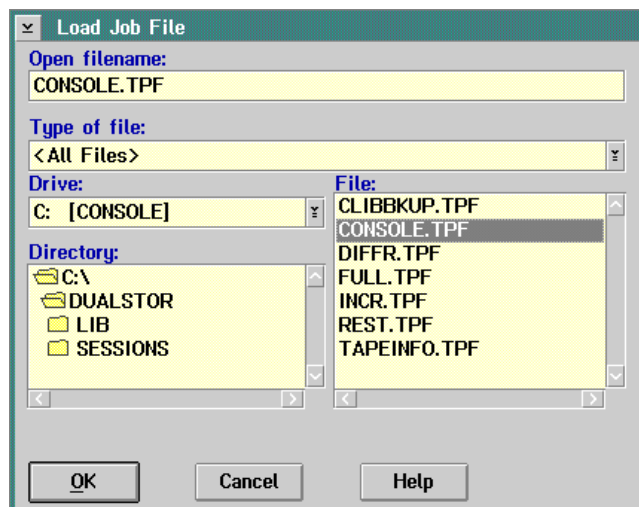


3. Click the *DualStor* button on the launch pad. The *DualStor for OS/2* window appears.

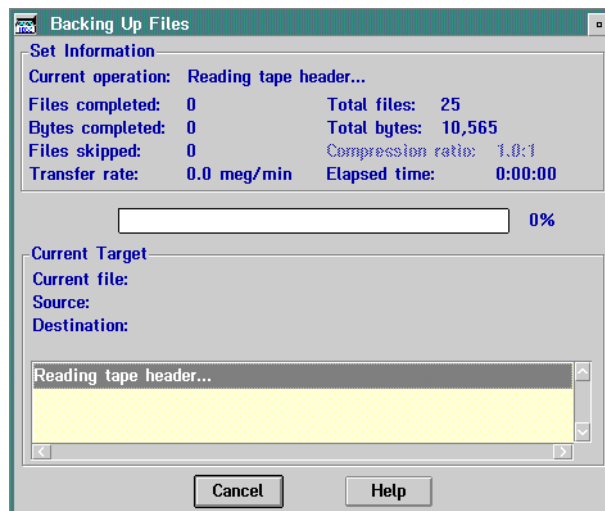
Note: If the IBM logo appears and remains on the Console screen, press **Enter** to display the *DualStor for OS/2* window.



4. If a new tape is used for the backup, retension the tape before performing the backup. A tape currently being used in the Console or a newly-formatted tape does not need to be retensioned. For these cases, continue to [step 5](#). To retension the tape:
 - a. Wait until a **Tape Ready** message appears on the bottom line of the *DualStor for OS/2* window. Select the current tape in the *Tapes* section of the window.
 - b. Select the *Operations* option to open the *Operations* menu.
 - c. At the *Operations* menu, select the *Retension Tape* option. The *Retension Confirmation* dialog box appears.
 - d. Click the *Yes* button to begin tape retensioning. This operation may take up to five minutes. When the tape is retensioned, the *DualStor for OS/2* window reappears.
5. Select the *Load Job File* option from the *Jobs* menu. The *Load Job File* dialog box appears.



6. At the *File* list box, click (select) the **CONSOLE.TPF** option. Wait for the **QIC Tape Ready** message to display on the bottom line of the *DualStor for OS/2* window, then click the *OK* button in the *Load Job File* dialog box.
7. Click the *Yes* button when the confirmation dialog box appears. The *Backing Up Files* dialog box appears. All selected files are scanned (*Scan Checked Files* dialog box), and a message box appears. The message box indicates the system will erase the contents of the installed tape. Click the *OK* button to continue. The *Backing Up Files* dialog box reappears and displays the backup statistics as the backup occurs. The entire Console fixed disk copies to tape in approximately 45 minutes to one hour.



Note: When a new QIC formatted tape is used, a message box appears indicating the tape is in QIC 40/80 format and asking if you want to continue the backup. Click the *Continue* button to proceed with the backup.

8. When the backup completes, click the *OK* button to exit the *Backing Up Files* dialog box.

Note: When a backup is performed using DualStor, a log file is created. This log file contains error, verification, and status messages created during the backup. The log file may contain a sharing violation error message. This is a normal condition. The file **<filename>.DIR** contains the header information currently in use for the backup session and is skipped by DualStor.

9. Double-click the upper left corner of the *Load Job File* dialog box and *DualStor for OS/2* window to return to the OS/2 desktop.
10. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 2](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 2](#) of this procedure.

Restore the Console Fixed Disk from Diskettes and Tape

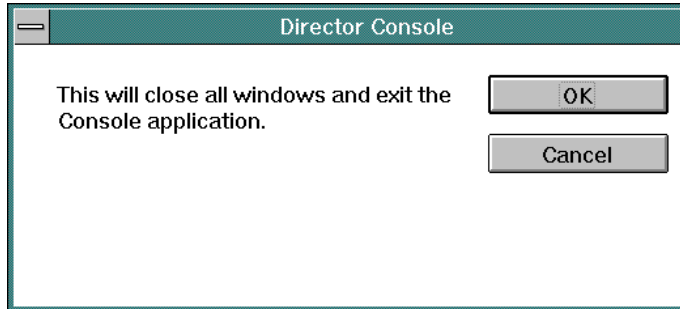
Perform this procedure to format and restore the Console fixed disk from stand-alone restore (SR) diskettes and a backup tape cartridge. Use the instructions after installing a new unformatted fixed disk. This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). Default parameters when the fixed disk is restored are listed in [Table 3](#).

Table 3. Default Parameters for Console Support Software (Tape Restore)

Feature	Default Parameters
Set Time and Date	Time and date for manufacturing location
Change Time and Date Format	Time: 12-hour clock Date: Month-Day-Year
Console Screen Lock	Disabled
Keyboard Layout	United States
IP Address	1.1.1.1
MAC Address	Set on adapter card
Subnet Mask	255.0.0.0
Automatic Backup	Disabled
Default Printer	Generic/Text Only on LPT1 Generic/Text to File

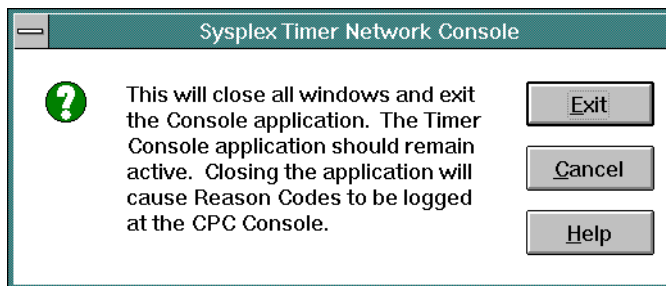
To reformat and restore the Console fixed disk from diskettes and a backup tape:

1. Obtain the following (XX.YY.ZZ indicates the software version, release, and patch numbers):
 - The 3.5-inch Console restore diskette labeled *Console Restore/SR1 of SR3, Version XX.YY.ZZ* (shipped with the Director or Sysplex Timer)
 - The 3.5-inch Console restore diskette labeled *Console Restore/SR2 of SR3, Version XX.YY.ZZ* (shipped with the Director or Sysplex Timer)
 - The 3.5-inch Console restore diskette labeled *Console Restore/SR3 of SR3, Version XX.YY.ZZ* (shipped with the Director or Sysplex Timer)
 - The tape cartridge containing the most recent backup version of the Console fixed disk (includes both the Director or Sysplex Timer Console application and associated system library).
2. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Network Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

3. At the OS/2 desktop, click the *Shutdown* button at the bottom of the launch pad. A dialog box appears, asking if you want to close the application without saving data.
4. Click the *OK* button. A *Shutdown Has Completed* message box appears, explaining it is now safe to turn off the computer or restart.
5. Power off the Console PC.
6. Insert the *Console Restore/SR1 of SR3* diskette in the diskette drive and power on the Console PC. Verify the memory test completes and the system powers on.
7. When prompted for OS/2 Diskette 2, insert the *Console Restore/SR2 of SR3* diskette and press the **Enter** key. Install and load messages appear.

8. When the following message appears, insert the *Console Restore/SR3 of SR3* diskette.

```
Place SR Disk #3 in Boot Drive
for following operations:

    FDISK.COM      Partitioning Disk
    FORMAT.COM     High Level Format
    SR.EXE         Restore Your DualStor Backup
```

9. To format the fixed disk, type `FDISK` at the `[A:\]` prompt and press the **Enter** key.
10. When the *FDISK* screen appears, press the **Enter** key to display the *Options* menu.
11. Select the *Create Partition* option. The maximum disk size appears.

Note: If the *Create Partition* option is not available, a partition may exist. The *FDISK* screen displays the Console hardware configuration status as **Startable**, access as **C:primary**, FS Type as **Fat**, and MB between **150** and **500** (depending on the PC model and fixed disk size). If this appears, go to [step 14](#). If these specifications do not appear, select *Delete Partition* from the *Options* menu, then select *Create Partition* and continue to [step 12](#).

12. Press the **Enter** key. The *Partition* dialog box appears.
13. Select the *Primary Partition* option and press the **Enter** key.
14. Press the **F3** key twice to exit the *FDISK* utility.
15. Insert the *Console Restore/SR1 of SR3* diskette, and simultaneously press the **Ctrl**, **Alt**, and **Del** keys twice to reboot the Console PC.
16. When prompted, insert the *Console Restore/SR2 of SR3* diskette and press the **Enter** key.
17. When prompted, insert the *Console Restore/SR3 of SR3* diskette (this diskette must be in the diskette drive for [step 18](#) through [step 20](#)).
18. At the `[A:\]` prompt, type `Format C:/FS:FAT` and press the **Enter** key.
19. When a message appears warning that all data on hard disk **C** will be lost, type **Y** (Yes) and press the **Enter** key to proceed with the format utility. Percentages of formatting completed appear.
20. When prompted for a volume label for drive **C**, type `Console` and press the **Enter** key.
21. Insert the *Console Restore/SR1 of SR3* diskette.

22. Power off the Console PC, wait at least 10 seconds, then power the Console PC back on.
23. Insert the tape cartridge that contains the most recent backup version of the Console fixed disk in the tape drive. The indicator to the left of the tape drive illuminates as the PC reads the tape header.
24. Insert the *Console Restore/SR2 of SR3* diskette when prompted.
25. Insert the *Console Restore/SR3 of SR3* diskette when prompted.
26. When the indicator to the left of the tape drive extinguishes, type **SR** at the **[A:\]** prompt and press the **Enter** key. The indicator illuminates.
27. When the indicator extinguishes, press the **Enter** key. Ensure the light extinguishes *before* pressing the **Enter** key. The following prompt appears when installation is complete:

```
Do you want to restore backup set 'Console Backup'?
```
28. Type **Y** (Yes) and press the **Enter** key. The following prompt appears:

```
Enter logical disk letter to be the restore target of  
backup set 'Console Backup' (default=C:).
```
29. Press the **Enter** key. The following prompt appears:

```
Begin restore operation?
```
30. Type **O** (OK) and press the **Enter** key. This starts installation from the tape to the fixed disk. Complete installation takes approximately one hour. The restore process completes as messages appear indicating bytes restored.
31. When the **[A:\]** prompt appears, remove the tape cartridge and *Console Restore/SR3 of SR3* diskette, and simultaneously press the **Ctrl**, **Alt**, and **Del** keys twice to reboot the Console PC.

Customize the Console Operating Environment

This section describes procedures to change ESCON Director or Sysplex Timer Console operating parameters from default values listed in [Table 4](#). If you restore the Model PC-330 Console's fixed disk, all the parameters (including the IP address of the Console) are reset to default values.

Note: Do not enable the screen saver or automatic lockup function (password protection) through the OS/2 desktop *Settings* option. Enable the screen saver using instructions in this section.

Table 4. Procedures and Default Parameters for Console Operating Environment

Procedure	Default Parameter	Page
Set Date and Time	Set to date and time for manufacturing location	190
Change Date and Time Format	Time: 12-hour clock Date: Month-Day-Year	193
Enable Screen Saver	Disabled	196
Change Keyboard Layout and Country Code Page	United States	199
Change IP Address	1.1.1.1	207
Change Subnet Mask	255.0.0.0	207
Change MAC Address	Set on adapter card	214
Change Default Printer	Generic/Text Only on LPT1 Generic/Text to File	217

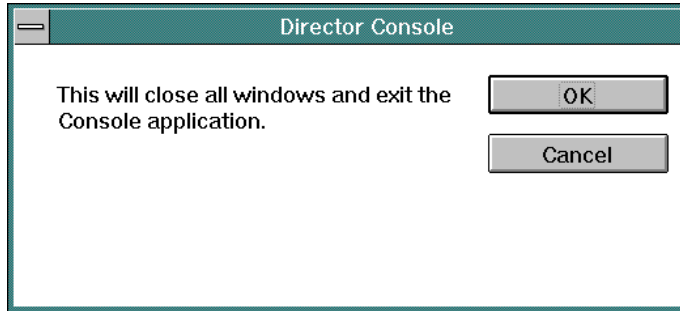
Set Date and Time

This procedure sets the date and time for the Console PC's operating environment. Although the date and time are set, the parameters may require change for an installation location. Use this procedure to display or change the Console date and time or synchronize the Console date and time with a Sysplex Timer network.

In the Director Console application, *Console Audit Log* and *Console Error Log* events are time stamped with the PC date and time. All other date and time entries in the application are time stamped with parameters derived from the Director.

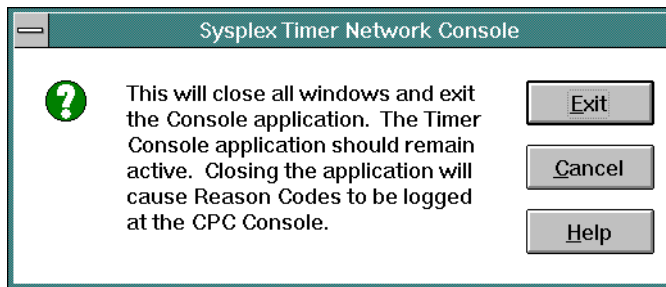
In the Sysplex Timer Console application, *Console Audit Log* events are time stamped with the PC date and time. All other date and time entries in the application are time stamped with Coordinated Universal Time (UTC) derived from the Timer.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



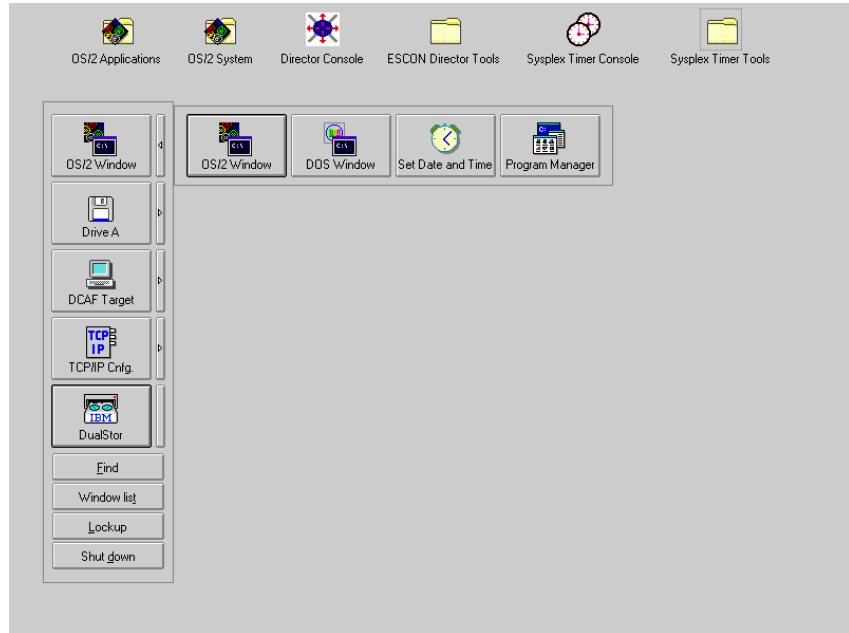
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

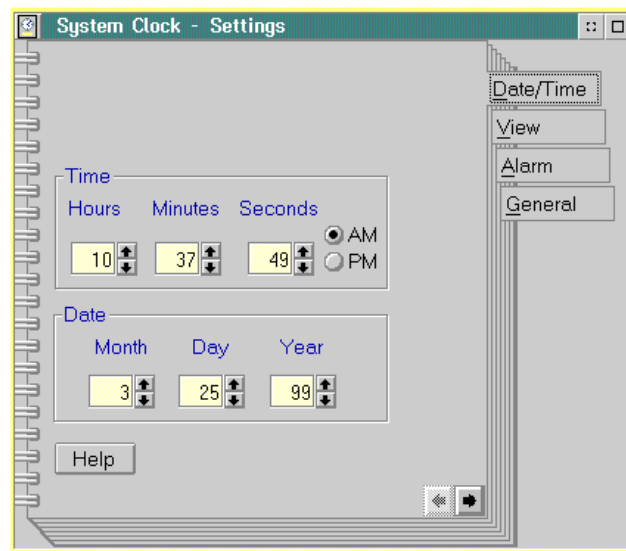


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



3. Click the *Set Date and Time* button. The *System Clock - Settings* notebook appears with the *Date/Time* page open.



4. To adjust the Console time, click the up or down arrows by the *Hours*, *Minutes*, and *Seconds* fields as required. Click the *AM* or *PM* radio button as required.

5. To adjust the Console date, click the up or down arrows by the *Month*, *Day*, and *Year* fields as required.
6. Close the *System Clock - Settings* notebook by double-clicking the icon in the upper left corner of the notebook.
7. Close the *OS/2 Window* drawer by clicking the drawer arrow.
8. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 4](#) on page 190), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
9. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Change Date and Time Format

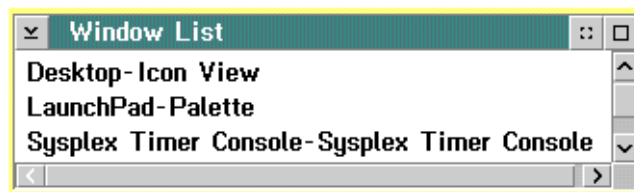
This procedure changes the time format between a 12-hour and 24-hour clock, and the date format between a month-day-year, day-month-year, or year-month-day format.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



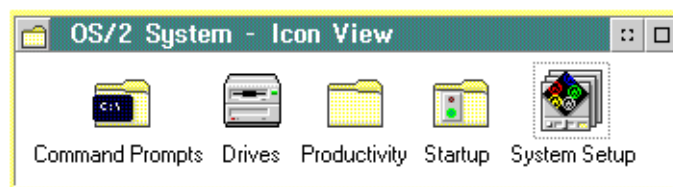
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

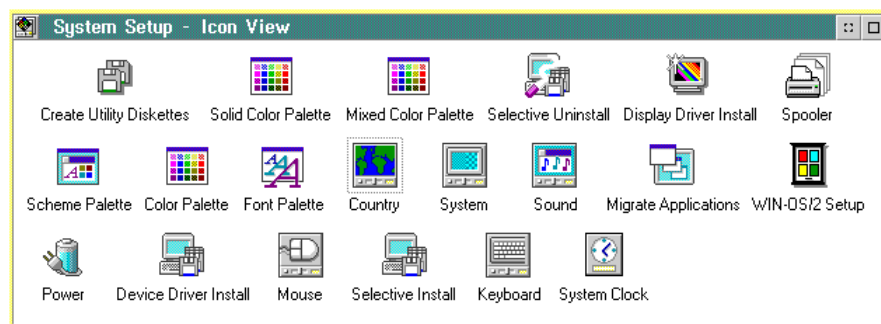


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Double-click the *OS/2 System* icon at the top of the OS/2 desktop. The *OS/2 System - Icon View* appears.

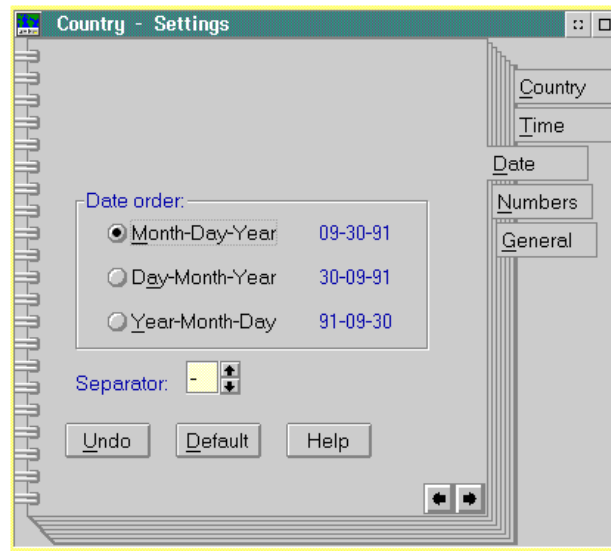


3. Double-click the *System Setup* icon. The *System Setup - Icon View* appears.

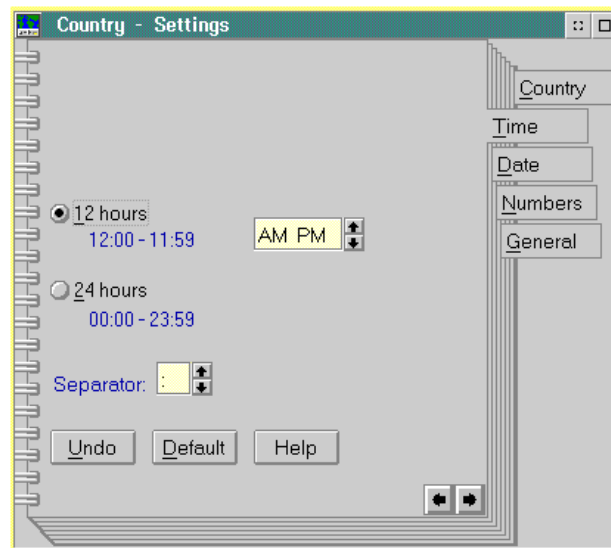


4. Double-click the *Country* icon. The *Country - Settings* notebook appears with the *Country* page open.
5. Perform one or both of the following to adjust the format:

- Click the *Date* tab to display the *Date* page. Click the desired radio button to select between *Month-Day-Year*, *Day-Month-Year*, or *Year-Month-Day* display formats.



- Click the *Time* tab to display the *Time* page. Click the desired radio button to select between *12 hours* or *24 hours* display formats. If the *12 hours* format is used, select between AM or PM display by scrolling through the list box to the right of the radio button.



6. Double-click the upper left corner of the *Country - Settings* notebook box to close the notebook.
7. Double-click the upper left corner of the *System Setup - Icon View* to close the view.
8. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 4](#) on page 190), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
9. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Enable Screen Saver

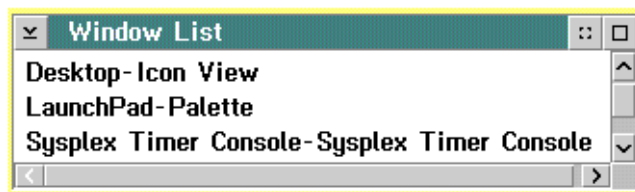
Perform this procedure to enable the Win-OS/2 screen saver or modify screen saver operation. Do not enable the screen saver or automatic lockup (password protection) function available through the OS/2 desktop *Properties* option.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



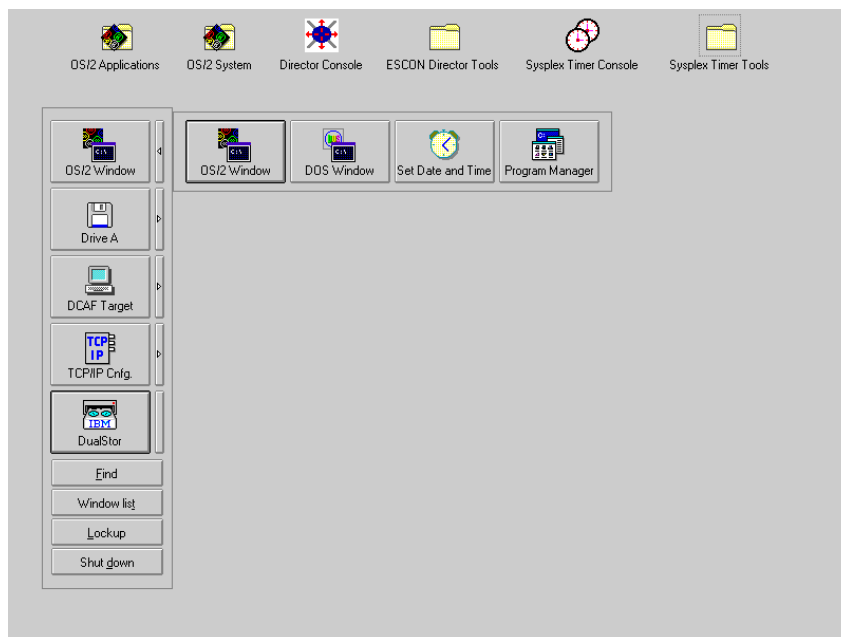
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

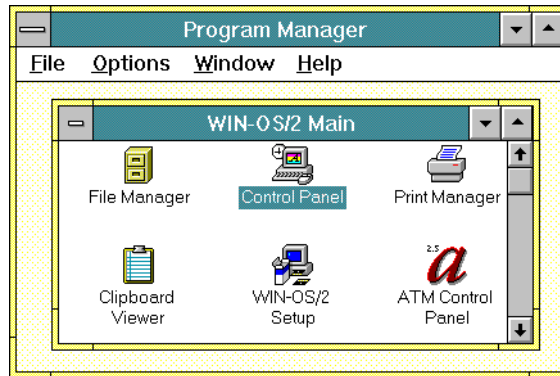


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

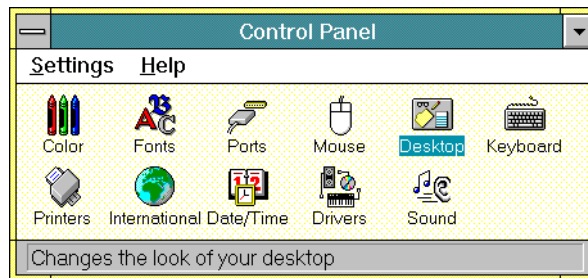
2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



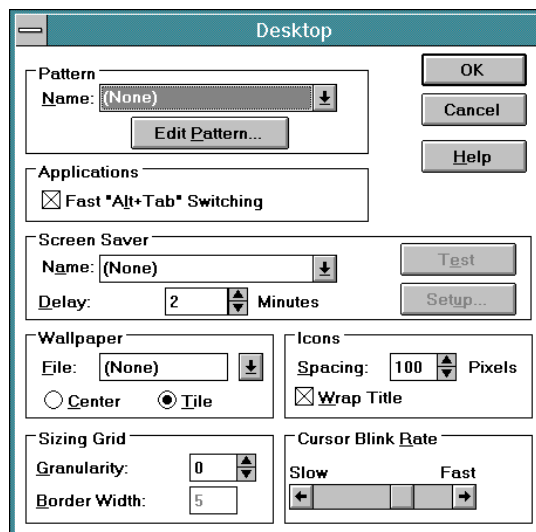
3. Click the *Program Manager* button. The *Program Manager* window appears.



4. At the *Win-OS/2 Main* window, double-click the *Control Panel* icon. The *Control Panel* window appears.



5. Double-click the *Desktop* icon. The *Desktop* dialog box appears.



6. Modify the screen saver function as required. Enable the screen saver by scrolling to a desired screen (other than *None*) in the *Name* field in the *Screen Saver* section. Set the time delay for the screen saver to enable by scrolling to the desired time in the *Delay* field. The password function for the Console is not required. To enable the password function, select a screen saver and the *Setup* button. Click the *Password* check box, enter a password, and click *OK*.
7. When finished, click the *OK* button on the *Desktop* dialog box.
8. Double-click the top left corner of the *Control Panel* and *Program Manager* windows to close the windows.
9. When the *Exit Win-OS/2* dialog box appears, click the *OK* button to exit Win-OS/2, close the dialog box, and return to the OS/2 desktop.
10. Close the *OS/2 Window* drawer by clicking the drawer arrow.
11. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 4](#) on page 190), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
12. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Keyboard Layout and Country Code Page (International Users Only)

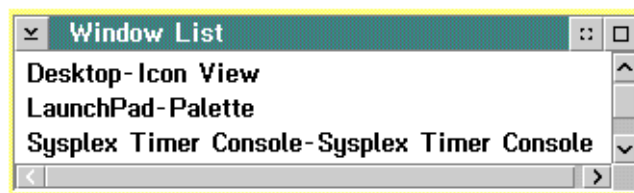
Perform this procedure to change the keyboard layout and country information. This allows keyboards to be customized for international users (outside of the United States). You must also change options for Win-OS/2 windows and the OS/2 operating system.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



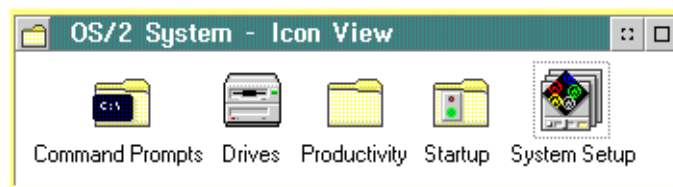
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

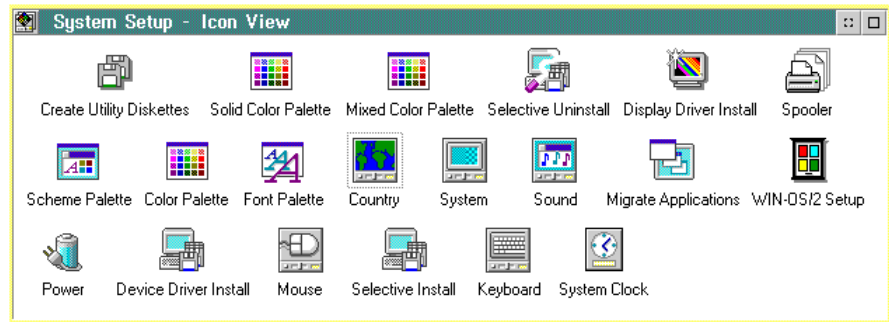


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

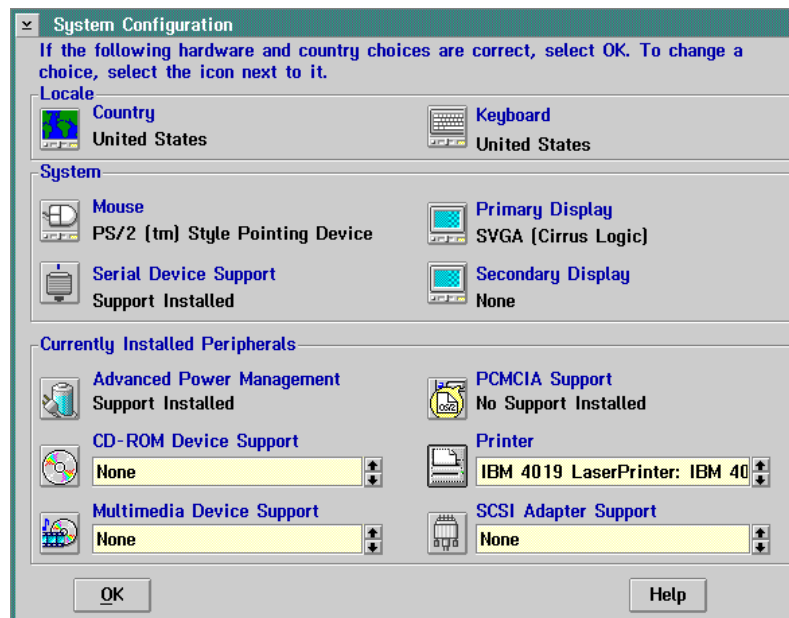
2. Double-click the *OS/2 System* icon at the top of the OS/2 desktop. The *OS/2 System - Icon View* appears.



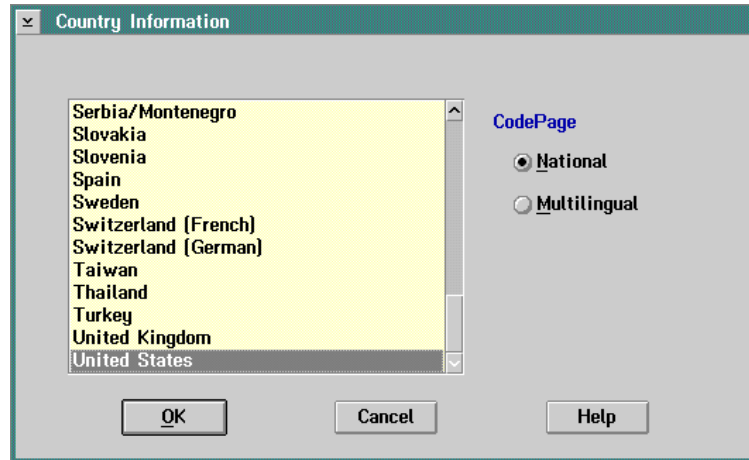
3. Double-click the *System Setup* icon. The *System Setup - Icon View* appears.



4. Double-click the *Selective Install* icon. A message box appears indicating the installation program is initializing. After a few seconds, the *System Configuration* dialog box appears.



5. At the *Locale* area of the *System Configuration* dialog box, click the *Country* icon. The *Country Information* dialog box appears.

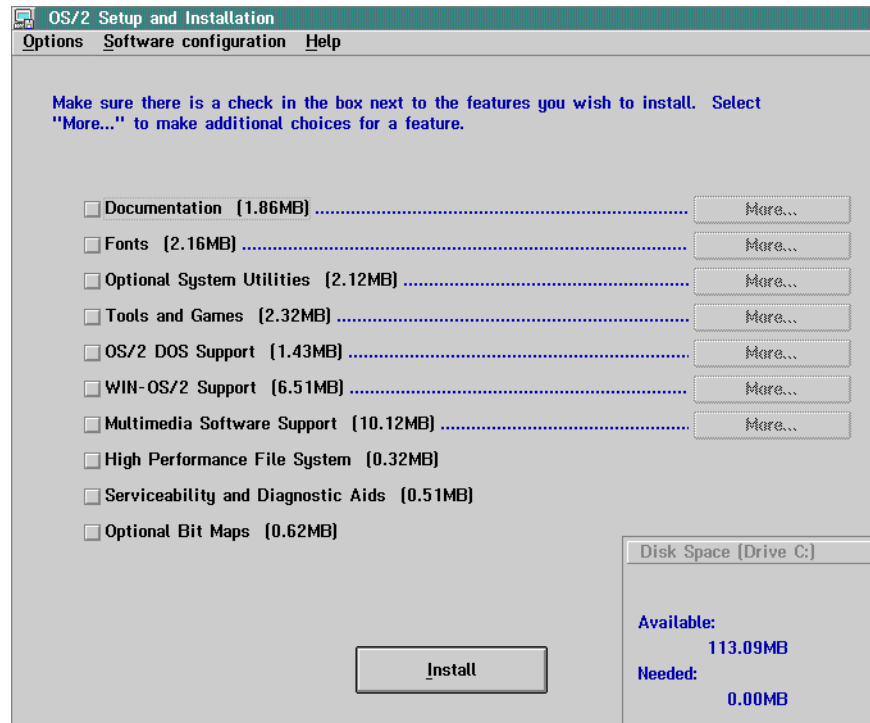


6. Click (select) the desired country name and click the *OK* button. The *System Configuration* dialog box appears again.
7. At the *Locale* area of the *System Configuration* dialog box, click the *Keyboard* icon. The *Keyboard* dialog box appears.

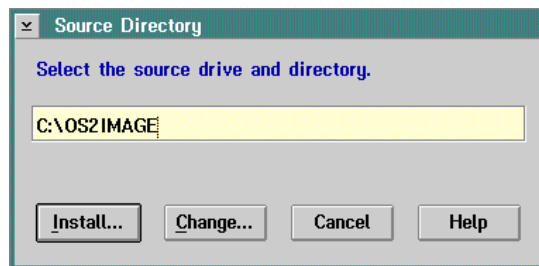


8. Click (select) the desired country name and click the *OK* button. The *System Configuration* dialog box appears again.

9. Click the *OK* button. The *OS/2 Setup and Installation* dialog box appears.



10. Click the *Install* button to continue. The *Source Directory* dialog box appears.



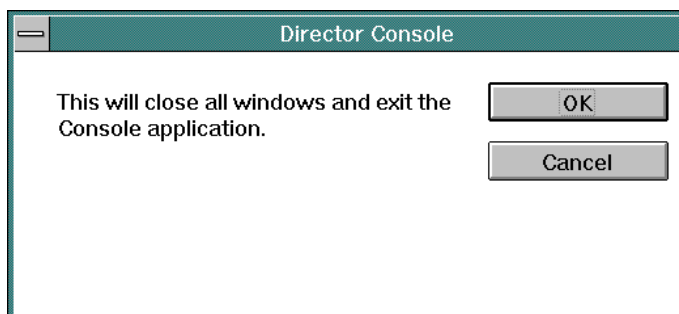
11. Click the *Install* button. A message box appears explaining that the OS/2 setup is completing the configuration change. After a few seconds, a message box appears telling you to shut down and restart the system.
12. Click the *OK* button. The *System Setup - Icon View* appears again.
13. Double-click the upper left corner of the *System Setup - Icon View* and *OS/2 System - Icon View* to close the views and return to the OS/2 desktop.

14. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 4](#) on page 190), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
15. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Change Win-OS/2 Keyboard Settings

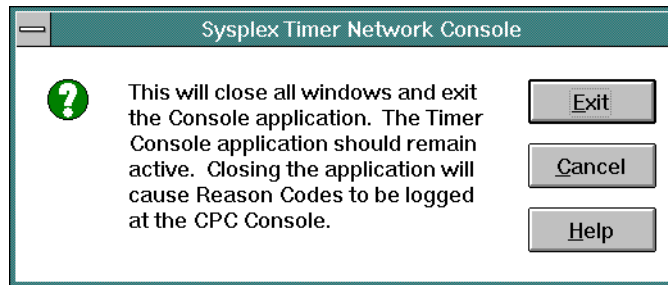
Perform this procedure to change the keyboard layout for Win-OS/2 windows and the OS/2 operating system. This allows keyboards to be customized for international users (outside of the United States).

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



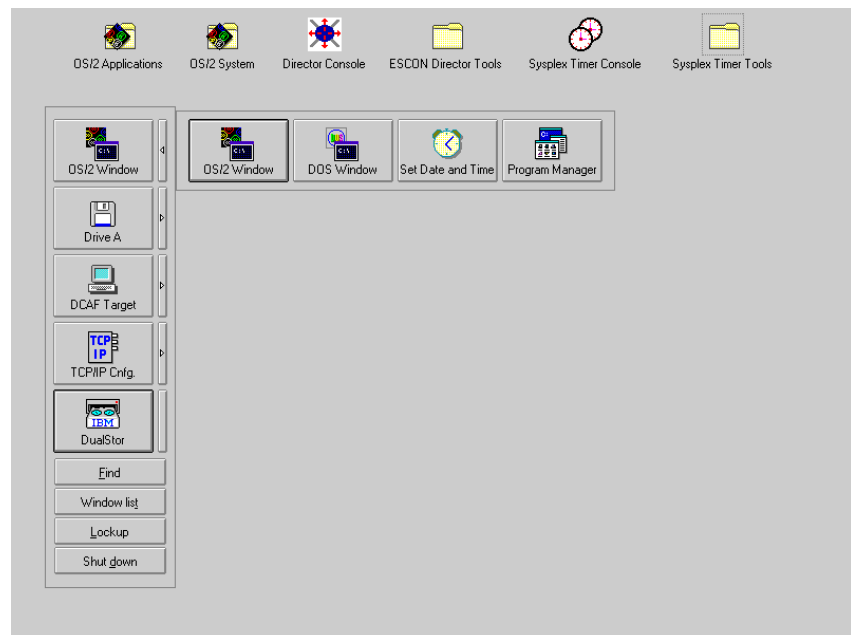
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

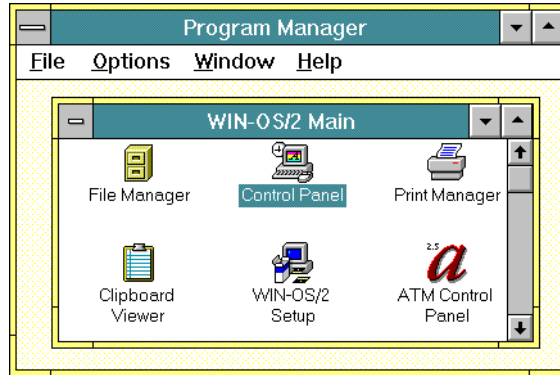


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

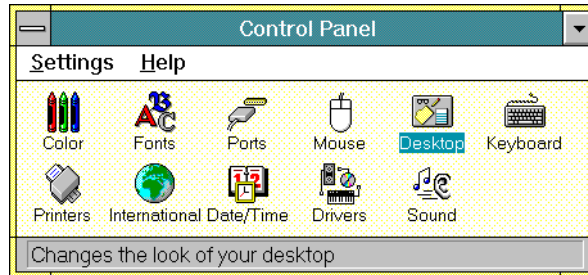
2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



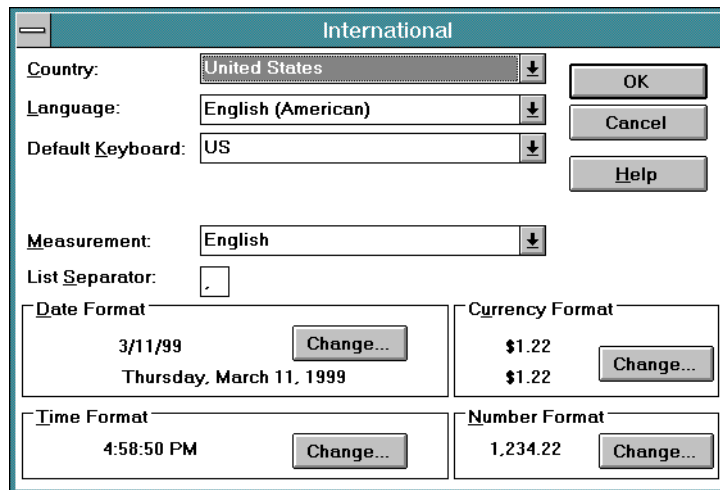
3. Click the *Program Manager* button. The *Program Manager* window appears.



4. At the *Win-OS/2 Main* window, double-click the *Control Panel* icon. The *Control Panel* window appears.



5. Double-click the *International* icon. The *International* dialog box appears.



6. Click the arrow button for the *Country* field and select the desired country from the drop-down list.

7. Click the arrow button for the *Language* field and select the desired language from the drop-down list.
8. Click the arrow button for the *Default Keyboard* field and select the desired keyboard layout from the drop-down list.
9. Double-click the top left corner of the *Control Panel* and *Program Manager* windows to close the windows.
10. When the *Exit Win-OS/2* dialog box appears, click the *OK* button to exit Win-OS/2, close the dialog box, and return to the OS/2 desktop.
11. Close the *OS/2 Window* drawer by clicking the drawer arrow.
12. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 4](#) on page 190), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
13. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Token Ring Adapter IP Address and Subnet Mask

The default IP address for the Console Token Ring adapter card is 1.1.1.1, and the default subnet mask is 255.0.0.0. If you wish to change either or both these values, obtain a unique Console IP address or subnet mask from the LAN administrator.

The IP address must be in the form *nnn.nnn.nnn.nnn*, where *nnn* is a decimal byte in the range 0 through 255. The IP address may not be all zeros or all 255s.

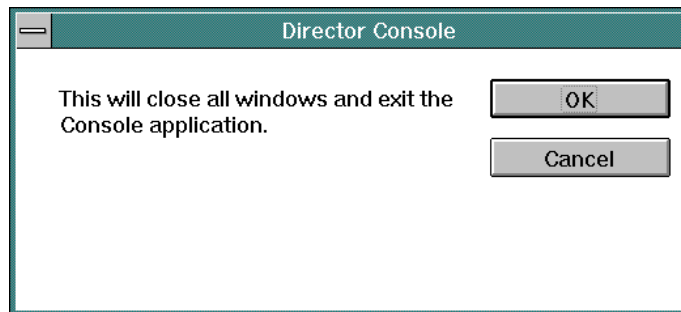
Change default IP address and subnet mask values if:

- The Console is not on an isolated Token Ring LAN.
- There is more than one Console on the Token Ring LAN.

- The subnet mask does not conform to the network to which the Console is connected.
- The IP address conflicts with the address of another device on the ring or does not conform to the LAN addressing scheme.
- The IP address does not conform to the LAN addressing scheme.

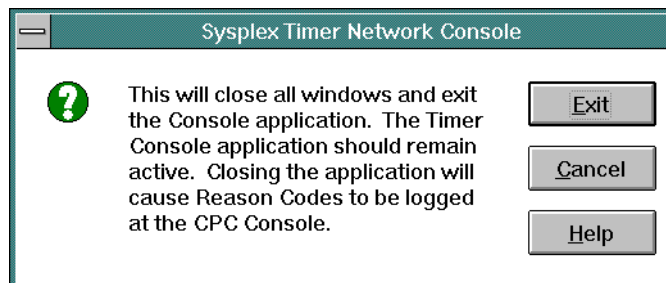
Perform the following procedure to display and change the Director or Sysplex Timer Console's IP address and subnet mask.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



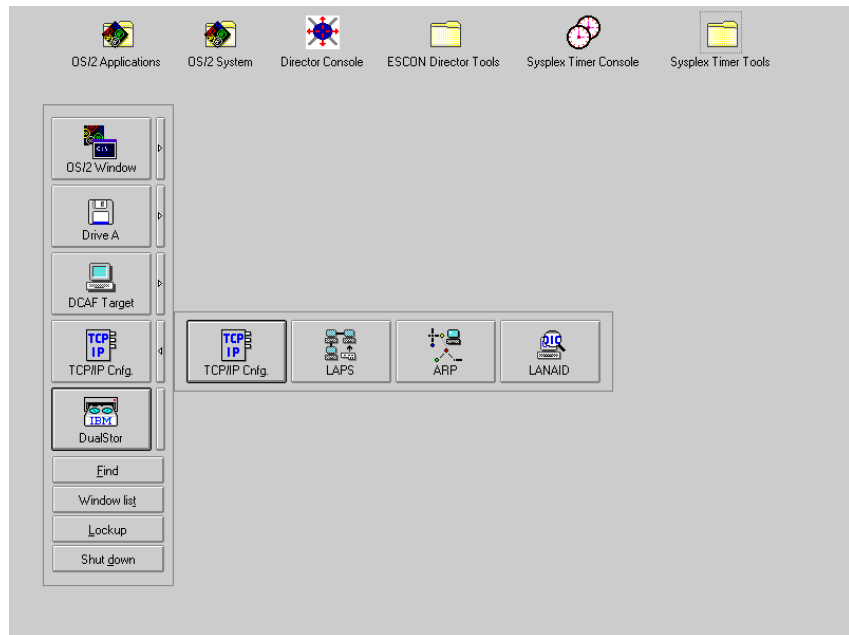
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

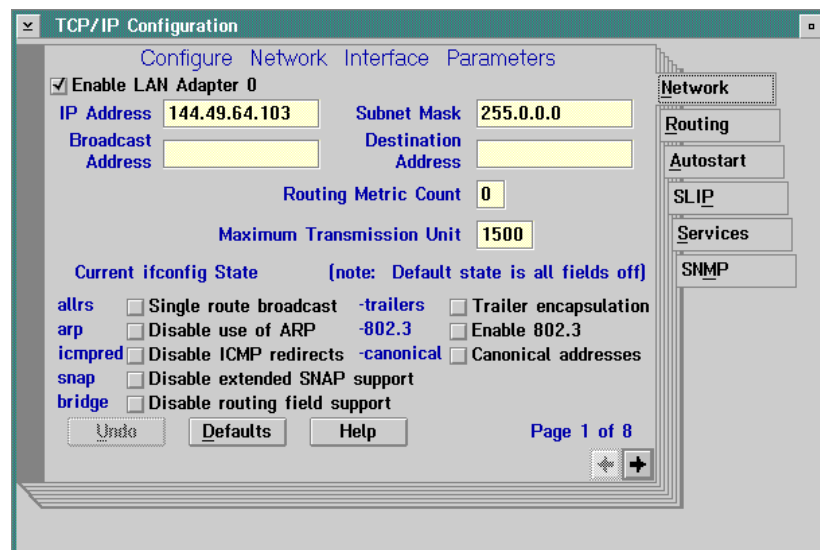


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

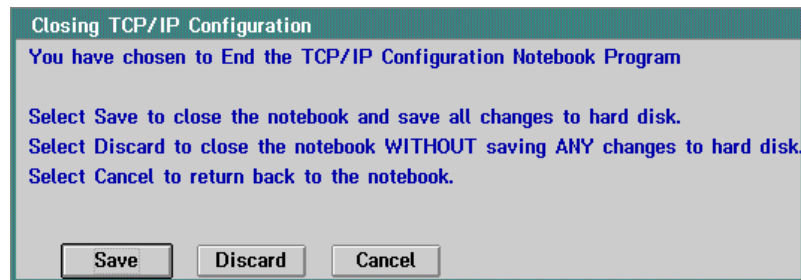
- At the OS/2 desktop, click the *TCP/IP Cnfg.* drawer arrow on the launch pad to open the drawer.



- Click the *TCP/IP Cnfg.* button. The *TCP/IP Configuration* notebook appears with the *Network* page open.



4. To change the IP address, click in the *IP Address* field. Type the new IP address as necessary. Move within the field by using the left and right arrow keys (← and →). Use the **Backspace** key to delete characters.
5. To change the subnet mask, click in the *Subnet Mask* field. Type the new subnet mask as necessary. Move within the field by using the left and right arrow keys (← and →). Use the **Backspace** key to delete characters.
6. Close the *TCP/IP Configuration* notebook by double-clicking the upper left corner of the notebook. The *Closing TCP/IP Configuration* dialog box appears.

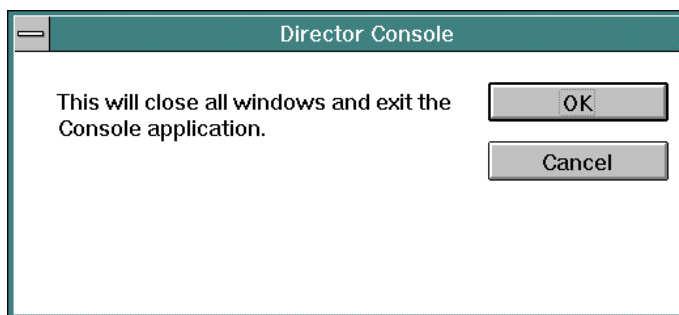


7. Click the *Save* button. The OS/2 desktop appears.
8. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
9. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 4](#) on page 190), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
10. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Token Ring Adapter MAC Address

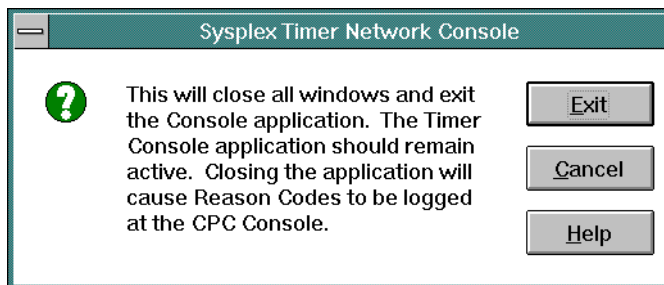
Change the Console Token Ring adapter's Media Access Control (MAC) address if the address does not conform to the locally-administered LAN addressing scheme. Perform the following procedure to display and change the Director or Sysplex Timer Console's MAC address.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



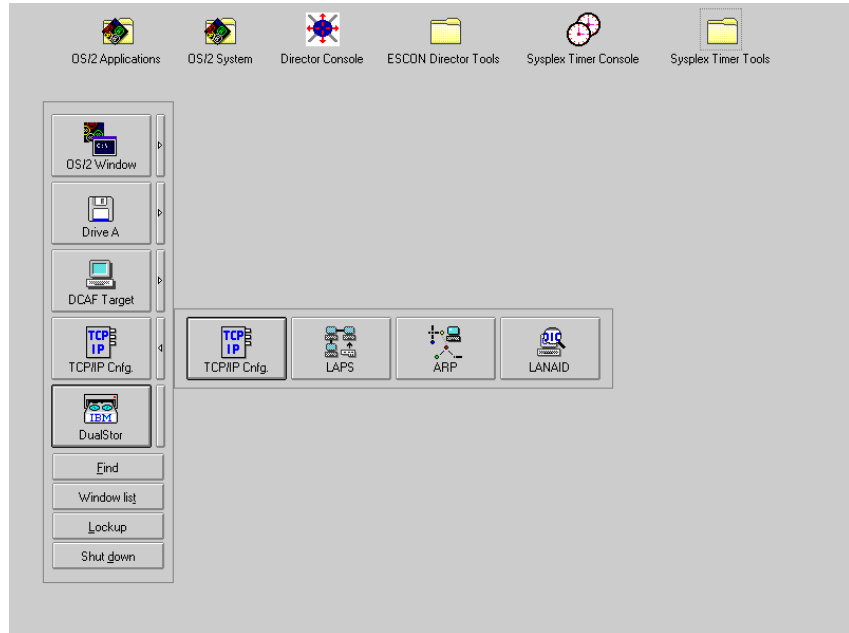
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

2. At the OS/2 desktop, click the *TCP/IP Cnfg.* drawer arrow on the launch pad to open the drawer.

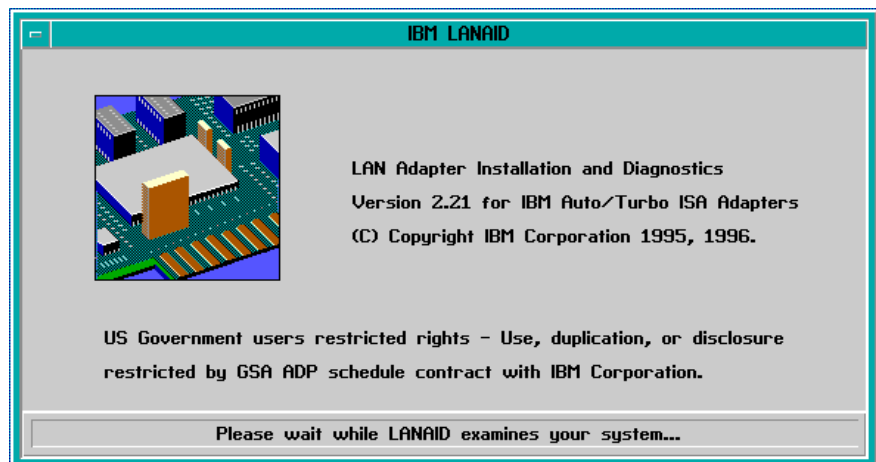


3. To display the MAC address, continue to "[Display MAC Address](#)" below. To change the MAC address, refer to "[Change MAC Address](#)" on page 214.

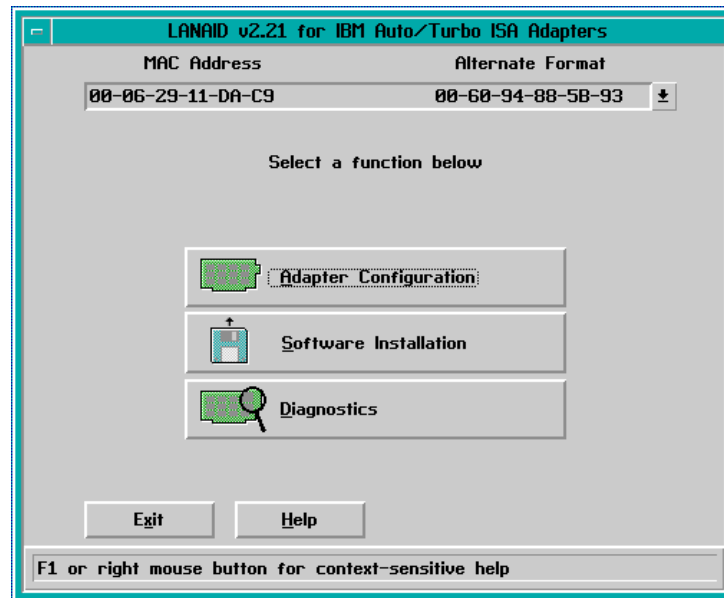
Display MAC Address

To display the MAC address:

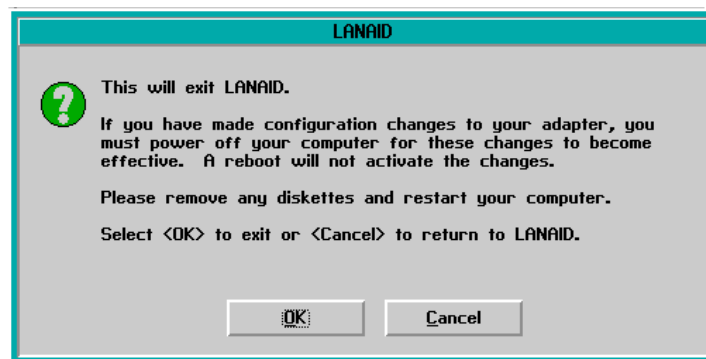
1. Click the *Lanaid* button on the *TCP/IP Cnfg.* drawer. The *IBM LAN AID* message box appears briefly while the system configuration is queried.



The *IBM LANAIID* message box closes, and the *LANAID v2.21 for IBM Auto/Turbo ISA Adapters* window appears.



2. Record the MAC address. The address is listed at the top of the window under *MAC Address*.
3. Click the *Exit* button. The *LANAID* dialog box appears.



4. Click the *OK* button. The OS/2 desktop appears.
5. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.

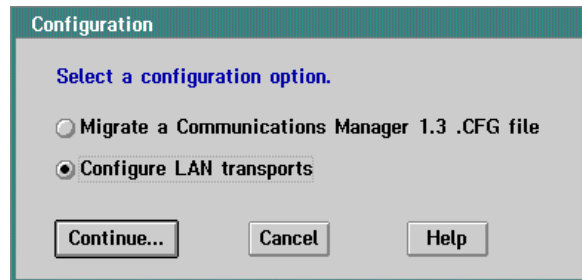
Change MAC Address

To change the MAC address:

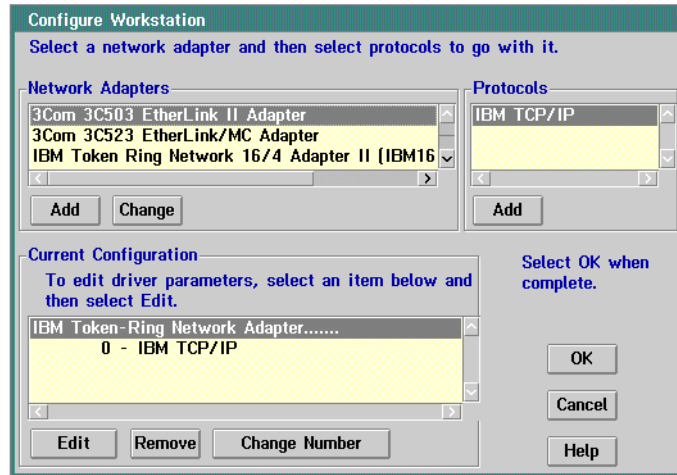
1. Click the *LAPS* button on the *TCP/IP Cnfg.* drawer. The *IBM LAN Adapter and Protocol Support* window appears.



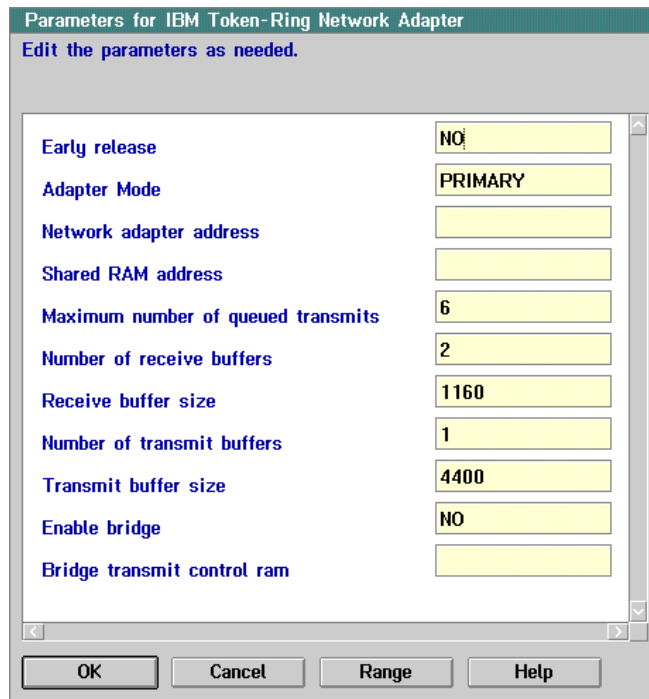
2. Click the *Configure* button. The *Configuration* dialog box appears.



3. Ensure the *Configure LAN transports* radio button is selected, then click the *Continue* button. The *Configure Workstation* dialog box appears.



4. Use the scrolling arrows to scroll through the *Current Configuration* list box and click (select) the *IBM Token-Ring Network Adapters* entry.
5. Click the *Edit* button. The *Parameters for IBM Token-Ring Network Adapter* dialog box appears.



6. Click the *Network adapter address* field. Enter the new hexadecimal MAC address (12-digit) as required.
7. Click the *OK* button. The *Configure Workstation* dialog box reappears.
8. Click the *OK* button. The *IBM LAN Adapter and Protocol Support* dialog box reappears.
9. Click the *Exit* button. The *CONFIG.SYS Updates* dialog box appears. The letter **C** should appear in the *Drives to update* field. If it does not, use the scrolling arrows to select **C**.
10. Click the *Continue* button. A *CONFIG.SYS Updated* dialog box appears explaining the **CONFIG.SYS** file was successfully updated.
11. Click the *OK* button. The *Exiting LAPs* dialog box appears.
12. Click the *Exit* button to return to the OS/2 desktop.
13. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
14. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 4](#) on page 190), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
15. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Set or Change Default Printer

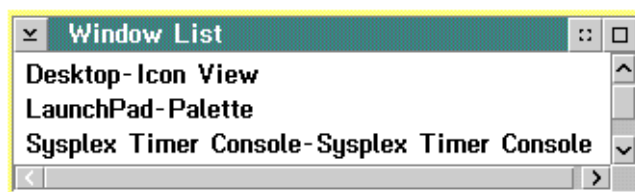
Perform the following procedure to set or change the default printer for the Director or Sysplex Timer Console.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



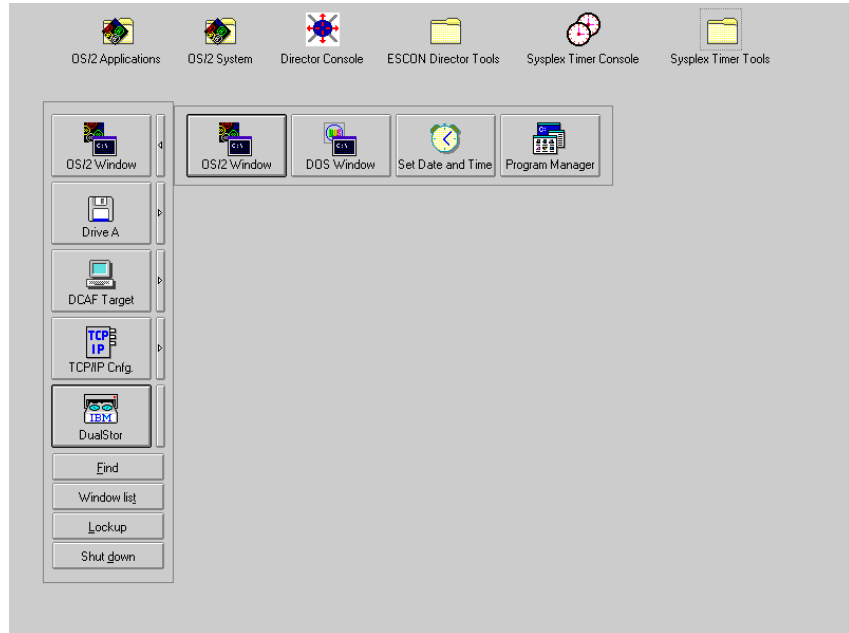
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

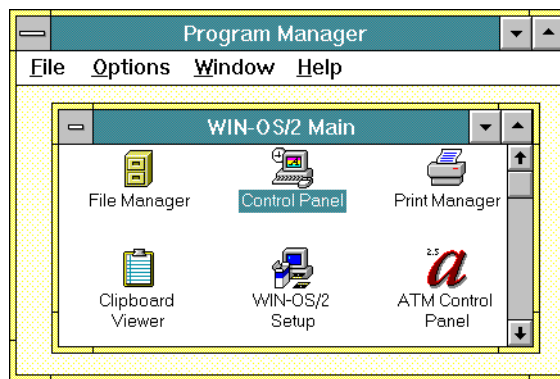


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

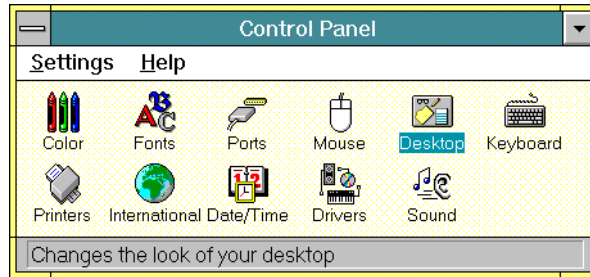
2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



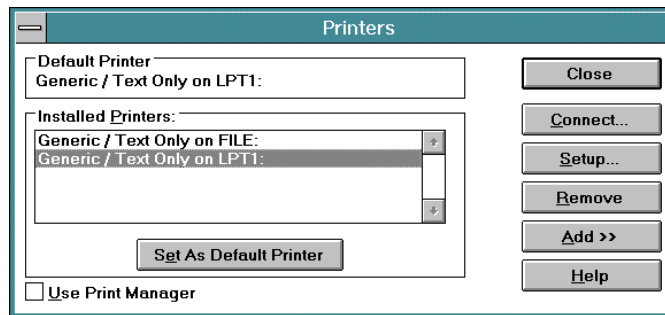
3. Click the *Program Manager* button. The *Program Manager* window appears.



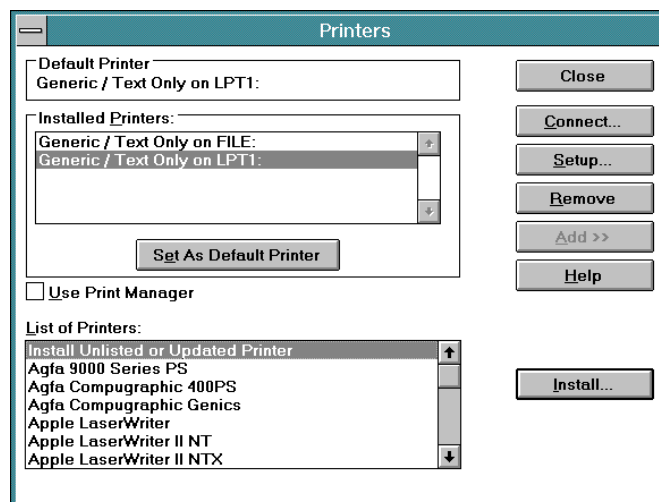
4. At the *Win-OS/2 Main* window, double-click the *Control Panel* icon. The *Control Panel* window appears.



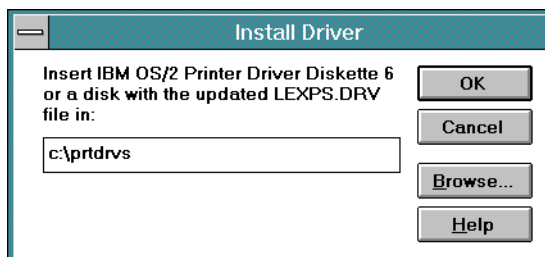
5. Double-click the *Printers* icon. The *Printers* dialog box appears.



6. Click (select) a driver displayed in the *Installed Printers* field and click the *Set as Default Printer* button.
7. To add a driver not listed in the *Installed Printers* field, perform the following:
 - a. Click the *Add* button. The *Printers* dialog box reappears with a list of available printers.



- b. Scroll through the list of printers and select the desired printer.
- c. Click the *Install* button to display the *Install Driver* dialog box.



- d. Type **C:\prtdrvs** and click the *OK* button. The driver loads and appears under the list of installed printers in the *Printers* dialog box.
8. Close all open windows by double-clicking the upper left corner of each window. When the *Exit Win-OS/2* dialog box appears, click the *OK* button to exit Win-OS/2, close the dialog box, and return to the OS/2 desktop.
 9. Close the *OS/2 Window* drawer by clicking the drawer arrow.
 10. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 4](#) on page 190), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 11. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Chapter 7. Model PC-365 Console Procedures

This chapter describes Operating System/2 (OS/2) Warp 4.0 procedures for an IBM Model PC-365 computer used as an Enterprise Systems Connection (ESCON) Director Console or Sysplex Timer Console. The procedures are Director and Timer-specific and include:

- Performing general administrative tasks.
- Performing backup and restore functions.
- Customizing the Console operating environment.

General Administrative Tasks

This section describes general administrative tasks for the ESCON Director Console or Sysplex Timer Console. The section provides instructions to:

- Perform the data collection procedure for the Director or Sysplex Timer.
- Clear the address resolution protocol (ARP) table for the local area network (LAN) on which a Director or Timer is installed.
- Migrate a Director database to another Console (excluding a Hardware Management Console).
- Change the Token Ring adapter data rate for the Console PC.
- Create Console diagnostic diskettes.

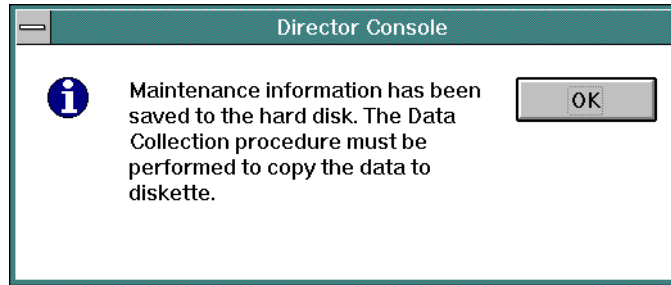
Perform Data Collection Procedure

Perform the data collection procedure for the Director or Sysplex Timer after a system problem occurs or when a field-replaceable unit (FRU) is removed and replaced.

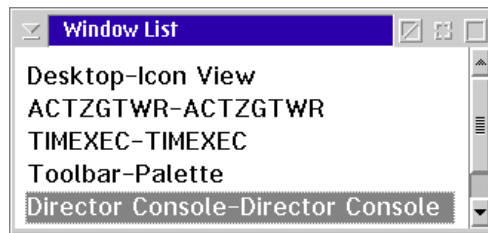
Director Data Collection

The data collection procedure transfers maintenance information to the Director Console's fixed disk, then to a 3.5-inch diskette. The diskette is mailed to the original equipment manufacturer (OEM) for problem analysis and resolution.

1. With the Director's *Active Matrix* window open, select the *Collect Maintenance Information* option from the *Maintenance* menu. The *Collect Maintenance Information* dialog box appears showing files being transferred and the transfer status. When all files are transferred to the fixed disk, the following dialog box appears.



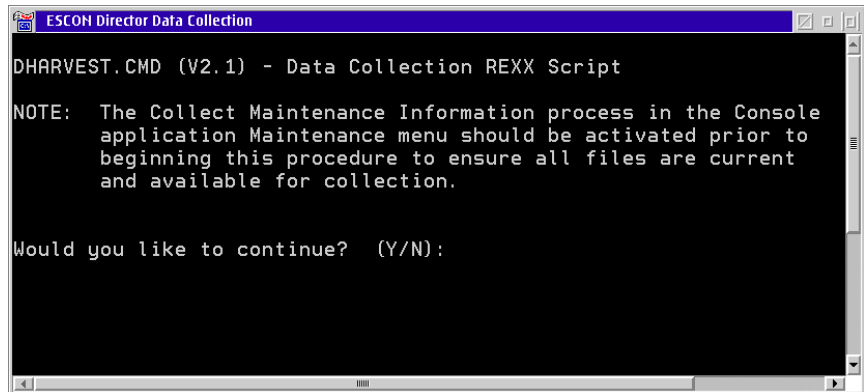
2. Click the *OK* button to close the dialog box. The Director's *Active Matrix* window reappears.
3. Record the Director name. The name (up to eight characters in length) appears on the title bar at the top of the active matrix window.
4. Simultaneously press the **Ctrl** and **Esc** keys to transfer to the Director Console's OS/2 desktop. The *Window List* appears.



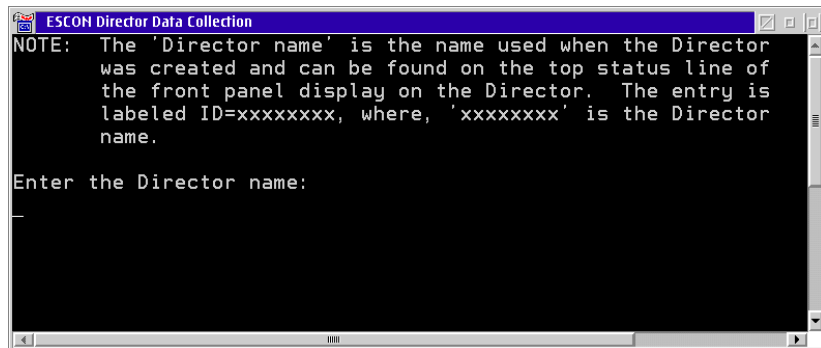
5. Double-click the *Desktop-Icon View* selection. The Director Console's OS/2 desktop appears.
6. Insert a data collection diskette into drive **A:** of the Director Console in accordance with one of the following steps:
 - If you are removing and replacing a FRU in the 9032-003 or 9033-004 ESCON Director, use the data collection diskette shipped with the replacement FRU. The diskette is labeled *Data Collection Diskette*.
 - If you are removing and replacing a FRU in the 9032-005 ESCON Director or collecting data for another purpose (such as fault isolating problems), use a data collection diskette shipped with the Director. The diskette is labeled *Data Collection Utility Version XX.YY.ZZ*, where *XX.YY.ZZ* is the Licensed Internal Code (LIC) version number.
 - If a labeled data collection diskette is not available, a blank, DOS-formatted diskette may be used.
7. At the OS/2 desktop, double-click the *ESCON Director Tools* folder. The *ESCON Director Tools - Icon View* appears.



8. Double-click the *ESCON Director Data Collection* icon. The first ESCON Director Data Collection window appears



9. Type **Y** and press the **Enter** key. The second *ESCON Director Data Collection* window appears.



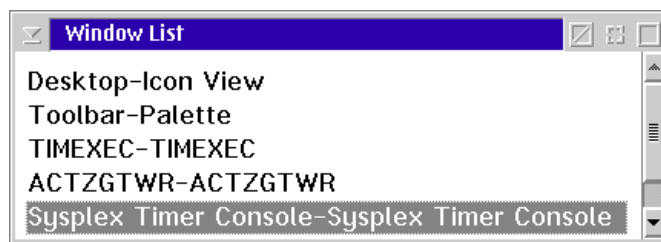
10. Type the Director name (recorded in [step 3](#) of this procedure) and press the **Enter** key. Messages appear in the window showing files transferring from the fixed disk to diskette. The data collection process is complete when the *Enter* prompt appears.

11. Press the **Enter** key. The *ESCON Director Data Collection* window closes.
12. Double-click the upper left corner of the *ESCON Director Tools - Icon View* to close the view and return to the OS/2 desktop.
13. Remove the data collection diskette from drive **A:** of the Director Console. Record the following information on the diskette label.
 - Director serial number.
 - Quality Service Activity Reporting (QSAR) number.
 - Problem Management - Hardware (PMH) number.
 - Current date.
14. Insert the data collection diskette in the pre-addressed envelope provided and mail the envelope to the OEM.
15. At the OS/2 desktop, open the Director Console application by double-clicking the *Director Console* icon. The Console application opens to the window closed in [step 4](#) of this procedure.

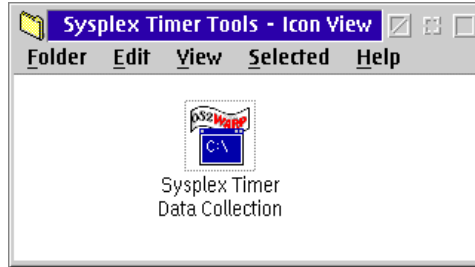
Sysplex Timer Data Collection

The data collection procedure transfers maintenance information from the Timer to a 3.5-inch diskette. The diskette is mailed to the OEM for problem analysis and resolution.

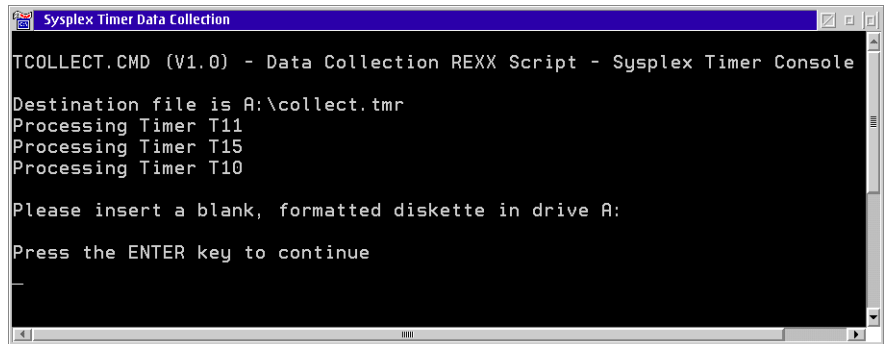
1. At the *Sysplex Timer Network Console* window, simultaneously press the **Ctrl** and **Esc** keys to transfer to the Timer Console's OS/2 desktop. The *Window List* appears.



2. Double-click the *Desktop-Icon View* selection. The Timer Console's OS/2 desktop appears.
3. At the OS/2 desktop, double-click the *Sysplex Timer Tools* folder. The *Sysplex Timer Tools - Icon View* appears.



4. Double-click the *Sysplex Timer Data Collection* icon. The *Sysplex Timer Data Collection* window appears.



5. Insert a data collection diskette into drive **A:** of the Timer Console. The diskette is labeled *Data Collection Diskette*. If a labeled data collection diskette is not available, a blank, DOS-formatted diskette may be used.
6. Press the **Enter** key. Messages appear in the window showing files transferring from fixed disk to diskette. The data collection process is complete when the *Enter* prompt appears.
7. Press the **Enter** key. The *Sysplex Timer Data Collection* window closes.
8. Double-click the upper left corner of the *Sysplex Timer Tools - Icon View* to close the view and return to the OS/2 desktop.
9. Remove the data collection diskette from drive **A:** of the Timer Console. Record the following information on the diskette label.
 - Timer serial number.
 - QSAR number.
 - PMH number.
 - Current date.
10. Insert the data collection diskette in the pre-addressed envelope provided and mail the envelope to the OEM.

11. At the OS/2 desktop, open the Sysplex Timer Console application by double-clicking the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Clear the Address Resolution Protocol Table

This procedure clears the ARP table for a LAN with a Director or Timer installed. The procedure clears old Internet Protocol (IP) or Media Access Control (MAC) addresses so the ARP table can rebuild with new addresses. The procedure prevents new Console, Director, or Timer addresses from conflicting with old, unused addresses. Clear the ARP table if:

- The IP or MAC address of a Director, Director Console, Timer, or Timer Console was changed after operating previously on the LAN.
- The Director, Director Console, Timer, or Timer Console are installed on a public (nondedicated) LAN.

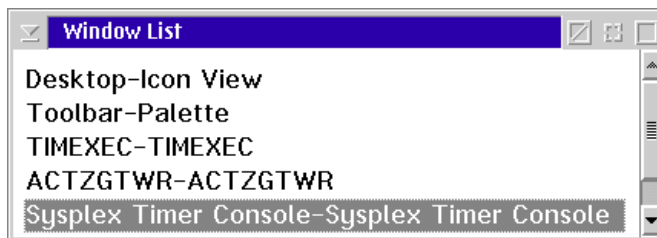
To clear the ARP table:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



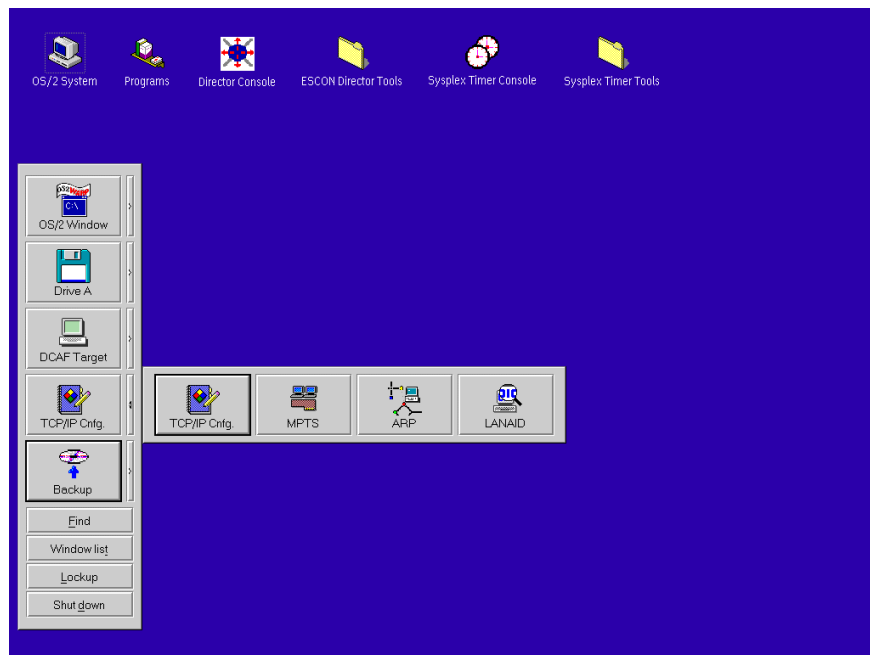
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.



Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Click the arrow on the *TCP/IP Cnfg.* drawer to open the drawer.



3. Click the *ARP* button to clear the table. The *ARP* window appears briefly and closes, indicating all the IP and MAC addresses cleared by the procedure.
4. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
5. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Migrate Director Definitions

If the Director Console application is uninstalled at a Console (Director, Sysplex Timer, Hardware Management, or other nondedicated Console) and installed on a new Console, Director definitions must be recorded on a 3.5-inch diskette and migrated to the new Console. Definitions include IP addresses, Director names, model numbers, and matrix configuration files.

If the Console application is discontinued and installed on a another Director Console, a Director definitions diskette must be created. Refer to "[Create Director Definitions Diskette](#)" below for instructions. If the Console application is installed on a new Director Console, Director definitions must be migrated. For instructions, refer to "[Migrate Definitions to a Director Console](#)" on page 230.

Create Director Definitions Diskette

Perform this procedure to create a Director definitions diskette.

1. Ensure the Director Console application is closed, not just reduced to an icon. If the Console application is open (*Startup* or *Matrix* window appears), continue to [step a](#). If the OS/2 desktop appears, go to [step b](#).

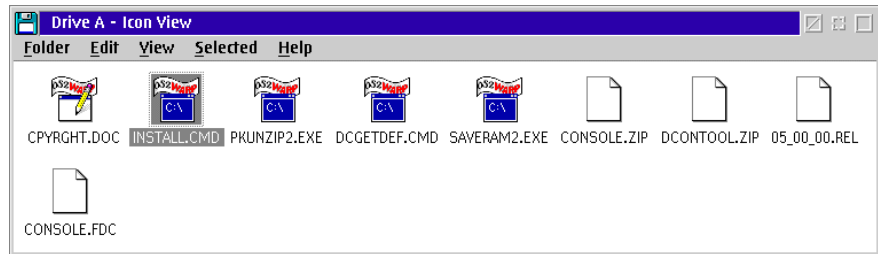
Note: OS/2 screens may look slightly different depending on the level of operating system installed on the Director Console.

- a. At the *Startup* or *Matrix* window, select the *Close Window* option from the *File* menu. The Director Console application closes and the OS/2 desktop appears. Go to [step 2](#).
- b. At the OS/2 desktop, simultaneously press the **Ctrl** and **Esc** keys. The *Window List* appears.

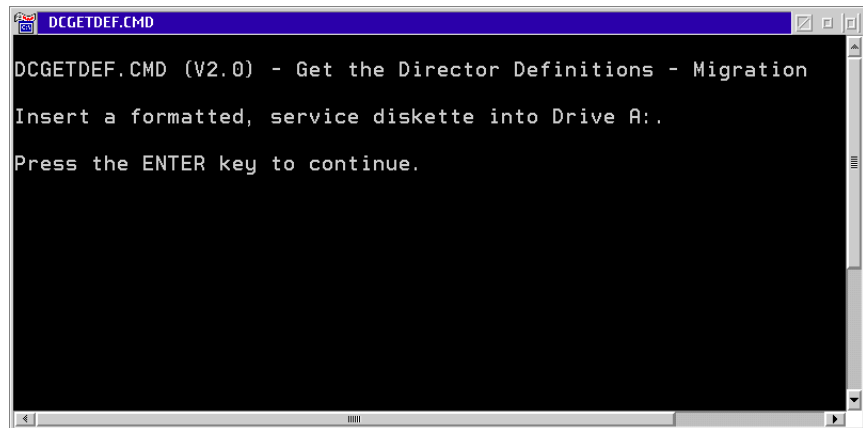


- If the *Director Console - Director Console* selection **does not** appear, the Console application is closed. Double-click the *Desktop - Icon View* selection to return to the OS/2 desktop, and go to [step 2](#).
- If the *Director Console - Director Console* selection **appears**, the Console application is open and minimized. Double-click the selection to maximize the application. At the *Startup* or *Matrix* window, select the *Close Window* option from the *File* menu. The Console application closes and the OS/2 desktop appears.

2. Insert the Console application diskette (labeled *Console Version XX.YY.ZZ*) into drive **A:** of the Director Console.
3. Double-click the *OS/2 System* icon. The *OS/2 System - Icon View* appears.
4. Double-click the *Drives* icon. The *Drives - Icon View* appears.
5. Double-click the *Drive A* icon. The *Drive A - Icon View* appears.



6. Double-click the *DCGETDEF.CMD* icon. The *DCGETDEF.CMD* window appears.



7. Remove the Console application diskette from drive **A:** of the Director Console and insert a blank, DOS-formatted diskette (provided with the Director).
8. Press the **Enter** key. Director definitions are copied to the diskette, and the copy progress is displayed in the *DCGETDEF.CMD* window. When the process is complete, the *DCGETDEF.CMD* window closes.
9. Double-click the upper left corner of the *Drive A - Icon View*, *Drives - Icon View*, and *OS/2 System - Icon View* to close the views and return to the OS/2 desktop.

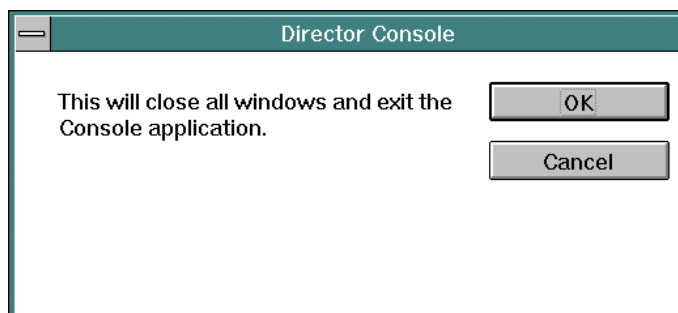
10. Remove the Director definitions diskette from drive **A:** of the Director Console.
11. Label and store the Director definitions diskette as appropriate. The diskette can now be used to transport definitions to a new Console.

Migrate Definitions to a Director Console

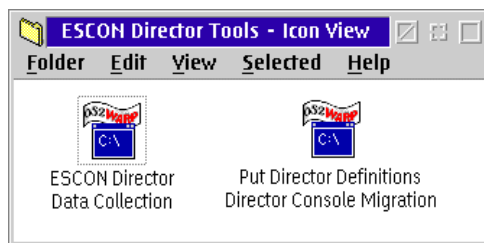
Perform this procedure to migrate Director definitions to a Director Console.

Note: This procedure does not work if the Director Console application is open or if the Director Console library already contains definitions.

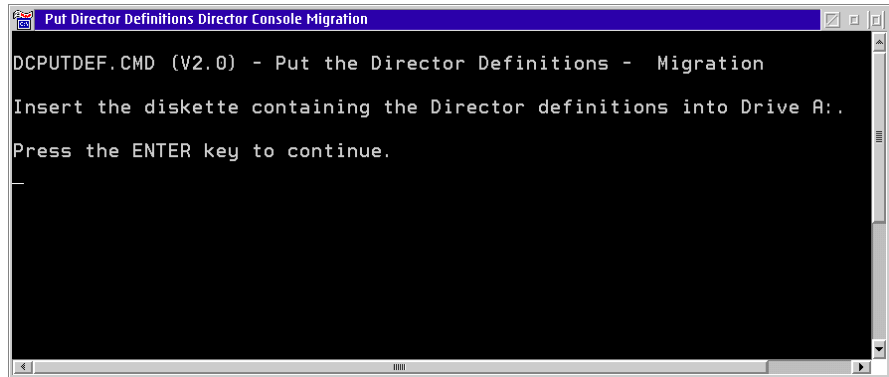
1. If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



2. Click the *OK* button to close the dialog box. The OS/2 desktop appears.
3. At the OS/2 desktop, double-click the *ESCON Director Tools* folder. The *ESCON Director Tools - Icon View* appears.



4. Double-click the *Put Director Definitions Director Console Migration* icon. The *Put Director Definitions Director Console Migration* window appears.



Note: If a warning appears indicating migration was terminated because Director definitions exist in the Console library, press the **Enter** key to close the *Put Director Definitions Director Console Migration* window and exit the utility.

If a warning appears indicating migration was terminated because the Console library was not initialized, press the **Enter** key to close the *Put Director Definitions Director Console Migration* window and exit the migration utility. Open and close the Director Console application, then perform this procedure again.

5. Insert the Director definitions diskette (created at the Console from which the definitions are migrated) into drive **A:** of the Console.
6. Press the **Enter** key. Director definitions are copied to the Console fixed disk for initializing the Director Console library. When the process is complete, the *Put Director Definitions Director Console Migration* window closes.
7. Double-click the upper left corner of the *ESCON Director Tools - Icon View* to close the view and return to the OS/2 desktop.
8. Remove the Director definitions diskette from drive **A:** of the Console. Store the Director definitions diskette as appropriate.
9. At the OS/2 desktop, start the Director Console application by double-clicking the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.

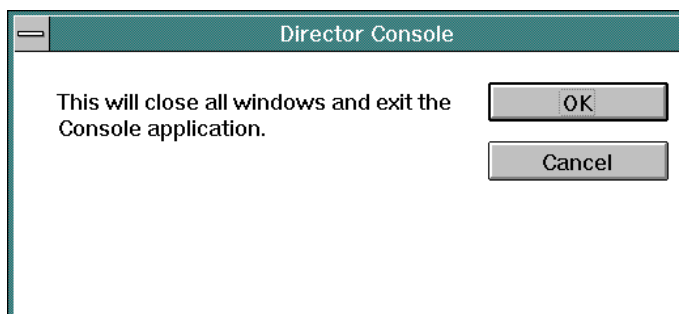
Change Token Ring Adapter Card Data Rate

Perform this procedure to change the data rate of the Token Ring adapter card for the Director or Sysplex Timer Console. The procedure changes the default rate of 16 megabits per second (Mbps) to 4 Mbps.

Note: The data rate is set at the factory. Do not change the data rate unless required because of LAN or other system requirements.

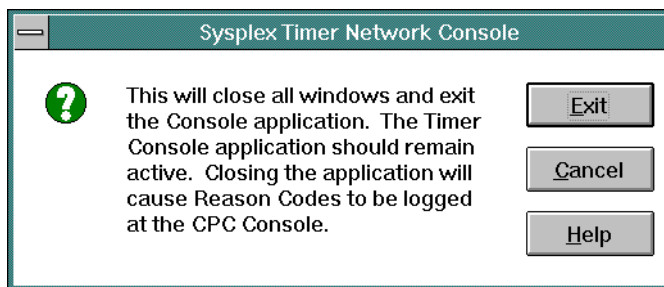
To change the Token Ring adapter card data rate:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

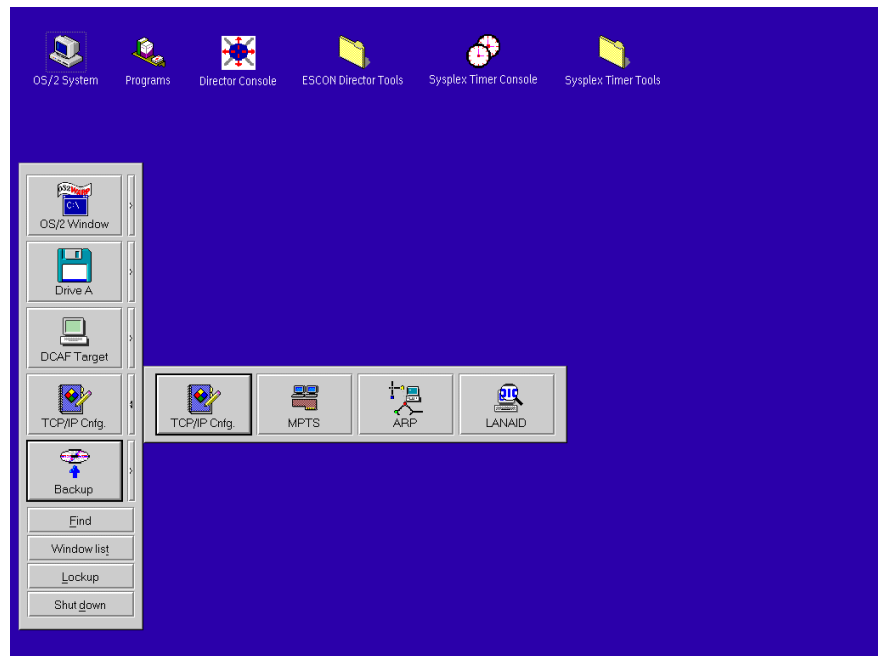
2. At the OS/2 desktop, simultaneously press the **Ctrl** and **Esc** keys. The *Window List* appears.



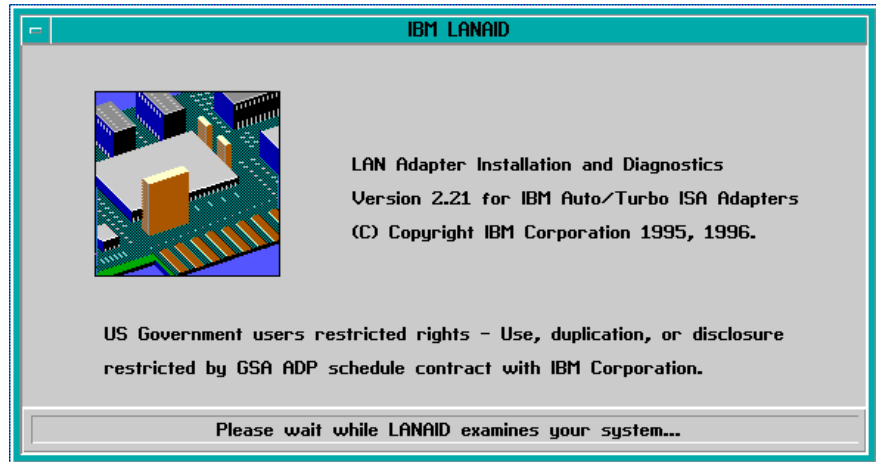
3. Select the *ACTZGTWR - ACTZGTWR* entry and click the right mouse button. The *Show* pop-up menu appears.

Note: If the *ACTZGTWR - ACTZGTWR* entry does not appear in the *Window List*, press the **Esc** key and go to [step 5](#).

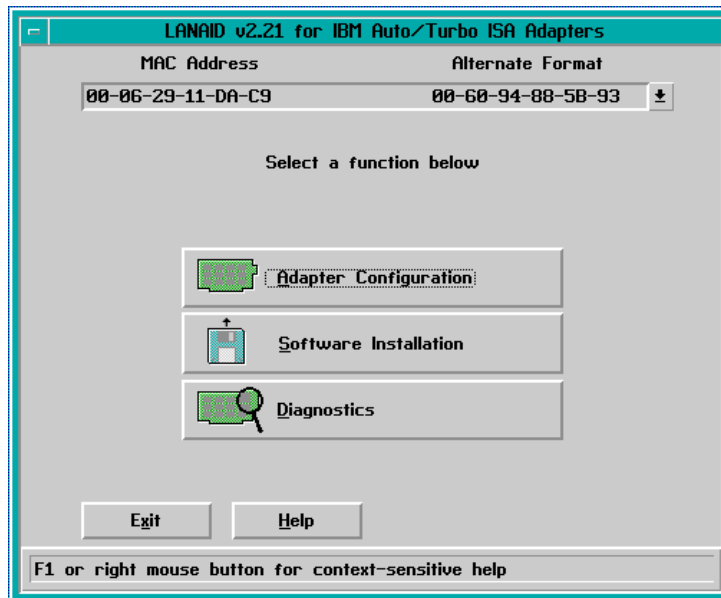
4. Select the *Close* option. The *Show* pop-up menu and the *Window List* close.
5. Click the arrow on the *TCP/IP Cnfg.* drawer to open the drawer.



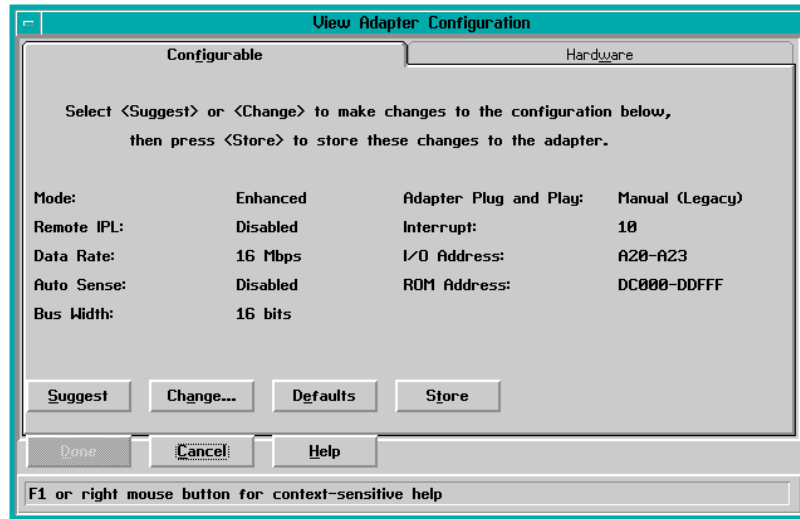
6. Click the *LANAIID* button. The *IBM LANAIID* message box appears briefly while the system configuration is queried.



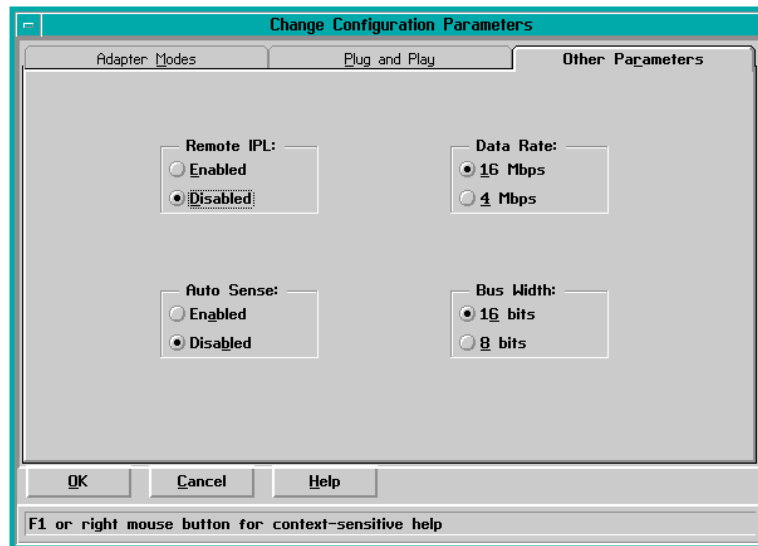
The *IBM LANAIID* message box closes, and the *LANAIID v2.21 for IBM Auto/Turbo ISA Adapters* window appears.



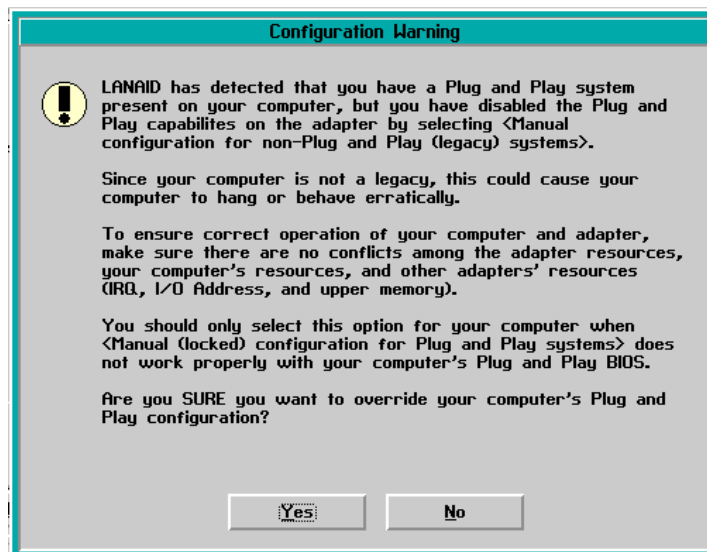
7. Click the *Adapter Configuration* button. The *View Adapter Configuration* dialog box appears with the *Configurable* page open.



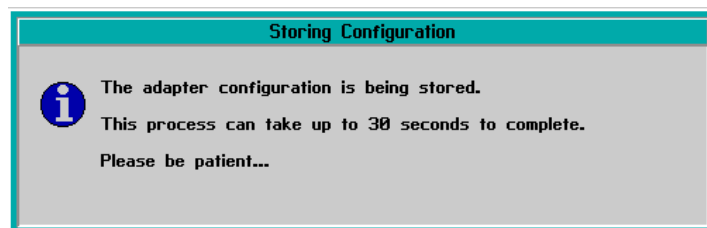
8. Click the *Change* button at the bottom of the dialog box. The *Change Configuration Parameters* dialog box appears with the *Adapter Modes* page open.
9. Click the *Other Parameters* tab at the top of the dialog box. The *Other Parameters* page appears.



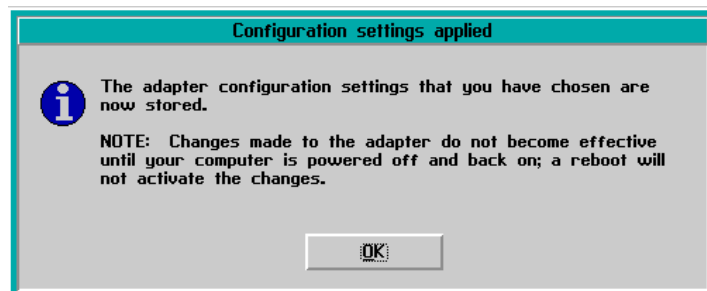
10. To change the data rate from 16 Mbps (default), click the *4 Mbps* radio button in the *Data Rate* box.
11. Click the *OK* button. The *Configuration Warning* message box appears.



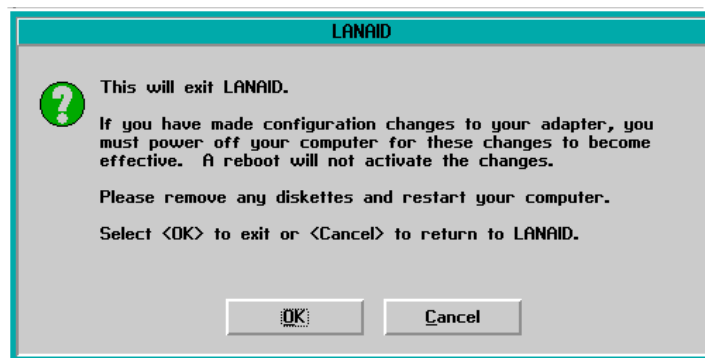
12. Click the *Yes* button. The *Configuration Warning* message box closes and the *View Adapter Configuration* dialog box reappears.
13. Click the *Store* button at the bottom of the dialog box to save the parameters. The *Storing Configuration* message box appears for approximately 30 seconds.



When the configuration change is stored, the *Storing Configuration* message box closes and the *Configuration settings applied* message box appears.



14. Click the *OK* button. The *Configuration settings applied* message box closes.
15. Click the *Done* button. The *View Adapter Configuration* dialog box closes and the *LANAID v2.21 for IBM Auto/Turbo ISA Adapters* dialog box reappears.
16. Click the *Exit* button. The *LANAID* dialog box appears.



17. Click the *OK* button. The OS/2 desktop appears.
18. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
19. Shut down and restart the operating system and Console to initiate changes. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.

Create Console Diagnostic Diskettes

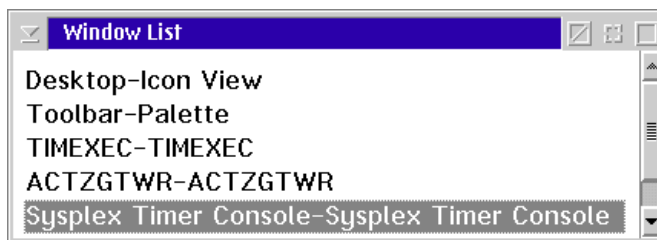
Perform this procedure to create diagnostic diskettes for the Console PC. Keep the diskettes with the Console, and use them under direction from the next level of support to fault isolate problems with the PC. To create the diagnostic diskettes:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



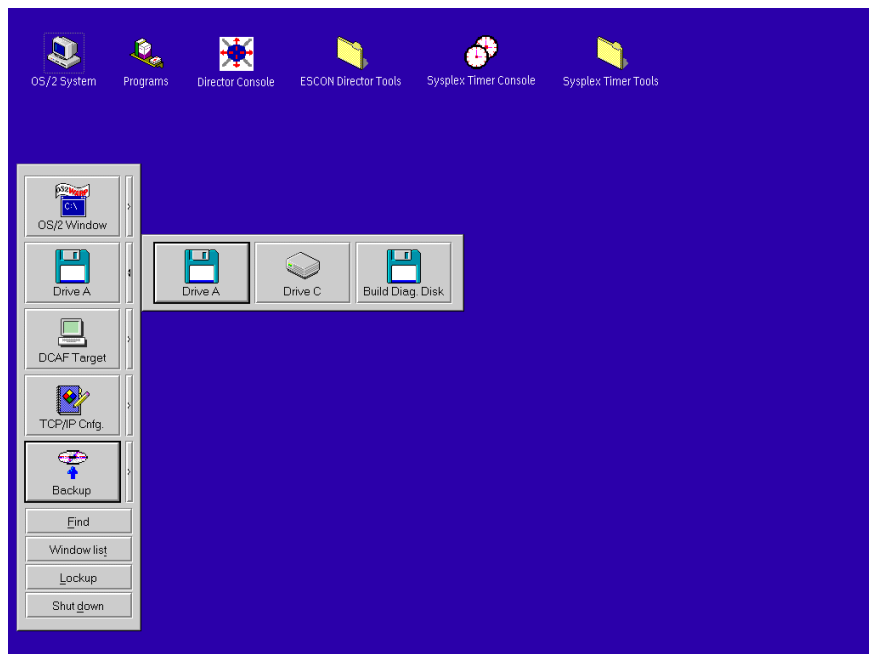
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

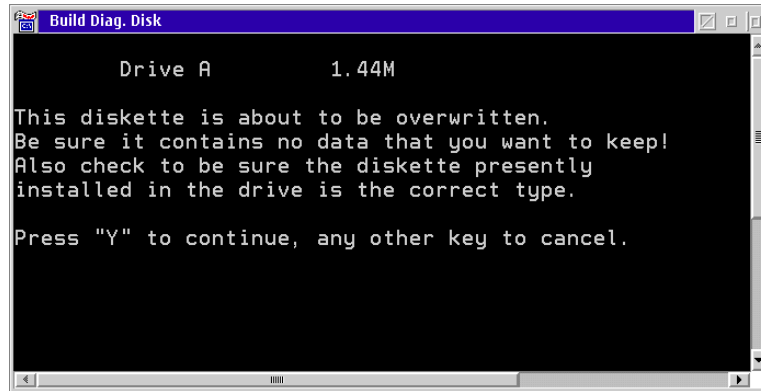


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Insert a blank, formatted diskette (labeled **For Use By Service Personnel Only** and shipped with the Console) into the diskette drive.
3. Click the arrow on the *Drive A* drawer to open the drawer.



4. Click the *Build Diag. Disk* button. The *Build Diag. Disk* window appears.



5. Press the **Y** key to continue. A message appears at the bottom of the window showing the percentage of files written to the diskette.
6. When the percentage reaches 100, remove the diskette, insert a second diskette as prompted, and press the **Enter** key. Label the first diskette *Reference Diskette*.
7. The *Build Diag. Disk* window appears again. Press the **Y** key to continue. A message appears at the bottom of the window showing the percentage of files written to the diskette.
8. When the percentage reaches 100 again, the second diagnostic diskette is created and the OS/2 desktop reappears. Remove the diskette from the drive. Label the second diskette *SCSI Diagnostic*.
9. Close the *Drive A* drawer by clicking the drawer arrow.
10. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
11. Keep the diskettes with the Console and use them under direction from the next level of support to fault isolate PC problems.

Backup and Restore Functions

The Model PC-365 Console contains a rewriteable optical cartridge (ROC) drive to perform backup and restore functions. Backups of the Director or Sysplex Timer system libraries are routinely performed. Library data is restored using a ROC with the most recent backup version of the Director or Timer system library. The entire Console fixed disk is restored using:

- A 3.5-inch Director or Sysplex Timer Console application diskette.
- A 3.5-inch Console restore diskette.
- A Console restore CD-ROM.
- A ROC that contains the most recent backup version of the Director or Timer system library.

This section describes:

- Backing up the Director or Sysplex Timer system library to ROC.
- Restoring the Director or Sysplex Timer system library from ROC.
- Restoring the Console fixed disk from CD-ROM and ROC.

Back Up the System Library to ROC

Routine backups of the Director or Sysplex Timer system library to a ROC ensure critical data can be restored if required. The data is also required when migrating the Director Console application to a backup or replacement Console.

Critical data for the Director Console includes Console settings, LIC files, logs, IP addresses, Director configuration files, and Director matrices. Critical data for the Sysplex Timer Console includes Console settings, IP addresses, configuration files, logs, and identification information for the Timer network.

This section describes procedures to enable automatic back up of the system library to ROC at the default time, change backup settings, or back up the system library on demand.

Enable Automatic Backup at Default Time

If enabled, the operating system automatically backs up the system library to a ROC at a specified or default time. Perform this procedure to enable automatic backup of the system library at the default backup time (daily at 12:00 midnight).

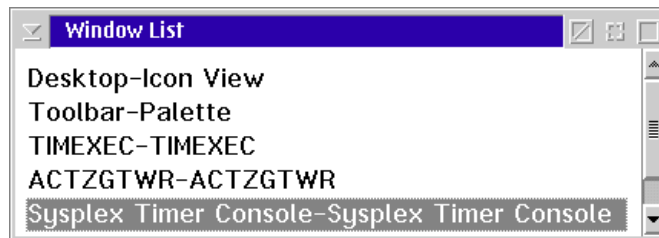
This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). If either or both applications are running on a Hardware Management Console, refer to [Chapter 3](#) for system library backup procedures. To enable the automatic backup feature using the default setting of 12:00 midnight:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



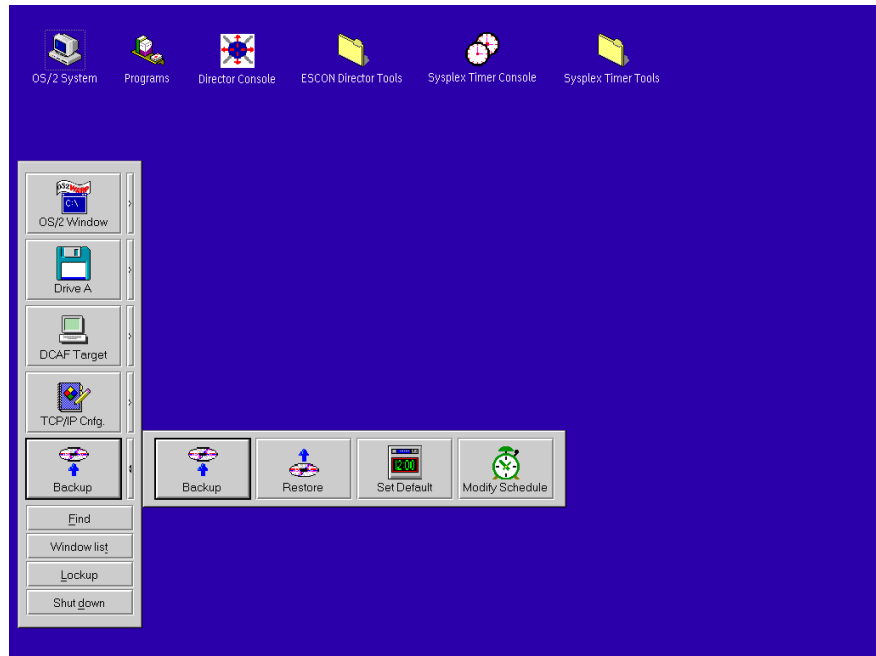
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

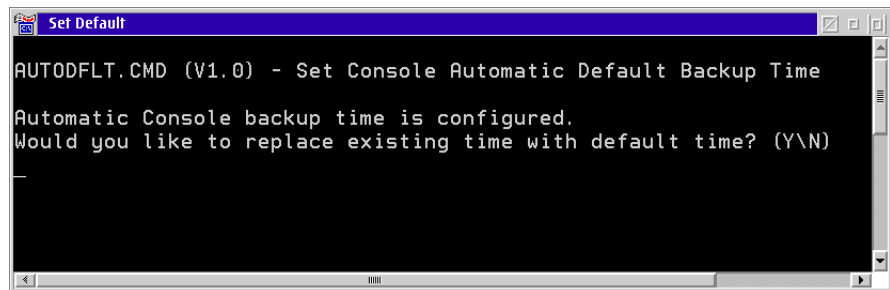


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Click the arrow on the *Backup* drawer to open the drawer.



3. Click the *Set Default* button on the *Backup* drawer. The *Set Default* dialog box appears.



4. Type **Y** and press the **Enter** Key. The Director or Sysplex Timer Console system library automatically backs up every day at midnight.
5. Click the arrow on the *Backup* drawer to close the drawer.
6. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

- To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
7. Ensure a blank optical cartridge is installed in the Console ROC drive when the automatic backup feature is enabled. The backup ROC is provided with the Console.

Change Backup Settings

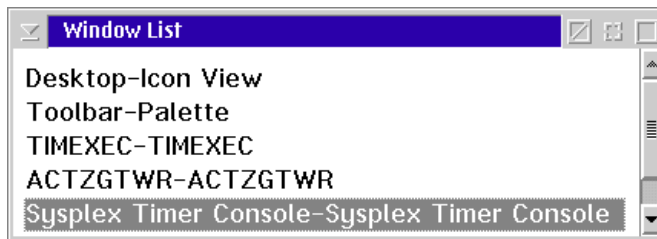
Perform this procedure to change backup settings from the default values. To change the backup settings:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



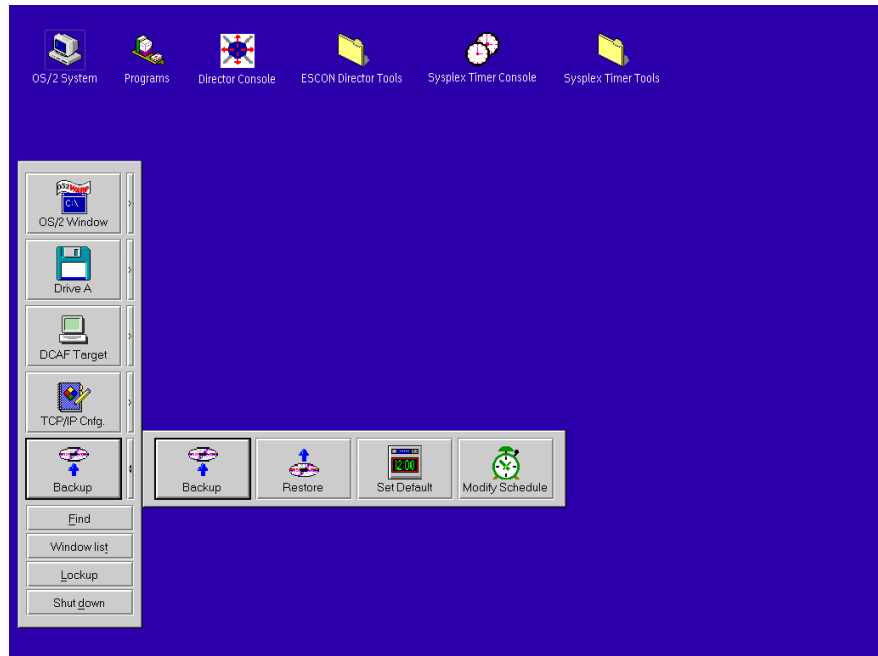
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

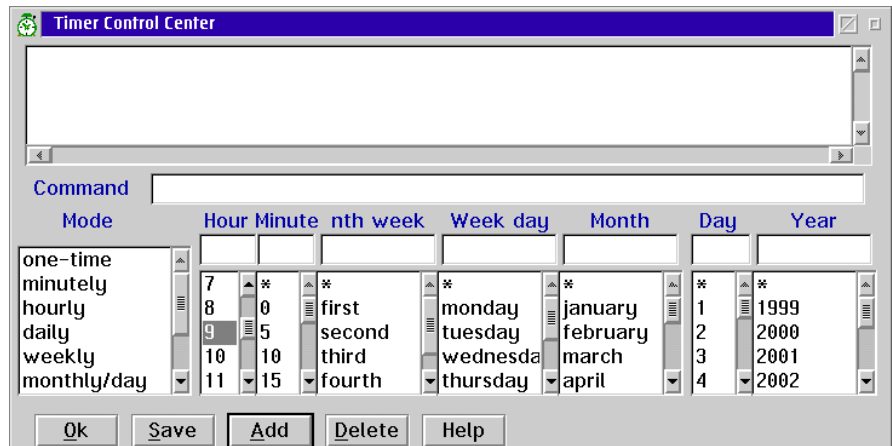


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Click the arrow on the *Backup* drawer to open the drawer.



3. Click the *Modify Schedule* button on the *Backup* drawer. The *Timer Control Center* dialog box appears. The command line (script) shown at the top of the screen automatically runs a program using the default backup setting.



Note: The term *Timer* in the *Timer Control Center* dialog box does not refer to the Sysplex Timer.

4. Click the script name to select it. The settings associated with the script display at the lower part of the screen. To change the settings, perform one of the following:
 - Select an item in the *Mode* column. All required parameters are completed for the selection.
 - Change parameters by scrolling up or down a column (*Hour*, *Minute*, etc.) or by typing the desired value at the top of the column. An asterisk (*) indicates backup periodically by that parameter.
5. When the parameters are set correctly, click the *Save* button to save changes to the script.
6. Click the *OK* button to enable the changes and return to the OS/2 desktop.
7. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Backup on Demand

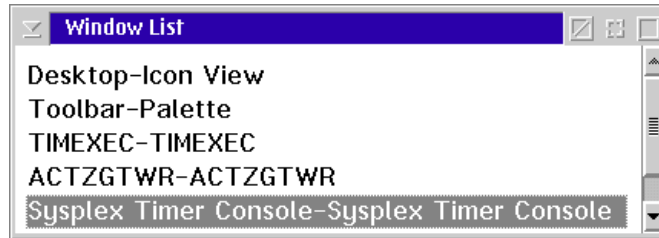
Perform this procedure to back up the Director or Sysplex Timer system library on demand. This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). If either or both applications are running on a Hardware Management Console, refer to [Chapter 3](#) for system library backup procedures. To back up the system library to ROC on demand:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



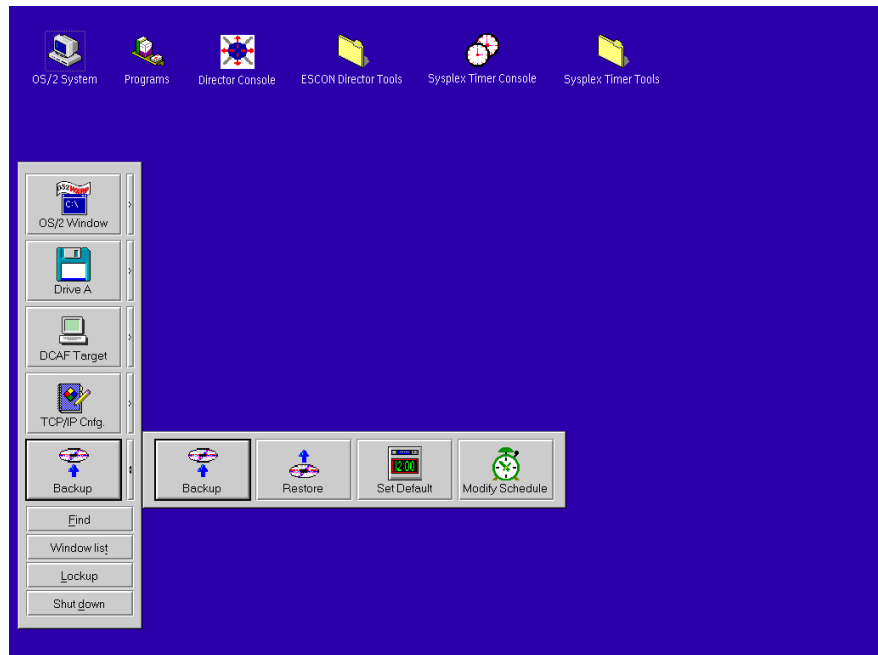
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

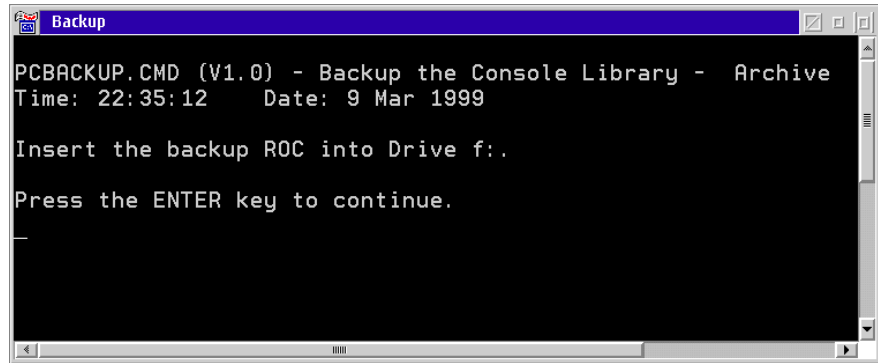


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Click the arrow on the *Backup* drawer to open the drawer.



3. Click the *Backup* button on the *Backup* drawer. The *Backup* dialog box appears.



4. Insert a blank cartridge (or a cartridge with data that can be overwritten) in the ROC drive of the Console PC, then press the **Enter** key. Process messages display until the backup is complete.
5. Remove the cartridge from the ROC drive, label the cartridge, and store it in a safe, secure location.

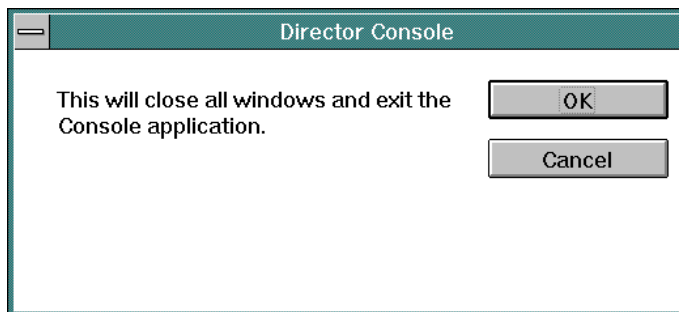
Note: Ensure a new blank cartridge is inserted in the ROC drive if the automatic backup feature is enabled.

6. Click the arrow on the *Backup* drawer to close the drawer.
7. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Restore the System Library from ROC

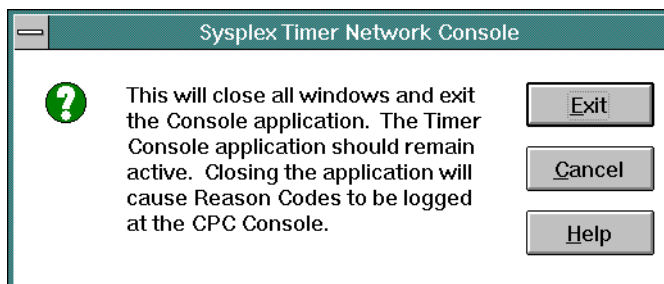
Perform this procedure to restore the Director or Sysplex Timer system library from a backup ROC to the Console fixed disk. To restore the system library:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



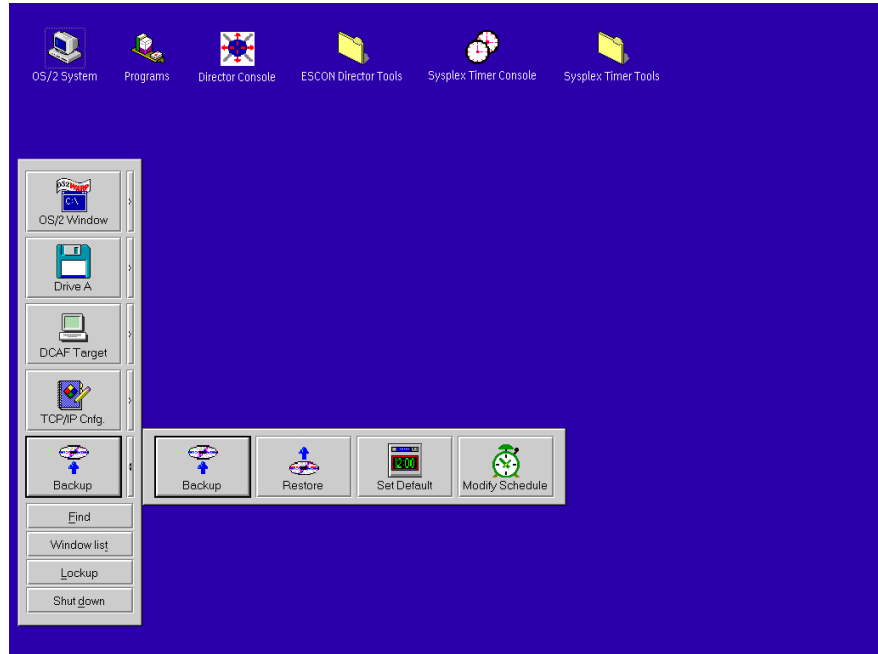
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

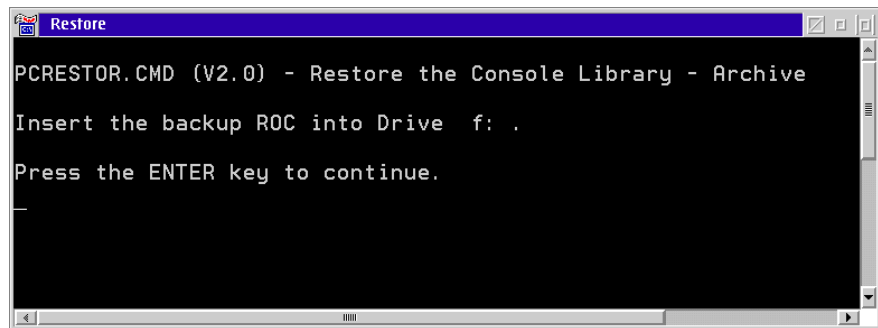


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

2. Click the arrow on the *Backup* drawer to open the drawer.



3. Click the *Restore* button on the *Backup* drawer. The *Restore* dialog box appears.



4. Insert a backup cartridge in the ROC drive of the Console PC, then press the **Enter** key. The OS/2 desktop reappears when the restore operation is finished.

Note: Ensure the correct cartridge is inserted in the ROC drive.

5. Remove the backup cartridge from the ROC drive and store it in a safe, secure location.

Note: Ensure a new blank cartridge is inserted in the ROC drive if the automatic backup feature is enabled.

6. Click the arrow on the *Backup* drawer to close the drawer.
7. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational. The Console application should remain active and operational for the following reasons:
 - a. Certain Timer events and associated reason codes are transmitted only to the Event log maintained at the Timer Console. The events are not transmitted through attached processors to the System Control Program (SCP) Console. If the Console application is closed and a Timer network failure occurs, reason codes and other information required for fault isolation may not be recorded.
 - b. Closing the Console application causes an **ETR Service is Requested** message to be reported to the SCP Console with reason code **40** (communication lost with active Console) or reason code **41** (communication lost with standby Console). This may result in an unnecessary service call.
 - c. Starting the Console application causes an **ETR Service is Requested** message to be reported to the SCP Console, with reason code **8** (communication established with active Console) or reason code **9** (communication established with standby Console). This may result in an unnecessary service call.

Restore the Console Fixed Disk from CD-ROM and ROC

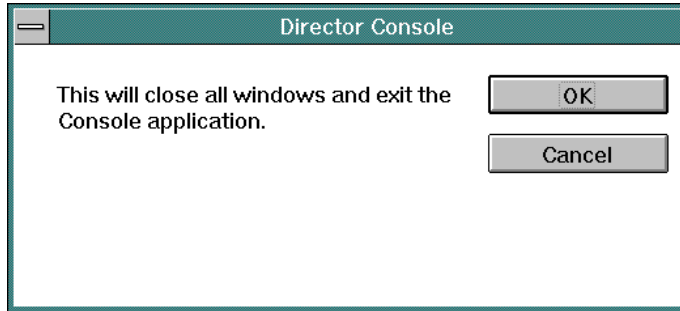
Perform this procedure to format and restore the Console fixed disk from CD-ROM and a backup ROC. Use the instructions after installing a new unformatted fixed disk. This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). Default parameters when the fixed disk is restored are listed in [Table 5](#).

Table 5. Default Parameters for Console Support Software (ROC Restore)

Feature	Default Parameters
Set Time and Date	Time and date for manufacturing location
Change Time and Date Format	Time: 12-hour clock Date: Month-Day-Year
Console Screen Lock	Disabled
Keyboard Layout	United States
IP Address	1.1.1.1
MAC Address	Set on adapter card
Subnet Mask	255.0.0.0
Automatic Backup	Disabled
Default Printer	Generic/Text Only on LPT1 Generic/Text to File

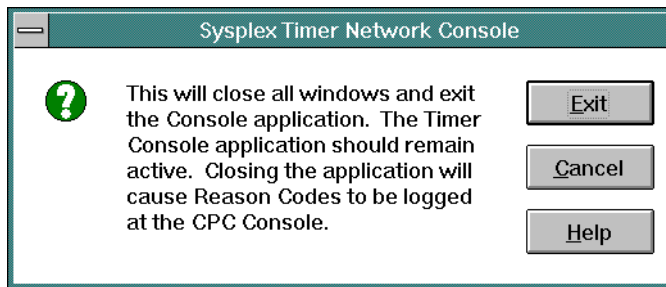
To reformat and restore the Console fixed disk from CD-ROM and a backup ROC:

- Obtain the following (XX.YY.ZZ indicates the software version, release, and patch numbers):
 - The 3.5-inch Console application diskette labeled *Console Version XX.YY.ZZ* (shipped with the Director or Sysplex Timer).
 - The 3.5-inch Console restore diskette labeled *Base Console Restore Version XX.YY.ZZ* (shipped with the Director or Sysplex Timer).
 - The Console restore CD-ROM labeled *Base Console Restore Version XX.YY.ZZ* (shipped with the Director or Sysplex Timer).
 - The rewriteable optical cartridge (ROC) that contains the most recent backup version of the system library.
- If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

3. At the OS/2 desktop, click the *Shutdown* button at the bottom of the launch pad. A dialog box appears, asking if you want to close the application without saving data.
4. Click the *OK* button. A *Shutdown Has Completed* message box appears, explaining it is now safe to turn off the computer or restart.
5. Power off the Console PC.
6. Insert the *Base Console Restore Version XX.YY.ZZ* diskette in the diskette drive (ensure the diskette is write enabled). Power on the Console PC.
7. The IBM OS/2 logo screen appears, followed by a series of installation and load messages.

Ignore all messages until the following message appears:

```
Base Console Hard Disk Restore

The procedure will load your Console hard disk
from the Base Console Restore CD-ROM

WARNING: Continuing this process will result in
the destruction of information currently on your
hard disk.

Press F1 to continue with the RESTORE process.
Press ESC to EXIT the program.
```

8. Press the **F1** key to continue the process. The fixed disk is formatted and partitioned in preparation for insertion of the Console restore CD-ROM. This process takes approximately 10 minutes.

When the system is ready the following message appears:

```
Install the Base Console Restore CD-ROM

To continue press any key.
```

9. At the preceding prompt, insert the CD-ROM labeled *Base Console Restore Version XX.YY.ZZ* in the CD-ROM drive and press the **Enter** key. The process of installing the files from the CD-ROM to the Console fixed disk takes approximately 10 minutes.

When the installation is complete the following message appears:

```
Base Console restore is complete.
Remove the diskette and the CD-ROM and reboot
the PC.
```

10. Remove the Console restore diskette and CD-ROM from their respective drives. Simultaneously press the **Ctrl**, **Alt**, and **Del** keys to reboot the Console PC.
11. If required, change the default IP address. For instructions, refer to “[Token Ring Adapter IP Address and Subnet Mask](#)” on page 272 and return here.
12. Install the Director or Sysplex Timer Console application using the application diskette labeled *Console Version XX.YY.ZZ*. For instructions, refer to Chapter 6 of the appropriate maintenance information manual listed below:
 - *Maintenance Information for the 9032 Model 3 Enterprise Systems Connection Director* (SY27-3601).
 - *Maintenance Information for the 9033 Model 4 Enterprise Systems Connection Director* (SY27-2638).

- *Maintenance Information for the 9032 Model 5 Director* (SY28-1158).
 - *Maintenance Information for the 9037 Model 2 Sysplex Timer* (SY27-2641).
13. Restore the system library using the backup ROC. For instructions, refer to [“Restore the System Library from ROC”](#) on page 247.

Customize the Console Operating Environment

This section describes procedures to change ESCON Director or Sysplex Timer Console operating parameters from default values listed in [Table 6](#). If you restore the Model PC-365 Console's fixed disk, all the parameters (including the IP address of the Console) are reset to default values.

Note: Do not enable the screen saver or automatic lockup function (password protection) through the OS/2 desktop *Settings* option. Enable the screen saver using instructions in this section.

Table 6. Procedures and Default Parameters for Console Operating Environment

Procedure	Default Parameter	Page
Set Date and Time	Set to date and time for manufacturing location	254
Change Date and Time Format	Time: 12-hour clock Date: Month-Day-Year	257
Enable Screen Saver	Disabled	261
Change Keyboard Layout and Country Code Page	United States	264
Change IP Address	1.1.1.1	272
Change Subnet Mask	255.0.0.0	272
Change MAC Address	Set on adapter card	276
Change Default Printer	Generic/Text Only on LPT1 Generic/Text to File	281

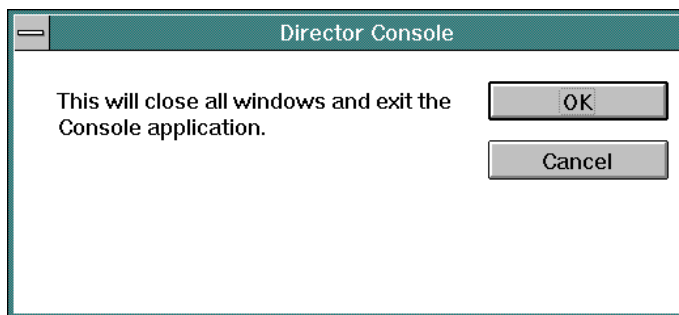
Set Date and Time

This procedure sets the date and time for the Console PC's operating environment. Although the date and time are set, the parameters may require change for an installation location. Use this procedure to display or change the Console date and time or synchronize the Console date and time with a Sysplex Timer network.

In the Director Console application, *Console Audit Log* and *Console Error Log* events are time stamped with the PC date and time. All other date and time entries in the application are time stamped with parameters derived from the Director.

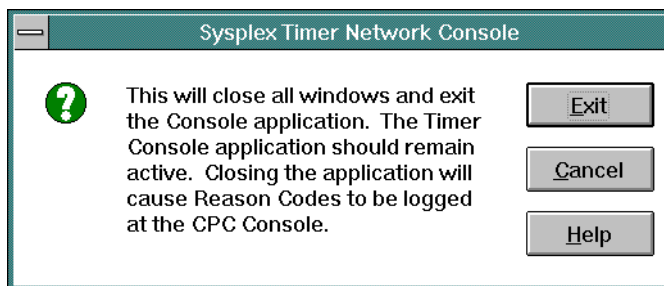
In the Sysplex Timer Console application, *Console Audit Log* events are time stamped with the PC date and time. All other date and time entries in the application are time stamped with Coordinated Universal Time (UTC) derived from the Timer.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



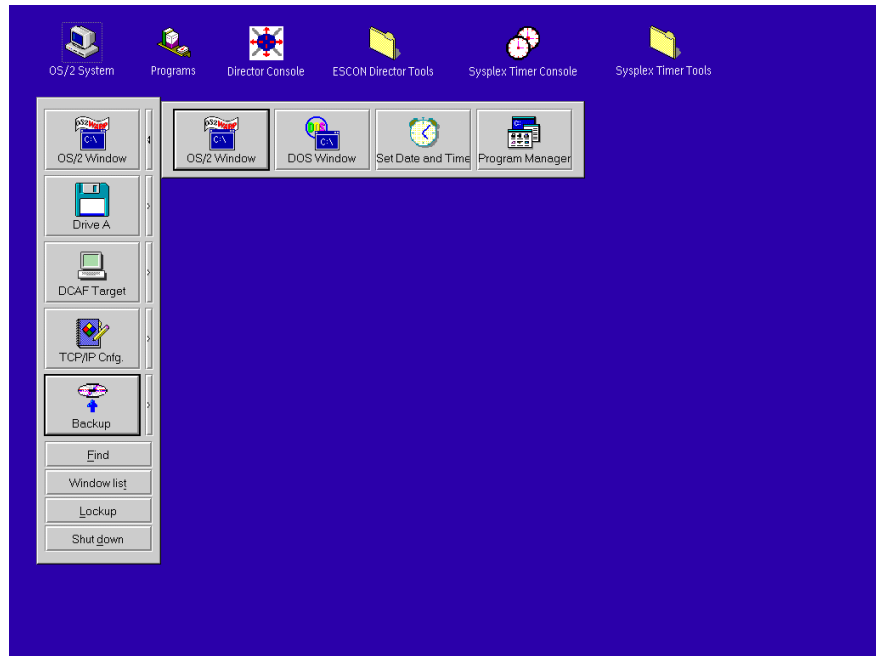
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

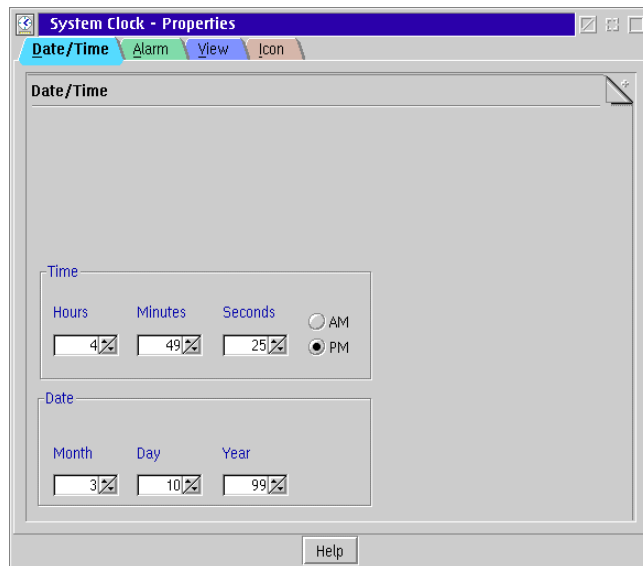


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



3. Click the *Set Date and Time* button. The *System Clock - Properties* dialog box appears with the *Date/Time* page open.



4. To adjust the Console time, click the up or down arrows by the *Hours*, *Minutes*, and *Seconds* fields as required. Click the *AM* or *PM* radio button as required.
5. To adjust the Console date, click the up or down arrows by the *Month*, *Day*, and *Year* fields as required.
6. Close the *System Clock - Properties* dialog box by double-clicking the icon in the upper left corner of the dialog box.
7. Close the *OS/2 Window* drawer by clicking the drawer arrow.
8. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 6](#) on page 254), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
9. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Change Date and Time Format

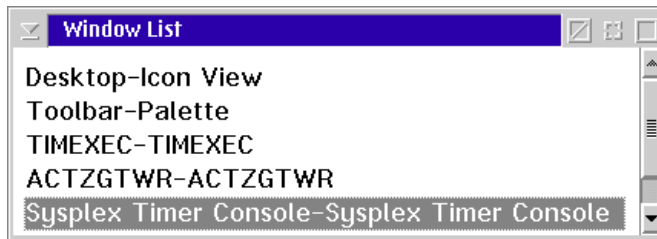
This procedure changes the time format between a 12-hour and 24-hour clock, and the date format between a month-day-year, day-month-year, year-month-day, or year-day-month format.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

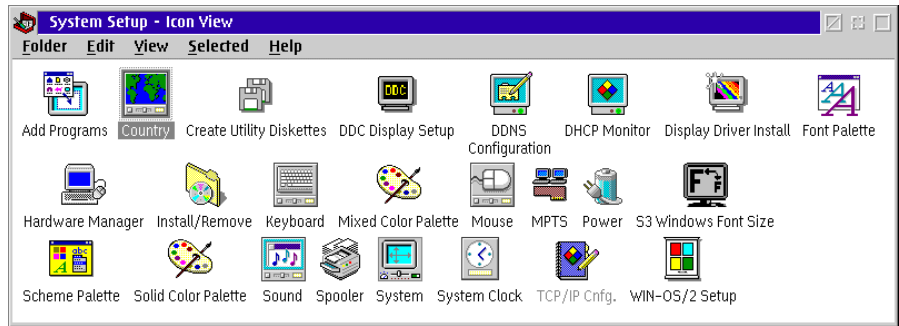


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

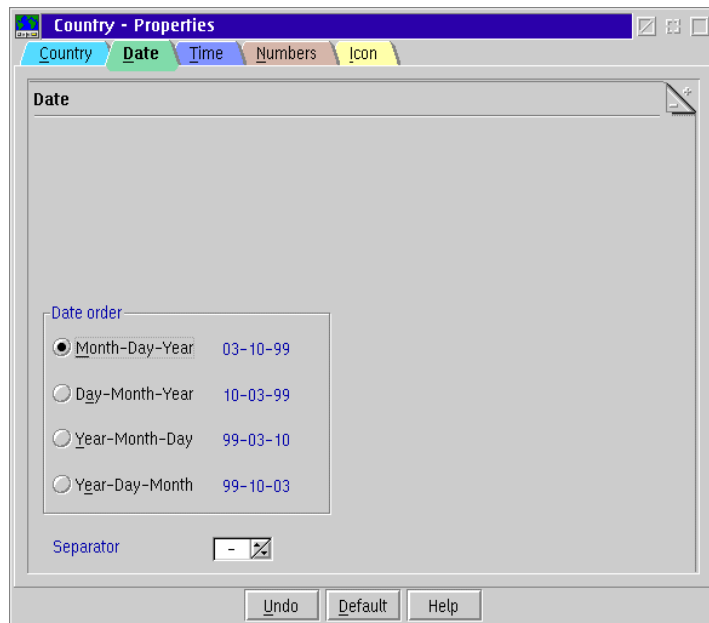
2. Double-click the *OS/2 System* icon at the top of the OS/2 desktop. The *OS/2 System - Icon View* appears.



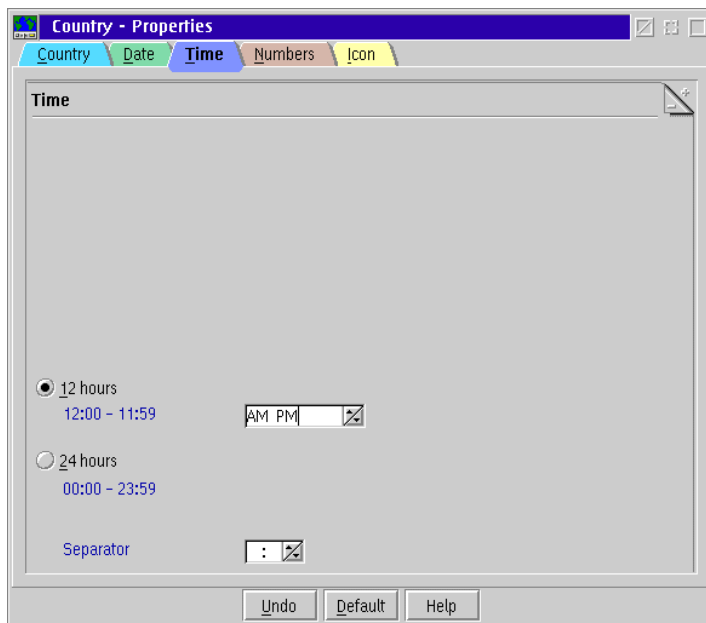
3. Click the *System Setup* option. The *System Setup - Icon View* appears.



4. Double-click the *Country* icon. The *Country - Properties* dialog box appears with the *Country* page open.
5. Perform one or both of the following to adjust the format:
 - Click the *Date* tab to display the *Date* page. Click the desired radio button to select between *Month-Day-Year*, *Day-Month-Year*, *Year-Month-Day*, or *Year-Day-Month* display formats.



- Click the *Time* tab to display the *Time* page. Click the desired radio button to select between *12 hours* or *24 hours* display formats. If the *12 hours* format is used, select between AM or PM display by scrolling through the list box to the right of the radio button.



6. Double-click the upper left corner of the *Country - Properties* dialog box to close the dialog box.
7. Double-click the upper left corner of the *System Setup - Icon View* to close the view.
8. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 6](#) on page 254), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
9. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.

- To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Enable Screen Saver

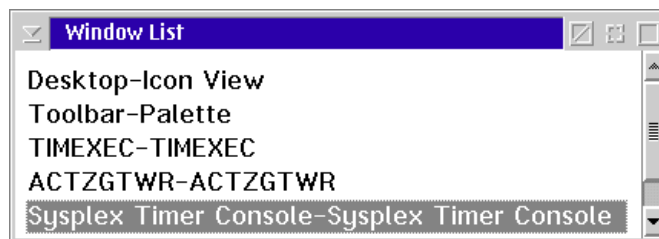
Perform this procedure to enable the Win-OS/2 screen saver or modify screen saver operation. Do not enable the screen saver or automatic lockup (password protection) function available through the OS/2 desktop *Properties* option.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



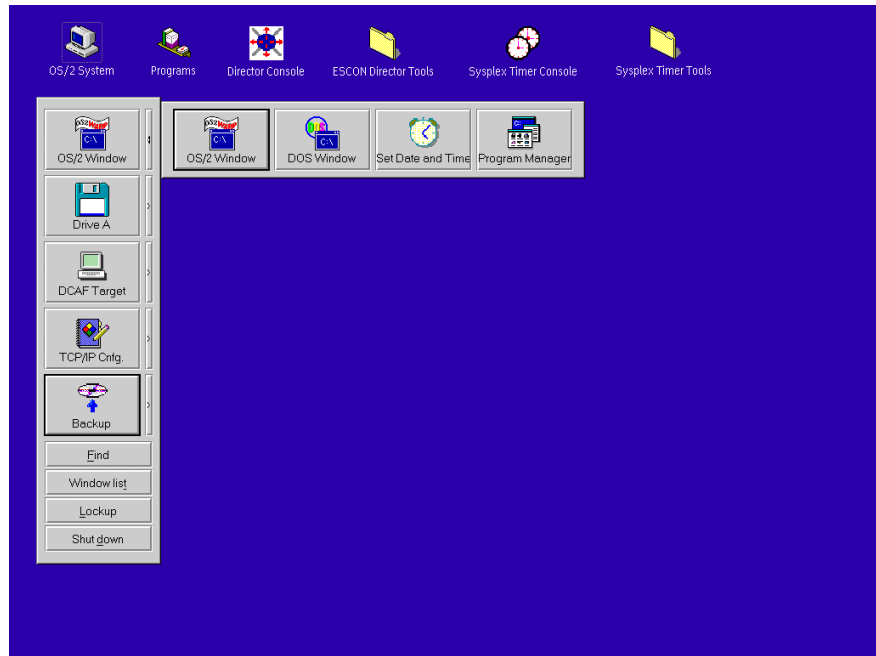
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

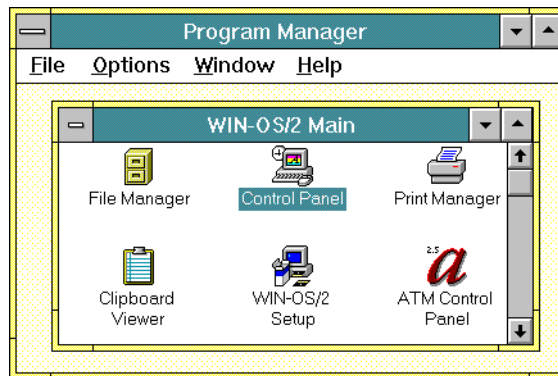


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

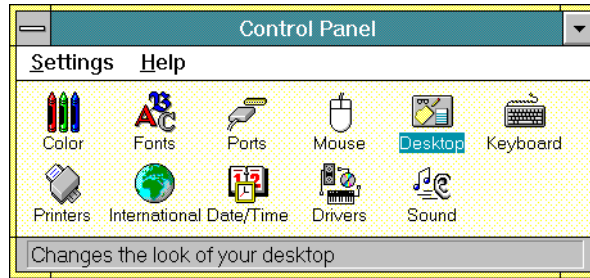
2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



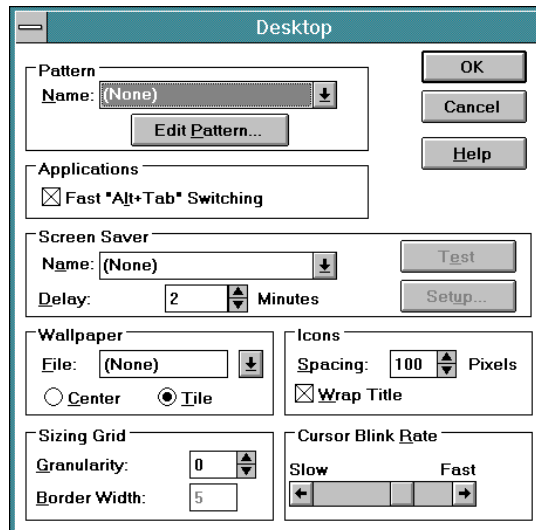
3. Click the *Program Manager* button. The *Program Manager* window appears.



4. At the *Win-OS/2 Main* window, double-click the *Control Panel* icon. The *Control Panel* window appears.



5. Double-click the *Desktop* icon. The *Desktop* dialog box appears.



6. Modify the screen saver function as required. Enable the screen saver by scrolling to a desired screen (other than *None*) in the *Name* field in the *Screen Saver* section. Set the time delay for the screen saver to enable by scrolling to the desired time in the *Delay* field. The password function for the Console is not required. To enable the password function, select a screen saver and the *Setup* button. Click the *Password* check box, enter a password, and click *OK*.
7. When finished, click the *OK* button on the *Desktop* dialog box.
8. Double-click the top left corner of the *Control Panel* and *Program Manager* windows to close the windows.
9. When the *Exit Win-OS/2* dialog box appears, click the *OK* button to exit Win-OS/2, close the dialog box, and return to the OS/2 desktop.
10. Close the *OS/2 Window* drawer by clicking the drawer arrow.
11. Perform one of the following:

- If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 6](#) on page 254), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
12. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
- To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Keyboard Layout and Country Code Page (International Users Only)

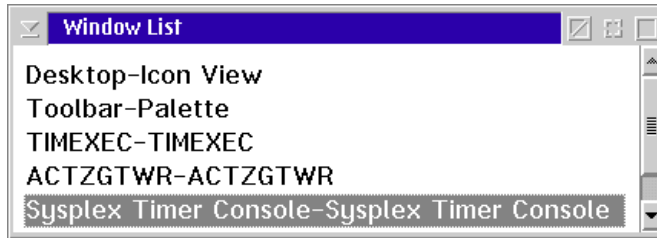
Perform this procedure to change the keyboard layout and country information. This allows keyboards to be customized for international users (outside of the United States). You must also change options for Win-OS/2 windows and the OS/2 operating system.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



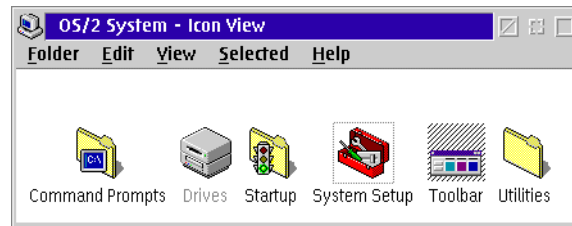
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

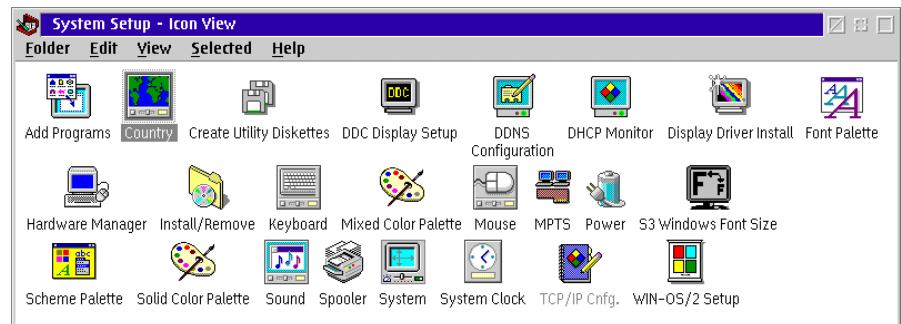


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

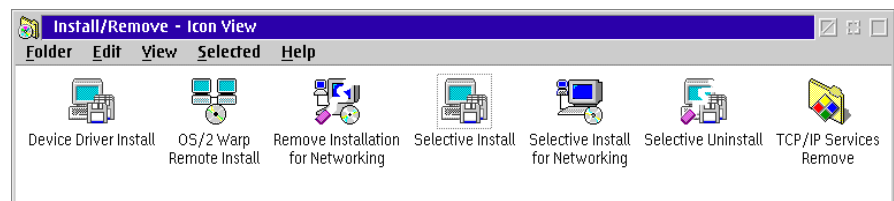
2. Double-click the *OS/2 System* icon at the top of the OS/2 desktop. The *OS/2 System - Icon View* appears.



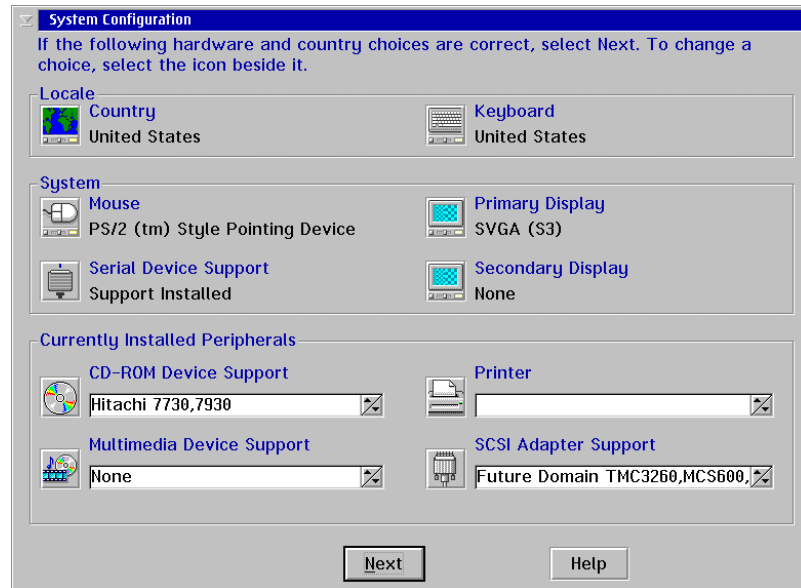
3. Double-click the *System Setup* icon. The *System Setup - Icon View* appears.



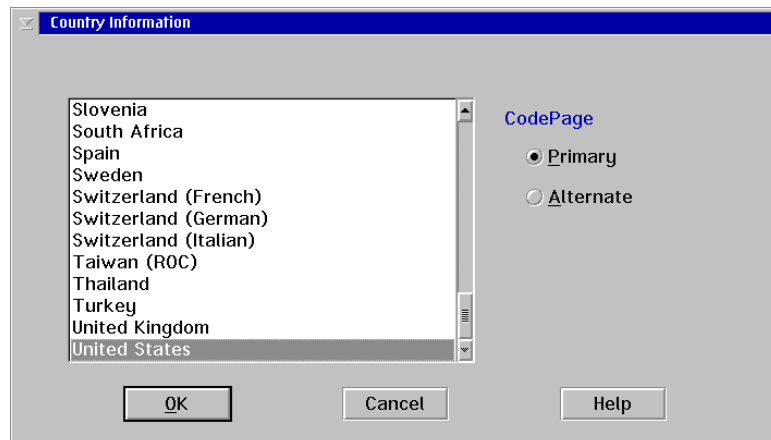
4. Double-click the *Install/Remove* icon. The *Install/Remove - Icon View* appears.



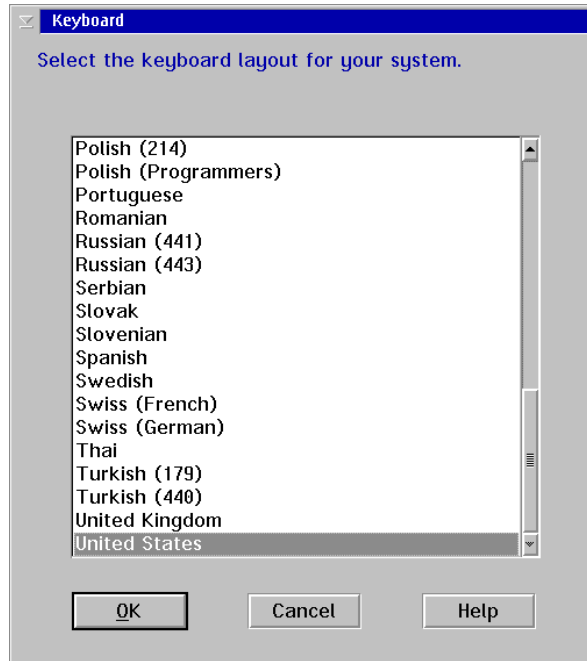
5. Double-click the *Selective Install* icon. A message box appears indicating the installation program is initializing. After a few seconds, the *System Configuration* dialog box appears.



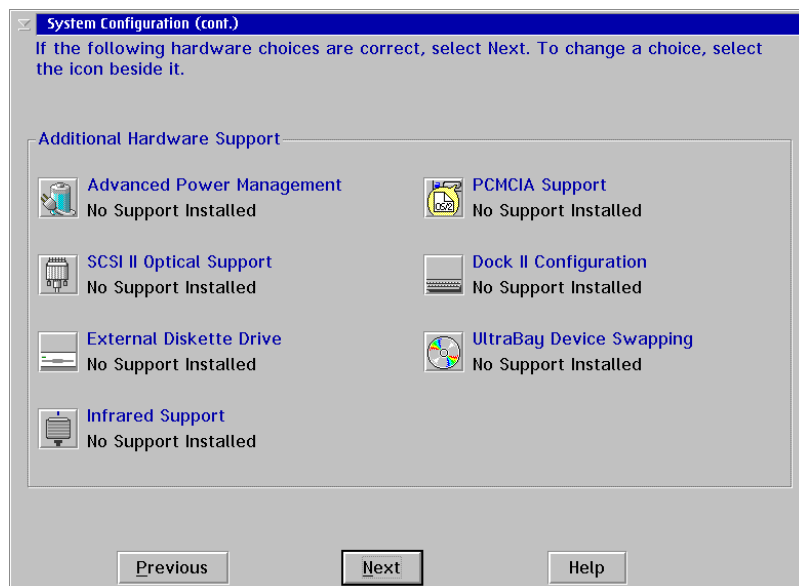
6. At the *Locale* area of the *System Configuration* dialog box, click the *Country* icon. The *Country Information* dialog box appears.



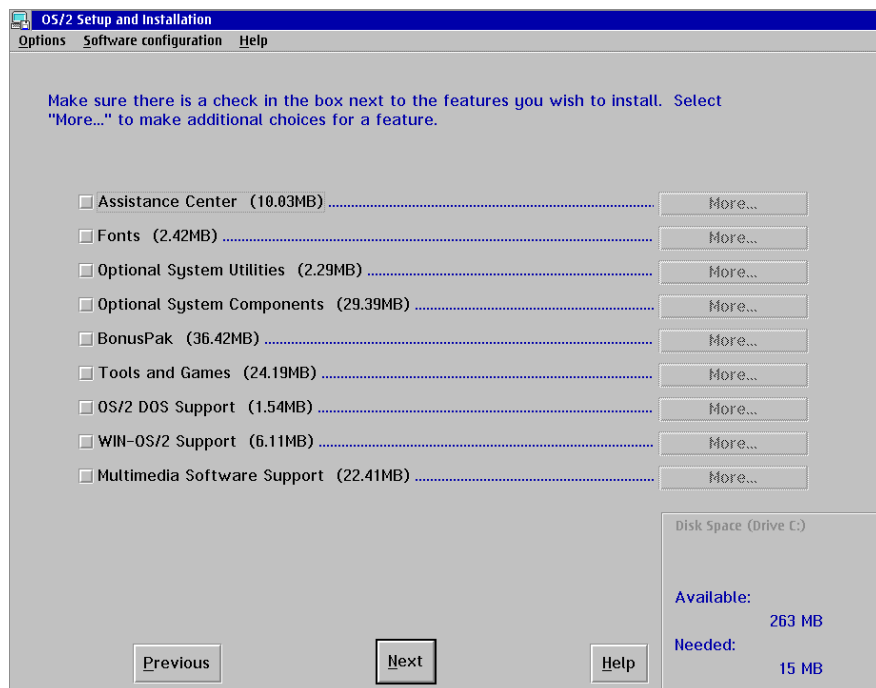
7. Click (select) the desired country name and click the *OK* button. The *System Configuration* dialog box appears again.
8. At the *Locale* area of the *System Configuration* dialog box, click the *Keyboard* icon. The *Keyboard* dialog box appears.



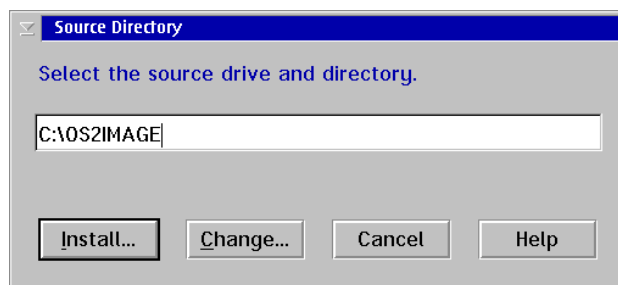
9. Click (select) the desired country name and click the *OK* button. The *System Configuration* dialog box appears again.
10. Click the *Next* button. The *System Configuration (cont'd)* dialog box appears.



11. Click the *Next* button. The *OS/2 Setup and Installation* dialog box appears.



12. Click the *Next* button to continue. The *Source Directory* dialog box appears.



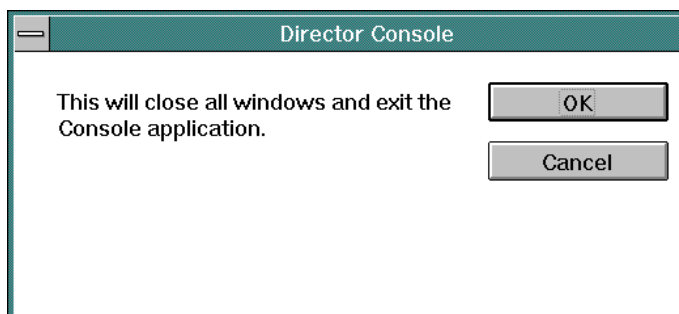
13. Click the *Install* button. A message box appears explaining that the OS/2 setup is completing the configuration change. After a few seconds, a message box appears telling you to shut down and restart the system.
14. Click the *OK* button. The *Install/Remove - Icon View* appears again.
15. Double-click the upper left corner of the *Install/Remove - Icon View*, *System Setup - Icon View*, and *OS/2 System - Icon View* to close the views and return to the OS/2 desktop.

16. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 6](#) on page 254), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
17. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Change Win-OS/2 Keyboard Settings

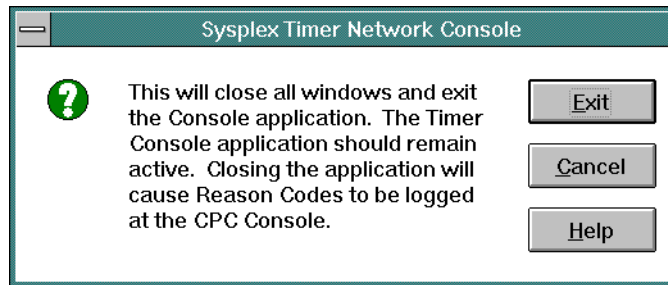
Perform this procedure to change the keyboard layout for Win-OS/2 windows and the OS/2 operating system. This allows keyboards to be customized for international users (outside of the United States).

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



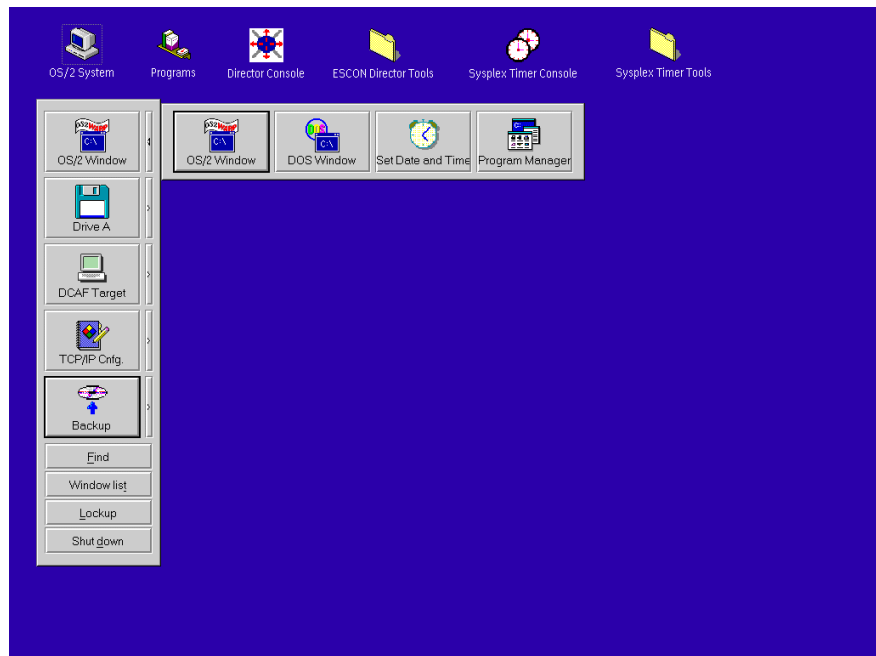
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

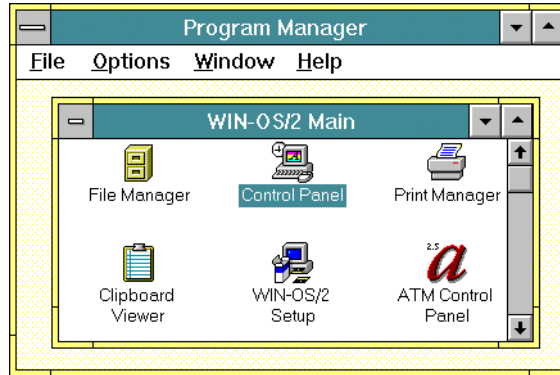


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

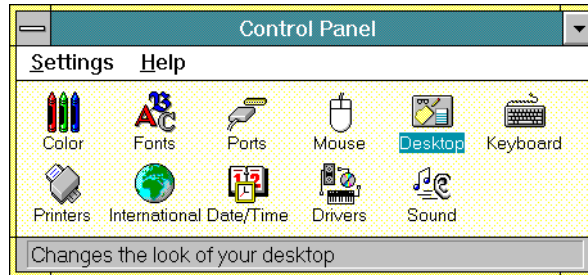
2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



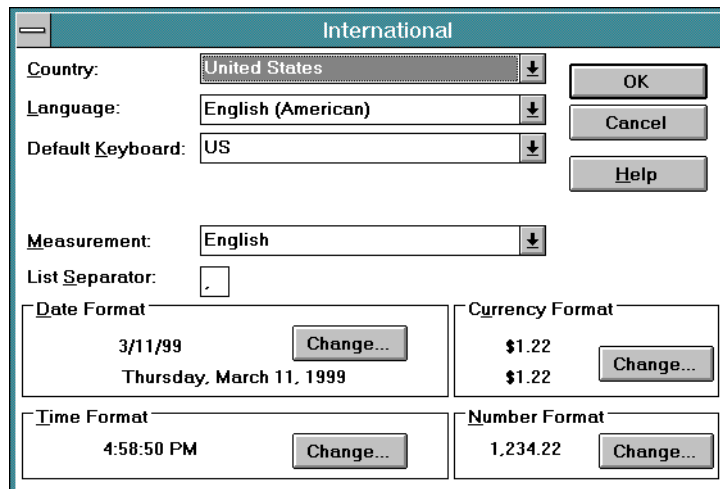
3. Click the *Program Manager* button. The *Program Manager* window appears.



4. At the *Win-OS/2 Main* window, double-click the *Control Panel* icon. The *Control Panel* window appears.



5. Double-click the *International* icon. The *International* dialog box appears.



6. Click the arrow button for the *Country* field and select the desired country from the drop-down list.

7. Click the arrow button for the *Language* field and select the desired language from the drop-down list.
8. Click the arrow button for the *Default Keyboard* field and select the desired keyboard layout from the drop-down list.
9. Double-click the top left corner of the *Control Panel* and *Program Manager* windows to close the windows.
10. When the *Exit Win-OS/2* dialog box appears, click the *OK* button to exit Win-OS/2, close the dialog box, and return to the OS/2 desktop.
11. Close the *OS/2 Window* drawer by clicking the drawer arrow.
12. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 6](#) on page 254), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
13. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Token Ring Adapter IP Address and Subnet Mask

The default IP address for the Console Token Ring adapter card is 1.1.1.1, and the default subnet mask is 255.0.0.0. If you wish to change either or both these values, obtain a unique Console IP address or subnet mask from the LAN administrator.

The IP address must be in the form *nnn.nnn.nnn.nnn*, where *nnn* is a decimal byte in the range 0 through 255. The IP address may not be all zeros or all 255s.

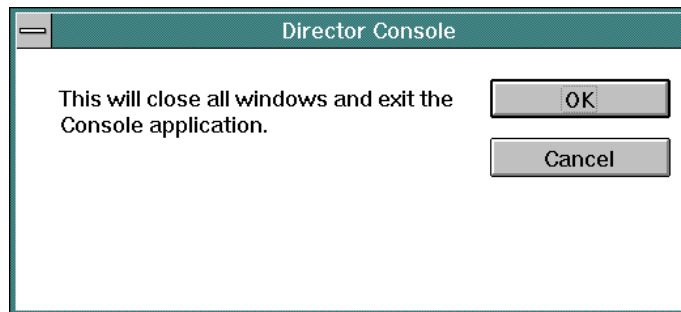
Change default IP address and subnet mask values if:

- The Console is not on an isolated Token Ring LAN.
- There is more than one Console on the Token Ring LAN.

- The subnet mask does not conform to the network to which the Console is connected.
- The IP address conflicts with the address of another device on the ring or does not conform to the LAN addressing scheme.
- The IP address does not conform to the LAN addressing scheme.

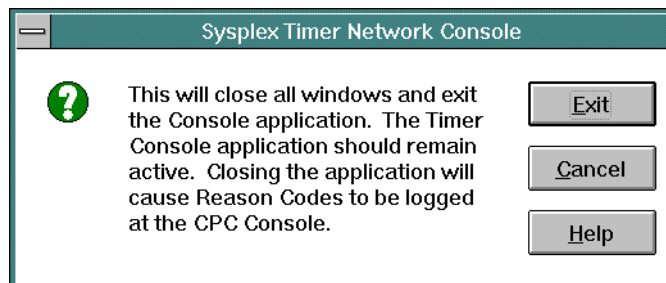
Perform the following procedure to display and change the Director or Sysplex Timer Console's IP address and subnet mask.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



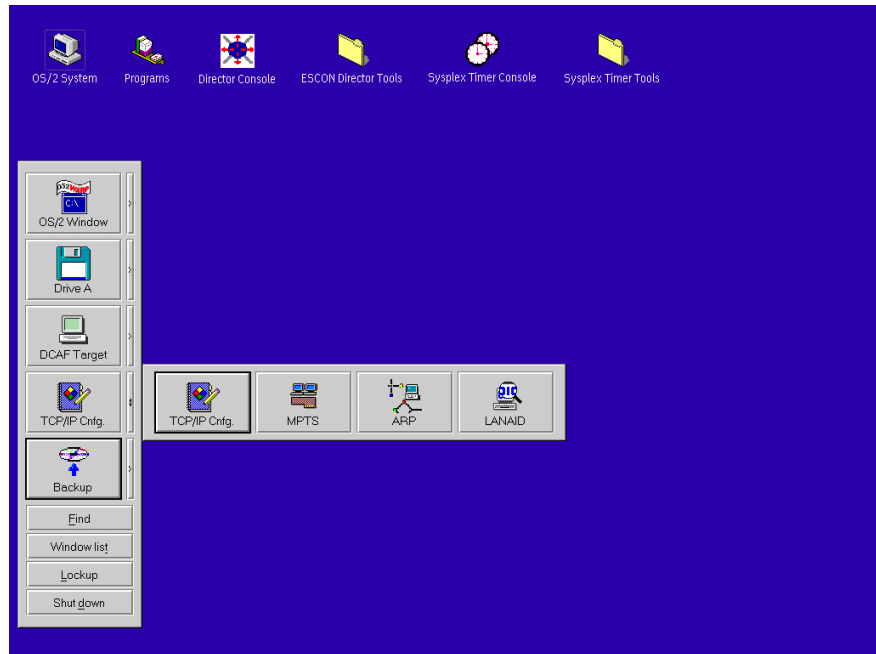
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

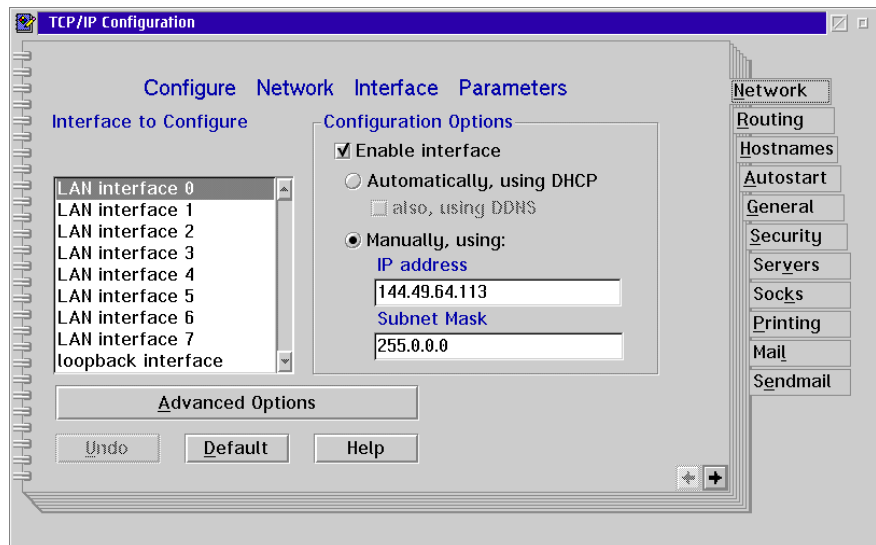


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

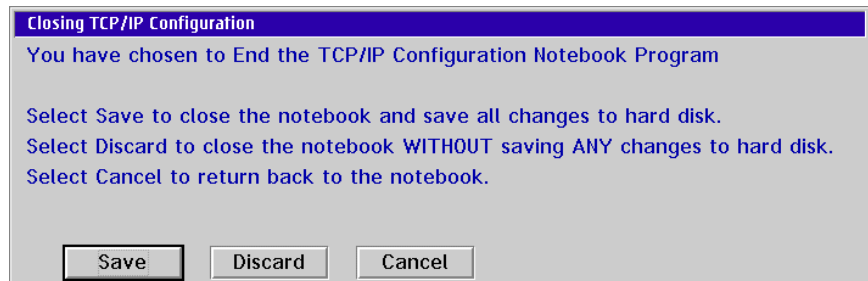
2. At the OS/2 desktop, click the *TCP/IP Cnfg.* drawer arrow on the launch pad to open the drawer.



3. Click the *TCP/IP Cnfg.* button. The *TCP/IP Configuration* notebook appears with the *Network* page open.



4. To change the IP address, click in the *IP Address* field. Type the new IP address as necessary. Move within the field by using the left and right arrow keys (← and →). Use the **Backspace** key to delete characters.
5. To change the subnet mask, click in the *Subnet Mask* field. Type the new subnet mask as necessary. Move within the field by using the left and right arrow keys (← and →). Use the **Backspace** key to delete characters.
6. Close the *TCP/IP Configuration* notebook by double-clicking the upper left corner of the notebook. The *Closing TCP/IP Configuration* dialog box appears.

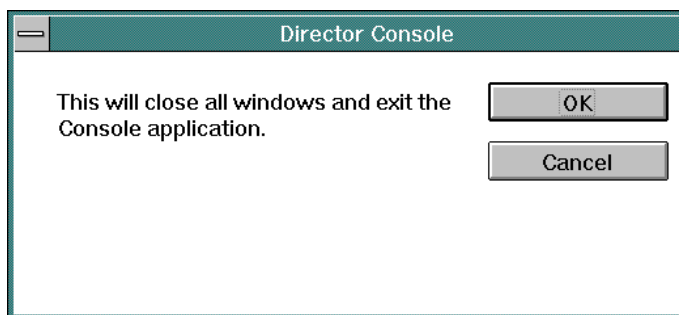


7. Click the *Save* button. The OS/2 desktop appears.
8. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
9. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 6](#) on page 254), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
10. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Token Ring Adapter MAC Address

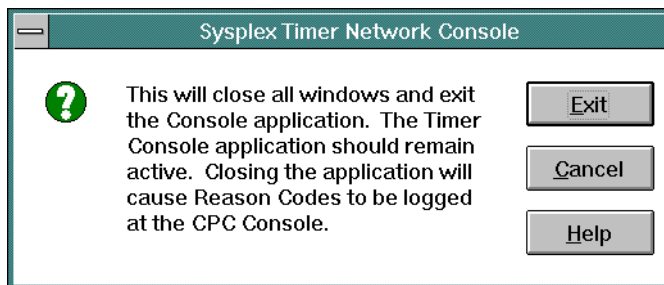
Change the Console Token Ring adapter's Media Access Control (MAC) address if the address does not conform to the locally-administered LAN addressing scheme. Perform the following procedure to display and change the Director or Sysplex Timer Console's MAC address.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



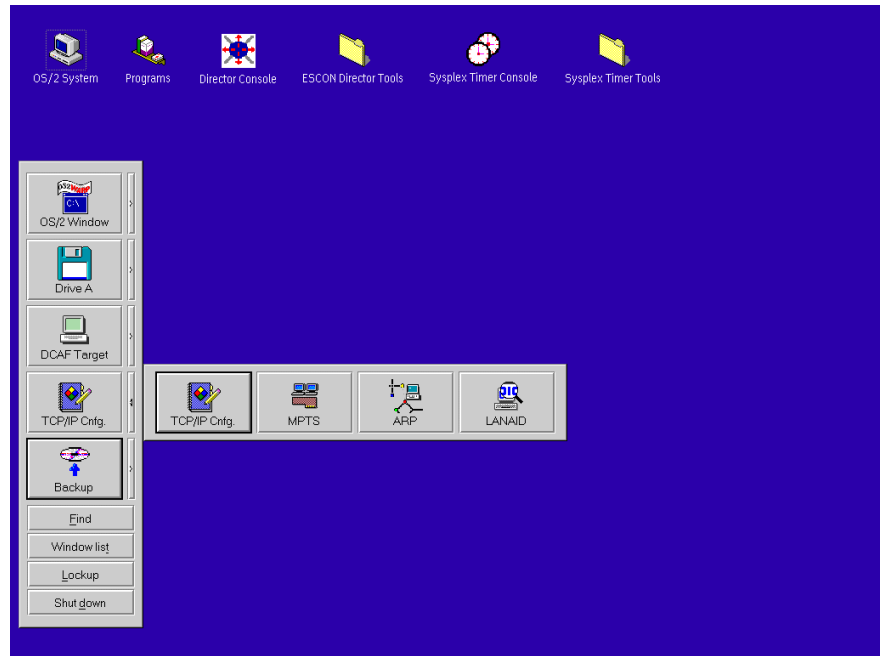
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

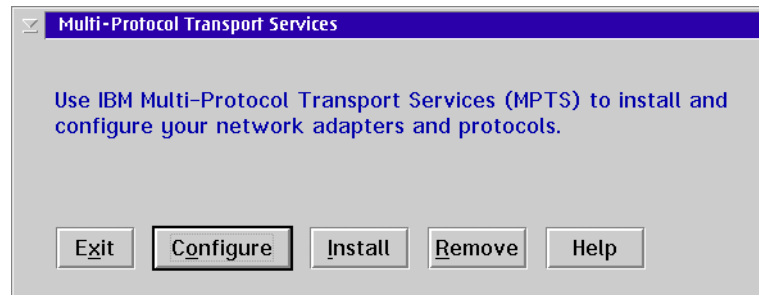


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

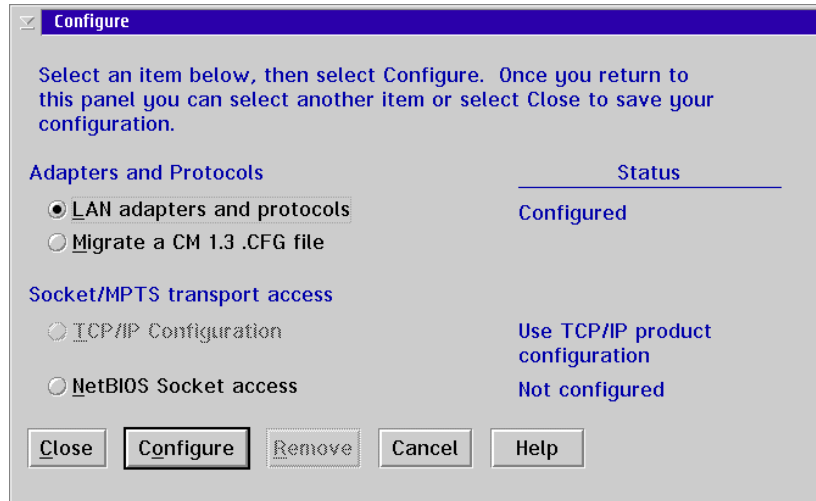
2. At the OS/2 desktop, click the *TCP/IP Cnfg.* drawer arrow on the launch pad to open the drawer.



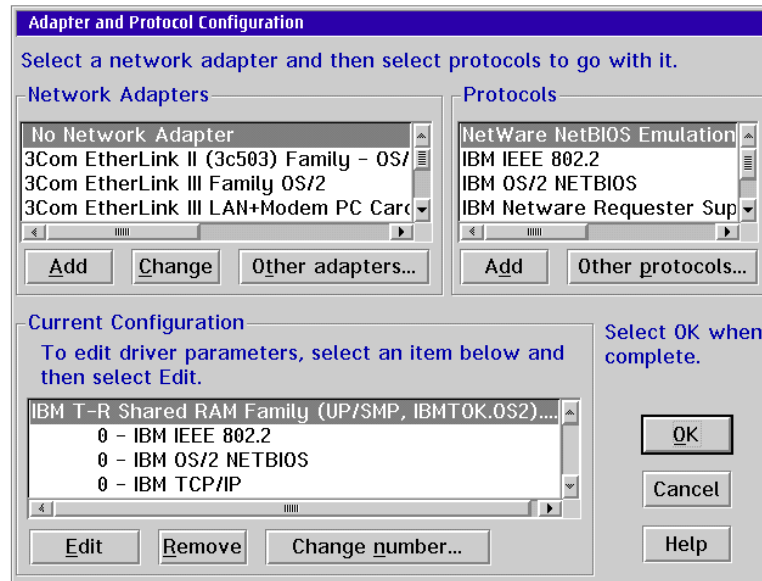
3. Click the *MPTS* button. An IBM logo dialog box appears briefly, then the *Multi-Protocol Transport Services* dialog box appears.



4. Click the *Configure* button. The *Configure* dialog box appears.



5. Ensure the *LAN adapters and protocols* radio button is selected and click the *Configure* button. The *Adapter and Protocol Configuration* dialog box appears.



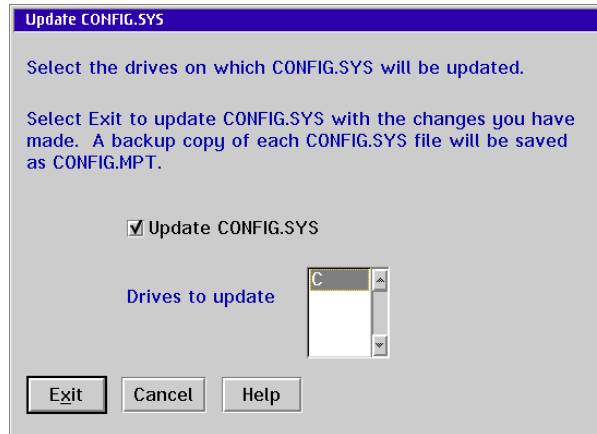
6. Use the scrolling arrows to scroll through the *Current Configuration* list box. Click (select) the *IBM T-R Shared RAM Family . .* selection.
7. Click the *Edit* button. The *Parameters for IBM T-R Shared RAM Family* dialog box appears containing parameters for the Token Ring adapter.

The current MAC address appears in the *Network adapter address* field if a user has previously configured the MAC address. Otherwise the field is blank.

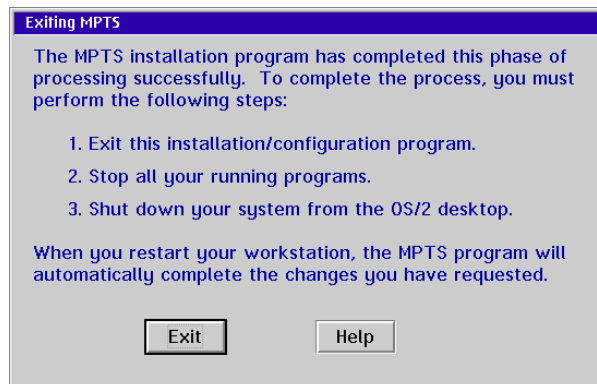
Parameters for IBM T-R Shared RAM Family (UP/SMP, IBMTOK.052)	
Edit the parameters as needed.	
Adapter assignment	<input type="text"/>
Network adapter address	<input type="text"/>
Shared RAM address	<input type="text"/>
Maximum number of queued transmits	<input type="text" value="6"/>
Number of receive buffers	<input type="text" value="2"/>
Receive buffer size	<input type="text" value="1160"/>
Number of transmit buffers	<input type="text" value="1"/>
Transmit buffer size	<input type="text" value="4400"/>
Full-Duplex	<input type="text"/>
Shallow Mode	<input type="text"/>
Receive Look Ahead	<input type="text"/>
Enable bridge	<input type="text" value="NO"/>
Bridge transmit control ram	<input type="text"/>

OK Range Cancel Help

8. To change the MAC address, click in the *Network adapter address* field. Type the new MAC address as necessary. Move within the field by using the left and right arrow keys (← and →). Use the **Backspace** key to delete characters.
9. Click the *OK* button. The *Adapter and Protocol Configuration* dialog box reappears.
10. Click the *OK* button. The *Configure* dialog box reappears.
11. Click the *Close* button to save the changes. The *Multi-Protocol Transport Services* dialog box reappears.
12. Click the *Exit* button. The *Update CONFIG.SYS* dialog box appears. Ensure a **C** appears in the *Drives to update* field.



13. Click the *Exit* button. A *CONFIG.SYS Updated* dialog box appears explaining the **CONFIG.SYS** file was successfully updated.
14. Click the *OK* button. The *Exiting MPTS* dialog box appears.



15. Click the *Exit* button to return to the OS/2 desktop.
16. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
17. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 6](#) on page 254), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.

18. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Set or Change Default Printer

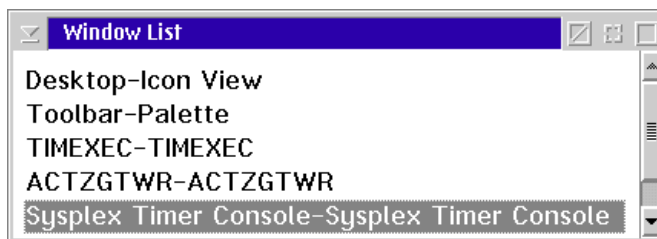
Perform the following procedure to set or change the default printer for the Director or Sysplex Timer Console.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



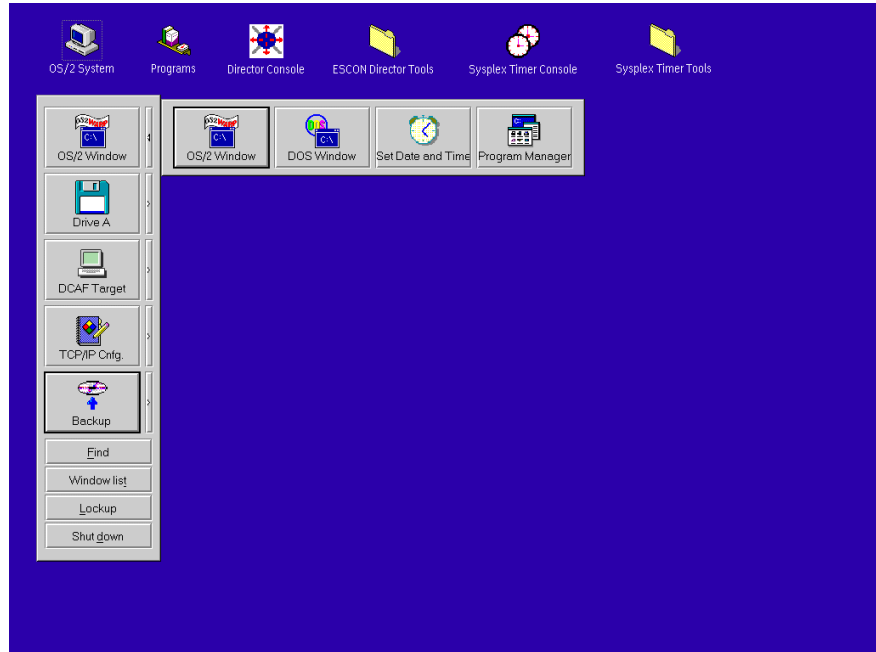
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

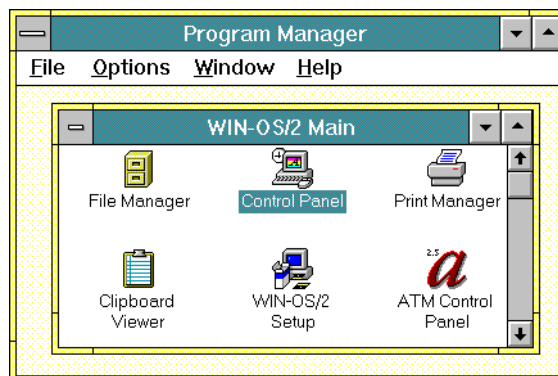


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

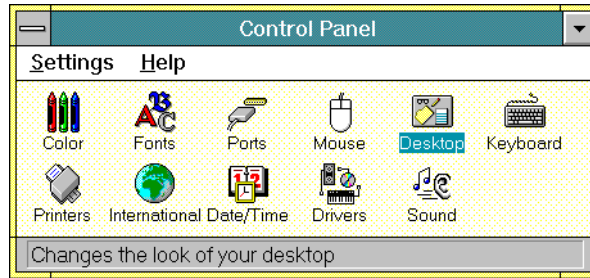
2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



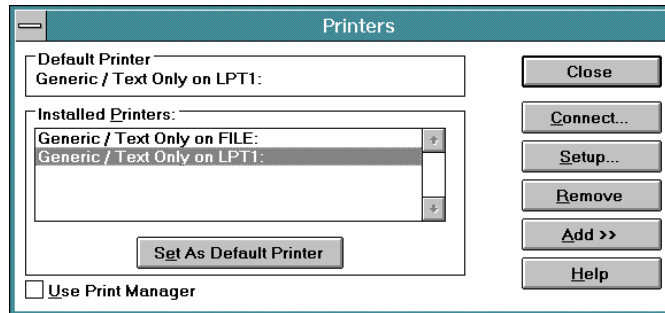
3. Click the *Program Manager* button. The *Program Manager* window appears.



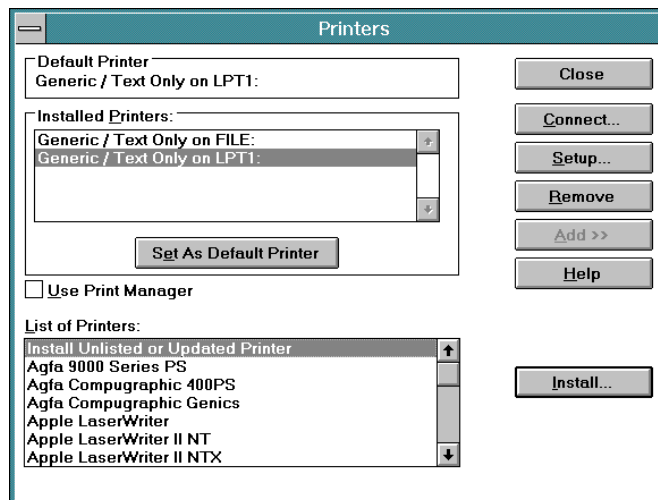
4. At the *Win-OS/2 Main* window, double-click the *Control Panel* icon. The *Control Panel* window appears.



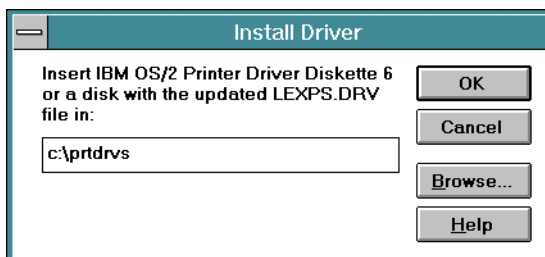
5. Double-click the *Printers* icon. The *Printers* dialog box appears.



6. Click (select) a driver displayed in the *Installed Printers* field and click the *Set as Default Printer* button.
7. To add a driver not listed in the *Installed Printers* field, perform the following:
 - a. Click the *Add* button. The *Printers* dialog box reappears with a list of available printers.



- b. Scroll through the list of printers and select the desired printer.
- c. Click the *Install* button to display the *Install Driver* dialog box.



- d. Type **C:\prtdrv** and click the *OK* button. The driver loads and appears under the list of installed printers in the *Printers* dialog box.
8. Close all open windows by double-clicking the upper left corner of each window. When the *Exit Win-OS/2* dialog box appears, click the *OK* button to exit Win-OS/2, close the dialog box, and return to the OS/2 desktop.
 9. Close the *OS/2 Window* drawer by clicking the drawer arrow.
 10. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 6](#) on page 254), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 11. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Chapter 8. Model PC 300PL Console Procedures

This chapter describes Operating System/2 (OS/2) Warp 4.0 procedures for an IBM Model PC 300PL computer used as an Enterprise Systems Connection (ESCON) Director Console or Sysplex Timer Console. The procedures are Director and Timer-specific and include:

- Performing general administrative tasks.
- Performing backup and restore functions.
- Customizing the Console operating environment.

General Administrative Tasks

This section describes general administrative tasks for the ESCON Director Console or Sysplex Timer Console. The section provides instructions to:

- Perform the data collection procedure for the Director or Sysplex Timer.
- Clear the address resolution protocol (ARP) table for the local area network (LAN) on which a Director or Timer is installed.
- Migrate a Director database to another Console (excluding a Hardware Management Console).
- Change the Token Ring adapter data rate for the Console PC.
- Create Console diagnostic diskettes.

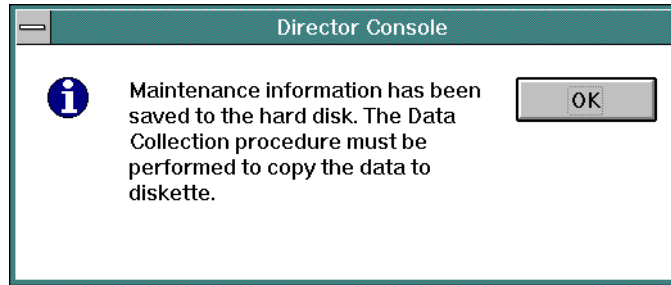
Perform Data Collection Procedure

Perform the data collection procedure for the Director or Sysplex Timer after a system problem occurs or when a field-replaceable unit (FRU) is removed and replaced.

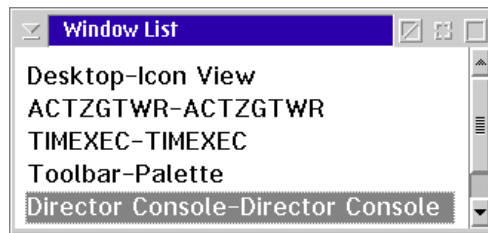
Director Data Collection

The data collection procedure transfers maintenance information to the Director Console's fixed disk, then to a 3.5-inch diskette. The diskette is mailed to the original equipment manufacturer (OEM) for problem analysis and resolution.

1. With the Director's *Active Matrix* window open, select the *Collect Maintenance Information* option from the *Maintenance* menu. The *Collect Maintenance Information* dialog box appears showing files being transferred and the transfer status. When all files are transferred to the fixed disk, the following dialog box appears.



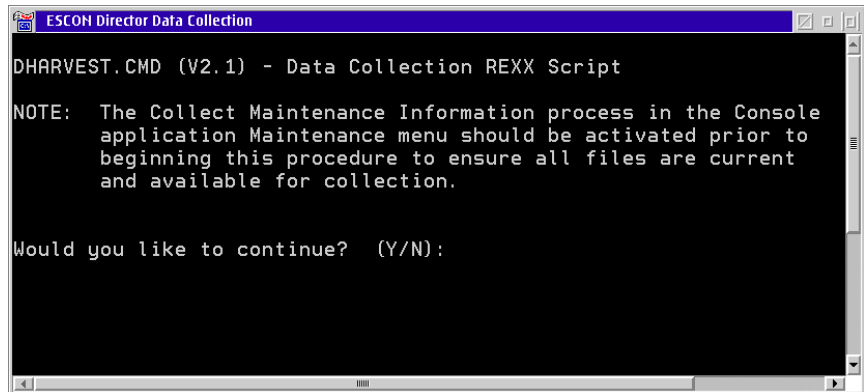
2. Click the *OK* button to close the dialog box. The Director's *Active Matrix* window reappears.
3. Record the Director name. The name (up to eight characters in length) appears on the title bar at the top of the active matrix window.
4. Simultaneously press the **Ctrl** and **Esc** keys to transfer to the Director Console's OS/2 desktop. The *Window List* appears.



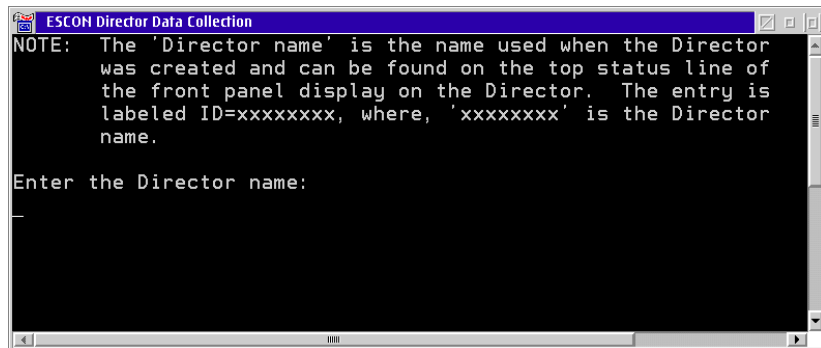
5. Double-click the *Desktop-Icon View* selection. The Director Console's OS/2 desktop appears.
6. Insert a data collection diskette into drive **A:** of the Director Console in accordance with one of the following steps:
 - If you are removing and replacing a FRU in the 9032-003 or 9033-004 ESCON Director, use the data collection diskette shipped with the replacement FRU. The diskette is labeled *Data Collection Diskette*.
 - If you are removing and replacing a FRU in the 9032-005 ESCON Director or collecting data for another purpose (such as fault isolating problems), use a data collection diskette shipped with the Director. The diskette is labeled *Data Collection Utility Version XX.YY.ZZ*, where *XX.YY.ZZ* is the Licensed Internal Code (LIC) version number.
 - If a labeled data collection diskette is not available, a blank, DOS-formatted diskette may be used.
7. At the OS/2 desktop, double-click the *ESCON Director Tools* folder. The *ESCON Director Tools - Icon View* appears.



8. Double-click the *ESCON Director Data Collection* icon. The first ESCON Director Data Collection window appears



9. Type **Y** and press the **Enter** key. The second *ESCON Director Data Collection* window appears.



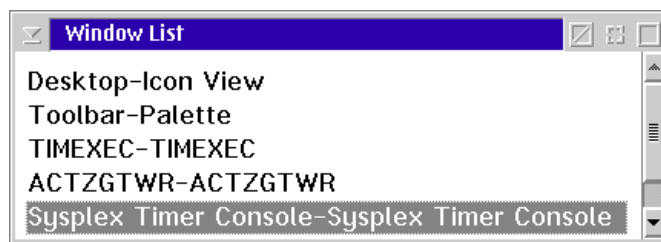
10. Type the Director name (recorded in [step 3](#) of this procedure) and press the **Enter** key. Messages appear in the window showing files transferring from the fixed disk to diskette. The data collection process is complete when the *Enter* prompt appears.

11. Press the **Enter** key. The *ESCON Director Data Collection* window closes.
12. Double-click the upper left corner of the *ESCON Director Tools - Icon View* to close the view and return to the OS/2 desktop.
13. Remove the data collection diskette from drive **A:** of the Director Console. Record the following information on the diskette label.
 - Director serial number.
 - Quality Service Activity Reporting (QSAR) number.
 - Problem Management - Hardware (PMH) number.
 - Current date.
14. Insert the data collection diskette in the pre-addressed envelope provided and mail the envelope to the OEM.
15. At the OS/2 desktop, open the Director Console application by double-clicking the *Director Console* icon. The Console application opens to the window closed in [step 4](#) of this procedure.

Sysplex Timer Data Collection

The data collection procedure transfers maintenance information from the Timer to a 3.5-inch diskette. The diskette is mailed to the OEM for problem analysis and resolution.

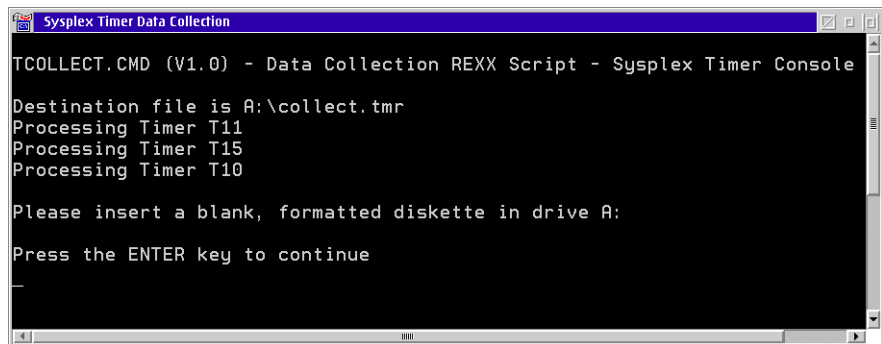
1. At the *Sysplex Timer Network Console* window, simultaneously press the **Ctrl** and **Esc** keys to transfer to the Timer Console's OS/2 desktop. The *Window List* appears.



2. Double-click the *Desktop-Icon View* selection. The Timer Console's OS/2 desktop appears.
3. At the OS/2 desktop, double-click the *Sysplex Timer Tools* folder. The *Sysplex Timer Tools - Icon View* appears.



4. Double-click the *Sysplex Timer Data Collection* icon. The *Sysplex Timer Data Collection* window appears.



5. Insert a data collection diskette into drive **A:** of the Timer Console. The diskette is labeled *Data Collection Diskette*. If a labeled data collection diskette is not available, a blank, DOS-formatted diskette may be used.
6. Press the **Enter** key. Messages appear in the window showing files transferring from fixed disk to diskette. The data collection process is complete when the *Enter* prompt appears.
7. Press the **Enter** key. The *Sysplex Timer Data Collection* window closes.
8. Double-click the upper left corner of the *Sysplex Timer Tools - Icon View* to close the view and return to the OS/2 desktop.
9. Remove the data collection diskette from drive **A:** of the Timer Console. Record the following information on the diskette label.
 - Timer serial number.
 - QSAR number.
 - PMH number.
 - Current date.
10. Insert the data collection diskette in the pre-addressed envelope provided and mail the envelope to the OEM.

11. At the OS/2 desktop, open the Sysplex Timer Console application by double-clicking the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Clear the Address Resolution Protocol Table

This procedure clears the ARP table for a LAN with a Director or Timer installed. The procedure clears old Internet Protocol (IP) or Media Access Control (MAC) addresses so the ARP table can rebuild with new addresses. The procedure prevents new Console, Director, or Timer addresses from conflicting with old, unused addresses. Clear the ARP table if:

- The IP or MAC address of a Director, Director Console, Timer, or Timer Console was changed after operating previously on the LAN.
- The Director, Director Console, Timer, or Timer Console are installed on a public (nondedicated) LAN.

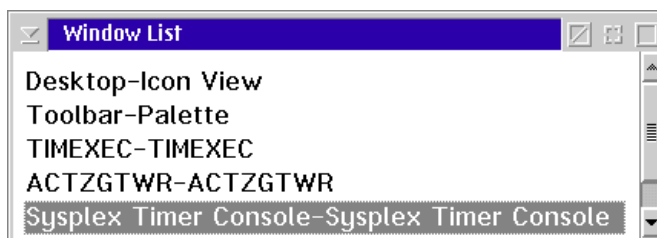
To clear the ARP table:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



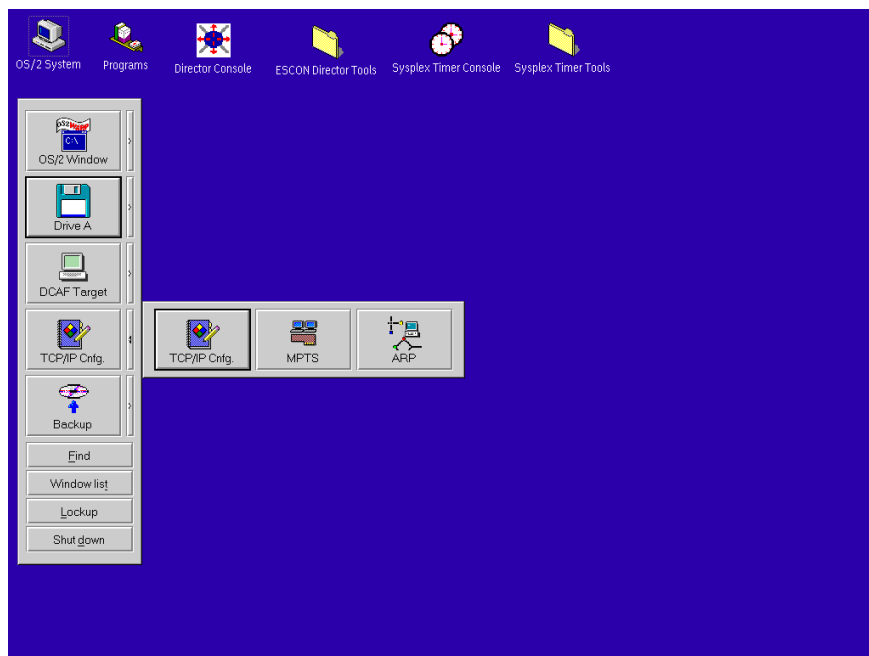
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.



Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Click the arrow on the *TCP/IP Cnfg.* drawer to open the drawer.



3. Click the *ARP* button to clear the table. The *ARP* window appears briefly and closes, indicating all the IP and MAC addresses cleared by the procedure.
4. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
5. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Migrate Director Definitions

If the Director Console application is uninstalled at a Console (Director, Sysplex Timer, Hardware Management, or other nondedicated Console) and installed on a new Console, Director definitions must be recorded on a 3.5-inch diskette and migrated to the new Console. Definitions include IP addresses, Director names, model numbers, and matrix configuration files.

If the Console application is discontinued and installed on a another Director Console, a Director definitions diskette must be created. Refer to "[Create Director Definitions Diskette](#)" below for instructions. If the Console application is installed on a new Director Console, Director definitions must be migrated. For instructions, refer to "[Migrate Definitions to a Director Console](#)" on page 294.

Create Director Definitions Diskette

Perform this procedure to create a Director definitions diskette.

1. Ensure the Director Console application is closed, not just reduced to an icon. If the Console application is open (*Startup* or *Matrix* window appears), continue to [step a](#). If the OS/2 desktop appears, go to [step b](#).

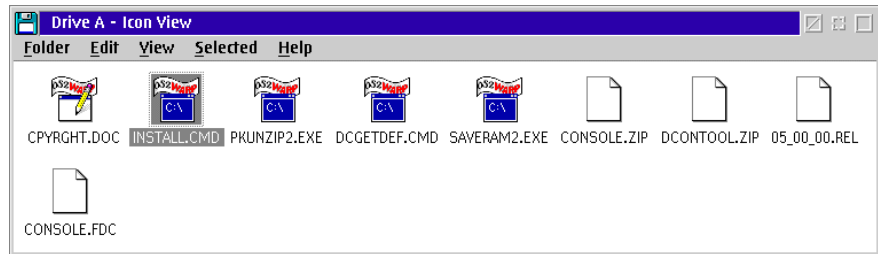
Note: OS/2 screens may look slightly different depending on the level of operating system installed on the Director Console.

- a. At the *Startup* or *Matrix* window, select the *Close Window* option from the *File* menu. The Director Console application closes and the OS/2 desktop appears. Go to [step 2](#).
- b. At the OS/2 desktop, simultaneously press the **Ctrl** and **Esc** keys. The *Window List* appears.

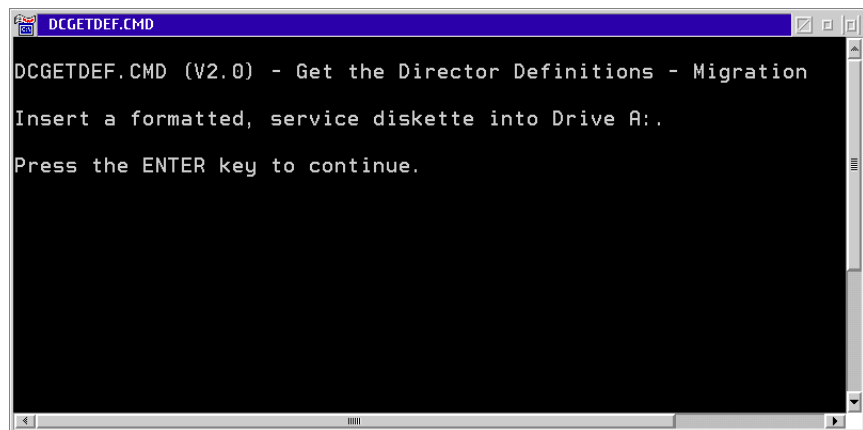


- If the *Director Console - Director Console* selection **does not** appear, the Console application is closed. Double-click the *Desktop - Icon View* selection to return to the OS/2 desktop, and go to [step 2](#).
- If the *Director Console - Director Console* selection **appears**, the Console application is open and minimized. Double-click the selection to maximize the application. At the *Startup* or *Matrix* window, select the *Close Window* option from the *File* menu. The Console application closes and the OS/2 desktop appears.

2. Insert the Console application diskette (labeled *Console Version XX.YY.ZZ*) into drive **A:** of the Director Console.
3. Double-click the *OS/2 System* icon. The *OS/2 System - Icon View* appears.
4. Double-click the *Drives* icon. The *Drives - Icon View* appears.
5. Double-click the *Drive A* icon. The *Drive A - Icon View* appears.



6. Double-click the *DCGETDEF.CMD* icon. The *DCGETDEF.CMD* window appears.



7. Remove the Console application diskette from drive **A:** of the Director Console and insert a blank, DOS-formatted diskette (provided with the Director).
8. Press the **Enter** key. Director definitions are copied to the diskette, and the copy progress is displayed in the *DCGETDEF.CMD* window. When the process is complete, the *DCGETDEF.CMD* window closes.
9. Double-click the upper left corner of the *Drive A - Icon View*, *Drives - Icon View*, and *OS/2 System - Icon View* to close the views and return to the OS/2 desktop.

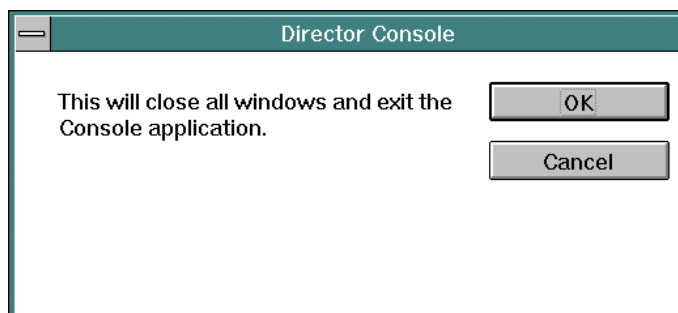
10. Remove the Director definitions diskette from drive **A:** of the Director Console.
11. Label and store the Director definitions diskette as appropriate. The diskette can now be used to transport definitions to a new Console.

Migrate Definitions to a Director Console

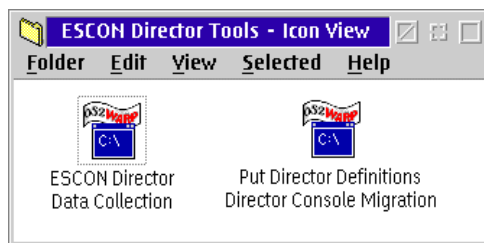
Perform this procedure to migrate Director definitions to a Director Console.

Note: This procedure does not work if the Director Console application is open or if the Director Console library already contains definitions.

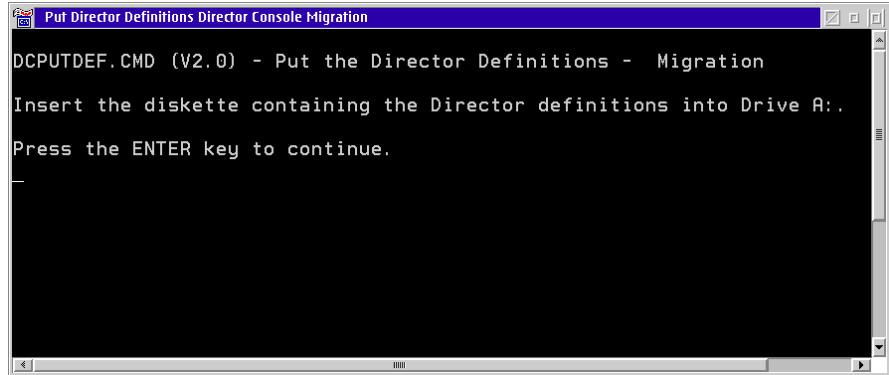
1. If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



2. Click the *OK* button to close the dialog box. The OS/2 desktop appears.
3. At the OS/2 desktop, double-click the *ESCON Director Tools* folder. The *ESCON Director Tools - Icon View* appears.



4. Double-click the *Put Director Definitions Director Console Migration* icon. The *Put Director Definitions Director Console Migration* window appears.



Note: If a warning appears indicating migration was terminated because Director definitions exist in the Console library, press the **Enter** key to close the *Put Director Definitions Director Console Migration* window and exit the utility.

If a warning appears indicating migration was terminated because the Console library was not initialized, press the **Enter** key to close the *Put Director Definitions Director Console Migration* window and exit the migration utility. Open and close the Director Console application, then perform this procedure again.

5. Insert the Director definitions diskette (created at the Console from which the definitions are migrated) into drive **A:** of the Console.
6. Press the **Enter** key. Director definitions are copied to the Console fixed disk for initializing the Director Console library. When the process is complete, the *Put Director Definitions Director Console Migration* window closes.
7. Double-click the upper left corner of the *ESCON Director Tools - Icon View* to close the view and return to the OS/2 desktop.
8. Remove the Director definitions diskette from drive **A:** of the Console. Store the Director definitions diskette as appropriate.
9. At the OS/2 desktop, start the Director Console application by double-clicking the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.

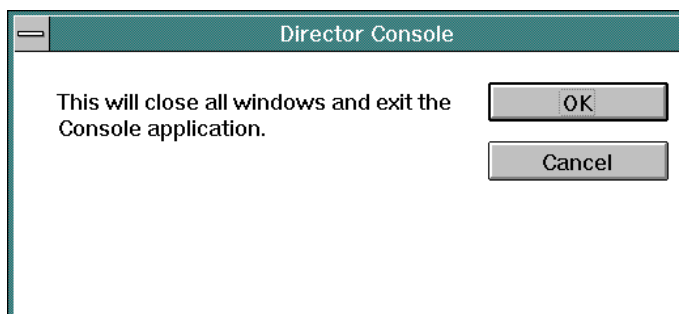
Change Token Ring Adapter Card Data Rate

Perform this procedure to change the data rate of the Token Ring adapter card for the Director or Sysplex Timer Console. The procedure changes the default rate of 16 megabits per second (Mbps) to 4 Mbps. Perform the procedure using the LAN Adapter Installation and Diagnostics (LANAID) application from a **native DOS** (not DOS or OS/2) window.

Note: The data rate is set at the factory. Do not change the data rate unless required because of LAN or other system requirements.

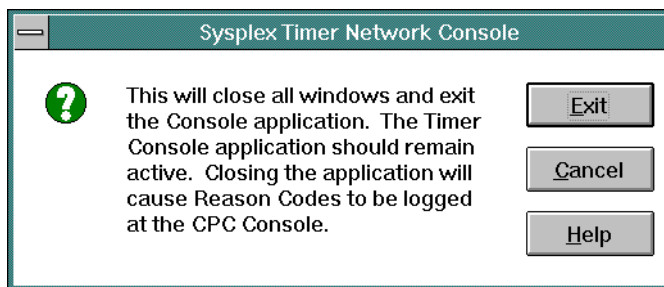
To change the Token Ring adapter card data rate:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

2. Insert the *LANAID Boot Diskette* into drive **A:** of the Console PC.

3. At the OS/2 desktop, click the *Shutdown* button at the bottom of the launch pad. A dialog box appears, asking if you want to close the application without saving data.
4. Click the *OK* button. A *Shutdown Has Completed* message box appears, explaining it is now safe to turn off the computer or restart.
5. Simultaneously press the **Ctrl**, **Alt**, and **Del** keys to restart the Console PC from the *LANAID Boot Diskette*. The PC performs power-on self-tests (POSTs). Upon completion, the *PC DOS 7.0 Startup Menu* appears with the first menu option highlighted.

```
PC DOS 7.0 Startup Menu
=====
1. IBM Auto/Turbo ISA Configuration using LANAIDC
2. IBM Auto/Turbo ISA Extended Diagnostics
Enter a choice: 1
```

6. Press the **Enter** key with the first option highlighted. The following warning and note appear.

```
-----
WARNING: To best avoid conflicts you should boot your system
        as you normally do before running LANAIDC.
        Running LANAIDC after booting from Disk1 will work,
        but conflict checking will not be as effective.
-----
NOTE:   To run the graphical version of the LANAID
        configuration program for the IBM Auto/Turbo ISA
        adapter, you need to boot your system normally and
        then install LANAID from the diskette by typing
        A:\install at your normal system prompt.
-----
Hit any key to continue with LANAIDC from diskette or remove
diskette and reboot system normally ...
```

7. Ignore the warning and note and press the **Enter** key. A **LANAIDC >** prompt appears.
8. At the **LANAIDC >** prompt, type **/view** to view the Token Ring LAN settings, and press the **Enter** key. After a few seconds, the *IBM Turbo 16/4 Token-Ring ISA Adapter* menu appears.

```

                                IBM Turbo 16/4 Token-Ring ISA Adapter

PnP Support:                    BIOS
Adapter Number:                 1
Adapter MAC Address:           00 06 29 6B 1A 3D
MicroCode Level:               000400 P3F3A4
Serial Number:                 IBM1080 - 296B1A3D
Adapter Mode:                  ENHANCED
Configuration:                 LEGACY
Adapter State:                 Active
I/O Address:                   320 - 323
Interrupt:                     10
ROM Address:                   C8000 - C9FFF
Remote IPL:                    Disabled
Token-Ring Data Rate:          16
Auto-Sense Data Rate:          Disabled
Adapter Bus Width:             16

LANAIDC >
```

9. At the **LANAIDC >** prompt, type **/rs=4** to change the Token Ring data rate from 16 Mbps to 4 Mbps, and press the **Enter** key. After a few seconds, the menu reappears with the change implemented. **Do not change any of the other Token Ring LAN settings.**
10. Remove the *LANAID Boot Diskette* from drive **A:** of the Console PC and store in a safe location.
11. Simultaneously press the **Ctrl**, **Alt**, and **Del** keys to restart the Console PC from the fixed disk (OS/2). The PC performs POSTs and loads the operating system. Upon completion, the OS/2 desktop appears.
12. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Create Console Diagnostic Diskettes

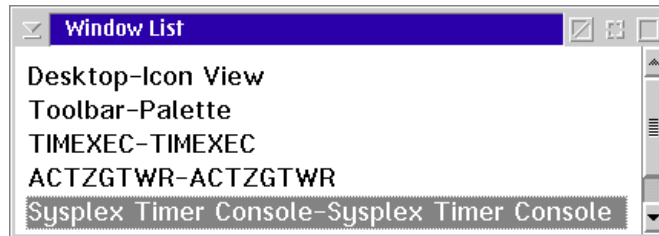
Perform this procedure to create diagnostic diskettes for the Console PC. Keep the diskettes with the Console, and use them under direction from the next level of support to fault isolate problems with the PC. To create the diagnostic diskettes:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



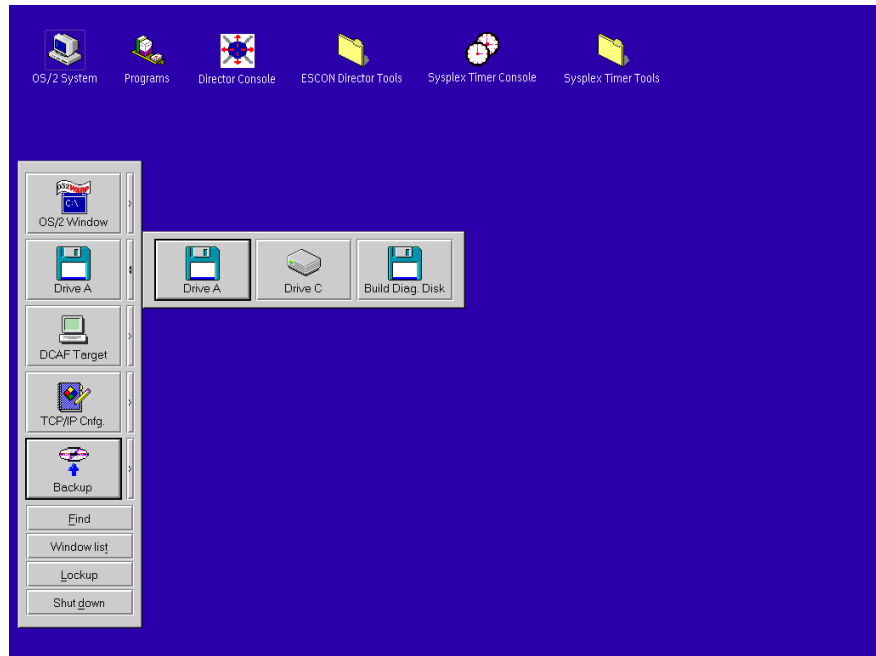
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

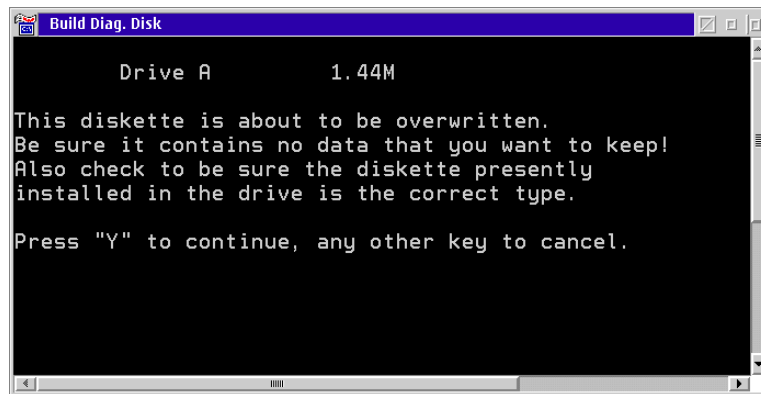


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Insert a blank, formatted diskette (labeled **For Use By Service Personnel Only** and shipped with the Console) into the diskette drive.
3. Click the arrow on the *Drive A* drawer to open the drawer.



4. Click the *Build Diag. Disk* button. The *Build Diag. Disk* window appears.



5. Press the **Y** key to continue. A message appears at the bottom of the window showing the percentage of files written to the diskette.
6. When the percentage reaches 100, remove the diskette, insert a second diskette as prompted, and press the **Enter** key. Label the first diskette *Reference Diskette*.

7. The *Build Diag. Disk* window appears again. Press the **Y** key to continue. A message appears at the bottom of the window showing the percentage of files written to the diskette.
8. When the percentage reaches 100 again, the second diagnostic diskette is created and the OS/2 desktop reappears. Remove the diskette from the drive. Label the second diskette *SCSI Diagnostic*.
9. Close the *Drive A* drawer by clicking the drawer arrow.
10. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
11. Keep the diskettes with the Console and use them under direction from the next level of support to fault isolate PC problems.

Backup and Restore Functions

The Model PC 300PL Console contains a rewriteable optical cartridge (ROC) drive to perform backup and restore functions. Backups of the Director or Sysplex Timer system libraries are routinely performed. Library data is restored using a ROC with the most recent backup version of the Director or Timer system library. The entire Console fixed disk is restored using:

- A 3.5-inch Director or Sysplex Timer Console application diskette.
- A 3.5-inch Console restore diskette.
- A Console restore CD-ROM.
- A ROC that contains the most recent backup version of the Director or Timer system library.

This section describes:

- Backing up the Director or Sysplex Timer system library to ROC.
- Restoring the Director or Sysplex Timer system library from ROC.
- Restoring the Console fixed disk from CD-ROM and ROC.

Back Up the System Library to ROC

Routine backups of the Director or Sysplex Timer system library to a ROC ensure critical data can be restored if required. The data is also required when migrating the Director Console application to a backup or replacement Console.

Critical data for the Director Console includes Console settings, LIC files, logs, IP addresses, Director configuration files, and Director matrices. Critical data for the Sysplex Timer Console includes Console settings, IP addresses, configuration files, logs, and identification information for the Timer network.

This section describes procedures to enable automatic back up of the system library to ROC at the default time, change backup settings, or back up the system library on demand.

Enable Automatic Backup at Default Time

If enabled, the operating system automatically backs up the system library to a ROC at a specified or default time. Perform this procedure to enable automatic backup of the system library at the default backup time (daily at 12:00 midnight).

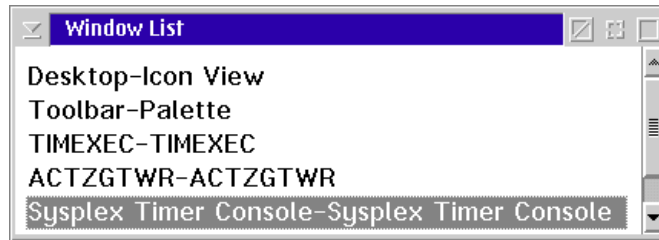
This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). If either or both applications are running on a Hardware Management Console, refer to [Chapter 3](#) for system library backup procedures. To enable the automatic backup feature using the default setting of 12:00 midnight:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



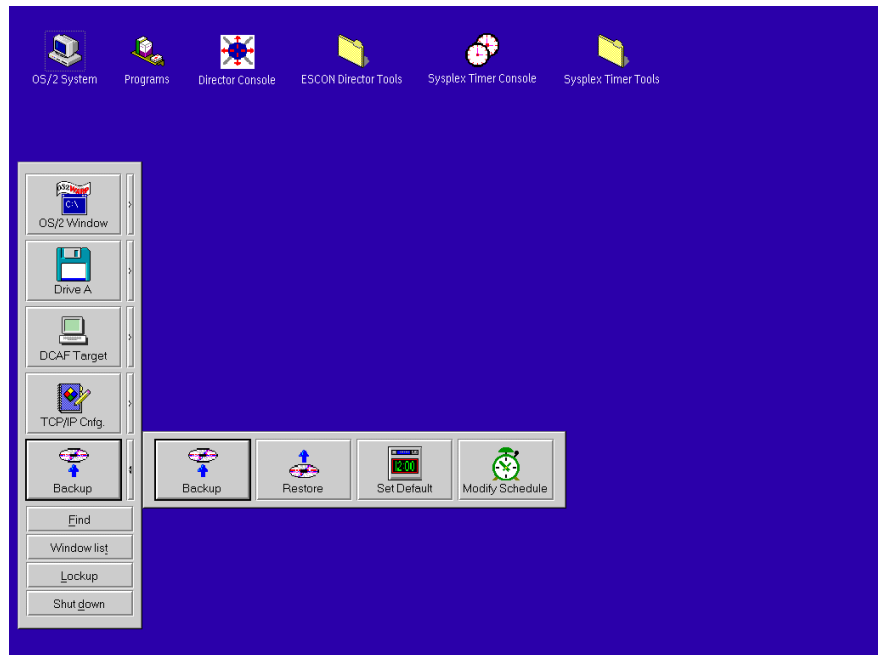
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

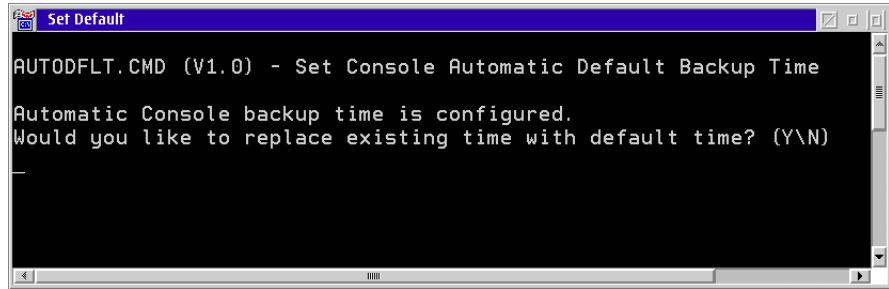


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Click the arrow on the *Backup* drawer to open the drawer.



3. Click the *Set Default* button on the *Backup* drawer. The *Set Default* dialog box appears.



4. Type **Y** and press the **Enter** Key. The Director or Sysplex Timer Console system library automatically backs up every day at midnight.
5. Click the arrow on the *Backup* drawer to close the drawer.
6. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
7. Ensure a blank optical cartridge is installed in the Console ROC drive when the automatic backup feature is enabled. The backup ROC is provided with the Console.

Change Backup Settings

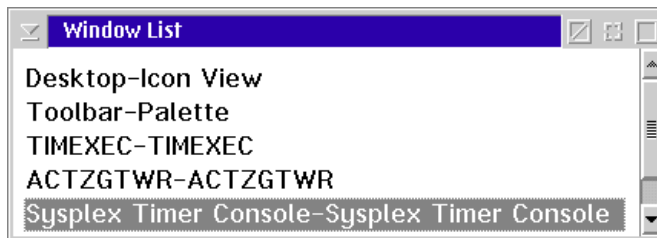
Perform this procedure to change backup settings from the default values. To change the backup settings:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



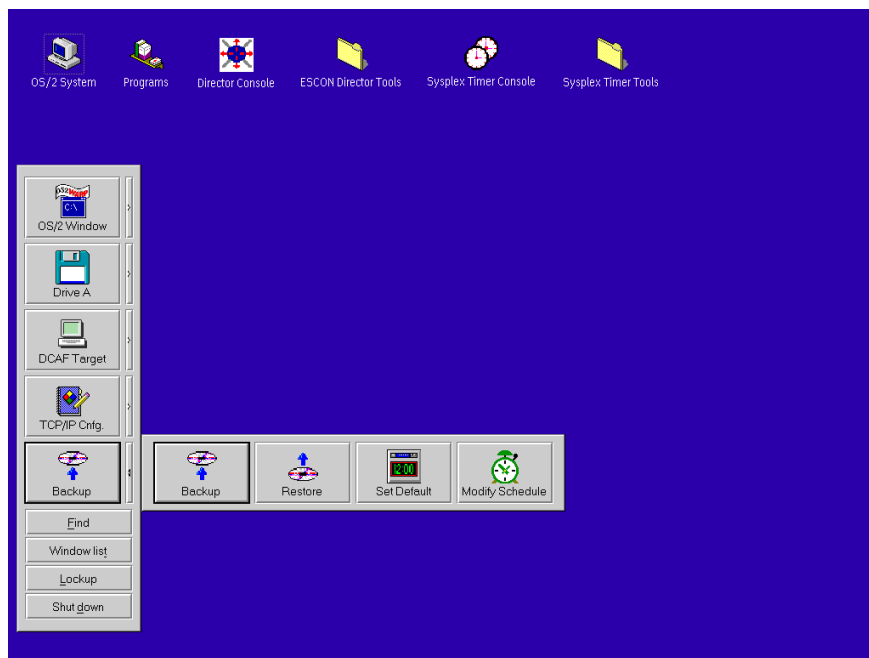
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

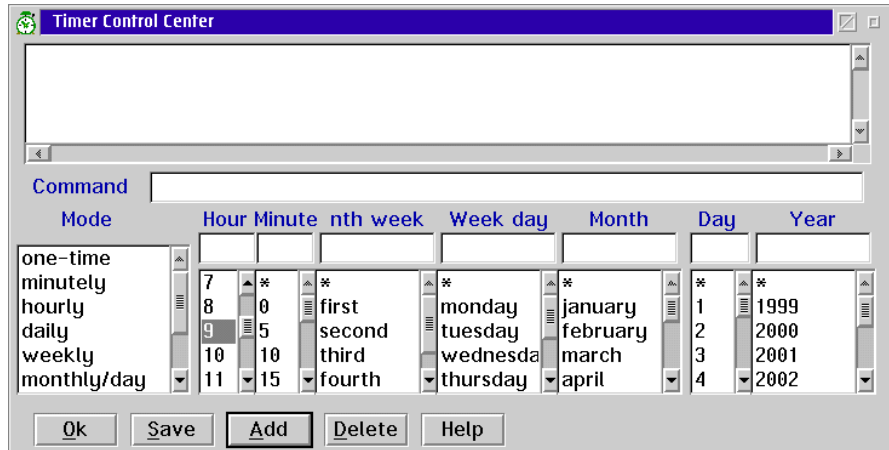


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Click the arrow on the *Backup* drawer to open the drawer.



3. Click the *Modify Schedule* button on the *Backup* drawer. The *Timer Control Center* dialog box appears. The command line (script) shown at the top of the screen automatically runs a program using the default backup setting.



Note: The term *Timer* in the *Timer Control Center* dialog box does not refer to the Sysplex Timer.

4. Click the script name to select it. The settings associated with the script display at the lower part of the screen. To change the settings, perform one of the following:
 - Select an item in the *Mode* column. All required parameters are completed for the selection.
 - Change parameters by scrolling up or down a column (*Hour*, *Minute*, etc.) or by typing the desired value at the top of the column. An asterisk (*) indicates backup periodically by that parameter.
5. When the parameters are set correctly, click the *Save* button to save changes to the script.
6. Click the *OK* button to enable the changes and return to the OS/2 desktop.
7. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Backup on Demand

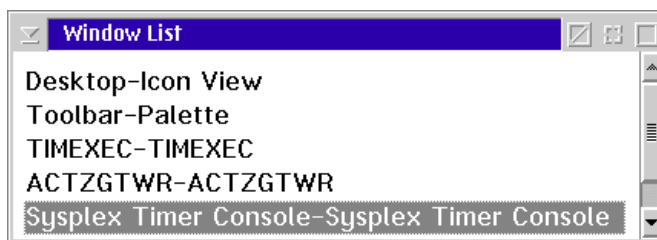
Perform this procedure to back up the Director or Sysplex Timer system library on demand. This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). If either or both applications are running on a Hardware Management Console, refer to [Chapter 3](#) for system library backup procedures. To back up the system library to ROC on demand:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



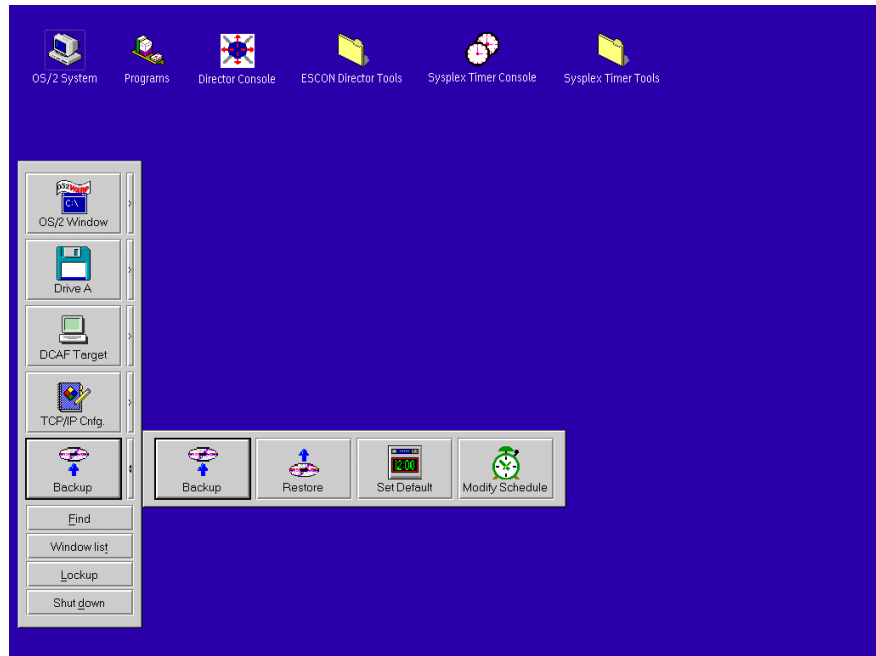
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

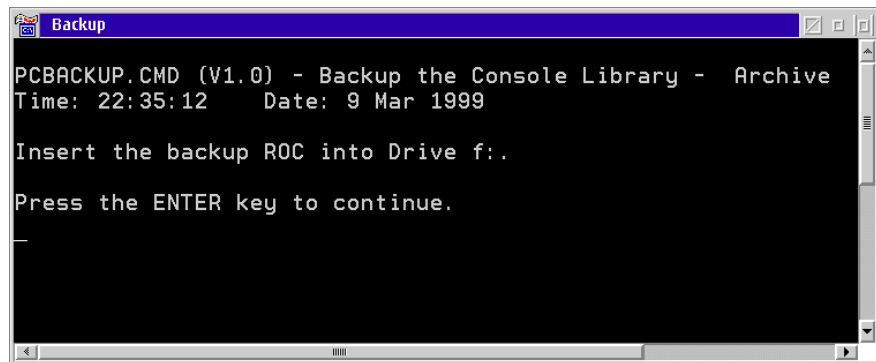


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

2. Click the arrow on the *Backup* drawer to open the drawer.



3. Click the *Backup* button on the *Backup* drawer. The *Backup* dialog box appears.



4. Insert a blank cartridge (or a cartridge with data that can be overwritten) in the ROC drive of the Console PC, then press the **Enter** key. Process messages display until the backup is complete.
5. Remove the cartridge from the ROC drive, label the cartridge, and store it in a safe, secure location.

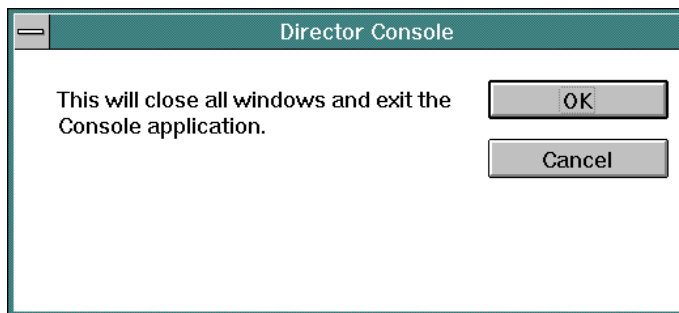
Note: Ensure a new blank cartridge is inserted in the ROC drive if the automatic backup feature is enabled.

6. Click the arrow on the *Backup* drawer to close the drawer.
7. At the OS/2 desktop, perform one of the following steps to open the Director Console or Sysplex Timer Console application.
 - To open the Director Console application, double-click the *Director Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.
 - To open the Sysplex Timer Console application, double-click the *Sysplex Timer Console* icon. The Console application opens to the window closed in [step 1](#) of this procedure.

Restore the System Library from ROC

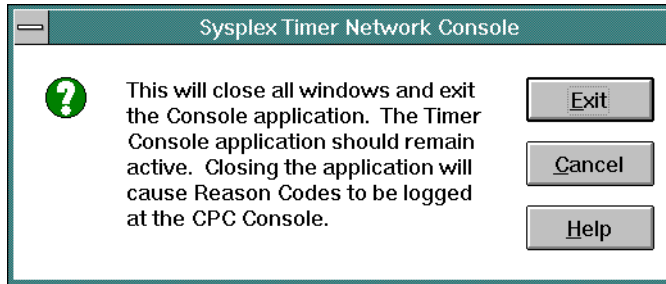
Perform this procedure to restore the Director or Sysplex Timer system library from a backup ROC to the Console fixed disk. To restore the system library:

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



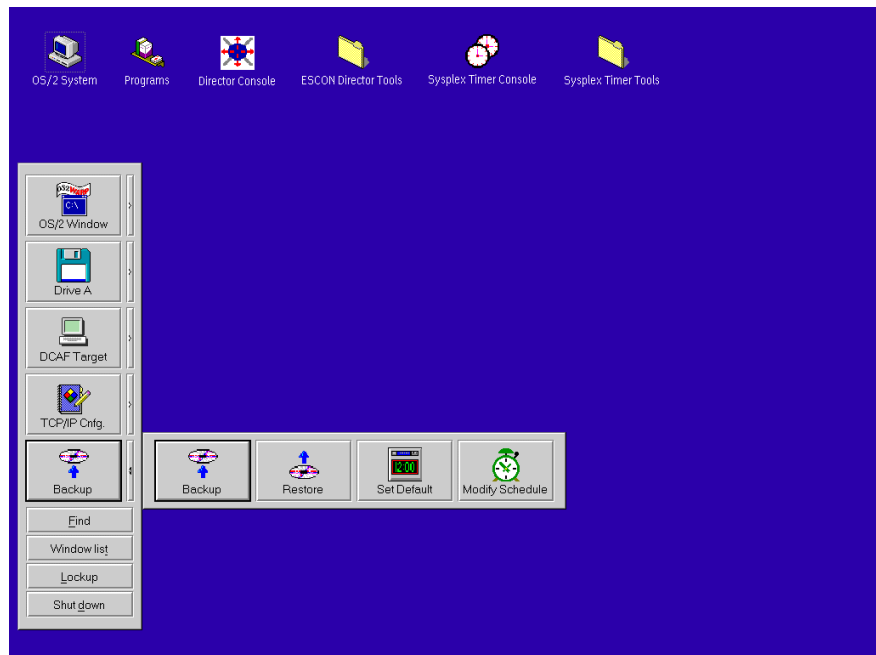
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

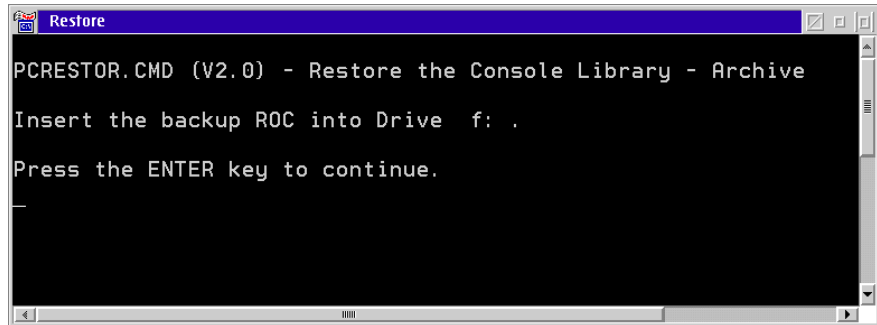


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

2. Click the arrow on the *Backup* drawer to open the drawer.



3. Click the *Restore* button on the *Backup* drawer. The *Restore* dialog box appears.



4. Insert a backup cartridge in the ROC drive of the Console PC, then press the **Enter** key. The OS/2 desktop reappears when the restore operation is finished.

Note: Ensure the correct cartridge is inserted in the ROC drive.

5. Remove the backup cartridge from the ROC drive and store it in a safe, secure location.

Note: Ensure a new blank cartridge is inserted in the ROC drive if the automatic backup feature is enabled.

6. Click the arrow on the *Backup* drawer to close the drawer.
7. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational. The Console application should remain active and operational for the following reasons:
 - a. Certain Timer events and associated reason codes are transmitted only to the Event log maintained at the Timer Console. The events are not transmitted through attached processors to the System Control Program (SCP) Console. If the Console application is closed and a Timer network failure occurs, reason codes and other information required for fault isolation may not be recorded.

- b. Closing the Console application causes an **ETR Service is Requested** message to be reported to the SCP Console with reason code **40** (communication lost with active Console) or reason code **41** (communication lost with standby Console). This may result in an unnecessary service call.
- c. Starting the Console application causes an **ETR Service is Requested** message to be reported to the SCP Console, with reason code **8** (communication established with active Console) or reason code **9** (communication established with standby Console). This may result in an unnecessary service call.

Restore the Console Fixed Disk from CD-ROM and ROC

Perform this procedure to format and restore the Console fixed disk from CD-ROM and a backup ROC. Use the instructions after installing a new unformatted fixed disk. This procedure applies to a dedicated Console PC running the Director Console application or Sysplex Timer Console application (or both). Default parameters when the fixed disk is restored are listed in [Table 7](#).

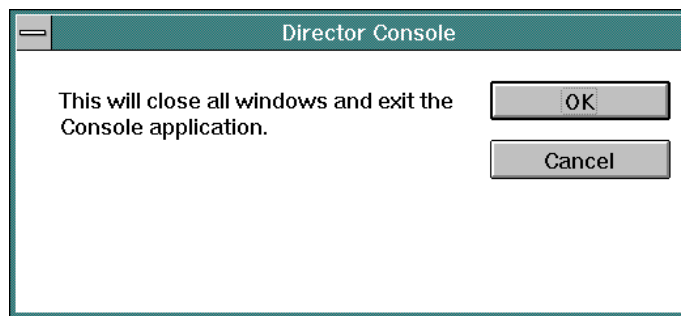
Table 7. Default Parameters for Console Support Software (ROC Restore)

Feature	Default Parameters
Set Time and Date	Time and date for manufacturing location
Change Time and Date Format	Time: 12-hour clock Date: Month-Day-Year
Console Screen Lock	Disabled
Keyboard Layout	United States
IP Address	1.1.1.1
MAC Address	Set on adapter card
Subnet Mask	255.0.0.0
Automatic Backup	Disabled
Default Printer	Generic/Text Only on LPT1 Generic/Text to File

To reformat and restore the Console fixed disk from CD-ROM and a backup ROC:

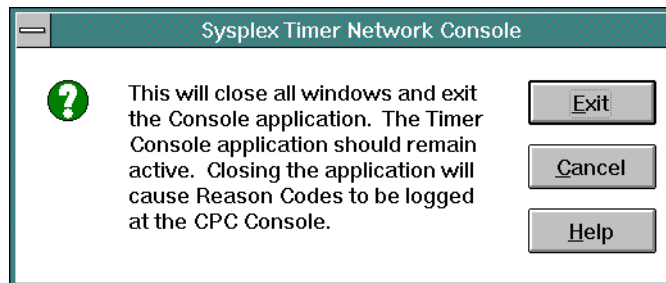
1. Obtain the following (XX.YY.ZZ indicates the software version, release, and patch numbers):
 - The 3.5-inch Console application diskette labeled *Console Version XX.YY.ZZ* (shipped with the Director or Sysplex Timer).

- The 3.5-inch Console restore diskette labeled *Base Console Restore Version XX.YY.ZZ* (shipped with the Director or Sysplex Timer).
 - The Console restore CD-ROM labeled *Base Console Restore Version XX.YY.ZZ* (shipped with the Director or Sysplex Timer).
 - The rewriteable optical cartridge (ROC) that contains the most recent backup version of the system library.
2. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
- If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

3. At the OS/2 desktop, click the *Shutdown* button at the bottom of the launch pad. A dialog box appears, asking if you want to close the application without saving data.
4. Click the *OK* button. A *Shutdown Has Completed* message box appears, explaining it is now safe to turn off the computer or restart.
5. Power off the Console PC.
6. Insert the *Base Console Restore Version XX.YY.ZZ* diskette in the diskette drive (ensure the diskette is write enabled). Power on the Console PC.
7. The IBM OS/2 logo screen appears, followed by a series of installation and load messages.

Ignore all messages until the following message appears:

Base Console Hard Disk Restore
The procedure will load your Console hard disk from the Base Console Restore CD-ROM
WARNING: Continuing this process will result in the destruction of information currently on your hard disk.
Press F1 to continue with the RESTORE process. Press ESC to EXIT the program.

8. Press the **F1** key to continue the process. The fixed disk is formatted and partitioned in preparation for insertion of the Console restore CD-ROM. This process takes approximately 10 minutes.

When the system is ready the following message appears:

Install the Base Console Restore CD-ROM
To continue press any key.

9. At the preceding prompt, insert the CD-ROM labeled *Base Console Restore Version XX.YY.ZZ* in the CD-ROM drive and press the **Enter** key. The process of installing the files from the CD-ROM to the Console fixed disk takes approximately 10 minutes.

When the installation is complete the following message appears:

```
Base Console restore is complete.  
Remove the diskette and the CD-ROM and reboot  
the PC.
```

10. Remove the Console restore diskette and CD-ROM from their respective drives. Simultaneously press the **Ctrl**, **Alt**, and **Del** keys to reboot the Console PC.
11. If required, change the default IP address. For instructions, refer to [“Token Ring Adapter IP Address and Subnet Mask”](#) on page 334 and return here.
12. Install the Director or Sysplex Timer Console application using the application diskette labeled *Console Version XX.YY.ZZ*. For instructions, refer to Chapter 6 of the appropriate maintenance information manual listed below:
 - *Maintenance Information for the 9032 Model 3 Enterprise Systems Connection Director* (SY27-3601).
 - *Maintenance Information for the 9033 Model 4 Enterprise Systems Connection Director* (SY27-2638).
 - *Maintenance Information for the 9032 Model 5 Director* (SY28-1158).
 - *Maintenance Information for the 9037 Model 2 Sysplex Timer* (SY27-2641).
13. Restore the system library using the backup ROC. For instructions, refer to [“Restore the System Library from ROC”](#) on page 309.

Customize the Console Operating Environment

This section describes procedures to change ESCON Director or Sysplex Timer Console operating parameters from default values listed in [Table 8](#). If you restore the Model PC 300PL Console's fixed disk, all the parameters (including the IP address of the Console) are reset to default values.

Note: Do not enable the screen saver or automatic lockup function (password protection) through the OS/2 desktop *Settings* option. Enable the screen saver using instructions in this section.

Table 8. Procedures and Default Parameters for Console Operating Environment

Procedure	Default Parameter	Page
Set Date and Time	Set to date and time for manufacturing location	316
Change Date and Time Format	Time: 12-hour clock Date: Month-Day-Year	319
Enable Screen Saver	Disabled	323
Change Keyboard Layout and Country Code Page	United States	326
Change IP Address	1.1.1.1	334
Change Subnet Mask	255.0.0.0	334
Change MAC Address	Set on adapter card	338
Change Default Printer	Generic/Text Only on LPT1 Generic/Text to File	343

Set Date and Time

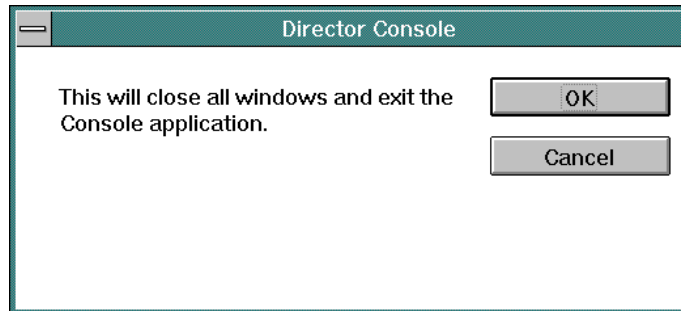
This procedure sets the date and time for the Console PC's operating environment. Although the date and time are set, the parameters may require change for an installation location. Use this procedure to display or change the Console date and time or synchronize the Console date and time with a Sysplex Timer network.

In the Director Console application, *Console Audit Log* and *Console Error Log* events are time stamped with the PC date and time. All other date and time entries in the application are time stamped with parameters derived from the Director.

In the Sysplex Timer Console application, *Console Audit Log* events are time stamped with the PC date and time. All other date and time entries in the application are time stamped with Coordinated Universal Time (UTC) derived from the Timer.

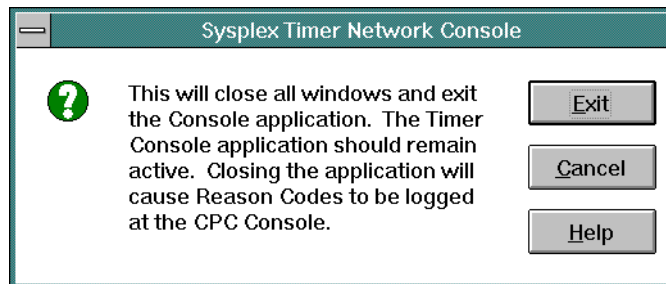
1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.

- If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



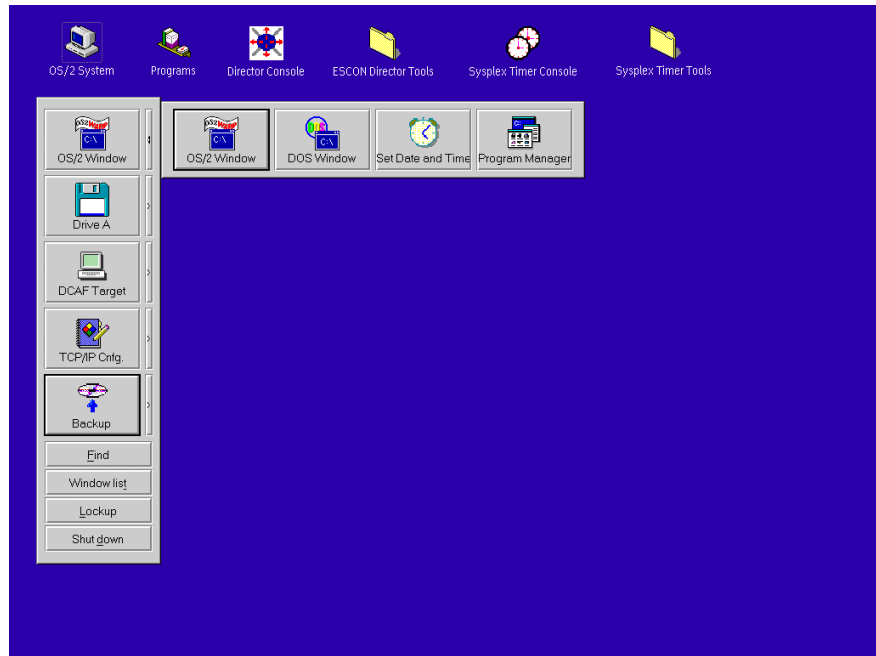
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

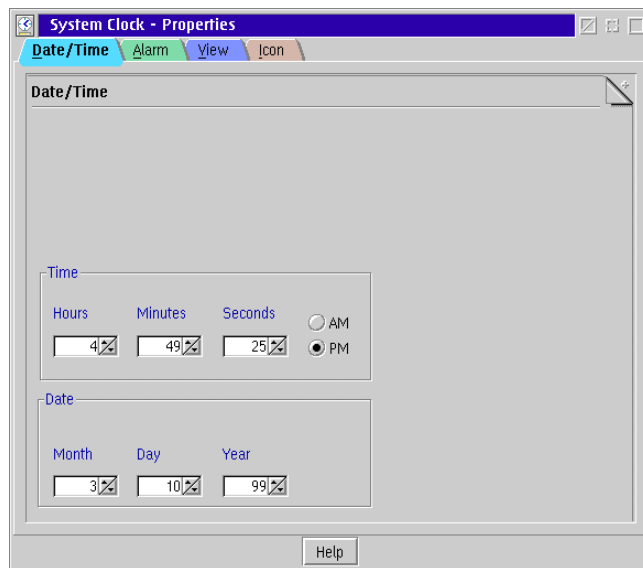


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



3. Click the *Set Date and Time* button. The *System Clock - Properties* dialog box appears with the *Date/Time* page open.



4. To adjust the Console time, click the up or down arrows by the *Hours*, *Minutes*, and *Seconds* fields as required. Click the *AM* or *PM* radio button as required.
5. To adjust the Console date, click the up or down arrows by the *Month*, *Day*, and *Year* fields as required.
6. Close the *System Clock - Properties* dialog box by double-clicking the icon in the upper left corner of the dialog box.
7. Close the *OS/2 Window* drawer by clicking the drawer arrow.
8. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 8](#) on page 316), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
9. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Change Date and Time Format

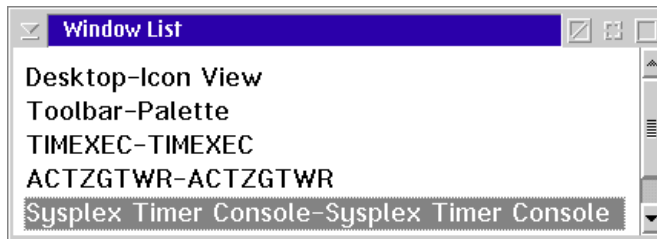
This procedure changes the time format between a 12-hour and 24-hour clock, and the date format between a month-day-year, day-month-year, year-month-day, or year-day-month format.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

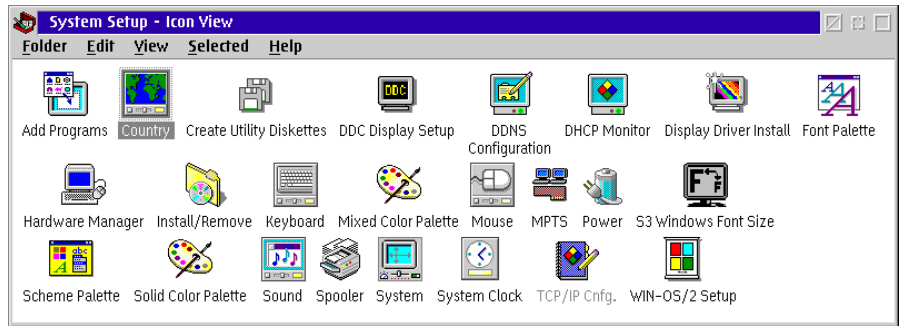


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

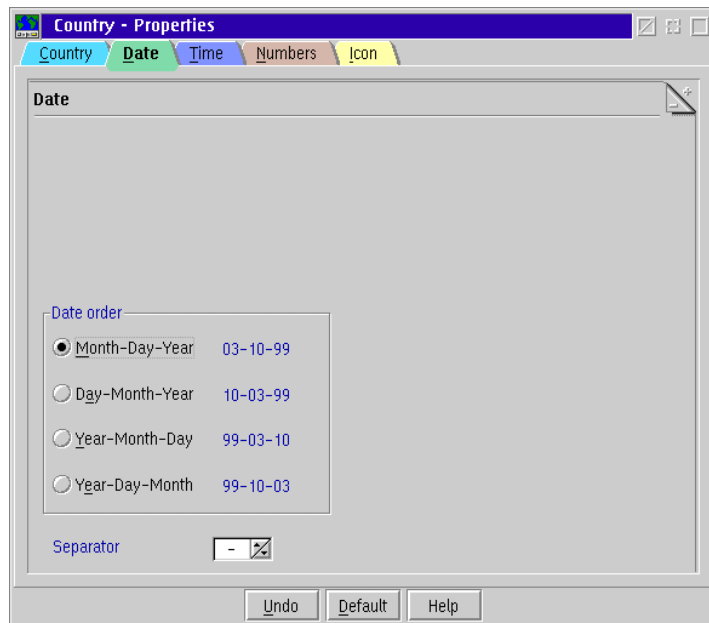
2. Double-click the *OS/2 System* icon at the top of the OS/2 desktop. The *OS/2 System - Icon View* appears.



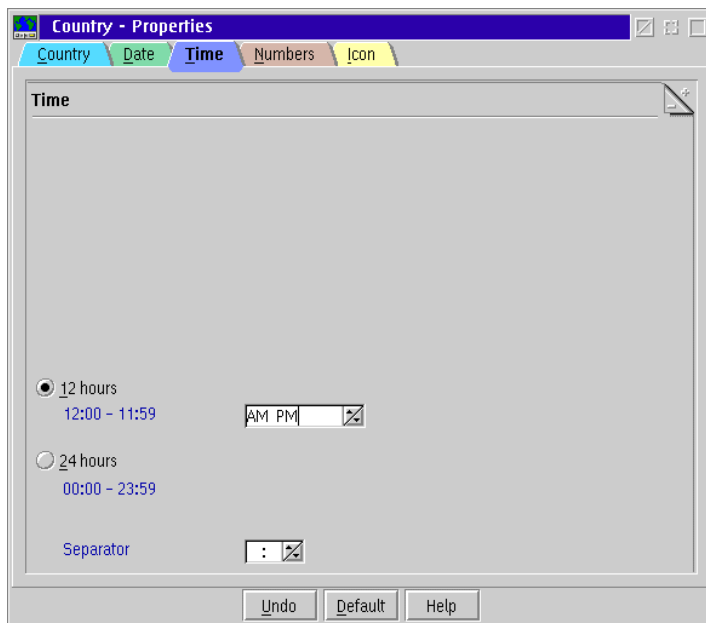
3. Click the *System Setup* option. The *System Setup - Icon View* appears.



4. Double-click the *Country* icon. The *Country - Properties* dialog box appears with the *Country* page open.
5. Perform one or both of the following to adjust the format:
 - Click the *Date* tab to display the *Date* page. Click the desired radio button to select between *Month-Day-Year*, *Day-Month-Year*, *Year-Month-Day*, or *Year-Day-Month* display formats.



- Click the *Time* tab to display the *Time* page. Click the desired radio button to select between *12 hours* or *24 hours* display formats. If the *12 hours* format is used, select between AM or PM display by scrolling through the list box to the right of the radio button.



6. Double-click the upper left corner of the *Country - Properties* dialog box to close the dialog box.
7. Double-click the upper left corner of the *System Setup - Icon View* to close the view.
8. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 8](#) on page 316), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
9. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.

- To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Enable Screen Saver

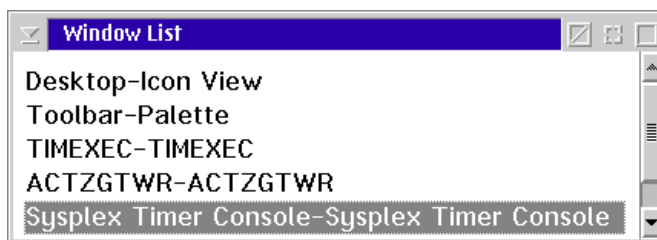
Perform this procedure to enable the Win-OS/2 screen saver or modify screen saver operation. Do not enable the screen saver or automatic lockup (password protection) function available through the OS/2 desktop *Properties* option.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



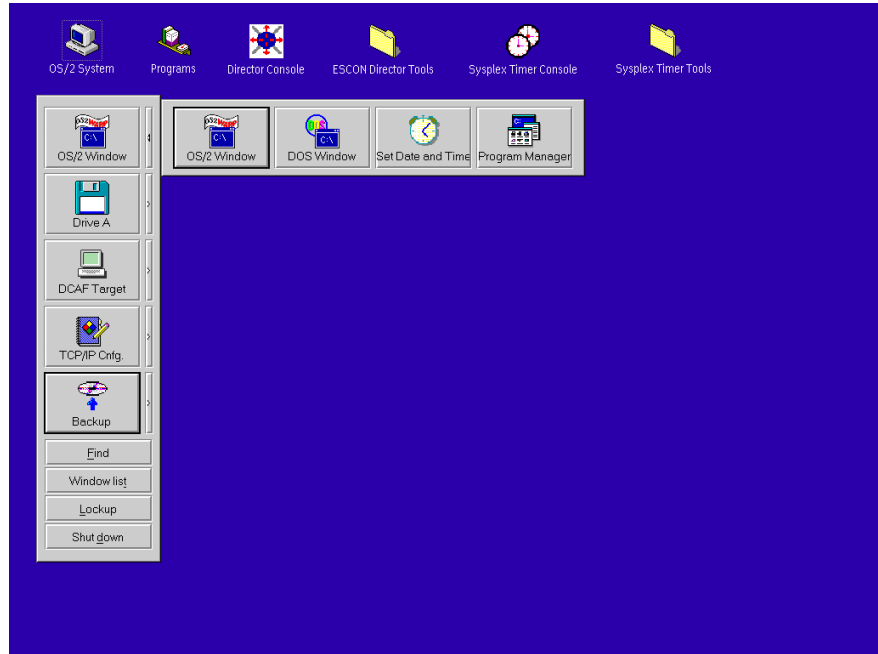
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

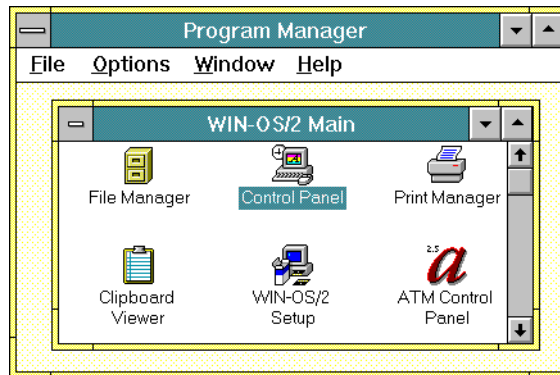


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

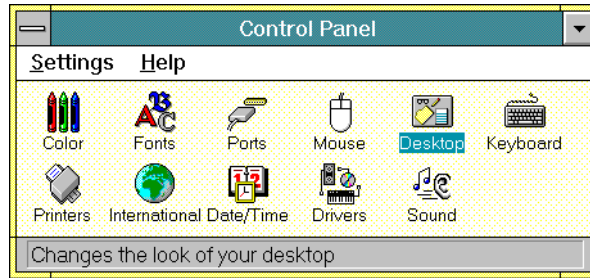
2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



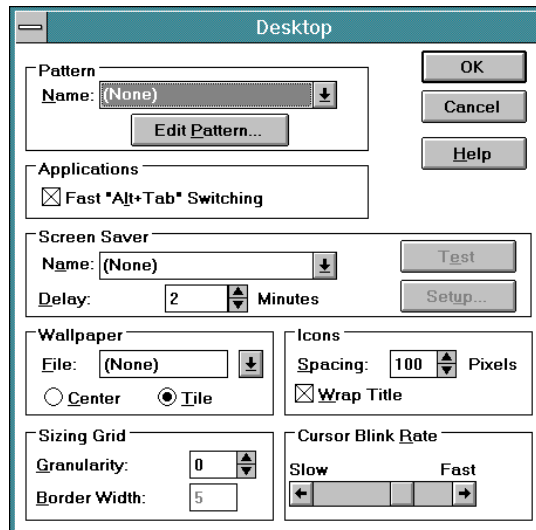
3. Click the *Program Manager* button. The *Program Manager* window appears.



4. At the *Win-OS/2 Main* window, double-click the *Control Panel* icon. The *Control Panel* window appears.



5. Double-click the *Desktop* icon. The *Desktop* dialog box appears.



6. Modify the screen saver function as required. Enable the screen saver by scrolling to a desired screen (other than *None*) in the *Name* field in the *Screen Saver* section. Set the time delay for the screen saver to enable by scrolling to the desired time in the *Delay* field. The password function for the Console is not required. To enable the password function, select a screen saver and the *Setup* button. Click the *Password* check box, enter a password, and click *OK*.
7. When finished, click the *OK* button on the *Desktop* dialog box.
8. Double-click the top left corner of the *Control Panel* and *Program Manager* windows to close the windows.
9. When the *Exit Win-OS/2* dialog box appears, click the *OK* button to exit Win-OS/2, close the dialog box, and return to the OS/2 desktop.
10. Close the *OS/2 Window* drawer by clicking the drawer arrow.
11. Perform one of the following:

- If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 8](#) on page 316), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
12. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
- To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Keyboard Layout and Country Code Page (International Users Only)

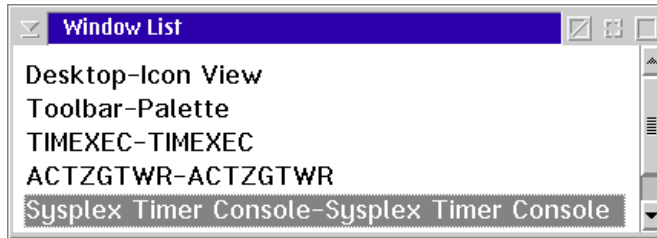
Perform this procedure to change the keyboard layout and country information. This allows keyboards to be customized for international users (outside of the United States). You must also change options for Win-OS/2 windows and the OS/2 operating system.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



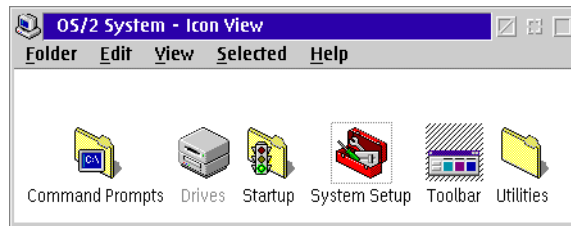
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

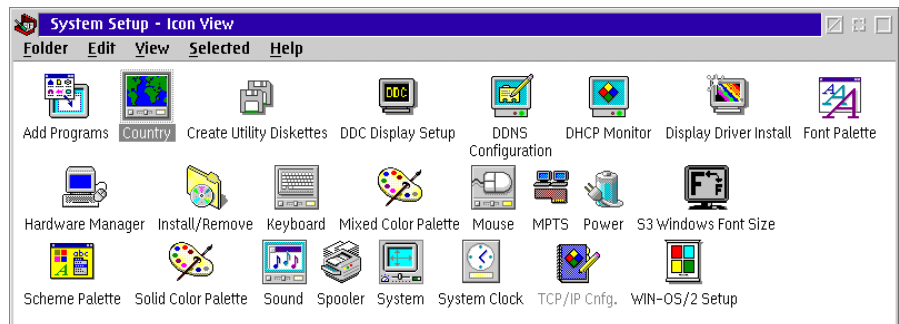


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

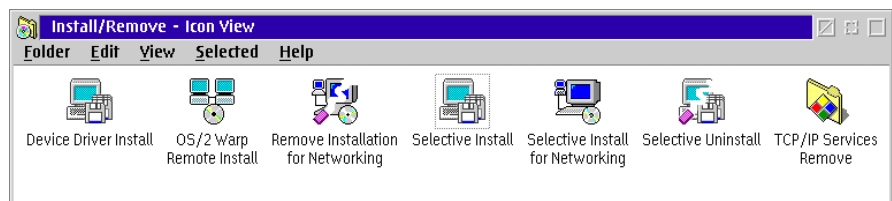
2. Double-click the *OS/2 System* icon at the top of the OS/2 desktop. The *OS/2 System - Icon View* appears.



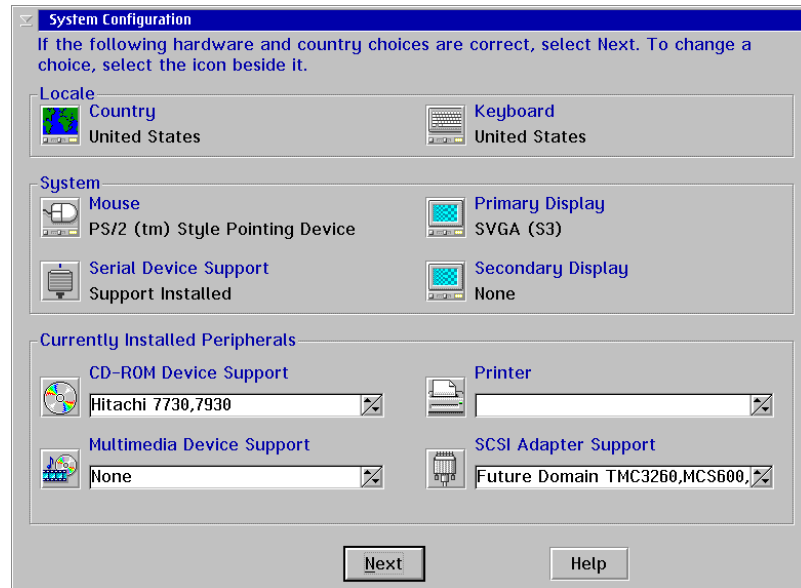
3. Double-click the *System Setup* icon. The *System Setup - Icon View* appears.



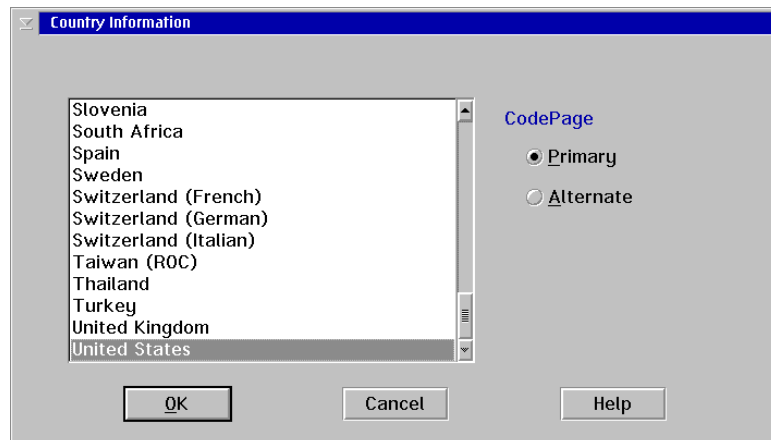
4. Double-click the *Install/Remove* icon. The *Install/Remove - Icon View* appears.



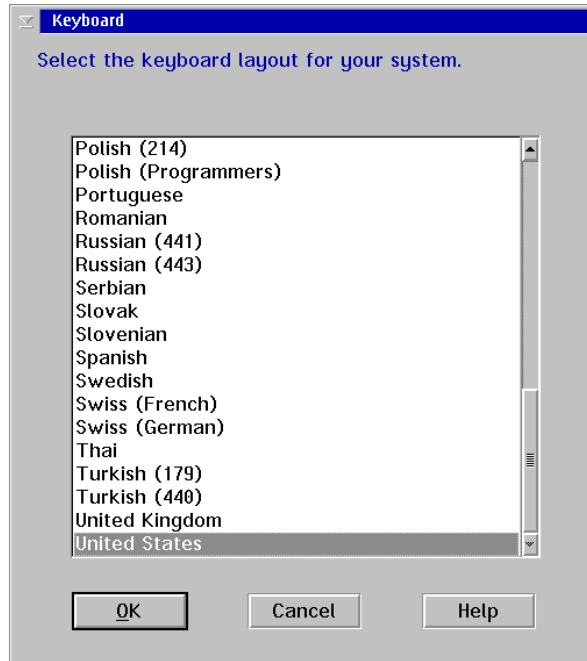
5. Double-click the *Selective Install* icon. A message box appears indicating the installation program is initializing. After a few seconds, the *System Configuration* dialog box appears.



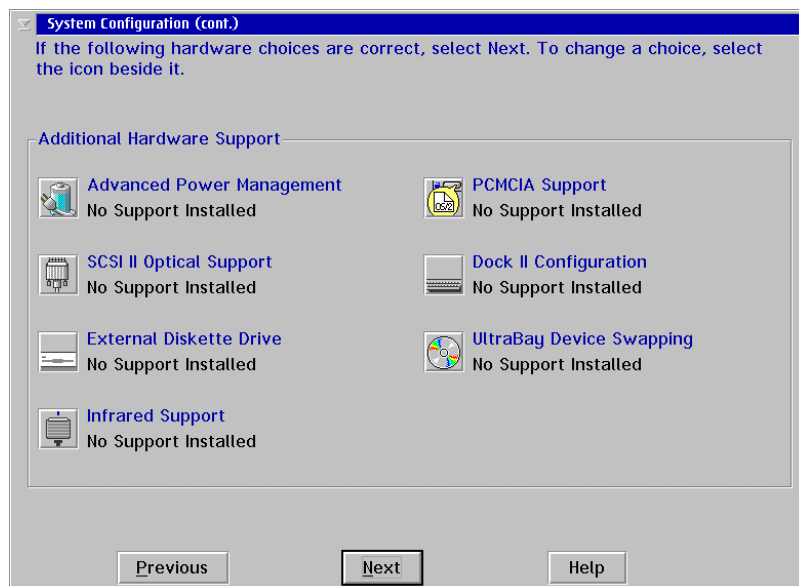
6. At the *Locale* area of the *System Configuration* dialog box, click the *Country* icon. The *Country Information* dialog box appears.



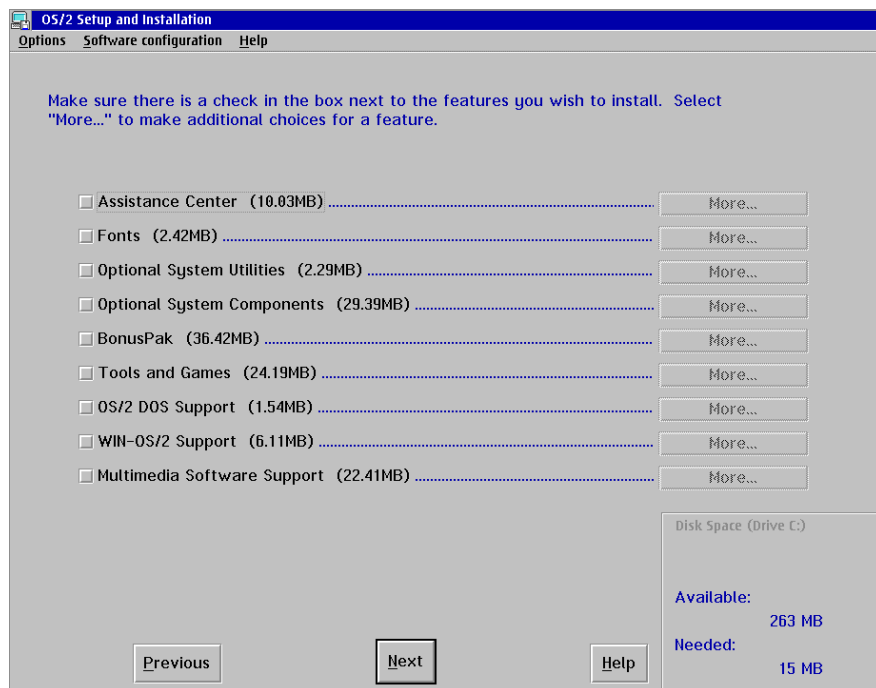
7. Click (select) the desired country name and click the *OK* button. The *System Configuration* dialog box appears again.
8. At the *Locale* area of the *System Configuration* dialog box, click the *Keyboard* icon. The *Keyboard* dialog box appears.



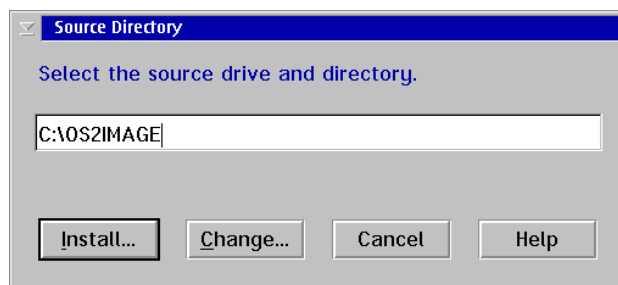
9. Click (select) the desired country name and click the *OK* button. The *System Configuration* dialog box appears again.
10. Click the *Next* button. The *System Configuration (cont'd)* dialog box appears.



11. Click the *Next* button. The *OS/2 Setup and Installation* dialog box appears.



12. Click the *Next* button to continue. The *Source Directory* dialog box appears.



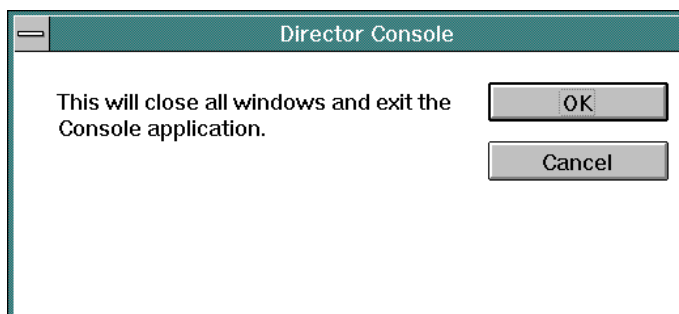
13. Click the *Install* button. A message box appears explaining that the OS/2 setup is completing the configuration change. After a few seconds, a message box appears telling you to shut down and restart the system.
14. Click the *OK* button. The *Install/Remove - Icon View* appears again.
15. Double-click the upper left corner of the *Install/Remove - Icon View*, *System Setup - Icon View*, and *OS/2 System - Icon View* to close the views and return to the OS/2 desktop.

16. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 8](#) on page 316), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
17. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Change Win-OS/2 Keyboard Settings

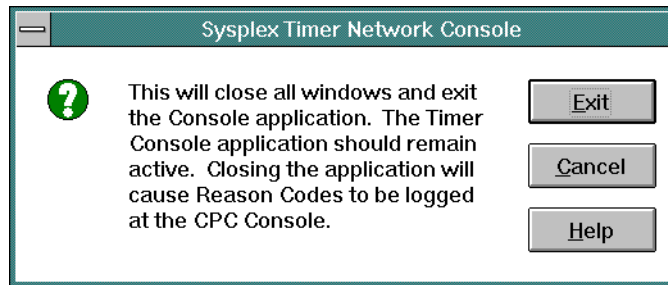
Perform this procedure to change the keyboard layout for Win-OS/2 windows and the OS/2 operating system. This allows keyboards to be customized for international users (outside of the United States).

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



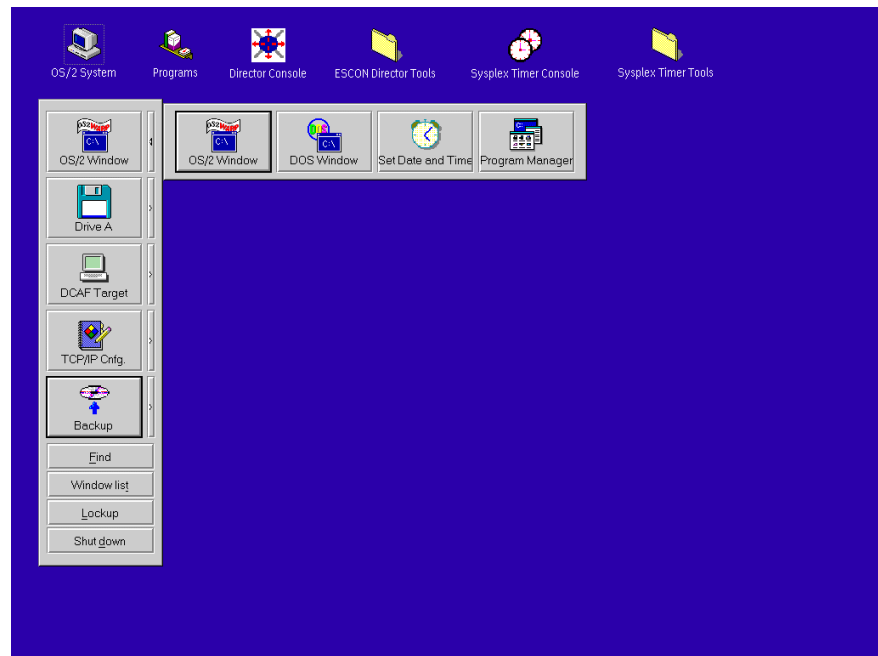
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

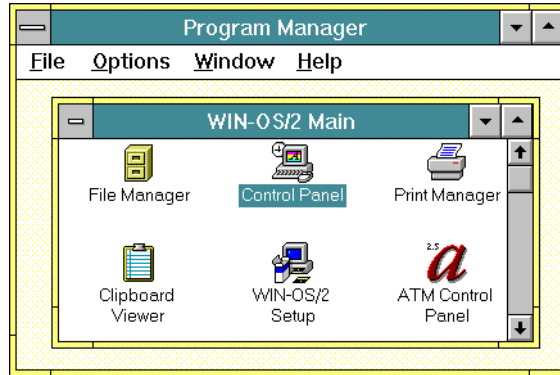


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

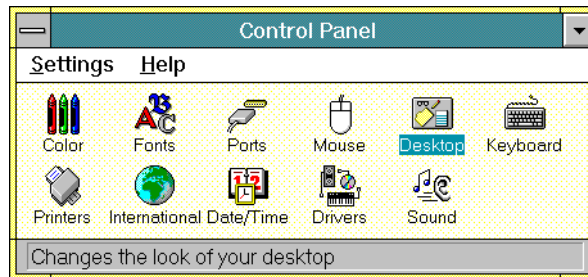
2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



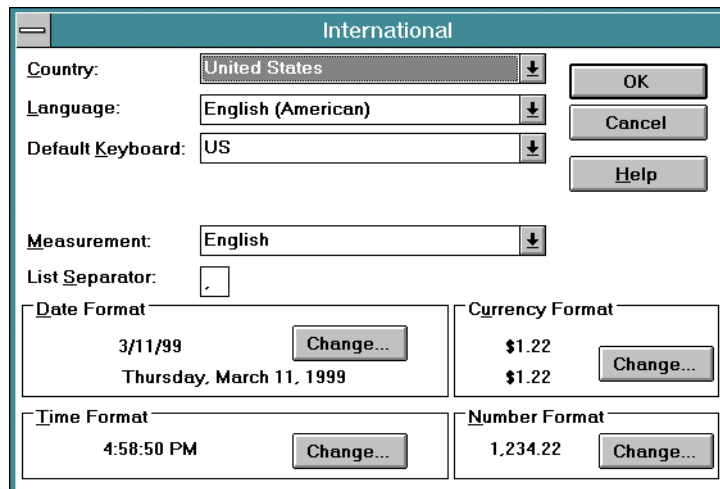
3. Click the *Program Manager* button. The *Program Manager* window appears.



4. At the *Win-OS/2 Main* window, double-click the *Control Panel* icon. The *Control Panel* window appears.



5. Double-click the *International* icon. The *International* dialog box appears.



6. Click the arrow button for the *Country* field and select the desired country from the drop-down list.

7. Click the arrow button for the *Language* field and select the desired language from the drop-down list.
8. Click the arrow button for the *Default Keyboard* field and select the desired keyboard layout from the drop-down list.
9. Double-click the top left corner of the *Control Panel* and *Program Manager* windows to close the windows.
10. When the *Exit Win-OS/2* dialog box appears, click the *OK* button to exit Win-OS/2, close the dialog box, and return to the OS/2 desktop.
11. Close the *OS/2 Window* drawer by clicking the drawer arrow.
12. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 8](#) on page 316), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
13. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Token Ring Adapter IP Address and Subnet Mask

The default IP address for the Console Token Ring adapter card is 1.1.1.1, and the default subnet mask is 255.0.0.0. If you wish to change either or both these values, obtain a unique Console IP address or subnet mask from the LAN administrator.

The IP address must be in the form *nnn.nnn.nnn.nnn*, where *nnn* is a decimal byte in the range 0 through 255. The IP address may not be all zeros or all 255s.

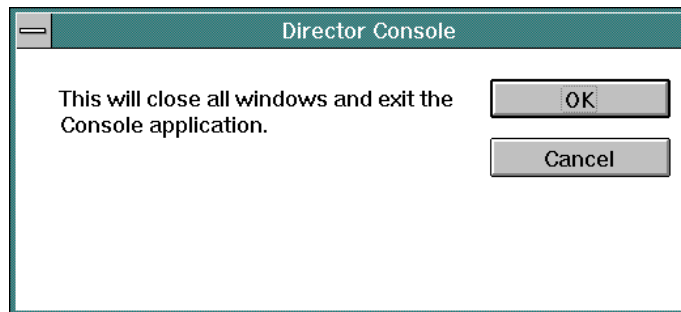
Change default IP address and subnet mask values if:

- The Console is not on an isolated Token Ring LAN.
- There is more than one Console on the Token Ring LAN.

- The subnet mask does not conform to the network to which the Console is connected.
- The IP address conflicts with the address of another device on the ring or does not conform to the LAN addressing scheme.
- The IP address does not conform to the LAN addressing scheme.

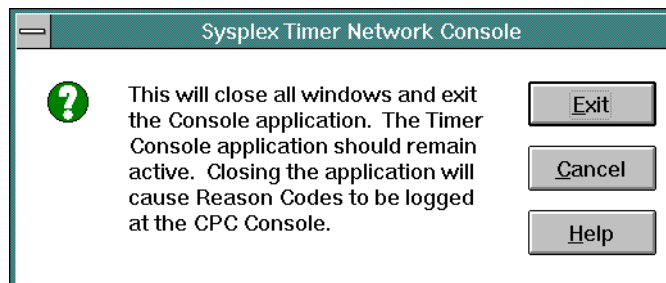
Perform the following procedure to display and change the Director or Sysplex Timer Console's IP address and subnet mask.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



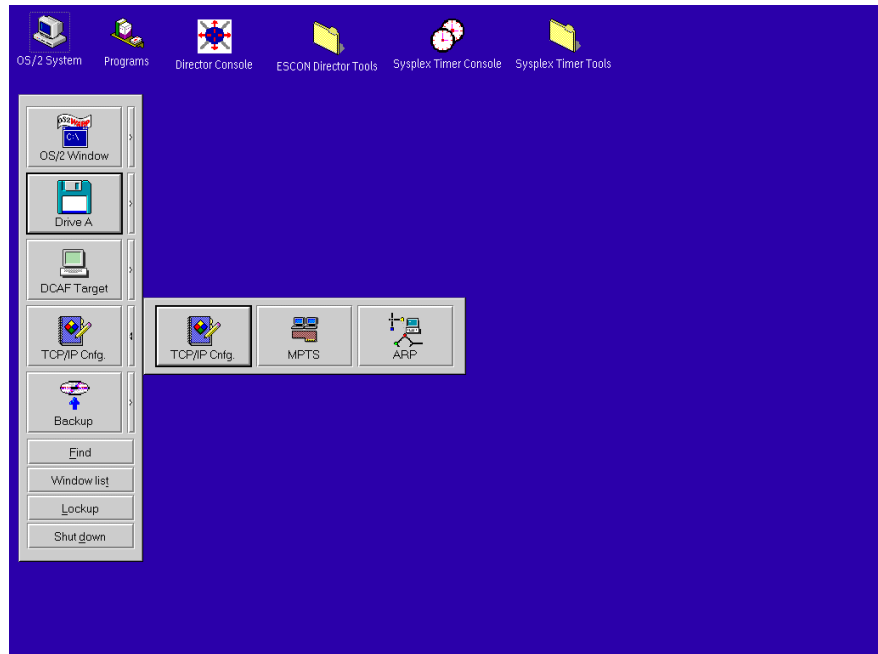
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

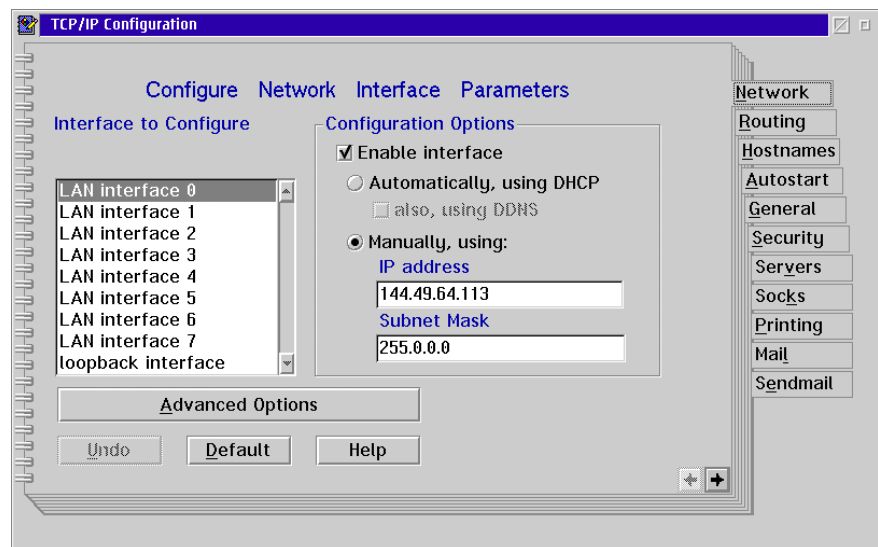


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

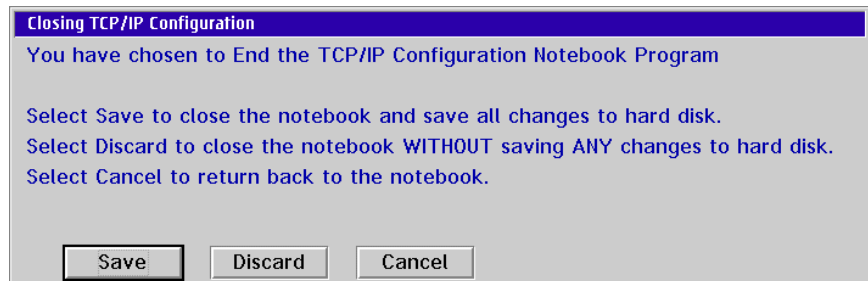
2. At the OS/2 desktop, click the *TCP/IP Cnfg.* drawer arrow on the launch pad to open the drawer.



3. Click the *TCP/IP Cnfg.* button. The *TCP/IP Configuration* notebook appears with the *Network* page open.



4. To change the IP address, click in the *IP Address* field. Type the new IP address as necessary. Move within the field by using the left and right arrow keys (← and →). Use the **Backspace** key to delete characters.
5. To change the subnet mask, click in the *Subnet Mask* field. Type the new subnet mask as necessary. Move within the field by using the left and right arrow keys (← and →). Use the **Backspace** key to delete characters.
6. Close the *TCP/IP Configuration* notebook by double-clicking the upper left corner of the notebook. The *Closing TCP/IP Configuration* dialog box appears.

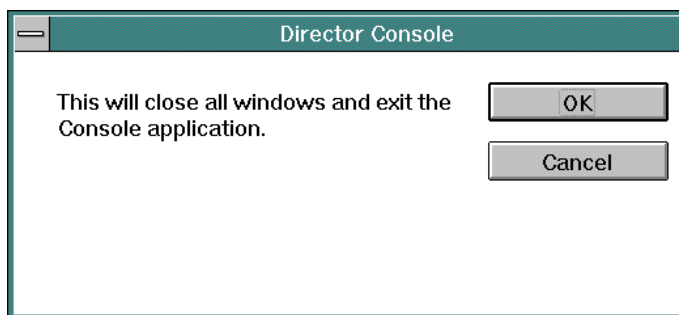


7. Click the *Save* button. The OS/2 desktop appears.
8. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
9. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 8](#) on page 316), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
10. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Token Ring Adapter MAC Address

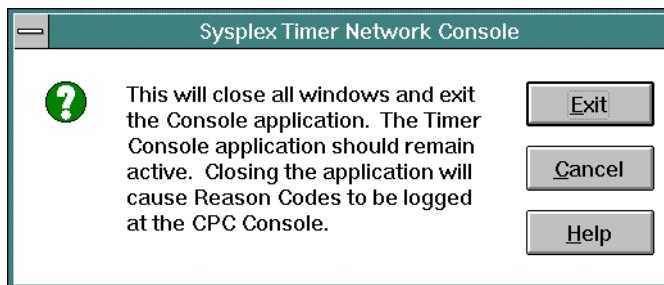
Change the Console Token Ring adapter's Media Access Control (MAC) address if the address does not conform to the locally-administered LAN addressing scheme. Perform the following procedure to display and change the Director or Sysplex Timer Console's MAC address.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to close the application.
 - If the Director Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.



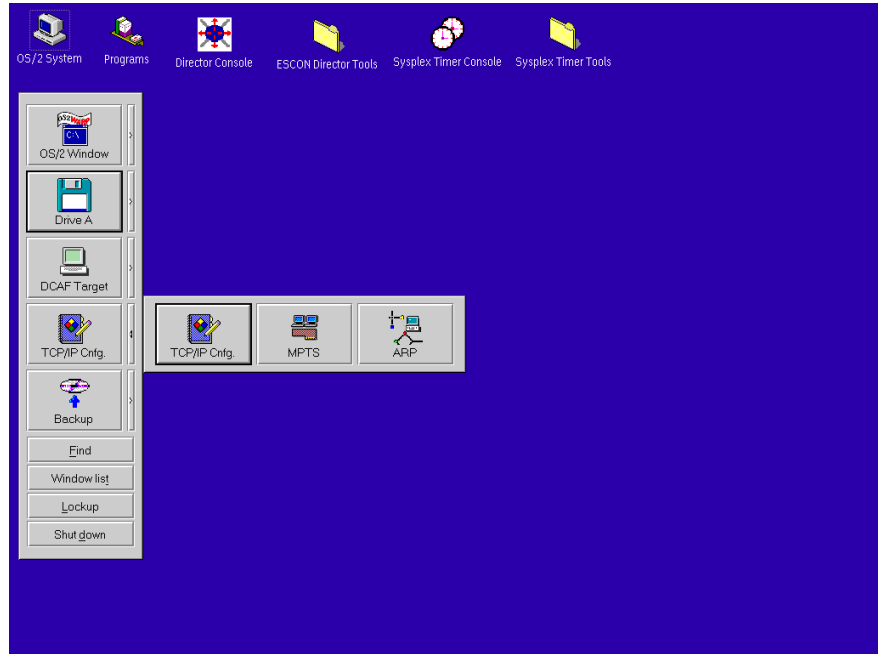
Click the *OK* button to close the dialog box. The OS/2 desktop appears. The Director continues to operate normally after exiting the Console application.

- If the Sysplex Timer Console application is open, select the *Exit* option from the *File* menu. The following dialog box appears.

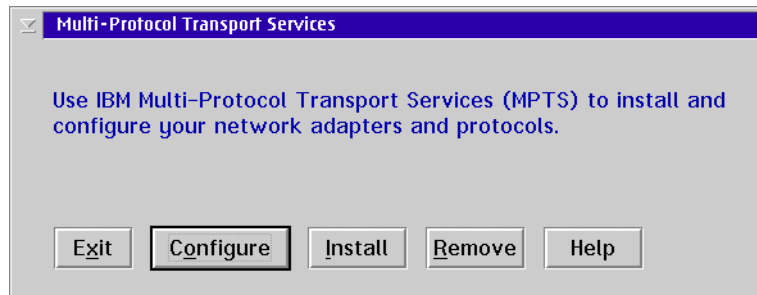


Click the *Exit* button to close the dialog box. The OS/2 desktop appears. The Timer network continues to operate normally after exiting the Console application.

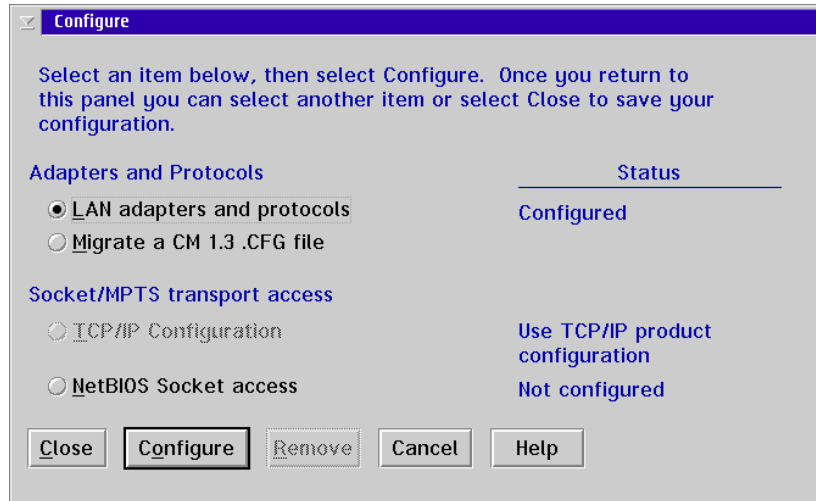
2. At the OS/2 desktop, click the *TCP/IP Cnfg.* drawer arrow on the launch pad to open the drawer.



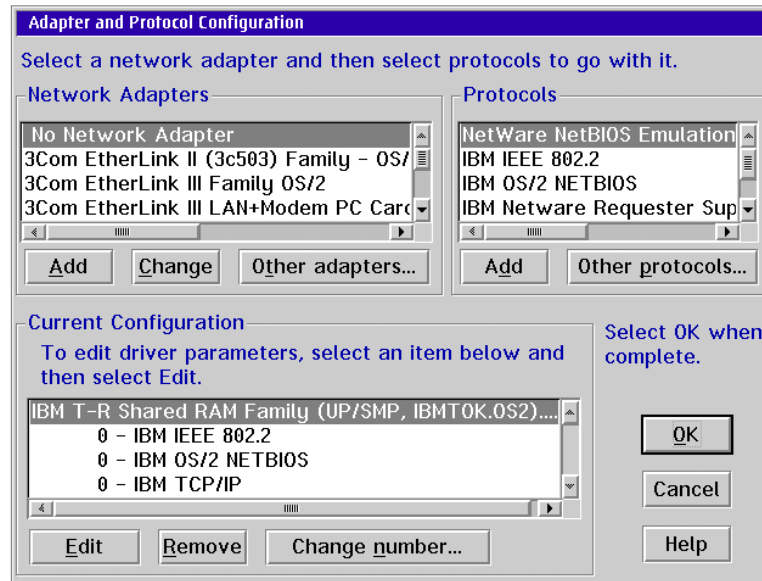
3. Click the *MPTS* button. An IBM logo dialog box appears briefly, then the *Multi-Protocol Transport Services* dialog box appears.



4. Click the *Configure* button. The *Configure* dialog box appears.



5. Ensure the *LAN adapters and protocols* radio button is selected and click the *Configure* button. The *Adapter and Protocol Configuration* dialog box appears.



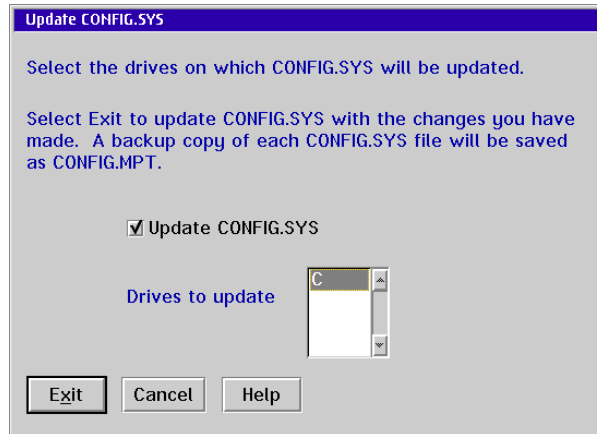
6. Use the scrolling arrows to scroll through the *Current Configuration* list box. Click (select) the *IBM T-R Shared RAM Family*. selection.
7. Click the *Edit* button. The *Parameters for IBM T-R Shared RAM Family* dialog box appears containing parameters for the Token Ring adapter.

The current MAC address appears in the *Network adapter address* field if a user has previously configured the MAC address. Otherwise the field is blank.

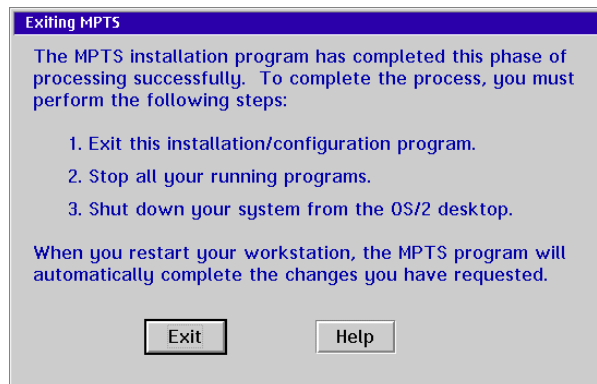
Parameter	Value
Adapter assignment	
Network adapter address	
Shared RAM address	
Maximum number of queued transmits	6
Number of receive buffers	2
Receive buffer size	1160
Number of transmit buffers	1
Transmit buffer size	4400
Full-Duplex	
Shallow Mode	
Receive Look Ahead	
Enable bridge	NO
Bridge transmit control ram	

Buttons: OK, Range, Cancel, Help

8. To change the MAC address, click in the *Network adapter address* field. Type the new MAC address as necessary. Move within the field by using the left and right arrow keys (← and →). Use the **Backspace** key to delete characters.
9. Click the *OK* button. The *Adapter and Protocol Configuration* dialog box reappears.
10. Click the *OK* button. The *Configure* dialog box reappears.
11. Click the *Close* button to save the changes. The *Multi-Protocol Transport Services* dialog box reappears.
12. Click the *Exit* button. The *Update CONFIG.SYS* dialog box appears. Ensure a **C** appears in the *Drives to update* field.



13. Click the *Exit* button. A *CONFIG.SYS Updated* dialog box appears explaining the **CONFIG.SYS** file was successfully updated.
14. Click the *OK* button. The *Exiting MPTS* dialog box appears.



15. Click the *Exit* button to return to the OS/2 desktop.
16. Close the *TCP/IP Cnfg.* drawer by clicking the drawer arrow.
17. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 8](#) on page 316), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.

18. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Set or Change Default Printer

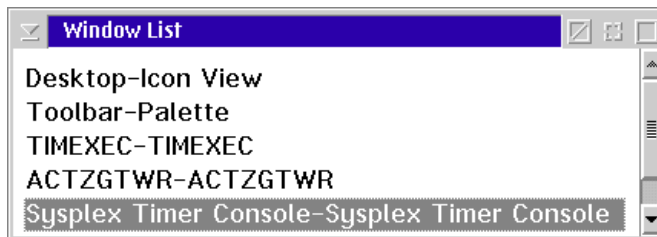
Perform the following procedure to set or change the default printer for the Director or Sysplex Timer Console.

1. If the Director or Sysplex Timer Console application is open, perform one of the following steps to transfer to the OS/2 desktop.
 - If the Director Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* window or any active matrix window. The *Window List* appears.



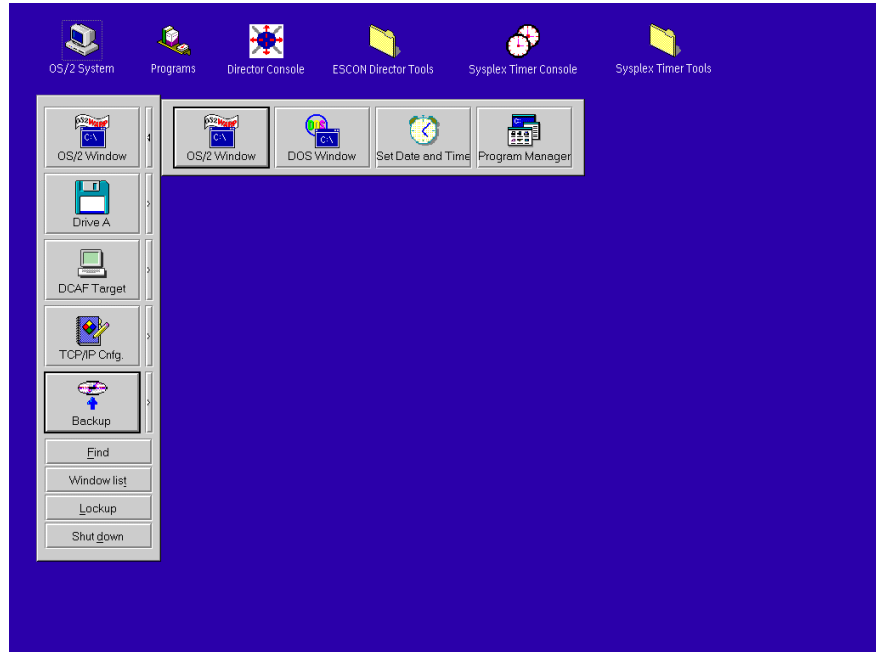
Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

- If the Sysplex Timer Console application is open, press the **Ctrl** and **Esc** keys from the *Startup* or *Sysplex Timer Network Console* window. The *Window List* appears.

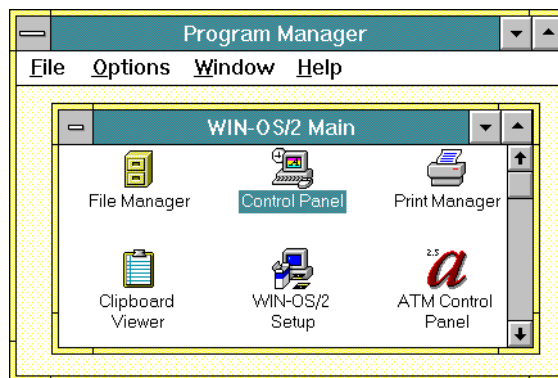


Double-click the *Desktop-Icon View* selection. The OS/2 desktop appears.

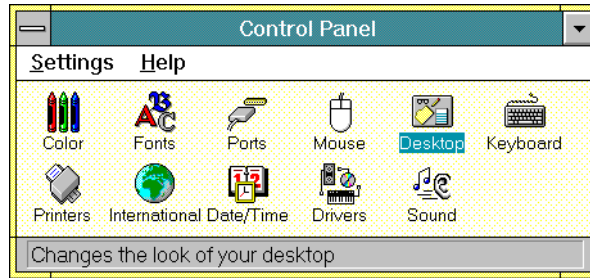
2. At the OS/2 desktop, click the *OS/2 Window* drawer arrow on the launch pad to open the drawer.



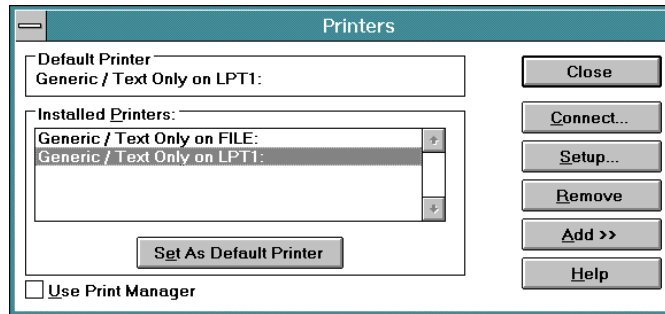
3. Click the *Program Manager* button. The *Program Manager* window appears.



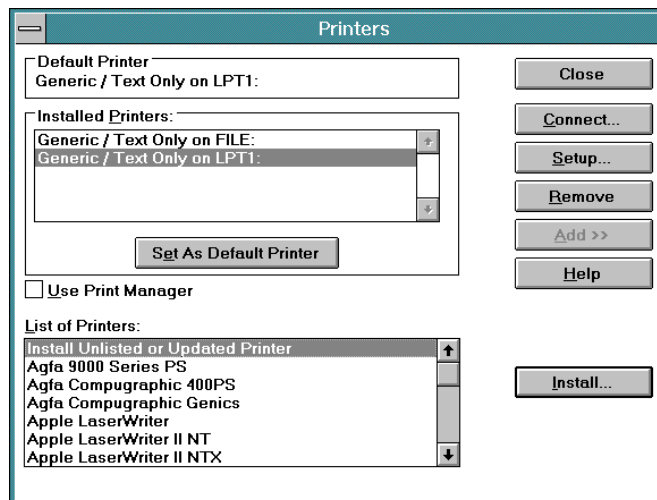
4. At the *Win-OS/2 Main* window, double-click the *Control Panel* icon. The *Control Panel* window appears.



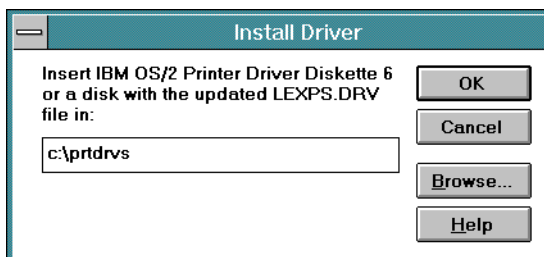
5. Double-click the *Printers* icon. The *Printers* dialog box appears.



6. Click (select) a driver displayed in the *Installed Printers* field and click the *Set as Default Printer* button.
7. To add a driver not listed in the *Installed Printers* field, perform the following:
 - a. Click the *Add* button. The *Printers* dialog box reappears with a list of available printers.



- b. Scroll through the list of printers and select the desired printer.
- c. Click the *Install* button to display the *Install Driver* dialog box.



- d. Type **C:\prtdrv** and click the *OK* button. The driver loads and appears under the list of installed printers in the *Printers* dialog box.
8. Close all open windows by double-clicking the upper left corner of each window. When the *Exit Win-OS/2* dialog box appears, click the *OK* button to exit Win-OS/2, close the dialog box, and return to the OS/2 desktop.
 9. Close the *OS/2 Window* drawer by clicking the drawer arrow.
 10. Perform one of the following:
 - If this is the final procedure performed to customize the operating environment, shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 - If you are performing other customization tasks (refer to [Table 8](#) on page 316), perform the tasks and shut down and restart the Console. For instructions, refer to [“Shut Down and Restart the OS/2 Operating System and Console”](#) on page 26.
 11. At the OS/2 desktop, perform one of the following steps to start the Director Console or Sysplex Timer Console application.
 - To start the Director Console application, double-click the *Director Console* icon. The *Startup* window appears when the Console application is operational. It may take up to 30 seconds for the Console application to open.
 - To start the Sysplex Timer Console application, double-click the *Timer Console* icon. The *Startup* window appears when the Console application is operational.

Glossary

This glossary includes terms and definitions from:

- The *IBM Dictionary of Computing* (ZC20-1699).
- The *American National Standard Dictionary for Information Systems* (ANSI X3.172-1990), copyright 1990 by the American National Standards Institute (ANSI). Copies can be purchased from the American National Standards Institute, 1430 Broadway, New York, New York 10018. Definitions from this text are identified by the symbol (A).
- *ANSI/EIA Standard - 440A: Fiber Optic Terminology*, copyright 1989 by the Electronic Industries Association (EIA). Copies can be purchased from the Electronic Industries Association, 2001 Pennsylvania Avenue N.W., Washington, D.C. 20006. Definitions from this text are identified by the symbol (E).
- The *Information Technology Vocabulary*, developed by Subcommittee 1 (SC1), Joint Technical Committee 1 (JTC1), of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). Definitions of published parts of this vocabulary are identified by the symbol (I). Definitions taken from draft international standards, committee drafts, and working papers developed by ISO/IEC SC1/JTC1 are identified by the symbol (T), indicating that final agreement has not been reached among the participating national bodies of SC1.

The following cross references are used in this glossary:

- Contrast with** - Refers to a term with an opposite or substantively different meaning.
- See** - Refers the reader to multiple-word terms in which this term appears.
- See also** - Refers the reader to terms with a related, but not synonymous, meaning.
- Synonym for** - Indicates the term has the same meaning as a preferred term defined in the glossary.

A

ac. See *alternating current*. Contrast with *dc*.

accelerator. A short-cut keystroke method to perform a menu operation. Menu options may have accelerator keys listed to the right of the menu option. Use the accelerator to perform the menu option's function when no menu is selected for the window.

active configuration. In an ESCON or FICON environment, the Director configuration that is determined by the status of the connectivity attributes. Contrast with *saved configuration*.

adapter. (1) Hardware that provides transitional functions between multiple devices. (2) In a fiber-optic environment, the link hardware used to join different optical fiber connector types. Contrast with *coupler*.

address. (1) To refer to a device or an item of data by its address (*I*, *A*). (2) The location in a computer where data is stored. (3) In data communication, the unique code assigned to each device or workstation connected to a network. (4) The identifier of a location, source, or destination.

address name. See *port name*.

address resolution protocol (ARP). The protocol by which a host computer maintains a cache of address translations, allowing the physical address of the computer to be derived from the Internet address.

administrative password authorization. The level-one password authorization that allows access to a Director to perform administrative, maintenance, and operator functions. Contrast with *maintenance password authorization* and *operator password authorization*.

allowed connection. In a Director, the attribute that when set, establishes dynamic connectivity capability. Contrast with *prohibited connection*.

alternating current (ac). Electric current that reverses direction at regular sinusoidal intervals. Contrast with *direct current*.

American National Standard Code for Information Interchange (ASCII). A standard character set consisting of 7-bit coded characters (8-bit including parity check) used for information exchange between systems and equipment.

American National Standards Institute (ANSI). A national organization consisting of producers, consumers, and general interest groups that establishes procedures by which accredited organizations create and maintain industry standards in the United States (*A*).

ANSI. See *American National Standards Institute*.

AOC/MVS. See *Automated Operations Control for MVS*.

application. (1) The use to which a data processing system is put, for example, a payroll application, an airline reservation application, or a network application. (2) A collection of software components used to perform specific types of work on a computer.

application-specific integrated circuit (ASIC). A circuit designed for a specific application or purpose, such as implementing the lower-layer Fibre Channel protocol (FC-0). ASICs differ from general-purpose devices such as memory chips or microprocessors.

AR. IBM parts list acronym for *As Required*. AR indicates the parts quantity is not the same for all machines.

ARP. See *address resolution protocol*.

ASCII. See *American National Standard Code for Information Interchange*.

ASIC. See *application-specific integrated circuit*.

attribute. The connection status of the address on a configuration matrix; allowed, blocked, dedicated, or prohibited.

Automated Operations Control for MVS (AOC/MVS). An IBM-licensed program that automates routine processor management tasks, including, shutdown, recovery, startup, and initialization procedures, and automates operator responses to messages. AOC/MVS functions are now integrated into SA OS/390.

B

backup diskette. A diskette that contains duplicate information from an original diskette. The backup diskette is used in case information on the original diskette is unintentionally changed or destroyed.

bit. Acronym for *binary digit*, the smallest unit of data in computing, with a value of zero or one. Abbreviated as lowercase *b*.

blocked. In a Director, the attribute that when set, removes the communication capability of a specific port. Contrast with *unblocked*.

bridge. (1) An attaching device that connects two LAN segments to allow the transfer of information from one LAN segment to the other. A bridge can connect the LAN segments directly by network adapters and software in a single device, or can connect network adapters in two devices through software and use of a telecommunication link between the two adapters. (2) A functional unit that connects two LANs that use the

same logical link control protocol, but may use different media access control protocols (*T*). Contrast with *router*.

British Thermal Unit (BTU). The quantity of heat required to raise the temperature of one pound of water by one degree Fahrenheit.

BTU. See *British Thermal Unit*.

button. On a graphical user interface, a virtual display element (a rectangle containing text) that is selected with an input device and programmed to operate as a function key (*T*).

byte. An 8-bit quantity that computers treat as a single unit, often called an octet or word. Abbreviated as uppercase *B*. See also *octet*.

C

cascade. Windows on a console cascade to show all open windows in a way that allows any window to be viewed by clicking its title (window is brought to the front). Cascaded windows are overlapped. To cascade windows, use the *Window* pull-down menu and select *Cascade*. Contrast with *Tile*.

CBY. Acronym for *channel operations running in byte mode* (ESCON channel attached to ESCON converter), and specifies the I/O operation mode for the channel path under the IOCP CHPID statement *Type* parameter. Contrast with *CVC*.

CD-ROM. See *compact disk read-only memory*.

cell. On the Director matrix window, a cell is the intersection point between a horizontal port address and a vertical port address. A selected cell is indicated by the cell cursor.

cell cursor. A white square on the Director's matrix window indicating the selected intersection cell. Attribute modifications that require two port addresses, such as prohibit or dedicate, are performed on the cell.

chained. In an ESCON environment, means that two Directors are physically attached.

channel. A system element that controls one channel path, and whose mode of operation depends on the type of hardware attached. Each channel controls an I/O interface between the channel control element and the attached control units.

channel-attached. (1) Pertaining to direct attachment of devices by data I/O channels to a computer. (2) Pertaining to devices attached to a control unit by cables, not telecommunication lines.

channel path (CHP). A single interface between a central processor and one or more control units, along which signals and data is sent to perform I/O requests.

channel path identifier (CHPID). In a channel subsystem, a value assigned to each channel path of the system that uniquely identifies the path.

channel subsystem (CSS). A collection of subchannels that direct the flow of information between I/O devices and main storage, relieve the processor of communication tasks, and perform path management functions.

CHP. See *channel path*.

CHPID. See *channel path identifier*.

Class 3 Fibre Channel service. Class 3 service duplicates the functions of a packet-switched network and allows multiple nodes to share links by multiplexing transmitted data. Class 3 service does not acknowledge data frame delivery. Class 3 service is supported by the 9032-005 Director.

CNC. Acronym for *ESCON channel-attached to ESCON-capable* device, and specifies the I/O operation mode for the channel path under the IOCP CHPID statement *Type* parameter.

column. Vertical arrangement of data. Contrast with *row*.

command. (1) A character string from an external source to a system that represents a request for system action. (2) A request from a terminal to perform an operation or execute a program. (3) A value sent through an I/O interface from a channel to a control unit that specifies the operation to be performed.

compact disk read-only memory (CD-ROM). High capacity read-only memory in the form of an optically read disk.

component. (1) Hardware or software that is part of a functional unit. (2) A functional part of an operating system; for example, the scheduler or supervisor.

concurrent maintenance. The ability to perform maintenance tasks, such as the removal and replacement of FRUs, while the Director is operating. In addition, fiber-optic cables can be connected or disconnected from ports while the Director is operating. See also *hot pluggable* and *nondisruptive installation*.

configuration matrix. A configuration matrix defines a Director's address configuration. The three matrix types are new matrix, saved matrix, and active matrix. Synonym for *matrix*.

connectivity attribute. The characteristic that determines port status for the Director. See *allowed connection*, *dedicated connection*, *prohibited connection*, *blocked*, and *unblocked*.

connectivity capability. (1) The capability that allows attachment of a device to a system without requiring physical reconfiguration of either the device or the interconnections. (2) The Director capability that allows logical manipulation of link connections to provide physical device attachment. See also *configuration matrix*, *connectivity control*, and *dynamic connection*.

connectivity control. In a Director, the method used to change port connectivity attributes and determine the communication capability of the link attached to the port.

connector. See *optical fiber connector*.

Console. The Director device used to perform administrative, maintenance, and operations tasks. Synonym for *display device* or *terminal*.

Console Audit log. A log that tracks and records Director Console operator activities, including changing passwords, adding or deleting LIC versions, adding or deleting Director definitions, and entering or exiting the application. Each log entry contains a description of the action, an action identifier, and the date and time the action occurred.

Console Error log. A log of abnormal errors that were encountered by the Director Console software during operations, but did not cause Console failure. For example, errors caused by insufficient PC memory are logged.

Console library. An information database for the Director, maintained by the Console application. The library is stored on the PC platform running the Console application, and contains logs, LIC versions, and saved configurations.

Control Processor (CTP) card. In the Director, the circuit card that provides the processor and associated logic. The card initializes hardware after power on. While in operation, the card supports the switch CUP, maintenance port, and operator panel, and supports port exception handling and error recovery. It also contains the fiber channel controller for I/O requirements.

control program. A computer program that schedules and supervises execution of programs in a computer system (*I*).

control unit. Hardware that controls the reading, writing, or display of data at one or more I/O units.

Control Unit Port (CUP). An internal Director port (on the CTP card and labelled *FE*) that communicates with channels to report error conditions and link initialization.

converter. In an ESCON environment, a device that allows attachment of parallel channel (bus and tag) I/O control units to ESCON channels.

coupler. In a fiber-optic environment, the link hardware used to join optical fiber connectors of the same type. Contrast with *adapter*.

CSS. See *channel subsystem*.

CTC. Acronym for an ESCON channel attached to another ESCON channel (*channel-to-channel*), and specifies the I/O mode of operation for the channel path under the IOCP CHPID statement *Type* parameter.

CTP. See *Control Processor card*.

CUP. See *Control Unit Port*.

CVC. Acronym for *channel operations running in block mode* (ESCON channel attached to ESCON converter), and specifies the I/O operation mode for the channel path under the IOCP CHPID statement *Type* parameter. Contrast with *CBY*.

D

DASD. See *direct access storage device*.

dB. See *decibel*.

dBm. Decibels referenced to one milliwatt. Zero dBm equals one milliwatt, with a logarithmic relationship as the value increases.

dc. See *direct current*. Contrast with *ac*.

DCAF. Acronym for IBM-licensed *Distributed Console Access Facility* software. Through DCAF, the Director Console is accessed and controlled by a remote PC.

decibel (dB). A standard unit used to express gain or loss of optical power, expressed as the ratio of input power to output power on a logarithmic basis.

dedicated connection. A connection between two Director ports not affected by information in the transmission frames. The connection restricts those ports from communicating with any other port, and can be established only as a result of actions performed by a host control program or at the Director Console. Contrast with *dynamic connection*.

default. Pertaining to an attribute, value, or option assumed by a system when none is specified (*l*).

destination. A point or location, such as a processor, Director, or Console, to which data is transmitted.

device. Mechanical, electrical, or electronic hardware with a specific purpose.

device number. In a channel subsystem, four hexadecimal digits that uniquely identify an I/O device.

device port (DVP) card. The Director's hardware interface for ESCON fiber-optic media. Each port card contains either LED or XDF laser port interfaces. See also *port card*.

dialog box. A pop-up window on a console with information messages or fields to be modified or completed with desired options.

diagnostics. (1) The process of investigating the cause or nature of a problem in a product or system. (2) Modules or tests used by computer users and service personnel to diagnose hardware problems.

direct access storage device (DASD). A storage device that provides direct access to data, and in which access time is independent of data location.

direct current (dc). Electric current that continuously flows in one direction. Contrast with *alternating current*.

Director. A device that provides dynamic switching of fiber-optic connections between ESCON channel paths and control units, and FICON channel paths and ESCON control units. The Director also extends the operational distance between processors (ESCON or FICON) and ESCON control units.

Director Audit log. A log containing summaries of actions taken by the Console operator or the host-based software, recording an audit trail of changes affecting the Director. For example, prohibiting or dedicating an address intersection is recorded (with the date and time).

Director Event log. A log of abnormal hardware or software incidents that are reported by the Director during operations. For example, a CTP card failure is logged as a hardware incident. A corrupt configuration file is logged as a software incident.

Director LIN log. A log of abnormal link incidents reported by the Director during operations. For example, a loss of synchronization condition or a bit error rate threshold exceeded condition is reported as a link incident.

disconnected. In a Director, the attribute that when set, disables a dedicated connection. Contrast with *connected*.

diskette. A thin magnetic disk enclosed in a plastic jacket, which is removable from a computer and is used to store and transport data.

diskette drive. The hardware mechanism by which a computer reads data from and writes data to removable diskettes.

display device. A computer peripheral that presents information on a screen. A synonym for *Console* or *terminal*.

distribution panel. In an ESCON environment, a panel that provides a central location to attach trunk and jumper cables, and is mounted in a rack, wiring closet, or on a wall.

DRAM. See *dynamic random access memory*. See also *RAM* and contrast with *SRAM*.

duplex. In data communication, pertaining to transmission in which data is sent and received at the same time. Contrast with *half-duplex* and *simplex*.

duplex connector. An optical fiber component that terminates jumper cable fibers in one housing and provides physical keying for attachment to a duplex receptacle. See also *Fibre Channel Standard connector*, *multimode connector*, and *subscriber connector*.

duplex receptacle. A fixed or stationary optical fiber component that provides a keyed attachment method for a duplex connector.

DVP card. See *device port card*.

dynamic connection. In a Director, a connection between two ports established by the Director that appears as one continuous link when active. The duration of the connection depends on the protocol defined for the frames transmitted and on the state of the ports. Contrast with *dedicated connection*.

dynamic connectivity. The Director capability that allows connections to be enabled or disabled at any time.

dynamic random access memory (DRAM). Random access memory that resides in a cell comprised of a capacitor and transistor. DRAM data deteriorates (i.e. is dynamic) unless the capacitor is periodically recharged by the controlling microprocessor. DRAM is slow, but relatively inexpensive. See *random access memory* and contrast with *static random access memory*.

E

EAF. See *enhanced availability feature*.

EBCDIC. See *extended binary-coded decimal interchange code*.

EC. See *engineering change*.

EIA. See *Electronic Industries Association*. See also *TIA*.

electromagnetic interference (EMI). Refers to undesirable electromagnetic emissions generated by solar activity, lightning, and electronic devices. The emissions interfere with or degrade the performance of another electronic device.

Electronic Industries Association (EIA).

The governing body that publishes recommended standards for physical devices and associated interfaces. For example, RS-232 is the EIA standard that defines computer serial port connectivity. See also *TIA*.

electrostatic discharge (ESD). The undesirable discharge of static electricity that can damage or degrade electronic circuitry.

ELP. See *establish logical path*.

EMI. See *electromagnetic interference*.

engineering change (EC). A change to the design, construction, or operation of a hardware or software system that improves the operation, reliability, or serviceability of the system. The EC process involves submission of a formal proposal that is reviewed and authorized. Implementation of an authorized EC is carefully tracked and controlled.

Enhanced Availability Feature (EAF).

Enhanced availability features are backup FRUs that are ordered and installed in the Director to provide redundancy and reduce disruption in case of failure.

Enterprise Systems Architecture (ESA). A computer architecture introduced by IBM in 1988 as ESA/370. The architecture added access registers to improve virtual memory management and increase storage from 2 gigabytes to 16 terabytes. The architecture was enhanced with the introduction of ESA/390 in 1990.

Enterprise Systems Connection (ESCON).

An IBM architecture, technology, and set of products and services introduced in 1990 that provides a dynamically connected environment using fiber-optic cables as the data transmission medium.

erase. To remove electrically or magnetically stored data, leaving the space where the data was stored unoccupied.

EREP. Acronym for IBM's *Environmental Record Editing and Printing* software.

Through EREP, data contained in a system recorder file is made available for maintenance analysis.

error message. An indication an error is detected. See also *information message* and *warning message*.

ESA. See *Enterprise Systems Architecture*.

ESCON. See *Enterprise Systems Connection*.

ESCON channel. A data communications channel that uses ESCON technology with fiber-optic cables as the transmission medium, rather than copper bus and tag cables. Contrast with *FICON channel* and *parallel channel*.

ESCON Converter. See *converter*.

ESCON Manager. An IBM-licensed program that provides host control and intersystem communication with the Director connectivity operations. ESCON Manager was discontinued in 1998 and its functions are now integrated into SA OS/390.

ESD. See *electrostatic discharge*.

establish logical path (ELP). An ESCON protocol command issued from host to establish a connection between host and port or between two ports on a Director. The command frame contains a destination and source address.

event code. A multi-digit code that displays at the operator panel or Director Event log. The code is used by maintenance personnel to determine corrective actions to be taken.

extended binary-coded decimal interchange code (EBCDIC). A coded character set comprised of 256 8-bit characters.

Extended Distance Feature (XDF). A means to extend the propagation distance of a fiber-optic signal. Essentially a singlemode laser ESCON port.

F

fabric. A network of one or more switch elements that can transmit, route, and receive data using the Fibre Channel protocol. A fabric can support multiple, concurrent Fibre Channel connections.

fabric port (F_port). A port on a switch to which N_ports are directly connected. Contrast with *node port*. See also *thin fabric port*.

FC-0. The Fibre Channel layer that describes the physical link between two ports, including the transmission media, transmitter and receiver circuitry, and interfaces.

FC-1. The Fibre Channel layer that describes the IBM-patented 8B/10B transmission code that provides DC balance in the transmitted bit stream, separates control bytes from data bytes (for simplification), and detects transmit and receive errors.

FC-2. The Fibre Channel layer that specifies the signaling protocol, rules, and mechanisms required to transfer data blocks. The FC-2 layer is very complex, and provides different classes of service, packetization, sequencing, error detection, segmentation, and reassembly of transmitted data.

FC-3. The Fibre Channel layer that provides a set of services common across multiple N_ports of a Fibre Channel node. The services are not commonly used and are essentially reserved for Fibre Channel architecture expansion.

FC-4. The Fibre Channel layer that provides mapping of Fibre Channel capabilities to upper level protocols, including IP and SCSI.

FC-PH. See *Fibre Channel Physical and Signaling Interface*.

FCS. See *Fibre Channel Standard*.

FCS Connector. See *Fibre Channel Standard connector*.

FCV. (1) Acronym for *Fibre Channel Converter* port card, the Director's hardware interface for FICON fiber-optic media. See also *port card*. (2) Acronym for *FICON channel-attached converted to ESCON-capable* device, and specifies the I/O operation mode for the channel path (using an FCV port card) under the IOCP CHPID statement *Type* parameter.

feature. A part of an IBM-licensed product that may be ordered separately or as an option by the customer.

fiber. See *optical fiber*.

fiber-optic cable. See *optical cable*.

fiber optics. The branch of optical technology concerned with the transmission of radiant power through fibers of transparent materials such as glass, fused silica, or plastic (*E*). Telecommunication applications of fiber optics use optical fibers. A single fiber or a nonspatially aligned fiber bundle is used for each information channel. Such fibers are often called optical fibers to differentiate them from fibers that are used in noncommunication applications.

Fiber Transport Services (FTS). An IBM service that provides installation of fiber-optic cable trunk lines and strategically-located distribution panels in a data center. Optically-connected equipment can then be installed with either short jumper cables, harnesses, or factory-terminated trunk cables.

Fibre Channel Converter (FCV) port card. The Director's hardware interface for FICON fiber-optic media. See also *port card*.

Fibre Channel Standard (FCS). ANSI standard that provides a common, efficient data transport system that supports multiple protocols. The architecture integrates both channel and network technologies, and provides active, intelligent interconnection among devices. All data transmission is isolated from the control protocol, allowing use of point-to-point, arbitrated loop, or switched fabric topologies to meet the needs of an application.

Fibre Channel Standard (FCS) connector. A connector that terminates fiber-optic jumper cables in a pair of connected housings (one transmit and one receive), and provides physical keying for attachment to an SC receptacle. An FCS connector is synonymous with an SC connector. An FCS connector can attach to an FCV port card or XDF Laser port card. See also *multimode connector* and *subscriber connector*.

Fibre Channel Physical and Signaling Interface (FC-PH). The ANSI document that specifies the FC-0 (physical signaling), FC-1 (data encoding), and FC-2 (frame construct) layers of the Fibre Channel protocol.

Fibre Connection (FICON). An IBM set of products and services introduced in 1999 that is based on the Fibre Channel Standard. FICON technology uses fiber-optic cables as the data transmission medium, and significantly improves I/O performance (including

one Gbps bidirectional data transfer). FICON is designed to coexist with ESCON channels, and FICON-to-ESCON control unit connections are supported.

FICON. See *Fibre Connection*.

FICON channel. A data communications channel that uses FICON technology (rather than ESCON technology) with fiber-optic cables as the transmission medium. Contrast with *ESCON channel* and *parallel channel*.

Field Replaceable Unit (FRU). An assembly that is removed and replaced in its entirety when any one of its components fails. A logic card is an example of a FRU.

FLASH memory. Reusable nonvolatile memory that is organized as segments for writing, and bytes or words for reading. FLASH memory is faster than read-only memory, but slower than random access memory.

FLOGI. Acronym for the fabric login command. The command establishes the initial operating parameters and topology for a fabric. The command is accepted by an *F_port* or *thin F_port*.

F_port. See *fabric port*. See also *thin F_port*.

FRU. See *Field Replaceable Unit*.

FTS. See *Fiber Transport Services*.

G

GB. See *gigabyte*.

Gbps. Acronym for *gigabits per second*.

GHz. See *gigahertz*.

gigabyte (GB). A unit of measure for data storage, equal to 1,073,741, 824 bytes. Generally approximated as one billion bytes.

gigahertz (GHz). One billion cycles per second (hertz).

GND. Acronym for *ground* (e.g. that portion of a conducting circuit connected to the earth).

graphic display. The Director's configuration matrix may be displayed in a graphic mode on the Console. This mode shows all connection types as unique graphic symbols in the matrix region of the window. When graphic display mode is disabled, only prohibited connections are displayed.

graphical user interface (GUI). A GUI is a visually oriented interface where the user interacts with representations of real-world objects displayed on the computer screen. Interactions with such objects produce actions that are intuitive to the user.

GUI. See *graphical user interface*.

H

half-duplex. In data communication, pertaining to transmission in only one direction at a time. Contrast with *duplex*, synonym for *simplex*.

hardware. Physical equipment (Director or Console) as opposed to computer programs, procedures, rules, and associated documentation. Contrast with *software*.

Hardware Audit log. A log that records all configuration changes for Director FRUs. Each entry contains a FRU name, position, status, part number, serial number, and date and time a change was detected.

Hardware Configuration Definition (HCD).

A program that defines all available I/O devices and channel paths to a processor system and the MVS operating system. This program replaced the Input Output Configuration and MVS Configuration Programs starting with MVS/ESA Version 4.0.

hardware information block (HIB). A Director status register that defines if a port is installed, has a dynamic connection, has a link failure, is blocked, or is offline. The MXC reads the register in response for connection requests to the port.

HCD. See *Hardware Configuration Definition*.

Hertz (Hz). A unit of frequency equal to one cycle per second.

hexadecimal. A numbering system with base of sixteen; valid numbers use the numbers 0 through 9 and characters A through F, where A represents 10 and F represents 15.

HIB. See *hardware information block*.

host-based software. Pertains to ESCON Manager, the software used in configuring and managing multiple Directors on the network.

host processor. (1) A processor that controls all or part of a user application network (*T*). (2) In a network, the processing unit in which resides the access method for the network.

hot pluggable. Pertains to a FRU that is removed and replaced from a device while the device is powered on and operational. See also *concurrent maintenance* and *nondisruptive installation*.

Hz. See *Hertz*.

ID. See *identifier*.

identifier (ID). (1) One or more characters used to identify or name a data element and possibly to indicate certain properties of that data element (*T*). (2) A sequence of bits or characters that identifies a program, device, or system to another program, device, or system. (3) A user-defined symbolic name of 24 characters or less that identifies a Director. See also *password identifier* and *port name*.

IEEE. See *Institute of Electrical and Electronics Engineers*.

IML. See *Initial Machine Load*.

information message. A message informing a user that a function is performing normally or has completed normally. User acknowledgment may not be required, depending on the message. See also *error message* and *warning message*.

Initial Machine Load (IML). Process of loading the operating system and applications software from secondary storage to a central processor after machine power-on. Sometimes referred to as booting the machine.

Initial Program Load (IPL). (1) Initialization procedure causing an operating system to commence operation. (2) Process by which a configuration image is loaded into storage at the beginning of a work day or after a system malfunction. (3) Process of loading system programs and preparing a system to run jobs.

Initial Program Load (IPL) file. Information stored in Director's nonvolatile memory that contains default connection configurations. The Director loads the file for operation when powered on. The file can be modified or another file can be specified as the IPL file.

input/output (I/O). (1) Pertaining to a device whose parts can perform an input process and an output process at the same time (*I*). (2) Pertaining to a functional unit or channel involved in an input process, output process, or both, concurrently or not, and to the data involved in such a process. (3) Pertaining to input, output, or both.

input/output configuration. A collection of channel paths, control units, and I/O devices that attaches to a processor.

input/output configuration data set (IOCDS). A data set that contains an I/O configuration definition built by the IOCP.

Input/Output Configuration Program (IOCP). A program that defines all available I/O devices and channel paths to a processor system. Replaced by the Hardware Configuration Definition Program starting with MVS/ESA Version 4.0.

input/output controller (IOC). A functional unit in a data processing system that controls one or more devices or units of peripheral equipment.

Institute of Electrical and Electronics Engineers (IEEE). A technical professional society that promotes the development and application of electrotechnology and allied sciences.

interface. (1) A shared boundary between two functional units, defined by functional, signal, or other characteristics. The concept includes the specification of the connection of two devices having different functions (*T*). (2) Hardware, software, or both, that link systems, programs, or devices.

Internet Protocol (IP). Network layer for the TCP/IP protocol used on Ethernet networks. IP provides packet routing, fragmentation, and reassembly through the data link layer.

I/O. See *input/output*.

IOC. See *input/output controller*.

IOCDs. See *input/output configuration data set*.

IOCP. See *Input/Output Configuration Program*.

IP. See *Internet Protocol*.

IP address. A unique string of numbers that identifies a device on the Internet. The address consists of four groups of numbers delimited by periods (dotted quad). All resources on the Internet must have an IP address.

IPL. See *Initial Program Load*.

ISA. See *Industry Standard Architecture*.

ITE. Acronym for *Information Technology Equipment*.

J

jack. A hardware-connecting device to which the wire or wires of a circuit are attached, and that is arranged for the insertion of a plug.

jumper cable. In a fiber-optic environment, a cable having two conductors that provide a physical connection between two devices, or between a device and a distribution panel. Contrast with *trunk cable*.

K

kB. See *kilobyte*.

kilobyte (kB). A unit of measure for data storage, equal to 1,024 bytes. Generally approximated as one thousand bytes.

L

LAN. See *Local Area Network*.

LAN Adapter Installation and Diagnostics (LANAID). An IBM-licensed installation tool providing a graphical and command-line interface for manual installation and configuration of a Token Ring LAN or LAN devices.

LAN Adapter and Protocol Support (LAPS). IBM - licensed software that manages and controls network adapter cards in a device, including the device drivers for those cards as well as the protocols that are used to communicate with other devices on the network.

LANAID. See *LAN Adapter Installation and Diagnostics*.

LAPS. See *LAN Adapter and Protocol Support*.

laser. Acronym for *Light Amplification by Stimulated Emission of Radiation*. A device that produces optical radiation using a population inversion to provide amplification and an optical resonant cavity to provide positive feedback. Laser radiation is highly coherent temporally, or spatially, or both (*E*).

LCD. See *liquid crystal display*.

LED. See *light-emitting diode*.

LIC. See *Licensed Internal Code*.

Licensed Internal Code (LIC). Software provided for use on IBM machines and licensed to customers under the terms of IBM's customer agreement.

light-emitting diode (LED). A semiconductor chip that emits visible or infrared light when activated. Often used as an indicator light on computer hardware.

LIN. See *link incident*.

link. In a fiber-optic environment, the physical connection and transmission medium between an optical transmitter and receiver. A link consists of two conductors, one for sending and the other for receiving, thereby providing a duplex communication path.

link address. In an ESCON environment, an address assigned at initialization that identifies a channel or control unit and allows it to send and receive transmission frames and perform I/O operations. See also *port address*.

link incident. A failure associated with a link, rather than a hardware or software failure associated with the Director. Examples of link incidents include an invalid sequence, sequence timeout, bit error rate threshold exceeded, loss of signal or synchronization, or a not-operational sequence recognized.

LMA Code. See *Loader/Monitor Area Code*.

Loader/Monitor Area (LMA) Code. Code that resides in the loader/monitor area of the CTP card, and provides input/output functions (through a maintenance port, operator panel, or Console), terminal window command functions, power-on diagnostics, FRU power-on hours, data read/write control, and LMA/LIC download functions.

local. Synonym for channel-attached.

Local Area Network (LAN). A computer network in a localized geographical area (e.g. a building or campus), and whose communications technology provides a high-bandwidth medium to which many nodes are connected.

log. (1) To record or print all messages on a system printer. (2) A record or compilation of system events that have occurred.

logical partition (LPAR). A processor hardware subset defined to support the operation of a system control program, and can be used without affecting any of the applications in another partition.

logical switch number (LSN). A two-digit number used by the IOCP to identify a Director.

LPAR. See *logical partition*.

LSN. See *logical switch number*.

M

MAC. See *Media Access Control*.

MAC Address. The hardware address of a device connected to a shared network.

Maintenance Agreement Qualification (MAQ). After a period of equipment service by another vendor, the MAQ is the verification procedure that ensures the equipment is eligible for maintenance by IBM customer engineers.

Maintenance Analysis Procedure (MAP). A written or online set of procedures that guide maintenance personnel through step-by-step instructions for hardware fault isolation, repair, and verification.

maintenance password authorization. The level-two password authorization that allows access to a Director to perform maintenance and operator functions. Contrast with *administrative password authorization* and *operator password authorization*.

management information system (MIS). (1) management performed using automatic data processing (*I, A*). (2) An information system that aids in performing management functions (*A*).

MAP. See *Maintenance Analysis Procedure*

MAQ. See *Maintenance Agreement Qualification*.

matrix. A matrix defines a Director's address configuration. The three matrix types are new matrix, saved matrix, and active matrix. Synonym for *configuration matrix*.

Matrix Controller-2 (MXC2) card. A Director circuit card that replaces a standard MXC card and upgrades the Director to support FICON operation.

Matrix Controller/Matrix Switch (MXC/MXS) card. A set of Director circuit cards that makes decisions on dynamic connection requests between channels, control units attached to the Director, and provides for connection paths between ports.

MAU. See *Multistation Access Unit*.

MB. See *megabyte*.

Mbps. Acronym for *megabits per second*.

MBps. Acronym for *megabytes per second*.

MCL. See *microcode level*.

Media Access Control (MAC). In LANs, the sublayer of the data link control layer that supports media dependent functions and uses the functions of the physical layer to provide services to the logical link control sublayer. The MAC sublayer includes a method of determining when a device has access to the transmission media.

megabyte (MB). A unit of measure for data storage, equal to 1,048,576 bytes. Generally approximated as one million bytes.

menu. A list of items displayed on the Console from which a user can make a selection. See also *pull-down menu*.

menu bar. The menu bar is located across the top of a Console window. Pull-down menus are displayed by clicking on the menu bar option with the mouse, or by pressing **Alt** with the underlined letter of the name for the menu bar option.

MES. See *miscellaneous equipment specification*.

microcode level (MCL). The release level (1.0, 1.2, 2.0, etc.) of a set of developed and tested microcode instructions that is made public.

micrometer. One millionth of a meter.

MIF. See *Multiple Image Facility*.

MIS. See *management information system*.

miscellaneous equipment specification (MES). A set of stand-alone instructions provided by IBM that supports the installation of a hardware or software replacement or upgrade.

modem. Acronym for *modulator/demodulator*. A device that converts digital computer data to an analog signal that is transmitted over a telecommunication line and converts a received analog signal to digital data for the computer.

mouse. In computer graphics, a hand-held locating, pointing, and selection device. A mouse usually contains a control ball, and is operated by moving it on a flat surface.

MTP. See *multifiber terminated push-on*.

multifiber terminated push-on (MTP). A 12-fiber quick-disconnect push-on connector that provides fast and effective reconnection of processors and devices without disturbing channel hardware configurations.

multimode optical fiber. A graded-index or step-index optical fiber that allows more than one mode (light path) to propagate. Contrast with *singlemode optical fiber*.

Multiple Image Facility (MIF). An IBM-licensed program that allows multiple logical partitions to concurrently share native ESCON or FICON channels. This reduces the number of channel paths required to support a configuration.

Multiple Virtual Storage (MVS). The generic name for an IBM-licensed operating system used on System/370 and later main-frame processors. See also *virtual storage* and *OS/390*.

Multistation Access Unit (MAU). A cabling attachment device that can connect up to eight nodes to an IBM Token Ring network.

MVS. See *Multiple Virtual Storage*.

MVS Configuration Program (MVSCP). A program that defines all available I/O devices and channel paths to the MVS operating system. Replaced by Hardware Configuration Definition Program starting with MVS/ESA Version 4.0.

MVSCP. See *MVS Configuration Program*.

MVS/ESA. Acronym for Multiple Virtual Storage/Enterprise Systems Architecture. See also *MVS* and *ESA*.

MXC2 card. See *Matrix Controller-2 card*.

MXC/MXS card. See *Matrix Controller/Matrix Switch card*.

N

network. An arrangement of hardware, software, nodes, and connecting branches that comprises a data communication system. The ISO seven-layer specification partitions a computer network into independent modules from the lowest (physical) layer to the highest (application) layer.

new matrix. A Director's saved matrix that is blank (contains default configuration attributes) but does not have a saved name. It is used for creating a new configuration, and updating a saved matrix the first time configuration changes are saved. Contrast with *saved matrix*.

node. (1) In a network, a point at which one or more functional units connect channels or data circuits (*I*). In network topology, the point at an end of a branch (*T*).

node port (N_port). A port on a computer, storage system, or other end device through which the device performs Fibre Channel communication. Contrast with *fabric port*. See also *thin fabric port*.

nondisruptive installation. The installation of units or FRUs while normal equipment operation continues without interruption. Contrast with *nondisruptive removal*. See also *concurrent maintenance* and *hot pluggable*.

nondisruptive removal. The removal of units or FRUs without interrupting normal equipment operation. Contrast with *nondisruptive installation*. See also *concurrent maintenance* and *hot pluggable*.

nonvolatile. A term used to describe a data storage device or memory chip that retains its contents when power is removed or off.

NP. IBM parts list acronym for Not Procurable. NP indicates the part is not procurable and the next higher assembly should be ordered.

N_port. See *node port*.

NR. The IBM parts list acronym for Not Recommended. NR indicates the part is procurable but is not recommended, and the next higher assembly should be ordered.

O

octet. An 8-bit quantity, often called a byte or word, and often used to explain specific segments of a LAN address. A LAN address is a 32-bit number in decimal format, normally represented as four 8-bit octets with each byte or octet separated by a decimal point. See also *byte*.

ohm. A unit of electrical resistance equal to that of a conductor in which a current of one ampere is produced by a potential of one volt across the conductor terminals.

Open Systems Interconnection (OSI). A model that represents a network as a hierarchical structure of functional layers. Each layer provides a set of functions that can be accessed and used by the layer above. Layers are independent, in that implementation of a layer can be changed without affecting other layers.

operating system (OS). Software that controls execution of applications and provides services such as resource allocation, scheduling, I/O control, and data management. Most operating systems are predominantly software, but partial hardware implementations are possible (*T*).

operator password authorization. The level-three password authorization that allows access to a Director to perform operator functions only. Contrast with *administrative password authorization* and *maintenance password authorization*.

optical cable. A single fiber, multiple fibers, or a fiber bundle in a structure constructed to meet certain optical, mechanical, or environmental specifications (*E*). See also *jumper cable*, *optical cable assembly*, and *trunk cable*.

optical cable assembly. A connector-terminated optical cable. The cable is generally terminated by the manufacturer and is ready for installation (*E*). See also *jumper cable* and *optical cable*.

optical drive backup. A data backup system that uses rewriteable optical cartridges (ROCs) as the storage medium.

optical fiber connector. A hardware component that transfers optical power between two optical fibers or bundles, and is designed to be repeatedly connected and disconnected.

optical waveguide. (1) A structure capable of guiding optical power (*E*). (2) In optical communications, a fiber designed to transmit optical signals. See also *optical fiber*.

OS. See *operating system*.

OS/2. Acronym for Operating System 2, the operating system developed by IBM for personal computers. The OS/2 licensed program can perform multiple tasks at the same time.

OS/390. Acronym for Operating System 390, an integrated, open-enterprise server operating system developed by IBM that incorporates a leading-edge and open communications server, distributed data and file services, Parallel Sysplex support, object-oriented programming, distributed computing environment, and open application interfaces.

OSI. See *Open Systems Interconnection*.

P

parallel channel. A data communications channel that uses copper bus and tag cables as a transmission medium, rather than fiber-optic cables. Contrast with *ESCON channel* and *FICON channel*.

parameter. (1) Variable that is given a constant value for a specified application and that may denote the application (*I, A*). (2) Item in a menu for which the user specifies a value, or for which the system provides a value when the menu is interpreted. (3) Data passed between programs or procedures.

password. A unique string of characters known to a computer system, and to a user who must specify the password to gain full or limited access to the system and the information stored within.

password identifier. In a Director, a user-defined symbolic name of 24 characters or less that identifies the password user.

path. (1) In a network, any route between two nodes (*T*). (2) In systems network architecture, the series of path control network components (path control and data link control) traversed by the information exchanged between two network-addressable units.

PC. See *personal computer*.

PDCM. See *port dynamic connect mask*.

personal computer (PC). A portable computer that consists of a system unit, display, keyboard, mouse, one or more diskette drives, and internal fixed-disk storage. PCs are designed to give independent computing power to a single user.

point-to-point. A Fibre Channel topology that provides a single, direct connection between two communication ports. The Director supports only point-to-point topology.

POR. See *Power-on Reset*.

port. (1) An access point for data entry or exit. (2) A receptacle on a device to which a cable for another device is attached.

port address. In a Director, the address used to specify port connectivity parameters and to assign link addresses for attached channels and control units.

port authorization. Feature of the password definition function that allows an administrator to extend operator-level passwords to specific port addresses for each Director definition managed by a Console. Port authorization affects only operator-level actions for active and saved matrices.

port card. In a fiber-optic environment, a FRU that provides an optomechanical attachment method for fiber cables, and performs specific device-dependent logic functions. See also *Device port card* and *FCV port card*.

port dynamic connect mask (PDCM). Register that controls blocking between two ports and defines the blocked status between the ports. This provides information about blocked status of two ports with a static connection so requests can be denied for dynamic connections.

port name. In a Director, a user-defined symbolic name of 24 characters or less that identifies a port.

POST. See *Power-on Self-Test*.

Power-on Reset (POR). Method by which a device is set to a prescribed or clear state. The device is powered off, then powered on and re-IPLed.

Power-on Self-Test (POST). A series of diagnostic tests that are automatically executed by a device when the power is switched on.

processor. A computer's functional unit that interprets and executes instructions. A processor consists of an instruction control unit and an arithmetic and logic unit. (*I, A*).

prohibited connection. In a Director, the attribute that when set, removes dynamic connectivity capability. Contrast with *allowed connection*.

protective plug. In a fiber-optic environment, a type of duplex connector (or cover) that provides physical protection. Contrast with *wrap plug*.

protocol. (1) Set of semantic and syntactic rules that determines the behavior of functional units in achieving communication (*I*). (2) In systems network architecture, the meanings of and sequencing rules for requests and responses for managing the network, transferring data, and synchronizing network component states. (3) A specification for the format and relative timing of data exchanged between communicating devices.

pull-down menu. A menu that is displayed below, or *pulled down* from a menu bar at the top of a window.

Q

quadrant. One of four areas in a Director where device port cards are installed. The quadrants are designated A through D.

query. (1) The process by which a master device asks a slave device for identification and status (*T*). (2) For interactive systems, an operation at a Console that elicits a response from the system. (3) A request for information from a file based on specific conditions.

queue. (1) A list constructed and maintained so the next data element to be retrieved is the one stored first. This method is characterized as first in-first out (*T*). (2) A line or list of items that is waiting to be processed.

R

R. The IBM parts list acronym for *Restricted*. R indicates the part is procurable but has a restricted availability.

RAM. See *random access memory*. See also *DRAM* and *SRAM*, and contrast with *ROM*.

random access memory (RAM). A group of computer memory locations that is numerically identified to allow high-speed access by the controlling microprocessor. A memory location is randomly accessed by referring to its numerical identifier. See *dynamic random access memory* and *static random access memory*, and contrast with *read-only memory*.

read-only memory (ROM). An information storage chip with permanent memory. Stored information cannot be changed or deleted except under special circumstances. Contrast with *random access memory*.

rewriteable optical cartridge (ROC). A plastic cartridge with a recording medium that uses magneto-optical read/write technology, and is removable from a computer and used to store and transport data.

RI. See *ring-in*. Contrast with *RO*.

ring-in (RI). In an IBM Token Ring network, the receive or input receptacle on a multistation access unit. Contrast with *ring-out*.

ring-out (RO). In an IBM Token Ring network, the transmit or output receptacle on a multistation access unit. Contrast with *ring-in*.

ring topology. A logically circular, unidirectional transmission path without defined ends, in which control is distributed or centralized. See also *Token Ring*.

RO. See *ring-out*. Contrast with *RI*.

ROC. See *rewriteable optical cartridge*.

ROM. See *read-only memory*. Contrast with *RAM*.

router. An attaching device that connects two LAN segments, which use similar or different architectures, at the reference model network layer. Contrast with *bridge*.

row. Horizontal arrangement of data. Contrast with *column*.

RS-232. The EIA-recommended specification for asynchronous serial interfaces between computers and communications equipment. It specifies both the number of pins and type of connection, but does not specify the electrical signals.

S

SA. See *Service Agreement*.

SA OS/390. See *System Automation for OS/390*.

saved configuration. In an ESCON or FICON environment, a stored set of connectivity attributes whose values determine a configuration used to replace all or part of a Director's active configuration matrix. Contrast with *active configuration*.

saved matrix. A matrix modified for a particular purpose, then saved to the Director Console fixed disk. Multiple saved matrices are maintained in the Console library for each Director. Contrast with *new matrix*.

SC Connector. See *subscriber connector*.

SCP. See *System Control Program*.

SCSI. See *small computer system interface*.

Service Agreement (SA). A tailored hardware, software, or combined support contract between IBM and the customer.

simplex. In data communication, pertaining to transmission in only one direction at a time. Contrast with *duplex*, synonym for *half-duplex*.

singlemode optical fiber. An optical fiber that allows one wavelength-dependent mode (light path) to propagate. Contrast with *multimode optical fiber*.

small computer system interface (SCSI). An input and output bus that provides a standard interface between the OS/2 operating system and peripheral devices.

software. Computer programs, procedures, rules, and associated documentation pertaining to the operations of a system. See also *application*, and contrast with *hardware*.

spare ports card. A card feature for the Director that contains either four LED ports (#5245), or two LED and two XDF ports (#5255).

SRAM. See *static random access memory*. See also *RAM* and contrast with *DRAM*.

static random access memory (SRAM). SRAM is microprocessor-cache random access memory. SRAM is built internal to the microprocessor or on external chips. SRAM is fast, but relatively expensive. See *random access memory* and contrast with *dynamic random access memory*.

stop bit. In start-stop transmission, a signal at the end of a character that prepares the receiving device for reception of a subsequent character (*I*).

subnet mask. For internet subnetworking, a 32-bit mask used to identify the subnetwork address bits in the host portion of the IP address.

subscriber connector (SC). A connector that terminates fiber-optic jumper cables in two housings (one transmit and one receive), and provides physical keying to an SC receptacle. An SC connector is synonymous with an FCS connector. An SC connector can attach to an FCV port card or XDF laser port card. See also *Fibre Channel Standard connector* and *multimode connector*.

subsystem. A secondary or subordinate system, or programming support, usually capable of operating independently of or asynchronously with a controlling system (*T*).

SWCH. The acronym used in ESCON Manager to represent a Director and identify the Director in the *UNIT* parameter.

switch. A synonym used in ESCON Manager for a Director. Identifies the Director in the *CHPID* statement.

Sysplex Timer. An IBM table top unit that provides the synchronization for time-of-day clocks in multiple central processing complexes.

System Automation for OS/390 (SA OS/390). IBM-licensed software that provides System/390 Parallel Sysplex management, automation capabilities, and integrated systems and network management. SA OS/390 manages host, remote processor, and I/O operations. SA OS/390 integrates the functions of Automated Operations Control for MVS, ESCON Manager, and Target System Control Facility.

system configuration. A process that specifies the devices and programs that form a particular data processing system.

System Control Program (SCP). An IBM-supplied program that is fundamental to the operation and maintenance of a mainframe system. The software serves as an interface with licensed and other programs.

T

Target System Control Facility (TSCF). An IBM-licensed program that designates one processor in a Parallel Sysplex as a focal-point system that controls target systems. The focal point system can load, configure, start, control, and monitor applications on target systems. The focal point system can also coordinate processes across systems. TSCF functions are now integrated into SA OS/390.

TCP. See *transmission control protocol*.

TCP/IP. See *transmission control protocol/internet protocol*.

Telecommunications Industry Association (TIA). TIA is a member organization of the Electronic Industries Association, and is the trade group representing the communications and information technology industries. See also *EIA*.

terminal. In data communication, a device equipped with a keyboard and display, capable of transmitting and receiving information. Synonym for *Console* or *display device*.

thin fabric port (thin F_port). The port connection on the FCV port card that behaves externally as an N_port, but has the F_port ability to accept a fabric login (FLOGI) command. Contrast with *node port*. See also *fabric port*.

thin F_port. See *thin fabric port*.

TIA. See *Telecommunications Industry Association*. See also *EIA*.

tile. Windows on a console are tiled to simultaneously display all open windows side-by-side in a reduced-size format. No overlapping of windows occurs. To tile windows, use the *Window* pull-down menu and select *Tile*. Contrast with *Cascade*.

TKRG. See *Token Ring Controller Adapter card*.

toggle. A procedure to change the state of a feature. If the feature is **On**, toggling will turn it **Off**, and vice versa.

token. A sequence of bits passed from one device to another on a Token Ring network that signifies permission to transmit over the network. The token consists of a starting delimiter, access control field, and end delimiter. If a device has data to transmit, it appends the data to the token.

Token Ring. A LAN configuration where devices attach to a network cable in a closed path or ring. A token (unique sequence of bits) circulates on the ring to allow devices to access the LAN for data transmission. See also *ring topology*.

Token Ring Controller Adapter (TKRG) card. The circuit card that provides a port to connect a Director to a 4/16 Mbps Token Ring LAN. The card is labelled *TKRG*.

topology. The physical or logical arrangement of nodes in a computer network.

TPF. See *Transaction Processing Facility*.

Transaction Processing Facility (TPF). IBM-licensed software that supports interactive applications in which requests submitted at terminals are processed upon receipt. TPF provides a message-based, real-time, high-capacity transaction processing environment.

transmission control protocol (TCP). The transport layer for the TCP/IP protocol widely used on Ethernet networks and any network that conforms to U.S. Department of Defense standards for network protocol. TCP provides reliable communication and control through full-duplex connections.

transmission control protocol/internet protocol (TCP/IP). A layered set of protocols (network and transport) that allows sharing of applications among devices on a high-speed LAN communication environment. See also *TCP* and *IP*.

trunk cable. In an fiber-optic environment, a cable consisting of multiple fiber pairs that does not directly attach to an active device. The cable usually exists between distribution panels and can be located within, or external to, a building. Contrast with *jumper cable*.

TSCF. See *Target System Control Facility*.

U

UL. See *Underwriters Laboratories*.

ULP. See *upper level protocol*.

unblocked. In a Director, the attribute that when set, establishes communication capability for a specific port. Contrast with *blocked*.

Underwriters Laboratories (UL). A laboratory organization accredited by the Occupational Safety and Health Administration, and authorized to certify products for use in the home and workplace.

uninterruptable power supply (UPS). A buffer between public utility power or an other power source, and a system that requires precise, uninterrupted power.

URL. Acronym for *Uniform Resource Locator*. A URL is the address of a document or other resource on the internet.

upper level protocol (ULP). Protocols that map to and run on top of Fibre Channel FC-4 layer. Upper level protocols include IP and SCSI.

UPS. See *uninterruptable power supply*.

V

Vac. Acronym for volts alternating current. See *alternating current*.

Vdc. Acronym for volts direct current. See *direct current*.

Virtual Machine (VM). (1) A virtual data processing system that appears to be at the exclusive disposal of a single user, but whose functions are accomplished by sharing the resources of a real data processing system. (2) A functional simulation of a computer system and its associated devices, multiples of which can be controlled concurrently by one operating system.

Virtual Storage (VS). (1) Storage space that may be regarded as addressable main storage by the user of a computer system in which virtual addresses are mapped to real addresses. The size of virtual storage is limited by the addressing scheme of the computer system and by the amount of auxiliary storage available, not by the number of main storage locations. (2) Addressable space that is apparent to the user as processor storage space, from which the instructions and the data are mapped to the processor storage locations.

Virtual Storage Extended (VSE). An IBM-licensed software operating system that controls the execution of programs.

VM. See *Virtual Machine*.

VM/ESA. Acronym for *Virtual Machine/Enterprise Systems Architecture*. See also *VM* and *ESA*.

volt. A measure of the difference in electrical potential between two points in a conductor, equal to one ohm resistance carrying a constant current of one ampere, with a power dissipation of one watt.

VS. See *Virtual Storage*.

VSE. See *Virtual Storage Extended*.

W

watt. A unit of power in the International System equal to one joule (Newton-meter) per second.

warning message. An indication that a system error or other problem has been detected. See also *error message* and *information message*.

window. A portion of the Director Console screen in which one of several concurrent applications or data sets can display information. The user sees what appears to be several sheets of paper, much as the sheets would appear on a desktop. See also *cascade* and *tile*.

Windows. A graphical user interface and windowing system introduced by Microsoft Corporation in 1985. Windows runs on top of the MS-DOS operating system.

Win-OS/2. Win-OS/2 is the Windows component of IBM's OS/2 Version 2.0 operating system. It is based partially on Windows 3.0 and Windows 3.1. Win-OS/2 is the operating system used by the Director Console application.

wrap plug. (1) A connector attached to the plug end of a cable that connects input and output pins together for testing. See *wrap test*. (2) In a fiber-optic environment, a type of duplex connector used to wrap the optical output signal of a device directly to the optical input. Contrast with *protective plug*.

wrap test. A test that checks attachment or control unit circuitry, without checking the mechanism itself, by returning the output of the mechanism as input. A wrap test can transmit a specific character pattern through a system, and compare the pattern received with the pattern transmitted.

X

XDF. See *Extended Distance Feature*.

Index

A

Adapter and Protocol Configuration
dialog box, [278](#), [340](#)

administrative tasks

change date and time format

PC 300PL Console, [319](#)

PC-330 Console, [193](#)

PC-365 Console, [257](#)

PS/2 Console, [121](#)

change default printer

PC 300PL Console, [343](#)

PC-330 Console, [217](#)

PC-365 Console, [281](#)

PS/2 Console, [145](#)

change keyboard layout

PC 300PL Console, [326](#)

PC-330 Console, [199](#)

PC-365 Console, [264](#)

PS/2 Console, [127](#)

change Win-OS/2 keyboard settings

PC 300PL Console, [331](#)

PC-330 Console, [204](#)

PC-365 Console, [269](#)

PS/2 Console, [132](#)

enable or change screen saver

PC 300PL Console, [323](#)

PC-330 Console, [196](#)

PC-365 Console, [261](#)

PS/2 Console, [124](#)

set date and time

PC 300PL Console, [316](#)

PC-330 Console, [190](#)

PC-365 Console, [254](#)

PS/2 Console, [118](#)

ARP table

clear

PC 300PL Console, [290](#)

PC-330 Console, [153](#)

PC-365 Console, [226](#)

PS/2 Console, [83](#)

description, [83](#), [153](#), [226](#), [290](#)

automatic backup

change settings, [243](#), [304](#)

fixed disk

PC-330 Console, [178](#)

PS/2 Console, [106](#)

system library

PC 300PL Console, [302](#)

PC-330 Console, [167](#)

PC-365 Console, [240](#)

PS/2 Console, [96](#)

AutoTape dialog box, [97](#), [168](#), [179](#)

AutoTape Event Schedule dialog
box, [98](#), [108](#), [169](#), [179](#)

B

back up

backup on demand (fixed disk)

PC-330 Console, [180](#)

PS/2 Console, [109](#)

backup on demand (system library)

PC 300PL Console, [307](#)

PC-330 Console, [170](#)

PC-365 Console, [245](#)

PS/2 Console, [99](#)

change automatic backup
settings, [243](#), [304](#)

critical Hardware Management
Console data, [39](#)

- default time, [96](#), [106](#), [167](#), [178](#), [240](#), [302](#)
 - Director system library
 - from Hardware Management Console, [45](#)
 - from PC 300PL Console, [302](#)
 - from PC-330 Console, [167](#)
 - from PC-365 Console, [240](#)
 - from PS/2 Console, [96](#)
 - enable automatic backup (fixed disk)
 - PC-330 Console, [178](#)
 - PS/2 Console, [106](#)
 - enable automatic backup (system library)
 - PC 300PL Console, [302](#)
 - PC-330 Console, [167](#)
 - PC-365 Console, [240](#)
 - PS/2 Console, [96](#)
 - fixed disk
 - from PC-330 Console, [178](#)
 - from PS/2 Console, [106](#)
 - QIC 80 format tape, [99](#), [109](#), [170](#), [180](#)
 - Sysplex Timer system library
 - from Hardware Management Console, [49](#)
 - from PC 300PL Console, [302](#)
 - from PC-330 Console, [167](#)
 - from PC-365 Console, [240](#)
 - from PS/2 Console, [96](#)
- Backing Up Files dialog box, [102](#), [112](#), [173](#), [184](#)
- backup Console (Director), [8](#)
- Backup dialog box, [247](#), [308](#)
- Backup drawer (launch pad), [17](#)
- Backup Library Director Console Archive window, [46](#)
- Backup Library Sysplex Timer Console Archive window, [50](#)
- backup on demand
 - fixed disk
 - PC-330 Console, [180](#)
 - PS/2 Console, [109](#)
- system library
 - PC 300PL Console, [307](#)
 - PC-330 Console, [170](#)
 - PC-365 Console, [245](#)
 - PS/2 Console, [99](#)
- backup options
 - PC-330 Console, [167](#)
 - PS/2 Console, [95](#)
- Build Diagnostic Diskette window, [94](#), [165](#), [239](#), [300](#)
- ## C
- CD-ROM
 - fixed disk restore, [250](#), [312](#)
- Change Configuration Parameters dialog box, [162](#), [235](#)
- clear ARP table
 - PC 300PL Console, [290](#)
 - PC-330 Console, [153](#)
 - PC-365 Console, [226](#)
 - PS/2 Console, [83](#)
- close a window, [29](#)
- Closing TCP/IP Configuration, [275](#), [337](#)
- Configuration dialog box, [143](#), [214](#)
- Configure dialog box, [277](#), [339](#)
- Configure Workstation dialog box, [143](#), [214](#)
- Confirm on Data File delete dialog box, [53](#), [55](#)
- Console
 - backup Director Console, [8](#)
 - Director Console, [1](#)
 - Hardware Management Console, [33](#)
 - LAN configurations, [59](#)
 - remote access by TCP/IP, [61](#)
 - replacement Director Console, [8](#)
 - shared Console, [14](#)

- standby Sysplex Timer Console, [13](#)
- Sysplex Timer Console, [8](#)
- Control Panel window, [126](#), [134](#), [146](#), [198](#), [206](#), [218](#), [262](#), [271](#), [282](#), [324](#), [333](#), [344](#)
- Country - Properties dialog box, [259](#), [321](#)
- Country Information dialog box, [129](#), [266](#), [328](#)
- create Console diagnostic diskette
 - PC 300PL Console, [299](#)
 - PC-330 Console, [164](#)
 - PC-365 Console, [237](#)
 - PS/2 Console, [93](#)
- create definitions diskette
 - Hardware Management Console, [42](#)
 - PC 300PL Console, [292](#)
 - PC-330 Console, [156](#)
 - PC-365 Console, [228](#)
 - PS/2 Console, [86](#)
- customize Console environment
 - change default printer
 - PC 300PL Console, [343](#)
 - PC-330 Console, [217](#)
 - PC-365 Console, [281](#)
 - PS/2 Console, [145](#)
 - change IP address
 - PC 300PL Console, [334](#)
 - PC-330 Console, [207](#)
 - PC-365 Console, [272](#)
 - PS/2 Console, [135](#)
 - change keyboard layout
 - PC 300PL Console, [326](#)
 - PC-330 Console, [199](#)
 - PC-365 Console, [264](#)
 - PS/2 Console, [127](#)
 - change MAC address
 - PC 300PL Console, [338](#)
 - PC-330 Console, [214](#)
 - PC-365 Console, [276](#)
 - PS/2 Console, [142](#)

- change subnet mask
 - PC 300PL Console, [334](#)
 - PC-330 Console, [207](#)
 - PC-365 Console, [272](#)
 - PS/2 Console, [135](#)
- change time and date format
 - PC 300PL Console, [319](#)
 - PC-330 Console, [193](#)
 - PC-365 Console, [257](#)
 - PS/2 Console, [121](#)
- change Win-OS/2 keyboard settings
 - PC 300PL Console, [331](#)
 - PC-330 Console, [204](#)
 - PC-365 Console, [269](#)
 - PS/2 Console, [132](#)
- enable or change screen saver
 - PC 300PL Console, [323](#)
 - PC-330 Console, [196](#)
 - PC-365 Console, [261](#)
 - PS/2 Console, [124](#)
- set time and date
 - PC 300PL Console, [316](#)
 - PC-330 Console, [190](#)
 - PC-365 Console, [254](#)
 - PS/2 Console, [118](#)

D

- data collection procedure
 - Director
 - Hardware Management Console, [39](#)
 - PC 300PL Console, [285](#)
 - PC-330 Console, [149](#)
 - PC-365 Console, [221](#)
 - PS/2 Console, [79](#)
 - Sysplex Timer
 - Hardware Management Console, [48](#)
 - PC 300PL Console, [288](#)
 - PC-330 Console, [152](#)
 - PC-365 Console, [224](#)
 - PS/2 Console, [82](#)

- data rate (LAN), [162](#), [235](#)
- date and time
 - change format
 - PC 300PL Console, [319](#)
 - PC-330 Console, [193](#)
 - PC-365 Console, [257](#)
 - PS/2 Console, [121](#)
 - set
 - PC 300PL Console, [316](#)
 - PC-330 Console, [190](#)
 - PC-365 Console, [254](#)
 - PS/2 Console, [118](#)
- DCAF - Directory window, [65](#)
- DCAF software
 - configure Console for remote access, [59](#)
 - configuring for TCP/IP, [61](#)
 - DCAF - Directory window, [65](#)
 - Distributed Console Access Facility window, [65](#)
- DCAF Target drawer (launch pad), [16](#)
- DCGETDEF.CMD window, [43](#), [87](#), [157](#), [229](#), [293](#)
- delete
 - Director Console application from Hardware Management Console, [52](#)
 - Director Console icons from Hardware Management Console, [53](#)
 - Extra Applications folder, [54](#), [56](#)
 - Timer Console application from Hardware Management Console, [54](#)
 - Timer Console icons from Hardware Management Console, [56](#)
- Delete Object(s) dialog box, [52](#), [55](#)
- Desktop dialog box, [126](#), [198](#), [263](#), [325](#)
- desktop objects
 - description, [17](#)
 - Director Console icon, [18](#)
 - Director tools folder, [18](#)
 - OS/2 Applications icon, [17](#)
 - OS/2 System icon
 - Warp 4.0, [18](#)
 - Warp Connect 3.0, [17](#)
 - Sysplex Timer Console icon, [18](#)
 - Sysplex Timer tools folder, [19](#)
- dialog boxes
 - Adapter and Protocol Configuration, [278](#), [340](#)
 - AutoTape, [97](#), [168](#), [179](#)
 - AutoTape Event Schedule, [98](#), [108](#), [169](#), [179](#)
 - Backing Up Files, [102](#), [112](#), [173](#), [184](#)
 - Backup, [247](#), [308](#)
 - Change Configuration Parameters, [162](#), [235](#)
 - Closing TCP/IP Configuration, [275](#), [337](#)
 - Configuration, [143](#), [214](#)
 - Configure, [277](#), [339](#)
 - Configure Workstation, [143](#), [214](#)
 - confirm on Data File delete, [53](#), [55](#)
 - Country - Properties, [259](#), [321](#)
 - Country Information, [129](#), [266](#), [328](#)
 - Delete Object(s), [52](#), [55](#)
 - Desktop, [126](#), [198](#), [263](#), [325](#)
 - Director Console - Properties, [70](#), [72](#)
 - Exiting MPTS, [280](#), [342](#)
 - Install Driver, [148](#), [220](#), [284](#), [346](#)
 - International, [134](#), [206](#), [271](#), [333](#)
 - Keyboard, [130](#), [202](#), [266](#), [328](#)
 - LANAID, [164](#), [213](#), [237](#)
 - List of Printers, [147](#), [219](#), [283](#), [345](#)
 - Load Job File, [101](#), [112](#), [173](#), [183](#)
 - Multi-Protocol Transport Services, [277](#), [339](#)
 - OS/2 Setup and Installation, [131](#), [203](#), [268](#), [330](#)
 - Printers, [147](#), [219](#), [283](#), [345](#)
 - Restore, [249](#), [310](#)
 - Restore Parameters for Tape Library Backup, [105](#), [176](#)
 - Retention Confirmation, [101](#), [112](#), [173](#), [183](#)
 - Set Default, [242](#), [303](#)
 - Source Directory, [131](#), [203](#), [268](#), [330](#)

- Sysplex Timer Console - Properties, [74](#), [76](#)
- System Clock - Properties, [256](#), [318](#)
- System Configuration, [129](#), [201](#), [266](#)
- Timer Control Center, [244](#), [305](#)
- Update CONFIG.SYS, [279](#), [341](#)
- View Adapter Configuration, [161](#), [234](#)
- Director Console
 - application icon, [18](#), [35](#)
 - backup Console, [8](#)
 - description, [1](#)
 - PC 300PL
 - description, [6](#)
 - specifications, [7](#)
 - PC-330
 - description, [4](#)
 - specifications, [4](#)
 - PC-365
 - description, [5](#)
 - specifications, [6](#)
 - platforms, [1](#)
 - PS/2
 - description, [2](#)
 - specifications, [3](#)
 - replacement Console, [8](#)
 - shared Console, [14](#)
 - tools folder, [18](#)
- Director Console - Properties dialog box
 - Program page, [70](#), [72](#)
 - Session page, [70](#), [72](#)
- Director Console application
 - delete from Hardware Management Console, [52](#)
 - install on Hardware Management Console, [34](#)
 - shut down
 - from Director Console, [24](#)
 - from Hardware Management Console, [35](#)
- start
 - from Director Console, [24](#)
 - from Hardware Management Console, [35](#)
- transfer
 - from OS/2 desktop, [22](#)
 - to OS/2 desktop, [21](#)
- uninstall from Hardware Management Console, [51](#)
- Director definitions
 - create definitions diskette
 - Hardware Management Console, [42](#)
 - PC 300PL Console, [292](#)
 - PC-330 Console, [156](#)
 - PC-365 Console, [228](#)
 - PS/2 Console, [86](#)
 - migrate
 - Hardware Management Console, [42](#)
 - PC 300PL Console, [292](#)
 - PC-330 Console, [155](#)
 - PC-365 Console, [228](#)
 - PS/2 Console, [85](#)
- diskettes
 - Console diagnostic, [93](#), [164](#), [237](#), [299](#)
 - Data Collection, [40](#), [49](#)
 - fixed disk restore, [114](#), [185](#)
- Distributed Console Access Facility
 - window, [65](#)
- Drive A - Icon View, [43](#), [86](#), [156](#), [229](#), [293](#)
- Drive A drawer (launch pad), [16](#)
- DualStor drawer (launch pad), [17](#)
- DualStor for OS/2 window, [101](#), [104](#), [111](#), [172](#), [175](#), [182](#)
- DualStor software
 - PC-330 Console, [167](#), [178](#)
 - PS/2 Console, [96](#), [106](#)

E

- electronic emission notices, [xi](#)
- ESCON Director Data Collection window, [41](#), [81](#), [151](#)
- ESCON Director Tools - Icon View, [18](#), [46](#), [80](#), [150](#), [222](#), [286](#)
- Exiting MPTS dialog box, [280](#), [342](#)
- Extra Applications - Icon View, [35–36](#)
- Extra Applications folder
 - delete, [54](#), [56](#)
 - open, [35–36](#)

F

- fixed disk
 - back up
 - PC-330 Console, [178](#)
 - PS/2 Console, [106](#)
 - restore
 - PC 300PL Console, [312](#)
 - PC-330 Console, [185](#)
 - PC-365 Console, [250](#)
 - PS/2 Console, [114](#)
 - restore CD-ROM, [250](#), [312](#)
 - restore diskettes, [114](#), [185](#)
- folders
 - Director tools
 - description, [18](#)
 - Hardware Management Console, [39](#)
 - Extra Applications
 - delete, [54](#), [56](#)
 - open, [35–36](#)
 - Sysplex Timer tools
 - description, [19](#)
 - Hardware Management Console, [47](#)

H

- Hardware Management Console
 - back up
 - Director system library, [45](#)
 - Sysplex Timer system library, [49](#)
 - back up critical data, [39](#)
 - create definitions diskette, [42](#)
 - data collection procedure
 - Director, [39](#)
 - Sysplex Timer, [48](#)
 - description, [33](#)
 - Director tools folder, [39](#)
 - install
 - Director Console application, [34](#)
 - Timer Console application, [34](#)
 - migrate Director definitions, [42](#)
 - nonapplicable information, [33](#)
 - OS/2 desktop, [36](#), [38](#)
 - restore
 - Director system library, [46](#)
 - Timer system library, [50](#)
 - shut down
 - Director Console application, [35](#)
 - Timer Console application, [37](#)
 - start
 - Director Console application, [35](#)
 - Timer Console application, [36](#)
 - Sysplex Timer tools folder, [47](#)
 - uninstall
 - Director Console application, [51](#)
 - Timer Console application, [54](#)

I

- icons
 - delete Director Console, [53](#)
 - delete Timer Console, [56](#)
 - Director Console, [18](#), [35](#)
 - OS/2 Applications, [17](#)

- OS/2 System
 - Warp 4.0, [18](#)
 - Warp Connect 3.0, [17](#)
- Sysplex Timer Console, [18](#), [37](#)

install

- Director Console application on Hardware Management Console, [34](#)
- Timer Console application on Hardware Management Console, [34](#)

Install Driver dialog box, [148](#), [220](#), [284](#), [346](#)

International dialog box, [134](#), [206](#), [271](#), [333](#)

IP address

change

- PC 300PL Console, [334](#)
- PC-330 Console, [207](#)
- PC-365 Console, [272](#)
- PS/2 Console, [135](#)

default value

- PC 300PL Console, [334](#)
- PC-330 Console, [207](#)
- PC-365 Console, [272](#)
- PS/2 Console, [135](#)

for remote access Console, [63](#)

K

Keyboard dialog box, [130](#), [202](#), [266](#), [328](#)

keyboard layout

changing

- PC 300PL Console, [326](#)
- PC-330 Console, [199](#)
- PC-365 Console, [264](#)
- PS/2 Console, [127](#)

changing in Win-OS/2

- PC 300PL Console, [331](#)
- PC-330 Console, [204](#)
- PC-365 Console, [269](#)
- PS/2 Console, [132](#)

default

- PC 300PL Console, [316](#)
- PC-330 Console, [118](#), [190](#)
- PC-365 Console, [254](#)

L

LAN

data rate, [162](#), [235](#)

default IP address

- PC 300PL Console, [334](#)
- PC-330 Console, [207](#)
- PC-365 Console, [272](#)
- PS/2 Console, [135](#)

default subnet mask

- PC 300PL Console, [334](#)
- PC-330 Console, [207](#)
- PC-365 Console, [272](#)
- PS/2 Console, [135](#)

LAN configurations

bridged, [59](#)

for remote access by TCP/IP, [59](#)

routed, [59](#)

Sysplex Timer, [60](#)

LANAID

dialog box, [164](#), [213](#), [237](#)

DOS menus, [296](#)

from DOS boot diskette, [296](#)

from OS/2, [161](#), [212](#), [233](#)

message box, [161](#), [212](#), [233](#)

launch pad

Backup drawer, [17](#)

DCAF Target drawer, [16](#)

description, [16](#)

Drive A drawer, [16](#)

DualStor drawer, [17](#)

OS/2 Window drawer, [16](#)

Shut down button, [17](#)

TCP/IP Cnfg. drawer, [16](#)

List of Printers dialog box, [147](#), [219](#), [283](#), [345](#)

Load Job File dialog box, [101](#), [112](#), [173](#), [183](#)

M

MAC address

change

PC 300PL Console, [338](#)

PC-330 Console, [214](#)

PC-365 Console, [276](#)

PS/2 Console, [142](#)

display

PC 300PL Console, [338](#)

PC-330 Console, [212](#)

PC-365 Console, [276](#)

PS/2 Console, [140](#)

maximize a window, [29](#)

migrate Director definitions

Hardware Management Console, [42](#)

PC 300PL Console, [292](#)

PC-330 Console, [155](#)

PC-365 Console, [228](#)

PS/2 Console, [85](#)

minimize a window, [29](#)

mouse operation, [27](#)

move a window, [29](#)

Multi-Protocol Transport Services dialog box, [277](#), [339](#)

N

notational conventions, [xvi](#)

notebooks

Country - Settings

Date page, [122](#), [195](#)

Time page, [123](#), [195](#)

Open a workstation

General page, [65](#)

TCP/IP page, [66](#)

System Clock - Settings, [120](#), [192](#)

TCP/IP Configuration, [137](#), [209](#), [274](#), [336](#)

notices

electronic emission, [xi](#)

O

OS/2 Application - Icon View, [17](#)

OS/2 Applications icon, [17](#)

OS/2 desktop

AutoTape dialog box, [97](#), [168](#), [179](#)

AutoTape Event Schedule dialog box, [98](#),
[108](#), [169](#), [179](#)

Backing Up Files dialog box, [102](#), [112](#),
[173](#), [184](#)

change default printer

PC 300PL Console, [343](#)

PC-330 Console, [217](#)

PC-365 Console, [281](#)

PS/2 Console, [145](#)

change keyboard layout

PC 300PL Console, [326](#)

PC-330 Console, [199](#)

PC-365 Console, [264](#)

PS/2 Console, [127](#)

description, [15](#)

desktop objects, [17](#)

DualStor for OS/2 window, [101](#), [104](#), [111](#),
[172](#), [175](#), [182](#)

Hardware Management Console, [36](#), [38](#)

launch pad, [16](#)

Load Job File dialog box, [101](#), [112](#), [173](#),
[183](#)

- OS/2 Window, [140](#)
- OS/2 Windows, [19](#)
- Restore Parameters for Tape Library
 - Backup dialog box, [105](#), [176](#)
- Retention Confirmation dialog box, [101](#), [112](#), [173](#), [183](#)
- screen saver
 - PC 300PL Console, [323](#)
 - PC-330 Console, [196](#)
 - PC-365 Console, [261](#)
 - PS/2 Console, [124](#)
- shut down
 - Director Console application, [24](#)
 - OS/2, [26](#)
 - Timer Console application, [25](#)
- start
 - Director Console application, [24](#)
 - Timer Console application, [25](#)
- transfer
 - from Director Console application, [21](#)
 - from Timer Console application, [21](#)
 - to Director Console application, [22](#)
 - to Timer Console application, [22](#)
- OS/2 Setup and Installation dialog box, [131](#), [203](#), [268](#), [330](#)
- OS/2 System - Icon View, [17](#), [122](#), [128](#), [194](#), [200](#), [258](#), [265](#), [320](#), [327](#)
- OS/2 System icon
 - Warp 4.0, [18](#)
 - Warp Connect 3.0, [17](#)
- OS/2 Window, [140](#)
- OS/2 Window drawer (launch pad), [16](#)
- OS/2 windows
 - components (Warp 4.0), [20](#)
 - components (Warp Connect 3.0), [19](#)
 - description, [19](#)

P

- PC 300PL Console
 - back up
 - Director system library, [302](#)
 - Sysplex Timer system library, [302](#)
 - change default printer, [343](#)
 - change IP address, [334](#)
 - change keyboard layout, [326](#)
 - change MAC address, [338](#)
 - change subnet mask, [334](#)
 - change time and date format, [319](#)
 - change token ring adapter card data
 - rate, [295](#)
 - change Win-OS/2 keyboard settings, [331](#)
 - create Console diagnostic diskette, [299](#)
 - create definitions diskette, [292](#)
 - data collection procedure
 - Director, [285](#)
 - Sysplex Timer, [288](#)
 - description
 - Director, [6](#)
 - Sysplex Timer, [12](#)
 - display MAC address, [338](#)
 - enable or change screen saver, [323](#)
 - keyboard layout (default), [316](#)
 - migrate Director definitions, [292](#)
 - restore
 - Director system library, [309](#)
 - fixed disk, [312](#)
 - Sysplex Timer system library, [309](#)
 - set time and date, [316](#)
 - specifications
 - Director Console, [7](#)
 - Sysplex Timer Console, [13](#)
- PC-330 Console
 - back up
 - Director system library, [167](#)
 - fixed disk, [178](#)
 - Sysplex Timer system library, [167](#)
 - backup options, [167](#)

- change default printer, [217](#)
 - change IP address, [207](#)
 - change keyboard layout, [199](#)
 - change MAC address, [214](#)
 - change subnet mask, [207](#)
 - change time and date format, [193](#)
 - change token ring adapter card data rate, [159](#)
 - change Win-OS/2 keyboard settings, [204](#)
 - create Console diagnostic diskette, [164](#)
 - create definitions diskette, [156](#)
 - data collection procedure
 - Director, [149](#)
 - Sysplex Timer, [152](#)
 - description
 - Director, [4](#)
 - Sysplex Timer, [9](#)
 - display MAC address, [212](#)
 - enable or change screen saver, [196](#)
 - keyboard layout (default), [118](#), [190](#)
 - migrate Director definitions, [155](#)
 - restore
 - Director system library, [175](#)
 - fixed disk, [185](#)
 - Sysplex Timer system library, [175](#)
 - set time and date, [190](#)
 - specifications
 - Director Console, [4](#)
 - Sysplex Timer Console, [10](#)
- PC-365 Console
- back up
 - Director system library, [240](#)
 - Sysplex Timer system library, [240](#)
 - change default printer, [281](#)
 - change IP address, [272](#)
 - change keyboard layout, [264](#)
 - change MAC address, [276](#)
 - change subnet mask, [272](#)
 - change time and date format, [257](#)
 - change token ring adapter card data rate, [231](#)
 - change Win-OS/2 keyboard settings, [269](#)
 - create Console diagnostic diskette, [237](#)
 - create definitions diskette, [228](#)
- data collection procedure
- Director, [221](#)
 - Sysplex Timer, [224](#)
- description
- Director, [5](#)
 - Sysplex Timer, [11](#)
- display MAC address, [276](#)
- enable or change screen saver, [261](#)
- keyboard layout (default), [254](#)
- migrate Director definitions, [228](#)
- restore
- Director system library, [247](#)
 - fixed disk, [250](#)
 - Sysplex Timer system library, [247](#)
- set time and date, [254](#)
- specifications
- Director Console, [6](#)
 - Sysplex Timer Console, [11](#)
- platforms
- Director Console, [1](#)
 - PC 300PL
 - Director, [6](#)
 - Sysplex Timer, [12](#)
 - PC-330
 - Director, [4](#)
 - Sysplex Timer, [9](#)
 - PC-365
 - Director, [5](#)
 - Sysplex Timer, [11](#)
 - PS/2, [2](#)
 - Sysplex Timer Console, [9](#)
- printer
- add driver
 - PC 300PL Console, [345](#)
 - PC-330 Console, [147](#), [219](#)
 - PC-365 Console, [283](#)
 - change default
 - PC 300PL Console, [343](#)
 - PC-330 Console, [217](#)
 - PC-365 Console, [281](#)
 - PS/2 Console, [145](#)
- Printers dialog box, [147](#), [219](#), [283](#), [345](#)

- procedures
 - back up
 - Director system library, [45](#), [96](#), [167](#), [240](#), [302](#)
 - PC-330 Console fixed disk, [178](#)
 - PS/2 Console fixed disk, [106](#)
 - Sysplex Timer system library, [49](#), [96](#), [167](#), [240](#), [302](#)
 - back up critical Hardware
 - Management Console data, [39](#)
 - change IP address
 - PC 300PL Console, [334](#)
 - PC-330 Console, [207](#)
 - PC-365 Console, [272](#)
 - PS/2 Console, [135](#)
 - change MAC address
 - PC 300PL Console, [338](#)
 - PC-330 Console, [214](#)
 - PC-365 Console, [276](#)
 - PS/2 Console, [142](#)
 - change subnet mask
 - PC 300PL Console, [334](#)
 - PC-330 Console, [207](#)
 - PC-365 Console, [272](#)
 - PS/2 Console, [135](#)
 - change token ring adapter card data rate
 - PC 300PL console, [295](#)
 - PC-330 console, [159](#)
 - PC-365 console, [231](#)
 - PS/2 console, [89](#)
 - clear ARP table
 - PC 300PL Console, [290](#)
 - PC-330 Console, [153](#)
 - PC-365 Console, [226](#)
 - PS/2 Console, [83](#)
 - create Console diagnostic diskette
 - PC 300PL console, [299](#)
 - PC-330 console, [164](#)
 - PC-365 console, [237](#)
 - PS/2 console, [93](#)
 - create definitions diskette
 - Hardware Management Console, [42](#)
 - PC 300PL Console, [292](#)
 - PC-330 Console, [156](#)
 - PC-365 Console, [228](#)
 - PS/2 Console, [86](#)
 - delete Extra Applications folder, [54](#), [56](#)
 - Director data collection
 - Hardware Management Console, [39](#)
 - PC 300PL Console, [285](#)
 - PC-330 Console, [149](#)
 - PC-365 Console, [221](#)
 - PS/2 Console, [79](#)
 - enable remote access console
 - (TCP/IP), [61](#)
 - install
 - Director Console application, [34](#)
 - Timer Console application, [34](#)
 - migrate Director definitions
 - Hardware Management Console, [42](#)
 - PC 300PL Console, [292](#)
 - PC-330 Console, [155](#)
 - PC-365 Console, [228](#)
 - PS/2 Console, [85](#)
 - restore
 - Director system library, [46](#), [103](#), [175](#), [247](#), [309](#)
 - PC 300PL Console fixed disk, [312](#)
 - PC-330 Console fixed disk, [185](#)
 - PC-365 Console fixed disk, [250](#)
 - PS/2 Console fixed disk, [114](#)
 - Sysplex Timer system library, [103](#), [175](#), [247](#), [309](#)
 - Timer system library, [50](#)
 - set Win-OS/2 full screen session
 - parameters
 - Director, [71](#)
 - Sysplex Timer, [75](#)
 - set Win-OS/2 window session parameters
 - Director, [69](#)
 - Sysplex Timer, [73](#)

- shut down
 - Director Console application, [24](#), [35](#)
 - OS/2, [26](#)
 - Timer Console application, [25](#), [37](#)
 - start
 - Director Console application, [24](#), [35](#)
 - OS/2, [26](#)
 - Timer Console application, [25](#), [36](#)
 - Sysplex Timer data collection
 - Hardware Management Console, [48](#)
 - PC 300PL Console, [288](#)
 - PC-330 Console, [152](#)
 - PC-365 Console, [224](#)
 - PS/2 Console, [82](#)
 - transfer
 - from Director Console application to OS/2 desktop, [21](#)
 - from OS/2 Desktop to Director Console application, [22](#)
 - from OS/2 desktop to Timer Console application, [22](#)
 - from Timer Console application to OS/2 desktop, [21](#)
 - uninstall
 - Director Console application, [51](#)
 - Timer Console application, [54](#)
- Program Manager window, [125](#), [133](#), [146](#), [197](#), [205](#), [218](#), [262](#), [270](#), [282](#), [324](#), [332](#), [344](#)
- PS/2 Console
- back up
 - Director system library, [96](#)
 - fixed disk, [106](#)
 - Sysplex Timer system library, [96](#)
 - backup options, [95](#)
 - change default printer, [145](#)
 - change IP address, [135](#)
 - change keyboard layout, [127](#)
 - change MAC address, [142](#)
 - change subnet mask, [135](#)
 - change time and date format, [121](#)
 - change token ring adapter card data rate, [89](#)
 - change Win-OS/2 keyboard settings, [132](#)
 - create Console diagnostic diskette, [93](#)
 - create definitions diskette, [86](#)
 - data collection procedure
 - Director, [79](#)
 - Sysplex Timer, [82](#)
 - description, [2](#)
 - Director Console specifications, [3](#)
 - display MAC address, [140](#)
 - enable or change screen saver, [124](#)
 - migrate Director definitions, [85](#)
 - restore
 - Director system library, [103](#)
 - fixed disk, [114](#)
 - Sysplex Timer system library, [103](#)
 - set time and date, [118](#)
- publications, [xv](#)
- Put Director Definitions Director Console Migration window, [44](#), [88](#), [158](#), [230](#), [294](#)
- ## R
- related publications, [xvi](#)
- remote access
- configure local Console, [62](#)
 - configure remote console, [64](#)
 - Console access by TCP/IP, [61](#)
 - LAN configurations, [59](#)
 - set Win-OS/2 full screen session parameters
 - Director, [71](#)
 - Sysplex Timer, [75](#)
 - set Win-OS/2 window session parameters
 - Director, [69](#)
 - Sysplex Timer, [73](#)
 - start a TCP/IP session, [64](#)
 - terminate a TCP/IP session, [68](#)
- Remote Setup window, [63](#)
- replacement Console (Director), [8](#)

resize a window, [29](#)

restore

- Director system library
 - from Hardware Management Console, [46](#)
 - from PC 300PL Console, [309](#)
 - from PC-330 Console, [175](#)
 - from PC-365 Console, [247](#)
 - from PS/2 Console, [103](#)

- fixed disk

- from PC 300PL Console, [312](#)
 - from PC-330 Console, [185](#)
 - from PC-365 Console, [250](#)
 - from PS/2 Console, [114](#)

- Sysplex Timer system library

- from PC 300PL Console, [309](#)
 - from PC-330 Console, [175](#)
 - from PC-365 Console, [247](#)
 - from PS/2 Console, [103](#)

- Timer system library

- from Hardware Management Console, [50](#)

restore a window, [29](#)

Restore dialog box, [249](#), [310](#)

Restore Library Director Console Archive window, [47](#)

Restore Library Sysplex Timer Console Archive window, [51](#)

Restore Parameters for Tape Library Backup dialog box, [105](#), [176](#)

Retention Confirmation dialog box, [101](#), [112](#), [173](#), [183](#)

ROC

- back up

- Director system library, [45](#), [240](#), [302](#)
 - Sysplex Timer system library, [49](#), [240](#), [302](#)

restore

- Director system library, [46](#), [247](#), [309](#)
- PC 300PL Console fixed disk, [312](#)
- PC-365 Console fixed disk, [250](#)
- Sysplex Timer system library, [247](#), [309](#)
- Timer system library, [50](#)

S

Set Default dialog box, [242](#), [303](#)

set Win-OS/2 full screen session parameters

- Director, [71](#)
- Sysplex Timer, [75](#)

set Win-OS/2 window session parameters

- Director, [69](#)
- Sysplex Timer, [73](#)

shared Console, [14](#)

shut down

- Director Console application
 - from Director Console, [24](#)
 - from Hardware Management Console, [35](#)

- OS/2, [26](#)

- Timer Console application
 - from Hardware Management Console, [37](#)
 - from Timer Console, [25](#)

Shut down button (launch pad), [17](#)

Source Directory dialog box, [131](#), [203](#), [268](#), [330](#)

specifications

- PC 300PL
 - Director Console, [7](#)
 - Sysplex Timer Console, [13](#)

- PC-330
 - Director Console, [4](#)
 - Sysplex Timer Console, [10](#)
- PC-365
 - Director Console, [6](#)
 - Sysplex Timer Console, [11](#)
- PS/2 Director Console, [3](#)
- standby Console (Sysplex Timer), [13](#)
- start
 - Director Console application
 - from Director Console, [24](#)
 - from Hardware Management Console, [35](#)
 - OS/2, [26](#)
 - Timer Console application
 - from Hardware Management Console, [36](#)
 - from Timer Console, [25](#)
- Startup window
 - Director, [24](#), [35](#)
 - Sysplex Timer, [25](#), [37](#)
- subnet mask
 - change
 - PC 300PL Console, [334](#)
 - PC-330 Console, [207](#)
 - PC-365 Console, [272](#)
 - PS/2 Console, [135](#)
 - default value
 - PC 300PL Console, [334](#)
 - PC-330 Console, [207](#)
 - PC-365 Console, [272](#)
 - PS/2 Console, [135](#)
- Sysplex Timer Console
 - application icon, [18](#), [37](#)
 - description, [8](#)
 - PC 300PL
 - description, [12](#)
 - specifications, [13](#)
 - PC-330
 - description, [9](#)
 - specifications, [10](#)
 - PC-365
 - description, [11](#)
 - specifications, [11](#)
 - platforms, [9](#)
 - shared Console, [14](#)
 - standby Console, [13](#)
 - tools folder, [19](#)
- Sysplex Timer Console - Properties dialog box
 - Program page, [74](#), [76](#)
 - Session page, [76](#)
- Sysplex Timer Console application
 - delete from Hardware Management Console, [54](#)
 - install on Hardware Management Console, [34](#)
 - shut down
 - from Hardware Management Console, [37](#)
 - from Timer Console, [25](#)
 - start
 - from Hardware Management Console, [36](#)
 - from Timer Console, [25](#)
 - transfer
 - from OS/2 desktop, [22](#)
 - to OS/2 desktop, [21](#)
 - uninstall from Hardware Management Console, [54](#)
- Sysplex Timer Data Collection window, [48](#), [82](#), [152](#), [225](#), [289](#)
- Sysplex Timer Tools - Icon View, [19](#), [48](#), [50](#), [82](#), [152](#), [224](#), [288](#)
- System Clock - Properties dialog box, [256](#), [318](#)
- System Configuration dialog box, [129](#), [201](#), [266](#)

- system library
 - back up
 - Hardware Management Console, [45](#), [49](#)
 - PC 300PL Console, [302](#)
 - PC-330 Console, [167](#)
 - PC-365 Console, [240](#)
 - PS/2 Console, [96](#)
 - restore
 - Hardware Management Console, [46](#), [50](#)
 - PC 300PL Console, [309](#)
 - PC-330 Console, [175](#)
 - PC-365 Console, [247](#)
 - PS/2 Console, [103](#)
- System Setup - Icon View, [122](#), [128](#), [194](#), [200](#), [258](#), [265](#), [320](#), [327](#)

T

- tape cartridge
 - back up
 - Director system library, [96](#), [167](#)
 - PC-330 Console fixed disk, [178](#)
 - PS/2 Console fixed disk, [106](#)
 - Sysplex Timer system library, [96](#), [167](#)
 - restore
 - Director system library, [103](#), [175](#)
 - PC-330 Console fixed disk, [185](#)
 - PS/2 Console fixed disk, [114](#)
 - Sysplex Timer system library, [103](#), [175](#)
- TCP/IP
 - configure local Console, [62](#)
 - configure remote console, [64](#)
 - start a session, [64](#)
 - terminate a session, [68](#)
- TCP/IP Cnfg. drawer (launch pad), [16](#)

- time and date
 - change format
 - PC 300PL Console, [319](#)
 - PC-330 Console, [193](#)
 - PC-365 Console, [257](#)
 - PS/2 Console, [121](#)
 - set
 - PC 300PL Console, [316](#)
 - PC-330 Console, [190](#)
 - PC-365 Console, [254](#)
 - PS/2 Console, [118](#)
- Timer Control Center dialog box, [244](#), [305](#)
- token ring adapter card
 - change data rate
 - PC 300PL Console, [295](#)
 - PC-330 Console, [159](#)
 - PC-365 Console, [231](#)
 - PS/2 Console, [89](#)
 - change IP address
 - PC 300PL Console, [334](#)
 - PC-330 Console, [207](#)
 - PC-365 Console, [272](#)
 - PS/2 Console, [135](#)
 - change MAC address
 - PC 300PL Console, [338](#)
 - PC-330 Console, [214](#)
 - PC-365 Console, [276](#)
 - PS/2 Console, [142](#)
 - change subnet mask
 - PC 300PL Console, [334](#)
 - PC-330 Console, [207](#)
 - PC-365 Console, [272](#)
 - PS/2 Console, [135](#)
 - default data rate, [89](#), [159](#), [231](#), [295](#)
 - default IP address
 - PC 300PL Console, [334](#)
 - PC-330 Console, [207](#)
 - PC-365 Console, [272](#)
 - PS/2 Console, [135](#)

- default subnet mask
 - PC 300PL Console, [334](#)
 - PC-330 Console, [207](#)
 - PC-365 Console, [272](#)
 - PS/2 Console, [135](#)
- display MAC address
 - PC 300PL Console, [338](#)
 - PC-330 Console, [212](#)
 - PC-365 Console, [276](#)
 - PS/2 Console, [140](#)

- tools folder
 - Director, [18](#)
 - Hardware Management Console, [39](#)
 - Sysplex Timer, [19](#)
 - Hardware Management Console, [47](#)
- trademarks, [xiii](#)

U

- uninstall
 - Director Console application from Hardware Management Console, [51](#)
 - Timer Console application from Hardware Management Console, [54](#)
- Update CONFIG.SYS dialog box, [279](#), [341](#)

V

- View Adapter Configuration dialog box, [161](#), [234](#)
- views
 - Drive A - Icon, [43](#), [86](#), [156](#), [229](#), [293](#)
 - ESCON Director Tools - Icon, [18](#), [46–47](#), [80](#), [150](#), [222](#), [286](#)
 - Extra Applications - Icon, [35–36](#)

- OS/2 Application - Icon, [17](#)
- OS/2 System - Icon, [17](#), [122](#), [128](#), [194](#), [200](#), [258](#), [265](#), [320](#), [327](#)
- Sysplex Timer Tools - Icon, [19](#), [48](#), [50](#), [82](#), [152](#), [224](#), [288](#)
- System Setup - Icon, [122](#), [128](#), [194](#), [200](#), [258](#), [265](#), [320](#), [327](#)

W

- window
 - DCAF - Directory, [65](#)
 - Distributed Console Access Facility, [65](#)
 - Remote Setup, [63](#)
- window list
 - Warp 4.0, [222](#), [286](#)
 - Warp Connect 3.0, [80](#), [150](#)
- windows
 - Backup Library Director Console Archive, [46](#)
 - Backup Library Sysplex Timer Console Archive, [50](#)
 - Build Diagnostic Diskette, [94](#), [165](#), [239](#), [300](#)
 - Control Panel, [126](#), [134](#), [146](#), [198](#), [206](#), [218](#), [262](#), [271](#), [282](#), [324](#), [333](#), [344](#)
 - DCGETDEF.CMD, [43](#), [87](#), [157](#), [229](#), [293](#)
 - DualStor for OS/2, [101](#), [104](#), [111](#), [172](#), [175](#), [182](#)
 - ESCON Director Data Collection, [41](#), [81](#), [151](#)
 - OS/2, [140](#)
 - Program Manager, [125](#), [133](#), [146](#), [197](#), [205](#), [218](#), [262](#), [270](#), [282](#), [324](#), [332](#), [344](#)
 - Put Director Definitions Director Console Migration, [44](#), [88](#), [158](#), [230](#), [294](#)
 - Restore Library Director Console Archive, [47](#)

- Restore Library Sysplex Timer
 - Console Archive, [51](#)

- Startup

- Director, [24](#), [35](#)

- Sysplex Timer, [25](#), [37](#)

- Sysplex Timer Data Collection, [48](#), [82](#),
[152](#), [225](#), [289](#)

- Win-OS/2

- change keyboard settings

- PC 300PL Console, [331](#)

- PC-330 Console, [204](#)

- PC-365 Console, [269](#)

- PS/2 Console, [132](#)

- close a window, [29](#)

- definition of terms, [27](#)

- dialog boxes, [30](#)

- maximize a window, [29](#)

- menu bars, [30](#)

- minimize a window, [29](#)

- minimize an application, [32](#)

- mouse operation, [27](#)

- move a window, [29](#)

- resize a window, [29](#)

- restore a window, [29](#)

- restore an application, [32](#)

- scroll bars, [30](#)

- set Win-OS/2 full screen session

- parameters

- Director, [71](#)

- Sysplex Timer, [75](#)

- set Win-OS/2 window session parameters

- Director, [69](#)

- Sysplex Timer, [73](#)

- window components, [28](#)

Communicating Your Comments to IBM

S/390

**Console Installation and User's Guide, 9032 Model 3 ESCON Director,
9033 Model 4 ESCON Director, 9032 Model 5 Director, and 9037 Model 2
Sysplex Timer**

Publication Number GA22-7291-02

If you especially like or dislike anything about this book, please use one of the methods listed below to send your comments to IBM. Whichever method you choose, please send your name, address, and telephone number if you would like a reply.

Feel free to comment on specific errors or omissions, accuracy, organization, subject matter, or completeness of this book. However, the comments you send should pertain to only the information in this manual and the way in which the information is presented. To request additional publications, or to ask questions or to make comments about the functions of IBM products or systems, you should talk to your IBM representative or to your IBM-authorized remarketer.

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate without incurring any obligation to you.

If you are mailing a reader's comment form (RCF) from a country other than the United States, you can give the RCF to the local IBM branch office or IBM representative for postage-paid mailing.

- If you prefer to send comments by mail, print, complete, and mail the RCF (two pages) provided at the back of this publication.
- If you prefer to send comments by FAX, use this number:
 - FAX: (International Access Code)+1+914+432-9405
- If you prefer to send comments electronically, use one of these network IDs:
 - IBM Mail Exchange: USIB6TC9 at IBMMAIL
 - Internet e-mail: mhvrcfs@us.ibm.com
 - World Wide Web: <http://www.ibm.com/s390/os390/>

Include the following in your note:

- Title and publication number of this book.
- Page number or topic to which your comment applies.

Optionally, if you include your telephone number, we can respond to your comments by phone.

Reader's Comments - We'd like to Hear from You

S/390

Console Installation and User's Guide, 9032 Model 3 ESCON Director, 9033 Model 4 ESCON Director, 9032 Model 5 Director, and 9037 Model 2 Sysplex Timer

Publication Number GA22-7291-02

Cut
Along
Line

You may use this form to communicate your comments about this publication, its organization, or subject matter, with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you. Your comments will be sent to the author's department for whatever review and action, if any, are deemed appropriate.

Note: Copies of IBM publications are not stocked at the location to which this form is addressed. Please direct any requests for copies of publications, or for assistance in using your IBM system, to your IBM representative or to the IBM branch office serving your locality.

Today's date: _____

What is your occupation?

Newsletter number of latest Technical Newsletter (if any) concerning this publication:

How did you use this publication?

- | | |
|--|---|
| <input type="checkbox"/> As an introduction | <input type="checkbox"/> As a text (student) |
| <input type="checkbox"/> As a reference manual | <input type="checkbox"/> As a text (instructor) |
| <input type="checkbox"/> For another purpose (explain) | |

Is there anything you especially like or dislike about the organization, presentation, or writing in this manual? Helpful comments include general usefulness of the book; possible additions, deletions, and clarifications; and specific errors and omissions.

Page Number: Comment:

Cut
Along
Line

Name

Address

Company or Organization

Phone Number

Reader's Comments - We'd Like to Hear from You

GA22-7291-02

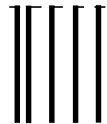


Cut
Along
Line

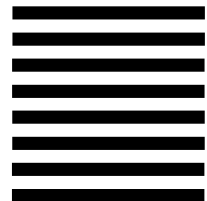
Fold and Tape

Please do not staple

Fold and Tape



NO POSTAGE
NECESSARY
IF MAILED IN THE
UNITED STATES



BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 40 ARMONK, NEW YORK

POSTAGE WILL BE PAID BY ADDRESSEE

IBM Corporation
Department 55JA, Mail Station P384
522 South Road
Poughkeepsie, NY 12601-5400



Fold and Tape

Please do not staple

Fold and Tape

Cut
Along
Line

GA22-7291-02



SA22-7296-01

