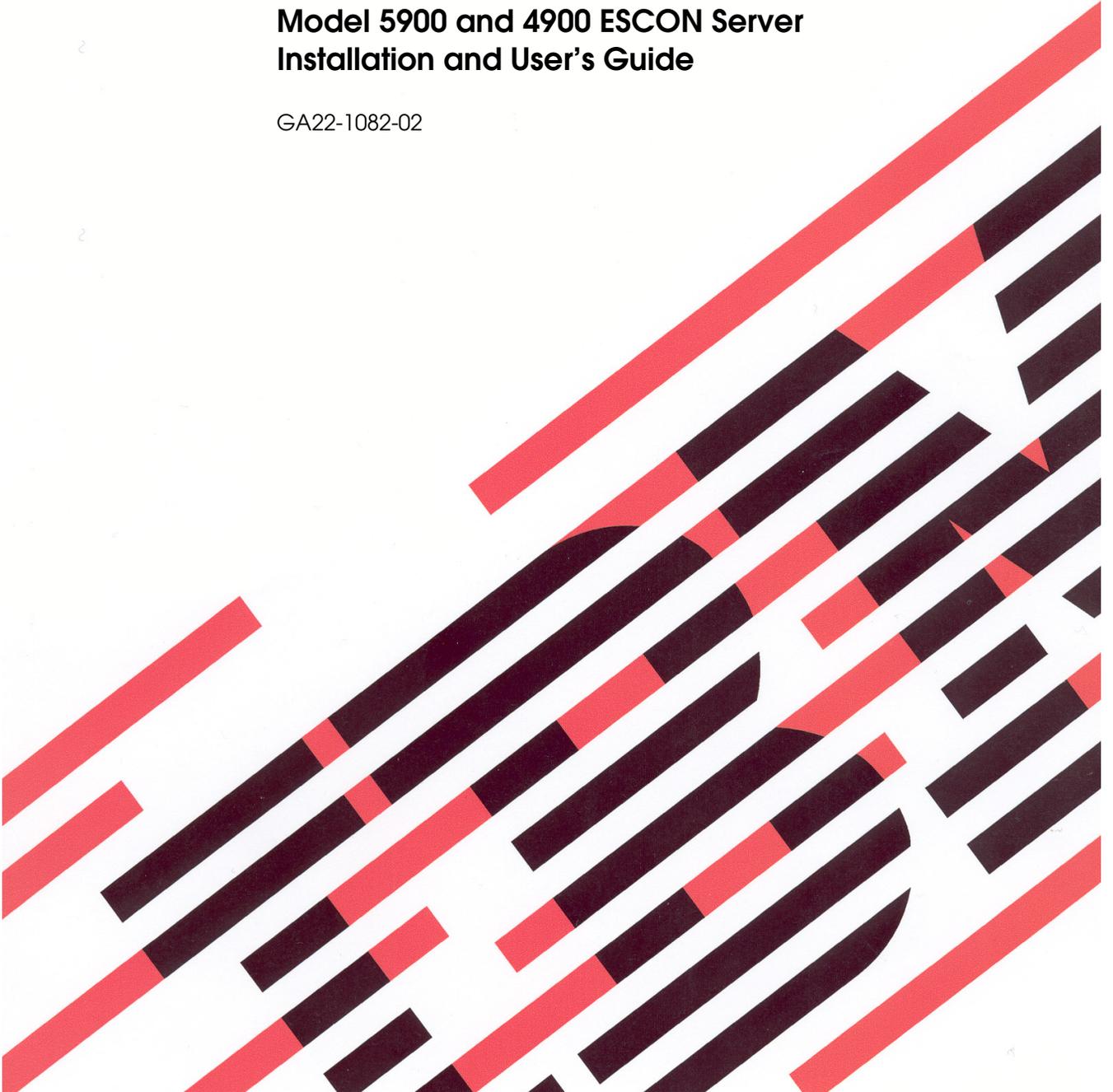


IBM

@server

**Model 5900 and 4900 ESCON Server
Installation and User's Guide**

GA22-1082-02



Note !

Before using information in this publication or the product it supports, read the information provided under Regulatory and Safety Information on page 5.

Third Edition (March 2004)

This edition (GA22-1082-02) applies only to the IBM[®] Model 5900 ESCON[®] Server and Model 4900 ESCON Server. There may be a newer version of this document in PDF format on **Resource Link**[™]. Go to <http://www.ibm.com/servers/resourcelink> and click *Library* on the navigation bar. A newer version is indicated by a lower-case letter following the form number suffix (for example, 00a, 00b, 01a, or 01b).

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Preface

This document provides instructions to install and use an:

- IBM® Model 5900 ESCON® Server to provide console support for the 9032 Model 3 ESCON Director, 9033 Model 4 ESCON Director, and 9032 Model 5 ESCON Director.
- IBM Model 4900 ESCON Server to provide console support for the 9037 Model 2 Sysplex Timer®.

Related Publications

The ESCON server is intended to replace IBM Model PS/2, PC-330, PC-365, and PC 300PL consoles. Information in this document supplements or supersedes console-related information in the following publications:

- *Console Installation and User's Guide - 9032 Models 3 and 5 ESCON Director, 9033 Model 4 ESCON Director, and 9037 Model 2 Sysplex Timer (GA22-7291).*
- *Using the 9032 Model 3, 9033 Model 4, and 9032 Model 5 Enterprise Systems Connection Director (SA22-7296).*
- *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 Enterprise Systems Connection Director (SY28-1158).*
- *Using the 9037 Model 2 Sysplex Timer (SA22-7230).*
- *Maintenance Information for the 9037 Model 2 Sysplex Timer (SY27-2641).*

Trademarks

All trademarked terms, indicated by a registered trademark symbol (®) or trademark symbol (™) on first use in this publication, are trademarks of either IBM Corporation or their respective owners in the United States, other countries, or both.

Regulatory and Safety Information



Use this publication if you are a trained installation and service representative experienced with ESCON directors and the 9037-002 Sysplex Timer.

The product contains no serviceable parts that require internal access during normal operation or prescribed maintenance conditions. Refer to these instructions prior to performing any maintenance action.

Federal Communications Commission (FCC) Statement

The product generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with instructions provided, may cause interference to radio communications. The product was tested and found to comply with the limits for Class B computing devices pursuant to Subpart B of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference in a residential environment. Any modification or change made to the product without explicit approval from IBM, by means of a written endorsement or through published literature, invalidates the service contract and voids the warranty agreement with IBM.

European Union Conformity Declarations and Directives (CE Mark)



The CE mark on the product indicates compliance with the following regulatory requirements as set forth by European Norms (ENs) and relevant international standards for commercial and light industrial information technology equipment (ITE):

- **EN55022: 1998** - ITE-generic radio frequency interference (RFI) emission standard for domestic, commercial, and light industrial environments, including electrical business equipment.
- **EN55024-1: 1998** - ITE-generic electromagnetic immunity standard for domestic, commercial, and light industrial environments, including electrical business equipment.

- **EN60950/A11:1997** - ITE-generic electrical and fire safety standard for domestic, commercial, and light industrial environments, including electrical business equipment.
- **EN61000-3-2:1995** - ITE-generic harmonic current emissions standard for domestic, commercial, and light industrial environments (equipment with rated current less than or equal to 16 amperes per phase).
- **EN61000-3-3:1995** - ITE-generic voltage fluctuation and flicker standard (low-voltage power supply systems) for domestic, commercial, and light industrial environments (equipment with rated current less than or equal to 16 amperes per phase).

In addition, the European Union (EU) Council has implemented a series of directives that define product safety standards for member countries. The following directives apply to the product:

- The product conforms with all protection requirements of EU directive **89/336/EEC** (Electromagnetic Compatibility Directive) in accordance with laws of the member countries relating to electromagnetic compatibility (EMC) emissions and immunity.
- The product conforms with all protection requirements of EU directive **73/23/EEC** (Low-Voltage Directive) in accordance with laws of the member countries relating to electrical safety.
- The product conforms with all protection requirements of EU directive **93/68/EEC** (Machinery Directive) in accordance with laws of the member countries relating to safe electrical and mechanical operation of the equipment.

IBM does not accept responsibility for any failure to satisfy the protection requirements of any of these directives resulting from a non-recommended or non-authorized modification to the product.

Australia and New Zealand C-Tick Mark



The Australia and New Zealand regulatory compliance mark (C-tick mark) on the product indicates compliance with regulatory requirements for safety and EMC (for information technology equipment) as set forth by the Australian Communications Authority (ACA) and the Radio Spectrum Management Group (RSM) of New Zealand.

People's Republic of China CCC Mark



The China Compulsory Certification mark (CCC mark) on the product indicates compliance with People's Republic of China regulatory requirements for safety and EMC (for information technology equipment) as set forth by the National Regulatory Commission for Certification and Accreditation.

Chinese National Standards Statement

The Chinese National Standards (CNS) statement below indicates compliance with Taiwanese Bureau of Standards, Metrology, and Inspection (BSMI) regulatory requirements. The statement indicates the product is a Class B product, and in a domestic environment may cause radio interference, in which case the user is required to take corrective actions.

這是乙類的資訊產品，在居住環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

German TÜV GS Mark



The German regulatory compliance mark (TÜV GS Mark) on the product indicates compliance with the German Safety of Equipment Act as tested by the Technical Inspection Association (Technischer Überwachungsverein or TÜV), and accredited by the Central Office of Safety of the German Länder (Zentralstelle der Länder für Sicherheit - ZLS).

Japanese VCCI Statement

The Voluntary Control Council for Interference (VCCI) statement below applies to information technology equipment, and indicates compliance with Japanese regulatory requirements. The statement indicates the product is a Class B product, and in a domestic environment may cause radio interference, in which case the user is required to take corrective actions.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Korean MIC Mark



The Korean Ministry of Information and Communications mark (MIC mark) on the product indicates compliance with regulatory requirements for safety and EMC (for information technology equipment) as authorized and certified by the Korean Radio Research Institute (RRI).

Mexican NOM Mark



The Official Mexican Standard (Normas Oficiales Mexicanas or NOM) mark on the product indicates compliance with regulatory requirements for safety (for information technology equipment) as authorized and accredited by the National System of Accreditation of Testing Laboratories (Sistema Nacional de Acreditamiento de Laboratorios de Pruebas or SINALP).

Russian GOST Certification



The Russian Gosudarstvennyi Standart (GOST) mark on the product indicates compliance with regulatory requirements for safety and EMC (for information technology equipment) as authorized and accredited by the State Committee for Standardization, Metrology and Certification.

Danger and Attention Statements

The following **DANGER** statement appears in this publication and describes safety practices that must be observed while installing or servicing the product. A **DANGER** statement provides essential information or instructions for which disregard or noncompliance may result in death or severe personal injury. The **DANGER** statement appears in English, followed by translations to:

- Arabic.
- Chinese (simplified - People's Republic of China).
- Chinese (traditional - Taiwan).
- French (European).
- German.
- Hebrew.
- Italian.
- Brazilian Portuguese.
- Spanish (European).
- Spanish (Latin American).



DANGER

Use the supplied power cords. Ensure the facility power receptacle is the correct type, supplies the required voltage, and is properly grounded.

خطر

استخدم الأسلاك الكهربائية المزودة. وتأكد من أن المقبس الكهربائي هو من النوع الصحيح، ويوفر عدد الفولتات المطلوبة، وأنه مؤرّض كهربائياً بشكل مناسب.





危險

使用所提供的電源線。確保使用正確型號的設備電源插座，提供必需的電壓並且正確接地。



危險

使用隨附的電源線，確定使用正確類型的設備電源插座，提供必需的電壓，並且正確接地。



DANGER

Utiliser les câbles d'alimentation fournis. S'assurer que la prise de courant du local est du type correct, délivre la tension requise et est correctement raccordée à la terre.



GEFAHR

Die mitgelieferten Netzkabel verwenden. Sicherstellen, dass die verwendete Netzsteckdose dem vorgeschriebenen Typ entspricht, die erforderliche Spannung liefert und einwandfrei geerdet ist.

סכנה

השתמש בכבלי החשמל הנלווים. וודא כי כלי הקיבול לחשמל של המתקן הוא מהסוג הנכון, מספק את המתח הדרוש, ומוארק כהלכה.



PERICOLO

Usare il cavo di alimentazione in dotazione. Assicurarsi che la presa di corrente a disposizione sia del tipo corretto, eroghi la tensione richiesta e sia dotata di messa a terra idonea.



PERIGO

Use os cordões elétricos fornecidos. Certifique-se de que o tipo de receptor de energia da facilidade é apropriado, fornece a voltagem necessária, e está corretamente aterrado.



PELIGRO

Utilice los cables de alimentación proporcionados. Asegúrese que el receptáculo tomacorriente para la instalación sea el tipo correcto, suministre el voltaje necesario, y que esté apropiadamente puesto a tierra.



PELIGRO

Utilice los cables de alimentación proporcionados. Asegúrese que el receptáculo tomacorriente para la instalación sea del tipo correcto, suministre el voltaje necesario, y que esté apropiadamente conectado a tierra.

General Precautions

When installing or servicing the product, follow these practices:

- Always use correct tools.
- Always use correct replacement parts.
- Keep all paperwork up to date, complete, and accurate.

ESD Precautions

All electrostatic discharge (ESD) sensitive components and field-replaceable units (FRUs) in the product are enclosed and shielded. ESD procedures are not required when working with the product.

Bill of Materials

The fully-configured server is delivered with a:

- Gigabyte GS-SR114 central processing unit (CPU) with the following minimum specifications:
 - Intel® Pentium® 4 processor with an 1,800 megahertz (MHz) or greater clock speed.
 - 1,024 megabyte (MB) or greater RAM.
 - 40 gigabyte (GB) or greater internal hard drive.
 - 1.44 MB 3.5-inch slim-type disk drive and slim-type compact disk-rewritable (CD-RW) drive.
 - 56K internal modem and modem adapter with RJ-11 connector.
 - Hinged liquid crystal display (LCD) front panel.
 - Microsoft Windows® 2000 Professional operating system.
 - Director console application or sysplex timer console application.
 - TightVNC™ Viewer Version 1.2.7 client-server software control package that provides remote network access (through a standard web browser) to the server desktop.

Current platforms may ship with more enhanced hardware, such as a faster processor, additional random-access memory (RAM), or a higher-capacity hard drive.

- Alternating current (AC) power cables for the CPU and color monitor, configured for length and plug type according to country and site requirements. The minimum cable length is six feet.
- 20-foot token ring cable with DB-9 male connector and 4P multistation access unit (MAU) connector (required to install and configure the server on a token ring LAN).
- 8-inch token ring adapter cable with DB-9 female connector and RJ-45 connector (required to install and configure the server on a token ring LAN).

- ESCON server kit, containing a:
 - 15-inch color display monitor with monitor-to-CPU cable.
 - Keyboard with keyboard-to-CPU cable.
 - Pointing device (mouse) with mouse-to-CPU cable.
 - CPU-installed 4/16 megabit per second (Mbps) token ring adapter card with RJ-45 connector.
 - CD-ROM and documentation supporting the 4/16 Mbps token ring adapter card.
- Software and documentation kit, containing a:
 - Blank, formatted, rewritable CD to back up the director or sysplex timer system libraries.
 - *ESCON Server Restore CD* that contains the Windows 2000 Professional operating system, the disk operating system (DOS) files required to boot the server after a hard drive failure, and the director console application or sysplex timer console application
 - *Model 5900 or 4900 ESCON Server Installation and User's Guide* (these instructions).
 - Director or sysplex timer support documentation.

Installation Instructions

These upgrade instructions describe procedures to:

- Install and connect the 5900 or 4900 ESCON Server.
- Configure the server LCD password and network addresses.
- Configure additional server information.
- Configure Windows 2000 operating system users as directed by the customer.
- Set the server date and time.
- Verify product-to-server connectivity.

Install and Connect Server

To install and connect the 5900 or 4900 ESCON Server:

1. Unpack and inspect the server as follows:
 - a. Inspect shipping container(s) for damage caused during transit. If a container is damaged, ensure a representative from the freight carrier is present when the container is opened.
 - b. Unpack shipping container(s) and inspect each item for damage. Ensure all items listed on the enclosed bill of materials are included in the container.
 - c. If any items are damaged or missing, contact IBM customer support.
2. Position the server components (CPU, color monitor, keyboard, and mouse) on a table or desk top as directed by the customer.

NOTE: The server is delivered with attached L-brackets for an optional rack-mount configuration. The L-brackets are not used.

3. As shown in [Figure 1](#), connect peripheral cables to the monitor (blue VGA), keyboard (purple), and mouse (green) connectors at the rear of the server.

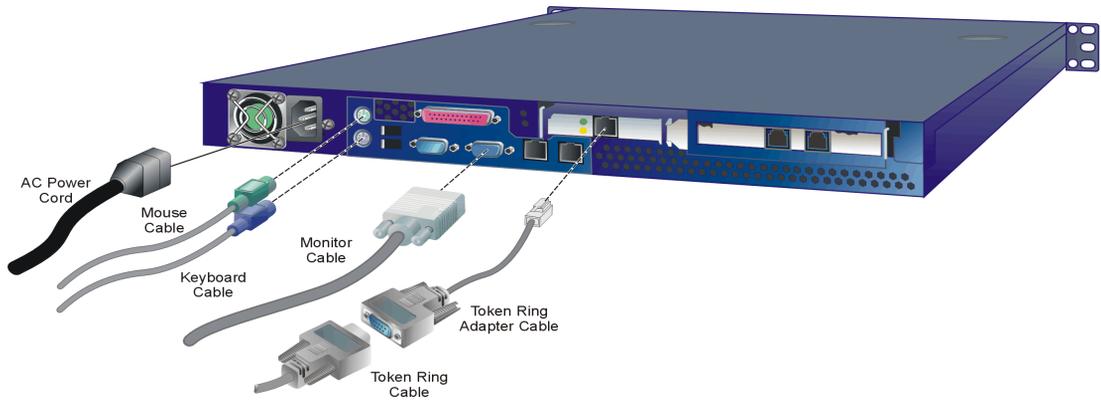


Figure 1 5900 or 4900 ESCON Server Connections

4. As shown in [Figure 1](#), connect the 8-inch token ring adapter cable to the RJ-45 connector on the token ring adapter card installed in the *left* card cage at the rear of the server.
5. Connect the 20-foot token ring cable (DB-9 adapter end) to the token ring adapter cable. Connect the other end (4P adapter end) to the MAU that connects the director or timer LAN.
6. Connect the color monitor power cord to the rear of the monitor and to a facility power source that provides single-phase, 90 to 264 VAC current, then power on the monitor.



DANGER

Use the supplied power cords. Ensure the facility power receptacle is the correct type, supplies the required voltage, and is properly grounded.

7. As shown in [Figure 1](#), connect the CPU power cord to the server and to a facility power source that provides single-phase, 90 to 264 VAC current.



DANGER

Use the supplied power cords. Ensure the facility power receptacle is the correct type, supplies the required voltage, and is properly grounded.

8. When the power cord is connected, the server powers on and performs power-on self-tests (POSTs). During POSTs:
 - a. The green liquid crystal display (LCD) panel illuminates.
 - b. The green hard disk drive (**HDD**) LED blinks momentarily, and processor speed and random-access memory information display momentarily at the LCD panel.
 - c. After a few seconds, the LCD panel displays the following message pertaining to boot sequence selection ([Figure 2](#)):

**Boot from LAN?
Press <Enter>**

Figure 2 LCD Panel During Boot Sequence

- d. Ignore the message. After ten seconds, the server performs the boot sequence from the basic input/output system (BIOS). After successful boot and POST completion, the LCD panel displays a **Welcome!!** message.
- e. The server then continuously cycles through and displays the following operational information at the LCD panel:
 - Host name.
 - System date and time.
 - LAN Internet Protocol (IP) addresses.
 - Fan 1, fan 2, fan 3, and fan 4 rotational speed.
 - Central processing unit (CPU) temperature.
 - Hard disk capacity.
 - Virtual and physical memory capacity.

9. Press the left edge (**PUSH** label) of the LCD panel to disengage the panel and expose the CD-RW drive.
10. Insert a blank rewritable CD into the CD-RW drive and close the LCD panel.

Configure Server Password and Network Addresses

If required, change the default password for the server's LCD panel and the following network information to conform to the customer's token ring LAN addressing scheme:

- IP address.
- Subnet mask.

Configure LCD Panel Password

To configure a new LCD panel password at the server:

1. At the LCD panel, press **ENTER**. The **Welcome!!** or operational information message changes to the following (Figure 3):



Figure 3 LCD Panel (Password Entry)

2. Using the **▲** button to increment a digit, the **▼** button to decrement a digit, the **◀** button to move the cursor left, and the **▶** button to move the cursor right, input the default password (9999), and press **ENTER**. The **LAN 1 Setting??** message appears at the LCD panel.
3. Press the **▼** button several times until the **Change Password?** option appears at the LCD panel, then press **ENTER**. The following message appears (Figure 4):



Figure 4 LCD Panel (New Password)

4. Use the arrow keys as described in [step 2](#) to input a new 4-digit numeric password, then press **ENTER**. The following message appears ([Figure 5](#)):



Save Change?
Yes, Save !!

Figure 5 LCD Panel (Save Change)

5. Press **ENTER**. A **Wait a moment!** message appears at the LCD panel, the LCD panel returns to the **LAN 1 Setting??** message, and the password changes.

Configure LAN Addresses

To configure IP address and subnet mask information for the token ring LAN connection:

1. At the LCD panel, press **ENTER**. The **Welcome!!** or operational information message changes to the following ([Figure 6](#)):



Input Password:
0****

Figure 6 LCD Panel (Password Entry)

2. Using the **▲** button to increment a digit, the **▼** button to decrement a digit, the **◀** button to move the cursor left, and the **▶** button to move the cursor right, input the default or changed password, and press **ENTER**. The **LAN 1 Setting??** message appears at the LCD panel.
3. Press the **▼** button several times until the **LAN 3 Setting??** message appears at the LCD panel. Press **ENTER** and the following message appears ([Figure 7](#)) with the default IP address of 10.1.1.1.



Input IP:
010.001.001.001

Figure 7 LCD Panel (LAN 3 IP Address)

4. Use the arrow keys as described in [step 2](#) to input a new IP address, then press **ENTER**. The following message appears ([Figure 8](#)):



**Save Change?
Yes, Save !!**

Figure 8 LCD Panel (Save Change)

5. Press **ENTER**. The LAN 3 IP address changes and the following message appears ([Figure 9](#)) with the default subnet mask of 255.0.0.0.



**Input Netmask:
255.000.000.000**

Figure 9 LCD Panel (LAN 3 Subnet Mask)

6. Use the arrow keys as described in [step 2](#) to input a new subnet mask, then press **ENTER**. The following message appears ([Figure 10](#)):



**Save Change?
Yes, Save !!**

Figure 10 LCD Panel (Save Change)

7. Press **ENTER**. A **Wait a moment!** message appears at the LCD panel, the LCD panel returns to the **LAN 1 Setting??** message, and the LAN 3 subnet mask changes.
8. Record the private LAN IP address and subnet mask for reference if the server hard drive fails and must be restored.

Configure Additional Server Information

If required, change the server's gateway address and domain name system (DNS) server IP address to conform to the customer's token ring LAN addressing scheme. The gateway address is the address of the local router for the corporate intranet. Configure these parameters from the server's Windows 2000 operating system.

1. After the server powers on and performs POSTs (refer to *Install and Connect Server* on page 14), the *Welcome to Windows* dialog box displays (Figure 11).



Figure 11 Welcome to Windows Dialog Box

2. Simultaneously click the **Send Ctrl-Alt-Del** buttons to log on to the server desktop. The *Log On to Windows* dialog box displays (Figure 12).

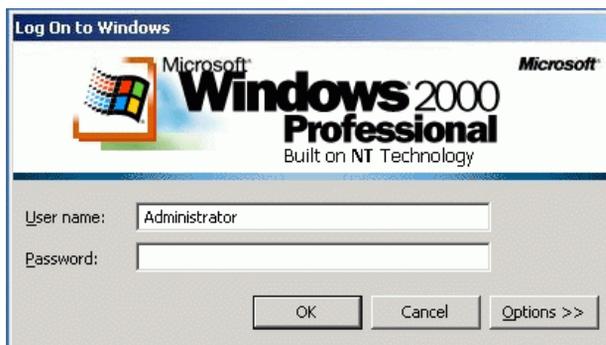


Figure 12 Log On to Windows Dialog Box

3. Type the default Windows 2000 user name and password and click OK. The server's Windows 2000 desktop opens (Figure 13).

NOTE: The default Windows 2000 user name is **Administrator** and the default password is **password**. Both are case-sensitive.

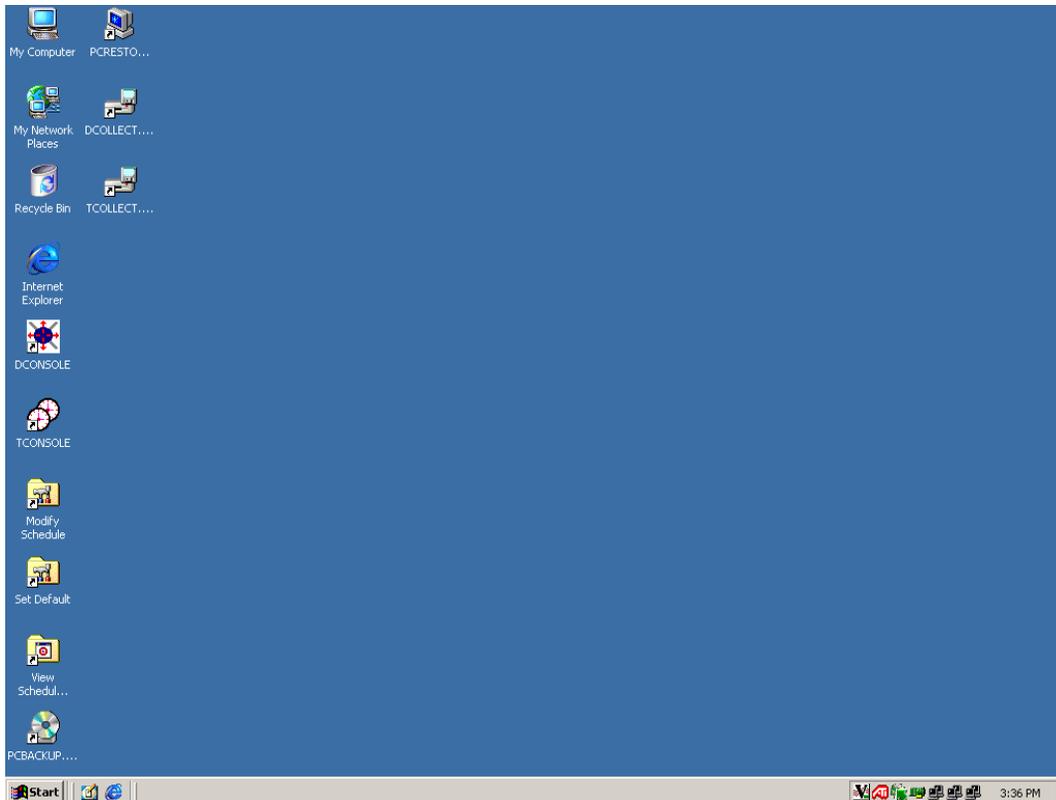


Figure 13 Windows 2000 Desktop

Configure Gateway and DNS Server Addresses

To configure gateway addresses and DNS server IP addresses for the token ring LAN connection (LAN 3):

1. At the Windows 2000 desktop, click *Start* at the left side of the task bar (bottom of the desktop), then select *Settings*, then *Control Panel*. The *Control Panel* window displays (Figure 14).

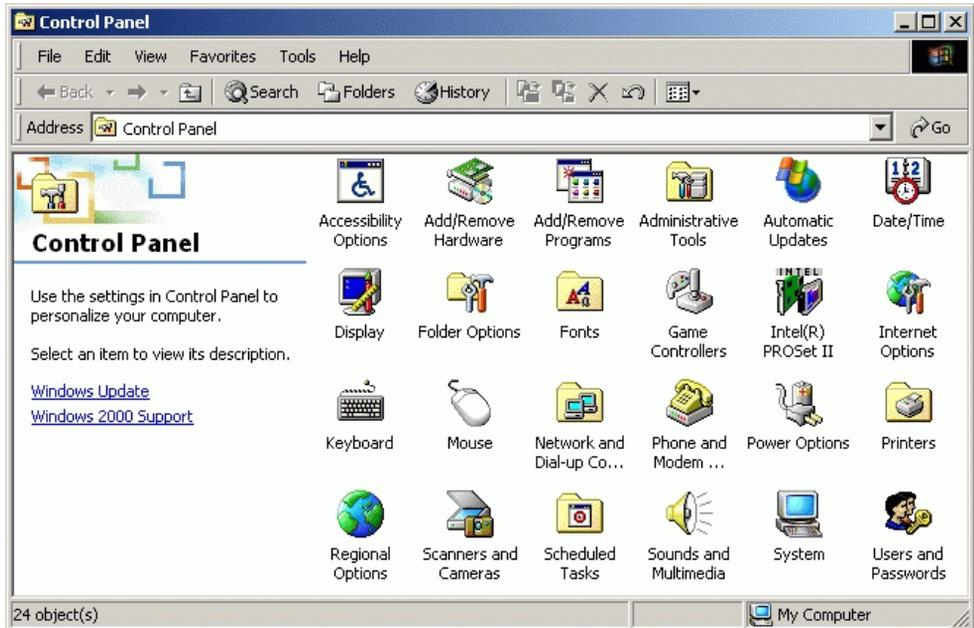


Figure 14 Control Panel Window

2. Double-click the *Network and Dial-up Connections* icon. The *Network and Dial-up Connections* window displays (Figure 15).

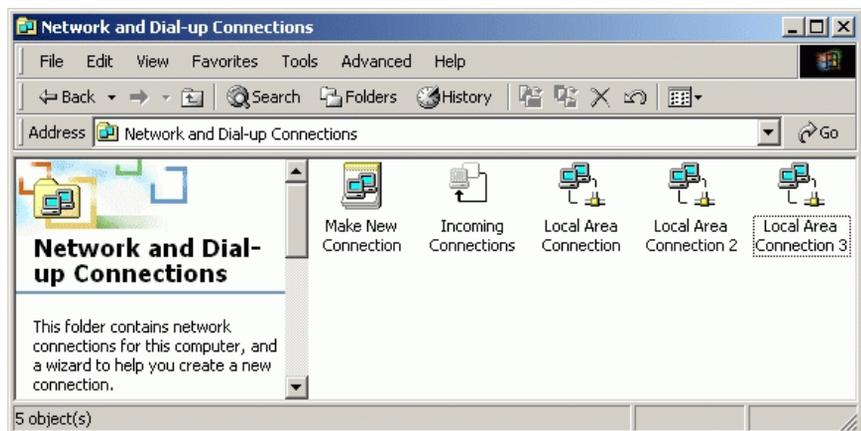


Figure 15 Network and Dial-up Connections Window

3. To configure addresses for the token ring LAN connection, double-click the *Local Area Connection 3* icon. The *Local Area Connection 3 Status* dialog box displays (Figure 16).

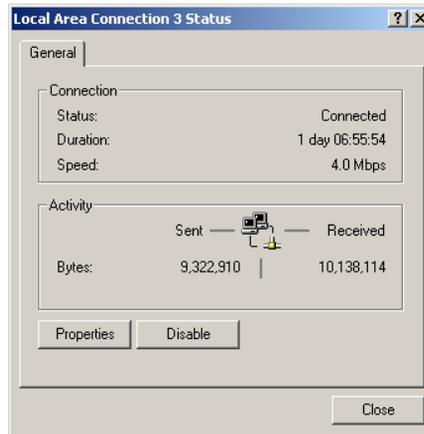


Figure 16 Local Area Connection 3 Status Dialog Box

4. Click *Properties*. The *Local Area Connection 3 Properties* dialog box displays (Figure 17).

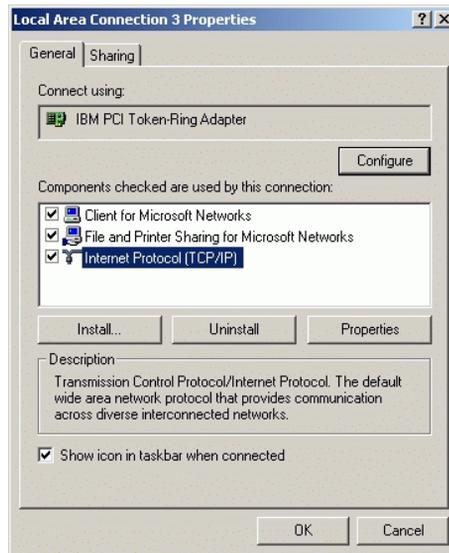


Figure 17 Local Area Connection 3 Properties Dialog Box

5. Double-click the *Internet Protocol (TCP/IP)* entry. The *Internet Protocol (TCP/IP) Properties* dialog box displays (Figure 18).

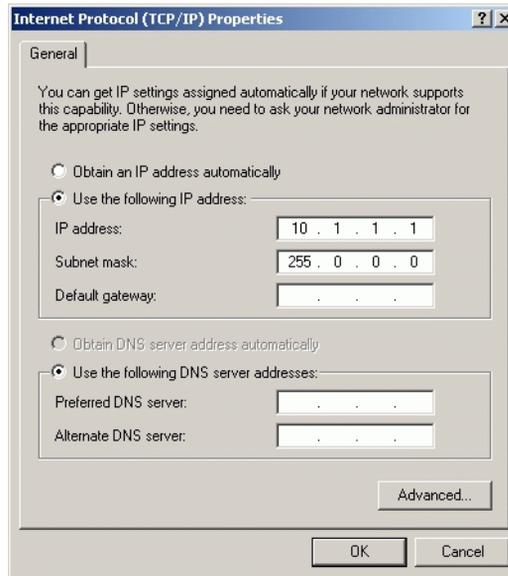


Figure 18 Internet Protocol (TCP/IP) Properties Dialog Box

6. The *Use the following IP address* radio button is enabled and the *IP address* and *Subnet mask* fields display network information configured while performing *Configure Server Password and Network Addresses*.
7. At the *Default gateway* field, enter the gateway address obtained from the customer's network administrator.
8. Select (enable) the *Use the following DNS server addresses* radio button. At the *Preferred DNS server* field, enter the DNS server IP address obtained from the customer's network administrator, then click *OK* to apply the changes and close the dialog box.
9. Click *OK* to close the *Local Area Connection 3 Properties* dialog box.
10. Record the changed gateway and DNS server addresses for reference if the server hard drive fails and must be restored.
11. Click close (X) at the upper right corner of the *Network and Dial-up Connections* window to return to the Windows 2000 desktop.

12. Reboot the server:

- a. At the Windows 2000 desktop, click *Start* at the left side of the task bar (bottom of the desktop), then select *Shut down*. The *Shut Down Windows* dialog box appears.
- b. At the *Shut Down Windows* dialog box, select the *Restart* option and click *OK* to reboot the server.

Configure Windows 2000 Users

Configure password access for all authorized Windows 2000 users. It is also recommended to change the default administrator password. To configure users:

1. At the Windows 2000 desktop, click *Start* at the left side of the task bar (bottom of the desktop), then select *Settings*, then *Control Panel*. The *Control Panel* window displays (Figure 14).
2. Double-click the *Users and Passwords* icon. The *Users and Passwords* dialog box displays (Figure 19).

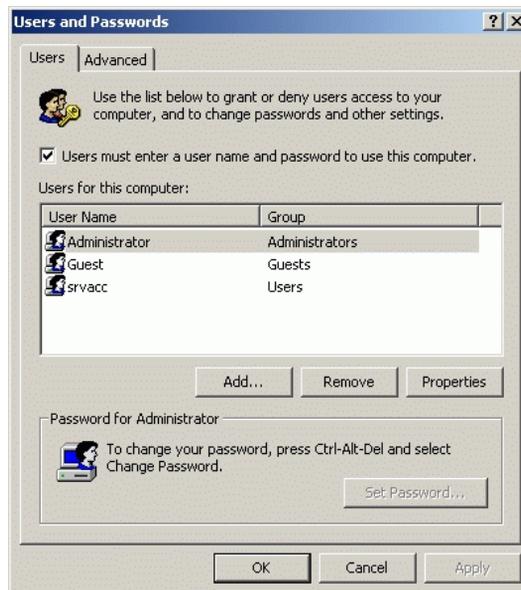


Figure 19 Users and Passwords Dialog Box

3. The *Guest* user name is a built-in account in the Windows 2000 operating system and cannot be deleted. The *svracc* account is for field service users and must not be modified or deleted.

Change Default Administrator Password

To change the administrator password from the default (**password**) to a customer-specified password:

1. At the Windows 2000 desktop, simultaneously click the **Ctrl-Alt-Del** buttons. The *Windows Security* dialog box displays (Figure 20).



Figure 20 Windows Security Dialog Box

2. Click *Change Password*. The *Change Password* dialog box displays (Figure 21).



Figure 21 Change Password Dialog Box

3. At the *Old Password* field, type the old password. At the *New Password* and *Confirm New Password* fields, type the new password.

NOTE: The *New Password* and *Confirm New Password* fields are case-sensitive.

4. Click *OK*. The default administrator password changes and the *Change Password* dialog box closes.
5. Click *Cancel* at the *Windows Security* dialog box to return to the *Users and Passwords* dialog box.

Add a New User

To set up a new Windows 2000 user:

1. At the *Users and Passwords* dialog box, click *Add*. The first window of the *Add New User* wizard displays (Figure 22).



Figure 22 Add New User Wizard (First Window)

2. Type the appropriate new user information in the *User name*, *Full name*, and *Description* fields, then click *Next*. The second window of the *Add New User* wizard displays (Figure 23).



Figure 23 Add New User Wizard (Second Window)

3. Type the new user's password in the *Password* and *Confirm password* fields, then click *Next*. The third window of the *Add New User* wizard displays (Figure 24).



Figure 24 Add New User Wizard (Third Window)

4. Based on the level of access to be granted, select the *Standard user*, *Restricted user*, or *Other* radio button. If the *Other* radio button is selected, choose the type of access from the adjacent list box.

5. Click *Finish*. The new user information is added and the wizard closes. Record the user information for reference if the server hard drive fails and must be restored.
6. If no other users are to be added, click *OK* to close the *Users and Passwords* dialog box.
7. Click close (X) at the upper right corner of the *Control Panel* window to return to the Windows 2000 desktop.

Set Server Date and Time

Audit and event logs are time-stamped with the server date and time. All managed product system clocks are synchronized with the server date and time by default. To set the server date and time:

1. At the Windows 2000 desktop, click *Start* at the left side of the task bar (bottom of the desktop), then select *Settings*, then *Control Panel*. The *Control Panel* window displays (Figure 14).
2. Double-click the *Date/Time* icon. The *Date/Time Properties* dialog box displays with the *Date & Time* page open (Figure 25).

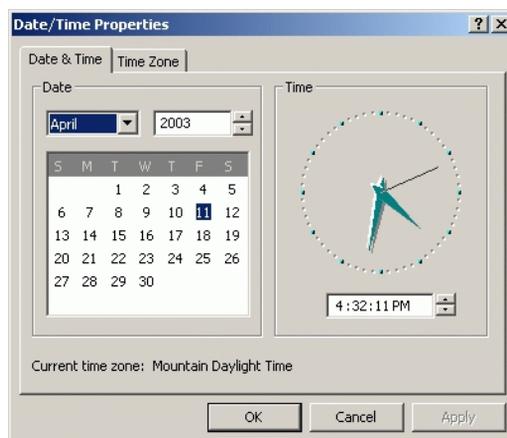


Figure 25 Date/Time Properties Dialog Box (Date & Time Tab)

NOTE: The *Time Zone* field must be set before the *Date & Time* field.

3. Click the *Time Zone* tab. The *Date/Time Properties* dialog box displays with the *Time Zone* page open (Figure 26).

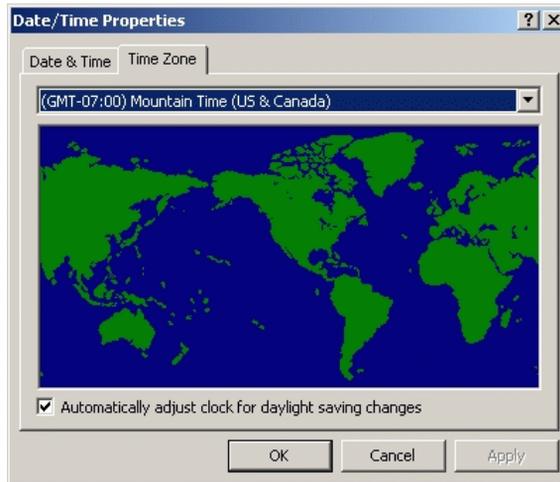


Figure 26 Date/Time Properties Dialog Box (Time Zone Tab)

4. To change the time zone:
 - a. Select the appropriate time zone from the drop-down list at the top of the dialog box.
 - b. If instructed by the customer's system administrator, select the *Automatically adjust clock for daylight saving changes* check box.
 - c. Click *Apply*. Record time zone and daylight savings information for reference if the server hard drive fails and must be restored.
5. Click the *Date & Time* tab. The *Date/Time Properties* dialog box displays with the *Date & Time* page open.
6. To change the date and time:
 - a. Select the month from the drop-down list under *Date*.
 - b. Click the up or down arrow adjacent to the year field and select the desired year.

- c. Click the day on the calendar to select the desired date.
 - d. Click in the time field and enter the desired time, then click the adjacent up or down arrow and select *AM* or *PM*.
 - e. Click *Apply*. Record date and time information for reference if the server hard drive fails and must be restored.
7. Click *OK* to close the *Date/Time Properties* dialog box.
 8. Click close (*X*) at the upper right corner of the *Control Panel* window to return to the Windows 2000 desktop.

Define and Verify Server Connectivity

Connectivity must be established between managed products and the ESCON server. This sections describes procedures to:

- Define and verify connectivity between a director and the server.
- Define and verify connectivity between a sysplex timer network and the server.

Director-to-Server Connectivity

To define and verify director-to-ESCON server connectivity:

1. At the Windows 2000 desktop ([Figure 13](#)), double-click the director console (**D**CONSOLE) icon ([Figure 27](#)).



Figure 27 Director Console Icon

2. The application opens and the *Director Console* startup window displays ([Figure 28](#)).



Figure 28 Director Console Startup Window

3. Select *New Configuration Matrix* from the *File* menu. The *Select Director for New Matrix* dialog box displays (Figure 29).

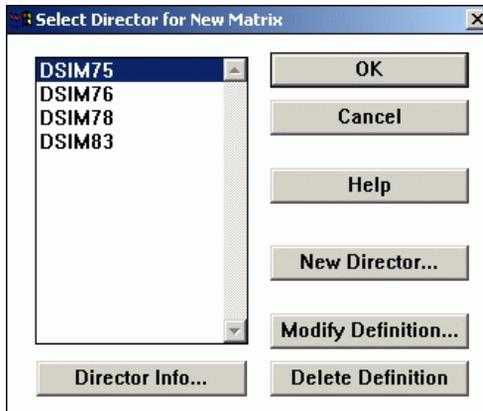


Figure 29 Select Director for New Matrix Dialog Box

4. Click *New Director*. The *Director Definition* dialog box displays (Figure 30).

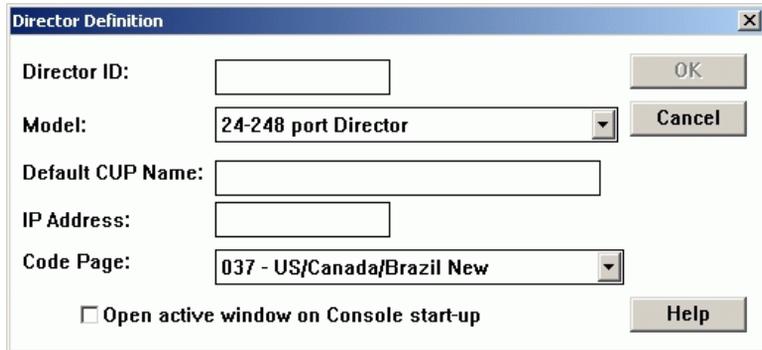


Figure 30 Director Definition Dialog Box

5. Complete *Director Definition* dialog box fields as follows:
 - a. **Director ID** - Enter a name from one to eight characters that uniquely identifies the director to the ESCON console.
 - b. **Model** - Select the director model being defined from the drop-down list. The default value is **24-248 port Director**.
 - c. **Default CUP Name** - Use this option to assign a control unit port (CUP) name for communication with the System Automation for OS/390® (SA OS/390®) operating system.
 - d. **IP Address** - Enter the director's IP address.
 - e. **Code Page** - Select a country code page to display port names (for the director matrix) from the drop-down list. The default value is **US/Canada/Brazil New**.
 - f. **Open active window on Console start-up** - Click the check box to display the active matrix for this director when the console powers on.
6. Click **OK**. The *Director Console - New Matrix* window displays (Figure 31).

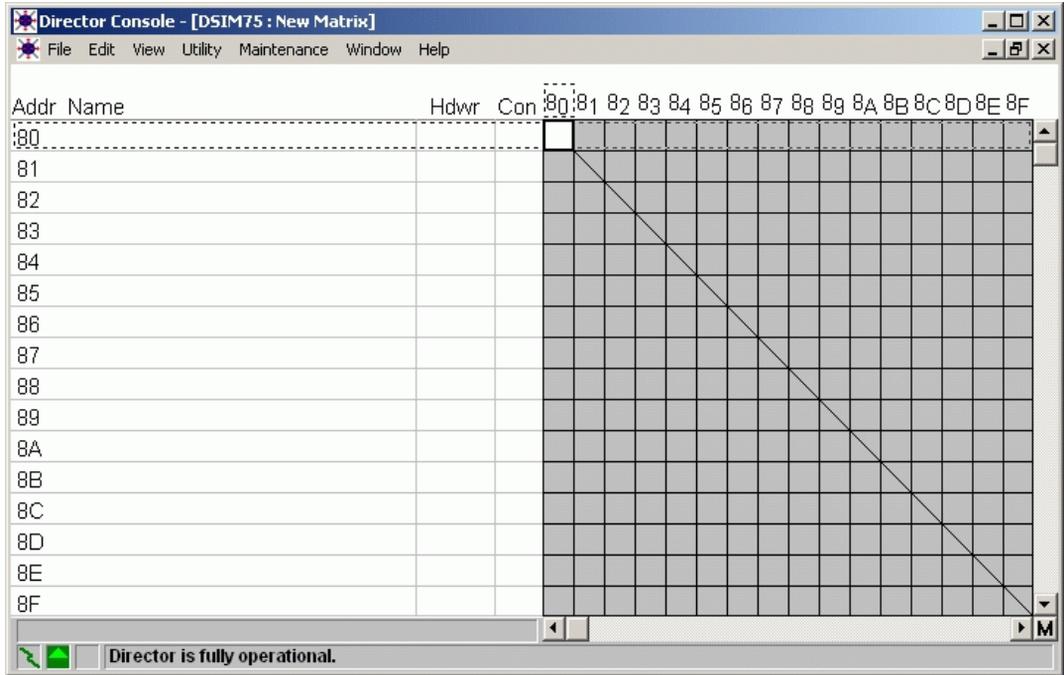


Figure 31 Director Console - New Matrix Window

7. Examine the link status and director status indicators at the bottom left corner of the window:
 - A green lightning bolt indicates the director-to-ESCON console is operational and available.
 - A green up arrow indicates the director is operational.
8. For additional installation instructions or fault isolation instructions, refer to the director-specific maintenance information manual (MIM).

Sysplex Timer-to-Server Connectivity

To define and verify sysplex timer network-to-ESCON server connectivity:

1. At the Windows 2000 desktop (Figure 13), double-click the sysplex timer console (TCONSOLE) icon (Figure 32).



Figure 32 Sysplex Timer Console Icon

2. The application opens and the *Sysplex Timer Network Console* startup window displays (Figure 33).

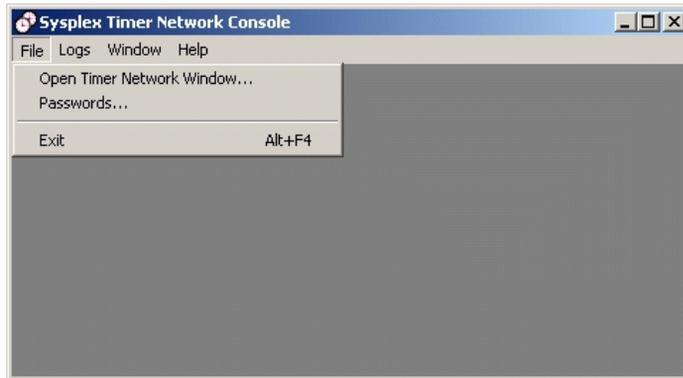


Figure 33 Sysplex Timer Network Console Startup Window

3. Select *Open Timer Network Window* from the *File* menu. The *Select Timer Network* dialog box displays (Figure 34).

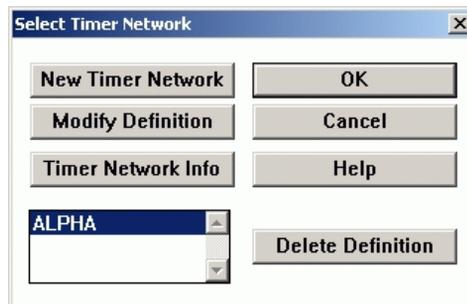


Figure 34 Select Timer Network Dialog Box

4. Click *New Timer Network*. The *Timer Network Connection Definition* dialog box displays (Figure 35).

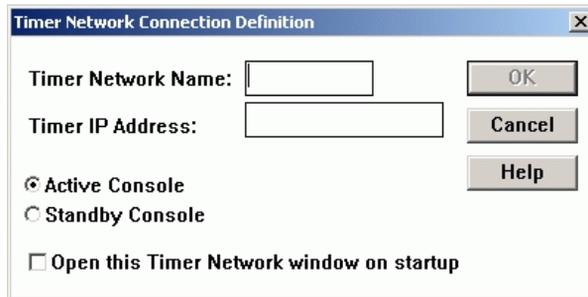


Figure 35 Timer Network Connection Definition Dialog Box

5. Complete *Timer Network Connection Definition* dialog box fields as follows:
 - a. **Timer Network Name** - Enter a name from one to eight characters that uniquely identifies the sysplex timer network to the ESCON console. A network consists of a single timer in basic or expanded basic (EB) configuration, or two timers in expanded availability (EA) configuration.
 - b. **Timer IP Address** - Enter the IP address of the *local* sysplex timer (sysplex timer attached to the ESCON console).
 - c. **Active or Standby Console** - Click (select) the appropriate radio button, depending on if the console is to be initialized (active console).
 - d. **Open this timer network window on start-up** - Click the check box to display this sysplex timer network when the console powers on.
6. Click **OK**. The *Sysplex Timer Network Console - Timer Network* window displays (Figure 36).

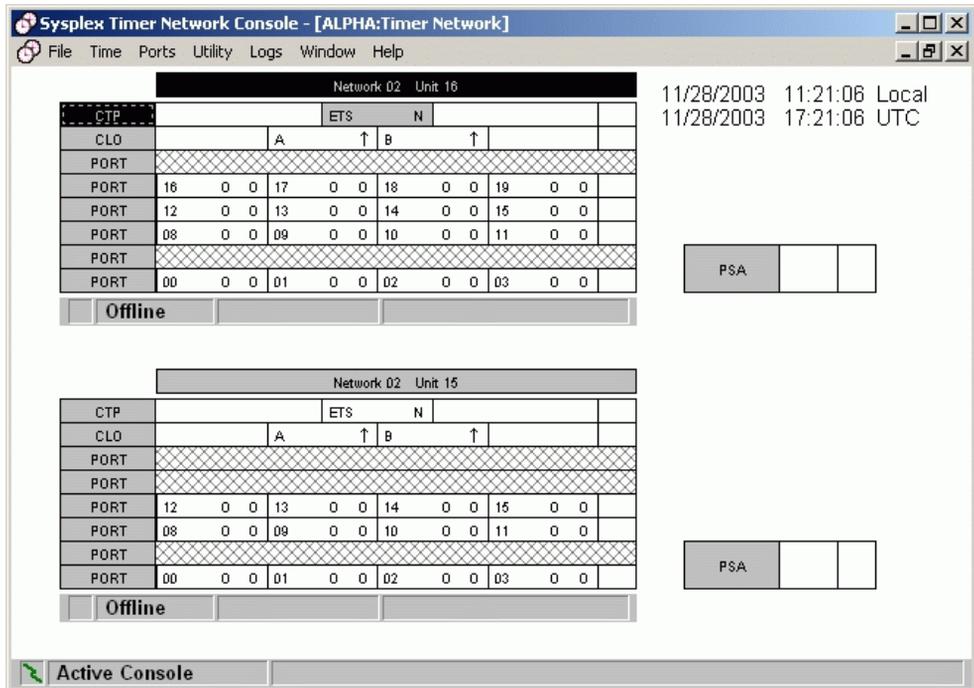


Figure 36 Sysplex Timer Network Console - Timer Network Window

7. Examine the link status indicator at the bottom left corner of the window. A green lightning bolt indicates the timer network-to-ESCON console is operational and available.
8. For additional installation instructions or fault isolation instructions, refer to *Maintenance Information for the 9037 Model 2 Sysplex Timer (SY27-2641)*.

Remote Access Console Support

Early-model director and sysplex timer consoles (Model PS/2, PC-330, PC-365, and PC 300PL) use Distributed Console Access Facility (DCAF™) software to provide remote PC or workstation access to the console's OS/2® desktop.

The 5900 or 4900 ESCON Server uses a TightVNC Viewer Version 1.2.7 client-server software control package that provides remote network access (through a standard web browser) to the server's Windows 2000 desktop. To login and access the server desktop:

1. Ensure the server and a browser-capable PC are connected through an Ethernet LAN segment. At the PC, launch the browser application (Netscape Navigator or Internet Explorer).
2. At the PC browser, enter the LAN 3 IP address of the server, followed by :5800, as the Internet uniform resource locator (URL). Enter the URL in the following format:

http://xxx.xxx.xxx.xxx:5800

Where *xxx.xxx.xxx.xxx* is the default IP address of **10.1.1.1** or the IP address configured while performing [Configure Server Password and Network Addresses](#). The VNC Authentication screen displays (Figure 37).



Figure 37 VNC Authentication Screen

3. Type the default TightVNC viewer password and click *OK*. The *Welcome to Windows* dialog box displays (Figure 38). The default password is **password**.



Figure 38 Welcome to Windows Dialog Box (Remote Access)

4. Click the **Send Ctrl-Alt-Del** button at the top of the window to log on to the server desktop. The *Log On to Windows* dialog box displays (Figure 39).

NOTE: Do not simultaneously press the **Ctrl**, **Alt**, and **Delete** keys. This action logs the user on to the browser-capable PC, not the ESCON server.



Figure 39 Log On to Windows Dialog Box (Remote Access)

5. Type the default Windows 2000 user name and password and click **OK**. The server's Windows 2000 desktop opens (Figure 40).

NOTE: The default Windows 2000 user name is **Administrator** and the default password is **password**. Both are case-sensitive.

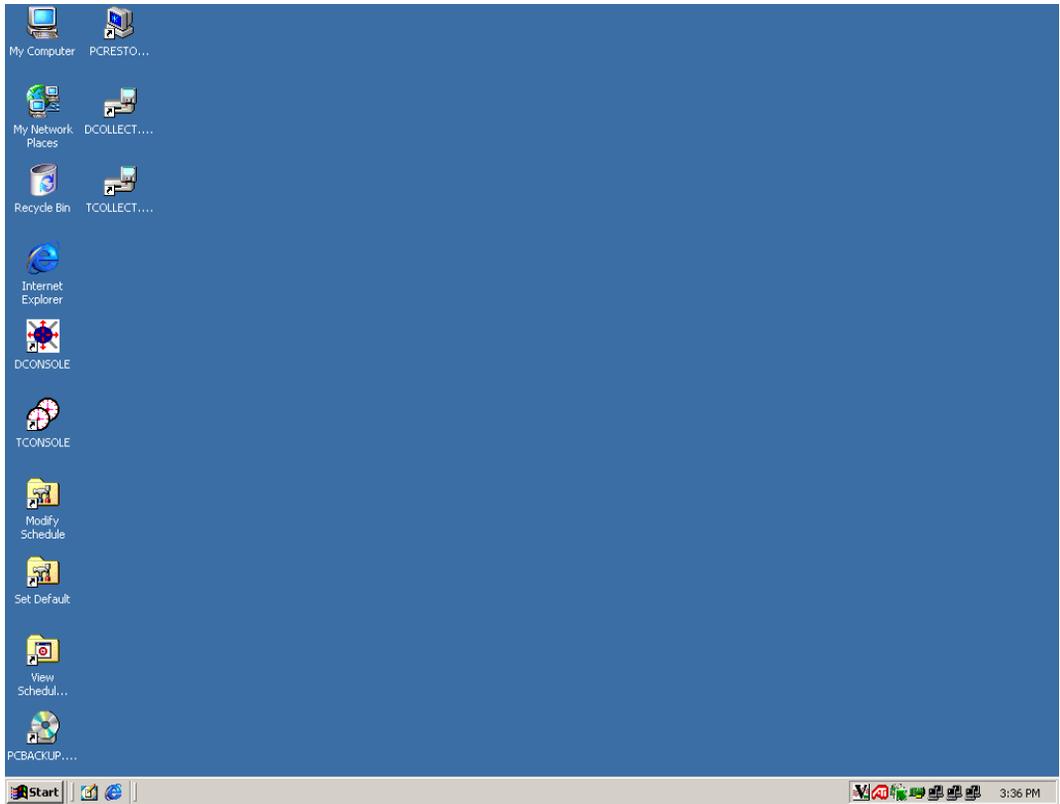


Figure 40 Windows 2000 Desktop (Remote Access)

Backup Procedures

Routine backups of the director or sysplex timer system library to CD-RW ensure critical data can be restored if required. The data is also required when migrating an application to a backup or replacement ESCON server.

Critical data for the applications includes console settings, IP addresses, configuration files, logs, licensed internal code (LIC) files, identification information, and matrices. To back up director or sysplex timer system library data:

1. At the ESCON server, ensure the director console or sysplex timer application is closed and the Windows 2000 desktop is open.
2. At the Windows 2000 desktop (Figure 13), double-click the backup (PCBACKUP.CMD) icon (Figure 41).



Figure 41 PC Backup Icon

3. The *PCBACKUP.CMD* window displays (Figure 42).

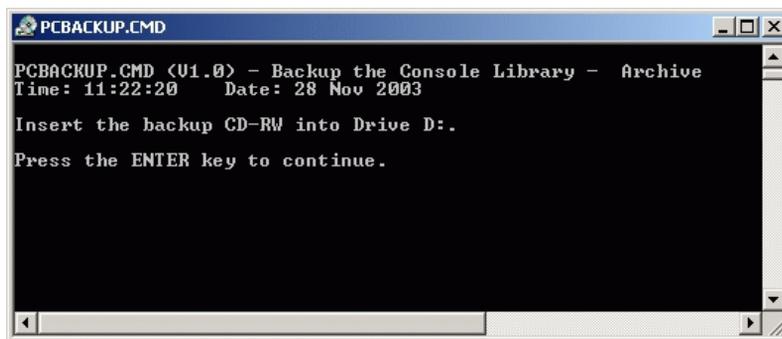


Figure 42 PCBACKUP.CMD Window

4. Insert a blank, formatted, rewritable CD (supplied with the server) into the CD-RW (**D:**) drive. After a few moments, the *InCD* dialog box displays, indicating the presence of a CD in the drive (Figure 43). Click *OK* to close the *InCD* dialog box.

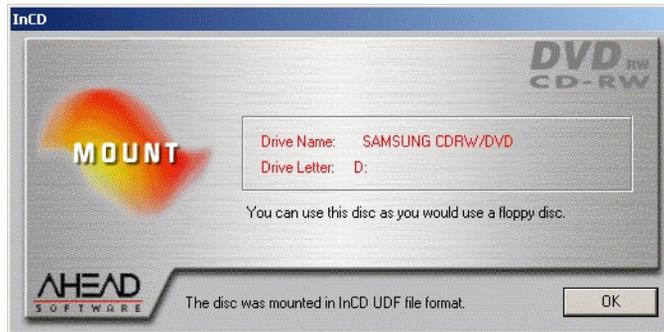


Figure 43 InCD Dialog Box

5. At the *PCBACKUP.CMD* window, press the **Enter** key to initiate the backup process. Files are backed up as follows:
 - Director system library files are backed up to:
D:\DARCHIVE.CNS
 - Sysplex timer system library files are backed up to:
D:\TARCHIVE.CNS
6. The *PCBACKUP.CMD* window closes and the Windows 2000 desktop displays.

Restore Procedures

Perform this procedure to restore the director or sysplex timer system library from CD-RW to the ESCON server's hard drive. To restore director or sysplex timer system library data:

1. At the ESCON server, ensure the director console or sysplex timer application is closed and the Windows 2000 desktop is open.
2. At the Windows 2000 desktop (Figure 13), double-click the restore (PCRESTOR.CMD) icon (Figure 44).



Figure 44 PC Restore Icon

3. The REXX PCRESTOR.ORX window displays (Figure 45).

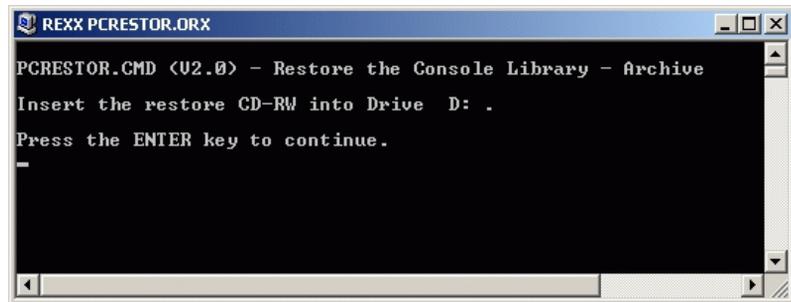


Figure 45 REXX PCRESTOR.ORX Window

4. Insert the rewritable CD with backed up director or sysplex timer system library files into the CD-RW (D:) drive. After a few moments, the *InCD* dialog box displays, indicating the presence of a CD in the drive (Figure 46). Click *OK* to close the *InCD* dialog box.

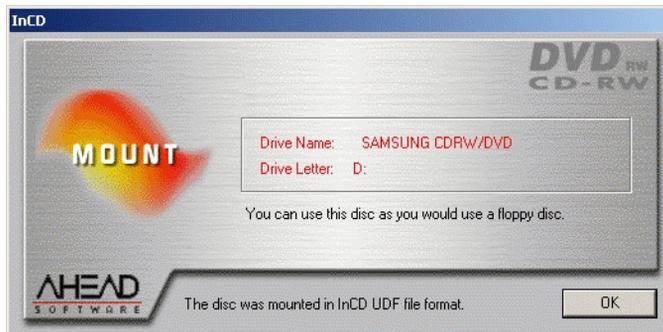


Figure 46 InCD Dialog Box

5. At the *REXX PCRESTOR.ORX* window, press the **Enter** key to initiate the restore process. System library files are restored to the ESCON server hard drive, the *REXX PCRESTOR.ORX* window closes, and the Windows 2000 desktop displays.

Data Collection Procedures

Perform a maintenance data collection procedure for an ESCON director or sysplex Timer after a system problem occurs or when a FRU is removed and replaced.

- **Director data collection** - The data collection procedure transfers maintenance information from the director to the ESCON server's hard drive, then to a 3.5-inch diskette. The diskette is then mailed to the original equipment manufacturer (OEM) for problem analysis and resolution.
- **Sysplex timer data collection** - The data collection procedure transfers maintenance information from the sysplex timer directly to a 3.5-inch diskette. The diskette is then mailed to the OEM for problem analysis and resolution.

Director Data Collection

To perform the data collection procedure for a director:

1. At the ESCON server, ensure the director console application is open. Record the director name (up to eight characters in length) that appears in the title bar of the *Director Console - New or Active Matrix* window (Figure 31).
2. Select the *Collect Maintenance Information* option from the *Maintenance* menu. The *Collect Maintenance Information* dialog box displays (Figure 47), showing status of files transferred from the director to the ESCON server hard drive.

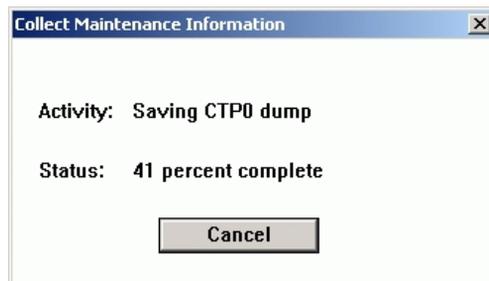


Figure 47 Collect Maintenance Information Dialog Box

3. When file transfer is complete, a **Maintenance information has been saved to the hard disk** message appears. Click *OK* to close the dialog box.
4. At the ESCON server, minimize the director console application to display the Windows 2000 desktop (Figure 13), then insert a blank, formatted, 3.5-inch diskette into the disk (A:) drive of the ESCON server.
5. At the Windows 2000 desktop, double-click the director data collection (DCOLLECT.CMD) icon (Figure 48).



Figure 48 Director Data Collection Icon

6. The REXX *DHARVEST.ORX* window displays (Figure 49).

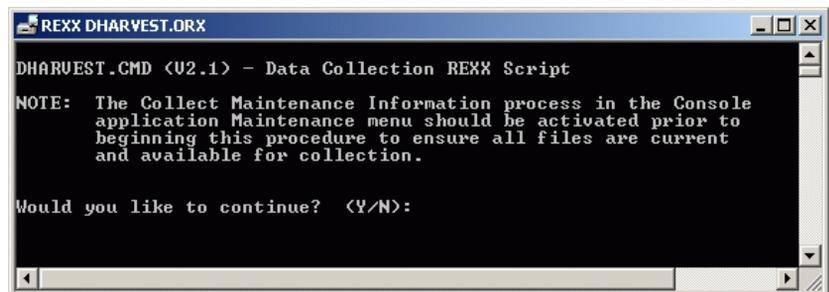


Figure 49 REXX DHARVEST.ORX Window

7. Type **Y** and press the **Enter** key. A second *REXX DHARVEST.ORX* window displays (Figure 50).

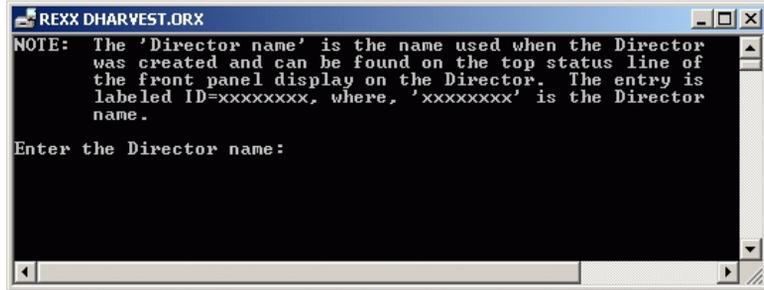


Figure 50 REXX DHARVEST.ORX Window (Second Window)

8. Type the director name (obtained in [step 1](#)), then press the **Enter** key to initiate the data collection procedure. Messages appear showing files transferring from the ESCON server hard drive to diskette. The process is complete when the *Enter* prompt appears (Figure 51).

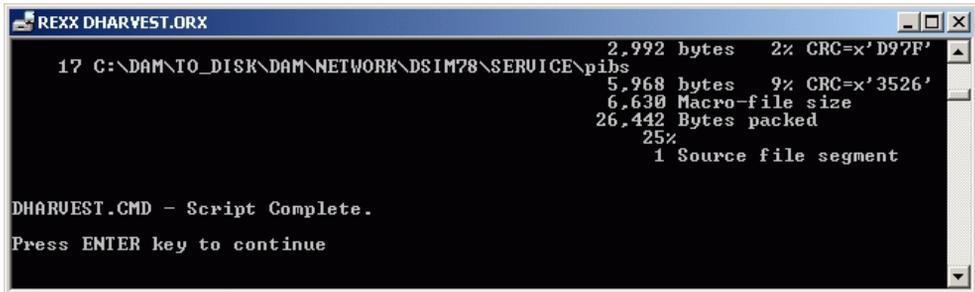


Figure 51 REXX DHARVEST.ORX Window (Process Complete)

9. Press the **Enter** key to close the *REXX DHARVEST.ORX* window and return to the Windows 2000 desktop.

10. Remove the data collection diskette from the disk (A:) drive and record the following on the label:
 - Director serial number.
 - Quality Service Activity Reporting (QSAR) and Problem Management - Hardware (PMH) numbers.
 - Current date.
11. Insert the data collection diskette in the pre-addressed envelope provided and mail the envelope to the OEM.

Sysplex Timer Data Collection

To perform the data collection procedure for a sysplex timer:

1. At the ESCON server, minimize the sysplex timer console application (if the application is open) to display the Windows 2000 desktop (Figure 13).
2. At the Windows 2000 desktop, double-click the sysplex timer data collection (TCOLLECT.CMD) icon (Figure 52).



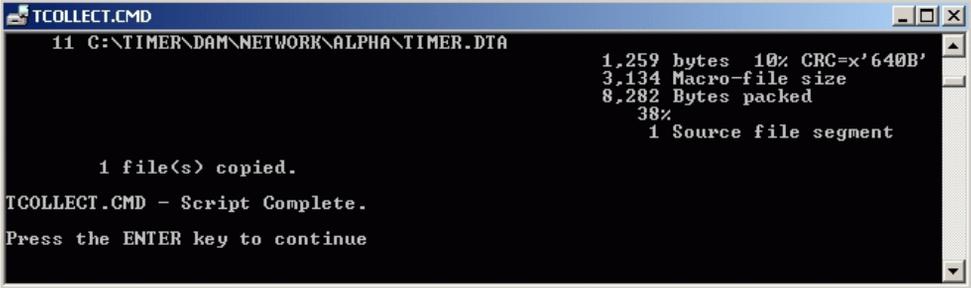
Figure 52 Sysplex Timer Data Collection Icon

3. The TCOLLECT.CMD window displays (Figure 53).



Figure 53 TCOLLECT.CMD Window

4. Insert a blank, formatted, 3.5-inch diskette into the disk (A:) drive of the ESCON server, then press the **Enter** key to initiate the data collection procedure. Messages appear showing files transferring from the sysplex timer to diskette. The process is complete when the *Enter* prompt appears (Figure 54).



```
TCOLLECT.CMD
11 C:\TIMER\DAM\NETWORK\ALPHA\TIMER.DTA
1,259 bytes 10% CRC=x'640B'
3,134 Macro-file size
8,282 Bytes packed
38%
1 Source file segment

1 file(s) copied.
TCOLLECT.CMD - Script Complete.
Press the ENTER key to continue
```

Figure 54 TCOLLECT.CMD Window (Process Complete)

5. Press the **Enter** key to close the *TCOLLECT.CMD* window and return to the Windows 2000 desktop.
6. Remove the data collection diskette from the disk (A:) drive and record the following on the label:
 - Sysplex timer serial number.
 - Quality Service Activity Reporting (QSAR) and Problem Management - Hardware (PMH) numbers.
 - Current date.
7. Insert the data collection diskette in the pre-addressed envelope provided and mail the envelope to the OEM.

Migrate from OS/2 to Windows Environment

If the director or sysplex timer application is discontinued at a PS/2, PC-330, PC-365, or PC 300PL console, then installed on an ESCON server, product definitions and system libraries must be migrated from the OS/2 to Windows 2000 environment. The migration process involves:

- Creating an OS/2 installation diskette at the new ESCON server.
- Transferring installation diskette scripts to the discontinued console running the OS/2 operating system.
- Backing up director or sysplex timer console library files at the discontinued console running the OS/2 operating system.
- Restoring director or sysplex timer console library files at the new ESCON server running the Windows 2000 operating system.

Create OS/2 Installation Diskette

To create an OS/2 installation diskette:

1. Insert a blank, formatted, 3.5-inch diskette into the disk (A:) drive of the ESCON server.
2. At the server's Windows 2000 desktop (Figure 13), click *Start* at the left side of the task bar, then select the *Run* option. The *Run* dialog box displays (Figure 55).

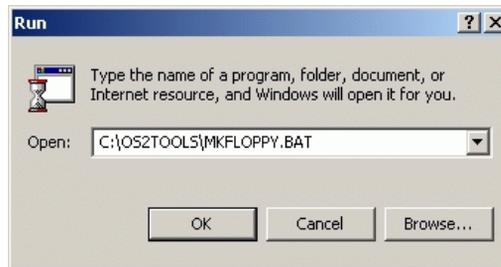


Figure 55 Run Dialog Box

3. At the *Run* dialog box, type `C:\OS2TOOLS\MKFLOPPY.BAT` in the *Open* field.

- Click **OK**. The `C:\WINNT\system32\cmd.exe` window displays (Figure 56) and prints a series of messages as an `INSTALL.COMD` file is written to the 3.5-inch diskette. Upon program completion, the window closes.

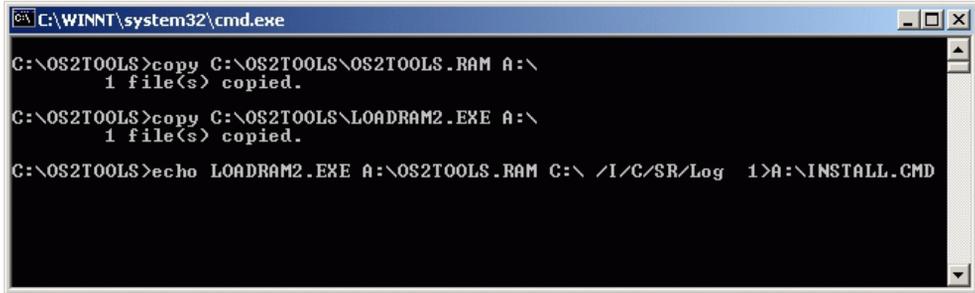


Figure 56 `C:\WINNT\system32\cmd.exe` Window

- Remove the newly-created OS/2 installation diskette from the disk (A:) drive of the ESCON server.

Install Scripts on OS/2 Console

To transfer installation diskette scripts to the discontinued OS/2 console:

- Insert the OS/2 installation diskette (created while performing [Create OS/2 Installation Diskette](#)) into the disk (A:) drive of the discontinued OS/2 console.
- At the launchpad (console's OS/2 desktop), click the *Drive A* drawer button. The *Drive A - Icon View* displays (Figure 57).

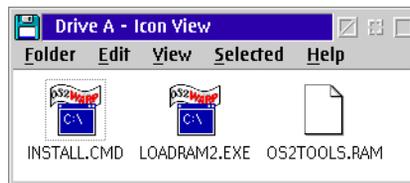


Figure 57 Drive A - Icon View

- Double-click the *INSTALL.CMD* icon. The *INSTALL.CMD* window displays (Figure 58), writes installation scripts to the *C:\OS2TOOLS* directory on the console hard drive, and creates an *OS2TOOLS.LOG* file (with icon) at the *Drive A - Icon View*.

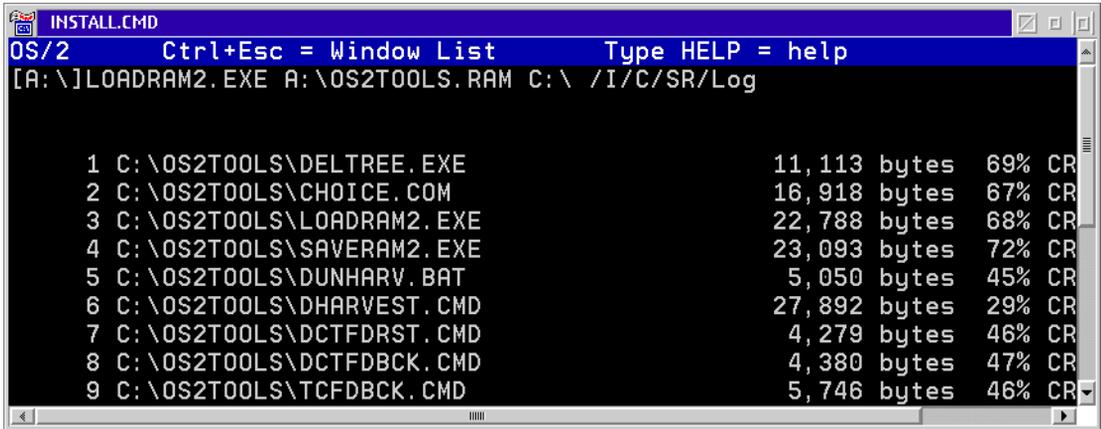


Figure 58 **INSTALL.CMD Window**

- Upon installation script completion, the *INSTALL.CMD* window closes. Double-click the upper left corner of the *Drive A - Icon View* to close the view and return to the OS/2 desktop.
- Remove the OS/2 installation diskette from the disk (A:) drive.

Perform Backup at OS/2 Console

To back up director or sysplex timer console library files at the discontinued OS/2 console:

- Insert a blank, formatted, 3.5-inch diskette into the disk (A:) drive of the discontinued OS/2 console.
- At the launchpad (console's OS/2 desktop), click the arrow to the right of the *Drive A* drawer button. The drawer opens.
- At the open drawer, click the *Drive C* button. The *Drive C - Tree View* displays (Figure 59).

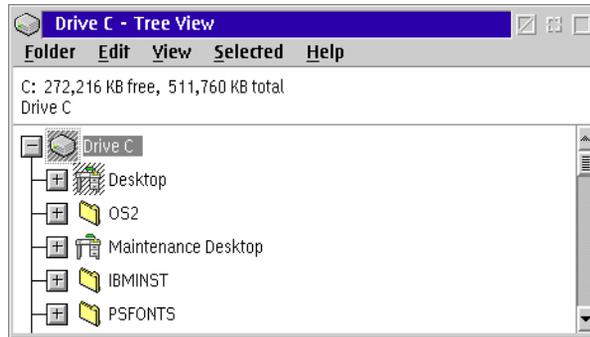


Figure 59 Drive C - Tree View

4. At the *Drive C - Tree View*, scroll down (if required) and double-click the *OS2TOOLS* folder. The *OS2TOOLS - Icon View* displays (Figure 60).

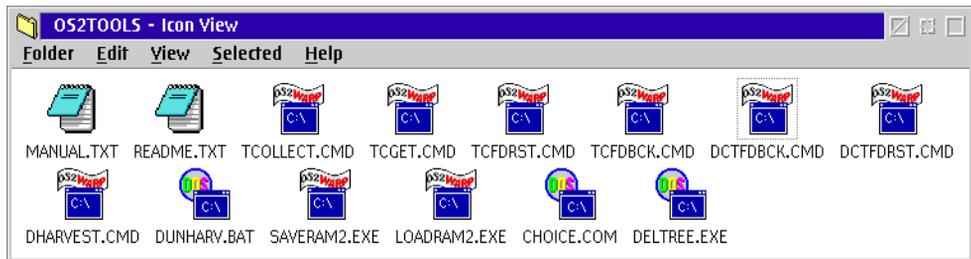


Figure 60 OS2TOOLS - Icon View

5. To back up director console library files at the *OS2TOOLS - Icon View*, double-click the *DCTFDBCK.COM* icon. The *DCTFDBCK.COM* window displays (Figure 61).

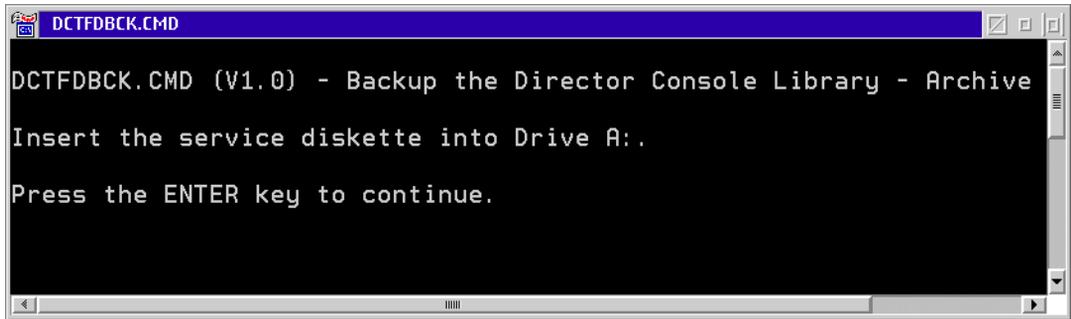


Figure 61 DCTFDBCK.CMD Window

6. Press the **Enter** key to run the backup script. Director console library files are backed up to:
A:\ARCHIVE.CNS
7. Upon backup script completion, the *DCTFDBCK.CMD* window closes.
8. To back up sysplex timer console library files at the *OS2TOOLS - Icon View*, double-click the *TCFDBCK.CMD* icon. The *TCFDBCK.CMD* window displays (Figure 62).

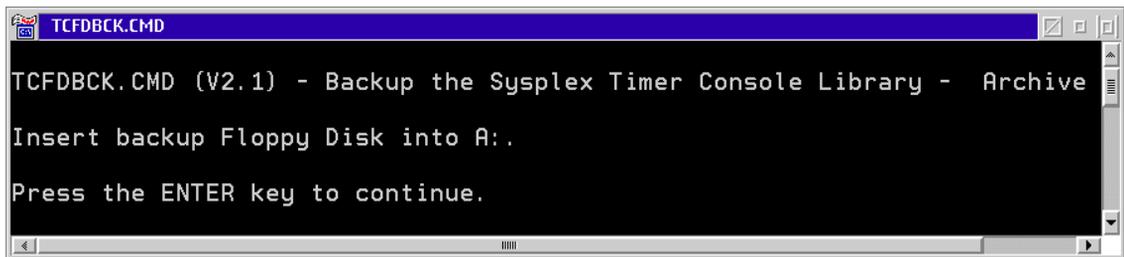


Figure 62 TCFDBCK.CMD Window

9. Press the **Enter** key to run the backup script. Sysplex timer console library files are backed up to:
A:\TARCHIVE.CNS
10. Upon backup script completion, the *TCFDBCK.CMD* window closes.

11. Double-click the upper left corner of the *OS2TOOLS - Icon View* and *Drive C - Tree View* to close the views and return to the OS/2 desktop.
12. At the launchpad (console's OS/2 desktop), click the arrow to the right of the *Drive A* drawer button. The drawer closes.
13. Remove the backup diskette from the disk (A:) drive.

Perform Restore at ESCON Server

To restore director or sysplex timer console library files at the new ESCON server:

1. Insert the director and sysplex timer backup diskette (created while performing *Perform Backup at OS/2 Console*) into the disk (A:) drive of the ESCON server.
2. To restore director console library files:
 - a. At the server's Windows 2000 desktop (Figure 13), click *Start* at the left side of the task bar, then select the *Run* option. The *Run* dialog box displays (Figure 63).

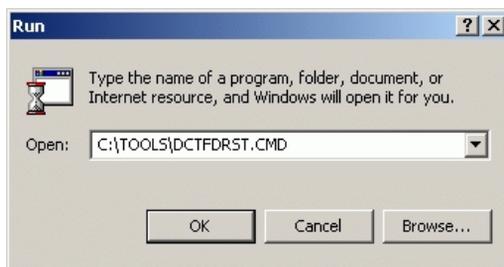


Figure 63 Run Dialog Box

- b. At the *Run* dialog box, type **C:\TOOLS\DCTFDRST.CMD** in the *Open* field and click *OK*. The *C:\WINNT\system32\cmd.exe* window displays (Figure 64).

NOTE: Run the **DCTFDRST.CMD** script from the **TOOLS** directory, not the **OS2TOOLS** directory.

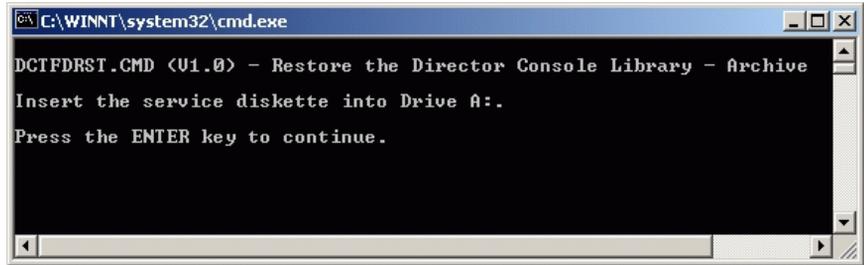


Figure 64 C:\WINNT\system32\cmd.exe Window

- c. Press the **Enter** key to run the script and restore director console library files to the ESCON server hard drive. Upon restore script completion, the `C:\WINNT\system32\cmd.exe` window closes.
3. To restore sysplex timer console library files:
 - a. At the server's Windows 2000 desktop (Figure 13), click *Start* at the left side of the task bar, then select the *Run* option. The *Run* dialog box displays (Figure 65).

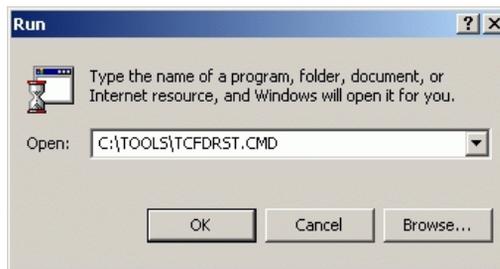


Figure 65 Run Dialog Box

- b. At the *Run* dialog box, type `C:\TOOLS\TCFDRST.CMD` in the *Open* field and click *OK*. The `C:\WINNT\system32\cmd.exe` window displays (Figure 66).

NOTE: Run the `TCFDRST.CMD` script from the `TOOLS` directory, not the `OS2TOOLS` directory.



Figure 66 C:\WINNT\system32\cmd.exe Window

- c. Press the **Enter** key to run the script and restore sysplex timer console library files to the ESCON server hard drive. Upon restore script completion, the *C:\WINNT\system32\cmd.exe* window closes.
4. Remove the director and sysplex timer backup diskette from the disk (**A:**) drive of the ESCON server.