

Discovering Devices With MVP 10.1

What is Device Discovery?

Device Discovery is the process that MarkVision uses to locate devices, such as printers and print servers, on your network. It is the initial act of communication through which MarkVision identifies the devices that it manages. The device locations are then stored on the MarkVision Server so that MVP can continue to communicate with the devices and execute your management commands.

In MarkVision Professional 10.1, the Device Discovery process is designed to accommodate the various types of users that work with MVP. As a result, there are several different methods with which you can execute a Device Discovery with varying degrees of application.

Types of Device Discoveries

There are three basic Device Discovery methods: Quick Find, Add Devices, and Discovery Profiles. Each method is designed to aid in a different degree of device management, ranging from immediate, small scale use, as in Quick Find, to dynamic, larger scale use, through Add Devices and Discovery Profiles.

Quick Find

The Quick Find method of device discovery does exactly what the name implies: it quickly finds devices that you want to work with without going through the normal device discovery process.

To use Quick Find:

- 1 Select the **Quick Find** tab on the left side of the MarkVision Professional home screen (see figure 1).

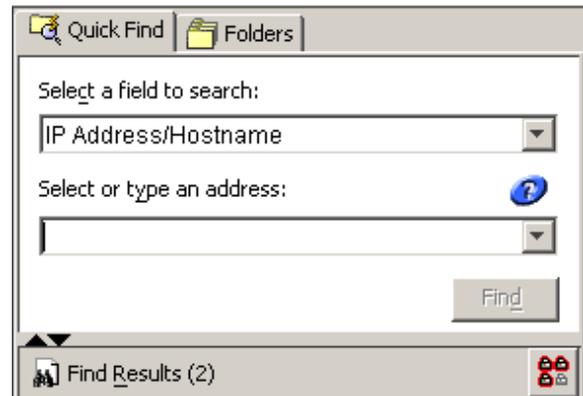


Figure 1

- 2 Select a field to search, and enter the appropriate parameter. You can choose to find a device based on several criteria, including an IP address or hostname, a designated device name, a hardware address, a particular model, a property tag or serial number, or by defining a set of specific parameters to search for by selecting **Other**.
- 3 Click **Find** to discover the device.

Quick Find is set to add any devices that you discover to the MarkVision Server by default. However, in some situations, you may only want to perform a session-based discovery. A session-based discovery is the temporary discovery of a device in which MVP makes an initial connection with the device that terminates at the end of the client session without adding the device's address to

the MarkVision Server. This is particularly helpful for MarkVision users who are not concerned with maintaining a specific set of devices, such as a Help desk technician. A Help desk or technical support technician may only be interested in devices for which they receive specific requests for assistance.

For example, if an employee contacted technical support because they were having difficulty printing to a certain device, a Help desk user could use MVP to locate the device using Quick Find. Once the printer is discovered, they could use the Status of Printer or Operator Panel LCD tasks to assess the problem and provide the caller with a potential solution. After the problem is resolved, they can end their client session without having to remove an unnecessary device address from the server.

To configure Quick Find to function as a session-based discovery, go to **MarkVision → Administrative Settings** from the MVP home screen. In the Device Discovery section of the dialog box, check **Automatically remove printers discovered through Quick Find from Server when client session ends**.

The Add Devices Task

For larger device discoveries, MarkVision Professional 10.1 utilizes a refined approach to discovering devices based on the creation of different discovery profiles that limit the discovery of devices to those included within a specific profile. This saves time and bandwidth across a network by letting you discover devices in smaller batches over time, as opposed to discovering a large number of devices all at once. However, a network administrator who manages a smaller number of devices may not be interested in creating several different profiles. The number of devices managed may not be large enough to necessitate more than

one profile, or at the most, only a few. In this case, an administrator could use the **Add Devices** task to quickly discover a specific device or group of devices on the network and add the device(s) to the MarkVision Server.

Like Quick Find, the Add Devices Task similarly provides a fast and efficient method for discovering devices. The primary benefit in using the Add Devices task however, is a greater degree of flexibility in determining the overall group of devices that you want to discover.

To use the Add Devices task:

- 1 Select **Add Devices** from the All Tasks List, or select **MarkVision → Device Discovery → Add Devices** from the MarkVision Professional Menu.

The Add Devices dialog box contains a window with three different tabs that control which devices are discovered, and by what method. Those tabs are Include, Exclude, and Advanced (see figure 2).

- 2 To add one or multiple devices to the list of devices that will be discovered, click the **Add** button under the **Include** tab.
- 3 Enter the TCP/IP Address, IPX Address, Subnet, or Hostname.

NOTE: IPX protocol must be installed on the MarkVision Server to enable the IPX address option. For information on installing IPX protocol, refer to your operating system's *User's Guide*.

If you want to discover multiple devices, enter an entire subnet or select **TCP/IP Address Range** to enter a range of addresses (For example: From 123.123.12.0 To 123.123.12.99). After you have entered the address, subnet, hostname, or address range, you can modify the SNMP community names as an additional security feature. The community name functions like a password for the TCP/IP protocol. As a result, the community name that you specify here must match the community name stored in the print server or you will not be allowed to reconfigure or monitor

the print server. After entering these fields correctly, click **OK** to return to the Add Devices dialog box.

If there are devices within the range you have specified in the Include list that you do not want to discover, you can likewise add the addresses of the unwanted devices to the Exclude tab. The Exclude tab uses the same process as the Include tab, only in this case, specifies a list of devices that will not be discovered.

After selecting the discovery methods, you have the option to adjust the amount of time that MVP will wait for responses from devices and the number of retries that it will perform when attempting to discover the devices.

Once the Include, Exclude, and Advanced options have been entered, you can proceed with the discovery by clicking **Start**. If the device list that you have created is also a set of devices that

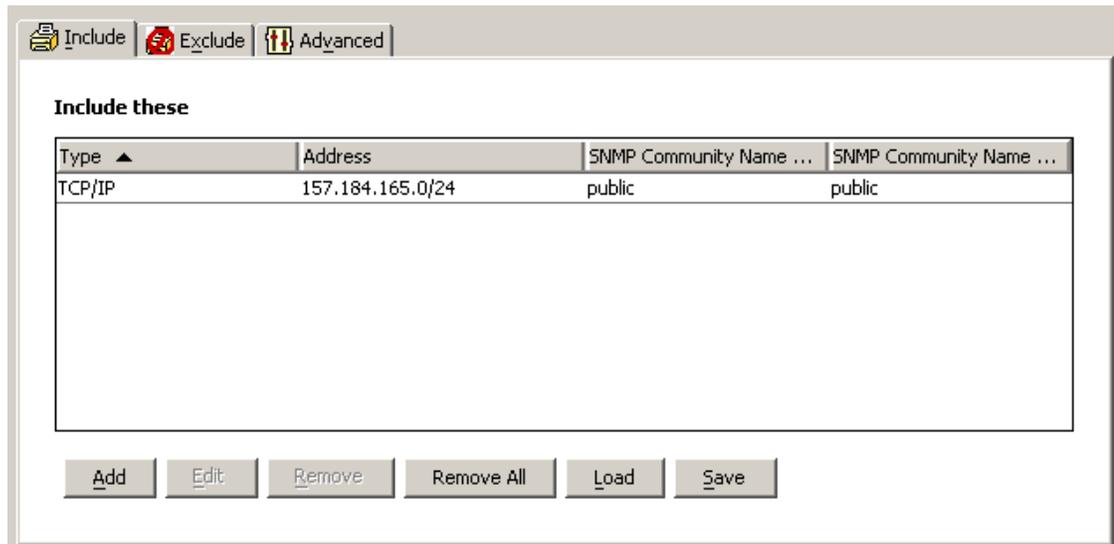


Figure 2

4 The final step in adding a device is to set the Advanced Options. Under the Advanced tab you have the option to set the TCP/IP discovery methods and settings. The three TCP/IP discovery methods are:

- **Query each address:** Prompts MVP to send individual queries to each address included in the discovery.
- **Also search for other vendor's devices:** Tells MVP to look for non-Lexmark devices.
- **SLP Multicast:** Prompts MVP to send out a single SLP request across the network. SLP Multicast can only discover Lexmark devices.

you would like to use again, you also have the option of saving the list as a profile by clicking the **Save as Profile** button.

Discovery Profiles

Creating discovery profiles is the most dynamic method of discovering devices. Discovery profiles provide not only the most efficient method for discovering devices on a network, but the most versatile as well. The ability to create specific device profiles that encompass different groups of the devices that you deal with provides the flexibility to save network resources by letting you work

exclusively with the devices that need attention at the time. This is especially helpful when you are working with a multitude of devices. For example, on a network with 1000+ devices, discovering all of the devices on the network results in a needless use of time and bandwidth to execute the task when you only need to communicate with one or two hundred. By creating profiles, MarkVision provides the ability to break down the workgroups that you use on a regular basis, so that you only need to deal with the devices you want, when you want.

- **Creating Discovery Profiles**

To create or manage Discovery Profiles go to **MarkVision → Device Discovery → Manage Discovery Profiles** on the MarkVision Home screen, or select **Device Discovery—Profiles** from the All Tasks List. To create a new discovery profile, click **New**.

The Device Profiles dialog box follows the same basic process as the Add Devices Task (as the Add Devices Task functions as a default profile).

- 1 At the top of the dialog, on the right side, enter a name and any descriptive comments about the profile in the appropriate fields.
- 2 Enter the addresses for the specific devices that you want to include in the profile under the Include tab, and, if you included a device range, any devices within that range that you do not want to be included in the profile under the Exclude tab.
- 3 Set the Advanced options accordingly, and click **Apply** to save the profile.

Once you have created a new profile, or if you want to use an existing profile, select the profile from the window on the left side of the screen and click **Start** to begin a discovery of the devices detailed within that profile.

- **Managing Profiles**

If at any time you want to make changes to an existing profile, open the Manage Discovery Profiles task and select the profile that you want to modify. Each device included in the profile is listed under the Include and Exclude tabs respectively. Select an included or excluded device to make changes to. There are several management options to choose from.

- The Edit button lets you modify any of the previously entered parameters related to the selected device.
- The Remove and Remove All buttons remove the selected devices from the Include and Exclude lists respectively. This action removes the devices from the profile only; this will not remove a device from the MarkVision Server. To remove a device from the server completely, see **Removing Devices**.
- The Load and Save buttons let you import an existing device list into the present profile, or save the currently selected devices as a .lst file that can be stored elsewhere for later use.

- **Importing and Exporting Profiles**

One of the most powerful aspects of using device profiles is the ability to import or export profiles as an XML file. Once a profile is created, clicking the Export button opens an Explorer window and prompts you to save the file in a location of your choice. Similarly, clicking the Import button lets you browse for an existing profile and load it into your system. This is especially helpful if a user on one client needs quick access to one of another user's profiles. The profile can be exported and saved in a location from which it can be retrieved and implemented.

The previously mentioned Load and Save features employ a similar function. Sections of a profile can be saved in a remote location and then retrieved to later be

included in another profile's Include or Exclude device list.

Upgrading MarkVision Professional

If you are upgrading from a previous version of MarkVision Professional, any devices that had been previously discovered under that version of MVP are retained in MVP 10.1 as a default profile called Full Discovery.

If you are performing a new installation of MarkVision Professional 10.1, MVP provides the option to create a default discovery profile based on your local subnet's netmask called Default Profile (local subnet). As the creation of this profile is automated, the profile may require some modification.

Scheduling Discoveries

The Scheduling task provides the final level of adaptability to Device Discovery. By scheduling discoveries of device profiles rather than of individual devices, the time and resources needed to perform a discovery are greatly reduced. Discoveries based on specific profiles can be scheduled to run at the optimum times for each group of devices. This way, different device discoveries can all be set to run during off-peak hours, such as on nights or weekends. Similarly, device removals can also be scheduled, letting MVP do the work of both adding and removing devices from the server for you, so that you can focus on other tasks.

To schedule a device discovery or removal:

- 1 Select **Scheduling** from the All Tasks menu, or go to **Actions** → **Scheduling** from the MVP home screen.
- 2 Click **Add**.
- 3 Select the type of event that you want to schedule (**Device Discovery: Add**

Devices or **Device Discovery: Remove Devices**) and click **Next**.

- 4 Set the date and time that you want the event to occur, and click **Next**.
- 5 Finally, select the profile that encompasses the devices that you want to discover.
- 6 Click **Finish**.

Removing Devices

If there are any devices that you no longer want to associate with your network, and that you do not want to include in any subsequent discoveries, you can add the devices to your profile's Exclude list. However, excluding a device from a discovery will not remove the specified device from the MarkVision Server. To remove a device from the server's list of managed devices, use the **Remove Devices** feature.

To remove devices from the MarkVision Server, browse the existing device folders or use the Quick Find feature to locate the devices that you want to remove. When you have selected all of the appropriate devices, click the **Remove Devices** icon  on the MarkVision taskbar. The selected devices are then removed from the MarkVision Server.

Remove Devices is also available in the MarkVision menu under **Device Discovery** → **Remove Devices (Advanced)**, or by selecting **Remove Devices (Advanced)** from the All Tasks Menu. Selecting a device and pressing the Delete key also functions as a shortcut for the Remove Devices icon.



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