HP JetAdmin Utility

The HP JetAdmin Utility is an administrative tool used to install and configure Hewlett-Packard printers connected to a network using an HP JetDirect print server (network interface). The HP JetAdmin utility operates as a Microsoft Windows utility and can be used for networking when a Novell NetWare server is available or when the Novell NetWare file server is not available (Peer to Peer).

To Remove a Printer from the Network

1   With the printer highlighted in the list of available printers, click **Printer** at the top of the main window, then click **Properties**.

2   Click the **JetDirect** tab.

3   Click **Reset JetDirect Card**.

4   Click Reset Card to Factory Defaults.

5   Click **OK**.

6   Turn off the printer.

The printer will still appear in the main window for about 2 minutes.

To Change HP JetDirect Settings

1   With the printer highlighted in the list of available printers, click **Printer** at the top of the main window, then click **Properties**.

    The available property pages appear.

2   Click the **JetDirect** tab.

3   Click the type of selection you want to change in the list of options. Use the scroll bars to see any options that are off screen.

4   Click the settings you want for the current selection.

5   Click **OK** to activate your selection.

Hints

To access property pages from the printer list, double-click the printer you want.

To Perform Diagnostics

1   With the printer highlighted in the list of available printers, click **Printer** at the top of the main window, then click **Properties**.

The available property pages appear.

2   Click the Diagnostics tab.

3   Double-click the type of diagnostics you desire.

4   If necessary, double-click the lower level diagnostics you desire.

The current status of the diagnostics is displayed.

5   To immediately update the data, click **Refresh**.

6   To save the data to a file, click **Save**. You will be prompted for the name, file type, and location of the file where you want the data saved.

7   Click **OK** when you are finished.

Hints

Click **Expand All** or **Collapse All** to expand or collapse all of the items listed under diagnostics.

HP JetDirect Property Page

From this page you can remotely configure the HP JetDirect interface including the following items:

- PJL Settings

- Toner Notification

- Frame Types

- Protocol Stacks

- HP JetDirect Reset Options

- Broadcast Rate

- Job Poll Rate

- Job Timeout

- Token-Ring Source Routing

- Locally Administered Addresses

Hints

- Selections on property pages that are missing or grayed out are not available for the currently selected printer or HP JetDirect print server.

- Token-Ring Source Routing and Locally Administered Addresses only appear on the list for networking environments that support these features.

To Select PJL Settings

1   With the property pages displayed, click the **JetDirect** tab.

2   Click **Advanced** in the list of selections.

3   Check the PJL settings you desire.

4   Click **OK** to activate your selection.

PJL Settings

The HP JetDirect print server uses PJL (Printer Job Language) for special functions including the following:

- **Banner Pages** - Check "Banners" to enable a banner page to print on PostScript capable printers running in the queue server mode.

- **End of Job Detection** - Check "End-of-Job Detection" to enable this feature for printers running in the queue server mode. With End-of-Job Detection enabled, the HP JetAdmin utility monitors how long the printer waits without receiving data before ending a print job.

- **Advanced Printer Status** - Check "Determining Printer Information" to use PJL to determine advanced printer information.

To Select Toner Notification

1   With the property pages displayed, click the **JetDirect** tab.

2   Click **Advanced** in the list of selections.

3   Check the settings you want for toner notification.

4   Click **OK** to activate your selection.

Toner Notification

Lists the options you have for notifying the operator of toner related problems.

- **Notify Only if Intervention Required** - Select this option to notify the user if the printer goes offline due to a low level of toner. This usually implies the toner cartridge is empty.

- **Notify Even if Printer is Operational** - Select this option to notify the operator of toner-low warnings. This usually implies the level of toner in the toner cartridge is low.

To Select Frame Types

1   With the property pages displayed, click the **JetDirect** tab.

2   Click **Frame Types** in the list of selections.

3   Check the frame types required for the HP JetDirect print server.

4   Click **OK** to activate your selection.

CAUTION

The HP JetAdmin utility will lose communication with the HP JetDirect print server if the frame type supporting the configuration channel is disabled.

Frame Types

Lists the frame type options that are available for the HP JetDirect print server including the following:

- **Enable All Frame Types** - Select this option to enable the HP JetDirect print server to accept any of the available frame types.

- **Enable Ethernet_802.3** - Select this option to enable the HP JetDirect print server to use only the Ethernet 802.3 frame type.

- **Enable Ethernet_II** - Select this option to enable the HP JetDirect print server to use only the Ethernet II frame type.

- **Enable Ethernet_802.2** - Select this option to enable the HP JetDirect print server to use only the Ethernet 802.2 frame type.

- **Enable Ethernet_SNAP** - Select this option to enable the HP JetDirect print server to use only the Ethernet SNAP frame type.

To Select Protocol Stacks

1   With the property pages displayed, click the **JetDirect** tab.

2   Click **Protocol Stacks** in the list of selections.

3   Check the protocol stacks over which the HP JetDirect print server will receive print data.

4   Click **OK** to activate your selection.

To Reset the HP JetDirect Interface

1   With the property pages displayed, click the **JetDirect** tab.

2   Click **Reset JetDirect Card** in the list of selections.

3   Click the reset option you desire.

4   Click **OK** to activate your selection.

Reset Options

The options available for restarting the HP JetDirect connection with the file server or for resetting the HP JetDirect print server to its factory defaults include the following:

- **Restart NetWare Server Connections** - This option causes all file server connections to the HP JetDirect print server to be disconnected and restarted, re-reading the configuration files. This forces any currently printing jobs on the Novell protocol stack to be disrupted and allows changes in frame types and polling rates to take effect.

- **Complete Reinitialization** - This options causes an immediate restart of the Novell protocol stack on the HP JetDirect print server. This forces any currently printing jobs on the Novell protocol stack to be disrupted and allows changes in frame types and polling rates to take effect.

- **Reset Card to Factory Defaults** - This option resets the HP JetDirect print server back to its factory default settings (including clearing the name assigned). After selecting this option, turn the printer off, then back on. This also resets the printer to its factory default settings.

To Set the Broadcast Rate

1   With the property pages displayed, click the **JetDirect** tab.

2   Click **Time Intervals** in the list of selections.

3   Click the scroll arrows in the Broadcast Rate box to change the value, or highlight the current value and type in your new value.

4   Click **OK** to activate your selection.

To Set the Job Poll Rate

1   With the property pages displayed, click the **JetDirect** tab.

2   Click **Time Intervals** in the list of selections.

3   Click the scroll arrows in the Job Poll Rate box to change the value, or highlight the current value and type in your new value.

4   Click **OK** to activate your selection.

To Set the Job Timeout

1   With the property pages displayed, click the **JetDirect** tab.

2   Click **Time Intervals** in the list of selections.

3   Click the scroll arrows in the Job Timeout box to change the value, or highlight the current value and type in your new value.

4   Click **OK** to activate your selection.

To Select Token-Ring Source Routing

1   With the property pages displayed, click the **JetDirect** tab.

2   Click **Token Ring** in the list of selections.

3   Click the source routing option you desire.

4   Click **OK** to activate your selection.

Note

Token-Ring Source Routing and Locally Administered Addresses only appear on the list for networking environments that support these features.

Token Source Routing Options

Lists the options for Token-Ring source routing including the following:

- **Auto Sensing Mode** - Check "Auto-Sensing Mode (AUTO)" to enable the HP JetDirect print server to determine the correct source routing options.

- **Send Without SR** - Check "Send without SR (OFF)" to enable packets to be received, but only on the same ring.

- **Send with SR, Single Route** - Check "Send with SR, Single Route (SINGLE R)" to enable source routing. This method is used for broadcasts, and when the route is unknown.

- **Send with SR, All Routes** - Check "Send with SR, All Routes (ALL R)" to enable source routing. This method is used for broadcasts, and when the route is unknown.

To Select a Locally Administered Address

1   With the property pages displayed, click the **JetDirect** tab.

2   Click **Token Ring** in the list of selections.

3   Click the Locally Administered Addresses box.

4   Type in a new node address for the HP JetDirect print server.

     This address should be a 12 digit number in the range of 4000 0000 0000 to 40FF FFFF FFFF.

5   Click **OK** to activate your selection.

Hints

▪ To prevent potential communication problems, make sure the address you assign in step 4 is not already in use.

▪ Token-Ring Source Routing and Locally Administered Addresses only appear on the list for networking environments that support these features.

Locally Administered Addresses

Locally Administered Addresses are only supported on HP JetDirect Token Ring print servers. This feature enables you to reassign the node address for the HP JetDirect print server. This new address is then used for all communication with the HP JetDirect print server.

To prevent potential problems, make sure the address you assign is not already in use.

Note

While the Novell protocol environment on the HP JetDirect print server can restart and begin printing again after assigning locally administered addressing, the other protocol environments must be reconfigured to acknowledge the new address. This includes the UNIX, IBM OS/2, and Microsoft host software.

Diagnostics Property Page

Lists general diagnostics information including the following information:

- DLC/LLC Status

- EtherTalk Status

- HP JetDirect Interface Description

- Packets Information

- NetWare File Server Information

- NetWare Frame Types

- NetWare Frame Counts

- Printer Information

- TCP/IP Status

By examining the values returned on this page you can determine abnormal network conditions that may affect printing performance and reliability. Network errors should be examined in relation to the total number of packets transmitted and received. Errors exceeding 5% of the total packets are considered to be over the expected values.

Hints

Selections on property pages that are grayed out are not available for the currently selected printer.

To access property pages from the printer list, double-click the printer you want.

To Display DLC/LLC Printer and Server Status

1   With the property pages displayed, click the **Diagnostics** tab.

2   Double-click DLC/LLC.

    The current server and printer status is displayed.

3   To update the data, click **Refresh**.

4   To save the data to a file, click **Save**. You will be prompted for the name, file type, and location of the file where you want the data saved.

5   Click **OK** when you are finished.

To Display EtherTalk Printer Status

1   With the property pages displayed, click the **Diagnostics** tab.

2   Double-click **EtherTalk**.

    The current Macintosh print system status is displayed.

3   To update the data, click **Refresh**.

4   To save the data to a file, click **Save**. You will be prompted for the name, file type, and location of the file where you want the data saved.

5   Click **OK** when you are finished.

To Display TCP/IP Status

1   With the property pages displayed, click the **Diagnostics** tab.

2   Double-click **TCP/IP**.

3   Double-click the type of information you desire.

     Byte counts, connection information, general information including the IP address, and various statistics are available.

4   To update the data, click **Refresh**.

5   To save the data to a file, click **Save**. You will be prompted for the name, file type, and location of the file where you want the data saved.

6   Click **OK** when you are finished.

To Access HP JetDirect Interface Information

1   With the property pages displayed, click the **Diagnostics** tab.

2   Double-click **JetDirect**.

3   Double-click **General**.

The model number, address, version, I/O type, and other information about the HP JetDirect print server for the current printer is displayed.

4   To update the data, click **Refresh**.

5   To save the data to a file, click **Save**. You will be prompted for the name, file type, and location of the file where you want the data saved.

6   Click **OK** when you are finished.

To Access Packet Information

1   With the property pages displayed, click the **Diagnostics** tab.

2   Double-click **JetDirect**.

3   Double-click **Packets Received** or **Packets Transmitted**.

Packets received, number of bad packets, packets transmitted, transmission errors, and other packet information is displayed. By examining these values, you can determine abnormal network conditions that may affect printing performance and reliability. Network errors should be examined in relation to the total number of packets transmitted and received. Errors exceeding 5% of the total packets are considered to be over the expected values.

4   To update the data, click **Refresh**.

5   To save the data to a file, click **Save**. You will be prompted for the name, file type, and location of the file where you want the data saved.

6   Click **OK** when you are finished.

To Access NetWare Server Information

1   With the property pages displayed, click the **Diagnostics** tab.

2   Double-click **NetWare**.

3   Double-click the **File Server** name.

     Connection status and queue information for file servers is displayed.

4   To update the data, click **Refresh**.

5   To save the data to a file, click **Save**. You will be prompted for the name, file type, and location of the file where you want the data saved.

6   Click **OK** when you are finished.

To Access Frame Types Information

1   With the property pages displayed, click the **Diagnostics** tab.

2   Double-click **NetWare**.

3   Double-click Frame Types.

4   Double-click the specific frame type that you are interested in.

     Network information for specific frame types is displayed.

5   To update the data, click **Refresh**.

6   To save the data to a file, click **Save**. You will be prompted for the name, file type, and location of the file where you want the data saved.

7   Click **OK** when you are finished.

To Access Frame Counts Information

1   With the property pages displayed, click the **Diagnostics** tab.

2   Double-click **NetWare**.

3   Double-click Frame Counts.

    The current frame counts information is displayed.

4   To update the data, click **Refresh**.

5   To save the data to a file, click **Save**. You will be prompted for the name, file type, and location of the file where you want the data saved.

6   Click **OK** when you are finished.

To Access Printer Specific Information

1   With the property pages displayed, click the **Diagnostics** tab.

2   Double-click **Printer**.

3   Double-click the lower level topic you desire.

      Printer information including page counts, version numbers, the printer serial number, personality information, and SIMM module information is displayed.

4   To update the data, click **Refresh**.

5   To save the data to a file, click **Save**. You will be prompted for the name, file type, and location of the file where you want the data saved.

6   Click **OK** when you are finished.

To Access Property Pages

1   With the printer highlighted in the list of available printers, click **Printer** at the top of the main window, then click **Properties**.

The available property pages appear.

2   Click the tab for the property page you want displayed.

Hints

To access property pages from the printer list, double-click the printer you want.

Click Help for additional information on individual property pages.

The Diagnostics page enables you to obtain HP JetDirect print server information and status, printer information, and protocol statistics. The information in this window is gathered from several locations in the system. NetWare diagnostics and the Simple Network Management Protocol (SNMP) are used extensively.

Click Help to access online documentation for tasks and features for the currently displayed page or window.

Click Cancel to cancel all changes made since the last time changes were saved by clicking OK.

Click OK to apply all setting changes made since the last time changes were saved.

Click this button to update the diagnostics information.

Click this button to save the current diagnostics data to a file. You will be prompted for the name, file type, and location of the file where you want the data saved.

Lists the HP JetDirect selections available on this page. These include Advanced, Frame Types, Protocol Stacks, HP JetDirect reset options, Time Interval settings, and Token Ring settings (when supported).

The HP JetDirect print server uses PJL (Printer Job Language) for special functions including banner pages, end of job detection, and advanced printer status.

Check "Banners" to enable a banner page to print on PostScript capable printers running in the queue server mode.

Check "End-of-Job Detection" to enable this feature for printers running in the queue server mode. With End-of-Job Detection enabled, the HP JetAdmin utility monitors how long the printer waits without receiving data before ending a print job.

Check "Determining Printer Information" to use PJL to determine advanced printer information.

Lists the options for notifying the operator of toner related problems.

Select this option to notify the user if the printer goes offline due to a low level of toner. This usually implies the toner cartridge is empty.

Select this option to notify the operator of toner-low warnings. This usually implies the level of toner in the toner cartridge is low.

Lists the available frame type selections that the NetWare protocol stack will send and receive.

Select this option to enable the HP JetDirect print server to accept any of the available frame types.

Select this option to enable the HP JetDirect print server to use only the Ethernet 802.3 frame type.

Select this option to enable the HP JetDirect print server to use only the Ethernet II frame type.

Select this option to enable the HP JetDirect print server to use only the Ethernet 802.2 frame type.

Select this option to enable the HP JetDirect print server to use only the Ethernet SNAP frame type.

Lists the available protocol stacks over which the HP JetDirect print server receives print data.

Select this option to have the HP Direct print server receive print data from Novell NetWare networks using the IPX/SPX protocol.

Select this option to have the HP Direct print server receive print data from Microsoft or IBM networks using the DLC/LLC protocol.

Select this option to have the HP Direct print server receive print data from HP-UX, SunOS, or Solaris networks using the TCP/IP protocol.

Select this option to have the HP Direct print server receive print data from EtherTalk networks.

Select "All" to turn on all of the protocols and receive print data from any supported network.

Lists the options for restarting the HP JetDirect connection with the file server or for resetting the HP JetDirect print server to its factory defaults.

This option causes all file server connections to the HP JetDirect print server to be disconnected and restarted, re-reading the configuration files. This forces any currently printing jobs on the Novell protocol stack to be disrupted and allows changes in frame types and polling rates to take effect.

This options causes an immediate restart of the Novell protocol stack on the HP JetDirect print server. This forces any currently printing jobs on the Novell protocol stack to be disrupted and allows changes in frame types and polling rates to take effect.

This option resets the HP JetDirect print server back to its factory default settings (including clearing the name assigned). After selecting this option, turn the printer off, then back on. This also resets the printer to its factory default settings.

Lists the available time interval settings for the HP JetDirect print server including Broadcast Rate, Job Poll Rate, and Job Timeout.

Broadcast Rate selects how often in seconds that the HP JetDirect print server generates broadcast traffic. Changing this setting may prevent other utilities from recognizing the HP JetDirect print server.

Job Poll Rate indicates the frequency that the queue server checks the file server for new print jobs. A low setting (2 seconds) provides prompt service of the print queue. A high setting reduces the network traffic on congested networks.

Tips gives a brief description of the tasks you can perform from the currently displayed page or window.

Clicking this button expands or collapses the information and statistics listed under Diagnostics.

Job Timeout sets the amount of time the HP JetDirect print server waits since the last print data before switching I/O ports.

Lists the options for Token-Ring source routing.

Check "Auto-Sensing Mode (AUTO)" to enable the HP JetDirect print server to determine the correct source routing options.

Check "Send without SR (OFF)" to enable packets to be received, but only on the same ring.

Check "Send with SR, Single Route (SINGLE R)" to enable source routing. This method is used for broadcasts, and when the route is unknown.

Check "Send with SR, All Routes (ALL R)" to enable source routing. This method is used for broadcasts, and when the route is unknown.

This box enables you to reassign the node address for the HP JetDirect print server. This address is used for all communication to the HP JetDirect print server.

Select this box and type in a new node address for the HP JetDirect print server. To prevent potential communications problems, make sure the address you select is not already in use.

Frame Counts list the frame types that have been detected by the HP JetDirect print server and how active each frame type is on the network compared to the other frame types listed. If a specific frame type has the majority of the frame counts (90 percent or more), that frame type is the preferred one for this network. If a frame type has zero frame counts or is not listed, that frame type is not being used, or has not been detected on the network.

Indicates the Novell NetWare frame type automatically detected and in use by the HP JetDirect print server. The HP JetDirect print server automatically determines the protocol frame type by listening to the NetWare data being transferred over the network, unless a specific frame type has been configured using the HP JetAdmin utility or the printer's control panel.

Shows the status for DLC/LLC-based printing systems. These systems include IBM's Lan Server, Microsoft's Lan Manager, Windows for Workgroups, and Windows NT.