Introducing HostExplorer Print Services

HostExplorer Print Services is a server-based, scalable printing solution that lets you distribute reports from host computers to any LAN (local area network) printer in your enterprise network.

HostExplorer connects desktop computers to IBM mainframes, and IBMcompatible systems to IBM midrange systems (the AS/400 family).

Print Services has two key components:

Service Starts automatically whenever a machine on which it is installed starts Windows. Service runs in the background as a Windows NT service, formatting host reports and routing them to LAN printers.

Console Lets LAN administrators to configure and monitor the functions of Service. Console is a Windows application that is used to create printer definitions that connect LAN printers to a host and to monitor the activities of Service.

Related Topics Connecting Console to Service Monitoring Service How a Host Report is Routed to a LAN Printer

Routing Host Reports

Before you connect a LAN printer to a host for the first time, you must first create and load a printer session profile. In the printer profile, identify the host machine, the LU name of the host, and the LAN printer to which the host report is sent.

Related Topics Creating a Printer Profile Modifying Profile Properties Managing Profiles

How a Host Report is Routed to a LAN Printer

In a typical scenario that describes how Print Services routes a report, a host report is routed to a LAN printer in your company Sales department (Sales Printer).

Connect the LAN printer specified in the profile to the host specified in the profile. Reports that the host spools to the specified LU name (for example, SALES) print on the LAN printer (for example, Sales Printer).

LU Name

Specify the LU name of the host in the Printer Session Properties dialog box. Your host system administrator can provide you with an LU name (also known as the logical unit name) for the host printer.

Note: LU names intended for use with Print Services are processed by the host TCP/IP package, and the TCP/IP package must support TN3270E or TN5250E protocols. For more information, consult with your host system administrator.

Related Topics

Routing Host Reports

How a Host Report is Formatted and Routed

How a Host Report is Generated and Processed

How a Host Report is Formatted and Routed

When a host report is routed to a LAN printer, the following procedures are carried out by Print Services:

- The report is routed to Service by the TCP/IP package, which is running on a PC in your LAN.
- Service translates the text of the report from EBCDIC to ASCII, and converts the printer codes from host printer codes to ASCII codes.
- Service routes the report to the LAN printer. In most cases, this means that Service spools the report to the printer queue for the LAN printer.
 - **Note:** If Service is not running or is not properly configured, the reports do not print. They remain in the print queue of the host until the problem is solved.

In the Sales Department scenario, the LU name of the host printer is SALES. Use the Print Services Session menu to make the connection between SALES and Sales Printer.

Related Topics

How a Host Report is Generated and Processed

Creating a Printer Profile

Printer Session Properties—LU1 Settings Tab

Printer Session Properties—LU3 Settings Tab

How a Host Report is Generated and Processed

When you submit a batch job to the host, you can use Hummingbird HostExplorer as a terminal emulator, or use a terminal that is connected directly to the host.

- The host then spools the batch job to a job queue, where it stays until it is able to run.
- The job runs, generating a report intended for a host printer. The report is in EBCDIC (not ASCII). EBCDIC uses a system of printer controls that is different from the ASCII codes for line feed, carriage return, form feed, and so on.
- Before the report is printed, the host spools the report to a print queue. For our scenario, reports intended for the Sales department are spooled to a print queue named SALESQ.
- Reports in the print queue are printed on a host printer with the LU name. This host printer is normally a real printer (for example, an IBM 3287) if you are not using Print Services. In the scenario, print jobs in the SALESQ print queue are printed on the host printer with the LU name of SALES.

Related Topics

How a Host Report is Formatted and Routed How a Host Report is Routed to a LAN Printer Connecting a Printer to a Host

Note: Your host system administrator is normally responsible for ensuring that a print queue is connected to the correct printer LU name and that reports are spooled to the correct print queue.

Print Services Overview

The Print Services process consists of the following steps:

- 1. Starting Console and Service
- 2. Connecting Console to Service
- 3. Creating a Printer Profile
- 4. Connecting a Printer to a Host

Starting Console and Service

To start Console, do one of the following:

- On your desktop, double-click the Hummingbird Connectivity version icon, then the Administrative Tools folder, and then HostExplorer Print Services Console.
- On the Windows Start menu, click Programs, Hummingbird Connectivity, Administrative Tools, and then HostExplorer Print Services Console.

Service automatically runs after the installation of Print Services is complete.

Note: To view or change the startup options, open Administrative Tools on the Control Panel and then open Services. Right-click Hummingbird Print Services and select Properties. Select an option from the Startup Type box.

Related Topics Print Services Overview Connecting Console to Service Monitoring Service

Connecting Console to Service

If Service is installed and running on more than one machine in your LAN, you can connect to an instance of Service that is running on your own machine or to one on another machine.

To connect Console to Service:

- 1. On the toolbar, click the Connect To Service button.
- 2. In the Server Name dialog box, enter the name of the machine on which Service is running. If Service is running on the same machine as Console, accept the default, which is Local Machine.
 - **Note:** To locate a machine name, open the System folder in the Control Panel of a local machine. Click on the Network Identification tab in the System Properties dialog box.

To disconnect from Service:

To disconnect from a Service, click the Connect To Service button on the toolbar. Console disconnects from the Service to which it is connected. You can then connect to a different Service.

Note: Console starts Service before connecting to it, if it is not already running.

Related Topics Server Name Dialog Box Monitoring Service

Monitoring Service

You can monitor Service in the main window of Console. Data is displayed in the Service Messages area at the bottom of the main window when you connect or disconnect a session (load a profile) to a host and when Service is processing a host report.

Displaying Recent Messages from Service

If you encounter a problem with Service, you can display the fifty most recent messages relating to the session.

To display recent messages:

To display recent messages from Service, do one of the following:

- Right-click a session name. On the menu, click Message History.
- Double-click on a session. The Profile Messages dialog box is displayed.

Monitoring Multiple Instances of Service

If more than one instance of Service is running on different machines, you can monitor them from your machine. You can then start several instances of Console on your machine and connect each of these Console instances to different instances of Service.

Refreshing Console

If one instance of Service is running on more than one PC, each instance of Console on the different PCs refreshes automatically. Each PC displays a current version of Print Services activity.

Related Topics Connecting Console to Service Main Window

Formatting Reports

A printer profile lets you format a report for your LAN printer and refine the conversion from host printer output to LAN printer output. To create a profile, use the Printer Session Properties dialog box.

Related Topics Creating a Printer Profile Print Services Overview Printer Session Properties Dialog Box

Creating a Printer Profile

You must create and load a printer profile before you connect a LAN printer to a host for the first time.

To create a printer profile:

- 1. On the Service menu, click Create New Profile On Service.
- 2. Type a profile name (for example, SalesProfile).
- 3. Click OK. The Printer Session Properties dialog box opens, where you define the properties of this session.
- 4. On the General tab, you must include the following information:
 - IP Host/Gateway—Specify the IP address, machine name, or DNS name of the host machine from which reports are printed.
 - LU Name/Device Name—Specify the logical unit (LU) or device name (for example, SALES) that the host is using to identify the host printer that the program is emulating. Consult with your host system administrator to obtain an LU name or a device name.
- 5. On the Printer Destination tab, click Use Specific Printer, and then Select Printer. In the Print Setup dialog box, click a printer on your system and specify printer settings.
- 6. Make any necessary changes in the remaining tabs. The default settings are sufficient for most situations.
- 7. Click OK.

Related Topics

Printer Session Properties Dialog Box Modifying Profile Properties Loading a Profile Autostarting a Profile Managing Profiles

Modifying Profile Properties

Once you have connected to Service and loaded a profile, you can modify its properties to:

- Change the format of a report for your LAN printer.
- Modify the conversion from host printer output to LAN printer output.

To change the properties of a profile, use the Printer Session Properties dialog box.

To change the properties of a session:

- 1. Load the profile into Service (if it is not already loaded) and select it.
- 2. Right-click the profile, and click Properties. The Printer Session Properties dialog box opens.
- 3. Make the session properties changes, and then click OK.

Related Topics Printer Session Properties Dialog Box Creating a Printer Profile Loading a Profile Autostarting a Profile Managing Profiles

Loading a Profile

To use an existing printer profile to connect a host to a printer, or to modify it, you must load the profile into service. A profile that is loaded into Service is called a session.

Note: Before loading a profile, make sure Console is connected to the appropriate instance of Service.

To load a profile into Service:

- 1. On the Service menu of the Main window of Console, click Load Profile Into Service. The Select A Profile To Load dialog box opens.
- 2. Select a profile, (for example, SalesProfile.hep) and then click OK. A list of profiles that are loaded in the selected Service displays in the main window.

Note: You can load several profiles and run several sessions simultaneously.

To unload a profile from Service:

Select the profile from the list in the main window and right-click it. Select Unload From Service.

To delete a profile from an instance of Service:

Once you have connected to Service, you can delete one or more profiles for that service.

- 1. On the Service menu, click Delete Profile On Service. The Select Profiles to Delete dialog box opens.
- 2. Check the profile(s) that you want to delete.
- 3. Click OK.

Related Topics Connecting Console to Service Creating a Printer Profile Modifying Profile Properties Managing Profiles

Autostarting a Profile

Once you have created and tested a printer profile, you can put it into production. It is possible to load the profile automatically whenever you start Service.

To configure Autostart Profiles:

- 1. On the Service menu, click Autostart Profiles. The Autostart Profiles dialog box opens.
- 2. On the list of profiles, select one or more profiles that you want to start automatically.

Related Topics Creating a Printer Profile Modifying Profile Properties Loading a Profile Managing Profiles

Managing Profiles

The following tips can help you manage your profiles:

HostExplorer printer session profiles HostExplorer Print Services works with printer profiles created by HostExplorer. Move or copy the profiles to the User folder for Service. To access the User Files folder, double-click the User Files shortcut in the Hummingbird Connectivity program group.

Modifying profiles To modify the properties of a profile, load the profile into service, right-click it, and select Properties.

New profiles based on old To create a new profile based on an existing profile, use Windows Explorer to make a copy of the source profile. Rename the copy and then load the new profile and modify its properties.

Profiles with the same LU name You can keep several profiles on disk with the same LU name. However, you cannot connect two profiles at the same time to the same host using the same LU name.

Related Topics

Printer Session Properties Dialog Box Creating a Printer Profile Modifying Profile Properties Loading a Profile Autostarting a Profile

Connecting a Printer to a Host

Once a profile is loaded into Service, you can connect a LAN printer to a host.

To start a connection:

On the Session menu in the Console main window, click Connect To Host. The LAN printer specified in the profile connects to the host that you specified in the profile. Any reports that the host spools to the specified LU name (for example, SALES) print on the LAN printer (for example, Sales Printer). You can monitor connection progress in the Service Messages area at the bottom of the Console main window.

Related Topics Printer Session Properties—LU1 Settings Tab Printer Session Properties—LU3 Settings Tab Creating a Printer Profile Loading a Profile

Printing a Test Report

To make sure that the connection is working, generate a report and check the following:

- If the report does not reach the printer, see <u>Troubleshooting a Missing</u> <u>Report</u>.
- If the report prints, but you are not satisfied with the formatting, use the Printer Session Properties dialog box to format the report for the LAN printer.
 - **Note:** If you have created and tested a printer profile, you can modify the default settings so that the profile loads automatically whenever you start Service.

Related Topics

Autostarting a Profile Printer Session Properties Dialog Box Troubleshooting a Missing Report

Troubleshooting Service

The following are suggested solutions for some common issues with HostExplorer Print Services:

- create a trace file
- configure re-connection attempts
- configure the host TCP/IP package
- . configure Printer Session properties for incorrectly formatted reports

Creating a Trace File

Before contacting Hummingbird Technical Support with a problem, turn on tracing and then reproduce the problem. This creates a trace file that you can send by e-mail to our support team.

To turn on tracing:

- 1. Connect to Service using Connect To Service on the File menu.
- 2. On the Service menu, click Properties. The Service Properties dialog box opens.
- 3. Select Enable Tracing.

Note: You can change the file name or path of the trace file in the Trace File box.

Configuring Re-Connection Attempts

When you select Properties from the Service menu, you can configure whether Service automatically tries to re-connect with a host. In the Number Of Times To Attempt AutoReconnect box, use the following list as a guideline:

- 0—Never attempts to automatically reconnect.
- -1—Continually attempts to automatically reconnect.
- >0—Maximum number of times to attempt to automatically reconnect.

No Reports Print from a New Host

If the host reports do not print on the LAN printer, the host TCP/IP package may not be properly configured to support the TN3270E or TN5250E protocol. Consult with your host system administrator.

Poorly Formatted Reports

If the report prints, but is poorly or incorrectly formatted, you can experiment with the settings in the Printer Session Properties dialog box.

Related Topics Troubleshooting a Missing Report Service Properties Dialog Box Printer Session Properties Dialog Box

Troubleshooting a Missing Report

The following checklist can help you track down reports that did not arrive at the LAN printer to which it was routed.

Question	Comments	
Is Service running?	In Console, check Connect To Service on the File menu.	
Is the correct printer profile (session) for that report loaded and connected?	Check the status line for the session in the main window of Console.	
Have you ever successfully printed a report from this host computer?	If not, make sure that the host's TCP/IP package is properly configured to support the TN3270E or TN5250E protocol. Consult with your host system administrator.	
Was the batch job (that generates the report) submitted?	Ask the person who is responsible for submitting the job.	
Is the job still in the job queue?	Consult with your host system administrator.	
Has the print queue been assigned to the LU name used by the printer profile?	In Console, click Properties on the Service menu to obtain the LU name used by the printer profile.	
Did the job fail?	Consult with your host system administrator.	
Is the report spool file still in the print queue on the host printer?	If it is, check if Service is still running, or if the session (printer profile) is connected to the host. The report may have printed, but the spool file not deleted. If so, release the report without rerunning the batch job.	
Was the report (that is, the job's output) spooled to the correct (host) print queue?	Consult with your host system administrator.	
Is the report spool file an unusually small size?	Retry. The job may not have run properly. The report may have been empty, or too small to be recognized.	
Was the report processed by Service?	Check the trace file. See <u>Creating a Trace File</u> .	
Did Service send the (processed) report to the correct printer?	Use Console to check the properties of the printer profile and also check the trace file. See <u>Creating a Trace File</u> .	

Does the report printer profile specify Print to File?	Use Console to check the properties of the printer profile. Print To File means that the Service saves the host report as a file rather than routing it to a LAN printer.
Is the report still on the print queue of the LAN printer?	Check the LAN printer status dialog box. If the report is listed, make sure the printer is functioning properly.

Note: You can use Hummingbird HostExplorer to check jobs and print queues on the host.

Related Topics

Service Properties Dialog Box How a Host Report is Routed to a LAN Printer Troubleshooting Service

Special Characters

Escape and binary codes are entered using the backslash character ($\$).

- \a Bell (alert)
- \b Backspace
- \e Escape
- \f Form feed
- \n New line
- \r Carriage Return
- \t Horizontal Tab
- \v Vertical Tab
- ' Single quotation mark
- " Double quotation mark
- \\ Backslash
- \xhh ASCII character in hexadecimal notation

The sequence \xhh lets you specify any ASCII character as a hexadecimal character code. For example, you can give the ASCII backspace character as the escape sequence (\b), or you can code it as \x08 hexadecimal.

You may use one or two hexadecimal digits for a hexadecimal escape sequence. For example, you can specify the hexadecimal escape sequence for the backspace character as either x8 or x08.

Use the caret character to enter control sequences. For example, to enter a Ctrl-A value, you would type ^A. To enter a caret, enter the caret character twice. Example: ^^

Related Topics Supported SCS Control Sequences

Supported SCS Control Sequences

The following is a list of supported SCS (SNA Character String) control sequences:

Function	Code	Description	
BEL	0x2F	Bell	
CR	0x0D	Carriage return	
FF	0x0C	Form feed	
GE	0x08xx	Graphic escape	
HT	0x05	Horizontal tab	
IRS	0x1E	Interchange record separator	
LF	0x25	Line feed	
NL	0x15	New line	
NUL	0x00	Null	
RFF	0x3A	Required form feed	
RNL	0x06	Required new line	
SA	0x28+	Set attribute	
SHF	0x2BC1+	Set horizontal format	
SLD	0x2BC6+	Set line density	
SPD	0x2B+	Set print density	
SVF	0x2BC2+	Set vertical format	
TRN	0x35+	Transparency block	
ATRN	0x36	Absolute transparency	
VT	0х0В	Vertical tab	
SHM	0x2BD2nn11+	Set horizontal margins	

SVM	0x2BD2nn49+	Set vertical margins	
SPPS	0x2BD2nn40+	Set presentation page size	
SLS	0x2BD20309+	Set Line Spacing	
SSLD	0x2BD20415+	Set Single Line Distance	
SIC	0x2BD20345+	Set Initial Conditions	
STO	0x2BD3nnF6+	Set text orientation	
AHPP	0x34C0+	Absolute horizontal presentation position	
AVPP	0x34C4+	Absolute vertical presentation position	
-	0x03nn+	ASCII Transparent	

Related Topics Special Characters

HostExplorer Print Services Console Menus

HostExplorer Print Services Console offers five menus:

- File Menu
- Service Menu
- <u>Session Menu</u>
- View Menu
- Help Menu

General Accessibility

Hummingbird products are accessible to all users. Wherever possible, our software adheres to Microsoft Windows interface standards and contains a comprehensive set of accessibility features.

Access Keys All menus have associated access keys (mnemonics) that let you use the keyboard, rather than a mouse, to navigate the user interface (UI). These access keys appear as underlined letters in the names of most UI items. (If this is not the case, press Alt to reveal them.) To open any menu, press Alt and then press the key that corresponds with the underlined letter in the menu name. For example, to access the File menu in any Hummingbird application, press Alt+F.

Once you have opened a menu, you can access an item on the menu by pressing the underlined letter in the menu item name, or you can use the arrow keys to navigate the menu list.

Keyboard Shortcuts Some often-used menu options also have shortcut (accelerator) keys. The shortcut key for an item appears beside it on the menu.

Directional Arrows Use the directional arrows on the keyboard to navigate through menu items or to scroll vertically and horizontally. You can also use the directional arrows to navigate through multiple options. For example, if you have a series of radio buttons, you can use the arrow keys to navigate the possible selections.

Tab Key Sequence To navigate through a dialog box, press the Tab key. Selected items appear with a dotted border. You can also press Shift+Tab to go back to a previous selection within the dialog box.

Spacebar Press the Spacebar to select or clear check boxes, or to select buttons in a dialog box.

Esc Press the Esc key to close a dialog box without implementing any new settings.

Enter Press the Enter key to select the highlighted item or to close a dialog box and apply the new settings. You can also press the Enter key to close all About boxes.

ToolTips ToolTips appear for all functional icons. This feature lets users use Screen Reviewers to make interface information available through synthesized speech or through a refreshable Braille display.

Microsoft Accessibility Options

Microsoft Windows environments contain accessibility options that let you change how you interact with the software. These options can add sound, increase the magnification, and create sticky keys.

To enable/disable Accessibility options:

- 1. In Control Panel, double-click Accessibility Options.
- 2. In the Accessibility Options dialog box, select or clear the option check boxes on the various tabs as required, and click Apply.
- 3. Click OK.

If you installed the Microsoft Accessibility components for your Windows system, you can find additional accessibility tools under Accessibility on the Start menu.

Technical Support

You can contact the Hummingbird Technical Support department Monday to Friday between 8:00 a.m. and 8:00 p.m. Eastern Time.

Hummingbird Ltd. 1 Sparks Avenue, Toronto, Ontario, Canada M2H 2W1					
	Canada and the USA	International			
Technical Support:	1-800-486-0095	+1-416-496-2200			
General Enquiry:	1-877-FLY-HUMM	+1-416-496-2200			
Main:	+1-416-496-2200				
Fax:	+1-416-496-2207				
E-mail:	<pre>support@hummingbird.com</pre>				
FTP:	ftp.hummingbird.com				
Web Support:	<pre>support.hummingbird.com/customer</pre>				
Web Site:	www.hummingbird.com				

Printer Session Properties—LU1 Settings Tab

Use this tab to set options that HostExplorer Print Services will use for reports that the host computer prints using the LU1 printer protocol.

An LU1 printer is also known as an SCS (SNA Character String) printer. Unlike LU3 printers, LU1 printers use data streams that are similar to ASCII print jobs. For more information about SNA Character Strings, see Supported SCS Control Sequences. »

Double Space Lines—Treat all line feed characters as double line feeds.

Print upper case only—Convert all lower case letters of the English alphabet [a..z] to upper case. This does not affect special characters and accented letters.

Suppress initial form feed—Discard a form feed character (if any) at the beginning of a report. Many host programs include a form feed at the beginning of a report to align the printer. If you are printing through Windows, then alignment is automatic and the initial form feed is not required.

Add blank page at end of job—Add a form feed character at the end of a report. (This may cause a blank page to print.) This option is useful if you are printing to fan-folded paper: it forces the last page of the report to leave the printer.

Discard SCS transparency blocks—Discard (ignore) transparency blocks. Transparency blocks are usually used to send down printer formatting codes to a specific host printer. If you are printing through Windows, discard transparency blocks since they are not compatible with the Windows internal print engine.

Ignore Vertical Channel Select (VCS)—Ignore Vertical Channel Select (VCS) commands. VCS commands are used with host printers to skip to a specific channel to align the vertical format.

LU1 transparency blocks contain ASCII data—If you use the transparency blocks to download printer specific information such as escape sequences for font selection and other printing orders, then enable this option. Otherwise, all data in transparency blocks are

translated from EBCDIC to ASCII.

Host formatting field—Select one of the following options:

- Ignore host formatting orders—Ignores most host formatting orders, except carriage returns and line feeds.
- Honor host formatting orders in current job only—Interpret host formatting orders but reset the print settings such as the tabs stops, vertical tabs, and margins at the end of the print job. This way, all print jobs start with the default values as if the printer is powered on.
- Honor host formatting and retain in following jobs—Interpret host formatting orders and retain printer settings such as the tabs stops, vertical tabs, and margins at the end of the print job. The next report to print after a host report will begin with the host report's printer settings.

Defaults—Reset all options to the system default.

Printer Session Properties—LU3 Settings Tab

Use this tab to configure options that HostExplorer Print Services will use for reports that the host computer prints using the LU1 printer protocol.

An LU3 printer is also known as an 3270 printer. LU3 is sometimes used by IBM mainframes, and is never used by AS/400 hosts.

Double Space Lines—Treats all line feed characters as double line feeds.

Print upper case only—Converts all lower case letters of the English alphabet [a..z] to upper case. It does not affect special characters and accented letters.

Suppress initial form feed—Discards a form feed character (if any) at the beginning of a report. Many host programs include a form feed at the beginning of a report to align the printer. If you are printing through Windows, then alignment is automatic and the initial form feed is not required.

Add blank page at end of job—Add a form feed character at the end of a report. (This may cause a blank page to print.) This option is useful if you are printing to fan-folded paper: it forces the last page of the report to leave the printer.

Always honor form feeds—Honors form feed orders even if the print position is not in column 1. Normally, form feed orders are treated as blanks when the print position is not column 1.

Reset position to column 1 on form feed—Resets the print position to column 1 after processing a form feed order. Normally, a form feed causes a form eject and then moves the print position to column 2. Warning: If you enable this option, your report may not align correctly.

Print blank lines if line is empty—Print a blank line when a line contains only null characters.

Defaults—Reset all options to their system default.

Related Topics

Printer Session Properties—General Tab

Printer Session Properties—Host-Print Transform TabPrinter Session Properties—LU1 Settings TabPrinter Session Properties—Printer Destination TabPrinter Session Properties— Page Layout TabPrinter Session Properties—Printer Advanced Tab

Printer Session Properties— ASCII/EBCDIC Translation Table Tab

Server Name Dialog Box

Use this dialog box to connect your Console to a Service that is running on either the local machine or a remote machine. When you connect to a remote machine, the machine name is added to the drop-down list.

Enter a machine name—Type the name of the machine where Service is located. The default is [Local Machine]. However, the last machine name that you type becomes the default.

Related Topics Connecting Console to Service Connecting a Printer to a Host

Main Window

The main window opens when you start Console. Use the main window to define sessions, to monitor the operations of Service, to format reports, and to troubleshoot.

Title Bar

Displays one of the following:

HostExplorer Print Services Console - Not Connected—when Console is not connected to Service.

HostExplorer Print Services Console -[Local Machine]—when Console is connected to Service running on the same machine as Console.

HostExplorer Print Services Console - *machine-name*—when Console is connected to Service running on *machine-name*. *Machine-name* may be the same as the machine on which Console is running.

Status Window

Displays the following information for each session:

Session ID—Identifies a session established between Console and Service.

Profile—The name of the printer profile used to establish the session.

Connection Status—The status of the connection between the session and the host. This area is blank when there is no connection established.

Host Status—The status of the host to which a session is connected. This area is blank when the session is not connected to a host.

Printer Status—The status of the LAN printer specified in the session's printer profile.

Printed Status—The page counts and job counts for the session.

Other Status—Miscellaneous status information about the session.

LU Name/Device Name—Specifies the logical unit (LU) name that the host is using to identify the host printer that the program is emulating. Called a device name on AS/400.

Note: Double-clicking on a session's line opens a dialog box that shows the 50 most recent messages from Service about that session.

HostExplorer Print Services Service Messages—Messages from Service about intermediate stages of a session that is changing state (for example, changing from being Connected to being Disconnected). Final status is displayed under Connection Status in the Main box, above.

Related Topics File Menu Service Menu Session Menu View Menu Help Menu

Printer Session Properties Dialog Box

This dialog box lets you control a session's properties. These properties let you identify the host computer and the LAN printer, and set many properties that control the format of the host report.

When you click OK, the session's properties are automatically saved to disk as a profile.

To access this tabbed dialog box, on the Session menu, click Properties. If this option is not available, on the Service menu, click Create New Profile On Service. Type a name for the new profile, and click OK.

Related TopicsPrinter Session Properties—General TabPrinter Session Properties—Host-Print Transform TabPrinter Session Properties—LU1 Settings TabPrinter Session Properties—LU3 Settings TabPrinter Session Properties—Printer Destination TabPrinter Session Properties—Page Layout TabPrinter Session Properties—Printer Advanced TabPrinter Session Properties—ASCII/EBCDIC Translation Table Tab

Service Properties Dialog Box

Use this dialog box to configure tracing and auto-reconnection. You can view trace information using any text editor.

Enable Tracing—Lets you create a trace file. To terminate tracing, clear this option. If you do not clear tracing, HostExplorer Print Services automatically starts transferring data to a trace file when it restarts.

Trace File—The default name and the location where the trace file is stored. All traces create an ASCII file with the extension .txt.

Number of Times to Attempt Auto-Reconnect—Lets you set the number of times the system attempts to auto-reconnect when Service prematurely shuts down. Use the following list as a guideline:

- 0—Never attempts to automatically reconnect.
- -1—Continually attempts to automatically reconnect.
- >0—Maximum number of times to attempt to automatically reconnect.

Number of Seconds to Wait Between Auto-Reconnect Attempts— Lets you set the number of seconds between auto-reconnect attempts.

Related Topics Troubleshooting Service Troubleshooting a Missing Report

File Menu

Connect to Service—This menu item is displayed with a check mark if Console is already connected to Service.

If it is not checked, the Server Name dialog box opens when you click Connect to Service. Enter a machine name (or IP address, or DNS name, or [Local Machine]) of a machine that is running Service. Click OK to connect Console to Service.

Note: If Service is installed but not running on the target machine, the Connect to Service command will start it.

If Connect to Service is checked, clicking it disconnects Console from Service. Service and any sessions continue to run.

Exit—Exits Console. Service and any sessions continue to run.

Related Topics Connecting Console to Service Service Menu Session Menu View Menu

Service Menu

The following options are available only if Console is connected to Service.

Create New Profile On Service—Lets you enter the name of a new printer profile, and then displays the Printer Session Properties dialog box. When you click OK, the printer profile is automatically saved on disk with a .hep file extension, and with the properties you set in the Printer Session Properties dialog box. The new profile is automatically loaded into service.

Delete Profile On Service—Displays a list of printer profiles. Select one or more profiles you want to delete.

Load Profile Into Service—Displays a list of printer profiles. Select one or more profiles to load into Service. Loading a profile into service establishes a session.

Stop Service—Stops the instance of Service to which you are connected. Disconnects all connected sessions. Reports that depend on Service will not print if Service is not running.

Autostart Profiles—Displays a list of printer profiles. The list shows which profiles have been selected to load automatically whenever Service starts. Select the profiles that you want to load automatically in the future, and clear the profiles that you no longer want to load automatically.

Note: Service starts automatically whenever a machine on which it is installed starts Windows. To view or change the startup options, open Administrative Tools on the Control Panel, and then open Services. Right-click Hummingbird HostExplorer Print Services and select Properties. Select an option from the Startup Type box.

Properties—Opens the Service Properties dialog box, which lets you do the following:

- Enable and specify a trace file.
- Configure how Service attempts to automatically reconnect with the host if the connection is broken.

Related Topics

Service Properties Dialog Box Creating a Printer Profile Loading a Profile

Session Menu

Sessions are listed in the main box of the main window. You must select a session before using any of these commands, with the exception of the commands in the All Sessions submenu.

Connect To Host—Connects the session to the host specified in General tab the Printer Session Properties dialog box.

Note: If a session is not connected to a host, then all reports that use that session will not print.

Disconnect From Host—Disconnects the session from the host specified in General tab the Printer Session Properties dialog box.

Unload From Service—Unloads the session from Service. Disconnects the session if it was connected to its host.

Message History—Opens the Profile Messages dialog box, which displays the 50 most recent messages from Service relating to that session.

Properties—Opens the Printer Session Properties dialog box.

All Sessions—Lets you do one of the following three options:

- Connect All To Host—Connects all sessions from their respective hosts.
- Disconnect All From Host—Disconnects all sessions from their respective hosts.
- Unload All From Service—Unloads and disconnects all sessions.

Related Topics Service Menu View Menu Modifying Profile Properties Troubleshooting Service

View Menu

Refresh—Refreshes the main window.

Related Topics Main Window File Menu Service Menu Session Menu

Help Menu

Help Topics—Starts HostExplorer Print Services online Help.

About HostExplorer Print Services Console—Displays information about Print Services. For information about each module installed with the product, double-click on the module name.

Related Topics File Menu Main Window Service Menu Session Menu View Menu

Printer Session Properties—General Tab

Use this tab to set options relating to the host computer.

IP Host/Gateway—Specifies the IP address, machine name, or DNS name of the host (or the gateway to the host) from which reports are printed.

LU Name/Device Name—Specifies the logical unit (LU) name that the host is using to identify the host printer that the program is emulating. Called a device name on AS/400.

TCP Port—This box is enabled only when you select Telnet from the Connect By list. Specifies the port number of the host.

Connect Timeout—This box is enabled only when you select Telnet from the Connect By list. The number of seconds before the connection to the host times out.

Choose a Printer Type—Select one of the following two host printers that you want to emulate:

- IBM-3287-1—Commonly used by MVS and other IBM mainframe operating systems.
- IBM-3812-1—Commonly used by AS/400.

TN5250E Message Queue area—Lets you configure queue settings. This area is enabled only when you select IBM-3812-1 in the Choose a Printer Type list.

Message Queue Name and Message Queue Library—Identifies the location (on the AS/400) to which status messages are spooled. These fields are enabled only if you select IBM-3812-1 in the Choose a Printer Type list.

TN3270E LU Request—This setting is enabled only when you select IBM-3287-1 from the Choose a Printer Type list. Specifies the format of the contents of the LU Name box. Select Connect or Associate.

Associate—If you select this option, the LU Name box specifies the LU of the display session. In this case, the host system

assigns the LU associated with the display LU (if available).

Related Topics

Printer Session Properties—Host-Print Transform Tab Printer Session Properties—LU1 Settings Tab Printer Session Properties—LU3 Settings Tab Printer Session Properties—Printer Destination Tab Printer Session Properties— Page Layout Tab Printer Session Properties—Printer Advanced Tab Printer Session Properties—ASCII/EBCDIC Translation Table Tab

Printer Session Properties—Host-Print Transforn Tab

This page is available for 5250 connections only. Use this page to set the properties of AS/400 print jobs. The AS/400 host will format the data and send it to the printer using ASCII Transparency.

Host-Print Transform—Select this check box if you want the AS/400 host to transform printed data into ASCII format. You must select this check box to specify the following options.

 Printer Model—This box is available only when you select the Host-Print Transform check box. Specifies the type of PC printer that you want to use. If your printer model is not in the list, then select a model that is similar to your printer type.

- Drawer 1—Specifies the size of the paper that is loaded in drawer 1 of the LAN printer.
- Drawer 2—Specifies the size of the paper that is loaded in drawer 2 of the LAN printer.
- Envelope Hopper—Specifies the size of the envelopes that are loaded in the envelope hopper of the LAN printer.
- ASCII Code Page 899—Select this check box if you want your printer to support ASCII code-page-899 symbols.
- Customizing Object—Specifies the name of the AS/400 customizing object that contains the information to be used for your printer during a printer session.
- Customizing Library—Specifies the name of the AS/400 system library that contains the customizing object.

Related Topics

Printer Session Properties—General Tab

Printer Session Properties—LU1 Settings Tab

Printer Session Properties—LU3 Settings Tab

Printer Session Properties—Printer Destination Tab

Note: Your AS/400 system must be able to recognize the selected printer model for Host-Print Transform to function properly.

<u>Printer Session Properties— Page Layout Tab</u> <u>Printer Session Properties—Printer Advanced Tab</u> <u>Printer Session Properties— ASCII/EBCDIC Translation Table Tab</u>

Printer Session Properties—Printer Destination Tab

Use this tab to configure the destination path used to print host jobs.

Printing system—Select one of the following options in the Printing system field.

- Use Windows Printing—Prints all reports through the Windows Printing subsystem. You can print to any type of printer; PCL, PostScript, etc. In this mode, the program lays out the print job similar to that of a word processor. This mode provides complete control over the format of the report and the font used to print the report. You can select the layout options in the Page Layout tab.
- Print directly to LPT1/LPT2/LPT3—Spools print reports to the device of the same name. This spools the data to the printer port through the operating system. Use these options only in special situations, since error messages such as the Printer Offline and Out of Paper can cause Abort/Retry errors by the operating system.
- Print to File—Spools reports to a file. If the file does not exist, the program creates it. All reports are automatically appended to the file. The filename is entered in the Filename edit box below.

Spool Job directly—Select this box to bypass the Windows Printing system and spool the data directly to the printer. This option is similar to Print directly to LPTx, except that network printers are supported. With this option enabled, you cannot control the layout of the print report since the program spools the report to the printer (after converting it from EBCDIC to ASCII). If it is enabled, reports are queued in Print Manager.

Use Specific Printer—Enables the following:

- Select Printer—Opens the standard Print Setup dialog, where you select the destination printer when the destination is Windows Printing. Enabled if you select Use Specific Printer.
- Selected Printer Info—This read-only field shows the Print Setup information. To change it, click Select Printer.

Filename—Type the path and name of the file which will receive the host print reports when the destination is Print to File.

Defaults—Resets all options to their system default.

Related TopicsPrinter Session Properties—General TabPrinter Session Properties—Host-Print Transform TabPrinter Session Properties—LU1 Settings TabPrinter Session Properties—LU3 Settings TabPrinter Session Properties—Page Layout TabPrinter Session Properties—Printer Advanced TabPrinter Session Properties—ASCII/EBCDIC Translation Table Tab

Printer Session Properties— Page Layout Tab

Use this tab to configure the page layout for the host report.

The options in the Page Layout tab are only available if, in the Printer Destination tab, Printing System is set to Use Windows Printing and the Spool Job Directly option is not selected.

Layout using:—Select one of the following options in this field:

- Use font info only—Lets you choose the font style and size for the printed data. In this mode, the selected font and font size-as well as the size of the paper loaded in the actual printer-determine the quantity of text that is printed on each page.
- Use page format info—Lets you specify the dimensions of the report in columns and rows, as well as the size of the margins.

For example, this option lets you specify that you want 80 columns, 54 rows, a one-inch margin top and bottom, and a half-inch margin left and right. HostExplorer Print Services will select a font size and spacing to create a printout with the characteristics specified.

Margins—Lets you specify the print margins in inches.

Page Format—Controls the size of the printout when the Use Page Format Info Layout is selected. The system will use the font name selected and will create a font that fits the specified number of rows and columns.

Host Overrides Settings—Select this box to use the host's page format settings.

Orientation—Selects the orientation of the print job. This overrides the value selected in the Printer Setup dialog.

Printer Font—Displays the currently selected font name. It also displays the currently selected font size if you selected Use Font Info Only from the Layout Using list.

Defaults—Resets all options to the system default.

Font—Opens the Font dialog box, which lets you choose font characteristics for print jobs. If the layout mode is Use Page Format Info, then only the Font name is used from this dialog. The Font Size parameter is ignored because the HostExplorer Print Services will generate a font to fit the specified number of rows and columns. If the layout mode is Use Font Info only, then all parameters are used and the paper size, margins, and the font size determine the number of rows and columns.

Related Topics

Printer Session Properties—General Tab

Printer Session Properties—Host-Print Transform Tab

Printer Session Properties—LU1 Settings Tab

Printer Session Properties—LU3 Settings Tab

Printer Session Properties—Printer Destination Tab

Printer Session Properties—Printer Advanced Tab

Printer Session Properties— ASCII/EBCDIC Translation Table Tab

Printer Session Properties—Printer Advanced Tab

Use this tab to set advanced printer options.

Printer Initialization String—Defines escape sequences that the program will send to the printer at the beginning of a print report. The string can contain up to 255 characters. This option is available for the Print to LPTx and Print to File destinations.

You can enter Escape and binary codes by using the backslash character (\). Embedded spaces are treated as part of the string. For more information, see Special Characters. »

Printer Deinitialization String—Defines escape sequences that the program will send to the printer at the end of a print report.

Flush Printing Options—Select Flush when End Of Job received or enter a value in Host print timeout for flushing.

- Flush when End of Job received—Service will force the last page of the report to clear the printer. To print several reports together like on a line printer (where the beginning of a report prints on the same page as the end of a previous report), clear this option and specify a timeout for flushing the jobs.
- Host print timeout for flushing (sec.):—When the Flush When End Of Job Received option is cleared, you must specify this timeout. The timeout is the amount of time (in seconds) that the system remains idle before forcing the last page of a report to clear the printer.

Defaults—Resets all options to their system default.

Related TopicsPrinter Session Properties—General TabPrinter Session Properties—Host-Print Transform TabPrinter Session Properties—LU1 Settings TabPrinter Session Properties—LU3 Settings TabPrinter Session Properties—Printer Destination Tab

Printer Session Properties— Page Layout Tab Printer Session Properties— ASCII/EBCDIC Translation Table Tab

Printer Session Properties— ASCII/EBCDIC Translation Table Tab

Use this tab to select a host code page, and to edit the translate tables that are used to convert the report from EBCDIC to ASCII, and to translate messages sent to the host from ASCII to EBCDIC.

Language—Lets you selects a host code page. The default language is US English.

Related Topics

Printer Session Properties—General Tab

Printer Session Properties—Host-Print Transform Tab

Printer Session Properties—LU1 Settings Tab

Printer Session Properties—LU3 Settings Tab

Printer Session Properties—Printer Destination Tab

Printer Session Properties— Page Layout Tab

Printer Session Properties—Printer Advanced Tab