

Sabre Java Printing Module (SJPM)

User's Guide

Sabre Travel Network Edition

This document provides detailed information for the Install/Uninstall, Configuration/Operation and Troubleshooting/Support of SJPM in the Sabre Travel Network environment.

Travel Sabre | Network

USER'S GUIDE

14 March 2017

© 2017, Sabre Inc. All rights reserved.

This documentation is the confidential and proprietary intellectual property of Sabre Inc. Any unauthorized use, reproduction, preparation of derivative works, performance, or display of this document, or software represented by this document, without the express written permission of Sabre Inc. is strictly prohibited.

Sabre and the Sabre logo design are trademarks and/or service marks of an affiliate of Sabre Inc. All other trademarks, service marks, and trade names are owned by their respective companies.

Contents

General	Information	<u>1</u>
	1.1 Purpose	
	1.2 Certified and Supported Operating Systems	2
Installin	g SJPM	3
	2.4 Installing CIDM	2
	2.1 1 Stalling SJPM	ວ ວ
	2.1.1 Soft Wis Java Offiziation	
	2.1.2 Soft Wishinstandton Options	
	2.1.6 con Mis Opgrade 1 discionanty	
	2.1.5 Typical Installation	5
	2.1.6 Custom Installation	10
	2.1.0 Costorn Installation	17
	2.1.8 SJPM's Repair Installation	
	·	
Uninstal	ling SJPM	
	3.1 Uninstalling SJPM	
	3.1.1 Uninstalling SJPM from the Windows Start Menu	
	3.1.2 Uninstalling SJPM from the SJPM Executable File	
Running	SJPM	
	4.1 Running SJPM	
	4.1.1 SJPM Windows System Tray Icon	
	4.1.2 SJPM Windows System Tray Icon Menu Items	
	4.1.2.1 About SJPM	
	4.1.2.2 Restore	
	4.1.2.3 Restart Server	
	4.1.2.4 Server Mode	
	4.1.2.5 Configure SJPM Server	
	4.1.2.6 Language	40
	4.1.2.7 Client Logging	40
	4.1.2.8 Server Logging	41
	4.1.2.9 Exit	41
	4.1.3 Running SJPM as an Application	
	4.1.4 Running SJPM as a Service	

4.1.5 Running the SJPM Client GUI Manually 50
4.1.5.1 Windows 7 50
4.1.5.2 Windows 8
4.1.5.3 Windows 8.1
4.1.5.4 Windows 10 51
4.2 Starting and Stopping the SJPM Server
4.2.1 Starting / Stopping the SJPM Server - Windows "Start" Menu 53
4.2.1.1 Start the SJPM Server (as a service) – Windows 7 53
4.2.1.2 Start the SJPM Server (as a service) – Windows 8 54
4.2.1.3 Start the SJPM Server (as a service) – Windows 8.1
4.2.1.4 Start the SJPM Server (as a service) – Windows 10 57
4.2.1.5 Start the SJPM Server (as an application) – Windows 7 58
4.2.1.6 Start the SJPM Server (as an application) – Windows 8 59
4.2.1.7 Start the SJPM Server (as an application) – Windows 8.1 60
4.2.1.8 Start the SJPM Server (as an application) – Windows 10 61
4.2.1.9 Stop the SJPM Server – Windows 7 62
4.2.1.10 Stop the SJPM Server – Windows 8 64
4.2.1.11 Stop the SJPM Server – Windows 8.1 64
4.2.1.12 Stop the SJPM Server – Windows 10 66
4.3 Starting and Stopping the SJPM Client67
4.3.1 Starting the SJPM Client 67
4.3.2 Stopping the SJPM Client67
4.4 Restarting SJPM 69
4.4.1 Restarting SJPM – Client GUI 69
4.4.2 Restarting SJPM – SJPM Windows System Tray Icon Menu
4.5 Running SJPM on Linux
4.5.1 Prerequisites
4.5.2 Install/Setup/Operate SJPM on Linux – Browse SJPM from Linux
4.5.3 Install/Setup/Operate SJPM on Linux – Browse SJPM from Windows

SJPM Client GUI......76

5.1 SJPM Client GUI Component Descriptions	76
5.1.1 Device Line Fields	77
5.1.2 GUI Buttons	78
5.1.3 Adding and Deleting Devices	81
5.1.3.1 Adding Devices	81
5.1.3.2 Deleting Devices	84
5.1.4 Disabling and Enabling Devices	87
5.1.4.1 Disabling Devices	87
5.1.4.2 Enabling Devices	91
5.1.5 Editing a Device	94
5.1.5.1 Editing a Device	94

5.1.6 Grouping Devices	
5.1.6.1 Grouping Devices	
5.1.7 Importing and Exporting Devices	
5.1.7.1 Importing Devices	
5.1.7.2 Exporting Devices	103
5.1.8 Copying a Device	105
5.1.9 Renaming a Device	107
5.1.10 Utilize Device	109

Configurations and Drivers112

6.1 Configurations
6.1.1 Supplemental Hosts Configuration – Applies to All Drivers
6.1.1.1 Adding Supplemental Hosts – Applies to All Drivers 113
6.1.1.2 Deleting Supplemental Hosts – Applies to All Drivers 114
6.1.2 SJPM STP Configuration – STP Drivers Only 115
6.1.2.1 Configure a Modem 117
6.1.2.2 Add a Modem Pool 121
6.1.2.3 Edit a Modem 127
6.1.2.4 Edit a Modem Pool 129
6.1.2.5 Delete a Modem 131
6.1.2.6 Delete a Modem Pool 132
6.1.3 Device Backup and Restore133
6.1.3.1 Device Backup – Manual Process
6.1.3.2 Device Backup – Automated Process 135
6.1.3.3 Device Restore – Manual Process 137
6.1.3.4 Device Restore – Automated Process
6.1.4 SJPM Failsafe Configurations 144
6.1.4.1 Failsafe Scenario One – Running Two SJPM Installs 144
6.1.4.2 Failsafe Scenario Two – Running One SJPM Install
6.1.5 Printing to a Mapped Network Drive Folder – ATB2File, File, and IFQ Drivers 146
6.1.6 Allow User Rights – Queue and System Drivers 148
6.1.7 Installing SJPM to an Alternate Hard Drive 151
6.2 SJPM Drivers
6.2.1 ATB2File Driver
6.2.2 ATB2LPR Driver
6.2.3 ATB2System Driver
6.2.4 ATB2TN Driver
6.2.5 ATB2TNProxy Driver
6.2.6 File Driver
6.2.7 Group Driver 191
6.2.7.1 Single Output to Multiple Devices194
6.2.8 IFQ Driver 196
6.2.9 LPR Driver

(Sabre Java Printing Module (SJPM) User's Guide – Travel Network Edition. March, 2017) Confidential and Proprietary Sabre Inc.

6.2.10 MQJMS Driver	211
6.2.11 Printer Driver	213
6.2.12 Proxy Driver	223
6.2.13 Queue Driver	226
6.2.14 RawIP Driver	229
6.2.15 STPATB1 Driver	238
6.2.16 STPATB1INI Driver	240
6.2.17 STPATB2 Driver	242
6.2.18 STPATB2INI Driver	244
6.2.19 System Driver	246
6.2.19.1 System Driver Generic Text Only Font Selection	250

7.1 Enabling SJPM Logging	257
7.1.1 Enabling SJPM Server Logging – System Tray Icon Menu	257
7.1.1.1 Increasing the Server Log Files Size to "20000KB" – File Edit	259
7.1.2 Enabling SJPM Server Logging – File Edit	259
7.1.3 Enabling SJPM Client Logging – System Tray Icon Menu	262
7.1.5 Enabling SJPM Client Logging – File Edit	263
7.2 Disabling SJPM Logging	265
7.2.1 Disabling SJPM Server Logging – System Tray Icon Menu	265
7.2.2 Disabling SJPM Server Logging – File Edit	266
7.2.3 Disabling SJPM Client Logging – System Tray Icon Menu	267
7.2.4 Disabling SJPM Client Logging – File Edit	268

A. SJPM Recommended Requirements	9
B. SJPM Minimum Requirements	0
C. SJPM Frequently Asked Questions	1
D. Connecting to Sabre with SJPM Using SCVPN	6
E. Compatibility with Sabre Customer Virtual Private Network (SCVPN)	7
F. File Encryption and Decryption – ATB2File and File Drivers	7
F.a Encryption – Source Code	7
F.b Decryption – Source Code	9
G. Licensing	0
G.a. QJson	0
G.b. Log4QT	7
G.c. QtSingleApplication	9
G.d. com.sun.media	0
H. Creating and Loading ATB2 Virtual Stock	1

I. LPR vs System vs RawIP Drivers	
I.a. LPR Driver	
I.b. System Driver	
I.c. RawIP Driver	
J. ATB2LPR vs ATB2System Drivers	
J.a. ATB2LPR Driver	
J.b. ATB2System Driver	
K. Remote File Services Terminology	
L. Print Data Request	
M. LPR/LPD Printing (SJPM "ATB2LPR" and "LPR" Drivers)	
N. USB to Serial Port Converter Use with SJPM	
O. SJPM International Character Capability	
O.a. International Unicode data originating from a Sabre Printer LNIATA	
O.b. International Unicode data originating from the SJPM printData RESTful Web Service30	0
P. Automatic Check for Updates / Manual Check for Updates	

General Information

1

1.1 Purpose

This document (**SJPMTNUsersGuide.docx**) is a detailed guide for the install, uninstall, operation, configuration, and support of **Sabre Java Printing Module** (SJPM) and includes detailed information on the (**19**) SJPM Drivers listed below.

Driver	Description
"ATB2File"	Printing ATB2 data (PECTAB protocol) to file(s) (BMP, JPG, PDF, PNG, or PostScript formats).
"ATB2LPR"	Printing ATB2 data (PECTAB protocol) to non-ATB2 printers.
"ATB2Sysem"	Printing ATB2 data (PECTAB protocol) to Microsoft Windows configured printers using the Microsoft Windows printer spooler.
"ATB2TN"	Printing ATB2 data (PECTAB protocol) to physical ATB2 printers.
"ATB2TNProxy"	Printing ATB2 data (PECTAB protocol) from multiple LNIATAs to a single " ATB2TN " device (Multiple to One).
"File"	Printing to file(s) (Text, PDF, or PostScript formats).
"Group"	Printing data from a single device to multiple devices (Replication).
"IFQ"	Interface Queue back office printing to file(s) (Text format).
"LPR"	Printing hardcopy data for both textual and graphical modes to a TCP/IP Network printer using the LPR, Line Printer Remote, protocol.
"MQJMS"	IBM MQ data delivery.
"Printer"	Printing data to Hardcopy, Invoice/Itinerary, ATB1 printers and to file(s) (Serial and Parallel interfaces).
"Proxy"	Printing data from multiple LNIATAs to a single device (Multiple to One).
"Queue"	Printing data to a Network printer for back office printing.
"RawIP"	Printing data to IP printers and to file(s).
"STPATB1"	STP ATB1 document printing.
"STPATB1INI"	STP ATB1 non-ATB1 Invoice/Itinerary document printing.
"STPATB2"	STP ATB2 document printing.
"STPATB2INI"	STP ATB2 non-ATB2 Invoice/Itinerary document printing.
"System"	Printing hardcopy data to Microsoft Windows configured printers using the Microsoft Windows printer spooler.

Sabre Java Printing Module (SJPM) has been regression tested and certified for use with the Operating Systems listed below. If the Operating System is not listed below then it <u>IS NOT</u> certified nor supported at this time for use with SJPM.

However, since SJPM is Java based it should function on any Operating System even though not certified. SJPM has also been spot tested on Operating Systems such as **Windows Server 2008-R2** and **2008-R3** with no reported issues.

Certified and Supported Operating Systems:

- Windows 7-64Bit
- Windows 8.1-64 Bit
- Windows 10-64 Bit
- Linux

Installing SJPM

2.1 Installing SJPM

2.1.1 SJPM's Java Utilization

The Sabre Java Printing Module (SJPM) installation includes Java. The use of SJPM's installed Java is dependent on the Windows "SJPM_JAVA_HOME" environment variable setting.

SJPM uses the "SJPM_JAVA_HOME" environment variable's Java:

• If the "SJPM_JAVA_HOME" environment variable is set and configured in Windows; the Java.exe that is in "%SJPM_JAVA_HOME%/bin" will be used.

Possible Error Condition:

• If the "SJPM_JAVA_HOME" environment variable is pointing to a java version which is older than Java version 1.8. SJPM requires a minimum of Java version 1.8.

2.1.2 SJPM's Installation Options

SJPM can be installed using one of the two methods listed below:

Typical:

The "**Typical**" method installs the SJPM Client, Server and all drivers.

Custom:

The "**Custom**" method allows for custom component selection and installation. This method should be used to install only the SJPM drivers you want to be visible and available for use in the SJPM device driver type drop down list in the "**SJPM** – **Add Device**" popup window (displays when the "**New**" button in the SJPM Client GUI is clicked).

2.1.3 SJPM's Upgrade Functionality

When installing a newer version of SJPM; SJPM's automatic upgrade functionality eliminates the need to uninstall the previous version of SJPM or re-configure SJPM after an upgrade. All devices and configurations are copied and migrated to the new SJPM installation automatically.

For SJPM Device backup and restore procedures see section 6.1.3 Device Backup and Restore.

2.1.4 Running the SJPM Installation as an Administrator

In certain cases, e.g. when the SJPM user is not logged in as Administrator, SJPM must be installed as Administrator using the Windows "**Run as <u>a</u>dministrator**" feature. This section describes the procedure for **Windows 7** 32 Bit / 64 Bit, **Windows 8** 64 Bit and **Windows 10**.

To run the SJPM installation exe (**Example:** "Install_SJPM_TN_x86_32Bit_x.x.x.exe") as an Administrator on **Windows 7** 32 Bit / 64 Bit, **Windows 8** 64 Bit and **Windows** 10, perform the following step:

1. Right click on the SJPM installation exe file and then left click on the "**Run as** <u>a</u>dministrator" menu item.



2.1.5 Typical Installation

This section describes SJPM's "**Typical**" installation. The "**Typical**" installation method of the SJPM installer installs the **SJPM Client**, **SJPM Server** and the following (**19**) **SJPM Drivers**:

ATB2File ATB2LPR ATB2System ATB2TN **ATB2TNProxy** File Group IFQ LPR MQJMS **Printer** Proxy Queue **RawIP STPATB1 STPATB1INI STPATB2 STPATB2INI** System

1. Right click on the Sabre Java Printing Module (SJPM) installation executable file (**Example:** "Install_SJPM_TN_x86_32Bit_x.x.x.exe") and then left click on the "**Run as <u>a</u>dministrator**" menu item.

2. On the "User Account Control" window that pops up click on the "Yes" button.

😗 Use	r Account Control	
0	Do you want to allow the following program from an unknown publisher to make changes to this computer?	
	Program name: Publisher: File origin:	Install_SJPM_TN_x86_32Bit_1.8.25.exe Unknown Hard drive on this computer
Show <u>d</u> etails		Yes No
		Change when these notifications appear

The "File Extracting..." and then "Windows Installer" windows will appear.



3. After file extraction and installation preparation the SJPM "**Setup**" window will appear. Click on the "<u>Next</u> >" button.



4. The "End-User License Agreement" window will appear. Click on the "I <u>accept the terms</u> in the License Agreement" radio button and then click on the "<u>Next</u> >" button.

BJPM-TN 1.8 (1.8.115) x86_32 Bit License Agreement	x
End-User License Agreement Please read the following license agreement carefully Sabre	rk.
Sabre License Agreement	
This License Agreement (" Agreement ") describes the terms and conditions applicable to your (herein the " You " or " Your ") use of the downloaded software (" Software ") being provided to you by Sabre Inc. or its affiliate (" Sabre ").	
1. License. Sabre hereby grants You a personal, limited, non- exclusive, non-transferable, worldwide, royalty-free license to access and use the Software solely for Your internal business operations and	
I accept the terms in the License Agreement	
\bigcirc I <u>d</u> o not accept the terms in the License Agreement	
< <u>B</u> ack <u>Next</u> Cancel	

5. The "Choose Setup Type" window will appear. Click on the "Typical" button.

BJPM-TN 1.8 (1.8.25) x86_32 Bit Setup	x
Choose Setup Type Choose the setup type that best suits your needs Choose the setup type that best suits your needs	rk.
Ippical Installs the most common program features. Recommended for most users. Typical Installation Image: Custom installation of the SJPM Server, Client and Drivers.	
< <u>B</u> ack <u>N</u> ext > Cancel	

6. The "Ready to Install" window will appear. Click on the "Install" button.

🗒 SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup
Ready to Install The Setup Wizard is ready to begin the Typical installation
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
< <u>B</u> ack Install Cancel

7. The "Installing SJPM-TN x.x (x.x.x) x86_32 Bit" window will appear. Click on the "Cancel" button if you need to cancel the installation.

岗 SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup	
Installing SJPM-TN 1.8 (1.8.25) x86_32 Bit	Sabre Travel Network.
Please wait while the Setup Wizard installs SJPM-TN 1.8 (1.8.2 may take several minutes. Status:	25) x86_32 Bit. This
< <u>B</u> ack	ext > Cancel

8. Click on the "<u>F</u>inish" button to complete the installation.

BJPM-TN 1.8 (1.8.25) x86_32 Bit Setup		
Sabre / Travel Network.	Completing the SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup Wizard Click the Finish button to exit the Setup Wizard.	
	< <u>B</u> ack Finish Cance	el

2.1.6 Custom Installation

This section describes SJPM's "**Custom**" installation method. The "**Custom**" installation method of the SJPM installer allows for the selection of the "**Client**", "**Server**" and the following (**19**) **SJPM Drivers**.

ATB2File ATB2LPR ATB2System ATB2TN **ATB2TNProxy** File Group IFQ LPR **MQJMS** Printer Proxy Queue **RawIP** STPATB1 **STPATB1INI STPATB2 STPATB2INI** System

1. Right click on the Sabre Java Printing Module (SJPM) installation executable file (**Example:** "Install_SJPM_TN_x86_32Bit_x.x.x.exe") and then left click on the "**Run as <u>a</u>dministrator**" menu item.

2. On the "User Account Control" window that pops up click on the "Yes" button.

😗 Use	r Account Control	
0	Do you want unknown pul	to allow the following program from an plisher to make changes to this computer?
	Program name: Publisher: File origin:	Install_SJPM_TN_x86_32Bit_1.8.25.exe Unknown Hard drive on this computer
💌 s	how <u>d</u> etails	Yes No
		Change when these notifications appear

The "File Extracting..." and then "Windows Installer" windows will appear.



3. After file extraction and installation preparation the SJPM "**Setup**" window will appear. Click on the "<u>Next</u> >" button.



4. The "End-User License Agreement" window will appear. Click on the "I <u>accept the terms</u> in the License Agreement" radio button and then click on the "<u>Next</u> >" button.

0	
😸 SJPM-TN 1.8 (1.8.115) x86_32 Bit License Agreement	— ×
End-User License Agreement	Travel
Please read the following license agreement carefully	Sabre Network.
Sabre License Agreement	<u>^</u>
This License Agreement ("Agreement") describes conditions applicable to your (herein the "You" or "Yo downloaded software ("Software") being provided to y or its affiliate ("Sabre").	the terms and pur ") use of the rou by Sabre Inc.
 License. Sabre hereby grants You a person exclusive, non-transferable, worldwide, royalty-free li and use the Software solely for Your internal business 	al, limited, non- cense to access s operations and T
I accept the terms in the License Agreement	
\bigcirc I $\underline{d}o$ not accept the terms in the License Agreement	
< <u>B</u> ack Next	ct > Cancel

5. The "Choose Setup Type" window will appear. Click on the "Custom" button.

影 SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup	×
Choose Setup Type Choose the setup type that best suits your needs	Travel Network.
Installs the most common program features. Recommended from most users.	pr
Custom installation of the SJPM Server, Client and Drivers. Custom Installation	
< <u>B</u> ack <u>N</u> ext > C	ancel

6. The "**Custom Setup**" window will appear. Click on the "**plus signs**" to see all of the available items that can be installed. Click on the "**<u>R</u>eset**" button to reset features to factory defaults.

岗 SJPM-TN 1.8 (1.8.102) x86_32 Bit Setup	X
Custom Setup Select the way you want features to be installed.	Sabre Travel Network.
Click on the icons in the tree below to change the w	vay features will be installed.
SJPM-TN 1.8 (1.8.102) x86 Client Client Drivers ATB2F ATB2L ATB2L	This will install SJPM-TN 1.8 (1.8.102) x86_32 Bit components on the local machine. This feature requires 0KB on your hard drive. It has 0 of 2 subfeatures selected. The subfeatures require 43MB on you
Reset Disk Usage < B	ack Next > Cancel

7. Click on the icons in the tree to select which items will be installed. Click on the "**<u>R</u>eset**" button to reset features to factory defaults.

影 SJPM-TN 1.8 (1.8.102) x86_32 Bit Setup	X
Custom Setup Select the way you want features to be installed.	Sabre Travel Network.
Click on the icons in the tree below to change the v	way features will be installed.
Drivers ATB2File ATB2LPR ATB2System ATB2TN ATB2TN ATB2TNProxy	This will install the ATB2TNProxy driver on the local machine. This feature requires 0KB on your hard drive.
Will be installed or Sector will	n local hard drive be installed on local hard drive
× Entire feature will	be unavailable
Reset Disk Usage < E	<u>Back Next > Cancel</u>

Click on the "**Disk <u>U</u>sage**" button to view disk space for installation (**Optional**). Click on the "**OK**" button to return to the installation.

討 s	JPM-TN 1.8 (1.8.25) x86_32 Bit	Setup		×	
D	Disk Space Requirements The disk space required for the installation of the selected features. Sabre Network.				
	The highlighted volumes (if any) do not have enough disk space available for the currently selected features. You can either remove some files from the highlighted volumes, or choose to install less features onto local drive(s), or select different destination drive(s).				
	Volume	Disk Size	Available	Required	
	■C:	19GB	7348MB	310MB	
	· · · · · · · · · · · · · · · · · · ·				
				ОК	

8. When selections are complete click on the "<u>Next</u> >" button.

BJPM-TN 1.8 (1.8.102) x86_32 Bit Setup	x
Custom Setup Select the way you want features to be installed. Sabre Trave	l ork.
Click on the icons in the tree below to change the way features will be installed.	
Reset Disk Usage < Back Next > Cancel	

9. The "Ready to Install" window will appear. Click on the "Install" button.

谩 SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup	x
Ready to Install The Setup Wizard is ready to begin the Custom installation	rk.
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.	
< <u>B</u> ack Install Cancel	

10. The "Installing SJPM-TN x.x (x.x.x) x86_32 Bit" window will appear. Click on the "Cancel" button if you need to cancel the installation.

岗 SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup	- • •
Installing SJPM-TN 1.8 (1.8.25) x86_32 Bit	Sabre Travel Network.
Please wait while the Setup Wizard installs SJPM-TN 1.8 (1.8.25 may take several minutes. Status:	i) x86_32 Bit. This
< <u>B</u> ack <u>N</u> ex	ct > Cancel

11. Click on the "**<u>F</u>inish**" button to complete the installation.

🛃 SJPM-TN 1.8 (1.8.25) x86_3	2 Bit Setup	×
Sabre / Travel Network.	Completing the SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup Wizard Click the Finish button to exit the Setup Wizard.	
	< <u>B</u> ack Finish Cance	el

2.1.7 SJPM's Modify Installation

The SJPM's installation package includes a feature to modify the SJPM installation. This feature can be used to modify the SJPM installation, adding and/or removing drivers.

- 1. Right click on the Sabre Java Printing Module (SJPM) installation executable file (**Example:** "Install_SJPM_TN_x86_32Bit_x.x.x.exe") and then left click on the "**Run as <u>a</u>dministrator**" menu item.
- 2. On the "User Account Control" window that pops up click on the "Yes" button.

😗 Use	r Account Control	
\bigcirc	Do you want unknown pul	to allow the following program from an blisher to make changes to this computer?
	Program name: Publisher: File origin:	Install_SJPM_TN_x86_32Bit_1.8.25.exe Unknown Hard drive on this computer
🕑 s	how <u>d</u> etails	<u>Y</u> es <u>N</u> o
		Change when these notifications appear

The "File Extracting..." and then "Windows Installer" windows will appear:



Cancel

3. After file extraction and installation preparation the SJPM "**Setup**" window will appear. Click on the "<u>Next</u> >" button.



4. The "**Repair or Remove installation**" window will appear. Click on the "**Modify**" button.



5. The "**Custom Setup**" window will appear. Click on the "**plus signs**" to see all of the available items that can be installed. Click on the "**Reset**" button to reset features to factory defaults.

BJPM-TN 1.8 (1.8.115) x86_32 Bit Setup	—
Custom Setup Select the way you want features to be installed.	Sabre Travel Network.
Click on the icons in the tree below to change the v	vay features will be installed.
Image: Signature Signature Signature Image: Signature Ima	This will install SJPM-TN 1.8 (1.8.115) x86_32 Bit components on the local machine. This feature requires 10025KB on your hard drive. It has 2 of 2 subfeatures selected. The subfeatures require 141MB on yo
	Browse
<u>R</u> eset Disk <u>U</u> sage < <u>B</u>	ack Next > Cancel

6. Click on the icons in the tree to select which items will be installed. Click on the "**<u>R</u>eset**" button to reset features to factory defaults.

🛃 SJPM-TN 1.8 (1.8.102) x86_32 Bit Setup
Custom Setup Travel Select the way you want features to be installed. Select the way you want features to be installed.
Click on the icons in the tree below to change the way features will be installed.
Group This will install the Interface Queue driver on the local machine.
Image: Will be installed on local hard drive Image: Will be installed on local hard drive Image: Will be installed on local hard drive
Entire feature will be unavailable
Reset Disk Usage < Back Next > Cancel

Click on the "Disk Usage" button to view disk space for installation (Optional). Click on the "**OK**" button to return to the installation.

👸 SJPM-TN 1.8 (1.8.31) x86_32 Bit	Setup		X
Disk Space Requirements The disk space required for the in	stallation of the sele	cted features. 🍤	abre Travel Network.
The highlighted volumes (if any) of selected features. You can either choose to install less features on the selected fea	do not have enough remove some files fi to local drive(s), or s	disk space available rom the highlighted elect different dest	for the currently volumes, or ination drive(s).
Volume	Disk Size	Available	Required
■C:	19GB	6968MB	43MB
•			4
			ОК

7. When selections are complete click on the "<u>Next</u> >" button.

谩 SJPM-TN 1.8 (1.8.102) x86_32 Bit Setup	
Custom Setup Select the way you want features to be installed.	Sabre Travel Network.
Click on the icons in the tree below to change the	way features will be installed.
Group Group Group LPR LPR MQJMS Printer Proxy T	This will install the Interface Queue driver on the local machine. This feature frees up 72KB on your hard drive.
Reset Disk Usage <	<u>Back Next > Cancel</u>

8. The "Ready to Install" window will appear. Click on the "Install" button.



9. The "Changing SJPM-TN x.x (x.x.x) x86_32 Bit" window will appear.

BJPM-TN 1.8 (1.8.31) x86_32 Bit Setup	- • •
Changing 5JPM-TN 1.8 (1.8.31) x86_32 Bit	Sabre Travel Network.
Please wait while the Setup Wizard changes SJPM-TN 1.8 (1.8. may take several minutes. Status: Closing SJPM Client	31) x86_32 Bit. This
< <u>B</u> ack <u>N</u> e	xt > Cancel

If the "Files in Use" window appears, click on the "Ignore" button.

😸 SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup 🧮	
Files in Use Travel Some files that need to be updated are currently in use. Some files that need to be updated are currently in use.	•
The following applications are using files that need to be updated by this setup. Close these applications and then click Retry to continue the installation or Cancel to exit it.	
Sabre Print Service (Process Id: 1412)	
<u>Exit</u>	

10. The following window will appear. Click on the "Finish" button.

😸 SJPM-TN 1.8 (1.8.31) x86_3	2 Bit Setup	×
Sabre <i>Travel</i> Network.	Completing the SJPM-TN 1.8 (1.8.31) x86_32 Bit Setup Wizard Click the Finish button to exit the Setup Wizard.	
	< <u>B</u> ack Einish Cano	el

If the "**Installer Information**" window appears, click on the "**Yes**" button to restart the system for the repair to complete.



2.1.8 SJPM's Repair Installation

The SJPM's installation package includes an installation repair feature that can be used, in cases where SJPM is not operating properly, to repair SJPM to a functional state.

- 1. Right click on the Sabre Java Printing Module (SJPM) installation executable file (**Example:** "Install_SJPM_TN_x86_32Bit_x.x.x.exe") and then left click on the "**Run as <u>a</u>dministrator**" menu item.
- 2. On the "User Account Control" window that pops up click on the "Yes" button.

😗 Use	r Account Control	×
\bigcirc	Do you want unknown pul	to allow the following program from an plisher to make changes to this computer?
	Program name: Publisher: File origin:	Install_SJPM_TN_x86_32Bit_1.8.25.exe Unknown Hard drive on this computer
🕑 s	how <u>d</u> etails	Yes No
		Change when these notifications appear

The "File Extracting..." and then "Windows Installer" windows will appear:



Cancel

3. After file extraction and installation preparation the SJPM "**Setup**" window will appear. Click on the "<u>Next</u> >" button.



4. The "**Repair or Remove installation**" window will appear. Click on the "**Repair**" button.



5. The "Repair SJPM-TN x.x (x.x.x) x86_32 Bit" window will appear. Click on the "Repair" button.

😾 SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup
Repair SJPM-TN 1.8 (1.8.25) x86_32 Bit
The Setup is ready to repair SJPM-TN 1.8 (1.8.25) x86_32 Bit.
Click Repair to repair the installation of SJPM-TN 1.8 (1.8.25) x86_32 Bit. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
< <u>B</u> ack Repair Cancel

6. The "Repairing SJPM-TN x.x (x.x.x) x86_32 Bit" window will appear.

影 SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup	
Repairing 5JPM-TN 1.8 (1.8.25) x86_32 Bit	Sabre Travel Network.
Please wait while the Setup Wizard repairs SJPM-TN 1.8 (1.8.2 may take several minutes. Status: Closing SJPM Client	5) x86_32 Bit. This
< <u>B</u> ack <u>N</u> ex	kt > Cancel

If the "Files in Use" window appears, click on the "Ignore" button.

岃 SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup	—X —	
Files in Use Some files that need to be updated are currently in use.	re Travel Network.	
The following applications are using files that need to be updated by this setup. Close these applications and then click Retry to continue the installation or Cancel to exit it.		
Sabre Print Service (Process Id: 1412)		
<u>E</u> xit <u>Ig</u> nore	Retry	

7. The following window will appear. Click on the "Finish" button.



If the "**Installer Information**" window appears, click on the "**Yes**" button to restart the system for the repair to complete.



3.1 Uninstalling SJPM

SJPM can be uninstalled one of two (2) ways. SJPM can be uninstalled from the **Windows Start Menu** or from the **SJPM installation executable file (Example:** "Install_SJPM_TN_x86_32Bit_x.x.x.exe").

3.1.1 Uninstalling SJPM from the Windows Start Menu

This section describes the procedures for uninstalling SJPM from the Windows "**Start**" Menu for **Windows 7**, **Windows 8**, **Windows 8.1** and **Windows 10**.

1. Windows 7:

Click on the Windows "**Start**" button on the Windows Taskbar. Click on "**All Programs**" and then scroll down and click on the "**SJPM**" folder. Right click on the "**Uninstall SJPM**" menu item and then left click on the "**Run as <u>a</u>dministrator**" menu item.

Windows 8:

Click on Windows "Start", and then right click on the "Uninstall SJPM" icon, and then click on the "Run as <u>a</u>dministrator" icon on the menu bar.

Windows 8.1:

Click on the Windows "**Start**" button on the Windows Taskbar. Click on the "**Circled Down Arrow**" icon on the Windows desktop. Right click on the "**Uninstall SJPM**" icon on the Windows desktop. Click on the "**Run as <u>a</u>dministrator**" icon on the menu bar.

Windows 10:

Click on the Windows "**Start**" button on the Windows Taskbar. Click on the "**All apps**" and then scroll down and click on the SJPM folder. Right click on the "**Uninstall SJPM**" menu item and then left click on the "**Run as <u>a</u>dministrator**" menu item.
😗 Use	r Account Control	×	
0	Do you want to allow the following program from an unknown publisher to make changes to this computer?		
	Program name: Publisher: File origin:	UninstallSJPM.exe Unknown Hard drive on this computer	
Show <u>d</u> etails		Yes No	
		Change when these notifications appear	

3. The "**Windows Installer**" window will appear. Click on the "**Yes**" button to continue and uninstall SJPM. Click on the "**No**" button to not uninstall SJPM.



4. The "Windows Installer' and then "SJPM-TN x.x (x.x.x) x86_32 Bit" windows will appear if "<u>Y</u>es" was clicked. Click on the "Cancel" button if you need to cancel the uninstall process.



If the following window appears click on the "OK" button:

SJPM-TN 1.7 (1.7.22) x86_32 Bit	— X
The following applications should be closed before continuing the install:	ıe
SJPM client	
 Automatically close applications and attempt to restart them setup is complete. Do not close applications. (A Reboot may be required.) 	after
OK Cancel	

3.1.2 Uninstalling SJPM from the SJPM Executable File

This section describes the procedures for uninstalling SJPM using the SJPM installation executable file. The procedures are the same for **Windows 7**, **Windows 8**, **Windows 8.1** and **Windows 10**.

- 1. Right click on the Sabre Java Printing Module (SJPM) installation executable file (**Example:** "Install_SJPM_TN_x86_32Bit_x.x.x.exe") and then left click on the "**Run as <u>a</u>dministrator**" menu item.
- 2. On the "User Account Control" window that pops up click on the "Yes" button.

😗 Use	😌 User Account Control			
	Do you want to allow the following program from an unknown publisher to make changes to this computer?			
	Program name: Publisher: File origin:	Install_SJPM_TN_x86_32Bit_1.8.25.exe Unknown Hard drive on this computer		
Show <u>d</u> etails		Yes No		
		Change when these notifications appear		

3. The "**File Extracting...**" and then "**Windows Installer**" windows will appear. Click on the "**Cancel**" button if you need to cancel the uninstall process. After file extraction and installation preparation the SJPM "**Setup**" window will appear. Click on the "**Next** >" button.

File Extracting
Extracting Sabre Java Printing Module - TN Installer files. This may take several minutes.
Please wait
Cance

Windows Installer	
Preparing to install	
	Cancel



4. The "Repair or Remove installation" window will appear. Click on the "Remove" button.

😸 SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup			
Repair or Remove in Select the operation	you wish to perform.		
	<u>M</u> odify Allows users to change the way features are installed.		
	Repair Repairs errors in the most recent installation state - fixes missing or corrupt files, shortcuts and registry entries.		
Rer	<u>Remove</u> Removes SJPM-TN 1.8 (1.8.25) x86_32 Bit from your computer.		
	< <u>B</u> ack <u>N</u> ext > Cancel		

5. The "**Remove SJPM-TN x.x** (**x.x.x**) **x86_32 Bit**" window will appear. Click on the "**Remove**" button.

😸 SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup			
Remove SJPM-TN 1.8 (1.8.25) x86_32 Bit			
You have chosen to remove the program from your computer.			
Click Remove to remove SJPM-TN 1.8 (1.8.25) x86_32 Bit from your computer. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.			
< <u>B</u> ack <u>Remove</u> Cancel			

6. The "**Removing SJPM-TN x.x** (**x.x.x**) **x86_32 Bit**" window will appear. Click on the "**Cancel**" button if you need to cancel the uninstall process.



If the "Files in Use" window appears, click on the "Ignore" button.

😸 SJPM-TN 1.8 (1.8.25) x86_32 Bit Setup
Files in Use Some files that need to be updated are currently in use. Some files that need to be updated are currently in use.
The following applications are using files that need to be updated by this setup. Close these applications and then click Retry to continue the installation or Cancel to exit it.
Sabre Print Service (Process Id: 1412)
<u>E</u> xit <u>Ignore</u> <u>R</u> etry

7. The following window will appear. Click on the "<u>F</u>inish" button.



Running SJPM

4.1 Running SJPM

Sabre Java Printing Module (SJPM) consists of three (3) main components (**Client**, **Server**, and **SJPM Drivers**). Upon SJPM installation the "**Client**" and '**Server**" will run automatically if installed and the SJPM "**Server**" will run as a **Service** by default.

Note: The SJPM "Server" must be installed and running for the SJPM "Client" and "SJPM Drivers" to function.

4.1.1 SJPM Windows System Tray Icon

After SJPM installation the SJPM "**Client**" will automatically run in the Windows System Tray with an icon. The SJPM "**Client**" will also automatically run in the Windows System Tray with an icon upon boot-up of the host PC.



To display the SJPM Windows System Tray Icon Menu, right click on the SJPM Windows System Tray Icon.

	About SJPM	
	Restore	
	Restart Server	
	Export All Instances	
	Import Instances	
	Check for Updates	
	Server Mode	
	Configure SJPM Server	
	Language 🕨	
	Client Logging	
	Server Logging	
	Exit	
See 199	🕩 📴 🏪 🏴 12:4	4 PM

This section provides detailed descriptions for the menu items of the SJPM Windows System Tray Icon.

4.1.2.1 About SJPM

The "About SJPM" menu item opens the "SJPM - About" window that provides two informational tabs ("Versions" and "Licenses").

- "Versions" This tab provides version information for the installed SJPM "Client", "Server", and "SJPM Drivers".
- "Licenses" This tab provides License information for the SJPM components. Also see <u>Appendix G</u>.

S About	🛛 🗾 🖇 SJPM - About 🗖 🗖 💌
SJPM Version Info	SJPM Version Info Versions
Component Versio	This application makes use of these
SJPM Client 1.0.0.45	E QJson Copyright © 2010 Flavio
Variant TN	Castelli
SJPM Server 1.8.162	GNU LESSER GENERAL PUBLIC LICENSE Version 2.1, February 1999
SJPM UI 1.0.0.28	Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston,
ATB2File 1.8.162	MA 02110-1301 USA Everyone is permitted to copy and distribute
ATB2LPR 1.8.162	verbatim copies of this license document, but changing it is not allowed. This is the first released
ATB2Svstem 1.8.162	version of the Lesser GPL. It also
ОК	ОК

The "Restore" menu item restores (opens) the SJPM Client GUI.

Note: If the SJPM Client GUI does not appear check the Windows Taskbar for the SJPM Icon and click on it to bring it to the front.

4.1.2.3 Restart Server

The "**Restart Server**" menu item restarts the SJPM "**Server**". If the SJPM Client GUI is open it will close and SJPM will restart. The SJPM Windows System Tray icon menu items "**Restart Server**", "**Server Mode**", and "**Server Logging**" will be disabled until the restart has completed.

	About SJPM			About SJPM	
	Restore			Restore	
	Restart Server			Restart Server	
	Export All Instances Import Instances			Export All Instances Import Instances	
	Check for Updates			Check for Updates	
	Server Mode			Server Mode 🔹 🕨	
	Configure SJPM Server			Configure SJPM Server	
	Language •			Language 🕨	
	Client Logging Server Logging			Client Logging Server Logging	
	Exit			Exit	
9 🐝	🕪 📴 💾 🏴 🛛 12:46 P	м 📗 💽	1	🕪 📴 📮 🏴 🛛 12:46 PN	Ν

After the SJPM restart has completed device configurations will take effect and devices will connect and be ready for use.

The "Server Mode" menu item displays the current SJPM mode of operation. The available modes are "Service" and "Application".

The "Server Mode" menu item and sub-menu items do not change the mode of operation; to change the mode of operation refer to sections <u>4.1.3 Running SJPM as an Application</u> and <u>4.1.4 Running SJPM as a Service</u>.



4.1.2.5 Configure SJPM Server

The "**Configure SJPM Server**" menu item opens the "**SJPM - Server Configuration**" window. The "**SJPM – Server Configuration**" window provides options to change the "**SJPM Server Address**" and "**SJPM Server Port Number**" configurations.

SJPM - Server Configur	ation
SJPM Server Address: SJPM Server Port Number:	127.0.0.1 5196
	OK Cancel

The "**Language**" menu item displays the currently selected language and changes the SJPM language. The current languages available in SJPM are "**English**" and "**Spanish**".

	About SJPM		Acerca de SJPM
	Restore		Restaurar
	Restart Server		Reiniciar Servidor
	Export All Instances Import Instances		Exportar Todas las Instancias Importar Instancias
	Check for Updates		Comprobar Actualizaciones
	Server Mode		Modo del Servidor 🔹 🕨
	Configure SJPM Server		Configurar Servidor SJPM
English	Language 🕨	English	Idioma 🔸
Español	Client Logging Server Logging	Español	Registro Eventos Cliente Registro Eventos Servidor
	Exit 🕉 🕪 🛱 📮 🕶 12:49 P	м 📕 💽	Salir

4.1.2.7 Client Logging

The "**Client Logging**" menu item, when selected, will turn on/off SJPM "**Client Logging**". Selection will be noted on the menu item with a check mark. Refer to Sections <u>7.1</u> Enabling SJPM Logging and <u>7.2 Disabling SJPM Logging</u>.



The "Server Logging" menu item, when selected, will turn on/off SJPM "Server Logging". The SJPM Server will restart for the logging to take effect. Selection will be noted on the menu item with a check mark. Refer to Sections <u>7.1 Enabling SJPM Logging</u> and <u>7.2</u> Disabling SJPM Logging.



4.1.2.9 Exit

The "**Exit**" menu item closes the SJPM Client GUI. The SJPM Client GUI can be restarted from the Windows "**Start**" menu. Refer to section <u>4.1.5 Running the SJPM Client GUI</u> <u>Manually</u>.

4.1.3 Running SJPM as an Application

By default SJPM installs to run as a **Service**. Use the Windows "**Start**" menu to change SJPM to run as an **Application**. Steps will vary slightly for **Windows 8**, **Windows 8.1** and **Windows 10**. See Section <u>4.2 Starting and Stopping the SJPM Server</u>.

To check the current SJPM Server Mode state:

1. Right click on the SJPM Windows System Tray Icon to display the menu, and then click on the "Server Mode" menu item to see what mode SJPM is currently running in.

	About SJPM
	Restore
	Restart Server
	Export All Instances
	Import Instances
	Check for Updates
Service	Server Mode
Application	Configure SJPM Server
	Language 🕨
	Client Logging
	Server Logging
	Exit
2 3	🕪 📴 📮 🏴 12:55 PM

Important Note:

When running SJPM as an **Application** it will be necessary to run "**Start SJPM Server (as an application**)", as the administrator, from the Windows "**Start**" button each time after a system reboot or startup.

To configure SJPM's service to run manually:

Before running SJPM as an application perform the steps below to configure the SJPM service's "**Startup Type**" to "**Manual**".

- 1. Click on the Windows "Start" button.
- 2. In the "Search programs and files" field type in "services".
- 3. Click on the "Services" program.
- 4. Scroll to the "**Sabre Java Printing Module** (**SJPM**)" service, then right click on it and then click on the "**Properties**" menu item.
- 5. Click on the "Startup type:" drop down menu, then select "Manual", then click on the "Apply" button and then click on the "OK" button.
- 6. Close the "**Services**" window.

To change SJPM to run as an Application:

- 1. Click on the Windows "Start" button.
- 2. Click on the "All Programs" ("All apps" for Windows 10) menu item.
- 3. Click on the "SJPM" folder.
- 4. Right click on the "**Stop SJPM Server**" menu item and then left click on the "**Run as** <u>a</u>dministrator" menu item.



😯 Use	r Account Control	×
0	Do you want to allow the following program from an unknown publisher to make changes to this computer?	
	Program name: Publisher: File origin:	StopSJPMServer.exe Unknown Hard drive on this computer
💌 s	Show <u>d</u> etails	
		Change when these notifications appear

Next you will see the "SJPM Server" window showing the server is stopping and then stopped.

SJPM Server	1
Stopping SJPM Server	
Stop Pending	
SJPM Server	
SJPM Server Stopped	
Stopped	

6. Right click on the "**Start SJPM Server (as an application**)" menu item and then left click on the "**Run as <u>a</u>dministrator**" menu item.



7. On the "User Account Control" window that pops up click on the "Yes" button.

😗 Use	r Account Control		
	Do you want to allow the following program from an unknown publisher to make changes to this computer?		
	Program name: Publisher: File origin:	StartSJPMServerApp.exe Unknown Hard drive on this computer	
💌 s	Show <u>d</u> etails		
		Change when these notifications appear	

Note: Step 6 runs SJPM as the Administrator user, not the System user.

4.1.4 Running SJPM as a Service

By default SJPM installs to run as a **Service**. If SJPM has been changed to run as an **Application**; use the Windows "**Start**" menu to change SJPM to run as a **Service**. Steps will vary slightly for **Windows 8**, **Windows 8.1** and **Windows 10**. See Section <u>4.2 Starting and Stopping the SJPM</u> <u>Server</u>.

To check the current SJPM Server Mode state:

1. Right click on the SJPM Windows System Tray Icon to display the menu, and then click on the "Server Mode" menu item to see what mode SJPM is currently running in.

	About SJPM
	Restore
	Restart Server
	Export All Instances
	Import Instances
	Check for Updates
Service	Server Mode
Application	Configure SJPM Server
	Language
	Client Logging
	Server Logging
	Exit
Sec. 19	🐝 🕪 📴 🎦 🏴 12:57 PM

To change SJPM to run as a Service:

- 1. Click on the Windows "Start" button.
- 2. Click on the "All Programs" ("All apps" for Windows 10) menu item.
- 3. Click on the "**SJPM**" folder.

4. Right click on the "**Stop SJPM Server**" menu item and then left click on the "**Run as** <u>a</u>dministrator" menu item.



5. On the "User Account Control" window that pops up click on the "Yes" button.

😗 Use	r Account Control	•••	
	Do you want to allow the following program from an unknown publisher to make changes to this computer?		
	Program name: Publisher: File origin:	StopSJPMServer.exe Unknown Hard drive on this computer	
💌 s	how <u>d</u> etails	Yes No	
		Change when these notifications appear	

Next you will see the "SJPM Server" window showing the server is stopping.



6. Right click on the "**Start SJPM Server (as a service**)" menu item and then left click on the "**Run as <u>a</u>dministrator**" menu item.



😗 Use	r Account Control	×	
1	Do you want to allow the following program from an unknown publisher to make changes to this computer?		
	Program name: Publisher: File origin:	StartSJPMServer.exe Unknown Hard drive on this computer	
🕑 s	Show <u>d</u> etails		
		Change when these notifications appear	

Next you will see the "**SJPM Server**" window showing the server is starting and then complete.

SJPM Server		
Starting SJPM Server		
Start Pending		
SJPM Server		
Complete		
Done		

Note: Step 6 runs SJPM as the Administrator user, not the System user.

If the SJPM Icon is not displayed in the Windows System Tray and the SJPM Client GUI is not running you can start it manually using the steps in the sections below:

4.1.5.1 Windows 7

 Click on the Windows "Start" button on the Windows Taskbar. Click on "All Programs" and then scroll down and click on the "SJPM" folder. Left click on the "SJPM Client" menu item. This will start the SJPM Client GUI and the SJPM icon will appear in the Windows System Tray. Double click on the SJPM icon in the Windows System Tray to open the SJPM Client GUI.



1. Move the mouse pointer to the bottom left corner of the screen. Click on Windows "**Start**", and then click on the "**SJPM Client**" icon on the Windows desktop (if needed scroll to the right). This will start the SJPM Client GUI and the SJPM icon will appear in the Windows System Tray. Double click on the SJPM icon in the Windows System Tray to open the SJPM Client GUI.



4.1.5.3 Windows 8.1

1. Click on the Windows "Start" button on the Windows Taskbar.



2. Click on the "Circled Down Arrow" icon on the Windows desktop.



3. Click on the "**SJPM Client**" icon on the Windows desktop (if needed scroll to the right to find the icon). This will start the SJPM Client GUI and the SJPM icon will appear in the Windows System Tray. Double click on the SJPM icon in the Windows System Tray to open the SJPM Client GUI.



4.1.5.4 Windows 10

1. Click on the Windows "**Start**" button on the Windows Taskbar. Click on the "**All apps**" menu item and then scroll down and click on the "**SJPM**" folder. Left click on the "**SJPM Client**" menu item.

Upon installation SJPM will install to start as a **Service** by default and the SJPM Server will run automatically in Windows "**Services**". The SJPM service name is "**Sabre Java Printing Module** (**SJPM**)".

Note:	The SJPM Server must be installed on one computer in the offic	e that has Sabre
	connectivity in order to make the connection to the Sabre Host.	



This section describes the procedures for starting and stopping the SJPM Server as a service and as an application in **Windows 7**, **Windows 8**, **Windows 8.1**, and **Windows 10**.

4.2.1.1 Start the SJPM Server (as a service) – Windows 7

 Click on the Windows "Start" button on the Windows Taskbar. Click on "All Programs" and then scroll down and click on the "SJPM" folder. Right click on the "Start SJPM Server (as a service)" menu item and then left click on the "Run as <u>a</u>dministrator" menu item.



😗 Use	r Account Control	—	
0	Do you want to allow the following program from an unknown publisher to make changes to this computer?		
	Program name: Publisher: File origin:	StartSJPMServer.exe Unknown Hard drive on this computer	
🕑 s	Show <u>d</u> etails		
		Change when these notifications appear	

Next you will see the "**SJPM Server**" window showing the server is starting and then complete.

SJPM Server	
Starting SJPM Server	
Start Pending	-
SJPM Server	
Complete	
Done	

4.2.1.2 Start the SJPM Server (as a service) - Windows 8

Windows 8

1. Move the mouse pointer to the bottom left corner of the screen. Click on Windows "Start", and then right click on the "Start SJPM Server (as a service)" icon on the Windows desktop.



2. Click on the "**Run as administrator**" icon on the menu bar.



3. On the "User Account Control" window that pops up click on the "Yes" button.

۲	User Account Control			
	Do you want to allow the following program from an unknown publisher to make changes to this computer?			
	Program name: StartSJPMServer.exe Publisher: Unknown File origin: Hard drive on this computer			
•	Show details Yes No			
		Change when	n these notifications ap	pear

4.2.1.3 Start the SJPM Server (as a service) – Windows 8.1

Windows 8.1

1. Click on the Windows "Start" button on the Windows Taskbar.



2. Click on the "**Circled Down Arrow**" icon on the Windows desktop (if needed scroll to the right).



3. Right click on the "Start SJPM Server (as a service)" icon on the Windows desktop.



4. Click on the "**Run as administrator**" icon on the menu bar.



۲	User Account Control ×		
Û	Do you want to allow the following program from an unknown publisher to make changes to this computer?		
	Program name: StartSJPMServer.exe Publisher: Unknown File origin: Hard drive on this computer		
•	Show details	Yes No	
		Change when these notifications ap	<u>pear</u>

Next you will see the "SJPM Server" window showing the server is starting and then complete.

SJPM Server
Starting SJPM Server
Start Pending
SIPM Server
Complete

Done

Windows 10

- 1. Click on the Windows "Start" button on the Windows Taskbar, then click on the "All apps" menu item, then scroll down and click on the "SJPM" folder. Right click on the "Start SJPM Server (as a service)" menu item and then left click on the "Run as administrator" menu item.
- 2. On the "User Account Control" window that pops up click on the "Yes" button.

💔 User Account Control		
Do you want to allow this app from an unknown publisher to make changes to your PC?		
Program name: StartSJPMServer.exe Publisher: Unknown File origin: Hard drive on this computer		
Show details	No	
Change when these notification	ons appear	

Next you will see the "**SJPM Server**" window showing the server is starting and then complete.

SJPM Server	
Starting SJPM Server	
Start Pending	
SJPM Server	
SJPM Server Complete	
SJPM Server Complete	
SJPM Server Complete Done	

 Click on the Windows "Start" button on the Windows Taskbar, then click on "All Programs", then scroll down and click on the "SJPM" folder. Right click on the "Start SJPM Server (as an application)" menu item and then left click on the "Run as <u>a</u>dministrator" menu item.

💓 Windows DVD Maker		<u>O</u> pen
👜 Windows Fax and Scan	0	Run as <u>a</u> dministrator
 Windows Media Center Windows Media Player Windows Update XPS Viewer Accessories Games Maintenance Sabre SJPM SJPM Client SJPM Quick Reference SJPM Release Notes SJPM STP Configuration SJPM User's Guide Start SJPM Server (as a 	c 🛞	Troubleshoot compatibility Open file location Pin to Taskbar Pin to Start Menu Restore previous versions Send to ▶ Cut Cut Copy Delete Rename Properties
Start SJPM Server (as all a start SJPM Server (as all a start SJPM Server (as all a start sta	n app	lication) Devices and Printers
Stop SJPM Server Stop SJPM Server		🚽 Default Programs
◀ Back		Help and Support
Search programs and files		P Shut down ▶
🛃 🖉 🗔 (0

😗 Use	🚱 User Account Control 📃				
	Do you want to allow the following program from an unknown publisher to make changes to this computer?				
	Program name: Publisher: File origin:	StartSJPMServerApp.exe Unknown Hard drive on this computer			
🕑 s	how <u>d</u> etails	Yes No			
		Change when these notifications appear			

4.2.1.6 Start the SJPM Server (as an application) – Windows 8

Windows 8

1. Move the mouse pointer to the bottom left corner of the screen. Click on Windows "**Start**", and then right click on the "**Start SJPM Server (as an application**)" icon on the Windows desktop.



2. Click on the "Run as administrator" icon on the menu bar.



۲	User Account Control ×		
Û	Do you want to allow the following program from an unknown publisher to make changes to this computer?		
	Program name: StartSJPMServerApp.exe Publisher: Unknown File origin: Hard drive on this computer		
ي چ	Show details	Yes No	
		Change when these notifications ap	pear

4.2.1.7 Start the SJPM Server (as an application) – Windows 8.1

Windows 8.1

1. Click on the Windows "Start" button on the Windows Taskbar.



2. Click on the "**Circled Down Arrow**" icon on the Windows desktop (if needed scroll to the right).



3. Right click on the "**Start SJPM Server (as an application**)" icon on the Windows desktop.



4. Click on the "Run as administrator" icon on the menu bar.



۲	User Account Control			
	Do you want to allow the following program from an unknown publisher to make changes to this computer?			
	Program name:StartSJPMServerApp.exePublisher:UnknownFile origin:Hard drive on this computer			
•	Show details Yes No			
		<u>Change v</u>	vhen these notifications a	opear

4.2.1.8 Start the SJPM Server (as an application) – Windows 10

Windows 10

- 1. Click on the Windows "**Start**" button on the Windows Taskbar, then click on the "**All apps**" menu item, then scroll down and click on the "**SJPM**" folder.
- 2. Right click on the "**Start SJPM Server (as an application**)" menu item and then left click on the "**Run as administrator**" menu item.
- 3. On the "User Account Control" window that pops up click on the "Yes" button.

😌 User Account Control			×
	Do you want to allow this app from an unknown publisher to make changes to your PC?		
F	Program name: Publisher: File origin:	StartSJPMServerApp.exe Unknown Hard drive on this computer	
📀 Sho	w details	Yes No	
		Change when these notifications ap	opear

 Click on the Windows "Start" button on the Windows Taskbar, then click on "All Programs", then scroll down and click on the "SJPM" folder. Right click on the "Stop SJPM Server" menu item and then left click on the "Run as <u>a</u>dministrator" menu item.

Windows DVD Maker		
Mindows Media Center		<u>O</u> pen
Windows Media Dlaver	۲	Run as <u>a</u> dministrator
Windows Undate		Troubleshoot compatibility
VINDOWS Opdate		Open file location
		Pin to Taskhar
Games		Din to Chart Manu
Maintenance		Pin to Start Menu
Sabre		Restore previous versions
		6 JI
SIPM Client		Send to
SJPM Ouick Reference	e o a 🛞	Cu <u>t</u>
SJPM Release Notes		Сору
SJPM STP Configuration		- 17
SJPM User's Guide		<u>D</u> elete
Start SJPM Server (as a		Rena <u>m</u> e
Start SJPM Server (as a		Droportion
Stop SJPM Server	_	Pioperties
Uninstall SJPM		👻 Default Programs
◀ Back		Help and Support
Search programs and files	Shut down 🕨	
🥵 🤌 🌔	2	0

😗 Use	🛞 User Account Control 📃				
\bigcirc	Do you want to allow the following program from an unknown publisher to make changes to this computer?				
	Program name: Publisher: File origin:	StopSJPMServer.exe Unknown Hard drive on this computer			
🕑 s	how <u>d</u> etails	Yes No			
		Change when these notifications appear			

Next you will see the "**SJPM Server**" window showing the server is stopping and then stopped if SJPM was running as a service.

SJPM Server	
Stopping SJPM Server	
Stop Pending	

SJPM Server	
SJPM Server Stopped	
Stopped	

Or

Next you will see the "**SJPM Server**" window showing the server is stopping if SJPM was running as an application.

SJPM Server
Stopping SJPM Server (APP Mode)
SJPM Server (APP mode) Stopped
SJPM Server (APP mode) Stopped

Windows 8

1. Move the mouse pointer to the bottom left corner of the screen. Click on Windows "**Start**", and then right click on the "**Stop SJPM Server**" icon on the Windows desktop.



2. Click on the "Run as administrator" icon on the menu bar.



3. On the "User Account Control" window that pops up click on the "Yes" button.

3		User Account Control	×
	Do you want to allow the following program from an unknown publisher to make changes to this computer?		
	Program name: Publisher: File origin:	StopSJPMServer.exe Unknown Hard drive on this computer	
د چ	how details	Yes No Change when these notifications ap	pear 1

4.2.1.11 Stop the SJPM Server – Windows 8.1

Windows 8.1

1. Click on the Windows "Start" button on the Windows Taskbar.



2. Click on the "Circled Down Arrow" icon on the Windows desktop.



3. <u>Right click on the "Stop SJPM Server</u>" icon on the Windows desktop.



4. Click on the "**Run as administrator**" icon on the menu bar.



5. On the "User Account Control" window that pops up click on the "Yes" button.

0		User Account Control	
1	Do you want to allow the following program from an unknown publisher to make changes to this computer?		
	Program name: Publisher: File origin:	StopSJPMServer.exe Unknown Hard drive on this computer	
•	Show details	Yes No	
		Change when these notifications appear	

Next you will see the "**SJPM Server**" window showing the server is stopping and stopped.

SJPM Serv	er
Stopping SJPM Server	·
Stop Pending	
SJPM Serv	er
SJPM Server Stopped	
Stopped	
Windows 10

- 1. Click on the Windows "**Start**" button on the Windows Taskbar, then click on the "**All apps**" menu item, then scroll down and click on the "**SJPM**" folder.
- 2. Right click on the "Stop SJPM Server" menu item and then left click on the "Run as administrator" menu item.
- 3. On the "User Account Control" window that pops up click on the "Yes" button.

🗣 User Account Control								
Do you want to allow this app from an unknown publisher to make changes to your PC?								
Program name: StopSJPMServer.exe Publisher: Unknown File origin: Hard drive on this computer								
Show details Yes No								
	Change when these notifications appear							

Next you will see the "SJPM Server" window showing the server is stopped.

JPM	1 Server	
S	topping SJPM Server (APP Mode)	
S	JPM Server (APP mode) Stopped	

This section describes the procedures for starting and stopping the SJPM Client. The SJPM Client runs automatically when the PC starts. If the SJPM icon does not appear in the Windows System Tray it will be necessary to start the SJPM Client in order to view the SJPM Client GUI.



4.3.1 Starting the SJPM Client

 Click on the Windows "Start" button on the Windows Taskbar, then click on "All Programs", then scroll down and click on the "SJPM" folder. Right click on the "SJPM Client" menu item and then left click on the "Run as administrator" menu item.

4.3.2 Stopping the SJPM Client

1. Right click on the SJPM Windows System Tray Icon, and then click on the "Exit" menu item.



2. The "SJPM – Exit" window will appear. Click on the "Yes" button.



3. The SJPM icon will disappear from the Windows System Tray.

This section describes the procedures for restarting SJPM. Restarting SJPM is required after configuring devices for the changes to take effect or to clear error conditions. The two methods by which SJPM can be restarted are from the **SJPM Client GUI** and **SJPM Windows System Tray Icon Menu**.

4.4.1 Restarting SJPM – Client GUI

1. Open the SJPM Client GUI by double clicking on the SJPM Windows System Tray Icon.



2. Click on the "**Restart**" button.

📓 Sabre Java Pr	inting Module (SJPM) -	1.8.156					-	
Devices								Restart
					Group Expand All	New Edit	Delete Enable	Disable
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction St	atus 🔶
	Test-1	File	000000	Compter Room	🎻 Ready	🎸 Online		
								-
Refresh				Devices 1 to 1 of 1		First	Previous Nex	t Last
JPM Server:	127.0.0.1] Up							

3. The "SJPM – Confirm Restart' popup window will appear.

Sabre Java Printing Module (SJPM) -	1.8.156					- • •
Devices						Restart
				Group Expand All	New Edit I	Delete Enable Disable
Name Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
Test-1	File	000000	Compter Room	🖌 Ready	🖌 Online	
		SJPM - Co	nfirm Restart start the SJPM server? OK C	ancel		
Refresh			Devices 1 to 1 of	1	First	Previous Next Last
SJPM Server: [127.0.0.1] Up						

4. Click on the "**OK**" button to restart SJPM.

Sabre Java Printin	g Module (SJPM) -	1.8.156						
Devices								Restart
					Group Expand All	New Edit	Delete Enable	Disable
🔳 N	lame	Туре	LNIATA	Location	Host Status	Device Status	Transaction Sta	tus 🔶
Т	est-1	File	000000	Compter Room	🔀 Down 🕕	🎻 Online		
Refresh				Reconnecting		First	Previous Next	Last
SJPM Server: [127	.0.0.1] Restartin	g						

5. After the SJPM restart has completed, device configurations will take effect and devices will connect and be ready for use.

	Sabre Java Printing Module (SJPM) -	1.8.156					- • -
	Devices						Restart
Γ					Group Expand All	New Edit	Delete Enable Disable
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
[Test-1	File	000000	Compter Room	🎻 Ready	🎻 Online	
							~
	Defresh			Devices 1 to 1 of 1		Time	Dravieur Maut Last
11-	Kellesi					FIISU	Previous Next Edst
SJI	יא Server: [127.0.0.1] Up						

4.4.2 Restarting SJPM – SJPM Windows System Tray Icon Menu

1. Right click on the SJPM Windows System Tray Icon and then click on the "**Restart Server**" menu item.



2. If the SJPM Client GUI is open it will close and SJPM will restart. The SJPM Windows System Tray Icon menu items for "**Restart Server**", "**Server Mode**", and "**Server Logging**" will be disabled until the restart has completed.

	About SJPM	
	Restore	
	Restart Server	
	Export All Instances Import Instances	
	Check for Updates	
	Server Mode 🔹 🕨	
	Configure SJPM Server	
	Language 🕨	
	Client Logging	
	Server Logging	
	Exit	
🤹 😵	🕩 🚰 🏴 1:02 PM	

3. After the SJPM restart has completed device configurations will take effect and devices will connect and be ready for use.

Sabre Java Printing Module (SJPM)	Sabre Java Printing Module (SJPM) - 1.8.156								
Devices				Restart					
			Group Expand All New	Edit Delete Enable Disable					
Name Name	Type LNIATA	Location	Host Status Devic	e Status Transaction Status 🔶					
Test-1	File 000000	Compter Room	🖌 Ready 🖌 O	nline					
Refresh		Devices 1 to 1 of 1		First Previous Next Last					
SJPM Server: [127.0.0.1] Up									

This section provides information on SJPM Linux installation, setup and operation in a Linux environment.

Note: These sections assume the operator has technical knowledge of Linux operations.

4.5.1 Prerequisites

Prerequisite:

Software:

a) SJPM zip (**Example:** SJPM x.x.xx.sabre.zip).

4.5.2 Install/Setup/Operate SJPM on Linux – Browse SJPM from Linux

This section describes the procedure for running SJPM in a browser from a Linux PC.

- Copy the SJPM zip file (Example: SJPM x.x.xx.sabre.zip) to the Linux PC and then unzip it. This will create the following folders and files: client - folder jre - folder server - folder ReleaseNotes.txt - file SJPMUsersGuide.pdf - file
- 2. In the folder where you unzipped SJPM, go into the "server" folder.
- 3. Open the "server.properties" file.

Set the "**sjpm.drivers=**" property value to "**AEAIERIP,File,IFQ,MQJMS**". The **AEAIERIP, File, IFQ**, and **MQJMS** Drivers are the only supported drivers on Linux. (**Example:** sjpm.drivers= AEAIERIP,File,IFQ,MQJMS)

- 4. Save and close the "server.properties" file.
- 5. Run the command "chmod +x RunSJPM.sh".
- 6. Then run the command "./RunSJPM.sh".
- 7. Open a browser on the Linux PC and then browse to the following address: <u>http://127.0.0.1:5196/</u>

4.5.3 Install/Setup/Operate SJPM on Linux – Browse SJPM from Windows

This section describes the procedure for running SJPM in a browser from a Windows PC.

- Copy the SJPM zip file (Example: SJPM x.x.xx.sabre.zip) to the Linux PC and then unzip it. This will create the following folders and files: client - folder jre - folder server - folder ReleaseNotes.txt - file SJPMUsersGuide.pdf - file
- 2. In the folder where you unzipped SJPM, go into the "server" folder.
- 3. Open the "server.properties" file.

Set the "**sjpm.drivers=**" property value to "**AEAIERIP,File,IFQ,MQJMS**". The **AEAIERIP, File, IFQ**, and **MQJMS** Drivers are the only supported drivers on Linux. (**Example:** sjpm.drivers= AEAIERIP,File,IFQ,MQJMS)

- 4. Uncomment the "**sjpm.server.hostAddr=127.0.0.1**" property by deleting the "#" sign before it. Change the IP address to the IP address of the Linux PC where SJPM is running.
- 5. Save and close the "server.properties" file.
- 6. Run the command "chmod +x RunSJPM.sh".
- 7. Then run the command "./RunSJPM.sh".
- 8. Open a browser on a Windows PC and then browse to the following address: http://x.x.x.x:5196/

x.x.x. x = IP address of the Linux PC where SJPM is running.

SJPM Client GUI

5.1 SJPM Client GUI Component Descriptions

Sabre Java Printing Module (SJPM) - 1.8.156 Devices Restart Group Expand All New Edit Delete Enable Disable Name Туре LNIATA Location Host Status De vice Statu Transaction Statu Test-1 000000 Compter Room Ready Online File Å Å Devices 1 to 1 of 1 First Previous Next Last Refresh SJPM Server: [127.0.0.1] Up

This section describes the components of the SJPM Client GUI.

Field Name	Description	Example(s)
Name	This column field displays the name identifying the configured device. This is entered during " New " device creation and it is not editable after creation.	Test-1
Туре	This column field displays the device driver's name. This can only be selected during " New " device creation and is not editable after creation.	File
LNIATA	This column field displays the device's configured LNIATA. This is configured during " New " device creation and can be edited after device creation.	000000
Location	This column field displays the pseudo name or a physical location of the receiving device. This is configured during " New " device creation and can be edited after device creation.	Computer Room
Host Status	This column field displays the current state of the SJPM's connection to the Sabre Host.	Connecting Ready Down
Device Status	This column field displays the current state of the SJPM's connection to the receiving device.	Online Disconnected
Transaction Status	This column field displays the last state of the last transaction sent to the receiving device.	Sending to Device Last Send Successful Last Send Failed

This section describes the SJPM Client GUI device line column fields.

5.1.2 GUI Buttons

This section describes the SJPM Client GUI buttons.

🥥 s	Sabre Java Printing Module (SJPM) - 1.8.156							
D	evices						Res	tart
					Group Expand All	New Edit	Delete Enable Disal	ble
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status	^
	Test-1	File	000000	Compter Room	🎻 Ready	🎻 Online		
								4
F	Refresh			Devices 1 to 1 of 1		First	Previous Next La	ast
SJP	M Server: [127.0.0.1] Up							

Restart Button

The "**Restart**" button is located in the upper right corner of the SJPM Client GUI window. The "**Restart**" button restarts the SJPM Server. This action (**Restart**) is required after all device additions, device deletions, device disable, device enable, device edit and to enable/disable the Server Logging.

Group/Ungroup Buttons

The "**Group**" and "**Ungroup**" buttons are located in the upper right corner of the SJPM Client GUI, inside the "**Devices**" tab, under the "**Restart**" button and display between the "**Import**" and "**Expand All**" buttons when device(s) are present. The "**Group**" button groups together like device lines based on the "**Location**" column field of the device lines. The "**Ungroup**" button ungroups grouped device lines.

Expand All/Collapse All Buttons

The "**Expand All**" and "**Collapse All**" buttons are located in the upper right corner of the SJPM Client GUI, in the "**Devices**" tab, under the "**Restart**" button and display between the "**Group**" and "**New**" buttons when device(s) are present. The "**Expand All**" button expands all device lines to show their status in more detail. The "**Collapse All**" button collapses all device lines to show the device status in a single line. A device line can also be clicked on to expand and collapse the individual device's view.

New Button

The "**New**" button is located in the upper right corner of the SJPM Client GUI, in the "**Devices**" tab, under the "**Restart**" button when no devices are present and between the "**Expand All**" and "**Edit**" buttons when device(s) are present. The "**New**" button is used to create a new device in the SJPM Client GUI.

Edit Button

The "**Edit**" button is located in the upper right corner of the SJPM Client GUI, in the "**Devices**" tab, under the "**Restart**" button between the "**New**" and "**Delete**" buttons when device(s) are present. The "**Edit**" button is used to edit selected device lines.

Delete Button

The "**Delete**" button is located in the upper right corner of the SJPM Client GUI, in the "**Devices**" tab, under the "**Restart**" button between the "**Edit**" and "**Enable**" buttons when device(s) are present. The "**Delete**" button is used to delete selected device lines.

Enable Button

The "**Enable**" button is located in the upper right corner of the SJPM Client GUI, in the "**Devices**" tab, under the "**Restart**" button between the "**Delete**" and "**Disable**" buttons when device(s) are present. The "**Enable**" button is used to enable selected device lines.

Disable Button

The "**Disable**" button is located in the upper right corner of the SJPM Client GUI, in the "**Devices**" tab, under the "**Restart**" button to the right of the "**Enable**" button when device(s) are present. The "**Disable**" button is used to disable selected device lines.

Refresh Button

The "**Refresh**" button is located in the lower left corner of the SJPM Client GUI. The "**Refresh**" button is used to manually update the SJPM Client GUI to the most current state.

Pagination Buttons

The **Pagination** buttons, "**First**", "**Previous**", "**Next**" and "**Last**" are located in the bottom right corner of the SJPM Client GUI. The **Pagination** buttons are used to navigate through devices.

The SJPM Client GUI will display up to 15 devices per page and will activate pagination if there are more than 15 devices. The "**Next**", and "**Last**" buttons will be active when on the first page. The "**First**" and "**Previous**" buttons will be active when on the second page. If there are more than two pages of devices then all four buttons will be active on the second page.

This section describes the procedures for adding and deleting a device in the SJPM Client GUI.

5.1.3.1 Adding Devices

Sab	Sabre Java Printing Module (SJPM) - 1.8.156								
Dev	vices					Restart			
						New			
	Namo		Location	Host Status	Device Status Tra	Click to create a			
	Name	Туре спіятя	Location	Host Status	Device Status The	new device.			
Re	frach				First Drov	ious Next Last			
Ke	inesi.				Plise Plev	Next Last			
SJPM	Server: [127.0.0.1] Up								

1. Click on the "New" button.

2. The "SJPM – Add Device" popup window will appear. Type in a device name in the field and then click on the device driver drop down list and select a driver. Click on the "OK" button.

Sabre Java Printin	ng Module (SJPM) - 1	.8.156					- • •
Devices							Restart
							New
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
			SJPM - Add	1 Device			
				Enter the name of the new	device.		
			Sel	ect the device driver type from the	e drop down list		
			500	· · · · · · · · · · · · · · · · · · ·			
				01			
				UK Ca	incer		
				Select "OK" to configure the of select "Cancel"	create and device or ' to cancel		
				the device add	ition.		
							*
Refresh						First	Previous Next Last
SJPM Server: [127	7.0.0.1] Up						

(Sabre Java Printing Module (SJPM) User's Guide – Travel Network Edition. March, 2017) Confidential and Proprietary Sabre Inc. 3. The device's configuration tab will appear. Configure the device (Refer to section <u>6.2</u> <u>SJPM Drivers</u>) and then click on the "Save" button.

Sabre Java Printing Module (SJPM) - 1.8.25	×
Devices Test-1 🗵	rt
Devices Test 1 (File)	•
Device: Test-1 (File)	
Physical Device Location:	
Location:	
- Printer Settings:	
Output Format: Text PDF	
Print to Single or Multiple File(s): Single O Multiple Multiple	
Directory Path: C:\Program Files (x86)\SJPM\Oul	-
Filename: SJPM	-
Maximum File Size: 1024000	
Single:	
File Extension: Ext	
If File Exists: Append Overwrite	
- Encryption:	
File Encryption: Disabled	
Public Key File Path: public.key	
Device Extended Settings:-	
Insert LF After CR: 📝	
- Termination Block Segment:	
Insert form feed	
Disable form feed	
Custom terminator	
Number of line feeds after message	
Custom Terminator: -OD-OA***EOM***-OD-OA-OC	
-xx (hex value). Eg: -0D is CR, -0A is linefeed, -0C is FF (Form Feed).	-
SJPM Server: [127.0.0.1] Up	

4. The "**SJPM – Confirm Restart**" popup window will appear. Click on the "**OK**" button.

Sabre Java Printing Module (SJPM) -	1.8.156					
Devices						Restart
				Group Expand All	New Edit	Delete Enable Disable
Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
Test-1	File	000000	Computer Room	Inactive	Inactive	Inactive
		SJPM - Co	nfirm Restart ice configuration saved. Restart t nges? OK C	ne SJPM server to apply		~
Refresh			Devices 1 to 1 of 1		First	Previous Next Last
SJPM Server: [127.0.0.1] Up						

5. SJPM will restart, the device line will appear in the SJPM GUI and the device will connect and be ready for use.

I	📓 Sabre Java Printing Module (SJPM)	- 1.8.156				- • •
	Devices					Restart
				Group Expand All	New Edit	Delete Enable Disable
	Name	Type LNIATA	Location	Host Status	Device Status	Transaction Status
	lest-1	File 000000	Computer Room	Inactive	Inactive	Inactive
	Refresh		Reconnecting		First	Previous Next Last
	C 1014 Comment [107, 0, 0, 4] C					
	SJPM Server: [127.0.0.1] Restarti	ng				

Sabre Java Printing Module (SJPM) - 1.8.156											
Devices								Restart			
					Group Expand All	New Edit	Delete Enable	Disable			
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction !	Status 🔶 ^			
	Test-1	File	000000	Computer Room	🎻 Ready	🎻 Online					
Refresh				Devices 1 to 1 of 1		First	Previous Ne	ext Last			
SJPM Server:	[127.0.0.1] Up										

1. There are various methods in SJPM for deleting devices.

Method One (1):

Right click on the device to be deleted and then select the "Delete Device" menu item.

Sabre Java Printing Module (SJPM) -	1.8.158					_	
Devices							Restart
				Group Expand All	New Edit	Delete Enable	Disable
	_						
Name Test-1	l ype File	LNIATA	Location Computer Room	Host Status	Device Status	I ransaction S	atus ^
Copy Device Delete Devic Disable Devic Editi Device Rename Devi Utilize Devic	e Click to de selected de	lete the evice.					
Refresh			Devices 1 to 1 of 1		First	Previous Nex	t Last
5JPM Server: [127.0.0.1] Up							

Method Two (2):

Click on the checkbox for the device to be deleted and then click on the "Delete" button.

🥯 Sab	Sabre Java Printing Module (SJPM) - 1.8.156												
Dev	vices										Restart		
					Group	Expand All	New	Edit	Delete	Enable	Disable		
	Name	Type L	NIATA	Location	Host	Status	Device	e Status	Select o	levice(s) wit	h 🔺		
	Test-1	File (000000	Computer Room	🖌 R	eady	🖌 Or	line	the che click to	ckbox and t delete the	hen		
									device(s).			
											-		
Po	frosh			Devices 1 to 1 of 1				First	Drovic	Nov	t Lact		
Re								FIISt	Previo	Nex	LdSL		
SJPM	Server: [127.0.0.1] Up												
	· [· = · · · · ·] · PP												

Method Three (3):

To delete multiple devices click on the checkbox for each device to be deleted and then click on the "Delete" button.

Sabre Java Printing Module (SJPM) - 1.8.156											
Devices									Restart		
					Group	Expand All	New Edit	Delete Enable	Disable		
1	lame	Туре	LNIATA	Location	H	ost Status	Device Status	Select device(s) with	th 🔨 🔶		
T T	'est-1	File	000000	Computer Room	1	Ready	🎻 Online	click to delete the	then		
V T	'est-2	File	000000	Computer Room	1	Ready	Online	device(s).			
Refresh				Devices 1 to 2 of 2			First	Previous Nex	× t last		
Kenesii							FIISU	PTETIOUS NEX	Last		
SJPM Server: [127	.0.0.1] Up										

Method Four (4):

To delete all devices click on the checkbox in the header to select all devices and then click on the "Delete" button.

Sabre Java Printing Module (SJPM) -	1.8.156				- • •
Devices					Restart
			Group Expand All	New Edit Delete	e Enable Disable
☑ Name	Type LNIATA	Location	Host Status	Device Status Tr	ansaction Status
Select or deselect	File 000000	Computer Room	🎻 Ready	🖌 Online	
all devices. 2	File 000000	Computer Room	🎻 Ready	🖌 Online	
Refresh		Devices 1 to 2 of 2	2	First Pre	vious Next Last
SJPM Server: [127.0.0.1] Up					

2. The "SJPM – Confirm Action" popup window will appear. Click on the "OK" button.

Group Expand Alt New Edit Delete Enable Dis V Test-1 File 000000 Computer Room Image: Ready Image: Online Image: Transaction Status V Test-2 File 000000 Computer Room Image: Ready Image: Online Image: Transaction Status V Test-2 File 000000 Computer Room Image: Ready Image: Online Image: Online SJPM - Confirm Delete Image: Online Image: Online Image: Online Image: Online Image: Online OK Cancel Image: Online Image: Online Image: Online Image: Online	Devices								Rest
V Name Type LNATA Location Host Status Device Status Transaction Status 2 Test-1 File 000000 Computer Room Image: Ready						Group Expand A	ll New Edit	Delete Enable	Disab
Image: constraint of the constr	2	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction St	tatus
Test:2 File 000000 Computer Room Peady Online SJPM - Confirm Delete Image: Delete 2 devices and restart the SJPM server? Image: Delete 2 devices and restart the SJPM server? Image: Delete 2 devices and restart the SJPM server? Image: Devices 1 to 2 of 2 First Previous Next Image: Next Ima]	Test-1	File	000000	Computer Room	🞻 Ready	🛷 Online		
SJPM - Confirm Delete]	Test-2	File	000000	Computer Room	🛷 Ready	🛷 Online		
SJPM - Confirm Delete									
Delete 2 devices and restart the SJPM server? OK Cancel tefresh Devices 1 to 2 of 2 First Previous Next I				SJPM - Co	nfirm Delete				
OK Cancel				Del	ete 2 devices and restart the SJF	?M server?			
tefresh Devices 1 to 2 of 2 First Previous Next I					ОК	Cancel			
tefresh Devices 1 to 2 of 2 First Previous Next I									
lefresh Devices 1 to 2 of 2 First Previous Next 1									
Refresh Devices 1 to 2 of 2 First Previous Next									
	Refresh				Devices 1 to 2 of	2	First	Previous Nex	t La

3. SJPM will restart and the device(s) will be deleted.

nting Module (SJPM)) - 1.8.156					
						Resta
						Nev
Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
			Reconnecting			
					First	Previous Next Las
	nting Module (SIPM)	nting Module (SJPM) - 1.8.156	ting Module (SJPM) - 1.8.156	ting Module (SIPM) - 1.8.156	Name Type LNIATA Location Host Status	Name Type LNIATA Location Host Status Device Status

5.1.4 Disabling and Enabling Devices

This section describes the procedures for disabling and enabling devices in the SJPM Client GUI. Disabling a device is an alternative to device deletion, making the device inactive for testing or failover purposes while retaining the device and its configuration in the SJPM Client GUI.

5.1.4.1 Disabling Devices

1. There are various methods in SJPM for disabling devices.

Method One (1):

Right click on the device to be disabled and then select the "**Disable Device**" menu item.

🧟 Sabre Java Printing Module (SJPM) -	1.8.158					×
Devices					Resta	art
			Group Expand All	New Edit	Delete Enable Disable	e
🔲 Name	Type LNIATA	Location	Host Status	Device Status	Transaction Status	^
Copy Device Detete Device Detete Device Edit Device Rename Devic Utilize Device	rife 000000	Computer Koom	Keady	v Unane		
Refresh		Devices 1 to 1 of 1		First	Previous Next Last	t
SJPM Server: [127.0.0.1] Up						

Method Two (2):

Click on the checkbox for the device to be disabled and then click on the "**Disable**" button.

Sabre Java Printing Module (SJPM) - 1.8.156											
Devices					Restart						
			Group Expand All	New Edit Delete	e Enable Disable						
Name Name	Type Ll	NIATA Location	Host Status	Device Status 1	Select device(s) with						
Test-1	File 0	000000 Computer Room	🎻 Ready	🖌 Online	click to disable the						
					~						
Refresh		Devices 1 to	1 of 1	First Pre	vious Next Last						
SJPM Server: [127.0.0.1] Up											

Method Three (3):

To disable multiple devices click on the checkbox for each device to be disabled and then click on the "**Disable**" button.

Sabre Java Printing Module (SJPM) -	1.8.156				
Devices					Restart
			Group Expand All	New Edit Delete	Enable Disable
					et device(s) with
Name	Type LNIATA	Location	Host Status	Device Status the	checkbox and then
Test-1	File 000000	Computer Room	Ready	Online clic dev	k to disable the
Test-2	File 000000	Computer Room	🛷 Ready	V Online	
					~
Defrech		Devices 1 to 2 of 2		Direct Dre	views Newt Last
Reiresn		Devices 1 to 2 01 2		First Pre	Next Last
SJPM Server: [127.0.0.1] Up					

Method Four (4):

To disable all devices click on the checkbox in the header to select all devices and then click on the "**Disable**" button.

	💭 Sabre Java Print	ing Module (SJPM) -	1.8.156									• 💌
	Devices											Restart
						Group	Expand All	New	Edit	Delete	Enable	Disable
		Name	Type	LNIATA	Location	He	ost Status	Devid	ce Status	Select	device(s) wi	ith 🖌 🔺
		Test-1	File	000000	Computer Room	4	Ready	🧹 (Online	the click	neckbox and	then
	V	Test-2	File	000000	Computer Room	-	Ready	🧹 (Online	devic	e(s).	
												~
					Devices 4 to 0 - 60							
	Refresh				Devices 1 to 2 of 2				First	Previ	ous Nex	t Last
l												
	SJPM Server: [12	27.0.0.1] Up										

2. <u>The "SJPM – Confirm Action" popup window will appear</u>. Click on the "OK" button.

bre Java Printing Module (SJPN	M) - 1.8.156						
vices							Rest
				Group Expand All	New Edit	Delete Enable I	Disab
Name	Type	LNIATA	Location	Host Status	Device Status	Transaction State	us
Test-1	File	000000	Computer Room	🖌 Ready	🖌 Online		
Test-2	File	000000	Computer Room	🖌 Ready	🖌 Online		
		SJPM - Cont	firm Disable				
		? Disab	le 2 devices and restart the S	JPM server?			
			ОК	Cancel			
			Devices 4 to D a	()			
efresh			Devices 1 to 2 o	12	First	Previous Next	Contraction of the local division of the loc
							La

3. SJPM will restart and the device line will appear in red with "**Disabled**" in the "**Host Status**", "**Device Status**" and "**Transaction Status**" columns.

Sabre Java Printing Module (SJPM)	Sabre Java Printing Module (SJPM) - 1.8.156 📃 🕢 💌											
Devices					Restar							
			Group Expand All	New Edit	Delete Enable Disable							
Name	Type LNIAT	A Location	Host Status	Device Status	Transaction Status							
Test-1	File 00000	Computer Room	🔀 Down 🕕	🖌 Online								
Test-2	File 00000	Computer Room	💥 Down 🕕	🛷 Online								
Refresh		Reconnecting		First	Previous Next Last							
SJPM Server: [127.0.0.1] Restarti	ng											

Sabre Java	a Printing Module (SJPM)	- 1.8.156					_	• 🗙
Devices								Restart
					Group Expand All	New Edit I	Delete Enable	Disable
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Sta	tus 🔺
	Test-1	File	000000	Computer Room	Disabled	Disabled	Disabled	
	Test-2	File	000000	Computer Room	Disabled	Disabled	Disabled	
								~
Refresh				Devices 1 to 2 of 2		First	Previous Next	Last
Kerresi						THE	HEAL	Lust
SJPM Serve	er: [127.0.0.1] Up							

5.1.4.2 Enabling Devices

1. Disabled device lines will appear in red with "Disabled" in the "Host Status", "Device Status" and "Transaction Status" columns. There are various methods in SJPM for enabling devices.

Method One (1):

Right click on the device to be enabled and then select the "Enable Device" menu item.

Sabre Java Printing Module (SJPM) -	1.8.158				
Devices					Restart
			Group Expand All	New Edit De	elete Enable Disable
Name	Type LNIATA	Location	Host Status	Device Status	Transaction Status
Test-1	File 000000	Computer Room	Disabled	Disabled	Disabled
Coy Devic Delete Devi Enable Devi Edit Devic Rename Dev Utilize Devi	ce ce ce ce ce ce click to enable the ce ce ce click to enable the ce ce ce ce ce ce ce ce ce ce ce ce ce				
Refresh		Devices 1 to 2 of 2		First	Previous Next Last
SJPM Server: [127.0.0.1] Up					

Method Two (2):

Click on the checkbox for the device to be enabled and then click on the "**Enable**" button.

Devices Carcup Expand Al New Edit Delaite Disable	Sabre Java Printing Me	odule (SJPM) - 1.8.156						- • -
Group Expand All New Edit Delete Enable Disable Test-1 File 000000 Computer Room Disabled Disabled dick to enable the device(s) with the checkboar and then	Devices							Restart
Name Type LNIATA Location Host Status Device Status Trans Select device(s) with the checkbox and then click to enable the ch					Group Expand All	New Edit	Delete Er	nable Disable
Name type LNATA Location Host Status Device Status Trans State device(s) with the checkbox and then checkbox and th		-		1	11	D 1 01 1	-	last da da chi da
Instruction Instruction Disabled Disabled Circk to enable the device(s). Image: Test-2 File 000000 Computer Room Disabled Disabled device(s). Image: Test-2 File 000000 Computer Room Disabled Disabled device(s). Image: Test-2 File 000000 Computer Room Disabled Disabled device(s). Image: Test-2 File 000000 Computer Room Disabled Disabled device(s). Image: Test-2 File 000000 Computer Room Disabled Disabled device(s). Image: Test-2 File 000000 Computer Room Disabled Disabled device(s). Refresh Devices 1 to 2 of 2 First Previous Next Last IPM Server: [127.0.0.1] Up Disabled Disabled Disabled Disabled Disabled	Name	e Type	LNIATA	Location	Host Status	Device Status	Trans St th	elect device(s) with
Image: Note of the server: The could computer room Disade to Disade to	Test-1	1 File	000000	Computer Room	Disabled	Disabled	cl d	ick to enable the
Refresh Devices 1 to 2 of 2 First Previous Next Last	V lest-	2 File	00000	Computer Room	Disabled	Disabled	di	evice(s).
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								
Refresh Devices 1 to 2 of 2 First Previous Next Last								Ŧ
JPM Server: [127.0.0.1] Up	Refresh			Devices 1 to 2 of 2		First	Previous	Next Last
JPM Server: [127.0.0.1] Up								
JPM Server: [127.0.0.1] Up	CIDU Comune FACT & C	A 11-						
	SJPM Server: [127.0.0	0.1] Up						

Method Three (3):

To enable multiple devices click on the checkbox for each device to be enabled and then click on the "**Enable**" button.

Sabre Jav	/a Printing Module (SJPM) -	1.8.156					- 0	
Devices							R	estart
					Group Expand All	New Edit	Delete Enable Di	able
	Name	Туре	LNIATA	Location	Host Status	Device Status	Trans Select device(i) with and then
	Test-1	File	000000	Computer Room	Disabled	Disabled	click to enable	the
	Test-2	File	000000	Computer Room	Disabled	Disabled	device(s).	_
								-
Defead				Devices 1 to 2 of 2		Eluch.	Description	Last
Refrest	1			Devices 1 to 2 of 2		First	Previous Next	Last
SJPM Serv	er: [127.0.0.1] Up							

Method Four (4):

To enable all devices click on the checkbox in the header to select all devices and then click on the "**Enable**" button.

	🔵 Sabre Jav	va Printing Module (SJPM)	- 1.8.156					- • •
	Devices							Restart
						Group Expand All	New Edit	Delete Enable Disable
		Name	Туре	LNIATA	Location	Host Status	Device Status	Tran: Select device(s) with the checkbox and then
		Test-1	File	000000	Computer Room	Disabled	Disabled	click to enable the
		Test-2	File	000000	Computer Room	Disabled	Disabled	device(s).
								Ŧ
	Refres	h			Devices 1 to 2 of 2		First	Previous Next Last
-	S IPM Serv	ver: [127.0.0.1] Lin						· · · · · · · · · · · · · · · · · · ·
	John Jerv	c[.z] op						

2. The "SJPM – Confirm Action" popup window will appear. Click on the "OK" button.

								Rest
				Group Expand All	New	Edit	Delete Enable	Disat
ime	Туре	LNIATA	Location	Host Status	Device	Status	Transaction S	tatus
st-1	File	000000	Computer Room	Disabled	Disa	abled	Disabled	
st-2	File	000000	Computer Room	Disabled	Disa	abled	Disabled	
		_						
		SJPM - Co	nfirm Lnable ible 2 devices and restart the SJPi	N server?	1			
			ОК	ancel				
			Devices 1 to 2 of 2			First	Previous Nex	t La
	me st-1 st-2	me Type st-1 File st-2 File	me Type LNIATA st-1 Fie 000000 st-2 Fie 000000 SJPM - Co v€2 fie	me Type LNIATA Location st-1 Fie 000000 Computer Room st-2 Fie 000000 Computer Room SJPM - Confirm Enable Enable 2 devices and restart the SJP/ OK C	Group Expand All me Type LNIATA Location Host Status st-1 File 00000 Computer Room Disabled st-2 File 00000 Computer Room Disabled SJPM - Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confir	Group Expand All New nme Type LNIATA Location Host Status Device st-1 File 00000 Computer Room Disabled Disabled Disabled st-2 File 00000 Computer Room Disabled Disabled	Group Expand All New Edit me Type LNIATA Location Host Status Device Status st-1 File 00000 Computer Room Disabled Disabled st-2 File 00000 Computer Room Disabled Disabled SJPM - Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable Image: Confirm Enable	Group Expand All New Edit Delete Enable me Type LNIATA Location Host Status Device Status Transaction Stated st-1 File 00000 Computer Room Disabled Disabled Disabled st-2 File 00000 Computer Room Disabled Disabled Disabled SJPM - Confirm Enable Image: Computer Room Disabled Disabled Disabled Disabled OK Cancel Cancel Disabled Enable 2 devices 1 to 2 of 2 Enable Enable Devices 1 to 2 of 2 Enable Enable Enable

3. SJPM will restart and the device will be enabled. "Host Status" should display "Ready" and "Device Status" should display "Online".

Sahr	e Java Printing Module (SIDM).	1 8 156			, -							~
3401	e Java Printing Woudle (SPIVI)	- 1.5.150										~
Devi	ces										Restar	t
					Group	Expand All	New	Edit	Delete	Enable	Disable	
					<u> </u>							
	Name				Host	Status	Devic	e Status		nsaction St	atus	-
	Test-1	File	000000	Computer Room	Di	sabled	Dis	abled		Disabled		
	Test-2	File	000000	Computer Room	Di	sabled	Dis	abled		Disabled		
				Reconnecting								
				Reconnecting								
												-
Dof	rach			Devices 1 to 2 of 2				First	Droui	aus Nov	t Lact	51
Ret	resit			5541665 1 10 2 01 2				First	Previe	Nex	Last	
SJPM S	erver: [127.0.0.1] Restarti	ng										

Sabre Java Printing Module (SJPM) -	1.8.156				
Devices					Restart
			Group Expand All	New Edit	Delete Enable Disable
Name	Type LNIAT	Location	Host Status	Device Status	Transaction Status
Test-1	File 000000	Computer Room	🖌 Ready	🎸 Online	
Test-2	File 000000	Computer Room	🎻 Ready	🎻 Online	
Refresh		Devices 1 to 2 of 2	2	First	Previous Next Last
SJPM Server: [127.0.0.1] Up					

5.1.5 Editing a Device

This section describes the procedure for editing a device in the SJPM Client GUI.

5.1.5.1 Editing a Device

1. Click on the checkbox for the device line to be edited and then click on the "Edit" button or right click on the device line to be edited and then select the "Edit Device" menu item.

Devices	116 (2161AI) - 11	0.130									Rest
					Group	Expand All	New	Edit	Delete	Enable	Disab
Name		Туре	LNIATA	Location	Hos	st Status	Devic	e Status	Trar	saction St	atus
Test-1		File	000000	Computer Room	🖌 I	Ready	🎻 OI	nline			
Test-2	Copy Device	File	000000	Computer Room	1	Ready	🎻 Or	nline			
	Disable Device Edit Device Rename Device Utilize Device	e Click to e selected	edit the device.								
Refresh				Devices 1 to 2 of 2				First	Previ	ous Nex	t La

2. The device's configuration tab will appear. Edit the device (Refer to section <u>6.2</u>) and then click on the "**Save**" button.

Sabre Java Printing Module (SJPM) - 1.8.25	- • •						
Devices Test-1 🖾	Restart						
Device: Test-1 (File)							
- Physical Device Location:							
Location: Computer Room							
Printer Settings:							
Output Format: Text PDF							
Print to Single or Multiple File(s): Single Multiple							
Directory Path: C:\Program Files (x86)\SJPM\Out	=						
Filename: SJPM							
Maximum File Size: 1024000							
-Single:							
File Extension: txt							
If File Exists: Append Overwrite							
File Encryption: Finabled Disabled							
Public Key File Path: public.key							
Device Extended Settings:							
Insert LF After CR: 🕼							
Ierminadon block segment:							
Distriction form ford							
Cuscom cernimator							
Curters Terminater - 00-04111C04114-00-04-00							
Custom reminiator, "Donat Lom "Donation"							
Serves (12) of the serves of t							

3. The "SJPM – Confirm Restart" popup window will appear. Click on the "OK" button.

Sabre Java Printing Module (SJPM) -	Sabre Java Printing Module (SJPM) - 1.8.156						
Devices						Restart	
				Group Expand All	New Edit	Delete Enable Disable	
Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status	
Test-1	File	000000	Computer Room	🖌 Ready	🖌 Online		
		SJPM - Cor	nfirm Restart ce configuration saved. Restart nges? OK	: the SJPM server to apply Cancel		~	
Refresh			Devices 1 to 1 of	1	First	Previous Next Last	
SJPM Server: [127.0.0.1] Up							

4. SJPM will restart. "Host Status" should display "Ready" and "Device Status" should display "Online".



Sabre Java Printing Module (SIPM) - 1.8.156							
Devices							Restart
				Group Expand All	New Edit	Delete Enable	Disable
🔲 Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction St	atus 🔶
Test-1	File	000000	Computer Room	🎸 Ready	🎸 Online		
Refresh			Devices 1 to 1 of 1		First	Previous Nex	t Last
SJPM Server: [127.0.0.1]) Up						

This section describes the procedure for grouping devices in the SJPM Client GUI. The "**Group**" and "**Ungroup**" buttons are located in the upper right corner of the SJPM Client GUI, inside the "**Devices**" tab, under the "**Restart**" button when device(s) are present.

The "**Group**" button groups together like device lines based on the "**Location**" field of the device lines. The "**Ungroup**" button ungroups grouped device lines. Grouping can be used to group similar devices, devices for specific functionality, or devices for specific offices.

5.1.6.1 Grouping Devices

1. When you add or edit your devices make the "**Location**" the same for all of the devices you want to be grouped together. The example below shows three (3) different groupings ("**Computer Room**", "**Lab**", and "**Test Room**").

Ungrouped

Sabre Ja	ava Printing Module (SJPM) -	1.8.156					
Device	s						Restart
					Group Expand All	New Edit	Delete Enable Disable
					oroup Expand Ma	Lon Lone	belete Endote bibliote
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
	Test-1	File	ABC123	Computer Room	🎻 Ready	🎻 Online	
	Test-2	File	ABC100	Computer Room	🖌 Ready	🎻 Online	
	Test-3	File	ABC101	Lab	🎸 Ready	🎸 Online	
	Test-4	File	ABC102	Lab	🖌 Ready	🖌 Online	
	Test-5	File	ABC103	Test Room	🎻 Ready	🎸 Online	
	Test-6	File	ABC104	Test Room	🖌 Ready	🛷 Online	
							*
Pofro	-h			Devices 1 to 6 of 6		Fire	t Drovious Novt Last
Refres	511			2010031100010		PIIS	rievious Next Edst
SJPM Ser	ver: [127.0.0.1] Up						

2. Click on the "Group" button to group the device lines. Click on the "Ungroup" button to ungroup the device lines.

Grouped

Sabre Java Printing Module (SIPM) - 1.8.156											
Devices										Rest	tart
				Ungrou	p Expand All	Ne	w Edit	Delete	Enable	Disat	le
Name Name	Туре	LNIATA	Location	ŀ	lost Status	De	vice Status	Tran	saction S	tatus	*
Test-1	File	ABC123	Computer Room	-	Ready	1	Online				
Test-2	File	ABC100	Computer Room	-	Ready	1	Online				
Test-3	File	ABC101	Lab	-	Ready	1	Online				
Test-4	File	ABC102	Lab	-	Ready	4	Online				
Test-5	File	ABC103	Test Room	-	Ready	1	Online				
Test-6	File	ABC104	Test Room	-	Ready	1	Online				
											Ŧ
Refresh			Devices 1 to 6 of 6				First	Previo	us Ne	xt La	st
SJPM Server: [127.0.0.1] Up											

This section describes the procedures for importing and exporting devices in the SJPM Client GUI.

5.1.7.1 Importing Devices

Device files must be zipped with an extension of "**.zip**" and no sub-folders for use with the import function of SJPM (**Example:** SJPM_instances_20170131140127636.zip). Follow the steps below to restore your backup of SJPM devices and configurations.

1. Right click on the "SJPM Windows System Tray Icon" and then click on the "Import Instances" menu item.



2. The "**SJPM TN – Confirm Import**" popup window will appear. Click on the "**Choose File**" button. The "**Open ZIP File**" window will appear.

👂 SJPM - Confirm	Import	? 💌
SJPM will restart wh	en import has finished.	
Select File:		
Choose File No If Device Exists:	file selected	
Ignore	Overwrite	Rename
	Ir	mport Cancel

🧟 Open ZIP File				×
SIPM >	client	- - i i j	Search QtClient	٩
Organize 🔻 New fold	er			
☆ Favorites	Name		Date modified	Туре
	퉬 html		3/7/2017 8:40 AM	File folder
🧊 Libraries	鷆 imageformats		3/7/2017 8:40 AM	File folder
👰 Computer				
🚢 Local Disk (C:)				
🥳 CD Drive (D:) Virtual				
🙀 vmshare (\\10.0.2.2)				
vmshare (\\10.16.38				
🙀 Network				
	•			÷.
File <u>r</u>	ame:	-	ZIP Files (*.zip)	•
			Open 🔽	Cancel

3. Navigate to the location of your instances zip file and select it. Then click on the "**Open**" button.

🧟 Open ZIP File		×
😋 🗢 🗣 🚺 « Local Di	► SJPM Instances Backup ►	Search SJPM Instances Backup 👂
Organize 🔻 New folde	er	i= - 🔟 🔞
🔆 Favorites	Name	Date modified Type
	BJPM_instances_20170302142355660.zip	3/2/2017 2:27 PM Compresse
🥞 Libraries		
🖳 Computer		
🚢 Local Disk (C:)		
🥳 CD Drive (D:) Virtual		
🙀 vmshare (\\10.0.2.2)		
vmshare (\\10.16.38		
🗣 Network		
	•	•
File <u>n</u>	ame: SJPM_instances_2017030214235566(👻	ZIP Files (*.zip) 🔻
		Open Cancel

4. Then on the "SJPM TN – Confirm Import" popup window click on the "Import" button.


5. Then on the "SJPM TN – Import Status" popup window click on the "OK" button.



SJPM will restart and the imported devices will display in the SJPM Client GUI.

Sabre Java Printing Module (SJPM) - 1.8.156					_	• 💌
Devices						[Restart
				Group Expand A	l New Edit I	Delete Enable	Disable
Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Stat	us 🔶
Test-88	File	000000	Computer Room	🖌 Ready	🎻 Online		
Test-99	System	000000	Computer Room	🎸 Ready	🗹 Online		
							Ŧ
Refresh			Devices 1 to 2 of 2		First	Previous Next	Last
C IDH Comum [407.0.0.4] Up							
SJPM Server: [127.0.0.1] Up							

5.1.7.2 Exporting Devices

1. Once you have added and configured all of your devices follow these steps to make a backup copy that can be used to restore your SJPM devices and configurations.

Sabre Java Printing Module (SJPM) -	1.8.156					
Devices						Restart
				Group Expand All	New Edit	Delete Enable Disable
Name	Type	LNIATA	Location	Host Status	Device Status	Transaction Status 🔷
Test-1	File	ABC123	Computer Room	🎻 Ready	🎻 Online	
Test-2	File	ABC100	Computer Room	🖌 Ready	🎻 Online	
Test-3	File	ABC101	Lab	🎻 Ready	🎻 Online	
Test-4	File	ABC102	Lab	🎻 Ready	🎻 Online	
Test-5	File	ABC103	Test Room	🎻 Ready	🎻 Online	
Test-6	File	ABC104	Test Room	🎻 Ready	🎻 Online	
Refresh			Devices 1 to 6 of 6		First	Previous Next Last
SJPM Server: [127.0.0.1] Up						

2. Right click on the "SJPM Windows System Tray Icon" and then click on the "Export All Instances" menu item. The "Save As" window will appear.



Save As		×
SJPM ► client ► QtClient ► ▼ 4	Search QtClient	٩
Organize 🔻 New folder	:== •	• 🕡
Downloads Recent Places Libraries Documents Music Pictures Videos	Date modified 2/27/2017 2:29 PM 2/27/2017 2:29 PM	Type File folder File folder
Computer Local Disk (C:) CD Drive (D:) Vitt File name: SJPM_instances_20170228125647652.zip Save as type: Compressed Files (*.zip)		۱ ۲
Hide Folders	<u>S</u> ave Ca	incel

3. Browse to a location on the hard drive and create a folder to save the instances zip file into and then click on the "**Save**" button.

Computer 🕨 Local Disk (C:)	► SJPM Instances Backup ►	Search SJPM Instances Backup
Organize 🔻 Include in library 💌 Share	with 🔻 New folder	III 🕶 🗍 🔞
☆ Favorites	Name	Date modified Type
🥽 Libraries	3 SJPM_instances_20170131140127636.zip	1/31/2017 2:05 PM Compressed (zipp
🖳 Computer		
🚢 Local Disk (C:)		
😵 CD Drive (D:) VirtualBox Guest Additions		
vmshare (\\10.0.2.2) (S:)		
🙀 vmshare (\\10.16.38.162) (Z:)		
🙀 Network	7	
	•	4
1 item		

This section describes the procedure for copying a device in the SJPM Client GUI.

1.	Right click on	the device lin	ne to be copie	ed and then select the	e "Copy Device"	' menu item.

🧟 Sabre Java Printing Module (SJPM) -	1.8.158				- • •
Devices					Restart
			Group Expand All	New Edit Delete	Enable Disable
Name	Type LNIATA	Location	Host Status	Device Status Tr	ansaction Status
Test-1	File 000000	Computer Room	🎻 Ready	🎻 Online	
Test-2 Copy Devic	e File 000000	Computer Room	🖌 Ready	🖌 Online	
Delete Dev Disable Dev Edit Device Rename De Utilize Dev	ce ice selected device. ce				
Refresh		Devices 1 to 2 of 2		First Pre-	vious Next Last
SJPM Server: [127.0.0.1] Up					

2. The "**SJPM – Confirm Copy**" pop up window will appear. Type in the name of the new device and then click on the "**OK**" button to copy or the "**Cancel**" button to cancel the copy.

Sabre Java Printing Module (SJP)	vl) - 1.8.156					- • •
Devices						Restart
				Group Expand All	New Edit	Delete Enable Disable
Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
Test-99	File	ABC123	Computer Room	🖌 Ready	🞻 Online	
		SJPM - Cc Co Pie	py the device "Test-99" and restar asse enter the name for the new d OK C	: the SJPM server? levice: ancel		
Refresh			Devices 1 to 1 of 1		First	Previous Next Last
SJPM Server: [127.0.0.1] Up						

(Sabre Java Printing Module (SJPM) User's Guide – Travel Network Edition. March, 2017) Confidential and Proprietary Sabre Inc.

3. On the "**SJPM – Confirm Copy**" pop up window, a confirmation message will be displayed. Click on the "**OK**" button to restart SJPM.

	Sabre Java Printing Module (SJPM) -	1.8.156						×
	Devices						Res	start
					Group Expand All	New Edit I	Delete Enable Disa	ible
I								
I	Name Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status	^
	Test-88	File	ABC123	Computer Room	Inactive	Inactive	Inactive	
	Test-99	File	ABC123	Computer Room	🎸 Ready	🎸 Online		
			SJPM - Co	onfirm Copy				
			🞧 Co	pied Test-99 to Test-88 successfull	v	-		
			Y					
				ОК				
	Refresh			Devices 1 to 2 of 2		First	Previous Next L	ast
F	SJPM Server: [127.0.0.1] Up							

4. Edit, configure and save the new device making sure to assign the new device with its own LNIATA.

Sabre Java Printing Module (SJPM) -	1.8.156: Host	Unavailable					x
Devices						Resta	rt
				Group Expand All	New Edit	Delete Enable Disable	2
Name Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status	^
Test-88	File	ABC123	Computer Room	💢 Down 🕕	🎸 Online		
Test-99	File	ABC123	Computer Room	🎻 Ready	🎻 Online		
Refresh			Devices 1 to 2 of 2		First	Previous Next 1 as	*
Refresh			Devices 1 to 2 of 2		First	Previous Next Las	t
SJPM Server: [127.0.0.1] Up							

5.1.9 Renaming a Device

This section describes the procedure for renaming a device in the SJPM Client GUI.

- • Sabre Java Printing Module (SJPM) - 1.8.158 Restart Devices Group Expand All New Edit Delete Enable Disable Nar Туре LNIATA Locati st Sta vice Stat Test-1 File 000000 Computer Room Ready Online Test-2 File 000000 Computer Room Ready Online e de la come de la com Copy Device elete Device Disable Device Edit Device ename Devic Utilize Device Click to rename the selected device. Devices 1 to 2 of 2 First Previous Next Last Refresh SJPM Server: [127.0.0.1] Up
- 1. Right click on the device line to be renamed and then select the "Rename Device" menu item.

2. The "**SJPM – Confirm Rename**" pop up window will appear. Type in the new name for the device and then click on the "**OK**" button to rename or the "**Cancel**" button to cancel the rename.

🥥 Sabre Java Printi	ng Module (SJPM) - :	1.8.156										3
Devices											Restar	:
					Group	Expand All	New	Edit	Delete	Enable	Disable	1
	Name	Туре	LNIATA	Location	Hos	t Status	Device	e Status	Tran	saction St	atus 🥤	
	Test-99	File	ABC123	Computer Room	🖌 F	Ready	🛷 Or	line				ı
			SJPM - Co	nfirm Rename name the device "Test-99" and res ase enter the new name for the o OK C	tart the SJI Jevice: ancel	PM server?						
Refresh				Devices 1 to 1 of 1				First	Previo	ous Nex	t Last	
SJPM Server: [12	7.0.0.1] Up											

3. On the "**SJPM – Confirm Rename**" pop up window, a confirmation message will be displayed. Click on the "**OK**" button to restart SJPM.

Sabre Java Printing Module (S	JPM) - 1.8.156										×
Devices										Resta	art
				Group	Expand All	New	Edit	Delete	Enable	Disabl	le
Namo	Tupo		Location	Host	Status	Doudo	o Statue	Tran	raction St	stue	
Test-88	File	ABC123	Computer Room	Ina	active	Ina	e status ictive	Trai	Inactive	atus	
		SJPM - Co	onfirm Rename named Test-99 to Test-88 successf OK	ılty							
Refresh			Devices 1 to 1 of 1				First	Previo	Next	Las	st
SJPM Server: [127.0.0.1] Up											

This section describes the procedure to "**Utilize**" a device for printing from the device line in the SJPM Client GUI. The "**Utilize Device**" feature is capable of printing **International Unicode Character** data in various languages such as English, Spanish, French, Japanese (which is the same a Simplified Chinese), Chinese Traditional, and Korean.

SJPM is capable of printing International Unicode Characters both to hardcopy and ATB2 devices.

- **Note:** Not all SJPM devices are capable of printing International Unicode data. Device types that are capable of printing International Unicode data include hardcopy devices ("**File**", "**LPR**", and "**System**") and ATB2 devices ("**ATB2File**", "**ATB2LPR**", and "**ATB2System**"). ATB2 devices will require the data to be ATB2 formatted. The "**Group**" and "**Proxy**" drivers can also be used with the above devices.
- 1. Right click on the device line to print to and then select the "Utilize Device" menu item.

Sabre	e Java Printing Module (SJPM)	1.8.158						_	• 💌
Devi	ces								Restart
					Group	Expand All	New Edit	Delete Enable	Disable
	Name	Туре	LNIATA	Location	Ho	ost Status	Device Status	Transaction Stat	tus 🔶
	Test-1	File	000000	Computer Room	4 - 1	Ready	Online		
	Copy Devic Delete Dev Disable De Edit Devic	ice vice	00000	Comparer room	•	Ready	- Officie		
	Rename De Utilize Dev	vice							
		Click to	utilize the						
		selected	device.						
									-
Ref	resh			Devices 1 to 2 of 2	2		First	Previous Next	Last
SJPM S	erver: [127.0.0.1] Up								

2. The "SJPM – Confirm Action" popup window will appear.

🥯 Sa	abre Java Printing Module (SJPM) -	1.8.158					- • •
D	evices						Restart
					Group Expand All	New Edit	Delete Enable Disable
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status 🔺
] Test-1	File	000000	Computer Room	🎻 Ready	😽 Online	
] Test-2	File	000000	Computer Room	🞻 Ready	🖌 Online	
			SJPM - Co	onfirm Action lize the device "Test-2" printData \ lize enter the data to be sent to OK C	Veb Service? the device:		
F	Refresh			Devices 1 to 2 of 2		First	Previous Next Last
SJP	M Server: [127.0.0.1] Up						

3. Paste the data to be sent to the device into the box and then click on the "**OK**" button to send the data to the device or "**Cancel**" to cancel sending the data.

Sabre Java Printing Module (SJPM)	1.8.158										×
Devices										Rest	art
				Group	Expand All	New	Edit	Delete	Enable	Disab	le
Name	Type	LNIATA	Location	Hos	t Status	Devic	e Status	Trar	nsaction St	atus	
Test-1	File	000000	Computer Room	🖌 F	Ready	🖌 0	nline				
Test-2	File	000000	Computer Room	🖌 F	Ready	🖌 0	nline				
		SJPM - Co Vit Ple English Español Française 부호 문本語 학국어	nfirm Action lize the device "Test-2" printData V ase enter the data to be sent to t OK Cz	/eb Service he device: incel	s?	Sends	; data to tf	e			
Refresh			Devices 1 to 2 of 2			device	e. First	Previ	ous Nex	t La	▼ st

4. The "SJPM – Utilize Status" popup window will appear with the status. Click on the "OK" button.

	Sabre Java	a Printing Module (SJPM) ·	1.8.158						×
	Devices							Re	start
ſ						Group Expand All	New Edit	Delete Enable Dis	able
			_						
		Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status	
		Test-1	File	000000	Computer Room	Ready	Online	D Lact Cond Supported	-
		Test-2	rite	000000	Computer Room	🤞 кеацу	- Onune	Last send successful	_
				SJPM - Ut	ilize Status				
				A 50	ading of data to device succeeded		-		
					iding of data to device succeeded				
				-					
					ОК				
									-
		7			Devices 1 to 2 of 2				
	Refresh				Devices 1 to 2 of 2		First	Previous Next	Last
l									
	SJPM Serve	er: [127.0.0.1] Up							

Configurations and Drivers

6.1 Configurations

This section describes configuration and setup procedures for SJPM and Microsoft Windows that are applicable to SJPM and specific SJPM Drivers.

Note: See "Appendix N" for information on USB to Serial Port converter use with SJPM.

6.1.1 Supplemental Hosts Configuration – Applies to All Drivers

Each device configuration tab has a "**Supplemental Hosts:**" text box in the "**Host Settings:**" section. "**Supplemental Hosts:**" is used to specify host connections in addition to the host connection configured in the "**Primary Host:**" field. This provides the ability to print from multiple hosts using the same device.

To add or delete hosts from the "**Configured Supplemental Hosts**" list, follow the steps detailed in sections <u>6.1.1.1 Adding Supplemental Hosts – Applies to All Drivers</u> and <u>6.1.1.2 Deleting</u> <u>Supplemental Hosts – Applies to All Drivers</u>.

Host Settings:		
Connection Type:	HSSP None	
LNIATA:		
Primary Host:	access.sabre.com	
Supplemental Hosts:	Supplemental Hostname: Add Configured Supplemental Hosts:	ш
Save	Cancel	4
5JPM Server: [127.0.0.1] Up		

This section describes the procedure to add supplemental hosts (concurrent connections) to the "**Configured Supplemental Hosts:**" list.

1. Type in a host address in the "Supplemental Hostname:" text box.

Host Settings:		
Connection Type:	HSSP None	
LNIATA:		
Primary Host:	access.sabre.com	
Supplemental Hosts:	Supplemental Hostname:	
	access.tsts.sabre.com Add	
	Configured Supplemental Hosts:	
	Remove Selected	E
Save	Cancel	
SJPM Server: [127.0.0.1] Up		

2. Click on the "Add" button to add the supplemental host to the "Configured Supplemental Hosts:" list.

Host Settings:		
Connection Type:	HSSP None	
LNIATA:		
Primary Host:	access.sabre.com	
Supplemental Hosts:	Supplemental Hostname:	
	Add	
	Configured Supplemental Hosts:	
	access.tsts.sabre.com	Ξ
	Remove selected	
Save	Cancel	+
SJPM Server: [127.0.0.1] Up		

3. Repeat steps **1** and **2** for each additional host connection to be added.

Connection Type:	HSSP None	
LNIATA:		
Primary Host:	access.sabre.com	
Supplemental Hosts:	Supplemental Hostname:	
	Add	
	Configured Supplemental Hosts:	
(access.tsts.sabre.com	Ш
Save	Cancel	4
SJPM Server: [127.0.0.1] Up		

When all changes have been made click on the "Save" button. Then click on the "OK" button on the "SJPM – Confirm Restart" popup window to restart SJPM and for the changes to take effect.

6.1.1.2 Deleting Supplemental Hosts – Applies to All Drivers

This section describes the procedure to delete supplemental hosts (concurrent connections) from the "**Configured Supplemental Hosts:**" list.

 Highlight the host(s) you wish to remove from the "Configured Supplemental Hosts:" list (Hold down the "Ctrl" key and click the Left Mouse Button to select more than one.).

Host Settings: Connection Type: LNIATA: Primary Host: Supplemental Hosts:	HSSP None access.sabre.com Supplemental Hostname: Add Configured Supplemental Hosts: access.tsts.sabre.com access.cet.sabre.com
	Remove Selected
Save	Cancel
SJPM Server: [127.0.0.1] Up	

- 2. Click on the "Remove Selected" button.
- When all changes have been made click on the "Save" button. Then click on the "OK" button on the "SJPM Confirm Restart" popup window to restart SJPM and for the changes to take effect.

6.1.2 SJPM STP Configuration – STP Drivers Only

This section describes configuration procedures that are only applicable to the configuration of STP Drivers in SJPM. This section applies to the **STPATB1**, **STPATB1INI**, **STPATB2**, and **STPATB2INI** Drivers only.

Note: If using any of the STP Drivers, SJPM must be run as a Service.

 Click on the Windows "Start" button on the windows Taskbar, then click on "All Programs", then scroll down and click on the "SJPM" folder. Right click on the "SJPM STP Configuration" menu item and then left click on the "Run as administrator" menu item.



2. On the "User Account Control" window that pops up click on the "Yes" button.

😗 Use	r Account Control	×				
0	Do you want to allow the following program from an unknown publisher to make changes to this computer?					
	Program name: Publisher: File origin:	SJPMSTPConfig.exe Unknown Hard drive on this computer				
🕑 s	how <u>d</u> etails	Yes No				
		Change when these notifications appear				

3. The "SJPM STP Configuration" window will appear.

The "**Retry Timeout**" is a required field. The default setting is: "960000". Enter a different "**Retry Timeout**" only if needed.

The "Hangup Timeout" is a required field. The default setting is: "30000". Enter a different "Hangup Timeout" only if needed.

The "Idle Timeout" is a required field. The default setting is: "5000". Enter a different "Idle Timeout" only if needed.

SJPM STP Configu	ration						×
Global Configurat Retry Timeout 960000 Hangup Timeout 30000 Idle Timeout 5000 Modems							
Name	Port Nur	nb Numb	AT dial str	AT setup string	1	Add Edi <u>t</u> D <u>e</u> lete	
Modem Pools							
Pool Name	Baud Sto	p bits Data bits	Parity	Modems		A <u>d</u> d Edit Delete	
					Sa <u>v</u> e	<u>C</u> ancel	

6.1.2.1 Configure a Modem

This section describes the procedure for configuring a modem for use with STP device(s).

1. Click on the "<u>A</u>dd" button in the "Modems" box of the "SJPM STP Configuration" window to add a Modem. The "Modem Configurations" window will appear.

Modem Configuration	S	
Modem		
Modem name *	_	
	Enter modem name.	
Com port *	_	
COM1 -		
Dialing prefix	4	
Number of digits to strip	_	
0		
AT dial string *	_	
ATDTW		
AT setup string *	_	
ATH0V0Q1E0W2		
Modem pool		
]	
		OK Cancel

2. The "**Modem name** *" is a required field. Default is blank. Type in a name for the modem you are adding in the "**Modem name** *" field.

Modem		
Modem name *		
MODEM-1	Enter modem name.	
Com port ~		
COM1 -		
Dialing prefix	_	
Number of digits to strip		
0		
AT dial string *	-	
ATDTW		
AT setup string *	-	
ATH0V0Q1E0W2]	
Modem pool	_	
]	

(Sabre Java Printing Module (SJPM) User's Guide – Travel Network Edition. March, 2017) Confidential and Proprietary Sabre Inc. 3. The "Com port *" is a required field. Default setting is "The First available COM port on the PC". Select a COM port from the "Com port *" drop down list.

Modem Configurations	5	- • ×
Modem Modem name * MODEM-1		
Com port * COM1 - COM1	Select a COM port.	
Number of digits to strip]	
AT dial string * ATDTW]	
AT setup string * ATH0V0Q1E0W2]	
Modem pool]	
		O <u>K</u> Canc <u>e</u> l

4. The "**Dialing prefix**" is an optional field. Default is blank. Enter a dialing prefix in the "**Dialing prefix**" field if required.

The dialing prefix is needed if a digit is required to access an outside line. (e.g. "**9**," where 9 is the digit required to access the outside line and a comma "," puts a pause between dialing 9 and rest of the phone number.)

S Modem Configuration	5	
Modem		
Modem name *		
MODEM-1		
Com port *		
COM1 +		
Dialing prefix		
9,	Enter digits to prepend.	
Number of digits to strip		
0		
AT dial string *	a	
ATDTW]	
AT setup string *	_	
ATH0V0Q1E0W2		
Modem pool		
]	
		O <u>K</u> Canc <u>e</u> l

5. The "Number of digits to strip" is a required field. Default setting is "0". Enter the number of digits to strip if required.

This setting is required when a user wants to strip digits before dialing the number. (e.g. if "**Number of digits to strip**" is 3 and the phone number entered is 1112223333, the application will strip the first 3 numbers i.e. "**111**" when making a call).

Modem Configuration	s	- • ×
Modem		
Modem name *		
MODEM-1		
Com port *		
COM1 -		
Dialing prefix	n	
9,]	
Number of digits to strip		
이	Enter number of digits to strip.	
A I dial string *		
ATDTW		
AT setup string *		
ATH0V0Q1E0W2		
Modem pool	d	
]	
	OK	Canc <u>e</u> l

6. The "**AT dial string** *" is a required field. Default setting is "**ATDTW**". Refer to your modem manual before making any changes to this option and only change if required.

S Modem Configuration:	5	
Modem		
Modem name *	_	
MODEM-1		
Com port *		
COM1 -]	
Dialing prefix	_	
9,		
Number of digits to strip		
0		
AT dial string *		
ATDTW	Enter AT dial string .	
AT setup string *		
ATH0V0Q1E0W2		
Modem pool		
]	
		OK Cancel

7. The "**AT setup string** *" is a required field. Default setting is "**ATV0Q1E0W2**". Refer to your modem manual before making any changes to this option and only change if required.

S Modem Configuration	s	- • •
Modem		
Modem name *	1	
MODEM-1		
Com port *		
COM1 -		
Dialing prefix	-	
9,		
Number of digits to strip	_	
0		
AT dial string *		
ATDTW		
AT setup string *		
ATH0V0Q1E0W2	Enter AT setup string.	
Modem pool		
]	
		OK Cancel

8. The "**Modem pool**" field displays the pool to which the modem belongs. Click on the "**OK**" button when all configuration changes are complete. The modem will now be displayed in the "**Modems**" list. Click on the "**Saye**" button to save the configuration.

Retry Timeout								
960000								
Hangup Timeout								
30000								
Idle Timeout								
5000								
Modems								
Name					Numb	AT dial str	AT setup	Add
			Port	NUMD	Numb	AT uldi Su	Ar setup	
MODEM-1		(Port COM1	9,	0	ATDTW	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete
MODEM-1	_		Port COM1	9,	0	ATDTW	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete
MODEM-1 Modem Pools			Port COM1	9,	0	ATDTW	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete
MODEM-1 Modem Pools Pool Name	Baud	Stop b	Port COM1 III its Dat	Numb 9, ta bits Pa	rity Mc	ATDTW	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete
MODEM-1 Modem Pools Pool Name	Baud	Stop b	COM1	ta bits Pa	o rity Mo	ATDTW	ATHOVOQ1	Edi <u>t</u> Delete
MODEM-1 Modem Pools Pool Name	Baud	Stop b	III III	ta bits Pa	rity Mc	ATDTW	ATHOVOQ1	Edi <u>t</u> Delete
MODEM-1 Modem Pools Pool Name	Baud	Stop b	III its Dat	ta bits Pa	rity Mc	ATDTW	ATHOVOQ1	Edi <u>t</u> Delete
MODEM-1 Modem Pools Pool Name	Baud	Stop b	III III	ta bits Pa	rity Mc	ATDTW	ATHOVOQI	Edi <u>t</u> D <u>e</u> lete A <u>d</u> d Edit Delete

6.1.2.2 Add a Modem Pool

This section describes the procedure for configuring a modem pool for use with STP device(s).

 From Windows "Start" open the "SJPM STP Configuration" window (Refer to Number 1 in section <u>6.1.2 SJPM STP Configuration – STP Drivers Only</u>). Click on the "Add" button in the "Modem Pools" box of the "SJPM STP Configuration" window to add a modem pool. The "Modem Pool Configurations" window will appear.

S Modem Pool Configurations		×
Modem Pool Pool name * Enter pool name. Modems * Add/Remove Baud * 9600 Stop bits * 1 Data bits * 8 Parity *		
none 👻	O <u>K</u> Cano	el

2. The "**Pool name** *" is a required field. Default is blank. Type in a pool name in the "**Pool name** *" field and then click on the "**Add/Remove**" button.

S Modem Pool Configurations	- • •
Modem Pool Pool name * POOL-1 modems * Baud * 9600 Stop bits * 1 Data bits * 8 Parity * none	
	O <u>K</u> Canc <u>e</u> l

3. The "Modem Selector" window will appear.

S Modem Selector	- • •
Available Modems: MODEM-1	Selected Modems:
OK	Canc <u>el</u>

4. Select a modem by clicking on the modem name in the "Available Modems:" list.

S Modem Selector	
Available Modems: MODEM-1	>> <<
OK	Cancel

5. Click on the ">>" button to add the modem to the "Selected Modems:" list. Click on the "OK" button.

S Modem Selector	
Available Modems:	Selected Modems: MODEM-1
	>>
OK	Canc <u>el</u>

6. The modem will now appear in the "Modems *" list.

S Modem Pool Configurations	
Modem Pool Pool name * POOL -1 Modems * MODEM-1 Add/Remove Add modem.	
9600 Stop bits *	
1	
Data bits *	
8 🗸	
Parity *	
none 👻	
	O <u>K</u> Canc <u>e</u> l

7. The "**Baud** *" is a required field. Default setting is "**9600**". Click on the "**Baud** *" drop down list to select a different baud if required.

👂 Modem Pool Configur	ations	
Modem Pool Pool name * POOL-1 Modems * MODEM-1	Add/Remove	
Baud * 9600 ▼ 1200 2400 4800 9600 19200 38400 57600 115200	Select baud from the list.	
38400 57600 115200		⊃ <u>K</u>

8. The "**Stop Bits** *" is a required field. Default setting is "1". Click on the "**Stop bits** *" drop down list to select different Stop bits if required.

S Modem Pool Configurations	- • ×
Modem Pool Pool name * POOL-1 Modems * MODEM-1 Add/Remove Baud * 9600	
Stop bits * Select stop bits from the list. I I I Select stop bits from the list. I I Select stop bits from the list.	
none	O <u>K</u> Canc <u>e</u> l

9. The "**Data Bits** *" is a required field. Default setting is "8". Click on the "**Data bits** *" drop down list to select different Data bits if required.

S Modem Pool Configurations	- • •
Modem Pool Pool name * POOL-1 Modems * MODEM-1 Baud * 9600 Stop bits * 1	
Data bits * 8 Select data bits from the list. 7 8	
	OK Cancel

10. The "**Parity** *" is a required field. Default setting is "**none**". Click on the "**Parity** *" drop down list to select a different Parity if required. Click on the "**O**<u>K</u>" button when done.

👂 Modem Pool Configur	ations	
Modem Pool Pool name * POOL-1 Modems * MODEM-1 Baud * 9600 • Stop bits * 1 • Data bits * 8 •	Add/Remove	
Parity * none ven odd mark	Select the parity from the list.	O <u>K</u> Canc <u>e</u> l

11. The modem pool will now be displayed in the "**Modem Pools**" list. Click on the "**Save**" button to save the configuration.

JPM STP Configuration						
Clobal Configurations						
Retry Timeout						
960000						
Hangup Timeout						
30000						
Idle Timeout						
5000						
Modems						
Name	Port	Numb	Numb	AT dial str	. AT setup	<u>A</u> dd
Name MODEM-1	Port COM1	Numb 9,	Numb	AT dial str ATDTW	AT setup	<u>A</u> dd Edi <u>t</u> D <u>e</u> lete
Name MODEM-1	Port COM1	Numb 9,	Numb	AT dial str ATDTW	AT setup ATH0V0Q	Edi <u>t</u>
Name MODEM-1 Modem Pools	Port COM1	Numb 9,	Numb	AT dial str	AT setup	<u>A</u> dd Edi <u>t</u> D <u>e</u> lete
Name MODEM-1 Nodem Pools Pool Name	Port COM1 III Baud	9, Stop bits	Numb 0	AT dial str ATDTW	AT setup ATHOVOQ	Edi <u>t</u> Dglete
Name MODEM-1 MODEM-1 Modem Pools Pool Name POOL-1	Port COM1 III Baud 9600	Numb 9, Stop bits 1	Numb 0 Data bits 8	AT dial str ATDTW Parity none	AT setup ATHOVOQ	Add Edi <u>t</u> Dglete Add Edit
Name MODEM-1 Nodem Pools Pool Name POOL-1	Port COM1 III Baud 9600	Numb 9, Stop bits 1	Numb 0 Data bits 8	AT dial str ATDTW Parity none	AT setup ATHOVOQ	Add Edi <u>t</u> Dglete Add Edit Delete
Name MODEM-1 MODEM-1 Nodem Pools Pool Name POOL-1	Port COM1 III Baud 9600	Numb 9, Stop bits 1	Numb 0 Data bits 8	AT dial str ATDTW Parity none	AT setup ATHOVOQ	Add Edi <u>t</u> Dglete Add Edit Delete
Name MODEM-1 Nodem Pools Pool Name POOL-1	Port COM1 III Baud 9600	Numb 9, Stop bits 1	Numb 0 Data bits 8	AT dial str ATDTW Parity none	AT setup ATHOVOQ	Add Edi <u>t</u> Dglete Add Edit Delete
Name MODEM-1 Nodem Pools Pool Name POOL-1	Port COM1 III Baud 9600	Numb 9, Stop bits 1	Numb 0 Data bits 8	AT dial str ATDTW Parity none	AT setup ATHOVOQ	Add Edit Dglete Add Edit Delete

This section describes the procedure for editing a modem for use with STP device(s).

 From Windows "Start" open the "SJPM STP Configuration" window (Refer to Number 1 in section <u>6.1.2 SJPM STP Configuration – STP Drivers Only</u>). Select a modem in the "Modems" box and then click on the "Edi<u>t</u>" button in the "Modems" box.

Global Configurations						
Retry Timeout						
960000						
Hangup Timeout						
30000						
Idle Timeout						
5000						_
Modems						
Name	Port	Numb	Numb	AT dial str	. AT setup	Add
() · · · · · · · · · · · · · · · · · ·						_
MODEM-1	COM1		0 A	TDTW	ATH0V0Q1	
MODEM-1	COM1	9,	0 A	TDTW	ATH0V0Q1	Edi <u>t</u> D <u>e</u> lete
MODEM-1	COM1	9,	0 A	IDTW	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete
MODEM-1	COM1	9,	0 A	IDTW	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete
MODEM-1 Modem Pools Pool Name	COM1 III Baud	9, Stop bits	0 A	Parity	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete
MODEM-1 Modem Pools Pool Name Pool 1	COM1 III Baud	9, Stop bits	Data bits	Parity	ATHOVOQ1	Edi <u>t</u> Dglete
MODEM-1 Modem Pools Pool Name POOL-1	COM1 III Baud 9600	9, Stop bits	0 A Data bits 8	Parity	ATHOVOQ1	Edit Delete
MODEM-1 Modem Pools Pool Name POOL-1	COM1 III Baud 9600	9, Stop bits	0 A Data bits 8	Parity none	ATHOVOQ1	Edit Delete
MODEM-1 Modem Pools Pool Name POOL-1	COM1 111 Baud 19600	9, Stop bits	Data bits	Parity none	ATHOVOQ1	Edit Delete

2. The "**Modem Configurations**" window will appear with the selected modem's configuration.

S Modem Configuration:	5	- • ×
Modem Modem name *		
MODEM-1	Enter modem name.	
Com port *	-	
COM1 -]	
Dialing prefix		
9,		
Number of digits to strip	-	
0]	
AT dial string *	<i>.</i>	
ATDTW]	
AT setup string *	-	
ATH0V0Q1E0W2		
Modem pool	_	
POOL-1]	
		O <u>K</u> Canc <u>e</u> l

- 3. Make the required changes to the configuration and then click on the "**OK**" button. The window will close and the edited modem row will reflect the changes.
- 4. Click on the "Save" button on the "SJPM STP Configuration" window to save the changes.

This section describes the procedure for editing a modem pool for use with STP device(s).

 From Windows "Start" open the "SJPM STP Configuration" window (Refer to Number 1 in section <u>6.1.2 SJPM STP Configuration – STP Drivers Only</u>). Select a pool in the "Modem Pools" box and then click on the "Edit" button in the "Modem Pools" box.

Detry Timeout						
960000						
Hangup Timeout						
30000						
Idle Timeout						
5000						
Modems						
Name	Port	Numb	Numb	AT dial str	. AT setup	Add
						AUU
MODEM-1	COM1	9,	0	ATDTW	ATH0V0Q1	Edi <u>t</u>
MODEM-1	COM1	9,	0	ATDTW	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete
MODEM-1	COM1	9,	0	ATDTW	ATHOVOQ 1	Edi <u>t</u>
MODEM-1 Modem Pools	COM1	9,	0	ATDTW	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete
MODEM-1 Modem Pools Pool Name	COM1 III Baud	9, Stop bits	0 Data bits	ATDTW 8 Parity	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete
MODEM-1 Modem Pools Pool Name POOL-1	COM1 	9, Stop bits 1	0 Data bits 8	ATDTW s Parity none	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete
MODEM-1 Modem Pools Pool Name POOL-1	COM1 III Baud 9600	9, Stop bits	0 Data bits 8	ATDTW Parity none	ATHOVOQ1	Edi <u>t</u> Delete
MODEM-1 Modem Pools Pool Name POOL-1	COM1 III Baud 9600	9, Stop bits 1	0 Data bits 8	ATDTW s Parity none	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete A <u>d</u> d Edit Delete
MODEM-1 Modem Pools Pool Name POOL-1	COM1 III Baud 9600	9, Stop bits 1	0 Data bits 8	ATDTW s Parity none	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete A <u>d</u> d Edit Delete

2. The "**Modem Pool Configurations**" window will appear with the selected modem pool's configuration.

👂 Modem Pool Configu	ations	- • •
Modem Pool Pool name * POOL-1 Modems * MODEM-1 Baud * 9600 • Stop bits * 1 •	Enter pool name. Add/Remove	
Data bits *	1	
8 🔻		
Parity *	1	
none 🔻		
		O <u>K</u> Canc <u>el</u>

- 3. Make the required changes in the configuration and click on the "**OK**" button. The window will close and the edited modem pool row will reflect the changes.
- 4. Click on the "Save" button on the "SJPM STP Configuration" window to save the changes.

6.1.2.5 Delete a Modem

This section describes the procedure for deleting a modem.

- From Windows "Start" open the "SJPM STP Configuration" window (Refer to Number 1 in section <u>6.1.2 SJPM STP Configuration – STP Drivers Only</u>).
- 2. Select a modem in the "**Modems**" box and then click on the "**Delete**" button in the "**Modems**" box.

FM STF Conniguration						
Global Configurations						
Retry Timeout						
960000						
Hangup Timeout						
30000						
Idle Timeout						
5000						_
Modems						
Name	Port	Numb	Numb	AT dial str	AT setup	Add
O MODEM-1	COM1	9,	0	ATDTW	ATH0V0Q1	Edit
MODEM-1	COM1	9,	0	ATDTW	ATH0V0Q1	Edi <u>t</u>
MODEM-1	COM1	9,	0	ATDTW	ATH0V0Q1	Edi <u>t</u> D <u>e</u> lete
MODEM-1	COM1	9,	0	ATDTW	ATHOVOQ1	Edi <u>t</u> Delete
MODEM-1 Modem Pools	COM1	9,	0	ATDTW	ATHOVOQ1	Edi <u>t</u> Delete
MODEM-1 Modem Pools Pool Name	COM1 Baud	9, III Stop bits	0 Data biti	ATDTW s Parity	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete
MODEM-1 Modem Pools Pool Name POOL-1	COM1 Baud 9600	9, III Stop bits	Data bit	ATDTW s Parity none	ATHOVOQ1	Edi <u>t</u> Delete Add
MODEM-1 Modem Pools Pool Name POOL-1	COM1 Baud 9600	9, III Stop bits	Data bits	ATDTW s Parity none	ATHOVOQ1	Edi <u>t</u> D <u>e</u> lete A <u>d</u> d Edit
MODEM-1 Modem Pools Pool Name POOL-1	COM1 Baud 9600	9, III Stop bits	Data bits	s Parity none	ATHOVOQ1	Edi <u>t</u> Delete Add Edit Delete
MODEM-1 Modem Pools Pool Name POOL-1	COM1 Baud 9600	9, III Stop bits 1	Data bit	s Parity none	ATHOVOQ1	Edi <u>t</u> Delete Add Edit Delete
MODEM-1 Modem Pools Pool Name POOL-1	COM1 Baud 9600	9, III Stop bits 1	0 Data bit	s Parity none	ATHOVOQ1	Edi <u>t</u> Delete Edit Delete
MODEM-1 Modem Pools Pool Name POOL-1	COM1 Baud 9600	9, III Stop bits 1	0 Data bite 8	ATDTW s Parity none	ATHOVOQ1	Edi <u>t</u> Delete
MODEM-1 Modem Pools Pool Name POOL-1	COM1 Baud 9600	9, III Stop bits 1	0 Data bit: 8	s Parity none	ATHOVOQ1	Edi <u>t</u> Delete Add Edit Delete Cancel
MODEM-1 Modem Pools Pool Name POOL-1	COM1 Baud 9600	9, III I III	0 Data biti	s Parity none	ATHOVOQ 1 Modems MODEM-1	Edi <u>t</u> Delete Add Edit Delete Cancel

3. The "**Delete Modem**" window will appear. Click on the "**Yes**" button to delete the Modem.



6.1.2.6 Delete a Modem Pool

This section describes the procedure for deleting a modem pool.

- From Windows "Start" open the "SJPM STP Configuration" window (Refer to Number 1 in section <u>6.1.2 SJPM STP Configuration – STP Drivers Only</u>).
- 2. Select a modem pool in the "Modem Pools" box and then click on the "Delete" button in the "Modem Pools" box.

JPM STP Configuration						
Global Configurations						
960000						
Hangun Timeout						
30000						
Idle Timeout						
5000						
Modems						
Name	Port	Numb	Numb	AT dial str	AT setup :	Add
Name MODEM-1	Port COM1	Numb 9,	Numb 0	AT dial str ATDTW	AT setup : ATHOVOQ1	Add Edi <u>t</u> D <u>e</u> lete
Name MODEM-1	Port COM1	Numb 9,	Numb 0	AT dial str ATDTW	AT setup : ATHOVOQ1	Add Edi <u>t</u> D <u>e</u> lete
Name MODEM-1 Kodem Pools	Port COM1	Numb 9,	Numb 0	AT dial str ATDTW	AT setup : ATHOVOQ1	Add Edi <u>t</u> D <u>e</u> lete
Name MODEM-1 Modem Pools Pool Name	Port COM1 III Baud	Numb 9, Stop bits	Numb 0 Data bit	AT dial str ATDTW	AT setup : ATHOVOQ1	Add Edi <u>t</u> D <u>e</u> lete
Name Name Nodem-1 Nodem Pools Pool Name POOL-1	Port COM1 III Baud 9600	Numb 9, Stop bits 1	Numb 0 Data bit 8	AT dial str ATDTW s Parity none M	AT setup : ATHOVOQ1	Add Edit Delete Add Edit
Name Name Notem-1 Notem-1 Nodem Pools Pool Name POOL-1	Port COM1 III Baud 9600	Numb 9, Stop bits 1	Numb 0 Data bit 8	AT dial str ATDTW s Parity none M	AT setup : ATHOVOQ1	Add Edi <u>t</u> D <u>e</u> lete A <u>d</u> d Edit
Name MODEM-1 Modem Pools Pool Name POOL-1	Port COM1 III Baud 9600	Numb 9, Stop bits 1	Numb 0 Data bit 8	AT dial str ATDTW s Parity none N	AT setup : ATHOVOQ1	Add Edi <u>t</u> Delete Add Edit Delete
Name Name Nodem-1 Nodem Pools Pool Name Pool Name V	Port COM1 III Baud 9600	Numb 9, Stop bits 1	Numb 0 Data bit 8	AT dial str ATDTW s Parity none N	AT setup : ATHOVOQ1	Add Edi <u>t</u> Delete Add Edit Delete

3. The "**Delete Modem Pool**" window will appear. Click on the "**Yes**" button to delete the Modem Pool.



6.1.3 Device Backup and Restore

This section describes the procedures for backing up and restoring devices in SJPM. The device backup files should be zipped and stored in a safe location, on a thumb drive or other media, off of the PC that is running SJPM.

6.1.3.1 Device Backup – Manual Process

1. Once you have added and configured all of your devices follow these steps to make a backup copy that can be used to restore your SJPM devices and configurations.

Sabre Java Printing Module (SJPM)	- 1.8.156										×
Devices										Resta	art
				Group	Expand All	Ne	w Edit	Delete	Enable	Disabl	e
Name Name	Туре	LNIATA	Location	Hos	st Status	De	vice Status	Trar	nsaction S	tatus	~
Test-1	File	ABC123	Computer Room	- 🖌	Ready	-	Online				
Test-2	File	ABC100	Computer Room	-	Ready	1	Online				
Test-3	File	ABC101	Lab	- d	Ready	-	Online				
Test-4	File	ABC102	Lab	-	Ready	-	Online				
Test-5	File	ABC103	Test Room		Ready	-	Online				
Test-6	File	ABC104	Test Room	- d	Ready	-	Online				
											Ŧ
Refresh			Devices 1 to 6 of 6				First	Previ	ous Ne	xt Las	st
SJPM Server: [127.0.0.1] Up											

2. Open Windows Explorer and then navigate to "C:\Program Files (x86)\SJPM\server\devroot".

C:\Prog	ram Files\SJPM\server\devroot	✓ ✓ Search devroot	٩
Organize 🔻 Inclue	de in library 🔻 Share with 💌 New folder		:=
Documents	Name	Date modified Type	Size
J Music	🐌 instances	4/2/2014 12:30 PM File folder	
Videos	prototypes	4/2/2014 1:06 PM File folder	
Videos	📔 templates	4/2/2014 10:22 AM File folder	
Computer Local Disk (C:) Jisapi Downloads PerfLogs Program Files Sabre Licere	E widgets	4/2/2014 10:22 AM File folder	
4 items			

3. Copy and save the "**instances**" folder to a secure location. The "**instances**" folder contains the files and information for all of your configured devices and will be used for restoring your devices.

C:\Prog	ram	Files\SJPM\server\devroot\instances	▼ 43	earch instances	
Organize 👻 Inclu	de in	library 👻 Share with 👻 New folder			ii • 🔟 🔞
Documents	*	Name	Date modified	Туре	Size
Music Pictures Computer Local Disk (C:) Jisapi Downloads PerfLogs Sabre Licere		 Test-1.json Test-2.json Test-3.json Test-4.json Test-5.json Test-6.json 	4/2/2014 1:06 PM 4/2/2014 1:06 PM 4/2/2014 1:06 PM 4/2/2014 1:06 PM 4/2/2014 1:06 PM	JSON File JSON File JSON File JSON File JSON File	9 KB 9 KB 9 KB 9 KB 9 KB
6 items					

6.1.3.2 Device Backup – Automated Process

1. Once you have added and configured all of your devices follow these steps to make a backup copy that can be used to restore your SJPM devices and configurations.

🥯 Sabre Java Printing Mod	ule (SJPM) - 1.8.156									, •	×
Devices										Rest	art
				Group	Expand All	Ne	w Edit	Delete	Enable	Disab	le
Name Name	Туре	LNIATA	Location	Hos	st Status	Der	vice Status	Trar	saction S	tatus	~
Test-1	File	ABC123	Computer Room	I 🖌	Ready	×.	Online				
Test-2	File	ABC100	Computer Room	I - I	Ready	1	Online				1
Test-3	File	ABC101	Lab	🖌 – I	Ready	1	Online				
Test-4	File	ABC102	Lab	I 🖌 🚽	Ready	÷	Online				1
Test-5	File	ABC103	Test Room	I - I	Ready	÷	Online				
Test-6	File	ABC104	Test Room	I - 1	Ready	1	Online				1
											-
Refresh			Devices 1 to 6 of 6				First	Previ	ous Nex	t La	st
SJPM Server: [127.0.0.1] Up										

2. Right click on the "SJPM Windows System Tray Icon" and then click on the "Export All Instances" menu item. The "Save As" window will appear.



Save As	—
COO SJPM ► client ► QtClient ► ▼ 4	Search QtClient 🔎
Organize 🔻 New folder	100
Downloads Recent Places Libraries Documents Music Pictures	Date modifiedType2/27/2017 2:29 PMFile folder2/27/2017 2:29 PMFile folder
Videos Computer Computer Cocal Disk (C:) CD Drive (D:) Virt (III)	
File name: SJPM_instances_20170228125647652.zip	•
Save as type: Compressed Files (*.zip)	▼
Hide Folders	Save Cancel

3. Browse to a location on the hard drive and create a folder to save the instances zip file into and then click on the "**Save**" button.

Save As		
😋 🔾 🗢 📗 « Local Di.	🕨 SJPM Instances Backup 🕨 🔫 😽	Search SJPM Instances Backup 👂
Organize 🔻 New fold	er	:= - 🔞
🔆 Favorites	Name	Date modified Type
Contraction (1997)	JPM_instances_20170302142355660.zip	3/2/2017 2:27 PM Compresse
👰 Computer		
🚢 Local Disk (C:)		
🧐 CD Drive (D:) Virtual		
🙀 vmshare (\\10.0.2.2)		
🙀 vmshare (\\10.16.38		
🗣 Network	< [•
File <u>n</u> ame: SJPM	l_instances_20170302142355660.zip	•
Save as <u>t</u> ype: Com	pressed Files (*.zip)	•
) Hide Folders	(Save Cancel

6.1.3.3 Device Restore - Manual Process

1. Once you have installed SJPM follow these steps to restore your SJPM backup of devices and configurations.

Sabre Java Printing Module (SJPM) - 1.8.156							
Devices					Restart		
					New		
Name Name	Type LNIATA	Location	Host Status	Device Status	Transaction Status		
					~		
Refresh				First	Previous Next Last		
SJPM Server: [127.0.0.1] Up							

Open Windows Explorer and then navigate to the location where you have stored your SJPM backup copy. Right click on the "instances" folder and then left click on the "Copy" menu item. Then navigate to "C:\Program Files (x86)\SJPM\server\devroot".

C:\Progr	ram Files\SJPM\server\devroot	 ✓ ✓ Search devroot 	
Organize 👻 Includ	de in library 🔻 Share with 👻 New folder		····
Documents	Name	Date modified Type	Size
↓ Music	 instances prototypes templates 	4/2/2014 12:30 PM File folder 4/2/2014 1:06 PM File folder 4/2/2014 10:22 AM File folder	
Computer Local Disk (C:) Jisapi Downloads PerfLogs Sabre Licer	E widgets	4/2/2014 10:22 AM File folder	
4 items			
3. Right click in the right pane in Windows Explorer and then left click on the "**Paste**" menu item.

C:\Prog	ram	Files\SJPM\server\devroot	✓ ⁴ → Sei	arch devroot	٩
Organize 👻 Inclue	de ir	n library 🔻 Share with 👻 New folder			:= - 🗋 🔞
Documents	*	Name	Date modified	Туре	Size
J Music		instances	4/2/2014 12:30 PM	File folder	
Pictures		prototypes	4/2/2014 1:06 PM	File folder	
Videos		퉬 templates	4/2/2014 10:22 AM	File folder	
Computer Local Disk (C:) Jisapi Downloads PerfLogs Program Files Sabre Licer	H	widgets	4/2/2014 10:22 AM	File folder	
4 items					

4. The "Confirm Folder Replace" window will appear. Click on the "Yes" button.

Confirm	Folder Replace
	This destination already contains a folder named 'instances'.
	If any files have the same names, you will be asked if you want to replace those files.
	Do you still want to merge this folder
	instances Date created: 4/2/2014 1:40 PM
	with this one?
	instances Date created: 4/2/2014 1:08 PM
	Yes <u>N</u> o

5. If the "**Destination Folder Access Denied**" window appears. Click on the "**Continue**" button.

Destinatio	on Folder Access Denied	×
<u> </u>	You'll need to provide administrator permission to copy to this folder instances Date created: 4/2/2014 1:40 PM	
	Continue Skip Cancel	
	Do this for <u>all current items</u> (5 found)	

6. In the SJPM Client GUI click on the "**Restart**" button. The "**SJPM – Confirm Restart**" popup window will appear. Click on the "**OK**" button.

Sabre Java Printing Module (SJPM)	- 1.8.156					_ 0 💌
Devices						Restart
						New
Name Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
		SJPM - Cor	nfirm Restart			
		? Res	tart the SJPM server?			
			ОК	Cancel		
						-
Refresh					First	Previous Next Last
SJPM Server: [127.0.0.1] Up						

7. SJPM will restart and the devices will appear ready for use.

Sabre Java Printi	Sabre Java Printing Module (SJPM) - 1.8.156						
Devices							Restart
							New
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
Refresh				Reconnecting		First	Previous Next Last
SJPM Server: [12	7.0.0.1] Restarting	1					

Sabre Java Printing Module (SJPM)	1.8.156					_ 0 🔀
Devices						Restart
				Group Expand All	New Edit	Delete Enable Disable
				Croup Expand Au		
Name Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
Test-1	File	ABC123	Computer Room	🎻 Ready	🎸 Online	
Test-2	File	ABC100	Computer Room	🖌 Ready	🖌 Online	
Test-3	File	ABC101	Lab	🎻 Ready	🎻 Online	
Test-4	File	ABC102	Lab	🎻 Ready	🎻 Online	
Test-5	File	ABC103	Test Room	🎻 Ready	🎸 Online	
Test-6	File	ABC104	Test Room	🎻 Ready	🗹 Online	
Refresh			Devices 1 to 6 of 6		First	Previous Next Last
SJPM Server: [127.0.0.1] Up						

6.1.3.4 Device Restore – Automated Process

Device files must be zipped with an extension of "**.zip**" and no sub-folders for use with the import function of SJPM (**Example:** SJPM_instances_20170131140127636.zip). Follow the steps below to restore your backup of SJPM devices and configurations.

1. Right click on the "SJPM Windows System Tray Icon" and then click on the "Import Instances" menu item.

		About SJPM	
		Restore	
		Restart Server	
		Export All Instances	
		Import Instances	
		Check for Updates	Γ
		Server Mode	
		Configure SJPM Server	
		Language 🕨 🕨	
		Client Logging	
		Server Logging	
		Exit	
4	1 196	🕩 📴 🎦 🏴 12:31 P	М

2. The "SJPM TN – Confirm Import" popup window will appear. Click on the "Choose File" button. The "Open ZIP File" window will appear.



🧕 Open ZIP File				—
SJPM 🕨 clien	t 🕨 QtClient 🕨	▼ 4 j	Search QtClient	Q
Organize 🔻 New folder				
 ★ Favorites ▲ N ■ Desktop ▲ Downloads ■ Recent Places ■ Libraries ■ Documents ▲ Music 	ame html		Date modified 3/6/2017 11:55 AM 3/6/2017 11:55 AM	Type File folder File folder
Pictures Videos Computer				
😵 CD Drive (D:) Virt ▼ 🔸 🔤 File <u>n</u> ame:		•	ZIP Files (*.zip) Open ▼ C	► Cancel

3. Navigate to the location of your instances zip file and select it. Then click on the "**Open**" button.

🧟 Open ZIP File		×
😋 🕞 🗢 📔 « Local Di	► SJPM Instances Backup ► 👻 🍫	Search SJPM Instances Backup 👂
Organize 🔻 New folde	r	= - 1 💿
🔶 Favorites	Name	Date modified Type
	SJPM_instances_20170302142355660.zip	3/2/2017 2:27 PM Compresse
Cibraries		
🖳 Computer		
🏭 Local Disk (C:)		
🥳 CD Drive (D:) Virtual		
🙀 vmshare (\\10.0.2.2)		
🙀 vmshare (\\10.16.38.		
🙀 Network		
	•	4
File <u>n</u> a	ame: SJPM_instances_2017030214235566(-	ZIP Files (*.zip)
		<u>Open</u> ▼ Cancel

4. Then on the "SJPM TN – Confirm Import" popup window click on the "Import" button.



5. Then on the "SJPM TN – Import Status" popup window click on the "OK" button.

🖲 SJPM	- Import Status
i	All files imported successfully
	ОК

SJPM will restart and the devices will display in the SJPM Client GUI.

Sabre Java Printing Module (SJPM) -	1.8.156				- • •
Devices					Restart
			Group Expand All	New Edit Delete	Enable Disable
Name	Type LNIATA	Location	Host Status	Device Status Tr	ansaction Status 🔺
Test-88	File 000000	Computer Room	🎻 Ready	🎸 Online	
Test-99	System 000000	Computer Room	🎻 Ready	🎻 Online	
Refresh		Devices 1 to 2 of 2		First Pre	vious Next Last
SJPM Server: [127.0.0.1] Up					

This section describes the procedures for setting up SJPM failsafe Scenarios. There are two possible failsafe scenarios (**Running Two SJPM installs** and **Running One SJPM install**).

6.1.4.1 Failsafe Scenario One - Running Two SJPM Installs

In **Failsafe Scenario One** install SJPM on two (2) different operationally ready PCs in your office (**both PCs will require Sabre connectivity**). Each of the PCs will run SJPM simultaneously and will be configured with all of the devices. However, each PC will have only half of the devices enabled as described below.

- **PC One (1)** will have the first half of the devices enabled (the disabled second half of the devices are enabled on PC 2).
- **PC Two (2)** will have the second half of the devices enabled (the disabled first half of the devices are enabled on PC 1).

In the case of a failure situation follow the step described below in the "Activation:" section. After the failure has been resolved, restore the failsafe scenario.

Configuration:

- On PC One (1) add and configure all of your devices and then ensure that they are all connecting and working properly (Refer to Section <u>5.1.3.1 Adding Devices</u>). If you have instances files from a previous SJPM installation you can use them to add the devices (Refer to sections <u>6.1.3.3 Device Restore Manual Process</u> and <u>6.1.3.4 Device Restore Automated Process</u>).
- On PC One (1) open Windows Explorer and then go to the "C:\Program Files (x86)\SJPM\server\devroot\instances" directory. Copy all of the instances files in the directory to a thumb drive (Refer to Section <u>6.1.3.1 Device Backup – Manual Process</u> and <u>6.1.3.2 Device Backup – Automated Process</u>).
- On PC Two (2) open Windows Explorer and then go to the "C:\Program Files (x86)\SJPM\server\devroot\instances" directory. Copy all of the instances files collected from PC One (1) in step 2 into the directory (Refer to sections <u>6.1.3.3 Device</u> <u>Restore – Manual Process</u> and <u>6.1.3.4 Device Restore – Automated Process</u>).
- On PC One (1) disable the second half of the total number of devices (Example: If you have 10 total devices configured disable devices 6 through 10) (Refer to Section <u>5.1.4.1</u> <u>Disabling Devices</u>).

On PC Two (2) disable the first half of the total number of devices (Example: If you have 10 total devices configured disable devices 1 through 5) (Refer to Section <u>5.1.4.1</u> <u>Disabling Devices</u>.).

Activation:

On the PC that has not failed enable all of the devices that are disabled (Refer to Section 5.1.4.2 Enabling Devices).

6.1.4.2 Failsafe Scenario Two – Running One SJPM Install

In **Failsafe Scenario Two** install SJPM on two (2) different operationally ready PCs in your office (**both PCs will require Sabre connectivity**). Each of the PCs will run SJPM simultaneously and will be configured with all of the devices. However, only one PC will have the devices enabled as described below.

- **PC One** (1) will be the Primary PC with all of the devices enabled.
- PC Two (2) will be the Secondary PC with all of the devices disabled.

In the case of a failure situation follow the step described below in the "Activation:" section. After the failure has been resolved, restore the failsafe scenario.

Configuration:

- On PC One (1) add and configure all of your devices and then ensure they are all connecting and working properly (Refer to Section <u>5.1.3.1 Adding Devices</u>). If you have instances files from a previous SJPM installation you can use them to add the devices (Refer to sections <u>6.1.3.3 Device Restore – Manual Process</u> and <u>6.1.3.4 Device</u> <u>Restore – Automated Process</u>).
- On PC One (1) open Windows Explorer and then go to the "C:\Program Files (x86)\SJPM\server\devroot\instances" directory. Copy all of the instances files in the directory to a thumb drive (Refer to Section <u>6.1.3.1 Device Backup – Manual Process</u> and <u>6.1.3.2 Device Backup – Automated Process</u>).
- On PC Two (2) open Windows Explorer and then go to the "C:\Program Files (x86)\SJPM\server\devroot\instances" directory. Copy all of the instances files collected from PC One (1) in step 2 into the directory (Refer to sections <u>6.1.3.3 Device</u> <u>Restore – Manual Process</u> and <u>6.1.3.4 Device Restore – Automated Process</u>).
- 4. On **PC One (1)** enable all of the devices (**Example:** If you have 10 total devices configured enable all 10 devices) (Refer to Section <u>5.1.4.1 Disabling Devices</u>).

5. On **PC Two (2)** disable all of the devices (**Example:** If you have 10 total devices configured disable all 10 devices) (Refer to Section <u>5.1.4.1 Disabling Devices</u>).

Activation:

1. On PC Two (2) enable all of the devices (Refer to Section 5.1.4.2 Enabling Devices).

6.1.5 Printing to a Mapped Network Drive Folder – ATB2File, File, and IFQ Drivers

This section describes the procedure for printing to a mapped network drive folder for the "**ATB2File**", "**File**", and "**IFQ**" Drivers. SJPM must be running as an application for this functionality to work (Refer to section 4.1.3 Running SJPM as an Application).

1. In Windows open Windows Explorer and then right click on "**Computer**" and then click on "**Map <u>network drive...</u>**". The "**Map Network Drive**" window will appear.

G	😪 Map Ne	twork Drive	x
	What net	work folder would you like to map? drive letter for the connection and the folder that you want to connect to:	
	Drive:	Z:	
	r <u>o</u> ider:	Example: \\server\share Image: Reconnect at logon Image: Connect using different gredentials Connect to a Web site that you can use to store your documents and pictures.	
		<u>F</u> inish Can	cel

Select a drive letter from the "<u>D</u>rive:" drop down list and then type in the folder path in the "Folder:" field. Also make sure that the "<u>Reconnect at logon</u>" and "Connect using different <u>credentials</u>" checkboxes are checked. Then click on the "<u>Finish</u>" button.

G	😪 Map Ne	twork Drive	×
	What net Specify the o <u>D</u> rive: F <u>o</u> lder:	work folder would you like to map? drive letter for the connection and the folder that you want to connect to: H: \\CATEST50-HP\Oren Example: \\server\share @ Reconnect at logon @ Connect using different credentials Connect to a Web site that you can use to store your documents and pictures.	
		Finish Can	cel

3. The "**Windows Security**" window will appear. Type in the password and then click on the "**OK**" button.

Windows Security	у	×
Enter Netw Enter your pass	rork Password sword to connect to: CATEST50-HP	
	User name Password Domain: CSD-PC Remember my credentials	
	OK Can	cel
Map Network Dri	OK Can	cel
Map Network Dri Attempting to c	OK Can	cel

4. The folder will now be mapped.

~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			×
Comp > Local Disk (C:)	•	✓ ✓ Search Local Disk (C:)	٩
Organize	bility	y files New folder 🔠 🔻 🗍	?
	*	Name	-
4 🖳 Computer		CARDE	Ξ
🛛 🚰 Local Disk (C:)		JAUNE SAUNE	
⊡ 🚅 Oren (\\CATEST50-HP) (H:) ⊕ 🎉 SABRE			
> 🗣 Network	III		Ŧ
	Ŧ	<	Þ.

IMPORTANT:

For the SJPM Server to recognize the mapped folder right click on the "**Notepad**" icon in the "**Start**" menu and select "**Run as <u>a</u>dministrator**". Then using this Notepad try to save a text file on the H drive (mapped drive). Notepad takes a few seconds to change its H drive icon from red to green when you try to save the file there but once the H drive icon is green SJPM will also be able to write its output files to the H drive.

Note: You do not need to save a file into the H drive, just clicking on the red H drive icon in Notepad's file browse dialog box should be sufficient to trigger Windows to do what it needs to do to turn the H drive icon from red to green.

6.1.6 Allow User Rights – Queue and System Drivers

Allow user rights to "Queue" and "System" Drivers:

Setup of the Sabre Java Printing Module (SJPM) Service User is required to allow SJPM access rights to print to any system printers that are configured to be owned by a non-Administrative user and make them visible for configuration in the SJPM "**Queue**" and/or "**System**" Driver's configuration tab.

The following procedure should be completed before addition and configuration of a "**Queue**" or "**System**" device in SJPM if the SJPM user needs to print to system printers configured to be owned by a non-Administrative user.

- In Windows 7 and Windows 8 click on the "Start" button and then click on "Control Panel" (Windows 10 click on the "Start" button, then click on "All apps", then click on "Windows System", and then click on "Control Panel".).
- 2. Click on the "Administrative Tools" icon.

3. Double click on the "Services" icon. This will open the "Services" Window.

Services						×
<u>File Action View</u>	<u>H</u> elp					
	à 📾 🛛 🖬 🖿 🖬 🖬 🖬					
Services (Local)	Services (Local)					
	Sabre Java Printing Module (SJPM)	Name	Description	Status	Startup Type	Lo <u>c</u> ^
		🌼 Remote Registry	Enables rem		Manual	Loc
	Stop the service	Routing and Remote Access	Offers routi		Disabled	Loc
	Kestart the service	鵒 RPC Endpoint Mapper	Resolves RP	Started	Automatic	Net
		🐝 Sabre Java Printing Module (SJPM)	Provides Sa	Started	Automatic	Loc
	Description:	🧠 Sabre Print Service	Sabre Print		Automatic	Loc
	functionality	🎑 Secondary Logon	Enables star		Manual	Loc
	ranceionancy	🔍 Secure Socket Tunneling Protocol	Provides su		Manual	Loc
		🎑 Security Accounts Manager	The startup	Started	Automatic	Loc
		🎑 Security Center	The WSCSV	Started	Automatic (D	Loc
		🔍 Server	Supports fil	Started	Automatic	Loc 👻
		•	m			•
	\Extended (Standard /					

4. Right click on the "Sabre Java Printing Module (SJPM)" service and then click on "Properties". The "Sabre Java Printing Module (SJPM) Properties (Local Computer)" window will appear.

Sabre Java Printing	Module (SJPM) Properties (Local Computer)
General Log On	Recovery Dependencies
Service name:	SJPM_Service
Display name:	Sabre Java Printing Module (SJPM)
Description:	Provides Sabre message printing functionality
Path to executab ''C:\Program Files	le: \\SJPM\server\daemon\prunsrv.exe" //RS//SJPM_Servic
Startup type:	Automatic
Help me configur	e service startup options.
Service status:	Started
Start	Stop Pause Resume
You can specify t from here.	he start parameters that apply when you start the service
Start para <u>m</u> eters:	
<u></u>	OK Cancel Apply

5. Click on the "Log On" tab.

Sabre Java Printing Modul	e (SJPM) Properties (Local Computer)
General Log On Recov	ery Dependencies
Log on as:	
Local System account Allow	eract with desktop
This account:	Browse
Password:	
<u>C</u> onfirm password:	
Help me configure user ad	count log on options.
	OK Cancel Apply

6. Click on the "<u>This account:</u>" radio button.

Sabre Java Printing Mod	lule (SJPM) Properties (Local Computer)
General Log On Rec	overy Dependencies
Log on as:	
Local System according Allow service to	unt interact with desktop
This account:	Browse
Password:	•••••
<u>C</u> onfirm password:	•••••
Help me configure user	account log on options.
	OK Cancel Apply

- In the "<u>This account:</u>" field type in your Windows User name. In the "<u>Password:</u>" field type in your Windows Password. In the "Confirm password:" field type in your Windows Password again. Click on the "OK" button.
- 8. Close the "**Services**" windows and Control Panel and then continue with the SJPM Queue or System device configuration.

6.1.7 Installing SJPM to an Alternate Hard Drive

This section describes the procedure for installing SJPM to an alternate hard drive other than the default (C:\Program Files (x86)\SJPM).

- 1. Run Command Prompt as the administrator.
- 2. From Command Prompt change to the directory where the SJPM installation executable is located.
- 3. From Command Prompt type in "Install_SJPM_TN_x86_32Bit_x.x.xx.exe INSTALLDIR=''Z:\TTT'''. Where "x.x.xx" is the version of SJPM you are installing. Where "Z:\TTT" is the hard drive and directory where SJPM will be installed.

SJPM comes with **Nineteen** (19) Drivers to choose from that handle various and specific data delivery requirements.

SJPM Drivers:

ATB2File, ATB2LPR, ATB2TN, ATB2System, ATB2TNPProxy, File, Group, IFQ, LPR, MQJMS, Printer, Proxy, Queue, RawIP, STPATB1, STPATBINI, STPATB2, STPATB2INI, and System

SJPM Drivers can be selected from the drop down list in the "SJPM – Add Device" popup window which is opened by clicking on the "New" button in the SJPM Client GUI.



SJPM also provides "**Print Data Request**" for its drivers that is used to pass data, either URL encoded, as JSON or as XML document, to a device for printing. The format of the data in the request body should be specified by means of the HTTP header "**Content-Type**".

Note: This is a **POST** request, not a GET.

Refer to **Appendix L. Print Data Request** for details on print data request.

The "**ATB2File**" Driver allows the user to send data from the Sabre Host to file with various configuration options. The "**ATB2File**" device emulates the physical ATB2 printer. PECTABS for the "**ATB2File**" device are stored in a similar way as they are in the physical ATB2 printer and the same printing management will apply as it did with the physical ATB2 printer.

For example; if the PECTABs are lost in the "**ATB2File**" device (**SJPM PECTABs missing Error:** "An error occurred during printing: ATB2 Message Handler Exception; PECTAB "T" needed to process Document not found; ATB2 PECTAB T not found") then it will be necessary to resend the PECTABs from Sabre to the "**ATB2File**" device using the

"W*ATLNIATA/RESTORE" command where LNIATA is the ATB2 printer's LNIATA.

Refer to <u>Appendix F</u> for details on file Encryption and Decryption.

Refer to Section <u>6.1.5 Printing to a Mapped Network Drive Folder – ATB2File, File, and IFQ</u> <u>Drivers</u> for details on printing to a mapped network drive.

Refer to <u>Appendix H. Creating and Loading ATB2 Virtual Stock</u> for details on ATB2 Virtual Stock.

Refer to <u>Appendix K</u> for terminology on **Remote File Services** that are available in the destination selection.

Usage:

The "**ATB2File**" Driver should be used if the user needs to send ATB2 data from the Sabre Host to a file and no ticket coupons are required; or for coupon archive purposes. Users can also create their own custom stock to use with the "**ATB2File**" Driver. The "**ATB2File**" device's output is a file on the PC's hard drive. The "**ATB2File**" Driver supports various output file types; **BMP**, **JPG** (**default**), **PDF**, **PNG**, and **Postscript**. The output files can be configured with a filename and Numeric or Timestamp naming conventions with the extension of the selected output file format. The "**Multiple**" selection configuration has also been enhanced with the addition of "**Add Supplemental File Ext.**" and "**Supplemental File Extension**" to provide common, configurable extensions for the "**Numeric**" and "**Timestamp**" selections. The "**ATB2File**" driver also provides remote network file delivery and, file encryption for security purposes.

The screenshots below show the "ATB2File" Driver's configuration tab.

"ATB2File" configuration tab – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.118	
Devices Test-1 🖾	Restart
Device: Test-1 (ATB2File)	
Physical Device Location:	
Location:	
Font Settings:	
Customize Basic Font Settings:	
Customize Extended Font Settings:	
Printer Settings:	
Output Format: BMP OJPG PDF PNG PostScript	E
Print to Single or Multiple File(s): Single	
Filename: SJPM	
Maximum File Size: 1024000	
Destination: Please select an option 🔻	
- Multiple:	
File Extension: Numeric I Timestamp	
Add Supplemental File Ext.: 🕅	
Supplemental File Extension: jpg	
Maximum # of Files in Directory: 999	
Encryption:	
File Encryption: Enabled Disabled	
Public Key File Path: public.key	
Host Settings:	
Connection Type: HSSP None	
LNIATA:	-
SJPM Server: [127.0.0.1] Up	



"ATB2File" configuration tab with "Customize Basic Font Settings" and Customize Extended Font Settings" selected – Default Settings:

Sabre Java Printing Module (SIPM) - 1.8.118	- • •
Devices Test-1 🖾	Restart
Device: Test-1 (ATB2File)	
- Physical Device Location:	
Location:	
Customize Basic Font Settings: 📝	
Customize Extended Font Settings: 🗹	
Basic Font:	
Name: Please select an option	
Scaling factor (%): 100	
Extended Font:	
Name: Please select an option 👻	
Scaling factor (%): 100	
Defek ka Grade sa Muktela Filo (a) Grade (a) Muktela	
Filesanae Class	
Maximum File Sizer 1024000	
Destination: Blasse select an option	
-Multiple:	
File Extension: () Numeric () Timestamp	
Add Supplemental File Ext.: 🕅	
Supplemental File Extension: jpg	
Maximum # of Files in Directory: 999	
IPM Server: [127.0.0.1] Up	

"ATB2File" configuration tab with "Local Filesystem" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.89	
Devices Test-1 🖾	Rest
Device: Test-1 (ATB2File)	
-Physical Device Location:	
Location:	
Printer Settings:	
Output Format: BMP O JPG PDF PNG PostScript	
Print to Single or Multiple File(s): Single	
Filename: SJPM	
Mandaum File Fires 403 4000	
Destination: Local Filesystem 💌	
Directory Settings:	
Directory Path: C:\Program Files (x86)\SJPM\Ou	
matapie.	
File Extension: Numeric O Timestamp	
Add Supplemental File Ext.:	
Supplemental File Extension: jpg	
Supplemental File Extension: jpg Maximum # of Files in Directory: 999	
Supplemental File Extension: jpg Maximum # of Files in Directory: 999	
Supplemental File Extension: jpg Maximum # of Files in Directory: 1999 Encryption:	
Supplemental File Extension: jpg Maximum # of Files in Directory: 999 Encryption: File Encryption: ©Enabled @Disabled	
Supplemental File Extension: jpg Maximum # of Files in Directory: 999 Encryption: File Encryption: ©Enabled Public Key File Path: public.key	
Supplemental File Extension: jpg Maximum # of Files in Directory: 999 Encryption: File Encryption: Enabled Public Key File Path: public.key Host Settings:	
Supplemental File Extension: jpg Maximum # of Files in Directory: 999 Encryption: File Encryption: Enabled Public Key File Path: public.key Host Settings: Connection Type: @ HSSP None	
Supplemental File Extension: jpg Maximum # of Files in Directory: 999 Encryption: File Encryption: Enabled @ Disabled Public Key File Path: public.key Host Settings: Connection Type: @ HSSP None LNIATA:	
Supplemental File Extension: jpg Maximum # of Files in Directory: 999 Encryption: File Encryption: Enabled @ Disabled Public Key File Path: public.key Host Settings: Connection Type: @ HSSP	

"ATB2File" configuration tab with "Network Share, FTP, FTPS, FTPES, SCP, SFTP, CIFS/SMB1, or SMB2/SMB3" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.89	- 0 💌
Devices Test-1 🖾	Restart
Device: Test-1 (ATB2File)	
Physical Device Location:	
Location:	
Printer Settings:	
Output Format: BMP O JPG PDF PNG PostScript	
Print to Single or Multiple File(s): Single	
Filename: SJPM	=
Her Journe File Street (00 4000	
Destination: Network Share 🔻	
Remote Host Information:	
Remote Host:	
Network Share:	
Port: 445	
Directory Subpath:	
User Name:	
Password:	
mataphy	
File Extension: 🔘 Numeric 💿 Timestamp	
Add Supplemental File Ext.: 📃	
Supplemental File Extension: jpg	
Maximum # of Files in Directory: 999	
Encryption:	
File Encryption: (*) Enabled	-
CIPAL Comments (1977 0.0.4) Un	
SPW Server: [127.0.0.1] up	

"ATB2File" Driver Configuration Options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Font Settings:"

"Customize Basic Font Settings:"

The "Customize Basic Font Settings" selection, when selected, will display the "Basic Font" box. The default is unchecked.

"Customize Extended Font Settings:"

The "**Customize Extended Font Settings**" selection, when selected, will display the "**Extended Font**" box. The default is unchecked.

"Basic Font:"

The "**Basic Font**" box will display when "**Customize Basic Font Settings**" is selected from the "**Font Settings**" box.

"Font:"

The "Font" selection sets the font to use with the "ATB2File" Device. The default is set to "Please select an option...".

"Scaling Factor (%):"

The "Scaling Factor (%)" configuration sets the percentage to scale the selected font. The default is set to "Please select an option...".

"Extended Font:"

The "**Extended Font**" box will display when "**Customize Extended Font Settings**" is selected from the "**Font Settings**" box.

"Font:"

The "Font" selection sets the font to use with the "ATB2File" Device. The default is set to "Please select an option...".

"Scaling Factor (%):"

The "Scaling Factor (%)" configuration sets the percentage to scale the selected font. The default is set to "Please select an option...".

"Printer Settings:"

"Output Format:"

The "Output Format" selection sets the output file type. The default is set to "JPG".

Available selections are:

"BMP"

"JPG"

"PDF"

"PNG"

"PostScript"

"Print to Single or Multiple File(s):"

The "**Print to Single or Multiple File**(s)" selection is disabled in the "**ATB2File**" Driver and is defaulted to "**Multiple**". This selection cannot be changed for the "**ATB2File**" Driver.

"Multiple"

• For multiple file creation. With this option selected SJPM will generate a unique filename for each file created based on configuration settings in the "**Multiple**" box.

"Filename:"

The "**Filename**" configuration is for the name that will be used to name the files when they are created. This field should not include a file extension. The default is set to "**SJPM**".

"Maximum File Size:"

The "**Maximum File Size**" configuration is for the maximum file size limit that will be used when writing to each file. The default is set to "**1024000**". If this configuration is set lower you could receive an error in SJPM for the device. For example; "**An error** occurred during printing: Maximum file size limit exceeded".

"Destination:"

The "**Destination**" selection sets the destination of the output files. The default is set to "**Please select an option...**".

Refer to <u>Appendix K</u> for terminology on **Remote File Services** that are available in the destination selection.

Available selections are:

"Local Filesystem"

"Network Share"

"FTP"

"FTPS"

"FTPES"

"SCP"

"SFTP"

"CIFS/SMB1"

"SMB2/SMB3"

"Directory Settings:"

The "**Directory Settings**" box will display when "**Local Filesystem**" is selected from the "**Destination**" drop down list.

"Directory Path:"

The "**Directory Path**" configuration is for the location where the files will be created (**Example:** "**C:\Test**\"). The default is set to "**C:\Program Files\SJPM\Output**\" for 32bit operating systems and "**C:\Program Files (x86)\SJPM\Output**\" 64bit operating systems.

"Remote Host Information:"

The "**Remote Host Information**" box will be displayed when "**Network Share**", "**FTP**", "**FTPS**", '**FTPES**", "**SCP**", "**SFTP**", "**CIFS/SMB1**", or "**SMB2/SMB3**" is selected from the "**Destination**" drop down list.

"Remote Host:"

The "**Remote Host**" configuration sets the IP address, hostname, or computer name of the machine where the share exists. The default is blank.

"Network Share:"

The "**Network Share**" configuration sets the name of the network share. The default is blank.

"Port:"

The "Port" configuration sets the remote host's port that will be connected.

Defaults are:

Network Share, CIFS/SMB1 and SMB2/SMB3 = 445

(By default port 445 is used, which uses the SMB protocol. If this is changed to another value, the Network Share will connect using the WebDav protocol.)

FTP and FTPES = 21

FTPS = 990

SCP and **SFTP** = 22

"Directory Subpath:"

The "**Directory Subpath**" configuration sets the **optional** directory subpath under the network share where files will be written. The default is blank.

"User Name:"

The "User Name" configuration sets user name connecting to the network share. The default is blank.

"Password:"

The "**Password**" configuration sets the password of the user connecting to the network share. The default is blank.

"Multiple:"

"File Extension:"

The "File Extension" selection is for the output files extension.

Available selections are:

"Numeric"

• For setting the filename for BMP, JPG, PDF, PNG, and PostScript output file formats to be the name configured in the "**Filename**" configuration plus a three digit extension starting at "**.000**".

For example, for "**JPG**" output format, the filename will be "**SJPM.000**". "**Timestamp**"

 For setting the file name for BMP, JPG, PDF, PNG, and PostScript output file formats to be the name configured in the "Filename" configuration plus the current <u>veardatetime</u>. This selection is set as default.

For example, for "**JPG**" output format, the filename will be "**SJPM20130329165816397.jpg**".

"Add Supplemental File Ext.:"

The "Add Supplemental File Ext." selection activates the "Supplemental File Extension" field and adds the configured extension to the output files. The default is unchecked.

"Supplemental File Extension:"

The "**Supplemental File Extension**" field is activated by the "**Add Supplemental File Ext.**" checkbox. The default is set to that of the file type selected in the "**Output Format**" option. The configured extension will be added to the end of the output files.

For example, for "**JPG**" output format and "**Numeric**" file extension, the filename will be "**SJPM.000.jpg**".

"Maximum # of Files in Directory:"

The "**Maximum # of Files in Directory**" configuration is for the maximum number of files allowed to be created in the Directory Path. This field is defaulted to "**999**", the maximum setting allowed. This configuration is only available when the "**Numeric**" file extension radio button is selected. If you require more than 999 files to be stored in the Directory Path then use the "**Timestamp**" selection. If this configuration is set low or the configured value is met, you will receive an error in SJPM for the device. For example; "**An error occurred during printing: Maximum output file limit reached**".

Note: If the number of files in the directory equals the set limit (**999**) SJPM will receive an error, stop sending data and the Sabre Queue will go on hold after the Host retries are completed. If this occurs then clear the directory path of its files and restart the Sabre Queue.

"Encryption:"

Refer to <u>Appendix F</u> for details on file Encryption and Decryption.

"File Encryption:"

The "File Encryption" selection sets file encryption.

Available selections are:

"Enabled"

• For setting file encryption to be enabled. This selection will encrypt all files written by SJPM for this device and decryption will be necessary to read them.

"Disabled"

• For setting file encryption to be disabled. This selection is set as default.

"Public Key File Path:"

The "**Public Key File Path**" configuration is for the location where the public key file will be located. This configuration is only available when the "**File Encryption**" "**Enabled**" radio button is selected.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host. This selection is set as default.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "access.sabre.com".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

Refer to section <u>6.1.1 Supplemental Hosts Configuration – Applies to All Drivers</u> for a detailed explanation.

The "**ATB2LPR**" Driver allows the user to send ATB2 data from the Sabre Host as an image to a non-ATB2 printer with various configuration options.

Refer to <u>Appendix M. LPR/LPD Printing (SJPM "ATB2LPR" and "LPR" Drivers)</u> for a detailed explanation.

Usage:

The "**ATB2LPR**" Driver should be used if the user needs to send ATB2 data from the Sabre Host to a non-ATB2 printer and no ticket coupons are required. This driver creates an image of the output similar to the "**ATB2File**" driver but instead of sending it to file it sends the ATB2 data directly to a network printer via IP eliminating any possible issues with user rights.

The screenshots below show the "ATB2LPR" Driver's configuration tab.

evrces Test-2 🖾	Rest
Device: Test-2 (ATB2LPR)	
Location.	
ont Settings:	
Customize Basic Font Settings: 📃	
Customize Extended Font Settings: 🗐	
Printer Settings:	
Host:	
Port 515	
line Maren	
-Dage Setury	
Size Letter -	
-Orientation:	
Jack Cathlann	
Connection Type:	
Primary Host	
supplemental hosts. Supplemental hostname:	
Aud Configured Constants I United	
Configured Supplemental Hosts:	

"ATB2LPR" configuration tab – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.150	×
Devices Test-2 🖾	art
Printer Settings:	
Host:	
Port: 515	
Queue:	
User Name:	
Page Setup:	
Size: Letter 👻	
Orientation:	
Portrait O Landscape	
Host Settings:	
Connection Type: HSSP None	
LNIATA:	
Primary Host: access.sabre.com	
Supplemental Hosts: Supplemental Hostname:	
	Ξ
Configured Supplemental Hosts:	
*	
*	
Remove Selected	
Enable Extended Characters:	
Save	
	-
SJPM Server: [127.0.0.1] Up	

"ATB2LPR" configuration tab with "Customize Basic Font Settings" and Customize Extended Font Settings" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.118	- • •
Devices Test-2 🖾	Restart
Device: Test-2 (ATB2LPR)	
Physical Device Location:	
Location:	
- Font Settings:	
Customize Basic Font Settings: 🕢	
Customize Extended Font Settings: 📝	
Basic Font:	
Name: Please select an option 🔻	=
Scaling factor (%): 100	
Extended Font:	
Name: Please select an option	
Scaling factor (%): 100	
Printer Setangs:	
Host:	
Port: 515	
Queue:	
User Name:	
Fage Setup:	
- Orientation:	
Portrait Candscape	
Host Settings:	
Connection Type:	-
SJPM Server: [127.0.0.1] Up	

"ATB2LPR" Driver Configuration Options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Font Settings:"

"Customize Basic Font Settings:"

The "Customize Basic Font Settings" selection when selected will display the "Basic Font" box. The default is unchecked.

"Customize Extended Font Settings:"

The "**Customize Extended Font Settings**" selection when selected will display the "**Extended Font**" box. The default is unchecked.

"Basic Font:"

The "**Basic Font**" box will display when "**Customize Basic Font Settings**" is selected from the "**Font Settings**" box.

"Font"

The "Font" selection is for the Font to use with the "ATB2LPR" Device. The default is set to "Please select an option...".

"Scaling Factor (%)"

The "Scaling Factor (%)" configuration is for setting the percentage to scale the selected Font. The default is set to "Please select an option...".

"Extended Font:"

The "**Extended Font**" box will display when "**Customize Extended Font Settings**" is selected from the "**Font Settings**" box.

"Font"

The "Font" selection is for the Font to use with the "ATB2LPR" Device. The default is set to "Please select an option...".

"Scaling Factor (%)"

The "Scaling Factor (%)" configuration is for setting the percentage to scale the selected Font. The default is set to "Please select an option...".

"Printer Settings:"

"Host:"

The "Host" configuration sets the LPR printer's hostname/IP. The default is blank.

"Port:"

The "**Port**" configuration sets the LPR printer's port to connect to. The default is "**515**".

"Queue:"

The "Queue" configuration option sets the LPR printer's queue. The default is blank.

"User Name:"

The "**User Name**" configuration sets the LPR printer's user name connecting to the printer. The default is blank.

"Page Setup:"

"Size:"

The "Size" is for the selection of the Paper Size. The default is set to "Letter".

Available selections are:

"Letter" "A0" "A1" "A2" "A3" "A4"

"Orientation:"

The "Orientation" selection sets the page orientation. The default is set to "Portrait".

Available selections are:

"Portrait"

• For the Portrait orientation.

"Landscape"

• For the Landscape orientation.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "**access.sabre.com**".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

Refer to section <u>6.1.1 Supplemental Hosts Configuration – Applies to All Drivers</u> for a detailed explanation.

6.2.3 ATB2System Driver

The "**ATB2System**" Driver allows the user to send data from the Sabre Host to a Network printer with various configuration options. The "**ATB2System**" device emulates the physical ATB2 printer. PECTABS for the "**ATB2System**" device are stored in a similar way as they are in the physical ATB2 printer and the same printing management will apply as it did with the physical ATB2 printer.

For example; if the PECTABs are lost in the "**ATB2System**" device (**SJPM PECTABs missing Error:** "An error occurred during printing: ATB2 Message Handler Exception; PECTAB "T" needed to process Document not found; ATB2 PECTAB T not found") then it will be necessary to resend the PECTABs from Sabre to the "**ATB2System**" device using the "**W*ATLNIATA/RESTORE**" command where **LNIATA** is the ATB2 printer's LNIATA.

- Note 1: To ensure proper functionality with the SJPM "ATB2System" Driver, the driver for the Network printer you plan to print to should be downloaded from the manufacturer's website and installed. Do not use the driver for the printer that comes with Windows.
- **Note 2:** Due to a limitation with the way that Java's print service library is implemented, both the paper **Size** and **Source** cannot be specified and provided to the printer at the same time. Furthermore, any print job generated with the **Source** selection results in the page **Size** being set to the default of your locale (for example: NA Letter for North America). If the selected tray has any other media besides the default, the print job will fail to print. If printing to a specific media **Size** is required, use the **Size** selection and configure the printer to print from a specific bin using that size. The SJPM Team is hoping that future Java updates will provide more features that allow both **Size** and **Source** selections for a specific printer.

Refer to Section <u>6.1.6 Allow User Rights – Queue and System Drivers</u> for details on user rights configurations.

Refer to <u>Appendix H. Creating and Loading ATB2 Virtual Stock</u> for details on ATB2 Virtual Stock.

Usage:

The "**ATB2System**" Driver should be used if the user needs to send ATB2 data to a non-ATB2 system printer and no ticket coupons are required. This driver creates an image of the output similar to the "**ATB2File**" driver but instead of sending it to file it sends the ATB2 data directly to a system printer.

The screenshots below show the "ATB2System" Driver's configuration tab.

"ATB2System" configuration tab – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.150	- • •
Devices Test-3 🖾	Restart
Device: Test-3 (ATB2System)	
Physical Device Location:	
-Font Settings:	
Customize Basic Font Settings:	
Customize Extended Font Settings:	=
- Printer Settings:	
Printer: Please select an option	
Printer Mode: Text Only (e.g. dot matrix) © Graphics (e.g. laser)	
- Oraphics (e.g. user):	
Paper:	
Size Source	
Size: None Available	
Source: None Available	
Orientation:	=
Portrait O Landscape	
Margins:	=
Units of Measure: Millimeters	
Ton: 1.0	
Left: 1.0	
Bottom: 1.0	
Right: 1.0	Ŧ
SJPM Server: [127.0.0.1] Up	

Sabre Java Printing Module (SIPM) - 1.8.150	×
Devices Test-3 🖾 Resta	irt
Units of Measure: Inches: Inches: Top: 1.0 Left: 1.0 Bottom: 1.0 Right: 1.0 Fit To Page: Fit	
Host Settings: Connection Type: HSSP None LNIATA: Primary Host: access.sabre.com Supplemental Hosts: Add Configured Supplemental Hosts:	m
Enable Extended Characters:	

"ATB2System" configuration tab with "Customize Basic Font Settings" and Customize Extended Font Settings" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.124	- • •
Devices Test-3 🖾	Restart
Device: Test-3 (ATB2System)	
Physical Device Location:	
Font Settings: Customize Basic Font Settings: Customize Extended Font Settings: Basic Font: Name: Please select an option	
Scaling factor (%): 100 Extended Font: Name: Please select an option Scaling factor (%): 100	
Printer Setungs: Printer: Please select an option Printer Mode: Text Only (e.g. dot matrix) Graphics (e.g. laser) - Page Setup:	
Size Size Source Size: None Available Source: None Available	
SJPM Server: [127.0.0.1] Up	

"ATB2System" configuration tab with a printer selected – Default Settings:

Devices Test.3 Restart Printer Settings: Printer: HP Universal Printing PCL 6 (r6.3.0) ▼ Printer Mode: Text Only (e.g. dot matrix) ③ Graphics (e.g. laser) Graphics (e.g. laser): Page Setup: Page Setup: ● Size Source Size: Default ▼ Orientation: ● Portrait Landscape Margins: Units of Measure: Inches: Top: 1.0
Printer Settings: Printer: HP Universal Printing PCL 6 (v6.3.0) Printer Mode: Text Only (e.g. dot matrix) Graphics (e.g. laser): Page Setup: Page Setup: Size Source Size Default Source: Default Orientation: Portrait Landscape Margins: Units of Measure: @ Inches Top: 1.0
Printer: HP Universal Printing PCL 6 (v6.3.0) Printer Mode: Text Only (e.g. dot matrix) Graphics (e.g. laser) Fage Setup: Page Setup: Page Setup: Size: Default Source: Default Orientation: Portrait Landscape Margins: Units of Measure: @ Inches Millimeters Top: 1.0
Printer Mode: Text Only (e.g. dot matrix) Graphics (e.g. laser) Graphics (e.g. laser): Page Setup: Page Setup: Size Source Size Graut Source: Defaut Orientation: Portrait Landscape Margins: Units of Measure: Inches Millimeters Top: 1.0
Graphics (e.g. laser): Page Setup: Page Setup: Page Setup: Size Source Size Default Source: Default Orientation: Portrait Landscape Margins: Units of Measure: @ Inches Millimeters Top: 1.0
Page Setup: Page Setup: Paper: Size Source Size Default Orientation: Orientation: Units of Measure: @ Inches Top: 1.0
Paper: © Size Source Size Source Source: Default Orientation: © Portrait Units of Measure: Inches: Top: 1.0
Surce Source Size Default Source: Default Orientation: Portrait Landscape Margins: Units of Measure: @ Inches Inches: Top: 1.0
Source: Default Source: Default Orientation: Portrait Landscape Margins: Units of Measure: Inches Top: 1.0
Orientation:
Orientation: Portrait Landscape Margins: Units of Measure: Inches: Top: 1.0
Margins:
Margins:
Units of Measure: Inches: Top: 1.0
Top: 1.0
Top: 1.0
Left 10
rit to Page:
Interage.
Connection Type: HSP None
LNIATA:
SJPM Server: [127.0.0.1] Up

"ATB2System" Driver Configuration Options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Font Settings:"

"Customize Basic Font Settings:"

The "Customize Basic Font Settings" selection when selected will display the "Basic Font" box. The default is unchecked.

"Customize Extended Font Settings:"

The "Customize Extended Font Settings" selection when selected will display the "Extended Font" box. The default is unchecked.

"Basic Font:"

The "**Basic Font**" box will display when "**Customize Basic Font Settings**" is selected from the "**Font Settings**" box.

"Font"

The "Font" selection is for the Font to use with the "ATB2File" Device. The default is set to "Please select an option...".

"Scaling Factor (%)"

The "Scaling Factor (%)" configuration is for setting the percentage to scale the selected Font. The default is set to "Please select an option...".

"Extended Font:"

The "**Extended Font**" box will display when "**Customize Extended Font Settings**" is selected from the "**Font Settings**" box.

"Font"

The "Font" selection is for the Font to use with the "ATB2File" Device. The default is set to "Please select an option...".

"Scaling Factor (%)"

The "Scaling Factor (%)" configuration is for setting the percentage to scale the selected Font. The default is set to "Please select an option...".

"Printer Settings:"

"Printer"

The "**Printer**" selection is for selection of the system printer you want to use to print to. The default is set to "**Please select an option...**".

"Printer Mode:"

The "**Printer Mode**" selection sets the print mode. The default is set to "**Graphics Only (e.g. laser**)" and cannot be changed for the "**ATB2System**" Driver. The "**ATB2System**" Driver only provides graphics printing not text only.

"Graphics (e.g. laser):"

"Page Setup:"

"Paper:"

The "Paper" selection sets the paper size or source. The default is set to "Size".

Available selections are:

"Size"

• For the paper size. This selection activates the "Size" option to set the paper size.

"Source"

• For the paper source. This selection activates the "**Source**" option to set the paper source.

"Orientation:"

The "Orientation" selection sets the page orientation. The default is set to "Portrait".

Available selections are:

"Portrait"

• For the Portrait orientation.

"Landscape"

• For the Landscape orientation.

"Margins:"

The "Margins" configuration sets the Top, Left, Bottom, and Right Margin size.

"Units of Measure:"

The "**Units of Measure**" selection sets the margins units of measure. The default is set to "**Inches**" and "**1.0**" for all margins.

Available selections are:

"Inches"

• For measure in inches.

"Millimeters"

• For measure in millimeters.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "access.sabre.com".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

Refer to section <u>6.1.1 Supplemental Hosts Configuration – Applies to All Drivers</u> for a detailed explanation.

The "**ATB2TN**" Driver allows the user to send ATB2 data from the Sabre Host to a "**Sabre Certified**" ATB2 printer with various configuration options.

Usage:

The "**ATB2TN**" Driver should be used if the user needs to send ATB2 data from the Sabre Host to a physical, "**Sabre Certified**", ATB2 printer such as the IER577 or Journey printer.

The screenshots below show the "ATB2TN" Driver's configuration tab.

"ATB2TN" configuration tab – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.89	
Devices Test-4	Restart
Device: Test-4 (ATB2TN)	Ē
- Physical Device Location:	
Location:	
-Printer Settings:	
Disable LRC/DRC:	
- Serial Settings:	
COM Port: Please select an option	
Baud Rate: 9600 👻	
Data Bits: 🛛 💌	
Parity: none 💌	
Stop Bits: 1 V	
- Group Settings:	
Enable Group Settings:	
Host Settings:	
Connection Type: HSSP None	
LNIATA:	
Primary Host: access.sabre.com	
Supplemental Hosts: Supplemental Hostname:	
Add	
Configured Supplemental Hosts:	
A	
+	
	1
Sabre Java Printing Module (SJPM) - 1.8.150	×
---	-----
Devices Test-4 🖾	ırt
Disable LRC/DRC:	
Serial Settings:	
COM Port: Please select an option 🔻	
Baud Rate: 9600 🔻	
Data Bits: 🛽 💌	
Parity: none V	
Stop Bits: 1 💌	
Group Settings:	
Enable Group Settings: 🕅	
Host Settings:	
Connection Type: HSSP	
LNIATA:	
Primary Host: access.sabre.com	
Supplemental Hosts: Supplemental Hostname:	E
Add	
Remove Selected	
Enable Extended Characters:	
Save	
	-
SJPM Server: [127.0.0.1] Up	

"ATB2TN" configuration tab with "Enable Group Settings" selected with no device(s) available -**Default Settings:**

Devices Tes		Resta
	Device: Test-4 (ATB2TN)	
Physical Device	ncation:	
,	Location:	
Printer Setting		
	Disable LRC/DRC:	
Serial Settings		
	COM Port. Desce celect an option	
	Pour Dates Select an option	
	Data Bits: 8 V	
	Parity: none -	
	Stop Bits: 1 💌	
Group Setting		
	Enable Group Settings: 💹	
Group Devic	:	
	Include in Group: No Devices Available	
nose secongs.		
	Connection Type: HSSP None	
	LNIATA:	
	Primary Host: access.sabre.com	
	Supplemental Hosts: Supplemental Hostname:	
	Add	
	Configured Supplemental Hosts:	

"ATB2TN" configuration tab with "Enable Group Settings" selected with device(s) available – Default Settings:

🔄 Sabre Java Printing Module (SJPM) - 1.8.89 💼 📧						
Devices Test-4 🖾	Restart					
Device: Test-4 (ATB2TN)						
Physical Device Location:						
Location:						
Printer Settings:						
Disable LRC/DRC:						
- Serial Settings:						
COM Port: Please select an option						
Baud Rate: 9600 V						
Data Bits: 8 💌	E					
Parity: none						
- Group Settings:						
Group Devices:						
Include in Group: Test-99						
Connection Type: Mone						
LNIATA:						
Primary Host: access.sabre.com						
Supplemental Hosts: Supplemental Hostname:						
Add						
Configured Supplemental Hosts:						
SJPM Server: [127.0.0.1] Up	SJPM Server: [127.0.0.1] Up					

"ATB2TN" Driver Configuration Options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Printer Settings:"

"Disable LRC/DRC:"

The "**Disable LRC/DRC**" selection sets the option to disable the LRC/DRC validation. This selection is unchecked as default.

"Serial Settings:"

"COM Port:"

The "**COM Port**" selection sets the COM port. Select the COM port that the printer is connected to on the PC running SJPM. The default is set to "**Please select an option...**".

Available selections will vary by PC according to their hardware configuration.

"Baud Rate:"

The "**Baud Rate**" selection sets the baud rate for communications with the printer. The default is set to "**9600**". This setting must match the baud rate setting configured in the connected printer.

Available selections are:

1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200

"Data Bits:"

The "**Data Bits**" selection sets the data bits for communications with the printer. The default is set to "**8**". This setting must match the data bits setting configured in the connected printer.

Available selections are:

7 and 8

"Parity:"

The "**Parity**" selection sets the parity for communications with the printer. The default is set to "**none**". This setting must match the parity setting configured in the connected printer.

Available selections are:

even, odd, mark, none and space

"Stop Bits:"

The "**Stop Bits**" selection sets the stop bits for communications with the printer. The default is set to "**1**". This setting must match the stop bits setting configured in the connected printer.

Available selections are:

1, 1.5 and 2

"Group Settings:"

"Enable Group Settings:"

The "**Enable Group Settings**" selection enables and displays the "**Group Devices**" box and displays within it the available device(s) that can be selected for this device to print to.

"Group Devices:"

The "Group Devices" box will display when "Enable Group Settings" is selected from the "Group Settings" box.

"Include in Group:"

The "**Include in Group**" selection(s) lists the available device(s) that can be selected for this device to print to. If "**Enable Group Settings**" is selected at least one device must be selected from the "**Include in Group**" list in order to save the device.

Refer to sections 6.2.7 Group Driver and 6.2.7.1 Single Output to Multiple Devices.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "**access.sabre.com**".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

Refer to section <u>6.1.1 Supplemental Hosts Configuration – Applies to All Drivers</u> for a detailed explanation.

The "**ATB2TNProxy**" Driver allows the user to send ATB2 data, from the Sabre Host, from multiple LNIATAs to a single "**ATB2TN**" device (**Multiple to One**); for example, multiple "**ATB2TNProxy**" devices directing their LNIATA's output to a single "**ATB2TN**" device.

IMPORTANT NOTE: Devices to be added to the "**ATB2TNProxy**" device must already exist in SJPM or be created before the "**ATB2TNProxy**" device is created and its configuration can be saved. "**ATB2TN**" devices to be used must have a host connection type of "**None**" selected.

Supported Drivers are as follows:

"ATB2TN" ("ATB2TN" devices used must have a connection type of "None" selected.)

Usage:

The "**ATB2TNProxy**" Driver should be used if the user needs to send ATB2 data, from the Sabre Host, from multiple LNIATAs to a single "**ATB2TN**" device (**Multiple to One**).

The screenshots below show the "ATB2TNProxy" Driver's configuration tab.

"ATB2TNProxy" configuration tab with no device(s) available – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.150			
Devices Test-5 🖾	Restart		
Device: Test-5 (ATB2TNProxy)			
Physical Device Location:			
ATB2TN Proxy Settings: ATB2TN Device: No Devices Available ATB2TN devices listed must have a host connection type of 'None'.			
Inder Setungs. Connection Type: HSSP None LNIATA: Primary Host: access.sabre.com Supplemental Hosts: Configured Supplemental Hosts: Remove Selected Enable Extended Characters: Save Cancel			
SJPM Server: [127.0.0.1] Up			

Sabre Java Printing Module (SJPM) - 1.8.150 - - -Devices Test-5 🖾 Restart Device: Test-5 (ATB2TNProxy) Physical Device Location: Location ATB2TN Proxy Settings: ATB2TN Device: Please select an optic a host connection type of 'None' Test-88 Connection Type: HSSP Non LNIATA: Primary Host: access.sabre.com upplemental Hosts: Supplemental Hostname Add nfigured Suppleme ental Hosts Remove Selected Enable Extended Characters: Cancel Save SJPM Server: [127.0.0.1] Up

"ATB2TNProxy" configuration tab with device(s) available – Default Settings:

"ATB2TNProxy" Driver Configuration Options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"ATB2TN Proxy Settings:"

"ATB2TN Device:"

The "**ATB2TN Device**" selection sets the device you want to use to print to. The default is set to "**Please select an option...**" when "**ATB2TN**" devices are available in SJPM. If there are no "**ATB2TN**" devices available in SJPM then it will display "**No Devices Available**". "**ATB2TN**" devices to be used must have a host connection type of "**None**" selected.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "**access.sabre.com**".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

Refer to section <u>6.1.1 Supplemental Hosts Configuration – Applies to All Drivers</u> for a detailed explanation.

The "**File**" Driver allows the user to send data from the Sabre Host to file(s) in various output formats, to various destinations, and with various configuration options.

Note: In order for the "**File**" Driver to use different fonts other than the standard ones listed, the TrueType font file must be placed into the "**SJPM/server/devroot/fonts**" directory. Only TrueType fonts with the "**.ttf**" extension will be loaded and show in the available fonts list.

Refer to Appendix F for details on file Encryption and Decryption.

Refer to Section <u>6.1.5 Printing to a Mapped Network Drive Folder – ATB2File, File, and IFQ</u> <u>Drivers</u> for details on printing to a mapped network drive.

Refer to <u>Appendix K</u> for terminology on Remote File Services that are available in the destination selection.

Usage:

The "**File**" Driver should be used if the user needs to send data from the Sabre host to file(s) in the output format of TXT, PDF, or PostScript. These file output formats can also be sent via the "**File**" Driver to remote network locations using the "**Destination**" selections. The output files can also be encrypted for security purposes.

The screenshots below show the "File" Driver's configuration tab.

"File" configuration tab – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.137	
Devices Test-6 🖾	Restart
Device: Test-6 (File)	<u> </u>
Physical Device Location:	
Location:	
Printer Settings:	
Output Format: Text PDF PostScript	
Print to Single or Multiple File(s): Single Multiple	
Filename: SJPM	=
Maximum File Size: 1024000	
Destination: Please select an option 💌	
Multiple:	
File Extension: O Numeric O Timestamp	
Add Supplemental File Ext.: 🕅	
Supplemental File Extension: txt	
Maximum # of Files in Directory: 999	
File Encryption: Enabled	
Public Key File Path: public.key	
Device Extended Settings:	
Insert LF After CR: 📝	
Termination Block Segment:	
Insert form feed	
Disable form feed	
Custom terminator	
Number of line feeds after message	
SJPM Server: [127.0.0.1] Up	

۲	Sabre Java	Printing Module (SJPM) - 1.8.150		- • •
	Devices	Test-6 🖾		Restart
П			Insert form feed	
			Disable form feed	
			O Custom terminator	
			Number of line feeds after message	
		Custom Terminato	or: ~OD~OA***EOM***~OD~OA~OC	
			~xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).	
		# of Line Feeds After Messag	ye: 0	
	Insert	Spaces on Empty Lines:		
		Enable spaces on empty line	s: 🗸	
	Hort Sat	tings		
	11050 500	Connection Type:	HSSP None	
		LNIATA:		
		Primary Host:	access.sabre.com	
		Supplemental Hosts:	Supplemental Hostname:	
			Add	
			Configured Supplemental Hosts:	
			A	
				=
			*	
			Remove Selected	
		Enable Extended Characters:		
		Save	Cancel	
		Sure		-
51	M Serve	r: [127 0 0 1] Un		
551				

"File" configuration tab with "PDF" selected – Default Settings:

evices Test-6 🖾	Rest
Device: Test-6 (File)	
Physical Device Location:	
Location:	
Printer Settings:	
Output Format: Text	
Filename: SJPM	
Maximum File Size: 1024000	
Destination: Deace select an ontion	
- Multiple:	
File Extension: Numeric OTimestamp	
Add Supplemental Ele Evt -	
Suppemental rite Extension: pur	
Maximum # of Files in Directory: 999	
PDE/PostScript Settings	
Dage Size:	
- Font Settings	
Font: Diase elect as action	
Point size: Please select an option V	
File Encryption: Cabled Cabled	
Dublic Kay File Dath: nublic kay	
FOUND NOY FRE FALLS. DUDIC-NOY	
Device Extended Settings:	

"File"	configuration	tab with	"Single"	selected -	- Default	Settings:

Sabre Java Printing Module (SIPM) - 1.8.137	• 🗙
Devices Test-6 🖾	Restart
Device: Test-6 (File)	*
-Physical Device Location:	
Location:	
Printer Settings:	_
Output Format: Text PostScript Print to Single or Multiple File(s Filename: SJPM	E
Maximum File Size: 1024000	
Destination: Bease select an option •	_
Single: File Extension: pdf If File Exists: @ Append @ Overwrite	
PDF/PostScript Settings: Page Size: Letter	
Font: Please select an option Font Size: Please select an option	
Encryption:	=
File Encryption: © Enabled © Disabled Public Key File Path: public.key	
Device Extended Settings:	=
Insert LF After CR: 📝	
Termination Block Segment:	
SJPM Server: [127.0.0.1] Up	

"File" configuration tab with "Local Filesystem" selected - Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.137	- • •
Devices Test-6 🖾	Restart
Device: Test-6 (File)	
- Physical Device Location:	
Location:	
- Printer Settings:	
Output Format: Text PDF PostScript	=
Print to Single or Multiple File(s): () Single () Multiple	
Filename: SJPM	
Maximum File Size: 1024000	
Destination: Local Filesystem 👻	
Directory Settings: Directory Path: C:\Program Files (x86)\SJPM\Oul	
Single:	
rite Extension: put	
in ne chasa. Oppenu Soverwitte	
- PDF/PostScript Settings:	
Page Size: Letter 💌	
Font Settings:	
Font: Please select an option 🔻	
Font Size: Please select an option	
- Encryption:	
File Encryption: CEAbled Disabled	
Public Key File Path: public.key	
- Device Extended Settines:	

"File" configuration tab with "Network Share, FTP, FTPS, FTPES SCP, SFTP, CIFS/SMB1, or SMB2/SMB3" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.137	×
Devices Test-6 🖾	art
Device: Test-6 (File)	*
- Physical Device Location:	
Location:	
Printer Settings:	
Output Format: Text PDF PostScript	Ξ
Print to Single or Multiple File(s): Single Multiple	
Filename: SJPM	
Maximum File Size: 1024000	
Destination: Network Share	
Barrota Hort	
New York Control of State	
Der name	
rasworu:	
- angeo.	
File Extension: pdf	
If File Exists: Append	
Pape Strat Lattar	
-Font Settings:-	
Font: Please select an option	
Font Size: Please select an ontion	-
SJPM Server: [127.0.0.1] Up	

"File" Driver Configuration Options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Printer Settings:"

"Output Format:"

The "Output Format" selection sets the output format. The default is set to "Text".

Available selections are:

"Text"

• For text file format.

"PDF"

• For PDF file format.

"PostScript"

• For PostScript file format.

"Print to Single or Multiple Files(s):"

The "**Print to Single or Multiple File(s)**" selection sets printing to a "**Single**" file or "**Multiple**" files. The default is set to "**Multiple**".

Available selections are:

"Single"

• For single file creation.

"Multiple"

• For multiple file creation. With this option selected SJPM will generate a unique filename for each file created.

"Filename:"

The "**Filename**" configuration is for the name that will be used to name the file(s) when they are created. This field should not include a file extension. The default is set to "**SJPM**".

"Maximum File Size:"

The "**Maximum File Size**" configuration is for the maximum file size limit that will be used when writing to each file. The default is set to "**1024000**".

"Destination:"

The "**Destination**" selection sets the destination of the output files. The default is set to "**Please select an option...**".

Refer to <u>Appendix K</u> for terminology on Remote File Services that are available in the destination selection.

Available selections are:

"Local Filesystem"
"Network Share"
"FTP"
"FTPS"
"FTPES"
"SCP"
"SFTP"
"CIFS/SMB1"
"SMB2/SMB3"

"Multiple:"

"File Extension:"

The "File Extension" selection is for the output file's extension.

Available selections are:

"Numeric"

• For setting the file extension for Text, PDF, and PostScript output file formats to be the configured filename plus a three digit numeric extension starting at ".000".

For example, for "Text" output format, the filename will be "SJPM.000".

"Timestamp"

• For setting the file name for Text, PDF, and PostScript output file formats to be the configured filename plus the current <u>yeardatetime</u>. This selection is set as default.

For example, for "**Text**" output format, the filename will be "**SJPM20130329165816397.txt**".

"Add Supplemental File Ext.:"

The "Add Supplemental File Ext." selection activates the "Supplemental File Extension" field and adds the configured extension to the output files.

"Supplemental File Extension:"

The "**Supplemental File Extension**" field is activated by the "**Add Supplemental File Ext.**" checkbox. The default is set to that of the file type selected in the "**Output Format**" option. The configured extension will be added to the output files.

For example, for "**Text**" output format and "**Numeric**" file extension, the filename will be "**SJPM.000.txt**".

"Maximum # of Files in Directory:"

The "**Maximum # of Files in Directory**" configuration is for the maximum number of files allowed to be created in the Directory Path. This field is defaulted to "**999**", the maximum setting allowed. This configuration is only available when the "**Numeric**" file extension radio button is selected. If you require more than 999 files to be stored in the Directory Path then use the "**Timestamp**" selection. If the configured value is met, you will receive an error in SJPM for the device. For example; "**An error occurred during printing: Maximum output file limit reached**".

Note: If the number of files in the directory equals the set limit (**999**) SJPM will get an error, stop sending data and the Sabre Queue will go on hold after the Host retries are completed. If this occurs then clear the directory path of its files and restart the Sabre Queue.

"PDF/PostScript Settings:"

The "**PDF/PostScript Settings**" box will be displayed when "**PDF**" or "**PostScript**" is selected from the "**Output Format**" configuration.

"Page Size:"

The "**Page Size**" selection sets the Page Size to be used for the PDF or PostScript output file. The default is set to "**Letter**".

"Font Settings:"

The "**Font Settings**" box displays the selections for the Font and Font Size to be used for the PDF or PostScript output file.

"Font:"

The "**Font**" selection sets the Font to be used for the PDF or PostScript output file. The default is set to "**Please select an option...**".

"Font Size:"

The "**Font Size**" selection sets the Font Size to be used for the PDF or PostScript output file. The default is set to "**Please select an option...**".

"Single:"

The "Single" box will be displayed when "Single" is selected from the "Print to Single or Multiple File(s)" configuration.

"File Extension:"

The "File Extension" configuration is for the output file extension. The default for "Text" output format is "txt". The default for "PDF" output format is "pdf". The default for "PostScript" output format is "ps".

"If File Exists:"

The "**If File Exists**" selection is for the output file creation method. When "**PDF**" or "**PostScript**" output formats are selected from the "**Output Format**" configuration, this selection is defaulted to "**Overwrite**" and cannot be changed.

Available selections are:

"Append"

• This selection appends data to a single file. This selection is set as default when "**Text**" is selected from the "**Output Format**" configuration.

"Overwrite"

• This selection overwrites the data in a single file each time a new message is received.

"Directory Settings:"

The "**Directory Settings**" box will be displayed when "**Local Filesystem**" is selected from the "**Destination**" option.

"Directory Path:"

The "**Directory Path**" configuration is for the location where the files will be created (**Example:** "**C:\Test**\"). The default is set to "**C:\Program Files\SJPM\Output**\" for 32bit operating systems and "**C:\Program Files (x86)\SJPM\Output**\" 64bit operating systems.

"Remote Host Information:"

The "**Remote Host Information**" box will be displayed when "**Network Share**", "**FTP**", "**FTPS**", '**FTPES**", "**SCP**", "**SFTP**", "**CIFS/SMB1**", or "**SMB2/SMB3**" is selected from the "**Destination**" option.

"Remote Host:"

The "**Remote Host**" configuration sets the IP address, hostname, or computer name of the machine where the share exists. The default is blank.

"Network Share:"

The "**Network Share**" configuration sets the name of the network share. The default is blank.

"Port:"

The "Port" configuration sets the remote host's port that will be connected.

Defaults are:

Network Share, CIFS/SMB1 and SMB2/SMB3 = 445

(By default port 445 is used, which uses the SMB protocol. If this is changed to another value, the Network Share will connect using the WebDav protocol.)

FTP and FTPES = 21

FTPS = 990

SCP and SFTP = 22

"Directory Subpath:"

The "**Directory Subpath**" configuration sets the **optional** directory subpath under the network share where files will be written. The default is blank.

"User Name:"

The "User Name" configuration sets user name connecting to the network share. The default is blank.

"Password:"

The "**Password**" configuration sets the password of the user connecting to the network share. The default is blank.

"Encryption:"

Refer to <u>Appendix F</u> for details on file Encryption and Decryption.

"File Encryption:"

The "File Encryption" selection sets file encryption.

Available selections are:

"Enabled"

• For setting file encryption to be enabled.

"Disabled"

• For setting file encryption to be disabled. This selection is set as default.

"Public Key File Path:"

The "**Public Key File Path**" configuration is for the location where the "**Public Key File**" will be located. This configuration is only available when the "**Enabled**" radio button is selected from the "**File Encryption**" option.

"Device Extended Settings:"

"Insert LF After CR:"

The "Insert LF After CR" selection, if checked, inserts a Line Feed after a Carriage Return. The "Insert LF After CR" checkbox is checked by default.

"Termination Block Segment:"

"Insert form feed"

The "**Insert form feed**" selection, if selected, inserts a Form Feed at the end of the message data. The "**Insert form feed**" selection is selected by default.

"Disable form feed"

The "Disable form feed" selection, if selected, disables Form Feed.

"Custom terminator:"

The "Custom terminator" selection, if selected, inserts a custom terminator that can be user edited. The default custom terminator is set to "~0D~0A***EOM***~0D~0A~0C".

~xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).

"Number of line feeds after message"

The "**Number of line feeds after message**" selection, if selected, inserts the number of line feeds entered in the "**# of Line Feeds After Message**:" field to the end of the message data if selected. The default is set to "**0**".

"Insert Spaces on Empty Lines:"

"Enable spaces on empty lines"

The "**Enable spaces on empty lines**" selection, if checked, inserts spaces on empty lines. The "**Enable spaces on empty lines**" selection is checked by default.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "ATB2TNProxy" (required by children devices), "Group", and "Proxy" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "access.sabre.com".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

Refer to section 6.1.1 Supplemental Hosts Configuration – Applies to All Drivers for a detailed explanation.

The "**Group**" Driver provides data pass-through capabilities for printing from a single device to multiple devices (**Replication**). This allows the user to send data from the Sabre Host to multiple printers and/or files based on the receiving device and its device options.

IMPORTANT NOTE: Devices to be added to the "**Group**" device must already exist in SJPM or be created before the "**Group**" device is created and its configuration can be saved.

Supported (Groupable) Drivers are as follows:

"ATB2File", "ATB2LPR", "ATB2System", "File", "IFQ", "LPR", "MQJMS", "Printer", "Queue", "RawIP", "STPATB1", "STPATB1INI", and "System"

Usage:

The "**Group**" Driver should be used if the user needs to send Sabre Host data from a single device to multiple printers and/or files (**Replication**) based on the receiving device and its device options.

The screenshots below show the "Group" Driver's configuration tab.

"Group" configuration tab with no device(s) present - Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.150	- • ×				
Devices Test-7 🖾	Restart				
Device: Test-7 (Group)					
Physical Device Location:					
Location:					
Group Settings:					
Connection Type: HSSP None					
LNIATA:					
Primary Host: access.sabre.com					
Supplemental Hosts: Supplemental Hostname:					
Add					
Configured Supplemental Hosts:					
Remove Selected					
Foable Extended Characters:					
Save Cancel					
SJPM Server: [127.0.0.1] Up					

Sabre Java Printing Module (SJPM) - 1.8.152	- • •
Devices Test-7 🖾	Restart
Device: Test-7 (Group)	
Physical Device Location:	
Group Settings:	
Connection Type: HSSP None	
LNIATA:	
Primary Host: access.sabre.com	
Supplemental Hosts: Supplemental Hostname:	
Add	
Configured Supplemental Hosts:	
v	
Remove Selected	
Enable Extended Characters:	
Save Cancel	
5JPM Server: [127.0.0.1] Up	

"Group" configuration tab with device(s) present - Default Settings:

"Group" Driver Configuration Options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Group Settings:"

"Include in Group:"

The "**Include in Group**" selection(s) lists the available device(s) that can be selected for this device to send data to. At least one device must be selected in order to save the "**Group**" device's configuration.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "**access.sabre.com**".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

Refer to section <u>6.1.1 Supplemental Hosts Configuration – Applies to All Drivers</u> for a detailed explanation.

6.2.7.1 Single Output to Multiple Devices

The section describes the procedure for using the "**Group**" Driver to send data to multiple devices. The "**Group**" Driver provides the functionality to deliver data from the Sabre Host (from a LNIATA) to many devices.

IMPORTANT NOTE: Devices to be added to the "**Group**" device must already exist in SJPM or be created before the "**Group**" device is created and its configuration can be saved.

The best practice is to use the "**Location**" field in the devices to associate the "**Group**" device and children devices by making the "**Location**" the same for them. Then the SJPM grouping feature ("**Group**" button) can be used to group them together.

The screenshots below show examples of various groups setup in SJPM to send a single output of data to multiple "**File**" devices. Also shown is the grouping functionality that will show all associated devices.

🥯 Sabre Java	Printing Module (SJPM) -	1.8.134					- • •
Devices							Restart
					Group Expand All	New Edit I	Delete Enable Disable
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
	A6JE Group	Group	7A31BA	A6JE-IUR	🎸 Ready	🎸 Online	
	Test-1	File	000000	A6JE-IUR	🖌 Ready	🎻 Online	
	Test-2	File	000000	A6JE-IUR	🎸 Ready	🎻 Online	
	B4T0 Group	Group	308D3A	B4T0-IUR	🖌 Ready	🎸 Online	
	Test-3	File	000000	B4T0-IUR	🎸 Ready	🎻 Online	
	Test-4	File	000000	B4T0-IUR	🎸 Ready	🎻 Online	
							~
Refresh				Devices 1 to 6 of 6		First	Previous Next Last
SJPM Serve	r: [127.0.0.1] Up						

Configured Groups Example:

Grouping Functionality Example:

🥯 Sal	ore Java Printing Module (SJPM) -	1.8.134									
De	vices									R	estart
					Ungroup	Expand All	Nev	v Edit	Delete	Enable Dis	able
	Name	Туре	LNIATA	Location	Hos	t Status	Dev	rice Status	Tran	saction Status	^
	A6JE Group	Group	7A31BA	A6JE-IUR	🖌 I	Ready	1	Online			
	Test-1	File	000000	A6JE-IUR	🖌 I	Ready	1	Online			
	Test-2	File	000000	A6JE-IUR	🖌 I	Ready	4	Online			
	B4T0 Group	Group	308D3A	B4T0-IUR	🖌 I	Ready	1	Online			
	Test-3	File	000000	B4T0-IUR	🖌 I	Ready	1	Online			
	Test-4	File	000000	B4T0-IUR	🖌 I	Ready	Ý	Online			
											Ŧ
Re	efresh			Devices 1 to 6 of 6				First	Previo	us Next	Last
SJPM	Server: [127.0.0.1] Up										

Group Printing Example:

Sabre Java Printing Module (SJPM) - 1.8.134								
D	Devices							
				Group Ex	pand All Collapse All	New Edit	Delete Enable Disab	le
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status	~
	A6JE Group	Group	7A31BA	A6JE-IUR	🎻 Ready	🎻 Online	Last Send Successful	
				Test-1: Last Send Succe Test-2: Last Send Succe	ssful ssful			
] Test-1	File	000000	A6JE-IUR	🎻 Ready	🛷 Online	Last Send Successful	1
] Test-2	File	000000	A6JE-IUR	🎻 Ready	🎻 Online	Last Send Successful	
] B4T0 Group	Group	308D3A	B4T0-IUR	🎻 Ready	🖌 Online		
] Test-3	File	000000	B4T0-IUR	🎻 Ready	🎻 Online		
] Test-4	File	000000	B4T0-IUR	🎻 Ready	🛷 Online		
								÷
F	Refresh			Devices 1 to 6 of 6		First	Previous Next La	st
SJP/	M Server: [127.0.0.1] Up							

6.2.8 IFQ Driver

The "**IFQ**" Driver allows the user to send data from the Sabre Host to a file with various configuration options.

Refer to Appendix F for details on file Encryption and Decryption.

Refer to Section <u>6.1.5 Printing to a Mapped Network Drive Folder – ATB2File, File, and IFQ</u> <u>Drivers</u> for details on printing to a mapped network drive.

Usage:

The "**IFQ**" Driver should be used if the user needs to send data from the Sabre Host to a file with various configuration options. The "**IFQ**" Driver is used for sending IUR data from the Sabre Host to files providing various output types including file naming with PNR number.

The screenshots below show the "IFQ" Driver's configuration tab.

"IFQ" configuration tab - Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.89	
Devices Test-8 🖾	Restart
Device: Test-8 (IFQ)	
Location:	
File Settings:	
Queue Number: <a>None>	
Directory Path: C:\SPL	
File Type: QWORK.SF [LEGACY]	
Encryption:	=
File Encryption: Canabled	
Public Key File Path: public.key	
Device Extended Settings:	
Insert LF After CR: 📝	
- Termination Block Segment:	
Insert form feed	
Disable form feed	
Custom terminator	
Number of line feeds after message	
Custom Terminator: -OD-OA***EOM***-OD-OA-OC	
-xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).	
# of Line Feeds After Message: 0	
- Host Settings	
Connection Type: HSSP None	
LNIATA	
SJPM Server: [127.0.0.1] Up	

۲	Sabre Java	a Printing Module (SJPM) - 1.8.152	
	Devices	Test-8 🖾	Restart
Π	- Termi	Insert LF After CR: 🗹	
		Insert form feed Disable form feed	
		 Custom terminator Number of line feeds after message 	
		Custom Terminator: -00-0A***EOM****00-0A-0C -xx (hex value). Eg: -00 is CR, -0A is linefeed, -0C is FF (Form Feed).	
	-Host Sat	# of Line Feeds After Message: 0	
	-nosc set	Connection Type: HSSP None LNIATA:	
		Primary Host: access.sabre.com Supplemental Hosts: Supplemental Hostname:	
		Add Configured Supplemental Host:	E
		- Remove Selected	
		Enable Extended Characters:	
		Save	
SJ	PM Serve	er: [127.0.0.1] Up	

"IFQ" Driver Configuration Options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (TKTPrinter1), physical location of the device (Computer Room) or location of the device's output data (Reports Folder-ABC1). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"File Settings:"

"Queue Number:"

The "Queue Number" selection sets the Queue Number. Using "<None>" will use Queue "0" (Zero). Other Queue options are: "30" and "27". The default is set to "<None>".

"Directory Path:"

The "**Directory Path**" configuration is for the location where the file(s) will be created for the device (**Example:** "**C:****Test**\"). The default is set to "**C:****SPL**".

"File Type:"

The "File Type" selection sets the file type. The default is set to "QWORK.SF [LEGACY]".

Available selections are

"QWORK.SF [LEGACY]"

"*.PNR [IUR]"

"*.FIL [IUR w/CRLF]"

"INP.FIL [PRONTO]"

"INP.FIL [SABRE Quick]"

"Encryption:"

Refer to <u>Appendix F</u> for details on file Encryption and Decryption.

"File Encryption:"

The "File Encryption" selection sets file encryption.

Available selections are:

"Enabled"

• For setting file encryption to be enabled.

"Disabled"

• For setting file encryption to be disabled. This option is set as default.

"Public Key File Path:"

The "**Public Key File Path**" configuration is for the location where the "**Public Key File**" will be located. This configuration is only available when the "**Enabled**" radio button is selected.

"Device Extended Settings:"

"Insert LF After CR:"

The "Insert LF After CR" selection, if checked, inserts a Line Feed after a Carriage Return. The "Insert LF After CR" checkbox is checked by default.

"Termination Block Segment:"

"Insert form feed"

The "**Insert form feed**" selection, if selected, inserts a Form Feed at the end of the message data. The "**Insert form feed**" selection is selected by default.

"Disable form feed"

The "Disable form feed" selection, if selected, disables Form Feed.

"Custom terminator:"

The "**Custom terminator**" selection, if selected, inserts a custom terminator that can be user edited. The default custom terminator is set to "**~0D~0A***EOM***~0D~0A~0C**".

~xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).

"Number of line feeds after message"

The "**Number of line feeds after message**" selection, if selected, inserts the number of line feeds entered in the "**# of Line Feeds After Message**:" field to the end of the message data if selected. The default is set to "**0**".

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "**LNIATA**" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "access.sabre.com".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

Refer to section <u>6.1.1 Supplemental Hosts Configuration – Applies to All Drivers</u> for a detailed explanation.

The "LPR" Driver allows the user to send data from the Sabre Host to a network IP printer or file with various configuration options.

Note: In order for the "**LPR**" Driver to use different fonts other than the standard ones listed, the TrueType font file must be placed into the "**SJPM/server/devroot/fonts**" directory. Only TrueType fonts with the "**.ttf**" extension will be loaded and show in the available fonts list.

Refer to <u>Appendix M. LPR/LPD Printing (SJPM "ATB2LPR" and "LPR" Drivers)</u> for a detailed explanation.

Refer to <u>Appendix K</u> for terminology on Remote File Services that are available in the destination selection.

Usage:

The "**LPR**" Driver should be used if the user needs to send data from the Sabre Host to a network IP printer or file. This driver sends the data directly to a network printer via IP eliminating any possible issues with user rights.

The screenshots below show the "LPR" Driver's configuration tab.

"LPR" configuration tab – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.131	
Devices Test-9 🖾	Restart
Device: Test-9 (LPR)	
Physical Device Location:	
Location:	
Printer Settings:	
Host:	
Port: 515	
Queue:	
User Name:	=
Printer Mode: Text Only (e.g. dot matrix)	
Output Settings:	
Customize Output Settings:	
Device Extended Settings:	
Insert LF After CR: 📝	
Termination Block Segment:	
Insert form feed	
Disable form feed	
Custom terminator	
Number of line feeds after message	
Custom Terminator: ~0D~0A***EOM***~0D~0A~0C	
~xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).	
# of Line Feeds After Message: 0	
-Host Settines:	
Connection Type: @ H55P None	-
SJPM Server: [127.0.0.1] Up	, La

Sabre Java Printing Module (SJPM) - 1.8.152	- • ×
Devices Test-9 🖾	Restart
Insert LF After CR: 🗹	
(Binsert form feed (Custom terminator (Disable form feed (Custom terminator (Number of line feeds after message Custom Terminator: -0D-0A+**EOM**-0D-0A-*0C	
-xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed). # of Line Feeds After Message: 0	
Host Settings: Connection Type: HSSP None UNIATA: Primary Host: access.sabre.com Supplemental Hosts: Add Configured Supplemental Hosts: Remove Selected Enable Extended Characters:	E
Save Cancel	
SJPM Server: [127.0.0.1] Up	

"LPR" configuration tab with "Graphics (e.g. laser)" selected – Default Settings:

Devices Test-9 🖾		Rest
	Device: Test-9 (LPR)	
Physical Device Loca	tion:	
	Location:	
Printer Settings:		
-	Host:	
	Port: 515	
	Oueue:	
	User Name:	
	Printer Mode: Text Only (e.g. dot matrix)	
	Font: Please select an option 💌	
	Font Size: Please select an option	
Output Settings:	Font Size: Please select an option	
Output Settings:	Font Size: Please select an option	
Output Settings:	Font Size: Please select an option	
Output Settings:	Font Size: Please select an option nize Output Settings: Insert LF After CR:	
Output Settings:	Font Size: Rease select an option	
Output Settings:	Font Size: Please select an option Font Size: Please select an option inize Output Settings: Insert LF After CR: Segment: © Insert form feed	
Output Settings:	Font Size: Please select an option	
Output Settings:	Font Size: Please select an option Font Size: Please select an option nize Output Settings: Insert LF After CR: Segment: Olisable form feed Olisable form feed Olisable form feed Ocutom terminator	

"LPR" configuration tab with "Customize Output Settings" selected and "All Documents" selected – Default Settings:

Sabre Java Printing Module (SIPM) - 1.8.131	×
Devices Test-9 🖾	tart
- Output Settings:	
Customize Output Settings:	
File Extension: () .TXT () Timestamp (seconds)	
Prefix:	
Destination: Please select an option 💌	
Documents:	
Documents: All Documents: Selected Documents	
AL Documents: Print to Hardcopy Save to File	
Borles Exemples Selenger	-
Insert LF After CR: 🗹	E
Termination Block Segment:	
Insert form feed	
Disable form feed	
Custom terminator	
Number of line feeds after message	
Custom Terminator: -OD-0A***EOM***-OD-0A-0C	
-xx (hex value). Eg: -0D is CR, -0A is linefeed, -0C is FF (Form Feed).	
# of Line Feeds After Message: 0	
Host Settings:	
Connection Type: HSSP None	
LNIATA:	
Primary Host: access.sabre.com	-
SJPM Server: [127.0.0.1] Up	

"LPR" configuration tab with "Customize Output Settings" selected and "Local Filesystem" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.131	×
Devices Test-9 🖾 Res	tart
Output Settings:	
Customize Output Settings: 📝	
- Save to File Settings:	
File Extension: (1). TXT (1) Timestamp (seconds)	
Directory Settings:	
Directory Path: C:\Program Files (x86)/SJPM\Ou	
Documents: Ocuments: Ocuments Selected Documents	
-All Documents:	
AL Documents: Print to Hardcopy Vave to File	=
Derice Extended Security.	
Insert LF After CR: 🖉	
Insert form feed	
Disable form feed	
Custom terminator	
Number of line feeds after message	
Custom Terminator: -OD-OA***COM***-OD-OA-OC	
~xx (hex value). Eg: ~OD is CR, ~OA is linefeed, ~OC is FF (Form Feed).	
# of Line Feeds After Message: 0	
Host Settings:	
SJPM Server: [127.0.0.1] Up	

"LPR" configuration tab with "Customize Output Settings" selected and "Network Share" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.131		x
Devices Test-9 🖾	Restar	rt
← Output Settings:		
File Extension: () .TXT () Timestamp (seconds) Prefix:	_	
Destination: Network Share Remote Host Information: Remote Host: Network Share: Port: 445 Directory Subpath: User Name: Password:		III
Documents: Documents: All Documents: All Documents: All Documents: Print to Hardcopy Save to File		
Termination Block Segment:		
O lisable form feed O Lisable form feed Custom terminator Number of line feeds after message		4
SJPM Server: [127.0.0.1] Up		

"LPR" configuration tab with "Customize Output Settings" selected and "Selected Documents" selected – Default Settings:

Devices Test-9 Restart Output Settings: Customize Output Settings: Image: Set of
Output Settings: Customize Output Settings: Save to File Settings: Pile Extension: Pile Extension: Prefix: Destination: Please select an option Documents: Document
Customize Output Settings: Save to File Settings: File Extension: Prefix: Destination: Please select an option Documents: Docu
Save to File Settings: File Extension: The E
File Extension: @.TXT Timestamp (seconds) Prefix:
Prefix: Destination: Please select an option Documents: Docum
Destination: Please select an option Documents: Documents: Documents: Document Types: Document Type: Documen
Documents: Documents: AL Documents Document Types:
Documents: Al Documents Document Types:
Document Types:
Agent Coupon (Ticket): Print to Hardcopy Save to File
Agent Coupon (VMCO): Print to Hardcopy Save to File
CCCF (Ticket): Print to Hardcopy Save to File
CCCF (VMCO): Print to Hardcopy Save to File
Refund Notice (REN): Print to Hardcopy Save to File
Exchange Auth. (REA): "Print to Hardcopy Save to File
Refund Auth. (REA): Print to Hardcopy Save to File
Host ET PIR: Print to Hardcopy Save to File
Host Itinerary: Print to Hardcopy Save to File
Host Invoice: Print to Hardcopy Save to File
Other: Print to Hardcopy Save to File
Device Extended Setting:
Insert LF After CR: 🗹
r Iermination Block Segment:
(insert form feed
SJPM Server: [127.0.0.1] Up

"LPR" Driver Configuration Options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Printer Settings:"

"Host:"

The "Host" configuration sets the LPR printer's hostname/IP. The default is blank.

"Port:"

The "**Port**" configuration sets the LPR printer's port to connect to. The default is "**515**".

"Queue:"

The "Queue" configuration option sets the LPR printer's queue. The default is blank.

"User Name:"

The "**User Name**" configuration sets the LPR printer's user name connecting to the printer. The default is blank.

"Printer Mode:"

The "**Printer Mode**" selection sets the print mode. The default is set to "**Text Only** (e.g. dot matrix)".

Available selections are:

"Text Only (e.g. dot matrix)"

• For text only print such as used with dot matrix printers.

"Graphics (e.g. laser)"

• For graphics print such as used with laser printers.

"Graphics Mode Settings:"

The "Graphics Mode Settings" box will display when "Graphics (e.g. laser)" is selected from the "Printer Mode" option.

"Page Size:"

The "Page Size" selection sets the page size. The default is set to "Letter".

Available selections are:

"Letter" "A0" "A1" "A2" "A3" "A4" "A5" "A6"

"Font Settings:"

"Font:"

The "Font" selection sets the font. The default is set to "Please select an option...".

"Font Size:"

The "Font Size" selection sets the font size. The default is set to "Please select an option...".

"Output Settings:"

Note: The configurations and functionality of the options contained within the **"Output Settings**" box (displayed when the "**Customize Output Settings**" checkbox is selected) are regional for the Asia Pacific (APAC) market and should be used with caution in other markets.

"Customize Output Settings:"

The "**Customize Output Settings**" selection, if checked, provides additional output settings that can be configured for the device. The "**Customize Output Settings**" checkbox is un-checked by default.

"Save to File Settings:"

The "Save to File Settings" box will display when the "Customize Output Settings" checkbox is checked.

"File Extension:"

The "File Extension" selection sets the file extension to use when sending data to file.

Available selections are:

"**.TXT**"

 Sets the output file extension to ".TXT". This option is set as default. File output format will be timestamp with a .txt extension. For example, with ".TXT" selected and a "Prefix" of "APAC" the output file will be "APAC_20161107105045016.txt".

"Timestamp (seconds)"

Sets the output file extension to "Timestamp (seconds)". For example, with "Timestamp (seconds)" selected and a "Prefix" of "APAC" the output file will be "APAC_20161107105720577.20".

"Prefix:"

The "**Prefix**" configuration sets the prefix that will be prepended to the output filename. The default is blank.

"Destination:"

The "**Destination**" selection sets the destination of the output files. The default is set to "**Please select an option...**".

Refer to <u>Appendix K</u> for terminology on Remote File Services that are available in the destination selection.

Available selections are:

"Local Filesystem" "FTP" "FTPS" "FTPES" "SCP" "SFTP" "CIFS/SMB1"

"SMB2/SMB3"

"Directory Settings:"

The "**Directory Settings**" box will display when "**Local Filesystem**" is selected from the "**Destination**" drop down list.

"Directory Path:"

The "**Directory Path**" configuration is for the location where the files will be created (**Example:** "**C:\Test**\"). The default is set to "**C:\Program Files\SJPM\Output**\" for 32bit operating systems and "**C:\Program Files (x86)\SJPM\Output**\" 64bit operating systems.

"Remote Host Information:"

The "**Remote Host Information**" box will be displayed when "**Network Share**", "**FTP**", "**FTPS**", "**FTPES**", "**SCP**", "**SFTP**", "**CIFS/SMB1**", or "**SMB2/SMB3**" is selected from the "**Destination**" drop down list.

"Remote Host:"

The "**Remote Host**" configuration sets the IP address, hostname, or computer name of the machine where the share exists. The default is blank.

"Network Share:"

The "**Network Share**" configuration sets the name of the network share. The default is blank.

"Port:"

The "**Port**" configuration sets the remote host's port to connect to.

Defaults are:

Network Share, CIFS/SMB1 and SMB2/SMB3 = 445

(By default port 445 is used, which uses the SMB protocol. If this is changed to another value, the Network Share will connect using the WebDav protocol.)

FTP and FTPES = 21

 $\mathbf{FTPS}=\mathbf{990}$

SCP and SFTP = 22

"Directory Subpath:"

The "**Directory Subpath**" configuration sets the optional directory subpath under the network share where files will be written. The default is blank.

"User Name:"

The "User Name" configuration sets user name connecting to the network share. The default is blank.

"Password:"

The "**Password**" configuration sets the password of the user connecting to the network share. The default is blank.

"Documents:"

"Documents:"

The "**Documents**" selection sets the document type(s) to use when printing. The default is set to "**All Documents**".

Available selections are:

"All Documents"

• The "All Documents" selection sets the data output to all documents with options.

"Selected Documents"

 The "Selected Documents" selection displays the "Document Types" box with the document types that can be selected (see the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list).

"All Documents:"

"All Documents:"

The "All Documents" selection sets the data output type.

Available selections are:

"Print to Hardcopy"

 The "Print to Hardcopy" selection sets the data output for all print types (see the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list) to go to hardcopy. The "Print to Hardcopy" checkbox is selected by default.

"Save to File"

 The "Save to File" selection sets the data output for all print types (see the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list) to go to file. The "Save to File" checkbox is selected by default.

"Document Types:"

The "**Document Types**" box will display when "**Selected Documents**" is selected from the "**Documents**" option.

See the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list.

"Device Extended Settings:"

"Insert LF After CR:"

The "**Insert LF After CR**" selection, if checked, inserts a Line Feed after a Carriage Return. The "**Insert LF After CR**" checkbox is checked by default.

"Termination Block Segment:"

"Insert form feed"

The "**Insert form feed**" selection, if selected, inserts a Form Feed at the end of the message data. The "**Insert form feed**" selection is selected by default.

"Disable form feed"

The "Disable form feed" selection, if selected, disables Form Feed.

"Custom terminator:"

The "Custom terminator" selection, if selected, inserts a custom terminator that can be user edited. The default custom terminator is set to "~0D~0A***EOM***~0D~0A~0C".

~xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).

"Number of line feeds after message"

The "**Number of line feeds after message**" selection, if selected, inserts the number of line feeds entered in the "**# of Line Feeds After Message**:" field to the end of the message data if selected. The default is set to "**0**".
"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "**access.sabre.com**".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

The "**MQJMS**" Driver allows the user to send data from the Sabre Host to a MQ JMS Server Queue with various configuration options.

Usage:

The "**MQJMS**" Driver should be used if the user needs to send data from the Sabre Host to a MQ JMS Server Queue.

The screenshot below shows the "MQJMS" Driver's configuration tab.

"MQJMS" configuration tab – Default Settings:

	Sabre Java	Printing Module (SJPM) - 1.8.152		
	Devices	Test-10 🖾		Restart
Γ			Device: Test-10 (MQJMS)	
	Physical I	Device Location:		
		Location:		
	MQ Confi	gurations:		
		Hostname:		
		Port Number:		
		Queue Manager:		
		Channel:		
		Queue:		
	Host Set	ings:		
		Connection Type:	HSSP None	
		LNIATA:		=
		Primary Host:	access.sabre.com	
		Supplemental Hosts:	Supplemental Hostname:	
			Add	
			Configured Supplemental Hosts:	
			A	
			Ψ.	
			Remove Selected	
		Enable Extended Characters:		
		Save	Cancel	
L				-
S	JPM Server	: [127.0.0.1] Up		

"MQJMS" Driver Configuration Options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"MQ Configurations:"

"Hostname:"

The "**Hostname**" configuration is for setting the hostname of the MQ Server. The default is blank.

"Port Number:"

The "**Port Number**" configuration is for setting the port number of the MQ Server. The default is blank.

"Queue Manager:"

The "**Queue Manager**" configuration is for setting the queue manager name on the configured MQ Server. The default is blank.

"Channel:"

The "**Channel**" configuration is for setting the channel for the MQ Manager. The default is blank.

"Queue:"

The "**Queue**" configuration is for setting the queue name where the messages will be delivered. The default is blank.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "access.sabre.com".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

6.2.11 Printer Driver

The "**Printer**" Driver allows the user to send data from the Sabre Host to a printer using Serial or Parallel interface and also to a file with various configuration options.

Refer to <u>Appendix K</u> for terminology on Remote File Services that are available in the destination selection.

Usage:

The "**Printer**" Driver should be used if the user needs to send data from the Sabre Host to a physical printer that is connected to the PC where SJPM is running either via Serial or Parallel interface.

The screenshots below show the "**Printer**" Driver's configuration tab with various options selected.

🥯 Sabre Java	Sabre Java Printing Module (SIPM) - 1.8.95				
Devices	Test-11 🖾	Restart			
	Device: Test-11 (Printer)				
Physical	Device Location:				
Port Set	tings:				
Serial	ial Settings:				
	COM Port: Please select an option				
	Daud kate: 9000 V Data Bits: 8 V				
	Parity: none Stop Bits: 1				
Output	Settings:				
Device E	xtended Settings:				
Termi	Insert LF After CR: 📝 nation Block Segment:				
	Insert form feed				
	Disable form feed				
	Custom terminator				
	Number of line feeds after message				
	Custom Terminator: -OD-OA***EOM***-OD-OA~OC -xx (hex value). Eg: -OD is CR, -OA is tinefeed, -OC is FF (Form Feed).				
SJPM Serve	r: [127.0.0.1] 0p				

"Printer" configuration tab with "Serial" selected - Default Settings:

۲	Sabre Java	Printing Module (SJPM) - 1.8.152		- • ×
	Devices	Test-11 🖾		Restart
П			Insert form feed	
			Disable form feed	
			Custom terminator	
			Number of line feeds after message	
		Custom Terminator	- ~OD~OA***EOM***~OD~OA~OC	
			~xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).	
		# of Line Feeds After Message	e 0	
	Insert	Spaces on Empty Lines:		
		Enable spaces on empty lines	: 🗸	
L		e		
	-Host bet	Connection Type: (
		I NIATA:		
		Primary Host:	access, sabre, com	
		Supplemental Hosts:	upplemental Hostname:	
			Add	
		c	Configured Supplemental Hosts:	
		-	×	
				=
			Remove Selected	
		Enable Extended Characters:		
.				
		Save	Cancel	
		Jure		-
- SJ	PM Serve	r: [127.0.0.1] Up		
		. [

"Printer" configuration tab with "Parallel" selected – Default Settings:

Devices Test-11 🖾	Restar
Device: Test-11 (Print	ter)
- Physical Device Location:	
Location:	
Port Settings:	
Port Type: Serial Port Type: Port Type:	
Parallel Cattle and	
LPT Port: Please select an option	
- Output Settings:	
Customize Output Settings:	
De las Estado I Catilano	
- Device Extended Settings:	
Insert LF After CR: 🗹	
lermination Block Segment:	
Insert form feed	
Utsable form feed	
Custom terminator	
© Disable form feed © Custom terminator © Number of line feeds after message	
© Utsable form feed © Custom terminator © Number of line feeds after message Custom Terminator: -0D-0A+=EOM+=-0D-0A-0C	
Usable form feed Custom terminator Number of line feeds after message Custom Terminator: <u>OD-DA**EOM***-OD-DA+OC</u> -xx (hex value). Ee: •OD is CR. •DA is linefeed. •OC is FF (FG	prm Feed),
© Disable form feed © Custom terminator © Number of line feeds after message Custom Terminator: = -000A+***-0D = 0A0C = -xx (hex value). Eg: =0D is CR, =0A is linefeed, =0C is FF (Fo	vrm Feed).
Utable form feed Ocustom terminator OLutom terminator Number of line feeds after message Custom Terminator: -OD-OA+==EOM===-OD-OA-OC -xx (hex value). Eg: -OD is CR, -OA is linefeed, -OC is FF (Fo # of Line Feeds After Message: 0	vm Feed).
Utable form feed Outsom terminator Outsom terminator Outsom terminator: -0D-04***E0M***.0D-0A-0C -xx (hex value). Eg: -0D is CR, -0A is linefeed, -0C is FF (Fo # of Line Feeds After Message: 0 Insert Spaces on Empty Lines:	rm Feed).
Usable form feed Usable form feed Usable form feed Usable form feeds Usable form feeds after message Custom Terminator: -OD-0A==EGM====OD=OA==CM====OD=OA==CM===CM===CM===CM===CM===CM===CM===	rm Feed).
□ Disable form feed □ Disable form feed □ Custom terminator □ Number of line feeds after message Custom Terminator: □00-0A***CON***-0D=0A+OC -xx (hex value). Eg: -0D is CR, -0A is linefeed, -0C is FF (Fo # of Line Feeds After Message: 0 □ Insert Spaces on Empty Lines: Enable spaces on empty lines: ♥	vm Feed).

Sabre Java Printing Module (SJPM) - 1.8.152	
Devices Test-11 🖾	Restart
Insert form feed	
Disable form feed	
Custom terminator	
Number of line feeds after message	
Custom Terminator: -OD-OA***EOM***-OD-OA-OC	
~xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).	
# of Line Feeds After Message: 0	
Insert Spaces on Empty Lines:	
Enable spaces on empty lines: 🕡	
line fatien	
Drimary Host: access salve com	
Supplemental Hosts: Supplemental Hostsamer	
Add	
Configured Supplemental Hosts	
A	
	=
· · · · · · · · · · · · · · · · · · ·	
Remove selected	
Enable Extended Characters:	
Save	
S IDM Server: [127.0.0.1] lin	
Sofin Serrer, Erzzuszul op	

"Printer" configuration tab with "Customize Output Settings" selected and "All Documents" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.95	- • ×
Devices Test-11 🖾	Restart
Output Settings: Customize Output Settings:	
File Extension: File Extension: TXT Timestamp (seconds) Prefix: Destination: Please select an option	
Documents: Documents Ocuments Ocuments Oselected Documents	
AL Documents: Print to Hardcopy Save to File	
□ Device Extended Settings: Insert LF After CR: ☑ □ □ Termination Block Segment:	E
Insert form feed Disable form feed	
© Custom terminator © Number of line feeds after message	
Custom Terminator: -00-0A***E0M***-00-0A-0C -xxc (hex value). Eg: -0D is CR, -0A is timefeed, -0C is FF (Form Feed).	
# or Line reeds Arter Message: U Insert Spaces on Empty Lines: Enable spaces on empty lines: ✓	
Host Settings:	
SJPM Server: [127.0.0.1] Up	

"Printer" configuration tab with "Customize Output Settings" selected and 'Selected Documents" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.95	•	×
Devices Test-11	Restar	rt
Output Settings: Customize Output Settings: Save to File Settings:		*
File Extension: (a) .TXT (b) Timestamp (seconds) Prefix: (c) Timestamp (seconds) Destination: Please select an option (*)		
Documents: Documents: AL Documents Documents: AL Documents Document Types:		
Agent Coupon (Ticket): Print to Hardcopy Save to File Agent Coupon (VMCO): Print to Hardcopy Save to File CCCF (Ticket): Print to Hardcopy Save to File CCCF (VMCO): Print to Hardcopy Save to File CCCF (VMCO): Print to Hardcopy Save to File Refund Notice (REN): Print to Hardcopy Save to File Exchange Auth. (REA): Print to Hardcopy Save to File Host ET FIR: Print to Hardcopy Save to File Host ET FIR: Print to Hardcopy Save to File Host Itinerary: Print to Hardcopy Save to File Host Invoice: Print to Hardcopy Save to File Host Invoice: Print to Hardcopy Save to File Other: Print to Hardcopy Save to File		E
Device Extended Settings: Insert LF After CR: Insert LF After CR: Insert Form feed Inser		-

"Printer" Driver Configuration Options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (TKTPrinter1), physical location of the device (Computer Room) or location of the device's output data (Reports Folder-ABC1). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Port Settings:"

"Port Type:"

The "**Port Type**" selection sets the interface type to use when printing.

Available selections are:

"Serial"

• For Serial Interface printing. This option is set as default.

"Parallel"

• For Parallel Interface printing.

"Serial:"

The "Serial" box will display when "Serial" is selected from the "Port Type" option.

"Serial Settings:"

"COM Port:"

The "**COM Port**" selection sets the COM port. Select the COM port that the printer is connected to on the PC running SJPM. The default is set to "**Please select an option...**". Available "**COM Port**" selections will vary by PC.

"Baud Rate:"

The "**Baud Rate**" selection sets the baud rate for communications with the printer. The default is set to "**9600**". This setting must match the baud rate setting configured in the connected printer.

Available "Baud Rate" selections are:

1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200

"Data Bits:"

The "**Data Bits**" selection sets the data bits for communications with the printer. The default is set to "**8**". This setting must match the data bits setting configured in the connected printer.

Available "Data Bits" selections are:

7 and 8

"Parity:"

The "**Parity**" selection sets the parity for communications with the printer. The default is set to "**none**". This setting must match the parity setting configured in the connected printer.

Available "Parity" selections are:

even, odd, mark, none and space

"Stop Bits:"

The "**Stop Bits**" selection sets the stop bits for communications with the printer. The default is set to "**1**". This setting must match the stop bits setting configured in the connected printer.

Available "Stop Bits" selections are:

1, 1.5 and 2

"Parallel:"

The "**Parallel**" box will display when "**Parallel**" is selected from the "**Port Type**" option.

"Parallel Settings:"

"LPT Port:"

The "LPT Port" selection sets the LPT port. Select the LPT port that the printer is connected to on the PC running SJPM. The default is set to "Please select an option...". Available "LPT Port" selections will vary by PC.

"Output Settings:"

Note: The configurations and functionality of the options contained within the **"Output Settings**" box (displayed when the "**Customize Output Settings**" checkbox is selected) are regional for the Asia Pacific (APAC) market and should be used with caution in other markets.

"Customize Output Settings:"

The "**Customize Output Settings**" selection, when checked, provides additional output settings that can be configured for the device. The "**Customize Output Settings**" checkbox is un-checked by default.

"Save to File Settings:"

"File Extension:"

The "File Extension" selection sets the file extension to use when sending data to file.

Available selections are:

"**.TXT**"

 Sets the output file extension to ".TXT". This option is set as default. File output format will be timestamp with a .txt extension. For example, with ".TXT" selected and a "Prefix" of "APAC" the output file will be "APAC_20161107105045016.txt".

"Timestamp (seconds)"

• Sets the output file extension to "**Timestamp** (seconds)". For example, with "**Timestamp** (seconds)" selected and a "**Prefix**" of "**APAC**" the output file will be "**APAC_20161107105720577.20**".

"Prefix:"

The "**Prefix**" configuration sets the prefix that will be prepended to the output filename. The default is blank.

"Destination:"

The "**Destination**" selection sets the destination of the output files. The default is set to "**Please select an option...**".

Refer to <u>Appendix K</u> for terminology on Remote File Services that are available in the destination selection.

Available selections are:

"Local Filesystem"
"Network Share"
"FTP"
"FTPS"
"FTPES"
"SCP"
"SFTP"
"CIFS/SMB1"
"SMB2/SMB3"

"Directory Settings:"

The "**Directory Settings**" box will display when "**Local Filesystem**" is selected from the "**Destination**" option.

"Directory Path:"

The "**Directory Path**" configuration is for the location where the files will be created (**Example:** "**C:\Test**\"). The default is set to "**C:\Program Files\SJPM\Output**\" for 32bit operating systems and "**C:\Program Files (x86)\SJPM\Output**\" 64bit operating systems.

"Remote Host Information:"

The "**Remote Host Information**" box will be displayed when **Network Share**, **FTP**, **FTPS**, **FTPES**, **SCP**, **SFTP**, **CIFS/SMB1**, or **SMB2/SMB3** is selected from the "**Destination**" option.

"Remote Host:"

The "**Remote Host**" configuration sets the IP address, hostname, or computer name of the machine where the share exists. The default is blank.

"Network Share:"

The "**Network Share**" configuration sets the name of the network share. The default is blank.

"Port:"

The "Port" configuration sets the remote host's port to connect to.

Defaults are:

Network Share, CIFS/SMB1 and SMB2/SMB3 = 445

(By default port 445 is used, which uses the SMB protocol. If this is changed to another value, the Network Share will connect using the WebDav protocol.)

FTP and FTPES = 21

 $\mathbf{FTPS} = \mathbf{990}$

SCP and SFTP = 22

"Directory Subpath:"

The "**Directory Subpath**" configuration sets the optional directory subpath under the network share where files will be written. The default is blank.

"User Name:"

The "User Name" configuration sets user name connecting to the network share. The default is blank.

"Password:"

The "**Password**" configuration sets the password of the user connecting to the network share. The default is blank.

"Documents:"

"Documents:"

The "**Documents**" selection sets the document type(s) to use when printing. The default is set to "**All Documents**".

Available selections are:

"All Documents"

• The "All Documents" selection sets the data output to all documents with options.

"Selected Documents"

 The "Selected Documents" selection displays the "Document Types:" field set with the document types that can be selected (see the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list).

"All Documents:"

"All Documents:"

The "All Documents" selection sets the data output type.

Available selections are:

"Print to Hardcopy"

 The "Print to Hardcopy" selection sets the data output for all print types (see the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list) to go to hardcopy. The "Print to Hardcopy" checkbox is selected by default.

"Save to File"

 The "Save to File" selection sets the data output for all print types (see the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list) to go to file. The "Save to File" checkbox is selected by default.

"Document Types:"

The "**Document Types**" box will display when "**Selected Documents**" is selected from the "**Documents**" configuration.

See the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list.

"Device Extended Settings:"

"Insert LF After CR:"

The "**Insert LF After CR**" selection, if checked, inserts a Line Feed after a Carriage Return. The "**Insert LF After CR**" checkbox is checked by default.

"Termination Block Segment:"

"Insert form feed"

The "**Insert form feed**" selection, if selected, inserts a Form Feed at the end of the message data. The "**Insert form feed**" selection is selected by default.

"Disable form feed"

The "Disable form feed" selection, if selected, disables Form Feed.

"Custom terminator:"

The "Custom terminator" selection, if selected, inserts a custom terminator that can be user edited. The default custom terminator is set to "~0D~0A***EOM***~0D~0A~0C".

~xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).

"Number of line feeds after message"

The "**Number of line feeds after message**" selection, if selected, inserts the number of line feeds entered in the "**# of Line Feeds After Message**:" field to the end of the message data if selected. The default is set to "**0**".

"Insert Spaces on Empty Lines:"

"Enable spaces on empty lines"

The "**Enable spaces on empty lines**" selection, if checked, inserts spaces on empty lines. The "**Enable spaces on empty lines**" selection is checked by default.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "ATB2TNProxy" (required by children devices), "Group", and "Proxy" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "access.sabre.com".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

The "**Proxy**" Driver allows the user to send data from the Sabre Host, from multiple LNIATAs, to a single device (**Multiple to One**); for example, multiple "**Proxy**" devices directing their LNIATA's data output to a single "**Printer**" device.

IMPORTANT NOTE: Devices to be added to the "**Proxy**" device must already exist in SJPM or be created before the "**Proxy**" device is created and its configuration can be saved.

Supported Drivers are as follows:

"ATB2File", "ATB2LPR", "ATB2System", "File", "IFQ", "LPR", "MQJMS", "Printer", "Queue", "RawIP", "STPATB1", "STPATB1INI", and "System"

Usage:

The "**Proxy**" Driver should be used if the user needs to send data from the Sabre Host, from multiple LNIATAs to a single SJPM device (**Multiple to One**); for example, multiple "**Proxy**" devices directing their LNIATA's data output to a single "**Printer**" device.

The screenshots below show the "Proxy" Driver's configuration tab.

"Proxy" configuration tab with no device(s) present – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.152	- • ×
Devices Test-12 🖾	Restart
Device: Test-12 (Proxy)	
Physical Device Location:	
Location:	
- Proxy Settings:	
Proxy Device: No Devices Available	
Host Society.	
Connection Type: HSSP None	
LNIATA:	
Primary Host: access.sabre.com	
Supplemental Hosts: Supplemental Hostname:	
Add	
Configured Supplemental Hosts:	
Remove Selected	
Enable Extended Characters:	
Save	

Sabre Java Printing Module (SJPM) - 1.8.95	
Devices Test-12	Restart
Device: Test-12 (Proxy)	
Physical Device Location:	
Location:	
Proxy Settings:	
Proxy Device: Please select an option 💌	
Host Settings: Test-99	
LNIATA:	
Primary Host: access.sabre.com	
Supplemental Hosts: Supplemental Hostname:	
Add	
Configured Supplemental Hosts:	
Remove Selected	
Save Cancel	
SJPM Server: [127.0.0.1] Up	

"Proxy" configuration tab with device(s) present – Default Settings:

"Proxy" driver configuration options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (TKTPrinter1), physical location of the device (Computer Room) or location of the device's output data (Reports Folder-ABC1). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Proxy Settings:"

"Proxy Device:"

The "**Proxy Device**" selection sets the device to use to print to. The default is set to "**Please select an option...**".

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "**access.sabre.com**".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

The "**Queue**" Driver allows the user to send data from the Sabre Host to a Network printer with various configuration options.

Note: To ensure proper functionality with the SJPM "Queue" Driver, the driver for the printer you plan to print to should be downloaded from the manufacturer's website and installed. Do not use the driver for the printer that comes with Windows.

Refer to Section <u>6.1.6 Allow User Rights – Queue and System Drivers</u> for details on user rights configurations.

Usage:

The "**Queue**" Driver should be used if the user needs to send data from the Sabre Host to a Network printer with various configuration options.

The screenshots below show the "Queue" Driver's configuration tab.

"Queue" configuration tab – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.95					
Devices Test-13 🖾	Restart				
Devices Test 13 (Ousue)	×				
Device. Testers (Queue)					
Physical Device Location:					
Location:					
Queue Settings:					
Available Queues: Please select an option 👻					
Column Offset: 0					
Device Extended Settings:					
Insert LF After CR: 📝					
Termination Block Segment:					
Insert form feed					
Disable form feed					
Custom terminator					
Number of time feeds after message					
Custom Terminator: -00-0A***EOM***-00-0A-0C					
-xx (hex value). Eg: -0D is CR, -0A is linefeed, -0C is FF (Form Feed).					
# of Line Feeds After Message: 0					
Host Settings:					
Connection Type: HSSP None					
LINIATA:					
Primary Host: access.sabre.com					
Supplemental Hosts: Supplemental Hostname:					
bbA					
Configured Supplemental Hosts:					
	-				
SJPM Server: [127.0.0.1] Up					

🥥 Sabre J	Sabre Java Printing Module (SJPM) - 1.8.152				
Device	rs Test-13 🖾		Restart		
-Te	Insert LF After CR:	V			
	initiation block sognoria	Insert form feed			
		O Disable form feed			
		Custom terminator			
		Number of line feeds after message			
	Custom Terminat	vv (hev value) Fa: <0D is CP <0A is linefeed <0C is FE (Form Feed)			
	# of Line Feeds After Messa	ge: 0			
Host	Settings:				
	LNIATA:				
	Primary Host:	access.sabre.com			
	Supplemental Hosts:	Supplemental Hostname:			
		Add	=		
		Configured Supplemental Hosts:			
		-			
		Remove Selected			
	Enable Extended Characters:				
	Save	Cancel			
			•		
SJPM Server: [127.0.0.1] Up					

"Queue" driver configuration options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Queue Settings:"

"Available Queues:"

The "**Available Queues**" selection sets the Network printer you want to use to print to. The default is set to "**Please select an option...**".

"Column Offset:"

The "**Column Offset**" configuration sets the number of characters to indent the data from the left margin. The default is set to "**0**".

"Device Extended Settings:"

"Insert LF After CR:"

The "**Insert LF After CR**" selection, if checked, inserts a Line Feed after a Carriage Return. The "**Insert LF After CR**" checkbox is checked by default.

"Termination Block Segment:"

"Insert form feed"

The "**Insert form feed**" selection, if selected, inserts a Form Feed at the end of the message data. The "**Insert form feed**" selection is selected by default.

"Disable form feed"

The "Disable form feed" selection, if selected, disables Form Feed.

"Custom terminator:"

The "**Custom terminator**" selection, if selected, inserts a custom terminator that can be user edited. The default custom terminator is set to "**~0D~0A***EOM***~0D~0A~0C**".

~xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).

"Number of line feeds after message"

The "**Number of line feeds after message**" selection, if selected, inserts the number of line feeds entered in the "**# of Line Feeds After Message**:" field to the end of the message data if selected. The default is set to "**0**".

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "access.sabre.com".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

The "**RawIP**" Driver allows the user to send data from the Sabre Host to an IP printer and to a file with various configuration options.

Refer to <u>Appendix K</u> for terminology on Remote File Services that are available in the destination selection.

Usage:

The "**RawIP**" Driver should be used if the user needs to send data from the Sabre Host directly to an IP printer or file. This driver sends the data directly to a network printer via IP eliminating any possible issues with user rights.

The screenshots below show the "RawIP" Driver's configuration tab.

"RawIP" configuration tab – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.95	- • •
Devices Test-14 🖾	Restart
Device: Test-14 (RawIP)	
- Physical Device Location:	
Location:	
Printer Settings:	
Hostname or IP Address:	
Port: 9100	
Output Settings:	
Customize Output Settings: 🔟	E
Device Extended Settings:	
Insert LF After CR: 📝	
- Termination Block Segment:	
Insert form feed	
Disable form feed	
Custom terminator	
Number of line feeds after message	
Custom Terminator: -00-0A**FOM***-0D-0A*0C	
control of the second s	
i of the East Mar Nacross on	
# Of Life redus ALER Message.	
- Host Settings	
Connection Type:	
Supplemental Hosts: Dupplemental Hostname:	-
SJPM Server: [127.0.0.1] Up	
· · ·	

Sabre Java Printing Module (SJPM) - 1.8.152	
Devices Test-14 🖾	Restart
Insert LF After CR: 🗹	
Insert form feed	
Disable form feed	
Custom terminator	
Number of line feeds after message	
Custom Terminator: -0D-0A***EOM***-0D-0A-0C	
-xx (hex value). Eg: -0D is CR, -0A is linefeed, -0C is FF (Form Feed).	
# of Line Feeds After Message: 0	
Host Settings:	
Connection Type: HSSP None	
LNIATA:	
Primary Host: access.sabre.com	
Supplemental Hosts: Supplemental Hostname:	
Add	
Configured Supplemental Hosts:	=
Remove Selected	
Enable Extended Characters:	
Sure Crant	
Save Cancer	
S ID44 Service: [127.0.0.1] Un	
20PM 261461: [127.0.0.1] 0h	

"RawIP" configuration tab with "Customize Output Settings" selected and "All Documents" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.137	
Devices Test-14 🖾	Restart
Output Settings: Customize Output Settings: Save to File Settings:	
Prie Extension:	
Documents: Document: All Documents: All Documents:	
All Documents: Print to Hardcopy Save to File	
Inset LF Arter CR: 📝	
Insert form feed	
Disable form feed	
Custom terminator	
Number of tine feeds after message	
Custom Terminator: ~OD~OA***EOM***~OD~OA~OC	
<pre>-vxx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed). # of Line Feeds After Message: 0</pre>	
Host Settings:	
Connection Type: HSSP None	
LNIATA:	
Primary Host: access.sabre.com	-
SJPM Server: [127.0.0.1] Up	

"RawIP" configuration tab with "Customize Output Settings" selected and "Local Filesystem" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.137	- • •
Devices Test-14 🖾	Restart
Output Settings:-	
Customize Output Settings: 📝	
Save to rite Securitys: File Extension: Timestamp (Seconds)	
Destination: Local Filesystem	
Directory Path: C:\Program Files (x86)/SJPM/Oul	
Documents:	
Documents: All Documents Selected Documents	
All Documents: Print to Hardcopy Save to File	
bence Extended Setungs	
← Termination Block Segment:	
Insert form feed	
Disable form feed	
Custom terminator	
Number of line feeds after message	
Custom Terminator: -OD-OA***EOM***-OD-OA-OC	
-xx (hex value). Eg: ~OD is CR, ~OA is linefeed, ~OC is FF (Form Feed).	
# of Line Feeds After Message: 0	
Host Settings:	
SJPM Server: [127.0.0.1] Up	

"RawIP" configuration tab with "Customize Output Settings" selected and "Network Share" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.137	- • •
Devices Test-14 🖾	Restart
Cutput Settings: Customize Output Settings: Save to File Settings: File Extension: @,TXT © Timestamp (Seconds)	
Prefix:	
Destination: Network Share Remote Host Information: Remote Host Information: Remote Hos	E
Documents: Documents: Al Documents Selected Documents All Documents: Print to Hardcopy Save to File	
Insert LF After CR:	
Disable form feed Ocustom terminator Number of line feeds after message	•

"RawIP" configuration tab with "Customize Output Settings" selected and "Selected Documents" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.137	• •
Devices Test-14 🖾	<u>Restar</u> t
Output Settings:	
Customize Output Settings: 📝	
Save to File Settings:	- I I I
File Extension: TXT Timestamp (Seconds)	
Prefix:	
Destination: Please select an option 🔻	
Documents:	-
Documents: Al Documents Selected Documents	
Document Types:	
Agent Coupon (Ticket): Print to Hardcopy Save to File	=
Agent Coupon (VMCO): Print to Hardcopy Save to File	
CCCF (Ticket): Print to Hardcopy Save to File	
CCCF (VMCO): Print to Hardcopy Save to File	
Refund Notice (REN): Print to Hardcopy Save to File	
Exchange Auth. (REA): Print to Hardcopy Save to File	
Refund Auth. (REA): Print to Hardcopy Save to File	
Host ET PIR: Print to Hardcopy Save to File	
Host Itinerary: Print to Hardcopy Save to File	
Host Invoice: Print to Hardcopy Save to File	
Other: Print to Hardcopy Save to File	
Device Extended Settings:	
Insert LF After CR: 🗹	
lermination Block Segment:	7
Insert form feed	-

"RawIP" driver configuration options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Printer Settings:"

"Hostname or IP Address:"

The "**Hostname or IP Address**" configuration is for the hostname or IP address of the printer to be used to print to. The default is blank.

"Port:"

The "**Port**" configuration sets the port to be used for printing. The default port is set to "**9100**".

"Output Settings:"

Note: The configurations and functionality of the options contained within the "Output Settings" box (displayed when the "Customize Output Settings" checkbox is selected) are regional for the Asia Pacific (APAC) market and should be used with caution in other markets.

"Customize Output Settings:"

The "Customize Output Settings" option, when checked, provides additional output settings that can be configured for the device. The "Customize Output Settings" checkbox is un-checked by default.

"Save to File Settings:"

"File Extension:"

The "File Extension" selection sets the file extension to use when printing to file.

Available selections are:

".TXT"

Sets the output file extension to ".TXT". This option is set as default. File output format will be timestamp with a .txt extension. For example, with ".TXT" selected and a "Prefix" of "APAC" the output file will be "APAC 20161107105045016.txt".

"Timestamp (seconds)"

Sets the output file extension to "Timestamp (seconds)". For example, with "Timestamp (seconds)" selected and a "Prefix" of "APAC" the output file will be "APAC_20161107105720577.20".

"Prefix:"

The "**Prefix**" configuration sets the prefix that will be prepended to the output filename. The default is blank.

"Destination:"

The "**Destination**" selection sets the destination of the output files. The default is set to "**Please select an option...**".

Refer to <u>Appendix K</u> for terminology on Remote File Services that are available in the destination selection.

Available selections are:

"Local Filesystem"
"Network Share"
"FTP"
"FTPS"
"FTPES"
"SCP"
"SFTP"
"CIFS/SMB1"
"SMB2/SMB3"

"Directory Settings:"

The "**Directory Settings**" box will display when "**Local Filesystem**" is selected from the "**Destination**" configuration.

"Directory Path:"

The "**Directory Path**" configuration is for the location where the files will be created (**Example:** "**C:\Test**\"). The default is set to "**C:\Program Files\SJPM\Output**\" for 32bit operating systems and "**C:\Program Files (x86)\SJPM\Output**\" 64bit operating systems.

"Remote Host Information:"

The "**Remote Host Information**" box will be displayed when **Network Share**, **FTP**, **FTPS**, **FTPES**, **SCP**, **SFTP**, **CIFS/SMB1**, or **SMB2/SMB3** is selected from the "**Destination**" option.

"Remote Host:"

The "**Remote Host**" configuration sets the IP address, hostname, or computer name of the machine where the share exists. The default is blank.

"Network Share:"

The "**Network Share**" configuration sets the name of the network share. The default is blank.

"Port:"

The "Port" configuration sets the remote host's port to connect to.

Defaults are:

Network Share, CIFS/SMB1 and SMB2/SMB3 = 445

(By default port 445 is used, which uses the SMB protocol. If this is changed to another value, the Network Share will connect using the WebDav protocol.)

FTP and FTPES = 21

 $\mathbf{FTPS} = \mathbf{990}$

SCP and SFTP = 22

"Directory Subpath:"

The "**Directory Subpath**" configuration sets the optional directory subpath under the network share where files will be written. The default is blank.

"User Name:"

The "User Name" configuration sets user name connecting to the network share. The default is blank.

"Password:"

The "**Password**" configuration sets the password of the user connecting to the network share. The default is blank.

"Documents:"

"Documents:"

The "**Documents**" selection sets the document type(s) to use when printing. The default is set to "**All Documents**".

Available selections are:

"All Documents"

• The "All Documents" selection sets the data output to all documents with options.

"Selected Documents"

 The "Selected Documents" selection displays the "Document Types" box with the document types that can be selected (see the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list).

"All Documents:"

"All Documents:"

The "All Documents" selections set the data output type.

Available selections are:

"Print to Hardcopy"

 The "Print to Hardcopy" selection sets the data output for all print types (see the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list) to go to hardcopy. The "Print to Hardcopy" checkbox is selected by default.

"Save to File"

 The "Save to File" selection sets the data output for all print types (see the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list) to go to file. The "Save to File" checkbox is selected by default.

"Document Types:"

The "**Document Types**" box will display when "**Selected Documents**" is selected from the "**Documents**" configuration.

See the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list.

"Device Extended Settings:"

"Insert LF After CR:"

The "**Insert LF After CR**" selection, if checked, inserts a Line Feed after a Carriage Return. The "**Insert LF After CR**" checkbox is checked by default.

"Termination Block Segment:"

"Insert form feed"

The "**Insert form feed**" selection, if selected, inserts a Form Feed at the end of the message data. The "**Insert form feed**" selection is selected by default.

"Disable form feed"

The "Disable form feed" selection, if selected, disables Form Feed.

"Custom terminator:"

The "Custom terminator" selection, if selected, inserts a custom terminator that can be user edited. The default custom terminator is set to "~0D~0A***EOM***~0D~0A~0C".

~xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).

"Number of line feeds after message"

The "**Number of line feeds after message**" selection, if selected, inserts the number of line feeds entered in the "**# of Line Feeds After Message**:" field to the end of the message data if selected. The default is set to "**0**".

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "**access.sabre.com**".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

The "**STPATB1**" Driver allows the user to send data from the Sabre Host, through a modem at the Main Office location, to a Sabre Certified printer at a STP or Branch location with various configuration options.

Note 1: If using any of the STP Drivers, SJPM must be run as a Service.

Note 2: The STP must be configured prior to device creation and configuration. Refer to section 6.1.2 SJPM STP Configuration – STP Drivers Only.

Usage:

The "**STPATB1**" Driver should be used if the user needs to send ATB1 data from the Sabre Host to a Satellite printing location for ATB1 ticket printing.

The screenshot below shows the "STPATB1" Driver's configuration tab.

"STPATB1" configuration tab – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.152	- • •
Devices Test-15 🖾	Restart
Device: Test-15 (STPATB1)	
Physical Device Location:	
Location:	
Printer Settings:	
Phone Number:	
Modem Pool Name: Please select an option	
Host Settings:	
Connection Type: HSSP None	
LNIATA:	
Primary Host: access.sabre.com	
Supplemental Hosts: Supplemental Hostname:	
Add	
Configured Supplemental Hostin	
Ψ.	
Remove Selected	
Enable Extended Characters: 🛄	
Faux Causal	
Save Caller	
S IDM Sarver: [127.0.0.1] Un	
Service (involution)	

"STPATB1" driver configuration options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Printer Settings:"

"Phone Number:"

The "**Phone Number**" configuration is for the phone number of the STP location. This phone number will also be displayed in the "**Location**" section of the device line in SJPM.

"Modem Pool Name:"

The "Modem Pool Name" selection is for the selection of the modem pool to be used when dialing the STP location. The STP must be configured prior to device creation and configuration. Refer to section <u>6.1.2 SJPM STP Configuration – STP Drivers</u> <u>Only</u>.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "ATB2TNProxy" (required by children devices), "Group", and "Proxy" Drivers.

"LNIATA:"

The "**LNIATA**" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "access.sabre.com".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

The "**STPATB1INI**" Driver allows the user to send data from the Sabre Host, through a modem at the Main Office location, to a Sabre Certified printer at a STP or Branch location with various configuration options.

Note 1: If using any of the STP Drivers, SJPM must be run as a Service.

Note 2: The STP must be configured prior to device creation and configuration. Refer to section 6.1.2 SJPM STP Configuration – STP Drivers Only.

Usage:

The "**STPATB1INI**" Driver should be used if the user needs to send ATB1 data, from the Sabre Host to a Satellite printing location for invoice and itinerary printing.

The screenshot below shows the "STPATB1INI" Driver's configuration tab.

"STBATB1INI" configuration tab – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.152	
Devices Test-16 🖾	Restart
Device: Test-16 (STPATB1INI)	
Physical Device Location:	
Location:	
Printer Settings:	
Phone Number:	
Nodem Pool Name: Please select an option 🔻	
Host Settings:	
Connection Type:	
LNIATA:	
Primary Host: access.sabre.com	
Supplemental Hosts: Supplemental Hostname:	
Add	
Configured Supplemental Hosts:	
A	
-	
Remove Selected	
Enable Extended Characters:	
Save	
5JPM Server: [127.0.0.1] Up	

"STPATB1INI" driver configuration options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Printer Settings:"

"Phone Number:"

The "**Phone Number**" configuration is for the phone number of the STP location. This phone number will also be displayed in the "**Location**" section of the device line in SJPM.

"Modem Pool Name:"

The "Modem Pool Name" selection is for the selection of the modem pool to be used when dialing the STP location. The STP must be configured prior to device creation and configuration. Refer to section <u>6.1.2 SJPM STP Configuration – STP Drivers</u> <u>Only</u>.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "ATB2TNProxy" (required by children devices), "Group", and "Proxy" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "access.sabre.com".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

The "**STPATB2**" Driver allows the user to send data from the Sabre Host, through a modem at the Main Office location, to a Sabre Certified printer at a STP or Branch location with various configuration options.

Note 1: If using any of the STP Drivers, SJPM must be run as a Service.

Note 2: The STP must be configured prior to device creation and configuration. Refer to section 6.1.2 SJPM STP Configuration – STP Drivers Only.

Usage:

The "**STPATB2**" Driver should be used if the user needs to send ATB2 data from the Sabre Host to a Satellite printing location for ATB2 ticket printing.

The screenshot below shows the "STPATB2" Driver's configuration tab.

"STPATB2" configuration tab – Default Settings:

🥯 Sabre Java Printing Module (SJPM) - 1.8.152	
Devices Test-17 🖾	Restart
	Device: Test-17 (STPATB2)
Physical Device Location:	
Location:	
Printer Settings:	
Phone Number:	
Modem Pool Name:	Please select an option 💌
Host Settings:	
Connection Type:	HSSP None
LNIATA:	
Primary Host:	access.sabre.com
Supplemental Hosts:	Supplemental Hostname:
	Add
	Configured Supplemental Hosts:
	w.
	Remove Selected
Enable Extended Characters:	
Save	Callcet
SJPM Server: [127.0.0.1] Up	

"STPATB2" driver configuration options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Printer Settings:"

"Phone Number:"

The "**Phone Number**" configuration is for the phone number of the STP location. This phone number will also be displayed in the "**Location**" section of the device line in SJPM.

"Modem Pool Name:"

The "Modem Pool Name" selection is for the selection of the modem pool to be used when dialing the STP location. The STP must be configured prior to device creation and configuration. Refer to section <u>6.1.2 SJPM STP Configuration – STP Drivers</u> <u>Only</u>.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "ATB2TNProxy" (required by children devices), "Group", and "Proxy" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "access.sabre.com".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

6.2.18 STPATB2INI Driver

The "**STPATB2INI**" Driver allows the user to send data from the Sabre Host, through a modem at the Main Office location, to a Sabre Certified printer at a STP or Branch location with various configuration options.

Note 1: If using any of the STP Drivers, SJPM must be run as a Service.

Note 2: The STP must be configured prior to device creation and configuration. Refer to section 6.1.2 SJPM STP Configuration – STP Drivers Only.

Usage:

The "**STPATB2INI**" Driver should be used if the user needs to send ATB2 data from the Sabre Host to a Satellite printing location for invoice and itinerary printing.

The screenshot below shows the "STPATB2INI" Driver's configuration tab.

"STPATB2INI" configuration tab – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.152		
Devices Test-18 🖾	Restart	
	Device: Test-18 (STPATB2INI)	
Physical Device Location:		
Location:		
Printer Settings:		
Phone Number:		
Modem Pool Name:	Please select an option	
Host Settings:		
Connection Type:	HSSP None	
LNIATA:		
Primary Host:	access.sabre.com	
Supplemental Hosts	Supplemental Hertaame	
Supponentai noses.		
	Add	
	Configured Supplemental Hosts:	
	A	
	Remove Selected	
Eastle Extended Characterer		
Enable Extended Characters.		
Save	Cancel	
L		
SJPM Server: [127.0.0.1] Up		

"STPATB2INI" driver configuration options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Printer Settings:"

"Phone Number:"

The "**Phone Number**" configuration is for the phone number of the STP location. This phone number will also be displayed in the "**Location**" section of the device line in SJPM.

"Modem Pool Name:"

The "Modem Pool Name" selection is for the selection of the modem pool to be used when dialing the STP location. The STP must be configured prior to device creation and configuration. Refer to section <u>6.1.2 SJPM STP Configuration – STP Drivers</u> <u>Only</u>.

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "ATB2TNProxy" (required by children devices), "Group", and "Proxy" Drivers.

"LNIATA:"

The "**LNIATA**" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "access.sabre.com".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.
The "**System**" Driver allows the user to print data from the Sabre Host to a Network printer with various configuration options.

- **Note 1:** To ensure proper functionality with the SJPM "**System**" Driver, the driver for the printer you plan to print to should be downloaded from the manufacturer's website and installed. **Do not use the driver for the printer that comes with Windows.**
- **Note 2:** Existing System printer devices created with SJPM version earlier than 1.8 that are using the paper settings Source selection will not work. This is due to a limitation in the amount of configuration data that is retrieved for the configured printer. If the source as a valid target is required then delete the old device and create a new device with SJPM version 1.8 or newer.
- **Note 3:** Due to a limitation with the way that Java's print service library is implemented, both the paper **Size** and **Source** cannot be specified and provided to the printer at the same time. Furthermore, any print job generated with the **Source** selection results in the page **Size** being set to the default of your locale (for example: NA Letter for North America). If the selected tray has any other media besides the default, the print job will fail to print. If printing to a specific media **Size** is required, use the **Size** selection and configure the printer to print from a specific bin using that size. The SJPM Team is hoping that future Java updates will provide more features that allow both **Size** and **Source** selections for a specific printer.

Refer to Section 6.1.6 Allow User Rights – Queue and System Drivers for details on user rights configurations.

Refer to <u>Appendix K</u> for terminology on Remote File Services that are available in the destination selection.

Usage:

The "**System**" Driver should be used if the user needs to send data from the Sabre Host to a Network printer on the user's network.

The screenshots below show the "System" Driver's configuration tab.

"System" configuration tab with "Graphics (e.g. laser)" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.134	• 🔀
Devices Test-19 🖾	Restart
Device: Test-19 (System)	×
Physical Device Location:	
Printer Setting:: Printer: Please select an option Printer Mode: Text Only (e.g. dot matrix) Graphics (e.g. laser) Graphics (e.g. laser): Foot Setting::	
Font: Please select an option Font Size: Please select an option Page Setup:	
Paper: © Size © Source Size: None Available Source: None Available	
Orientation: Portrait © Landscape	
Units of Measure: Inches Millimeters	
Top: 1.0 Left: 1.0 Bottom: 1.0 Right: 1.0	V

Devices Test-19 Restar Line Spacing (%): Line Spacing (%): 100.0 Output Settings: Customize Output Settings: Customize Output Settings:
Line Spacing (%): Line Spacing (%): 0utput Settings: Customize Output Settings:
Output Settings: Customize Output Settings:
Device Extended Settings:
Termination Block Segment: @Insert form feed
Disable form feed Custom terminator
Number of line feeds after message Custom Terminator: -0D-0A ⁺ **EOM ^{+**} =OD-0A ⁺ OC -xxx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).
of Line Feeds After Message: 0
Host Settings: Connection Type: HSSP None LNATA: Primary Host: access.sabre.com Supplemental Hosts: Add Configured Supplemental Hosts:

Sabre Java Printing Module (SJPM) - 1.8.152	- • •
Devices Test-19 🖾	Restart
Insert LF After CR: V	
# of Line Feeds After Message:	
Host Settings: Connection Type: HSSP None LNIATA: Primary Host: Supplemental Hostname: Add Configured Supplemental Hosts: Remove Selected Enable Extended Characters:	E
Save	Y
SJPM Server: [127.0.0.1] Up	

"System" configuration tab with "Text Only (e.g. dot matrix)" selected – Default Settings:

Devices Test-1	· Ø	Rest
	Device: Test-19 (System)	
Physical Device L	ocation:	
	Location:	
Printer Settings:		
	Printer: Please select an option 🔻	
	Printer Mod : @Text Only (e.g. dot matrix)	
Output Settings:		
Ci	stomize Output Settings: 📃	
Device Extended	Settings:	
	Insert LF After CR: 🖤	
- Termination B	uck Segment:	
	Insert form feed	
	Disable form feed	
	Custom terminator	
	- Number of the reeds after message	
	Sucher Territories of Aller South of Aller	
	Custom Terminator: -0D-0A***EOM***-0D-0A-0C	
	Custom Terminator: -00-0A***EOM**-00-0A-0C -xx (hex value). Eg: -0D is CR, -0A is linefeed, -0C is FF (Form Feed).	
#	Custom Terminator: -00-0A***EOM**-00-0A-0C -xx (hex value). Eg: -0D is CR, -0A is linefeed, -0C is FF (Form Feed). f Line Feeds After Message: 0	
#	Custom Terminator: -OD-OA***EOM**-OD-OA-OC -xx (hex value). Eg: -OD is CR, -OA is linefeed, -OC is FF (Form Feed). f Line Feeds After Message: 0	
# Host Settings: —	Custom Terminator: -OD-OA***EOM**-OD-OA-OC -xx (hex value). Eg: -OD is CR, -OA is linefeed, -OC is FF (Form Feed). f Line Feeds After Message: 0 Connection Type: © H5SP	
#	Custom Terminator: -OD-OA***EOM**-OD-OA-OC -xx (hex value). Eg: -OD is CR, -OA is linefeed, -OC is FF (Form Feed). f Line Feeds After Message: 0 Connection Type: • HSSP LNIATA:	
# Host Settings:	Custom Terminator: -OD-OA***EOM**-OD-OA-OC -xx (hex value). Eg: -OD is CR, -OA is linefeed, -OC is FF (Form Feed). f Line Feeds After Message: 0 Connection Type: @ HSSP None LNIATA: Primary Hot: access sabre com	
#	Custom Terminator: -00-0A***EOM**-00-0A-0C -xx (hex value). Eg: -0D is CR, -0A is linefeed, -0C is FF (Form Feed). f Line Feeds After Message: 0 Connection Type: @ HSSP Connection Type: @ HSSP Primary Host: access.sabre.com	

"System" configuration tab with "Customize Output Settings" selected and "All Documents" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 1.8.95	
Devices Test-19 🖾	Restart
Output Settings:	
File Extension: File E	
Documents: Documents Ocuments Call Documents Docume	
Al Documents: Print to Hardcopy Save to File	
Insert LF After CR: 🔽	
Insert form feed	
Disable form feed	=
© Custom terminator	
Number of line feeds after message Custom Terminator: -0D-0A**EOM***-0D-0A-0C	
# of Line Feeds After Message:	
Host Settings:	
Connection Type: O None None	
LNIATA:	
Primary Host: access.sabre.com	-
SJPM Server: [127.0.0.1] Up	

"System" configuration tab with "Customize Output Settings" selected and "Selected Documents" selected – Default Settings:

Sabre Java Printing Module (SJPM) - 18.95		×
Devices Test-19 🖾	Res	start
Output Settings:		-
Customize Output Settings: 📝		
Save to File Settings:		
File Extension: ().TXT () Timestamp (seconds)		
Prefix:		
Destination: Please select an option 🔻		
Documents:	=	
Documents: All Documents Selected Documents		
Document Types:		
Agent Coupon (Ticket): Print to Hardcopy Save to File		
Agent Coupon (VMCO): Print to Hardcopy Save to File		
CCCF (Ticket): Print to Hardcopy Save to File		
CCCF (VMCO): Print to Hardcopy Save to File		=
Refund Notice (REN): Print to Hardcopy Save to File		
Exchange Auth. (REA): Print to Hardcopy Save to File		
Refund Auth. (REA): Print to Hardcopy Save to File		
Host ET PIR: Print to Hardcopy Save to File		
Host I tinerary: Print to Hardcopy Save to File		
Host Invoice: Print to Hardcopy Save to File		
Other: Print to Hardcopy Save to File		
Device Extended Settings:		۱ ۲
Insert LF After CR: 🔽		
Termination Block Segment:		
Insert form feed		-
SJPM Server: [127.0.0.1] Up		

Generic Text only Printer Driver:

When using the "Generic Text Only" printer driver in Windows with SJPM's "System" Driver and the "Graphics (e.g. laser)" selection you must select the "monospace.plain" font from the "Font:" drop down list in the System Driver's configuration tab for data to be delivered correctly to file. If the "monospace.plain" font is not selected the driver may print empty lines to the file.

"System" driver configuration options:

"Physical Device Location:"

"Location:"

The "Location" configuration is for a pseudo name (**TKTPrinter1**), physical location of the device (**Computer Room**) or location of the device's output data (**Reports Folder-ABC1**). This configuration is also used by the SJPM grouping feature to group devices together based on the "Location" field.

"Printer Settings:"

"Printer:"

The "**Printer**" selection is for selection of the System printer you want to use to print to. The default is set to "**Please select an option...**".

"Printer Mode:"

The "**Printer Mode**" selection sets the print mode. The default is set to "**Graphics** (e.g. laser)".

Available selections are:

"Text Only (e.g. dot matrix)"

• For Text Only print such as used with dot matrix printers.

"Graphics Only (e.g. laser)"

• For Graphics Only print such as used with laser printers.

"Graphics (e.g. laser):"

The "Graphics (e.g. laser)" box will display when "Graphics (e.g. Laser)" is selected from the "Printer Mode" option.

"Font Settings:"

The "Font Settings" box will display when "Graphics (e.g. Laser)" is selected from the "Printer Mode" option.

"Font:"

The "Font" selection is for the Font to use with the System printer. The default is set to "Please select an option...".

"Font Size:"

The "Font Size" selection is for the Font Size to use with the System printer. The default is set to "Please select an option...".

"Page Setup:"

The "**Page Setup**" box will display when "**Graphics (e.g. Laser**)" is selected from the "**Printer Mode**" option.

"Paper:"

The "Paper" selection sets the paper size and source. The default is set to "Size".

Available selections are:

"Size"

• For the selection of the Paper Size.

"Source"

• For the selection of the Paper Source.

"Orientation:"

The "Orientation" selection sets the page orientation. The default is set to "Portrait".

Available selections are:

"Portrait"

• For the Portrait orientation.

"Landscape"

• For the Landscape orientation.

"Margins:"

The "**Margins**" configuration sets the Top, Left, Bottom, and Right margin size. Settings can be set in Inches or Millimeters. The default is set to "**Inches**" and "**1.0**" for all margins.

"Units of Measure:"

Available selections are:

"Inches"

• For inches unit of measure.

"Millimeters"

• For millimeters unit of measure.

"Line Spacing (%):"

The "Line Spacing (%)" configuration sets the line spacing percentage between printed lines. The default is set to "100.0".

"Output Settings:"

Note: The configurations and functionality of the options contained within the **"Output Settings**" box (displayed when the "**Customize Output Settings**" checkbox is selected) are regional for the Asia Pacific (APAC) market and should be used with caution in other markets.

"Customize Output Settings:"

The "**Customize Output Settings**" option, when checked, provides additional output settings that can be configured for the device. The "**Customize Output Settings**" checkbox is un-checked by default.

"Save to File Settings:"

"File Extension:"

The "File Extension" selection sets the file extension to use when printing to file.

Available selections are:

".TXT"

 Sets the output file extension to ".TXT". This option is set as default. File output format will be timestamp with a .txt extension. For example, with ".TXT" selected and a "Prefix" of "APAC" the output file will be "APAC_20161107105045016.txt".

"Timestamp (seconds)"

Sets the output file extension to "Timestamp (seconds)". For example, with "Timestamp (seconds)" selected and a "Prefix" of "APAC" the output file will be "APAC_20161107105720577.20".

"Prefix:"

The "**Prefix**" configuration sets the prefix that will be prepended to the output filename. The default is blank.

"Destination:"

The "**Destination**" selection sets the destination of the output files. The default is set to "**Please select an option...**".

Refer to <u>Appendix K</u> for terminology on Remote File Services that are available in the destination selection.

Available selections are:

"Local Filesystem"
"Network Share"
"FTP"
"FTPS"
"FTPES"
"SCP"
"SFTP"
"CIFS/SMB1"
"SMB2/SMB3"

"Directory Settings:"

The "**Directory Settings**" box will display when "**Local Filesystem**" is selected from the "**Destination**" option.

"Directory Path:"

The "**Directory Path**" configuration is for the location where the files will be created (**Example:** "**C:\Test**\"). The default is set to "**C:\Program Files\SJPM\Output**\" for 32bit operating systems and "**C:\Program Files (x86)\SJPM\Output**\" 64bit operating systems.

"Remote Host Information:"

The "**Remote Host Information**" box will be displayed when **Network Share**, **FTP**, **FTPS**, **FTPES**, **SCP**, **SFTP**, **CIFS/SMB1**, or **SMB2/SMB3** is selected from the "**Destination**" option.

"Remote Host:"

The "**Remote Host**" configuration sets the IP address, hostname, or computer name of the machine where the share exists. The default is blank.

"Network Share:"

The "**Network Share**" configuration sets the name of the network share. The default is blank.

"Port:"

The "Port" configuration sets the remote host's port to connect to.

Defaults are:

Network Share, CIFS/SMB1 and SMB2/SMB3 = 445

(By default port 445 is used, which uses the SMB protocol. If this is changed to another value, the Network Share will connect using the WebDav protocol.)

FTP and FTPES = 21

 $\mathbf{FTPS} = \mathbf{990}$

SCP and SFTP = 22

"Directory Subpath:"

The "**Directory Subpath**" configuration sets the optional directory subpath under the network share where files will be written. The default is blank.

"User Name:"

The "User Name" configuration sets user name connecting to the network share. The default is blank.

"Password:"

The "**Password**" configuration sets the password of the user connecting to the network share. The default is blank.

"Documents:"

"Documents:"

The "**Documents**" selection sets the document type(s) to use when printing. The default is set to "**All Documents**".

Available selections are:

"All Documents"

• The "All Documents" selection sets the data output to all documents with options.

"Selected Documents"

 The "Selected Documents" selection displays the "Document Types" box with the document types that can be selected (see the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list).

"All Documents:"

"All Documents:"

The "All Documents" selections set the data output type.

Available selections are:

"Print to Hardcopy"

 The "Print to Hardcopy" selection sets the data output for all print types (see the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list) to go to hardcopy. The "Print to Hardcopy" checkbox is selected by default.

"Save to File"

 The "Save to File" selection sets the data output for all print types (see the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list) to go to file. The "Save to File" checkbox is selected by default.

"Document Types:"

The "**Document Types**" box will display when "**Selected Documents**" is selected from the "**Documents**" option.

See the "Customize Output Settings selected – Selected Documents selected - Default Settings:" screenshot above for document type list.

"Device Extended Settings:"

"Insert LF After CR:"

The "**Insert LF After CR**" selection, if checked, inserts a Line Feed after a Carriage Return. The "**Insert LF After CR**" checkbox is checked by default.

"Termination Block Segment:"

"Insert form feed"

The "**Insert form feed**" selection, if selected, inserts a Form Feed at the end of the message data. The "**Insert form feed**" selection is selected by default.

"Disable form feed"

The "Disable form feed" selection, if selected, disables Form Feed.

"Custom terminator:"

The "**Custom terminator**" selection, if selected, inserts a custom terminator that can be user edited. The default custom terminator is set to "**~0D~0A***EOM***~0D~0A~0C**".

~xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed).

"Number of line feeds after message"

The "**Number of line feeds after message**" selection, if selected, inserts the number of line feeds entered in the "**# of Line Feeds After Message**:" field to the end of the message data if selected. The default is set to "**0**".

"Host Settings:"

"Connection Type:"

The "**Connection Type**" selection sets the connection type. The default is set to "**HSSP**".

Available selections are:

"HSSP"

• For receiving data directly from the Sabre Host.

"None"

• For use with the "**ATB2TNProxy**" (required by children devices), "**Group**", and "**Proxy**" Drivers.

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to send data to.

"Primary Host:"

The "**Primary Host**" configuration is for the address to the Sabre Host. The default is set to "**access.sabre.com**".

"Supplemental Hosts:"

The "**Supplemental Hosts**" configuration allows for supplemental host addresses to be configured for the device. This will allow data to be sent to the device from multiple host addresses.

"Enable Extended Characters:"

The "**Enable Extended Characters**" selection enables decoding of extended characters for providing international character capability. The default is unchecked.

Refer to section <u>6.1.1 Supplemental Hosts Configuration – Applies to All Drivers</u> for a detailed

Troubleshooting

7.1 Enabling SJPM Logging

SJPM logging is disabled by default. Logging must be enabled from the SJPM Windows System Tray Icon Menu to generate SJPM log files that can be used to troubleshoot and support SJPM.

7.1.1 Enabling SJPM Server Logging – System Tray Icon Menu

Enable SJPM Server logging from the SJPM Windows System Tray Icon Menu:

The procedure below describes how to enable SJPM Server logging from the SJPM Windows system Tray Icon Menu.

- 1. Right click on the SJPM Windows System Tray Icon.
- 2. Highlight and left click on "Server Logging".



3. The "SJPM TN – Logging Configuration Changed" window will appear. Click on the "<u>Y</u>es" button to restart the SJPM Server.



Open the SJPM Client GUI. The SJPM Client GUI will display the current logging status, logging level, and location of the log file.

Refresh		First Previous Next Last
SJPM Server: [127.0.0.1] Up	LOGGING IS ACTIVE; Level:ALL; Log File:logs/SJPMService.log.	

SJPM will create log files "SJPMServer.log" in the ("C:\Program Files (x86)\SJPM\server\logs" directory for Windows 7 64bit and Windows 8 64bit).

SJPM Server Logging will create ten (10) rolling log files. Zip up all of the log files in the "**logs**" folder to send in for analysis. For the zip file extension use "**.sabre.zip**".

~					- • ×
C v Program Files (x8)	5) 🕨	SJPM ▶ server ▶ logs	✓ Sear	ch logs	٩
Organize 💌 Include in library	•	Share with 🔻 New fol	lder	: :	• 🔳 🔞
a 퉲 SJPM	*	Name	Date modified	Туре	Size
b lient		SJPMServer.log	2/13/2017 1:04 PM	Text Document	1,124 KB
A server		SJPMServer.log.1	2/13/2017 1:03 PM	1 File	2,001 KB
daemon		SJPMServer.log.2	2/13/2017 1:02 PM	2 File	2,001 KB
		SJPMServer.log.3	2/13/2017 1:00 PM	3 File	2,001 KB
	_	SJPMServer.log.4	2/13/2017 12:59 PM	4 File	2,001 KB
	=	SJPMServer.log.5	2/13/2017 12:58 PM	5 File	2,001 KB
linings		SJPMServer.log.6	2/13/2017 12:57 PM	6 File	2,002 KB
		SJPMServer.log.7	2/13/2017 12:55 PM	7 File	2,001 KB
Vindows Defender		SJPMServer.log.8	2/13/2017 12:54 PM	8 File	2,678 KB
Vindows Mail		SJPMServer.log.9	2/13/2017 12:44 PM	9 File	2,420 KB
Windows Media Player	+ 4	1			•
10 items					

Once the issue has been captured in the log files stop the SJPM Server from the Windows "**Start**" button. Refer to Sections <u>4.2.1.9</u>, <u>4.2.1.10</u>, <u>4.2.1.11</u>, and <u>4.2.1.12</u>.

Go to the "C:\Program Files (x86)\SJPM\server\logs" directory and then zip up all of the log files to send in for analysis. For the zip file extension use ".sabre.zip". Example: "SJPMServer.log.sabre.zip". By default the SJPM log files are set to "**2000KB**". If the log files size needs to be increased in order to capture an issue follow the procedure below.

- Stop the SJPM Server. Click on the Windows "Start" button, then click on "All Programs", then click on the "SJPM" folder, then right click on the "Stop SJPM Server" menu item and then left click on the "Run as <u>a</u>dministrator" menu item. Refer to Sections <u>4.2.1.9</u>, <u>4.2.1.10</u>, <u>4.2.1.11</u>, and <u>4.2.1.12</u>.
- 2. Open Windows Notepad as the administrator and then open the "server.properties" file that is located in the "C:\Program Files (x86)\SJPM\server\" directory.
- 3. Search the "server.properties" file for the text string "#sjpm.logmaxfilesize=20000KB".
- 4. Delete the "#" from the line (sjpm.logmaxfilesize=20000KB).
- 5. Save the changes to the "server.properties" file and then close the file.
- 6. Start the SJPM Server. Click on the Windows "Start" button, then click on "All Programs", then click on the "SJPM" folder, then right click on either the "Start SJPM Server (as a service)" or "Start SJPM Server (as an application)" menu item according to how you run SJPM and then left click on the "Run as <u>a</u>dministrator" menu item. Refer to Section <u>4.2.1</u>.

SJPM Server logging will now create up to ten (10) rolling log files of 20000KB each named "SJPMServer.log" in the ("C:\Program Files (x86)\SJPM\server\logs" directory for Windows 7 64bit and Windows 8 64bit).

🚱 🗢 📕 « Local Disk	(C:) ► Program Files ► SJPM ► server	► logs - 47 See	arch logs	<u>×</u> ם ــــ
Organize 👻 Include in	ibrary 🔻 Share with 👻 New fold	er		= - 1 0
A SJPM	Name	Date modified	Туре	Size
	SJPMService.log	3/27/2014 8:34 AM	Text Document	349 KB
/ Jie	SJPMService.log.1	2/5/2014 8:59 AM	1 File	20,391 KB
server	SJPMService.log.2	2/4/2014 9:22 AM	2 File	20,001 KB
ji daemon	SJPMService.log.3	1/30/2014 12:40 PM	3 File	20,002 KB
D devroot	SJPMService.log.4	1/29/2014 9:52 AM	4 File	20,001 KB
	SJPMService.log.5	1/28/2014 12:42 PM	5 File	20,001 KB
logs	SJPMService.log.6	1/27/2014 7:35 AM	6 File	20,001 KB
Vindows Def	SJPMService.log.7	1/23/2014 11:42 AM	7 File	20,001 KB
Vindows Jou	SJPMService.log.8	1/22/2014 10:10 AM	8 File	20,367 KB
 Windows Ma Windows Me 	SJPMService.log.9	1/21/2014 12:24 PM	9 File	20,001 KB
10 items				

7.1.2 Enabling SJPM Server Logging – File Edit

Enable SJPM Server logging in the "server.properties" file:

The procedure below describes how to manually enable SJPM Server logging.

Stop the SJPM Server. Click on the Windows "Start" button, then click on "All Programs", then click on the "SJPM" folder, then right click on the "Stop SJPM Server" menu item and then left click on the "Run as <u>a</u>dministrator" menu item. Refer to sections <u>4.2.1.9</u>, <u>4.2.1.10</u>, <u>4.2.1.11</u>, and <u>4.2.1.12</u>.

2. Open Windows Notepad as the administrator and then open the "server.properties" file that is located in the "C:\Program Files (x86)\SJPM\server\" directory.

				- • ×
😋 🔾 🗢 📙 « Local Disk	(C:) Program Files SJPM server	▶ - 4	arch server	م
Organize 👻 📄 Open	New folder		:==	- 🔳 🔞
🎳 SJPM 🔷	Name	Date modified	Туре	Size
🔒 client	 Instaliojenioerver.exe 	12/11/2015 2:01 PIVI	Application	492 ND
📔 ire	jsapi.properties	4/26/2012 5:39 PM	PROPERTIES File	7 KB
server	S MQLogger.exe	4/26/2012 5:40 PM	Application	239 KB
daemon	pm.properties	3/27/2014 8:09 AM	PROPERTIES File	1 KB
devroot	SeinstallSJPMServer.exe	12/11/2013 2:01 PM	Application	476 KB
lib	RestartSJPMServer.exe	12/11/2013 2:01 PM	Application	491 KB
logs	🚳 RunSJPM.bat	5/4/2012 4:00 PM	Windows Batch File	3 KB 😑
Windows Def	server.properties	3/27/2014 8:06 AM	PROPERTIES File	1 KB
Windows Jou	StartSJPMServer.exe	12/11/2013 2:01 PM	Application	491 KB
Windows Ma	StopSJPMServer.exe	12/11/2013 2:01 PM	Application	479 KB
Windows Me	UninstallSJPMServer.exe	12/11/2013 2:01 PM	Application	479 KB 👻
Windows NT	•	III		•
server.properti PROPERTIES File	es Date modified: 3/27/2014 8:06 AM Size: 478 bytes	Date created: 5/10/2013 3:01	PM	

3. Search the "server.properties" file for the text string "loglevel=NONE". Change the "loglevel" to "ALL". Example: loglevel=ALL

Available log levels are:

FATAL – Log only fatal errors

ERROR – Log only errors

WARN – Log only warnings

INFO – Log only information

DEBUG – Log only debug information

TRACE – Log only trace information

ALL – Log all of the above

- 4. Save the changes to the "server.properties" file and then close the file.
- 5. Start the SJPM Server. Click on the Windows "Start" button, then click on "All Programs", then click on the "SJPM" folder, then right click on either the "Start SJPM Server (as a service)" or "Start SJPM Server (as an application)" menu item according to how you run SJPM and then left click on the "Run as administrator" menu item. Refer to Section 4.2.1.

Once logging is turned on the SJPM Client GUI will display the current logging status, logging level, and location of the log files.

					∇	
Refresh		First	Previous	Next	Last	
SJPM Server: [127.0.0.1] Up	LOGGING IS ACTIVE; Level:ALL; Log File:logs/SJPMService.log.					

SJPM will create log files "**SJPMServer.log**" in the ("**C:\Program Files** (**x86**)**SJPM\server\logs**" directory for Windows 7 64bit and Windows 8 64bit).

SJPM Server Logging will create ten (10) rolling log files. Zip up all of the log files in the "**logs**" folder to send in for analysis. For the zip file extension use "**.sabre.zip**".

V Program Files (x8	b) ►	SJPM ► server ► logs	▼ +→ Sear	rch logs	Q
Organize 🔻 Include in library	•	Share with 🔻 New fo	lder	8==	• 🔟 🔞
a 🌗 Sibw	*	Name	Date modified	Туре	Size
Image: Second		SJPMServer.log	2/13/2017 1:04 PM	Text Document	1,124 KB
A Diserver		SJPMServer.log.1	2/13/2017 1:03 PM	1 File	2,001 KB
daemon		SJPMServer.log.2	2/13/2017 1:02 PM	2 File	2,001 KB
		SJPMServer.log.3	2/13/2017 1:00 PM	3 File	2,001 KB
b lib	_	SJPMServer.log.4	2/13/2017 12:59 PM	4 File	2,001 KB
	=	SJPMServer.log.5	2/13/2017 12:58 PM	5 File	2,001 KB
linin stell lefe mestic a		SJPMServer.log.6	2/13/2017 12:57 PM	6 File	2,002 KB
		SJPMServer.log.7	2/13/2017 12:55 PM	7 File	2,001 KB
Windows Defender		SJPMServer.log.8	2/13/2017 12:54 PM	8 File	2,678 KB
Windows Mail		SJPMServer.log.9	2/13/2017 12:44 PM	9 File	2,420 KB
Windows Media Player Windows NT	+ 4		111		Þ
10 items					

Stop the SJPM Server. Click on the Windows "**Start**" button, then click on "**All Programs**", then click on the "**SJPM**" folder, then right click on the "**Stop SJPM Server**" menu item and then left click on the "**Run as <u>a</u>dministrator**" menu item. Refer to sections <u>4.2.1.9</u>, <u>4.2.1.10</u>, <u>4.2.1.11</u>, and <u>4.2.1.12</u>.

Go to the "C:\Program Files (x86)\SJPM\server\logs" directory and then zip up all of the log files. For the zip file extension use ".sabre.zip". Example: "SJPMServer.log.sabre.zip".

If you need to change the log files size refer to section 7.1.1.1.

7.1.3 Enabling SJPM Client Logging – System Tray Icon Menu

Enable SJPM Client logging from the SJPM Windows System Tray Icon Menu:

The procedure below describes how to enable SJPM Client Logging from the SJPM Windows System Tray Icon Menu.

- 1. Right click on the SJPM Windows System Tray Icon.
- 2. Highlight and left click on "Client Logging".



SJPM will create the "**sjpmclient.log**" file in

"logfile=%{HOMEPATH}/logs/sjpmclient.log". You can also look in the "client.ini" file for the log file location.

🔄 client.ini - Notepad	×
<u>F</u> ile <u>E</u> dit F <u>o</u> rmat <u>V</u> iew <u>H</u> elp	
[server] ip=127.0.0.1 port=5196 pollInterval=30000	*
[Logging] loglevel=ALL logfile=%{HOMEPATH}/logs/sjpmclient.log	
	Ŧ
<	н

3. Right click on the SJPM Windows System Tray Icon and then highlight and left click on "**Exit**". Go to the sipmclient.log file location and zip up the "**sjpmclient.log**" file to send in for analysis. For the zip file extension use "**.sabre.zip**". **Example:** "**sjpmclient.log.sabre.zip**".

4. Start the SJPM Client. Click on the Windows "Start" button, then click on "All Programs", then click on the "SJPM" folder, then right click on the "SJPM Client" menu item and then left click on the "Run as administrator" menu item.

7.1.5 Enabling SJPM Client Logging - File Edit

Enable SJPM Client logging in the "client.ini" file:

Run Windows Notepad as Administrator and then open the "client.ini" file that is located in the ("C:\Program Files (x86)\SJPM\client\QtClient\" directory for Windows 7 64bit and Windows 8 64bit).

					×
😋 🗢 🗸 « Program	n Files 🕨 SJPM 🕨 client 🕨 QtClient 🕨	✓ 49 Sec	arch QtClient		٩
Organize 👻 🧻 Ope	n 🔻 Print New folder		:==	- 🔟 🧯	
📕 SJPM 🧳	Name	Date modified	Туре	Size	
📗 client	퉬 html	3/20/2014 4:20 PM	File folder		
U QtClient	🌗 imageformats	3/20/2014 4:20 PM	File folder		
jre	😰 client.ini	3/27/2014 1:55 PM	Configuration sett	1 KB	
ji server	libgcc_s_dw2-1.dll	9/25/2012 10:37 AM	Application extens	42 KB	Ξ
aaemon	🚳 libqjson.dll	4/25/2013 9:46 AM	Application extens	3,832 KB	
devroot	🚳 log4qt.dll	4/25/2013 9:46 AM	Application extens	470 KB	
🦺 lib	🚳 mingwm10.dll	9/25/2012 10:37 AM	Application extens	12 KB	
🦉 logs	QtCore4.dll	4/25/2013 9:46 AM	Application extens	2,825 KB	
Windows Def	QtGui4.dll	4/25/2013 9:46 AM	Application extens	9,916 KB	
Windows Jou	QtNetwork4.dll	4/25/2013 9:46 AM	Application extens	1,276 KB	-
Windows Me	•			+	
client.ini Configuration	Date modified: 3/27/2014 1:55 PM settings Size: 123 bytes	Date created: 4/19/2013	2:31 PM		

The steps below describe the procedure to manually enable SJPM Client logging.

1. In the "client.ini" file search for the text string "loglevel=OFF".

Change the "loglevel" to "ALL". Example: loglevel=ALL

- 2. Save the changes to the "client.ini" file and close the file.
- 3. Right click on the SJPM Windows System Tray Icon and then highlight and left click on "Exit".

4. Start the SJPM Client. Click on the Windows "**Start**" button, then click on "**All Programs**", then click on the "**SJPM**" folder, then right click on the "**SJPM Client**" menu item and then left click on the "**Run as <u>a</u>dministrator**" menu item.

SJPM will create the "sjpmclient.log" file in

"logfile=%{HOMEPATH}/logs/sjpmclient.log". You can also look in the "client.ini" file for the log file location.

📃 client.ini - Notepad	- • •
<u>F</u> ile <u>E</u> dit F <u>o</u> rmat <u>V</u> iew <u>H</u> elp	
[server] ip=127.0.0.1 port=5196 pollInterval=30000	^
[Logging] loglevel=ALL logfile=%{HOMEPATH}/logs/sjpmclient.log	_
4	► d

- 5. Right click on the SJPM Windows System Tray Icon and then highlight and left click on "**Exit**". Go to the sipmclient.log file location and zip up the "**sjpmclient.log**" file to send in for analysis. For the zip file extension use "**.sabre.zip**".
- 6. Start the SJPM Client. Click on the Windows "**Start**" button, then click on "**All Programs**", then click on the "**SJPM**" folder, then right click on the "**SJPM Client**" menu item and then left click on the "**Run as <u>a</u>dministrator**" menu item.

SJPM logging is disabled by default. Logging must be enabled in order to generate SJPM log files for use in troubleshooting.

7.2.1 Disabling SJPM Server Logging – System Tray Icon Menu

Disable SJPM Server logging from the SJPM Windows System Tray Icon Menu:

The steps below describe the procedure to disable SJPM Server Logging. A check mark next to the "Server Logging" menu item denotes that logging is enabled.

- 1. Right click on the SJPM Windows System Tray Icon.
- 2. Highlight and left click on "Server Logging".



3. The "SJPM TN – Logging Configuration Changed" window will appear. Click on the "<u>Y</u>es" button to restart the SJPM Server.

🖲 SJPM	- Logging Configuration Changed	×
i	For changes to take effect the SJPM server must be restarted. Select "Yes" to restart the SJPM server now or select "No" to restart the SJPM server later.	
	<u>Y</u> es <u>N</u> o	

Disable SJPM Server logging in the "server.properties" file:

Run Windows Notepad as Administrator and then open the "**server.properties**" file that is located in the ("**C:\Program Files** (**x86**)**SJPM\server**\" directory for Windows 7 64bit and Windows 8 64bit).

				- • •
😋 🕞 🗢 📔 « Local Disk	(C:) Program Files SJPM server	▶ - 4	arch server	٩
Organize 🔻 📄 Open	New folder			• 🔟 🔞
JPM ^		Date modified	Туре Аррисацоп	Size
jre	📄 jsapi.properties 🗐 MQLogger.exe	4/26/2012 5:39 PM 4/26/2012 5:40 PM	PROPERTIES File Application	7 KB 239 KB
🍑 daemon	 pm.properties ReinstallSJPMServer.exe 	3/27/2014 8:09 AM 12/11/2013 2:01 PM	PROPERTIES File Application	1 KB 476 KB
ib 🔒 lib	SestartSJPMServer.exe RunSJPM.bat	12/11/2013 2:01 PM 5/4/2012 4:00 PM	Application Windows Batch File	491 KB 3 KB
Windows Def ₩ Windows Jou	 server.properties StartSJPMServer.exe 	3/27/2014 8:06 AM 12/11/2013 2:01 PM	PROPERTIES File Application	1 KB 491 KB
i Windows Ma Windows Me	StopSJPMServer.exe UninstallSJPMServer.exe	12/11/2013 2:01 PM 12/11/2013 2:01 PM	Application Application	479 KB 479 KB 👻
Windows NT T	S Date modified: 3/27/2014 8:06 AM	III Date created: 5/10/2013 3:01	PM	4
PROPERTIES File	Size: 478 bytes			

The steps below describe the procedure to manually disable SJPM Server logging.

- Stop the SJPM Server. Click on the Windows "Start" button, then click on "All Programs", then click on the "SJPM" folder, then right click on the "Stop SJPM Server" menu item and then left click on the "Run as <u>a</u>dministrator" menu item. Refer to section <u>4.2 Starting and</u> <u>Stopping the SJPM Server</u>.
- 2. In the "server.properties" file search for the text string "loglevel=ALL".

Change the "loglevel" to "NONE". Example: loglevel=NONE

- 3. Save the changes to the "server.properties" file and then close the file.
- 4. Start the SJPM Server. Click on the Windows "Start" button, then click on "All Programs", then click on the "SJPM" folder, then right click on the "Start SJPM Server (as a service)" or "Start SJPM Server (as an application)" menu item according to how you run SJPM and then left click on the "Run as <u>a</u>dministrator" menu item. Refer to section <u>4.2 Starting and</u> <u>Stopping the SJPM Server</u>.

7.2.3 Disabling SJPM Client Logging – System Tray Icon Menu

Disable SJPM Client logging from the SJPM Windows System Tray Icon Menu:

The steps below describe the procedure to disable SJPM Client Logging. A check mark next to the "**Client Logging**" menu item denotes that logging is enabled.

- 1. Right click on the SJPM Windows System Tray Icon.
- 2. Highlight and left click on "Client Logging".



Disable SJPM Client logging in the "client.ini" file:

Run Windows Notepad as Administrator and then open the "**client.ini**" file that is located in the ("**C:\Program Files (x86)\SJPM\client\QtClient**\" directory for Windows 7 64bit and Windows 8 64bit).

					×
😋 🔵 🗢 📙 « Program	Files ► SJPM ► client ► QtClient ►	✓ 4 Sec	arch QtClient		م
Organize 👻 🧻 Open	n ▼ Print New folder			• 🔟 🧯)
🔰 SJPM 🔺	Name	Date modified	Туре	Size	
🖟 client 👔 QtClient	html	3/20/2014 4:20 PM	File folder File folder		
🍌 jre	client.ini	3/27/2014 1:55 PM	Configuration sett	1 KB	
server	libgcc_s_dw2-1.dll	9/25/2012 10:37 AM	Application extens	42 KB	Ξ
aemon 📗	🚳 libqjson.dll	4/25/2013 9:46 AM	Application extens	3,832 KB	
devroot	🚳 log4qt.dll	4/25/2013 9:46 AM	Application extens	470 KB	
	🚳 mingwm10.dll	9/25/2012 10:37 AM	Application extens	12 KB	
Windows Def	🚳 QtCore4.dll	4/25/2013 9:46 AM	Application extens	2,825 KB	
Windows Jer	🚳 QtGui4.dll	4/25/2013 9:46 AM	Application extens	9,916 KB	
Windows Ma	QtNetwork4.dll	4/25/2013 9:46 AM	Application extens	1,276 KB	-
Windows Me	•			4	
Client.ini Configuration	Date modified: 3/27/2014 1:55 PM settings Size: 123 bytes	Date created: 4/19/2013	2:31 PM		

The steps below describe the procedure to manually disable SJPM Client Logging.

1. In the "client.ini" file search for the text string "loglevel=ALL".

Change the "loglevel" to "OFF". Example: loglevel=OFF

- 2. Save the changes to the "client.ini" file and then close the file.
- 3. Right click on the SJPM Windows System Tray Icon and then highlight and left click on "**Exit**".
- 4. Start the SJPM Client. Click on the Windows "**Start**" button, then click on "**All Programs**", then click on the "**SJPM**" folder, then right click on the "**SJPM Client**" menu item and then left click on the "**Run as <u>a</u>dministrator**" menu item.

Appendix

A. SJPM Recommended Requirements

Certified Operating System Software

- Windows 7 64Bit, Windows 8.1 64Bit, Windows 10 64Bit and Linux.
- Other systems running SJPM as an application with Java 1.7 or above.

SJPM GUI – Configured Devices

The recommended maximum number of configured devices in the SJPM Client GUI is (**35**). The SJPM Client GUI **is** capable of handling more devices based on the machine's processor and memory capabilities.

Java[™] Runtime Environment

• Java 2 Platform, Standard Edition (included with the SJPM installation)

Hardware

- **Processor** Intel Pentium 4 or higher
- **RAM** 2 GB or higher
- Video Resolution 1024 x 768 or higher
- Hard disk Space 250 MB of free disk space

Network

• Sabre Host access is required on the machine where SJPM is running

Firewall Considerations

- Sabre Host access is required
- Your firewall administrator should verify that all firewall configurations allow the following traffic types:

Outbound TCP connections to 151.193.141.0/24 (255.255.255.0) for the following TCP Port: 30051 (NOFEP Printing)

Certified Operating System Software

- Windows 7 64Bit, Windows 8.1 64Bit, Windows 10 64Bit and Linux.
- Other systems running as an application with Java 1.7 or above.

SJPM GUI – Configured Devices

The recommended maximum number of configured devices in the SJPM Client GUI, when using the minimum requirements, is (10). The SJPM Client GUI is capable of handling more devices based on the machine's processor and memory capabilities.

Java[™] Runtime Environment

• Java 2 Platform, Standard Edition (included with the SJPM installation)

Hardware

- **Processor** Intel Pentium 4
- **RAM** 1 GB
- Video Resolution 1024x768
- Hard disk Space 250 MB of free disk space

Network

• Sabre Host access is required on the machine where SJPM is running

Firewall Considerations

- Sabre Host access is required
- Your firewall administrator should verify that all firewall configurations allow the following traffic types:

Outbound TCP connections to 151.193.141.0/24 (255.255.255.0) for the following TCP Port: 30051 (NOFEP Printing)

The **SJPM FAQ** provides questions and answers to the most popular questions on the install, uninstall, configuration, operation, and support of Sabre Java Printing Module (SJPM).

Q: What Operating Systems are SJPM certified for use on?

- A: SJPM is certified for use with the following operating systems. If the operating system is not listed below then it is not certified nor supported at this time.
 - Windows 7 64Bit
 - Windows 8.1 64 Bit
 - Windows 10 64 Bit
 - Linux

Q: How long does it take to install SJPM?

A: The average installation time for the "Typical" installation is 2-5 Minutes depending on the machine it is being installed on.

Q: How do I run SJPM on Linux?

A: Refer to section 4.5 Running SJPM on Linux in the SJPM User's Guide.

Q: Will SJPM run on Windows XP?

A: SJPM IS NOT certified for use on Windows XP operating systems. However, there are customers currently running SJPM on Windows XP with no issues and we have done testing on various versions with no issues.

Q: Will SJPM run on Windows Server?

A: SJPM IS NOT certified for use on Windows Server operating systems. However, there are customers currently running SJPM on Windows Server with no issues and we have done testing on various versions with no issues.

Q: Will SJPM run on Citrix?

A: SJPM IS NOT certified for use on Citrix. However, there are several customers running SJPM on Citrix with no issues and we have done testing on Citrix with no issues.

- **Q:** Does SJPM update automatically?
- A: No, SJPM does not update automatically. SJPM must be updated manually. New versions of SJPM can be downloaded from "<u>agency eservices</u>". Log in to agency eservices, then navigate to "Support", then "Downloads", and then click on the "Sabre Java Print Module" link.

When installing a newer version of SJPM; SJPM's internal automatic upgrade functionality eliminates the need to uninstall the previous version of SJPM. Application files are updated as needed and all device configurations are saved and migrated to the new SJPM installation version.

Q: Is SJPM automatically downloaded through "Install Sabre Applications" in SRW?

A: No, SJPM is not available in SRW for download. SJPM can be downloaded from "agency eservices".

Log in to agency eservices, then navigate to "**Support**", then "**Downloads**", and then click on the "**Sabre Java Print Module**" link.

Q: Where do I download SJPM?

A: Travel Network users can download SJPM from "agency eservices".

Log in to agency eservices, then navigate to "**Support**", then "**Downloads**", and then click on the "**Sabre Java Print Module**" link.

Q: Does SJPM require Java to be installed?

A: No, the SJPM installation includes its own Java, version **1.8.0_45**. The use of SJPM's Java is dependent on the "SJPM_JAVA_HOME environment variable" settings. All SJPM Drivers will use SJPM's Java.

Q: Can SJPM print to LPT parallel printers?

A: Yes, the "Printer" Driver has configuration options for printing to parallel printers. Refer to section <u>6.2.7 Printer Driver</u> in the SJPM User's Guide.

Q: Can SJPM print to PDF files?

A: Yes, the "File" and "ATB2File" Drivers have configuration options for printing to **PostScript**. Refer to sections <u>6.2.6 File Driver</u> and <u>6.2.1 ATB2File Driver</u> in the SJPM User's Guide.

Q: Can SJPM print PostScript files?

A: Yes, the "File" and "ATB2File" Drivers have configuration options for printing to **PostScript**. Refer to sections <u>6.2.6 File Driver</u> and <u>6.2.1 ATB2File Driver</u> in the SJPM User's Guide.

Q: Can SJPM print to BMP files?

A: Yes, the "ATB2File" Driver has configuration options for printing to BMP. Refer to section <u>6.2.1 ATB2File Driver</u> in the SJPM User's Guide.

Q: Can SJPM print to JPG files?

A: Yes, the "ATB2File" Driver has configuration options for printing to JPG. Refer to section <u>6.2.1 ATB2File Driver</u> in the SJPM User's Guide.

Q: Can SJPM print to PNG files?

A: Yes, the "ATB2File" Driver has configuration options for printing to PNG. Refer to section <u>6.2.1 ATB2File Driver</u> in the SJPM User's Guide.

Q: Can SJPM print tickets to file?

A: Yes, the "ATB2File" Driver has configuration options for printing tickets to BMP, JPG, and PNG file formats. Refer to section <u>6.2.1 ATB2File Driver</u> in the SJPM User's Guide.

Q: Can SJPM be installed to another hard drive other than C:\?

A: Yes. This requires running the SJPM installation from the command line. Refer to section <u>6.1.7Installing SJPM to a Different Hard Drive</u> in the SJPM User's Guide.

Command Example:

Install_SJPM_TN_x86_32Bit_1.8.25.exe INSTALLDIR="Z:\TTT"

Q: Is SJPM available in other languages?

A: Yes. Currently SJPM is available in **English** and **Spanish**, accessible from the SJPM Windows System Tray icon menu. Other languages will be added in later releases.

Q: How many devices can be configured in SJPM?

A: The recommended number of configured devices for the SJPM Client GUI is **35**. The SJPM GUI is capable of handling more devices but this could result in performance issues while viewing the SJPM GUI. The maximum number of devices will be determined by the machine's CPU and Memory capabilities on which SJPM is installed.

Q: Where are the SJPM log files created and stored?

A: Refer to sections 7.1 Enabling SJPM Logging and 7.2 Disabling SJPM Logging.

Server Logging:

When Server Logging is enabled SJPM will create and store the log files "SJPMServer.log" (Maximum of ten (10) files. "SJPMServer.log" thru "SJPMServer.log.9") in the "C:\Program Files (x86)\SJPM\server\logs" directory for Windows 7 64bit and Windows 8 64bit for default installations. If SJPM is installed on a different drive than the default then the log files will be located on the install drive in the "SJPM\server\logs" folder.

SJPM Server Logging creates ten (10) rolling log files. (All 10 log files should be zipped up with the file extension of "**.sabre.zip**" before sending in for analysis.)

Client Logging:

When Client Logging is enabled SJPM will create the log file "**sjpmclient.log**" in the "**logfile=%{HOMEPATH}/logs/sjpmclient.log**". You can also look in the "**client.ini**" file for the log file location.

(The log file should be zipped up with the file extension of "**.sabre.zip**" before sending in for analysis.)

Q: Is there a manual with instructions on SJPM?

A: Yes. You are reading it!, The SJPM User's Guide is included in the SJPM installation under "Start", "All Programs", "SJPM", SJPM User's Guide.

Q: Are there ports or firewall exclusions that need to be configured for SJPM?

- A: SJPM functions the same as SPM (OADP) so it will not require any changes. For new Sabre users SJPM does not require any Windows setup for operation. However, connectivity to Sabre on the machine where SJPM is installed is required.
- **Q:** Can SJPM be run more than once on a single machine?
- A: No, currently this feature is not available but we will be working to add this functionality in a later release.

Q: Can SJPM run as a Service or an Application?

A: Yes. SJPM runs as a Service by default upon installation but can be changed to run as an Application from the SJPM Windows System Tray icon menu. Refer to sections
 4.1.4 Running SJPM as a Service and 4.1.3 Running SJPM as an Application.

Q: Can SJPM print to network printers?

A: Yes, the "System" and "Queue" Drivers can print to network printers. Refer to sections <u>6.2.19 System Driver</u> and <u>6.2.13 Queue Driver</u>.

- **Q:** Can SJPM print to network drives?
- A: Yes, the "File" and "IFQ" Drivers can print to network drives. Refer to section <u>6.1.5</u> <u>Printing to a Mapped Network Drive Folder – ATB2File, File, and IFQ Drivers</u>.
- **Q:** Can you specify the location of output files?
- A: Yes, with the SJPM "ATB2File", "File" and "IFQ" Drivers you can specify the location of the output files. Refer to sections <u>6.2.1 ATB2File Driver</u>, <u>6.2.6 File Driver</u> and <u>6.2.8 IFQ Driver</u>.

They are defaulted as follows:

ATB2File and File Driver = C:\Program Files (x86)\SJPM\Output\

IFQ Driver = C:\SPL

Q: Can you restart a single device after edit in SJPM?

A: No, SJPM currently requires a complete restart after edits, deletions, or additions. This is a feature we will add in a later release.

Q: Does SJPM work with SCVPN?

A: Yes, SJPM has a SCVPN enabled JCSAPI included that provides compatibility with SCVPN.

Q: Does SJPM require configuration to work with SCVPN?

A: No, the SCVPN enabled JCSAPI included with SJPM is preconfigured for compatibility with SCVPN.

Q: Does SJPM connect to SCVPN on startup?

A: No, the SCVPN Launcher must be run first and Sabre Sign-In credentials authenticated before SJPM can connect devices to Sabre.

Q: Does SJPM provide file encryption?

A: Yes, SJPM provides file encryption with the "ATB2File", "File", and "IFQ" Drivers. Refer to <u>Appendix F</u>.

Q: Does SJPM provide device backup and restore functionality?

- A: Yes, you can backup and restore SJPM devices. The procedure is manual. Refer to section <u>6.1.3 Device Backup and Restore</u>.
- Q: Can you Import and Export devices in SJPM?
- A: Yes, SJPM provides functionality in the SJPM Client GUI and SJPM System Tray Icon to import and export devices.

Q: Can you Enable and Disable multiple devices in SJPM?

A: Yes, SJPM provides functionality in the SJPM Client GUI to enable or disable multiple devices.

Q: Can you FTP files with SJPM?

A: Yes, SJPM provides functionality in the "ATB2File" and "File" Drivers to FTP files.

D. Connecting to Sabre with SJPM Using SCVPN

When using **SJPM** with the **Sabre Customer Virtual Private Network** (**SCVPN**) product it is required that you enter your Sabre credentials whenever SJPM runs and tries to connect a device to Sabre for the first time. Once the credentials have been entered, accepted and the devices have connected, SJPM will then maintain the connection to Sabre.

Possible reasons for SJPM devices to not be able to connect to Sabre could be that the credentials have not been entered (look for the credentials windows), the credentials entered are incorrect, or the connectivity is down.

There is a 15 minute timeout with SCVPN. If the connectivity in your office is down for more than 15 minutes and SJPM cannot maintain the connection it will be necessary for you to enter your credentials again once connectivity to your office has been restored.

E. Compatibility with Sabre Customer Virtual Private Network (SCVPN)

The **JCSAPI** that is included with **SJPM** has been enhanced to support the **Sabre Customer Virtual Private Network (SCVPN)** product. The SCVPN enabled JCSAPI is included in the SJPM installation and does not require any configuration or interaction.

SJPM requires an active SCVPN tunnel before SJPM can connect. "SCVPNLauncher" can be used and should be running. Once SCVPNLauncher is running then SJPM can be started, or restarted if already running, for the SCVPN connection to be performed. The user will then be prompted for Sabre Sign-In credentials. Once the Sabre credentials have been submitted and authenticated SJPM devices will connect through SCVPN.

F. File Encryption and Decryption – ATB2File and File Drivers

SJPM provides the ability to encrypt files when using the "**ATB2File**" and "**File**" Drivers. These drivers can be configured to encrypt output files. The following source code can be used to generate a public and private key for use with the "**ATB2File**" and "**File**" Drivers.

F.a Encryption – Source Code

The following source code can be used to encrypt files created from the "**ATB2File**" and "**File**" Drivers.

EncryptDecryptHelper.java

```
import java.io.ByteArrayOutputStream;
import java.util.Random;
import javax.crypto.Cipher;
import javax.crypto.SecretKey;
import javax.crypto.SecretKeyFactory;
import javax.crypto.spec.PBEKeySpec;
import javax.crypto.spec.PBEParameterSpec;
public class EncryptDecryptHelper
   private static final int ITERATIONS = 1000;
   public static byte[] passwordEncrypt( char[] password, byte[] plaintext ) {
   ByteArrayOutputStream();;
       try
           byte[] salt = new byte[8];
           Random random = new Random();
           random.nextBytes( salt );
           PBEKeySpec keySpec = new PBEKeySpec( password );
           SecretKeyFactory keyFactory = SecretKeyFactory.getInstance( "PBEWithMD5AndDES");
SecretKey key = keyFactory.generateSecret( keySpec );
PBEParameterSpec paramSpec = new PBEParameterSpec( salt, ITERATIONS );
           Cipher cipher = Cipher.getInstance( "PBEWithMD5AndDES" );
           cipher.init( Cipher.ENCRYPT_MODE, key, paramSpec );
           byte[] ciphertext = cipher.doFinal( plaintext );
           baos.write( salt );
           baos.write( ciphertext );
       } catch( Exception e ) {
   System.out.println( "Threw exception: " );
   e.printStackTrace();
       return baos.toByteArray();
   public static byte[] passwordDecrypt( char[] password, byte[] saltAndCiphertext ) {
    byte[] plaintext = new byte[1];
       trv
           byte[] salt = new byte[8];
           byte[] ciphertext = new byte[ saltAndCiphertext.length - 8 ];
           int keySize = saltAndCiphertext.length
```

(Sabre Java Printing Module (SJPM) User's Guide – Travel Network Edition. March, 2017) Confidential and Proprietary Sabre Inc.

```
System.arraycopy( saltAndCiphertext, 0, salt, 0, 8 );
          System.arraycopy( saltAndCiphertext, 8, ciphertext, 0, keySize );
          PBEKeySpec keySpec = new PBEKeySpec( password );
SecretKeyFactory keyFactory = SecretKeyFactory.getInstance( "PBEWithMD5AndDES");
          SecretKey key = keyFactory.generateSecret( keySpec );
          PBEParameterSpec paramSpec = new PBEParameterSpec( salt, ITERATIONS );
          Cipher cipher = Cipher.getInstance( "PBEWithMD5AndDES" );
          cipher.init( Cipher.DECRYPT_MODE, key, paramSpec );
          plaintext = cipher.doFinal( ciphertext );
       } catch( Exception e ) {
   System.out.println( "Threw exception: " );
          e.printStackTrace();
       return plaintext;
   }
CreateKeysApp.java:
import java.io.BufferedReader;
import java.io.ByteArrayOutputStream;
import java.io.FileOutputStream;
import java.io.InputStreamReader;
import java.security.Key;
import java.security.KeyPair;
import java.security.KevPairGenerator;
import java.util.Arrays;
import java.util.Random;
import javax.crypto.Cipher;
import javax.crypto.SecretKey;
import javax.crvpto.SecretKeyFactory;
import javax.crypto.spec.PBEKeySpec;
import javax.crypto.spec.PBEParameterSpec;
import javax.crypto.spec.SecretKeySpec;
public class CreateKeysApp {
    private static final int ITERATIONS = 1000;
   public static void main( String[] args ) {
      try {
    BufferedReader in = new BufferedReader( new InputStreamReader( System.in ) );
    System.out.print( "Password to encrypt the private RSA key: " );
    //String password = in.readLine();
    Compared = Sustem console();

          char[] password = System.console().readPassword();
          System.out.println( "Generating public and private RSA keys..." );
          KeyPairGenerator keyPairGenerator = KeyPairGenerator.getInstance( "RSA" );
          keyPairGenerator.initialize( 4096 );
KeyPair keyPair = keyPairGenerator.genKeyPair();
          System.out.println( "Generated RSA key." );
          System.out.print( "Public key filename: " );
           String publicKeyFilename = in.readLine();
          byte[] publicKeyBytes = keyPair.getPublic().getEncoded();
          FileOutputStream fos = new FileOutputStream( publicKeyFilename );
           fos.write( publicKeyBytes );
          fos.close():
          System.out.print( "Private key filename: " );
String privateKeyFilename = in.readLine();
          byte[] privateKeyBytes = keyPair.getPrivate().getEncoded();
          byte[] encryptedPrivateKeyBytes =
              EncryptDecryptHelper.passwordEncrypt( password, privateKeyBytes );
          byte[] decryptedPrivateKeyBytes =
              EncryptDecryptHelper.passwordDecrypt( password, encryptedPrivateKeyBytes );
          if( Arrays.equals( privateKeyBytes, decryptedPrivateKeyBytes ) ) {
   System.out.println( "Password Based Encryption/Decryption success" );
          else (
              System.out.println( "Password Based Encryption/Decryption failure" );
           fos = new FileOutputStream( privateKeyFilename );
           fos.write( encryptedPrivateKeyBytes );
           fos.close();
       } catch( Exception e ) {
   System.out.println( "Threw exception: " );
          e.printStackTrace();
       }
  }
}
```

}

The following source code can be used to decrypt encrypted files created from the "**ATB2File**" and "**File**" Drivers.

```
DecryptFileApp.java:
import java.io.BufferedReader;
import java.io.ByteArrayOutputStream;
import java.io.DataInputStream;
import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.InputStreamReader;
import java.security.Key;
import java.security.KeyFactory;
import java.security.PrivateKey;
import java.security.spec.PKCS8EncodedKeySpec;
import java.util.Arrays;
import java.util.Random;
import javax.crypto.Cipher;
import javax.crypto.CipherInputStream;
import javax.crypto.SecretKey;
import javax.crypto.SecretKeyFactory;
import javax.crypto.spec.IvParameterSpec;
import javax.crypto.spec.PBEKeySpec;
import javax.crypto.spec.PBEParameterSpec;
import javax.crypto.spec.SecretKeySpec;
public class DecryptFileApp {
    private static final int ITERATIONS = 1000;
   public static void main( String[] args ) {
       try {
   BufferedReader in = new BufferedReader( new InputStreamReader( System.in ) );
   System.out.print( "Password to dencrypt the private RSA key: " );
   Cuttom console() readPassword();
           char[] password = System.console().readPassword();
           System.out.print( "Private RSA key filename: " );
String privateKeyFilename = in.readLine();
           System.out.print( "Encrypted input filename: " );
String encryptedInputFilename = in.readLine();
           System.out.print( "Decrypted output filename: '
                                                                     ");
           String decryptedOutputFilename = in.readLine();
           FileInputStream fis = new FileInputStream( privateKeyFilename );
           ByteArrayOutputStream baos = new ByteArrayOutputStream();
           int aByte = 0;
           while( ( aByte = fis.read() ) != -1 ) {
              baos.write( aByte );
           }
           fis.close();
           byte[] encryptedPrivateKeyBytes = baos.toByteArray();
           baos.close();
           byte[] decryptedPrivateKeyBytes =
              EncryptDecryptHelper.passwordDecrypt( password, encryptedPrivateKeyBytes );
           PKCS8EncodedKeySpec keySpec = new PKCS8EncodedKeySpec( decryptedPrivateKeyBytes );
           RevFactory keyFactory = KeyFactory.getInstance( "RSA" );
PrivateKey privateKey = keyFactory.generatePrivate( keySpec );
           Cipher rsaCipher = Cipher.getInstance( "RSA/ECB/PKCS1Padding" );
           DataInputStream dis =
           new DataInputStream( new FileInputStream( encryptedInputFilename ) );
byte[] encryptedAESKeyBytes = new byte[ dis.readInt() ];
           dis.readFully( encryptedAESKeyBytes );
           rsaCipher.init( Cipher.DECRYPT_MODE, privateKey );
byte[] aesKeyBytes = rsaCipher.doFinal( encryptedAESKeyBytes );
           SecretKey aesKey = new SecretKeySpec( aesKeyBytes, "AES" );
           byte[] iv = new byte[16];
           dis.read( iv );
           IvParameterSpec ivSpec = new IvParameterSpec( iv );
```

```
Cipher cipher = Cipher.getInstance( "AES/CFB8/NoPadding" );
cipher.init( Cipher.DECRYPT_MODE, aesKey, ivSpec );
CipherInputStream cis = new CipherInputStream( dis, cipher );
FileOutputStream fos = new FileOutputStream( decryptedOutputFilename );
aByte = 0;
while( (aByte = cis.read() ) != -1 ) {
fos.write( aByte );
}
cis.close();
fos.close();
fos.close();
} catch( Exception e ) {
System.out.println( "Threw exception: " );
e.printStackTrace();
}
```

G. Licensing

SJPM makes use of various external libraries in its functionality. This section provides detailed information on licensing for the SJPM application and its components.

G.a. QJson

QJson Copyright © 2010 Flavio Castelli

GNU LESSER GENERAL PUBLIC LICENSE Version 2.1, February 1999 Copyright (C) 1991, 1999 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed. [This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.] Preamble The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below. When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things. To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it. For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights. We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others. Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license. Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs. When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library. We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances. For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License. In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system. Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library. The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run. GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION 0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you". A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables. The "Library", below, refers to any such software library or work which has been distributed under these terms.
A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".) "Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library. Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does. 1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library. You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee. 2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions: a) The modified work must itself be a software library. b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change. c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License. d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful. (For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.) These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it. Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library. In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License. 3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library.

To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices. Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy. This option is useful when you wish to copy part of the code of the Library into a program that is not a library. 4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machinereadable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange. If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code. 5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License. However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables. When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law. If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.) Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself. 6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications. You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things: a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library.

(It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.) b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with. c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution. d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place. e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy. For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable. It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute. 7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things: a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above. b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work. 8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance. 9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it. 10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein.

You are not responsible for enforcing compliance by third parties with this License. 11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library. If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances. It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice. This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License. 12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License. 13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation. 14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally. NO WARRANTY 15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU.

SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION. 16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. END OF TERMS AND CONDITIONS How to Apply These Terms to Your New Libraries If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License). To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found. Copyright (C) This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA Also add information on how to contact you by electronic and paper mail. You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names: Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker., 1 April 1990 Ty Coon, President of Vice That's all there is to it!

Log4Qt Copyright © 2007 Martin Heinrich

Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION 1. Definitions. "License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document. "Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License. "Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity. "You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License. "Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files. "Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types. "Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below). "Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof. "Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution." "Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work. 2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, nocharge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form. 3. Grant of Patent License.

Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed. 4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions: (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and (b) You must cause any modified files to carry prominent notices stating that You changed the files; and (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License. You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License. 5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions. 6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file. 7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License. 8. Limitation of Liability.

In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages. 9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability. END OF TERMS AND CONDITIONS APPENDIX: How to apply the Apache License to your work. To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives. Copyright [yyyy] [name of copyright owner] Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

G.c. QtSingleApplication

OtSingleApplication Copyright © 2009 Nokia Corporation and/or its subsidiary(-ies)

These rights are described in the Nokia Qt LGPL ** Exception version 1.1, included in the file LGPL_EXCEPTION.txt in this ** package. ** ** GNU General Public License Usage ** Alternatively, this file may be used under the terms of the GNU ** General Public License version 3.0 as published by the Free Software ** Foundation and appearing in the file LICENSE.GPL included in the ** packaging of this file. Please review the following information to ** ensure the GNU General Public License version 3.0 requirements will be ** met: http://www.gnu.org/copyleft/gpl.html. ** ** Please note Third Party Software included with Qt Solutions may impose ** additional restrictions and it is the user's responsibility to ensure ** that they have met the licensing requirements of the GPL, LGPL, or Qt ** Solutions Commercial license and the relevant license of the Third ** Party Software they are using. ** ** If you are unsure which license is appropriate for your use, please ** contact Nokia at qt-info@nokia.com. **

/

G.d. com.sun.media

This license applies to classes in the `com.sun.media` namespace Copyright (c) 2005 Sun Microsystems, Inc. All Rights Reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: - Redistribution of source code must retain the above copyright notice, this list of conditions and the following disclaimer. - Redistribution in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer. - Redistribution in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of Sun Microsystems, Inc. or the names of contributors may be used to endorse or promote products derived from this software without specific prior written permission.

This software is provided "AS IS," without a warranty of any kind. ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE HEREBYEXCLUDED. SUN MIDROSYSTEMS, INC. ("SUN") AND ITS LICENSORS SHALL NOT BE LIABLE FOR ANY DAMAGES SUFFERED BY LICENSEE AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THIS SOFTWARE OR ITS DERIVATIVES. IN NO EVENT WILL SUN OR ITS LICENSORS BE LIABLE FOR ANY LOST REVENUE, PROFIT OR DATA, OR FOR DIRECT, INDIRECT, SPECIAL, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF THE USE OF OR INABILITY TO USE THIS SOFTWARE, EVEN IF SUN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

You acknowledge that this software is not designed or intended for use in the design, construction, operation or maintenance of any nuclear facility.

The SJPM "**ATB2File**" and "**ATB2System**" Drivers make use of ATB2 Virtual Stock. This section provides detailed information on creation of custom ATB2 Virtual Stock and explains how to load and configure the ATB2 Virtual Stock using the bin-specific forms and their associated bmp files. **Note:** The ATB2 Virtual Stock image file must be **1673 x 737** pixels.

SJPM comes with bin form and bmp files for printing to ATB2 Virtual Stock. You can create your own custom ATB2 Virtual Stock for use with the SJPM "**ATB2File**" and "**ATB2System**" Drivers. The steps below describe the procedure to create, load, configure and use your custom virtual stock.

STEP 1

Create the ATB2 Virtual Stock:

1. In a picture editor create your ATB2 Virtual Stock image. The ATB2 virtual stock image you create must be "1673 x 737" pixels in size and saved as a ".bmp" file type. When saving the file, name the file with a two digit number (i.e. 50.bmp).

STEP 2

Stop the SJPM Server:

- 1. Click on the "**Start**" button, then click on "**All Programs**", then click on the "**SJPM**" folder, then right click on the "**Stop SJPM Server**" menu item and then click on the "**Run as** <u>a</u>dministrator" menu item.
- 2. The "User Account Control" pop-up window will appear. Click on the "Yes" button. The SJPM Server will stop.

STEP 3

Loading the ATB2 Virtual Stock:

1. Copy the ATB2 Virtual Stock file you created into the folder of the driver you are using as shown below.

ATB2File = C:\Program Files (x86)\SJPM\server\devroot\resources\ATB2FILE ATB2System = C:\Program Files (x86)\SJPM\server\devroot\resources\ATB2SYSTEM

STEP 4

Configuring the ATB2 Virtual Stock:

- 1. In the same folder that you copied your ATB2 Virtual Stock into, edit the bin form that you want to use this virtual stock (**b1.form** and/or **b2.form**).
- Open a text editor like Notepad as the Administrator and then open the form file (b1.form and/or b2.form) and make the changes. In the b1.form file, for example, you will see the following "TTB1:01L00000009900000". Delete the "99" and replace it with the number you gave your ATB2 Virtual Stock file and then save the file.

STEP 5

Start the SJPM Server:

- Click on the "Start" button, then click on "All Programs", then click on the "SJPM" folder, then right click on the "Start SJPM Server (as a service)" and then click on the "Run as <u>a</u>dministrator" menu item to start SJPM as a Service or right click on "Start SJPM Server (as an application)" and then click on the "Run as <u>a</u>dministrator" menu item to start SJPM as an application.
- 2. The "User Account Control" pop-up window will appear. Click on the "Yes" button. The SJPM Server will start.

I. LPR vs System vs RawIP Drivers

The SJPM "LPR", "System" and "RawIP" drivers each provide the SJPM user with similar capabilities. Each of these drivers allows the user to print hardcopy data, but not ATB2 data, to a physical printer but through different connectivity protocols. The data that is being printed on each physical printer can also be, optionally, archived to a file stored on either a local or remote filesystem. The SJPM user can choose either to archive all of the printer data or to archive only selected printer data document types. The available document types include "Agent Coupon (Ticket)", "Agent Coupon (VMCO)", "CCCF (Ticket)", "CCCF (VMCO)", "Refund Notice (REN)", "Exchange Auth. (REA)", "Refund Auth. (REA)", "Host ET PIR", "Host Itinerary", "Host Invoice", and "Other". Each document types. The SJPM "File" Driver also provides the SJPM user with similar capabilities as the "LPR", "System" and "RawIP" Drivers but the "File" Driver allows the user to print hardcopy data, not ATB2 data, to a file on either a local or remote filesystem rather than printing data to a physical printer.

The SJPM "LPR" Driver allows the user to print hardcopy data in both textual mode and graphical mode to a TCP/IP network printer using the LPR, Line Printer Remote, protocol. Many TCP/IP network capable printers include an LPD, Line Printer Daemon, which provides LPR protocol capability. The printer is addressed based upon its "Hostname", the TCP/IP "Port" which it is listening on, its LPD "Queue" name, and the LPD "User" which will be used for printing. The default TCP/IP port is **515**. When using graphical mode the SJPM user can chose the Page Size, the Font, and the Font Size.

I.b. System Driver

The SJPM "**System**" Driver allows the user to print hardcopy data in both textual mode and graphical mode to a Microsoft Windows configured printer using the Microsoft Windows printer spooler. The Microsoft Windows configured printer could be a network TCP/IP network capable printer, it could be a locally attached printer, or it could be a file if the printer has been configured as a print-to-file printer within Microsoft Windows. When using graphical mode the SJPM user can chose the Paper Size or Source, Orientation, Margins, the Font, and the Font Size.

I.c. RawIP Driver

The SJPM "**RawIP**" Driver allows the user to print hardcopy data in textual mode, but not graphical mode, to a TCP/IP network printer using the RAW TCP/IP protocol. Many TCP/IP network capable printers include the RAW TCP/IP protocol capability. The printer is addressed based upon its "**Hostname**" and the TCP/IP "**Port**" which it is listening on. The default TCP/IP port is **9100**. There is no graphical mode capability in the "**RawIP**" Driver so only raw text data is sent to the printer without any special formatting.

J. ATB2LPR vs ATB2System Drivers

The SJPM "**ATB2LPR**" and "**ATB2System**" Drivers each provide the SJPM user with similar capabilities. Each of these allows the user to print ATB2 data, e.g. ticket documents, to a physical printer but through different connectivity protocols. The SJPM "**ATB2File**" Driver is also similar but it allows the user to print ATB2 data, but not hardcopy data, to a file on either a local or remote filesystem. The SJPM "**ATB2File**" Driver also provides the SJPM user with similar capabilities as the "**ATB2LPR**" and "**ATB2System**" Drivers but the "**ATB2File**" Driver allows the user to print ATB2 data, to a file on either a printer allows the user to print attraction of the structure of the

J.a. ATB2LPR Driver

The SJPM "**ATB2LPR**" Driver allows the user to print ATB2 data to a TCP/IP network printer using the LPR, Line Printer Remote, protocol. Many TCP/IP network capable printers include an LPD, Line Printer Daemon, which provides LPR protocol capability. The printer is addressed based upon its "**Hostname**", the TCP/IP "**Port**" which it is listening on, its LPD "**Queue**" name, and the LPD "**User**" which will be used for printing. The default TCP/IP port is **515**. The user can choose the Page Size and whether to print the ATB data at native AEA paper stock size or to fit the document to the printer's paper page size. The SJPM "**ATB2System**" Driver allows the user to print ATB2 data to a Microsoft Windows configured printer using the Microsoft Windows printer spooler. The Microsoft Windows configured printer could be a network TCP/IP network capable printer, it could be a locally attached printer, or it could be a file if the printer has been configured as a print-to-file PDF-type printer within Microsoft Windows. When configuring their "**ATB2System**" Driver the SJPM user can chose the Paper Size or Source, Orientation, Margins and whether to print the ATB2 data at native AEA paper stock size or to fit the document to the printer's paper page size.

K. Remote File Services Terminology

The SJPM "**ATB2File**", "**File**", "**LPR**", "**Printer**", "**RawIP**", and "**System**" Drivers utilize remote file services. The descriptions below provide information on each remote file service available in SJPM.

Network Share

Network Share uses the Windows "**NET USE**" command to transfer computer files between a client and server on a computer network; SJPM automatically connects to the configured share and then transfers data to it. After the data transfer is complete, SJPM disconnects from the share. SJPM Network Share is only available on Windows installations. Linux does not have this option available.

FTP

The File Transfer Protocol (FTP) is a standard network protocol used to transfer computer files between a client and server on a computer network; Plain, unencrypted FTP that defaults over port **21**. Most web browsers support basic FTP.

FTPS

Implicit SSL/TLS encrypted FTP that works just like HTTPS. Security is enabled with SSL as soon as the connection starts. The default FTPS port is **990**.

FTPES

Explicit FTP over SSL/TLS. This starts out as plain FTP over port **21**, but through special FTP commands is upgraded to TLS/SSL encryption. This upgrade usually occurs before the user credentials are sent over the connection.

SCP

The SCP protocol is a network protocol, which supports file transfers between hosts on a network. SCP uses Secure Shell (SSH) for data transfer and uses the same mechanisms for authentication, thereby ensuring the authenticity and confidentiality of the data in transit. The default port is **22**.

SFTP

SFTP, which stands for SSH File Transfer Protocol, or Secure File Transfer Protocol, is a separate protocol packaged with SSH that works in a similar way over a secure connection. The default port is **22**.

CIFS

The Common Internet File System (CIFS) is the standard way that computer users share files across corporate intranets and the Internet. The default port is **445**.

SMB

The Server Message Block (SMB) Protocol is a network file sharing protocol. It operates as an application-layer network protocol mainly used for providing shared access to files, printers, and serial ports and miscellaneous communications between nodes on a network. The default port is **445**.

L. Print Data Request

This request is used to pass data, either URL encoded, as JSON or as XML document, to a device for printing. The format of the data in the request body should be specified by means of the HTTP header "**Content-Type**".

Note: This is a **POST** request, not a GET.

Example (JSON):

POST /printData?deviceName=FILE_PTR HTTP/1.1

If-Modified-Since: Thu, 1 Jan 1970 00:00:00 GMT

Cache-Control: no-cache

Content-Length: 54 Content-Type: application/json

{"data":";Este texto está acentuado y tiene eñes!"}

Example (URL-encoded):

POST /printData?deviceName=FILE_PTR HTTP/1.1

If-Modified-Since: Thu, 1 Jan 1970 00:00:00 GMT Cache-Control: no-cache Content-Length: 67 Content-Type: application/x-www-form-urlencoded

```
%C2%A1Este%20texto%20est%C3%A1%20acentuado%20y%20tiene%20e%C3%B1e
s!
```

POST /printData?deviceName=FILE_PTR HTTP/1.1

If-Modified-Since: Thu, 1 Jan 1970 00:00:00 GMT Cache-Control: no-cache Content-Length: 106 Content-Type: application/xml

```
<?xml version="1.0" encoding="UTF-8"?> <data>;Este texto est&#xel;
acentuado & tiene eñes!</data>
```

Response (regardless of input format):

HTTP/1.1 200 OK

Content-Type: application/json Cache-Control: no-cache Date: Tue Nov 08 11:43:19 ART 2016 Content-Length: 163

```
{
  "FILE_PTR": {
    "Host_Status": "Ready",
    "Device_Status": "Online",
    "Transaction_Status": "Last Send Successful",
    "Detailed_Status": "No issues.",
    "Transation_Status_Code": 0
  }
}
```

An error condition will be reported with a Transaction_Status_Code <> 0 and the other fields describing the condition. See the example for a request sent for a device that doesn't exist.

Example:

POST /printData?deviceName=A_DEVICE HTTP/1.1

If-Modified-Since: Thu, 1 Jan 1970 00:00:00 GMT Cache-Control: no-cache Content-Length: 54 Content-Type: application/json {"data":";Este texto está acentuado y tiene eñes!"}

Response:

HTTP/1.1 200 OK

Content-Type: application/json Cache-Control: no-cache Date: Tue Nov 08 11:43:19 ART 2016 Content-Length: 118

```
{
    "A_DEVICE": {
        "Transaction_Status": "Last Send Failed",
        "Detailed_Status": "Device not found",
        "Transation_Status_Code": 1
    }
}
```

M. LPR/LPD Printing (SJPM "ATB2LPR" and "LPR" Drivers)

LPR/LPD is short for *line printer daemon/line printer remote*, a printer protocol that uses TCP/IP to establish connections between printers and workstations on a network.

The LPD software is typically stored in the printer or print server and the LPR software must be installed in the client device. The LPR client sends the print request to the IP address of the LPD printer/server, which in turn queues the file and prints it when the printer becomes available.

What is LPR/LPD?

LPR/LPD is the printing method most commonly used in TCP/IP networks. The new generation of operating systems, for both mainframe and desktop, now support TCP/IP and LPD. It is a computer-to-computer printing method, rather than PC-to-PC.

The LPR/LPD protocol is broken into two parts, LPR and LPD. The standard LPD port is 515.

LPR is an acronym for **Line Printer Remote**; this is the part that submits the print request. LPR is the client part of the protocol. Any system submitting requests via an "**LPR client**" is a client.

LPD stands for **Line Printer Daemon**; this is the piece that receives and processes the request. A "**daemon**" is a server or agent.

The phrase "LPD printing" refers to the setup or process required to print to an LPD server. Often what people have in mind is system of organizing their print requirements into LPD print queues. For instance a queue named "printronix132" might be setup to print 132 column text to a printronix printer. It's easier to keep your work organized if you are systematic and print queue names certainly give you that opportunity.

The phrase "**LPR printing**" is very closely related, and often refers to using an LPR capable program on your system to send print jobs to an LPD server.

The LPD Protocol Specification is documented in <u>RFC 1179</u>, Line Printer Daemon Protocol, dated August 1990, edited by L. McLaughlin III.

N. USB to Serial Port Converter Use with SJPM

USB to Serial Port converters can be used with SJPM but they are not supported by Sabre. This is due to the inconsistency found in prior testing of various USB to Serial Port converters and the short market life for these products. With some units tested we found that they were not properly converting the data and thus we observed loss of data in the print output. The most reliable solution is to add a PCI Serial Port Card to the PC running SJPM, if possible.

SJPM is capable of printing International Unicode Characters both to hardcopy and ATB2 devices.

Note: Not all SJPM devices are capable of printing International Unicode data. Device types that are capable of printing International Unicode data include hardcopy devices ("File", "LPR", and "System") and ATB2 devices ("ATB2File", "ATB2LPR", and "ATB2System"). ATB2 devices will require the data to be ATB2 formatted. The "Group" and "Proxy" drivers can also be used with the above devices.

To print International Unicode Characters it is important to configure the printing device's font to one which is capable of printing those specific International Unicode characters. Each of the SJPM device types which are capable of printing International Unicode characters allows the SJPM user to configure that a specific System font be used in order to ensure that the print data characters print correctly as the SJPM user intends. International Unicode character data to be printed using an SJPM device can arrive from either a Sabre printer LNIATA or from the SJPM printData RESTful Web Service., including the "Utilize Device" feature in the SJPM Device's context menu (shown when a device is right clicked on).

O.a. International Unicode data originating from a Sabre Printer LNIATA

The printable International Unicode characters from a Sabre printer LNIATA include any of the possible 65,536 code points of the 55,237 assigned Unicode characters from the Basic Multilingual Plane. Due to the fact that the Sabre TPF system encodes its data internally using a descendant of a 6-bit character encoding system, which later transformed into a unique Sabre-specific subset of 8-bit IBM EBCDIC, the Sabre TPF system is not able to handle International Unicode Characters natively. However, SJPM is able to utilize International Unicode character data because it uses the **Numeric Character Reference** (**NCR**) specification to encode all 65,536 16-bit Unicode characters using only the available native Sabre characters.

The NCR encoding specification allows Sabre to pass International Unicode data to SJPM in the following form; "**&**#**x**[0-9A-F]{4};". For example, this is the NCR encoding of the International Unicode Character "**0x1234**", an Ethiopic Syllable See (**b**) character, "**&**#**x1234**;".

Although each of these 8 characters in an NCR-encoded International Unicode character is itself a native Sabre character, some Sabre TPF applications have restrictions that prevent some of those native characters from being used. For example, the ampersand (&), pound (#), and lowercase "x" characters may sometimes be restricted in Sabre TPF applications. In order to also cope with those restrictions SJPM utilizes a secondary Sabre-specific encoding technique to encode NCR-encoded characters using only the characters "0-9", "A-F", "X" and the Sabre Cross of Lorraine character "¥". The Sabre-encoded NCR-encoded "0x1234" is "#X1234X#". These encoding specifications allow SJPM to handle all International Unicode character data whether it is NCR-encoded with, or without, additional Sabre TPF restrictions on the use of the ampersand (&), pound (#), and lowercase "x" characters.

To print International Unicode character data from Sabre TPF, using SJPM, the International Unicode character data must be sent to the Sabre Printer LNIATA encoded either using the NCR encoding standard, e.g. "**&**#**x1234;**", or the Sabre encoding standard, e.g. "**#X1234X**#".

O.b. International Unicode data originating from the SJPM printData RESTful Web Service

The printable International Unicode characters from the printData RESTful Web Service include any of the 1,112,064 valid code points Unicode UTF-8 characters. The printData RESTful Web Service is made easily accessible to the SJPM user through the SJPM Device's context menu by selecting the "**Utilize Device**" menu item. This "**Utilize Device**" menu item presents the SJPM user with a dialog box where they can send any SJPM device any UTF-8 International Unicode character data. It is not necessary to NCR-encode International Unicode character data sent to SJPM using the SJPM printData RESTful Web Service.

[DIAGRAM OF UTILIZE DEVICE DIALOG BOX CONTAINING INTERNATIONAL DATA]

The SJPM printData RESTful Web Service can also be used by an external application directly. There are 3 forms of the SJPM printData RESTful Web Service delineated by their "Content-Type" HTTP headers; "application/json", "application/x-www-form-urlencoded", and "application/xml". The SJPM printData RESTful Web Service requires all print data passed to it to use the UTF-8 charset encoding.

Here are examples of the 3 forms of the SJPM printData RESTful Web Service:

Example (JSON):

POST /printData?deviceName=FILE_PTR HTTP/1.1

If-Modified-Since: Thu, 1 Jan 1970 00:00:00 GMT Cache-Control: no-cache Content-Length: 54 Content-Type: application/json

{"data":";Este texto está acentuado y tiene eñes!"}

Example (URL-encoded):

POST /printData?deviceName=FILE_PTR HTTP/1.1

If-Modified-Since: Thu, 1 Jan 1970 00:00:00 GMT Cache-Control: no-cache Content-Length: 72 Content-Type: application/x-www-form-urlencoded

```
data=%C2%AlEste%20texto%20est%C3%Al%20acentuado%20y%20tiene%20e%C
3%Bles!
```

Example (XML):

POST /printData?deviceName=FILE_PTR HTTP/1.1

If-Modified-Since: Thu, 1 Jan 1970 00:00:00 GMT Cache-Control: no-cache Content-Length: 106 Content-Type: application/xml

```
<?xml version="1.0" encoding="UTF-8"?> <data>;Este texto est&#xel;
acentuado & tiene eñes!</data>
```

Here is an example of a successful response from the SJPM printData RESTful Web Service:

Response (regardless of input format):

HTTP/1.1 200 OK

Content-Type: application/json Cache-Control: no-cache Date: Tue Nov 08 11:43:19 ART 2016 Content-Length: 163

```
{
   "FILE_PTR": {
        "Host_Status": "Ready",
        "Device_Status": "Online",
        "Transaction_Status": "Last Send Successful",
        "Detailed_Status": "No issues.",
        "Transation_Status_Code": 0
   }
}
```

Here is an example of an unsuccessful response from the SJPM printData RESTful Web Service:

Response:

HTTP/1.1 200 OK

Content-Type: application/json Cache-Control: no-cache Date: Tue Nov 08 11:43:19 ART 2016 Content-Length: 118

```
{
  "A_DEVICE": {
    "Transaction_Status": "Last Send Failed",
    "Detailed_Status": "Device not found",
    "Transation_Status_Code": 1
  }
}
```

P. Automatic Check for Updates / Manual Check for Updates

SJPM automatically checks for updates periodically and allows the user to manually check for updates whenever required. This feature provides users with the ability to update SJPM when notified that an update is available or to update at a later date.

Automatic Check:

The Automatic Check for Updates functionality will occur weekly and if an update is found will notify the user and provide the option to update now or at a later date.

Manual Check:

The Manual "Check for Updates" functionality can be initiated by the user from the "SJPM Windows System Tray Icon".



1. Click on the "Check for Updates" menu item. The "SJPM – Update" window will appear.



 Click on the "Download" button to start the download. Click on the "Close" button to cancel or click on the "See Release Notes" button to review the release notes. The following window will appear when the "See Release Notes" button is clicked.

1	SJPM - Update	×		
	SJPM version 1.8. 168 available for download (100. 2 MB)			
	ĩ»ć Sabre Java Print Module (SJPM)	_		
	This RELEASE NOTES file summarizes all the differences between various versions of Java Print Module (JPM) Server			
	example:			
	BUGS FIXED/FEATURES ADDED IN SJPM VERSION 1.0.xxx			
	Date Submitted: <day month="" year=""> Story: <story #:="" story="" title=""> Created: <list created="" etc.="" jars,="" of=""> Added: <list distributed="" files="" of="" party="" third=""> Updated: <list etc.="" jars,="" of=""></list></list></list></story></day>	-		
	Download	ose		

3. Click on the "**Download**" button from either window to begin the download or click on "**Close**" to cancel. The following window will appear.

SJPM - Update			×	
Downloading installer 1.8.164				
			53%	
			Cancel	

4. After the download has completed, the following window will appear.



5. Click on the "Install" button to start the installation or click on the "Close" button to cancel. The "User Account Control" window will appear. Click on the "Yes" button. The "File Extracting..." window will appear and when the file extraction is complete the installation process will begin. Click on the "Cancel" button to cancel.



Follow the onscreen prompts to complete the installation.

For detailed information on the SJPM installation process please refer to the "SJPM User's Guide" which is in the Windows Start SJPM folder.