

## Sabre Java Printing Module (SJPM)

## **User's Guide**

## **Sabre Airline Solutions**

This document provides detailed information for the install, uninstall, operation, configuration, and troubleshooting for SJPM in the Sabre Airline Solutions environment.

**Sabre** | Airline | Solutions | ...

#### **USER'S GUIDE**

16 October 2014

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## **General Information**

# 1

#### **1.1 Purpose**

This document is a detailed guide for the install, uninstall, operation, configuration, and support of **Sabre Java Printing Module** (SJPM).

"AEAIERIP"	Airline Ticket, Boarding Pass and Bag Tag printing via an <b>IER IP</b> printer only.
"ATB2Airline"	Airline Ticket, Boarding Pass and Bag Tag printing.
"File"	Printing to file(s) ( <b>Text or PDF formats</b> ).
"JavaPOS"	JavaPOS printer document printing.
"MQJMS"	IBM MQ data delivery.
"Printer"	<b>ASCII Data</b> printing to Hard Copy printers ( <b>Serial and Parallel</b> interfaces).
"System"	System hardcopy printing.

This guide includes information on the following (7) SJPM Drivers:

#### **1.2 Certified and Supported Operating Systems**

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 32Bit
- Windows 7 64Bit
- Windows 8 64 Bit
- Windows 8.1 64 Bit
- Linux

## Installation

#### 2.1 Installation

#### 2.1.1 SJPM's Java Utilization

The Sabre Java Printing Module (SJPM) installation includes Java version 1.7.0 25. The use of SJPM's installed Java is dependent on the "JavaPOS Driver" and the Windows "SJPM JAVA HOME environment variable" settings.

#### See also Appendix A and B for recommended and minimum requirements.

#### **Uses PC's Java**

If the SJPM JavaPOS Driver is installed then the PC's installed Java will be used by • SJPM. For the JavaPOS printer this should be a minimum version of 1.6.

#### **Uses SJPM's Java**

If the SJPM JavaPOS Driver is not installed then SJPM's installed Java will be used by • SJPM.

#### Uses 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 Conditions:**

- 1) If Java is **\*not**\* installed and the SJPM JavaPOS Driver is selected to be installed. The SJPM JavaPOS Driver requires that Java version **1.6** minimum be installed on the PC and does not use SJPM's Java.
- 2) If the "SJPM\_JAVA\_HOME environment variable" is pointing to a Java version which is older than Java version 1.6. SJPM requires a Java version **1.6** minimum.

#### 2.1.2 SJPM's Installation Options

SJPM can be installed one of two methods:

• Typical

> The Typical method installs the SJPM Client, Server and all drivers except for the "JavaPOS" driver.

Custom •

> The Custom method allows for custom component selection and installation. This method should be used to install only the SJPM device drivers you want to be visible and available for use in the SJPM device 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. All devices and configurations are saved and migrated to the new SJPM installation version automatically.

#### 2.1.4 Running the SJPM Installation as an Administrator

In certain cases, e.g. when the current user is not an Administrator, SJPM must be installed as an Administrator using the Windows "**Run as...**" feature. This section describes the process for **Windows XP SP3** 32 Bit, **Windows 7** 32 Bit / 64 Bit, and **Windows 8** 64 Bit.

#### 2.1.4.1 Windows XP SP3 32 Bit

To run the SJPM installation exe (**Example:** "Install\_SJPM\_AS\_x86\_32Bit\_x.x.x.exe") as an Administrator on **Windows XP SP3** 32 Bit, perform the following steps:

1. Right click on the SJPM installation exe file and then left click on the "**Run as...**" menu item.



2. The "Run As" window will appear.



3. Click on the "**The following user:**" radio button. Click on the "**User name:**" drop down to select the user. Type the password into the "**Password:**" field. Click on the "**OK**" button when done.

Run As			
Which user accou	unt do you want to use to run this program?		
O Current user (	(TROMPROVING CONTRACTOR		
Protect my comput	er and data from unauthorized program activity		
This option can prevent computer viruses from harming your computer or personal data, but selecting it might cause the program to function improperly.			
• The <u>following</u> user:			
User name:	😰 Administrator		
Password:			
	OK Cancel		

To run the SJPM installation exe (**Example:** "Install\_SJPM\_AS\_x86\_32Bit\_x.x.x.exe") as an Administrator on **Windows 7** 32 Bit / 64 Bit and **Windows 8** 64 Bit, perform the following steps:

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

8			
Install_SJPM AS_x86_32Bi	L t_		
.exe		<u>O</u> pen	
	0	Run as administrator	
		${\sf Troubleshoot\ compatibilit} \underline{y}$	
		S <u>h</u> are with	•
		Restore previous $\underline{v}$ ersions	
		Se <u>n</u> d to	+
		Cu <u>t</u>	
		<u>С</u> ору	
		<u>P</u> aste	
		Create <u>s</u> hortcut	
		Delete	
		Rena <u>m</u> e	
		P <u>r</u> operties	

#### **2.1.5 Typical Installation**

This section describes SJPM's "**Typical**" installation. The "**Typical**" installation of the SJPM installer installs the **SJPM Client**, **SJPM Server** and the following SJPM drivers:

AEAIERI	Р
ATB2Airl	ine
File	
MQJMS	
Printer	
System	
Note:	With the " <b>Typical</b> " installation the " <b>JavaPOS</b> " driver IS NOT installed.

1. Right click on the Sabre Java Printing Module (SJPM) installation executable file (**Example:** "Install\_SJPM\_AS\_x86\_32Bit\_x.x.x.exe") and then select the "**Run as...**" or "**Run as administrator**" menu item according to the operating system you are using.

To install the "JavaPOS" driver use the "Custom" installation method.

#### Windows 7 and Windows 8 Operating Systems:

If you see the following window click on the "Yes" button:

😗 Use	r Account Control	×	
Û	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_AS_x86_32Bit_ <b>L</b> exe <b>Unknown</b> Hard drive on this computer	
Show <u>d</u> etails		Yes No	
		Change when these notifications appear	

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

File Extracting	
Extracting Sabre Java Printing Module - AS Installer files.	
This may take several minutes.	
Please wait	
Cancel	
Windows Installer	
Preparing to install	Const

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



2. 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.



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



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



5. The "Installing SJPM-AS x.x (x.x.x) x86\_32 Bit" window will appear. Click on the "Cancel" button to cancel the installation if required.

BJPM-AS	- • •
Installing SJPM-AS 🚺 🚺 x86_32 Bit	Sabre Airline Solutions.
Please wait while the Setup Wizard installs SJPM-AS 🖬 may take several minutes.	<b>1. 1.</b> x86_32 Bit. This
< <u>B</u> ack	Next > Cancel

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



#### **2.1.6 Custom Installation**

This section describes SJPM's "**Custom**" installation. The "**Custom**" installation of the SJPM installer allows selection of the "**Client**" installation, "**Server**" installation and selection of SJPM drivers. The following SJPM drivers are available for selection:

AEAIERIP	
ATB2Airline	
File	
JavaPOS	
MQJMS	
Printer	
System	

1. Right click on the Sabre Java Printing Module (SJPM) installation executable file (**Example:** "Install\_SJPM\_AS\_x86\_32Bit\_x.x.x.exe") and then select the "**Run as...**" or "**Run as administrator**" menu item according to the operating system you are using.

#### Windows 7 and Windows 8 Operating Systems:

If you see the following window click on the "Yes" button:

😗 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_AS_x86_32Bitexe Unknown Hard drive on this computer
🕑 si	now <u>d</u> etails	<u>Y</u> es <u>N</u> o
		Change when these notifications appear

The "File Extracting..." window and "Windows Installer" window will appear:

File Extracting	
Extracting Sabre Java Printing Module - AS Installer files.	
This may take several minutes.	
Please wait	
Cancel	
Windows Installer	
Preparing to install	
	Cancel

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



2. 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.



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



4. The "Custom Setup" window will appear. Click on the "plus signs" to see all the available items that can be installed.

BJPM-AS	
Custom Setup Select the way you want features to be installed.	Sabre Airline Solutions.
Click on the icons in the tree below to change the vertice of the icons in the tree below to change the vertice of the icons in the tree below to change the vertice of the icons in the tree below to change the vertice of the icons in the tree below to change the vertice of the icons in the tree below to change the vertice of the icons in the tree below to change the vertice of the icons in the tree below to change the vertice of the icons in the tree below to change the vertice of the icons in the tree below to change the vertice of the icons in the tree below to change the vertice of the icons in the tree below to change the vertice of the icons in the tree below to change the vertice of the icons in the icons in the tree below to change the vertice of the icons in the icon	way features will be installed. This will install SJPM-AS x86_32 Bit components on the local machine. This feature requires 43MB on your hard drive. It has 2 of 2 subfeatures selected. The subfeatures require 68MB on you Browse
Reset Disk Usage < E	ack Next > Cancel

5. 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.

ustom Setup	
Select the way you want features to be installed.	Sabre Solut
(instance with the entropy = 2012bit of part model for each state of the part of the optimization (instance with the entropy = 2012bit of part model for each state of the part of the optimization)	n and that so an in a film data
Click on the icons in the tree below to change the wa	y features will be installed.
ATB2Airline / Printer	This will install the JavaPOS driver
File	on the local machine.
Will be installed on local h	ard drive
Entire feature will be instal	lled on local hard drive
Entire feature will be unav	ailable
	Browse
Dick Licana C Rac	-k 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.

BIPM-AS	32 Bit Setup		×
Disk Space Requirements The disk space required for the installation of the selected features. Sabre Solutions.			
The highlighted volumes ( selected features. You ca choose to install less feat	if any) do not have enough disk n either remove some files from ures onto local drive(s), or selec	space available for the highlighted vol t different destinat	the currently umes, or ion drive(s).
Volume	DISK SIZE	Available	Required
C:	19GB	11GB	282MB
			ОК

6. When selections are complete click on the " $\underline{N}ext >$ " button.

SJPM-AS x86_32 Bit Setup	×
Custom Setup Select the way you want features to be installed.	Sabre Airline Solutions.
Click on the icons in the tree below to change the v	vay features will be installed.
ATB2Airline / Printer File JavaPOS V MQJMS Printer System	This will install the JavaPOS driver on the local machine. This feature requires 44KB on your hard drive.
4	Browse
Reset Disk Usage < E	ack Next > Cancel

7. The "**Airline**" window will appear if the "**JavaPOS**" driver has been selected for installation. Click on the "**Choose Airline**:" drop down list and then select an airline. Then click on the "**Next** >" button.

BIPM-AS x86_32 Bit Setup	
Airline Please select an Airline from the dropdown	Sabre Airline Solutions.
Choose Airline:	
	< <u>B</u> ack <u>N</u> ext > Cancel

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

BIPM-AS x86_32 Bit Setup	×
Ready to Install The Setup Wizard is ready to begin the Custom installation	lirline olutions.
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 <u>Install</u> Ca	ncel

9. The "Installing SJPM-AS x.x (x.x.x) x86\_32 Bit" window will appear. Click on the "Cancel" button to cancel the installation.

😸 SJPM-AS 👘 x86_32 Bit Setup	- • •
Installing SJPM-AS x86_32 Bit	Sabre Airline Solutions.
Please wait while the Setup Wizard installs SJPM-AS may take several minutes. Status:	x86_32 Bit. This
< <u>B</u> ack	Next > Cancel

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

BJPM-AS x86_32 Bit Setup		×
Sabre Airline Solutions.	Completing the SJPM-AS x86_32 Bit Setup Wizard Click the Finish button to exit the Setup Wizard.	
< <u>B</u> ack <b>Einish</b> Cancel		

#### 2.1.7 SJPM's Installation Repair

The Sabre Java Printing Module (SJPM) installation package also 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\_AS\_x86\_32Bit\_x.x.x.exe") and then select the "**Run as...**" or "**Run as administrator**" menu item according to the operating system you are using.

#### Windows 7 and Windows 8 Operating Systems:

If you see the following window click on the "Yes" button:

😗 Use	Account Control		
Û	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_AS_x86_32Bitl.exe Unknown Hard drive on this computer	
🕑 si	how <u>d</u> etails	<u>Y</u> es <u>N</u> o	
		Change when these notifications appear	

The "File Extracting..." window and "Windows Installer" window will appear:

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

Windows Installer	
Preparing to install	
	Cancel

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



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



3. The "Repair SJPM-AS x.x (x.x.x) x86\_32 Bit" window will appear. Click on the "Repair" button.

😸 SJPM-AS 👘 🖬 x86_32 Bit Setup	×
Repair SJPM-AS x86_32 Bit	
The Setup is ready to repair SJPM-AS	ns.
	_
Click Repair to repair the installation of SJPM-AS <b>Sector</b> 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 <u>Repair</u> Cancel	

4. The "Repairing SJPM-AS x.x (x.x.x) x86\_32 Bit" window will appear.

BJPM-AS x86_32 Bit Setup	
Repairing SJPM-AS x86_32 Bit	Sabre Airline Solutions.
Please wait while the Setup Wizard repairs SJPM-AS may take several minutes.	x86_32 Bit. This
< <u>B</u> ack N	ext > Cancel

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



5. The following window will appear. Click on the "**<u>Finish</u>**" button.

BJPM-AS x86_32 Bit Setup		
Sabre Airline Solutions.	Completing the SJPM-AS X86_32 Bit Setup Wizard Click the Finish button to exit the Setup Wizard.	
< <u>B</u> ack <u>Einish</u> Cancel		

#### **3.1 Uninstallation**

SJPM can be uninstalled one of two (2) ways. SJPM can be uninstalled from the **Windows Start Menu** or from the **SJPM Executable File (Example:** Install\_SJPM\_AS\_x86\_32Bit\_x.x.x.exe).

#### **3.1.1 Windows Start Menu Uninstallation**

This section describes the process for uninstallation of SJPM from the Windows "**Start**" Menu for **Windows XP SP3, Windows 7** and **Window 8 and 8.1**.

#### 1. Windows XP SP3:

Click on the Windows "**Start**" button, then click on the "**Programs**" folder, then click on the "**SJPM**" folder, and then click on the "**Uninstall SJPM**" menu item.

#### Windows 7:

Click on the Windows "**Start**" button, then click on "**All Programs**", then click on the "**SJPM**" folder, then right click on the "**Uninstall SJPM**" menu item and then select "**Run as administrator**".

#### Windows 8:

Click on Windows "**Start**", then right click on the "**Uninstall SJPM**" icon on the Windows desktop, and then click on the "**Run as administrator**" 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 administrator**" icon on the menu bar.

#### Windows 7 and Windows 8 Operating Systems:

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

🛞 User Account Contro	I 💽	
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 <b>Unknown</b> Hard drive on this computer	
Show <u>d</u> etails	Yes No	
	Change when these notifications appear	

2. 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.



3. The "**Windows Installer**" window and "**SJPM-AS x.x** (**x.x.x**) **x86\_32 Bit**" window will appear if "<u>Y</u>es" was clicked. Click on the "**Cancel**" button to cancel the uninstallation process.



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

SJPN	A-AS x86_32 Bit
	The following applications should be closed before continuing the install:
	SJPM client Sabre Java Printing Module (SJPM)
	<ul> <li>Automatically close applications and attempt to restart them after setup is complete.</li> <li>Do not close applications. (A Reboot may be required.)</li> </ul>

#### 3.1.2 SJPM Executable File Uninstallation

This section describes the process for uninstallation of SJPM using the SJPM executable file. The process is the same for **Windows XP SP3**, **Window 7**, **Window 8** and **Windows 8.1**.

1. Right click on the Sabre Java Printing Module (SJPM) executable file (**Example:** "Install\_SJPM\_AS\_x86\_32Bit\_x.x.x.exe") and then select the "**Run as...**" or "**Run as administrator**" menu item according to the operating system you are using.

### Windows 7 and Windows 8 Operating Systems:

If you see the following window click on the " $\underline{Y}es$ " button:

😗 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_AS_x86_32Bitexe <b>Unknown</b> Hard drive on this computer	
🕑 Sh	ow <u>d</u> etails	<u>Y</u> es <u>N</u> o	
		Change when these notifications appear	

2. The "**File Extracting...**" window and "**Windows Installer**" window will appear. Click on the "**Cancel**" button to cancel the uninstallation 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 - AS Installer files. This may take several minutes. Please wait
Cancel

Windows Installer	
Preparing to install	
50	
	Cancel



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

😸 SJPM-AS 💦 x86_32 Bit Setup				
Repair or Remove installation				
Select the operation you wish to perform.		Sabre   Solutions.		
	<u>M</u> odify Allows users to change the way features a	re installed.		
	Repair Repairs errors in the most recent installation state - fixes missing or corrupt files, shortcuts and registry entries.			
	Remove x86_32 Bit	from your computer.		
Ren	noveInstallation			
	< <u>B</u> ack Ne	ext > Cancel		

The "Remove SJPM-AS x.x (x.x.x) x86\_32 Bit" window will appear. Click on the 4. "**Remove**" button.

😸 SJPM-AS 💦 x86_32 Bit Setup				
Remove SJPM-AS x86_32 Bit				
You have chosen to remove the program from your computer.	ons.			
Click Remove to remove SJPM-AS <b>2</b> State of the settings, click Back. Click Cancel to exit the wizard.				
< <u>B</u> ack <u>Remove</u> Cancel				

5. The "Removing SJPM-AS x.x (x.x.x) x86\_32 Bit" window will appear.



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

BJPM-AS x86_32 Bit Setup	<b>X</b>
Files in Use Some files that need to be updated are currently in use.	Airline Solutions.
The following applications are using files that need to be updated by this setup. Cle applications and then click Retry to continue the installation or Cancel to exit it.	ose these
Sabre Java Printing Module (SJPM) (Process Id: 2460) SJPM client (Process Id: 1192)	
<u>Exit</u>	Retry

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



## **Running SJPM**

## 4

#### 4.1 Running the SJPM Client GUI

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

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

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.

🚱 🖉 🗯 🖓 😵 🕄 1129 AM

#### 4.1.1 SJPM Windows System Tray Icon Menu

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

	About SJPM	
	Restore	
	Restart Server	
	Server Mode	
	Configure SJPM Server	
	Language 🕨 🕨	
	Client Logging	
	Server Logging	
	Exit	
1	<b>- 🕞  -* 📢 꾯 📜 (</b> 17) 3:0	6 AN

#### About SJPM

The "About SJPM" menu item opens the "SJPM - About" window and provides version information for the installed SJPM Client, Server, and Device Drivers. License information is also provided in the "Licenses" tab.

S SJPM - About					
	SJPM Version Info				
Versions Licenses					
	Component	Version			
	SJPM Client	1.0.0.33			
	SJPM Server	1.4.5	=		
	SJPM UI	1.0.0.5			
	AEAIERIP	1.4.5			
	ATB2Airline	1.4.5			
	File	1.4.5			
	мојмѕ	1.4.5	Ŧ		
ОК					

#### Restore

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

#### **Restart Server**

The "Restart Server" menu item restarts the SJPM Server.

#### Server Mode

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

#### **Configure SJPM Server**

The "Configure SJPM Server" menu item opens the "SJPM - Server Configuration" window.

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

#### Language

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

#### **Client Logging**

The "**Client Logging**" menu item, when selected, will turn on/off logging for the SJPM Client. The SJPM service must be restarted for the logging to take effect. Selection will be noted on the menu with a check.

#### Server Logging

The "**Server Logging**" menu item, when selected, will turn on/off logging for the SJPM Server. The SJPM service must be restarted for the logging to take effect. Selection will be noted on the menu with a check.

#### Exit

The "**Exit**" menu item closes the SJPM Client GUI. The SJPM Client GUI can be restarted from the Windows "**Start**" menus. See section **4.1.5**.
By default SJPM is installed to run as a **Service**. Use the SJPM Windows System Tray Icon to change SJPM to run as an **Application**.

## **Important Note:**

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

<ul> <li>Default Programs</li> <li>Desktop Gadget Gallery</li> <li>Internet Explorer</li> </ul>		
i Windows DVD Maker	_	<u>O</u> pen
Windows Fax and Scan	۲	Run as <u>a</u> dministrator
Windows Media Center		Troubleshoot compatibility
Windows Media Player		Open file locat <u>i</u> on
VINDOWS Update		Pin to Tas <u>k</u> bar
		Pin to Start Menu
Enson JavaPOS ADK		-
Epstinisavar ob Abit		Restore previous <u>v</u> ersions
Games		Send to
Maintenance		<u>.</u>
퉬 Oracle VM VirtualBox Gu		Cut
퉬 Sabre		<u>С</u> ору
퉬 Sabre HSSP Simulator		<u>P</u> aste
🎳 SJPM		Delete
SJPM Client		Rename
SJPM Release Notes	<b>U</b>	Kena <u>m</u> e
SJPM User's Guide		P <u>r</u> operties
Start SJPM Server	_	
Stop SJPM Server		_
Uninstall SJPM		·
◀ Back		
Search programs and files	5	Shut down ▷

## **Run SJPM as an Application:**

- 1. Right click on the SJPM Icon in the Windows System Tray.
- 2. Click on the "Server Mode" menu item.
- 3. Click on the "Application" menu item.

	About SJPM
	Restore
	Restart Server
Service	Server Mode
Application	Configure SJPM Server
	Language 🕨
	Client Logging
	Server Logging
	Exit
Sec. 1997.	ע 10:40 🖓 🛀 🖓 און דער 🖓 🖵 🖓

4. The "**SJPM – Server Mode Change**" window will appear. Click on the "<u>Y</u>es" button. SJPM will restart and run as an Application.

👂 SJPM	- Server Mode Change
?	Do you want to change SJPM Server mode to Application?
	<u>Y</u> es <u>N</u> o

	About SJPM
	Restore
	Restart Server
Service	Server Mode
Application	Configure SJPM Server
	Language
	Client Logging
	Server Logging
	Exit

 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 click on "Run as <u>a</u>dministrator". Click on the "<u>Y</u>es" button on the "User Account Control" window.

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

 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" menu item, and then click on "Run as <u>a</u>dministrator". Click on the "<u>Y</u>es" button on the "User Account Control" window.

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

Steps 5 and 6 are necessary to set the SJPM Application to run as the administrator user and not the System user.

#### 4.1.4 Running SJPM as a Service

By default SJPM is installed to run as a **Service**. If SJPM has been changed to run as an **Application** you can change it to run as a **Service** from the SJPM Windows System Tray Icon menu.

## **Run SJPM as a Service:**

- 1. Right click on the SJPM Icon in the Windows System Tray.
- 2. Then click on the "Server Mode" menu item.
- 3. Then click on the "Service" menu item.

About SJPM
Restore
Restart Server
Server Mode
Configure SJPM Server
Language •
Client Logging
Server Logging
Exit

4. The "**SJPM – Server Mode Change**" window will appear. Click on the "<u>Y</u>es" button. SJPM will restart and run as a Service.



[Sabre Java Printing Module (SJPM) User's Guide – Airline Solutions] October, 2014 Confidential and Proprietary Sabre Inc.

#### 4.1.5 Manually Running the SJPM Client GUI

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

#### 4.1.5.1 Windows XP SP3

1. Click on the Windows "**Start**" button, then click on the "**Programs**" folder, then click on the "**SJPM**" folder, and then 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. Click on the Windows "**Start**" button, then click on "**All Programs**", then click on the "**SJPM**" folder, and then 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.

🔗 D-f It D		
Derault Programs	Â	
Besktop Gadget Gallery		
E Internet Explorer		
Windows DVD Maker		CSD
Windows Fax and Scan		CSD
🧐 Windows Media Center		Documents
🜔 Windows Media Player		Documents
🖑 Windows Update		Pictures
🛹 XPS Viewer		rictures
Accessories	Ξ	Music
🌗 Games		
🐌 Maintenance		Games
Oracle VM VirtualBox Guest Additions		Guines
🔐 SJPM		Computer
SJPM Client		
SJPM Release Notes		Control Panel
SJPM User's Guide		
Start SJPM Server		Devices and Printers
Stop SJPM Server		
S Uninstall SJPM	Ŧ	Default Programs
	_	
Back		Help and Support
Search programs and files		Shut down 🕨

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. 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 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. 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.



Upon installation SJPM will install as a Service and the SJPM Server will run automatically in Windows "Services". The SJPM service name is "Sabre Java Printing Module (SJPM)". See sections 4.2.2.1, 4.2.2.2, and 4.2.2.3.

**Note:** The SJPM Server must be installed on one computer in the office in order to make the connection to the Sabre Host.

Services						
<u>File Action V</u> iew	<u>H</u> elp					
	à 🔒 🛛 🖬 🕨 🔲 II II 🕨					
Services (Local)	Services (Local)					
	Sabre Java Printing Module (SJPM)	Name	Description	Status	Startup Type	
	Stop the service Restart the service	Remote Registry Routing and Remote Access RPC Endpoint Mapper	Enables rem Offers routi Resolves RP	Started	Manual Disabled Automatic	
	Description: Provides Sabre message printing functionality	Sabre Java Printing Module (SJPM)     Secondary Logon     Secure Socket Tunneling Protoc     Security Accounts Manager     Security Center     Senier	Provides Sa Enables star Provides su The startup The WSCSV Supports fil	Started Started Started Started	Automatic Manual Manual Automatic Automatic (D	
	Extended Standard	* L			•	

#### 4.2.1 Starting / Stopping the SJPM Server - Windows "Start" Menus

This section describes the process for starting and stopping the SJPM Server in Windows XP SP3, Windows 7, Windows 8, and Windows 8.1. You must be logged in as the Administrator to start or stop the server.

#### 4.2.1.1 Starting the SJPM Server – Windows XP XP3

1. Click on the Windows "**Start**" button, then click on the "**Programs**" folder, then click on the "**SJPM**" folder, and then click on the "**Start SJPM Server**" menu item.



1. 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" menu item and then select "Run as administrator".

😥 Default Programs	Open
	Run as administrator
Windows DVD Maker	Troubleshoot compatibility
Windows Fax and Sca	Open file location
👨 Windows Media Cento	Pin to Taskbar
🖸 Windows Media Playe	Pin to Start Menu
Windows Update XPS Viewer	Restore previous versions
Accessories Games	Send to +
Maintenance	Cut
Oracle VM VirtualBox	Сору
JPM SJPM	Delete
SJPM Client	Denere
📄 SJPM Release Note 🔍	Rename
SJPM User's Guide	Properties
Start SJPM Server	
Stop SJPM Server	Default Programs
Uninstall SJPM	
◀ Back	Help and Support
Search programs and files	Shut down 🕨
🔁 🖉 🚍	

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

😗 Use	r Account Control	<b>—</b>	
$\bigcirc$	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 <b>Unknown</b> Hard drive on this computer	
🕑 si	how <u>d</u> etails	Yes No	
		Change when these notifications appear	

The following window will briefly display.

SJPM Server	
Complete	
Done	
Dono	

### 4.2.1.3 Starting the SJPM Server – Windows 8 and Windows 8.1

## 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.



## 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. Right click on the "Stop SJPM Server" icon on the Windows desktop.



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

$\checkmark$		(Ī	A	5	
Pin to Start	Pin to taskbar	Uninstall	Open new window	Run as administrator	Open file location

5. The following window will briefly display.

	SJPM Server
Complete	
Done	

#### 4.2.1.4 Stopping the SJPM Server – Windows XP SP3

1. Click on the Windows "**Start**" button, then click on the "**Programs**" folder, then click on the "**SJPM**" folder, and then click on the "**Stop SJPM Server**" menu item.



1. 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 select "**Run as administrator**".



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

😗 Use	r Account Control	<b>—</b>					
$\bigcirc$	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 <b>Unknown</b> Hard drive on this computer					
🕑 s	how <u>d</u> etails	Yes No					
		Change when these notifications appear					

The following window will briefly display.

SJPM S	Server			
SJ	P <b>M</b> Serv	er Stopped	l	
Stop	oped			

## 4.2.1.6 Stopping the SJPM Server – Windows 8 and Windows 8.1

## 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.



## 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. Right click on the "Stop SJPM Server" icon on the Windows desktop.



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

$\checkmark$		Ē	A	5	
Pin to Start	Pin to taskbar	Uninstall	Open new window	Run as administrator	Open file location

5. The following window will briefly display.

	SJPM Server	
SJPM S	erver Stopped	
Stopped		

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

This assumes the operator has technical knowledge of Linux operations.

## 4.3.1 Prerequisites

**Prerequisite:** 

Software:

a) SJPM zip (**Example:** SJPM 1.5.2.sabre.zip).

#### 4.3.2 Install/Setup/Operate SJPM on Linux – Browse SJPM from Linux

This option is for running SJPM in a browser from the Linux machine.

- Copy the SJPM zip file (Example: SJPM 1.5.2.sabre.zip) to the Linux machine 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.
- 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 machine and then browse to the following address: <u>http://127.0.0.1:5196/</u>

#### 4.3.3 Install/Setup/Operate SJPM on Linux – Browse SJPM from Windows

This option is for running SJPM in a browser from a Windows machine.

- Copy the SJPM zip file (Example: SJPM 1.5.2.sabre.zip) to the Linux machine 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.
- 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 machine 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 machine and then browse to the following address: http://x.x.x.x:5196/
  - **x.x.x. x** = IP address of the Linux machine where SJPM is running.

# **SJPM Client GUI**

## **5.1 SJPM Client GUI Description**

This section describes the SJPM Client GUI and its components.

	Sabre Java Printing Module (SJPM) -								
	Devices						Restart		
						Group Expand A	ll New Edit Delete		
	Name Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status		
	Test-1	File	7A31BD	Computer Room-1	🖌 Ready	🎸 Online			
	Refresh			Devices 1 to 1 of 1		First	Previous Next Last		
-	SJPM Server: [127.0.0.1] Up								

Field Name	Description	Example(s)
Name	This field displays the name identifying the configured device. This is provided during " <b>New</b> " device creation and it is not editable after creation.	Test-1
Туре	This field displays the configured device driver's name. This can only be selected during " <b>New</b> " device creation and is not editable after creation.	File
LNIATA	This field displays the device's configured LNIATA. This is provided during " <b>New</b> " device creation and can be edited after device creation.	ABC123
Location	This field displays the pseudo name or a physical location of the device. This is provided during " <b>New</b> " device creation and can be edited after device creation.	Computer Room-1
Host Status	This field displays the current state of the SJPM's connection to the Sabre Host.	Connecting Ready Down
Device Status	This field displays the current state of the SJPM's connection to the device.	Online Disconnected
Transaction Status	This field displays the last state of the last transaction sent to the device.	Sending to Device Last Send Successful Last Send Failed

## 5.1.2 GUI Buttons

Sabre	Sabre Java Printing Module (SJPM) -								
Devi	es						Restart		
						Group Expand A	l New Edit Delete		
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status		
	Test-1	File	ABC123	Computer Room	🎻 Ready	🎸 Online			
Refr	esh			Devices 1 to 1 of 1		First	Previous Next Last		
SJPM S	erver: [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 service. This action (**Restart**) is required after all device additions, device deletions, device disable, device enable, device configuration change and enable/disable 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 when a device is configured. The "**Group**" button groups together like device lines based on the "**Location**" 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 when a device is configured. The "**Expand All**" button expands all device lines to show their status in detail. The "**Collapse All**" button collapses all device lines to show the device status in a single line. The device line can also be clicked on to expand and collapse the device 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 configured and between the "**Expand All**" and "**Edit**" buttons when a device is configured. 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 a device is configured. 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 to the right of the "**Edit**" button when a device is configured. The "**Delete**" button is used to delete 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 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 buttons will be active on the second page.

#### **5.1.3 Adding and Deleting a Device**

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

#### 5.1.3.1 Adding a Device

Sabre Java	Printing Module (SJP	M) -					
Devices							Rest
							Ne
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status

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 Printing Module (SJPM) - 💷 💿 💽							
Devices				Restart			
				New			
Name Type	LNIATA Location	Host Status	Device Status	Transaction Status			
	SJPM - Add Device Enter the name of the ner Test-1 Select the device driver type from File • OK C	w device. the drop down list. ancel					
Refresh			First	Previous Next Last			
SJPM Server: [127.0.0.1] Up							

3. The device's configuration tab will appear. Configure the device (refer to section 6.2) and then click on the "Save" button.

🔄 Sabre Java Printing Module (SJPM) - 🚥	- 0 💌
Devices Test-1 🛙	Restart
Device: Test 1 (File)	
Device: Test-T (File)	
Physical Device Location:	
Location:	
Printer Settings:	
Output Format:   Text  PDF	
Print to Single or Multiple File(s):  Single Multiple	
Directory Path: C:\Program Files\SJPM\Output\	
Filename: SJPM	
Maximum File Size: 1024000	
Singles	
Single.	
If Fig. Fucks @ Amand	
II ne Exists: Wypend Overwrite	
Encryption:	
File Encryption: C 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	
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) -						
Devices						Restar
					Group Expand A	ll New Edit Delete
Name	Tunn	INIATA	Location	Heat Status	Davies Status	Transaction Status
Test-1	File	743184	Computer Room	Inactive	Inactive	Inactive
		SJPM - Cor	nfirm Restart ice configuration saved. Restart t	he SJPM		
		serv	er to apply changes?	ancel		
Refresh			Devices 1 to 1 of 1		First	Previous Next Las
M Server: [127.0.0.1] Up						

5. SJPM will restart and the device line will appear in the SJPM GUI.

Sabre Java Printing Module (SJP)	4) -					- • •
Devices						Restart
					Group Expand A	l New Edit Delete
Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
Test-1	File	7A318A	Computer Room	Inactive	Inactive	Inactive
			Reconnecting			
Refresh			Devices 1 to 1 of 1		First	Previous Next Last
JPM Server: [127.0.0.1] Resta	rting					

Sabre Java	Sabre Java Printing Module (SIPM) - 📖 🕞									
Devices							Restart			
						Group Expand A	I New Edit Delete			
						ereep espandin				
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status			
	Test-1	File	7A31BA	Computer Room	🗹 Ready	🖌 Online				
							*			
Refresh	1			Devices 1 to 1 of 1		First	Previous Next Last			
	1									
C IDM Sociar	[127.0.0.1] Up									
SJPM Server	. [127.0.0.1] op									

#### 5.1.3.2 Deleting a Device

1. Click on the checkbox for the device to be deleted and then click on the "**Delete**" button or right click on the device to be deleted and then select the "**Delete Device**" menu item.

Sabre Java Printing Module (SJPM) - 📖	8			- • •
Devices				Restart
				Group Expand All New Edit Delete
E Name 1	Гуре LNIATA	Location	Host Status	Device Status Transaction Status
Edit Device	File 7A31BA	Computer Room	🎻 Ready	✓ Online
Delete Device				
Disable Device Click to delete the				
selected device.				
				*
Refresh		Devices 1 to 1 of 1		First Previous Next Last
SJPM Server: [127.0.0.1] Up				

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

Sabre Java Printing Module (SJP	M) -					- • <b>•</b>
Devices						Restart
					Group Expand A	ll New Edit Delete
Name Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
Test-1	File	7A31BA	Computer Room	🖌 Ready	🗹 Ontine	
		SJPM - Con	firm Action te the device "Test-1" and res r? OK	start the SJPM Cancel		
Refresh			Devices 1 to 1 c	of 1	First	Previous Next Last
SJPM Server: [127.0.0.1] Up						

3. SJPM will restart and the device will be deleted.

Sabre Java Printing Module (SJPM) - 💻 💿 💽										
Devices							Restart			
							New			
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status			
				Reconnecting						
							*			
Refresh						First	Previous Next Last			
	[127.0.0.1] Postarti	0.0								
sorm server:	[127.0.0.1] Restarti	ing								

Sabre Ja	🔄 Sabre Java Printing Module (SJPM) - 💻 💿 📧									
Devices							Restart			
							New			
	Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status			
							*			
Refres	h					First	Previous Next Last			
SJPM Serv	er: [127.0.0.1] Up									

#### **5.1.4 Disabling and Enabling a Device**

This section describes the processes for disabling and enabling a device 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 line and device's configuration in the SJPM Client GUI.

#### 5.1.4.1 Disabling a Device

1. Right click on the device line that you want to disable and then click on the "**Disable Device**" menu item.

Sabre Java Printing Module (SJPM) -	Sabre Java Printing Module (SJPM) - 💷 💿 💽									
Devices						Restart				
					Group Expand A	l New Edit Delete				
E Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status				
Test-1	File	7A31BA	Computer Room-1	Ready	🎻 Online					
			Deir Disa	e Device as Device Click to disable selected device.	he					
Refresh			Devices 1 to 1 of 1		First	Previous Next Last				
SJPM Server: [127.0.0.1] Up										

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

Sabre Java Printing Module (SJPM) -						- • •
Devices						Restart
					Group Expand A	Il New Edit Delete
Name Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
Test-1	File	7A31BA	Computer Room-1	😽 Ready	🞻 Online	
		S IDM C	ofirm Astion			
		SJPM - CO	nnrm Action		-	
		Ser Ser	able the device "Test-1" and rest ver?	art the SJPM		
			OK	Cancel		
Refresh			Devices 1 to 1 of	1	First	Previous Next Last
SJPM Server: [127.0.0.1] Up						

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

Sabre Java Print	ing Module (SJPM) -	12					- • 💌
Devices							Restart
						Group Expand A	ll New Edit Delete
	Name	Type	LNIATA	Location	Host Status	Device Status	Transaction Status
	Test-1	File	7A318A	Computer Room-1	🞻 Ready	🗹 Ontine	
				Reconnecting			
Refresh				Devices 1 to 1 of 1		First	Previous Next Last
SJPM Server: [12	7.0.0.1] Restartin	g					

Sabre Java Printir	Sabre Java Printing Module (SJPM) - 📰 💼										
Devices							R	estart			
						Group Expand A	ll New Edit D	elete			
<b>a</b> 1	lame	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status	^			
۱ 📄	fest-1	File	7A318A	Computer Room-1	Disabled	Disabled	Disabled				
Refresh				Devices 1 to 1 of 1		First	Previous Next	Last			
SJPM Server: [127	7.0.0.1] Up										

## 5.1.4.2 Enabling a Device

1. Right click on the device line that you want to enable and then click on the "Enable Device" menu item.

Sabre Java Printing Module (SJF	PM) -					- 0 💌
Devices						Restart
					Group Expand A	ll New Edit Delete
Name Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
Test-1	File	7A318A	Computer Room-1	dit Device	Disabled	Disabled
			C	elete Device nable Device		
				Click to enable the		
				selected device.		
						Ψ.
Refresh			Devices 1 to 1	of 1	First	Previous Next Last
SJPM Server: [127.0.0.1] Up						
server frances if ob						

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

						Rest
			[	Group Expa	and All New Edit	Dele
Туре	LNIATA	Location	Host Status	Device State	us Transaction Statu	s
File	7A318A	Computer Room-1	Disabled	Disabled	Disabled	
	SJPM - Con	firm Action				
	Enab	e the device "Test-1" and restar	t the SJPM			
			incer			
	Type Fie	Type LNIATA Fie 7A318A SJPM - Cont SJPM - Cont Serve	Type         LNIATA         Location           File         7A31BA         Computer Room-1           SJPM - Confirm Action         Image: Computer Room and the device "Test-1" and restar           Server?         OK         Category	Type         LNIATA         Location         Host Status           File         7A318A         Computer Room-1         Disabled           SJPM - Confirm Action         Image: Confirm Action         Image: Confirm Action Confirm Action <td>Group         Epsilon           Type         LNLATA         Location         Host Status         Device Statu           File         7A318A         Computer Room-1         Disabled         Disabled           SJPM - Confirm Action</td> <td>Group     Expand All     New     Edit       Type     LNATA     Location     Host Status     Device Status     Transaction Status       File     7A31BA     Computer Room-1     Disabled     Disabled     Disabled       SJPM - Confirm Action     Enable the device "Test-1" and restart the SJPM server?     OK     Cancel</td>	Group         Epsilon           Type         LNLATA         Location         Host Status         Device Statu           File         7A318A         Computer Room-1         Disabled         Disabled           SJPM - Confirm Action	Group     Expand All     New     Edit       Type     LNATA     Location     Host Status     Device Status     Transaction Status       File     7A31BA     Computer Room-1     Disabled     Disabled     Disabled       SJPM - Confirm Action     Enable the device "Test-1" and restart the SJPM server?     OK     Cancel

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

	Sabre Java Printing Module (SJPM)	-						• 💌
	Devices						R	testart
Γ						Group Expand A	ll New Edit D	elete
	Name Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status	<b>^</b>
	Test-1	File	7A31BA	Computer Room-1	Disabled	Disabled	Disabled	
	Refresh			Reconnecting		First	Previous Next	×
L	PM Server: [127.0.0.1] Restart	ing						
-								

Sabre Java	Printing Module (SJPM) -						- 0 💌	
Devices							Restart	
						Group Expand A	ll New Edit Delete	1
	Name	Type	LNIATA	Location	Host Status	Device Status	Transaction Status	Ш
	Test-1	File	7A31BA	Computer Room-1	🎻 Ready	online		Ш
Refresh	]			Devices 1 to 1 of 1		First	Previous Next Last	
SJPM Server	: [127.0.0.1] Up							

## 5.1.5 Editing a Device

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

#### 5.1.5.1 Editing a Device

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

Sabre Java Printing Module (SJPM) -						- • •
Devices						Restart
					Group Expand Al	New Edit Delete
Name Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
Edit Device	File	7A31BA	Computer Room	🖌 Ready	🎸 Online	
Delete Device	_					
Disable Device Click to edit the selected device.						
	-					
						-
Refresh			Devices 1 to 1 of 1		First	Previous Next Last
					1 1150	Here Lase
S IDM Server: [127.0.0.1] Up						
sorm server: [127.0.0.1] Op						

2. The device's configuration tab will appear. Edit the device (refer to section 6.2) and then click on the "Save" button.

Sabre Java Printing Module (SJPM) - 💻 💿	×
Devices Test-1 🖾 Rest	tart
Device: Test-1 (File)	
Physical Device Location:	1
Location: Computer Room	
Printer Settings:	1
Output Format:   Text  PDF	
Print to Single or Multiple File(s): 🖲 Single 💿 Multiple	
Directory Path: C:\Program Files\SJPM\Output\	
Filename: 5JPM	
Maximum File Size: 1024000	
File Extension: 1xt	
If File Exists:   Append  Overwrite	
Encryption:	i II
File Encryption: Enabled	
Public Key File Path: public.key	
Device Extended Settings:	í I
Insert LF After CR: 🗹	
-Termination Block Segment:	
Insert form feed	
Disable form feed	
© Custon terminator	
Number of line feeds after message	
Custom Terminator: 00-0A***EOM***-0D-0A-0C	
-xx (hex value). Eg: -00 is CR, -0A is tinefeed, -0C is FF (Form Feed).	
SJPM Server: [127.0.0.1] Up	

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

Sabre Java Printing Module (SJ	PM) -					- 0 🗾
Devices						Restart
					Group Expand A	ll New Edit Delete
Name	Type	LNIATA	Location	Host Status	Device Status	Transaction Status
Test-1	File	7A318A	Computer Room	🖌 Ready	🞻 Ontine	
		SJPM - Con	firm Restart ce configuration saved. Resta er to apply changes? OK	t the SJPM Cancel		
Refresh			Devices 1 to 1 o	of 1	First	Previous Next Last
JPM 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 (SJPM) -	100					- 0 💌
Devices						Restart
					Group Expand A	ll New Edit Delete
📃 Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status
Test-1	File	7A31BA	Computer Room	🎻 Ready	online	
Refresh			Devices 1 to 1 of 1		First	Previous Next Last
SJPM Server: [127.0.0.1] Up						

This section describes the processes 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 a device is configured. The "**Group**" button groups together like device lines based on the "**Location**" field of the device lines. The "**Ungroup**" button ungroups grouped device lines.

#### **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**").

-	va Printing Module (SJP	M) •							_	
Devices										Rest
							Group	Expand A	II New Edit	Delet
	Name	Туре	LNIATA	Location	Ho	ost Status	Devi	ce Status	Transaction	Status
	Test-1	File	7A31BA	Computer Room	4	Ready		Online		
	Test-2	File	7A318D	Computer Room	-	Ready		Online		
	Test-3	File	308D3A	Lab	-	Ready	- 🖌 (	Online		
	Test-4	File	7775D2	Lab	-	Ready	- <b>-</b> (	Online		
	Test-5	File	7775DA	Test Room	4	Ready	- 🖌 (	Online		
	Test-6	File	844758	Test Room	-	Ready	- 🖌 (	Online		

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 (SJPM) -	Sabre Java Printing Module (SJPM) - 📰 💿 💽						
Devices					Restart		
			U	Ingroup Expand A	ll New Edit Delete		
📰 Name	Type LNIATA	Location	Host Status	Device Status	Transaction Status		
Test-1	File 7A31BA	Computer Room	🎻 Ready	🎸 Online			
Test-2	File 7A31BD	Computer Room	🎻 Ready	🎻 Online			
Test-3	File 308D3A	Lab	🎻 Ready	🎻 Online			
Test-4	File 7775D2	Lab	🖌 Ready	🎻 Online			
Test-5	File 7775DA	Test Room	🎻 Ready	🎻 Online			
Test-6	File 844758	Test Room	🎻 Ready	🎻 Online			
					×		
Refresh		Devices 1 to 6 of 6		First	Previous Next Last		
SJPM Server: [127.0.0.1] Up							

## **Configurations and Drivers**

## **6.1 SJPM Configurations**

This section describes configurations that are applicable to SJPM and SJPM Drivers.

## **6.1.1 Supplemental Hosts Configuration**

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 device. To add or delete hosts from the list, follow the steps below.

Host Settings:	
LNIATA: ABC123	
Primary Host: access.sabre.com	
Supplemental Hosts: Add Configured Supplemental Hosts: Remove Selected	E
Save Cancel	
SJPM Server: [127.0.0.1] Up	

#### **6.1.1.1 Adding Supplemental Hosts**

Use the following steps to add supplemental hosts (concurrent connections) to the "**Configured Supplemental Hosts:**" list.

LNIAT	A: ABC123	
Primary Ho	it: access.sabre.com	
Supplemental Hos	s: Supplemental Hostname:	
	access.tsts.sabre.com Add	
	Configured Supplemental Hosts:	
	A	
	<b>T</b>	
	Remove Selected	
	Save Cancel	

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

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

	Host Settings:			I.
	LNIATA:	: ABC123		
	Primary Host:	: access.sabre.com		
	Supplemental Hosts:	: Supplemental Hostname:		
		Add		L
		Configured Supplemental Hosts:	E	
		access.tsts.sabre.com		
		*		
		Remove Selected		L
		Save		
			-	-
ŀ	S.IPM Server: [127.0.0.1] Un			-
	server [reviewer] op			

3. Repeat steps 1 and 2 for each additional host connection.

	Host Settings:		
	LNIATA:	ABC123	
	Primary Host:	access.sabre.com	
	Supplemental Hosts:	Supplemental Hostname:	
		Add	
		Configured Supplemental Hosts:	
	[	access.tsts.sabre.com	
		access.cert.sabre.com	
		*	
		Remove Selected	
		Save	
		Jure concer	
Ļ	IDM Comore [127.0.0.1] Up		2
2	Shew Selver: [15/10/01] Oh		

4. 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**

Use the following steps to delete supplemental hosts (concurrent connections) from the "Configured Supplemental Hosts:" list.

1. 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:		
	LNIATA:	ABC123	
	Primary Host:	access.sabre.com	
	Supplemental Hosts:	Supplemental Hostname:	
		Add	
	-	Configured Supplemental Hosts:	E
		access.tsts.sabre.com	
		access.cert.sabre.com	
		*	
		Remove Selected	
		Save	
			-
-	SJPM Server: [127.0.0.1] Up		=
	[		

- 2. Click on the "**Remove Selected**" button.
- 3. 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 Device Backup and Restore

This section describes the processes for backing up and restoring devices in SJPM. The backup files should be stored in a safe location or on a thumb drive off of the machine running SJPM.

#### 6.1.2.1 Device Backup

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.

	-								
vices									Res
							Grou	p Expand A	Il New Edit Dele
	Name	Type	LNIATA	Location		Host Status	De	vice Status	Transaction Status
	Test-1	File	7A31BA	Computer Room	- A	Ready	d'	Online	
	Test-2	File	7A31BD	Computer Room	-	Ready	-	Online	
	Test-3	File	308D3A	Lab	1	Ready	1	Online	
	Test-4	File	7775D2	Lab	1	Ready	-	Online	
	Test-5	File	7775DA	Test Room	-	Ready	-	Online	
	Test-6	File	844758	Test Room	1	Ready	-	Online	
efresh	I			Devices 1 to 6 of	6			First	Previous Next L

 Open Windows Explorer and then navigate to "C:\Program Files\SJPM\server\devroot". For Windows 7 64 Bit and Windows 8 64 Bit 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	\mu instances	4/2/2014 12:30 PM File folder	
Pictures	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 Ulcer 4 items	E widgets	4/2/2014 10:22 AM File folder	

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

	1300	Filer) SIDM convert developt) instances	- 40 3	arch instances												
		Thest supervised we would be the second s	• • • • • • • • • • • • • • • • • • • •	aren anstances	~											
Organize 🔻 Inclue	de in	library ▼ Share with ▼ New folder			E 🔻 🔟 🔞											
Documents	*	Name	Date modified	Туре	Size											
<ul> <li>Music</li> <li>Pictures</li> <li>Videos</li> </ul>		Test-1.json	4/2/2014 1:06 PM 4/2/2014 1:06 PM	JSON File JSON File	9 KB 9 KB											
🖳 Computer	Ш	Ш	Ш	Ш	Ш	Ш	=	ш	ш	ш	ш	ш	Test-3.json	4/2/2014 1:06 PM 4/2/2014 1:06 PM 4/2/2014 1:06 PM	JSON File JSON File	9 KB 9 KB
Local Disk (C:) J .jsapi							Test-6.json	4/2/2014 1:06 PM	JSON File	9 KB						
Downloads																
Program Files	Ŧ															
6 items																

#### 6.1.2.2 Device Restore

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

Sabre Java Printing Module (SIPM) - 📖 💿 💽										
Devices					Restart					
					New					
🔲 Name T	ype LNIATA	Location	Host Status Devi	ce Status Transaction State	us 🔷					
Refresh				First Previous Next	Last					
				THE TOTAL						
SJPM Server: [127.0.0.1] Up										

Open Windows Explorer and then navigate to the location you have stored your SJPM backup copy. Right click on the "instances" folder and then select "Copy". Then navigate to "C:\Program Files\SJPM\server\devroot". For Windows 7 64 Bit and Windows 8 64 Bit navigate to "C:\Program Files (x86)\SJPM\server\devroot".

					×
C:\Prog	ram Files\SJPM\server\devroot	👻 🐓 Sea	arch devroot		٩
Organize 👻 Includ	de in library 🔻 Share with 👻 New folder			:= -	0
Documents	Name	Date modified	Туре	Size	
J Music	instances	4/2/2014 12:30 PM	File folder		
🛃 Videos	templates	4/2/2014 1:00 PM	File folder		
Computer Local Disk (C:) Jisapi Downloads PerfLogs Program Files Sabre Userr	E widgets	4/2/2014 10:22 AM	File folder		
4 items					

3. Right click on the right pane and then select "Paste".

Ci\Prog	ram Files\SJPM\server\devroot	✓ 4y Search devroot	<b>-</b> -
Organize 👻 Inclue	de in library 🔻 Share with 👻 New folder		:= • 🔟 🔞
Documents	Name	Date modified Type	Size
J 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 Program Files Licer	₩idgets	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'.								
<u></u> μμ	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.

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

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

🥯 Sabre Java Printing Module	(SJPM) -					- • •
Devices						Restart
						New
Name	Type	LNIATA	Location	Host Status	Device Status	Transaction Status
		SJPM - Confi	rm Restart			
		Restar	t the SJPM server?			
			OK	Cancel		
						•
Refresh					First	Previous Next Last
S IPM Server: [127.0.0.1] []	n					

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



Sabre Java Printing Module (SIPM) - 📰 💿 💽										
Devices										
Group Expand All New Edit Delete										
Name	Туре	LNIATA	Location		Host Status	De	vice Status	Transaction St	atus 🔷 个	
Test-1	File	7A318A	Computer Room	1	Ready	1	Online			
Test-2	File	7A318D	Computer Room	d.	Ready	- d	Ontine			
Test-3	File	308D3A	Lab	1	Ready	1	Online			
Test-4	File	777502	Lab	1	Ready	-	Online			
Test-5	File	7775DA	Test Room	1	Ready	- 1	Online			
Test-6	File	844758	Test Room	1	Ready	-	Online			
									Ŧ	
Refresh			Devices 1 to 6 of 6				First	Previous Nex	t Last	
L										
SJPM Server: [127.0.0.1] Up										

SJPM currently has seven (7) drivers.

### **Current SJPM Drivers:**

## AEAIERIP, ATB2Airline, File, JavaPOS, MQJMS, Printer, and System

The SJPM Drivers are 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.

Sabre Java Printing Module (SJPM) - 💼 💿 💽									
Devices						Restart			
					Group Expand A	ll New Edit Delete			
Name Name	Туре	LNIATA	Location	Host Status	Device Status	Transaction Status			
Test-1	File	ABC123	Computer Room	🧹 Ready	online				
SJPM - Add Device Enter the name of the new device. Select the device driver type from the drop down list. Select the device driver type from the drop down list. AEAIERIP ATB2AITINE File JavaPOS MQJMAS Printer System									
Refresh			Devices 1 to 1 of 1		First	Previous Next Last			
SJPM Server: [127.0.0.1] Up									

The "**AEAIERIP**" Driver is an IP protocol driver which allows the user to print data from the Sabre Host to an IER IP printer only with various configuration options. This driver is used for the printing of Airline Ticket, Boarding Pass and Bag Tag documents. The screenshot below shows the "**AEAIERIP**" Driver's configuration tab.

Sabre Java Printing Module (SJPM) - 🔤 🖷	- • 🔀
Devices Test-1 🖾	Restart
Device: Test-1 (AEAIERIP)	Î.
Physical Device Location:	
Location:	
Printer Settings:	
Printer Hostname or IP Address:	
Printer Port:	
Printer Type:  ATB	
Receive STX: 0x02	
Receive ETX: 0x03	
Send STX: 0x02	
Send ETX: 0x03	
Host Settings:	=
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	

# **"AEAIERIP"** Driver Configuration Options:

#### "Physical Device Location:"

#### "Location:"

The "**Location**" configuration is for a pseudo name or a physical location of the printing device. This configuration is used by the grouping function in SJPM that allows you to group devices together based on the "**Location**" field.

## "Printer Settings:"

#### "Printer Hostname or IP Address:"

The "**Printer Hostname or IP Address**" configuration is for the IP address of the printer being used for printing with this driver.

#### "Printer Port:"

The "**Printer Port**" configuration is for the port number configured in the printer being used for printing with this driver.

#### "Printer Type:"

The "**Printer Type**" selection sets the printer type. The default is set to "**ATB**". Available selections are:

"ATB" - for ticket and boarding pass printing

"**BTP**" - for bag tag printing

"Receive STX:"

The "Receive STX" configuration is for the Receive STX. The default is set to "0x02".

"Receive ETX:"

The "**Receive ETX**" configuration is for the Receive ETX. The default is set to "**0x03**". "**Send STX:**"

The "Send STX" configuration is for the Send STX. The default is set to "0x02".

"Send ETX:"

The "Send ETX" configuration is for the Send ETX. The default is set to "0x03".

"Host Settings:"

"LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to print 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 printing to the device from multiple host addresses. (See section <u>6.1.1 Supplemental Hosts Configuration</u> for a detailed explanation)

#### 6.2.2 ATB2Airline Driver

The "**ATB2Airline**" Driver is a PECTAB protocol driver which allows the user to print data from the Sabre Host to an ATB printer with various configuration options. This driver is used for the printing of Airline ATB Ticket, Boarding Pass and Bag Tag documents. The screenshots below show the "**ATB2Airline**" Driver's configuration tab.

Sabre Java Printing Module (SIPM) -	×
Devices Test-2 🛙	irt
Device: Test-2 (ATB2Airline)	
- Physical Device Location:	
Location:	
- Delatar Sattinari	
Printer Jolung.	
Printer 1996 WHO OUP	
Receive List book	
sens site	-
Sena E IA: UXUL	-
- Serial Settings:	
COM Port: v	
Baud Rate: 9600 V	
Data Bits: 🐻 💌	
Parity: none V	
Stop Bits: 1 -	
Host Setting:	
Primary Host: access.sabre.com	
Supplemental Hosts: Supplemental Hostname:	
Add	
Configured Supplemental Hosts:	
<u>^</u>	
	٣
SJPM Server: [127.0.0.1] Up	

Sabre Java Printing Module (SJPM) -	- • •
Devices Test-2 🖾	Restart
Printer Type:  ATB  BTP	
Receive STX:	
Receive ETX: 0x0C	
Send STX:	
Send ETX: 0x0C	
- Serial Settings:	
COM Port:	
Baud Rate: 9600 💌	
Data Bits: 8 💌	
Parity: none 🔻	
Stop Bits:	
Host Settings:	
LNIATA:	
Primary Host: access.sabre.com	-
Supplemental Hosts: Supplemental Hostname:	
bbA	
Configured Supplemental Hosts:	
Remove Selected	
fund south	
Save Cancel	_
S IDH Carver [127.0.0.1] In	
Show Server: [151/0/0/1] oh	

# "ATB2Airline" Driver Configuration Options:

## "Physical Device Location:"

## "Location:"

The "**Location**" configuration is for a pseudo name or a physical location of the printing device. This configuration is used by the grouping function in SJPM that allows you to group devices together based on the "**Location**" field.

## "Printer Settings:"

## "Device Driver:"

The "Device Driver" selection sets the device driver. The default is set to "Sabre".

Available selections are:

"Sabre" - for the Sabre protocol

"**AEA**" - for the AEA standard protocol

"AEA567" - for the IER 567 protocol

#### "Printer Type:"

The "**Printer Type**" selection sets the printer type. The default is set to "**ATB**". Available selections are:

"ATB" for ticket and boarding pass printing and "BTP" for bag tag printing.

"Receive STX:"

The "Receive STX" configuration is for the Receive STX. The default is set to blank.

"Receive ETX:"

The "**Receive ETX**" configuration is for the Receive ETX. The default is set to "**0x0C**".

"Send STX:"

The "Send STX" configuration is for the Send STX. The default is set to blank.

"Send ETX:"

The "Send STX" configuration is for the Send ETX. The default is set to "0x0C".

"Serial Settings:"

#### "COM Port:"

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

#### "Baud Rate:"

The "**Baud Rate**" configuration 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.

#### "Data Bits:"

The "**Data Bits**" configuration 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.

#### "Parity:"

The "**Parity**" configuration 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.

#### "Stop Bits:"

The "**Stop Bits**" configuration 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.

#### "Host Settings:"

#### "LNIATA:"

The "**LNIATA**" configuration is for the LNIATA (Sabre Address) of the device you are configuring to print 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 printing to the device from multiple host addresses. (See section <u>6.1.1 Supplemental Hosts Configuration</u> for a detailed explanation)

The "**File**" Driver is an ASCII protocol, hardcopy driver which allows the user to print data from the Sabre Host to a file with various configuration options. The screenshots below show the "**File**" Driver's configuration tab with the following selections:

#### Text and Single selected

🔄 Sabre Java Printing Module (SJPM) - 📰 📰	- • •
Devices Test-3	Restart
Device: Test-3 (File)	
Device, reac 3 (rine)	
Physical Device Location:	
Location:	
Printer Settings:	
Output Format:  PDF	
Print to Single or Multiple File(s):   Single  Multiple	
Directory Path: C:\Program Files\SJPM\Output\	
Filename: SJPM	=
Maximum File Size: 1024000	
Single:	
File Extension: txt	
If File Exists: Append   Overwrite	
- Encryption:-	
File Encryption: C Enabled	
Public Key File Path: public.key	
- Device Extended Settings-	
Inset I after CP 2	
- Termination Block Segment:	
insert form feed	
O Disable form fand	
Coston terminator	
Cruster Termination On and Cruster intersage	
Custom reminator: PUU-UA**CUM***CUU-UA*UC	
L   1 -xxx (hex value). Eg: -OD IS CR, -OA IS Unefeed, -OC IS FF (Form Feed).	
SJPM Server: [127.0.0.1] Up	

	💁 Sabre Java Printing Module (SJPM) - 📰 📰 👘 👘				
	Devices	Test-3 🖾		Resta	rt
Γ		Public Key File Path:	public.key		~
	Device Ex	tended Settings:			
		Insert LF After CR:			
	Termir	ation 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 Lir	e Feeds After Message:	0		
	Hort Set	ingr			
	-Host Set	I NIATA.			
		Primary Host:	access salve com		
		Supplemental Hosts:	Supplemental Hostname:		
		supplimentation			
			Configured Supplemental Hosts:		
			v		
			Remove Selected		
			Save Cancel		
L					٣
S	JPM Server	: [127.0.0.1] Up			

# Text and Multiple selected

Sabre Java Printing Module (SJPM) - 🔜 🔳	- • •
Devices Test-3	Restart
Device: Test-3 (File)	
- Physical Device Location:	
Location:	
Printer Settings:	
Output Format:  Text  PDF	
Print to Single or Multiple File(s): Single  Multiple	
Directory Path: C:\Program Files\SJPM\Output\	
Filename: SJPM	=
Maximum File Size: 1024000	
- Multiple:	
File Extension:  Numeric  Timestamp	
Maximum # of Files in Directory: 999	
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-0A***EOM***-OD-0A-0C	
-xx (hex value). Eg: -00 is CR, -0A is linefeed, -0C is FF (Form Feed).	-
SJPM Server: [127.0.0.1] Up	

🥥 s	Sabre Java Printing Module (SIPM) -			
D	)evices	Test-3 🖾		Restart
П		Public Key File Path:	public.key	~
	Device Ex	tended Settings:		
		Insert LF After CR:	V	
	Termin	ation 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 Lir	e Feeds After Message:	0	
	Hart Cat	inger .		
IΓ	nost set	ings:		
		Primary Host:	anners sabre nom	
		Supplemental Hosts:		
		supported to sea	add	
			Configured Supplemental Hosts:	=
				-
			V Coloridad	
			Remove Selected	
			Save	
				-
SJP	M Server	: [127.0.0.1] Up		

# PDF and Single selected

Sabre Java Printing Module (SJPM) -		
Devices Test-3 🖾	Restart	
Devices Test 2 (File)		
Device: Test-5 (File)		
Physical Device Location:		
Location:		
Printer Settings:		
Output Format:  Text  PDF		
Print to Single or Multiple File(s):   Single  Multiple	=	
Directory Path: C:\Program Files\SJPM\Output\		
Filename: SJPM		
Maximum File Size: 1024000		
- PDF Settings:		
Page Size: Letter 🔻		
Font Settings:		
Font: Please select an option 🔻		
Font Size: Please select an option		
- Single -		
File Extension: off		
If File Exists: Append Overwrite		
File Encruption Capital Circled		
Dublic Kay Ela Dathr public kay		
Public ney i ne Pathi public ney		
Device Extended Settings:		
Insert LF After CR: 🖉		
SJPM Server: [127.0.0.1] Up		

	Sabre Java	Printing Module (SJPM	9-	-	3
	Devices	Test-3 🔛		Restart	t
Γ		Public Key File Path:	public.key		
	- Device Ex	tended Settings:			
		Insert LF After CR:	7		
	Termin	ation Block Segment:			
			Insert form feed	- 111	
			Disable form feed	- 111	
			◎ Custom terminator	- 111	
			Number of line feeds after message	- 111	
		Custom Terminator:	~0D~0A***EOM***~0D~0A~0C	- 111	
			-xx (hex value). Eg: -0D is CR, -0A is linefeed, -0C is FF (Form Feed).	- 111	
	# of Lin	e Feeds After Message:	0	- 111	
	-Host Sett	ings:			
		Drimery Harts			Ш
		Frimary Host:	access.sabre.com		Ш
		supplemental nosts.	Supplemental Hostiname:		Ш
			Configured Supplemental Hester		Ш
			Computed Supplemental Hosts:		
					Ш
			The second secon		Ш
			Remove Selected		Ш
			Save Cancel		
L					•
S	JPM Server	: [127.0.0.1] Up			

## PDF and Multiple selected.

🔄 Sabre Java Printing Module (SJPM) -	- • •
Devices Test-3 🖾	Restart
Device: Test-3 (File)	
Physical Device Location:	
Location:	
Printer Settings:	
Output Format:  Text OPF	
Print to Single or Multiple File(s): Single  Multiple	
Directory Path: C:\Program Files\SJPM\Output\	E
Filename: SJPM	
Maximum File Size: 1024000	
PDF Settings:	
Page Size: Letter 👻	
Font Settings:	
Font: Please select an option 🔻	
Font Size: Please select an option •	
File Extension: Numeric I Timestamp	
Maximum # of Files in Directory: 999	
Encryption:	
File Encryption: C Enabled	
Public Key File Path: [public.key	
- Davies Extended Satting:	
Local Laboratory	
SJPM Server: [127.0.0.1] Up	

1	Sabre Java Printing Module (SJPM) - 📰 📰 📰		
	Devices	Test-3 🖾	Restart
Γ		Public Key File Path: public.key	
	Device Ex	tended Settings:	
		Insert LF After CR: 📝	
	Termin	ation 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 Lir	e Feeds After Message: 0	
	- Hort Cott	1001	
	nosc sec	I NIATA-	
		Primary Host: access.sabre.com	
		Supplemental Hosts: Supplemental Hostname:	
		bba	
		Configured Supplemental Hosts:	
		A	=
		Remove Selected	
		Remote Selected	
		Sauge Canad	
		Save	
Ļ			
2	JPM Server	: [12/.u.u.1] up	

# "File" Driver Configuration Options:

## "Physical Device Location:"

#### "Location:"

The "**Location**" configuration is for a pseudo name or a physical location of the printing device. This configuration is used by the grouping function in SJPM that allows you 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

## "Print to Single or Multiple Files:"

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

Available selections are:

"Single" - for single file creation

"**Multiple**" - for multiple files creation - With this option selected SJPM will generate a unique file for each Sabre Host message printed.

### "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:**\**Program Files**\**SJPM\Output**\", "**C:**\**Program Files** (**x86**)\**SJPM\Output**\" for windows 7 64bit and Windows 8 64 bit.

#### "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.

#### "Maximum File Size:"

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

"PDF Settings:" (This box will be displayed when "PDF" is selected from the "Printer Settings" box.)

#### "Page Size:"

The "**Page Size**" configuration is for the page size to be used for the PDF output file. The default is set to "**Letter**".

#### "Font Settings:"

The "**Font Settings**" configuration is for the Font and Font Size to be used for the PDF output file.

"**Font:**" - for the PDF file output

"Font Size:" - for the PDF file output

"Single:" (This box will be displayed when "Single" is selected from the "Printer Settings" box.)

"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".

#### "If File Exists:"

The "If File Exists" selection is for the output file creation method.

## "Append"

- When "**Text**" output format is selected, this configuration option appends data to a single file. This selection is set as default.
- When "**PDF**" output format is selected, this option is disabled.

#### "Overwrite"

- When "**Text**" output format is selected, this configuration option overwrites the data in a single file each time a new message is received.
- When "**PDF**" output format is selected, this option is set as default and cannot be changed.

"Multiple:" (This box will be displayed when "Multiple" is selected from the "Printer Settings" box.)

#### "File Extension:"

The "**File Extension**" configuration is for the file extension for the file(s). The default is set to "**Timestamp**".

Available options are

"**Numeric**" – for setting the file extension for both Text and PDF output file format to start at "**.000**". (**Example:** "**Test.000**")

"**Timestamp**" - for setting the file name to be the current <u>yeardatetime</u>. This selection is set as default.

For example, for "Text" output format, the file name will be "SJPM20130329165816397.txt"

For example, for "PDF" output format, the file name will be "SJPM20130329165816397.pdf"

#### "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 is defaulted to "**999**", the maximum setting allowed. This configuration is only available when the "**Numeric**" file extension radio button is selected.

**Note:** If the number of files in the directory equals the set limit (**999**) SJPM will stop sending data and the Sabre Queue will go on hold after the Host retries are completed.

## "Encryption:"

#### "File Encryption:"

The "File Encryption" selection sets file encryption. The default is set to "Disabled".

Available selections are:

"Enabled" - for file encryption

"Disabled" - for no file encryption

#### "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 inserts a Line Feed after a Carriage Return if checked. This option is checked by default.

## "Termination Block Segment:"

#### "Insert form feed"

The "**Insert form feed**" selection inserts a Form Feed at the end of the message data if selected. This selection is set as default.

### "Disable form feed"

The "Disable form feed" selection disables Form Feed if selected.

### "Custom terminator"

The "Custom terminator" selection inserts a custom terminator, if selected that can be user edited. The default custom terminator is set to "~0D~0A\*\*\*EOM\*\*\*~0D~0A~0C".

#### "Number of line feeds after message"

The "Number of line feeds after message" selection inserts the number of Line Feeds entered at the end of the message data if selected. The default is set to "0".

#### "Host Settings:"

#### "LNIATA:"

The "**LNIATA**" configuration is for the LNIATA (Sabre Address) of the device you are configuring to print 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 printing to the device from multiple host addresses. (See section <u>6.1.1 Supplemental Hosts Configuration</u> for a detailed explanation)

The following source code can be used to generate a public and private key for use with the "**File**" Driver encryption functionality.

```
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 baos = new 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();
      1
      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 - 8;
         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();
      1
```

```
return plaintext;
}
```

```
CreateKeysApp.java:
\sim \sim \sim
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.KeyPairGenerator;
import java.util.Arrays;
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;
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();
         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 ) {
```

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```
System.out.println( "Threw exception: " );
e.printStackTrace();
```

#### 6.2.3.2 File Driver Decryption – Source Code

The following source code can be used to decrypt the encrypted files from the "**File**" Driver encryption functionality.

```
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: " );
         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 );
         KeyFactory 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/CBC/PKCS5Padding" );
   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();
} catch( Exception e ) {
  System.out.println( "Threw exception: " );
  e.printStackTrace();
}
```

} } ~~~ The "**JavaPOS**" Driver is a JavaPOS protocol on the printer end and Sabre Protected Message Protocol on the Host end Boarding Pass Printer driver which will allow the user to print data from the Sabre Host to a JavaPOS printer with various configuration options. The screenshot below shows the "**JavaPOS**" Driver's configuration tab.

# **IMPORTANT NOTE – MUST READ:**

The "JavaPOS" Driver does not utilize the SJPM's Java. The machine running SJPM must have a minimum of Java 1.6 installed on it prior to SJPM installation and configuration. For the SJPM "JavaPOS" Driver to function correctly it also requires the "Java Advanced Imaging 1.1.3 (JAI)" and "EPSON JavaPOS ADK 1.11.13" software to be installed prior to SJPM installation and configuration.

| 💁 Sabre Java Printing Module (SJPM) - 📰 📰 👘 💼 |         |  |
|-----------------------------------------------|---------|--|
| Devices Test-4 <sup>(2)</sup>                 | Restart |  |
| Device: Test-4 ( JavaPOS)                     |         |  |
| berice. react ( buriar ob)                    |         |  |
| Physical Device Location:                     |         |  |
| Location:                                     |         |  |
| Printer Settings:                             |         |  |
| Printer Name: POSPrinter                      |         |  |
| Large Font Size Vertical Offset: 310          |         |  |
| Small Font Size Vertical Offset: 0            |         |  |
| Time to Wait for Errors 0                     |         |  |
| The to Halt for Efforts of                    |         |  |
| Host Settings:                                |         |  |
| LNIATA:                                       |         |  |
| Primary Host: access.sabre.com                |         |  |
| Supplemental Hosts: Supplemental Hostname:    |         |  |
| Add                                           |         |  |
| Configured Supplemental Hosts:                |         |  |
|                                               |         |  |
|                                               |         |  |
|                                               |         |  |
|                                               |         |  |
| Remove Selected                               |         |  |
|                                               |         |  |
| Save                                          |         |  |
|                                               |         |  |
|                                               |         |  |
|                                               |         |  |
|                                               |         |  |
|                                               |         |  |
| SJPM Server: [127.0.0.1] Up                   |         |  |

# "JavaPOS" Driver Configuration Options:

## "Physical Device Location:"

#### "Location:"

The "**Location**" configuration is for a pseudo name or a physical location of the printing device. This configuration is used by the grouping function in SJPM that allows you to group devices together based on the "**Location**" field.

## "Printer Settings:"

"Printer Name:"

The "**Printer Name**" configuration is for the printer name for the device. The default is set to "**POSPrinter**".

### "Large Font Size Vertical Offset:"

The "Large Font Size Vertical Offset" configuration is to adjust the vertical position for the large font on each print line. The default is set to "310".

#### "Small Font Size Vertical Offset:"

The "Small Font Size Vertical Offset" configuration is to adjust the vertical position for the small font on each print line. The default is set to "**0**".

#### "Time to Wait for Errors:"

The "**Time to Wait for Errors**" configuration is to adjust the time to wait for errors. The default is set to "**0**".

### "Host Settings:"

### "LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to print 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 printing to the device from multiple host addresses. (See section <u>6.1.1 Supplemental Hosts Configuration</u> for a detailed explanation)

This section describes the process for installing "Java Advanced Imaging" (JAI) version **1.1.3** software which is required for functionality of the Epson JavaPOS printer.

1. Double click on the "jai-1\_1\_3-lib-windows-i586-jre.exe" to start the JAI installation.

## Windows 7 and 8 Operating Systems:

If you see the following window click on the " $\underline{Y}es$ " 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:<br>Publisher:<br>File origin:                                                            | jai-1_1_3-lib-windows-i586-jre.exe<br><b>Unknown</b><br>Hard drive on this computer |  |
| 💌 s   | how details                                                                                            | Yes No                                                                              |  |
|       |                                                                                                        | Change when these notifications appear                                              |  |

The following window will appear.

| InstallSł | hield Wizard                                                                                                                                                |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2         | Java Advanced Imaging 1.1.3 for JRE Setup is preparing the<br>InstallShield Wizard, which will guide you through the program<br>setup process. Please wait. |
| Config    | uring Windows Installer                                                                                                                                     |
|           | Cancel                                                                                                                                                      |
|           |                                                                                                                                                             |
|           |                                                                                                                                                             |

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



2. The "License Agreement" window will appear. Click on the "Yes" button.

| nstallShield Wizard                                                                                                                                                               |                                                                                          |                                                                                  |                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------|
| License Agreement<br>Please read the following license agreement                                                                                                                  | carefully.                                                                               |                                                                                  | 124                                       |
| Press the PAGE DOWN key to see the rest of                                                                                                                                        | of the agreement.                                                                        |                                                                                  |                                           |
| Sun Microsystems, Inc.<br>Binary Code License Agreement<br>JAVA ADVANCED IMAGING API VERSION                                                                                      | 1113                                                                                     |                                                                                  | <b>^</b>                                  |
| READ THE TERMS OF THIS AGREEMEN<br>LICENSE TERMS (COLLECTIVELY "AGRE<br>THE SOFTWARE MEDIA PACKAGE.? BY (<br>PACKAGE, YOU AGREE TO THE TERMS )<br>ACCESSING THE SOFTWARE ELECTROM | FAND ANY PROV<br>EMENT'') CAREFL<br>OPENING THE SO<br>DF THIS AGREEM<br>IICALLY, INDICAT | IDED SUPPLEN<br>JLLY BEFORE C<br>IFTWARE MEDI<br>IENT.? IF YOU A<br>E YOUR ACCEF | IENTAL<br>DPENING<br>A<br>ARE<br>PTANCE + |
| ,<br>Do you accept all the terms of the preceding<br>setup will close. To install Java Advanced In<br>agreement.<br>stallShield                                                   | License Agreemer<br>naging 1.1.3 for JR                                                  | nt? If you choose<br>E, you must acc                                             | e No, the<br>ept this                     |
|                                                                                                                                                                                   | < Back                                                                                   | Yes                                                                              | No                                        |

The "Choose Destination Location" window will appear. Click on the "Next>" 3. button.

| InstallShield Wizard                                                         |                                      | ×               |
|------------------------------------------------------------------------------|--------------------------------------|-----------------|
| Choose Destination Location<br>Select folder where Setup will install files. |                                      |                 |
| Setup will install Java Advanced Imaging                                     | 1.1.3 for JRE in the following for   | older.          |
| To install to this folder, click Next. To inst<br>another folder.            | all to a different folder, click Bro | owse and select |
| - Destination Folder                                                         |                                      |                 |
| C:\Program Files\Java\ire6\                                                  |                                      | Browse          |
| C:\Program Files\Java\jre6\                                                  |                                      |                 |
| IlShield                                                                     | C Pack                               | the Cancel      |
|                                                                              |                                      | Cancer          |

The "**Setup Type**" window will appear. Click on and select the "<u>C</u>omplete" radio button and then click on the "<u>N</u>ext>" button. 4.

| InstallShield Wiz           | ard 🛛 🔀                                                                              |
|-----------------------------|--------------------------------------------------------------------------------------|
| Setup Type<br>Select the Se | etup Type to install.                                                                |
| Please select               | t a setup type.                                                                      |
|                             | All program features will be installed. (Requires the most disk space.)              |
| C Custom                    | Choose which program features you want installed. Recommended for<br>advanced users. |
| InstallShield               | < Back Next> Cancel                                                                  |

5. The "Start Copying Files" window will appear. Click on the "<u>N</u>ext>" button.

| InstallShield Wizard                                                                                            |                                                                                                    | × |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|---|
| Start Copying Files                                                                                             |                                                                                                    |   |
| Review settings before copying files.                                                                           |                                                                                                    |   |
| Setup has enough information to start copyin<br>change any settings, click Back. If you are s<br>copying files. | ng the program files. If you want to review or<br>satisfied with the settings, click Next to begin |   |
| Current Settings:                                                                                               |                                                                                                    |   |
| Target Folder:<br>C:\Program Files\Java\jre6\                                                                   |                                                                                                    | • |
| ٠                                                                                                               |                                                                                                    | ~ |
| InstallShield                                                                                                   |                                                                                                    |   |
|                                                                                                                 | < <u>B</u> ack <u>Next</u> > Cancel                                                                |   |

6. The "**Setup Status**" window will appear. Click on the "**Cancel**" button only if you want to cancel the installation.

| InstallShield Wizard            |                                                   |
|---------------------------------|---------------------------------------------------|
| Setup Status                    |                                                   |
| Java Advanced Imaging 1.1.3 for | JRE Setup is performing the requested operations. |
| Registering product             |                                                   |
|                                 |                                                   |
|                                 |                                                   |
| nstallShield                    |                                                   |
|                                 | Cancel                                            |

7. The "**InstallShield Wizard Complete**" window will appear. Click on the "**Finish**" button to complete the installation.



Once the "Java Advanced Imaging" (JAI) version 1.1.3 software has been installed, install the "EPSON JavaPOS ADK version 1.11.13" software which is required for functionality of the Epson JavaPOS printer.

1. Double click on the "Epson\_JavaPOS\_ADK\_11113.exe".

#### Windows 7 and 8 Operating Systems:

If you see the following window click on the "Yes" button:

| 😗 Use | r Account Control                                                                                      | <b>×</b>                                                                     |  |
|-------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--|
| 0     | Do you want to allow the following program from an unknown publisher to make changes to this computer? |                                                                              |  |
|       | Program name:<br>Publisher:<br>File origin:                                                            | Epson_JavaPOS_ADK_11113.exe<br><b>Unknown</b><br>Hard drive on this computer |  |
| 🕑 s   | how details                                                                                            | Yes No                                                                       |  |
|       |                                                                                                        | Change when these notifications appear                                       |  |

The following windows will appear:

| <b>1</b> | InstallAnywhere is preparing to install |
|----------|-----------------------------------------|
|          | 56%                                     |
|          | Can                                     |

Select the Language and then click on the "OK" button.



2. The "Introduction" window will appear. Click on the "<u>N</u>ext" button.

| Epson JavaPOS ADK 1.11.13                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose JVM</li> <li>Choose Install Set</li> <li>Choose Folder Location</li> <li>Choose your communica</li> <li>Location for jpos xml</li> <li>Pre-Installation Summary</li> <li>Installing</li> <li>Install Complete</li> </ul> | InstallAnywhere will guide you through the installation of Epson JavaPOS ADK. It is strongly recommended that you quit all programs before continuing with this installation.<br>Click the 'Next' button to proceed to the next screen. If you want to change something on a previous screen, click the 'Previous' button. You may cancel this installation at any time by clicking the 'Cancel' button.<br>It is required that the user reads the Release Notes first.<br>View Release Notes<br>View Installation Manual (requires Adobe Reader)<br>Get Adobe Reader (R)<br>Generate silent install |
| InstallAnywhere by Macrovision –<br>Cancel                                                                                                                                                                                                                                                | Previous <u>N</u> ext                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

3. The "License Agreement" window will appear. Click on "I <u>accept the terms of the</u> License Agreement" and then click on the "<u>Next</u>" button.



4. The "**Choose JVM**" window will appear. Click on and select the Java VM to be used by JavaPOS and then click on the "<u>Next</u>" button.

| 📲 Epson JavaPOS ADK 1.11.13                                                                                                                                                                                                                                                               |                                                                                                 |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------|
|                                                                                                                                                                                                                                                                                           |                                                                                                 | Choose JVM      |
| <ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose JVM</li> <li>Choose Install Set</li> <li>Choose Folder Location</li> <li>Choose your communica</li> <li>Location for jpos.xml</li> <li>Pre-Installation Summary</li> <li>Installing</li> <li>Install Complete</li> </ul> | Please choose a Java VM for use by JavaPOS<br>C:\Program Files\Java\jre6\bin\java.exe<br>Browse |                 |
| InstallAnywhere by Macrovision —<br>Cancel                                                                                                                                                                                                                                                | Previou                                                                                         | ıs <u>N</u> ext |

5. The "Choose install Set" window will appear. Click on and select "User" and then click on the "<u>Next</u>" button.



6. The "Set User Classpath" window will appear. Click on and select the default Classpath and then click on the "<u>Next</u>" button.

| 📲 Epson JavaPOS ADK 1.11.13                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                           | Set User Classpath                                                                                                                                                                                                                             |
| <ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose JVM</li> <li>Choose Install Set</li> <li>Choose Folder Location</li> <li>Choose your communica</li> <li>Location for jpos.xml</li> <li>Pre-Installation Summary</li> <li>Installing</li> <li>Install Complete</li> </ul> | Select the path to install service files.  C:\Program Files\Epson\JavaPOS\lib Setting the Classpath will be required in order to use JavaPOS.  C:\Program Files\Java\ire6\lib\ext The default setting used for JavaPOS ADK 1.11.9 and earlier. |
| InstallAnywhere by Macrovision —<br><u>C</u> ancel                                                                                                                                                                                                                                        | Previous <u>N</u> ext                                                                                                                                                                                                                          |
7. The "**Choose your communication method**" window will appear. Click on and unselect the "**Serial**" communication method and then click on and select the "**USB**" communication method and then click on the "**Next**" button.

| 📲 Epson JavaPOS ADK 1.11.13                                                                                                                                                                                                                                                               |                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                           | Choose your communication method                                                      |
| <ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose JVM</li> <li>Choose Install Set</li> <li>Choose Folder Location</li> <li>Choose your communica</li> <li>Location for jpos.xml</li> <li>Pre-Installation Summary</li> <li>Installing</li> <li>Install Complete</li> </ul> | Please choose your communication method         Serial         V USB         Ethernet |
| InstallAnywhere by Macrovision —<br>Cancel                                                                                                                                                                                                                                                | Previous <u>N</u> ext                                                                 |

8. The "Location for jpos.xml" window will appear. Click on the "<u>N</u>ext" button.

| Epson JavaPOS ADK 1.11.13                                                                                                                                                                                            |                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
|                                                                                                                                                                                                                      | Location for jpos.xml           |
| <ul> <li>Introduction</li> <li>License Agreement</li> <li>Choose JVM</li> </ul>                                                                                                                                      | Use existing jpos.xml file      |
| <ul> <li>Choose Initial Set</li> <li>Choose Folder Location</li> <li>Choose your communica</li> <li>Location for jpos.xml</li> <li>Pre-Installation Summary</li> <li>Installing</li> <li>Install Complete</li> </ul> | Ipos.xml Restore Default Browse |
| InstallAnywhere by Macrovision —<br><u>Cancel</u>                                                                                                                                                                    | Previous Next                   |

9. The "Pre-Installation Summary" window will appear. Click on the "Install" button.



10. The "Installing Epson JavaPOS ADK" window will appear.



11. Once the install has completed the "**Install Complete**" window will appear. Click on the "**Done**" button to complete the installation process.



#### 6.2.4.3 EPSON JavaPOS ADK Version 1.11.13 Configuration

Once the "**Epson\_JavaPOS\_ADK\_11113.exe**" has been installed, configuration will be required before use. This section describes the process for configuration.

#### **EPSON TM-T88IV USB Printer Configuration:**

Configure the following settings in the EPSON SetupPOS program.

| Device Name:    | TM-T88IV                            |
|-----------------|-------------------------------------|
| Port Type:      | USB                                 |
| Port Name Type: | Serial Number                       |
| Port Name:      | Actual Serial Number of the printer |
|                 |                                     |

Use the USB cable that comes with the printer for workstation connection.

#### **EPSON TM-T88IV Serial Printer Configuration:**

Configure the following settings in the EPSON SetupPOS program.

| <b>Device Name:</b> | TM-T88IV                                                   |
|---------------------|------------------------------------------------------------|
| Port Type:          | Serial                                                     |
| Serial Port:        | COM1 (Select according to the COM port you are connected.) |
| Buffer size:        | 4096 (Default)                                             |
| Bits per second:    | 38400 bps                                                  |
| Data Bits:          | 8 Bits                                                     |
| Parity:             | No Parity Bits                                             |
| Stop Bits:          | 1 Stop Bit                                                 |
|                     |                                                            |

#### Flow Control: DTR/DSR

Use the serial cable that comes with the printer for workstation connection.

## **EPSON TM-T88V USB Printer Configuration:**

Configure the following settings in the EPSON SetupPOS program.

| <b>Device Name:</b> | TM-T88V |
|---------------------|---------|
| Port Type:          | USB     |

Use the USB cable that comes with the printer for workstation connection.

 Click on the Windows "Start" button, then navigate to "Programs" or "All Programs", and then click on "Epson JavaPOS ADK". For Windows 7 and Windows 8 Operating Systems right click on "SetupPOS" and then select ""Run as administrator" if required, otherwise click on "SetupPOS".



## Windows 7 and Windows 8 Operating Systems:

If you see the following window click on the " $\underline{Y}es$ " button:

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

2. The "SetupPOS" window will appear. Click on the "Add..." button.

| SetupPOS<br>File Edit View Tools Help                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                    |                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------|
| Image: Second secon | X Service Settings | 6 <del>0</del><br>s Preferences |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                                 |

3. The "Add JposEntry" "Important Properties" window will appear. In the "Logical Device Name" field type in the printer name (THIS NAME MUST MATCH WITH THE DEVICE NAME CONFIGURED IN SJPM).

## Configuration for the TM-T88IV USB Printer

In the "Device Category" drop down list select "POSPrinter".

In the "Device Name" drop down list select "TM-T88IV".

| 😼 Add JposEntry                       | ×     |
|---------------------------------------|-------|
| Important Properties                  |       |
| Logical Device Name POSPrinter1       |       |
| Device Category POSPrinter            |       |
| Device Name TM-T88IV 🔻                |       |
| Description EPSON TM-T88IV POSPrinter |       |
|                                       |       |
| Prev Next C                           | ancel |

The "Add JposEntry" "Connection Interface" window will appear.

| 😻 Add JposEntry                         | ×                |
|-----------------------------------------|------------------|
| Connection Interface<br>Port Type Seria |                  |
| Serial Specific Settings                |                  |
| Port Name                               | COM1             |
| Output Buffer Size                      | 4096             |
| Bits per second                         | 9600 bps 🔻       |
| Data bits                               | 8 Bits 🔻         |
| Parity                                  | No Parity Bit 🔻  |
| Stop Bits                               | 1 Stop Bit 🔻     |
| Flow Control                            | DTR/DSR 🔻        |
|                                         |                  |
|                                         | Prev Next Cancel |

In the "Port Type" drop down list select "USB".

The following window will appear.

In the "Port Name Type" drop down list select "Serial Number".

In the "Port Name" field type in the serial number for your printer.

| \delta Add JposEntry  |                                                      | x    |
|-----------------------|------------------------------------------------------|------|
| Connection Interface  | Port Type USB                                        |      |
| USB Specific Settings | Port Name Type Serial Number<br>Port Name 1234567890 |      |
|                       | Prev Next Ca                                         | ncel |

## **Configuration for the TM-T88IV Serial Printer**

In the "Device Category" drop down list select "POSPrinter".

In the "Device Name" drop down list select "TM-T88IV".

| 😼 Add JposEntry                          | <b>—</b> ×       |
|------------------------------------------|------------------|
| <ul> <li>Important Properties</li> </ul> |                  |
| Logical Device Name POSPrinter1          |                  |
| Device Category POSPrinter               | •                |
| Device Name TM-T88IV 🔻                   |                  |
| Description EPSON TM-T88IV PC            | OSPrinter        |
|                                          |                  |
|                                          | Prev Next Cancel |

The "Add JposEntry" "Connection Interface" window will appear.

In the "Port Type" drop down list select "Serial".

In the "**Port Name**" drop down list select "**COM1**" (Select according to the COM port your printer is connected).

In the "Output Buffer Size' field type in "4096".

In the "Bits per second" drop down list select "38400 bps".

In the "Data bits" drop down list select "8 Bits".

In the "Parity" drop down list select "No Parity Bit".

In the "Stop Bits" drop down list select "1 Stop Bit".

In the "Flow Control" drop down list select "DTR/DSR".

| 😽 Add JposEntry          |                  |
|--------------------------|------------------|
| Connection Interface     |                  |
|                          |                  |
| Port Type Seria          | <b>↓</b>         |
|                          |                  |
|                          |                  |
| Serial Specific Settings |                  |
|                          |                  |
| Port Name                | COM1             |
| Output Buffer Size       | 4096             |
| Bits per second          | 38400 bps 🔻      |
| Data bits                | 8 Bits 🔻         |
| Parity                   | No Parity Bit 🔹  |
| Stop Bits                | 1 Stop Bit 🔻     |
| Flow Control             | DTR/DSR -        |
|                          |                  |
|                          |                  |
|                          |                  |
|                          | Prev Next Cancel |
|                          |                  |

## Configuration for the TM-T88V USB Printer

In the "Device Category" drop down list select "POSPrinter".

In the "Device Name" drop down list select "TM-T88V".

| S Add JposEntry                      | ×    |
|--------------------------------------|------|
| Important Properties                 |      |
| Logical Device Name POSPrinter1      |      |
| Device Category POSPrinter -         |      |
| Device Name TM-T88V                  |      |
| Description EPSON TM-T88V POSPrinter |      |
|                                      |      |
| Prev Next Ca                         | ncel |

The "Add JposEntry" "Connection Interface" window will appear.

In the "Port Type" drop down list select "USB".

| \delta Add JposEntry |             |     |              | ×    |
|----------------------|-------------|-----|--------------|------|
| Connection Interface | Port Type 📗 | ISB | •            |      |
|                      |             |     | Prev Next Ca | ncel |

#### The "Add JposEntry" "Common" window will appear. 4.

Click on the "Done" button and take the default settings.

| 😽 Add JposEntry |                                                                                                                                                               |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Common          | nk on Paper for Completion<br>CharacterSet Matches Device<br>Save Images in NVRAM<br>Enable Two Color Printing<br>42 •<br>30<br>Threshold •<br>Alphanumeric • |
|                 | Prev Done Cancel                                                                                                                                              |

5. The "SetupPOS" window will appear.

Click on the "Save" button.

| Image: Service Settings       Preferences         Image: Service Setings       Preferences     < | SetupPOS<br><u>File E</u> dit <u>V</u> iew <u>T</u> ools <u>H</u> elp      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Common Port Device Details      POSPrinter      POSPrinter      Logical Device Name     POSPrinter      Device Category     POSPrinter      Device Name     TM-T88IV     POSPrinter      Description     EPSON TM-T88IV POSPrinter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | □     Image: Comparison       New     Open       Save     Copy       Paste | ★     Image: Second seco |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | EPSON     POSPrinter     POSPrinter                                        | Common       Port       Device Details         Important Properties       Important Properties         Logical Device Name       POSPrinter1         Device Category       POSPrinter         Device Name       TM-T88IV         Description       EPSON TM-T88IV POSPrinter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

6. The "Save As" window will appear.

In the "File <u>n</u>ame:" field type in "POSPrinter1" and then click on the "Save" button.

| Save As                                               |               |                              |              |          |                 |   |        | × |
|-------------------------------------------------------|---------------|------------------------------|--------------|----------|-----------------|---|--------|---|
| — — — — — — — — — — — — — — — — — — —                 | son 🕨 JavaPOS | <ul> <li>SetupPOS</li> </ul> | -            | <b>+</b> | Search SetupPOS |   |        | ٩ |
| Organize 🔻 Ne                                         | w folder      |                              |              |          |                 |   | •      | 0 |
| 💻 Desktop<br>🚺 Downloads<br>📆 Recent Places           | ^ Name        | ^                            | No items mat | tch your | Date modified   |   | Туре   |   |
| Libraries<br>Documents<br>Music<br>Pictures<br>Videos | E             |                              |              |          |                 |   |        |   |
| Local Disk (C:)                                       | )             |                              |              |          |                 |   |        |   |
| HP_RECOVER                                            | Y ([          |                              |              |          |                 |   |        |   |
| 👝 OS_TOOLS (E:                                        | .)            |                              | III          |          |                 |   |        | F |
| File <u>n</u> ame:                                    | POSPrinter1   |                              |              |          |                 |   |        | - |
| Save as <u>t</u> ype:                                 | *.xml         |                              |              |          |                 |   |        | • |
| Hide Folders                                          |               |                              |              |          | Save            | C | Cancel |   |

7. The "Confirmation" window will appear.



# 8. The "**SetupPOS**" window will appear. Configuration is now complete. POSPrinter1\_xml is now created in the "**Epson JavaPOS**" folder.

Close the window by clicking on the "**X**" in the top right corner of the window.

| SetupPOS ( C:\Program Files\Epso<br><u>F</u> ile <u>E</u> dit <u>V</u> iew <u>T</u> ools <u>H</u> elp | n\JavaPOS\SetupPOS\POSPrinter1.xml )                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image: Second stateImage: Second stateImage: Second stateNewOpenSaveCopyPaste                         | ★     *     *     ↓       Delete     Add     Modify     View     Service Settings     Preferences                                                                                                                                                              |
| EPSON     POSPrinter     POSPrinter     POSPrinter                                                    | Common       Port       Device Details         Important Properties       Logical Device Name       POSPrinter1         Device Category       POSPrinter         Device Name       TM-T88IV       TM-T88IV         Description       EPSON TM-T88IV POSPrinter |
|                                                                                                       |                                                                                                                                                                                                                                                                |

The "**MQJMS**" Driver is an ASCII protocol, hardcopy driver which allows the user to print data from the Sabre Host to a MQ JMS Server Queue with various configuration options. The screenshot below shows the "**MQJMS**" Driver's configuration tab.

| 🔄 Sabre Java Printing Module (SJPM) - 📰                                                                                     | - • •   |
|-----------------------------------------------------------------------------------------------------------------------------|---------|
| Devices Test-5 🛛                                                                                                            | Restart |
| Device: Test-5 (MO IMS)                                                                                                     |         |
| Device, rest-5 (mg/mb)                                                                                                      |         |
| Physical Device Location:                                                                                                   |         |
| Location:                                                                                                                   |         |
| MQ Configurations:                                                                                                          |         |
| Hostname:                                                                                                                   |         |
| Port Number:                                                                                                                |         |
| Queue Manager:                                                                                                              |         |
| Channel:                                                                                                                    |         |
| Queue:                                                                                                                      |         |
| Host Settings:<br>LNIATA:<br>Primary Host: access.sabre.com<br>Supplemental Hosts:<br>Add<br>Configured Supplemental Hosts: |         |
| Remove Selected Save Cancel                                                                                                 |         |
| SJPM Server: [127.0.0.1] Up                                                                                                 |         |

## "MQJMS" driver configuration options:

## "Physical Device Location:"

#### "Location:"

The "**Location**" configuration is for a pseudo name or a physical location of the printing device. This configuration is used by the grouping function in SJPM that allows you to group devices together based on the "**Location**" field.

## "MQ Configurations:"

#### "Hostname:"

The "Hostname" configuration is for setting the MQ Server hostname.

#### "Port Number:"

The "Port Number" configuration is for setting the port number of the MQ Server.

#### "Queue Manager:"

The "**Queue Manager**" configuration is for the Queue Manager name on the configured MQ Server.

"Channel:"

The "Channel" configuration is for the Channel for the MQ Manager.

"Queue:"

The "Queue" configuration is for the Queue name where the messages will be delivered.

## "Host Settings:"

## "LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to print 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 printing to the device from multiple host addresses. (See section 6.1.1 Supplemental Hosts Configuration for a detailed explanation)

#### **6.2.6 Printer Driver**

The "**Printer**" Driver is an ASCII protocol, hardcopy driver which allows the user to print data from the Sabre Host to a printer with various configuration options using both Serial and Parallel interfaces. The screenshots below show the "**Printer**" Driver's configuration tab.

| Sabre Java Printing Module (SJP)                                                                                                                                                                                                | v() -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | - • •   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Devices Test-6 🖾                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Restart |
|                                                                                                                                                                                                                                 | Device: Test 6 (Printer)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         |
|                                                                                                                                                                                                                                 | Device: Test-6 (Frinter)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         |
| Location                                                                                                                                                                                                                        | :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |
| Port Setting:                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |
| Port Type                                                                                                                                                                                                                       | : @Serial @Parallel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         |
| Serial:                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |
| Serial Settings:                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |
| COM Port                                                                                                                                                                                                                        | Please select an option                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | =       |
| Baud Rate                                                                                                                                                                                                                       | 9600 •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |         |
| Data Bits                                                                                                                                                                                                                       | : 8 -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |
| Parity                                                                                                                                                                                                                          | i none 🔻                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         |
| Stop Bits                                                                                                                                                                                                                       | : 1 •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |
|                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |
| Device Extended Settings:                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |
| Insert LF After CR                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |
|                                                                                                                                                                                                                                 | Incart form fead                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |
|                                                                                                                                                                                                                                 | Disable form feed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |
|                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |
|                                                                                                                                                                                                                                 | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         |
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| Host Settings:                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |
| SJPM Server: [127.0.0.1] Up                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |
|                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |         |
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| Sabre Java Printing Module (SJP)                                                                                                                                                                                                | v() - 🖿                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | - • •   |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾                                                                                                                                                                               | v() - <b>Land</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾                                                                                                                                                                               | v()                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖂                                                                                                                                                                               | x()                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6  Device Extended Settings:                                                                                                                                                      | x) - <b>■</b> ■<br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings:                                                                                                                                                     | x() - <b>■</b> ■<br>=                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings:                                                                                                                                                     | M) - L L<br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings:                                                                                                                                                     | M) - L L<br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 😫 Device Extended Settings:                                                                                                                                                     | M) - L L<br>M) - L | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 😫 Device Extended Settings: Insert LF After CR Termination Block Segment                                                                                                        | M) - L L<br>M) - L | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6  Device Extended Settings: Insert LF After CR Termination Block Segment Custom Terminator                                                                                       | M) - L L<br>M) - L | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6  Device Extended Settings: Device Extended Settings: Termination Block Segment Custom Terminator E of Line Feeds After Message                                                  | M) -<br>M)                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings: Device Extended Settings: Termination Block Segment Custom Terminator # of Line Feeds After Message                                                 | M) -<br>M) -<br>M) -<br>M) -<br>M) -<br>Minter form feed<br>Disable form feed<br>Custom terminator<br>Custom terminator<br>Number of line feeds after message<br>:<br>-00-0A**EOM***_00-0A*0C<br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖻 Device Extended Settings: Device Extended Settings: Termination Block Segment Custom Terminator # of Line Feeds After Message Host Settings:                                  | w)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖻 Device Extended Settings: Device Extended Settings: Custom Terminator # of Line Feeds After Message Host Settings: LNIATA                                                     | y)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖻 Device Extended Settings: Device Extended Settings: Custom Terminator for Line Feeds After Message Host Settings: LNIATA Primary Host                                         | y)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings: Device Extended Settings: Custom Terminator # of Line Feeds After Message Host Settings: LNIATA Primary Host Supplemental Hosts                     | y)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings: Device Extended Settings: Custom Terminator # of Line Feeds After Message Host Settings: LNIATA Primary Host Supplemental Hosts                     | y)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings: Device Extended Settings: Custom Terminator # of Line Feeds After Message Host Settings: LNIATA Primary Host Supplemental Hosts                     | y)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings: Device Extended Settings: Insert LF After CR Custom Terminator # of Line Feeds After Message Host Settings: LNIATA Primary Host Supplemental Hosts  | y)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings:                                                                                                                                                     | y)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings:                                                                                                                                                     | y)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings:                                                                                                                                                     | y)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings: Insert LF After CR Termination Block Segment Custom Terminator # of Line Feeds After Message Host Settings:- LNIATA Primary Host Supplemental Hosts | y)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings: Insert LF After CR Termination Block Segment Custom Terminator # of Line Feeds After Message Host Settings:- LNIATA Primary Host Supplemental Hosts | w)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |
| Sabre Java Printing Module (SJP) Devices Test-6 🖾 Device Extended Settings: Insert LF After CR Termination Block Segment Custom Terminator # of Line Feeds After Message Host Settings:- LNIATA Primary Host Supplemental Hosts | w)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Restart |

## "Printer" driver configuration options:

## "Physical Device Location:"

## "Location:"

The "**Location**" configuration is for a pseudo name or a physical location of the printing device. This configuration is used by the grouping function in SJPM that allows you to group devices together based on the "**Location**" field.

## "Port Settings:"

## "Port Type:"

The "**Port Type**" selection set the interface type to use when printing. The default is set to "**Serial**".

Available selections are:

"Serial" – for Serial Interface printing

"Parallel" - for Parallel Interface printing

## "Serial:"

## "Serial Settings:"

## "COM Port:"

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

## "Baud Rate:"

The "**Baud Rate**" configuration 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.

## "Data Bits:"

The "**Data Bits**" configuration 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.

#### "Parity:"

The "**Parity**" configuration 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.

## "Stop Bits:"

The "**Stop Bits**" configuration 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.

#### "Parallel:"

#### "Parallel Settings:"

## "LPT Port:"

The "LPT Port" configuration sets the LPT port. Select the LPT port that the printer is connected to on the PC. The default is set to "Please select an option...".

## "Device Extended Settings:"

#### "Insert LF After CR:"

The "**Insert LF After CR**" selection inserts a Line Feed after a Carriage Return if checked. This option is checked by default.

#### "Termination Block Segment:"

#### "Insert form feed"

The "**Insert form feed**" selection inserts a Form Feed at the end of the message data if selected. This selection is set as default.

#### "Disable form feed"

The "Disable form feed" selection disables Form Feed if selected.

#### "Custom terminator"

The "**Custom terminator**" selection inserts a custom terminator, if selected that can be user edited. The default custom terminator is set to "**~0D~0A\*\*\*EOM\*\*\*~0D~0A~0C**".

#### "Number of line feeds after message"

The "**Number of line feeds after message**" selection inserts the number of Line Feeds entered at the end of the message data if selected. The default is set to "**0**".

#### "Host Settings:"

#### "LNIATA:"

The "**LNIATA**" configuration is for the LNIATA (Sabre Address) of the device you are configuring to print 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 printing to the device from multiple host addresses. (See section <u>6.1.1 Supplemental Hosts Configuration</u> for a detailed explanation)

The "**System**" Driver is an ASCII protocol; hardcopy driver which allows the user to print data from the Sabre Host to a Network printer with various configuration options.

**Note:** 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.

#### 6.2.7.1 Sabre Java Printing Module (SJPM) Properties

#### Allow user rights to "System" printer driver

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 System Driver's configuration tab.

The following process should be completed before addition and configuration of the System Driver in SJPM if the SJPM user needs to print to system printers configured to be owned by a non-Administrative user.

- 1. In Windows XP click on "Start", then "Settings", and then "Control Panel" to open the "Control Panel". In Windows 7 and Windows 8 click on "Start", and then "Control Panel".
- 2. Click on "System and Security" and then click on "Administrative Tools".
- 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 | Loc ^ |
|                         | Stop the service                  | 🤹 Remote Registry                   | Enables rem  |         | Manual       | Loc   |
|                         | Restart the service               | Routing and Remote Access           | Offers routi |         | Disabled     | Loc   |
|                         |                                   | 🧠 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   |
|                         | runctionality                     | 🔍 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 🔻 |
|                         |                                   | •                                   |              |         |              | •     |
|                         | 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<br>''C:\Program Files | le:<br>s\SJPM\server\daemon\prunsrv.exe'' //RS//SJPM_Servic |
| Startup type:                          | Automatic                                                   |
| Help me configur                       | e service startup options.                                  |
| Service status:                        | Started                                                     |
| <u>S</u> tart                          | Stop Pause Resume                                           |
| You can specify t<br>from here.        | he start parameters that apply when you start the service   |
| Start para <u>m</u> eters:             |                                                             |
|                                        |                                                             |
|                                        | 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         | Local System account                 |  |  |
| Allo <u>w</u> service to int | eract with desktop                   |  |  |
| ○ This account:              | Browse                               |  |  |
| Password:                    |                                      |  |  |
| <u>C</u> onfirm password:    |                                      |  |  |
| Help me configure user ad    | ccount log on options.               |  |  |
|                              |                                      |  |  |
|                              |                                      |  |  |
|                              |                                      |  |  |
|                              |                                      |  |  |
|                              |                                      |  |  |
|                              |                                      |  |  |
|                              |                                      |  |  |
|                              | OK Cancel Apply                      |  |  |

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

| Sabre Java Printing Mode    | ule (SJPM) Properties (Local Computer) |
|-----------------------------|----------------------------------------|
| General Log On Reco         | very Dependencies                      |
| Log on as:                  |                                        |
| Local System accourt        | nt                                     |
| Allo <u>w</u> service to in | nteract with desktop                   |
| This account:               | <u>B</u> rowse                         |
| Password:                   | •••••                                  |
| <u>C</u> onfirm password:   | •••••                                  |
| Help me configure user      | account log on options.                |
|                             |                                        |
|                             |                                        |
|                             |                                        |
|                             |                                        |
|                             |                                        |
|                             |                                        |
|                             |                                        |
|                             |                                        |

- 7. 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 continue with the SJPM System Driver configuration.

#### **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.

| 1 | Sabre Java | Printing Module (SJPM  | ) - 📰                                                                   |         |
|---|------------|------------------------|-------------------------------------------------------------------------|---------|
|   | Devices    | Test-7 🖾               |                                                                         | Restart |
| Г |            |                        | Deviler, Test 7 (Center)                                                |         |
|   |            |                        | Device: Test-7 (System)                                                 |         |
|   | Physical   | Device Location:       |                                                                         |         |
|   |            | Location:              |                                                                         |         |
|   | Printer S  | ettings:               |                                                                         | _       |
|   |            | Printer:               | Please select an option                                                 |         |
|   |            | Printer Mode:          | Text Only (e.g. dot matrix)     Graphics (e.g. laser)                   |         |
|   | Device E   | tended Settings:       |                                                                         | _       |
|   |            | Insert LF After CR:    |                                                                         |         |
|   | Termin     | ation 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 Lir   | e Feeds After Message: | 0                                                                       |         |
|   |            |                        |                                                                         |         |
|   | Host Set   | tings:                 |                                                                         |         |
|   |            | LNIATA:                |                                                                         |         |
|   |            | Primary Host:          | access.sabre.com                                                        |         |
|   |            | Supplemental Hosts:    | Supplemental Hostname:                                                  |         |
|   |            |                        | Add                                                                     |         |
|   |            |                        | Configured Supplemental Hosts:                                          |         |
|   |            |                        | ·                                                                       | -       |
| S | JPM Server | : [127.0.0.1] Up       |                                                                         |         |

| 0 | Sabre Java | Printing Module  | (SJPM) -                                                                | - 0    | × |
|---|------------|------------------|-------------------------------------------------------------------------|--------|---|
|   | Devices    | Test-7 🖾         |                                                                         | Restar | t |
| Π |            | Printer          | Mode: (a) Text Only (e.g. dot matrix) (b) Graphics (e.g. laser)         | (      | * |
|   | Device E   | tended Settings  | 8                                                                       |        |   |
|   |            | Insert LF Afte   | er CR: 📝                                                                |        |   |
|   | Termin     | ation Block Seg  | ment                                                                    |        |   |
|   |            |                  | Insert form feed                                                        |        |   |
|   |            |                  | Disable form feed                                                       |        |   |
|   |            |                  | Custom terminator                                                       |        |   |
|   |            |                  | Number of line feeds after message                                      |        |   |
|   |            | Custom Termin    | nator: ~0D~0A***EOM***~0D~0A~0C                                         |        |   |
|   |            |                  | ~xx (hex value). Eg: ~0D is CR, ~0A is linefeed, ~0C is FF (Form Feed). |        |   |
|   | # of Lir   | e Feeds After Me | ssage: 0                                                                |        |   |
|   | Host Set   | tines:           |                                                                         |        |   |
|   |            | U                | IIATA:                                                                  |        |   |
|   |            | Primary          | Host: access.sabre.com                                                  |        |   |
|   |            | Supplemental H   | Hosts: Supplemental Hostname:                                           |        | E |
|   |            |                  | Add                                                                     |        |   |
|   |            |                  | Configured Supplemental Hosts:                                          |        |   |
|   |            |                  | A                                                                       |        |   |
|   |            |                  |                                                                         |        |   |
|   |            |                  | *                                                                       |        |   |
|   |            |                  | Remove Selected                                                         |        |   |
|   |            |                  |                                                                         |        |   |
|   |            |                  | Save                                                                    |        |   |
| L |            |                  |                                                                         |        | - |
| s | JPM Server | : [127.0.0.1] U  | p                                                                       |        |   |
|   |            |                  |                                                                         |        |   |

| Sabre Java Printing Module (SJPM) - 🔤 📕                          | - • ×   |
|------------------------------------------------------------------|---------|
| Devices Test-7 🛛                                                 | Restart |
| Device: Test-7 (System)                                          |         |
| -Physical Device Location:                                       |         |
| Location:                                                        |         |
| Printer Settings:                                                |         |
| Printer: Please select an option 💌                               |         |
| Printer Mode: Text Only (e.g. dot matrix)  Graphics (e.g. laser) | =       |
| Font: Please select an option                                    |         |
| Font Size: Please select an option                               |         |
| Page Setup:                                                      |         |
| Orientation:                                                     |         |
| Portrait     O Landscape                                         |         |
| Margins:                                                         |         |
| Units of Measure:                                                |         |
| Top: 0.75                                                        |         |
| Left: 0.75                                                       |         |
| Bottom: 0.75                                                     |         |
| Right: 0.75                                                      |         |
|                                                                  |         |
| Device Extended Settings:                                        |         |
| Insert LF After CR: 📝                                            |         |
| - Termination Block Segment:                                     |         |
| Insert form feed                                                 |         |
| SJPM Server: [127.0.0.1] Up                                      |         |

| 1 | Sabre Java | a Printing Module (SJPM) -                                              |       | x   |
|---|------------|-------------------------------------------------------------------------|-------|-----|
|   | Devices    | Test-7 🖾                                                                | Resta | art |
| Г |            |                                                                         |       |     |
|   | - Device E | Extended Settings:                                                      |       |     |
| L |            | Insert LF After CR: 📝                                                   |       |     |
|   | Termin     | ination 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 Li    | ine Feeds After Message: 0                                              |       |     |
|   | -Host Set  | tilnes:                                                                 |       |     |
|   |            | LNIATA:                                                                 |       |     |
|   |            | Primary Host: access.sabre.com                                          |       |     |
|   |            | Supplemental Hosts: Supplemental Hostname:                              |       |     |
|   |            | Add                                                                     |       |     |
|   |            | Configured Supplemental Hosts:                                          |       |     |
|   |            | *                                                                       |       | Ε   |
|   |            |                                                                         |       |     |
|   |            | *                                                                       |       |     |
|   |            | Remove Selected                                                         |       |     |
|   |            |                                                                         |       |     |
|   |            | Save Cancel                                                             |       |     |
|   |            |                                                                         |       |     |
| s | JPM Serve  | r: [127.0.0.1] Up                                                       |       | _   |
|   |            |                                                                         |       |     |

## "System" driver configuration options:

## "Physical Device Location:"

## "Location:"

The "**Location**" configuration is for a pseudo name or a physical location of the printing device. This configuration is used by the grouping function in SJPM that allows you to group devices together based on the "**Location**" field.

## "Printer Settings:"

#### "Printer:"

The "**Printer**" configuration is for selection of the System printer you want to use to print to.

#### "Printer Mode:"

The "**Printer Mode**" selection sets the print mope. The default is set to "**Graphics Only** (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

## "Font Settings:"

"Font:"

The "Font" configuration is for the Font to use with the System printer.

"Font Size:"

The "**Font Size**" configuration is for the Font Size to use with the System printer.

## "Page Setup:"

"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**" selection sets the Top, Left, Bottom, and Right Margins size. Settings can be set in inches or millimeters.

## "Device Extended Settings:"

## "Insert LF After CR:"

The "**Insert LF After CR**" selection inserts a Line Feed after a Carriage Return if checked. This option is checked by default.

## "Termination Block Segment:"

## "Insert form feed"

The "**Insert form feed**" selection inserts a Form Feed at the end of the message data if selected. This selection is set as default.

#### "Disable form feed"

The "Disable form feed" selection disables Form Feed if selected.

#### "Custom terminator"

The "Custom terminator" selection inserts a custom terminator, if selected that can be user edited. The default custom terminator is set to "~0D~0A\*\*\*EOM\*\*\*~0D~0A~0C".

#### "Number of line feeds after message"

The "Number of line feeds after message" selection inserts the number of Line Feeds entered at the end of the message data if selected. The default is set to "0".

## "Host Settings:"

## "LNIATA:"

The "LNIATA" configuration is for the LNIATA (Sabre Address) of the device you are configuring to print 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 printing to the device from multiple host addresses. (See section 6.1.1 Supplemental Hosts Configuration for a detailed explanation)

## Troubleshooting

## 7.1 Enabling SJPM Logging

SJPM logging is disabled by default. Logging must be enabled in order to generate SJPM log files for use in troubleshooting.

#### 7.1.1 Enabling SJPM Server Logging – System Tray Icon Menu

#### Enable SJPM Server logging from the SJPM Windows System Tray Icon Menu:

The steps below describe the process to enable SJPM Server logging.

- 1. Right click on the SJPM Windows System Tray Icon.
- 2. Highlight and left click on "Server Logging".

|   | About SJPM            |        |   |
|---|-----------------------|--------|---|
|   | Restore               |        |   |
|   | Restart Server        |        |   |
|   | Server Mode           |        |   |
|   | Configure SJPM Server |        |   |
|   | Language •            |        |   |
|   | Client Logging        |        |   |
|   | Server Logging        |        |   |
| 1 | Exit                  | ):20 A | N |
| - |                       |        |   |

3. The "**SJPM – Logging Configuration Changed**" window will appear. Click on the "<u>**Yes**</u>" button to restart the SJPM Server.



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 the log file "SJPMServer.log" in the "C:\Program Files\SJPM\Server\logs" directory ("C:\Program Files (x86)\SJPM\server\logs" for Windows 7 64bit and Windows 8 64bit).

SJPM Server Logging creates ten (10) rolling log files. (Zip up all of the log files in the "**logs**" folder. For the zip file extension use "**.sabre.zip**" before sending for analysis.)

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| Organize 🔻 Include in | library 🔹 Share with 👻 New folder      | r                  |               | = - 1 0   |
| A 📗 SJPM 🔷            | Name                                   | Date modified      | Туре          | Size      |
| b b client            | SJPMService.log                        | 3/27/2014 8:34 AM  | Text Document | 349 KB    |
| / jre                 | SJPMService.log.1                      | 2/5/2014 8:59 AM   | 1 File        | 20,391 KB |
| a domon               | SJPMService.log.2                      | 2/4/2014 9:22 AM   | 2 File        | 20,001 KB |
| b devroet             | SJPMService.log.3                      | 1/30/2014 12:40 PM | 3 File        | 20,002 KB |
| b 🔐 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 |
| Windows Def           | SJPMService.log.6                      | 1/27/2014 7:35 AM  | 6 File        | 20,001 KB |
| Windows Jou           | SJPMService.log.7                      | 1/23/2014 11:42 AM | 7 File        | 20,001 KB |
| > Windows Ma          | SJPMService.log.8                      | 1/22/2014 10:10 AM | 8 File        | 20,367 KB |
| Windows Me            | SJPMService.log.9                      | 1/21/2014 12:24 PM | 9 File        | 20,001 KB |
| Mindows NT            |                                        |                    |               |           |
| 10 items              |                                        |                    |               |           |

Enable SJPM Server logging in the "server.properties" file:

Use a text editor and open the "server.properties" file that is located in the "C:\Program Files\SJPM\Server" directory ("C:\Program Files (x86)\SJPM\server\" for Windows 7 64bit and Windows 8 64bit).

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| Windows Jou<br>Windows Ma<br>Windows Me<br>Windows NT<br>Server.propertie<br>PROPERTIES File       | StopSJPMServer.exe     StopSJPMServer.exe     Solution Michaele StopSJPMServer.exe     Solution State Michaele StopSJPMServer.exe     Solution State Michaele StopSJPMServer.exe     Solution State Michaele StopSJPMServer.exe     Solution StopSJPMServer.exe | 12/11/2013 2:01 PM<br>12/11/2013 2:01 PM<br>12/11/2013 2:01 PM<br>III<br>Date created: 5/10/2013 3:01                                                                                       | Application<br>Application<br>PM                                                                                                                | 479 KB<br>479 KB<br>479 KB |  |  |

The steps below describe the process to manually enable SJPM Server logging.

1. In the "server.properties" file search 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

- 2. Save the changes to the "server.properties" file and then close the file.
- 3. Restart the SJPM Server.

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. | 1                        |

SJPM will create the log file "SJPMServer.log" in the "C:\Program Files\SJPM\Server\logs" directory ("C:\Program Files (x86)\SJPM\server\logs" for Windows 7 64bit and Windows 8 64bit).

SJPM Server Logging creates ten (10) rolling log files. (Zip up all of the log files in the "**logs**" folder. For the zip file extension use "**.sabre.zip**" before sending for analysis.)

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| A 📕 SJPM 🔺            | Name                                 | Date modified      | Туре          | Size      |
| D client              | SJPMService.log                      | 3/27/2014 8:34 AM  | Text Document | 349 KB    |
| D 🌆 jre               | SJPMService.log.1                    | 2/5/2014 8:59 AM   | 1 File        | 20,391 KB |
| 4 📗 server            | SJPMService.log.2                    | 2/4/2014 9:22 AM   | 2 File        | 20,001 KB |
| aemon                 | SJPMService.log.3                    | 1/30/2014 12:40 PM | 3 File        | 20,002 KB |
| > 🧾 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 |
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| Windows Det           | SJPMService.log.7                    | 1/23/2014 11:42 AM | 7 File        | 20,001 KB |
| Windows Jou           | SJPMService.log.8                    | 1/22/2014 10:10 AM | 8 File        | 20,367 KB |
| Windows Ma            | SJPMService.log.9                    | 1/21/2014 12:24 PM | 9 File        | 20,001 KB |
| b 🛄 Windows NT 🍸      |                                      |                    |               |           |
| 10 items              |                                      |                    |               |           |

#### 7.1.3 Enabling SJPM Client Logging – System Tray Icon Menu

#### Enable SJPM Client logging from the SJPM Windows System Tray Icon Menu:

The steps below describe the process to enable SJPM Client logging.

- 1. Right click on the SJPM Windows System Tray Icon.
- 2. Highlight and left click on "Client Logging".

|  | About SJPM            |         |
|--|-----------------------|---------|
|  | Restore               |         |
|  | Restart Server        |         |
|  | Server Mode           |         |
|  | Configure SJPM Server |         |
|  | Language 🕨            |         |
|  | Client Logging        |         |
|  | Server Logging        |         |
|  | Exit                  | J:22 AM |

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. (Zip up the "sjpmclient.log" file. For the zip file extension use ".sabre.zip" before sending for analysis.)

| 🧾 client.ini - Notepad                                                    | - 0 2 | < |
|---------------------------------------------------------------------------|-------|---|
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| [server]<br>ip=127.0.0.1<br>port=5196<br>pollInterval=30000               |       | * |
| <pre>[Logging] loglevel=ALL logfile=%{HOMEPATH}/logs/sjpmclient.log</pre> |       | Ŧ |
| <                                                                         | Þ     | н |
#### Enable SJPM Client logging in the "client.ini" file:

Use a text editor and open the "**client.ini**" file that is located in the "**C:\Program Files\SJPM\client\QtClient**" directory ("**C:\Program Files (x86)\SJPM\client\QtClient**\" for Windows 7 64bit and Windows 8 64bit).

|                                |                                                             |                         |                    |          | x |
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|                                | 🚳 log4qt.dll                                                | 4/25/2013 9:46 AM       | Application extens | 470 KB   |   |
|                                | 🚳 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 | _ |
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The steps below describe the process 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 Taskbar Icon and then highlight and left click on "**Exit**".
- 4. Run the SJPM Client GUI from the Windows "Start" menu.

Click on the Windows "**Start**" button, and then click on "**Programs**", "**All Programs**" for Windows 7. Click on the SJPM folder and then click on "**SJPM Client**".

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. (Zip up the "sjpmclient.log" file. For the zip file extension use ".sabre.zip" before sending for analysis.)

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| [server]<br>ip=127.0.0.1<br>port=5196<br>pollInterval=30000          | *     |
| [Logging]<br>loglevel=ALL<br>logfile=%{HOMEPATH}/logs/sjpmclient.log | Ŧ     |
| <ul> <li></li> </ul>                                                 | ► uit |

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 process to disable SJPM Server logging.

- 1. Right click on the SJPM Windows System Tray Icon.
- 2. Highlight and left click on "Server Logging".

3. The "**SJPM – Logging Configuration Changed**" window will appear. Click on the "**Yes**" button to restart the SJPM Server.



**Disable SJPM Server logging in the "server.properties" file:** 

Use a text editor and open the "server.properties" file that is located in the "C:\Program Files\SJPM\Server" directory ("C:\Program Files (x86)\SJPM\server\" for Windows 7 64bit and Windows 8 64bit).

| 😋 🕞 🗢 📕 « Local Disk                                                               | (C:) ► Program Files ► SJPM ► server                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ▶ <b>- 4</b>                                                                                                                                                                              | arch server                                                                                                                      | Q                                                                                                       |
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The steps below describe the process to manually enable SJPM Server logging.

- 1. In the "server.properties" file search for the text string "loglevel=ALL". Change the "loglevel" to "NONE". Example: loglevel=NONE
- 2. Save the changes to the "server.properties" file and then close the file.
- 3. Restart the SJPM Server.

## Disable SJPM Client logging from the SJPM Windows System Tray Icon Menu:

The steps below describe the process to disable SJPM Client logging.

- 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:

Use a text editor and open the "**client.ini**" file that is located in the "**C:\Program Files\SJPM\client\QtClient**" directory ("**C:\Program Files (x86)\SJPM\client\QtClient**\" for Windows 7 64bit and Windows 8 64bit).

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| daman                          | libgcc_s_dw2-1.dll                                         | 9/25/2012 10:37 AM      | Application extens | 42 KB    | Ξ |
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|                                | 🚳 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 |   |
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| Windows Jou                    | QtNetwork4.dll                                             | 4/25/2013 9:46 AM       | Application extens | 1,276 KB | - |
| Windows Me                     | <                                                          |                         |                    | •        |   |
| client.ini<br>Configuration se | Date modified: 3/27/2014 1:55 PM<br>ttings Size: 123 bytes | Date created: 4/19/2013 | 2:31 PM            |          |   |

The steps below describe the process 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 taskbar icon and then highlight and left click on "Exit".
- 4. Run the SJPM Client GUI from the Windows "Start" menu.

Click on the Windows "**Start**" button, and then click on "**Programs**", "**All Programs**" for Windows 7. Click on the SJPM folder and then click on "**SJPM Client**".

# Appendix

# **A. SJPM Recommended Requirements**

## **Operating System Software**

- Windows 7 32Bit, Windows 7 64Bit, Windows 8 64Bit, Windows 8.1 64Bit and Linux.
- Other systems running as an application with Java 1.6 or above.

# SJPM GUI – Configured Devices

The recommended number of configured devices for the SJPM GUI is **35**. The GUI is capable of handling more devices but this could result in performance issues while viewing the SJPM GUI. The maximum number of configured devices is determined by the machine's CPU and Memory capabilities.

# Java<sup>™</sup> Runtime Environment

• Java 2 Platform, Standard Edition 1.7.0\_25 (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 300 MB of free disk space

#### Network

• SABRE Host access required

# **Firewall Considerations**

- SABRE Host access 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)

# **Operating System Software**

- Windows 7 32Bit, Windows 7 64Bit, Windows 8 64Bit, Windows 8.1 64Bit and Linux.
- Other systems running as an application with Java 1.6 or above.

# Java<sup>™</sup> Runtime Environment

• Java 2 Platform, Standard Edition 1.7.0\_25 (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 required

# **Firewall Considerations**

- SABRE Host access 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).

# Sabre Java Printing Module (SJPM) Frequently Asked Questions.

# 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 32Bit
  - Windows 7 64Bit
  - Windows 8 64 Bit
  - Windows 8.1 64 Bit
  - Linux

## Q: How do I run SJPM on Linux?

A: See section "4.3 Running SJPM on Linux" in the SJPM User's Guide.

## Q: Will SJPM run on Windows Server?

A: SJPM IS NOT certified for Windows Server operating systems. However, there are customers currently running SJPM on them with no issues and we have done minor testing on various versions with no issues.

#### Q: Can SJPM run on Citrix?

A: SJPM IS NOT certified for Citrix. However, there are several customers using it and we have done minor testing with no issues.

#### **Q:** Will SJPM run on Windows XP?

A: SJPM IS NOT certified for Windows XP operating systems. However, there are customers are currently running SJPM on them with no issues and we have done minor testing on various versions with no issues.

#### **Q:** Does SJPM update automatically?

A: No, SJPM does not automatically update. New versions of SJPM must be downloaded and installed manually.

When installing a newer version of SJPM; SJPM's automatic upgrade functionality eliminates the need to uninstall the previous version of SJPM. 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, currently it is not available in SRW. It would need to be downloaded from agency eservices.

Login to agency eservices, then navigate to "Support", then "Downloads", and then click on the "Sabre Java Print Module" link.

Note: This is only for Travel Network customers.

## Q: Where do I download SJPM?

#### A: Travel Network Customers

Travel Network Users can download SJPM from agency eservices.

Login to agency eservices, then navigate to "Support", then "Downloads", and then click on the "Sabre Java Print Module" link.

#### **Sabre Airline Solutions Customers**

Sabre Airline Solutions Users can download SJPM from the "Sabre Community Portal".

# **Q:** Does SJPM require that Java be installed?

A: The Sabre Java Printing Module (SJPM) installation includes Java version 1.7.0\_25. The use of SJPM's installed Java is dependent on the "SJPM\_JAVA\_HOME environment variable" settings.

All SJPM Drivers will use SJPM's Java except for the "**JavaPOS**" Driver which requires Java version **1.6** minimum be installed.

# **Q:** Can SJPM print to LPT printers?

A: Yes, the "Printer" Driver has configuration options for printing to Parallel printers.

# **Q:** Can SJPM print to PDF?

A: Yes, the "File" Driver has configuration options for printing to PDF.

# Q: Can SJPM be installed to another hard drive other than C:\?

A: Yes. This will require running the install from the command line.

#### **Command:**

Install\_SJPM\_TN\_x86\_32Bit\_1.2.36.exe INSTALLDIR="Z:\TTT"

#### **Q:** Is SJPM available in other languages?

A: Yes. Currently SJPM is available in **English** and **Spanish**, accessible from the Windows Task 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 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.

#### **Q:** Where are the SJPM log files created?

#### A: Server Logging

SJPM will create the log file "SJPMServer.log" in the "C:\Program Files\SJPM\Server\logs" directory ("C:\Program Files (x86)\SJPM\server\logs" for Windows 7 64bit and Windows 8 64bit) for default installations. If SJPM is installed on a different drive than 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**

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, there is a User's Guide that can be downloaded and it is also included in the SJPM installation under "Start", "Programs" or "All Programs", and "SJPM".
- 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.

#### **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 later a release.

# **Q:** Can SJPM run as a Service and an Application?

A: Yes. However, the run as an application function is not fully integrated into SJPM at this time and will require manual processes to run. The run as an application feature will be available in the 4Q2014 SJPM release.

# **Q:** Can SJPM print to network printers?

Yes, using the "System" or "Queue" Drivers SJPM can print to network printers. A:

Can you specify the location of output files? **Q**:

Yes, with the SJPM "File" and "IFQ" Drivers you can specify the location. They are A: defaulted as follows:

**File Driver** = C:\Program Files\SJPM\Output\

**IFQ Driver** = C:\SPL

This section describes the processes for disabling the UAC in Windows 7 and Windows 8 operating systems. (This Is Not Recommended)

#### Windows 7

1. From the Windows Desk Top, click on the Windows "**Start**" button and then click on "**Control Panel**".



2. The "Control Panel" window will appear. Click on "User Accounts" or "User Accounts and Family Safety".



3. The following window will appear. Click on "User Accounts".



4. The following window will appear. Click on "Change User Account Control Settings".



5. The "User Account Control Settings" window will appear. Click on the slider and drag it to the bottom ("Never notify"). Click on the "OK" button.



6. If the following "User Account Control" window appears click on the "Yes" button.

| 🛞 User Account Control                                                       | <b>—</b>                                    |  |
|------------------------------------------------------------------------------|---------------------------------------------|--|
| Do you want to allow the following program to make changes to this computer? |                                             |  |
| Program name: Use<br>Verified publisher: Mie                                 | erAccountControlSettings<br>crosoft Windows |  |
| Show details                                                                 | Yes No                                      |  |
|                                                                              | Change when these notifications appear      |  |

7. Close the "Control Panel" window.

# Windows 8

1. From the Windows Desk Top, move the mouse pointer to the bottom right corner of the screen and then on the charm bar click on the "**Settings**" icon.



2. On the "Settings" menu click on the "Control Panel" menu item.



3. The "Control Panel" window will appear. Click on "User Accounts and Family Safety".



4. The "User Accounts and Family Safety" window will appear. Click on "User Accounts".



5. The "User Accounts" window will appear. Click on "Change User Account Control settings".



6. The "User Account Control Settings" window will appear. Click on the slider and drag it to the bottom ("Never notify"). Click on the "OK" button

| 3                                                                                               | User Account Control Settings – 🗖 🗙                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Choose when to be<br>User Account Control he<br><u>Tell me more about User</u><br>Always notify | e notified about changes to your computer<br>lps prevent potentially harmful programs from making changes to your computer.<br>Account Control settings                                                |
|                                                                                                 | <ul> <li>Never notify me when:</li> <li>Apps try to install software or make changes to my computer</li> <li>I make changes to Windows settings</li> <li>I make changes to Windows settings</li> </ul> |
|                                                                                                 | OK Cancel                                                                                                                                                                                              |

7. Close the "Control Panel" window.