

# Release Notes

## SmartSystems Server v4.90

1. Version Information .....	2
2. Installation.....	2
2.1. System Requirements for installing the SmartSystems Server .....	2
2.2. Before Installing Version 4.90.....	4
2.3. To Install:.....	5
3. SmartSystems Management License .....	6
4. Supported Hardware .....	6
5. New Functionality Available in SmartSystems Server Version 4.90.....	6
5.1. Support for PD43 printers .....	6
5.2. Support for CV31 computers.....	7
5.3. End of Support for 7xx and CK32 computers.....	7
6. Best Practices.....	7
6.1. Provisioning .....	7
6.2. Device Discovery .....	9
7. Issues Fixed In This Version .....	10
8. Known Issues in This Version.....	10

## 1. Version Information

Release notes describe the updates available in SmartSystems Server 4.90.

### **Prior to Installing, review section 2.2.**

Please reference the online help for complete user information. The online help is accessible from the SmartSystems Server by selecting Help from the menu.

	Release Version	Version Date
SmartSystems Server	<b>4.90.00.121</b>	9/8/14

Release	Date Available
4.80.01.76	12/12/2013
4.60.00.0202	1/11/2013
4.50.00.0193	5/18/2012
4.02.06.0646	9/13/2011
4.01.05.0406	1/17/2011
3.51.04.1225	1/18/2010
3.50.04.1120	9/17/2009
3.42.03.0667	4/14/2009
3.41.03.0659	10/29/2008
3.22.02.0403	3/27/2008
3.21.02.0394	1/22/2008
3.20.00.0341	11/19/2007
3.11.01.0094	6/15/2007
3.10.00.0076	12/21/2006
3.00.00.0051	10/26/2006

## 2. Installation

### 2.1. System Requirements for installing the SmartSystems Server

<b>Processor:</b>	<ul style="list-style-type: none"> <li>• 2 GHz is recommended for optimum performance</li> </ul>
<b>Memory / RAM:</b>	<ul style="list-style-type: none"> <li>• 2 GB is required</li> </ul>
<b>Disk Space:</b>	<ul style="list-style-type: none"> <li>• 300 MB is required for SmartSystems Server</li> <li>• Additional space required for pre-requisite software.</li> </ul>
<b>Operating System:</b>	<ul style="list-style-type: none"> <li>• Windows XP Pro with SP3 and all related updates</li> <li>• Windows Server 2003 R2 or SP2, 32-bit only</li> <li>• Windows Server 2008 Enterprise and Windows Server 2008 R2 with SP1</li> <li>• Windows 7 Professional, Enterprise and Ultimate</li> <li>• Windows 8 Pro and Enterprise</li> <li>• Window Server 2012</li> <li>○ 64-bit OS will not support Cisco AP discovery.</li> <li>○ Windows 7 and above requires SQL Server 2008 R2 or above (full version or Express)</li> </ul> <p>Review <a href="http://msdn.microsoft.com/en-us/library/ms143506.aspx">http://msdn.microsoft.com/en-us/library/ms143506.aspx</a> for complete hardware and software requirements for SQL Server 2008 R2</p>

<p><b>Other Requirements:</b></p>	<ul style="list-style-type: none"> <li>• Microsoft Internet Explorer 6.0 SP1 or later</li> <li>• Microsoft ActiveSync 4.5 or later required.</li> <li>• .NET Framework v3.5 SP1 and v4 Full install are both required  <i>** If not detected, automatically installed from internet. If installing on a PC that does not have internet access, download and install prior to installing SmartSystems Server.</i></li> <li>• SQL Server - SQL Server 2012 SP1 and SQL Server 2008 R2 with latest SP are highly recommended <ul style="list-style-type: none"> <li>○ SQL Server 2008 with SP1 or later, SQL Server 2008 R2 Express Edition, and SQL Server 2008 Express Edition with SP1 or later are also supported</li> <li>○ Known issue: if installing SmartSystems Server with SQL Server 2012 SP2, the pre-checker will warn that "The database instance chosen has a newer version than has been tested with SmartSystems."</li> <li>○ Remote database is only supported in a domain environment (not supported in workgroup environment)</li> </ul> </li> <li>• Microsoft Windows Installer 4.5  <i>* SQL Server and Microsoft Windows Installer must be installed prior to installing SmartSystems Server. The SmartSystems Server installer provides a Help link to obtain an installation guide .</i></li> </ul>
-----------------------------------	---

## 2.2. Before Installing Version 4.90

- If an earlier version of SmartSystems is installed, the recommendation is to perform an upgrade rather than uninstalling and reinstalling. Uninstalling a previous version of SmartSystems and then reinstalling:
  - Will purge any Asset History collected by the current SmartSystems.
  - Will remove custom console settings like Broadcast Interval (automatic discovery)
  - Will preserve Software Bundles and Backup Settings.
- If you are currently using SQL 2005, you can perform a SQL upgrade and then upgrade SmartSystems server
- Migrating SmartSystems data (bundles, rules, etc.) from one machine to another is not fully supported.
  - Licenses can be migrated by “Returning” them using the Intermec License Utility on the old machine and then “Adding” them using the Intermec License Utility on the new machine
  - Software bundles can be migrated by copying the bundle installers from the old machine to the new machine and installing them
- Only these upgrade paths are supported:
  - v4.02 and above to v4.90
  - In other cases, you will need to do an intermediate upgrade or uninstall
- Recommendation is to uninstall Reporting Services prior to installing SmartSystems Foundation 4.90.
- Review [SmartSystems Foundation Installation Guide](#)
  - [http://epsfiles.intermec.com/eps\\_files/eps\\_man/932-015.pdf](http://epsfiles.intermec.com/eps_files/eps_man/932-015.pdf)

- For occasional use, SmartSystems Server may be installed on an administrator's desktop/laptop alongside other applications. For optimal operation in a production environment, install SmartSystems Server on a dedicated machine connected to a DHCP network.
- Do not install SmartSystems Server on a machine that is used as a Domain Controller.
- Do not install SmartSystems Server on a compressed drive.
- When initially installing SmartSystems Server, you must connect to an existing SQL Server database. It is highly recommended that you configure and connect to a named instance rather than connecting to the default instance of SQL Server.
  - NOTE: When upgrading from a prior version, the data from the existing database will be migrated automatically.
- Microsoft Windows Installer 4.5 and SQL Server must be installed prior to installing SmartSystems Server. You may obtain a download containing all prerequisites using the Help link when you run the installer.
- The SQL Server installation process authenticates your user account. If your user account is a network account, you must be logged into the network in order for authentication to occur. If the user account cannot be authenticated because you are not connected (or on a VPN connection), the database will not be created.
- SmartSystems Server uses the following ports. SmartSystems attempts to open these ports in Windows Firewall automatically during an install. If you are using another firewall, you will need to configure the firewall manually for the ports:

Port	Description
UDP 52316	Remote Viewer
TCP 1901	Remote Viewer
TCP 49152-65535	Remote Viewer
TCP 8789	HTTP (Intermec SmartSystems)
UDP 8791	Upgrade Progress (Intermec SmartSystems)
UDP 8792	Upgrade Monitor Online Status (Intermec SmartSystems)
UDP 49111	IQueue Discovery (Intermec SmartSystems)
TCP 62241	IQueue Messaging (Intermec SmartSystems)
UDP 1434	SQL Database Discovery
UDP 1758-1768	Multicast Files Transfer Protocol
TCP 27000-27009	License Server

Note: If using Windows Firewall, SmartSystems attempts to close the ports automatically during uninstall. If using another firewall, you will need to configure the firewall manually after uninstall.

### 2.3. To Install:

Download and run the installation file (SmartSystemsFoundationInstall.exe). Follow the on-screen instructions to verify requirements and complete the installation.

### 3. SmartSystems Management License

- For devices with a v4.0 or above client, a management license allows:
  - Drag-N-Drop to a folder of devices
    - Deploy or upgrade a group of Intermec by Honeywell devices all at once or in batches of 50 to save significant time. This procedure is error-proof, scalable and saves significant effort over manual procedures which utilize SD cards.
  - Activate Provisioning Bundles on a Folder
    - Automatically deploy a provisioning bundle to a device upon connection to the SmartSystems Server  
(3.46 SmartSystems client required, works best with 3.48 SmartSystems client and above)
  - Folder Right Click Tools
  - Device Health
  - Data from the device is available to Reporting Services
- No per-device license is needed for device with pre-4.0 client
- A 60 day demo of the Management license is provided on all 4.0 or higher clients and is enabled at the time the device is powered on.
- Perpetual license, no software maintenance agreement required

SmartSystems management license (454-048-001) is available for purchase through your Honeywell representative.

For additional assistance, contact Intermec by Honeywell Support (<http://intermec.custhelp.com> )

### 4. Supported Hardware

SmartSystems Foundation 4.90 supports devices and software configurations listed in the following matrix: [ftp://epsfiles.intermec.com/eps\\_files/swFiles/SmartSystems-compatibility-matrix.pdf](ftp://epsfiles.intermec.com/eps_files/swFiles/SmartSystems-compatibility-matrix.pdf)

### 5. New Functionality Available in SmartSystems Server Version 4.90

Certain new features are only available on devices using the SmartSystems v4.0 or higher SmartSystems Client. To determine which SmartSystems Client you are using, open Intermec Settings and navigate to Device Settings -> System Component Versions -> SSRef Client. (If the entry does not exist, then your device does not include the SmartSystems client.)

#### 5.1. Support for PD43 printers

- SmartSystems Foundation 4.90 supports a full range of device management features for PD43 printers, including: OS, application, settings update; licensing; the ability to manage SmartSystems server association; right-click tools [Default Setup, Print Test Label, Reboot, Test Feed]; device health; and Reporting services  
Section 3 lists the features that require a SmartSystems Management License.

## 5.2. Support for CV31 computers

- SmartSystems Foundation 4.90 supports a full range of device management features for CN51 handheld computers, including: OS, application, settings update; licensing; ScanNGo; the ability to manage SmartSystems server association; right-click power tools [Clean/Warm boots, Remote viewer]; device health; and Reporting services  
[Section 3 lists the features that require a SmartSystems Management License.](#)

## 5.3. End of Support for 7xx and CK32 computers

- SmartSystems Foundation 4.90 no longer supports 700 or 700 Color PocketPC 2003 mobile computers or CK32 mobile computer.

## 6. Best Practices

### 6.1. Provisioning Connectivity

Completing a provision depends on the device reporting its status to the console. Refrain from making changes which leave the device unreachable by the console. Wherever possible, use an Ethernet connection for provisioning. Any changes to network connectivity, such as an OS upgrade that resets network settings, may cause the device to disconnect from SS Console and stop provisioning.

#### Client Compatibility

SmartSystems Reference Client Version 3.46 is the minimum required version for provisioning, but version 3.48 or above is recommended. If the version in your device is less than the desired version, check the Downloads section of [www.Intermec.com/SmartSystems](http://www.Intermec.com/SmartSystems) for an upgrade.

- A quick way to check the version is to connect the device to the SmartSystems console and view the SSRef column in details layout. Alternately, open Intermec Settings and navigate to Device Settings -> System Component Versions -> SSRef Client.

#### Ordering

The type of file added to a provisioning bundle determines the order it will be installed. Many file types can be installed in a custom order. The provisioning bundle tool will place the added files in a preferred order. For stability, some bundle types, like OS, will cause an error message if they are attempted to be moved later in the installation order.

The SmartSystems Reference client affects the performance and features of provisioning. If your provisioning bundle includes the SmartSystems Reference Client, place it as early as possible in the provisioning bundle sequence.

#### Activating Auto-Deploy

For better control, avoid activating auto-deploy of a provisioning bundle to the Discovered Devices folder. Instead, create sub-folders with a name that describes the provisioning bundle. Then you can control which devices are provisioned automatically when they are first placed in that folder.

#### Manual Deployment

Manually dropping the provisioning bundle onto a device or a folder of devices is best done when the bundle is small and consists of mostly user settings.





## Monitoring Progress

There are four areas which show the progress of the devices being provisioned.

1. The Status and Reason sections of the device icon give minimal information and are best viewed in the details layout.
2. The Upgrade Monitor, launched from the right click menu of the Universal Upgrade Server icon, lists devices as they get provisioned and provides more information than the main console GUI.
3. The Upgrade Server Event Viewer, accessed from the right click menu of the Universal Upgrade Server icon, needs to be refreshed to show progress and may become difficult to follow as the quantity of devices increases.
4. The status window on the device displays the upgrade status as it progresses through each stage of the provisioning bundle.

## Population Sizes

The performance of the provisioning bundle is affected by server performance characteristics (processor speed and memory), network performance characteristics, size of the bundle, and quantity of devices being deployed. Smaller bundles, containing mostly configuration settings, are easily handled in batches of 50 devices at a time. Larger bundles, like OS upgrades, consume large amounts of bandwidth. The best practices support up to 12 simultaneous OS upgrades through a provisioning bundle. It is never recommended to attempt more than 24 simultaneous OS upgrades through a provisioning bundle.

## 6.2. Device Discovery

When the SmartSystems services start, they send out a signal to discover all the SmartSystems-enabled devices connected to your local subnet, and an icon representing each discovered device appears in the console. As the status of the device changes, it will send a message to the console to communicate its new status.

You can always trigger a broadcast manually by clicking the Discover button again, but there are several ways to configure your console or device through Intermec Settings to enhance the device discovery process:

- You can configure SmartSystems to broadcast across subnets or to specific IP addresses or IP address ranges.
  - Configuring IP Address Ranges works well for a small number of devices with known IP addresses. If you want to broadcast to a remote subnet, Subnet Broadcasts is preferable because the network traffic is reduced, but routers may have to be configured to forward SmartSystems broadcast packets. Configuring both subnet broadcasts and IP address ranges is not recommended. You do not need to specify the subnet broadcast interval of the SmartSystems server because SmartSystems automatically broadcasts to that subnet.
- You can configure SmartSystems to periodically initiate device discovery on its own using the Broadcast Interval timer.
- You can configure an Intermec by Honeywell device to connect to a specific SmartSystems console using the Server Association property.

Using the Broadcast Interval feature is helpful when working with a large number of devices because it can reduce network traffic associated with device discovery. Pressing the “Discover”

button causes all devices to identify themselves to the SmartSystems server. When using the Broadcast Interval to initiate periodic device discovery, only devices which aren't registered with the server will identify themselves.

## 7. Issues Fixed In This Version

ID	Description Summary	Systems
140721-000134	PB2x/3x - Not able to do one-to-many operation in SmartSystems such as dragging a backup to a folder	Folder Operations
SSSVR-211	PM43 – not able to drag and drop a health rules file to the printer	Health Rules
140407-000089	Licenses in a SmartSystems server are not checked out automatically by connected devices	Licensing
140515-000116	With a remote SQL database, the reports are blank in the SmartSystems console.	Reporting
140411-000012	Remote Viewer reports folders as empty if the folder name contains an international character	Remote Viewer
140407-000085	Remote Viewer does not work with WM5.0 devices	Remote Viewer

## 8. Known Issues in This Version

ID	Description Summary	Systems
91	Right-click option to Check for Updates on individual device is removed. <b>Workaround: Right-click the SmartSystems Console icon in the system tray and selecting Updates &gt; Check for Updates.</b>	Software Updates
170	A printer firmware software bundle in a provisioning bundle may be reinstalled repeatedly by SmartSystems Foundation <b>Recommendation: Do not place printer firmware software bundles in provisioning bundles</b>	Software Updates
31	Intermec Settings for IF61 via SmartSystems Console is not supported <b>Workaround: Use native settings management to manage IF61 settings</b>	RFID
SSSVR-216	If installing SmartSystems Server 4.90 with SQL Server 2012 SP2, the pre-checker will warn that "The database instance chosen has a newer version than has been tested with SmartSystems."	Installation
140903-000077	When the Software bundle for <u>CK71 OS v1.61.22.72</u> is included in a Provisioning bundle, SmartSystems does not detect the successful completion of the installation (retries continuously) <b>Workaround: Instead of including this particular software bundle in a provisioning bundle, drag and drop the software bundle to the device or folder of devices.</b>	Software Update

For more information about known limitations of the SmartSystems Foundation software, refer to the new Troubleshooting section in the online Help.