

PCS Axis[®] v1.6 Client/Server New Installation with Replication

June 2014

Introduction

American Innovations (AI) is pleased to announce version 1.6 of our Pipeline Compliance System Axis[®] software (PCS Axis[®]). This document explains how to install PCS Axis in a client/server network with support for replication (Figure 1, page 2). The information is intended for the IT System Administrator, Database Administrator, and PCS Axis Administrator.

NOTE: Instructions for installing PCS Axis without replication in a client/server network are available in the document entitled *PCS Axis v1.6 Client Server New Install without Replication*.

Topics in this document include those in the following list:

- PCS Axis Best Practices (page 3)
- Installation Overview (page 10)
- Installation Requirements (page 11)
- Adding the Local Domain User Group (page 14)
- Creating the Publication Share Folder (page 15)
- Restoring the PCS Axis Database and Creating the Publication (page 18)
- Creating a Login for the Publication Database and Setting Permission Roles (page 19)
- Installing the PCS Axis Job Service (page 21)
- Starting PCS Axis Job Service (page 24)
- Installing the PCS Axis Application on a Local Client Computer (page 27)
- Installing PCS Axis on a Subscriber's Computer (Remote Client) (page 32)
- Setting Up Users in PCS Axis (Local and Remote Clients) (page 37)
- Installation Checklist (page 39)
- *Product Support and Training* (page 40)

If you have questions or need assistance with the installation, contact <u>PCS Technical Services</u> using the contact information on page 40.



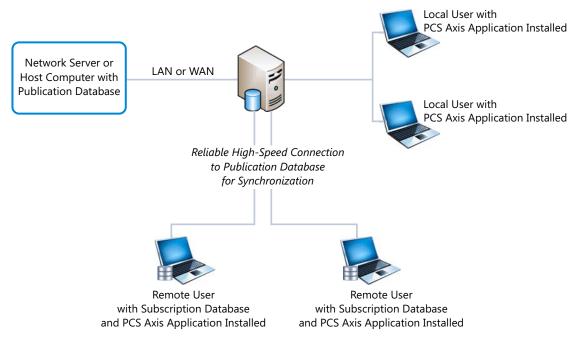


Figure 1. PCS Axis Client/Server Installation with Replication/Synchronization



PCS Axis Best Practices

PCS Axis Best Practices is a series of topics demonstrating best practices for setting up the PCS Axis[®] database and related services on a network server running Microsoft[®] SQL Server[®] 2008 R2. Topics include those in the following list:

- PCS Axis Job Service
- PCS Axis Database (page 5)
- SQL Server (MSSQLServer) Service (page 8)

PCS Axis Job Service

Run the *PCS Axis Job Service* under a domain account or a SQL Server account with access to the server and PCS Axis database. To set up *PCS Axis Job Service*, follow these steps:

- Click the Windows Start button and navigate to Computer. Right-click Computer and select
 Manage in the shortcut menu to open the Computer Management console (Figure 20).
- 2 Double-click **Services and Applications** in the left pane of the console. Then click **Services** to display a list of services in the middle pane.

• • 2 🖬 🗊 🙆 🖬 🛛	2 📰 🕨 🖬 🖬 🕪						
Computer Management (Local	Services	-				Actions	-
System Tools	PCS Axis Job Service 1.6	Name	Description	Status	Startup Type ^	Services	
Services and Applications		G Office Software Protection Platform	Enables the download, installatio		Manual	More Actions	
Internet Information Sec	Start the service	G Offine Files	The Offline Files service performs		Disabled	PCS Avit Job Service 1.6	
C. Services		Parental Controls	This service is a stub for Window		Manual		
MMI Control	Description:	PCS Axis Job Service 1.6			Automatic	More Actions	
Big SQL Server Configuratic	Monitors the PCS Axis job queue,	Peer Name Resolution Protocol	Enables serverless peer name res		Manual		
	initiating jobs as they become available.	Peer Networking Grouping	Enables multi-party communicat		Manual		
		Peer Networking Identity Manager	Provides identity services for the		Manual		
		Reformance Logs & Alerts	Performance Logs and Alerts Col		Manual		
		🔍 Plug and Play	Enables a computer to recognize	Started	Automatic		
		On Philad Phi	The PnP-X bus enumerator servi		Manual		
		PNRP Machine Name Publication Service	This service publishes a machine		Manual		
		Portable Device Enumerator Service	Enforces group policy for remov		Manual		
		C Power	Manages power policy and powe	Started	Automatic		
		🔍 Print Spooler	Loads files to memory for later pr	Started	Automatic		
		Problem Reports and Solutions Control	This service provides support for		Manual		
		端 Program Compatibility Assistant Service	This service provides support for	Started	Manual E		
		Protected Storage	Provides protected storage for se		Manual		
		Quality Windows Audio Video Experience	Quality Windows Audio Video Ex		Manual		
		😪 Remote Access Auto Connection Mana	Creates a connection to a remote		Manual		
		Remote Access Connection Manager	Manages dial-up and virtual priv		Manual		
		Remote Desktop Configuration	Remote Desktop Configuration s		Manual		
		Remote Desktop Services	Allows users to connect interacti		Manual		
		Remote Desktop Services UserMode Por	Allows the redirection of Printers		Manual		
		Remote Procedure Call (RPC)	The RPCSS service is the Service	Started	Automatic		
		Remote Procedure Call (RPC) Locator	In Windows 2003 and earlier versi		Manual		
		Remote Registry	Enables remote users to modify r		Manual		
		Routing and Remote Access	Offers routing services to busines		Disabled		
		C RPC Endpoint Mapper	Resolves RPC interfaces identifier	Started	Automatic		
		Secondary Logon	Enables starting processes under		Manual		
		🗟 Secure Socket Tunneling Protocol Service	Provides support for the Secure S		Manual		
		a Security Accounts Manager	The startup of this service signals	Started	Automatic		
		B Samuel Prates	The UKY CUP All advert County.	Charles	Automatic II	1	

Figure 2. Computer Management Console



- **3** Right-click **PCS Axis Job Service 1.6** and select **Properties** in the shortcut menu to open the *Properties* dialog box (Figure 21).
- 4 Click the **Log On** tab and select the option **This account**.
- 5 Set up PCS Axis Job Service with a user account to log on as a service using a domain account or a SQL Server account with access to the server and PCS Axis database. Type the user name and password in the appropriate fields (*This account, Password, Confirm Password*). You can also view a list of appropriate user account by clicking *Browse > Advanced > Find Now*.

NOTE: The user account must be a member of the *Axis_Users* group and have access to the database server and PCS Axis database.

- 6 Click **Apply** and then **OK** to close the *Properties* dialog box and return to the *Computer Management* console.
- 7 Click File > Exit to close the Computer Management console.

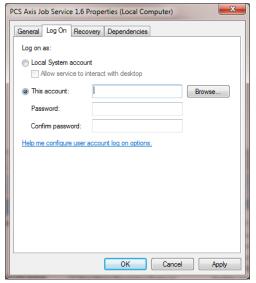


Figure 3. PCS Axis Job Service 1.6 Properties



PCS Axis Database

Information in this section covers best practices for managing the PCS Axis database using Microsoft® SQL Server® Management Studio (SSMS). Topics include those in the following list:

- Setting the Database Owner
- Recommended Autogrowth Setting (page 6)

Setting the Database Owner

To prevent errors from occurring when migrating or restoring the PCS Axis database, or when establishing a connection, set the "Owner" of the database using the "sa" account. To set the database "Owner" follow these steps:

- Start SQL Server Management Studio (SSMS). Click Start > Microsoft SQL Server 2008 R2 > SQL Server Management Studio.
- 2 Double-click the **Databases** folder in *Object Explorer* to open the folder.
- **3** Right-click the **PCS Axis database** and select **Properties** in the shortcut menu to open the *Database Properties* dialog box (Figure 4).
- 4 Select **Files** in the *Select a page* navigation panel.
- 5 Type sa in the Owner field. Then click **OK** to save changes and close the dialog box.

间 Database Properties - PcsAp	pDev					
Select a page	🔄 Script 🔻 🛐 Hel	þ				
Files Filegroups Options	Database name:		PcsAppDev			
🚰 Change Tracking	Owner:		sa			
Permissions Extended Properties	✓ Use full-text index	ang				
	Database files:					
	Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth	Path
	PcsAppDev_dat	Rows Data	PRIMARY	83	By 10 percent, unrest	c:\Program Files\Micro
	PcsAppDev_log	Log	Not Applicable	43	By 10 percent, restric	c:\Program Files\Micro
Connection						
Server: SERVERNAME\SQLEXPRES						
Connection: DOMAINname\user name						
View connection properties						
Progress						
Ready	•				Add	Remove
						OK Cancel

Figure 4. Database Owner



Recommended Autogrowth Setting

Information in this section applies to the PCS Axis database and log file. If you are running PCS Axis in a client/server network with synchronization, the information also applies to the publication and subscription databases.

Autogrowth indicates how much additional space is allocated when the PCS Axis database and log file require more space. Setting *Autogrowth* properties allow the PCS Axis database and log file to resize automatically based on a predetermined percentage. Because the database resizing process is a significant drain on computer resources, it is recommended that you set properties in a manner that does not allow the database to constantly resize itself.

NOTE: When using PCS Axis with synchronization, set *Autogrowth* properties after you create the publication and subscription databases.

To set *Autogrowth* properties for the database (*dat*) and log (*log*) files, follow these steps:

- 1 Start SSMS. Click Start > Microsoft SQL Server 2008 R2 > SQL Server Management Studio.
- 2 Double-click **Databases** in *Object Explorer*.
- **3** Right-click the PCS Axis database and select **Properties** in the shortcut menu to open the *Database Properties* dialog box.
- 4 Click Files in the Select a page navigation panel (Figure 5).

间 Database Properties - PcsApp	Dev					
Select a page	🔄 Script 👻 🛐 He	lp				
🚰 General	a · · · ·					
Filegroups	Database name:		PcsAppDev			
Options						
Ange Tracking	Owner:					
Permissions	Use full-text index	king				
Extended Properties						
	Database files:					_
	Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth	Path
Database _dat file -		Rows Data	PRIMARY	83	By 10 percent, unrestricted growth	c:\Program Files\Microso
Database _log file -	PcsAppDev_log	Log	Not Applicable	43	By 10 percent, restricted growth t	c:\Program Files\Microso
						T I
Connection						
Server: SERVERNAME\SQLEXPRES						
Connection: DOMAINname\user name						
View connection properties						
Progress						
Ready	•					4
					Add	Remove
						OK Cancel

Figure 5. Files - Database Properties



- **5** Complete the following steps to set *Autogrowth* properties for the database (*dat*) and log (*log*) files:
 - **a** Click the ... ellipsis button in the *Autogrowth* column of the database _*dat* file to open the *Change Autogrowth* dialog box (Figure 6).
 - **b** Click the **Enable Autogrowth** check box to place a check mark inside the check box.
 - **c** For the *File Growth* property setting, select the option **In Percent** and then type **10** in the adjacent field. This property setting automatically allocates 10% additional space when the database requires more space.
 - d Click **OK** to close the *Change Autogrowth* dialog box.
 - e Repeat step 5 for the database _log file.
 - f Click **OK** to close the *Database Properties* dialog box. Then click **File** > **Exit** to exit SSMS.

Change Autogrowth for PcsAppD	lev_dat	×
Enable Autogrowth		
File Growth		
In Percent		10 🜩
🔘 In Megabytes		10 🛬
Maximum File Size		
Restricted File Growth (MB)		100 🔺
Unrestricted File Growth		
	ОК	Cancel

Figure 6. Change Autogrowth



SQL Server (MSSQLServer) Service

Run the Windows *SQL Server (MSSQLSERVER)* service under a domain account with access to the PCS Axis database. To set up the service, follow these steps:

- 1 Click the Windows **Start** button (and navigate to *Computer*. Right-click **Computer** and select **Manage** in the shortcut menu to open the *Computer Management* console (Figure 7).
- 2 Double-click **Services and Applications** in the left pane of the console. Then click **Services** to display a list of services in the middle pane.

Computer Management (Local)	O. Services					Actions
System Tools	SQL Server (MSSQLSERVER)	Name	Description	Status	Startup Type	Services
Storage Storage Services and Applications		Software Protection	Enables the downloa		Automatic (D.	More Actions
Services and Applications	Stop the service	SPP Notification Service	Provides Software Lic		Manual	
Services	Pause the service Restart the service	SQL Active Directory Helper Service	Enables integration w		Automatic	SQL Server (MSSQLSERVER)
WMI Control	Include the period	Q SQL Server (MSSQLSERVER)	Provides storage, pro	Started	Manual	More Actions
SQL Server Configuration Ma		SQL Server (SQLEXPRESS)	Provides storage, pro	Started	Automatic	
	Description: Provides storage, processing and	SQL Server Agent (MSSQLSERVER)	Executes jobs, monito	Started	Automatic	
	controlled access of data, and rapid	SQL Server Agent (SQLEXPRESS)	Executes jobs, monito		Automatic	
	transaction processing.	SQL Server Browser	Provides SQL Server c	Started	Automatic	
		Q SQL Server VSS Writer	Provides the interface	Started	Automatic	
		SSDP Discovery	Discovers networked	Started	Manual	
		Storage Service	Enforces group policy		Manual	
		🖓 Superfetch	Maintains and impro	Started	Automatic	
		Symantec Endpoint Protection	Provides virus-scanni	Started	Automatic	
		🔍 Symantec Event Manager	Event propagation an	Started	Automatic	
		Symantec Management Client	Provides communica	Started	Automatic	
		Symantec Network Access Control	Checks that the com		Disabled	
		Symantec Settings Manager	Settings storage and	Started	Automatic	
		🔍 System Event Notification Service	Monitors system eve	Started	Automatic	
		Calification of the service and the service of the	Enables Tablet PC pe		Manual	1
		😘 Task Scheduler	Enables a user to conf		Automatic	
		C TCP/IP NetBIOS Helper	Provides support for t	Started	Automatic	
		🔍 Telephony	Provides Telephony A		Manual	
		🔍 Themes	Provides user experie	Started	Automatic	
		Children Contering Server	Provides ordered exec		Manual	
		TPM Base Services	Enables access to the		Manual	
		UPnP Device Host	Allows UPnP devices		Manual	
		Solution Control Contr	This service is respon	Started	Automatic	
		G Virtual Disk	Provides managemen		Manual	
		🔍 Volume Shadow Copy	Manages and implem		Manual	
		Web Management Service	The Web Manageme		Manual	

Figure 7. Computer Management Console

3 Right-click **SQL Server (MSSQLSERVER)** and select **Properties** in the shortcut menu to open the *Properties* dialog box (Figure 8).

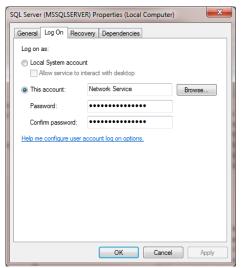


Figure 8. SQL Server (MSSQLSERVER) Properties



- 4 Click the **Log On** tab and select the option **This account**.
- 5 Set up SQL Server (MSSQLSERVER) with a user account to log on as a service using a domain account with access to the PCS Axis database. Type the user name and password in the appropriate fields (*This account, Password, Confirm Password*). You can also view a list of appropriate user account by clicking *Browse > Advanced > Find Now*.
- 6 Click **Apply** and then **OK** to close the *Properties* dialog box and return to the *Computer Management* console.
- 7 Click **File** > **Exit** to close the *Computer Management* console.



Installation Overview

Installation tasks covered in this document include those described in the following list. The term *central database server* is used in this document to refer to a network server or host computer.

IT System Administrator Tasks:

- Run *Windows Computer Management* on the central database server to create a local domain user group named *Axis_Users*. Add all PCS Axis users (local and remote clients) in the *Axis_Users* group with appropriate permissions to access the central database server. See *Adding the Local Domain User Group* (page 14).
- Use Windows Explorer on the central database server to create a share folder for the publication snapshot files. These files are a "snapshot" of the publication database and are created at the time the publication is created. Set the share folder with read/write permissions for the *Axis_Users* group. See *Creating the Publication Share Folder* (page 15).

Note: Remaining tasks are completed after Database Administrator (DBA) tasks are completed.

- Install the PCS Axis Job Service on the same server as the publication database or on a separate network server. See Installing the PCS Axis Job Service (page 21).
- Start PCS Axis Job Service. See Starting PCS Axis Job Service (page 24).
- Install the PCS Axis application on the local computer of the PCS Axis Administrator and all other users (local and remote clients). Use *Connection Manager* during the installation to set the server and database connection to the publication database on the central database server. See *Installing the PCS Axis Application on a Local Client Computer* (page 27) and *Installing PCS Axis on a Subscriber's Computer (Remote Client)* (page 32).
- Install the following items on the computer of all PCS Axis subscribers (remote clients). See *Installing PCS Axis on a Subscriber's Computer (Remote Client)*, page 32.
 - Microsoft[®] SQL Server[®] Express 2008 R2 SP2
 - PCS Axis application

Database Administrator Tasks:

- Restore the PCS Axis database on the central database server using the backup file provided by PCS Technical Services. Run the PCS Axis application to create the publication database on the central database server. See *Restoring the PCS Axis Database and Creating the Publication* (page 18)
- Create a new SQL login labeled *Axis_Users* for the publication database. Set permission roles for the *Axis_Users* login. See *Creating a Login for the Publication Database and Setting Permission Roles* (page 19).

PCS Axis Administrator Tasks:

Run the PCS Axis application to: add all PCS Axis users in *User Management*; add all subscribers in *Synchronization Configuration* (remote clients); and then set up the subscription database on the computer of all subscribers. See *Setting Up Users in PCS Axis (Local and Remote Clients)*, page 37.



Installation Requirements

Before installing PCS Axis, verify the items in the following list are available and the client and server computers meet the system requirements identified in Table 1 (page 12) and Table 2 (page 13).

NOTE: Unless specified otherwise, *client* refers to both local client and subscriber (remote client) when running PCS Axis with replication in a client/server network.

- *PCS Axis License File*: The installation process prompts you for the PCS Axis license file provided by AI.
- Bridge Import License File: If your company purchased the optional Bridge add-on to import data from a third-party application, activating Bridge import for operation requires the license file provided by AI.

NOTE: A Bridge license file is not required to import data from Bullhorn[®] Asset Tracker (BAT[™]) or export data from PCS Axis. You can maintain all PCS Axis licenses for your organization in the same shared folder location. PCS Axis will request the file and location the first time each user opens the PCS Axis application. The Bridge activation key is assigned only once for the PCS Axis database; once it is assigned it functions for all users.

- Microsoft[®] SQL Server[®] 2008 R2 SP2 Express with Tools: Before installing PCS Axis on a remote client computer, download and install SQL Server Express 2008 R2 SP2 from the Microsoft website. The installation provides the database engine required to run PCS Axis as a subscriber as well as database management tools, such as SQL Server Management Studio (SSMS). See page 4 for download and installation instructions.
- *PCS Axis Installation File*: Install PCS Axis using either the installation DVD provided by AI or the installation file downloaded from a location identified in an email from PCS Technical Services.
- *System Requirements*: Verify the server and client computers meet the system requirements identified in Table 1 (page 12) and Table 2 (page 13).



Properties	Minimum	Recommended
Processor	Intel Itanium or faster	Intel Itanium or faster
Processor Speed	1.4 GHz or faster	2.0 GHz or faster
RAM	16 GB	32 GB (see note)
Operating System	Windows Server 2008 R2	Windows Server 2008 R2
Relational Database Software	SQL Server 2008 R2	SQL Server 2008 R2
Available Disk Space	200 GB	400 GB (see note)
Resolution	1280x1024	1920x1080

Table 1. Central Database Server Requirements (Client/Server Network)

NOTES:

- Larger databases may require more RAM for optimum performance.
- Consult with your company's IT personnel or DBA to determine where database backups will be created.
- The PCS Axis database installs on the central database server. If selected in *Setup Wizard* during the installation, the PCS Axis application and job service can also install on the central database server. For client computer requirements, see Table 2 (page 13).



Properties	Minimum	Recommended
Processor	Intel Core i5 or faster	Intel Core i7 or faster
Processor Speed	1.4 GHz or faster	2.0 GHz or faster
RAM	4 GB	8 GB
Operating System	Windows 7 32-bit or 64-bit, Service Pack 1 (SP1)	Windows 7 32-bit or 64-bit, Service Pack 1 (SP1)
Available Disk Space	10 GB	100 GB
Resolution	1280x1024	1920x1080
Microsoft .NET Framework	Version 4.0 (see note)	Version 4.0 (see note)

Table 2. Client Computer Requirements (Client/Server Network)

NOTES:

- **Subscriber:** SQL Server Express 2008 R2 SP2 is required for remote clients (subscribers) with a subscription database. Computers with a subscription database should follow the *Recommended* requirements in the table above (Table 2). Only the PCS Axis application and subscription database install on the computer of a subscriber (remote client). For more information, see *Installing PCS Axis on a Subscriber's Computer (Remote Client)* on page 32.
- Local Client and Subscriber: If the target computer does not have Microsoft[®] .NET Framework v4.0 installed, the PCS Axis installation automatically installs it. This feature requires an active Internet connection to complete the installation of .NET Framework v4.0.
- Local Client: Only the PCS Axis application installs on a local client computer. See Table 1 (page 12) for information about the PCS Axis database and job service installation on the central database server.



Adding the Local Domain User Group

Information in this section explains how to add a local domain user group on the central database server labeled *Axis_Users*. By adding the *Axis_Users* group, all PCS Axis users will have access to the server. The following information is intended for the IT System Administrator.

Complete the following steps on the central database server:

- **1** Open *Computer Management*. Click **Start > Administrative Tools > Computer Management**.
- 2 Click to expand System Tools and then Local Users and Groups in the navigation tree.
- **3** To add the local domain user group labeled *Axis_Users*, follow these steps:
 - **a** Right-click **Groups** and select **New Group** in the shortcut menu to open the *New Group* dialog box (Figure 9).
 - **b** Type **Axis_Users** in the *Group name* field and a description for the user group in the *Description* field.
 - c Click Add > Advanced > Find Now to view a list of user names. Add all PCS Axis users in the *Axis_Users* group (local and remote users).
 - d Click Create and then click Close to close the dialog box.
- **4** Continue the installation with the next section titled *Creating the Publication Share Folder* (page 15).

New Group		? ×
Group name:	Axis_Users	
Description:	Axis local and remote users	
Members:		
Add	Remove	
Help	Create	Close

Figure 9. Axis_Users Local Domain User Group



Creating the Publication Share Folder

Information in this section explains how to create a share folder for the publication snapshot files and then configure the share folder with read/write permissions for the *Axis_Users* group created earlier (page 14). The following information is intended for the IT System Administrator.

Complete the following steps:

- 1 Add a new folder on the central database server labeled *AxisSnapshot* or something similar.
- 2 Right-click the share folder and select **Properties** in the shortcut menu to open the folder *Properties* page.
- 3 Click the Sharing tab, then click Share to open the *File Sharing* dialog box (Figure 10).
- 4 Share the folder with the local domain user group labeled *Axis_Users* by clicking the down arrow and selecting **Axis_Users** in the selection list. Then click **Add**.

If the group name *Axis_Users* does not appear in the selection list:

- a Select Find People in the selection list to open the Select Users or Groups dialog box.
- **b** Click **Object Types** to open the *Object Types* dialog box.
- c Click the Group check box, then click OK to return to the *File Sharing* dialog box.
- d Select Axis_Users in the selection list, then click Add.

File Sharing	
) 👔 File Sharing	
Choose people to share with	
Type a name and then click Add, or click the arrow t	o find someone.
	Add
Name	Permission Level
💈 Axis_Users	Read/Write 🔻
I I'm having trouble sharing	
Em naving trouble snanny	
	😚 Share Cancel

Figure 10. Publication Share Folder

- 5 Assign the Axis_Users group Read/Write permissions. Select Axis_Users, then click Read/Write in the shortcut menu that opens.
- 6 Click Share to share the folder and close the *File Sharing* dialog box.
- 7 Click **Advanced Sharing** in the *Sharing* tab of the *Properties* dialog box to open the *Advanced Sharing* dialog box (Figure 11, page 16).



vanced Sharing	
Settings	
Share name:	
	7
<u>A</u> dd <u>R</u> emove	
$\underline{L}imit$ the number of simultaneous users to:	
Comments:	
Permissions Caching	
OK Cancel	Apply

Figure 11. Advanced Sharing

- 8 Click the check box **Share this folder** and then click **Permissions** to open the *Permissions* dialog box (Figure 12).
- 9 Select Axis_Users in the *Group or user names* group box. Then click the Allow check boxes for Full Control, Change, and Read in the *Permissions* group box. A check mark inside an *Allow* check box indicates the permission has been granted as shown in the following figure (Figure 12).
- **10** Click **Apply** and then **OK** to close the *Permissions* dialog box.
- **11** Click **Apply** and then **OK** to close the *Advanced Sharing* dialog box. Then click **Close** to close the *Properties* dialog box.

📜 Permissions for AxisSnapsho	ot		×
Share Permissions			
Group or user names:			
용 Everyone 용 Administrators (ServerNa 용 Administrators (ServerNam AXIS_Users (ServerNam		ors)	
Permissions for AXIS_Users	Add	Remove	
Full Control Change Read	U U U		
Learn about access control and p	ermissions		
ОК	Cancel	Apply	

Figure 12. Permissions

- **12** Complete the following steps to assign *Network Service* permissions in the *Security* tab of the *Properties* page:
 - **a** Click the **Security** tab in the *Properties* page. Then click **Edit** to open the *Permissions* dialog box (Figure 13).
 - **b** Select **NETWORK SERVICE** in the group box labeled *Group or user names*.
 - c In the group box labeled *Permissions for NETWORK SERVICE*, click the **Allow** check box for **Full control** to place a check mark inside the check box.
 - d Click **OK** to close the dialog box. Then click **Close** to close the *Properties* page.
- **13** After the Database Administrator restores the PCS Axis database on the central database server (see page 18), continue the installation with the section entitled *Installing the PCS Axis Job Service* (page 21).

🕌 Permissions for MySnapshot!	Folder	×
Security		
• Object name: C:\MySnapshotFi	older	
object name. C. (Myonapshou)	bidei	
Group or user names:		
SYSTEM		
& NETWORK SERVICE		
AXIS_Users (SERVERNA	· –	
Administrators (SERVER	NAME\Adminis	trators)
1		
	Add	Remove
SERVICE	Allow	Deny
SERVICE Full control	Allow	
SERVICE Full control Modify		Deny
SERVICE Full control Modify Read & execute		
SERVICE Full control Modify Read & execute List folder contents	Allow Z Z Z Z	Deny
SERVICE Full control Modify Read & execute		
SERVICE Full control Modify Read & execute List folder contents	Allow V V V V	Deny
SERVICE Full control Modify Read & execute List folder contents Read	Allow V V V V	Deny

Figure 13. Security / Network Service Permissions



Restoring the PCS Axis Database and Creating the Publication

Information in this section is intended for the Database Administrator. The information explains how to:

- Restore the backup file of the PCS Axis database on the central database server.
- Run the PCS Axis application to create the publication database on the central database server.
- Create a new login labeled Axis_Users for the publication database. Then set permission roles for the Axis_Users login.

Complete the following steps:

- 1 Start SQL Server Management Studio (SSMS). Restore the PCS Axis database on the central database server using the database backup file provided by PCS Technical Services.
- 2 After the IT System Administrator installs the PCS Axis application on your local computer, complete the following steps to create the publication database:
 - a Start PCS Axis. Click the Windows 🚳 Start button, then click All Programs > 👫 PCS Axis 1.6.
 - **b** Click Tools > Options > Synchronization.
 - c In the field **Synchronization User Group Name**, type your company's *domain name* and the name of the local domain user group created earlier labeled *Axis_Users* using the format *Domain Name\Axis_Users*. Click **Save** and then close the *Options* window.
 - **d** Click **Tools** > **Synchronization** > **Create Publication** to open the *Create Publisher* dialog box (Figure 14).

Create Publisher	×
Enter Snapshot Path	
\\ServerName\SnapshotShareFolder	
Status Messages	
Progress 0 %	
🗎 ок 🚳	Cancel

Figure 14. Create Publisher

- e Type the server path to the share folder used for the publication snapshot in the field **Enter Snapshot Path** using the format *ServerName**SnapshotShareFolder*.
- f Click 💾 OK to create the publication and add snapshot files in the share folder.
- **g** Click **V OK** when the message *Publisher Creation Complete* displays. Then continue with the next section *Creating a Login for the Publication Database and Setting Permission Roles* (page 19).



Creating a Login for the Publication Database and Setting Permission Roles

Information in this section explains how to create a new login labeled *Axis_Users* for the publication database and then set database permissions for the new login. The information is intended for the Database Administrator.

Complete the following steps:

- 1 Start SQL Server Management Studio (SSMS). Connect to the central database server and then switch to the PCS Axis publication database.
- 2 Click to expand **Security**, then **Logins** in the navigation tree of *Object Explorer*. Right-click **Logins** and select **New Login** in the shortcut menu to open the *Login-New* dialog box (Figure 15).

ELogin - New Select a page	🕵 Script 👻 📭 Help		
General Server Roles User Mapping	Login name:		Search
Securables	 Windows authentication 		
🚰 Status	SQL Server authentication		
	Password:		
	Confirm password:		
	Specify old password		
	Old password:		
	Enforce password polic	y	
	Enforce password expir	ation	
	User must change pass	word at next login	
	Mapped to certificate]	Y
	Mapped to asymmetric key		Y
	Map to Credential		Add
Connection	Mapped Credentials	Credential Provider	
Server: (local)			
Connection:			
View connection properties			
Progress			Remove
C Ready	Default database:	master	•
"To a start of the	Default language:	<default></default>	•
		OK	Cancel

Figure 15. Login-New

- **3** Set the following properties in the *General* page:
 - **a** Type **Axis_Users** in the *Login name* field. If the group name *Axis_Users* does not appear in the selection list, complete the following steps:
 - (1) Select Find People in the selection list to open the Select Users or Groups dialog box.
 - (2) Click **Object Types** to open the *Object Types* dialog box.
 - (3) Click the **Group** check box, then click **OK** to return to the *File Sharing* dialog box.
 - (4) Select Axis_Users in the selection list, then click Add.



- **b** Enable the option **Windows authentication** if it is not enabled.
- c Verify master is selected in the *Default database* field.
- 4 Click Server Roles in Select a page and enable the public check box.
- 5 Click **User Mapping** in *Select a page* and enable the following properties:
 - **a** In the group box *Users mapped to this login*, enable the **PCS Axis publication database**.
 - **b** In the group box *Database role membership for*, enable the following properties:
 - Axis_Users
 - o db_datareader
 - o db_datawriter
 - o db_ddladmin
 - o public
 - c Click **OK** to save settings and close the *Login-New* dialog box.

Tasks performed by the Database Administrator are now complete.



Installing the PCS Axis Job Service

The following information is intended for the IT System Administrator. It explains how to install the *PCS Axis Job Service* on a network server. You can install the service either on the same server as the publication database or on a separate network server.

Complete the following steps:

1 If you are using the installation DVD to install PCS Axis, insert the DVD in the DVD/CD-ROM drive of the computer. Open Windows Explorer to view the contents of the installation DVD.

If you previously downloaded the installation file using a link in an email from PCS Technical Services, navigate to the location of the installation file.

Note: A single installation file labeled *setup.exe* is used to install PCS Axis on a 32-bit and 64-bit computer. If the target computer does not have Microsoft .NET Framework v4.0 installed, the PCS Axis installation automatically installs it. This feature requires an active Internet connection to complete the installation of .NET Framework v4.0.

2 Double-click the **setup.exe** installation file to open the PCS Axis dialog box (Figure 16).

滑 PCS Axis	Setup	
SAX SAX	PCS Axis	
	Install Close	

Figure 16. PCS Axis Installation

- 3 Click Install in the PCS Axis dialog box to open Setup Wizard (Figure 17, page 22).
- 4 Click **Next** to read the *End-User License Agreement*. To accept the license agreement, click the check box **I accept the terms in the License Agreement** to place a check mark inside the check box.



PCS Axis (32 bit) 1.6 Setup	
	Welcome to the PCS Axis (32 bit) 1.6 Setup Wizard
	The Setup Wizard will install PCS Axis (32 bit) 1.6 on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
	A M E R I C A N INNOVATIONS
	Back Next Cancel

Figure 17. Setup Wizard

- 5 Click Next to display *Custom Setup* (Figure 18).
- By default the PCS Axis Job Service is not selected for installation. To install the service on the server, click the down arrow in PCS Axis Job Service and select the option Entire feature will be installed on local hard drive.
- 8 Click **Next** and then click **Install** to begin the installation.

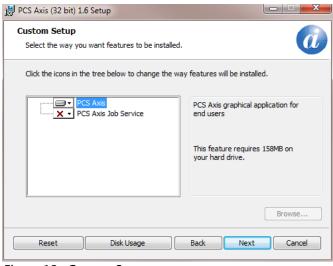


Figure 18. Custom Setup



When the installation completes and after a short delay, *Connection Manager* opens automatically on top of *Setup Wizard* (Figure 19).

- **9** Complete the following steps in *Connection Manager* to set *Server* and *Database* settings:
 - **a** Type the name of the central database server in the **Server** field. Or click **Select** in the *Server* field to select the server in the *Select Server* dialog box.
 - **b** Type the name of the publication database in the **Database** field. Or click **Select** in the *Database* field to select the database in the *Select Database* dialog box.
 - c Click 📀 **Test** to verify the connection to the server and database. When the message *Connection successful displays*, click **V OK** to close the message.
 - **d** Click **P** Save and Close to exit Connection Manager.
- **10** Click **Finish** in *Setup Wizard* and then click **Close** in the PCS Axis dialog box to close the PCS Axis installation file (setup.exe).
- **11** Installation of the *PCS Axis Job Service* is now complete. Continue with the next section to start the service (page 24).

Pcs Axis Connection Manager			
Pcs Axis Connection Manager		🔐 Save and Close 🛛 💾 Sa	ve 🛛 🔀 Close
Connections 🚳	Default	🏫 Make Default	🔀 Delete
순 Default (Primary)			
	🖌 Primary	🛷 Activate 🙆 Test 🎡 Crea	te / Upgrade
	Server	DB_SERVER	Select
	Database	DB_INITIAL_CATALOG	🏭 Select
	Connection String	Data Source=DB_SERVER;Initial Catalog=DB_INITIAL_CATALOG;Integrated Security=True	
			Correct
	🛷 Subscription	🛷 Activate 💿 Te	t 🛛 🛷 Clear
	Server		🎇 Select
	Database		🔯 Select
	Connection String		
			Scorrect

Figure 19. Connection Manager



Starting PCS Axis Job Service

The purpose of *PCS Axis Job Service* is to monitor the PCS Axis job queue, initiating jobs as they become available. The following procedure explains how to use Windows Services to start *PCS Axis Job Service*. The information is intended for the IT System Administrator.

Complete the following steps:

- 1 If the PCS Axis database and *PCS Axis Job Service* are installed on two different network servers, complete the following steps to set up a user account to log on as a service. The user account must have access to the central database server and publication database.
 - a Click the Windows **Start** button (3) and navigate to *Computer*. Right-click **Computer** and select **Manage** in the shortcut menu to open the *Computer Management* console (Figure 20).
 - **b** Double-click **Services and Applications** in the left pane of the console. Then click **Services** to display a list of services in the middle pane.

File Action View	Help						
× ⇒ 🔽 🖬 🛛	a 🔒 📓 📰 🕨 🖩 🛯 🕪 👘						
Services (Local)	Services (Local)	-					
	PCS Axis Job Service 1.6	Name	Description	Status	Startup Type	Log On As	
		G Office Software Protection Platform	Enables the download, installatio		Manual	Network Service	
	Start the service	🔍 Offline Files	The Offline Files service perform		Disabled	Local System	
		Q Parental Controls	This service is a stub for Window		Manual	Local Service	
	Description:	CS Axis Job Service 1.6	Monitors the PCS Axis job queue		Automatic	Network Service	L
	Monitors the PCS Axis job queue,	Peer Name Resolution Protocol	Enables serverless peer name res		Manual	Local Service	1
	initiating jobs as they become available.	Reer Networking Grouping	Enables multi-party communicat		Manual	Local Service	
	available.	Reer Networking Identity Manager	Provides identity services for the		Manual	Local Service	
		Reformance Logs & Alerts	Performance Logs and Alerts Col		Manual	Local Service	
		Q Plug and Play	Enables a computer to recognize	Started	Automatic	Local System	
		R PnP-X IP Bus Enumerator	The PnP-X bus enumerator servi		Manual	Local System	
		Report Physical Contract Interview Publication Service	This service publishes a machine		Manual	Local Service	
		Revice Enumerator Service	Enforces group policy for remov		Manual	Local System	
		Q Power	Manages power policy and powe	Started	Automatic	Local System	
		Print Spooler	Loads files to memory for later p	Started	Automatic	Local System	
		Reports and Solutions Control	This service provides support for		Manual	Local System	
		Reprogram Compatibility Assistant Service	This service provides support for	Started	Manual	Local System	
		C Protected Storage	Provides protected storage for se		Manual	Local System	
		Quality Windows Audio Video Experience	Quality Windows Audio Video Ex		Manual	Local Service	
		Remote Access Auto Connection Mana	Creates a connection to a remot		Manual	Local System	
		Remote Access Connection Manager	Manages dial-up and virtual priv		Manual	Local System	
		Remote Desktop Configuration	Remote Desktop Configuration s		Manual	Local System	
		Remote Desktop Services	Allows users to connect interacti		Manual	Network Service	
		Remote Desktop Services UserMode Por	Allows the redirection of Printers		Manual	Local System	
		Remote Procedure Call (RPC)	The RPCSS service is the Service	Started	Automatic	Network Service	
		Remote Procedure Call (RPC) Locator	In Windows 2003 and earlier versi		Manual	Network Service	
		Remote Registry	Enables remote users to modify r		Manual	Local Service	
		Routing and Remote Access	Offers routing services to busine		Disabled	Local System	
		RPC Endpoint Mapper	Resolves RPC interfaces identifier	Started	Automatic	Network Service	
		C Secondary Lonon	Enables starting processes under		Manual	Local Sustem	

Figure 20. Computer Management Console

- c Right-click **PCS Axis Job Service 1.6** (Figure 20) and select **Properties** in the shortcut menu to open the *Properties* dialog box (Figure 21, page 25).
- **d** Click the **Log On** tab and select the option **This account**. To set up a user account to log on as a service, type the user name and password in the appropriate fields. You can also view a list of appropriate user accounts by clicking *Browse* > *Advanced* > *Find Now*.

Note: The user account must be a member of the *Axis_Users* group and have access to the central database server and PCS Axis database.



e Click **Apply** and then **OK** to close the *Properties* dialog box and return to the *Computer Management* console.

PCS Axis Job Service 1.6 P	Properties (Local Computer)
General Log On Reco	very Dependencies
Log on as:	
Local System accour Allow service to in	nt iteract with desktop
This account:	Network Service Browse
Password:	
Confirm password:	
Help me configure user a	account log on options.
	OK Cancel Apply

Figure 21. PCS Axis Job Service 1.6 Properties

- 2 Complete the following steps in the *Computer Management* console to start *PCS Axis Job Service*:
 - a Select PCS Axis Job Service 1.6 and then click Start (Figure 22).
 - **b** Click **File** > **Exit** to close the *Computer Management* console.

ile Action View							
• • 🖂 🖸 6	3 🔒 🛛 📰 🕨 🔳 💷 🕬						
Services (Local)	Oj Services (Local)						
	PCS Axis Job Service 1.6	Name	Description	Status	Startup Ty		
		Office Software Protection Platform	Enables the download, installation, and enforce		Manual		
	Start the service	Q Offline Files	The Offline Files service performs maintenance		Disabled		
	- Fe	Revenue Controls	This service is a stub for Windows Parental Cont		Manual		
	Description:	Q PCS Axis Job Service 1.6	Monitors the PCS Axis job queue, initiating jobs		Automati		
	Monitors the PCS Axis job queue,	Peer Name Resolution Protocol	Enables serverless peer name resolution over the		Manual		
	initiating jobs as they become available.	Peer Networking Grouping	Enables multi-party communication using Peer		Manual		
	evenable.	Peer Networking Identity Manager	Provides identity services for the Peer Name Res		Manual		
		Reformance Logs & Alerts	Performance Logs and Alerts Collects performa		Manual		
		端 Plug and Play	Enables a computer to recognize and adapt to h	Started	Automati		
		RnP+X IP Bus Enumerator	The PnP-X bus enumerator service manages the		Manual		
		PNRP Machine Name Publication Service	This service publishes a machine name using th		Manual		
		Portable Device Enumerator Service	Enforces group policy for removable mass-stora		Manual		
		C Power	Manages power policy and power policy notific	Started	Automati		
		🔐 Print Spooler	Loads files to memory for later printing	Started	Automati		
		Problem Reports and Solutions Control	This service provides support for viewing, sendi		Manual		
		🔍 Program Compatibility Assistant Service	This service provides support for the Program C	Started	Manual		
		Protected Storage	Provides protected storage for sensitive data, su		Manual		
		🔍 Quality Windows Audio Video Experience	Quality Windows Audio Video Experience (qWav		Manual		
		🔍 Remote Access Auto Connection Mana	Creates a connection to a remote network when		Manual		
		Remote Access Connection Manager	Manages dial-up and virtual private network (VP		Manual		
		Remote Desktop Configuration	Remote Desktop Configuration service (RDCS) is		Manual		
		Remote Desktop Services	Allows users to connect interactively to a remot		Manual		
		🔍 Remote Desktop Services UserMode Por	Allows the redirection of Printers/Drives/Ports fo		Manual		
		Remote Procedure Call (RPC)	The RPCSS service is the Service Control Manag	Started	Automati		
		Remote Procedure Call (RPC) Locator	In Windows 2003 and earlier versions of Window		Manual		
		Ca Remote Registry	Enables remote users to modify registry settings		Manual		
		Routing and Remote Access	Offers routing services to businesses in local are		Disabled		
		RPC Endpoint Mapper	Resolves RPC interfaces identifiers to transport e	Started	Automati		
		Secondary Logon	Enables starting processes under alternate crede		Manual		
		🔍 Secure Socket Tunneling Protocol Service	Provides support for the Secure Socket Tunnelin		Manual		
		Security Accounts Manager	The startup of this service signals other services	Started	Automati		
		🔍 Security Center	The WSCSVC (Windows Security Center) service	Started	Automati		
		<					

Figure 22. Computer Management Console



c In PCS Axis, click **Tools** > **Job Service Viewer**. Verify the message *Running* displays in the *Status* field (Figure 23).

Starting *PCS Axis Job Service* is now complete. Continue with the next section to install the PCS Axis application on local client computers (page 27).

1	PCS Axis	terms in	day tan Mar	the state of	· 3 8·)H *			- • ×
ſ	ile Modul	es Data Entry	Reports / Graphs To	ols Field Computer	Help 🚫 PC	S Axis	Welco	me John Smith	😢 🛛 🔀 Log Out
	Job Service	Console ×							
L	Job Type	All	-						
L	Job Servi	e Status							
L	Status	Running							
L	Status Tin License	ne 3/6/2014 9:5		idge Import License					
L		Not Valid	Activate bi	luge import cicense					
L	Queue						Reindex Database	Current Jobs	Job History
L	Job	Туре	Direction	State	Last Update				A
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L	-								

Figure 23. Job Service Console



Installing the PCS Axis Application on a Local Client Computer

Information in this section is intended for the IT System Administrator. It explains how to install only the PCS Axis application on the computer of local client users. Installing the application on remote client users (subscribers) is provided in the next section (page 32).

Complete the following steps:

1 If you are using the installation DVD to install PCS Axis, insert the DVD in the DVD/CD-ROM drive of the computer. Open Windows Explorer to view the contents of the installation DVD.

If you previously downloaded the installation file using a link in an email from PCS Technical Services, navigate to the location of the installation file.

Note: A single installation file labeled *setup.exe* is used to install PCS Axis on a 32-bit and 64-bit computer. If the target computer does not have Microsoft .NET Framework v4.0 installed, the PCS Axis installation automatically installs it. This feature requires an active Internet connection to complete the installation of .NET Framework v4.0.

2 Double-click the **setup.exe** installation file to open the PCS Axis dialog box (Figure 24).

BCS Axis	Setup	x
SAX SAX	PCS Axis	
	Install CI	lose

Figure 24. PCS Axis Installation

- 3 Click Install in the PCS Axis dialog box to open Setup Wizard (Figure 25, page 28).
- 4 Click **Next** to read the *End-User License Agreement*. To accept the license agreement, click the check box **I accept the terms in the License Agreement** to place a check mark inside the check box.



PCS Axis (32 bit) 1.6 Setup	
	Welcome to the PCS Axis (32 bit) 1.6 Setup Wizard
	The Setup Wizard will install PCS Axis (32 bit) 1.6 on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
	A M E R I C A N INNOVATIONS
	Back Next Cancel

Figure 25. Setup Wizard

- 5 Click Next to display *Custom Setup* (Figure 26).
- 6 By default the **■** PCS Axis application is selected for installation. The **×** PCS Axis Job Service **should not** be selected for installation. Verify selections in *Custom Setup* match those in the following figure (Figure 26).
- 7 Click **Next** and then click **Install** to begin the installation.

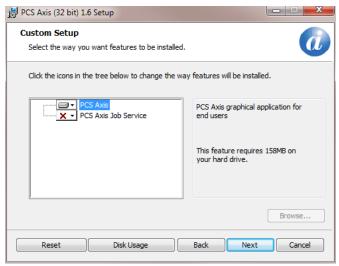


Figure 26. Custom Setup



When the installation completes and after a short delay, *Connection Manager* opens automatically on top of *Setup Wizard* (Figure 27).

- **8** Use *Connection Manager* to establish a connection to the publication database on the central database server as follows:
 - **a** Type the name of the central database server in the **Server** field. Or click **Select** in the *Server* field to select the server in the *Select Server* dialog box.
 - **b** Type the name of the publication database in the **Database** field. Or click **Select** in the *Database* field to select the database in the *Select Database* dialog box.
 - c Click 💿 **Test** to verify the connection to the server and database. When the message *Connection successful* displays, click 🖋 **OK** to close the message. Click 📑 **Save and Close** to exit *Connection Manager*.
- **9** Click **Finish** in *Setup Wizard* and then click **Close** in the PCS Axis dialog box to close the PCS Axis installation file (setup.exe).

👔 Pcs Axis Connection Manager	• ×
Pcs Axis Connection Manager 🛛 Save and Close 🔛 Save	e 🔀 Close
Connections 🚳 Default 😭 Make Default	🗙 Delete
순 Default (Primary)	
✓ Primary ✓ Activate S Test S Create	
Sever	Select
	🔯 Select
Connection String Data Source=DB_SERVER_Initial Catalog=DB_INITIAL_CATALOG;Integrated Security=True	
	Correct
Subscription de Activate 💿 Test	🧈 Clear
Server	🔯 Select
Database	🎇 Select
Connection String	
	Scorrect

Figure 27. Connection Manager

- 10 Start PCS Axis on the client computer. Click the Windows 😵 Start button, then All Programs > PCS Axis 1.6.
- **11** When the *Activation Key* message opens, click **V OK** and then locate and select your PCS Axis activation key (Figure 28, page 30).
- **12** When the *License Agreement* window opens, click **V I** Agree.



Activation Key	
Your user account does not hav	ve an active license. In order to activate this user
account, you will need to select file, please contact support.	t a *.lic license file. If you have not received this

Figure 28. Activation Key

- **13** If your company purchased the optional Bridge import add-on, complete the following steps to activate the feature for operation:
 - a Click Tools > Job Service Viewer to open the Job Service Console (Figure 29).
 - **b** Click **Activate Bridge Import License**. When the *Activation Key* dialog box opens, navigate to the license file and select it. Then click **Open** to close the dialog box and return to the *Job Service Console*.

The message *Valid* displays in the *License* field. If *Not Valid* displays instead, contact PCS Technical Services for assistance using the contact information on page 40.

1	PCS Axis	day tan Mari	the man of	- CI 8-)H *			- • ×
1	File Modules Data Entry	Reports / Graphs To	ols Field Computer	Help 🚫 PC	5 Axis	Welco	me John Smith	😢 🛛 🔀 Log Out
ſ	Job Service Console 🗙							
	Job Type All	*						
L	Job Service Status							
L	Status Running							
L	Status Time 3/6/2014 9:58							
L	License Not Valid	Activate Bri	idge Import License					
L	Queue					Reindex Database	Current Jobs	Job History
L	Job Type	Direction	State	Last Update				
L								^
								•
								Row Count: 0
_								

Figure 29. Job Service Console

14 Open the *About* window in PCS Axis to view information about the software and database version. Click Help > About PCS Axis to open the *About* window (Figure 30, page 31).



NOTE: Clicking *Copy To Clipboard* in the *About* window copies the following information to the Windows clipboard: network server and database connection; software application version; and build information (date and time). After copying information to the clipboard, you can then paste it in an email or other type of document, such as Microsoft Word. Use this feature when contacting PCS Technical Services for support with PCS Axis.

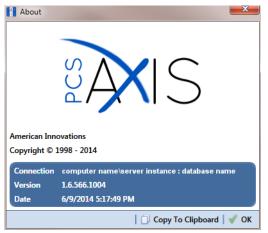


Figure 30. About PCS Axis

15 Repeat the steps in this section (pages 27-31) to install the PCS Axis application on all other local client computers.

The local client installation is complete after installing the PCS Axis application on all local client computers. Continue with the next section to install PCS Axis on remote client computers (subscribers).



Installing PCS Axis on a Subscriber's Computer (Remote Client)

Information in this section explains how to install the following items on the computer of a remote client (subscriber). The information is intended for the IT System Administrator.

- Microsoft[®] SQL Server[®] Express R2 SP2 with Tools
- PCS Axis application

Note: Creating and connecting to the subscription database occurs later in the section entitled *Setting Up Users in PCS Axis (Local and Remote Clients)* (page 37).

Complete the following steps:

- 1 Download and install *Microsoft SQL Server Express R2 SP2 with Tools* as follows:
 - a Visit the Microsoft Download Center at <u>http://www.microsoft.com/download/</u>.
 - **b** Type **SQL Server 2008 R2 SP2 Express Edition** in the search bar and then click the \wp search button.
 - c Click the link **Microsoft[®] SQL Server[®] 2008 R2 SP2 Express Edition** to open the product download page.

Note: Information related to the installation is available when clicking the \oplus expand button for any of the following items: *Details, System Requirements, Install Instructions,* and *Related Resources.*

- d Click **Download** to open a page with a list of files available for download.
- **e** If your computer is running the 32-bit version of Windows 7, complete the following steps to download and install the installation file labeled *SQLEXPRWT_x86_ENU.exe*:
 - (1) Click the check box for the installation file labeled SQLEXPRWT_x86_ENU.exe. Then click Next to begin the download.
 - (2) To install, double-click the **SQLEXPRWT_x86_ENU.exe** installation file and follow onscreen prompts. PCS Axis functions normally with a default installation set up with all default options.
- **f** If your computer is running the 64-bit version of Windows 7, complete the following steps to download and install the installation file labeled *SQLEXPRWT_x64_ENU.exe*:
 - Click the check box for the installation file labeled SQLEXPRWT_x64_ENU.exe. Then click Next to begin the download.
 - (2) To install, double-click the **SQLEXPRWT_x64_ENU.exe** installation file and follow onscreen prompts. PCS Axis functions normally with a default installation set up with all default options.



2 If you are using the installation DVD to install PCS Axis, insert the DVD in the DVD/CD-ROM drive of the computer. Open Windows Explorer to view the contents of the installation DVD.

If you previously downloaded the installation file using a link in an email from PCS Technical Services, navigate to the location of the installation file.

Note: A single installation file labeled *setup.exe* is used to install PCS Axis on a 32-bit and 64-bit computer. If the target computer does not have Microsoft .NET Framework v4.0 installed, the PCS Axis installation automatically installs it. This feature requires an active Internet connection to complete the installation of .NET Framework v4.0.

3 Double-click the **setup.exe** installation file to open the PCS Axis dialog box (Figure 31).

PCS Axis	Setup		
NAX IS	PCS Axis		
		Install	Close

Figure 31. PCS Axis Installation

- 4 Click Install in the PCS Axis dialog box to open Setup Wizard (Figure 32).
- 5 Click **Next** to read the *End-User License Agreement*. To accept the license agreement, click the check box **I accept the terms in the License Agreement** to place a check mark inside the check box.

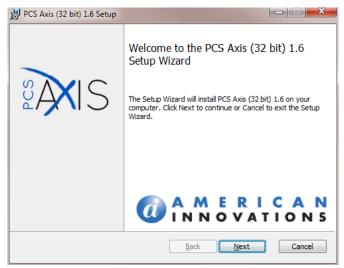


Figure 32. Setup Wizard



- 6 Click **Next** to display *Custom Setup* (Figure 33).
- **7** By default the PCS Axis application is selected for installation. Click **Next** and then click **Install** to begin the installation.

NOTE: Do not install *PCS Axis Job Service* on a subscriber's computer. The PCS Axis application provides this functionality when using a subscription.

PCS Axis (32 bit) 1.6 Setup			
Custom Setup Select the way you want features to be installed.			
Click the icons in the tree below to change the way features will be installed.			
PCS Axis PCS Axis Job Service	PCS Axis graphical application for end users		
	This feature requires 158MB on your hard drive.		
	Browse		
Reset Disk Usage	Back Next Cancel		

Figure 33. Custom Setup

When the installation completes and after a short delay, *Connection Manager* opens automatically on top of *Setup Wizard* (Figure 34, page 35).

8 Complete the following steps in *Connection Manager* to establish a connection to the publication database on the central database server.

Note: Creating and connecting to the subscription database occurs later in the section entitled *Setting Up Users in PCS Axis (Local and Remote Clients)* (page 37).

- **a** Type the name of the central database server in the **Server** field. Or click **Select** in the *Server* field to select the server in the *Select Server* dialog box.
- **b** Type the name of the publication database in the **Database** field. Or click **Select** in the *Database* field to select the database in the *Select Database* dialog box.
- c Click O Test to verify the connection to the server and database. When the message
 Connection successful displays, click V OK to close the message. Click P Save and Close to exit Connection Manager.
- **9** Click **Finish** in *Setup Wizard* and then click **Close** in the PCS Axis dialog box to close the PCS Axis installation file (setup.exe).



Pcs Axis Connection Manager	and the second		
Pcs Axis Connection Manager	_	😫 Save and Close 🛛 🗄 Sa	ve 🔀 Close
Connections		🏫 Make Default	🗙 Delete
순 Default (Primary)	^ ·		
	🗸 Primary	🖌 Activate 📀 Test 🎡 Crea	ite / Upgrade
	Server	DB_SERVER	🏭 Select
	Database	DB_INITIAL_CATALOG	🎇 Select
	Connection String	Data Source=DB_SERVER;Initial Catalog=DB_INITIAL_CATALOG;Integrated Security=True	
			Correct
	✓ Subscription	√ Activate	st 🛛 🥒 Clear
	Server		🎆 Select
	Database		🔯 Select
	Connection String		-
			State Correct
	•		

Figure 34. Connection Manager

- 10 Start PCS Axis on the remote client computer. Click the Windows 🚱 Start button, then All Programs > 🎼 PCS Axis 1.6.
- **11** When the *Activation Key* message opens, click **V OK** and then locate and select your PCS Axis activation key (Figure 35).
- **12** When the *License Agreement* window opens, click **V I** Agree.

Activ	ation Key
	Your user account does not have an active license. In order to activate this user account, you will need to select a *.lic license file. If you have not received this file, please contact support.
	🗹 OK 🛛 🔞 Cancel

Figure 35. Activation Key

- **13** If your company purchased the optional Bridge import add-on, complete the following steps to activate the feature for operation:
 - a Click Tools > Job Service Viewer to open the Job Service Console (Figure 36, page 36).
 - **b** Click **Activate Bridge Import License**. When the *Activation Key* dialog box opens, navigate to the license file and select it. Then click **Open** to close the dialog box and return to the *Job Service Console*.

The message *Valid* displays in the *License* field. If *Not Valid* displays instead, contact PCS Technical Services for assistance using the contact information on page 40.



PCS Axis	Reports / Graphs To	ols Field Computer	Help 🔅 PC	S Axis	Welc	ome John Smith		X
Job Service Console 🗙					inclo		le le cog	Jour
Job Type All	•							
Job Service Status								
Status Running Status Time 3/6/2014 9:5	9.02 AM							
License Not Valid		idge Import License						
Queue					Reindex Database	Current Jobs	Job History	y
Job Type	Direction	State	Last Update					
								^
						E I	Row Count: 0	•

Figure 36. Job Service Console

14 Open the *About* window in PCS Axis to view information about the software and database version. Click **Help** > **About PCS Axis** to open the *About* window (Figure 37).

NOTE: Clicking *Copy To Clipboard* in the *About* window copies the following information to the Windows clipboard: database connection; software application version; and build information (date and time). After copying information to the clipboard, you can then paste it in an email or other type of document, such as Microsoft Word. Use this feature when contacting PCS Technical Services for support with PCS Axis.

About	
	S
American Inn	ovations
Copyright © 1	1998 - 2014
Connection Version Date	computer name\server instance : database name 1.6.566.1004 6/9/2014 5:17:49 PM
	🗍 Copy To Clipboard ؇ OK

Figure 37. About PCS Axis

15 Continue with the next section (page 37) to set up a subscription database on the remote client computer (subscriber).

The remote client installation is complete after installing PCS Axis on the computer of all remote clients (subscribers).





Setting Up Users in PCS Axis (Local and Remote Clients)

Information in this section is intended for the PCS Axis Administrator. The information explains how to complete the following tasks:

- Add all PCS Axis users in User Management (local and remote clients).
- Add all subscribers in Synchronization Configuration (remote clients).
- Set up a subscription database on the computer of all subscribers (remote clients).

Complete the following steps:

- 1 Start the PCS Axis application and then click **Tools** > **User Management** >
- 2 To add a user in PCS Axis:
 - **a** Type the user's Windows domain user name in the **User Name** field and then press **Tab**. PCS Axis automatically adds the user's email address. Verify **Active** is enabled.
 - **b** Update other information as needed, such as a user **Role** selection.
 - c Click 💾 Save and then repeat step 2 for each user you want to add.
- **3** To add a subscriber in PCS Axis (remote client):
 - a Click Tools > Synchronization > Synchronization Configuration > Add to open the Add Subscription dialog box (Figure 38). A list of all Windows domain user accounts display in the dialog box.
 - **b** Select the user name of the remote client user you want to add as a subscriber and then click **OK**.
 - c Repeat step 3 for each remote client user you want to add as a subscriber.

1	Ac	ld Subscription				x
	Se	arch				
		User Name	First Name	Middle Initial	Last Name	
	•	al.jones	Al		Jones	-
		bob.brown	Bob		Brown	
		dave.williams	Dave		Williams	
						•
				E	Row Count:	3
				ОК	Cance	

Figure 38. Add Subscription



- 4 To set up a subscription database on the computer of a remote client (subscriber):
 - **a** Use PCS Axis *Connection Manager* to establish a connection to the publication database on the central database server.
 - **b** Start PCS Axis and then click **Tools** > **Synchronization** > **Configure Subscription** to open the *Configure Subscriber* dialog box (Figure 39).
 - **c** PCS Axis provides the name of the subscriber's computer in the field **Enter Instance Name**. Include the name of the local SQL server instance in this field using the following format:

ComputerName\LocalSQLServerInstanceName

NOTE: To view the name of the local SQL server instance using Microsoft SQL Server Management Studio (SSMS): (1) Start SSMS and connect to the server. (2) Right-click the server instance in *Object Explorer* and select *Properties*. (3) On the *General* page, view the SQL server instance name in the *Name* field.

d The default name of the subscription database set up in system Options (*Tools > Options > Synchronization*) displays in the field **Enter Subscription Database Name**. If you want to change the default name of the subscription database, type a name in this field.

Configure Subscriber				
Enter Instance Name				
ComputerName\LocalSQLServerInstanceName				
Enter Subscription Database Name				
SubscriptionDatabaseName				
Status Messages				
Progress 0 %				
🗎 OK 🛞 Cancel				

Figure 39. Configure Subscriber

- e Click 💾 OK to begin the configuration process.
- **f** When the message *Subscription Complete Restart* displays, click **V OK**. PCS Axis restarts and then connects to the subscription database.
- **5** Repeat step 4 as needed to set up a subscription database on the computer of another remote client (subscriber).



Installation Checklist

IT System Administrator Tasks

- □ Create a local domain user group labeled *Axis_Users* on the central database server. Add PCS Axis users to the *Axis_Users* group who are listed in Windows Active Directory.
- □ Create a share folder for the publication snapshot files on the central database server. Set the share folder with read/write permissions for the *Axis_Users* local domain user group. Then set *Full Control* for *Network Services* in the *Security* tab.

NOTE: Remaining IT tasks are completed when Database Administrator tasks are completed.

- □ Install *PCS Axis Job Service* on the same server as the publication database or on a separate network server. Then use Windows Services to start *PCS Axis Job Service*.
- □ Install the PCS Axis application on the local computer of the Database Administrator, PCS Axis Administrator, and all local users (clients). Use PCS Axis Connection Manager during the installation to set the server and database connection to the publication database on the central database server.
- □ Install the Microsoft SQL Server Express 2008 R2 SP2 and the PCS Axis application on the computer of all PCS Axis subscribers (remote clients).

Database Administrator Tasks

- □ Restore the PCS Axis database on the central database server.
- Create a new login for the PCS Axis database labeled *Axis_Users*.
- Set the following permission roles for the new login *Axis_Users*:
 - □ Axis_Users
 - □ db_datareader
 - □ db_datawriter
 - □ db_ddladmin
 - □ public
- □ Run the PCS Axis application and create the publication database on the central database server.

PCS Axis Administrator Task

- Use PCS Axis to add all users in *User Management* (local and remote clients).
- Use PCS Axis to add all subscribers in *Synchronization Configuration* (remote clients).
- □ Set up the subscription database on the computer of all subscribers (remote clients).



Product Support and Training

If you have a suggestion, question, feature request, or a bug to report-your feedback would be appreciated. Also if you have a training need for your organization or would like to know more about upcoming PCS Axis training classes, please use any of the following contact information to reach PCS Technical Services:

Support E-mail:	pcstechservices@aiworldwide.com
Support Telephone:	1-800-229-3404 (select 1, then press 2)
American Innovations:	http://www.aiworldwide.com