HP JetAdvantage Security Manager

Installation and Setup Guide

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Applicable product: J8023AA

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1 Introduction

HP JetAdvantage Security Manager (Security Manager) is a security compliance tool. Use Security Manager to create policies that assess the security of your imaging and printing devices, configure the devices to comply with the policy, and monitor the devices for continued compliance.

Use this guide to install and set up Security Manager or upgrade an existing installation.

- System requirements
- Installation and upgrade overview
- Verify Administrator account requirements
- Set up Internet Information Services (IIS) on a Windows server or operating system
- Install the prerequisite software

NOTE: For general information and instructions on how to use the system, see the Security Manager Help.

System requirements

The following are the basic requirements for installing the newest version of Security Manager:

- Internet Information Services (IIS) 7.5 or newer versions. See Set up Internet Information Services (IIS) on a Windows server or operating system on page 5

- Microsoft .NET Framework 4.6.1 or newer version (4.6.2 , for example).

NOTE: If the HP JetAdvantage Security Manager installer does not detect the .NET Framework 4.6.1 or newer versions , the installer provides the appropriate installation instructions and Microsoft URL to download the .NET Framework.

NOTE: Security Manager supports platforms that have Microsoft Windows and .NET Framework high-priority updates.

- **Database:** Security Manager installs Microsoft SQL Server 2014 Express.

  For a full list of supported databases, see the Security Manager Release Notes at www.hp.com/go/SecurityManager.

- A supported Microsoft Windows computer.

- **Operating Systems:** Supports the following Microsoft Windows 64-bit operating systems:

  - Windows Server 2008 R2
  - Windows Server 2012
  - Windows Server 2012 R2
  - Windows Server 2016
  - Windows Server 2019
  - Windows 8
  - Windows 8.1
  - Windows 10

NOTE: HP will no longer supports or tests Microsoft operating systems released for prior HP JetAdvantage Security Manager installations. Support will only be provided for the latest Security Manager release versions.

- **Server Hardware:** HP recommends the following hardware configuration for the server:

  - 4 or more processor cores
  - 2.8 GHz or higher processor speed
  - 12 GB or more of RAM
  - 4 GB of available storage

- **Supported browsers:** Security Manager 3.3 supports the following browsers:

  - Internet Explorer 11 or latest version
  - Chrome version 60 or the latest version

Installation and upgrade overview

The Security Manager installation program installs the Security Manager web application and database on a single computer or installs the database remotely.

Security Manager can use an existing installation of Microsoft SQL Server or install Microsoft SQL Server 2014 Express, if required.

NOTE: If you use a database that is not installed by the Security Manager installer, then the database permissions must be setup before installation . After Security Manager is installed, see Configure database security for the existing Microsoft SQL Servers on page 41 for instructions.

New Security Manager installations

The installation program provides the following options for a new installation of Security Manager:

- **Database Only** — Installs only the Security Manager database on a computer that contains an existing installation of Microsoft SQL Server. Use this option to install the Security Manager database separately from the Security Manager web application.
- **Full Install** — Installs the Security Manager web application, and database. Optionally, Microsoft SQL Server 2014 Express can be installed on a computer that does not contain an existing installation of Microsoft SQL Server. If required, the database can be installed remotely from the Security Manager web application.

Existing Security Manager installations (upgrade)

The Security Manager installation program determines whether an older version(v) is installed and can be upgraded.

NOTE: Security Manager supports direct upgrades only from the following versions: 3.1.1, 3.2, and 3.2.1.

Earlier versions of Security Manager **cannot** be upgraded.

NOTE: Make sure to use the same version of the Security Manager user interface and Security Manager service.

The installation program provides the following options for an upgrade of Security Manager:

- Upgrade the web application and database on the same computer.
- Upgrade the web application on one computer and update the database on another computer.

NOTE: If requested to restart your workstation when installing or uninstalling the MS installer file due to changes in the registry, you can either restart, or, delete the “PendingFileRenameOperations” key (HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Session Manager\PendingFileRenameOperations) in the registry editor.

For more information, see Solve problems on page 47 (*Issue: “A computer restart is required. You must restart this computer before continuing with installation.”*)

Verify Administrator account requirements

Review the following information **before** you begin the Security Manager installation.

- Login as the Administrator, or use an account that is a member of the HPIPSC group, on the local computer. The account must have the correct privileges to connect to the Security Manager database.

NOTE: HP SM 3.3 or newer versions will enable only users added under HPIPSC group to access Security Manager.

- When installing the Security Manager web application and database on **separate** computers, verify that the account you use to install the Security Manager web application has the correct permissions to connect to the database. When installing the Security Manager web application and the database on the same computer, by default Microsoft SQL Server allows the Administrator to connect to the local database.

NOTE: Make sure that the Windows user installing Security Manager has at least the Create Database rights (sysadmin role preferred) on the MS SQL instance to create a new database.

To upgrade the database, ensure that the Windows user installing the Security Manager has Database Owner (DBO) rights on the existing database to perform potential tasks using SQL commands on the database such as insert, update, alter, or create table.

Set up Internet Information Services (IIS) on a Windows server or operating system

Security Manager supports Internet Information Services 7.5 and later versions.

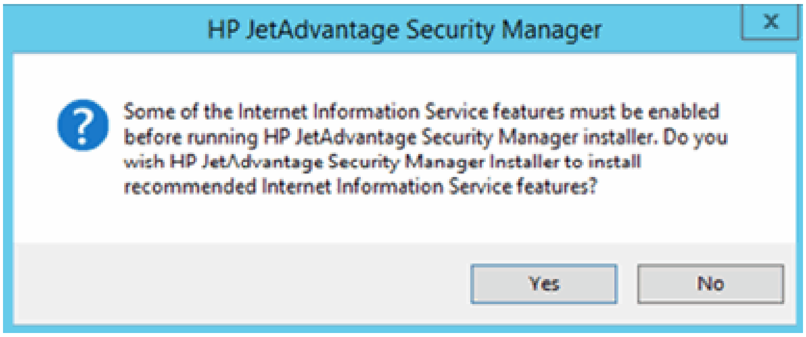
NOTE: To install Internet Information Services (IIS) on a Windows server or a Windows operating system, you must have an administrative account or administrative user rights.

NOTE: To run the Security Manager installer, ensure that Internet Information Services (IIS) and its recommended features are installed.

A confirmation window displays if the recommended features for IIS are not installed. Select one of the following options in the confirmation window:

- **Yes**: To continue installation of IIS and its recommended features.

Figure 1-1 Confirmation window to install IIS and its recommended features

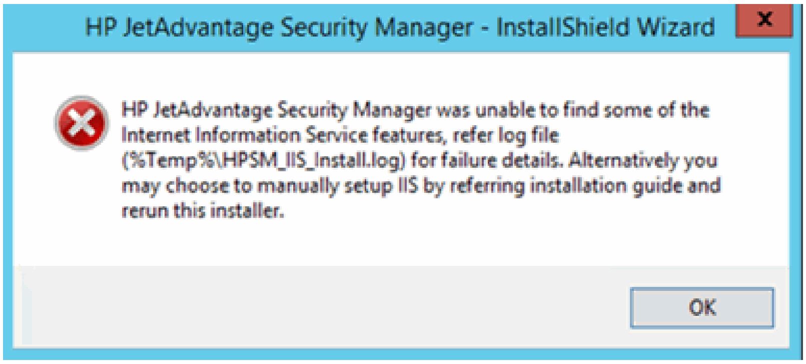


HP JetAdvantage Security Manager

Some of the Internet Information Service features must be enabled before running HP JetAdvantage Security Manager installer. Do you wish HP JetAdvantage Security Manager Installer to install recommended Internet Information Service features?

NOTE: If Security Manager is unable to install all the recommended features of IIS, then the Security Manager installation will get aborted. Refer the installation guide and the log file to manually install Internet Information services (IIS) and its features.

Figure 1-2 IIS installation failure

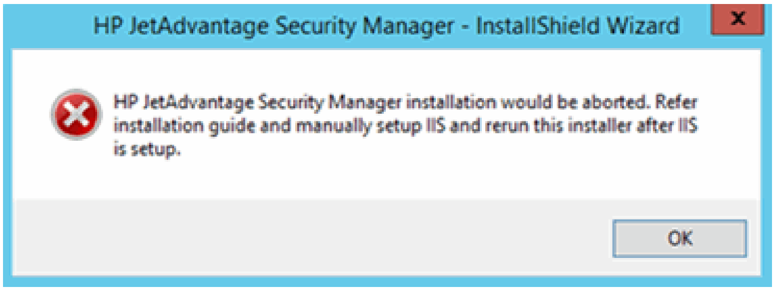


HP JetAdvantage Security Manager - InstallShield Wizard

HP JetAdvantage Security Manager was unable to find some of the Internet Information Service features, refer log file (%Temp%\HPSM_IIS_Install.log) for failure details. Alternatively you may choose to manually setup IIS by referring installation guide and rerun this installer.

- **No**: To manually install IIS and its recommended features.

  Figure 1-3 IIS manual installation

  HP JetAdvantage Security Manager - InstallShield Wizard

  HP JetAdvantage Security Manager installation would be aborted. Refer installation guide and manually setup IIS and rerun this installer after IIS is setup.

- Install IIS on Windows Server (2008 R2, 2012, 2012 R2, 2016, and 2019)
- Install IIS on a Windows client operating system (Windows 8, 8.1, 10)

Install IIS on Windows Server (2008 R2, 2012, 2012 R2, 2016, and 2019)

Follow these steps to install IIS on Windows Server 2012 R2:

1. Click **Start**, select **Administration Tools**, and then click **Server Manager**.
2. On the left pane in Security Manager, select **Roles**. In the **Roles Summary** sub-section, click **Add Roles**.
3. Read the security warnings and then click **Next**.
4. On the **Select Server Roles** page, select the **Web Server (IIS)** check box role option, and then click **Next**.
5. After reading the introduction to IIS, click **Next** to continue.
6. On the **Select Role Server** page, make sure to select the following IIS components check boxes to enable the role services for IIS.

NOTE: If the **Add Roles Wizard** launches, select the **Add Required Role Services** button.

- Web Server
  - Common HTTP Features
    - Default Document
    - Directory Browsing
    - HTTP Errors
    - Static Content
    - HTTP Redirection
  - Application Development
    - ASP.NET versions 3.5 and 4.5 are required.
    - .NET Extensibility versions 3.5 and 4.5 are required.
    - ASP

    - ISAPI Extensions
    - ISAPI Filters
  - Health and Diagnostics
    - HTTP Logging
    - Request Monitor
    - LoggingTools
  - Security
    - Request Filtering
  - Performance
    - Static Content Compression
- Management Tools
  - IIS Management Console
  - IIS Management Scripts and Tools
  - Management Service
  - IIS 6 Management Compatibility
    - IIS 6 Metabase Compatibility
    - IIS 6 WMI Compatibility
    - IIS 6 Scripting Tools
    - IIS 6 Management Console

7. Click **Next** to continue.
8. Click **Install** to install IIS.
9. After the installation finishes, click **Close**.

Install IIS on a Windows client operating system (Windows 8, 8.1, 10)

Follow these steps to install IIS on Windows operating system:

1. Select **Control Panel** from the Windows start menu.
2. Select **Programs**, in the **Programs and Features** section, and then click **Turn Windows Features on or off**.
3. Expand Internet Information Services
4. Select the following components check boxes to enable IIS.
   - Web Management Tools
     - IIS 6 Management Compatibility

    - IIS 6 Management Console
    - IIS 6 Scripting Tools
    - IIS 6 WMI Compatibility
    - IIS 6 Metabase and IIS 6 configuration compatibility
  - IIS Management Console
  - IIS Management Scripts and Tools
  - Management Service
- World Wide Web Service
  - Application Development Features
    - .NET Extensibility
    - ASP
    - ASP.NET
    - ISAPI Extensions
    - ISAPI Filters
- Common HTTP Features
  - Default Document
  - Directory Browsing
  - HTTP Errors
  - HTTP Redirection
  - Static Content
- Health and Diagnostics
  - HTTP Logging
  - Logging Tools
  - Request Monitor

5. Click **OK**.

Install the prerequisite software

Before you install Security Manager, the following software must be installed on the computers where the Security Manager system will run:

NOTE: If required, the Security Manager installation program (HPSecurityManager_Setup.exe) will install these products during the installation, or on-screen prompts will display to install the software correctly.

- Microsoft .NET Framework 4.6.1 or newer versions (4.6.2, for example)
- Microsoft SQL Server Systems CLR Types (x86 and x64)
- Microsoft Office Primary Interop Assembly
- Microsoft Report Viewer 2012 Runtime
- Microsoft SQL Server 2014 Express
- Internet Information Services (IIS) 7.5 or newer versions

NOTE: After the installation of Security Manager is completed, run Microsoft Windows Update to ensure that the listed software is current.

Make sure to use Chrome 60 or Internet Explorer 11 or the latest version to run the Security Manager application.

2 Install, upgrade, configure, or uninstall Security Manager

Use the following sections to install, upgrade, configure, or uninstall Security Manager.

Install the Security Manager system

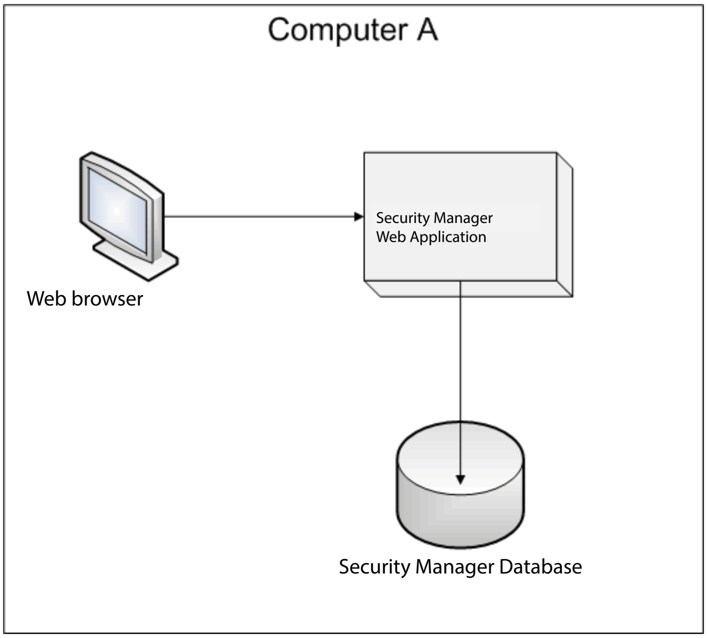
Use one of the following sections to install Security Manager.

- Install the web application and database on the same computer on page 12 — Provides instructions for installing the Security Manager web application and database on the same computer.
- Install the web application on one computer and install the database on another computer on page 17 — Provides instructions for first installing the Security Manager database on a computer that contains **an existing installation** of Microsoft SQL Server, and then installing the Security Manager web application on a separate computer.

Install the web application and database on the same computer

The following figure shows an installation on a single computer.

Figure 2-1 Install on the same computer

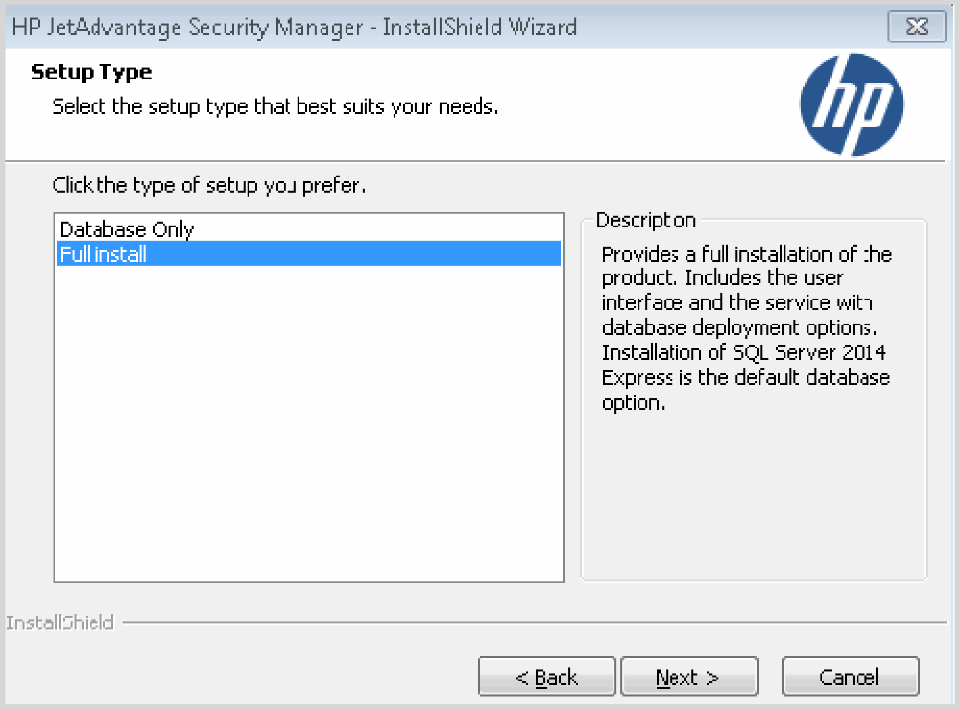


Use the following steps to install Security Manager on a single computer:

1. Log on to the computer where Security Manager will be installed.
2. Copy the Security Manager installation program (HPSecurityManager_Setup.exe) to this computer.
3. Double-click the HPSecurityManager_Setup.exe file.
4. On the welcome window, click **Next**.
5. Review the license agreement, click **I accept the terms of the license agreement**, and then click **Next**.

6. On the **Setup Type** window, select **Full install**, and then click **Next**.

Figure 2-2 Full Install selected as Setup Type



HP JetAdvantage Security Manager - InstallShield Wizard

Setup Type

Select the setup type that best suits your needs.

Click the type of setup you prefer.

Database Only
Full install

Description

Provides a full installation of the product. Includes the user interface and the service with database deployment options. Installation of SQL Server 2014 Express is the default database option.

7. On the **Choose Destination Location** window, click **Next** to use the default folder.

   -or-

   Click **Browse**, locate and select a different folder, and then click **Next**.

8. On the **Database Location** window, select **Install SQL Server Express 2014** to install Microsoft SQL Server 2014 Express on this computer, and then click **Next**.

   -or-

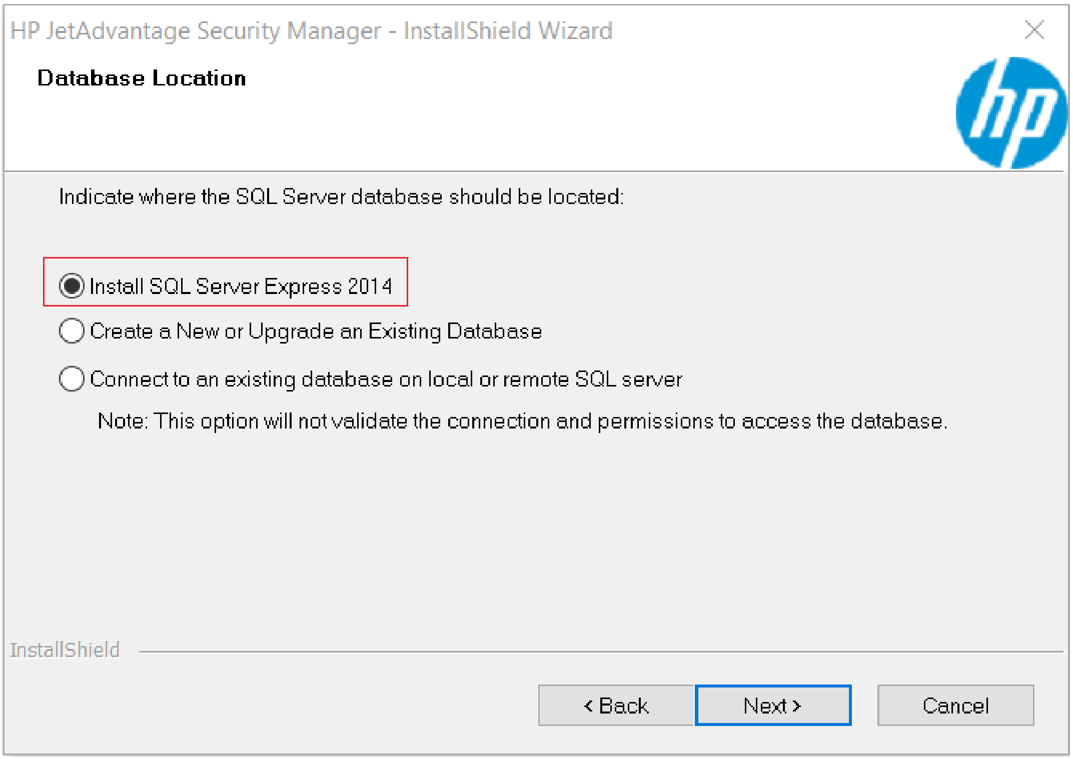
   Select **Create a New or Upgrade an Existing Database** to use an existing local instance of Microsoft SQL Server or Microsoft SQL Server Express and create a new database, and then click **Next**. The Windows user must have proper permissions in the existing SQL Server instance to create a database.

   -or-

   Select **Connect to an Existing database on local or remote SQL server** to use an existing Security Manager database on a local instance of Microsoft SQL Server or Microsoft SQL Server Express on this computer, and then click **Next**. The existing database version must match the Security Manager installation version as no attempt will be made to upgrade an older database.

   NOTE: Only one Security Manager application instance is used on the database. The Security Manager database does not support multiple service connections. For instructions on installing a remote database, see Install the web application on one computer and install the database on another computer on page 17.

   Figure 2-3 Database Location: Install SQL Server Express 2014



HP JetAdvantage Security Manager - InstallShield Wizard

Database Location

Indicate where the SQL Server database should be located:

● Install SQL Server Express 2014

○ Create a New or Upgrade an Existing Database

○ Connect to an existing database on local or remote SQL server

Note: This option will not validate the connection and permissions to access the database.

9. If **Install SQL Server Express 2014** is selected, the installation program extracts the files and displays a final verification. Click **Next** to install Microsoft SQL Server Express 2014.

   -or-

   If either **Create a New or upgrade an Existing database** or **Connect to an Existing database on a local or remote SQL server** is selected, the **Select Database Server** window opens.

a. Under the **Database Server** section, select the database server instance from the drop-down list, or click **Browse** to locate and select a database server instance.

b. Click the **Fetch DBs** button to get the list of available database names in the **Database Name** drop-down list.

NOTE: Make sure to click the **Fetch DBs** button before selecting a database name.

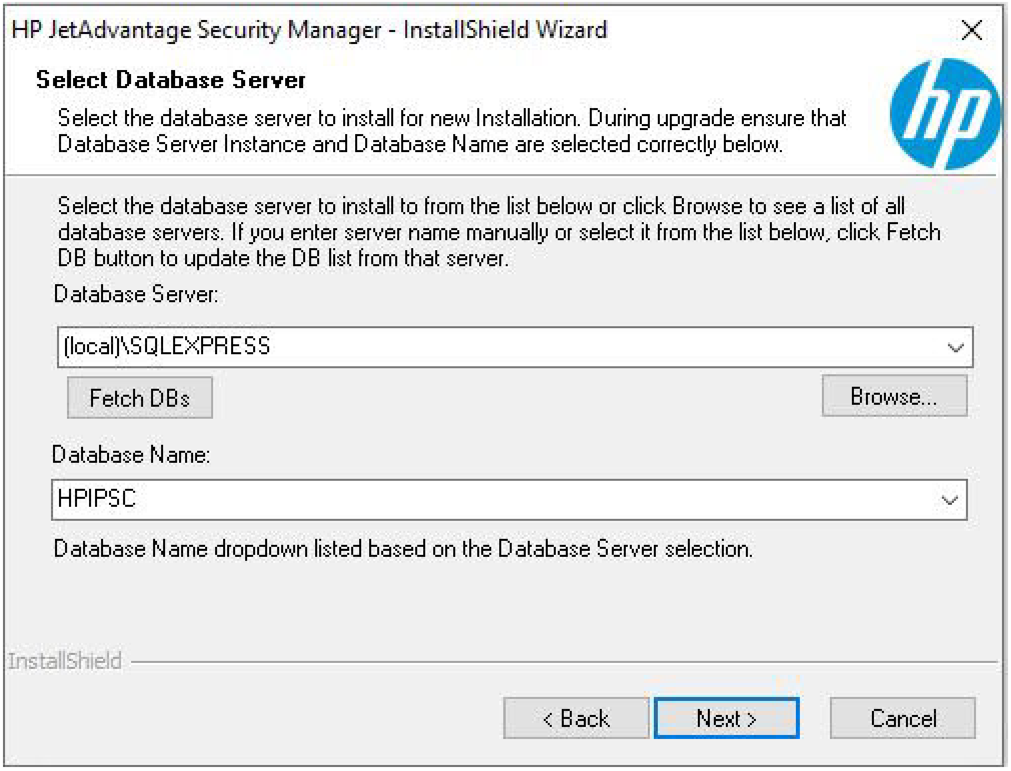
c. Select the database name, and then click **Next**.

NOTE: You can type the name of the database and create the database.

To enter the database server instance, use the format `<name of machine>\<name of database instance>`. For example, enter `MyComputer\SQLExpress`.

NOTE: If the installation program cannot connect to the database, it displays an error. Verify that the account used to install the service has database connection privileges. For more information, see Verify Administrator account requirements on page 4.

Figure 2-4 Database Server selection: New or upgrade the database



HP JetAdvantage Security Manager - InstallShield Wizard

Select Database Server

Select the database server to install for new Installation. During upgrade ensure that Database Server Instance and Database Name are selected correctly below.

Select the database server to install to from the list below or click Browse to see a list of all database servers. If you enter server name manually or select it from the list below, click Fetch DB button to update the DB list from that server.

Database Server: (local)\SQLEXPRESS

Database Name: HPIPSC

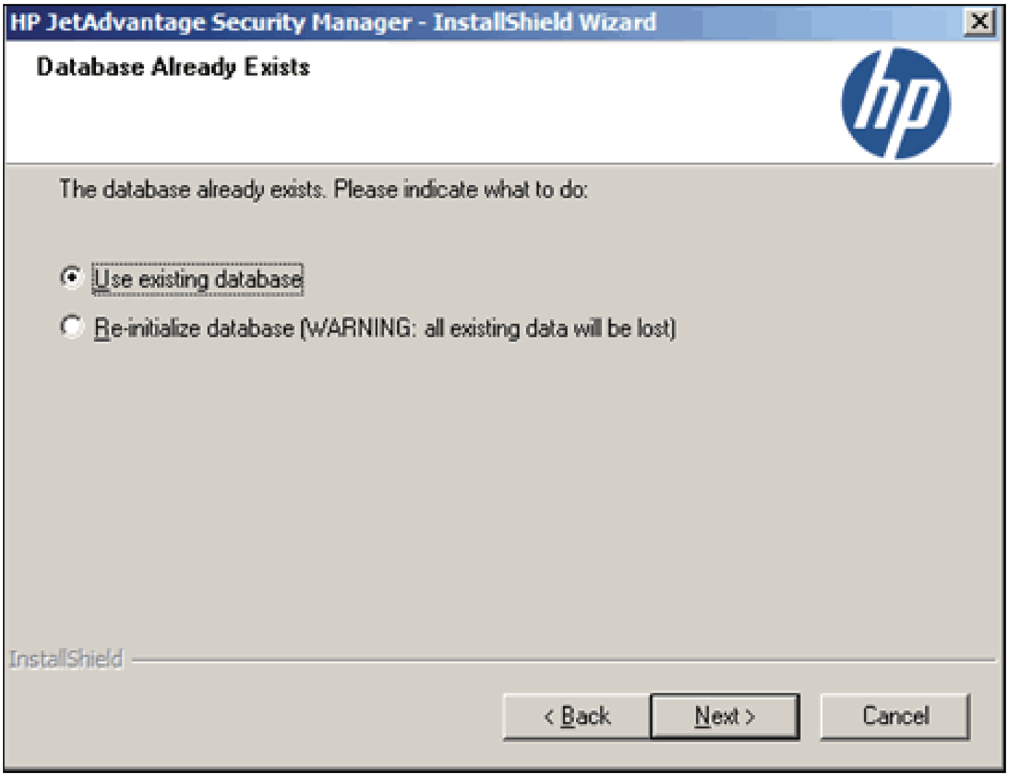
Database Name dropdown listed based on the Database Server selection.

10. If **Create a New or upgrade an Existing database** is selected and an existing Security Manager database exists, the installation program displays the **Database Already Exists** window. Select the option to use the existing database or to re-initialize the database.

    The **Use existing database** option will upgrade the database if it is an older version than the Security Manager installation version.

⚠ CAUTION: If **Re-initialize database** option is selected, any existing data is permanently deleted.

Figure 2-5 Options when Security Manager database exists



HP JetAdvantage Security Manager - InstallShield Wizard

Database Already Exists

The database already exists. Please indicate what to do:

● Use existing database

○ Re-initialize database (WARNING: all existing data will be lost)

11. In the **HP JetAdvantage Security Manager Security Settings** window, select a type of digital certificate for secure client communication, and then click **Next**.

    - **Use an existing certificate** - Select this option to allow HP Security Manager communicate via HTTPS protocol with a pre-existing certificate present in the certificate store. (In MMC, locate the **Certificates (Local Computer)**, and then open the **Personal** folder)

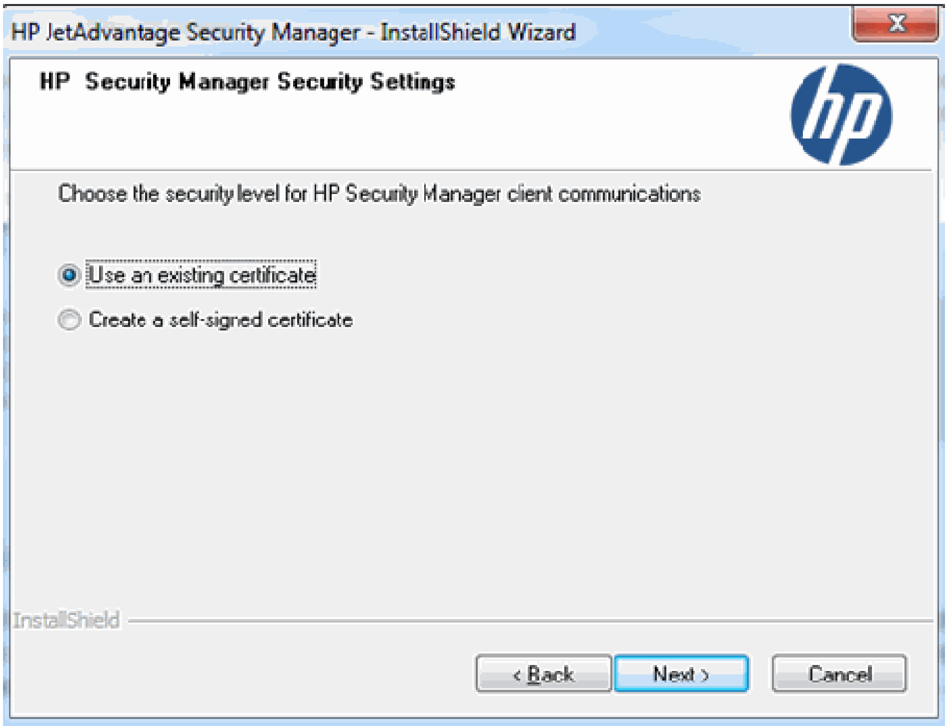
      NOTE: In case there are any certificate binding issues, access “Inetmgr” and manually perform the hpsm site binding.

      OR

    - **Create a self-signed certificate** - Select this option to allow HP Security Manager communicate via HTTPS protocol by creating a new self-signed certificate.

NOTE: Make sure that the system where HP Security Manager intends to install to is added to the domain and configured with correct DNS. After installation, this new certificate is valid for 5 years.

Figure 2-6 Options for Security Settings



HP JetAdvantage Security Manager - InstallShield Wizard

HP Security Manager Security Settings

Choose the security level for HP Security Manager client communications

● Use an existing certificate

○ Create a self-signed certificate

12. To start the installation, click **Install**. The installation program displays the setup status.

    -or-

    To modify the options, click **Back**.

    -or-

    To quit the installation, click **Cancel**.

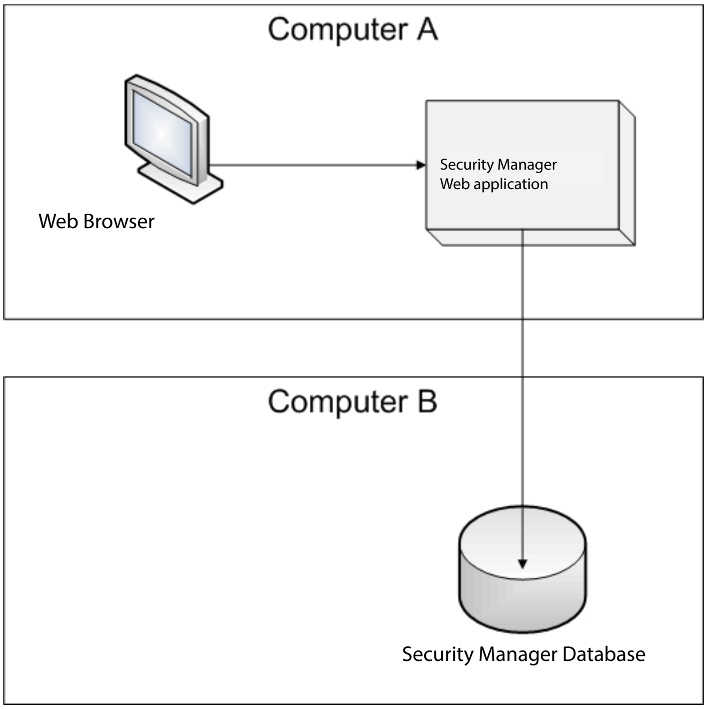
Install the web application on one computer and install the database on another computer

NOTE: If the Windows user installing the Security Manager does not have the permission rights to create a database on the remote SQL server, then the user must install the database on the remote system as described below, and then complete a full installation of the Security Manager.

If the Windows user installing the Security Manager has the permission rights to create a database on the remote SQL server, then the user can create the remote database and does not have to install the database on the remote system.

Use this option to connect to a Security Manager database located on a remote Microsoft SQL installation.

Figure 2-7 Install the web application on computer A; install the database on computer B



Use the following steps to install Security Manager:

1. Log on to the computer where the Security Manager database will run (computer B in Figure 2-7 Install the web application on computer A; install the database on computer B on page 18).

2. Install and configure Microsoft SQL Server on this computer, if required. For instructions, see the installation and configuration documentation for Microsoft SQL Server.

   NOTE: By default Microsoft SQL Server Express does not allow remote connections. If Microsoft SQL Server Express is used in this configuration, use the instructions on the Microsoft website (support.microsoft.com/kb/914277) to allow remote connections.

3. Copy the Security Manager installation program (HPSecurityManager_Setup.exe) to this computer.

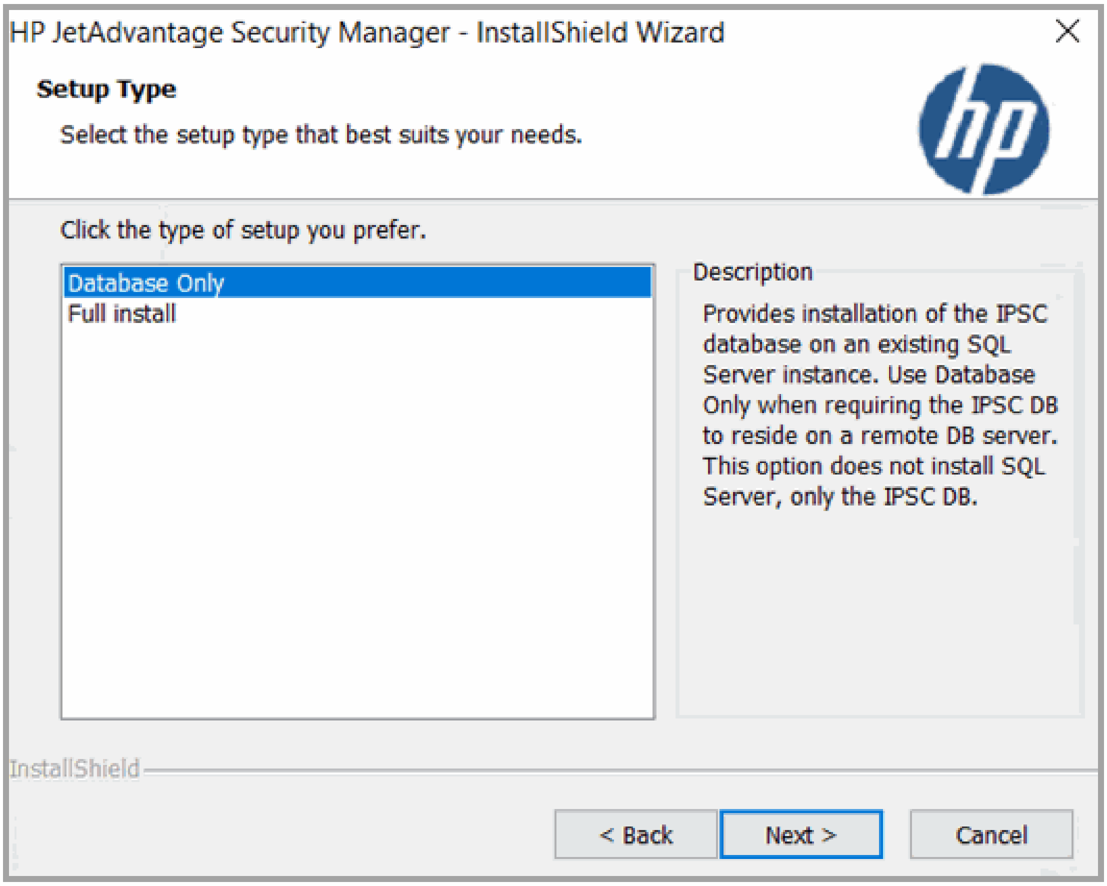
4. Double-click the HPSecurityManager_Setup.exe file.

5. On the welcome window, click **Next**.

6. Review the license agreement, click **I accept the terms of the license agreement**, and then click **Next**.

7. On the **Setup Type** window, select **Database Only**, and then click **Next**.

Figure 2-8 Setup Type: Database Only



HP JetAdvantage Security Manager - InstallShield Wizard

Setup Type

Select the setup type that best suits your needs.

Click the type of setup you prefer.

Database Only
Full install

Description

Provides installation of the IPSC database on an existing SQL Server instance. Use Database Only when requiring the IPSC DB to reside on a remote DB server. This option does not install SQL Server, only the IPSC DB.

8. On the **Select Database Server** window, click **Browse**, locate and select the Microsoft SQL server, and then click **Next**.

9. Use the instructions provided in Configure remote database security on page 43 to allow access by the Security Manager service.

NOTE: If you are prohibited to run the Security Manager installer on the remoter SQL server, contact HP Support for a set of SQL scripts to create the Security Manager database and corresponding tables.

After the changes are completed, continue with the next step to install the service and user interface.

10. Log on to the computer where the Security Manager service and user interface will run (computer A in the figure).

11. Copy the Security Manager installation program (HPSecurityManager_Setup.exe) to this computer.

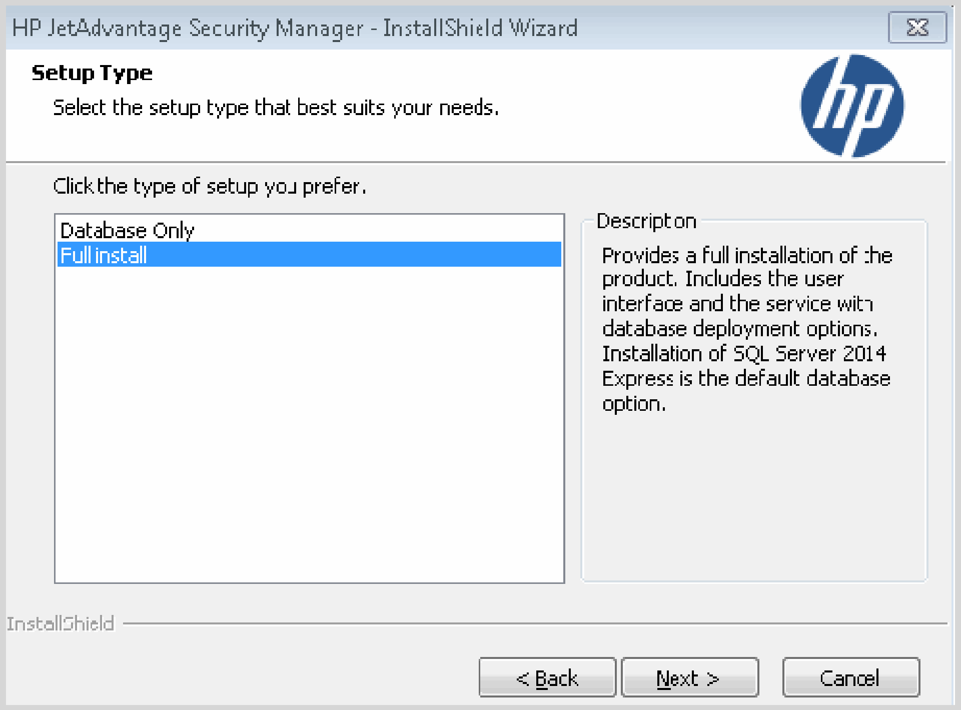
12. Double-click the HPSecurityManager_Setup.exe file.

13. On the welcome window, click **Next**.

14. Review the license agreement, click **I accept the terms of the license agreement**, and then click **Next**.

15. On the **Setup Type** window, select **Full install**, and then click **Next**.

Figure 2-9 Setup Type: Full Install



HP JetAdvantage Security Manager - InstallShield Wizard

Setup Type

Select the setup type that best suits your needs.

Click the type of setup you prefer.

Database Only

Full install

Description

Provides a full installation of the product. Includes the user interface and the service with database deployment options. Installation of SQL Server 2014 Express is the default database option.

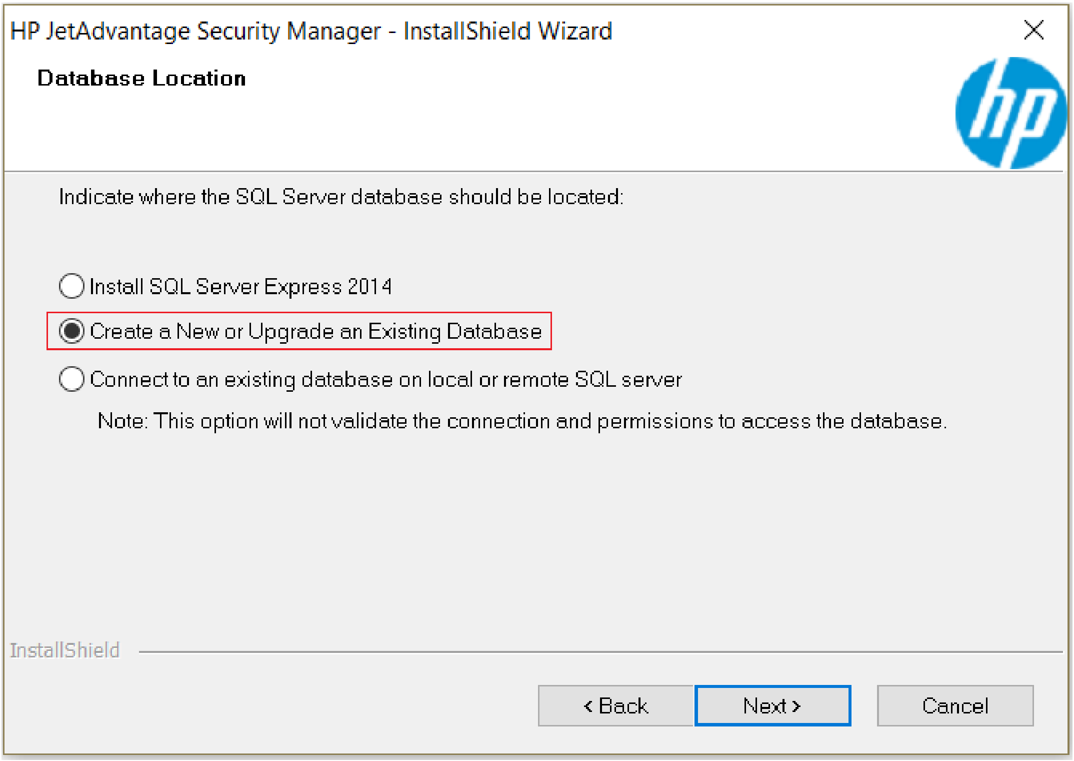
16. On the **Choose Destination Location** window, click **Next** to use the default folder.

-or-

Click **Browse**, locate and select a different folder, and then click **Next**.

17. On the **Database Location** window, select **Create a New or Upgrade an Existing Database**, and then click **Next**.

Figure 2-10 Database Location: Create a New or Upgrade and Existing Database



HP JetAdvantage Security Manager - InstallShield Wizard

Database Location

Indicate where the SQL Server database should be located:

○ Install SQL Server Express 2014

● Create a New or Upgrade an Existing Database

○ Connect to an existing database on local or remote SQL server

Note: This option will not validate the connection and permissions to access the database.

18. On the **Select Database Server** window, enter the remote database server instance, and then click **Next**. This is the database server instance that was installed in step 2.

To enter the database server instance, use the format `<name of machine>\<name of database instance>`. For example, enter `MyComputer\SQLExpress`.

-or-

Locate a database server instance.

a. Under the **Database Server** section, click **Browse** to locate and select a database server instance.

b. Click the **Fetch DBs** button to get the list of available database names in the **Database Name** drop-down list.

NOTE: Make sure to click the **Fetch DBs** button before selecting a database name.

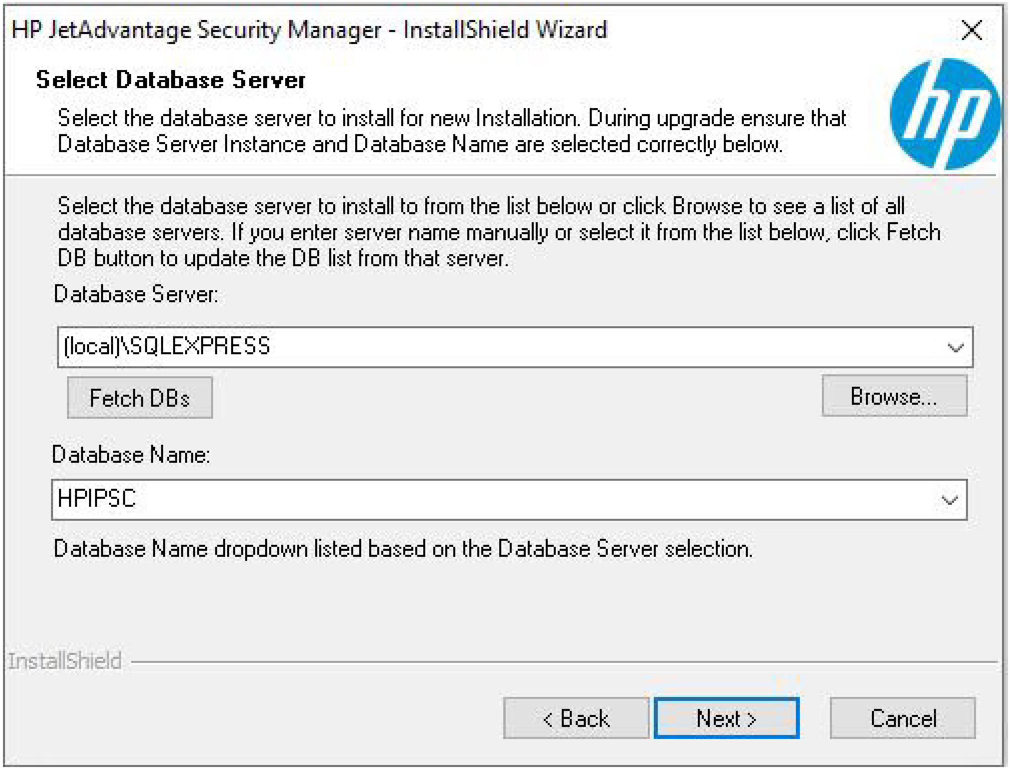
c. Select the database name, and then click **Next**.

NOTE: You can type the name of the database and create the database.

NOTE: If the installation program cannot connect to the database, it displays an error. Only one Security Manager service instance can use the database.

Verify that the account used to install the service has database connection privileges. For more information, see Verify Administrator account requirements on page 4.

Figure 2-11 Database Server selection: New or upgrade the database



HP JetAdvantage Security Manager - InstallShield Wizard

Select Database Server

Select the database server to install for new Installation. During upgrade ensure that Database Server Instance and Database Name are selected correctly below.

Select the database server to install to from the list below or click Browse to see a list of all database servers. If you enter server name manually or select it from the list below, click Fetch DB button to update the DB list from that server.

Database Server: (local)\SQLEXPRESS

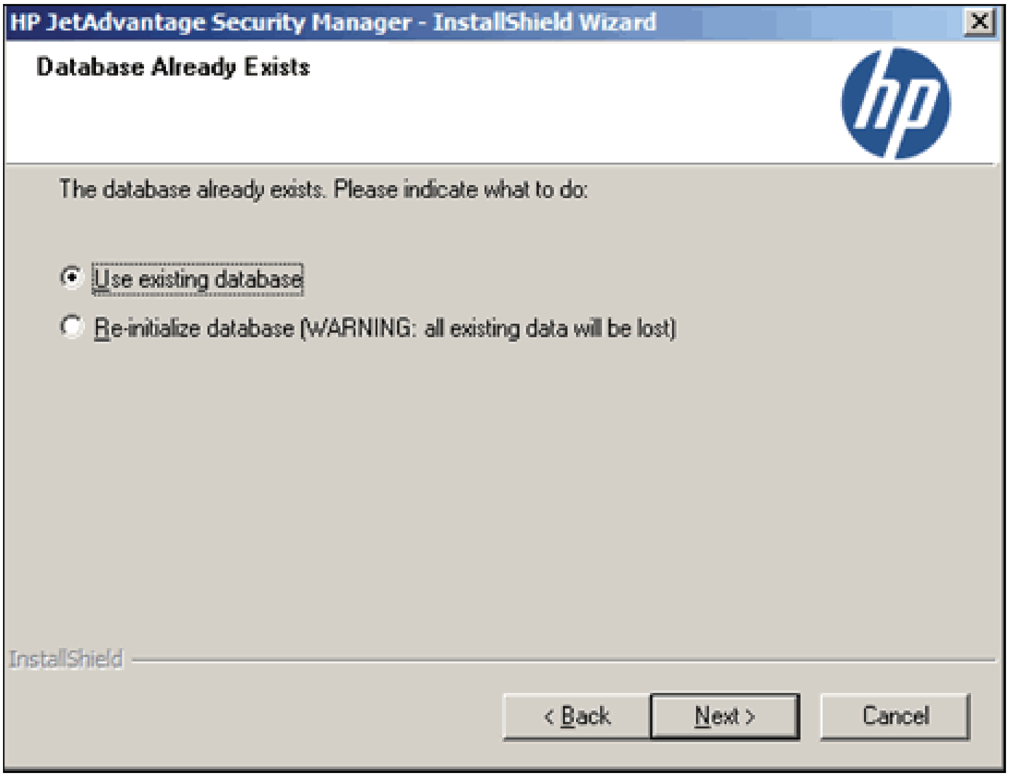
Database Name: HPIPSC

Database Name dropdown listed based on the Database Server selection.

19. Select the **Use existing database** option when the installation program displays the **Database Already Exists** window. This window displays if the database was created on the remote SQL server as described in the preceding steps.

NOTE: If the database was not created previously on the remote SQL server and if the Windows user installing the Security Manager has permission rights to create a database on the remote SQL instance, then the Security Manager installer will proceed to create the remote database.

Figure 2-12 Database Already Exists



HP JetAdvantage Security Manager - InstallShield Wizard

Database Already Exists

The database already exists. Please indicate what to do:

● Use existing database

○ Re-initialize database (WARNING: all existing data will be lost)

20. In the **HP JetAdvantage Security Manager Security Settings** window, select a type of digital certificate for secure client communication, and then click **Next**.

- **Use an existing certificate** - Select this option to allow HP Security Manager communicate via HTTPS protocol with a pre-existing certificate present in the certificate store. (In MMC, locate the **Certificates (Local Computer)**, and then open the **Personal** folder)

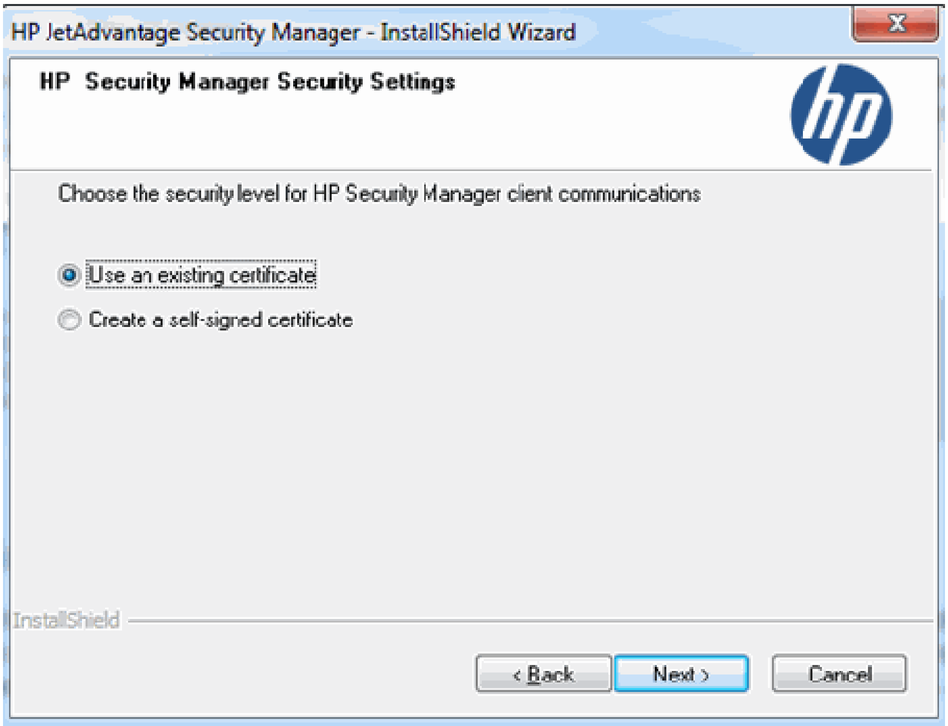
  NOTE: In case there are any certificate binding issues, access “Inetmgr” and manually perform the hpsm site binding.

  OR

- **Create a self-signed certificate** - Select this option to allow HP Security Manager communicate via HTTPS protocol by creating a new self-signed certificate.

NOTE: Make sure that the system where HP Security Manager intends to install to is added to the domain and configured with correct DNS. After installation, this new certificate is valid for 5 years.

Figure 2-13 Options for Security Settings



HP JetAdvantage Security Manager - InstallShield Wizard

HP Security Manager Security Settings

Choose the security level for HP Security Manager client communications

● Use an existing certificate

○ Create a self-signed certificate

21. To start the installation, click **Install**. The installation program displays the setup status.

    -or-

    To modify the options, click **Back**.

    -or-

    To quit the installation, click **Cancel**.

Set up the web application

To set up and run the web application, make sure to preview the following tasks:

- Use the supported web browsers, see System requirements on page 2.
- Security Manager service is running with the correct login address:
  - For the same machine as the browser:https://localhost:7637/#/Login
  - For a different machine than the browser: https://<HPSM Server IP>:7637/#/Login
- Use the correct credentials to log into the web application:
  - Administrator credentials where Security Manager service is running format: `<domain name>\<admin user>` (AUTH\hpsmadmin, for example).

NOTE: If required, guest users can also be included.

Upgrade the Security Manager system

Use one of the following sections to upgrade an existing installation of Security Manager, depending on how it is currently installed.

NOTE: The Security Manager installation program determines whether an earlier version is installed and can be upgraded. Make sure to use the same version of the Security Manager web application and database.

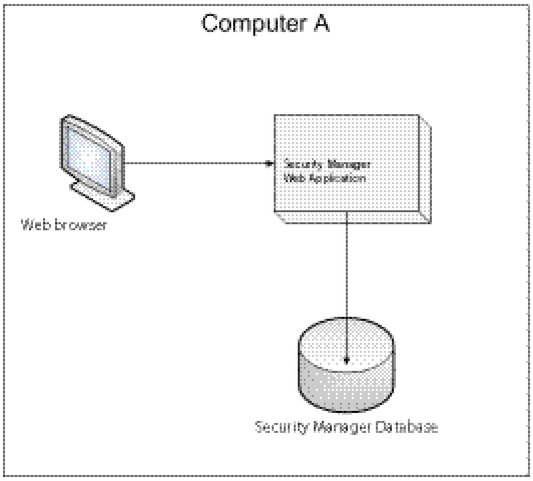
- Upgrade the web application and database on the same computer on page 26—Provides instructions for upgrading the Security Manager service, user interface, and database on the same computer.
- Upgrade the web application on one computer and update the database on another computer on page 31—Provides instructions for first upgrading the Security Manager database on a computer that contains an existing installation of Microsoft SQL Server, and then upgrading the web application on a separate computer.

Upgrade the web application and database on the same computer

NOTE: To perform an upgrade, the installation program uninstalls the current Security Manager version, installs the new version, and then upgrades the database. **Before** running the installation program, verify that you have done a **complete** backup of the entire Security Manager system.

The following figure shows an upgrade on a single computer.

Figure 2-14 Upgrade on the same computer



Use the following steps to upgrade Security Manager on a single computer:

1. Log on to the computer where Security Manager is installed.
2. Copy the Security Manager installation program (HPSecurityManager_Setup.exe) to this computer.
3. Double-click the HPSecurityManager_Setup.exe file.
4. On the welcome window, click **Next**.
5. Review the license agreement, click **I accept the terms of the license agreement**, and then click **Next**.

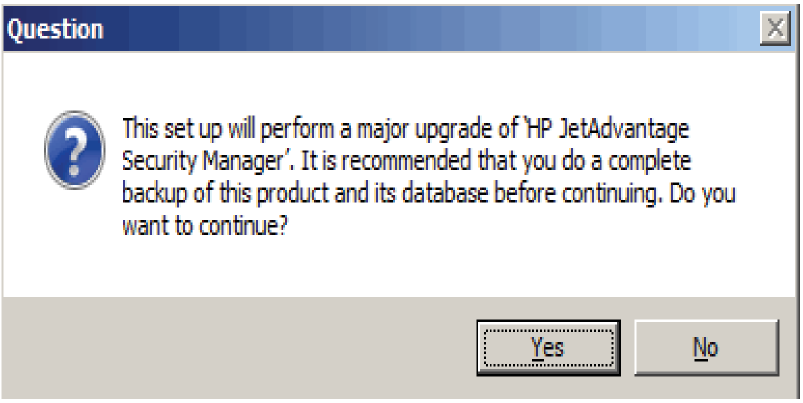
6. A confirmation window displays when upgrading an older version of Security Manager is installed and needs to be upgraded.

   To continue the upgrade, click **Yes**. The installation program displays a message indicating that the program is uninstalling Security Manager.

   -or-

   To quit the upgrade, click **No**.

   Figure 2-15 Dialog box when upgrading Security Manager

   This set up will perform a major upgrade of 'HP JetAdvantage Security Manager'. It is recommended that you do a complete backup of this product and its database before continuing. Do you want to continue?

7. When prompted, indicate whether to remove the license files.

   To retain the license files, click **No**.

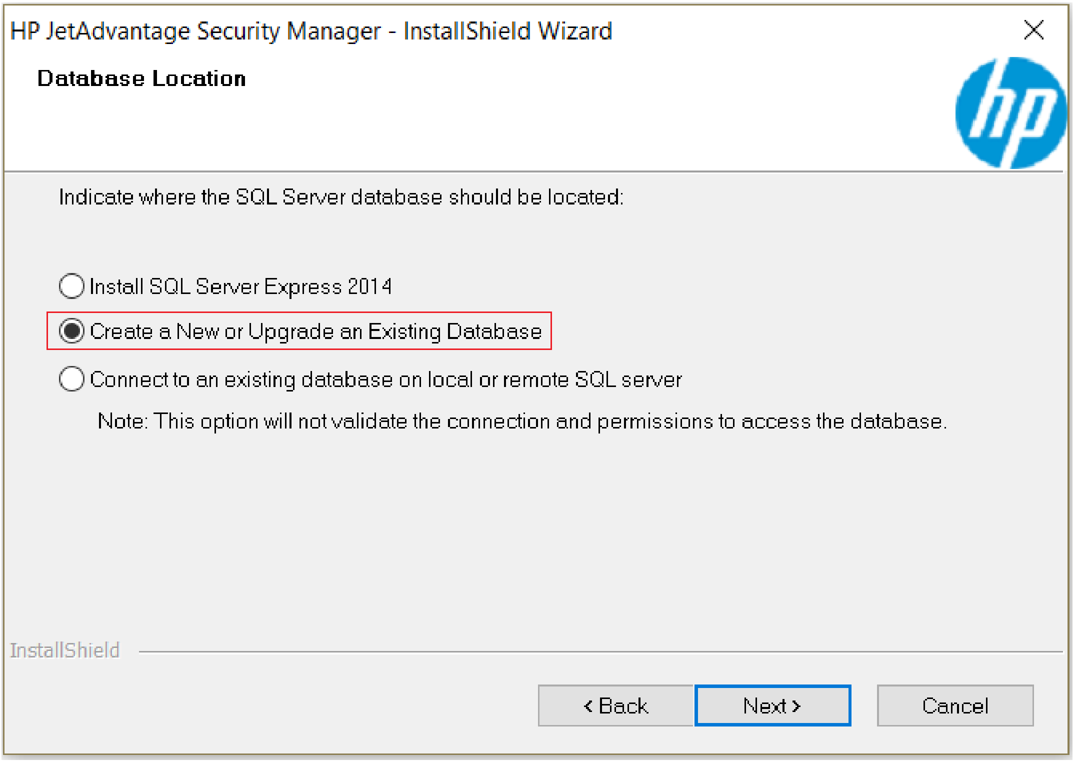
   -or-

   To remove the license files, click **Yes**. The license files must be reinstalled after the upgrade is completed.

8. On the **Database Location** window, select **Create a New or Upgrade an Existing Database**, and then click **Next**.

NOTE: The Security Manager database does not support multiple service connections. Only one Security Manager service installation is set on the database.

Figure 2-16 Database Location: Create a New or Upgrade an Existing Database



HP JetAdvantage Security Manager - InstallShield Wizard

Database Location

Indicate where the SQL Server database should be located:

○ Install SQL Server Express 2014

● Create a New or Upgrade an Existing Database

○ Connect to an existing database on local or remote SQL server

Note: This option will not validate the connection and permissions to access the database.

9. On the **Select Database Server** window, enter the database server instance where the existing local database resides, and then click **Next**.

   To enter the database server instance, use the format `<name of machine>\<name of database instance>`. For example, enter `MyComputer\SQLExpress`.

   NOTE: Security Manager will automatically detect the database server instance and the selected database name while upgrading to the latest Security Manager version.

   -or-

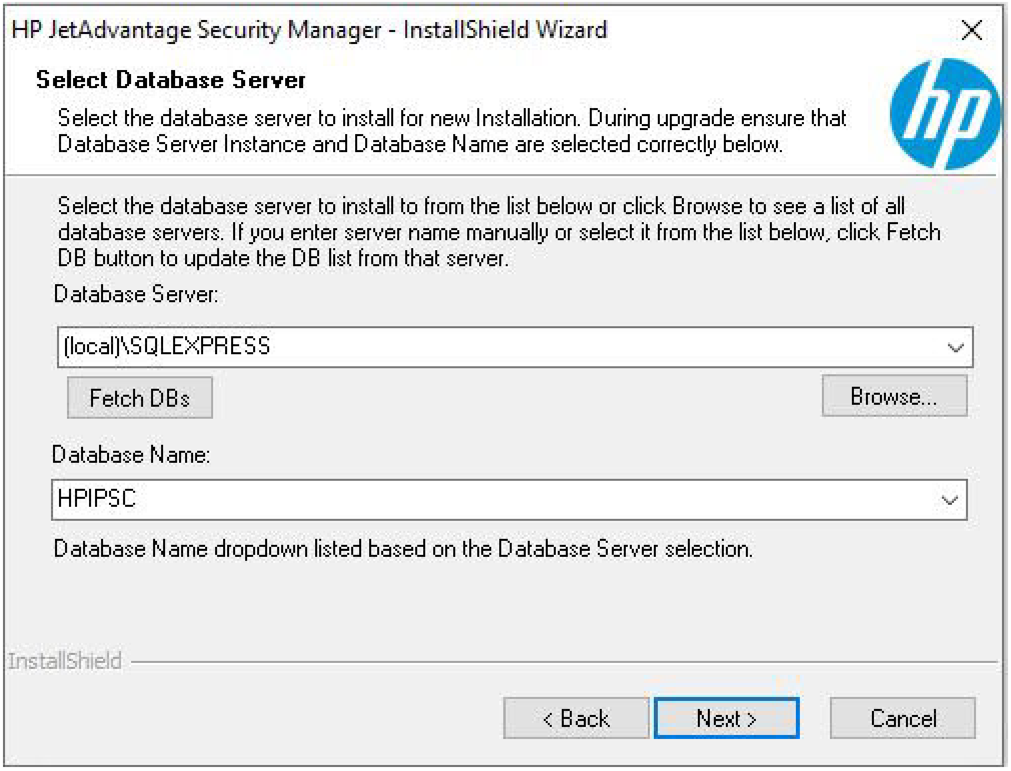
   Click **Browse**, locate and select the database server instance. When the **Database Name** displays click **Next**.

   WARNING! **Do Not** click the **Fetch DBs** button when upgrading.

   It is recommended not to modify the Database Name selection from the drop-down list when upgrading.

   NOTE: If the installation program cannot connect to the database, it displays an error. Verify that the account used to install the service has database connection privileges. For more information, see Verify Administrator account requirements on page 4.

   Figure 2-17 Database Server selection: New or upgrade the database



HP JetAdvantage Security Manager - InstallShield Wizard

Select Database Server

Select the database server to install for new Installation. During upgrade ensure that Database Server Instance and Database Name are selected correctly below.

Select the database server to install to from the list below or click Browse to see a list of all database servers. If you enter server name manually or select it from the list below, click Fetch DB button to update the DB list from that server.

Database Server: (local)\SQLEXPRESS

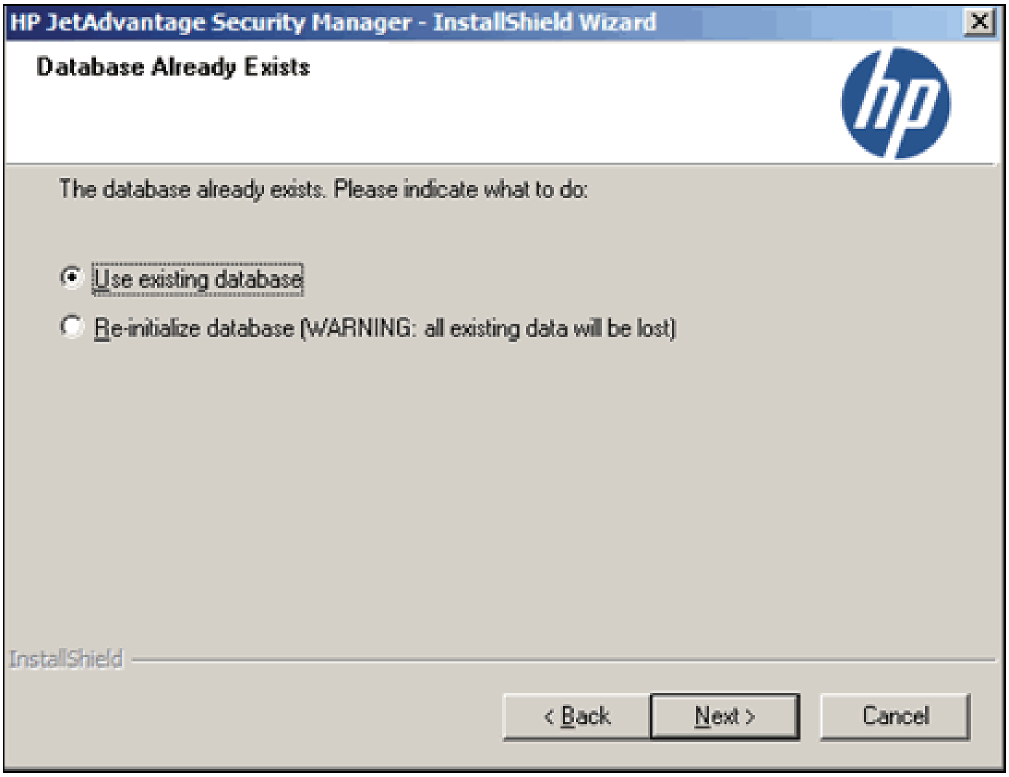
Database Name: HPIPSC

Database Name dropdown listed based on the Database Server selection.

10. If upgrading a database that already exists on the local SQL server, the installation program displays the **Database Already Exists** window. Select the **Use the existing database** option.

NOTE: The database will be upgraded only if the Windows user upgrading the Security Manager installer has DBO rights on the database.

Figure 2-18 Options when Security Manager database exists



HP JetAdvantage Security Manager - InstallShield Wizard

Database Already Exists

The database already exists. Please indicate what to do:

● Use existing database

○ Re-initialize database (WARNING: all existing data will be lost)

11. In the **HP JetAdvantage Security Manager Security Settings** window, select a type of digital certificate for secure client communication, and then click **Next**.

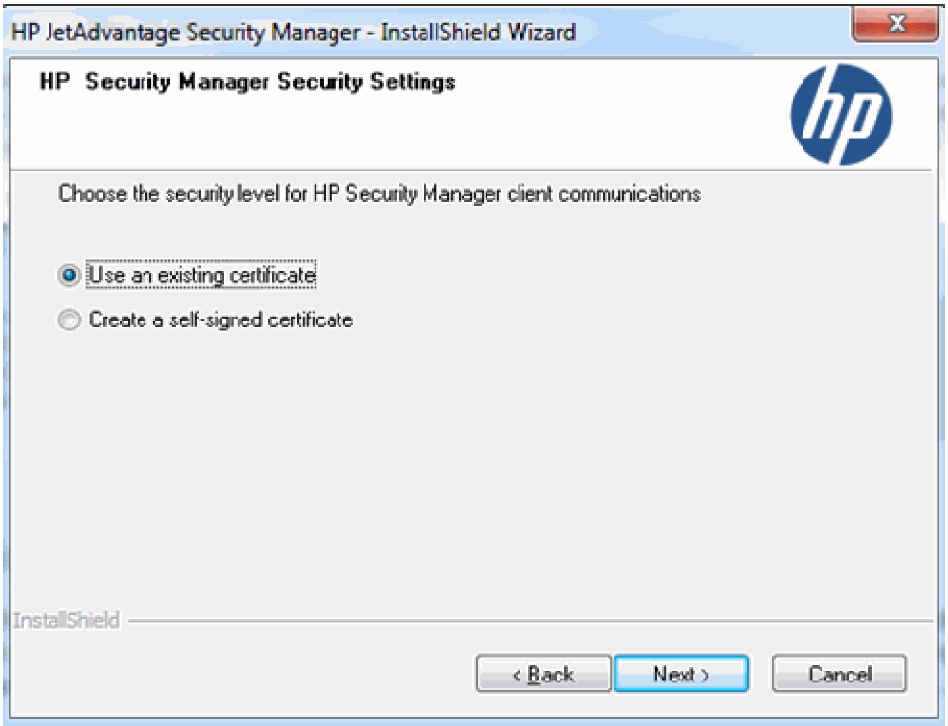
- **Use an existing certificate** - Select this option to allow HP Security Manager communicate via HTTPS protocol with a pre-existing certificate present in the certificate store. (In MMC, locate the **Certificates (Local Computer)**, and then open the **Personal** folder)

  OR

- **Create a self-signed certificate** - Select this option to allow HP Security Manager communicate via HTTPS protocol by creating a new self-signed certificate.

NOTE: Make sure that the system where HP Security Manager intends to install to is added to the domain and configured with correct DNS. After installation, this new certificate is valid for 5 years.

Figure 2-19 Options for Security Settings



HP JetAdvantage Security Manager - InstallShield Wizard

HP Security Manager Security Settings

Choose the security level for HP Security Manager client communications

● Use an existing certificate

○ Create a self-signed certificate

12. To continue the upgrade, click **Install**.

    -or-

    To modify the options, click **Back**.

    -or-

    To quit the upgrade, click **Cancel**.

Upgrade the web application on one computer and update the database on another computer

Use this option to connect to a Security Manager database located on a remote Microsoft SQL Server installation. First upgrade the database on the remote system, and then upgrade the Security Manager web application.

Or, if the Windows user upgrading the Security Manager has DBO rights on the remote database, then use the Security Manager installer to upgrade the remote database.

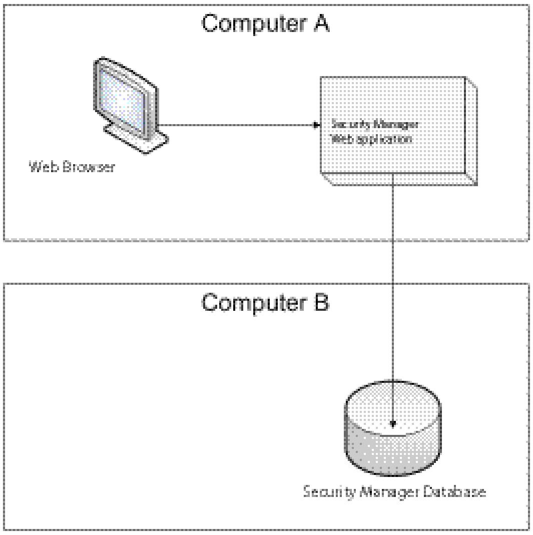
NOTE: The installation program uninstalls the current Security Manager version, installs the new version, and then upgrades the database.

Before running the installation program, verify that you have done a **complete** backup of the entire Security Manager system. Make sure that the Security Manager web application and database have the same version for the system to work.

NOTE: After upgrading Security Manager to the newest version, the older desktop interface will not be available.

The following figure shows the upgrades on the user interface and Security Manager service (Computer A) and upgrades on the database (Computer B).

Figure 2-20 Upgrade the web application on computer A; upgrade the database on computer B



Use the following steps to upgrade the Security Manager database when the Windows user upgrading the Security Manager does not have proper rights to remotely upgrade the database:

1. Log on to the computer where the Security Manager database runs (computer B in the figure).

2. Copy the Security Manager installation program (HPSecurityManager_Setup.exe) to this computer.

3. Double-click the HPSecurityManager_Setup.exe file.

4. On the welcome window, click **Next**.

5. Review the license agreement, click **I accept the terms of the license agreement**, and then click **Next**.

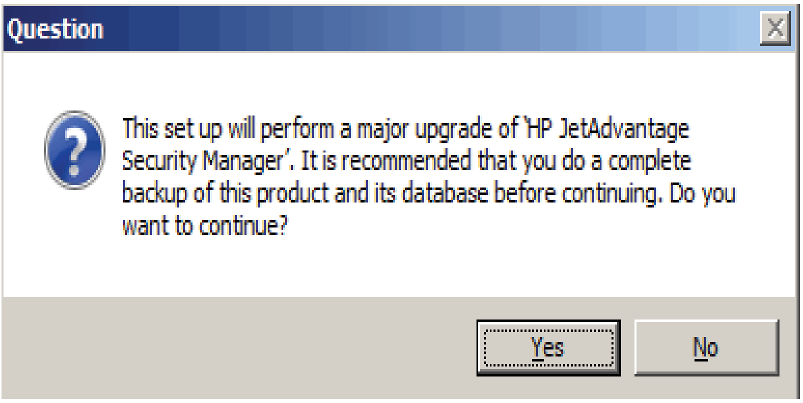
6. A confirmation window displays when an older version of Security Manager is installed and needs to be upgraded.

   To continue the upgrade, click **Yes**. The installation program displays a message indicating that the program is uninstalling Security Manager.

   -or-

   To quit the upgrade, click **No**.

   Figure 2-21 Dialog box when upgrading the Security Manager

   This set up will perform a major upgrade of 'HP JetAdvantage Security Manager'. It is recommended that you do a complete backup of this product and its database before continuing. Do you want to continue?

7. Verify that the Security Manager service is shut down, and then click **OK** to continue.

8. On the **Select Database Server** window, enter the database server instance, and then click **Next**.

   To enter the database server instance, use the format `<name of machine>\<name of database instance>`. For example, enter `MyComputer\SQLExpress`.

> NOTE: Security Manager will automatically detect the database server instance and the selected database name while upgrading to the latest Security Manager version.

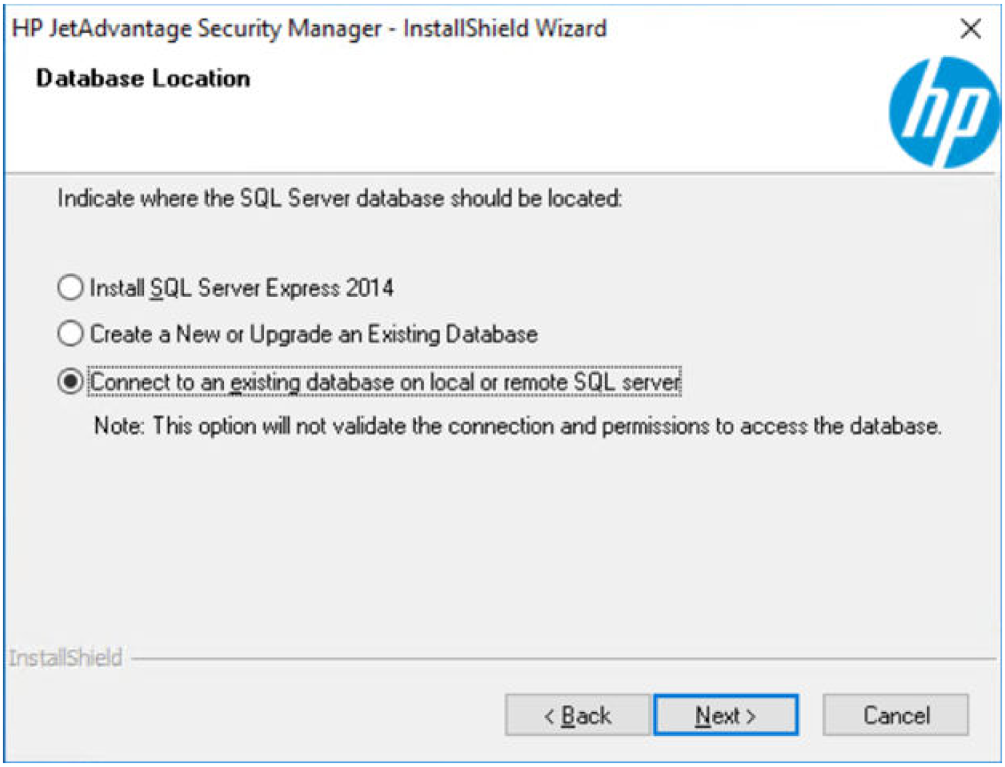
   -or-

   Indicate where the SQL server database should be located.

   a. In the **Database Location** window, select the **Connect to an existing database on local or remote SQL server** option.

   > NOTE: This option does not validate the connection and permission to access the database.

   Figure 2-22 Access the database options



HP JetAdvantage Security Manager - InstallShield Wizard

Database Location

Indicate where the SQL Server database should be located:

○ Install SQL Server Express 2014

○ Create a New or Upgrade an Existing Database

● Connect to an existing database on local or remote SQL server

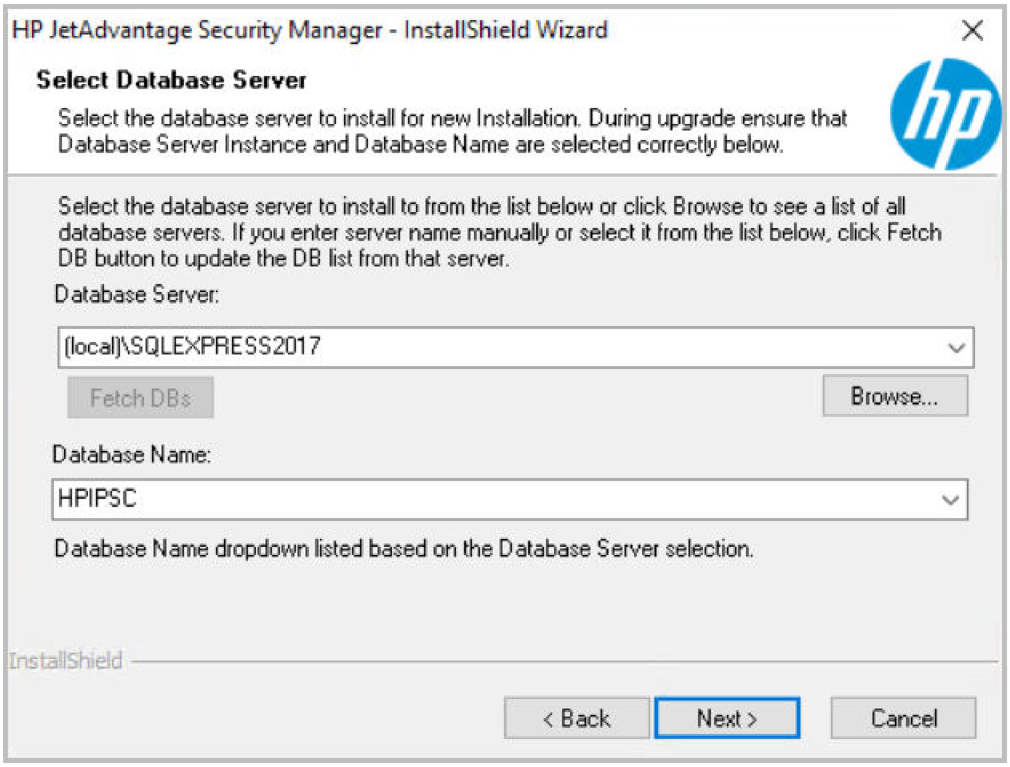
Note: This option will not validate the connection and permissions to access the database.

   b. Click **Browse**, locate and select the database server instance. When the **Database Name** displays, click **Next**.

   > NOTE: It is recommended not to modify the **Database Name** selection from the drop-down list when upgrading.

   > NOTE: If the installation program cannot connect to the database, it displays an error. Verify that the account used to install the service has database connection privileges. For more information, see Verify Administrator account requirements on page 4.

Figure 2-23 Connect to an existing database on local or remote SQL server



HP JetAdvantage Security Manager - InstallShield Wizard

Select Database Server

Select the database server to install for new Installation. During upgrade ensure that Database Server Instance and Database Name are selected correctly below.

Select the database server to install to from the list below or click Browse to see a list of all database servers. If you enter server name manually or select it from the list below, click Fetch DB button to update the DB list from that server.

Database Server: (local)\SQLEXPRESS2017

Database Name: HPIPSC

Database Name dropdown listed based on the Database Server selection.

9. On the **Ready to Install the Program** window, click **Install** to continue the upgrade.

   -or-

   To modify the options, click **Back**.

   -or-

   To quit the upgrade, click **Cancel**.

10. Use the instructions provided in Configure remote database security on page 43 to allow access by the Security Manager service. After the changes are completed, continue with the next step.

11. Log on to the computer where the Security Manager service runs (computer A in Figure 2-20 Upgrade the web application on computer A; upgrade the database on computer B on page 32).

12. Copy the Security Manager installation program (HPSecurityManager_Setup.exe) to this computer.

13. Double-click the HPSecurityManager_Setup.exe file

14. On the welcome window, click **Next**.

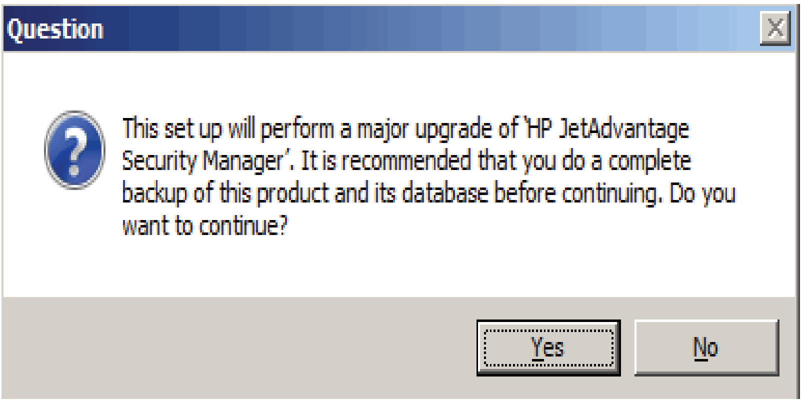
15. Review the license agreement, click **I accept the terms of the license agreement**, and then click **Next**.

16. A confirmation window displays when an older version of Security Manager is installed and can be upgraded.

    To continue with the upgrade, click **Yes**. The installation program displays a message indicating that the program is uninstalling Security Manager.

    To quit the upgrade, click **No**.

    Figure 2-24 Dialog box when upgrading the Security Manager

    This set up will perform a major upgrade of 'HP JetAdvantage Security Manager'. It is recommended that you do a complete backup of this product and its database before continuing. Do you want to continue?

17. Click **OK** at the reminder to upgrade the remote database.

    The installation program displays a message indicating that the program is uninstalling Security Manager.

18. When prompted, indicate whether to remove the license files.

    To retain the license files, click **No**.

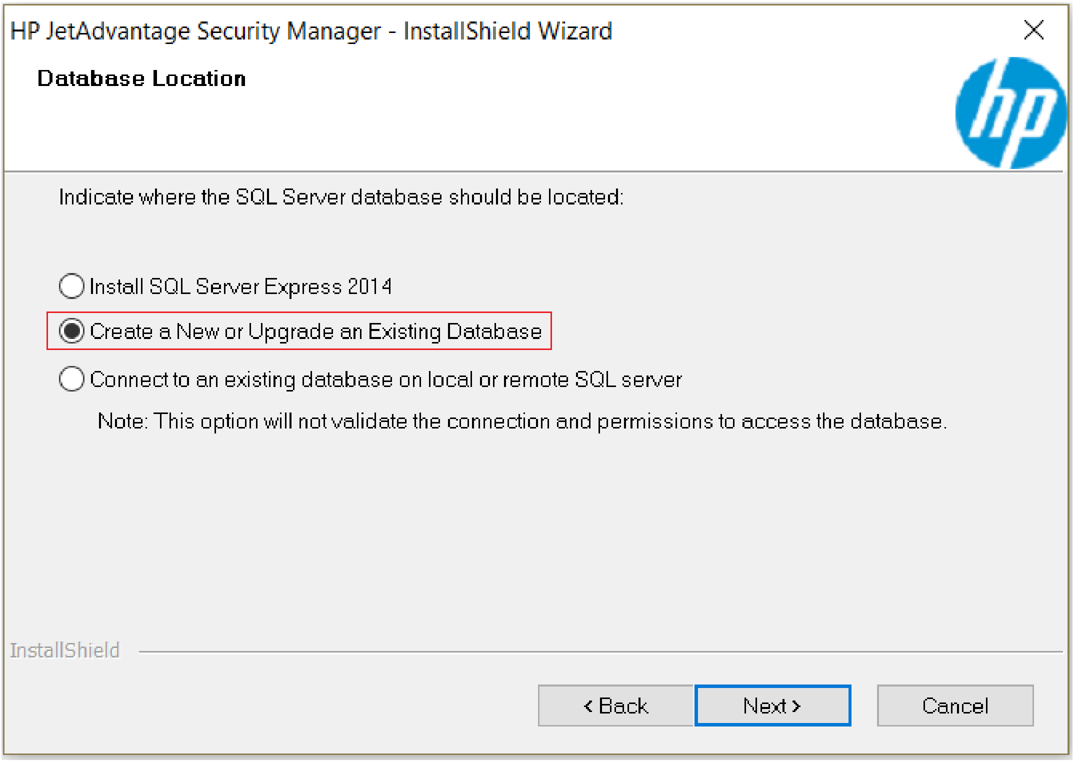
    -or-

    To remove the license files, click **Yes**. The license files must be reinstalled after the upgrade is completed.

19. On the **Database Location** window, select **Create a New or Upgrade an Existing database**, and then click **Next**.

NOTE: If the database was upgraded, then select **Connect to an existing database on local or remote SQL server** option.

Figure 2-25 Database Location: Create a New or Upgrade an Existing Database



HP JetAdvantage Security Manager - InstallShield Wizard

Database Location

Indicate where the SQL Server database should be located:

○ Install SQL Server Express 2014

● Create a New or Upgrade an Existing Database

○ Connect to an existing database on local or remote SQL server

Note: This option will not validate the connection and permissions to access the database.

20. On the **Select Database Server** window, enter the database server instance where the existing remote database resides, and then click **Next**.

    To enter the database server instance, use the format `<name of machine>\<name of database instance>`. For example, enter `MyComputer\SQLExpress`.

    NOTE: Security Manager installation will automatically detect the database server instance and the selected database name while upgrading to the latest Security Manager version.

    -or-

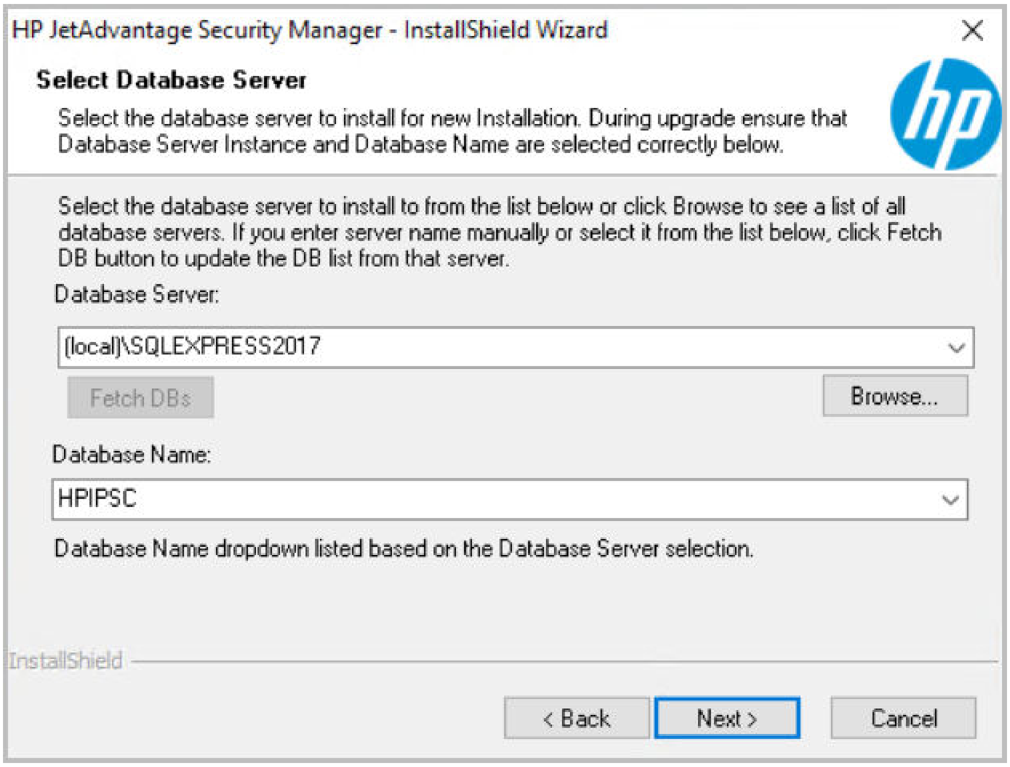
    Click **Browse**, locate and select the database server instance. When the **Database Name** displays, click **Next**.

    WARNING! **Do Not** click the **Fetch DBs** button when upgrading.

    NOTE: It is recommended not to modify the **Database Name** selection from the drop-down list when upgrading.

    NOTE: If the installation program cannot connect to the database, it displays an error. Verify that the account used to install the service has database connection privileges. For more information, see Verify Administrator account requirements on page 4.

    Figure 2-26 Connect to an existing database on local or remote SQL server



HP JetAdvantage Security Manager - InstallShield Wizard

Select Database Server

Select the database server to install for new Installation. During upgrade ensure that Database Server Instance and Database Name are selected correctly below.

Select the database server to install to from the list below or click Browse to see a list of all database servers. If you enter server name manually or select it from the list below, click Fetch DB button to update the DB list from that server.

Database Server: (local)\SQLEXPRESS2017

Database Name: HPIPSC

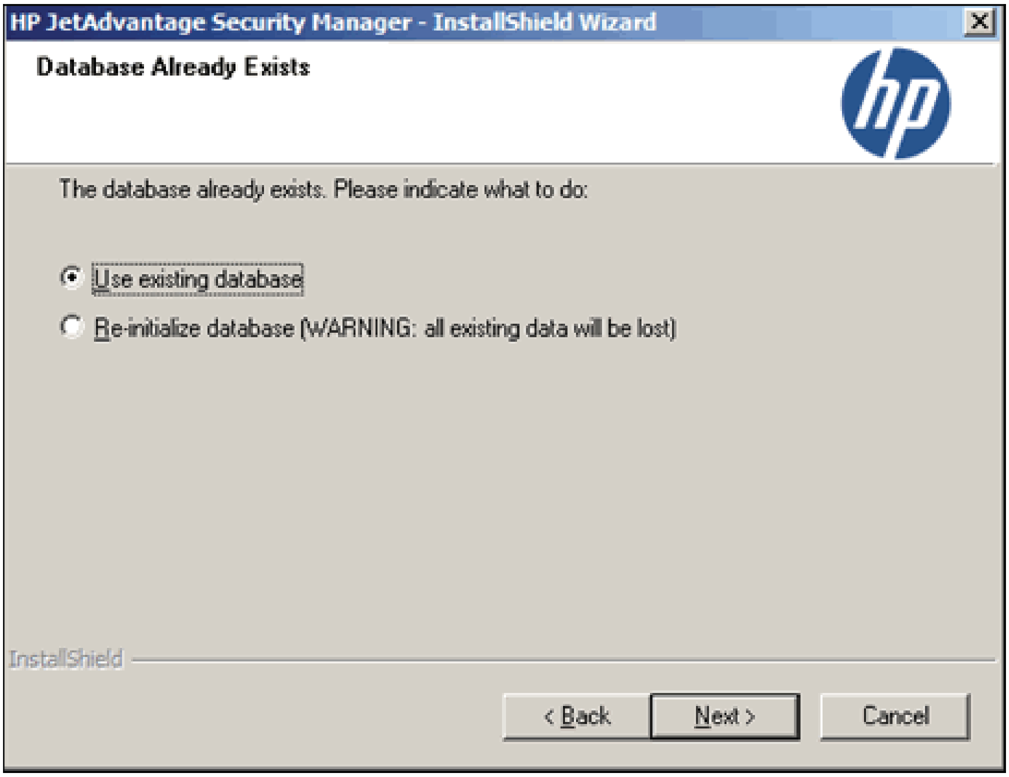
Database Name dropdown listed based on the Database Server selection.

21. If upgrading a database that already exists on the remote SQL server, the installation program displays the **Database Already Exists** window. Select the **Use the existing database** option.

NOTE: If the Windows user upgrading the database has DBO rights on the remote database, the database will be upgraded.

If the remote database had been manually updated, then this step will be the tasks to the upgraded remote database.

Figure 2-27 Options when Security Manager database exists



HP JetAdvantage Security Manager - InstallShield Wizard

Database Already Exists

The database already exists. Please indicate what to do:

● Use existing database

○ Re-initialize database (WARNING: all existing data will be lost)

22. In the **HP JetAdvantage Security Manager Security Settings** window, select a type of digital certificate for secure client communication, and then click **Next**.

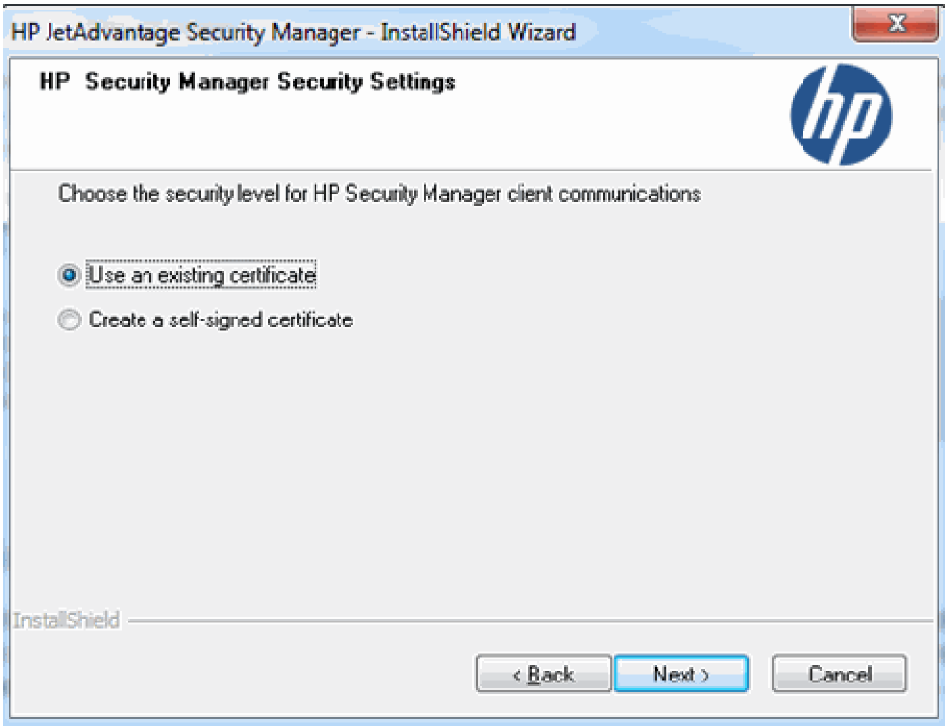
- **Use an existing certificate** - Select this option to allow HP Security Manager communicate via HTTPS protocol with a pre-existing certificate present in the certificate store. (In MMC, locate the **Certificates (Local Computer)**, and then open the **Personal** folder)

  OR

- **Create a self-signed certificate** - Select this option to allow HP Security Manager communicate via HTTPS protocol by creating a new self-signed certificate.

NOTE: Make sure that the system where HP Security Manager intends to install to is added to the domain and configured with correct DNS. After installation, this new certificate is valid for 5 years.

Figure 2-28 Options for Security Settings



HP JetAdvantage Security Manager - InstallShield Wizard

HP Security Manager Security Settings

Choose the security level for HP Security Manager client communications

● Use an existing certificate

○ Create a self-signed certificate

23. On the **Ready to Install the Program** window, click **Install** to continue the upgrade.

    -or-

    To modify the options, click **Back**.

    -or-

    To quit the upgrade, click **Cancel**.

Configure remote access to the Security Manager web application

The Security Manager web application must be configured to allow user access from a remote computer. By default, the web application allows remote access to all users who are members of the local Administrators group on the machine on which the Security Manager web application runs. All other users who require remote access must be added to the local group named HP JetAdvantage Security Manager, which the installation program creates, on the machine on which the Security Manager web application is installed.

NOTE: Use the following steps to add a user to the local group named HP JetAdvantage Security Manager:

1. Click **Start**, right-click **My Computer**, and then select **Manage**.
2. From the **System Tools** item, select **Local Users and Groups**, and then select **Groups**.
3. From the group name list, right-click **HP JetAdvantage Security Manager**, and then select **Add to Group**.
4. Click **Add**, and then enter the name of the account.
5. Click **OK** to save the changes.

For instructions on configuring the firewall for remote access to the Security Manager web application, see Firewall configuration for remote access on page 40.

Firewall configuration for remote access

If a firewall is installed on the computer on which the Security Manager web application runs and Security Manager is accessed from the web browser on a remote computer, the firewall must be set to allow access to the web application. The Security Manager web application configured during the installation listens on port 8002 and 7637, which must be opened in the firewall to allow remote access to the web application.

Configure database security for the existing Microsoft SQL Servers

If you use Microsoft SQL Server 2014 or SQL Server 2014 Express locally or remotely, the database must be configured to allow access by the Security Manager service.

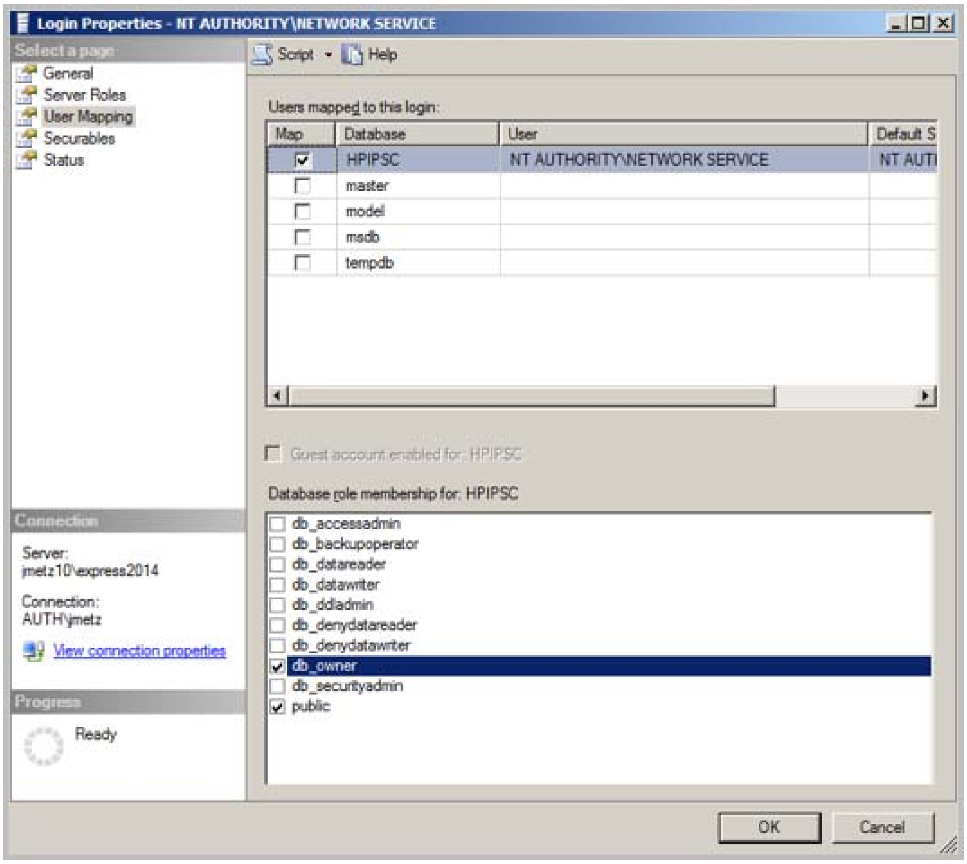
The Security Manager service runs as **NT AUTHORITY/NETWORK SERVICE**. When the service accesses the Security Manager database, it must have the correct credentials to access the Microsoft SQL Server 2014 or SQL Server 2014 Express database. Use **Microsoft SQL Server Management Studio** to add the service name and to connect to the database for users.

NOTE: Microsoft SQL Server Management Studio is a free tool available from Microsoft. The tool for Microsoft SQL Server 2014 or SQL Server 2014 Express can be obtained from the Microsoft download site.

1. Log on to the computer where the Microsoft SQL Server instance is installed.
2. To start Microsoft SQL Server Management Studio, click **Start**, and then select **All Programs**. Select **Microsoft SQL Server**, and then click **SQL Server Management Studio**.
3. Select the database instance where the Security Manager database is installed.
4. Expand the **Security** folder.
5. Right-click **Logins**, and then select **New Login**.
6. Enter the account name of **NT AUTHORITY\NETWORK SERVICE** in the **Login name** field.
7. From the **Select a page** panel, click **User Mapping**.

8. From the **Users mapped to this login** table, select the check box for **HPIPSC**

Figure 2-29 User mappings in HP JetAdvantage Security Manager



Server:
jmetz10\express2014

Connection:
AUTH\jmetz

View connection properties

Users mapped to this login:

Map	Database	User	Default S
☑	HPIPSC	NT AUTHORITY\NETWORK SERVICE	NT AUTI
□	master		
□	model		
□	msdb		
□	tempdb		

□ Guest account enabled for: HPIPSC

Database role membership for: HPIPSC

- □ db_accessadmin
- □ db_backupoperator
- □ db_datareader
- □ db_datawriter
- □ db_ddladmin
- □ db_denydatareader
- □ db_denydatawriter
- ☑ db_owner
- □ db_securityadmin
- ☑ public

9. From the **Database role membership for: HPIPSC** panel, select the check box for **db_owner**.

10. Click **OK** to save the changes and then exit.

11. Restart the Security Manager service to complete the permission change.

Configure remote database security

If the database was installed remotely from the Security Manager service, the database must be configured to allow access by the service.

The Security Manager service runs as **NT AUTHORITY/NETWORK SERVICE**. When the service accesses the Security Manager database across the network, it uses the service computer's credentials, which is an account named **<Domain Name>\<Computer Name>$**. The dollar symbol ($) symbol must be appended to the computer name. For the Security Manager service to access the database, use Microsoft SQL Server Management Studio to add the computer account to the logins for this database instance, add this account as a user for the database, and make this account an owner of the database.

NOTE: Microsoft SQL Server Management Studio Express is a free tool available from Microsoft. The tool for Microsoft SQL Server 2014 or Microsoft SQL Server 2014 Express can be obtained from the Microsoft download site.

In the following steps, the computer account is **AUTH\hpsmserver$**, where **AUTH** is the domain name, **hpsmserver** is the computer name, and the dollar symbol ($) is appended to the computer name.

1. Log on to the computer where the Microsoft SQL Server instance is installed.
2. To start Microsoft SQL Server Management Studio, click **Start**, and then select **All Programs**. Select **Microsoft SQL Server**, and then click **SQL Server Management Studio**.
3. Select the database instance where the Security Manager database is installed.
4. Expand the **Security** folder.
5. Right-click **Logins**, and then select **New Login**.
6. Enter the account name in the **Login name** field. In this example, the login name is **AUTH\hpsmserver$**.
7. From the **Select a page** panel, click **User Mapping**.
8. From the **Users mapped to this login** table, select the check box for **HPIPSC**.
9. From the **Database role membership for: HPIPSC** panel, select the check box for **db_owner**.
10. Click **OK** to save the changes and then exit.

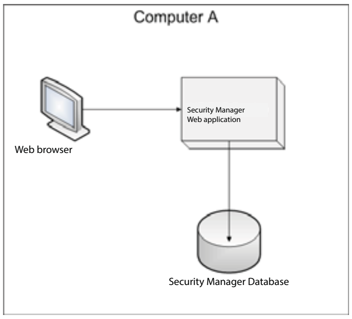
Uninstall the Security Manager system

Use one of the following sections to uninstall the Security Manager system:

NOTE: It is not necessary to stop the Security Manager service before running the uninstall program. The service is stopped as part of the process.

- Uninstall the web application and database from one computer
- Uninstall the web application from one computer and uninstall the database from another computer

Uninstall the web application and database from one computer

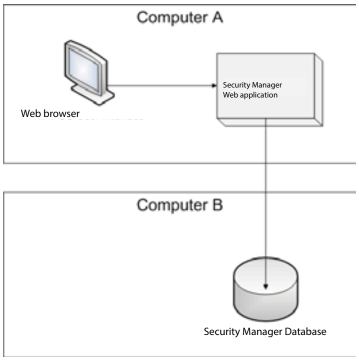


Use the following steps to uninstall Security Manager when the web application and database are installed on the same computer:

1. Log on to the computer where the Security Manager web application and database are installed.
2. Click **Start**, and then click **Control Panel**.
3. Click **Add or Remove Programs** or **Programs and Features**, depending on the operating system.
4. Select the entry for **HP JetAdvantage Security Manager**, and then click **Remove** or click **Uninstall**, depending on the operating system.
5. On the **Would you like to delete the HP JetAdvantage Security Manager Database?** confirmation window, click **Yes** to permanently remove the Security Manager information from the database.

   To save the information in the database, click **No**.
6. On the **Do you want to remove the license file?** confirmation window, Indicate whether or not the license file should be removed.

Uninstall the web application from one computer and uninstall the database from another computer



Use the following steps to uninstall the Security Manager when the web application is installed on one computer and the database is installed on another computer:

1. Log on to the computer where the Security Manager web application is installed (computer A in the figure).
2. Click **Start**, and then click **Control Panel**.
3. Click **Add or Remove Programs** or **Programs and Features**, depending on the operating system.
4. Select the entry for **HP JetAdvantage Security Manager**, and then click **Remove** or click **Uninstall**, depending on the operating system.
5. On the **Do you want to remove the license file?** confirmation window, indicate whether or not the license file should be removed.
6. Log on to the computer where the Security Manager database is installed (computer B in the figure).
7. Click **Start**, and then click **Control Panel**.
8. Click **Add or Remove Programs** or **Programs and Features**, depending on the operating system.

⚠ CAUTION: The uninstall program permanently removes the Security Manager information from the database. To save this information, verify that you have created a backup before continuing.

9. Select the entry for **HP JetAdvantage Security Manager**, and then click **Remove** or click **Uninstall**, depending on the operating system.

3 Solve problems

Use this section to solve typical installation problems.

“A computer restart is required. You must restart this computer before continuing with installation.”, displays when installing or uninstalling the MS installer file.

Cause	Solution
This message prompts when the MS installer detects files that need to be replaced are in use in the registry.	Do one of the following: Restart the workstation. OR Follow these steps to delete the PendingFileRenameOperations” key in the registry: 1. Go to the registry editor (regedit.exe). 2. In the left navigation pane, select the following keys: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control \Session Manager. 3. In the right navigation pane, right-click the “PendingFileRenameOperations” key, and then click **Delete**. 4. Close the registry editor.

“Installation of Security Manager failed.”, displays when attempting to uninstall.

Cause	Solution
The installation files might be corrupted.	The Microsoft Windows Installer CleanUp Utility might correct the uninstall failure.

“Service Not Running.”, displays when attempting to open Security Manager web application.

Cause	Solution
The Security Manager service might not be running.	1. Log on to the computer where the Security Manager web application runs. 2. Click **Start**, and then click **Control Panel**. 3. From the **Administrative Tools** folder, double-click **Services**. 4. Locate and select **HP JetAdvantage Security Manager** in the list, and then click **Start the service**. 5. Try restarting Security Manager. If this fails, see the following solution.
The Security Manager installation might be corrupt.	1. Click **Control Panel**, and then click **Add/Remove Programs**. 2. Right-click the **HP JetAdvantage Security Manager** entry, and then click **Repair**.
The Security Manager web application might not be running.	1. Log on to the computer where the Security Manager Web Application runs. 2. Click **Start**, and then click **Control Panel**. 3. Click **System and Security**, and the click **Administrative Tools**. 4. In the **Administrative Tools** window, double-click Internet Information Services (IIS) Manager. 5. Restart the Security Manager web application. If the application fails to start, check the Security Manager installation log and IIS logs.

Attempts to uninstall Security Manager might fail if the policy editor is open to an unsaved policy.

A Files in Use window is typically displayed. However, clicking OK does not resolve the issue.

Cause	Solution
The file is in use.	1. Exit the policy editor. 2. Exit the Security Manager system. 3. From the **Files in Use** window, click **OK** to continue with the uninstall.

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This section contains legal statements.

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