PlateSpin® Protect 11.2

Installation and Upgrade Guide

July 2017

NetIQ

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About This Guide and the Library

The *Installation and Upgrade Guide* provides detailed planning and installation information for the PlateSpin Protect software, as well as upgrade information.

Intended Audience

This document is intended for IT staff, such as data center administrators and operators, who use PlateSpin Protect in their ongoing workload protection projects.

Information in the Library

The library for this product is available in HTML and PDF formats on the PlateSpin Protect Documentation (https://www.netiq.com/documentation/platespin-protect/) website. In addition to the English language, online documentation is available in the Chinese Simplified, Chinese Traditional, French, German, Japanese, and Spanish languages.

The PlateSpin Protect library provides the following information resources:

Release Notes

Provides information about new features and enhancements in the release, as well as any known issues.

Installation and Upgrade Guide

Provides detailed planning and installation information for the software, as well as upgrade information.

User Guide

Provides conceptual information, an overview of the user interface, and step-by-step guidance for common tasks.

Additional Resources

We encourage you to use the following additional resources online:

- PlateSpin Protect Forum (https://forums.netiq.com/forumdisplay.php?59-Platespin-Protect): A web-based community of product users where you can discuss product functionality and advice with other product users.
- PlateSpin Protect Product page (https://www.netiq.com/products/protect/): A web-based product brochure that provides information about features, how to buy, technical specifications, frequently asked questions, and a variety of resources such as videos and white papers.
- NetIQ User Community (https://www.netiq.com/communities/): A web-based community with a variety of discussion topics.
- NetIQ Support Knowledgebase (https://www.netiq.com/support/kb/): A collection of in-depth technical articles.

- NetIQ Support Forums (https://forums.netiq.com/forum.php): A web location where product users can discuss NetIQ product functionality and advice with other product users.
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Contacting Documentation Support

Our goal is to provide documentation that meets your needs. The documentation for this product is available on the PlateSpin Protect Documentation (https://www.netiq.com/documentation/platespin-protect/) website in HTML and PDF formats.

If you have suggestions for documentation improvements, click **comment on this topic** at the bottom of any page in the HTML version of the documentation. You can also email Documentation-Feedback@netiq.com. We value your input and look forward to hearing from you.

1 Installing PlateSpin Protect

along with its feature extension modules, the ASP.NET web application framework, the Microsoft .NET Framework library and runtime, as well as a dedicated Microsoft SQL Server database instance.

- “Preparing to Install PlateSpin Protect” on page 7
- “Installing Prerequisite Software” on page 10
- “Installing PlateSpin Protect Software Components” on page 16
- “Post-Installation Tasks” on page 19

Preparing to Install PlateSpin Protect

For trouble-free installation and operation of PlateSpin Protect, you should familiarize with system requirements and take time to plan your installation.

- “System Requirements” on page 7
- “General Guidelines” on page 9

System Requirements

PlateSpin Server hosts must meet the system requirements in Table 1-1:

Table 1-1 *PlateSpin Server Host Requirements*

Requirement	Details
Operating System	For new installations, PlateSpin Protect supports any of the following operating systems, running on dedicated hardware or in a virtual machine: ◆ Windows Server 2012 R2 (64-bit) ◆ Windows Server 2008 R2 (64-bit) **NOTE:** You must activate your Windows operating system prior to installing PlateSpin Protect.
Processor	Minimum 1 GHz Recommended: multi-core, 2 GHz or higher
Memory (RAM)	Minimum 4 GB
Disk Space	Minimum 15 GB **NOTE:** Over time, space consumption will increase.

Requirement	Details
Database Server	A dedicated Microsoft SQL Server database instance, running one of the following supported versions of SQL Server: ◆ **New database server:** Microsoft SQL Server 2014 Express Edition database server is included in your PlateSpin Protect software distribution. You can install this software during the PlateSpin Protect installation on the same server, or you can install this software separately on a different server before you install the product. For more information, see "Installing Microsoft SQL Server Express Edition" on page 16. ◆ **Your existing database server:** You can use your existing (that is, already installed) Microsoft SQL Server database server to host the database instance. Your existing database server resides on a different server than the PlateSpin Server. Supported software versions are: ◆ Microsoft SQL Server 2014 ◆ Microsoft SQL Server 2012 Service Pack 2 ◆ Microsoft SQL Server 2008 R2 Service Pack 2 ◆ Microsoft SQL Server 2008 Service Pack 3 ◆ Microsoft SQL Server 2005 Service Pack 4 **NOTE:** Prior to installing the product, ensure that your existing SQL Server database server and named database instance meet the Database guidelines. For configuration information, see "Configuring Your Remote Microsoft SQL Server Database Server" on page 17.
Software Prerequisites	You must install the following components on the Windows server where you will install PlateSpin Protect: ◆ **For Windows Server 2012 R2 systems:** ◆ Microsoft .NET Framework 3.5 Service Pack 1 ◆ Microsoft .NET Framework 4.0 ◆ Web Server (IIS 8.0), running in 32-bit mode For more information, see "Installing Prerequisite Software on Windows Server 2012 R2 Systems" on page 10. ◆ **For Windows Server 2008 R2 systems:** ◆ Microsoft .NET Framework 3.5 Service Pack 1 ◆ Microsoft .NET Framework 4.0 ◆ Web Server (IIS 7.0), running in 32-bit mode For more information, see "Installing Prerequisite Software on Windows Server 2008 R2 Systems" on page 13.
National Language Support	In addition to the English language, PlateSpin Protect provides National Language Support (NLS) for installation and use on machines configured for the Chinese Simplified, Chinese Traditional, French, German, and Japanese languages. Localized online documentation is available in these languages, as well as in Spanish. To use the PlateSpin Protect Web Interface and integrated help in one of these languages, see Configuring Language Settings for International Versions of PlateSpin Protect.

General Guidelines

Follow the installation guidelines in Table 1-2 for trouble-free installation and operation of PlateSpin Protect.

Table 1-2 *Pre-Installation Checklist*

Guideline	Remarks
Dedicated Host	Install PlateSpin Protect on a dedicated physical machine or virtual machine. See also Co-location.
Credentials	Perform all installation procedures using an account with administrative privileges. Use the built-in Administrator account.
IP Address	Assign a static IP address to the PlateSpin Server host.
Co-location	Do not co-locate the PlateSpin Server with: ◆ Your domain controller ◆ Existing web servers with IIS applications ◆ A workload that you intend to protect by using the product ◆ Other PlateSpin software (PlateSpin Migrate and PlateSpin Recon)
Database	The *Microsoft SQL Server 2014 Express Edition* that is included with PlateSpin Protect Server cannot be installed on a domain controller, in accordance with Microsoft Developer Network recommendations. If you intend to use your existing Microsoft SQL Server database server (instead of the Microsoft SQL Server 2014 Express Edition included in your software distribution), ensure that your system uses a supported version of SQL Server. During the PlateSpin Protect software installation, you need to know the server name and name of the database instance. For more information about SQL Server settings and the firewall settings required for using a remote database server, see “Installing the Database Server” on page 16.
UAC	Disable the User Account Control (UAC) during the installation, removal, or upgrade.
Installation Workflow	Install the prerequisite software in the indicated order. Below is a high-level workflow for a typical PlateSpin Protect installation: 1. Supported operating system, followed by corresponding Windows Updates. 2. ASP.NET/IIS, followed by corresponding Windows Updates. a. Configure IIS to run in 32-bit mode. 3. SQL Server database, followed by applicable Microsoft updates. 4. PlateSpin Server.

Installing Prerequisite Software

This section provides information about installing the required Web Server (Internet Information Services (IIS)), ASP.NET, .NET Framework, and related software components. Because the packaging and distribution of these software components varies among different versions of the supported Windows Server platforms, procedures vary slightly. Use the indicated order of installation and setup.

- "Installing Prerequisite Software on Windows Server 2012 R2 Systems" on page 10
- "Installing Prerequisite Software on Windows Server 2008 R2 Systems" on page 13

Installing Prerequisite Software on Windows Server 2012 R2 Systems

Use the following procedure to install prerequisite software on the Microsoft Windows Server 2012 R2 servers where you plan to install PlateSpin Protect. Before you begin, ensure that you are familiar with the "System Requirements" on page 7 and "General Guidelines" on page 9.

To install required Microsoft software components:

1. Use the Local User Administrator (LUA) account to log in to your intended PlateSpin Server host.
2. Open Server Manager. Select **Start > All Programs > Administrative Tools > Server Manager**.

3 Use Server Manager to install Web Server (IIS) and other software required by PlateSpin Server:

3a In the Server Manager toolbar, select **Manage** > **Add Roles and Features**.

3b In the Add Roles and Features wizard, proceed to the Installation Type tab, then continue through the wizard:

Add Roles and Features Wizard	Action
1. Installation Type	Select **Role-based or feature-based installation**, then click **Next**.
2. Server Selection	Select your intended PlateSpin Server host, then click **Next**.
3. Server Roles	Select **Web Server (IIS)**, then click **Next**.
4. Pop-up prompt to **Add features that are required for Web Server (IIS)**	Select **Include management tools**, then click **Add Features.**
5. Features	Keep the default set of features for the Web Server and add other required features along with their sub-features as shown, then click **Next**. ❒ .NET Framework 3.5 Features (all installed) ◆ .NET Framework 3.5 (includes .NET 2.0 and 3.0) ◆ HTTP Activation ◆ Non-HTTP Activation ❒ .NET Framework 4.5 Features (all installed) ◆ .NET Framework 4.5 ◆ ASP.NET 4.5 ◆ WCF Services (5 of 5 installed) — HTTP Activation — Message Queuing (MSMQ) Activation — Named Pipe Activation — TCP Activation — TCP Port Sharing ❒ Windows Process Activation Service (all installed) ◆ Process Model ◆ .NET Environment ◆ Configuration APIs ❒ XPS Viewer
6. Web Server (IIS)	Read the information, then click **Next**.

Add Roles and Features Wizard	Action
7. Role Services	Keep the default set of role services for the Web Server and add other required role services along with their sub-role services as shown, then click **Next**. **Web Server (IIS) > Role Services (25 of 43 installed):** ❒ Web Server (19 of 34 installed) ◆ Common HTTP Features (4 of 6 installed) — Default Document — Directory Browsing — HTTP Errors — Static Content ◆ Health and Diagnostics (2 of 6 installed) — HTTP Logging — Request Monitor ◆ Performance (1 of 2 installed) — Static Content Compression ◆ Security (5 of 9 installed) — Requesting Filtering — Basic Authentication — IP and Domain Restrictions — URL Authorization — Windows Authentication ◆ Application Development (7 of 11 installed) — .NET Extensibility 3.5 — .NET Extensibility 4.5 — Application Initialization — ASP.NET 3.5 — ASP.NET 4.5 — ISAPI Extensions — ISAPI Filters ❒ Management Tools (6 of 7 installed) ◆ IIS Management Console ◆ IIS 6 Management Compatibility (4 of 4 installed) — IIS 6 Metabase Compatibility — IIS 6 Management Console — IIS 6 Scripting Tools — IIS 6 WMI Compatibility ◆ IIS Management Scripts and Tools
8. Confirmation	Review the roles, role services, and features to be installed, then click **Install**.

3c Wait for the installation to complete, then close the Add Roles and Features wizard.

4 Use IIS Manager to configure IIS to run in 32-bit mode:

4a In the Server Manager toolbar, select **Tools** > **Internet Information Services (IIS) Manager**.

You can alternatively open the IIS Manager from the Windows taskbar: select **Server Manager > Administrative Tools > Internet Information Services (IIS) Manager**.

4b In the Connections pane, expand the server name, then click **Application Pools** to display the list of available application pools in the center Sites pane.

4c In the list, right-click **DefaultAppPool**, then click **Advanced Settings**.

4d In the Advanced Settings dialog, set **Enable 32-bit Applications** to **True**, then click **OK**.

4e In the Actions pane on the right, click **Set application pool defaults**.

4f In the Application Pools Defaults dialog, set **Enable 32-bit Applications** to **True**, then click **OK**.

4g Restart the IIS service. Select the IIS server name in the Connections pane, then click **Restart** under the Actions pane.

4h Exit IIS Manager.

5 Exit Server Manager.

Installing Prerequisite Software on Windows Server 2008 R2 Systems

Use the following procedure to install prerequisite software on the Microsoft Windows Server 2008 R2 servers where you plan to install PlateSpin Protect. Before you begin, ensure that you are familiar with the “System Requirements” on page 7 and “General Guidelines” on page 9.

To install required Microsoft software components:

1 Use the Local User Administrator (LUA) account to log in to your intended PlateSpin Server host.

2 Open Server Manager. Select **Start > All Programs > Administrative Tools > Server Manager**.

3 Use Server Manager to install Web Server (IIS) with components required by PlateSpin Server:

3a In Server Manager, select **Roles** in the left pane, then click **Add Roles** in the Roles pane.

3b In the Add Roles wizard, proceed to the Server Roles tab, then continue through the wizard:

Add Roles Wizard	Action
1. Server Roles	Select **Web Server (IIS)**, then click **Next**.
2. Web Server (IIS)	Read the information, then click **Next**.
3. Role Services	Keep the default set of role services for the Web Server and add other required role services along with their sub-role services as shown, then click **Next**. **Web Server (IIS) > Role Services:** ❒ Web Server ◆ Common HTTP Features (all installed) — Static Content — Default Document — Directory Browsing — HTTP Errors — HTTP Redirection — WebDAV Publishing ◆ Application Development (4 of 7 installed) — ASP .NET — .NET Extensibility — ISAPI Extensions — ISAPI Filters ◆ Health and Diagnostics (2 of 6 installed) — HTTP Logging — Request Monitor ◆ Security (all installed) — Basic Authentication — Windows Authentication — Digest Authentication — Client Certificate Mapping — IIS Client Certificate Mapping — URL Authorization — Requesting Filtering — IP and Domain Restrictions ◆ Performance (1 of 2 installed) — Static Content Compression ❒ Management Tools (all installed) ◆ IIS Management Console ◆ IIS Management Script and Tools ◆ Management Service ◆ IIS 6 Management Compatibility (all installed) — IIS 6 Metabase Compatibility — IIS 6 WMI Compatibility — IIS 6 Scripting Tools — IIS 6 Management Console

Add Roles Wizard	Action
4. Confirmation	Review the roles and role services to be installed, then click **Install**.

3c Wait for the installation to complete, then close the Add Roles wizard.

4 Use Server Manager to install additional software required by PlateSpin Server:

4a In Server Manager, select **Features** in the left pane, then click **Add Features** in the Features pane.

4b In the Add Features wizard, proceed to the Features tab, then continue through the wizard:

Add Features Wizard	Action
1. Features	Select the following required features and their sub-features as shown, then click **Next**. ❒ .NET Framework (all installed) ◆ .NET Framework 3.5.1 ◆ WCF Activation — HTTP Activation — Non-HTTP Activation ❒ Windows Process Activation Service (all installed) ◆ Process Model ◆ .NET Environment ◆ Configuration APIs ❒ XPS Viewer
2. Confirmation	Review the features to be installed, then click **Install**.

4c Wait for the installation to complete, then close the Add Features wizard.

5 Exit Server Manager.

6 Download and install Microsoft .NET Framework 4.5.2 (https://www.microsoft.com/en-us/download/details.aspx?id=42642) on your intended PlateSpin Server host.

Wait for the installation to complete, then continue.

7 Use IIS Manager to configure IIS to run in 32-bit mode:

7a Open the IIS Manager. On the Windows taskbar, select **Start > Administrative Tools > Internet Information Services (IIS) Manager**.

7b In the Connections pane, expand the server name, then click **Application Pools** to display the list of available application pools in the center pane.

7c In the list, right-click **DefaultAppPool**, then click **Advanced Settings**.

7d In the Advanced Settings dialog, set **Enable 32-bit Applications** to **True**, then click **OK**.

7e In the Actions pane on the right, click **Set application pool defaults**.

7f In the Application Pools Defaults dialog, set **Enable 32-bit Applications** to **True**, then click **OK**.

7g Restart the IIS service. Select the IIS server name in the Connections pane, then click **Restart** under the Actions pane.

7h Exit IIS Manager.

Installing PlateSpin Protect Software Components

This section provides information on installing the required components included in the PlateSpin Protect software. In order to use a remote Microsoft SQL Server database server and environment (instead of installing the SQL Server software included with the product on the same server), you must configure settings for the SQL server and configure your environment to allow the remote connection.

- "Starting the PlateSpin Protect Installation Launcher" on page 16
- "Installing the Database Server" on page 16
- "Installing the PlateSpin Server" on page 18

Starting the PlateSpin Protect Installation Launcher

This section provides information about installing PlateSpin Protect software after you ensure that the intended host has been prepared with the required prerequisites.

1. From NetIQ Downloads (https://dl.netiq.com), download the `PlateSpinProtectSetup-11.2.0.xxxx.exe` installation program and save it on your intended PlateSpin Server host.
2. Run the installation program, specify a location for the temporary setup files, then click **Next**.

   The installation program extracts the required files and opens the Installation Launcher window.

   If the installation program detects an existing local installation of SQL Server, it disables the corresponding **Install SQL Server Express** option.

   If you intend to use the Microsoft SQL Server Express Edition distributed with PlateSpin Protect, install it first. For more information, see "Installing Microsoft SQL Server Express Edition" on page 16.

   If you intend to use an existing Microsoft SQL Server database server, skip the database software installation. Configure SQL Server settings and your environment as described in "Configuring Your Remote Microsoft SQL Server Database Server" on page 17 before you install the product.

Installing the Database Server

Use one of the following methods to set up the database server before you install PlateSpin Protect:

- "Installing Microsoft SQL Server Express Edition" on page 16
- "Configuring Your Remote Microsoft SQL Server Database Server" on page 17

Installing Microsoft SQL Server Express Edition

If you do not have an existing Microsoft SQL Server database server, you can install the Microsoft SQL Server Express Edition included in your PlateSpin Protect software distribution.

NOTE: The Microsoft SQL Server Express Edition included with PlateSpin Protect Server cannot be installed on a domain controller in accordance with Microsoft Developer Network recommendations (http://msdn.microsoft.com/en-us/library/ms143506%28v=sql.120%29.aspx#DC_support).

To install Microsoft SQL Server Express:

1. On your intended database server host, start the Installation Launcher.

See “Starting the PlateSpin Protect Installation Launcher” on page 16.

2 Click **Install SQL Server Express** and follow the on-screen instructions.

The program installs a database server and the database instance required for the operation of PlateSpin Protect.

3 (Conditional) If your SQL Server database server is on a separate server than the one you plan to use for the PlateSpin Server, configure the settings in your environment to allow the remote connection. See “Configuring Your Remote Microsoft SQL Server Database Server” on page 17.

Configuring Your Remote Microsoft SQL Server Database Server

In order for your existing Microsoft SQL Server installation to function properly, PlateSpin Protect requires that you configure specific settings in your environment before you install the product. These settings allow the remote connection between your SQL Server and PlateSpin Server.

To prepare your existing SQL server:

1 Ensure that your database server is running a supported version of Microsoft SQL Server. See “Database Server” on page 8.

2 Ensure that you have a dedicated, named database instance to use with PlateSpin Protect. You need the database server name and database instance name during the product installation.

NOTE: You can use the same Microsoft SQL Server database server to host database instances for multiple PlateSpin Protect an PlateSpin Migrate servers. Each database instance must be uniquely named and configured separately for its PlateSpin Server.

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3. Ensure that you configure Microsoft SQL Server to allow both TCP/IP and Named Pipe connections.

4 (Conditional) If you plan to use Windows Authentication to access the Microsoft SQL Server database, you must configure the following in Active Directory:

- You must add the Microsoft SQL Server database server to the domain.
- You need two domain user accounts for the PlateSpin Protect installation.
  - **A Domain user with the `sysadmin` role set:** This user with SQL Admin rights is required to create databases, tables, and other schema objects.
  - **PlateSpin Service user:** The service user can be a low-privileged domain user in the domain. However, the service user must be a local administrator on the PlateSpin Protect Server and should be granted that permission prior to the installation.

    If the Windows user’s password changes, you must update the password for the PlateSpin Service user and for the IIS App Pool. Consider using a Windows user whose password never expires to avoid the situation.

NOTE: If you use Windows Authentication, you must log in as the domain user with SQL Admin rights when you upgrade or update your PlateSpin Server.

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5 Open the following ports on the firewall to support authentication to the SQL Server:

- **Ports 49152-65535/TCP:** Allow traffic for RPC for LSA, SAM, Netlogon.
- **Port 1433/TCP:** Allow traffic for Microsoft SQL Server.
- **Custom ports:** If you configure SQL Server to use a custom TCP port, you must open that port on the firewall.

NOTE: If you do not use dynamic ports, you must specify the dedicated port in the **Database Server** field.

6 (Conditional) If you want to use dedicated ports with PlateSpin Protect, you must open the ports on the firewall:

6a On the database server, determine which ports need to be opened:

6a1 In the SQL Server Configuration Manager, select **Protocols for SQLExpress > TCP/IP**, then right-click and select **Properties**.

6a2 In the dialog, select the **IP Addresses** tab.

6a3 Under **IPAll** (or under the desired protocol), if **TCP Port** or **TCP Dynamic Ports** is set to any value other than 0, open the specified ports on the firewall. These are the ports you use to connect to the SQL Server.

For example, if the **TCP Dynamic Ports** field is set to 60664, and the **TCP Port** field is set to 1555, then you must enable Port 60664 and 1555 in the firewall rules on the SQL server.

6b Open the ports on the firewall.

NOTE: If you have a value set for dynamic ports, you may not see your server in the list of SQL servers when you click **Browse**. In this case, you must specify the server manually in the **Database Server** input field of the PlateSpin Protect installation.

For example, if your server name is `MYSQLSERVER`, the database instance name `SQLEXPRESS`, and the dedicated port set for the dynamic port is `60664`, you type the following text, and then select the desired authentication type:

```
MYSQLSERVER\SQLEXPRESS,60664
```

You must open the ports on the firewall.

Installing the PlateSpin Server

1 Ensure that your intended PlateSpin Server host meets the minimum system requirements.

See “System Requirements” on page 7.

2 Ensure that your intended PlateSpin Server host meets the recommended guidelines.

See “General Guidelines” on page 9.

3 Ensure that your intended PlateSpin Server host has the necessary prerequisite software installed.

See “Installing Prerequisite Software” on page 10.

4 Ensure that your intended PlateSpin Server host has the necessary database server installed and configured.

See “Installing the Database Server” on page 16.

5 On your intended PlateSpin Server host, start the Installation Launcher.

See “Starting the PlateSpin Protect Installation Launcher” on page 16.

6 In the PlateSpin Protect Installation Launcher, click **Install PlateSpin Server** and follow the on-screen instructions.

The program starts the installation process and prompts you to accept the PlateSpin Protect software license agreement.

You must accept the software license agreement before installing the product.

7 Select the **I accept the terms in the license agreement** option, then click **Next**.

8 Specify a database server and database instance. Do one of the following:

- If you are using the database server included in your PlateSpin Protect software distribution installed locally (the default option), leave the default selection `(local)\PLATESPINDB` in the drop-down list and leave the default `sa` credentials.

  If you subsequently move your PlateSpin Protect database instance or change your SQL Server password, you must reset the PlateSpin Protect database connection settings. For more information, see Knowledgebase Article 7970523 (https://www.netiq.com/support/kb/doc.php?id=7970523).

- If you are using a remote database server, click **Browse** to select from a list of available database servers in the network. Specify the database in the following format:
  - **Single-instance SQL Server installations:** *database_server*
  - **Multiple-instance SQL Server installations:** *database_server**database_instance* (specify the instance name)

9 Specify your database credentials for the specified database server, then click **Validate Server** to validate them.

(The default settings are **SQL Server:** `(local)PLATESPINDB`) and **SQL Logon:** `sa`.)

10 Click **Next** and verify your **SQL Instance** and **SQL Logon** selections.

11 Click **Next**.

The installation program prompts you specify whether you want to allow HTTP or HTTPS:

If you require unsecured connections (HTTP), select the **Allow unsecured connections (HTTP)** option; if you require secured connections (HTTPS), leave the option deselected (default).

If your IIS server has a signed SSL certificate, the default communication protocol will be HTTPS; if not, your browser will display a warning about an “untrusted connection.” This is normal. For information on how to proceed, see your browser documentation.

12 Click **Next**, verify the installation settings, click **Install**, and follow the on-screen instructions.

The installation program installs the PlateSpin Server software and prepares it to run.

NOTE: This process might take several minutes to complete.

Post-Installation Tasks

After completing the installation of the PlateSpin Server:

- Start the PlateSpin Protect Web Interface.See “Launching the PlateSpin Protect Web Interface” in your *User Guide*.
- License your product and configure your environment in preparation for workload protection. See “Activating Your Product License” in your *User Guide*.
- Familiarize yourself with the PlateSpin Protect Web Interface. See “Up and Running” in your *User Guide*.
- (Optional; for international versions) Set up PlateSpin Protect and your browser for use in a specific supported language. See “Configuring Language Settings for International Versions of PlateSpin Protect” in your *User Guide*.
- (Optional) Set up appropriate role-based access settings as required by your organization. See “Configuring User Authorization and Authentication” in your **User Guide**.

- Configure SMTP settings and add email notification recipients. See “Configuring Automatic Email Notifications of Events and Reports” in your **User Guide**.
- Familiarize yourself with the workload protection life cycle. See “Basic Workflow for Workload Protection and Recovery” in your *User Guide*.

2 Upgrading PlateSpin Protect

To upgrade your PlateSpin Server to PlateSpin Protect 11.2, you must have an existing installation of any of the following versions of the product, with or without hotfixes or field patches applied:

- PlateSpin Protect 11.0.1
- PlateSpin Protect 11.1

Other direct updates are not supported.

NOTE: For earlier versions of PlateSpin Protect, you must first upgrade to a version listed above in order to upgrade to version 11.2. For information about how to update your PlateSpin Server, see "Upgrading PlateSpin Protect" in the *PlateSpin Protect 11.0.1 Installation and Upgrade Guide* (https://www.netiq.com/documentation/platespin_protect_11/protect_install/).

- "Before You Upgrade PlateSpin Protect" on page 21
- "Upgrade Procedure" on page 22
- "Post-Upgrade Tasks" on page 23

Before You Upgrade PlateSpin Protect

Before you upgrade the PlateSpin Server software to PlateSpin Protect 11.2, ensure that you prepare your PlateSpin Servers and workload environments to meet the following prerequisites:

- ❒ (Conditional) Ensure that your VM containers are running a supported version of VMware ESXi and that you have a paid license for them. For more information, see "Supported VM Containers" in the *PlateSpin Protect User Guide*.
- ❒ Pause the replication schedules for all protected workloads, and ensure that no replications are running. See "Pausing the Replication Schedule" on page 21.
- ❒ Make a record of any customized `.config` parameters controlling the server's default behavior. You will need to restore these settings after the upgrade.
- ❒ Back up your database files. See "Backing Up Your Database Files" on page 22.

Pausing the Replication Schedule

Before you attempt to upgrade PlateSpin Protect, use the following procedure to pause the replication schedules for the workloads protected by the PlateSpin Server and ensure that there are no running replications. You can wait for the in-progress replications to complete gracefully, or abort them.

1. From the PlateSpin Protect Web Interface, click **Workloads**.
2. On the Workloads page, click **Select All**, click **Pause Schedule**, and then click **Execute** to initiate a pause for all scheduled replications.
3. On the Workloads page, ensure that the Schedule state of protected workloads is **Paused**.

4 On the Workloads page, ensure that the Replication Status of each of the protected workloads is **Idle**. Wait for any replications that are underway to complete, or abort the running operations.

   If you do not perform this task before the upgrade, the upgrade software will automatically detect the running jobs before it executes the software upgrade, and will prompt you to perform the task before you continue. You can proceed with the upgrade process only when each workload's Replication Status is **Idle**.

Backing Up Your Database Files

Use the following procedure to manually back up the Microsoft SQL Server database file that resides on the same server as PlateSpin Protect. You can use the backup file if you need to roll back.

1 On your server host, stop Microsoft SQL services:

   1a On the **Start** menu, click **Run**, type `services.msc`, then click **OK**.

   1b In the Services window, right-click the SQL Server items, then select **Stop**.

2 Copy all `*.mdf` and `*.ldf` files to a location outside the product installation directory. The default location of these files is:

   `\Program Files\PlateSpin Protect Server\Database`

3 Restart MS SQL services that you stopped in Step 1.

NOTE: This procedure assumes that your Protect database is installed on the same server with your PlateSpin Protect Server. Steps for backing up an external SQL server are similar, although the paths to the `*.mdf` and `*.ldf` files are specific to your SQL server.

Upgrade Procedure

During the upgrade process, the installation program automatically exports and then re-imports data from your previous installation.

To upgrade your PlateSpin Protect product:

1 Prepare for the software upgrade by performing the tasks in "Before You Upgrade PlateSpin Protect" on page 21.

2 Run the PlateSpin Protect setup executable as the Administrator user, then follow the on-screen instructions.

   Ensure that you select the **Save data** option when you are prompted during the server installation.

   NOTE: If replication jobs are still running, the validation might launch the Running Jobs Detected dialog. This prompt might also occur if some jobs were aborted and the condition is not correctly detected. You must wait for all operations to complete, or abort the running operations. After each workload's Replication Status is **Idle**, in the installation dialog, select **Yes - Proceed with installation**, then click **Next**.

   ---

3 Verify that the PlateSpin Protect software was upgraded to version 11.2:

   3a Log in to the PlateSpin Protect Web Interface.

If you cannot access the log in, the upgrade might have failed. Verify that the PlateSpin Server host is up, the PlateSpin Server running, and the network connections are working, then try again to log in. If you still cannot access the login, the upgrade process failed. Jump to Step 5.

3b Click **About** to view the version number. On the About page, the **Software Version** should be `11.2.0.xxxx`, where `xxxx` represents the build number.

If the version number displays the earlier version, it could be a browser cache issue. Clear the browser cache, close and restart the browser, then try again. If the version is still old, the upgrade failed. Jump to Step 5.

4 Verify that the protected workload data was re-imported successfully after the upgrade. In the PlateSpin Forge Web Interface, click **Workloads**, then visually confirm that the expected workloads are present.

If the protected workloads are not present, part or all of the upgrade process failed.

In some situations, the installation program might fail to automatically re-import data that it exports during the upgrade process. If this happens, use the `ImportExportAll.bat` utility to recover this data from the following directory on your server host:

- **Windows Server 2012 R2 Systems:** `\ProgramData\PlateSpin`

  This folder is hidden by default.

- **Windows Server 2008 Systems:** `\ProgramData\PlateSpin`

  This folder is hidden by default.

- **Windows Server 2003 Systems:** `\Documents and Settings\All Users\Application Data\PlateSpin`

In order to import or export when you use Windows Authentication for database access, the following conditions must be met:

1. The user must be logged in as the domain user with SQL Admin rights to access the database. This user is specified during the installation. See Step 4 in “Configuring Your Remote Microsoft SQL Server Database Server” on page 17.
2. As is required by the installation, the domain user with SQL Admin rights to access the database must be a member of the local Administrators group.
3. The process that runs the `ImportExportAll.bat` utility must have elevated privileges. This is most easily accomplished by starting a command window using the **Run as administrator** context menu option.

5 If the software upgrade failed according to the tests in Step 3, or if you were unable to re-import the data in Step 4, then try the upgrade again.

6 After the upgrade has successfully completed, continue with “Post-Upgrade Tasks” on page 23.

Post-Upgrade Tasks

After you upgrade the PlateSpin Protect software, you must perform the following tasks to resume normal operations of the PlateSpin Server:

1 Log in to the PlateSpin Protect Web Interface.

2 Click **Workloads**, then check the Workloads page for any paused replication schedules. In particular, look for *Tasks* (special workload protection events with optional commands) generated for automatically upgrading protection contracts that were using a legacy block-based component from earlier versions of the product. This requires a reboot of the protected workload.

3 Reapply the required `.config` parameters in the new `.config` files.

   See “Configuring PlateSpin Server Behavior through XML Configuration Parameters” in your *User Guide*.

4 Verify that the upgraded PlateSpin Server has a pre-compiled `blkwatch` driver for your workloads. See Linux Distributions Supported by Protect in your *User Guide*.

   If a pre-compiled driver is not available, you can create a custom `blkwatch` driver by following the steps found in the Knowledgebase Article 7005873 (https://www.netiq.com/support/kb/doc.php?id=7005873).

5 From the PlateSpin Protect Web Interface, click **Workloads**, click **Select All**, click **Resume Schedule**, then click **Execute** to resume all scheduled replications.

6 Verify that your PlateSpin Server and replications are working properly.

A Documentation Updates

This section contains information on documentation content changes that were made in this *Installation and Upgrade Guide* after the initial release of PlateSpin Protect 11.2.

NOTE: This updated information does not appear in the localized versions of the *Installation and Upgrade Guide*.

- "July 2017" on page 25
- "February 2016" on page 25
- "September 2015" on page 25

July 2017

Location	Update
"Installing Prerequisite Software" on page 10	Updated procedures for clarity.

February 2016

Location	Update
Various	Fixed broken links.

September 2015

Location	Update
"Configuring Your Remote Microsoft SQL Server Database Server" on page 17	**NOTE:** If you use Windows Authentication, you must log in as the domain user with SQL Admin rights when you upgrade or update your PlateSpin Server.
"Upgrade Procedure" on page 22	Added a link to information about the Domain User for SQL that was set up during the installation.