

Installation and Upgrade

Novell® PlateSpin® Protect

10

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About This Guide

This guide provides information about installing or upgrading your PlateSpin Protect product.

- ♦ [Chapter 1, “Installing PlateSpin Protect,” on page 9](#)
- ♦ [Chapter 2, “Upgrading PlateSpin Protect,” on page 17](#)

Audience

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

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation, or submit your comments through the [Novell Documentation Feedback site \(http://www.novell.com/documentation/feedback.html\)](http://www.novell.com/documentation/feedback.html).

Additional Documentation

This text is part of the PlateSpin Protect documentation set. For a complete list of publications supporting this release, visit the product’s Online Documentation Web Site:

[PlateSpin Protect 10 online documentation \(http://www.novell.com/documentation/platespin_protect_10\)](http://www.novell.com/documentation/platespin_protect_10)

Documentation Updates

For the most recent version of this text, visit the product’s Online Documentation Web site (see [Additional Documentation](#)).

Additional Resources

We encourage you to use the following additional resources on the Web:

- ♦ [Novell User Forum \(http://forums.novell.com/\)](http://forums.novell.com/)
- ♦ [Novell Knowledge Base \(http://www.novell.com/support/\)](http://www.novell.com/support/)

Technical Support

- ♦ Telephone (North America): +1-877-528-3774 (1 87 PlateSpin)
- ♦ Telephone (global): +1-416-203-4799
- ♦ E-mail: support@platespin.com

You can also visit the [PlateSpin Technical Support Web site \(http://www.platespin.com/support/\)](http://www.platespin.com/support/).

Installing PlateSpin Protect

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This section provides information about installing PlateSpin Protect 10. For information about upgrading PlateSpin protect from previous versions, see [Chapter 2, “Upgrading PlateSpin Protect,” on page 17](#).

- ♦ [Section 1.1, “Installation Overview,” on page 9](#)
- ♦ [Section 1.2, “System Requirements,” on page 9](#)
- ♦ [Section 1.3, “Installation Prerequisites for PlateSpin Protect Server Hosts,” on page 11](#)
- ♦ [Section 1.4, “Installing PlateSpin Protect Software Components,” on page 13](#)

1.1 Installation Overview

A typical installation of PlateSpin Protect requires the following software components:

- ♦ **A database server:** PlateSpin Protect works with Microsoft SQL Server 2005. If you do not have a Microsoft SQL Server 2005 database server, you can use the Microsoft SQL Server 2005 Express Edition database server included with your PlateSpin Protect distribution.
- ♦ **PlateSpin Protect Server:** The runtime execution engine underlying PlateSpin Protect.

You can install both components by using the PlateSpin Protect installation program (PlateSpinProtectSetup-10.x.x.x.x.x.exe).

The two components can be either collocated on a single host or installed on separate hosts.

1.2 System Requirements

- ♦ [Section 1.2.1, “System Requirements for PlateSpin Protect Server Hosts,” on page 9](#)
- ♦ [Section 1.2.2, “Enabling Support for FIPS-Compliant Data Encryption Algorithms \(Optional\),” on page 10](#)

1.2.1 System Requirements for PlateSpin Protect Server Hosts

PlateSpin Protect Server is the runtime execution engine underlying the PlateSpin Protect product. For trouble-free operation of the PlateSpin Protect Server, you should install it on a dedicated physical or virtual machine. Specifically, do not install the PlateSpin Protect Server on a machine that is:

- ♦ Your domain controller host
- ♦ A workload that you might need to protect by using the product

It is generally a good practice to install PlateSpin Protect on a host with a static IP address. If you change the host’s IP address after installing the product, restart the PlateSpin Protect Server. See [“Restarting the PlateSpin Protect Server to Apply System Changes”](#) in your *Configuration Guide*.

The following topics provide additional information about installation prerequisites for PlateSpin Protect Server hosts.

PlateSpin Protect Server hosts must meet the following system requirements:

Table 1-1 *PlateSpin Protect Server Host Requirements*

Requirement	Details
Operating System	Any of the following, running on dedicated hardware or in a virtual machine: <ul style="list-style-type: none">♦ Microsoft Windows Server 2008 (Standard and Enterprise editions)♦ Microsoft Windows Server 2003 (SP0, SP1, SP2), English, French, or German versions♦ Microsoft Windows Server 2003 R2
Processor	750 Mhz or higher Pentium compatible CPU (1 GHz recommended)
Memory	Minimum 512 MB RAM (2 GB recommended)
Disk Space	Minimum 10 GB Additional space might be necessary if you plan to use the same system as an image server. The amount of additional space depends on the number and size of workload images that you intend to store on a given image server.
Database Server	One of the following: <ul style="list-style-type: none">♦ Microsoft SQL Server 2005 Express Edition, included in your software distribution♦ Existing local or remote Microsoft SQL Server 2005 database server
Windows Software Components	For Windows Server 2003 systems: <ul style="list-style-type: none">♦ Microsoft IIS 5.0 and later (with ASP.NET)♦ Microsoft .NET Framework 3.5 SP1. For more details, see “Prerequisites for Windows Server 2003 Systems” on page 11. For Windows Server 2008 systems: <ul style="list-style-type: none">♦ Microsoft .NET Framework 3.5 SP1.♦ Web Server (IIS 7.0) For more details, see “Prerequisites for Windows Server 2008 Systems” on page 12.

1.2.2 Enabling Support for FIPS-Compliant Data Encryption Algorithms (Optional)

PlateSpin Protect supports data encryption algorithms that are compliant with FIPS (Federal Information Processing Standards, Publication 140-2).

If compliance with FIPS is required, it must be enabled on the intended PlateSpin Protect Server host prior to the installation of the PlateSpin Protect Server. This is because PlateSpin Protect runs in FIPS-compliant mode only if it detects that its host operating system is running in FIPS-compliant mode.

NOTE: FIPS-compliant mode has a performance impact and might slow down the data transfer rate up to 30%.

To enable FIPS-compliant algorithms:

- 1** On your PlateSpin Protect Server host, install the Microsoft .NET Framework security update [KB928365 released on July 10 2007 \(http://support.microsoft.com/kb/928365\)](http://support.microsoft.com/kb/928365).
- 2** Enable FIPS-compliant algorithms in the security options of your PlateSpin Protect Server host's local security policies:
 - 2a** Run `secpol.msc` and browse to *Local Policies > Security Options*.
 - 2b** Enable the *System cryptography: Use FIPS compliant algorithms for encryption* security option.
- 3** Configure ASP.NET for FIPS support:
 - 3a** Access the `machine.config` file located in the following directory of your PlateSpin Protect Server host:

```
..Windows\Microsoft.Net\Framework\vX.X.XXXXX\Config
```
 - 3b** Add the following under the `<system.web>` element:

```
<machineKey validationKey="AutoGenerate, IsolateApps"
decryptionKey="AutoGenerate, IsolateApps" validation="3DES"
decryption="3DES"/>
```
- 4** Save the `machine.config` file.

1.3 Installation Prerequisites for PlateSpin Protect Server Hosts

- ♦ [Section 1.3.1, “Prerequisites for Windows Server 2003 Systems,” on page 11](#)
- ♦ [Section 1.3.2, “Prerequisites for Windows Server 2008 Systems,” on page 12](#)

1.3.1 Prerequisites for Windows Server 2003 Systems

Before starting the installation of the PlateSpin Protect Server on a Windows Server 2003 system, ensure that the following prerequisite software components are installed on the intended PlateSpin Protect Server host, in the specified order:

- ♦ Microsoft IIS 5.0 and later (with ASP.NET)
- ♦ Microsoft .NET Framework 3.5, SP1 and later. Download a copy from the [Microsoft Download Center \(http://www.microsoft.com/downloads/details.aspx?FamilyId=AB99342F-5D1A-413D-8319-81DA479AB0D7\)](http://www.microsoft.com/downloads/details.aspx?FamilyId=AB99342F-5D1A-413D-8319-81DA479AB0D7).

If you are installing the PlateSpin Protect Server on a 64-bit Windows Server 2003 system, you must configure IIS to run in 32-bit mode. For details, see [Knowledge Base Article 20915 \(http://www.novell.com/support/php/search.do?cmd=displayKC&docType=kc&externalId=7920915\)](http://www.novell.com/support/php/search.do?cmd=displayKC&docType=kc&externalId=7920915).

1.3.2 Prerequisites for Windows Server 2008 Systems

Before starting the installation of the PlateSpin Protect Server on a Windows Server 2008 system, ensure that the prerequisite .NET Framework and Web Server (IIS 7.0) features, roles, and services are installed on the intended PlateSpin Protect Server host.

Download Microsoft .NET Framework 3.5 SP1 from the [Microsoft Download Center \(http://www.microsoft.com/downloads/details.aspx?FamilyId=AB99342F-5D1A-413D-8319-81DA479AB0D7\)](http://www.microsoft.com/downloads/details.aspx?FamilyId=AB99342F-5D1A-413D-8319-81DA479AB0D7).

The following procedures assume that you are installing the required items for the first time following the installation of the operating system. For detailed information, see your Windows documentation.

- ♦ “Installing Web Server (IIS 7.0) and the Required Role Services” on page 12
- ♦ “Installing .NET Features” on page 13

Installing Web Server (IIS 7.0) and the Required Role Services

- 1 Log in to your intended PlateSpin Protect Server host by using the built-in Administrator account, also known as Local User Administrator (LUA), and launch the Server Manager (*Start > Administrative Tools > Server Manager*).
- 2 Use the Server Manager’s Add Roles Wizard to install the *Web Server (IIS 7.0)* role (in the *Server Manager (hostname)* tree in the left pane, right-click *Roles* and select *Add Roles*).
- 3 At the wizard’s prompt, select to install the required Web Server dependencies (*Windows Process Activation Service* along with the *Process Model* and *Configuration APIs* items).
- 4 On the wizard’s Role Services page, select to install the following services:
 - ♦ In the *Web Server* group:
 - ♦ Items under the *Common HTTP Features* node: *Static Content*, *Default Document*, *Directory Browsing*, *HTTP Errors*, and *HTTP Redirection*.
 - ♦ Items under the *Application Development* node: *ASP.NET*, *.NET Extensibility*, *ISAPI Extensions*, and *ISAPI Filters*.
 - ♦ Items under the *Security* node: *Basic Authentication*, *Windows Authentication*, *Digest Authentication*, *Client Certificate Mapping Authentication*, *IIS Client Certificate Mapping Authentication*, *URL Authorization*, *Request Filtering*, and *IP and Domain Restrictions*.
 - ♦ In the *Management Tools* group:
 - ♦ *IIS Management Console*
 - ♦ *IIS Management Scripts and Tools*
 - ♦ *Management Service*
 - ♦ Items under the *IIS 6 Management Compatibility* node: *IIS 6 Metabase Compatibility*, *IIS 6 WMI Compatibility*, *IIS 6 Scripting Tools*, *IIS 6 Management Console*
- 5 Review your selections and complete the installation.

Installing .NET Features

- 1 Log in to your intended PlateSpin Protect Server host by using the built-in Administrator account, also known as Local User Administrator (LUA), and launch the Server Manager (*Start > Administrative Tools > Server Manager*).
- 2 Use the Server Manager's Add Features Wizard to install the required .NET Framework 3.0 features (in the *Server Manager (hostname)* tree in the left pane, right-click *Features* and select *Add Features*).
- 3 On the wizard's Select Features page, select the *.NET Framework 3.0 Features* item.
This automatically selects all items in that group: *.NET Framework 3.0*, *XPS Viewer*, and *WCF Activation* (along with the *HTTP Activation* and *Non-HTTP Activation* subitems).
- 4 Review your selections and complete the installation.

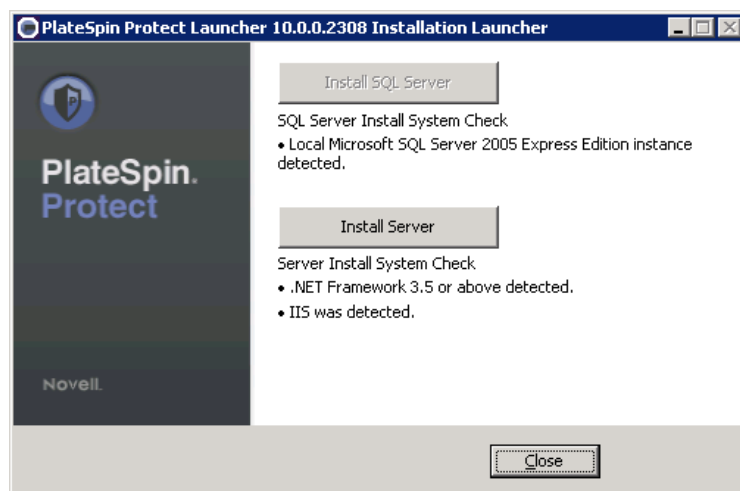
1.4 Installing PlateSpin Protect Software Components

- [Section 1.4.1, "Starting the PlateSpin Protect Installation Launcher," on page 13](#)
- [Section 1.4.2, "Installing the Database Server," on page 14](#)
- [Section 1.4.3, "Installing the PlateSpin Protect Server," on page 14](#)
- [Section 1.4.4, "Post-Installation Tasks," on page 15](#)

1.4.1 Starting the PlateSpin Protect Installation Launcher

- 1 Download the `PlateSpinProtectSetup-10.x.x.x.x.x.exe` installation program and save it on your intended PlateSpin Protect 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 you intend to use the Microsoft SQL Server 2005 Express Edition distributed with PlateSpin Protect, install it first. If you intend to use an existing SQL Server 2005 database, skip the database installation and install the PlateSpin Protect Server.

1.4.2 Installing the Database Server

If you do not have a Microsoft SQL Server 2005 database engine, you can install Microsoft SQL Server 2005 Express Edition included in your PlateSpin Protect software distribution.

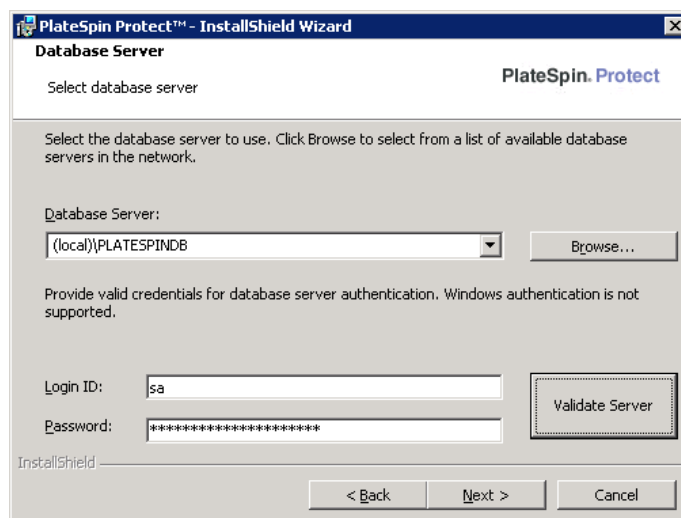
To install Microsoft SQL Server 2005 Express Edition:

- 1 On your intended database server host, start the Installation Launcher. See [“Starting the PlateSpin Protect Installation Launcher” on page 13](#).
- 2 Click *Install SQL Server* and follow the on-screen instructions.
The program installs a database server and the database instances required for the operation of PlateSpin Protect.

1.4.3 Installing the PlateSpin Protect Server

- 1 Make sure that your intended PlateSpin Protect Server host meets the minimum system requirements. See [“System Requirements for PlateSpin Protect Server Hosts” on page 9](#).
- 2 Make sure that your intended PlateSpin Protect Server host has the necessary prerequisite software installed. See [“Installation Prerequisites for PlateSpin Protect Server Hosts” on page 11](#).
- 3 On your intended PlateSpin Protect Server host, start the Installation Launcher. See [“Starting the PlateSpin Protect Installation Launcher” on page 13](#).
- 4 Click *Install Server* and following the on-screen instructions.

The installation program starts the installation process and prompts you to specify a database server and instance:



- 5 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. See [Knowledge Base article Q21119 \(http://www.novell.com/support/php/search.do?cmd=displayKC&docType=kc&externalId=7970523\)](http://www.novell.com/support/php/search.do?cmd=displayKC&docType=kc&externalId=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:

database_server\database_instance

- 6 Click *Validate Server* to validate your database credentials for the selected database server.
- 7 Click *Next* and follow the on-screen instructions.

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

NOTE: This process might take several minutes to complete.

1.4.4 Post-Installation Tasks

After completing the installation of the PlateSpin Protect Server:

- ♦ Start the PlateSpin Protect Web Client and familiarize yourself with its interface and the workload protection features. See “[Launching the PlateSpin Protect Web Client](#)” in your *User Guide*.
- ♦ (International versions) Set up PlateSpin Protect and your browser for use in a specific supported language. See “[Language Setup for International Versions of PlateSpin Protect](#)” in your *Configuration Guide*.
- ♦ License your product and configure your environment in preparation for workload protection. See your *PlateSpin Protect 10 Application Configuration Guide*.

Upgrading PlateSpin Protect

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You can use your PlateSpin Protect version 10 installation program to upgrade:

- ♦ PlateSpin Portability Suite (PlateSpin Protect edition) 8.0 and later

Note the following major functional and user experience changes from Portability Suite:

- ♦ **Discontinued Portability Suite Client.** The Portability Suite Client has been replaced by a Web browser-based application, the PlateSpin Protect Web Client. Before running the upgrade program, uninstall your Portability Suite Client.
- ♦ **Discontinued third-party block-based component.** The SteeleEye block-based component shipped with previous releases has been discontinued. Windows workload replication at the block level is now supported only for workloads that can leverage the Microsoft Volume Snapshot Service (VSS). Consequently, support for block-level replication of Windows 2000 workloads has been discontinued. You can still protect Windows 2000 workloads using file-level replication.

After the upgrade, PlateSpin Protect suspends all replications that used the SteelEye component, and a corresponding message is shown in the PlateSpin Protect Web Client. If applicable, PlateSpin Protect prompts you to upgrade the component on your workload; if not, consider re-protecting your workload and using the file-based transfer method.

You can still carry out Failover, Test Failover and Failback commands with the discontinued block-based component, but you cannot select it for any new protection contracts.

- ♦ **Discontinued Portability Suite network feature.** The Portability Suite Network feature (a named collection of sources and targets) has been discontinued. During the upgrade process, the installation program automatically imports data from your default network. Alternatively, you can import data from a single non-default network by running the upgrade at the command prompt.
- ♦ **Discontinued support for collocation.** PlateSpin Migrate and PlateSpin Protect are now separate products with separate installers, and cannot be installed on the same host.

The following topics provide further information on the upgrade procedure.

- ♦ [Section 2.1, “Before Upgrading PlateSpin Protect,” on page 17](#)
- ♦ [Section 2.2, “Upgrade Procedure,” on page 18](#)

2.1 Before Upgrading PlateSpin Protect

Before upgrading your PlateSpin Portability Suite software to PlateSpin Protect 10:

- ♦ Define a time window for the upgrade process and pause your synchronization schedules.
- ♦ Make a record of any customized `.config` parameters controlling the server’s default behavior.
- ♦ Back up your database files.

Use this procedure to manually back up your database files, which you can use if you require to roll back to Portability Suite.

- 1 On your server host, stop MS 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 located in your `\Program Files\PlateSpin Portability Suite Server\Database` directory to a location outside the product installation directory.
- 3 Restart MS SQL services that you stopped in [Step 1](#).

2.2 Upgrade Procedure

During the upgrade process, the installation program automatically imports data from your default network. If you prefer to import data from a non-default network, you can run the upgrade at the command prompt and specify the required network as a command parameter.

- ♦ [Section 2.2.1, “Generic Upgrade Procedure,” on page 18](#)
- ♦ [Section 2.2.2, “Upgrade Procedure for Non-Default Networks,” on page 18](#)
- ♦ [Section 2.2.3, “Post-Upgrade Notes,” on page 19](#)

2.2.1 Generic Upgrade Procedure

Use this procedure to upgrade your Portability Suite (PlateSpin Protect) product if you are using the default network.

- 1 (Optional) Back up your data. See [“Before Upgrading PlateSpin Protect” on page 17](#).
- 2 Uninstall your Portability Suite Client software (*Control Panel > Add/Remove Programs > PlateSpin Portability Suite Client*).
- 3 Run the PlateSpin Protect setup executable and follow the on-screen instructions.
Make sure that you select the *Save data* option when prompted during the server installation.

2.2.2 Upgrade Procedure for Non-Default Networks

Use this procedure to upgrade your Portability Suite (PlateSpin Protect) server at the command line with the option to import a non-default network.

- 1 Back up your data. See [“Before Upgrading PlateSpin Protect” on page 17](#).
- 2 Uninstall your Portability Suite Client software (*Control Panel > Add/Remove Programs > PlateSpin Portability Suite Client*).
- 3 Install the Microsoft ASP.NET AJAX 1.0 component on your server host. You can download it from the [ASP.NET AJAX 1.0 download site \(http://www.microsoft.com/downloads/details.aspx?FamilyID=ca9d90fa-e8c9-42e3-aa19-08e2c027f5d6\)](http://www.microsoft.com/downloads/details.aspx?FamilyID=ca9d90fa-e8c9-42e3-aa19-08e2c027f5d6).
- 4 On your server host, in the directory where the `PlateSpinProtectSetup-10.x.x.x.x.x.exe` installation program is located, execute the following command at the command prompt:

```
setup_filename.exe /SERVER='-s /v' PSNETWORK=network_name''
```

Replace:

- ♦ *setup_filename* with the actual setup filename. For example:

PlateSpinProtectSetup-10.0.0.2357.exe

- ♦ *network_name* with the actual network name

2.2.3 Post-Upgrade Notes

- 1 (International versions) Set up PlateSpin Protect and your browser for use in a specific supported language. See “[Language Setup for International Versions of PlateSpin Protect](#)” in your *Configuration Guide*.
- 2 Start the PlateSpin Protect Web Client and familiarize yourself with its interface and the workload protection features. See “[Working with the PlateSpin Protect User Interface](#)” in your *User Guide*.
- 3 Check the Workloads page for any suspended replication schedules. In particular, look for *Tasks* (special workload protection events with optional commands) generated for automatically upgrading protection contracts that were using the now-discontinued block-based component. Note that this requires a reboot of the protected workload.
- 4 Reapply the required `.config` parameters in the new `.config` files. See “[Configuring the Product Behavior through .config Parameters](#)” in your *Application Configuration Guide*.

