MICRO FOCUS

PlateSpin® Migrate 12.2.1
Installation and Upgrade Guide

September 2018

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Contents

About This Guide

This guide provides information to help you install your PlateSpin Migrate product.

Audience

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

Additional Documentation

This guide is part of the PlateSpin Migrate documentation set. For a complete list of publications supporting this release, visit the PlateSpin Migrate 12.2.1 Documentation website (https://www.netiq.com/documentation/platespin-migrate-12-2-1/).

Documentation Updates

The most recent version of this guide can be found at the PlateSpin Migrate Documentation website (https://www.netiq.com/documentation/platespin-migrate-12-2-1/).

Contacting Micro Focus

For specific product issues, contact Micro Focus Support at https://www.microfocus.com/support-and-services/.

Additional technical information or advice is available from several sources:

- Product documentation, Knowledge Base articles, and videos: https://www.microfocus.com/support-and-services/
- The Micro Focus Community pages: https://www.microfocus.com/communities/

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1 Installing PlateSpin Migrate

PlateSpin Migrate is a Windows application that runs on server operating systems. Its functionality depends on several software components, including the Microsoft Internet Information Services (IIS) Web server software 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.

For trouble-free installation and operation of PlateSpin Migrate, you should review the system requirements and plan your installation.

PlateSpin Migrate provides a Web Interface that you can use to plan and execute automated migrations for a large number of workloads. The PlateSpin Migrate Web Interface is automatically installed when you install the PlateSpin Migrate Server. For more information about working with the PlateSpin Migrate Web Interface, see the *PlateSpin Migrate 12.2.1 User Guide*.

NOTE: In addition to the English version of PlateSpin Migrate, the product has been localized for installation and use on machines configured for the Chinese Simplified, Chinese Traditional, French, German, and Japanese languages. Documentation is also available in Spanish.

This section provides information about installing PlateSpin Migrate:

1.1 Preparing to Install PlateSpin Migrate

1.1.1 System Requirements for PlateSpin Server

PlateSpin Server hosts must meet the following system requirements:

Table 1-1   Host Requirements for PlateSpin Migrate Server

Requirement	Details
Dedicated host	Physical or virtual server

Requirement	Details
Operating System	Any of the following Windows Server versions: ◆ Windows Server 2012 R2 ◆ Windows Server 2008 R2 Use Windows 2008 R2 SP1 or higher version if you want to install Microsoft SQL Server 2014 Express Edition locally on the Migrate server. **NOTE** ◆ You must activate the Microsoft license for your Windows operating system prior to installing PlateSpin Migrate. ◆ For installing PlateSpin Migrate server on a Windows Server 2012 R2 domain computer, you must have administrator privileges.
Processor	Recommended (physical): multi-core, 2 GHz or higher Recommended (VM): 2 or more Virtual CPUs
Memory	Recommended: 8 GB RAM
Disk Space	Minimum 50 GB Additional space might be necessary if you plan to use the same system as a PlateSpin 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. See "Designating a PlateSpin Image Server" in the *PlateSpin Migrate 12.2.1 User Guide*.
Database Server	A dedicated Microsoft SQL Server database instance (local or remote), running on one of the following: ◆ Microsoft SQL Server 2014 Express Edition. A copy of this database software is included in your PlateSpin Migrate software distribution. ◆ Microsoft SQL Server 2014 ◆ Microsoft SQL Server 2008 R2 While multiple PlateSpin Migrate Servers can use the same remote database server, each Migrate Server requires a separate database instance. See "Database Server" in the *PlateSpin Migrate 12.2.1 User Guide*.

Requirement	Details

Prerequisite Software	**NOTE:** You can install prerequisite software manually or use the PowerShell script provided on the NetIQ download site. See Section 1.2, "Installing Prerequisite Software," on page 11.
	
	❏ To perform a batch-file installation of PlateSpin Migrate, you must install Visual C++ 2013 on the host server. See Section 1.2.1, "Installing Visual C++ 2013 for Batch-File Installation of PlateSpin Migrate," on page 12.
	
	❏ All Windows hosts (recommended)
	   ◆ Ensure that a licensed version of the OS is installed.
	   ◆ Apply the latest applicable OS updates (service packs, cumulative security updates, drivers, etc.).
	
	❏ For Windows Server 2012 R2 systems
	   ◆ Disable User Account Control (UAC).
	   ◆ Install Microsoft .NET Framework 3.5 SP1 and 4.5.2. You can download `.NET` software from Microsoft:
	      ◆ .NET Framework 3.5 SP1 (https://www.microsoft.com/en-us/download/details.aspx?id=22)
	      ◆ .NET Framework 4.5.2 (https://www.microsoft.com/en-in/download/details.aspx?id=42642)
	   ◆ Install Microsoft IIS 8.0
	     For more details, see Installing Prerequisite Software on Windows Server 2012 R2 Systems (page 12).
	
	❏ For Windows Server 2008 R2
	   ◆ Disable User Account Control (UAC).
	   ◆ Install Microsoft .NET Framework 3.5 SP1 and 4.5.2. You can download `.NET` software from Microsoft:
	      ◆ .NET Framework 3.5 SP1 (https://www.microsoft.com/en-us/download/details.aspx?id=22)
	      ◆ .NET Framework 4.5.2 (https://www.microsoft.com/en-in/download/details.aspx?id=42642)
	   ◆ Install Microsoft IIS 7.0
	     For more details, see Installing Prerequisite Software on Windows Server 2008 R2 Systems (page 15).

TLS Protocol	PlateSpin Migrate requires Transport Layer Security (TLS) 1.0 and higher to be enabled on the intended PlateSpin Server host. For remote databases, TLS 1.0 is required for the SQL Server host operating system during the installation. After the installation is complete, you can use TLS 1.2 for communications between Migrate server and the SQL Server if the SQL Server supports it.

1.1.2 System Requirements for PlateSpin Migrate Client

You can install the PlateSpin Migrate Client on the PlateSpin Server host or on a separate computer.

Standalone PlateSpin Migrate Client hosts must meet the following system requirements:

Table 1-2 *Host Requirements for PlateSpin Migrate Client*

Requirement	Details
Operating System	Any of the following, running on dedicated hardware or in a virtual machine: ◆ Windows 8.1, 8 ◆ Windows Server 2012, Windows Server 2012 R2 ◆ Windows 7 ◆ Windows Server 2008, Windows Server 2008 R2 **NOTE:** You must activate the Microsoft license for your Windows operating system prior to installing PlateSpin Migrate Client.
Disk Space	Minimum 3 GB
Windows Software Components	Microsoft .NET Framework 2 SP2, 3.5 SP1, 4.5.2. You can download `.NET` software from Microsoft: ◆ .NET Framework 2 SP2 (http://www.microsoft.com/download/en/details.aspx?id=1639) ◆ .NET Framework 3.5 SP1 (https://www.microsoft.com/en-us/download/details.aspx?id=22) ◆ .NET Framework 4.5.2 (https://www.microsoft.com/en-in/download/details.aspx?id=42642)
TLS Protocol	PlateSpin Migrate Client requires Transport Layer Security (TLS) 1.0 and higher to be enabled on the intended PlateSpin Client host.

1.1.3 General Guidelines for Server Installation

Follow these installation guidelines for trouble-free installation and operation of PlateSpin Migrate.

Table 1-3 *Pre-Installation Checklist*

	Guideline	Remarks
☐	Dedicated Host	Install the PlateSpin Server on a dedicated physical or virtual machine. See also Co-location.
☐	Credentials	Perform all installation procedures using an account with administrative privileges. For Windows Server 2008 R2 systems, use the built-in Administrator account.
☐	IP Address	Assign the PlateSpin Server host a static IP address.
☐	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 migrate by using the product ◆ Other PlateSpin software (PlateSpin Protect and PlateSpin Recon)

	Guideline	Remarks
☐	Database	If you intend to use your own Microsoft SQL Server database (instead of the Microsoft SQL Server 2014 Express Edition included in your software distribution), ensure that it is supported and conforms to the product's database requirements. See KB Article 7009809. While multiple PlateSpin Migrate Servers can use the same remote database server, each Migrate Server requires a separate database instance. See "Database Server" in the *PlateSpin Migrate 12.2.1 User Guide*.
☐	UAC	Disable the User Account Control (UAC).
☐	Installation Workflow	Install the prerequisite software in the indicated order. Below is a high-level workflow for a typical PlateSpin Migrate installation: 1. Supported operating system, followed by corresponding Windows Updates 2. ASP.NET/IIS, followed by corresponding Windows Updates. 3. (Optional) Enable FIPS-Compliant Data Encryption 4. SQL Server database, followed by applicable Microsoft updates. 5. PlateSpin Server

1.2 Installing Prerequisite Software

Before you install PlateSpin Migrate, ensure that you have installed the Prerequisite Software: Visual C++, ASP.NET, IIS, and .NET Framework. You can use the *Install PlateSpin Migrate Prerequisites* script provided on the NetIQ Download site to install any missing software and apply the appropriate configuration. You can alternatively install the prerequisite software manually using the procedures in this section.

To use the script to install prerequisite software:

1 On the intended PlateSpin Migrate server, install a supported version of Microsoft Windows Server and activate the Windows license.

2 Go to the NetIQ Downloads (https://dl.netiq.com) page, then search for and go to the PlateSpin Migrate Download page.

3 Download the `Install_PlateSpin_Migrate_Prerequisites.zip` file.

4 Extract the files to the intended PlateSpin Migrate host server:

```
Install PlateSpin Migrate Prerequisites.ps1
Install PlateSpin Migrate Prerequisites.bat
readme.txt
```

The BAT file executes the script without requiring that the user change the PowerShell execution policy to **RemoteSigned**.

5 Run the PowerShell script.

The script automatically installs and configures the prerequisite software.

6 Continue with "Installing PlateSpin Migrate Software Components" on page 18.

To manually install prerequisite software:

NOTE: Because the packaging and distribution of these software components varies among different versions of the supported Windows Server platforms, procedures vary slightly. Use the appropriate procedure for the target platform in the indicated order of installation and setup.

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1 On the intended PlateSpin Migrate server, install a supported version of Microsoft Windows Server and activate the Windows license.

2 Install Visual C++.

  See Installing Visual C++ 2013 for Batch-File Installation of PlateSpin Migrate.

3 Install Windows Server components ASP .NET, IIS, and .NET Framework:

  ◆ Installing Prerequisite Software on Windows Server 2012 R2 Systems

    -OR-

  ◆ Installing Prerequisite Software on Windows Server 2008 R2 Systems

4 (Optional) Enable FIPS-compliant data encryption.

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

5 Continue with "Installing PlateSpin Migrate Software Components" on page 18.

1.2.1 Installing Visual C++ 2013 for Batch-File Installation of PlateSpin Migrate

Before you perform a batch-file installation of PlateSpin Migrate server, you must install Visual C++ 2013 on the planned Migrate server. This software is required to properly install the Event Messaging service that is used by PlateSpin Transformation Manager. A redistributable package of Visual C++ 2013 is available in the `PlateSpinMigrateSetup-12.2.1.X.exe` file. You can alternatively download the Visual C++ 2013 package from Microsoft and install it.

To install VC++ 2013 on the planned Migrate server:

1 Extract the `PlateSpinMigrateSetup-12.2.1.X.exe` to a location on the planned server host for PlateSpin Migrate.

2 In a file browser, navigate to the `..\Migrate-12.2.1.X\PlateSpinImage\VCruntime-x64` folder.

3 Run `vcredist_x64.exe` as Administrator.

1.2.2 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 Migrate Server. Before you begin, ensure that you are familiar with the "System Requirements for PlateSpin Server" on page 7 and "General Guidelines for Server Installation" on page 10.

To install required Microsoft software components:

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

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

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

2b In the Server Manager toolbar, select **Manage** > **Add Roles and Features**.

2c 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**.

2d Wait for the installation to complete, then close the Add Roles and Features wizard.

2e Exit Server Manager.

1.2.3 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 Migrate Server. Before you begin, ensure that you are familiar with the "System Requirements for PlateSpin Server" on page 7 and "General Guidelines for Server Installation" on page 10.

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.

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

PlateSpin Migrate 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 Server host prior to the installation of the PlateSpin Server. This is because PlateSpin Migrate runs in FIPS-compliant mode only if it detects that a workload's 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 Enable FIPS-compliant algorithms in the security options of your PlateSpin Migrate host's local security policies:

   1a Run `secpol.msc` and browse to **Local Policies > Security Options**.

   1b Enable the **System cryptography: Use FIPS compliant algorithms for encryption** security option.

2 Configure ASP.NET for FIPS support:

   2a Access the `machine.config` file located in the following directory of your PlateSpin Server host:

   ```
   ..Windows\Microsoft.Net\Framework\vX.X.XXXXX\Config
   ```

   2b Add the following under the `<system.web>` element:

   ```
   <machineKey validationKey="AutoGenerate,IsolateApps"
   decryptionKey="AutoGenerate,IsolateApps" validation="3DES"
   decryption="3DES"/>
   ```

3 Access the `web.config` file in each of the below listed directories of your PlateSpin Server host and add the following under the `<system.web>` element of each of the `web.config` file:

```
<machineKey validationKey="AutoGenerate,IsolateApps"
decryptionKey="AutoGenerate,IsolateApps" validation="3DES" decryption="3DES"/>
```

   ◆ *PlateSpin Migrate Install Directory\PlateSpin Forge\web*

   ◆ *PlateSpin Migrate Install Directory\Web*

   ◆ *PlateSpin Migrate Install Directory\ConfigurationEditor.Web*

   ◆ *PlateSpin Migrate Install Directory\Protection.WebServices*

   ◆ *PlateSpin Migrate Install Directory\OfxWeb*

1.3 Installing PlateSpin Migrate Software Components

1.3.1 Starting the PlateSpin Migrate Installation Launcher

1 From Micro Focus Downloads (https://www.microfocus.com/support-and-services/download/), download the `PlateSpinMigrateSetup-12.X.X.X.exe` installation program and save it on your intended PlateSpin Server host.

2 Run the installation program and click **Next** to launch the prerequisites check utility.

   The prerequisites check queries the host where you intend to install the PlateSpin Server. It verifies that all of the required software is installed or enabled. If you see any cautions or omissions, you need to either enable or install the prerequisite software before you proceed with the installation.

3 Click **Next** to launch the installation program.

The installation program extracts the required files and opens the Installation Launcher window (if the installation program detects a local installation of SQL Server 2008 R2 or Microsoft SQL Server 2014, it disables the corresponding **Install SQL Server Express** option):

If you intend to use the Microsoft SQL Server 2014 Express Edition distributed with PlateSpin Migrate, install it first.

If you intend to use an existing SQL Server database, skip the database installation, start installing the PlateSpin Server, and point to your existing database when prompted.

IMPORTANT: When you browse to and select an existing database, the default value for the server name is displayed, for example:

`<database_server>\<Database_instance_name>`

You need not specify the DB instance name explicitly in this field. Specify the database server name only, and delete the instance name default. Specifying the database instance name results in a failure to validate the server.

1.3.2 Installing the Database Server

If you do not have a SQL Server 2008 R2 database engine or SQL Server 2014, you can install Microsoft SQL Server 2014 Express Edition included in your PlateSpin Migrate software distribution.

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

See "Starting the PlateSpin Migrate Installation Launcher" on page 18.

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

The program installs a database server and the database instances required for the operation of PlateSpin Migrate.

NOTE: The SQL administrator password is generated during the installation of Microsoft SQL Server Express Edition. Keep the default `sa` credentials throughout the PlateSpin Migrate Server installation. After the installation is complete, you should modify the SQL administrator password. See Section 1.6, "Modifying the Password for the SQL Server Express System Administrator User," on page 24.

1.3.3 Installing the PlateSpin Server

1 Before you install the PlateSpin Server host, you must ensure the following requirements are met:

- ◆ The PlateSpin Server host meets the minimum system requirements. See "System Requirements for PlateSpin Server" on page 7.
- ◆ The PlateSpin Server host has the necessary prerequisite software installed. See "Installing Prerequisite Software" on page 11.

2 On the PlateSpin Server host, launch the Installation Launcher. See "Starting the PlateSpin Migrate Installation Launcher" on page 18.

3 Click **Install PlateSpin Server** and follow the on-screen instructions. Select the license agreement option and click **Next**.

4 On the Database Connection Information screen, click **Browse** to select the database server and select the authentication type.

5 (Conditional) If you select the **Authentication Type** as **Windows Authentication**, do the following:

5a On the Database Administrative Credentials screen, specify the credentials for the database administrator.

NOTE: If you choose to connect to a remote database, then you must specify the domain administrator credentials or the credentials of a domain user having sufficient administrator and database rights.

5b Click **Validate Credentials** to validate the credentials and click **Next**.

5c On the Database User Credentials screen, specify the credentials for the database user. However, to use the same credentials as the database administrator, select **Same as the Database Administrator**.

5d Click **Validate Credentials** to validate the credentials and click **Next**.

5e On the Confirm SQL Connection screen, review the information. Click **Back** to edit the SQL connection information or click **Next** to continue.

6 (Conditional) If you select the **Authentication Type** as **SQL Authentication**, do the following:

6a Specify a database server and instance:

- If you intend to install and use the local database server included in your PlateSpin Migrate software distribution (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 Migrate database instance or change your SQL Server password, you must reset the PlateSpin Migrate database connection settings. See KB 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:

  database_server\database_instance_name

- If the database server is running on a custom port, specify the database in the following format:

  `database_server\database_instance_name,port_number`

6b Specify the database credentials for the selected database server and click **Validate Credentials** to validate the credentials.

6c Click **Next** and review the SQL connection information. Click **Back** to edit the SQL connection information or click **Next** to continue.

7 On the IIS Configuration screen, specify whether you want to allow HTTP or HTTPS connections. To allow unsecured connections (HTTP), select the **Allow unsecured connections (HTTP)** option.

If your IIS server has a signed SSL certificate, the communication protocol is HTTPS by default. Your browser might display a `untrusted connection` warning message. For information on how to proceed, see your browser-specific documentation.

8 Click **Next** and verify the installation settings, then click **Install** and follow the on-screen prompts.

NOTE: This process of installing the PlateSpin Migrate server might take several minutes to complete.

9 (Optional) Select **Start the Migrate web client** to launch the PlateSpin Migrate Web Client immediately after the installation is complete.

1.3.4 Installing the PlateSpin Migrate Client

You have two installation options for the PlateSpin Migrate Client:

Installing the Client from within the Installation Launcher

Use this option to install the Client on the same host with your PlateSpin Server immediately after the completion of the Server installation.

1 Complete the Server installation.

   See "Installing the PlateSpin Server" on page 19.

2 In the Installation Launcher window, click **Install PlateSpin Client** and follow the on-screen instructions.

   The installation program installs and configures the PlateSpin Migrate Client, preparing it to run.

Downloading the Client from your PlateSpin Server

Use this option to install the Client on a remote host by using a Web browser at any time after the completion of the Server installation.

1 Complete the PlateSpin Server installation.

   See "Installing the PlateSpin Server" on page 19.

2 Make sure your intended PlateSpin Migrate Client host meets the minimum system requirements.

   See "System Requirements for PlateSpin Migrate Client" on page 9.

3 On your intended PlateSpin Migrate Client host, open a Web browser and navigate to the following URL:

   `http://server_host/platespinmigrate`

   Replace *server_host* with the actual name or IP address of your PlateSpin Server host. If the PlateSpin Server is installed on the local computer, replace *server_host* with `localhost`. If SSL is enabled, use the `https` protocol in the URL.

   The browser loads the PlateSpin Server's home page.

4 Click the PlateSpin Migrate Client download link, download the PlateSpin Migrate Client software, and install it by following the on-screen instructions.

Starting the Client and Activating the License

To start the client, click **Start** > **Programs** > **PlateSpin Migrate** > **PlateSpin Migrate Client**. When you install and launch the PlateSpin Migrate Client for the first time, the License Wizard opens and prompts you to activate your copy of the software. For help with product licensing, see "PlateSpin Migrate Product Licensing " in the *PlateSpin Migrate 12.2.1 User Guide*.

You can also use the PlateSpin Migrate Web Interface to activate the license. For more information, see the *PlateSpin Migrate User Guide* on the Documentation website (https://www.netiq.com/documentation/platespin-migrate-12-2-1/).

1.4 Installing the PlateSpin Migrate Software Components Using a Batch File

To silently install the PlateSpin Migrate Software Components:

1 From Micro Focus Downloads (https://www.microfocus.com/support-and-services/download/), download the `PlateSpinMigrateSetup-12.X.X.X.exe` installation program and save it on your intended PlateSpin Server host where you have installed and configured the prerequisite operating system and applications. See Section 1.2, "Installing Prerequisite Software," on page 11.

2 Double-click the PlateSpinMigrateSetup-12.*x.x.x*.exe and extract the contents to a folder of your preference, such as `C:\Install\`.

IMPORTANT: Do not extract the contents of the `.exe` file to the default folder.

3 After the files are extracted, click **Cancel** to exit the installation wizard.

4 Depending on your desired installation type, copy and paste one of the following scripts to a batch file and execute the batch file after modifying the installation path as applicable.

* **For a local Microsoft SQL Server Express Edition database:**

```
C:\Migrate-12.2.1.X\PlateSpinImage\ServerInstall\setup.exe /s /v/qn /v"/
l*v c:\install.log" ^

/v"DBINSTALLTYPE=customerinstall" ^

/v"IS_SQLSERVER_SERVER=(local)\PLATESPINDB" ^

/v"IS_SQLSERVER_USERNAME= domain\sqladminUser " ^

/v"IS_SQLSERVER_USER_USERNAME= domain\sqlServiceUser " ^

/v"IS_SQLSERVER_PASSWORD=sqlauthenticationpwd"
```

* **For a remote Microsoft SQL Server Express database:**

```
C:\Migrate-12.2.1.X\PlateSpinImage\ServerInstall\setup.exe /s /v/qn /v"/
l*v c:\install.log" ^

/v"INSTALLDIR=c:\Migrate" ^

/v"DBINSTALLTYPE=remotedb" ^

/v"IS_SQLSERVER_SERVER=BM7W2K12SQL\BM8INSTANCE,59977" ^

/v"IS_SQLSERVER_AUTHENTICATION=0" ^

/v"IS_SQLSERVER_USERNAME= domain\sqladminUser " ^

/v"IS_SQLSERVER_USER_USERNAME= domain\sqlServiceUser " ^

/v"IS_SQLSERVER_USER_PASSWORD=sqlauthenticationpwd"
```

Property	Definition
DBINSTALLTYPE	Specifies the database install type: • **For an embedded database:** customerInstall • **For a remote database:** remotedb
INSTALLDIR	Specifies the installation directory. For example: `C:\Program Files\PlateSpin Migrate Server`

Property	Definition
IS_SQLSERVER_AUTHENTICATION	Specifies the authentication method to be used: • **For Windows authentication:** 0 • **For SQL authentication:** 1
IS_SQLSERVER_SERVER	Specifies the database server: • **For a local database:** (local)\PLATESPINDB • **For a remote database:** DatabaseServerName\databaseInstance
IS_SQLSERVER_PASSWORD	Specifies the password for the database administrator.
IS_SQLSERVER_USER_PASSWORD	Specifies the password for the database service user.
IS_SQLSERVER_USERNAME	Specifies the database administrator user name in the format `domain\sqladminUser`.
IS_SQLSERVER_USER_USERNAME	Specifies the database service user name in the format `domain\sqlServiceUser`.

1.5 Checking for Software Updates

When the PlateSpin Migrate Client starts, it automatically checks the current version of the product and displays any available updates in the Update Availability dialog box.

To prevent the system from automatically checking for updates every time:

1 In the Update Availability dialog box, select the **Do not check for update at startup** option.

2 Click **OK**.

To re-enable automatic software update checks:

1 In the PlateSpin Migrate Client, click **Tools > Options.**

2 In the **General** tab, select **Restore Defaults**.

3 Click **OK**.

To manually check for version updates:

1 In the PlateSpin Migrate Client, click **Help > Check for Update**.

The system checks the current version of the product and shows updates if they are available. To download a specific software update or hotfix, follow the provided URL.

1.6 Modifying the Password for the SQL Server Express System Administrator User

If you installed Microsoft SQL Server Express Edition, the installation automatically generated a password for the SQL system administrator user (`sa`). For improved security, we strongly recommend that you modify the password for the `sa` credentials after the PlateSpin Server installation is complete. You can use your Windows Administrator credentials and SQL management tools to modify the password without needing to know the generated password.

The Microsoft OSQL (`osql`) utility is included in the SQL Server Express software. You can use this tool to modify the SQL system administrator password for your SQL Server Express database engine. After you change the password, you must update the information for PlateSpin Server and restart the Platespin Server service.

To change the SQL Server Express `sa` user password:

1 Log in to the PlateSpin Server host as the local Administrator user.

2 Launch the Administrator Command Prompt.

3 Modify the SQL system administrator password. Enter

```
osql -S .\PlateSpinDB -E -Q "ALTER LOGIN sa WITH PASSWORD = '${NewPassword}'"
```

This OSQL syntax executes the query that follows the -Q option, and then exits the OSQL utility.

This command uses the `ALTER LOGIN` syntax rather than the `sp_password` stored procedure as recommended by Microsoft in the sp_password (Transact-SQL documentation.

For information about syntax and commands for OSQL, see *OSQL Utility* on the Microsoft website.

4 Update PlateSpin with the new password for the SQL system administrator user. Enter

```
%PROGRAM FILES%\"PlateSpin Migrate
Server"\bin\PlateSpin.UpdateConnectionString.exe /instance=.\PlateSpinDB /
username=sa /password=${NewPassword}
```

5 Restart the PlateSpin Server service. Enter

```
%PROGRAM FILES%\PlateSpin Migrate
Server\bin\RestartPlateSpinServer\RestartPlateSpinServer.exe
```

2 Troubleshooting Installation Problems

2.1 Common Installation Issues and Solutions

Problems or Messages	Solutions
An unexpected error occurs when trying to install the PlateSpin Server to a non-default location	When you install the PlateSpin Server in a non-default directory, you must also grant the ASP.NET user account full access to that directory. For example, if you want to install the server in `D:\PM_9`, you must make sure that the ASP.NET user account has full access to `D:\PM_9`.
HTTP 403 Error	PlateSpin Migrate uses ASP.NET for its Web services. If ASP.NET is not installed on the server, the Web services do not function correctly, and the installation fails with this error. ASP.NET is included as part of the .NET Framework. When you install the .NET Framework, IIS must already be installed on the server for ASP.NET to be configured. If the .NET Framework was installed prior to IIS, simply uninstall and reinstall the .NET Framework.
Cannot connect to IIS with http or https...	During installation, an error message appears indicating that PlateSpin Migrate cannot connect to IIS with HTTP or HTTPS, when Setup attempted to connect with the existing IIS Server. The cause of this error generally indicates a problem with the IIS Server. ◆ Ensure that IIS and ASP.NET are installed properly. See KB Article 7920595 (https://www.netiq.com/support/kb/doc.php?id=7920595). ◆ To ensure that ASP.NET is properly registered with IIS, run the following command: `"C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_regiis.exe" -i` If the above steps do not resolve the issue, refer to the detailed instructions for reinstalling IIS and configuring IIS for isolation mode in KB Article 7920710 (https://www.netiq.com/support/kb/doc.php?id=7920710).
Installing PlateSpin Migrate on a computer that has other applications running on IIS	This can cause problems during and after installation. If possible, avoid installing the product on a computer that has other applications running on IIS.

2.2 Knowledgebase Articles about Installation Troubleshooting

ID	Description
7920710 (https://www.netiq.com/support/kb/doc.php?id=7920710)	ERRMSG: Install Error: Cannot connect to IIS with http or https...
7920718 (https://www.netiq.com/support/kb/doc.php?id=7920718)	INFO: IIS and NTFS Permissions requirements for PlateSpin Migrate
7920595 (https://www.netiq.com/support/kb/doc.php?id=7920595)	INFO: Installing IIS and ASP.NET v2.0

2.3 Removing PlateSpin Software

The procedure below outlines the required steps for uninstalling the software components of PlateSpin Migrate and performing an optional manual cleanup. This might be necessary when upgrading or recovering from problems with a previous installation.

For information on a post-migration cleanup of source workloads, see "Post-Migration Cleanup of Source Workloads" in the *PlateSpin Migrate 12.2.1 User Guide*.

NOTE: This procedure does not remove license information from the server.

1 Use the Windows Control Panel to uninstall the PlateSpin Migrate Client.

2 Use the Windows Control Panel to uninstall the PlateSpin Server.

3 (Optional) If you opted to install the local database server from within the PlateSpin Migrate installation program and if you no longer need it, use the Windows Control Panel to uninstall Microsoft SQL Server 2014 Express Edition.

4 Ensure that the program directories of PlateSpin Migrate components were removed:

   4a Make sure the PlateSpin Server home directory was removed:

   ```
   ..\PlateSpin Migrate Server
   ```

   4b Make sure the PlateSpin Migrate Client home directory was removed:

   ```
   ..\PlateSpin Migrate Client
   ```

   4c (Optional) If you installed a local Microsoft SQL Server 2014 Express Edition database server and if you chose to uninstall it, remove the directory:

   ```
   ..\Program Files\Microsoft SQL Server
   ```

   WARNING: Do not delete the SQL directory if you have another SQL server installed on the PlateSpin Migrate server host.

5 Open IIS Manager and ensure that the ofxweb and PlateSpinMigrate virtual directories are deleted.

6 Reboot the host.

3 Upgrading PlateSpin Migrate

To upgrade your PlateSpin Server to PlateSpin Migrate 12.2.1, you must have an existing installation of PlateSpin Migrate 12.2, with or without interim patches and hotfixes applied. Other direct upgrades are not supported.

IMPORTANT: Before upgrading:

- Run Diagnostics to generate detailed diagnostic reports on jobs executed before upgrade. Post upgrading, the diagnostics reports are not available for jobs that you executed before upgrading.
- Close the Migrate Client.

3.1 Prerequisites for Upgrade

Before an upgrade, prepare your environment for the backup and import of data.

3.1.1 Ensuring Valid Credentials for Target Cloud Containers

The credentials in the Migrate database for target Cloud containers must be valid at export and import. Ensure that the password does not change or expire after export and until the import completes after upgrade. If your password is pending expiration, modify the password in the Cloud provider environment and update the credentials in Migrate before you begin an export.

WARNING: If credentials are invalid during import, the Cloud container is not imported and its associated workload configurations are corrupted in the imported database. To use the same Migrate server for migrations to the target Cloud container, you must re-install PlateSpin Server, which resets the database. You must re-configure all target containers and workloads.

3.1.2 Backing Up Your Database Files Before Upgrade

During the upgrade, the PlateSpin Migrate installation program transparently exports data from your existing database and re-imports it into a new database instance as required. However, as an additional measure of precaution, consider backing up your data prior to the upgrade.

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 to a location outside the product installation directory. The default location of these files is:

`\Program Files\PlateSpin Migrate Server\Database`

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

Proceed with the upgrade, as detailed in "Upgrading Migrate" on page 28.

3.1.3 Backing Up Your Custom Linux blkwatch Drivers Before Upgrade

During the upgrade, the PlateSpin Migrate installation program will overwrite custom Linux blkwatch drivers that you previously added to PlateSpin Migrate. Consider saving a copy of your custom Linux blkwatch drivers prior to the upgrade.

1 Log in to the PlateSpin Migrate Server host machine as the Administrator user.

2 Navigate to the PlateSpin application's installation directory, such as `C:\Program Files\PlateSpin Migrate Server\`.

3 Open the `.\Packages\9D470BFF-E30F-4015-83D8-4D308A8C8B1B\` folder and copy the `1.package` file out of this folder to a temporary directory.

4 Rename `1.package` with the `.zip` file extension (`1.zip`), then extract the contents of the file to this temporary directory.

5 Save your `CustomKernel*` content to another temporary location.

Proceed with the upgrade, as detailed in "Upgrading Migrate" on page 28.

After the upgrade, you should upload again any custom Linux blkwatch drivers you need for future migrations. See KB Article 7005873 (https://www.netiq.com/support/kb/doc.php?id=7005873).

3.2 Upgrading Migrate

1 Back up your data.

See "Backing Up Your Database Files Before Upgrade" on page 27.

2 Use the Windows Control Panel to uninstall your client application, the PlateSpin Migrate Client.

3 On your server host, start the `PlateSpinMigrateSetup-12.2.1.X.exe` installation program.

4 Click **Install Server** and follow the on-screen instructions. When you are prompted to specify a database instance, point the installation program to your existing database instance.

5 Install the current version of the PlateSpin Migrate Client.

See "Installing the PlateSpin Migrate Client" on page 21.

6 (Optional) After the upgrade, you should upload again any custom Linux blkwatch drivers you need for future migrations. See KB Article 7005873 (https://www.netiq.com/support/kb/doc.php?id=7005873).

See also "Backing Up Your Custom Linux blkwatch Drivers Before Upgrade" on page 28.

A   Documentation Updates

This section contains information on documentation content changes that were made in the English version of the *PlateSpin Migrate Installation and Upgrade Guide* since the General Availability of PlateSpin Migrate 12.2.1.

- Section A.1, "October 2018," on page 29
- Section A.2, "September 2018," on page 29
- Section A.3, "February 2018," on page 30

A.1   October 2018

Location	Update
"TLS Protocol" in Table 1-1, "Host Requirements for PlateSpin Migrate Server," on page 7	Added the following information: For remote databases, TLS 1.0 is required for the SQL Server host operating system during the installation. After the installation is complete, you can use TLS 1.2 for communications between Migrate server and the SQL Server if the SQL Server supports it.

A.2   September 2018

Location	Update
"TLS Protocol" in Table 1-1, "Host Requirements for PlateSpin Migrate Server," on page 7	PlateSpin Migrate requires Transport Layer Security (TLS) 1.0 and higher to be enabled on the intended PlateSpin Server host.
"TLS Protocol" in Table 1-2, "Host Requirements for PlateSpin Migrate Client," on page 10	PlateSpin Migrate Client requires Transport Layer Security (TLS) 1.0 and higher to be enabled on the intended PlateSpin Client host.

A.3   February 2018

Location	Update
Section 1.3.2, "Installing the Database Server," on page 19	**NOTE:** The SQL administrator password is generated during the installation of Microsoft SQL Server Express Edition. Keep the default sa credentials throughout the PlateSpin Migrate Server installation. After the installation is complete, you should modify the SQL administrator password. See Section 1.6, "Modifying the Password for the SQL Server Express System Administrator User," on page 24.
Section 1.6, "Modifying the Password for the SQL Server Express System Administrator User," on page 24	This section is new.
Section 3.1.3, "Backing Up Your Custom Linux blkwatch Drivers Before Upgrade," on page 28	This section is new.
Section 3.2, "Upgrading Migrate," on page 28	Added a step to optionally upload the custom Linux blkwatch drivers that you backed up for the Migrate server.
Section 3.2, "Upgrading Migrate," on page 28	Removed an optional step to manually update any remote hosts running PlateSpin Image Server software. This step is not needed for PlateSpin Migrate 12 and later.