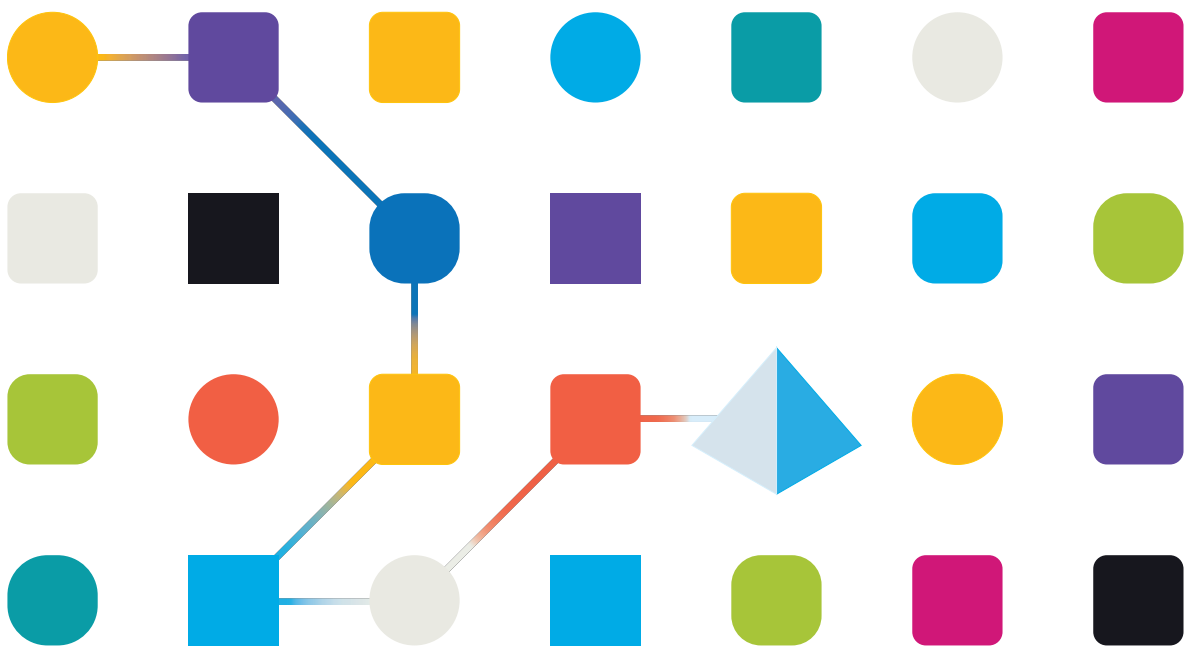




Hub 4.4

Release Notes

Document Revision: 1.4



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Release Notes

Hub 4.4.1 – October 2021

This release note is for the 4.4.1 release of Blue Prism Hub delivered in an on-premise configuration.

Control Room

The following improvements and fixes are included in this version of the Control Room plugin.

Area	Description of Change	Reference
Application	An issue with dashboard widgets on the Control Room dashboard has been fixed. Widgets now display data and filters work as intended. In Hub version 4.4 this issue caused widgets to display no data, and applying a filter to a widget would display a blank page.	HUB-2447

Known issues

A list of any prominent issues with this release is maintained in the knowledge base, click [here](#) for more information.

Secure development policy


As part of our secure development policy, Blue Prism products are evaluated against the following security standards:

- OWASP Top 10 –The security vulnerabilities that pose the most risk to applications development. For more information, see the [OWASP website](#).
- SANS CWE Top 25 – The most common software security vulnerabilities found throughout the software development industry. For more information, see the [SANS website](#).
- Federal Information Processing Standard (FIPS) Publication 140-2 – U.S. government standard that defines minimum security requirements for cryptographic modules in information technology products.
- Payment Card Industry Data Security Standard (PCI DSS).
- Health Insurance Portability and Accountability Act (HIPAA).
- Federal Information Security Management Act (FISMA).

A compliance highlight summary report is available upon request via Product Support.

Upgrade from 4.4.0 to 4.4.1

Blue Prism has made the latest plugin files available on the Blue Prism portal. These enable a Hub administrator to update the plugins from 4.4.0 to 4.4.1, thereby restoring the use of the Control Room widgets.

 You must be a Hub administrator to update the plugin files. You should update the plugins during a system maintenance period, when no other users are logged in, as the system will restart as part of the process.

To update 4.4.0 to 4.4.1:

1. Download the 4.4.1 Hub plugin package from the Blue Prism portal and unzip it to a folder on your computer.
2. In Hub, click your profile icon to open the Settings page and click **Plugin Management**.
The Plugin management page displays.
3. Click **Add plugin**.
The Open dialog displays to enable you to find a local file.
4. Navigate to the folder from step 1, select all the plugin files which you have unzipped from the plugin package and click **OK**.
A notification message displays indicating that the files have been uploaded successfully.
5. Click the refresh icon on your browser window to refresh the Plugin management page.
The **Update all** icon activates and a number is shown indicating the number of plugins to be updated.
6. Click **Update all**.
A message displays informing you of the update progress followed by a list of installed plugins.
7. Click **OK** on the Installed plugins screen to restart the site.
A Restating site message displays; this may display for a few minutes. Following the restart, the plugins display with a version number in the format 4.4.1.x, such as 4.4.1.2.
The updated system is now ready to use.

Hub 4.4 – September 2021

This release note is for the 4.4 release of Blue Prism Hub delivered in an on-premise configuration.

Enhancements

The following new features and enhancements are introduced in this version of Hub.

Area	Description of Change	Reference
Application	<p>The following improvements have been made to the user interface:</p> <ul style="list-style-type: none"> • Fields can no longer be edited when the submission process is in progress. • When editing or selecting information, a yellow border now displays around the field in focus. • Drop-down lists have been replaced with combo boxes. Starting to type the name of an item into the text field filters the displayed options to only show items that match the text. 	<p>INTER-56 HUB-1557 HUB-1714</p>
Audit	<p>The following categories and events have been added to the Audit page:</p> <ul style="list-style-type: none"> • Business process <ul style="list-style-type: none"> • Created business process • Made active business process • Retired business process • Process definitions (only applicable if the ALM plugin is installed) <ul style="list-style-type: none"> • Created process definition • Removed process definition • Increase major – audit logging for increasing the process definition major version • Sign off started • Sign off process definition • Redacted process definition • Sign off finished • Interact (only applicable if the Interact plugin is installed) <ul style="list-style-type: none"> • Created form • Removed form • Form increase major - audit logging for increasing the form major version <p>Audit functionality has been added to support all these events.</p>	<p>HUB-1117</p>
User Management	<p>It is now possible to create a new user in the Users area when Interact is not connected.</p>	<p>HUB-944</p>
Security	<p>To improve security, optional Single Socket Layer (SSL) settings have been added for applications that use RabbitMQ.</p>	<p>HUB-74</p>

Fixes and improvements

The following fixes and minor improvements are included in this version of Hub.

Area	Description of Change	Reference
Application	An issue has been fixed where Hub continually attempted to reload while displaying the "Something went wrong" error message. The issue was caused by an incorrect token refresh and was reported in environments that use Windows Authentication to authenticate with the SQL Server.	HUB-1201
	An issue has been fixed where, after applying an ALM license and rebooting the system, Hub and Interact could not be accessed. When Hub was selected from the selection screen displayed after logging in, an <i>HTTP Error 502.5 - ANCM Out-Of-Process Startup Failure</i> message was observed; where as Interact appeared as unavailable on the selection screen. Blue Prism Hub and Blue Prism Interact can now be accessed without experiencing these issues.	DS-597 HUB-2300 IADA-102
Audit	A minor adjustment has been made to the Edit view pane on the Audit page. The filter category/column heading previously labeled Date time has been changed to Created On for consistency.	HUB-1127
Authentication Server	A header style error has been fixed on the Authentication Server login page, where changing the width of the browser window to 992px or less caused the language drop-down list to become disabled.	HUB-1223
Environment Management	An issue has been resolved where the user was unable to add a new environment to the Hub Environment management page following a previous failed attempt. This was due to the environment data not being cleared from connected databases after the failed attempt.	HUB-1356

Area	Description of Change	Reference
Installer	<p>The following changes have been made to the Hub Installer:</p> <ul style="list-style-type: none"> • New fields have been added to the Prerequisites 2 – RabbitMQ screen: Virtual host and Protocol. • The Distributed Cache SQL connection screen has been removed. • The File Service SQL connection configuration screen has been added. This creates a new File Service database for the storage of files, rather than storing the files in a folder system on the server hard disk. <p>For more information, see the Hub install guide.</p>	<p>HUB-1515 HUB-1516 HUB-1654</p>
	<p>The installation no longer fails if the machine has no internet access or has an incompatible version of the PowerShell SqlServer module is installed on the machine. Previously, the installation would fail if the column encryption script was run in an offline environment.</p>	<p>HUB-2020</p>
	<p>Host names for all sites can now be custom host names and use mixed case characters (uppercase and lowercase).</p> <p>Previously, if the initial part (application name) of the default host name was changed during installation and mixed case characters were used, a 500 error was displayed when certain pages in Hub were accessed, for example, Email configuration page, Audit page, and when uploading a license.</p>	<p>HUB-906</p>
LDAP	<p>Hub can now synchronize with more than 10,000 Active Directory users. Previously, Hub was restricted by the default limit set within MaxTempTableSize on the LDAP server.</p>	<p>HUB-1538</p>
SMTP	<p>SMTP host names with more than three symbols can now be entered into the SMTP host field.</p>	<p>HUB-1222</p>
Settings	<p>An issue with the Customization page has been fixed, where attempting to save a theme with incorrectly formatted text in the Name field resulted in the system endlessly attempting (and failing) to validate the name, instead of displaying an error message.</p>	<p>HUB-1134</p>
	<p>On the Add connection page, the Database authentication header on the Add connection page no longer displays on the form when SQL with Windows Authentication is selected.</p>	<p>HUB-1163</p>
	<p>When creating new roles in Hub, all names must now be unique. It is no longer possible to give a Hub role and an Interact role the same name.</p>	<p>HUB-2036</p>
Service accounts	<p>A new permission has been added to service accounts: Interact Remote API. This enables service accounts to be created that can be used when setting up the Interact Remote API with other Blue Prism products.</p>	<p>HUB-1564</p>

Plugin updates

Automated Lifecycle Management (ALM)

The following improvements and fixes are included in this version of the ALM plugin.

Area	Description of Change	Reference
All	The user interface has been further refined to improve usability and readability when modifying process definitions, wireframes, exceptions, and templates. For more information about the user interface. See the ALM user guide	HUB-1093
Business processes	A new Delete button has been added to enable the user to retire business processes. A business process can only be deleted by the business process owner, and it cannot be deleted if it has a process definition or an Interact Form associated with it. For more information, see ALM – Business processes .	HUB-895
	When sorting data in the Name and Stage progression columns of the Business processes overview page, the first click now sorts the data alphabetically and the second click sorts in reverse alphabetical order. Previously, the sorting was incorrectly applied the opposite way around.	HUB-1159

Area	Description of Change	Reference
Process definitions	<p>JSON files exported from Blue Prism Capture versions 1.0, 2.0, and 2.1 can now be imported into ALM. This enables ALM users to quickly and efficiently generate a process definition without manually documenting the steps.</p> <p>The user can:</p> <ul style="list-style-type: none"> • Add up to 15 custom choices per decision step to be added to the process definition. • Drag and drop steps and sections to rearrange them in the process definition. • Move sections and steps directly above or below a specified section or step in the process definition. • Upload missing images manually if any fail to import automatically. • Opt to have any applications that are not already listed in ALM to be automatically added to the Applications page on import. <p>The following items are included in the import:</p> <ul style="list-style-type: none"> • Capture notes. • A Custom action option has also been added in the Action type drop-down list when creating an Action step in a process definition. • Click hold, Click release, Key press, and Triple click actions. <p>For more information, see Upload a JSON file.</p>	HUB-593
	<p>Process definitions can now be deleted. A process definition can only be deleted by the process definition document owner, and it cannot be deleted if it is locked for editing by another user. For more information, see Delete a process definition.</p>	HUB-896
	<p>A new filter called Sign off status has been added to the Process definitions page. This filter enables users to view only those process definitions where sign-off has been started but not yet completed.</p>	HUB-496
	<p>Auditing of process definition workflow events has been added. For information about the events within the Process definition category, see Audit page.</p>	HUB-1117
	<p>The maximum number of characters in the Element name field has been increased from 50 to 75.</p>	HUB-638
	<p>An issue on the Edit definition page has been resolved, where the thumbnail image did not display correctly in the action steps.</p>	HUB-1234
Wireframer	<p>Clicking the Send report button no longer results in an error and opens the correct page.</p>	HUB-1227
	<p>An issue has been fixed where the incorrect notification displayed when the user set up traditional SMTP settings and clicked Send report. The correct notification now displays.</p>	HUB-1171

Control Room

No changes have been made to the Control Room plugin in this release.

Interact

For the Interact plugin improvements and fixes, see the [Interact 4.4 release notes](#).

Known issues

A list of any prominent issues with this release is maintained in the knowledge base, click [here](#) for more information.

Secure development policy

As part of our secure development policy, Blue Prism products are evaluated against the following security standards:


- OWASP Top 10 –The security vulnerabilities that pose the most risk to applications development. For more information, see the [OWASP website](#).
- SANS CWE Top 25 – The most common software security vulnerabilities found throughout the software development industry. For more information, see the [SANS website](#).
- Federal Information Processing Standard (FIPS) Publication 140-2 – U.S. government standard that defines minimum security requirements for cryptographic modules in information technology products.
- Payment Card Industry Data Security Standard (PCI DSS).
- Health Insurance Portability and Accountability Act (HIPAA).
- Federal Information Security Management Act (FISMA).

A compliance highlight summary report is available upon request via Product Support.

Upgrade Hub and Interact

Upgrading Hub and Interact is a simple process that uses dedicated tools. You need to run the upgrade tools in the following order, starting with the version you are currently using:

- Upgrade from 4.0 to 4.1.
- Upgrade from 4.1 to 4.2.
- Upgrade from 4.2 to 4.3.
- Upgrade from 4.3 to 4.4.


 After you have completed the upgrade, advise your users to log into Hub and clear the cache by pressing **CTRL + F5**. This will refresh all web pages and ensure that any user interface changes are updated.

Upgrade Hub and Interact 4.0 to version 4.1

It is recommended that you schedule the upgrade to take place outside of working hours.

Prerequisites

- Version 4.0 of Hub and Interact is installed.
-
- You have backed up all relevant databases. Although the databases are not impacted by the upgrade, it is recommended that databases are backed up before performing any upgrade.

 The upgrader automatically stops any running websites as part of the upgrade process. You do not need to manually stop them.

Upgrade steps


1. Download the Blue Prism Interact and Hub Upgrader for version 4.0 to 4.1 from the [Blue Prism Portal](#).
2. Run the upgrader and follow the instructions.
3. Once the upgrader has completed, log in to Hub and open the plugin repository.
The repository will show that there are plugins ready to update with details of the currently installed and available versions displayed.
4. Select the **All** check box and click **Complete updating**.
The new versions of the selected plugins are installed and the upgrade to version 4.1 is complete.
5. Repeat the process on all machines on which Hub is installed.

Upgrade Hub and Interact 4.1 to version 4.2

It is recommended that you schedule the upgrade to take place outside of working hours.

Prerequisites

- Version 4.1 of Hub and Interact is installed.
-
- You have backed up all relevant databases. Although the databases are not impacted by the upgrade, it is recommended that databases are backed up before performing any upgrade.
- You have created DNS records for the License Manager and Notification Center to use during this upgrade. This prerequisite is not required for single machine environments.
- SSL certificates for the new web sites; License Manager and Notification Center. See the [Hub Install Guide](#) for more information about SSL certificates.
- You have sufficient database permissions to configure the new databases created as part of this upgrade, such as, dbcreator or sysadmin.
- GB of free disk space on the server where Hub and/or Interact are installed – This is required for the backup that is created until the installation process is complete.

 The upgrader automatically stops any running websites as part of the upgrade process. You do not need to manually stop them.

Upgrade steps

1. Download the Blue Prism Interact and Hub Upgrader for version 4.1 to 4.2 from the [Blue Prism Portal](#).
2. Unzip the installer on the machine where Hub and Interact 4.1 are installed. It contains two files:
 - Blue Prism Interact and Hub Upgrader.exe – The upgrader executable.
 - BluePrismHubAndInteractUpdate4.2.bin – The binary file needed to upgrade to 4.2.These files must be saved in the same directory.
3. Double-click the upgrader executable to start the upgrader wizard, and on the Welcome to the Hub and Interact Upgrader screen, click **Next**.
4. On the End-User License Agreement screen, read the End-User License Agreement and, if you

agree to the terms, select the check box and click **Next**.

5. On the Configure License Manager SQL connection screen:

Configure License Manager SQL connection
Please enter details for a SQL server instance

Please select SQL Server: WEBSERVER-QA-02 Refresh

Authentication Mode

Trusted (Windows Authentication)

Specify Username and Password (SQL Authentication)

Username: sqladmin

Password: ●●●●●●●●

Database name: LicenseManagerDB


Test connection to proceed

Back Next Cancel

a. Configure the settings for the License Manager database by providing the SQL Server host name or IP address, and the credentials for the account to create the database:

- If **Windows Authentication** is selected, the account must have the appropriate permissions.
- If **SQL Authentication** is selected, enter the username and password.

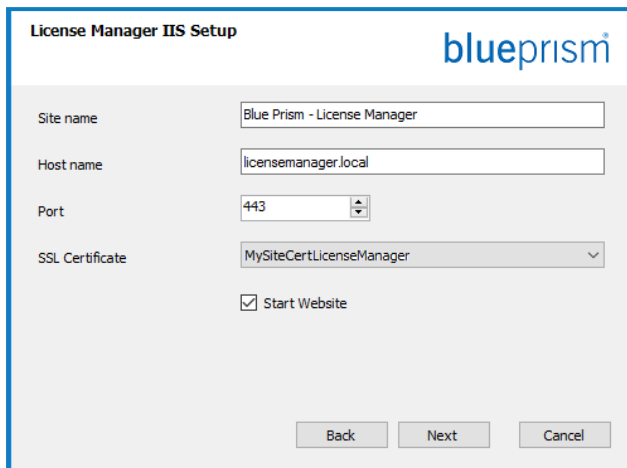
Confirm that **SQL Authentication** is selected, and enter the username and password.

 You must ensure that your database password does not contain an equals sign (=) or a semi-colon (;). These characters are not supported, and will lead to issues when trying to connect to the database.

The database name can be left as the default value or changed as required.

- b. Click **Test connection to proceed** to test the SQL credentials and verify connectivity.
A notification will display the result of the test. You will only be able to move on to the next step if the test is successful.
- c. Click **Next**.

6. On the License Manager IIS setup screen:



License Manager IIS Setup

Site name: Blue Prism - License Manager

Host name: licensemanager.local

Port: 443

SSL Certificate: MySiteCert.LicenseManager


Start Website

Back Next Cancel

a. Configure the License Manager website.

You need to:

- Enter a site name.
- Enter a host name in lowercase characters – This will be used as the URL for the site. The first part of the default host name must not be changed. You can only change the *.local* part of the host name. Ensure that you consider your DNS and Domain structure when choosing a host name.

 The use of uppercase characters in URLs is not supported.

- Enter the port number.
- Select the appropriate SSL certificate.
- Select **The One Cert** SSL certificate.
- Leave **Start Website** selected, unless you do not want the website to automatically start at the end of the installation.

b. Click **Next**.

7. On the Notification Center SQL connection screen:

Configure Notification Center SQL connection
Please enter details for a SQL server instance

Please select SQL Server: WEBSERVER-QA-02 Refresh

Authentication Mode

Trusted (Windows Authentication)

Specify Username and Password (SQL Authentication)

Username: sqladmin

Password:

Database name: NotificationCenterDB


Test connection to proceed

Back Next Cancel

- a. Configure the settings for the Notification Center database by providing the SQL Server host name or IP address, and the credentials for the account to create the database:

- If **Windows Authentication** is selected, the account must have the appropriate permissions.
- If **SQL Authentication** is selected, enter the username and password.

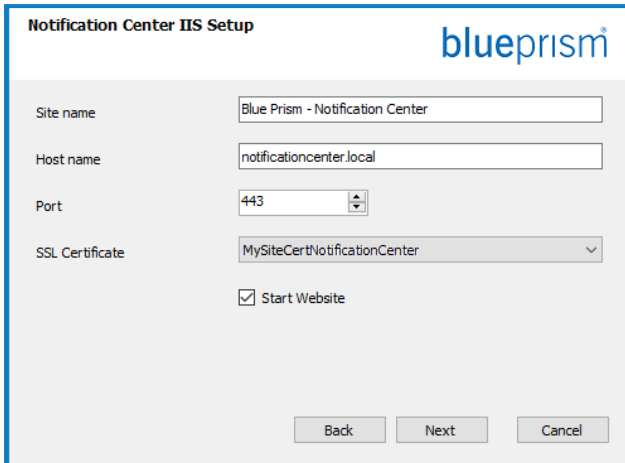
Confirm that **SQL Authentication** is selected, and enter the username and password.

 You must ensure that your database password does not contain an equals sign (=) or a semi-colon (;). These characters are not supported, and will lead to issues when trying to connect to the database.

The database name can be left as the default value or changed as required.

- b. Click **Test connection to proceed** to test the SQL credentials and verify connectivity.
A notification will display the result of the test. You will only be able to move on to the next step if the test is successful.
- c. Click **Next**.

8. On the Notification Center IIS setup screen:



Notification Center IIS Setup blueprism®

Site name: Blue Prism - Notification Center

Host name: notificationcenter.local

Port: 443

SSL Certificate: MySiteCertNotificationCenter


Start Website

Back Next Cancel

a. Configure the Notification Center website.

You need to:

- Enter a site name.
- Enter a host name in lowercase characters – This will be used as the URL for the site. The first part of the default host name must not be changed. You can only change the *.local* part of the host name. Ensure that you consider your DNS and Domain structure when choosing a host name.

 The use of uppercase characters in URLs is not supported.


- Enter the port number.
- Select the appropriate SSL certificate.
- Select **The One Cert** SSL certificate.
- Leave **Start Website** selected, unless you do not want the website to automatically start at the end of the installation.

b. Click **Next**.

9. On the Configure IADA SQL configuration screen:

- a. Configure the settings for IADA by providing the SQL Server host name or IP address, and the credentials for the account to create the database:
 - If **Windows Authentication** is selected, the account must have the appropriate permissions.
 - If **SQL Authentication** is selected, enter the username and password.

Confirm that **SQL Authentication** is selected, and enter the username and password.

 You must ensure that your database password does not contain an equals sign (=) or a semi-colon (;). These characters are not supported, and will lead to issues when trying to connect to the database.

The database name can be left as the default value or changed as required.

- b. Click **Test connection to proceed** to test the SQL credentials and verify connectivity.

A notification will display the result of the test. You will only be able to move on to the next step if the test is successful.
- c. Click **Next**.

10. On the Ready for Upgrade to 4.2 screen, click **Next** to upgrade Hub and Interact to 4.2.

11. On the Completed the Blue Prism Hub and Blue Prism Interact upgrade screen:

- When the upgrade completes successfully, click **Finish**.
- If the installation failed, the **View Log** option will give you details of the error that was encountered. For more information, see [Troubleshooting upgrades](#).

12. Ensure the database permissions for the new databases are:

Application name	Example service account name for SQL Windows Authentication	SQL Server permissions required during installation	Database permissions required during application running	Default database name
Blue Prism - Notification Center	IIS APPPOOL\Blue Prism – Notification Center	dbcreator / sysadmin	db_datawriter / db_datareader	NotificationCenterDB
Blue Prism - License Manager	IIS APPPOOL\Blue Prism – License Manager	dbcreator / sysadmin	db_owner Or db_datawriter / db_datareader with execute permissions (see below)	LicenseManagerDB

When the application is running, the License Manager requires appropriate permissions to execute stored procedures. If you do not want to use db_owner as the permission level, you can use db_datawriter/db_datareader and run the following SQL script to provide the required level to that user:


```
USE [LicenseManagerDB]
GRANT EXECUTE to "IIS APPPOOL\Blue Prism - License Manager"
```

Where:

- [LicenseManagerDB] is the database name for License manager.
- "IIS APPPOOL\Blue Prism - License Manager" is the username.

13. If using Windows Authentication:

- Change the Application Pools Identity of the newly installed License Manager and Notification Center to match the Application Pools that already exist for Hub and Interact.
- Give the Identity, under which the IIS pools run, access to the BPC_SQL_CERTIFICATE certificate. To do this, open Manage Computer Certificates from the Windows taskbar. In the Personal folder, right-click the certificate and select **All tasks > Manage Private Keys**. Add the user that matches the Identity and give the user Full control.

 Access to this certificate is required by Identity running the Blue Prism – Hub and Blue Prism – IADA Application Pools.


- Check the file permission is set to Full Control for the service account on the new folders:
 - C:\Program Files (x86)\Blue Prism\Notification Center
 - C:\Program Files (x86)\Blue Prism\License Manager.

14. Restart the RabbitMQ Service.

15. Restart all Application Pools.


16. Restart IIS.

17. Repeat the process on all machines on which Hub is installed.

 The plugins are automatically updated to the latest version as part of the upgrade process.


Upgrade Hub and Interact 4.2 to version 4.3

It is recommended that you schedule the upgrade to take place outside of working hours.

 In 4.3, IMS has been replaced with Authentication Server, any new installs will create a URL, Application Pool and database name that reflect this change. Using this upgrader, only the IMS folder and site name are changed from IMS to Authentication Server, however, your Application Pool, URL and IMS database name remain unchanged. It will also rename the Blue Prism – Email Sender site to Blue Prism – Email Service, however, the address remains unchanged. It is important that everyone is logged out of the IMS Server when you perform this upgrade.

Prerequisites

- Version 4.2 of Hub and Interact is installed.
-
- You have backed up all relevant databases. Although the databases are not impacted by the upgrade, it is recommended that databases are backed up before performing any upgrade.
- Sufficient database permissions to configure the new database created as part of this upgrade, such as, dbcreator or sysadmin.
- 2.5 GB of free disk space on the server where Hub and/or Interact are installed – This is required for the backup that is created until the installation process is complete. Remove any backups from any previous upgrades.

 The upgrader automatically stops any running websites as part of the upgrade process. You do not need to manually stop them.

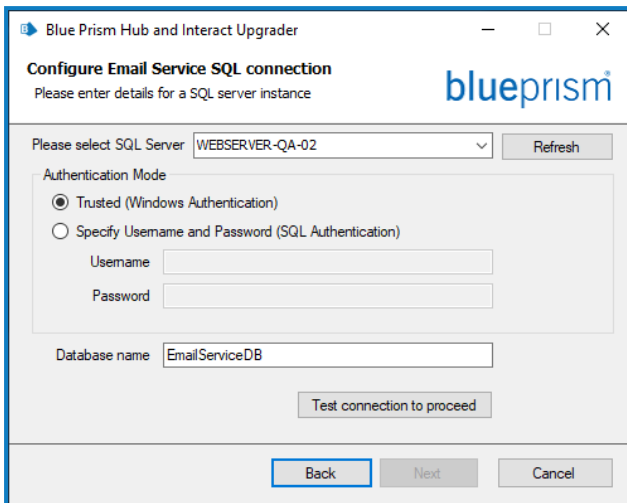
Upgrade steps

1. Download the Blue Prism Interact and Hub Upgrader for version 4.2 to 4.3 from the [Blue Prism Portal](#).
2. Unzip the installer on the machine where Hub and Interact 4.2 are installed. It contains two files:
 - Blue Prism Interact and Hub Upgrader.exe – The upgrader executable.
 - BluePrismHubAndInteractUpdate4.3.bin – The binary file needed to upgrade to 4.3.

These files must be saved in the same directory.


3. Double-click the upgrader executable to start the upgrader wizard, and on the Welcome to the Hub and Interact Upgrader screen, click **Next**.
4. On the End-User License Agreement screen, read the End-User License Agreement and, if you agree to the terms, select the check box and click **Next**.

5. On the Configure Email Service SQL connection screen:



- a. Configure the settings for the Email Service database by providing the SQL Server host name or IP address, and the credentials for the account to create the database:
 - If **Windows Authentication** is selected, the account must have the appropriate permissions.
 - If **SQL Authentication** is selected, enter the username and password.

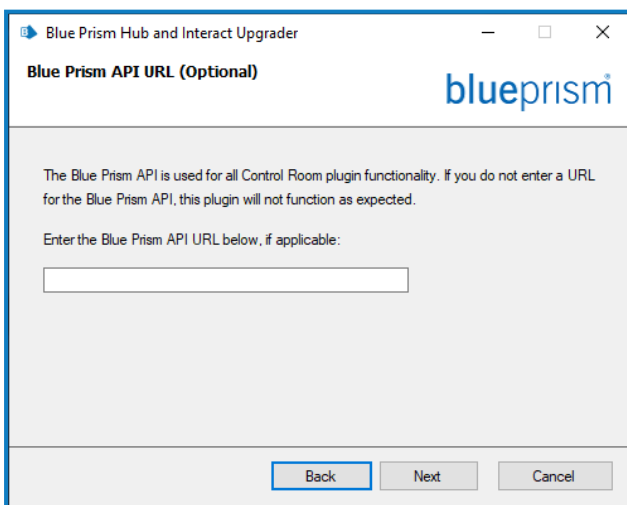
Confirm that **SQL Authentication** is selected, and enter the username and password.

 You must ensure that your database password does not contain an equals sign (=) or a semi-colon (;). These characters are not supported, and will lead to issues when trying to connect to the database.

The database name can be left as the default value or changed as required.

- b. Click **Test connection to proceed** to test the SQL credentials and verify connectivity.
A notification will display the result of the test. You will only be able to move on to the next step if the test is successful.
- c. Click **Next**.

6. On the Blue Prism API URL (Optional) screen:



If required, enter the URL for the Blue Prism API. This URL is essential if you want to use the Control Room plugin. The Control Room plugin is compatible with Blue Prism 7.0 or later.


If you decide to use the Control Room plugin and you have not entered a URL at this point, you will need to update the configuration file. For more information on how to do this, see the [Troubleshoot a Hub installation](#) section in the [Blue Prism Hub install guide](#).

7. On the Ready for Upgrade to 4.3 screen, click **Next** to upgrade Hub and Interact to 4.3.

8. On the Completed the Blue Prism Hub and Blue Prism Interact upgrade screen:
 - When the upgrade completes successfully, click **Finish**.
 - If the installation failed, the **View Log** option will give you details of the error that was encountered. For more information, see [Troubleshooting upgrades](#).
9. Ensure the database permissions for the new database is:

Application name	Example service account name for SQL Windows Authentication	SQL Server permissions required during installation	Database permissions required during application running	Default database name
Blue Prism - Email Service	IIS APPPOOL\Blue Prism – Email Service	dbcreator / sysadmin	db_datawriter / db_datareader	EmailServiceDB

10. Restart the RabbitMQ Service.
11. Restart all Application Pools.
12. Restart IIS.
13. Repeat the process on all machines on which Hub is installed.

 The plugins are automatically updated to the latest version as part of the upgrade process.


Upgrade Hub and Interact 4.3 to version 4.4

For new installations of 4.4, the Cache database is no longer used and there is now a File Service database to store files, rather than storing files within a folder. For upgrades, these changes are not applied and this functionality remains as it was.

It is recommended that you schedule the upgrade to take place outside of working hours.


Prerequisites


- Version 4.3 of Hub and Interact is installed.
- Everyone is logged out of Authentication Server.
- You have backed up all relevant databases. Although the databases are not impacted by the upgrade, it is recommended that databases are backed up before performing any upgrade.
- Sufficient database permissions to configure the new database created as part of this upgrade, such as, dbcreator or sysadmin.
- 2.5 GB of free disk space on the server where Hub and/or Interact are installed – This is required for the backup that is created until the installation process is complete. Remove any backups from any previous upgrades.

 The upgrader automatically stops any running websites as part of the upgrade process. You do not need to manually stop them.

Upgrade steps

1. Hub 4.4 requires version 3.1.11 of the .NET Framework. If you do not have this version, you will need to update your Hub web server.


Step	Details
1	<p>Download the following components and store them in a temporary location, for example, C:\temp:</p> <ul style="list-style-type: none">• .NET Core 3.1.11 Windows Server Hosting https://dotnet.microsoft.com/download/dotnet/thank-you/runtime-aspnetcore-3.1.11-windows-hosting-bundle-installer• .NET Core 3.1.11 Windows Desktop Runtime https://dotnet.microsoft.com/download/dotnet/thank-you/runtime-desktop-3.1.11-windows-x64-installer
2	<p>To install the .NET dependencies, run each of the following commands using the PowerShell command prompt, waiting until each completes, before running the next command:</p> <pre>start-process "C:\temp\dotnet-hosting-3.1.11-win.exe" /q -wait start-process "C:\temp\windowsdesktop-runtime-3.1.11-win-x64.exe" /q -wait</pre> <p> Ensure the file path matches the location where the files were stored in step 1.</p>

 To watch this installation step, see our [.NET installation video](#).


2. Download the Blue Prism Interact and Hub Upgrader for version 4.3 to 4.4 from the [Blue Prism Portal](#).
3. Unzip the installer on the machine where Hub and Interact 4.3 are installed. It contains two files:
 - Blue Prism Interact and Hub Upgrader.exe – The upgrader executable.
 - BluePrismHubAndInteractUpdate4.4.bin – The binary file needed to upgrade to 4.4.

These files must be saved in the same directory.

4. Double-click the upgrader executable to start the upgrader wizard, and on the Welcome to the Hub and Interact Upgrader screen, click **Next**.

 If you have not installed .NET Framework 3.1.11 or later, the Prerequisites screen displays and you will need to exit the installer and update the .NET Framework.

5. On the End-User License Agreement screen, read the End-User License Agreement and, if you agree to the terms, select the check box and click **Next**.
6. On the Ready for Upgrade to 4.4 screen, click **Next** to upgrade Hub and Interact to 4.4.
7. On the Completed the Blue Prism Hub and Blue Prism Interact upgrade screen:
 - When the upgrade completes successfully, click **Finish**.
 - If the installation failed, the **View Log** option will give you details of the error that was encountered. For more information, see [Troubleshooting upgrades](#).
8. Restart the RabbitMQ Service.
9. Restart all Application Pools.
10. Restart IIS.
11. Repeat the process on all machines on which Hub is installed.

 The plugins are automatically updated to the latest version as part of the upgrade process.

Upgrade Interact API VBO

The Interact API VBO is used within the Blue Prism interactive client, and it is updated independently to utilize any new features within the Interact API Service that are available when Interact is upgraded. The latest version of the VBO is available in the Interact API Service release zip file on the [Blue Prism Portal](#).

To upgrade the VBO, you only need to update the Utility - Interact VBO:

1. Download the Interact API Service release file from the [Blue Prism Portal](#).
2. Unzip the Interact API Service release file.
3. In the Blue Prism interactive client and select **File > Import > Release/Skill**.
The Choose the input file screen displays.
4. Click **Browse** and select the extracted Interact API Release.bprelease file, then click **Next**.
The Resolve Import Conflicts screen displays.
5. In the **Resolution** column:
 - a. Leave the setting for **Utility - Interact API** as **Overwrite the existing business object**.
 - b. Change the settings for all the other components to **Don't import this business object**.
6. Click **Next**.
The Process logging overview screen displays.
7. Ensure that only **Utility - Interact API** is listed for import. If:
 - Other components are listed, click **Back** and change the settings as detailed in step 5 above.
 - It is the only component, click **Next** to complete the import.
8. Click **Finish**.

Troubleshooting upgrades

The upgrade says it ended prematurely, what happens now.

The upgrade process has been designed so that if a failure is encountered, it rolls back the install and reinstates the version you were upgrading from. During the upgrade, the folder `backup_4.n` is created in the installation location (by default, `C:\Program Files (x86)\Blue Prism\`), where `4.n` reflects the existing version number. This contains a copy of the existing installed files and is used as the roll back source if an error is encountered during the installation.

You can try running the upgrader again. Before retrying an upgrade, read any error messages and log files created during the upgrade and ensure any issues have been addressed before attempting the upgrade again.

If this issue persists, please contact Blue Prism Support.

I have upgraded to version 4.4 but the 4.1 user interface still displays.

If this is encountered, clear your browser cache and reload the page.

I have upgraded from 4.1, however, none of my new queues are being created.

This is likely due to the quorum queue feature not being enabled in RabbitMQ. If you check the Hub logs, you will see the error "*the 'quorum_queue' feature is disabled*".

1. On the Message Broker server, run the RabbitMQ command:

```
rabbitmqctl enable_feature_flag quorum_queue
```

2. On the Hub web server, restart the application pools.

The queues are created.

Following an upgrade, when I attempt to log into Interact or Hub, I am seeing an error related to SignalR about overloading the web server in IIS.

This error is very rare but if it does occur, reload the site and restart the application pools in IIS.

I canceled an installation during the upgrade process and I am now seeing errors.

It is recommended that installations are not canceled during the upgrade process. However, although errors may be seen, the rollback operation will complete successfully.

Previous Releases


Hub 4.3 – May 2021

This release note is for the 4.3 release of Blue Prism Hub delivered in an on-premise configuration.

Enhancements

The following new features and enhancements are introduced in this version of Hub.



Area	Description of Change	Reference
Control Room	<p>A new plugin has been added to Hub; Control Room. This plugin can only be used with Blue Prism version 7.0 or later, and it complements the Control Room features in the Blue Prism interactive client.</p> <p>The new Control Room provides dashboards and data views that allow users to view and manage Blue Prism activity for all their environments. Control Room has four plugin features that complement the existing Blue Prism interactive client functionality:</p> <ul style="list-style-type: none"> • Work Queues – Monitor the status of work queue items and track queue activity. • Schedules and Tasks – View and monitor schedules and tasks. • Sessions – View, filter, and organize session activity in each environment. • Digital Worker Health – View and monitor the Digital Workers in each environment. <p>The Control Room plugin also introduces a number of widgets which can be used on the Dashboard to graphically view the data.</p>	BP-131 BP-1581

Area	Description of Change	Reference
Installer	<p>The following new features have been added to the Hub installer:</p> <ul style="list-style-type: none"> Authentication Server SQL configuration and IIS setup – The Identity Management Server (IMS) has been renamed to Authentication Server. In addition, the Authentication Server facilities enhanced integration to utilize the new features in Blue Prism 7.0, such as service accounts (using centralized authentication for selected components of the Blue Prism platform) and the Control Room plugin. <div data-bbox="424 584 1251 678" style="border: 1px solid #0070C0; padding: 5px; margin: 10px 0;">  The Authentication Server screens in the installer replace the IMS screens that were present in earlier versions. </div> Email Service SQL configuration – Email configuration now supports Microsoft OAuth 2.0 authentication as well as the existing username and password authentication method. To support this, a new screen has been added to the installer to configure the database for the Email Service. Email Service IIS setup – In earlier releases, Email Service was called Email Sender. The installer screen has been updated with this name change. The default website name has also changed, however, the default URL still remains as email.local. Blue Prism API URL – A new screen has been added to the installer to capture the URL for the Blue Prism API. The URL is required to use the new Control Room plugin with Blue Prism 7.0, otherwise, the screen can be left blank. 	<p>HUB-867 HUB-947 BP-2895</p>
Localization	<p>Support for two languages, Russian and Portuguese (Brazilian), has been removed. English will now be displayed for users who have selected these languages in their browser settings, or using the language drop-down on the login page in earlier versions of Hub.</p>	<p>BP-3601</p>
SMTP	<p>The Email configuration page has been enhanced to support Microsoft OAuth 2.0 authentication with SMTP, as well as the existing username and password authentication method. Any changes to the SMTP settings are audited and can be seen on the Audit page.</p>	<p>HUB-713</p>
User management	<p>The Users page has been enhanced:</p> <ul style="list-style-type: none"> Only live users (those that are not retired) are displayed by default. Retired users can be viewed by changing the setting under the Live filter. All users can be viewed by turning off the Live filter. On the Users page, an administrator can view a user's information and click the new Change password icon to change their password. An administrator cannot change another administrator's password. 	<p>HUB-865</p>

Fixes and improvements

The following fixes and minor improvements are included in this version of Hub.

Area	Description of Change	Reference
ALM	<p>The Uplift License option has been added to the Plugin management page to enable administrators to upgrade the ALM license from an earlier version to a version that is compatible with 4.3.</p> <p>This resolves the previously documented known issue where a warning message was permanently displayed on some pages in the system indicating that the ALM license limit had been exceeded.</p>	HUB-722
	<p>The creator of a process definition can now assign their own access level. Previously, they were defaulted to be the owner of the process definition and this could not be changed. They can now select to be a Contributor or a Viewer, however, the process definition can not be saved unless there is at least one owner.</p>	HUB-866
Audit	<p>Two columns in the Audit page have been renamed:</p> <ul style="list-style-type: none"> • Username is now Audited by – to reflect that the audit records can also be created by system components and not just users. • Date time is now Created on – to clearly define the purpose of this column. 	BP-2935
Environment	<p>An enhancement has been made so that Hub now also supports connections to multiple RPA databases that reside on the same server, that is, they have the same server IP or hostname. Previously, multiple databases could only be connected as long as they were on different servers to each other. The connection is configured through the existing Environment management page.</p>	HUB-723
	<p>Database connections can no longer be edited on the Environment management page. Connections can still be added, refreshed and deleted.</p>	HUB-932

Area	Description of Change	Reference
LDAP	<p>The importing of Active Directory users into Hub has been fixed. Previously, when importing Active Directory users into Hub, if any of the Active Directory user accounts were missing one of the mapped attributes defined in the Hub authentication settings, the import would fail for all users.</p> <p>The import now displays a counter with the number of valid users against the total number of users found, and displays the list of valid users so that the administrator can select the required users to synchronize with Hub.</p> <p>In addition, an enhancement has been made to introduce detailed LDAP logging. This can be turned on by updating the appsettings.json file in the Application Server folder. Under lms > Logging > LogLevel, add the line:</p> <pre>"ImsServer.IntegrationServices.Services.LdapConnectionService": "Debug"</pre> <p>Once this change has been made, refresh the Application Pool.</p> <div data-bbox="347 884 1273 1077" style="border: 1px solid #0070C0; padding: 5px;"> <p> For:</p> <ul style="list-style-type: none"> • a new install, the Application Pool will be called Authentication Server. • an upgraded system, the Application Pool will be called IMS. </div>	HUB-718
	<p>If a user who has been imported into Hub using LDAP clicks the Forgot password link, they are no longer sent an email enabling them to reset their password within Hub. Previously, this email was sent, and, if a user went through the process, it created a native user account in addition to their LDAP account.</p> <p>Users who have been synced into Hub using LDAP use their Active Directory domain password to log into Hub. If they need to reset their password, they should do so using Windows.</p>	HUB-1152
Licensing	<p>The error messages that display when uploading an invalid license file for a plugin have been improved. If an administrator uploads an invalid file type, or a license file that is too large, using the Renew license key functionality, a more informative message will display.</p> <div data-bbox="347 1574 1273 1632" style="border: 1px solid #0070C0; padding: 5px;"> <p> Only .lic files under 100Kb are accepted.</p> </div>	HUB-841
Plugins	<p>When a user clicks a plugin in the Plugins repository, they now see an overview of the plugin with a link to learn more about the product, which opens the online help. The plugin downloads are available below the overview.</p>	HUB-972 HUB-1063
SMTP	<p>A change has been made to ensure that emails are sent according to the encryption method selected. For SMTP configurations using the Username and password authentication method, the encryption method can be set to None or SSL-TLS. Previously, Hub was attempting to send emails over SSL regardless of the encryption setting.</p>	HUB-717

Known issues

A list of any prominent issues with this release is maintained in the knowledge base, click [here](#) for more information.

Secure development policy

As part of our secure development policy, Blue Prism products are evaluated against the following security standards:

- OWASP Top 10 –The security vulnerabilities that pose the most risk to applications development. For more information, see the [OWASP website](#).
- SANS CWE Top 25 – The most common software security vulnerabilities found throughout the software development industry. For more information, see the [SANS website](#).
- Federal Information Processing Standard (FIPS) Publication 140-2 – U.S. government standard that defines minimum security requirements for cryptographic modules in information technology products.
- Payment Card Industry Data Security Standard (PCI DSS).
- Health Insurance Portability and Accountability Act (HIPAA).
- Federal Information Security Management Act (FISMA).

A compliance highlight summary report is available upon request via Product Support.

Hub 4.2 – April 2021

This release note is for the 4.2 release of Blue Prism Hub delivered in an on-premise configuration.

Enhancements

The following new features and enhancements are introduced in this version of Hub.

Area	Description of Change
Application	<p>The Hub user interface has been redesigned.</p> <p>The help has been updated to reflect the changes, see the Hub user guide. The help can also be accessed from the link in the side navigation in Hub.</p>
Configuration	<p>An RPA database with no dependencies can now be removed from Hub.</p> <p>For more information, see Environment management.</p>
Installer	<p>The following new features have been added to the Hub installer:</p> <ul style="list-style-type: none"> • Notification Center SQL configuration and IIS setup – The Notification Center is required to enable the new notification functionality within Interact. • License Manager SQL configuration and IIS setup – Control of the licenses has been moved from within Hub into the new License Manager. The benefit of this is that Interact can still be accessed even if Hub is unavailable. Previously, if Hub was unavailable, Interact would be too. • SignalR IIS setup – This has been taken out of the Interact installer and moved into the Hub installer.
Licensing	<p>A new website (License Manager) has been created to handle license tasks. The advantage this provides is that if Hub is offline, users can still access Interact. Previously, Hub handled license tasks and if Hub was offline, Interact was unavailable too. The new website is installed and configured using the Hub installer.</p> <p>Hub now displays warnings if all the licenses have been used. For example, if all the ALM licenses have been assigned, a message is displayed against the users and/or roles:</p> <div style="border: 1px solid blue; padding: 10px; margin: 10px 0;"> <p>Automation Lifecycle restriction: 3/0</p> <p>WARNING: You are in breach of your license, please remove users, remove the ALM plugin or get in contact with your Accounts Manager for more information</p> </div>
Localization	<p>The IMS login page and Hub now display in the language compatible with the user's language settings set in their browser. If the user has an unsupported language selected in their browser settings, English is used as the default. If required, the user can manually change the language they want to use from the drop-down list on the login page.</p>
Supported software	<p>Hub now supports the use of Azure SQL Database.</p>

Fixes and improvements

The following fixes and minor improvements are included in this version of Hub.

Area	Description of Change
Audit	<p>The following event options have been added to the Audit page:</p> <ul style="list-style-type: none"> • Forms submitted • Forms declined • Forms approved <p>The Digital Worker category has been removed from the Audit page, this also removes the following event options:</p> <ul style="list-style-type: none"> • Edited Digital Worker Log • Retired Virtual Worker Log • Made Live-Virtual Worker Log
Configuration	<p>The following fields have been removed or replaced:</p> <ul style="list-style-type: none"> • The SMTP host field in the email configuration has been modified to remove the restrictive validation that was in place. Your organizations SMTP hostname can now be entered and accepted by the field. • The IADA URL field has been removed from the database connection information accessed from the Environment manager. • The Create a password for user check box has been removed from the Create user page. Instead, a new Create password dialog displays upon completing the new users details and clicking Create user. From this, the administrator can selected whether to create a password or send the user a password update email.
User Interface	<p>The level of visual customization has been reduced. UI customization is now restricted to:</p> <ul style="list-style-type: none"> • Theme name • Brand color • Brand logo <p>For more information, see Customization.</p>

Known issues

A list of any prominent issues with this release is maintained in the knowledge base, click [here](#) for more information.

Hub 4.1 – November 2020

This release note is for the 4.1 release of Blue Prism Hub delivered in an on-premise configuration.

Upgrading

The Blue Prism Interact and Hub Upgrader can be downloaded from the customer portal. This easy-to-use tool will upgrade 4.0 to 4.1. For more information, see [Upgrade Hub and Interact on page 12](#).

Enhancements

The following new features and enhancements are introduced in this version of Hub.

Area	Description of Change
Authentication	Active Directory Authentication using LDAP can now be used to leverage the advantages of single sign-on. Once this connection has been established, users will be able to use their corporate logins to sign into Hub or Interact. This removes the need for the Hub Administrator to set up local users.
Installer	<p>The following enhancements have been made to the Hub installer:</p> <ul style="list-style-type: none"> • Server Manager roles and features automatically install – This requires VMs to restart after the installation; the choice can be made to restart immediately or later. • Customer ID is now entered through a new screen, rather than manually updating the customerid key in the appsettings.json file after installation. • Enhanced SQL screens: <ul style="list-style-type: none"> • Test connection button – This ensures that the information entered establishes a successful SQL connection. The installation cannot progress to the next step without a successful connection. • Inherited values from the previous SQL screen – This prevents the user from having to enter the same SQL information across multiple screens.
Tools	<p>A new tool has been added for encrypting and decrypting of connection strings.</p> <p>For security reasons the appsettings.json files for all the web sites are encrypted. If changes are needed to the configuration settings in this file, the encrypting/decrypting console application allows the file to be decrypted and then encrypted again.</p> <p>See Blue Prism Data Protector Tool for more information.</p>

Fixes and improvements

The following fixes and minor improvements are included in this version of Hub.

Area	Description of Change
Authentication	Previously, if Windows Authentication was selected within the Hub Database settings, the username and password fields were still available. These fields are now unavailable if the Windows Authentication option is selected, which reduces the likelihood of any potential SQL errors.
Installer	The following improvements have been made to the Hub installer: <ul style="list-style-type: none">• The installer has been renamed to Blue Prism Hub from Blue Prism Base.• Increased maximum number of users – Previously the maximum pool size used the default value. The maximum pool size has now been set to 500, thus allowing more users.• Legal and visual enhancements:<ul style="list-style-type: none">• The End-User License Agreement (EULA) has been reformatted.• The publisher name has been updated to "Blue Prism Limited" throughout the installer.

Known issues

A list of any prominent issues with this release is maintained in the knowledge base, click [here](#) for more information.

Hub 4.0 – September 2020

This release note is for the 4.0 release of Blue Prism Hub delivered in an on-premise configuration.

Enhancements

The following new features and enhancements are introduced in this version of Hub.

Area	Description of change
Plugins	<p>The following enhancements have been made to Hub's plugin repository:</p> <ul style="list-style-type: none"> • Differentiating all, free and licensed plugins drop-down • Differentiating all, free and licensed plugins label • Enter license file modal • Renew plugin license tab • Renew license modal
	<p>The following enhancements have been made to Hub's plugin expiry functionality:</p> <ul style="list-style-type: none"> • A warning now displays when a plugin is about to expire • When a plugin license expires, the following can no longer be accessed: <ul style="list-style-type: none"> • Interact plugin
Customization	<p>The following changes have been made to Hub's customization functionality:</p> <ul style="list-style-type: none"> • New default Blue Prism inline image • New default Blue Prism logo image on IMS • Company and Strapline values have been removed from Customization
Installer	Base installer
Security	<p>The following enhancements have been added to improve security in Hub:</p> <ul style="list-style-type: none"> • Code Obfuscation for IMS • Code Obfuscation for Hub

Plugin updates

A number of plugins are provided in a release – new and/or updated plugins are listed below.

Updated plugins

Plugin	Description
Interact	Priority and SLA no longer required fields when creating an Interact form.

Known issues

A list of any prominent issues with this release is maintained in the knowledge base, click [here](#) for more information.