# SS&C | blueprism

# Decipher IDP 2.2

Installation and Configuration

Document Revision: 5.0



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### Contents

Minimum requirements and components	4
Minimum requirements	
Required components	6
Upgrade Decipher IDP	7
Before you upgrade	
Upgrade Decipher IDP 2.2 to 2.2.1	7
Upgrade Decipher IDP 2.1 to 2.2	7
Upgrade Decipher IDP 1.2 to 2.2	
Upgrade Decipher IDP 1.1 to 2.2	
Standalone deployment	
Steps	
Install and configure third-party software	
RabbitMQ configuration	
Install and configure Blue Prism	
Install Decipher IDP components	
Decipher IDP post-installation configuration	
Multi-device deployment	
Steps	
Install and configure third-party software	
RabbitMQ configuration	61
Install and configure Blue Prism	64
Install Decipher IDP components	
RabbitMQ configuration on Decipher Server	
Decipher IDP post-installation configuration	
Install and configure the Natural Language Processing (NLP) plugin	
Install the NLP plugin	
Configure the NLP plugin	
Verify SQL databases	
Silent install	
Decipher IDP component installation commands	
Command line parameters	
Reporting database command line parameters	
Default file locations	
Log file locations	
Configuration file locations	

### Minimum requirements and components

SS&C | Blue Prism® Decipher IDP is a production ready IDP solution, closely integrated with SS&C | Blue Prism® Enterprise. We recommend that you deploy Decipher IDP on dedicated hardware to better support scalability as your use of Decipher IDP increases. We also recommend installing and testing Decipher IDP in a non-production environment prior to using it in a live environment.

Decipher IDP is designed to provide an on-premise solution and is not supported in SS&C | Blue Prism Cloud at this time.

### Minimum requirements

#### Decipher IDP

The following minimum setup is required to run Decipher IDP on a standalone deployment:

- Administrator access to the devices on which Blue Prism is installed.
- CPU: Intel i7 3rd generation or above.
- Windows 10, or Windows Server 2012 or later.
- RAM: 6 GB (1 GB for the application server at a load of 10,000 pages per day, plus 3 GB for SQL Server, plus 2 GB for Windows).
- Hard drive space for image storage. The average file size is 1 MB per page and 1 TB per 1 million pages.

#### Natural Language Processing (NLP) Plugin

The NLP plugin is an optional Decipher IDP component and has the following minimum requirements:

- A graphics card with a Nvidia Graphics Processing Unit (GPU) on it installed on the same machine as the Decipher automated client.
- 8 GB of RAM per each GPU.
- The version of the GPU driver must be 418.0 or later.

#### Supported browsers

Decipher IDP requires Google Chrome to be set as the default browser. Decipher IDP does not currently support any other browsers.

Decipher IDP supports:

- Google Chrome
- Microsoft Edge

#### Minimum SQL permissions

The minimum SQL permissions for the user required to connect to the database during the installation process must have the appropriate privileges to create or configure the databases from within the product, therefore an appropriate administrator account will need to be used when running the installation process:

- Create Database: dbcreator (server role) or sysadmin (server role)
- Configure Database: sysadmin (server role) or db\_owner (database role)

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The database user required to connect to the databases during normal operation must have the minimum SQL permissions to access the Decipher IDP databases. The required permissions are:

- db\_datareader
- db\_datawriter

For details on architecture and the projected performance, see the Sizing guide.

### Required components

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The following software and database components are required to use Decipher IDP.

#### Third-party components

The following additional database and software components must be installed before installing Decipher IDP. For details of these components, including download links, see Install/configure required software components.

- RabbitMQ and Erlang
- SQL Server Express 2012 (or later) as a minimum requirement

SQL Server Express is supported for proof of concept and evaluation purposes only. It is not recommended or supported for production use.

- SQL Server Management Studio
- Internet Information Server (IIS)

#### Blue Prism and Decipher IDP components

The following components need to be installed and configured for this release of Decipher IDP. Download the Decipher IDP components from the Decipher IDP page on the customer portal. For installation details, see Install Blue Prism, Decipher VBO, and DLL and Install Decipher IDP.

Component	Filename
Blue Prism	BluePrism6.6.0_x64.msi or BluePrism6.6.0_x86.msi or later
Decipher DLL	BluePrism.Decipher.VBO.Interop.dll
Blue Prism Decipher VBO	BPA Object - Decipher.xml
Decipher Licensing Service	Decipher Licensing Service 0.1.984.0.msi
Decipher Server	Decipher Server 2.22.10050.msi
Decipher Web Client	Decipher Web Client 2.23.02150.msi
Decipher Automated Clients	Decipher Automated Clients 2.23.02140.msi
Server Plugin	Decipher Server Plugin 0.1.984.0.msi
NLP plugin (optional)	Decipher NLP Plugin 2.23.02140.msi

### Upgrade Decipher IDP

Blue Prism recommend that customers use the latest version of Decipher IDP. Download the required files from the Decipher IDP portal page and update as described below.

#### Before you upgrade

Blue Prism strongly advise that existing Decipher IDP environments and databases are fully backed up prior to upgrade, enabling the restoration of a working environment in the event of a failed installation. The backup should be a system or full volume backup and not a backup of specific files within Decipher IDP.

When a Decipher environment is upgraded, all existing data, templates (Data Form Definitions) and learning is retained. Once the upgrade is complete, all existing information is retained, but new functions and features are now available for use, whether with newly created or existing Data Form Definition files.

### Upgrade Decipher IDP 2.2 to 2.2.1

To upgrade from Decipher IDP 2.2 to 2.2.1:

 Decipher Web Client – Run the Decipher Web Client 2.23.03300.msi and click through the install wizard, following the on-screen instructions as prompted. See Install Decipher web client for details.

### Upgrade Decipher IDP 2.1 to 2.2

To upgrade from Decipher IDP 2.1 to 2.2:

- Decipher Licensing Service Run the Decipher Licensing Service.msi and click through the install wizard, following the on-screen instructions as prompted. See Install Decipher licensing service for details.
- Decipher Server Run the Decipher Server 2.22.10050.msi and click through the installation wizard, following the on-screen instructions as prompted. The installation wizard will display your current settings. Click Edit to amend the settings or create a new reporting database (see below for details), or click Install to continue. See Install Decipher server for details.

To create a new, separate reporting database as part of this Decipher IDP upgrade (optional):

a. Click Edit on the Setup configurations summary screen.

🖟 Decipher Server Setup	– 🗆 X
Setup configurations	( The second sec
This is the setup configuration	that you have
Installation folder	C:\Program Files (x86)\Blue Prism\Decipher Server\
SQL Server	.\SQLEXPRESS
Server Database name	DecipherServerDh
Transe sterage path	a la citación de la c
image storage path	C:\Decipher storage
Server TCP Port	12543
Install as service	Yes
Enable storage encrypti	
Liable Storage entrypt	Taise
Reporting SQL Server	.\SQLEXPRESS
	Edit Install Cancel

b. The Configure Server Settings screen displays.

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🖟 Decipher Server Setup		_	- [	×
Configure Server Set	tings			Č
Please configure the serv	ver			
Server Database Name:	DecipherServerDb			
Image Storage Path:	C:\Decipher storage			
Server TCP Port:	12543			
🗹 Install as Windows Se	ervice	Enable reporting	databas	e
Encrypt All Data At R	lest	Reporting databa	ase on sa	ame server
Encrypt Configuratio	n			
	Back	Next	(	Cancel

- c. Select Enable reporting database.
- d. Click Install to complete the installation, then Finish to exit the wizard.
- Decipher Web Client Run the Decipher Web Client 2.23.02150.msi and click through the install wizard, following the on-screen instructions as prompted. See Install Decipher web client for details.
- Decipher Automated Clients Run the Decipher Automated Clients 2.23.02140.msi and click through the install wizard. The install wizard will display your current settings. See Install Decipher automated clients for details.

When upgrading Decipher Automated Clients, the destination folder and configuration settings are grayed out to ensure the existing installation configuration is retained.

5. **Decipher Server Plugin** – Run the Decipher Server Plugin.msi and click through the install wizard. The install wizard will display your current settings. See Install Decipher server plugin for details.

### Upgrade Decipher IDP 1.2 to 2.2

To upgrade from Decipher IDP 1.2 to 2.2 :

- 1. Import the latest Decipher VBO, BPA Object Decipher.xml, into Blue Prism and overwrite the existing VBO.
- 2. Paste the BluePrismDecipher.VBO.Interop.dll file into C:\Program Files\Blue Prism Limited\Blue Prism Automate, and replace the existing file.
- Decipher Licensing Service Run the Decipher Licensing Service.msi and click through the install wizard, following the on-screen instructions as prompted. See Install Decipher licensing service for details.
- 4. Decipher Server Run the Decipher Server 2.22.10050.msi and click through the installation wizard, following the on-screen instructions as prompted. The installation wizard will display your current settings. Click Edit to amend the settings or create a new reporting database (see below for details), or click Install to continue. See Install Decipher server for details.

To create a new, separate reporting database as part of this Decipher IDP upgrade (optional):

a. Click Edit on the Setup configurations summary screen.

🖟 Decipher Server Setup	– 🗆 X
Setup configurations	िंस
This is the setup configuration	that you have
Installation folder	C:\Program Files (x86)\Blue Prism\Decipher Server\
SQL Server	.\SQLEXPRESS
Server Database name	DecipherServerDb
Image storage path	C:\Decipher storage
Server TCP Port	12543
Install as service	Yes
Enable storage encrypti	on false
Reporting SQL Server	.\SQLEXPRESS
	Edit Install Cancel

b. The Configure Server Settings screen displays.

🖟 Decipher Server Setup		- 🗆 X	
Configure Server Set Please configure the ser	t <b>ings</b> ver	Ě	7
Server Database Name: Image Storage Path:	DecipherServerDb C:\Decipher storage		
Server TCP Port:	12543	Enable reporting database	
Encrypt All Data At R	est n	Reporting database on same server	
	Back	Next Cancel	

- c. Select Enable reporting database.
  - If the existing reporting database is on the same server as Decipher Server, but you
    want to create a database on a separate server, deselect Reporting database on same
    server. The Reporting Database Server Configuration screen displays. Add the
    location and credentials for the reporting database server and click Next.
- d. Click Install to complete the installation, then Finish to exit the wizard.
- Decipher Web Client Run the Decipher Web Client 2.23.02150.msi and click through the install wizard, following the on-screen instructions as prompted. See Install Decipher web client for details.
- 6. Decipher Automated Clients Run the Decipher Automated Clients 2.23.02140.msi and click through the install wizard. The install wizard will display your current settings. See Install Decipher automated clients for details.

When upgrading Decipher Automated Clients, the destination folder and configuration settings are grayed out to ensure the existing installation configuration is retained.

7. **Decipher Server Plugin** – Run the Decipher Server Plugin.msi and click through the install wizard. The install wizard will display your current settings. See Install Decipher server plugin for details.

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#### Log locations

Decipher 2.1 introduced new default log locations for the Decipher clients. For details, see Decipher IDP 2.1 release notes. The log locations for existing installations upgrading from 1.2 to 2.2 will not be changed, but the client config files can be manually updated to use the new log location.

Follow the steps below to update the config files for the following clients: OCR, Classification, Capture, Export, Web client, Web SDK Service, and SDKWrapper.

- 1. Locate and open the config file as an Admin. For details on locations, see Default locations.
- 2. In the **appSettings** section, locate the LogRoot key and set to its value to "%PUBLIC%".
- 3. Save the changes to the config file.



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### Upgrade Decipher IDP 1.1 to 2.2

To upgrade from Decipher IDP 1.1 to 2.2:

- 1. Import the latest Decipher VBO, BPA Object Decipher.xml, into Blue Prism and overwrite the existing VBO.
- 2. Paste the BluePrismDecipher.VBO.Interop.dll file into C:\Program Files\Blue Prism Limited\Blue Prism Automate, and replace the existing file.
- Decipher Licensing Service Run the Decipher Licensing Service.msi and click through the install wizard, following the on-screen instructions as prompted. See Install Decipher licensing service for details.
- 4. **Decipher Server** Run the Decipher Server 2.22.10050.msi and click through the installation wizard, following the on-screen instructions as prompted. The installation wizard will display your current settings. Click **Edit** to amend the settings or create a new reporting database (see below for details), or click **Install** to continue. See Install Decipher server for details.

If required, the separate reporting database must be created when installing/upgrading the Decipher Server component.

To create a new, separate reporting database as part of this Decipher IDP upgrade (optional):

a. Click **Edit** on the Setup configurations summary screen.

🖟 Decipher Server Setup	– 🗆 X
Setup configurations This is the setup configuration	that you have
Installation folder	C:\Program Files (x86)\Blue Prism\Decipher Server\
SQL Server	.\SQLEXPRESS
Server Database name	DecipherServerDb
Image storage path	C:\Decipher storage
Server TCP Port	12543
Install as service	Yes
Enable storage encrypti	on false
Reporting SQL Server	.\SQLEXPRESS
	Edit Install Cancel

The Configure Server Settings screen displays.

🖟 Decipher Server Setup			-		×
Configure Server Sett	ings			ſ	Ť.
Please configure the serv	/er				
Server Database Name:	DecipherServerDb				
Image Storage Path:	C:\Decipher storage				<b>1</b>
Server TCP Port:	12543				
🗹 Install as Windows Se	ervice	🗹 Enable rej	porting data	abase	
Encrypt All Data At R	est	Reporting	database	on same s	erver
Encrypt Configuration	n				
				-	
	Ba	ick Nex	t	Cance	el

- b. Select Enable reporting database and click Next.
- c. Click Install to complete the installation, then Finish to exit the wizard.
- Decipher Web Client Run the Decipher Web Client 2.23.02150.msi and click through the install wizard, following the on-screen instructions as prompted. See Install Decipher web client for details.
- 6. **Decipher Automated Clients** Run the Decipher Automated Clients 2.23.02140.msi and click through the install wizard. The install wizard will display your current settings. See Install Decipher automated clients for details.
- 7. **Decipher Server Plugin** Run the Decipher Server Plugin.msi and click through the install wizard. The install wizard will display your current settings. See Install Decipher server plugin for details.

#### Following upgrade

The following scenarios should be considered after upgrading Decipher IDP:

Scenario	Action
You created a separate reporting database as part of the upgrade process.	If you need to copy existing reporting data from the Decipher database to the new reporting database see Reporting database configuration for details.
You bound the Decipher IDP 1.1 website to HTTPS, via Internet Information Services (IIS) Manager.	Check whether the site setting has reverted to HTTP and rebind if necessary.
Caching issues are impacting the display of DFDs, document types, and batch types across multiple users.	Clear your browser cache following upgrade. This can be done by pressing CTRL $_{\rm +}$ F5.

If you encounter any issues after you have followed every step above and referred to the relevant sections of this guide, please see Troubleshooting for further advice.

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### Standalone deployment

Follow the steps in this section for a standalone Decipher IDP installation.

Installation is a four-part process for a standalone deployment and must be installed and configured in the following order:

### Steps

For both standalone and multi-device installations, Decipher IDP must be installed and configured in the following order. Each installation step has detailed instructions, or you can follow the relevant installation video, where available.

Instructional videos on how to install Decipher IDP and other Blue Prism products are available from: https://bpdocs.blueprism.com/en-us/video/installation.htm.

Link to instructional video (if available)
<ul> <li>Install Erlang</li> <li>Install RabbitMQ</li> <li>The RabbitMQ management plugin does not need to be enabled, or a new user configured, for standalone deployments.</li> </ul>
Install IIS
<ul><li>Copy DLL</li><li>Import VBO</li></ul>
<ul> <li>Install Decipher Licensing Service</li> <li>Install Decipher Server</li> <li>Install Decipher Web Client</li> <li>Install Decipher Automated Clients</li> </ul>

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Installation Step	Link to instructional video (if available)
<ul> <li>4. Configure Decipher IDP</li> <li>Configure database access</li> <li>Grant system access (NT AUTHORITY) to the Decipher database (non-production environments only)</li> <li>Configure Windows Authentication (production environments).</li> <li>Secure the Decipher website with a Secure Sockets Layer (SSL) (production environments).</li> <li>Add Decipher SQL location to Web.config</li> <li>Check all Decipher services are running</li> <li>Activate Sites and Services for Decipher IDP</li> <li>Enable machine learning training (optional)</li> </ul>	<ul> <li>Configure database access – non-production environments</li> <li>Configure database access – production environments</li> <li>Add Decipher SQL location to Web.config</li> <li>Activate Sites and Services for Decipher IDP</li> </ul>
<ul><li>5. Log onto Decipher IDP</li><li>You are ready to get started with Decipher IDP</li></ul>	Log onto Decipher IDP

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### Install and configure third-party software

You need to install and configure the following software and settings in the order listed below on a dedicated PC **before** installing Decipher IDP.

Please ensure that you have read the minimum requirements section, including the browser details, before installing the third-party software and Decipher IDP components.

#### Erlang and RabbitMQ

The following components must be installed before installing Decipher IDP:

- Erlang OTP version 25.3
- RabbitMQ version 3.11.10

Decipher IDP is tested using the latest version of Erlang and RabbitMQ available at the time of release. Other versions have not been verified, but should also be compatible.

Function	<ul> <li>Erlang and RabbitMQ are required components and must be installed on the machine on which the Decipher Web Client will be installed.</li> <li>RabbitMQ is installed using a default username and password. These credentials are then automatically populated during the installation of the Decipher licensing service. If you do not want to use the default RabbitMQ credentials, you will need to amend them before installing Decipher licensing service and enter the new credentials during installation. For details on changing the default credentials, see RabbitMQ configuration.</li> </ul>
Download	The version of Erlang that you require is dependent on the RabbitMQ version you intend to use. For more information, see RabbitMQ Erlang Version Requirements. https://www.erlang.org/downloads https://www.rabbitmq.com/download.html
Install	Run the installers and follow the instructions, accepting the default options when prompted.

### SQL Server

Function	SQL Server Express 2012 is a minimum database requirement.
	SQL Server Express is supported for proof of concept and evaluation purposes only. It is not recommended or supported for production use.
Download	https://www.microsoft.com/en-us/sql-server/sql-server-downloads
	SQL Server Express 2012 (or later) is the minimum requirement for a standalone deployment of Decipher IDP.
Supported	SQL Server Express 2012, 2016, 2017, 2019
SQL Server versions	SQL Server 2012, 2014, 2016, 2017, 2019

#### Decipher IDP 2.2 | Installation and Configuration Standalone deployment

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#### SQL Server Management Studio

Function	This is not a requirement for Decipher IDP installation, but is recommended to configure and manage components within the SQL server. For multi-device installations this will need to be installed on a user's machine only where required.
Download	https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management- studio-ssms?redirectedfrom=MSDN&view=sql-server-ver15.
	Under Download SSMS, click <b>Download SQL Server Management Studio (SSMS)</b> to download the SSMS-Setup-ENU.exe.
Install	Run the installer and follow the instructions, accepting the default options when prompted.

#### Internet Information Server (IIS)

IIS needs to be configured on the web server. IIS settings are applied from the Windows control panel: **Programs > Programs and Features > Turn Windows Features on or off** and select **Internet Information Services**.

Ensure the following settings are applied:

IIS Setting	Sub Setting
Web Management Tools	IIS Management Console
World Wide Web Services	<ul><li>Application Development Features</li><li>.NET Extensibility 3.5</li></ul>
	.NET Extensibility 4.7
	• ASP .NET 4.7
	ISAPI Extensions
	ISAPI Filters
	Common HTTP Features
	Default Document
	Directory Browsing
	HTTP Errors
	Static Content
Health and Diagnostics	N/A
Performance Features	N/A
Security	N/A

#### Scripted installation

To apply the above settings automatically, run the command below using the PowerShell command prompt:

```
Install-WindowsFeature -Name Web-Mgmt-Console, Web-Net-Ext, Web-Net-Ext45, Web-Asp-Net45, Web-
ISAPI-Ext, Web-ISAPI-Filter, Web-Default-Doc, Web-Dir-Browsing, Web-Http-Errors, Web-Static-
Content -computerName localhost -Restart
```

#### .NET Framework

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This is installed by default on Windows Server 2019. You only need to install the .NET Framework if you are using Windows Server 2016.

Function	The .NET framework must be downloaded and installed.
Download	Download the following component:
	.NET Framework 4.6 or later
	https://dotnet.microsoft.com/en-us/download/dotnet-framework/net462
Install	Run the installer and follow the instructions, accepting the default options when prompted.
	Restart your server before installing Decipher IDP to ensure the framework is fully installed and registered.

### RabbitMQ configuration

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If required, you can amend the default RabbitMQ credentials.

#### Enable RabbitMQ management plugin

To create enable the RabbitMQ plugin:

- 1. From the Start menu, under the RabbitMQ Server folder, select the RabbitMQ Command Prompt (sbin dir).
- 2. In the RabbitMQ Command Prompt window, type the following command: rabbitmq-plugins enable rabbitmq\_management

#### Customize RabbitMQ credentials and set permissions

If you do not want to use the default RabbitMQ credentials, you can create a new user with custom credentials, or update the credentials used by the default RabbitMQ user:

1. Open a browser and navigate to http://localhost:15672/.

The RabbitMQ Management login screen displays.

- 2. Log into RabbitMQ using guest as both the username and password.
- 3. Select the Admin tab and click Add user.

Users					
<ul> <li>All users</li> </ul>					
Filter:		Regex ?			
Name	Tags	Can access virtual hosts	Has password		
decipheruser	administrator	/, pssandbox	•		
guest	administrator	/	•		
?				_	
? • Add a user					
? • Add a user	e. quest		*		
? • Add a user Usernam	ne: guest		*		
? • Add a user Usernam Password:	ne: guest		* * * (confirm)		
? • Add a user Usernam Password:	e: guest		* * * (confirm) ?		
? • Add a user Usernam Password: Tag	ne: guest	nin   Monitoring   Po	* * * (confirm) ? <b>licymaker</b>		
? • Add a user Usernam Password: Tag	ne: guest	nin   Monitoring   Po nagement   Imperson	* * * (confirm) ? Jicymaker ator   None		

If you do not want to create a new user, you can also change the username and password of the default RabbitMQ user.

- 4. Add the username and password for the user.
- 5. In the **Tags** field, enter administrator.
- 6. If adding a new user, click Add user.

Once created, the new user will display in the All users list.

7. To grant administrator permissions, in the All users list, select the relevant user.

The Permissions page for the selected user displays.

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Overview	Connections	5 Channe	ls Excha	anges	Queues	Admin		
User: decipheruser								
Can log in w	Tags ac	Iministrator						
▼ Permissi	ons							
Current permi	ssions							
Virtual host	Configure regexp	Write regexp	Read regexp					
/	*	*	.*	Clear				
Set permissio	n							
Virtual I	Host: /	~						
Configure reg	jexp: ⋅*							
Write reg	Jexp: ⋅*							
Read reg	Jexp: ⋅*							
Set permissi	on							

- 8. In the Set permission dialog, ensure the **Virtual Host** field contains the **/** character and do not amend the other default parameter settings.
- 9. Click Set permission to apply these permissions to the new user.
- 10. Run the installers for Decipher Licensing Service and Decipher Server. On the RabbitMQ connection configuration screen enter the RabbitMQ credentials as configured above. For details, see Install Decipher IDP components.
- 11. Run the installers for Decipher Web Client, Decipher Automated Clients, and Decipher Server Plugin.
- 12. Open the following config files, and in the appSettings node, populate the **RabbitMQHost** with just the hostname or IP address of the RabbitMQ server; and populate the **RabbitMQUsername** and **RabbitMQPassword** attributes with the relevant credentials and save the changes. For more information, see Configuration file parameters.

Config file	Default location
Web.config	C:\Program Files (x86)\Blue Prism\Decipher Web
Ssi.SdkService.exe.config	C:\Program Files (x86)\BluePrism\Decipher Web SDK Service
Ssi.SdkWrapper.exe.config	C:\Program Files (x86)\BluePrism\Decipher Web SDK Service\SdkWrapper

Credentials are entered as plain text. For enhanced security, the credentials can be encrypted. For more information, see Encrypt credentials on the next page.

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- 13. Open Internet Information Services (IIS) Manager and select the Decipher website from the navigation tree.
- 14. Under Manage Website in the right-hand pane, click Restart.
- 15. Using Windows Services, restart RabbitMQ and all Decipher Services (Decipher Licensing Service, Decipher Server, Decipher Web Client, and Decipher Automated Clients).
- 16. Restart your machine.

The RabbitMQ user is now set up and ready for use with Decipher IDP.

#### **Encrypt credentials**

As part of this configuration, RabbitMQ credentials are entered as plain text. While the Web.config automatically encrypts the credentials after first login, values are kept as plain text in the Ssi.SdkService.exe.config and Ssi.SdkWrapper.exe.config files. To be able to encrypt the credentials in all the files, the account running the Decipher Web SDK service must have write permissions to the Decipher installation folder. The default network service account will not have sufficient permissions. To change the account:

- 1. From Windows Services, right-click the Decipher Web SDK service and select **Properties**.
- 2. Click the Log On tab and select This account.
- 3. Enter the location and password of the relevant account, and click OK.
- 4. In Windows Services, restart the following Decipher services: Decipher Licensing Service, Decipher Server, Decipher Web Client, and Decipher Automated Clients.
- 5. Log into Decipher IDP.

Upon successful login to Decipher IDP, the credentials are encrypted in all three config files. If required, you can change the service to use the original account after the credentials have been encrypted.

#### Update default credentials for existing installations

If required, you can change the default credentials for existing installations:

- 1. From the Windows Start menu, open **Settings** > **Apps**, select the **Decipher Licensing Service** and click **Modify**. The Decipher Licensing Service Setup dialog displays.
- 2. On the Change, repair, or remove installation screen, click **Change**. Proceed through the wizard. On the RabbitMQ connection configuration screen, enter the new RabbitMQ credentials as configured above.
- 3. Uninstall and reinstall Decipher Server. During installation, on the Licensing screen, enter the new RabbitMQ credentials.

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4. Open the following config files, and in the appSettings node, populate the RabbitMQHost with just the hostname or IP address of the RabbitMQ server; and populate the RabbitMQUsername and RabbitMQPassword attributes with the relevant credentials and save the changes. For more information, see Configuration file parameters.

Config file	Default location
Web.config	C:\Program Files (x86)\Blue Prism\Decipher Web
Ssi.SdkService.exe.config	C:\Program Files (x86)\BluePrism\Decipher Web SDK Service
Ssi.SdkWrapper.exe.config	C:\Program Files (x86)\BluePrism\Decipher Web SDK Service\SdkWrapper

Credentials are entered as plain text. For enhanced security, the credentials can be encrypted. For more information, see Encrypt credentials on the previous page.

- 5. Open Internet Information Services (IIS) Manager and select the Decipher website from the navigation tree.
- 6. Under Manage Website in the right-hand pane, click **Restart**.
- 7. Using Windows Services, restart RabbitMQ and all Decipher Services (Decipher Licensing Service, Decipher Server, Decipher Web Client, and Decipher Automated Clients).
- 8. Restart your machine.

The credentials used for RabbitMQ are now updated and ready for use with Decipher IDP.

## Install and configure Blue Prism

The following components are required to complete the steps below:

- Enterprise
- Decipher DLL

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- Decipher VBO
- Decipher v2.2.bprelease

7 For details of component versions see the release notes.

#### Install Blue Prism and create a database

If you do not already have Blue Prism installed, you will need to install Blue Prism 6.6 or later. If you already have Blue Prism installed you just need to create a Blue Prism database for use with Decipher IDP – you will need to reference this when installing the Decipher Licensing Service.

This is an overview of the steps required to install Blue Prism and create a database. You can find full instructions on how to install, configure, and use our product in the Blue Prism help.

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#### Create a Blue Prim database for Decipher IDP

You need to create a new database for your Decipher IDP data.

- 1. Install and launch Blue Prism.
- 2. In the Sign in to Blue Prism screen, click **Configure connection** to launch the configure connection wizard.
- 3. Click New Connection followed by Create Database.
- 4. In the Connection Configuration screen complete the following details:

Connection Name	Enter an easily recognizable name for the connection.
Connection Type	Select SQL Server (Windows Authentication).
Database Server	Enter the network location of the SQL server instance. If you have installed SQL Express as described in this guide, this will be localhost\SQLExpress.
Database Name	Enter a name for the new database, e.g. BluePrism.
	BluePrism is the default database name when installing the Decipher licensing service. If you create a database using a different name, you will need to enter this name when you install the Decipher licensing service.
Additional SQL Connection Parameters	This is not required.

Connection Configuration			?	×
Store and recall differe	nt database connection	S		
Saved Connections	Current Connection			
Decipher	Connection Name	Decipher		
	Connection Type	SQL Server (Windows Authentication)		~
	Database Server	localhost\SQLExpress The bostname of the database server		
	Database Name	BluePrism		ן ב
	Additional SQL Connection Parameters	Semi-colon separated parameters to add to the connection string		
		Test	Connect	ion
New Connection Delete Co	onnection	Create Database Upgrade Database Confi	gure Dat	abase
		ОК	Can	cel

5. Select your required user authentication method and click **OK** to create the database.

#### Add Decipher IDP license to SS&C | Blue Prism

You need a Decipher IDP license to run Decipher. This must be added to Blue Prism before installing Decipher IDP.

1. Log into Blue Prism.

Ensure that you log into Blue Prism using the connection configured to use the database created for Decipher IDP. This is because Decipher licensing will not work unless you apply the license key to the Decipher database. You also need to ensure you specify this database when installing the Decipher Licensing Service.

- 2. Click the **System** tab and select **System** > **License** from the navigation tree. Details of the active license are displayed and options are available to install new licenses and remove existing ones.
- 3. Click **Install new license** to add the Decipher license.

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#### Add the Decipher DLL

For multi-device installations (any interactive client or runtime resource that will run the Decipher Blue Prism processes), this DLL needs to be copied to the Blue Prism install location for all Blue Prism interactive clients and runtime resources using Decipher IDP.

Paste the BluePrismDecipher.VBO.Interop.dll file into C:\Program Files\Blue Prism Limited\Blue Prism Automate.

This is the default install location so adjust it if you have used an alternative – just make sure it is in the same directory as Automate.exe.

📕   🖸 📑 🚽	Manage	Blue Prism Automate			— C	) X
File Home Share View A	pplication Tools					~ 🕐
🗧 🔶 👻 🛧 🧧 > This PC > OS (C:) > Program Files (x86) > Blue Prism Limited > Blue Prism Automate 🗸 🖸 Search Blue Prism Automate						
Program Files (x86)	^	Name	Date modified	Туре	Size	^
Adobe		📧 AppMan32.exe	28/01/2020 10:47	Application	46 KB	
ASM104xUSB3		🖓 AppMan32.exe.config	28/01/2020 10:37	XML Configuratio	5 KB	
AVAST Software		Autofac.dll	16/10/2017 09:53	Application extens	213 KB	
Blue Prism		Autofac.Extras.NLog.dll	24/05/2015 17:10	Application extens	23 KB	
Blue Prism Limited		Automate.exe	28/01/2020 10:49	Application	169 KB	
		🖓 Automate.exe.config	28/01/2020 10:37	XML Configuratio	6 KB	
Common Files		AutomateAppCore.dll	28/01/2020 10:47	Application extens	1,887 KB	
CORVID		AutomateC.exe	28/01/2020 10:47	Application	189 KB	
Dell		🖓 AutomateC.exe.config	28/01/2020 10:37	XML Configuratio	5 KB	
Dell Digital Delivery Services		🕸 AutomateConfig.exe	28/01/2020 10:47	Application	1,643 KB	
dotnet		🖓 AutomateConfig.exe.config	28/01/2020 10:37	XML Configuratio	5 KB	
DummyDir		AutomateControls.dll	28/01/2020 10:46	Application extens	844 KB	
		AutomateProcessCore.dll	28/01/2020 10:47	Application extens	1,173 KB	
Google		AutomateS.exe	28/01/2020 10:46	Application	2,327 KB	
InstallShield Installation Informatio	on	AutomateUI.dll	28/01/2020 10:49	Application extens	12,959 KB	
📊 Intel		BluePrism.ActiveDirectoryUserSearcher.dll	28/01/2020 10:47	Application extens	220 KB	
Internet Explorer	~	BluePrism.BrowserAutomation.dll	28/01/2020 10:46	Application extens	95 KB	~
149 items 1 item selected 168 KB						

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#### Import the Decipher VBO

In Blue Prism select **File** > **Import** and import the BPA Object - Decipher.xml. This Decipher VBO can also be used to create your own processes.

Action Prop	erties						?	_		$\times$
Name: Description:	Get Next Completed Ba	atch			<u>`</u>					
Business Object Action Inputs Outputs	Decipher Get Next Comple Conditions	ted Batch	Value			0	Group:	⊡ Da Items	ata Type	
Queue Suffix		Text	[Queue Suffix]				<ul> <li>Dinaff</li> <li>Collect</li> <li>Date Ti</li> <li>Flags</li> <li>Image</li> <li>Numb</li> <li>Passw</li> <li>Text</li> <li>TimeSj</li> </ul>	es ions mes s ers ords oans		
Stage logging: Warning threshold	Errors only System Default	~ [ ~ N	Don't log parameters	on this stage	(0 to disable)		OK		Canc	el

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#### Import the Decipher release

Import this release into each separate Blue Prism environment that needs to interact with Decipher IDP. The Decipher v2.2.bprelease contains a number of pre-built processes to help you use Decipher IDP.

Process	Function	Details
Decipher - 01 Push Documents	Takes documents located in C:\Invoices and pushes them to Decipher IDP as a single batch.	Do not include more than 15 invoices in a batch.
Decipher - 02 Batches to Verify	Sample process to determine whether there are batches in Decipher IDP that require manual verification.	This returns True or False and can be used to build a process to send notifications to users.
Decipher - 03 Get Verified Documents	Sample process to retrieve verified documents from Decipher IDP and put in a Blue Prism work queue.	N/A
Decipher - 04 Get Decipher Item from BP Queue	Takes the document data from Blue Prism work queue and pushes data into collection.	N/A

Select **File** > **Import** and select the Decipher v2.2.bprelease you downloaded from the portal. The processes are added to the Processes\Default folder in Studio.

### Install Decipher IDP components

Before installing the Decipher IDP components, you will need to apply a valid Decipher IDP license to the Decipher database in Enterprise for Decipher IDP to work. See Decipher IDP licensing for details.

The following components are required to complete the Decipher IDP installation and steps below and must be installed in this order:

- 1. Decipher Licensing Service
- 2. Decipher Server
- 3. Decipher Web Client

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- 4. Decipher Automated Clients
- 5. Decipher Server Plugin
- If you have already installed the beta version of Decipher IDP, you will need to use Windows Add/Remove Programs to remove all of the (beta) Decipher components from all devices, before installing this release. To avoid any issues, please then follow these installation instructions when re-installing Decipher IDP.

You can download these files from the Decipher IDP product page of our customer portal. You can see the component versions for each release in the release notes.

Depending on your current system setup you may need to restart your computer following installation before Decipher IDP can be used.

#### Install Decipher Licensing Service

RabbitMQ is installed using a default username and password. These credentials are then automatically populated during the installation of the Decipher licensing service. If you do not want to use the default RabbitMQ credentials, you will need to amend them before installing Decipher licensing service and enter the new credentials during installation. For details on changing the default credentials, see RabbitMQ configuration.

For multi-device installations, this needs to be installed on the Decipher Licensing Service.

- 1. Run the Decipher Licensing Service installer.
- 2. Click through the install wizard, following the on-screen instructions as prompted.

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3. On the End-User License Agreement screen, read the license agreement and select I accept the terms in the License Agreement, if you accept these terms.



4. On the Destination Folder screen, click **Next** to accept the default location for Decipher Licensing Service or click **Change** to specify a different location.

Decipher Licensing Service Setup	– 🗆 X
Destination Folder Click Next to install to the default location	🚯 blueprism
Install Decipher Licensing Service to:	
C:\Program Files (x86)\Blue Prism\Decipher Licensing Ser	vice
Change	
Back	Next Cancel

5. On the Configure SQL connection screen:

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- a. Ensure the correct SQL server is specified.
- b. The Trusted (Windows Authentication) authentication mode is selected by default. This setting is recommended for Decipher IDP, but can be changed if required.

If using SQL Authentication, ensure your SQL password does not start with an equals (=) sign or a semi-colon (;) as they are not supported and may lead to a corrupted configuration file.

c. Enter the name of your existing Blue Prism database. The Database name defaults to BluePrism. If you have already created a Blue Prism database for Decipher using a different name, enter that name in the **Database name** field.

If you don't enter the correct Decipher database name during this part of the installation, as described above, Decipher IDP will not successfully run.

Decipher Licensir	ig Service Setup	_		×
Configure SQL co	nnection			
Please enter detail	s for a SQL server instance for the Decipher Server	to use		
Please select SOL Ser	ver BPEU292\SQLEXPRESS		Refrech	
- Authentication Mode			Refresh	
Trusted (Wind	Trusted (Windows Authentication)			
<ul> <li>Specify Username and Password (SQL Authentication)</li> </ul>				
Username				
Password				
Database name	BluePrism			
	Back Next		Cancel	

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6. On the RabbitMQ connection configuration screen the following details are completed by default:

Host name	The hostname of your RabbitMQ server. Commonly in development environments, all components are installed on the same server, and therefore the default is <i>localhost</i> . For multi-device environments, you will need to enter the name of the RabbitMQ server.
Port	Defaults to 5672.
Queue name	Defaults to DecipherLicensing.

Decipher Lic	ensing Service Setup	_		×
RabbitMQ co	RabbitMQ connection configuration			
Amend the fo	lowing RabbitMQ connection values as required			
Host name	localhost			
Port	5672			
Queue name	DecipherLicensing			
	Back Next	t	Canc	el

- 7. Click **Next** to continue. A message displays notifying you that a queue using the name you have specified will be created in RabbitMQ. Click **Yes** to accept, or **No** if you want to go back and amend the name.
- 8. On the RabbitMQ connection configuration screen enter the username and password for RabbitMQ. The default is guest.

The RabbitMQ username and password entered here must match the RabbitMQ account – the default RabbitMQ username and password are guest. For standalone deployments, the default credentials are sufficient. If you created a different RabbitMQ user, enter the credentials for the new user. You will be prompted to enter these credentials when installing the Decipher server.

- 9. Click Next.
- 10. On the Installation Summary screen, click **Install** to complete the installation, followed by **Finish** to exit the wizard.

The user account running the Decipher Licensing Service must be granted access to the Blue Prism database where the license is stored. For more information, see Grant Blue Prism database access to the Decipher Licensing Service.

When the Decipher Licensing Service is installed, it is automatically configured with a default RabbitMQ connection timeout of 5 seconds. If required, you can update the timeout value. For more information, see Configure RabbitMQ connection timeout.

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#### Install Decipher Server

If required, the separate reporting database must be created when installing/upgrading the Decipher Server component.

For multi-device installations, this needs to be installed on the Decipher server.

- 1. Run the Decipher Server installer.
- 2. Click through the install wizard, following the on-screen instructions as prompted.
- 3. On the End-User License Agreement screen, read the license agreement and select I accept the terms in the License Agreement, if you accept these terms.



4. On the Destination Folder screen, click **Next** to accept the default location for Decipher Server or click **Change** to specify a different location.



5. On the Licensing screen, enter the following licensing details:

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- Host name The hostname of your RabbitMQ server. Commonly in development environments, all components are installed on the same server, and therefore the default is localhost. For multi-device environments, you will need to enter the name of the RabbitMQ server.
- Queue name The RabbitMQ queue name. The default is DecipherLicensing.
- Username and Password The username and password for the RabbitMQ account that you entered when installing the Decipher Licensing Service. The default RabbitMQ username and passwords are guest, these credentials can only be used for standalone deployments.

For multi-device deployments, you will need to first create a new RabbitMQ user to access to RabbitMQ server remotely, see Create new RabbitMQ user and set permissions for details. You will also need to modify the RabbitMQ instance on the Decipher Server to configure remote access to the RabbitMQ server, see Modify the RabbitMQ instance on the Decipher Server for details.

🕼 Decipher Server Setup			-		×
Licensing				ſ	Ť
				Ľ	
Host name:			Port:		
localhost			5672		-
Queue name:					
DecipherLicensing					
Usemame:					
guest					
Password:					
*****					
	Back	Ne	xt	Can	cel

- 6. On the Database Server Configuration screen:
  - a. Ensure the correct SQL server is specified.
    - If the SQL server is the MSSQLSERVER default instance, enter the machine name or localhost. Entering the full name will result in the server not being found. Alternatively, if you need to provide a different instance name, enter the machine name or localhost, followed by \ and the instance name.
  - b. The Trusted (Windows Authentication) authentication mode is selected by default. This setting is recommended for Decipher IDP, but can be changed if required.
  - c. Click Test connection to proceed, followed by Next to continue.

🕼 Decipher Server Setup	- 🗆 🗙
Database Server Configuration Please configure database server connection	Ď
Click refresh to view LAN SQL Instances. Type URL or IP for remote SQL In	nstances
Authentication Mode	Keirean
Irusted (Windows Authentication)     Specify Username and Password (SQL Authentication)	
Username: Password:	
Test connection to proceed	
Back Next	Cancel

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7. On the Configure Server Settings screen complete the following details:

Som or Database	Enter a new name for the conver database, or accent the default	
Name	DecipherServerDb.	
Image Storage Path	Enter the location in which to store the documents after they have been processed. This can be any location, including OneDrive, SharePoint, or a local drive. For example C:\Decipher storage.	
Server TCP Port	Accept the default TCP port, or enter a different port number if required. You will need to enter this port number when installing the Decipher Web Client.	
Install as Windows Service	This option is selected by default. Do not deselect this option.	
Encrypt All Data At Rest	Select this option if you want to store all completed documents as encrypted files. This is only necessary if the documents being processed are confidential.	
	If enabled, you will need to configure an encryption password. If enhanced security is required, enable the <b>Encrypt the password</b> option.	
	Decipher Server Setup     -       X      Encryption     Encryption configuration	
	Encryption password: Confirm password: Encrypt the password	
	Back Next Cancel	
Encrypt Configuration	Select this option if you want to encrypt the server settings.	
Enable reporting database	Select this option to create a separate reporting database. A separate reporting database enables you to retain report data for much longer. This is also required to populate the accuracy and automation rates reports.	
	For details of how to copy any existing reporting data from the Decipher database to the new reporting database, see Reporting database configuration.	
Reporting database on same server	If selected, the reporting database will be created on this server. This option is selected by default.	

If required, the separate reporting database must be created when installing/upgrading the Decipher Server component.


🕼 Decipher Server Setup							$\times$
Configure Server Sett	tings						Č
Please configure the serv	/er						
Server Database Name:	DecipherServerDb						
Image Storage Path:							<b>(</b>
Server TCP Port:	12543 🜲						
✓ Install as Windows Set	ervice		Enable	reportir	ng data	abase	
🗌 Encrypt All Data At R	est	I	Repor	ting data	abase o	on same	server
Encrypt Configuration	n						
		Back	1	Next		Car	ncel

- 8. Click Next.
- 9. On the Installation Summary screen, click **Install** to complete the installation, followed by **Finish** to exit the wizard.

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### Install Decipher Web Client

For multi-device installations, this needs to be installed on the Decipher web server.

- 1. Run the Decipher Web Client executable.
- 2. Click through the install wizard, following the on-screen instructions as prompted.
- 3. On the End-User License Agreement screen, read the license agreement and select I accept the terms in the License Agreement, if you accept these terms.



4. On the Configuration screen complete the following details:

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Destination Folder	Accept the default install location.				
Web Site Port	Accept the default web site port, or enter a different port number if required.				
Application Server IP/URL	This IP address is required when you install the Decipher server.				
Port	Ensure the same port number entered for Decipher Server is entered here.				
Application Database	Enter the name of the SQL database connection. If you accepted the default settings whilst installing Decipher Server, this will be:				
String	Data Source=.\SQLEXPRESS;Initial Catalog=DecipherServerDb;Integrated Security=True				
	If you didn't accept the default options, this can be found in the SsiServer.exe.config file, which is located in C:\Program Files (x86)\Blue Prism\Decipher Server by default.				

🖟 Decipher Web Client Setup	_	
Decipher Web Client Configuration		Ď
Destination Folder C:\Program Files (x86)\Blue Prism		Browse
Web Site Port: 80		
Application Server IP\URL: 127.0.0.1	Server Port: 12543	
Application Database Connection String re=, \SQLEXPRESS;Initial Catalog=Decipi	nerServerDb;Integrated Security=True	]
	Back Next	Cancel

- 5. Click **OK** to save the settings.
- 6. Click **Install** to continue to install Decipher Web Client, which may take several minutes, followed by **Close** to exit the wizard.
- Windows security alerts may display for the erl.exe and the epmd.exe. For Decipher IDP to work successfully you will need to allow them to communicate over your private networks.

### Install Decipher Automated Clients

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For multi-device installations, this needs to be installed on the Decipher clients server.

- 1. Run the Decipher Automated Clients installer.
- 2. Click through the install wizard, following the on-screen instructions as prompted.
- 3. On the End-User License Agreement screen, read the license agreement and select I accept the terms in the License Agreement, if you accept these terms.



4. On the Destination Folder screen, click **Next** to accept the default location for Decipher Automated Clients or click **Change** to specify a different location.

🕼 Decipher Automated Clients Setup 🦳		$\times$
Destination Folder Click Next to install to the default folder or click Change to choose another.		Ì
Install Decipher Automated Clients to:		
C:\Program Files (x86)\Blue Prism\Decipher Automated Clients		
Change		
Back Next	Cance	ł

5. On the Custom Setup screen, select the relevant options.

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For standalone deployments, select every option. For multi-device deployments, with multiple automated clients, select only the features required for each installation.

🕼 Decipher Automated Clients Setup	_		×
Custom Setup Select the way you want features to be installed.			Ž
Click the icons in the tree below to change the way features will be installed.			
Back Next		Can	cel

6. On the Decipher Automated Clients Configuration Settings screen complete the following details:

Server IP/URL	Ensure the same IP address entered in the Decipher Server is entered here. The default IP address is 127.0.0.1.
Port	Ensure the same port number entered for Decipher Server and the Decipher Web Client is entered here. The default port is 12543.
Username	generaluser This is the Decipher user that will run the different modules to extract data from a document.
Password	user
Encrypt Configuration	Select this option to encrypt the Automated Client configuration settings.

🖟 Decipher Auto	omated Clients Setup – 🗆 🗙
Decipher Auto	mated Clients Configuration Settings
Specify Applica	tion server connection settings
Server IP/URL	127.0.0.1
Port	12543
Username	generaluser
Password	Encrypt Configuration
Note: The syste	m is configured with a user "generaluser" with a password "user" by default.
	Back Install Cancel

7. Click Install to complete the installation, followed by Finish to exit the wizard.

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### Install Decipher Server Plugin

For multi-device installations, this needs to be installed on the Decipher server.

- 1. Run the Decipher Server Plugin installer.
- 2. Click through the install wizard, following the on-screen instructions as prompted.
- 3. On the End-User License Agreement screen, read the license agreement and select I accept the terms in the License Agreement, if you accept these terms.



4. On the Destination Folder screen, click **Next** to accept the default location for Decipher Server Plugin or click **Change** to specify a different location.

🕩 Decipher Server Plugin Setup - 🗆	$\times$
Destination Folder Click Next to install to the default folder or click Change to choose another.	٨
Install Decipher Server Plugin to:	
C:\Program Files (x86)\Blue Prism\Decipher Server\Plugins	
Change	
Back Next Cance	ł

5. Click Install to complete the installation, followed by Finish to exit the wizard.

## Decipher IDP post-installation configuration

When you have installed the Enterprise and Decipher IDP components, you need to complete the following configuration steps before you can get started. These should be done in the following order:

1. Configure database access:

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- Grant system access (NT AUTHORITY) to the Decipher database
- Grant Decipher Licensing Service access to the Blue Prism database
- Configure Windows Authentication
- 2. Secure the Decipher website with a Secure Sockets Layer (SSL) (production environments)
- 3. Ensure all Decipher services are running
- 4. Activate sites and services for Decipher IDP
- 5. Enable machine learning training (optional)
- 6. Update and encrypt database connection strings (optional)
- 7. Reporting database configuration (optional)
- 8. Configure RabbitMQ connection timeout (optional)

### Grant system access (NT AUTHORITY) to the Decipher database

By default, the Decipher Server service runs under the local system account (NT AUTHORITY). In order to access the Decipher database, this user must be given access to the database.

If you don't want to provide this level of access for the current user, you can set Decipher Server to run as a service account. This offers enhanced security as you can configure a more complex password. If set to use a service account, this account also needs to be configured with db\_datareader and db\_datawriter database permissions.

To give NT authority access to the Decipher database:

- 1. Open Microsoft SQL Server Management Studio and connect to the instance that is hosting your Decipher database. If you installed SQL Express, the default for this is .\SQLEXPRESS.
- 2. Click **Security** > **Logins**, and double-click **NT AUTHORITY\SYSTEM**. If you are not using the default account, select the relevant user from the list.

The Login Properties dialog displays.

 Click User Mapping and select the relevant the check boxes to ensure the user has db\_datareader and db\_datawriter access to the Decipher database and the Decipher reporting database, if applicable.

Login Properties - NT AUTHO	RITY\SYST	EM		-		Х
Select a page	Script	🕶 ? Help				
Server Roles     User Mapping	Users map	ped to this login:				
Securables	Мар	Database	User	Default Schema		^
🎾 Status		BluePrism				
		DecipherSearchCache				
		DecipherServer				
		DecipherServerDb	NT AUTHORITY\SYS	dbo		
	$\checkmark$	DecipherServerDbRe	NT AUTHORITY\SYS	dbo		
Connection Server: BPELI292\SQLEXPRESS	Guest	account enabled for: Decip	herServerDb			•
Connection: RPEI/292\Elizabeth Stewart	db_ac	cessadmin	lerserverbb			
	db_ba	ckupoperator tareader				
View connection properties	⊘ db_da	tawriter				
	db_dd	ladmin				
	db_de	nydatareader pydatawriter				
Progress	db_de	ner				
Ready	☐ db_se	curityadmin				
				ОК	Can	cel .:

4. Click **OK** to save the changes.

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#### Grant access to the Decipher database for additional service accounts

For environments where the Decipher Web Client has been installed using a database connection string enabling Windows authentication (for example, Data Source=.\SQLEXPRESS;Initial Catalog=DecipherServerDb;Integrated Security=True), the IIS Service user needs to be granted db\_reader and db\_writer access to the Decipher database.

By default this is the NT AUTHORITY\SYSTEM user, but if the IIS Service is being run by a different user (such as a service account), that user account needs to be configured with the relevant permissions using the steps above.

In addition, if the Web Client has been installed with a specified credential in the database connection string, this credential also requires configuring with the same permissions.

### Grant Decipher Licensing Service access to the Blue Prism database

The user running the Decipher Licensing Service needs db\_reader access to the Blue Prism database where the license is stored. By default, the service is run by the NT AUTHORITY\SYSTEM user, but in a production environment this should be configured to a service account. To grant the relevant permissions to the service account:

- 1. Open Microsoft SQL Server Management Studio and connect to the instance that is hosting your Blue Prism database. If you installed SQL Express, the default for this is .\SQLEXPRESS.
- 2. Click **Security** > **Logins** and double-click the relevant account.

The Login Properties dialog displays



- 3. Click **User Mapping** and select the relevant the check box to ensure the user has db\_datareader access to the Blue Prism database.
- 4. Click **OK** to save the changes.

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### Configure Windows Authentication (production environments)

For production environments, Blue Prism recommends the use of Windows Authentications using service accounts.

Interpretation A service and the website application pool must run under the context of a user that has access to the relevant databases.

### Configure the Decipher services

The following Decipher services must be configured with database access:

Service name	Database	Required database permissions
Decipher Licensing Service	The Blue Prism database to which the Decipher license is applied.	db_datawriter / db_datareader
Decipher Server	The Decipher database.	db_datawriter / db_datareader
Decipher Web SDK	The Decipher database.	db_datawriter / db_datareader

To configure Windows authentication for each Decipher service listed above:

- 1. From Windows Services, right-click the Decipher service and select **Properties**.
- 2. Click the Log On tab and select This account.
- 3. Enter the location and password of your service account.
- 4. Perform this task for each Decipher service.
- 5. Restart the Decipher services.

#### Grant the service account access to Decipher folders

The service account used to access the Decipher databases also needs access to the following Decipher folders:

- The Decipher Image Storage Path This location is defined during the Decipher Server installation and can be viewed in: C:\Program Files (x86)\Blue Prism\Decipher Server\SsiServer.exe.config under the "ImageStorageRoot" key.
- The Decipher application files C:\Program Files (x86)\Blue Prism\
- The default Decipher logging locations:
  - C:\Windows\SysWOW64\config\systemprofile\AppData\Local\Blue Prism\Blue Prism
  - C:\Windows\System32\config\systemprofile\AppData\Local\Decipher
  - C:\Windows\System32\config\systemprofile\AppData\Local\Blue Prism
- The default website folder C: \inetpub\wwwroot

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### Configure the Decipher website identity

The Decipher website identity should be set to an account that has db\_datareader and db\_datawriter access to the Decipher database. The service account that was specified in the Service configuration can be used.

To change the application pool identity:

- 1. Open Internet Information Services (IIS) Manager.
- 2. On the left-hand pane, navigate to Application Pools.
- 3. Select **Decipher AppPool**.
- 4. On the right-hand pane, click Advanced Settings.



The Advanced Settings dialog displays.

#### 5. Under Process Model, click Identity.

The ... (ellipsis) button displays.

١dva	anced Settings		?	×		
	Start Mode	OnDemand		^		
~	CPU					
	Limit (percent)	0				
	Limit Action	NoAction				
	Limit Interval (minutes)	5				
	Processor Affinity Enabled	False				
	Processor Affinity Mask	4294967295				
	Processor Affinity Mask (64-bit o	4294967295				
~	Process Model					
>	Generate Process Model Event L					
Identity LocalSystem						
	Idle Time-out (minutes)	10000				
	Idle Time-out Action	Terminate				
	Load User Profile	True				
	Maximum Worker Processes	1				
	Ping Enabled	True				
	Ping Maximum Response Time	90				
	Ping Period (seconds)	30				
	Shutdown Time Limit (seconds)	90		~		
Identity [identityType, username, password] Configures the application pool to run as built-in account, i.e. Application Pool Identity (recommended), Network Service, Local System, Local Service, or as a specific user identity.						
		ОК	Cano	el		

6. Click the ... (ellipsis) button.

The Application Pool Identity dialog displays.

7. Select Custom Account and click Set.

Application Pool Identity			?	$\times$
O Built-in account:				
LocalSystem		$\sim$		
Oustom account:		_		
			Set	
	ОК		Cancel	

- 8. Enter the account credentials, as prompted.
- 9. Once complete, navigate back to the **Application Pools** list.
- 10. Select **Decipher AppPool** and click the **Recycle** button.

A Recycling the IIS logs will log the user out of the current Decipher IDP session. If frequent recycling of the IIS logs is required, it is recommended that this is scheduled for outside of operating hours.

## Secure the Decipher website with a Secure Sockets Layer (SSL) (production

#### environments)

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To secure your Decipher website to use an SSL certificate:

- 1. Open Internet Information Services (IIS) Manager.
- 2. On the left-hand pane, expand the Sites node and select Decipher.
- 3. Under Edit Site in the right-hand pane, click Bindings.

The Site Bindings dialog displays.

4. Click Add.

The Add Site Binding dialog displays.

- 5. From the **Type** drop-down, select **https**.
- 6. Add the host name of the Decipher Server to the Host name field.
- 7. Select an SSL certificate.

C The SSL certificate drop-down is populated with certificates from the personal certificate store on the local machine.

- 8. Click **OK** to accept the changes.
- 9. Navigate to the Decipher website and click Restart.

Any clients connecting to the Decipher website will have to trust the certificate that you selected in the above process. Self-signed certificates will need to be imported onto client machines, but it is more advisable to use a certificate from a certificate authority so that it is implicitly trusted by all clients.

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### Check all Decipher services are running

Check that the necessary services exist and are running – you can do this by typing services into the Windows search bar and checking these services:

- Decipher Automated Client Manager
- Decipher Licensing Service
- Decipher Server

 This service will not run until the LocalSystem user has been given access to the database; or the Decipher Licensing Service has started.

- Decipher Web SDK Service
- RabbitMQ

🔍 Services						- 🗆	×
File Action View	Help						
⇐ ➡   📰 🖸 🧿	) 🗟 🛛 🖬 🕨 🔳 🕪 🕨						
🔍 Services (Local)	Services (Local)						
Decipher Automated Client		Name	Description	Status	Startup Type	Log On As	^
Manager	Manager	🆏 Data Sharing Service	Provides data brokering between	Running	Manual (Trig	Local System	
	Stop the convice	🥋 Data Usage	Network data usage, data limit, re	Running	Automatic	Local Service	
	Restart the service	COM Server Process Launcher	The DCOMLAUNCH service launc	Running	Automatic	Local System	_
		Decipher Automated Client Manager	Decipher Automated Client Mana	Running	Automatic (D	Local System	
	<b>D</b>	🖏 Decipher Licensing Service	Licensing mechanism for Blue Pri	Running	Automatic	Local System	
	Description: Descripter Automated Client Manager	🥋 Decipher Server	Decipher Server Service	Running	Automatic (D	Local System	
	Service	🖏 Decipher Web SDK Service	Decipher Web SDK Service	Running	Automatic (D	Network Service	
		Selivery Optimization	Performs content delivery optimi	Running	Automatic (D	Network Service	

See Troubleshooting if you encounter any issues starting the services.

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### Activate sites and services for Decipher IDP

By default, IIS creates a website on port 80. If you want Decipher IDP to run on port 80, then this default web site must be disabled or moved to avoid it conflicting with Decipher. To do this:

1. Open IIS and click the **Sites** folder in the Connections panel.

a monte montation services (iis)	tinings	
(← → ♥ ► BPEU292 → Sit	es ▶ Decipher ▶	
File View Help		
Connections	Decipher Home	Actions
2	Under the second	🔉 Explore
BPEU292 (BPEU292\Elizabeth	Filter: • 🐨 Go - 💭 Show All   Group by: Area • 💷 -	Edit Permissions
V Q Sites	ASP.NET	Edit Site
> 😌 Decipher		Bindings
> 🍓 Default Web Site	NET NET Less NET MET Palse MET Touts MET liser American Machine Far Dessend	Man Andiation
	arter a act a defension machine key regention arter rome avernois arter over Application connection machine key regention Authorizet Compilation Pages Globalization Levels Levels	View Virtual Directories
		Manage Website
	Device Series Shate (MTR 5 and	2 Restart
	Providels deskioli state dimitir cimitali	Start
	IIS N	Stop
		Browse Website
	Andrewing Default Directory Constant Co	Browse:80 (http)
	Authentic Compression Detaut Directory Entoringes Pantoter Printers Logging Wilke types Wilduits Output Document Browsing Mappings Respon	Advanced Settings
		Configure
		Limits
	Nequest SSL Settings OKL Newrite	
	Management	. nop
	Editor	
< >	🕎 Features View 🙀 Content View	

- 2. Select **Default Web Site** and click **Stop** on the Actions > Manage Website panel.
- 3. Select Decipher and click Start or Restart.

See Log on and set up Decipher IDP admin for next steps.

### Enable machine learning training (optional)

Machine learning training can be switched on and off in the Decipher IDP user interface via Document types. However, it first needs to be configured in the SsiDataCaptureClient.exe.config file.

- 1. Using Notepad++, open the SsiDataCaptureClient.exe.config file as an Admin. (The default location is C:\Program Files (x86)\Blue Prism\Decipher Automated Clients.)
- 2. Find <add key="EnableModelTrainingML" value="false" /> and set the value to true.



- 3. Save the changes to the config file.
- 4. Restart the Decipher Server Service.

For information on why machine learning is not enabled by default, see the Decipher IDP frequently asked questions.

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### Update and encrypt database connection strings (optional)

For enhanced security, you can choose to encrypt your database connection settings.

#### Update the connection string

- Using Notepad++, open the SsiServer.exe.config file. The default location is C:\Program Files
   (x86)\Blue Prism\Decipher Server\SsiServer.exe.config.
- 2. Find connectionString and update the string with the name of the SQL database connection and user credentials.



- The existing connection string depends on whether the option to encrypt was selected when installing Decipher Server, and how the user was configured. The following are examples of typical connection strings:
  - Data Source=.\SQLEXPRESS; Initial Catalog=DecipherServerDb; Integrated Security=True;
  - Data Source=.\SQLEXPRESS; Initial Catalog=DecipherServerDb; User Id=myUsername; Password =myPassword;
  - If already encrypted: enc:AQAAANCMnd8BFdERjHoAwE/Cl+sBAAAAardddLezc0amPmM328
- 3. Save the changes to the config file.
- 4. Restart the Decipher Server service.

#### Encrypt the connection string

- 1. Launch the command prompt.
- 2. Set the directory to the installation location, for example cd C:\Program Files (x86)\Blue Prism\Decipher Server.

3. Enter ssiserver -enc and press Enter.

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4. Restart the Decipher Server service to test if the configuration is successful. If the service does not start, follow the Troubleshooting suggestions.

### Reporting database configuration (optional)

If you have chosen to create a separate reporting database during the installation of the Decipher server, you can then copy across any existing reporting data from the Decipher database to the new reporting database.

- 1. Using Notepad++, open the SsiServer.exe.config file. The default location is C:\Program Files (x86)\Blue Prism\Decipher Server\SsiServer.exe.config.
- 2. Find WorkflowConfig and set the SyncOldDataToReportingDatabase value to True.



- 3. Save the changes to the config file.
- 4. Restart the Decipher Server service.

Restarting the server may take some time while the data is copied across to the reporting database.

### Configure RabbitMQ connection timeout (optional)

When the Decipher Licensing Service is installed, there is a default RabbitMQ connection timeout of 5 seconds. If the component cannot connect to RabbitMQ in this time, it will timeout and an exception message is logged in Windows Event Viewer: Failed to connect to RabbitMQ after 5 seconds of waiting.

If required, you can update the timeout value by editing the **RabbitMqConnectionTimeoutInSeconds** attribute in the component's config file:

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  - 1. In Windows Services, locate the Decipher Licensing Service, right-click and select **Stop**. You can access Windows Services by typing Services into the Windows search bar.
  - 2. Navigate to the Decipher Licensing Service config file. The default location is C:\Program Files (x86)\Blue Prism\Decipher Licensing Service\config.
  - 3. Open the file in a text editor.
  - 4. In the **Configurations** section, locate the **RabbitMqConnectionTimeoutInSeconds** attribute and update the value as required. This must be a positive integer value.

📄 con	fig.json	X Contraction of the second	
1	E (		^
2	Ę	"RabbitMg": {	
3		"Endpoint":	
		"CfDJ8KcL9De5MQlAnfyUiXvLckWdrM6cb0211dt0NsflejqIl1pxpqWg2FBzIZ1ghosDHqX5KXA6NrJ-TojFTzVov0TOUm3eRkRiISFTDqQQhKJrVHsv4 5krV6aTMert60uu54A6G-qjXv_ZPdiNTWCxYIk",	
4		"Username":	
		"CfDJ8KcL9De5MQlAnfyUiXvLckVTtDAPt8pA69WcC_ksL83XHQiGME7m9jThnwjSe_J5o1FdKeaJns6cx3k_kZjCc91kGYWw4KC2c3nHycPTeJnQOI-3U 9-gP9H1yAN150fRiA",	
5		"Password":	
		"CfDJ8KcL9De5MQlAnfyUiXvLckWCLoV0AabzOwnjhIc9lGmfblfcoEZd-VhZTB2fAAgFbej-vt3R6jVxUBVzSYgm8QisT0U-LNFL32ipfAGEKNFD7QyG1	
		NTrsTTxCViGqWYnyQ",	
6		"QueueName":	
		"CfDJ8KcL9De5MQlAnfyUiXvLckVnF7jtSRbDOfv3u7SWFtKcQa2BC5wzkRUXVChudWgyte1_1maw5YgjYJeBS02CU-807v52waI0F7yHx5xhzYsSCFmDH SAg67Gus1YQ8DpHgD6Pw33_IAgcQDI872qEtqI"	
7	-	},	
8	白	"Sql": {	
9		"ConnectionString":	
		"CfDJ8KcL9De5MQlAnfyUiXvLckUIMblajD1K57W0Mx8f24J6YESetUwzPxD8TmILypjxrABf1UsTzx44cJZXGO3jv_NvG4qYcdV1495311-KrWqjXkDSr HKWOyU2S2xgWKX2Z-z3aI7U9b2-1CFPDZLRt1GpZiFoJvhgjC9x1XOpTKKBauHATEza8B8eU65yDtMBu8RhxFqI9pfA6HfJDsi_kc5IqMF9UpMWTCZS8Hj 8rQhb"	
10	-	}	
11	L		
12	Ę	"Configurations": {	
13		"RabbitMqConnectionTimeoutInSeconds": 5	
14		}	
15	}		~

- 5. Save the changes to the config file.
- 6. In Windows Services, restart the Decipher Licensing Service.

The Decipher Licensing Service will now use the updated timeout value.

## Multi-device deployment

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This section describes the steps required for a multi-device installation. We recommend planning your installation before installing and considering the information below, regarding different server configurations and communication between the servers.

Decipher IDP requires the following six different server types, which can exist on separate machines, or be combined as required:

- Blue Prism application server This is the Enterprise server and it needs to access SQL Server and Decipher server.
- **Decipher licensing server** Should contain the Decipher licensing service and have access to the SQL server and an instance of RabbitMQ, either on the web server or a separate installation.
- **Decipher server** Should contain the Decipher server and the Decipher server plugin and have access to the SQL server and an instance of RabbitMQ, either on the web server or a separate installation.
- **Decipher clients server** Should contain Decipher automated clients and have access to the SQL server and the Decipher server.
- **Decipher web server** Should contain the Decipher Web Client, which includes RabbitMQ. It also needs to have access to the SQL server and the Decipher server. Every web server must have a local copy of RabbitMQ installed.
- **SQL server** Should contain the SQL server database.

Suitable for production and non-production use, a typical deployment contains all components of Decipher IDP deployed to separate machines and includes the application server.

### Steps

For both standalone and multi-device installations, Decipher IDP must be installed and configured in the following order. Each installation step has detailed instructions, or you can follow the relevant installation video, where available.

lacksquare	Instructional videos on how to install Decipher IDP and other Blue Prism products are available
	from: https://bpdocs.blueprism.com/en-us/video/installation.htm.

Installation Step	Link to instructional video (if available)
<ul> <li>1. Install and configure third-party software</li> <li>Erlang</li> <li>RabbitMQ</li> <li>SQL Server / SQL Server Express 2012 or later (minimum requirement)</li> <li>SQL Server Management Studio (recommend, but not required)</li> <li>Internation Comment (IIQ)</li> </ul>	<ul> <li>Install Erlang</li> <li>Install RabbitMQ</li> <li>Install IIS</li> </ul>
Internet Information Server (IIS)	
<ul> <li>2. Configure Rabbit MQ to allow remote runtime resources to push to Decipher IDP</li> <li>Add the Decipher hostname to the RabbitMQ configuration</li> <li>Create a new RabbitMQ user and set permissions</li> </ul>	Video not currently available.

### Decipher IDP 2.2 | Installation and Configuration Multi-device deployment

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Installation Step	Link to instructional video (if available)
<ul> <li>3. Install and configure Blue Prism</li> <li>Install Blue Prism and create a Decipher database</li> <li>Copy the Decipher DLL - Copy to the Blue Prism install location for all Blue Prism interactive clients and runtime resources using Decipher IDP</li> <li>Import the Decipher VBO - Import into every Blue Prism interactive client that needs to interact with Decipher IDP</li> <li>Import the Decipher processes (release) - Import into every Blue Prism interactive client that needs to interact with Decipher IDP</li> </ul>	<ul> <li>Copy DLL</li> <li>Import VBO</li> </ul>
<ul> <li>4. Install Decipher IDP</li> <li>Decipher Licensing Service</li> <li>Decipher Server</li> <li>Decipher Web Client</li> <li>Decipher Automated Clients</li> <li>Decipher Server Plugin</li> <li>5. Configure Decipher IDP</li> <li>Configure database access <ul> <li>Grant system access (NT AUTHORITY) to the Decipher database (non-production environments only).</li> <li>Configure Windows Authentication (production environments).</li> </ul> </li> <li>Secure the Decipher website with a Secure Sockets Layer (SSL) (production environments).</li> <li>Add Decipher SQL location to Web.config</li> <li>Check all Decipher services are running</li> <li>Activate Sites and Services for Decipher IDP – Update for all web servers</li> <li>Enable machine learning training (optional)</li> </ul>	<ul> <li>Install Decipher Licensing Service</li> <li>Install Decipher Server</li> <li>Install Decipher Web Client</li> <li>Install Decipher Automated Clients</li> <li>Install Decipher Server Plugin</li> <li>Configure database access – non-production environments</li> <li>Configure database access-production environments</li> <li>Add Decipher SQL location to Web.config</li> <li>Activate Sites and Services for Decipher IDP</li> </ul>
6. Configure RabbitMQ on Decipher Server This step is only required for multi-device deployments, where Decipher Server and the Decipher Server Plugin are installed on a server that is remote from the Decipher Web Server	Video not currently available.
<ul><li>5. Log onto Decipher IDP</li><li>You are ready to get started with Decipher IDP</li></ul>	Log onto Decipher IDP

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## Install and configure third-party software

You need to install and configure the following software and settings in the order listed below on a dedicated PC **before** installing Decipher IDP.

Please ensure that you have read the minimum requirements section, including the browser details, before installing the third-party software and Decipher IDP components.

### Erlang and RabbitMQ

The following components must be installed before installing Decipher IDP:

- Erlang OTP version 25.3
- RabbitMQ version 3.11.10

Decipher IDP is tested using the latest version of Erlang and RabbitMQ available at the time of release. Other versions have not been verified, but should also be compatible.

Function	<ul> <li>Erlang and RabbitMQ are required components and must be installed on the machine on which the Decipher Web Client will be installed.</li> <li>RabbitMQ is installed using a default username and password. These credentials are then automatically populated during the installation of the Decipher licensing service. If you do not want to use the default RabbitMQ credentials, you will need to amend them before installing Decipher licensing service and enter the new credentials during installation. For details on changing the default credentials, see RabbitMQ configuration.</li> </ul>
Download	The version of Erlang that you require is dependent on the RabbitMQ version you intend to use. For more information, see RabbitMQ Erlang Version Requirements. https://www.erlang.org/downloads https://www.rabbitmq.com/download.html
Install	Run the installers and follow the instructions, accepting the default options when prompted.

### SQL Server

Function	SQL Server Express 2012 is a minimum database requirement.
	SQL Server Express is supported for proof of concept and evaluation purposes only. It is not recommended or supported for production use.
Download	https://www.microsoft.com/en-us/sql-server/sql-server-downloads
	SQL Server Express 2012 (or later) is the minimum requirement for a standalone deployment of Decipher IDP.
Supported	SQL Server Express 2012, 2016, 2017, 2019
SQL Server versions	SQL Server 2012, 2014, 2016, 2017, 2019

#### Decipher IDP 2.2 | Installation and Configuration Multi-device deployment

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### SQL Server Management Studio

Function	This is not a requirement for Decipher IDP installation, but is recommended to configure and manage components within the SQL server. For multi-device installations this will need to be installed on a user's machine only where required.
Download	https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management- studio-ssms?redirectedfrom=MSDN&view=sql-server-ver15.
	Under Download SSMS, click <b>Download SQL Server Management Studio (SSMS)</b> to download the SSMS-Setup-ENU.exe.
Install	Run the installer and follow the instructions, accepting the default options when prompted.

### Internet Information Server (IIS)

IIS needs to be configured on the web server. IIS settings are applied from the Windows control panel: **Programs > Programs and Features > Turn Windows Features on or off** and select **Internet Information Services**.

Ensure the following settings are applied:

IIS Setting	Sub Setting
Web Management Tools	IIS Management Console
World Wide Web Services	<ul><li>Application Development Features</li><li>.NET Extensibility 3.5</li></ul>
	.NET Extensibility 4.7
	• ASP .NET 4.7
	ISAPI Extensions
	ISAPI Filters
	Common HTTP Features
	Default Document
	Directory Browsing
	HTTP Errors
	Static Content
Health and Diagnostics	N/A
Performance Features	N/A
Security	N/A

#### Scripted installation

To apply the above settings automatically, run the command below using the PowerShell command prompt:

```
Install-WindowsFeature -Name Web-Mgmt-Console, Web-Net-Ext, Web-Net-Ext45, Web-Asp-Net45, Web-
ISAPI-Ext, Web-ISAPI-Filter, Web-Default-Doc, Web-Dir-Browsing, Web-Http-Errors, Web-Static-
Content -computerName localhost -Restart
```

### .NET Framework

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This is installed by default on Windows Server 2019. You only need to install the .NET Framework if you are using Windows Server 2016.

Function	The .NET framework must be downloaded and installed.
Download	Download the following component:
	.NET Framework 4.6 or later
	https://dotnet.microsoft.com/en-us/download/dotnet-framework/net462
Install	Run the installer and follow the instructions, accepting the default options when prompted.
	Restart your server before installing Decipher IDP to ensure the framework is fully installed and registered.

## RabbitMQ configuration

The following information applies to multi-device configurations using RabbitMQ.

### Configure RabbitMQ for remote runtime resources

In multi-device deployments, runtime resources will not be able to push documents to Decipher IDP unless RabbitMQ has been configured to respond to the Decipher Server hostname as well as the localhost.

The following sections describe how to configure RabbitMQ to respond to the remote Decipher Server hostname, and how to create a RabbitMQ user so that runtime resources can access RabbitMQ remotely.

#### Add the Decipher hostname to the RabbitMQ configuration

To edit the advanced.config file:

- Navigate to the RabbitMQ application folder. The default location is: C:/Users/<username>/AppData/Roaming/RabbitMQ
- 2. Open advanced.config with a text editor.
- 3. Replace the existing content with the following:

```
[{rabbit, [
{tcp_listeners, [{"<hostname>",5672}, {"0.0.0.0",5672}]}
]
].
```

- 4. Replace <hostname> with the hostname of the Decipher Web Client machine hosting RabbitMQ and save your changes.
- 5. Restart the server on which the Decipher Server component is installed and the server on which RabbitMQ is installed, if different.
- Port 5672, added to the RabbitMQ configuration described above, is the default port used to connect to the RabbitMQbroker. Port 15672, used when creating a new RabbitMQ user, is a different port used to connect the management console add on.

### Create a new RabbitMQ user and set permissions

To create a new RabbitMQ user to access the RabbitMQ server remotely:

1. Open a browser and navigate to http://localhost:15672/.

The RabbitMQ Management login screen displays.

2. Log into RabbitMQ using guest as both the username and password.

3. Select the Admin tab and click Add user.

	Connection	s Channels E	xchanges	Queues	Admir
Users					
<ul> <li>All users</li> </ul>					
Filter:		Regex ?			
Name	Tags	Can access virtual hosts	Has password	]	
decipheruser	administrator	/, pssandbox	•		
guest	administrator	/	•		
▼ Add a user					
<ul> <li>Add a user</li> <li>Usernam</li> </ul>	ne: guest	a			
<ul> <li>Add a user</li> <li>Usernam</li> </ul>	ne: guest		-		
<ul> <li>Add a user</li> <li>Usernam</li> <li>Password:</li> </ul>	re: guest		confirm)		
<ul> <li>Add a user</li> <li>Usernam</li> <li>Password:</li> <li>Tag</li> </ul>	ne: guest		: (confirm)		
<ul> <li>Add a user</li> <li>Usernam</li> <li>Password:</li> <li>Tag</li> </ul>	ne: guest	nin   Monitoring   Pol	cymaker		
<ul> <li>Add a user</li> <li>Usernam</li> <li>Password:</li> <li>Tag</li> </ul>	ne: guest	nin   Monitoring   Pol aggement   Impersona	(confirm) icymaker tor   None		
Add a user Usernam Password: Tag	ne: guest	nin   Monitoring   Pol aggement   Impersona	confirm) icymaker tor   None		

- 4. Add credentials for a new user for use with Decipher Server.
- 5. In the **Tags** field, enter administrator.
- 6. Click Add user.

Once created, the new user will display in the All users list.

7. To grant administrator permissions to the new user, in the All users list, select the user you have just created. The Permissions page for the selected user displays.

Overview	Connection	5 Channe	s Excha	anges	Queues	Admin			
llser: decinheruser									
	aecipiteru.	501							
• Overviev	Tage								
Can log in w	ith password	iministrator							
▼ Permissi	ons								
Current permi	issions								
Virtual host	Configure regexp	Write regexp	Read regexp						
/	*	.*	.*	Clear					
					-				
Set permissio	n								
•									
Virtual	Host: /	<b>~</b>							
Configure reg	gexp: ·*								
Write reg	gexp: ⋅*								
Read reg	gexp: ·*								
Set permissi	on								

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- 8. In the Set permission dialog, ensure the **Virtual Host** field contains the **/** character, and do not amend the other default parameter settings.
- 9. Click **Set permission** to apply these permissions to the new user.

RabbitMQ will now respond to the Decipher Server hostname, enabling remote runtime resources to push to Decipher IDP.

You will also need to modify the RabbitMQ instance on the Decipher Server to configure remote access to the RabbitMQ server, see Modify the RabbitMQ instance on the Decipher Server for details.

## Install and configure Blue Prism

The following components are required to complete the steps below:

- Enterprise
- Decipher DLL

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- Decipher VBO
- Decipher v2.2.bprelease

7 For details of component versions see the release notes.

### Install Blue Prism and create a database

If you do not already have Blue Prism installed, you will need to install Blue Prism 6.6 or later. If you already have Blue Prism installed you just need to create a Blue Prism database for use with Decipher IDP – you will need to reference this when installing the Decipher Licensing Service.

This is an overview of the steps required to install Blue Prism and create a database. You can find full instructions on how to install, configure, and use our product in the Blue Prism help.

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#### Create a Blue Prim database for Decipher IDP

You need to create a new database for your Decipher IDP data.

- 1. Install and launch Blue Prism.
- 2. In the Sign in to Blue Prism screen, click **Configure connection** to launch the configure connection wizard.
- 3. Click New Connection followed by Create Database.
- 4. In the Connection Configuration screen complete the following details:

Connection Name	Enter an easily recognizable name for the connection.			
Connection Type	Select SQL Server (Windows Authentication).			
Database Server	Enter the network location of the SQL server instance. If you have installed SQL Express as described in this guide, this will be localhost\SQLExpress.			
Database Name	Enter a name for the new database, e.g. BluePrism.			
	BluePrism is the default database name when installing the Decipher licensing service. If you create a database using a different name, you will need to enter this name when you install the Decipher licensing service.			
Additional SQL Connection Parameters	This is not required.			

Connection Configuration			?	$\times$
Store and recall different	database connection:	s		
Saved Connections	Current Connection			
Decipher	Connection Name	Decipher		
	Connection Type	SQL Server (Windows Authentication)		~
	Database Server	The type of connection to use		
		The hostname of the database server		-
	Database Name	BluePrism The name of the database to connect to		
	Additional SQL Connection Parameters	Sami-rolon serviced exampler to yid to the connection string		
		senir-cooli sepelate palentes i ado to tre connectori sung		
		Test	Connecti	ion
New Connection Delete Conn	ection	Create Database Upgrade Database Confi	gure Dat	abase
		ОК	Can	:el

5. Select your required user authentication method and click **OK** to create the database.

### Add Decipher IDP license to SS&C | Blue Prism

You need a Decipher IDP license to run Decipher. This must be added to Blue Prism before installing Decipher IDP.

1. Log into Blue Prism.

Ensure that you log into Blue Prism using the connection configured to use the database created for Decipher IDP. This is because Decipher licensing will not work unless you apply the license key to the Decipher database. You also need to ensure you specify this database when installing the Decipher Licensing Service.

- 2. Click the **System** tab and select **System** > **License** from the navigation tree. Details of the active license are displayed and options are available to install new licenses and remove existing ones.
- 3. Click **Install new license** to add the Decipher license.

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### Add the Decipher DLL

For multi-device installations (any interactive client or runtime resource that will run the Decipher Blue Prism processes), this DLL needs to be copied to the Blue Prism install location for all Blue Prism interactive clients and runtime resources using Decipher IDP.

Paste the BluePrismDecipher.VBO.Interop.dll file into C:\Program Files\Blue Prism Limited\Blue Prism Automate.

This is the default install location so adjust it if you have used an alternative – just make sure it is in the same directory as Automate.exe.

🔜   🕑 🛄 🖛	Manage	Blue Prism Automate			— C	) ×
File Home Share View Ap	plication Tools					~ 🕐
$\leftarrow$ $\rightarrow$ $\checkmark$ $\uparrow$ $\square$ $\rightarrow$ This PC $\rightarrow$ OS (C:)	Program Files	(x86) > Blue Prism Limited > Blue Prism Autor	mate	✓ Ö Se	arch Blue Prism	Au 🔎
Program Files (x86)	^	Name	Date modified	Туре	Size	^
Adobe		📧 AppMan32.exe	28/01/2020 10:47	Application	46 KB	
ASM104xUSB3		🔁 AppMan32.exe.config	28/01/2020 10:37	XML Configuratio	5 KB	
AVAST Software		Autofac.dll	16/10/2017 09:53	Application extens	213 KB	
Blue Prism		Autofac.Extras.NLog.dll	24/05/2015 17:10	Application extens	23 KB	
Blue Price Limited		Automate.exe	28/01/2020 10:49	Application	169 KB	
		🖓 Automate.exe.config	28/01/2020 10:37	XML Configuratio	6 KB	
Common Files		AutomateAppCore.dll	28/01/2020 10:47	Application extens	1,887 KB	
CORVID		AutomateC.exe	28/01/2020 10:47	Application	189 KB	
Dell		🖓 AutomateC.exe.config	28/01/2020 10:37	XML Configuratio	5 KB	
Dell Digital Delivery Services		🕸 AutomateConfig.exe	28/01/2020 10:47	Application	1,643 KB	
dotnet		🖓 AutomateConfig.exe.config	28/01/2020 10:37	XML Configuratio	5 KB	
DummyDir		AutomateControls.dll	28/01/2020 10:46	Application extens	844 KB	
		AutomateProcessCore.dll	28/01/2020 10:47	Application extens	1,173 KB	
Google		AutomateS.exe	28/01/2020 10:46	Application	2,327 KB	
InstallShield Installation Information	n	AutomateUI.dll	28/01/2020 10:49	Application extens	12,959 KB	
lntel		BluePrism.ActiveDirectoryUserSearcher.dll	28/01/2020 10:47	Application extens	220 KB	
📙 Internet Explorer	~	BluePrism.BrowserAutomation.dll	28/01/2020 10:46	Application extens	95 KB	~
149 items 1 item selected 168 KB						:== <b>=</b>

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### Import the Decipher VBO

In Blue Prism select **File** > **Import** and import the BPA Object - Decipher.xml. This Decipher VBO can also be used to create your own processes.

Action Properties					?	_		$\times$
Name: Get Next Completed Ba Description:	tch			~ >				
Business Object Decipher Action Get Next Complet Inputs Outputs Conditions Name Cueue Suffix	ted Batch Data Type Text	Value [Queue Suffix]			Group: Page View All Grouper	✓ Data Items is ions mes : ers ords	а Туре	
Stage logging: Errors only	~ [	] Don't log parameters	s on this stage	(() to dieable)	OK		Conor	

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### Import the Decipher release

Import this release into each separate Blue Prism environment that needs to interact with Decipher IDP. The Decipher v2.2.bprelease contains a number of pre-built processes to help you use Decipher IDP.

Process	Function	Details
Decipher - 01 Push Documents	Takes documents located in C:\Invoices and pushes them to Decipher IDP as a single batch.	Do not include more than 15 invoices in a batch.
Decipher - 02 Batches to Verify	Sample process to determine whether there are batches in Decipher IDP that require manual verification.	This returns True or False and can be used to build a process to send notifications to users.
Decipher - 03 Get Verified Documents	Sample process to retrieve verified documents from Decipher IDP and put in a Blue Prism work queue.	N/A
Decipher - 04 Get Decipher Item from BP Queue	Takes the document data from Blue Prism work queue and pushes data into collection.	N/A

Select **File** > **Import** and select the Decipher v2.2.bprelease you downloaded from the portal. The processes are added to the Processes\Default folder in Studio.

## Install Decipher IDP components

Before installing the Decipher IDP components, you will need to apply a valid Decipher IDP license to the Decipher database in Enterprise for Decipher IDP to work. See Decipher IDP licensing for details.

The following components are required to complete the Decipher IDP installation and steps below and must be installed in this order:

- 1. Decipher Licensing Service
- 2. Decipher Server
- 3. Decipher Web Client

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- 4. Decipher Automated Clients
- 5. Decipher Server Plugin
- If you have already installed the beta version of Decipher IDP, you will need to use Windows Add/Remove Programs to remove all of the (beta) Decipher components from all devices, before installing this release. To avoid any issues, please then follow these installation instructions when re-installing Decipher IDP.

You can download these files from the Decipher IDP product page of our customer portal. You can see the component versions for each release in the release notes.

Depending on your current system setup you may need to restart your computer following installation before Decipher IDP can be used.

### Install Decipher Licensing Service

RabbitMQ is installed using a default username and password. These credentials are then automatically populated during the installation of the Decipher licensing service. If you do not want to use the default RabbitMQ credentials, you will need to amend them before installing Decipher licensing service and enter the new credentials during installation. For details on changing the default credentials, see RabbitMQ configuration.

For multi-device installations, this needs to be installed on the Decipher Licensing Service.

- 1. Run the Decipher Licensing Service installer.
- 2. Click through the install wizard, following the on-screen instructions as prompted.

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3. On the End-User License Agreement screen, read the license agreement and select I accept the terms in the License Agreement, if you accept these terms.



4. On the Destination Folder screen, click **Next** to accept the default location for Decipher Licensing Service or click **Change** to specify a different location.

Decipher Licensing Service Setup	– 🗆 X
Destination Folder Click Next to install to the default location	🚯 blueprism
Install Decipher Licensing Service to:	
C:\Program Files (x86)\Blue Prism\Decipher Licensing Ser	vice
Change	
Back	Next Cancel

5. On the Configure SQL connection screen:

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- a. Ensure the correct SQL server is specified.
- b. The Trusted (Windows Authentication) authentication mode is selected by default. This setting is recommended for Decipher IDP, but can be changed if required.

If using SQL Authentication, ensure your SQL password does not start with an equals (=) sign or a semi-colon (;) as they are not supported and may lead to a corrupted configuration file.

c. Enter the name of your existing Blue Prism database. The Database name defaults to BluePrism. If you have already created a Blue Prism database for Decipher using a different name, enter that name in the **Database name** field.

If you don't enter the correct Decipher database name during this part of the installation, as described above, Decipher IDP will not successfully run.

Decipher Licensi Configure SOL of		×			
Please enter detai	ls for	a SQL server instance for the Decipher Server t	o use		
Please select SQL Ser	rver	BPEU292\SQLEXPRESS		Refresh	
-Authentication Mod	le				
Trusted (Wind	lows	Authentication)			
O Specify Usern	ame a	and Password (SQL Authentication)			
Username					
Password					
Database name	Blue	Prism			
		Back Next		Cancel	
SS&C | blueprism

6. On the RabbitMQ connection configuration screen the following details are completed by default:

Host name	The hostname of your RabbitMQ server. Commonly in development environments, all components are installed on the same server, and therefore the default is <i>localhost</i> . For multi-device environments, you will need to enter the name of the RabbitMQ server.
Port	Defaults to 5672.
Queue name	Defaults to DecipherLicensing.

Decipher Lic	ensing Service Setup	_		×
RabbitMQ co	nnection configuration			
Amend the fo	llowing RabbitMQ connection values as required			
Host name	localhost			
Port	5672			
Queue name	DecipherLicensing			
	Back Nex	t	Cano	el

- 7. Click **Next** to continue. A message displays notifying you that a queue using the name you have specified will be created in RabbitMQ. Click **Yes** to accept, or **No** if you want to go back and amend the name.
- 8. On the RabbitMQ connection configuration screen enter the username and password for RabbitMQ. The default is guest.

The RabbitMQ username and password entered here must match the RabbitMQ account – the default RabbitMQ username and password are guest. For standalone deployments, the default credentials are sufficient. If you created a different RabbitMQ user, enter the credentials for the new user. You will be prompted to enter these credentials when installing the Decipher server.

- 9. Click Next.
- 10. On the Installation Summary screen, click **Install** to complete the installation, followed by **Finish** to exit the wizard.

The user account running the Decipher Licensing Service must be granted access to the Blue Prism database where the license is stored. For more information, see Grant Blue Prism database access to the Decipher Licensing Service.

When the Decipher Licensing Service is installed, it is automatically configured with a default RabbitMQ connection timeout of 5 seconds. If required, you can update the timeout value. For more information, see Configure RabbitMQ connection timeout.

### Install Decipher Server

If required, the separate reporting database must be created when installing/upgrading the Decipher Server component.

For multi-device installations, this needs to be installed on the Decipher server.

- 1. Run the Decipher Server installer.
- 2. Click through the install wizard, following the on-screen instructions as prompted.
- 3. On the End-User License Agreement screen, read the license agreement and select I accept the terms in the License Agreement, if you accept these terms.



4. On the Destination Folder screen, click **Next** to accept the default location for Decipher Server or click **Change** to specify a different location.



5. On the Licensing screen, enter the following licensing details:

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- Host name The hostname of your RabbitMQ server. Commonly in development environments, all components are installed on the same server, and therefore the default is localhost. For multi-device environments, you will need to enter the name of the RabbitMQ server.
- Queue name The RabbitMQ queue name. The default is DecipherLicensing.
- Username and Password The username and password for the RabbitMQ account that you entered when installing the Decipher Licensing Service. The default RabbitMQ username and passwords are guest, these credentials can only be used for standalone deployments.

For multi-device deployments, you will need to first create a new RabbitMQ user to access to RabbitMQ server remotely, see Create new RabbitMQ user and set permissions for details. You will also need to modify the RabbitMQ instance on the Decipher Server to configure remote access to the RabbitMQ server, see Modify the RabbitMQ instance on the Decipher Server for details.

/ Decipher Server Setup			-		×
Licensing				ſ	Ť
				Ľ	
Host name:			Port:		
localhost			5672		*
Queue name:					
DecipherLicensing					
Usemame:					
guest					
Password:					
*****					
	Back	Ne	xt	Can	cel

- 6. On the Database Server Configuration screen:
  - a. Ensure the correct SQL server is specified.
    - If the SQL server is the MSSQLSERVER default instance, enter the machine name or localhost. Entering the full name will result in the server not being found. Alternatively, if you need to provide a different instance name, enter the machine name or localhost, followed by \ and the instance name.
  - b. The Trusted (Windows Authentication) authentication mode is selected by default. This setting is recommended for Decipher IDP, but can be changed if required.
  - c. Click Test connection to proceed, followed by Next to continue.

🕼 Decipher Server Setup	- 🗆 🗙
Database Server Configuration Please configure database server connection	Ď
Click refresh to view LAN SQL Instances. Type URL or IP for remote SQL In	nstances Refresh
Authentication Mode	Keirean
Irusted (Windows Authentication)     Specify Username and Password (SQL Authentication)	
Username: Password:	
Test connection to proceed	
Back Next	Cancel

7. On the Configure Server Settings screen complete the following details:

Server Database Name	Enter a new name for the server database, or accept the default DecipherServerDb.
Image Storage Path	Enter the location in which to store the documents after they have been processed. This can be any location, including OneDrive, SharePoint, or a local drive. For example C:\Decipher storage.
Server TCP Port	Accept the default TCP port, or enter a different port number if required. You will need to enter this port number when installing the Decipher Web Client.
Install as Windows Service	This option is selected by default. Do not deselect this option.
Encrypt All Data At Rest	Select this option if you want to store all completed documents as encrypted files. This is only necessary if the documents being processed are confidential. If enabled, you will need to configure an encryption password. If enhanced security is required, enable the <b>Encrypt the password</b> option.
Encrypt Configuration	Select this option if you want to encrypt the server settings.
Enable reporting database	<ul> <li>Select this option to create a separate reporting database. A separate reporting database enables you to retain report data for much longer. This is also required to populate the accuracy and automation rates reports.</li> <li>For details of how to copy any existing reporting data from the Decipher database to the new reporting database, see Reporting database configuration.</li> </ul>
Reporting database on same server	If selected, the reporting database will be created on this server. This option is selected by default.

If required, the separate reporting database must be created when installing/upgrading the Decipher Server component.



🕼 Decipher Server Setup							$\times$
Configure Server Sett	tings						Č
Please configure the serv	/er						
Server Database Name:	DecipherServerDb						
Image Storage Path:							<b>(</b>
Server TCP Port:	12543 🜲						
✓ Install as Windows Set	ervice		Enable	reportir	ng data	abase	
Encrypt All Data At Rest		I	Repor	ting data	abase o	on same	server
Encrypt Configuration	n						
		Back	1	Next		Car	ncel

- 8. Click Next.
- 9. On the Installation Summary screen, click **Install** to complete the installation, followed by **Finish** to exit the wizard.

## Install Decipher Web Client

For multi-device installations, this needs to be installed on the Decipher web server.

- 1. Run the Decipher Web Client executable.
- 2. Click through the install wizard, following the on-screen instructions as prompted.
- 3. On the End-User License Agreement screen, read the license agreement and select I accept the terms in the License Agreement, if you accept these terms.



4. On the Configuration screen complete the following details:

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Accept the default install location.
Accept the default web site port, or enter a different port number if required.
This IP address is required when you install the Decipher server.
Ensure the same port number entered for Decipher Server is entered here.
Enter the name of the SQL database connection. If you accepted the default settings whilst installing Decipher Server, this will be:
Data Source=.\SQLEXPRESS;Initial Catalog=DecipherServerDb;Integrated Security=True
If you didn't accept the default options, this can be found in the SsiServer.exe.config file, which is located in C:\Program Files (x86)\Blue Prism\Decipher Server by default.

🖟 Decipher Web Client Setup		-	
Decipher Web Client Configuration			Ď
Destination Folder C:\Program Files (x86)\Blue Prism Web Site Port: 80 Application Server IP\URL: 127.0.0	Server Port:		Browse
Application Database Connection String re=.\SQLEXPRESS;Initial Catalog=Deciph	erServerDb;Integrated Securi	ty=True	
	Back Next		Cancel

- 5. Click **OK** to save the settings.
- 6. Click **Install** to continue to install Decipher Web Client, which may take several minutes, followed by **Close** to exit the wizard.
- Windows security alerts may display for the erl.exe and the epmd.exe. For Decipher IDP to work successfully you will need to allow them to communicate over your private networks.

### Install Decipher Automated Clients

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For multi-device installations, this needs to be installed on the Decipher clients server.

- 1. Run the Decipher Automated Clients installer.
- 2. Click through the install wizard, following the on-screen instructions as prompted.
- 3. On the End-User License Agreement screen, read the license agreement and select I accept the terms in the License Agreement, if you accept these terms.



4. On the Destination Folder screen, click **Next** to accept the default location for Decipher Automated Clients or click **Change** to specify a different location.

🕼 Decipher Automated Clients Setup	_		$\times$
Destination Folder Click Next to install to the default folder or click Change to choose another.			Ž
Install Decipher Automated Clients to:			
C:\Program Files (x86)\Blue Prism\Decipher Automated Clients			
Change			
Back Next		Can	cel

5. On the Custom Setup screen, select the relevant options.

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For standalone deployments, select every option. For multi-device deployments, with multiple automated clients, select only the features required for each installation.

🕼 Decipher Automated Clients Setup —		×
Custom Setup Select the way you want features to be installed.		Ĭ
Click the icons in the tree below to change the way features will be installed.		
Back Next	Cano	el

6. On the Decipher Automated Clients Configuration Settings screen complete the following details:

Server IP/URL	Ensure the same IP address entered in the Decipher Server is entered here. The default IP address is 127.0.0.1.
Port	Ensure the same port number entered for Decipher Server and the Decipher Web Client is entered here. The default port is 12543.
Username	generaluser This is the Decipher user that will run the different modules to extract data from a document.
Password	user
Encrypt Configuration	Select this option to encrypt the Automated Client configuration settings.

🖟 Decipher Auto	rmated Clients Setup — 🗆 🗙
Decipher Auto	mated Clients Configuration Settings
Specify Applica	tion server connection settings
Server IP/URL	127.0.0.1
Port	12543
Username	generaluser
Password	Encrypt Configuration
Note: The syste	m is configured with a user "generaluser" with a password "user" by default.
	Back Install Cancel

7. Click Install to complete the installation, followed by Finish to exit the wizard.

## Install Decipher Server Plugin

For multi-device installations, this needs to be installed on the Decipher server.

- 1. Run the Decipher Server Plugin installer.
- 2. Click through the install wizard, following the on-screen instructions as prompted.
- 3. On the End-User License Agreement screen, read the license agreement and select I accept the terms in the License Agreement, if you accept these terms.



4. On the Destination Folder screen, click **Next** to accept the default location for Decipher Server Plugin or click **Change** to specify a different location.

Decipher Server Plugin Setup		$\times$
Destination Folder Click Next to install to the default folder or click Change to choose another.		D
Install Decipher Server Plugin to:		
C:\Program Files (x86)\Blue Prism\Decipher Server\Plugins Change	 	
	 6-1	
Back Next	Car	ncel

5. Click **Install** to complete the installation, followed by **Finish** to exit the wizard.

## RabbitMQ configuration on Decipher Server

In multi-device deployments, where Decipher Server and the Decipher Server Plugin are installed on a server that is remote from the Decipher Web Server, you may need to manually install and configure RabbitMQ (and Erlang) on that server for the Blue Prism Server Plugin feature to operate.

The RabbitMQ host name and the Decipher Web Client host name must be the same. If you amend the default RabbitMQ host name, you must also update the Decipher Web Client host name. It will not update automatically and will result in Decipher IDP not working as expected.

The DecipherServerConfiguration.exe application, which is available to download from the customer portal, has been created by SS&C | Blue Prism to enable you to modify the configuration and authentication details of the RabbitMQ instance on the Decipher Server.

### Modify the RabbitMQ instance on the Decipher Server

- 1. Run the DecipherServerConfigurator.exe.
- 2. In the **Decipher Server configuration file path** field, enter the location of the SsiServer.exe.config file. If required, use the **Browse...** option to change the file path.

🔹 Decipher Server C	Configurator		-		×
Decipher Server confi	guration file path	6)\Blue Prism\Decipher Server\SsiServer.exe.config	Browse	Oper	n
RabbitMQ endpoint [ RabbitMQ port [ RabbitMQ username [ RabbitMQ password [	1				
				Appl	y.

3. Click **Open**. The default local host endpoints and authentication details for RabbitMQ display.

🗅 Decipher Server	Configurator	- 🗆 X
Decipher Server con	figuration file path [16]\Blue Prism\Decipher Server\SsiServer.exe.config Brows	se Open
RabbitMQ endpoint RabbitMQ port RabbitMQ username RabbitMQ password	localhost 5672 ÷ guest	
		Apply

4. Update the **RabbitMQ endpoint**, **RabbitMQ username**, and **RabbitMQ password** fields with the details specific to your RabbitMQ server. For example:

🔹 Decipher Server	Configurator —		×
Decipher Server con	figuration file path [6]\Blue Prism\Decipher Server\SsiServer.exe.config Browse	Op	en
RabbitMQ endpoint RabbitMQ port	192.168.56.101       5672		
RabbitMQ username	admin		
		Ap	ply

5. Click **Apply**. The tool will validate and update the SsiServer.exe.config with the amended details.

## Decipher IDP post-installation configuration

When you have installed the Enterprise and Decipher IDP components, you need to complete the following configuration steps before you can get started. These should be done in the following order:

1. Configure database access:

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- Grant system access (NT AUTHORITY) to the Decipher database
- Grant Decipher Licensing Service access to the Blue Prism database
- Configure Windows Authentication
- 2. Secure the Decipher website with a Secure Sockets Layer (SSL) (production environments)
- 3. Ensure all Decipher services are running
- 4. Activate sites and services for Decipher IDP
- 5. Enable machine learning training (optional)
- 6. Update and encrypt database connection strings (optional)
- 7. Reporting database configuration (optional)
- 8. Configure RabbitMQ connection timeout (optional)

### Grant system access (NT AUTHORITY) to the Decipher database

By default, the Decipher Server service runs under the local system account (NT AUTHORITY). In order to access the Decipher database, this user must be given access to the database.

If you don't want to provide this level of access for the current user, you can set Decipher Server to run as a service account. This offers enhanced security as you can configure a more complex password. If set to use a service account, this account also needs to be configured with db\_datareader and db\_datawriter database permissions.

To give NT authority access to the Decipher database:

- 1. Open Microsoft SQL Server Management Studio and connect to the instance that is hosting your Decipher database. If you installed SQL Express, the default for this is .\SQLEXPRESS.
- 2. Click **Security** > **Logins**, and double-click **NT AUTHORITY\SYSTEM**. If you are not using the default account, select the relevant user from the list.

The Login Properties dialog displays.

3. Click **User Mapping** and select the relevant the check boxes to ensure the user has db\_datareader and db\_datawriter access to the Decipher database and the Decipher reporting database, if applicable.

Login Properties - NT AUTHO	DRITY\SYST	EM		-		×
Select a page	Script	🕶 😯 Help				
<ul> <li>Server Roles</li> <li>User Mapping</li> </ul>	Users map	oped to this login:				
Securables	Map	Database	User	Default Schema		^
Distatus		BluePrism				
		DecipherSearchCache				
		DecipherServer				
		DecipherServerDb	NT AUTHORITY\SYS	dbo		
	$\checkmark$	DecipherServerDbRe	NT AUTHORITY\SYS	dbo		
Connection Server:	Guest	account enabled for: Decip	herServerDb			~
BPEU292\SQLEXPRESS	Database	role membership for: Decipl	herServerDb			
Connection: BPEU292\Elizabeth Stewart	db_ac	ccessadmin ickupoperator				
View connection properties	db_da	tareader				
	db_da	tawnter Iladmin				
	db_de	nydatareader				
Program	db_de	nydatawriter				
r rogicss	db_ov	curityadmin				
Ready	✓ public					
				ОК	Can	cel

4. Click **OK** to save the changes.

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#### Grant access to the Decipher database for additional service accounts

For environments where the Decipher Web Client has been installed using a database connection string enabling Windows authentication (for example, Data Source=.\SQLEXPRESS;Initial Catalog=DecipherServerDb;Integrated Security=True), the IIS Service user needs to be granted db\_reader and db\_writer access to the Decipher database.

By default this is the NT AUTHORITY\SYSTEM user, but if the IIS Service is being run by a different user (such as a service account), that user account needs to be configured with the relevant permissions using the steps above.

In addition, if the Web Client has been installed with a specified credential in the database connection string, this credential also requires configuring with the same permissions.

### Grant Decipher Licensing Service access to the Blue Prism database

The user running the Decipher Licensing Service needs db\_reader access to the Blue Prism database where the license is stored. By default, the service is run by the NT AUTHORITY\SYSTEM user, but in a production environment this should be configured to a service account. To grant the relevant permissions to the service account:

- 1. Open Microsoft SQL Server Management Studio and connect to the instance that is hosting your Blue Prism database. If you installed SQL Express, the default for this is .\SQLEXPRESS.
- 2. Click **Security** > **Logins** and double-click the relevant account.

The Login Properties dialog displays



- 3. Click **User Mapping** and select the relevant the check box to ensure the user has db\_datareader access to the Blue Prism database.
- 4. Click **OK** to save the changes.

### Configure Windows Authentication (production environments)

For production environments, Blue Prism recommends the use of Windows Authentications using service accounts.

In the Decipher services and the website application pool must run under the context of a user that has access to the relevant databases.

### Configure the Decipher services

The following Decipher services must be configured with database access:

Service name	Database	Required database permissions
Decipher Licensing Service	The Blue Prism database to which the Decipher license is applied.	db_datawriter / db_datareader
Decipher Server	The Decipher database.	db_datawriter / db_datareader
Decipher Web SDK	The Decipher database.	db_datawriter / db_datareader

To configure Windows authentication for each Decipher service listed above:

- 1. From Windows Services, right-click the Decipher service and select **Properties**.
- 2. Click the Log On tab and select This account.
- 3. Enter the location and password of your service account.
- 4. Perform this task for each Decipher service.
- 5. Restart the Decipher services.

### Grant the service account access to Decipher folders

The service account used to access the Decipher databases also needs access to the following Decipher folders:

- The Decipher Image Storage Path This location is defined during the Decipher Server installation and can be viewed in: C:\Program Files (x86)\Blue Prism\Decipher Server\SsiServer.exe.config under the "ImageStorageRoot" key.
- The Decipher application files C:\Program Files (x86)\Blue Prism\
- The default Decipher logging locations:
  - C:\Windows\SysWOW64\config\systemprofile\AppData\Local\Blue Prism\Blue Prism
  - C:\Windows\System32\config\systemprofile\AppData\Local\Decipher
  - C:\Windows\System32\config\systemprofile\AppData\Local\Blue Prism
- The default website folder C: \inetpub\wwwroot

### Configure the Decipher website identity

The Decipher website identity should be set to an account that has db\_datareader and db\_datawriter access to the Decipher database. The service account that was specified in the Service configuration can be used.

To change the application pool identity:

- 1. Open Internet Information Services (IIS) Manager.
- 2. On the left-hand pane, navigate to Application Pools.
- 3. Select **Decipher AppPool**.
- 4. On the right-hand pane, click Advanced Settings.



The Advanced Settings dialog displays.

#### 5. Under Process Model, click Identity.

The ... (ellipsis) button displays.

١dva	anced Settings		?	×
	Start Mode	OnDemand		^
~	CPU			
	Limit (percent)	0		
	Limit Action	NoAction		
	Limit Interval (minutes)	5		
	Processor Affinity Enabled	False		
	Processor Affinity Mask	4294967295		
	Processor Affinity Mask (64-bit o	4294967295		
~	Process Model			
>	Generate Process Model Event L			
	Identity	LocalSystem		
	Idle Time-out (minutes)	10000		
	Idle Time-out Action	Terminate		
	Load User Profile	True		
	Maximum Worker Processes	1		
	Ping Enabled	True		
	Ping Maximum Response Time	90		
	Ping Period (seconds)	30		
	Shutdown Time Limit (seconds)	90		~
Identity [identityType, username, password] Configures the application pool to run as built-in account, i.e. Application Pool Identity (recommended), Network Service, Local System, Local Service, or as a specific user identity.				
		ОК	Cano	el

6. Click the ... (ellipsis) button.

The Application Pool Identity dialog displays.

7. Select Custom Account and click Set.

Application Pool Identity			?	$\times$
O Built-in account:				
LocalSystem		$\sim$		
Oustom account:		_		
			Set	
	ОК		Cancel	

- 8. Enter the account credentials, as prompted.
- 9. Once complete, navigate back to the **Application Pools** list.
- 10. Select **Decipher AppPool** and click the **Recycle** button.

A Recycling the IIS logs will log the user out of the current Decipher IDP session. If frequent recycling of the IIS logs is required, it is recommended that this is scheduled for outside of operating hours.

## Secure the Decipher website with a Secure Sockets Layer (SSL) (production

### environments)

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To secure your Decipher website to use an SSL certificate:

- 1. Open Internet Information Services (IIS) Manager.
- 2. On the left-hand pane, expand the Sites node and select Decipher.
- 3. Under Edit Site in the right-hand pane, click Bindings.

The Site Bindings dialog displays.

4. Click Add.

The Add Site Binding dialog displays.

- 5. From the **Type** drop-down, select **https**.
- 6. Add the host name of the Decipher Server to the Host name field.
- 7. Select an SSL certificate.

C The SSL certificate drop-down is populated with certificates from the personal certificate store on the local machine.

- 8. Click **OK** to accept the changes.
- 9. Navigate to the Decipher website and click Restart.

Any clients connecting to the Decipher website will have to trust the certificate that you selected in the above process. Self-signed certificates will need to be imported onto client machines, but it is more advisable to use a certificate from a certificate authority so that it is implicitly trusted by all clients.

### Check all Decipher services are running

Check that the necessary services exist and are running – you can do this by typing services into the Windows search bar and checking these services:

- Decipher Automated Client Manager
- Decipher Licensing Service
- Decipher Server

 This service will not run until the LocalSystem user has been given access to the database; or the Decipher Licensing Service has started.

- Decipher Web SDK Service
- RabbitMQ

🔍 Services						- 0	×
File Action View	Help						
🗢 🔿 📊 🔲 🧔	) 📑 🛛 📰 🕨 🔲 II 🕩						
🔍 Services (Local)	Services (Local)						
	Decipher Automated Client	Name	Description	Status	Startup Type	Log On As	^
	Manager	🏟 Data Sharing Service	Provides data brokering between	Running	Manual (Trig	Local System	
	Stop the service	🆏 Data Usage	Network data usage, data limit, re	Running	Automatic	Local Service	
	Restart the service	🖏 DCOM Server Process Launcher	The DCOMLAUNCH service launc	Running	Automatic	Local System	_
		🍓 Decipher Automated Client Manager	Decipher Automated Client Mana	Running	Automatic (D	Local System	
	<b>D</b>	🖏 Decipher Licensing Service	Licensing mechanism for Blue Pri	Running	Automatic	Local System	
	Description: Descripter Automated Client Manager	🖏 Decipher Server	Decipher Server Service	Running	Automatic (D	Local System	
	Service	🧠 Decipher Web SDK Service	Decipher Web SDK Service	Running	Automatic (D	Network Service	
	· · · · · · · · · · · · · · · · · · ·	Selivery Optimization	Performs content delivery optimi	Running	Automatic (D	Network Service	-

See Troubleshooting if you encounter any issues starting the services.

## Activate sites and services for Decipher IDP

By default, IIS creates a website on port 80. If you want Decipher IDP to run on port 80, then this default web site must be disabled or moved to avoid it conflicting with Decipher. To do this:

1. Open IIS and click the **Sites** folder in the Connections panel.

Internet Information Services (IIS)	Manager	– 🗆 ×
← → ● BPEU292 → Si	tes > Decipher >	🖬 🗟 🔂 🔞
File View Help		
Connections	Decipher Home	Actions
Stee     Gold Decipher     Gold Decipher     Gold Decipher     Gold Decipher     Gold Default Web Site	Decipited Horize     Original Consults     Original	Explore     Edit Permissions     Edit Ste     Bindings     Basic Settings     View Applications     View Virtual Directories
	Provides: Session Sate SMTP E-mail F Authentic Compression Data Directory Document Browsing Compression Data Directory Compression Data Directory Compression Directory	Manage Website
	Requeit SS Settings UR Rewrite Fittering Configurat. Extern	HSTS Ø Hdp
< >	Eastures View 💦 Content View	

- 2. Select **Default Web Site** and click **Stop** on the Actions > Manage Website panel.
- 3. Select Decipher and click Start or Restart.

See Log on and set up Decipher IDP admin for next steps.

### Enable machine learning training (optional)

Machine learning training can be switched on and off in the Decipher IDP user interface via Document types. However, it first needs to be configured in the SsiDataCaptureClient.exe.config file.

- 1. Using Notepad++, open the SsiDataCaptureClient.exe.config file as an Admin. (The default location is C:\Program Files (x86)\Blue Prism\Decipher Automated Clients.)
- 2. Find <add key="EnableModelTrainingML" value="false" /> and set the value to true.



- 3. Save the changes to the config file.
- 4. Restart the Decipher Server Service.

For information on why machine learning is not enabled by default, see the Decipher IDP frequently asked questions.

### Update and encrypt database connection strings (optional)

For enhanced security, you can choose to encrypt your database connection settings.

### Update the connection string

- Using Notepad++, open the SsiServer.exe.config file. The default location is C:\Program Files
   (x86)\Blue Prism\Decipher Server\SsiServer.exe.config.
- 2. Find connectionString and update the string with the name of the SQL database connection and user credentials.



- The existing connection string depends on whether the option to encrypt was selected when installing Decipher Server, and how the user was configured. The following are examples of typical connection strings:
  - Data Source=.\SQLEXPRESS; Initial Catalog=DecipherServerDb; Integrated Security=True;
  - Data Source=.\SQLEXPRESS; Initial Catalog=DecipherServerDb; User Id=myUsername; Password =myPassword;
  - If already encrypted: enc:AQAAANCMnd8BFdERjHoAwE/Cl+sBAAAAardddLezc0amPmM328
- 3. Save the changes to the config file.
- 4. Restart the Decipher Server service.

#### Encrypt the connection string

- 1. Launch the command prompt.
- 2. Set the directory to the installation location, for example cd C:\Program Files (x86)\Blue Prism\Decipher Server.

3. Enter ssiserver -enc and press Enter.

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4. Restart the Decipher Server service to test if the configuration is successful. If the service does not start, follow the Troubleshooting suggestions.

### Reporting database configuration (optional)

If you have chosen to create a separate reporting database during the installation of the Decipher server, you can then copy across any existing reporting data from the Decipher database to the new reporting database.

- 1. Using Notepad++, open the SsiServer.exe.config file. The default location is C:\Program Files (x86)\Blue Prism\Decipher Server\SsiServer.exe.config.
- 2. Find WorkflowConfig and set the SyncOldDataToReportingDatabase value to True.



- 3. Save the changes to the config file.
- 4. Restart the Decipher Server service.

Restarting the server may take some time while the data is copied across to the reporting database.

### Configure RabbitMQ connection timeout (optional)

When the Decipher Licensing Service is installed, there is a default RabbitMQ connection timeout of 5 seconds. If the component cannot connect to RabbitMQ in this time, it will timeout and an exception message is logged in Windows Event Viewer: Failed to connect to RabbitMQ after 5 seconds of waiting.

If required, you can update the timeout value by editing the **RabbitMqConnectionTimeoutInSeconds** attribute in the component's config file:

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  - 1. In Windows Services, locate the Decipher Licensing Service, right-click and select **Stop**. You can access Windows Services by typing Services into the Windows search bar.
  - 2. Navigate to the Decipher Licensing Service config file. The default location is C:\Program Files (x86)\Blue Prism\Decipher Licensing Service\config.
  - 3. Open the file in a text editor.
  - 4. In the **Configurations** section, locate the **RabbitMqConnectionTimeoutInSeconds** attribute and update the value as required. This must be a positive integer value.



- 5. Save the changes to the config file.
- 6. In Windows Services, restart the Decipher Licensing Service.

The Decipher Licensing Service will now use the updated timeout value.

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# Install and configure the Natural Language Processing (NLP) plugin

The NLP plugin can be downloaded from the Decipher IDP page on the Blue Prism customer portal.

## Install the NLP plugin

The NLP plugin, GPU, and the Decipher automated client must be installed on the same machine.

🖉 An instructional video of the NLP plugin installation is available here.

### Prerequisites

Ensure the following before attempting to install the NLP plugin:

- The specified minimum requirements have been met.
- Decipher IDP is already installed.

To install the NLP plugin:

- 1. Run the Decipher NLP Plugin installer.
- 2. Click through the install wizard, following the on-screen instructions as prompted.
- 3. On the End-User License Agreement screen, read the license agreement and, if you accept these terms, select I accept the terms in the License Agreement, then click Next.

🖟 Decipher NLP Plugin Setup 🦳 🗌	×
End-User License Agreement	÷
Please read the Decipher NLP Plugin License Agreement	
	_
DECIPHER INTELLIGENT DOCUMENT PROCESSING	
END USER LICENSE AND SUPPORT TERMS	
We (Blue Prism Software, Inc. ( <i>if you are in the Americas</i> ) or Blue Prism Limited ( <i>if you are in any other jurisdiction</i> ) are making the Decipher Intelligent Document Processing products (the "Software") and associated support services available to you.	
These End User License and Support Terms, and the order (where " <b>order</b> " means an order on the Blue Prism Order Form or other document agreed with us, or between you and an authorized Blue Prism reseller (" <b>Reseller</b> ") contain the whole agreement between you and us relating to	Ļ
I accept the terms in the License Agreement	
Print Back Next Cance	ł

The Installing Decipher NLP Plugin screen displays.

Installing Decipher NLP Plugin	
Installing Decipher NLP Plugin	7
Please wait while the Setup Wizard installs Decipher NLP Plugin.	
Status: Migrating feature states from related applications	
	_
Back Next Cancel	

- 4. After the plugin has installed, click **Next**.
- 5. On the Completed the Decipher NLP Plugin Setup Wizard screen, click **Finish** to exit the wizard.

🕼 Decipher NLP Plugin Setup	- 🗆 X
	Completed the Decipher NLP Plugin Setup Wizard
	Click the Finish button to exit the Setup Wizard.
<u>View Log</u>	Back Finish Cancel

The NLP plugin is installed to the following location:

SSI\_AUTOMATED\_CLIENTS\_ROOT\_INSTALLATION\_DIR\DataCaptureML\unstructured.

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## Configure the NLP plugin

After you have successfully installed the NLP plugin, you will need to ensure that machine learning training is enabled in the <u>SsiDataCaptureClient.exe.config</u> file.

- 1. Using a text editor, open the SsiDataCaptureClient.exe.config file, which is found in the Decipher Web install folder. (The default location is C:\Program Files (x86)\Blue Prism\Decipher Automated Clients\SsiDataCaptureClient.exe.config.)
- 2. Find EnableModelTrainingML and change the value to true.



3. Save the amended file.

See Natural Language Processing (NLP) plugin for details on how to configure and use the plugin in Decipher IDP.

## Verify SQL databases

After installation, the following databases should have been created – you can check in SQL Server Management Studio:

SQL Database	Default Blue Prism Database Name
Blue Prism	BluePrism
Decipher IDP	DecipherServerDb
Decipher IDP reports	DecipherServerDbReporting

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## Silent install

A Downloading and installing any of the Decipher IDP components, including by silent installation via command line, means that you accept the End User License Terms.

The Decipher Licensing Service, Decipher Server, Decipher Web Client, Decipher Automated Clients, Decipher Server Plugin, NLP Plugin, and a separate reporting database can be installed via the command line using the commands in the sections below:

2 Commands must be run from an elevated command prompt to perform silent install.

## Decipher IDP component installation commands

Run the following command line arguments for either fresh install or upgrade:

### **Decipher Licensing Service**

#### Fresh install

start /wait msiexec /i "Decipher Licensing Service.msi" /qn /norestart /log .\log.txt

### **Decipher Server**

#### Fresh install

```
start /wait msiexec /i "Decipher Server 2.22.10050.msi" /qn /l .\install.txt SERVERPORT=12543
DBNAME=DecipherServerDb STORAGEPATH=C:\DecipherImageStore LICUSER=guest LICPASS=guest WINSERVICE=1
DBSERVER="dec-ws2019-0\SQLEXPRESS" DBAUTHTYPE=1 DBUSER=<username> DBPASS=<password>
```

#### Upgrade

```
start /wait msiexec /i "Decipher Server 2.22.10050.msi" /qn /l .\install.txt
```

### Decipher Web Client

#### Fresh install

```
start /wait msiexec /i "Decipher Web Client 2.23.02150.msi" /qn /norestart /log .\log.txt
INSTALLDIR="C:\Program Files (x86)\Blue Prism" WEBSITEPORT=80 SERVERIP=127.0.0.1 SERVERPORT=12543
DBCONNSTR="Data Source=dec-ws2019-0\SQLEXPRESS;Initial Catalog=DecipherServerDb;User
ID=<userid>;Password=<password>"
```

#### Upgrade

start /wait msiexec /i "Decipher Web Client 2.23.02150.msi" /qn /norestart /log .\log.txt



## **Decipher Automated Clients**

#### **Fresh install**

```
start /wait msiexec /i "Decipher Automated Clients 2.23.02140.msi" /qn /l .\log.txt
InstallDir="C:\Program Files (x86)\Blue Prism\Decipher Automated Clients" ServerIP=127.0.0.1
serverport=12543 serveruser=generaluser serverpass=user AddLocal=Common_Files,Server_Common_
Files,Data_Capture_Client,OCR_Client,Image_Processing_Client,Machine_Learning_
Module,Classification_Client,Export_Client
```

#### Upgrade

```
start /wait msiexec /i "Decipher Automated Clients 2.23.02140.msi" /qn /l .\log.txt
```

### Decipher Server Plugin

#### Fresh install

start /wait msiexec /i "Decipher Server Plugin.msi" /qn /norestart /log .\log.txt

### NLP Plugin

#### Fresh install

```
start /wait msiexec /i "Decipher NLP Plugin 2.23.02140.msi" /qn /l .\log.txt
```

#### Upgrade

As there is only one release of the NLP plugin, the upgrade command is not currently required.

### **Command line parameters**

Parameter	Component	Description
DBSERVER	Decipher Server	The name of the SQL server, or the Azure server database connection string.
DBAUTHTYPE	Decipher Server	<ul> <li>Authentication type – this can be:</li> <li>0 – Trusted (Windows Authentication)</li> <li>This is the default and recommended for Decipher IDP.</li> <li>1 – SQL Authentication</li> </ul>
DBUSER	Decipher Server	Username for the database. Only required for SQL authentication.
DBPASS	Decipher Server	Password for the database. Only required for SQL authentication.

Parameter	Component	Description
DBNAME	Decipher Server	The name of the database. The default is DecipherServerDb.
STORAGEPATH	Decipher Server	The image storage path. This is the location where the documents are stored after they have been processed. This can be any location, including OneDrive, SharePoint, or a local drive.
LICENSEKEY	Decipher Server	The license key for the Decipher software.
WINSERVICE	Decipher Server	<ul> <li>They type of install:</li> <li>0 – Install the server as a console application.</li> <li>1 – Install the server as service (default).</li> </ul>
ENCRYPTIONCONFIG	Decipher Server and Decipher Automated Clients	<ul> <li>The encryption requirement for the configuration file data, including sensitive information such as the SERVERUSER and SERVERPASS values, and any connection strings. This can be set to:</li> <li>false – Configuration file data is not encrypted (default).</li> </ul>
		<ul> <li>true – All configuration file data is encrypted.</li> </ul>
ENCRYPTIONPWD	Decipher Server	The encryption password for encrypted documents.
ENCRYPTEDPWD	Decipher Server	<ul> <li>The encryption requirement for the encryption password:</li> <li>0 – The password will not be encrypted (default).</li> <li>1 – The password will be encrypted.</li> </ul>
LICHOST	Decipher Server	The RabbitMQ server host name. The default is localhost.
LICPORT	Decipher Server	The RabbitMQ server port. The default is 5672.
LICQUEUE	Decipher Server	The RabbitMQ server queue name. The default is DecipherLicensing.
LICUSER	Decipher Server	The RabbitMQ username.
LICPASS	Decipher Server	The RabbitMQ password.
SERVERPORT	Decipher Server, Decipher Web Client, and Decipher Automated Clients	The port of the server. The default is 12543. This is required when installing the Decipher Web Client.



Parameter	Component	Description
SERVERIP	Decipher Web Client and Decipher Automated Clients	The IP of the application server. This does not need to be included if the default IP is used.
SERVERUSER	Decipher Automated Clients	The username for the application server.
SERVERPASS	Decipher Automated Clients	The password for the application server.
DBCONNSTR	Decipher Web Client	The SQL application or Azure server database connection string.
WEBSITEPORT	Decipher Web Client	The website port. This does not need to be included if the default port 80 is used.
INSTALLDIR	Decipher Web Client and Decipher Automated Clients	The installation directory. This does not need to be included if the default directory is used.
SQL_SERVER	Decipher Licensing Service	The SQL Server type, or the Azure server database connection string.
SQL_USERNAME	Decipher Licensing Service	The username for SQL Server Authentication. Required if SQL_AUTH_MODE is false.
SQL_PASSWORD	Decipher Licensing Service	The password for SQL Server Authentication. Required if SQL_AUTH_MODE is false.
SQL_DATABASE_NAME	Decipher Licensing Service	The SQL database name. The default is BluePrism.
SQL_AUTH_MODE	Decipher Licensing Service	<ul> <li>The authentication mode. This can be:</li> <li>true – Trusted (Windows Authentication)</li> <li>This is the default and recommended for Decipher IDP.</li> <li>false – SQL Authentication</li> </ul>
RMQ_USERNAME	Decipher Licensing Service	The RabbitMQ username. The default is guest.
RMQ_PASSWORD	Decipher Licensing Service	The RabbitMQ password. The default is guest.
RMQ_HOST_NAME	Decipher Licensing Service	The RabbitMQ host name. The default is localhost.
RMQ_PORT	Decipher Licensing Service	The RabbitMQ port number. The default is 5672.



Parameter	Component	Description
RMQ_QUEUE_NAME	Decipher Licensing Service	The RabbitMQ queue name, which must contain alphanumeric characters only. The default is DecipherLicensing.

Where appropriate, each property is initialized with the default value if it is not specified on the command line.

## Reporting database command line parameters

The following command line parameters can be used for the silent install of a separate reporting database on Decipher Server.

REPORTING	Specifies if the reporting database is enabled or disabled. This can be:
	• true
	• false
	The default for clean install is false.
REPORTSAMESVR	Specifies if the reporting database should be created on the same SQL Server instance as the main database. This can be:
	• true
	• false
	The default is true.
REPDBSERVER	The name of the SQL Server instance to be used for the reporting database.
REPDBAUTHTYPE	The Authentication type for the reporting server. Works analogically to DBAUTHTYPE:
	O – Windows Authentication
	A This is the default and recommended for Decipher IDP.
	• 1 – SQL Server Authentication
REPDBUSER	The username for the reporting server. Required if REPDBAUTHTYPE is 1.
REPDBPASS	The password for the reporting server. Required if REPDBAUTHTYPE is 1.
REPDBNAME	The name of the reporting database. The default value is DBNAME appended with Reporting.

## Default file locations

The default locations of Decipher IDP's configuration and log files are shown in the sections below.

## Log file locations

The default log locations were updated with the release of Decipher IDP 2.1, but logs for existing installations upgrading from versions 1.2 or earlier were not changed. For details on how to reconfigure the log locations, see Upgrade Decipher IDP.

### **Decipher Server**

File type	Location
Config	C:\Program Files (x86)\Blue Prism\Decipher Server\SsiServer.exe.config
Logs	C:\Windows\System32\config\systemprofile\AppData\Local\Decipher\Applicatio nServer\Logs

### Classification

File type	Location
Config	C:\Program Files (x86)\Blue Prism\Decipher Automated Clients\SsiClassificationClient.exe.config
Logs	C:\Users\Public\Blue Prism\ClassificationClient\Logs
	For systems using 1.2 or earlier:
	C:\Windows\SysWOW64\config\systemprofile\AppData\Local\Blue Prism\ClassificationClient\Logs

## Capture

File type	Location
Config	C:\Program Files (x86)\Blue Prism\Decipher Automated Clients\SsiDataCaptureClient.exe.config
Logs	C:\Users\Public\Blue Prism\DataCaptureClient\Logs
	For systems using 1.2 or earlier:
	C:\Windows\SysWOW64\config\systemprofile\AppData\Local\Blue Prism\DataCaptureClient\Logs

### Export

File type	Location
Config	C:\Program Files (x86)\Blue Prism\Decipher Automated Clients\SsiExportClient.exe.config

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File type	Location
Logs	C:\Users\Public\Blue Prism\ExportClient\Logs
	For systems using 1.2 or earlier:
	C:\Windows\SysWOW64\config\systemprofile\AppData\Local\Blue Prism\ExportClient\Logs

## Image Processing

File type	Location
Config	C:\Program Files (x86)\Blue Prism\Decipher Automated Clients\SsiImageProcessingClient.exe.config
Logs	C:\Users\Public\Blue Prism\ImageProcessingClient\Logs
	For systems using 1.2 or earlier:
	C:\Windows\SysWOW64\config\systemprofile\AppData\Local\Blue Prism\ImageProcessingClient\Logs

## OCR

File type	Location
Config	C:\Program Files (x86)\Blue Prism\Decipher Automated Clients\SsiOcrClient.exe.config
Logs	C:\Users\Public\Blue Prism\OcrClient\Logs
	For systems using 1.2 or earlier:
	C:\Windows\SysWOW64\config\systemprofile\AppData\Local\Blue Prism\OcrClient\Logs

## Web Client

File type	Location
Config	C:\Program Files (x86)\Blue Prism\Decipher Web\NLog.config
Logs	C:\Users\Public\Blue Prism\DecipherWebServer\Logs
	For systems using 1.2 or earlier:
	C:\Windows\SysWOW64\config\systemprofile\AppData\Local\Blue Prism\DecipherWebServer\Logs

## Configuration file locations

## RabbitMQ

File type	Location
Config	N/A
Logs	%appdata%\RabbitMQ\log\
## Web installer

File type	Location
Config	N/A
Logs	%temp% - there are 4 log files, whose names start with Blue Prism_Invoices_Web_ Client_
	C:\Users\{username}\AppData\Local\Temp

## Web SDK Service/SDKWrapper

File type	Location
Config	C:\Program Files (x86)\Blue Prism\Decipher Web SDK Service\SdkWrapper\Ssi.SdkWrapper.exe.config
Logs	C:\Users\Public\Blue Prism\SdkService\Logs
	C:\Users\Public\Blue Prism\SdkWrapper\Logs
	For systems using 1.2 or earlier:
	<pre>If started under NetworkService (default): C:\Windows\ServiceProfiles\NetworkService\AppData\Local\Blue Prism</pre>
	<pre>If started under LocalSystem (deprecated): C:\Windows\SysWOW64\config\systemprofile\AppData\Local\Blue Prism\SDKWrapper\Logs</pre>