Hub 3.0

This document details the product specifics of the Blue Prism Cloud Hub (Hub) capability within the Blue Prism Cloud platform. Hub exists as one of a collection of products from Blue Prism Cloud alongside Blue Prism Cloud Interact; a digital worker to human collaboration interface and Blue Prism Cloud IADA; a digital workforce manager to support at-scale deployments. The following sections outline the features and controls of Hub for a Software as a Service deployment.

Whilst Hub can be consumed as a stand-alone product as well as within the wider Blue Prism Cloud platform, the feature plugins available will differ. As such this documents content is relevant only to the stand-alone version of Hub.

Blue Prism Cloud®

Blue Prism Cloud® brings together the principles of Cloud, Robotic Process Automation (RPA) and Artificial Intelligence (AI) to offer a proprietary Software as a Service (SaaS) platform designed to automate and digitize the execution of knowledge-based work. Digital workers are deployed non-disruptively into business operations and work by emulating the way people use business systems, the decisions they make and the processes they follow, to augment, replace, or digitize manual work processes.

Blue Prism Cloud Hub

As the digital workforce landscape matures within an organization, operators and sponsors alike need to scale their approaches and methodologies to manage their automation investment. Management information on the digital workforce needs to be transparent across the business and intuitive to interpret, in addition best-practices need to be monitored to ensure alignment to industry standards. Blue Prism Cloud Hub provides new and existing Blue Prism users with a productivity platform for the management of the automation lifecycle. Hub caters for the individual roles within the robotic operating model (ROM) with a set of capabilities to ensure the successful, scalable delivery of an automation strategy.

Version support and prerequisites

Blue Prism Cloud – Hub in its role as a productivity platform for the management of the automation lifecycle has been created with the following prerequisites. These prerequisites should be met before the deployment of a Hub instance.

- Supported Blue Prism versions are limited to 6.2.1 through to 6.4.3.a
- Customer has read and acknowledge the Blue Prism Cloud - Security Guidelines
- Completion of the Blue Prism Cloud – Hub Connectivity Configuration document
- Client will need to supply database configuration details for each preconfigured RPA database connections

Hub plugins

The Hub product has been created as a lightweight 'empty' application which is then populated by a series of plugins (features). This forms what is referred to as the plugin architecture which allows the Blue Prism Cloud team to iterate features and make them available for consumption by the Hub administrators.

Each Hub instance contains a 'Plugin Repository' page which allows Hub administrators to view and deploy new plugins as well as update to existing plugins.

Hub is deployed with a series of out-the-box plugins. For more information on the capabilities of these plugins, please review the release notes and associated Blue Prism University materials.

In the delivery of the service, Hub is required to process and store specific items of information. These items will either be from the client domain, Blue Prism environment or information native to the configuration within Hub. The sub-sections highlight the data flows and requirements based on each plugin alongside the features.

Hub Core

The Hub Core plugin provides a foundation that additional plugins inherit functionality from. This includes the following features:

- Role-Based-Access-Control (RBAC)
- Email Settings
- Database (Connection) Settings
- Authentication Settings
- Users and Roles
- Customization Settings
- Audit
- Plugin Repository
- Notifications
- Announcements
- Profile Management

Hub Core is a mandatory plugin of Hub and expects the following data access/control requisites:

Data Access/Control Requisites	Information/Data Stored?	Storage Location
LDAP connection string information for user authentication	Yes	Hub Database
SQL Server connection string for Blue Prism database interactions (Read/Write)	Yes	Hub Database
Communication to customer Domain Controller	No	N/A
SMTP connection string information for outbound email notifications	Yes	Hub Database
Communication to nominated Email Gateway	No	N/A
Username and User Profile Information	Yes	Hub Database
Corporate Brand Guidelines (optional) for white labelling	Yes	Hub Database

Dashboard

The Dashboard plugin provides insight into the digital workforce landscape. Dashboards are crafted based on the deployment of a series of configurable widgets which can be added by each individual user. The available widgets are determined based on the 'parent' plugins deployed. For example, the Automation Lifecycle plugin must be deployed for a user to gain access to the 'Business Process Overview' widget.

Available widgets are:

Widget	Parent plugin
Monthly Utilization Diary	Utilization
Utilization Chart	Utilization
Business Process Overview	Automation Lifecycle Management
Live Workforce Utilization	Utilization
Total Virtual Workers Count	Virtual Worker Settings
Utilization Heatmap	Utilization

Dashboard is an optional plugin of Hub and has the following requirements:

Requirement	Information/Data Stored?	Storage Location
User dashboard Name, Description and Avatars	Yes	Hub Database

Platform Management

The Platform Management category elevates the control over your digital workforce, simplifying a range of operational activities using the web client. The key plugins within the Platform Management category are:

Digital Workforce Settings

View your digital workers, assign aliases and avatars to make them easily identifiable.

Digital Workforce Settings is an optional plugin of Hub and has the following requirements:

Requirement	Information/Data Stored?	Storage Location
Digital Worker; Name, Description and Avatars	Yes	Hub Database
Read and Write access to the BPAResource table within Blue Prism	No	N/A

License Manager

Upload, manage and view license properties of your Blue Prism estate.

License Management is an optional plugin of Hub and has the following requirements:

Requirement	Information/Data Stored?	Storage Location
Read and Write access to the BPALicense table within Blue Prism	No	N/A

Digital Workforce

Within the Digital Workforce category is the Utilization plugin. The Utilization plugin will allow you to generate detailed reports of your digital workforce utilization within a given timeframe. You can choose from 4 different reports and 2 different formats, with flexible settings allowing you to define the data view to suit your needs, including activity times or under-utilization, load and availability.

Utilization is an optional plugin of Hub and has the following requirements:

Requirement	Information/Data Stored?	Storage Location
Read access to BPASession and BPASessionLog_ NonUnicode tables within Blue Prism	No	N/A

> The Utilization plugin queries the Blue Prism environment in real-time and should only be initiated against performant configurations of Blue Prism.

Design Studio

The Design Studio category acts as the intersection to the development and oversight of Blue Prism automations. Design Studio supports both Automation Developer and Operator roles within the ROM to simplify the deployment and management of automations. Within this category are the following plugins:

Wireframer

Through an intuitive web-based collaborative interface, users specify high-level procedural information to allow Wireframer to deploy the low-level work instructions required by a Blue Prism digital worker. Wireframer adheres to the concept of the 'software-defined-operating-model', meaning that the best practices such as exception handling and the ROM design concepts are deployed as standard;

Wireframer is an optional plugin of Hub and has the following requirements:

Requirement	Information/Data Stored?	Storage Location
Wireframe; Name, Process Name and Description	Yes	Hub Database
Read and Write access to the BPAProcess table within Blue Prism	No	N/A

Process/Object Explorer

Access, View, Expose and Manage your Objects and Processes using filters to rapidly access them within large scale environments;

Process/Object Explorer is an optional plugin of Hub and has the following requirements:

Requirement	Information/Data Stored?	Storage Location
Read and Write access to the BPAProcess table within Blue Prism	No	N/A

Environment Data Items

Create, Edit, View and Delete your Blue Prism Environment Data Items through the Design Studio plugin. Where your Hub instance is connected to multiple Blue Prism environments, promote Environment Data Items as part of your release process;

Environment Data Items is an optional plugin of Hub and has the following requirements:

Requirement	Information/Data Stored?	Storage Location
Environment Data item; Name, Description, Data Type and Value	Yes	Hub Database

Environment Locks

View and Manage your Blue Prism environment locks from within the Design Studio plugin.

Environment Locks is an optional plugin of Hub and has the following requirements:

Requirement	Information/Data Stored?	Storage Location
Read access to the BPAEnvLock table within Blue Prism	No	N/A

Automation Lifecycle Management

The Automation Lifecycle category underpins the software-driven-operating-model of Blue Prism. The capability is delivered to guide all users within a center of excellence to a successful and scalable delivery of automations. This extends to the following features:

- **Applications**: Define and manage the applications in scope of your automation lifecycle. Allocate versions to support regression testing procedures and set owners to ensure release procedures are being maintained;
- **Business Processes**: Define your automation projects and associated business processes to provide project management tracking and team alignment when deploying either sequentially or at scale;
- **Process Definitions**: Adopt a web-based Process Definition Document (PDD) interface for collaboration with your business unit subject matter experts. Use a fully enabled version control with PDD submission and signoff workflow embedded;
- **Exceptions**: Create and manage templated exceptions to allow your business processes to share templated procedures for error control/exception handling.

Automation Lifecycle Management is an optional plugin of Hub and has the following requirements:

Requirement	Information/Data Stored?	Storage Location
Application, Business Process and Exceptions properties including; Name, Availability properties, ownership, process screenshots and procedure flow	Yes	Hub Database

Queue Management

The Queue Management category grants a growing level of functionality in the control and insight into your Blue Prism queues. Starting initially with the management of queues, this category will extend into the control of items within a queue. The initial version of Hub makes the following plugin available:

Queue Manager

Empower operators within your center of excellence to Create, Manage, Encrypt and Delete Blue Prism queues.

Queue Manager is an optional plugin of Hub and has the following requirements:

Requirement	Information/Data Stored?	Storage Location
Queue; Name, Category, Status, Key Name, Max Attempts and Encryption Key	Yes	Hub Database
Read and Write access to the BPAWorkQueue	No	N/A

Connectivity

Platform connectivity

Blue Prism Cloud – Hub is granted access to the customer Blue Prism environment via a Site to Site VPN. The VPN is initiated as part of service creation and maintains an active link for operation. End users' access to Hub is via the VPN only and all non-VPN access is restricted using Network Security Group and Application Security Group controls.

Ongoing access and interaction with the Blue Prism environment(s) require Read/Write access over the Blue Prism database(s) in scope of management.
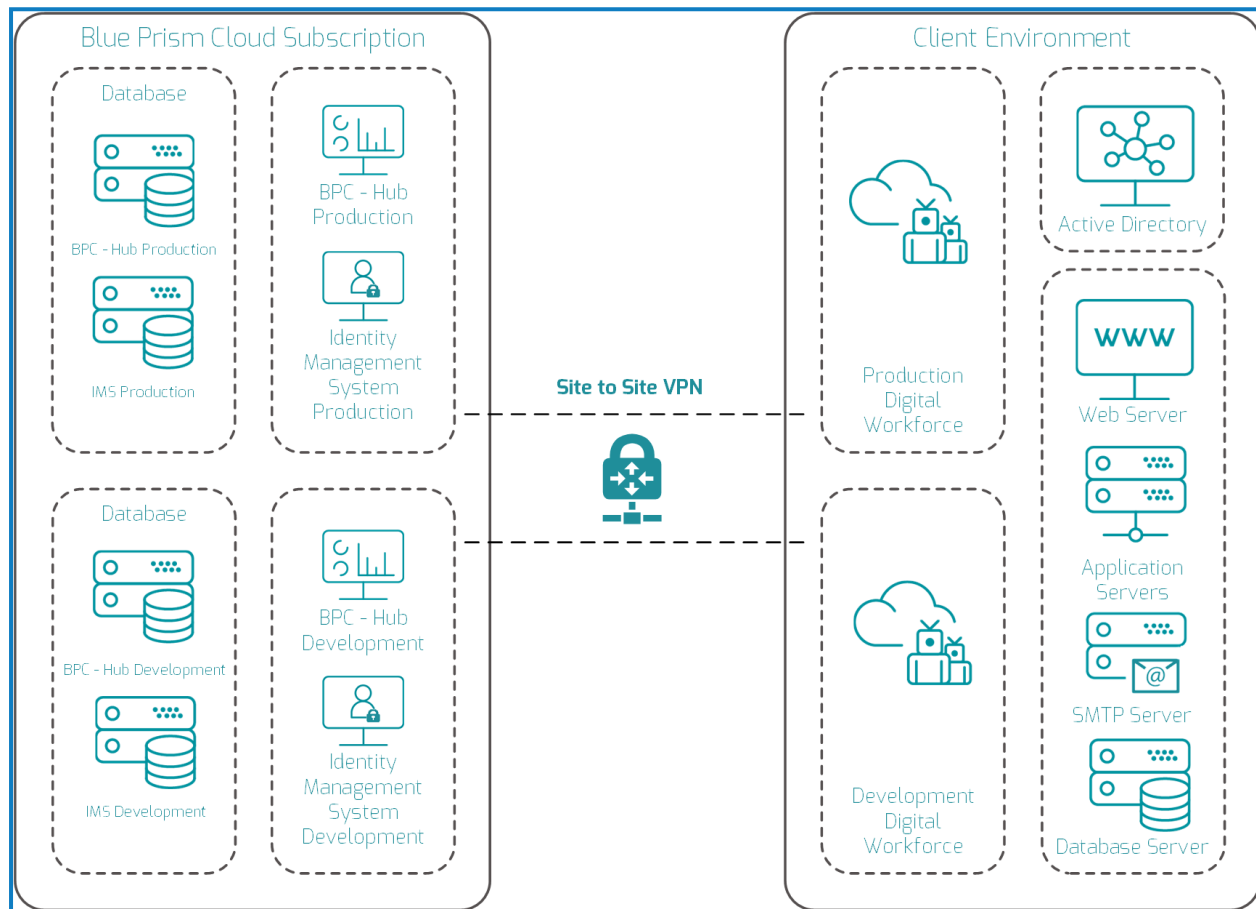
User authentication

The Hub platform as of version 1.0 supports Forms Based authentication only. Managed users will however be granted privileges through the embedded Role-Based-Access-Control capability to grant/limit access to specific plugins based on customer administration configuration. Hub version 1.1 will be deployed with an Identity Management Servers (IMS) which will extend the authentication options to include LDAP and LDAPS. As illustrated below.

Localization

The Hub interface as of version 1.0 is available in English only. Hub version 1.1 will support the following languages:

- Chinese Simplified
- English
- French (France)
- German
- Japanese
- Portuguese (Brazilian)
- Russian
- Spanish (Latin American)
- Ukrainian

Availability controls

Deployment

Blue Prism Cloud utilize Microsoft Azure for the deployment datacenter services of its SaaS architecture. Blue Prism Cloud can deploy into any available Microsoft Azure region and the customer will be prompted to select a region as part of the deployment activities.

Backup services

Blue Prism Cloud – Hub provides backup capabilities which allow for restoration of the Hub database anytime within a 7-day window. The restoration process is initiated as a Change Request to the Blue Prism Cloud support team.

> The Blue Prism Cloud Hub platform does not back-up information relating to the Blue Prism environment and should not be considered as a backup solution for a deployed instance of Blue Prism.

Security controls

Blue Prism Cloud has architected the Hub platform with the principles of information and cyber security at its core. Blue Prism Cloud maintains a 24/7 security operations center in support of protecting the environments from malicious activity.

Platform segregation

Each deployment of Blue Prism Cloud operates within its own subscription. This is a segregated subscription, meaning no components are multi-tenanted.

Blue Prism Cloud – Hub is delivered with two instances in each subscription by default. Each instance consisting of two web applications configured as a Hub and an Identity Management System (IMS). The two instances are preconfigured to a specific production and development Blue Prism environment at the point of deployment. The instances are connected to the Blue Prism environments using a provisioned gateway and Site to Site VPN with the address space whitelisted by the customer.

Hub is deployed with a development and production instance allowing for plugin updates to be validated before publication into the production environment.

Blue Prism Cloud recommend that a dedicated Active Directory Group is established for each of these environments i.e. 'BPC-Hub-Dev' and 'BPC-Hub-Prod'. Within these specific Active Directory groups, users who will require access to that environment should be added. This will then restrict users to an environment e.g. a developer would not require access to the production environment.

Blue Prism Cloud support

In response to an issue, to meet the service level agreements the Blue Prism Cloud support team may require access to the Hub environment. This is achieved through the customer 'granting' access through a procedure referred to as Just-in-Time (JiT) access. JiT access is a mechanism where approvers within the customer organization can grant privileged access to Blue Prism Cloud support team members to investigate and resolve an issue. This mechanism ensures that access can only be gained to the environment with the customers acknowledgement. During an investigation, other approaches such as a screen share may be used to troubleshoot, however this approach will also require customer approval.