



Technical User Guide

Blue Prism Cloud IADA®

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Summary

This document details the product specifics of the Blue Prism Cloud Intelligent Automated Digital Assistant (IADA®) capability within the Blue Prism Cloud platform. IADA is one of a collection of products from Blue Prism Cloud, which also includes Blue Prism Cloud **Hub** – a business administration interface to manage the automation lifecycle – and Blue Prism Cloud **Interact** – a digital worker-to-human collaboration interface. IADA is available as a standalone product, as well as within the wider Blue Prism Cloud platform, though it should be noted that the features will differ between the standalone and in-platform version of the products. As such, the contents of this document is relevant only to the standalone version of IADA.

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 IADA

Blue Prism Cloud IADA operates as the brain of the digital workforce, overseeing cross-departmental workers in a management capacity. IADA aligns business metrics to varied workloads to drive priority and service level and determine the order of work. Over time, as the digital workforce executes work, the data gathered fuels an AI predictive model to allow interpretation of application performance. This ensures work is distributed to maximize utilization. IADA also manages the ingestion of work from external channels, allowing for work to be written to a Blue Prism Queue for centralized control.

Priority and Service Level Orchestration

Within an organization, not all process automations and their associated items have the same value to the business, and some workloads will have a natural prioritization over others. Traditional deployments of Blue Prism address and process work items using a First-In-First-Out (FIFO) methodology. Organizations can create additional hierarchies of workload priority through the use and segmentation of Queues; however, Queues may also contain varying processes and tasks of differing levels of importance. Lastly, schedules can be configured to periodically loop over important workloads; however, this can lead to inefficiencies in digital workforce utilization, and schedules may not be initiated if associated digital worker(s) are already occupied.

To support a workload scenario that includes diverse tasks and processes and has varying levels of business importance, IADA acts as a digital workforce manager to coordinate the execution of work. IADA uses the concept of priority and service levels, along with a matrix of approaches, to ensure that the unique requirements of a business are met.

Priority and Service Levels

One of the key approaches used by IADA is measuring work (Queue Items within Blue Prism) based on the Priority and Service Level Agreement (SLA). Each item is labeled with these metrics individually or inherits this value from the associated business process to support the ordering of work. When a digital worker is ‘available’ to execute a process, IADA identifies the next ‘best’ item based on configurable properties and returns the activity to the digital worker.

Holistic Queue Analysis

IADA operates at a layer above the Blue Prism Application Server and maintains direct synchronization with the Blue Prism database. This allows IADA to interrogate Queues in parallel as well as the associated Items within the Queue. This approach coupled with the understanding of Priority and SLAs allows for specific Items to be selected and returned to the digital worker.

Machine Learning, Predictive Model

IADA provides users with a series of additional features to tailor the way work is prioritized and selected. One of these features includes taking into consideration the performance of the associated applications that are used as part of a business process. When a digital worker executes work, it builds up a repository of individuals steps and activities against the applications accessed. While no sensitive data is stored, the application names and responsiveness are logged. This data allows for a predictive model to ascertain how applications perform over a given time period, highlighting areas of efficiency or degradation. When IADA selects the ‘best’ Item to execute, it can also be instructed to use this information as part of the decision-making process – ordering work based on the efficiencies of either completing the Item now or deferring it to another time of the day when the applications will perform better.

In-Process Features

The priority and service level of a process or Item is just one of the metrics that is important to the way work is ordered. In some scenarios, digital workforce time can be wasted when starting, stopping, or switching between applications, such as if an application takes time to start up, for example. For this reason, IADA also provides a series of settings that can be used to weight the workload selection process – or even allow a series of Items from the same process to be completed before getting the next piece of work. Refer to the full list of setting properties in the table below:

Setting	Description
Run At	Ensure an Item is executed at a set period of time only
Run With	Ensure an Item is executed only by a specific digital worker(s)
Standard Run Mode	Prioritize Items based on standard Blue Prism ‘Get Next Item’
Maintain Application	Prioritize Items that use specified Applications as those that are open

IADA Queue Loader

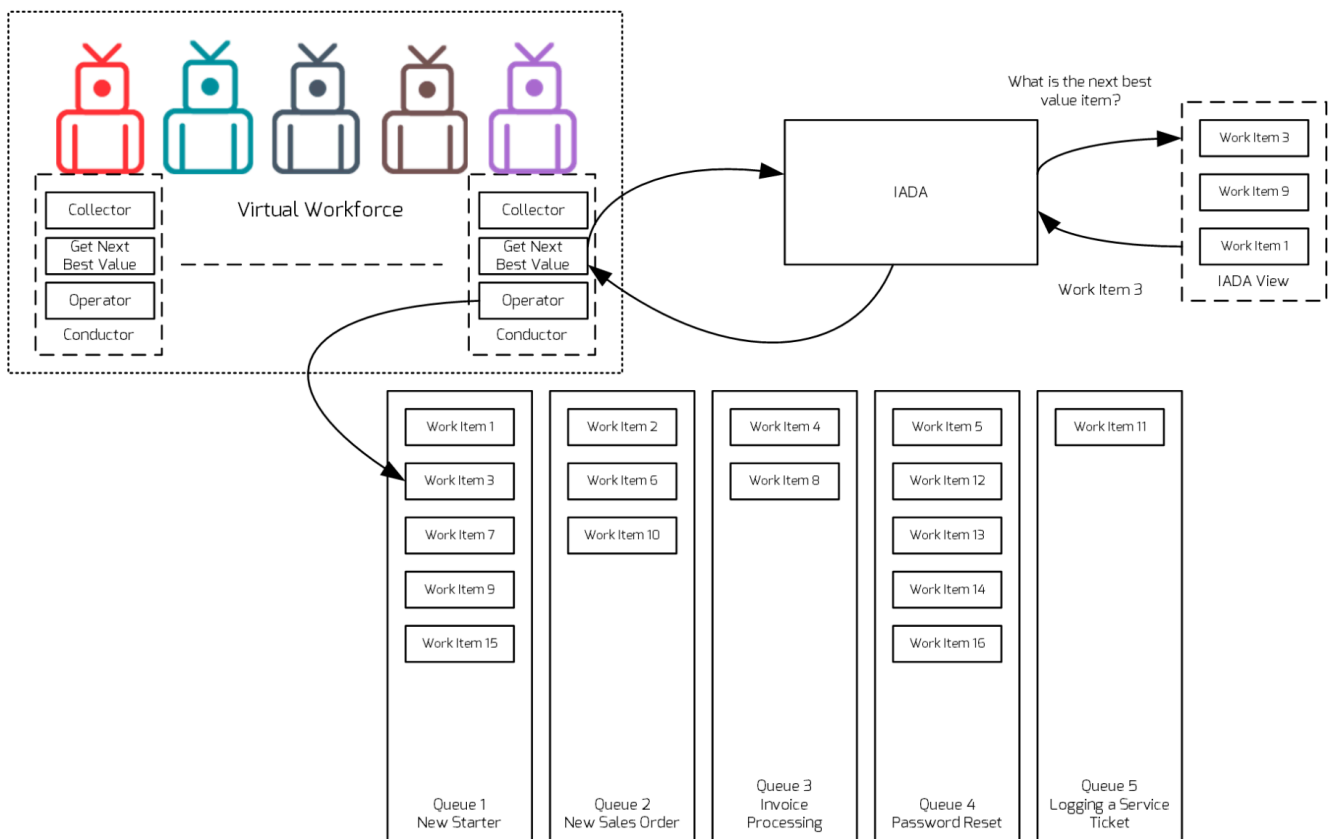
IADA gives users an API interface for use when adding work to a specified Blue Prism Queue. This Queue Loader can be called either from within a Blue Prism process or from an external source to allow for the centralized ingestion of work. In addition, users can append priority and service levels to the submission to allow for orchestration via the main IADA function.

Consuming IADA within an Environment

IADA is pre-integrated into Blue Prism and is consumed in the form of a Skill. Once deployed, the Skill will be accompanied by a Visual Business Object (VBO) for integration into the Blue Prism environment. It is commonplace for all digital workers to be linked with IADA[®]; however, the architecture also allows for digital workers to be isolated and to approach work on a traditional schedule or in a work queue-linked way.

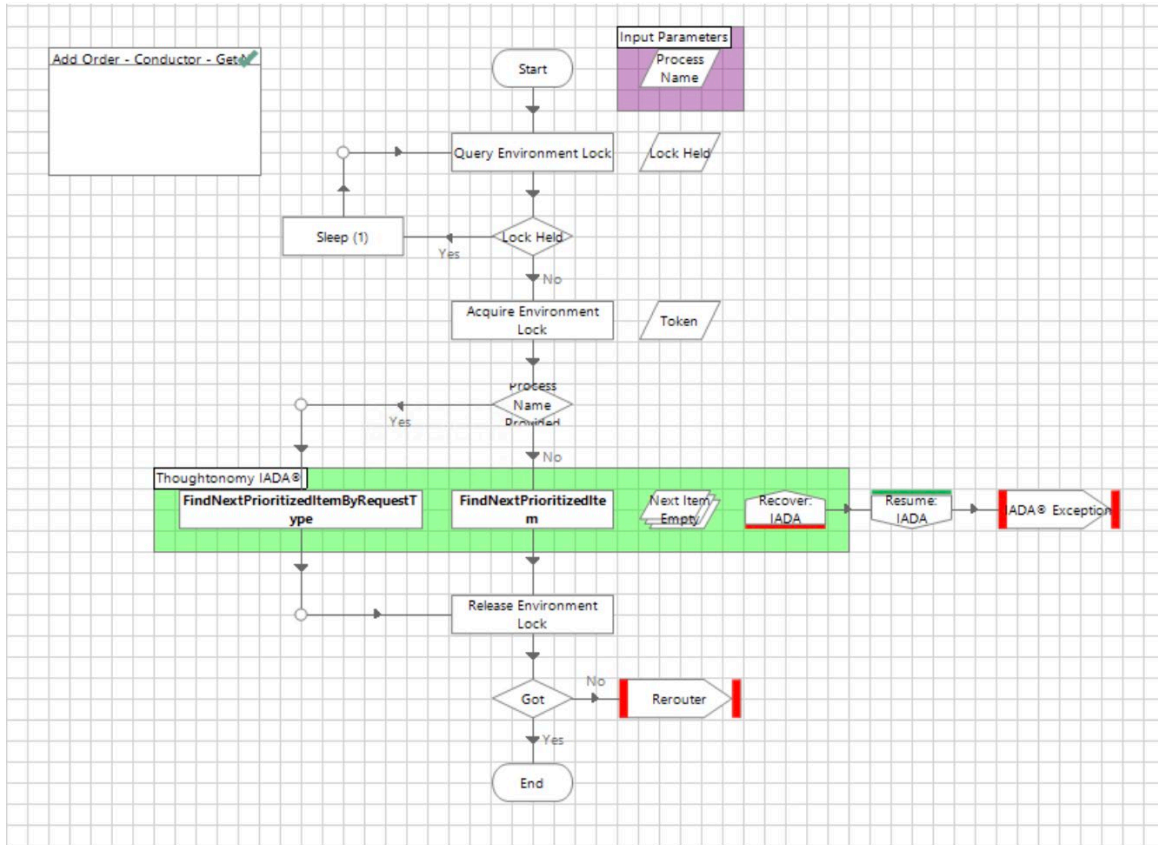
Orchestration Component Architecture

IADA provides an out-the-box integration with Blue Prism, making it easier to realize benefits and efficiencies. As IADA removes the need to adopt schedules in the management of work, the following diagram illustrates the component level architecture and how digital workers, Queues and IADA interface:



Orchestration VBO

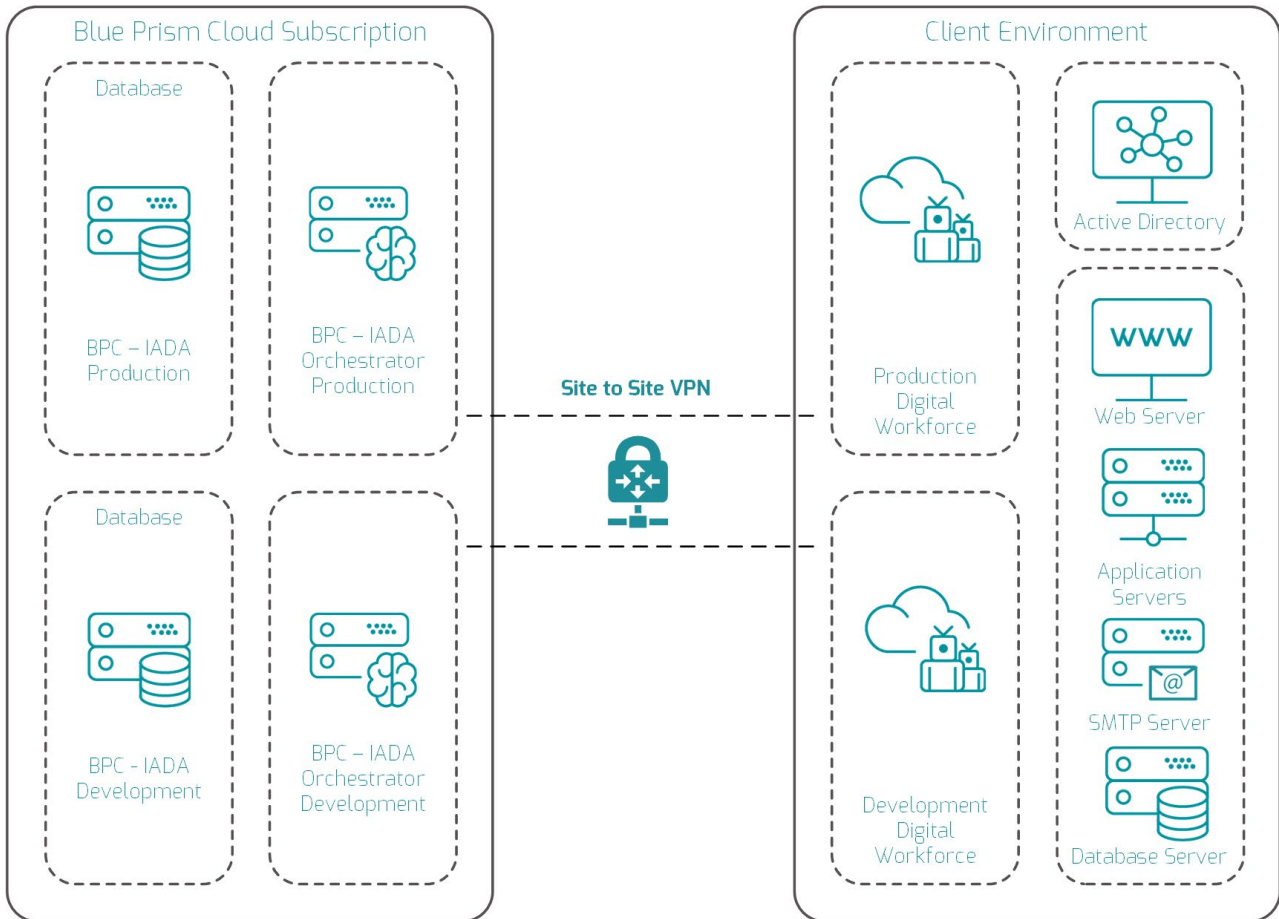
To make use of the IADA Skill, Blue Prism Cloud provides a VBO so IADA can be leveraged within an environment. Blue Prism Cloud also provides an IADA Orchestration training course to support the migration of business processes away from a scheduler-based approach to orchestration. This enablement can be used by those starting their Blue Prism journey, or those who already have a number of automations deployed.



Connectivity

Platform Connectivity

Blue Prism Cloud IADA is granted access to a customer’s Blue Prism environment via a Site-to-Site VPN that is initiated as part of service creation and maintains an active link for operation. Communication between IADA and the Blue Prism environment is only over the VPN, and all non-VPN traffic is restricted using Network Security Groups and Application Security Group controls.



Ongoing IADA access and interaction within the Blue Prism environment will require Read/Write access into the Blue Prism database(s).

Table	Access Requirements
BPA SessionLog_NonUnicode	Read Access Only
BPA WorkQueue	Read Access Only
BPA WorkQueueItem	Read and Write Access Only
BPA Tag	Read and Write Access Only
BPA WorkQueueItemTag	Read and Write Access Only

Availability Controls

Deployment

Blue Prism Cloud uses Microsoft Azure for the deployment datacenter services of its SaaS architecture. Blue Prism Cloud can be deployed into any available Microsoft Azure region; customers will be prompted to select a region as part of the deployment activities.

Backup Services

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

Note: The Blue Prism Cloud IADA 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

The IADA platform has been architected with the principles of information and cyber security at its core. Blue Prism Cloud maintains a 24/7 security operations center to support protecting the environment 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. By default, Blue Prism Cloud IADA is delivered with two instances in each subscription. These two instances are preconfigured to a specific production and development Blue Prism environment at the point of deployment. The instances are integrated into the Blue Prism environments via IADA over the established gateway and Site-to-Site VPN.

Audit

IADA provides an audit mechanism for requests and transactions made in relation to its integration with Blue Prism. As IADA communicates directly with Blue Prism, the Blue Prism audit logs will contain a record of events to centralize how audit information is stored and reviewed.

Blue Prism Cloud Support

The Blue Prism Cloud support team may require access to the IADA environment in response to an issue to meet the service level agreements. Customers have the ability to enable this access through a procedure referred to as Just-in-Time (JiT) access. JiT access gives approvers within the customer organization the ability to grant privileged access to Blue Prism Cloud support team members if it becomes necessary to investigate and resolve an issue. This mechanism ensures that access to the environment can only be gained with customer acknowledgement. During an investigation, we may use other approaches such as a screen share to troubleshoot; this approach will also require customer approval.

Version Support and Prerequisites

Blue Prism Cloud IADA ...

- Supported Blue Prism versions are limited to 6.2.1 onwards
- Customer has read and acknowledged the Blue Prism Cloud - Security Guidelines; and
- Customer has completed the Blue Prism Cloud Connectivity Configuration document.