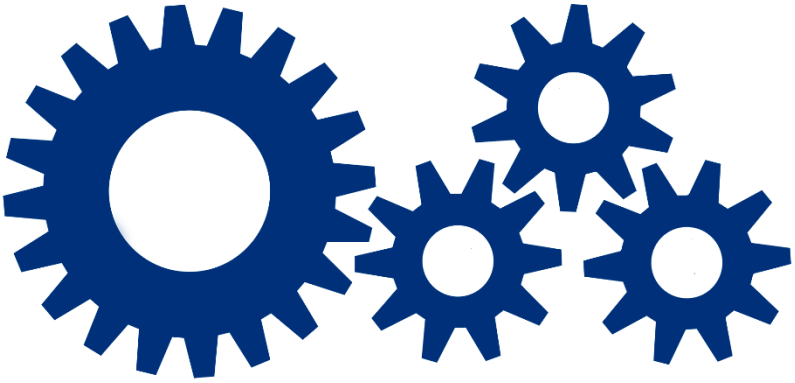

SmartRPA

SmartRPA Catalyst Package

Readme

Version 1.0

23/09/2022

SmartRPA

Table of Contents

1. Introduction

This document contains all essential information for the user to make full use of this SmartRPA Catalyst Package. It includes a description of the functions and capabilities and step-by-step procedures for setup & configuration of the package. This package is for connecting Enterprise A2019 with the SmartRPA Catalyst software, intelligent orchestration of your digital workforce.

1.1 Overview

There are 18 actions which all interacts with the SmartRPA Catalyst software. Integrating Enterprise A2019 and SmartRPA Catalyst enables: Scheduling, monitoring and dashboards, task queue, credential management and environmental variables. Accompanying this package is two sample bots, one for collection tasks and one for handling tasks in the Catalyst queue.

Package Actions

- Start Catalyst Session: Setup connection with Catalyst.
- Get Catalyst Session Info: Output all local data on the current session.
- Release Dependencies: Release all dependencies locked by this session.
- End Catalyst Session: End connection with Catalyst.
- Extract Application Config: Extracting environmental variable for the applications.
- Extract Application User Config: Extracting environmental variable for the user.
- Extract Credentials: Extract user credentials from Catalyst credential store.
- Extract Global Config: Extract environmental variable for a global scope in Catalyst.
- Extract Process Config: Extract environmental variable for the Catalyst process.
- Extract Tenant Config: Extract environmental variable for a tenant scope in Catalyst.
- Insert Task: Insert new task into the Catalyst process queue.
- Acquire Task: Acquire one task from the Catalyst process queue.
- Update Task: Update currently acquired task with new data.
- Release Task: Release currently acquired task with no new data.
- Get Task Input Data: Get input data stored in the currently acquired task.
- Get Task Work Data: Get work data stored in the currently acquired task.
- Set Task Input Data: Set input data back into the meta data dictionary.
- Set Task Work Data: Set work data back into the meta data dictionary.

Bot templates

- SmartRPA Collect Tasks: Sample bot for inserting tasks into the Catalyst queue.
- SmartRPA Handle Tasks: Sample bot for handling tasks from the Catalyst queue.

1.2 Use cases

The key use cases include:

- Intelligent scheduling of your bots, never start a bot which isn't ready to start due to dependencies not being ready.
- Auto restart failed/stopped bots.
- Live and dynamic dashboards, helps monitoring: Executions, tasks, Time back to business, error rates and much more.
- Task queue management, store and pull data from queues to enable parallel execution.
- Calendars and workplans, stops bots from executing in IT patching windows.
- Safe credential store for usernames and passwords.
- Environmental variables on all scopes.
- Execution overview, see all running bots and those waiting for their dependencies.
- Quarantine bots and machines after multiple failed runs.

2. Requirements & Prerequisites

2.1 System Requirements

Enterprise A2019 (Cloud deployed) and Community Edition device requirements.
Review the machine hardware specifications, operating system versions, and browser types supported by Automation Anywhere Enterprise for creating and running bots and command packages as an Enterprise A2019 (Cloud deployed) or Community Edition user on your local machine.

The package and bots integrate with SmartRPA Catalyst Software has no requirements; SmartRPA Catalyst Software has the following requirements:

Software

- Windows server 2016 (or newer).
- Webserver:
    - Apache Tomcat 9.
    - OpenJDK 11.
- Supported databases:
    - Microsoft SQL Server 2016, 2017, 2019.
    - MySQL 5.7, 8.0

Hardware

- Processor: 4 core CPU @ 2.6 GHz
- Memory: 12 GB RAM
- Disk: 10 GB free space

2.2 Prerequisites

To run SmartRPA Package or the two bots fully the SmartRPA Catalyst software needs to be installed separately. Following prerequisites are needed:

1. Install SmartRPA Catalyst on a server (See the above system requirements)

3. Getting Started

3.1 Quick Start

3.1.1 Setup

1. Install the package from Bot Store into your Control Room.
2. Enable the package named “SmartRPA Catalyst”.
3. Navigate to “Bot Store/SmartRPA Catalyst” to run or examine the two sample bots.

3.1.2 Configuration and Use

To start using the package, look firstly at the bot called “SmartRPA Collect Tasks”. This bot is created to show how to insert tasks into the Catalyst queue.

Secondly look at the bot called “SmartRPA Handle Tasks”. This bot is created to show how to acquire tasks from the Catalyst queue one task at a time and loop through the whole queue.

Both bots show how to setup the variables to be able to handle both debugging and production execution. This is done through the 6 Catalyst variables which is mandatory in any bot using the Catalyst queues, these variables hold the values for connecting to Catalyst and for Catalyst to send data to the bot.

Variable Name	***Type***	***Purpose***	***Example Input***
Catalyst_AllocatorId	*String*	Allocator ID shown in Catalyst. Used as unique marker	*$System:Machine$*
Catalyst_Dependencies	*String*	Holds all the dependencies specific for this bot, for example, Usernames/passwords and environmental variables	*Crated by Catalyst, should never be made by users.*
Catalyst_ProcessName	*String*	Process name in Catalyst	*P001 First Process*
Catalyst_RobotApiToken	*String*	API token to validate that the bot is permitted to extract data from Catalyst	*64 letters, unique string*
Catalyst_StateName	*String*	Catalyst state name in the process to extract data from.	*New, COMPLETE, ERROR.*
Catalyst_URL	*String*	URL for where the Catalyst connection can be found.	*https://MyCatalyst-Prod.net*

4. Support & FAQs

4.1 Support

Free bots are not officially supported. You can get access to Community Support through the following channels:

- You can get access to Community Support, connecting with other Automation Anywhere customers and developers on APeople – the Bot Building Forum, the Bot Store Support Forum, or the Developers Everywhere Group.
- Automation Anywhere also provides a Product Documentation portal which can be accessed for more information about our products and guidance on Enterprise A2019.

Support of SmartRPA Catalyst can be made through the ticketing system specified when the Catalyst Software has been acquired and installed.

4.2 FAQs

Q: Why should I use a task queue?
A: A task queue will store all the work your bot is going to process; The queue will act as a container for your data. The queue enables bots to fail/stop their execution and still startup later and continue the queue tasks. The queue also enables a historical overview of what the bot has done and used for statistics and metrics in the dashboard overview.

Q: What is a Task?
A: A task is a single item in the Catalyst queue. A task contains InputData, WorkData and MetaData.

Q: What is InputData?
A: InputData is a dynamic dictionary in the task, containing the data which was inserted at its creation. InputData also serves as a uniqueness check (if enabled), so that no duplicate tasks can be made.

Q: What is WorkData?
A: WorkData is a dynamic dictionary in the task, containing the data which was inserted at its creation and from each bot execution. WorkData can have data added on each execution, making it a storage of data between different bot executions.

Q: What is MetaData?
A: MetaData is a static dictionary contained by the task. Meta data contains multiple variables which tells Catalyst how to interpret the task, example; stateName tells Catalyst what state the task is currently in. When updating/inserting a task with new data using a bot, it's the MetaData dictionary which is used as input as it contains both InputData and WorkData dictionary, remember to update all fields accordingly before updating a task.

For questions relating to Enterprise A2019: See the Enterprise A2019 FAQs.

Appendix A: Record of Changes

No.	Version Number	Date of Change	Author	Notes
1	1.0	07/09/2022	SmartRPA	First version

Appendix B: References

No.	Topic	Reference Link
1	Overview of Enterprise A2019	Click here
2	Guidance: Building basic A2019 bots	Click here
3	Guidance: Building A2019 action packages	Click here
4	APeople Community Forum	Click here
5	Automation Anywhere University	Click here