CTX-Gateway
User Guide

Contents

Versions

Document Revisions

The following revisions have been made to this document

Date	Revision	Notes
15/10/2020	1.0	First release

Module Versions

The following revisions have been made to this module

Date	Revision	Notes
15/10/2020	1.0	Creation of: • FN-Flow-Names • SF-Start-Flow • SFA-Start-Flow-Async • StoF-Stop-Flow • GGBT-Get-Gateway-Bearer-Token • EF-Export-Flows • IF-Import-Flows • PFTS-Publish-Flows-To-Server

Preface

About this Manual

This document is a user guide for the CTX-Gateway module.

Audience

The audience for this document is those wanting to understand how to use the CTX-Gateway module, for remote flow management

Related Material

Document
CTX-Gateway - Deployment Guide
Cortex Flow API User Guide

Abbreviations used in this Document

None

Requirements

The CTX-Gateway subtasks require the following:

- Cortex v6.5, v7.0 or v7.1 installed on the Cortex Application Server

The following subtasks are associated with endpoints within the Cortex Flow API that will be supported in future versions of Cortex:

- FN-Flow-Names
- SF-Start-Flow
- SFA-Start-Flow-Async
- StoF-Stop-Flow

The following subtasks are associated with endpoints withing the Cortex Flow API that **MAY OR MAY NOT** be supported in future versions of Cortex. They have been developed and tested on versions v6.5, v7.0 and v7.1 of Cortex, but are subject to change at **ANY** time from v7.2 onwards.

- GGBT-Get-Gateway-Bearer-Token
- EF-Export-Flows
- IF-Import-Flows
- PFTS-Publish-Flows-To-Server

Integration

Integration with Third-Party Systems

None

Integration with Existing Infrastructure

There are 8 subtasks contained within this module that can be used to interact with Cortex flows remotely, allowing for Cortex to Cortex integration.

They have the following high-level functionality

Subtask Title	Subtask Purpose
FN-Flow-Names	Uses the api/flow/FlowNames endpoint in the Flow API to return a list of flows available to call For more information see section 2.1.1 of the Cortex Flow API User Guide
SF-Start-Flow	Uses the api/flow/StartFlow endpoint in the Flow API to trigger a flow synchronously For more information see section 2.2.3 of the Cortex Flow API User Guide
SFA-Start-Flow-Async	Uses the api/flow/StartFlowAsync endpoint in the Flow API to trigger a flow asynchronously For more information see section 2.2.4 of the Cortex Flow API User Guide
StoF-Stop-Flow	Uses the api/flow/StopFlow endpoint in the Flow API to stop a currently executing flow For more information see section 2.2.5 of the Cortex Flow API User Guide
GGBT-Get-Gateway-Bearer-Token	Generates a bearer token with which the Export, Import and Publish subtasks can use to authenticate
EF-Export-Flows	Exports a list of flows from Cortex Gateway to a .studiopkg file
IF-Import-Flows	Imports a pre-existing .studiopkg file to Cortex Gateway
PFTS-Publish-Flows-To-Server	Publishes the master version of a flow to the server so it can be triggered by the Flow API

1 Module Usage

1.1 FN-Flow-Names

1.1.1 Overview

Uses the api/flow/FlowNames endpoint in the Flow API to return a list of flows available to call

For more information see section 2.1.1 of the Cortex Flow API User Guide

1.1.2 Inputs

Variable Name	Type	Required	Description
i_baseUri	Text	True	The constant part of the URI for the HTTP request. e.g. **https://<server>.<domain>.com:10000**

i_authorisationData	Structure	True	Required authorisation data for the basic authentication
			
			Of the form:
			{
			"Username": "<Flow API Username>",
			"Password": "< Flow API Password>"
			}
			
			The Flow API username and password may be found in **Innovise.Cortex.Web.Owin.dll.config**, located by default in **C:\Program Files (x86)\Cortex\Cortex Flow Interface Service** on a Cortex application server

i_requestTimeout	Int	False	The number of seconds until the request times out. Setting it to 0 will timeout immediately, and -1 will set an indefinite timeout. 100 by default

1.1.3 Outputs

Variable Name	Type	Description

o_result	Structure	Contains the Response from the server
		
		Of the form:
		
		{
		"RESPONSE": "[**<flows>**]",
		"RESPONSECODE": {
		"CODE": "**<Response Code>**",
		"REASON": "**<Exception Message if applicable>**"
		}
		}

1.2 SF-Start-Flow

1.2.1 Overview

Uses the api/flow/StartFlow endpoint in the Flow API to trigger a flow synchronously

For more information see section 2.2.3 of the Cortex Flow API User Guide

1.2.2 Inputs

Variable Name	Type	Required	Description
i_baseUri	Text	True	The constant part of the URI for the HTTP request. e.g. **https://<server>.<domain>.com:10000**

i_authorisationData	Structure	True	Required authorisation data for the basic authentication
			
			Of the form:
			{
			"Username": "<Flow API Username>",
			"Password": "< Flow API Password>"
			}
			
			The Flow API username and password may be found in **Innovise.Cortex.Web.Owin.dll.config**, located by default in **C:\Program Files (x86)\Cortex\Cortex Flow Interface Service** on a Cortex application server

i_body	Text	True	JSON containing the name of the flow the start, the variable values to pass to it and the variables to return from it.
			
			E.g.
			
			{
			"Name": "Flow Name",
			"Arguments": {
			"TEXT-VAR": "ABC",
			"INT- VAR": 123,
			"FLOAT-VAR": 45.67
			},
			"ReturnParameters": [
			"OUT-VAR-1",
			"OUT-VAR-2"
			]
			}

i_requestTimeout	Int	False	The number of seconds until the request times out. Setting it to 0 will timeout immediately, and -1 will set an indefinite timeout. 100 by default
i_authorisationType	Text	False	Type of authorisation used “None” by default

1.2.3 Outputs

Variable Name	Type	Description

o_result	Structure	Contains the Response from the server
		
		Of the form:
		
		{
		"RESPONSE": "{**<Return Parameters and Values>**}",
		"RESPONSECODE": {
		"CODE": "**<Response Code>**",
		"REASON": "**<Exception Message if applicable>**"
		}
		}

1.3 SFA-Start-Flow-Async

1.3.1 Overview

Uses the api/flow/StartFlowAsync endpoint in the Flow API to trigger a flow asynchronously

For more information see section 2.2.4 of the Cortex Flow API User Guide

1.3.2 Inputs

Variable Name	Type	Required	Description
i_baseUri	Text	True	The constant part of the URI for the HTTP request. e.g. **https://<server>.<domain>.com:10000**

i_authorisationData	Structure	True	Required authorisation data for the basic authentication
			Of the form:
			{
			"Username": "<Flow API Username>",
			"Password": "< Flow API Password>"
			}
			
			The Flow API username and password may be found in **Innovise.Cortex.Web.Owin.dll.config**, located by default in **C:\Program Files (x86)\Cortex\Cortex Flow Interface Service** on a Cortex application server

i_body	Text	True	JSON containing the name of the flow the start, the variable values to pass to it and the variables to return from it.
			E.g.
			{
			"Name": "Flow Name",
			"Arguments": {
			"TEXT-VAR": "ABC",
			"INT- VAR": 123,
			"FLOAT-VAR": 45.67
			},
			"ReturnParameters": [
			"OUT-VAR-1",
			"OUT-VAR-2"
			]
			}

i_requestTimeout	Int	False	The number of seconds until the request times out. Setting it to 0 will timeout immediately, and -1 will set an indefinite timeout. 100 by default
i_authorisationType	Text	False	Type of authorisation used “None” by default

1.3.3 Outputs

Variable Name	Type	Description

o_result	Structure	Contains the Response from the server
		
		Of the form:
		
		{
		"RESPONSE": "**<ID of execution triggered>**",
		"RESPONSECODE": {
		"CODE": "**<Response Code>**",
		"REASON": "**<Exception Message if applicable>**"
		}
		}

1.4 StoF-Stop-Flow

1.4.1 Overview

Uses the api/flow/StopFlow endpoint in the Flow API to stop a currently executing flow

For more information see section 2.2.5 of the Cortex Flow API User Guide

1.4.2 Inputs

Variable Name	Type	Required	Description
i_baseUri	Text	True	The constant part of the URI for the HTTP request. e.g. **https://<server>.<domain>.com:10000**

i_authorisationData	Structure	True	Required authorisation data for the basic authentication
			
			Of the form:
			{
			"Username": "<Flow API Username>",
			"Password": "< Flow API Password>"
			}
			
			The Flow API username and password may be found in **Innovise.Cortex.Web.Owin.dll.config**, located by default in **C:\Program Files (x86)\Cortex\Cortex Flow Interface Service** on a Cortex application server

i_abortCurrentActivity	Boolean	True	"True" if the execution be stopped, "False" otherwise
i_identifier	Text	True	ID of the execution to be stopped
i_body	Text	False	Body of the request Empty string by default
i_requestTimeout	Int	False	The number of seconds until the request times out. Setting it to 0 will timeout immediately, and -1 will set an indefinite timeout. 100 by default
i_authorisationType	Text	False	Type of authorisation used "None" by default

1.4.3 Outputs

Variable Name	Type	Description

o_result	Structure	Contains the Response from the server
		
		Of the form:
		
		{
		"RESPONSE": "",
		"RESPONSECODE": {
		"CODE": "**<Response Code>**",
		"REASON": "**<Exception Message if applicable>**"
		}
		}

1.5 GGBT-Get-Gateway-Bearer-Token

1.5.1 Overview

Generates a bearer token with which the Export, Import and Publish subtasks can use to authenticate

1.5.2 Inputs

Variable Name	Type	Required	Description
GAT_i_GatewayUser	Text	True	Gateway user with admin permissions. This value can be Cortex encrypted.
GAT_i_GatewayPassword	Text	True	Gateway user password. This value can be Cortex encrypted.
GAT_i_GatewayURL	Text	True	URI for the Cortex Gateway. Example: **https://<server>.<domain>.com:/gateway**

1.5.3 Outputs

Variable Name	Type	Description
GAT_o_Bearer-Auth-Token	Text	User authentication token.

1.6 EF-Export-Flows

1.6.1 Overview

Exports a list of flows from Cortex Gateway to a .studiopkg file

1.6.2 Inputs

Variable Name	Type	Required	Description
EF_i_Bearer-Auth-Token	Text	True	Bearer token, the output of GGBT-Get-Gateway-Bearer-Token
EF_i_Gateway URL	Text	True	URI for the Cortex Gateway. Example: **https://<server>.<domain>.com:/gateway**
EF_i_Export-Location	Text	True	Location to place the exported flows
EF_i_File-Name	Text	True	Name to give the .studiopkg file containing the exported flows
EF_i_Flows-Ids	List	True	Unique IDs of the flows to export
EF_i_PowerShell-Domain	Text	True, if PowerShell Interface requires credentials	Domain of the machine where the Cortex PowerShell interface is located, which will most likely be the Cortex application server where the flows are executed
EF_i_PowerShell-Username	Text	True, if PowerShell Interface requires credentials	Username of a local admin who will the run PowerShell script to export the flows
EF_i_PowerShell-Password	Text	True, if PowerShell Interface requires credentials	Password of the same local admin as above

1.6.3 Outputs

None

1.7 IF-Import-Flows

1.7.1 Overview

Imports a pre-existing .studiopkg file to Cortex Gateway

1.7.2 Inputs

Variable Name	Type	Required	Description
IF_i_Bearer-Auth-Token	Text	True	Bearer token, the output of GGBT-Get-Gateway-Bearer-Token
IF_i_Gateway URL	Text	True	URI for the Cortex Gateway. Example: **https://<server>.<domain>.com:/gateway**
IF_i_Export-Location	Text	True	Location of the flows to import
IF_i_File-Name	Text	True	Name to give the .studiopkg file containing the exported flows
IF_i_PowerShell-Domain	Text	True, if PowerShell Interface requires credentials	Domain of the machine where the Cortex PowerShell interface is located, which will most likely be the Cortex application server where the flows are executed
IF_i_PowerShell-Username	Text	True, if PowerShell Interface requires credentials	Username of a local admin who will the run PowerShell script to export the flows
IF_i_PowerShell-Password	Text	True, if PowerShell Interface requires credentials	Password of the same local admin as above

1.7.3 Outputs

None

1.8 PFTS-Publish-Flows-To-Server

1.8.1 Overview

Publishes the master version of a flow to the server so it can be triggered by the Flow API

1.8.2 Inputs

Variable Name	Type	Required	Description
PFTS_i_Bearer-Auth-Token	Text	True	Bearer token, the output of GGBT-Get-Gateway-Bearer-Token
PFTS _i_GatewayURL	Text	True	URI for the Cortex Gateway. Example: **https://<server>.<domain>.com:/gateway**
PFTS _i_Flows-Ids	List	True	Unique IDs of the flows to export
PFTS_i_Server-Name	Text	True	Name of Cortex application server to publish to
PFTS_i_Gateway-Database-Name	Text	False	Name of the Cortex Gateway Database By default, this is “CortexWeb”

1.8.3 Outputs

None

