软 software AG

Getting Started with the Command Central REST API

Version 9.9

October 2015

Table of Contents

About this Guide

This guide describes Command Central REST API services and resources. It provides reference information for developers who want to build functionality on top of Command Central using Command Central REST API.

Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
Narrowfont	Identifies storage locations for services on webMethods Integration Server, using the convention *folder.subfolder:service* .
UPPERCASE	Identifies keyboard keys. Keys you must press simultaneously are joined with a plus sign (+).
Italic	Identifies variables for which you must supply values specific to your own situation or environment. Identifies new terms the first time they occur in the text.
Monospace font	Identifies text you must type or messages displayed by the system.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
|	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the | symbol.
[ ]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

Online Information

Software AG Documentation Website

You can find documentation on the Software AG Documentation website at http://documentation.softwareag.com. The site requires Empower credentials. If you do not have Empower credentials, you must use the TECHcommunity website.

Software AG Empower Product Support Website

You can find product information on the Software AG Empower Product Support website at https://empower.softwareag.com.

To submit feature/enhancement requests, get information about product availability, and download products, go to Products.

To get information about fixes and to read early warnings, technical papers, and knowledge base articles, go to the Knowledge Center.

Software AG TECHcommunity

You can find documentation and other technical information on the Software AG TECHcommunity website at http://techcommunity.softwareag.com. You can:

■   Access product documentation, if you have TECHcommunity credentials. If you do not, you will need to register and specify "Documentation" as an area of interest.

■   Access articles, code samples, demos, and tutorials.

■   Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.

■   Link to external websites that discuss open standards and web technology.

1   Introduction to Command Central REST API

About Command Central REST API

Command Central REST API is a web services API that supports all functions provided by Command Central. Command Central REST API is for developers who want to build functionality on top of Command Central. Along with the Command Central web user interface and command line tool, Command Central REST API enables you to use Command Central to configure, manage, and administer one or more installations of the webMethods product suite in your enterprise.

Securing Command Central REST API

At present Command Central REST API supports basic and trusted authentication. Command Central REST API uses the same credentials to authenticate a user as the ones you provide for the Command Central web user interface and command line tool. For more information about setting up security credentials, see *Software AG Command Central Help*.

Session Management

Command Central REST API is stateless. However, the REST API supports HTTP sessions for stateful clients, for example browsers. When the client does not support session management, for example does not support JSESSION cookie, the client *must* submit `DoNotCreateSession: true` HTTP request header to prevent creating a new session for each client request.

Command Central REST API Resources

The Command Central RESP API resources use the HTTP methods GET, POST, PUT, and DELETE to execute different operations. Each Command Central REST API resource is identified by a named URI that has the following base endpoint:

`http|https://`*`ccehost:cceport`*`/cce/`*`service_name`*`/[`*`resource`*`[/`*`subresource`*`/]...]`

where

`ccehost` is the name of the host machine where you have installed Command Central.

`cceport` is the port number where the Command Central instance is running.

`service_name` is the name of the Command Central REST API service.

`[`*`resource`*`[/`*`subresource`*`/]...]` (optional) is different for each Command Central REST API service.

Command Central REST API uses the Jersey RESTful framework that supports the Web Application Description Language (WADL). The WADL page for each Command

Central REST API service contains details about the resources, such as resource URI, supported media types, XML schemas for data structure, and HTTP methods. For more information about the Jersey RESTful framework and WADL, see the Jersey framework documentation.

For more information about the Command Central REST API resources, see:

■ The WADL page for each Command Central REST API service. You can find the name and URI for each REST service in "Summary of REST Services" on page 10.

■ In the Command Central command line tool, execute a command with the --debug option. This option returns REST API request and response details, such as URI, HTTP method, content type, content body, and HTTP response code. For information about the Command Central commands, see *Software AG Command Central Help*.

Testing Command Central REST API Resources

Use one of the following methods to test a Command Central REST API resource:

■ In the Command Central command line tool, execute a command with the --debug option (recommended). For example:

```
cc list landscape nodes  --debug -f json -u Administrator
 -p manage -s http://localhost:8090/cce
```

■ Use REST API clients browser plug-ins for Firefox and Chrome.

■ Use a third-party command line tool, for example cURL

Example command using cURL:

```
curl -u Administrator:manage -X GET -H "Content-Type: application/json"
 http://localhost:8090/cce/landscape/nodes
```

Supported Media Types

Command Central REST API resources support at least one of the following media types:

■ application/xml

■ application/json

■ text/plain

The following media types are supported for all GET resources that return lists of objects:

■ text/csv

■ text/tab-separated format

For information about the media types supported by each resource and method, see the REST service WADL pages. You can find the URI for each REST service in "Summary of REST Services" on page 10.

HTTP Response Codes

The Command Central REST API response returns an HTTP response code that indicates success or error of the requested operation.

HTTP response code	Description
2xx	Success.
4xx	Client error. Correct the request data and retry.
5xx	Server error.

The body of the 4xx and 5xx responses normally contains additional information about the error, such as error code, description, and action. Some error messages include a nested error cause.

For information about the HTTP response codes supported by each resource and method, see the REST service WADL pages. You can find the URI for each REST service in "Summary of REST Services" on page 10.

Summary of REST Services

The following table lists the Command Central REST API services.

Service Name	WADL URL	Description
Configuration	http://*ccehost:cceport*/cce/configuration/application.wadl	Manages configuration for run-time components.
Diagnostic	http://*ccehost:cceport*/cce/diagnostics/application.wadl	Retrieves information from the log files that a run-time component supports.
Inventory	http://*ccehost:cceport*/cce/inventory/application.wadl	Retrieves information about products, run-time components, and fixes.
Job Manager	http://*ccehost:cceport*/cce/jobmanager/application.wadl	Lists information about long-running jobs.

Service Name	WADL URL	Description
Landscape	http://*ccehost:cceport* /cce/landscape/ application.wadl	Manages environments and installations.
License Tools	http://*ccehost:cceport* /cce/license-tools/application.wadl	Creates and manages license reports to verify product license compliance.
Lifecycle	http://*ccehost:cceport* /cce/lifecycle/ application.wadl	Executes an action to start, stop, pause, and/ or resume run-time components.
Monitoring	http://*ccehost:cceport* /cce/monitoring/ application.wadl	Reports run-time component status, state, and alerts.
Provisioning	http://*ccehost:cceport* /cce/ provisioning/application.wadl	Bootstraps Platform Manager locally and remotely and installs and uninstall fixes.
Repository	http://*ccehost:cceport* /cce/repository/ application.wadl	Manages product and fix repositories.
Security	http://*ccehost:cceport* /cce/security/ application.wadl	Manages security credentials.
Template	http://*ccehost:cceport* /cce/templates/ application.wadl	Manages templates of installations.