



Open Automation

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Cisco UCS Director Open Automation

Cisco UCS Director provides the Cisco UCS Director Open Automation module (hereafter, simply "Open Automation") to enable you to enhance the functionality of the Cisco UCS Director appliance.

Using Open Automation, you can add a module to Cisco UCS Director. The module adds a new capability to Cisco UCS Director, such as the ability to control a new device type or to generate a new type of report.

For more information about existing functionality in Cisco UCS Director, see the [Cisco UCS Director Administration Guide](#), the [Cisco UCS Director Application Container Guide](#), the [Cisco UCS Director Orchestration Guide](#), and the numerous other guides that document functionality available using the Cisco UCS Director application.

For system requirements and information about how to set up a development environment, install libraries, and begin using the Open Automation SDK, see the [Cisco UCS Director Open Automation Getting Started Guide](#).

For annotated examples of using the Open Automation SDK, see the [Cisco UCS Director Open Automation Cookbook](#).

For a reference to the Cisco UCS Director Open Automation API, see the [Cisco UCS Director API Javadoc](#).

When to Use Cisco UCS Director Open Automation

Open Automation is a Java SDK and framework for extending the functionality of Cisco UCS Director. Use Open Automation to enhance Cisco UCS Director in the following ways:

- Develop your own or third-party components with Cisco UCS Director.
- Design a custom menu for displaying your device or component.
- Inventory your devices.
- Provide the ability to test connections between your device and Cisco UCS Director.

- Develop tasks that can be used in workflows.
- Expose your tasks in the form of a REST API.
- Develop and schedule repeatable tasks.
- Develop your own Cisco UCS Director reports and report actions.
- Develop new Cisco UCS Director Cloudsense reports.
- Track changes made to the system through your module.
- Customize your dashboard display by providing your own dashboard (stack) builder.
- Develop your own items that can be displayed in your dropdown boxes.
- Provide support for new account types.

Using Cisco UCS Director Open Automation

A *module* is the topmost logical entry point into Cisco UCS Director. To add or extend any functionality, you must develop and deploy a module on Cisco UCS Director. A module developed using Open Automation behaves just as do any Cisco UCS Director built-in features or modules.

To develop and deploy a module, you:

- Create a module by extending the `AbstractCloupiModule` class in the Open Automation Java API.
- Add forms, reports, workflow tasks, or other functionality to the module.
- If necessary, create new custom tasks by implementing task interfaces in the Java API.
- Package the module using a build tool such as Apache ANT or Apache Maven. An example ANT build file is provided with Open Automation to help you get started with module packaging.
- Deploy the package on Cisco UCS Director.

For system requirements and information about how to set up a development environment, install libraries, and begin using Cisco UCS Director Open Automation, see the [Cisco UCS Director Open Automation Getting Started Guide](#).

For annotated examples of using Open Automation, see the [Cisco UCS Director Open Automation Cookbook](#).

For a reference to Cisco UCS Director Open Automation classes and methods, see the [Cisco UCS Director Open Automation Javadoc](#).