

New and Changed Feature Information

This section lists all the new and changed features for the automation script features.

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New and Changed Automation Script Features

Feature	Description	Changed in Release	Where Documented
Operational Simplicity Using Automation Scripts	This feature provides you the flexibility to deploy your automation code on your router instead of running it on external controllers. With automation now available on-box and integrated into the IOS XR software, the router processes data locally using Python libraries that provide direct access to the underlying device operations to execute CLI commands, monitor router configurations and status continuously. With on-box automation, you can efficiently control the end-to-end operations from script enablement to deployment without depending on the connectivity, resource, and speed of an external controller.	Release 7.3.2	Achieve Network Operational Simplicity Using Automation Scripts
Model-driven CLI to Show YANG Operational Data	This feature enables you to use a traditional CLI command to display YANG data model structures on the router console and also obtain operational data from the router in JSON or XML formats. The functionality helps you transition smoothly between CLI and YANG models, easing data retrieval from your router and network. This feature introduces the show yang operational command.	Release 7.3.2	Model-Driven CLI to Display Data Model Structure

Feature	Description	Changed in Release	Where Documented
Model-driven CLI to Display Running Configuration in XML and JSON Formats	This feature enables you to display the configuration data for Cisco IOS XR platforms in both JSON and XML formats. This feature introduces the show run [xml json] command.	Release 7.3.2	Model-Driven CLI to Display Running Configuration in XML and JSON Formats
Manage Automation Scripts Using YANG RPCs	This feature enables you to use remote procedure calls (RPCs) on YANG data models to perform the same automated operations as CLIs, such as edit configurations or retrieve router information.	Release 7.3.2	Manage Automation Scripts Using YANG RPCs
Contextual Script Infrastructure	When you create and run Python scripts on the router, this feature enables a contextual interaction between the scripts, the IOS XR software, and the external servers. This context, programmed in the script, uses Cisco IOS XR Python packages, modules, and libraries to: • obtain operational data from the router • set configurations and conditions • detect events in the network and trigger an appropriate action	Release 7.3.2	Script Infrastructure and Sample Templates