



Get Started

This section contains the key workflows of Cisco Crosswork Change Automation and Health Insights:

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Getting Started

Step	For details, see...
1. Populate the Cisco Crosswork Change Automation and Health Insights environment and set up Cisco Crosswork Data Gateway.	Refer the <i>Cisco Crosswork Infrastructure 4.0 and Applications Administration Guide</i>
2. Configure the Change Automation settings.	Configure Change Automation Settings
3. (Optional) Setup and configure your map settings.	Workflow 1: Configure Network View , on page 2
4. Create KPI Profiles to monitor device Key Performance Indicators (KPIs) for issues and anomalies.	Workflow 2: Monitor Key Performance Indicators , on page 2
5. Link KPIs to playbooks.	Workflow 3: Respond to KPI Data , on page 2
6. Schedule Playbooks to perform routine maintenance.	Workflow 4: Schedule Playbooks , on page 3
7. Expand telemetry insight with custom KPIs.	Workflow 5: Develop Custom KPIs , on page 4
8. Remediate common scenarios and automate routine tasks with custom playbooks.	Workflow 6: Develop Custom Playbooks , on page 4

Workflow 1: Configure Network View

The following workflow describes the steps to configure the map display settings in Cisco Crosswork Change Automation and Health Insights:

Step	Action
1. Group your devices logically as per your requirement.	Follow the instructions in Create and Modify Device Groups and Enable Dynamic Device Grouping .
2. Set display preferences for your topology.	Follow the instructions in Customize Map Display Settings .
3. Manage your custom topology views.	Follow the instructions in Save Topology Views for Easy Access .

Workflow 2: Monitor Key Performance Indicators

Once you have completed initial setup, use Cisco Crosswork Change Automation and Health Insights to begin device performance monitoring using KPI Profiles.

Step	Action
1. (Optional) Tag all of the devices whose KPIs you plan to monitor with a tag indicating the function they perform, per your plan.	Refer the <i>Cisco Crosswork Change Automation and Health Insights 4.0 Administration Guide</i> for the procedure.
2. Plan which Cisco-supplied KPIs you want to begin using, based on each device's function and the device performance characteristics you want to monitor.	Review the Cisco-supplied KPIs documented in List of Health Insights KPIs . To create a new KPI that fits your requirement, see Create a New KPI .
3. Based on your experience or by using the recommendation engine, group the KPIs to form KPI Profiles.	Follow the instructions in Create a New KPI Profile .
4. Enable the appropriate KPI Profiles on the devices you want to monitor.	Review and follow the instructions in Monitor Network Health and KPIs

Workflow 3: Respond to KPI Data

The following workflow describes the steps to follow when using Cisco Crosswork Change Automation and Health Insights Playbook to reconfigure the network in response to KPI alerts detected by Health Insights:

Step	Action
1. Research the KPIs that are triggering alerts, and determine the best corrective action to take for the situation your network has experienced.	Follow the instructions in Monitor Network Health and KPIs , using the View Alerts for Network Devices to research the alerts and their possible causes.
2. Review the Cisco-supplied Playbooks and determine which ones will allow you to address the situation.	Review the list of Plays, Playbooks, and generic parameters in the "Playbooks" and "Verbs" references in the Change Automation Developer Guide on Cisco Devnet .
3. Try out the selected Playbooks and see if they are applicable to your purposes. As you experiment, adjust the Playbook parameters as needed.	See: Perform a Dry Run of a Playbook Run Playbooks In Single Stepping Mode Run Playbooks In Continuous Mode
4. If the Playbooks are appropriate for your purposes, and the situation occurs often, link the selected Playbooks and KPIs, so alerts triggered by a KPI will always display the linked Playbook for selection by operators. Once the KPI and Playbook are linked, operators can click on the Remediation icon, modify the Playbook parameters as needed, and execute the selected Playbook.	Follow the steps in Link KPIs to Playbooks . Use the Remediation icon shown in View Alerts for Network Devices to trigger a run of a linked Playbook from a device or KPI alert.

Workflow 4: Schedule Playbooks

The workflow below describes the steps to follow when using Cisco Crosswork Change Automation and Health Insights to automate routine network upkeep, and to verify that each routine change completed correctly.



Note This workflow is applicable only if scheduling is enabled in the Change Automation settings. For more information, see [Configure Change Automation Settings](#).

Step	Action
1. Identify routine maintenance tasks (such as throughput checks, software upgrades, SMU installs, and so on) that you perform on a regular schedule and that may be suitable for automation using one or more Cisco Crosswork Change Automation and Health Insights Playbooks.	See About Running Playbooks and View the Playbook List
2. Configure Playbooks to perform these tasks at the desired time.	See About Running Playbooks and Schedule Playbook Runs

Step	Action
3. Review the Change Automation Job History to review the current status of the Playbook and confirm that it ran successfully.	See Use the Change Automation Dashboard and View or Abort Playbook Jobs

Workflow 5: Develop Custom KPIs

The following workflow describes the steps to follow when considering whether or not to develop Cisco Crosswork Change Automation and Health Insights custom KPIs for your special needs, and how to proceed if you decide you do.

Step	Action
1. Review the existing KPIs to make sure the telemetry you want to monitor is not already available.	Follow the instructions in Monitor Network Health and KPIs , using the View Alerts for Network Devices to research the alerts and their possible causes.
2. Review the data available from the devices you want to monitor to see if they can supply the needed information: <ul style="list-style-type: none"> • If they can, proceed with building a custom KPI. • If they cannot: Contact Cisco to see if we can include the required data in a future version of the device code. <p>The latest information on the data your devices can provide is always available at the Cisco Telemetry Data Mapper (https://tdm.cisco.com).</p>	Review the KPIs in List of Health Insights KPIs .
3. Build the custom KPI and add it to a KPI Profile.	See Create a New KPI and Create a New KPI Profile
4. Enable the new KPI Profile on a test device and confirm that the data reported matches your expectations. Be aware that KPIs that depend on data over time to establish baseline performance will need some time to "calibrate" before they provide meaningful data.	See Enable KPI Profile on Devices and View Alerts for Network Devices
5. If the KPI Profile is meeting expectations, enable it on all devices where you consider it applicable.	Follow the steps in Enable KPI Profile on Devices .
6. Review the Health Insights Job History to make sure the KPI Profile was deployed to all targeted devices	See Verify the Deployment Status of Enabled KPIs

Workflow 6: Develop Custom Playbooks

The following workflow describes the steps to follow when deciding to develop a Change Automation custom Playbook.

Step	Action
1. Review the existing Playbook to see if any of them meet your needs fully or partially.	Review the Plays, Playbooks, and parameters in the "Playbooks" and "Verbs" references in the Change Automation Developer Guide on Cisco Devnet .
2. Find the Playbook that most closely matches your requirements and export that Playbook. Once you get good at modifying Playbook, you may choose to build them from scratch and skip this step.	See Export Playbooks
3. Modify the exported Playbook or create a new Playbook as necessary to meet your requirements.	Review the "Custom Playbooks" tutorial in the Change Automation Developer Guide on Cisco DevNet .
4. Import the new Playbook and then perform a dry run, or run it in single-stepping or continuous mode against a test device or devices, to confirm that it performs as expected.	First, follow the instructions in Import Playbooks . Then: Perform a Dry Run of a Playbook Run Playbooks In Single Stepping Mode Run Playbooks In Continuous Mode
5. For a Playbook you have developed that meets your needs: <ul style="list-style-type: none"> • In response to KPI alerts: If the Playbook is meeting expectations, link it to the KPI that indicates the need for the Playbook to be run, so that it is easy for operators to trigger the Playbook in response. • For planned maintenance or configuration changes: Schedule the Playbook to run, or run it, at the planned time. 	See: Link KPIs to Playbooks Schedule Playbook Runs

