Release Notes CWM 2.0

This section contains the following topics:

CWM v2.0 Release Notes

Intro

This document provides information about changes in Cisco Crosswork Workflow Manager 2.0.

Version history

Release date	Version	Release notes
9/Jun/2023	Cisco Crosswork Workflow Manager 1.0	Cisco Crosswork Workflow Manager 1.0 Release Notes
29/Feb/2024	Cisco Crosswork Workflow Manager 1.1	Cisco Crosswork Workflow Manager 1.1 Release Notes
29/Jun/2024	Cisco Crosswork Workflow Manager 1.2	Cisco Crosswork Workflow Manager 1.2 Release Notes
26/May/2025	Cisco Crosswork Workflow Manager 2.0	Current ones

What's new

Feature	Description
Crosswork Infrastructure instead of NxF platform	CWM 2.0 introduces a major change in its underlying infrastructure, now built on Crosswork Infrastructure instead of the NxF platform. This shift brings changes to system requirements and the installation process—please consult the Administrator Guide for updated system specifications and deployment instructions. CWM now supports Single VM deployment; support for Cluster deployment is planned for the official 2.0 release. Installation of CWM requires prior deployment of the Crosswork Infrastructure OVA. Note that this release uses the CWM CAPP. The CAPP currently has to be installed separately, after the Crosswork Infrastructure OVA is deployed.
Workflow Designer	**Workflow Designer** provides a visual representation of your workflow code in a tree-like, interactive graph format. It offers enhanced usability for reviewing and validating workflows directly within the UI.New features include multiple view modes—**Code view**, **Graph view**, and **Split view**—allowing users to switch from raw code to visual workflow structure. Each workflow state is represented as a node, displaying key elements like actions, assigned adapters, events, child workflows, and decision branches with condition indicators. Users can zoom, toggle dark mode, and validate workflow definitions directly in the Designer. **Error and compensation paths** can be shown or hidden for easier debugging and clarity.
Download button for Job events	The **Download** button has been added to Event history in Job details allowing users to export a history of workflow events in JSON format.
Adapter backward compatibility	Adapters now support **multiple workers** ensuring **backward compatibility** with older adapters. Please note that the CWM **2.0 version will not be backward compatible** with the 1.x versions.
Changes to worker-adapter compatibility	When creating workers, if the adapters' `cwm-version` does not match, **no error** will be returned. However, only adapters with **compatible `cwm-version` values** can be used together in a single worker.
Form-based workflow input	Workflows can now use interactive forms to collect input data at runtime, providing a more user-friendly alternative to manually entering input data in JSON format.
Redesigned Job details view	The **Job details** view now features a clear, three-panel layout for complete insight into each workflow run. The **Job Summary** presents key execution details like status, timing, version, and tags. The **Input and results** panel shows the input data provided at the start of the workflow alongside the final output returned once execution is complete. **Event history** is a comprehensive, ordered log of all events generated during the workflow execution. It records every state transition and action taken in response to external events or steps defined inside the workflow.
Worker profiles	A new **Worker profiles** panel has been added to CWM UI, allowing users to fine-tune resource allocation for workflow workers. Each profile lets you define minimum and maximum CPU and memory settings, helping to optimize performance for different workload types.
System settings in UI	With the new **System settings** panel in CWM UI, users can now manage job retention, retry policies, and timeouts. It controls how long completed jobs are kept, retry behavior (delay, jitter, max attempts), and various timeout settings for actions, events, states, system activities, and workflows.

Adapter changes

Adapter XDK changes

Enhancements to XDK for consistency across NSOX and OASX

NSOX:

- The `generate-activity` command has been updated:
- The `-request` option has been renamed to `-oper`.

OASX:

- The `generate-activity` command has been enhanced:
  - The `-activity` option is now optional and defaults to a predefined value if not specified.
  - The `-path` option has been renamed to `-poi`.
  - A new `-oper` option has been added to support CRUD operations.

Adapter SDK changes

- Adapters are now pre-compiled by the SDK. Previously, adapters contained the source code and the adapter manager built the .so file when deploying the adapter. Now the SDK will build a Docker image, start a container and run go build inside the container to compile the .so file and include the .json schemas for the activities, secret, and resource. Note that Docker is required for creating the adapter installable. Including the adapter source code when building an adapter installable is still possible by stating the -include-src option in the command.
- Adapter SDK has been upgraded to go version 1.23.1.
- A different version of the protoc plugin is now used. To ensure that all dependencies are correctly installed, use the cwm-sdk install-dependencies command.
- Update to the upgrade-adapter command: option name changed from cwmVersion to cwm-version.
- Adapter installable now includes the full value of the cwm-version option as part of the file name.

API changes

New API endpoints

Workflow API

Added new API endpoints for workflows, you can retrieve workflows using name and version. Also, a workflow/validate API endpoint for validating workflow definition has been added.

Method	2.0 path
GET	/workflow/name/{workflowName}/version/{workflowVersion}
PUT	/workflow/name/{workflowName}/version/{workflowVersion}

Method	2.0 path
DELETE	/workflow/name/{workflowName}/version/{workflowVersion}
POST	/workflow/name/{workflowName}/version/{workflowVersion}/validateInputData
GET	/workflow/tags
POST	/workflow/validate

Defaults API

New API endpoints are available for managing system defaults. These allow you to retrieve all defaults, set them in bulk, or access/update individual defaults using a key.

Method	2.0 path
GET	/config/defaults
PATCH	/config/defaults
GET	/config/defaults/{key}
PUT	/config/defaults/{key}

Resource API

Method	2.0 path
POST	/resourceExport
POST	/resourceImport

Task API

Method	2.0 path
DELETE	/task/{taskId}

Forms API

Method	2.0 path
POST	/formExport
POST	/formImport

Worker Profile API

Added a set of new API endpoints for managing worker profiles. These allow clients to list, create, retrieve, update, and delete specific worker profiles using their profile name.

Method	2.0 path
GET	/workerProfile
POST	/workerProfile
GET	/workerProfile/{profileName}

Method	2.0 path
DELETE	/workerProfile/{profileName}
PATCH	/workerProfile/{profileName}

Changes to existing endpoints

- GET adapter/{adapterId}: for each activity in adapter, the input/output schema definition are included
- Schedule API:
  - GET method now also includes input data.
  - PATCH method allows updates to search attributes.

Bug fixes

Backend bug fixes

CDETS ID	Description
N/A	Corrected the schedule API interval start time, which previously miscalculated first run timing.
N/A	Fixed support for importing parent and child workflows at the same time via API without validation errors.
N/A	Corrected handling of multiline Swagger descriptions by the XDK, enabling proper generation of comments in .proto files.

Frontend bug fixes

CDETS ID	Description
	Fixed issue where large job data caused session storage errors, leaving the spinner infinitely active in the Job Manager view.
	UI no longer hangs when selecting over 1,000 workflow records thanks to improving selection handling performance.
	Corrected job UI to display accurate event durations instead of showing 0s for each event.
	Fixed issue where tasks remained stuck in the UI; tasks can now be deleted using the new API endpoint.
CSCwm70375	Updated validation to properly handle actionDataFilter placement in onEvents, aligning with the workflow specification.

Known limitations

Payload size with inputs cannot exceed the 2MB limit

Workflow execution fails if the combined size of input payloads at workflow start and during execution exceeds the 2MB limit.

Missing input validation for special characters in API request URLs

CWM allows users to create objects with special characters (e.g., '), but the API does not support updating or deleting them. Input validation will be added in a future release.

Recommended system requirements (for XLarge VM size)

Resource	Value	Unit
vCPUs	24	cores
CPU Reservation	3.2	GHz
Memory	128	GB
Storage	1	TB

Supported versions

Component	Supported Version(s)
Hypervisor	VMware vCenter Server 7.0 (U3p or later), ESXi 7.0 (U3p or later)
Browsers	Latest versions supported. Tested versions: Chrome 135 Safari 18.4 Edge 135 Firefox 137
NSO Adapter	Minimum supported NSO release: 6.2.2 (Validated with 6.4)
JSON	Version 7
Kafka	Version 3.3.2
CloudEvents	Version 1.0.2
OpenAPI	Version 2.0