Cisco Crosswork Cloud APIs

Crosswork Cloud application programming interfaces (APIs) are intended for advanced users aiming to integrate their network and operational applications with Crosswork Cloud functions. This document provides a list of available APIs and descriptions.

API access

You must have Admin privileges to view and use Crosswork Cloud APIs.

API help and documentation

To view API call definitions and documentation, you must be logged into Crosswork Cloud and either choose **Help and Support** icon **> APIs** or go to https://crosswork.cisco.com/apiDoc/CiscoCrossworkCloudAPI.

Navigate within the documentation to view more information on parameters, usage samples, and schemas that you can copy.
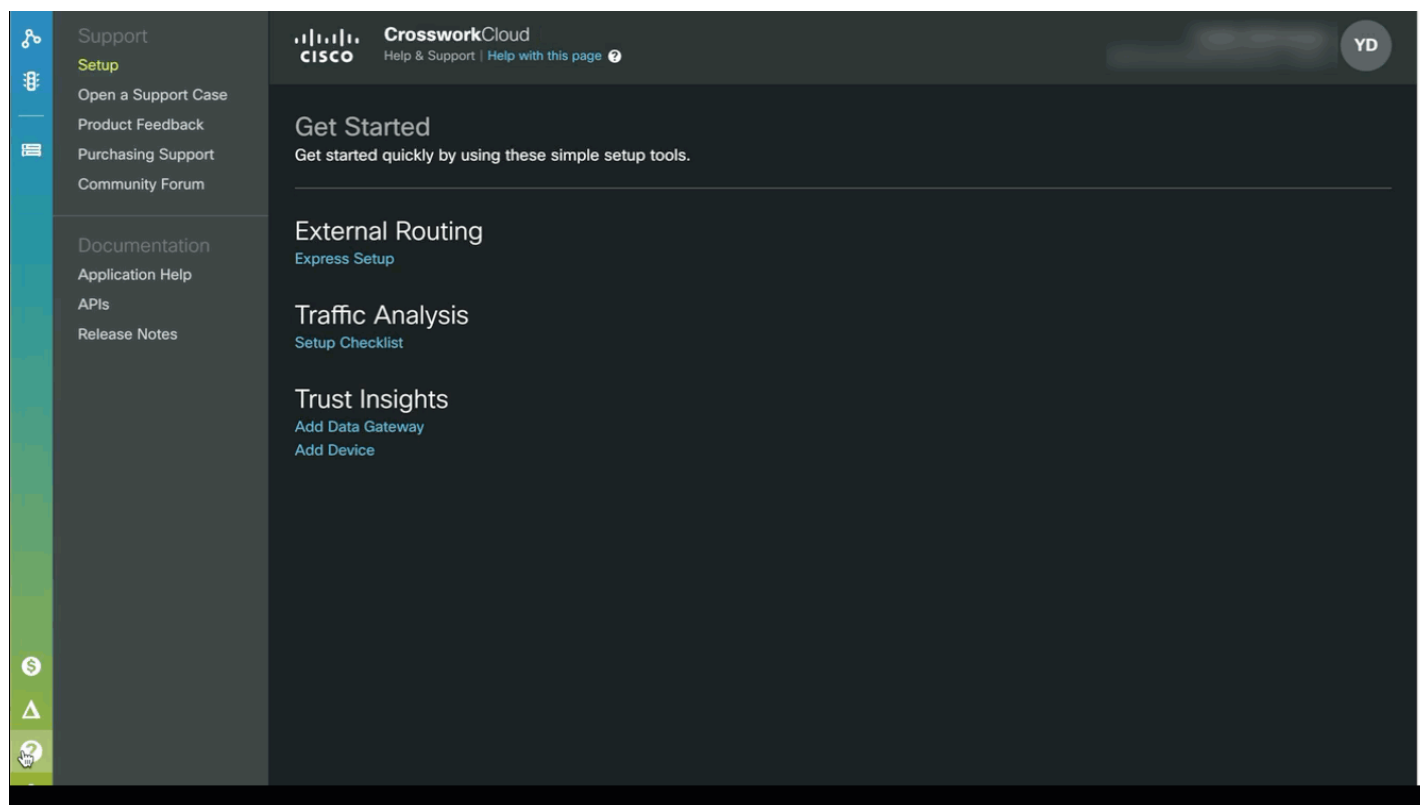
Network Insights APIs

These tables list available Network Insights APIs and their descriptions:

- ASNs

- Alarms

- BGP

- Policies

- Prefixes

- ROVs

Table 1: ASNs

Method type	Resource path	Description
GET	/api/v1/asns	Returns configuration data on all monitored ASNs.
POST	/api/v1/asns	Subscribes to one or more ASNs.
GET	/api/v1/asns/{asn}	Return a target ASN.
PUT	/api/v1/asns/{asn}	Update the configuration of a single ASN. All needed fields have to be specified / re-specified.
DELETE	/api/v1/asns/{asn}	Stop monitoring an ASN.
GET	/api/v1/asns/{asn}/bgp-updates	Returns BGP updates data for an ASN.

Table 2: Alarms

Method type	Resource path	Description
GET	/api/v1/alarms	Get alarms. By default, only Network Insights alarms are returned. Use the category query parameter to return historical alarm data. Alarms can be retrieved using one or more alarm ids or one or more alarm types or policy types but not combinations of these values. An alarm state may also be specified and/or a time window for the alarms.
PUT	/api/v1/alarms	Update the snooze settings for one or more alarms. When the chosen action is to snooze, the snoozeType query parameter can specify whether to snooze the alarm either Once (until cleared), Indefinitely, or Until a specified interval (with the options of an hour, a day, week, or month). The Unsnooze action removes any snooze settings on the alarm(s)
GET	/api/v1/alarms/{alarmId}/bgp-updates	Get relevant bgp updates by alarm Id.

Table 3: BGP

Method type	Resource path	Description
GET	/api/v1/asns/{asn}/bgp-updates	Returns BGP updates data for an ASN.
GET	/api/v1/prefixes/{prefix}/bgp-updates	Returns BGP updates data for a prefix.

Table 4: Policies

Method type	Resource path	Description
GET	/api/v1/policies	Returns all policies.
POST	/api/v1/policies	Add one or more policies. Each policy needs at least one rule to be defined.
GET	/api/v1/policies/{policyId}	Returns a target policy.
PUT	/api/v1/policies/{policyId}	Update a single policy.
DELETE	/api/v1/policies/{policyId}	Delete a specific policy.
GET	/api/v1/policies/{policyId}/alarms	Return all alarms for a policy.
GET	/api/v1/policies/{policyId}/asns	Returns all asns linked to a policy.
PUT	/api/v1/policies/{policyId}/asns	Update and link one or more asns to a single policy.
PATCH	/api/v1/policies/{policyId}/asns	Link or unlink asns and a single policy.
GET	/api/v1/policies/{policyId}/peers	Returns all peers linked to a policy.
PUT	/api/v1/policies/{policyId}/peers	Update and link one or more peers to a single policy.
GET	/api/v1/policies/{policyId}/prefixes	Returns all prefixes linked to a policy.
PUT	/api/v1/policies/{policyId}/prefixes	Update and link one or more prefixes to a single policy.
PATCH	/api/v1/policies/{policyId}/prefixes	Link or unlink prefixes and a single policy.
GET	/api/v1/policies/{policyId}/rules	Get all the alarm rules configured for a single policy.
POST	/api/v1/policies/{policyId}/rules	Add a new rule to an existing policy. Only one instance of an alarm rule type is permitted per policy and that rule is identified by the rule type.
PUT	/api/v1/policies/{policyId}/rules/{ruleType}	Update an existing alarm rule on a policy. The rule to be updated is identified by its alarm rule type.
DELETE	/api/v1/policies/{policyId}/rules/{ruleType}	Delete an existing alarm rule on a policy. The rule to be updated is identified by its alarm rule type.

Table 5: Prefixes

Method type	Resource path	Description
GET	/api/v1/prefixes	Return a list of all subscribed prefixes.
POST	/api/v1/prefixes	Subscribe to one or more prefixes.
PUT	/api/v1/prefixes	Update multiple prefixes. This API should be used for bulk updates.

Method type	Resource path	Description
DELETE	/api/v1/prefixes	Unsubscribe multiple prefixes in a single call. This should be used for bulk unsubscribes.
GET	/api/v1/prefixes/{prefix}	Return a target prefix.
PUT	/api/v1/prefixes/{prefix}	Update a single prefix. Use this API to add a description, add tags, or associate a policyId with a prefix.
DELETE	/api/v1/prefixes/{prefix}	Unsubscribe a single prefix.
GET	/api/v1/prefixes/{prefix}/bgp-updates	Returns BGP updates data for a prefix.

Table 6: ROVs

Method type	Resource path	Description
GET	/api/v1/rovs/unknown/asns/{asn}	Get ROVs with unknown status for an ASN. When an ROV has an **unknown** status, it means the router could not confirm the route's authenticity because no associated Route Origin Authorization (ROA) was found.
GET	/api/v1/rovs/non-compliant/roa-asns/{roa_asn}	Get non-compliant ROVs for a ROA ASN. When an ROV has a **non-compliant** status, it means the router could not validate the route because it does not comply with any existing Route Origin Authorization (ROA).
GET	/api/v1/rovs/non-compliant/asns/{asn}	Get non-compliant ROVs for an ASN.
GET	/api/v1/rovs/non-compliant/prefixes/{prefix}	Get non-compliant ROVs for a prefix.

Trust Insights APIs

These tables list available Trust Insights APIs and their descriptions:

- Alarms
- Credentials
- Data Gateways
- Devices
- Enrollment Tokens
- Policies

Table 7: Alarms

Method type	Resource path	Description
GET	/api/v1/alarms	Get Trust alarms. Add featureType=FEATURE_TYPE_CCTI to get Trust alarms. Use the category query parameter to return historical alarm data. Alarms can be retrieved using one or more alarm ids or one or more alarm types or policy types but not combinations of these values. An alarm state may also be specified and/or a time window for the alarms.
PUT	/api/v1/alarms	Update the snooze settings for one or more alarms. When the chosen action is to snooze, the snoozeType query parameter can specify whether to snooze the alarm either Once (until cleared), Indefinitely, or Until a specified interval (with the options of an hour, a day, week, or month). The Unsnooze action removes any snooze settings on the alarm(s)

Table 8: Credentials

Method type	Resource path	Description
GET	/api/v1/credentials	Get all device credentials.
POST	/api/v1/credentials	Add one or more new sets of credentials.
GET	/api/v1/credentials/{credentialId}	Return a target credential.
PUT	/api/v1/credentials/{credentialId}	Update an existing credential.
DELETE	/api/v1/credentials/{credentialId}	Delete a credential.
PATCH	/api/v1/credentials/{credentialId}/devices	Link or unlink devices and a single credential.
GET	/api/v1/credentials/{credentialId}/devices	Get devices linked to a credential.
PUT	/api/v1/credentials/{credentialId}/devices	Link one or more devices to a credential.
DELETE	/api/v1/credentials/{credentialId}/devices/{deviceId}	Unlink a single device from a credential.

Table 9: Data Gateways

Method type	Resource path	Description
GET	/api/v1/gateways/	Get all data gateways.
POST	/api/v1/gateways/	Add new data gateways. Adding gateways is achieved in two unique ways. Follow usage examples.

Method type	Resource path	Description
GET	/api/v1/gateways/{gatewayId}	Get a specific data gateway.
PUT	/api/v1/gateways/{gatewayId}	Update an existing gateway.
DELETE	/api/v1/gateways/{gatewayId}	Delete a data gateway.
PATCH	/api/v1/gateways/{gatewayId}/devices/	Link or unlink devices and a single credential.
GET	/api/v1/gateways/{gatewayId}/devices/	Get devices linked to a credential.
PUT	/api/v1/gateways/{gatewayId}/devices/	Link one or more devices to a credential.
DELETE	/api/v1/gateways/{gatewayId}/devices/{deviceId}	Unlink a single device from a credential.

Table 10: Devices

Method type	Resource path	Description
GET	/api/v1/devices	Get a list of all configured devices.
POST	/api/v1/devices	Add new devices.
GET	/api/v1/devices/{deviceId}	Get a specific device.
PUT	/api/v1/devices/{deviceId}	Update an existing device.
DELETE	/api/v1/devices/{deviceId}	Delete an existing device.
PUT	/api/v1/devices/{deviceId}/policies	Link a policy to a device
DELETE	/api/v1/devices/{deviceId}/policies/{policyId}	Unlink a policy from a device

Table 11: Enrollment Tokens

Method type	Resource path	Description
GET	/api/v1/enrollment-tokens	Get a list of all configured enrollment tokens.
POST	/api/v1/enrollment-tokens	Add an enrollment token.
DELETE	/api/v1/enrollment-tokens	Delete an enrollment token. Deleting the token will also delete the associated pending enrollments. To delete the token and associated enrollments set revokePendingEnrollments to true
GET	/api/v1/enrollment-tokens/{tokenId}	Get a specific enrollment token.
GET	/api/v1/enrollment-tokens/{tokenId}/enrollments	Get pending enrollments for a specific enrollment token

Method type	Resource path	Description
GET	/api/v1/policies	Returns all policies.
POST	/api/v1/policies	Add one or more policies. Each policy needs at least one rule to be defined.
GET	/api/v1/policies/{policyId}	Returns a target policy.
PUT	/api/v1/policies/{policyId}	Update a single policy.
DELETE	/api/v1/policies/{policyId}	Delete a specific policy.
GET	/api/v1/policies/{policyId}/devices	Returns all devices of a policy. Monitored or linked devices are shown. Ignored devices are not part of the response
PUT	/api/v1/policies/{policyId}/devices	Link devices to a specific policy.
PATCH	/api/v1/policies/{policyId}/devices	Link or unlink devices from a specified policy.
DELETE	/api/v1/policies/{policyId}/devices/{deviceId}	Unlink a single device from a specified policy.
GET	/api/v1/policies/{policyId}/gateways	Only returns default gateway policy information. Monitored or linked gateways are shown. Ignored gateways are not part of the response
PUT	/api/v1/policies/{policyId}/gateways	Link gateways to a specific policy.
PATCH	/api/v1/policies/{policyId}/gateways	Link or unlink gateways from a specified policy.
DELETE	/api/v1/policies/{policyId}/gateways/{gatewayId}	Unlink a single gateway from a specified policy.
GET	/api/v1/policies/{policyId}/rules	Get all the alarm rules configured for a single policy.
POST	/api/v1/policies/{policyId}/rules	Add a new rule to an existing policy. Only one instance of an alarm rule type is permitted per policy and that rule is identified by the rule type.
PUT	/api/v1/policies/{policyId}/rules/{ruleType}	Update an existing alarm rule on a policy. The rule to be updated is identified by its alarm rule type.
DELETE	/api/v1/policies/{policyId}/rules/{ruleType}	Delete an existing alarm rule on a policy. The rule to be updated is identified by its alarm rule type.

Traffic Analysis APIs

These tables list available Traffic Analysis APIs and their descriptions:

- Alarms
- Traffic

Table 13: Alarms

Method type	Resource path	Description
GET	/api/v1/alarms	Get all Traffic Analysis alarms. Alarms can be retrieved using one or more alarm IDs or one or more alarm types, but cannot be retrieved using a combination of these values. An alarm status can be retrieved for a specific or duration of time for the alarms.
PUT	/api/v1/alarms	You can update the snooze settings for one or more alarms. You can specify whether to snooze the alarm either once (until cleared), indefinitely, or until a specified interval (hour, a day, week, or month). The Unsnooze action removes any snooze settings on the alarm(s)

Table 14: Traffic

Method type	Resource path	Description
GET	/api/v1/devices/statistics/totals	Get SNMP counter traffic by device
GET	/api/v1/devices/{deviceId}/interfaces/statistics/totals	Get SNMP counter traffic by interface for a specified device
GET	/api/v1/devices/{deviceId}/interfaces/{interface}/statistics/totals	Get SNMP counter traffic for a specified interface
GET	/api/v1/devices/{deviceId}/statistics/totals	Get SNMP counter traffic for a specified device
GET	/api/v1/traffic/devices/{deviceId}/interfaces/{interface}/asns	Get Netflow traffic by asn for a specified interface
GET	/api/v1/traffic/devices/{deviceId}/interfaces/{interface}/asns/{asn}	Get Netflow traffic for a specified ASN on a specified interface
GET	/api/v1/traffic/devices/{deviceId}/interfaces/{interface}/asns/{asn}/prefixes	Get Netflow traffic by prefix for a specified asn on a specified interface
GET	/api/v1/traffic/devices/{deviceId}/interfaces/{interface}/asns/{asn}/prefixes/{prefix}	Get Netflow traffic for a specified prefix for a specified asn on a specified interface
GET	/api/v1/traffic/devices/{deviceId}/interfaces/{interface}/prefixes	Get netflow traffic by prefix for a specified interface
GET	/api/v1/traffic/devices/{deviceId}/interfaces/{interface}/prefixes/{prefix}	Get Netflow traffic for a specified prefix on a specified interface
GET	/api/v1/traffic/devices/{deviceId}/interfaces/{interface}/prefixes	Get Netflow traffic by prefix for a specified interface
GET	/api/v1/traffic/devices/{deviceId}/interfaces/{interface}/prefixes/{prefix}	Get Netflow traffic for a specified prefix on a specified interface
GET	/api/v1/traffic/prefixes	Get Netflow traffic by prefix
GET	/api/v1/traffic/prefixes/{prefix}	Get Netflow traffic for a specified prefix

Method type	Resource path	Description
GET	/api/v1/traffic/prefixes/{prefix}/devices	Get Netflow traffic for a specified prefix by device
GET	/api/v1/traffic/prefixes/{prefix}/devices/{deviceId}	Get Netflow traffic for a specified prefix by device
GET	/api/v1/traffic/prefixes/{prefix}/devices/{deviceId}/interfaces	Get Netflow traffic for a specified prefix and device by interface
GET	/api/v1/traffic/prefixes/{prefix}/devices/{deviceId}/interfaces/{interface}	Get Netflow traffic for a specified prefix and device and interface