

# Cisco Connected Analytics for Network Deployment



Cisco<sup>®</sup> Connected Analytics for Network Deployment (CAND) is analytics software as a service for Cisco network devices. It brings new network intelligence to IT executives, engineers, and analysts who face demands to prepare the network for new strategic initiatives, while doing more with less.

CAND helps customers control network risk and disruptions proactively, instead of reacting to issues. Its analytics correlate support case data from Cisco Technical Assistance Center and customer-managed support cases together with Cisco network deployment data (configurations of hardware, software, and features), in order to:

- Identify network risks
- Assess and benchmark network health
- Pinpoint causes of network disruption
- Understand incident types and trends
- Enhance readiness for new services
- Enhance customer relationships

## About Cisco Connected Analytics for Network Deployment

CAND is a software product in the Cisco Connected Analytics portfolio and is available for both enterprise and service provider customers.

Cisco Connected Analytics for Network Deployment provides:

- Automation of data collection, validation, and analysis
- Correlation of device configuration and service request data to pinpoint network configuration outliers and anomalies
- Measurement of network deployment key performance indicators (KPIs) using mathematical algorithms
- New analytics for incident trends, industry benchmarking, and software change simulation
- A self-service portal with at-a-glance visuals and systematic reports to identify top priority areas

This information helps businesses make better and faster decisions that can reduce overall operational costs while improving network support for their business requirements.

Table 1 describes the features of CAND.

**Table 1.** CAND Features

Feature	Description
Network consistency index	A KPI from 1 through 1000 indicating hardware, software, and feature deployment consistency level in the network.
Network consistency index breakdown (hardware, software, features)	This KPI is composed of KPIs for hardware, software, and feature level, each with a scale of 1 to 333, which indicates the deployment consistency of the hardware, software, and features. The network consistency KPI is the summary of hardware, software, and feature consistency.
Network consistency trend	A chart to record the network consistency KPIs within a certain time series.
Feature utilization index	A KPI using a scale from 1 through 1000 indicating the network-level feature utilization that is normalized from individually deployed features with associated complexity using Cisco intellectual capital.
Network disruption index	A KPI using a scale from 1 through 1000 indicating the network risk level based upon the analysis of customer/Cisco TAC cases and customer self-managed remedy cases for Cisco devices (provided by the customer).
Software consistency simulation scenario with predefined parameters (pseudo real time)	A "what if" simulation capability allowing a customer to predict future network consistency with preset software upgrade/migration options on the top three significant platforms.
Software consistency simulation scenario with customer-defined parameters (offline approach)	A "what if" simulation capability allowing a customer to predict future network consistency with customer-defined software upgrade/migration options on the top significant platforms.
Consistency outlier identification	A KPI to identify the devices with the most significant effects on network consistency at the family, platform, and cluster levels.
Network consistency and feature utilization visualization and export	Intuitive visual representation on portal with export capability.
Network consistency and feature utilization grid view and export	Table view of network consistency and feature utilization indexes with CSV format download capability.
Network consistency industry peer comparison	Compares the network consistency KPI with a peer in the same industry and with a similar network deployment. (Peer is identified by CAND application.)
Software version and age chart	An aggregated view of software versions and ages across all platforms in the network.
Network change management: KPI, hardware, software, and configuration	Comparing two data sets collected from the network to compare network deployment on KPI, hardware, software, and feature changes.
Network change management policy device identification	Capability to identify a device from the network as the standard configuration based on function and platform.
Device search capability	Capability to find a specific device by host name and view device details.
Customer self-managed Cisco device support case upload	Customers can upload their self-managed remedy cases for Cisco devices on the application portal, to include those cases in network deployment index (NDI) algorithm calculation, as well as support case management dashboard.
Customer contract list upload	Application users can upload a list of customer contracts on the application portal to make sure the contracts are included in the NDI algorithm and service request case management dashboard.
Network disruption industry peer comparison	Compare the network disruption KPI with a peer in the same industry and with a similar network deployment. (Peer is identified by CAND application.)
Network disruption index breakdown to hardware, software, and operational	Breaks down the network disruption KPI contribution to hardware, software, and operational categories to identify the most significant network risk factor.
Network disruption top hardware platform and software version identification	Capability to identify the top hardware platforms and software versions that contribute the most to network disruption.
Network disruption industry benchmark	Industry average network disruption KPI allows customers to evaluate their network risk factor by comparing to the industry average KPI value.

Feature	Description
Network TAC support case dashboard	An aggregated view of customers' TAC cases opened with Cisco, with a breakdown of the top three hardware platforms, top three software versions, and severities.
Network defect dashboard	An aggregated view of defects customers have encountered on Cisco devices, with a breakdown of the top three hardware platforms, top three software versions, and severities.
Network RMA dashboard	The number of RMAs customers had with Cisco within a time series.
Downloadable summary report	CAND application summary report in PDF format.
Customer report upload	Customers can download the application-generated summary report, modify it for their needs, and upload it back into the application using the portal.
Role-based portal access	Customer-designated administrator (DA) can manage users for their designated company.
Device group customization (non-function-based grouping)	Customers can define their network device groups in the hierarchy group → family → platform → cluster. The consistency and feature utilization KPIs are represented at the group level in addition to family, platform, and cluster levels.
Device group customization (function-based grouping)	Customers can define their network device groups in the hierarchy level 1 group → level 2 group → platform → devices. The consistency and feature utilization KPIs are represented at level 1 group, level 2 group, and platform.
Cisco device operating system support on consistency and feature utilization KPIs	Cisco CatOS and Cisco IOS®, NXOS, IOS-XR, and IOS-XE Software. Details for all supported Cisco operating systems are listed in the <a href="#">CAND supported device list</a> .
Consistency based on policy device	For policy devices identified under custom functional groups, CAND computes and reports consistency based on policies.

## Supported Hardware and Software

CAND supports the following Cisco operating systems:

- Cisco IOS
- Cisco CatOS
- Cisco NX-OS
- Cisco IOS-XR
- Cisco IOS-XE

For the complete list of supported devices and operating systems, see the [CAND supported devices list](#).

The CAND portal supports the following browsers and minimum versions:

- Apple Safari 8.x OSX only
- Google Chrome 42.x and 43.x
- Mozilla Firefox 39.x

## Requirements

The following are required prior to using CAND:

- The customer must have a common services platform collector (CSPC) deployed in their network as part of Smart Net Total Care (SNTC) or Network Optimization Service (NOS). CAND does not require the installation of an additional collector.
- The CSPC collector ID list is required to enable deployment analytics including consistency and feature utilization.
- The customer contract list is required to access TAC support cases to enable the disruption analytics and case statistics dashboard.

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## For More Information

For more information visit [CAND on Cisco.com](#) or contact your Cisco account representative.



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