

FEATURES

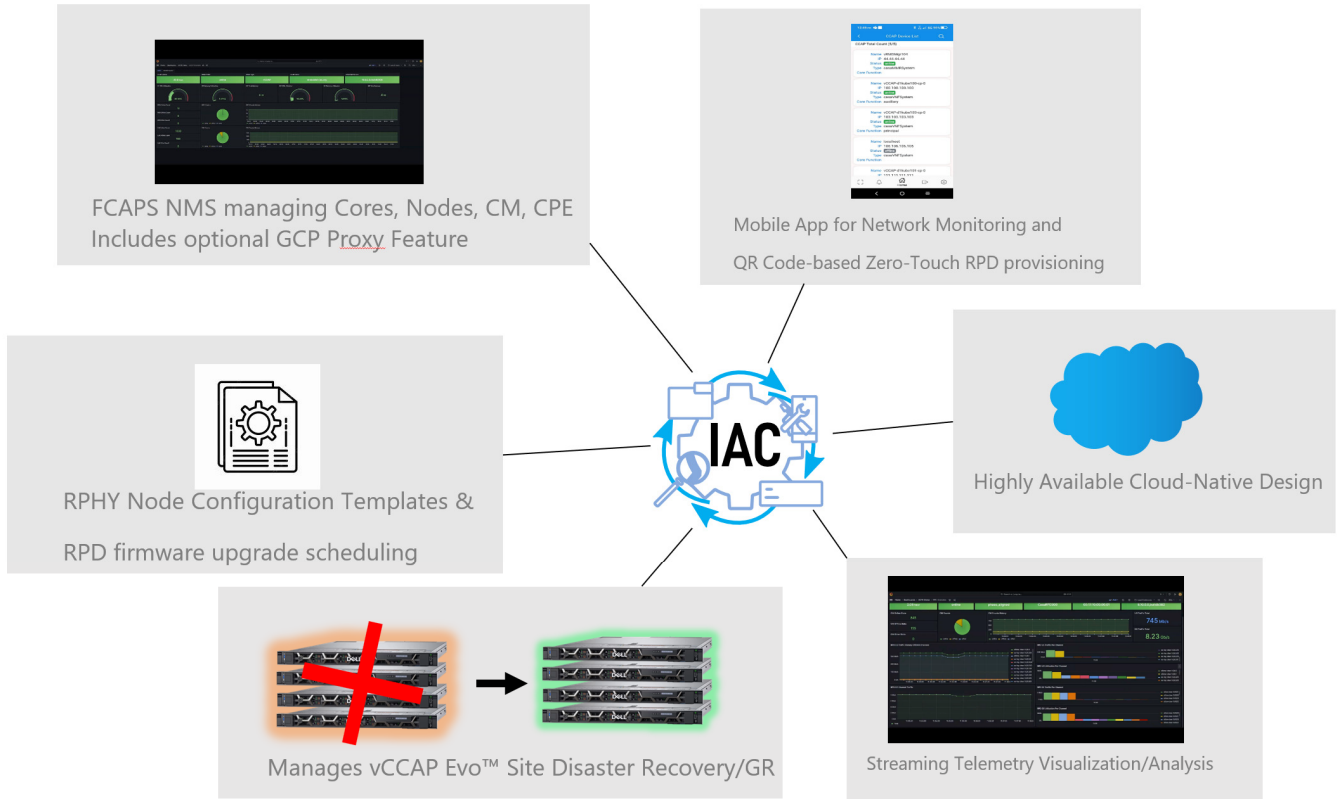
- Improved End User Experience: Web-based GUI provides a graphical view into the full access technology ecosystem showing CCAP Cores, DAA Nodes, Cable Modems, and CPEs
- Full web-based FCAPS NMS GUI
- Object Templates allow for streamlined node activation and configuration
- Improved Efficiency and Cost Savings: Zero-touch provisioning via IAC Smartphone App
- Mobile App also allows Status and Fault Monitoring across managed components
- GCP Proxy for programmatically mapping DAA Nodes to preferred CCAP Cores
- Standards-based SNMP, CLI, and Netconf/YANG adapters for southbound integration
- Faster Time to Market: Standards-based, highly flexible solution. Single REST API entry point for OSS integration managing all DAA aspects
- Scalable, fully virtualized software can be deployed in the cloud or data center

The CommScope® Intelligent Access Controller (IAC) provides the visibility, control, automation, and efficiency cable operators require as they expand and evolve their access networks to meet the demands of the next generation of services. IAC is a virtualized solution that provides full FCAPS network management functions including:

- Easy-to-use Network Management GUI for Cable DAA products
- Performance Management, Spectrum capture
- Implements the concept of templates to streamline bulk provisioning of modules while minimizing user error
- Status and KPI monitoring
- Fault Management and troubleshooting
- GCP Proxy to allow DAA Node redirection to optimal core as configured by MSO
- Manages vCCAP/Mac Manager Disaster recovery decisions
- Mobile (iOS/Android) UI to monitor the access network plus perform zero-touch DAA node activation via QR Code scanning
- Abstraction Layer, whereby a customer's OSS system only needs a single REST API entry point to access all Cores and DAA components



Fully virtualized, the IAC software can be deployed in a 1+1 High Availability (HA) setup. It implements a variety of southbound protocols such as SNMP, CLI, and NetConf/Yang to facilitate the integration of access components such as CCAP Cores, DAA Nodes, and CMs.



The Intelligent Access Controller (IAC) is an important part of CommScope’s Cable DAA solution, which includes a full-fledged NMS GUI, a REST API with full configuration and monitoring access to all access components, and a mobile App that can be used to monitor key performance metrics and faults. It also supports the ability to activate DAA nodes via QR Code scanning. A scalable non-SQL database is used to persist data.

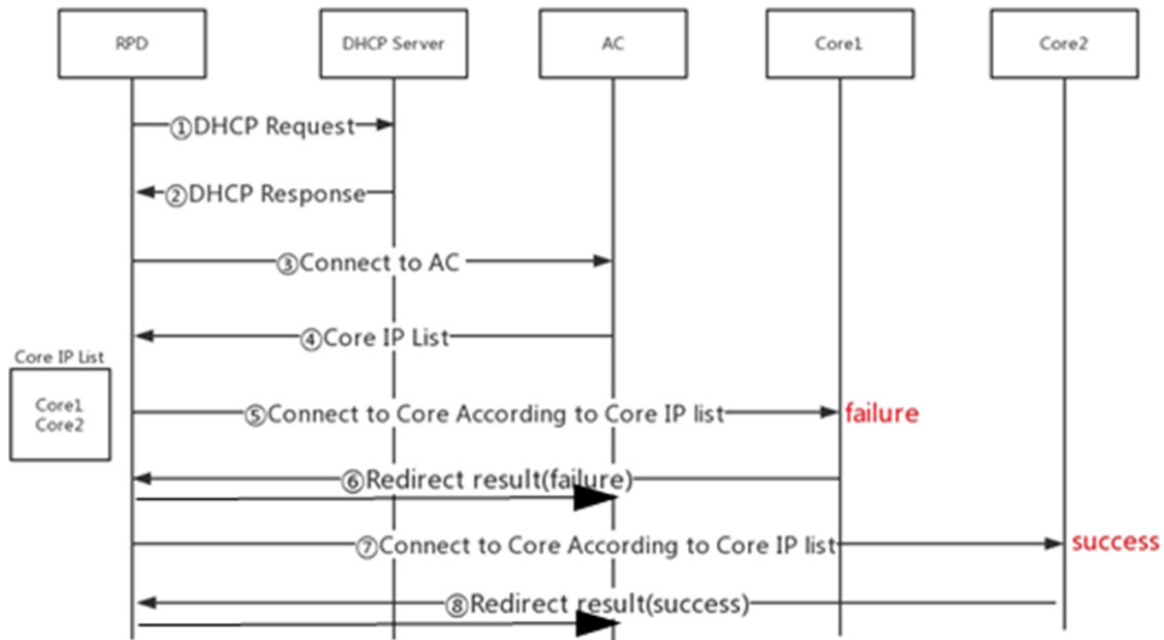
Templates

The use of templates, such as for node configuration, provides a simple method to apply configurations across a large number of managed components, reducing the likelihood of user errors. Software upgrades can also be applied to multiple nodes simultaneously, eliminating the need for repetitive and error-prone CLI commands.

Core Access Control

Customers who wish to have complete control over which CCAP Core manages specific RPHY Nodes can utilize the AC function. This feature allows the MSO to configure a Core-Node table via REST API, and IAC will direct Nodes to their correct Principal Core. Refer to the diagram on the following page for more details.

Access Control/GCP Proxy Function of IAC



Network Discovery

Deploying CCAP Cores is simplified by the ability to retrieve the full configuration into the IAC, which is stored in its database and synchronized to the backup IAC instance when deployed in an HA setup.

Reports

A wide array of Reports are available in both table and graphical formats such as:

- Device Counts with individual status and CM DOCSIS® versions
- Signal-to-noise ratio (SNR)
- Node temperature and power statistics
- CM Channel Signal data
- RxD software upgrade details with image data and upgrade durations and status
- IAC server status (current and historical) with details on CPU and Memory utilization

Scalability and Platform Dependencies

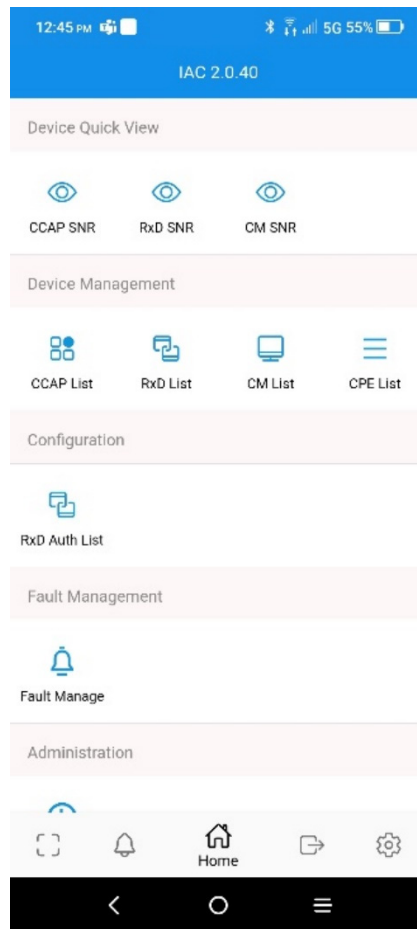
The IAC server can be installed on VMs, bare metal servers, and/or Kubernetes clusters.

OS support: CentOS 7+, Ubuntu 19.10, 20.04, 22.04

Manages up to 25,000 DAA Nodes and 2 million CMs (reference system with 16 CPU Cores, 64 GB RAM, 1 TB Storage). This can be customized to accommodate larger deployments.

Mobile App

The IAC mobile app, available for both iOS and Android, focuses on monitoring key performance indicators for CCAP Cores, DAA Nodes, CM, and CPE components. It also shows all faults and provides the option to enable notifications for them.



QR Code Scanning

The IAC mobile app enables the scanning of QR Codes for DAA Nodes, allowing them to be activated with the CCAP Core without requiring installers to manually type the required parameters. This reduces the likelihood of errors in provisioning and inventory systems, and the need for costly staff redeployment.

Key Benefits of the IAC Mobile App

Features	Benefits
Plug-and-play auto-configuration	QR Code scanning of labels on RPD/RMDs allows error-proof activation of DAA nodes with the CCAP Core, eliminating the need for installers to type the required data.
Monitoring	Available for all managed areas such as CCAP Cores, DAA Nodes, CM, and CPE.
Fault Display	Allows operators to have insight into network/service issues even when away from their desktops; Mobile notifications for incoming faults can also be enabled.

ORDERING INFORMATION

Model Name	Description
AXC-IAC-RPD-1x1-01	IAC functionality (Intelligence Access Controller) per CS RPD in 1x1 segmentation
AXC-IAC-RPD-1x2-01	IAC functionality (Intelligence Access Controller) per CS RPD in 1x2 segmentation
AXC-IAC-RPD-2x2-01	IAC functionality (Intelligence Access Controller) per CS RPD in 2x2 segmentation
AXC-IAC-RPD-2x4-01	IAC functionality (Intelligence Access Controller) per CS RPD in 2x4 segmentation
AXC-IAC-RPD-1x1-02	IAC functionality (Intelligence Access Controller) per non-CS RPD in 1x1 segmentation
AXC-IAC-RPD-1x2-02	IAC functionality (Intelligence Access Controller) per non-CS RPD in 1x2 segmentation
AXC-IAC-RPD-2x2-02	IAC functionality (Intelligence Access Controller) per non-CS RPD in 2x2 segmentation
AXC-IAC-RPD-2x4-02	IAC functionality (Intelligence Access Controller) per non-CS RPD in 2x4 segmentation

RELATED PRODUCTS

vCCAP Evo™	ServAssure® NXT Performance Management
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Contact Customer Care for product information and sales:

- United States: 888-944-4357
- International: +1-215-323-2345



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Intelligent Access Controller_DS_RevA