Highlights

Centralized Management

- Real time insights
- Access control
- Multi-vendor support

Visibility of All Devices

- Cloud native
- Non-cloud native
- Third-party networking

Flexible Management

- Public + Local
  (Internet connected mode)
- Local (Non-Internet connected –
  Air Gap mode)

Application Analytics

- Actionable business insights
- Application telemetry and DPI driven
- Root cause analysis troubleshooting
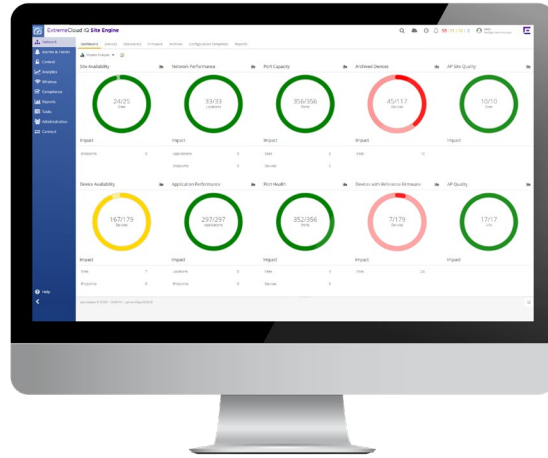
Network Access Control

- Role-based access security
- Secure BYOD, guest access, and IoT

Logic (Workflow/Event Management)

- Intuitive task automation/orchestration
- Built-in workflow tools
- Scripting language support

Integrated Applications

- ExtremeAnalytics™
- ExtremeControl™
- ExtremeConnect™

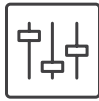# ExtremeCloud™ IQ – Site Engine

Extending the Value of ExtremeCloud IQ by Providing a Path to the Cloud and End-to-End Visibility for All Devices

ExtremeCloud IQ - Site Engine extends the value of ExtremeCloud IQ cloud network management offering. It enables a cloud migration path for third party and non-cloud native networking devices. It also enhances ExtremeCloud IQ's management capabilities with additional features for Extreme Networks' Universal Hardware (switches and access points) as well as legacy devices. This allows business leaders to realize their network modernization goals by adopting a cloud-based operational model at their own pace without having to rip and replace their existing infrastructure.

It provides end-to-end network management, task automation, real-time analytics, service assurance, and orchestration. ExtremeCloud IQ - Site Engine provides a centralized dashboard view of the entire network with visibility of all network devices without having to piece together multiple applications.

Delivered as a Software as a Service (SaaS) subscription-based offering, IT leaders can realize decreased overall cost of ownership, reduced time-to-benefit, and unique scalability.

Most benefits are gained by using ExtremeCloud IQ – Site Engine together with ExtremeCloud IQ in an internet connected mode of operation to manage the network in the public cloud with Amazon Web Services (AWS), Google Cloud Platform (GCP), and Microsoft Azure. The internet connected mode can also provide flexible deployment models to address an organization's specific non-cloud native and multivendor devices. Additionally, the ExtremeCloud IQ - Site Engine can also be deployed in a non-internet, locally connected "air-gapped" mode for adherence to specific industry and regional requirements. Support for all deployment models is provided, with uncompromised security for client data, and with options respecting data sovereignty requirements.

End-to-End Network Management

From a single screen, ExtremeCloud IQ – Site Engine provides end-to-end management of the wired and wireless network edge to the data center and across multivendor devices. Near zero-touch provisioning enables new infrastructure to be brought online quickly. A granular view of users, devices and applications with an easy-to-understand dashboard inventory and network topology to be managed efficiently. Policies and new services such as Bring-Your-Own-Device (BYOD) can be enabled through the integrated graphical user interface and enforced at the network point of entry through ExtremeControl for ExtremeCloud IQ – Site Engine. To enhance the management of third-party networking devices, the dashboard shows their topology and discovery. It helps decrease time-to-service with powerful fabric provisioning built right in.

Secured Cloud Networking Infrastructure

The ExtremeCloud IQ – Site Engine enables the security of an organization's wired and wireless networks to be unified and provides the in-depth visibility and control over its users, devices, and applications.

With the ExtremeControl application available as part of ExtremeCloud IQ - Site Engine, access security is enabled via a role-based network access control (NAC) for all devices including third party networking devices. The application securely enables BYOD, guest access and IoT to protect the network against external threats and protect corporate data by proactively preventing unauthorized users and compromised endpoints from network access. One can centrally manage and define granular policies to meet compliance obligations, locate, authenticate, and apply targeted policies to users and devices.

It is integrated with major enterprise platforms including solutions for network security, enterprise mobility management, analytics, cloud, and data center. In addition, it offers an open northbound API for customized integrations to key enterprise platforms. For additional information regarding ExtremeControl, please refer to the ExtremeControl for ExtremeCloud IQ – Site Engine Data Sheet.

Analytics-Driven Decisioning

ExtremeCloud IQ – Site Engine provides actionable business insights from the end-to-end network with granular details into the performance of applications and the network through application telemetry and deep packet inspection (DPI). ExtremeAnalytics for ExtremeCloud IQ – Site Engine speeds up troubleshooting by separating network from application performance so you can quickly identify root-causes. It monitors shadow IT, identifies, and reports malicious or unwanted applications, and helps with security compliance.

The Analytics Engine within ExtremeAnalytics extends application visibility from wired and wireless devices all the way through the campus to the datacenter. With deep packet inspection, Network Administrators can see and analyze network-traffic across multiple layers for real-time accurate information analysis. Additionally, integration with AWS, GCP and Azure provides a unique capability of a single analytics toolset that covers campus, data center and cloud instances. For additional information regarding ExtremeAnalytics, please refer to the ExtremeAnalytics for ExtremeCloud IQ – Site Engine Data Sheet.

Automation with Workflows

The ExtremeCloud – IQ Site Engine provides cross domain workflow automation capabilities via an intuitive graphical approach to easily automate network tasks. Built-in automation and workflow tools as well as support for common scripting languages (i.e., Python) enables their combination to form workflows. These capabilities assist in the reduction of command line interface-based management while helping to alleviate the burden on IT personnel and the impacts of unintended down-time. A workflow can be triggered by any event like threshold reached, syslog message or trap received or user action, or even an external API call. The workflow can reconfigure the network or interact with third party solutions. For example, if the reboot of the device is detected then technical logs and details can be gathered and a helpdesk ticket can be created by the workflow itself. If a high CPU utilization is detected, then the workflow can automatically gather additional information about running processes. The ExtremeCloud IQ Site engine can change a 3AM wake up call to 10AM follow-up.

Digital Transformation

As IT leaders look to deliver upon the promise of the Infinite Enterprise – an organization whose network is distributed to meet users wherever they are, delivers a consumer-centric experience where technology revolves around the user's needs, and enables that experience at scale. ExtremeCloud IQ – Site Engine allows for the transition to cloud network management at their pace, while having the flexibility to manage their network in a local mode and transition to the cloud when ready. ExtremeCloud IQ – Site Engine supports the Infinite Enterprise by virtue of simplified cloud-based management extended to a greater set of infinitely distributed devices and end users. As such, ExtremeCloud IQ – Site Engine cloud enablement pathway is ideally suited to fulfill the promise of the Infinite Enterprise as the solution enables end consumers to be more proactive regarding the management of their network by providing them the right tools to make data driven, more informed decisions as they require, and wherever they may be.

Ecosystem Integration

ExtremeCloud IQ – Site Engine is integrated with key enterprise platforms to streamline business processes, enable more robust data analysis, and deliver seamless user experiences. ExtremeConnect offers integration with major enterprise platforms for network security, mobile management, analytics, cloud, and data center solutions. In addition, a comprehensive suite of open APIs is offered from Extreme's network infrastructure portfolio of switches and wireless APs. This includes the classic integration methods like SNMP, Syslog, and more efficient integration methods like REST-based APIs. Additional information is available at https://developer.extremecloudiq.com.
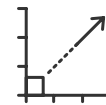
Agility and Scalability

ExtremeCloud IQ – Site Engine enables organizations to scale quickly with firmware and configurations across third-party networking devices reducing lengthy and error prone manual onboarding and updates.

Specifications

Virtual Appliance Options

The ExtremeCloud IQ – Site Engine virtual appliances must be deployed on a VMWare® or Hyper-V server with a disk format of VHDX.

- The VMWare Site Engine virtual engines are packaged in the .OVA file format (defined by VMware)
- The Hyper-V Site Engine virtual engines are packaged in the .ZIP file format

Refer to the Release Notes for information on Virtual Appliance scalability.

Deployment Options for ExtremeCloud IQ – Site Engines

- Red Hat Enterprise Linux WS and ES v6 and v7
- Ubuntu 18.04 (64-bit only)
- VMware (64-bit Virtual Appliance) VMware ESXi versions 6.0, 6.5, 6.7 server
- Hyper-V (64-bit Virtual Appliance) Hyper-V Server 2012 R2, Hyper-V Server 2016

Deployment options for ExtremeControl for ExtremeCloud IQ – Site Engines and ExtremeAnalytics for ExtremeCloud IQ – Site Engines

- VMware (64-bit Virtual Appliance) VMware ESXi versions 6.0, 6.5, 6.7 server
- Hyper-V (64-bit Virtual Appliance) Hyper-V Server 2012 R2, Hyper-V Server 2016

Supported Web Browsers

- Microsoft Edge
- Mozilla Firefox 34 and later
- Google Chrome 33.0 and later

Services and Support

Extreme Networks provides comprehensive service offerings that help you maintain, design, deploy, and optimize your network. We offer customized technical training and service and support tailored to your specific needs. Please contact your Extreme Networks account executive for more information about Extreme Networks Services and Support.

Ordering Information

Category	Model Number	Model Description
ExtremeCloud IQ Pilot Subscription	XIQ-PIL-S-C-EW	ExtremeCloud IQ Pilot SaaS Subscription and ExtremeWorks SaaS Support for one (1) device (1 year).
ExtremeCloud IQ Pilot Subscription	XIQ-PIL-S-C-PWP	ExtremeCloud IQ Pilot SaaS Subscription and PartnerWorks Plus SaaS Support for one (1) device (1 year).
ExtremeCloud IQ Navigator Subscription	XIQ-NAV-S-C-EW	ExtremeCloud IQ Navigator SaaS Subscription ExtremeWorks SaaS Support for one (1) device (1 year).
ExtremeCloud IQ Navigator Subscription	XIQ-NAV-S-C-PWP	ExtremeCloud IQ Navigator SaaS Subscription PartnerWorks Plus SaaS Support for one (1) device (1 year).

Every ExtremeCloud IQ customer can use ExtremeCloud IQ – Site Engine at no additional cost. Refer to the ExtremeCloud IQ Data Sheet for additional info on ExtremeCloud IQ.