



#### Highlights

#### **Key Features**

- Auto-Provisioning: With zero-touch deployment, automatically apply configuration policies
- Dashboard: Intuitive, visual dashboard with contextual filters for a comprehensive overview of network assets
- **Comparative Analytics:** Anonymously compare operational and performancebased metrics to those of other organizations of a similar size and vertical.
- Application Visibility and Control: Visibility and control of application usage for professional and recreational applications and network services.
- Simplified Management: Guided workflows for creating and deploying network policies, with optional advanced configuration.
- Full Stack Management: Native Cloud Management of Wi-Fi, Switching, and SD-WAN.
- Network Health: Real-time and historical view of client and device health with built-in remediation tools.



# ExtremeCloud<sup>™</sup> IQ

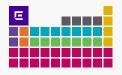
Enterprise Network Management Offering Intuitive Configuration Workflows, Real-Time & Historical Monitoring, and Simplified Troubleshooting

ExtremeCloud<sup>™</sup> IQ is an industry-leading and visionary approach to cloudmanaged networking, built from the ground up to take full advantage of Extreme's end-to-end networking solutions. ExtremeCloud<sup>™</sup> IQ delivers unified, full-stack management of wireless access points, switches, and routers and enables onboarding, configuration, monitoring, troubleshooting, reporting, and more. Using innovative machine learning and artificial intelligence technologies, ExtremeCloud<sup>™</sup> IQ analyzes and interprets millions of network and user data points, from the network edge to the data center, to power actionable business & IT insights, and deliver new levels of network automation and intelligence.





#### **Built to Suit Your Business Needs**



**Extreme Elements** are the building blocks that allow you to tailor your network to your specific business environment, goals, and objectives. They enable the creation of an Autonomous Network that delivers the positive experiences and business outcomes most important to your organization.

Combining architecture, automation, and artificial intelligence, Extreme Elements enable you to ensure that your uses get what they need — when and where they need it. Providing these superior user experiences is as simple as mixing and matching the right elements.

Learn more at extremenetworks.com/elements/.

ExtremeCloud<sup>™</sup> IQ operates on Extreme's third generation Cloud Services architecture, capable of supporting millions of infrastructure devices and hundreds of millions of clients per Regional Data Center. All Extreme Cloud Services components are hosted in secure SOC Type 1 data centers with 24/7 monitoring, scheduled backups, and build-in disaster recovery capabilities. The ExtremeCloud<sup>™</sup> IQ offers rapid feature velocity, increased availability, and advanced flexibility desired for modern access network management.

Extreme Cloud Services also provides a full suite of cloud-optimized open APIs for developers to create 3rd party applications and user experiences including user onboarding mechanisms, proximity-based services, presence and location analytics, and more

Deployment options include Public Cloud, Private Cloud and a Local Cloud solution.

## **Deployment Choices**

Different customers have different organizational needs. While many customers today opt for public cloud deployments with its many advantages, other customers may choose the Private Cloud, located on the customer or partner infrastructure.While still others choose onpremises deployments due to organizational or legal requirements. With one underlying cloud networking platform, the feature set is consistent across all deployment models, and customers can choose the option that works best for them without having to compromise on supported functionality.

# **Security & Operation**

- Accounts are password protected and accessed via secure SSL
- Management traffic is encrypted and restricted using industry-proven CAPWAP protocol over HTTPS
- Out-of-band operation ensures no customer data traverses Extreme's Cloud Services
- Single-Sign-On (SSO) to ExtremeCloud™ IQ for administrator accounts
- Multi-Factor authentication with Google Authenticator for administrator accounts
- Multi-tenant architecture with secure account separation
- Centralized monitoring and management
- Integrated RBAC to delegate select ExtremeCloud<sup>™</sup> IQ
  roles and permissions to different administrators

- VAR and partner management capabilities including account provisioning and maintenance
- ExtremeCloud<sup>™</sup> IQ connectivity does not impact network operations servicing end-users
- 99.99999% uptime, excluding maintenance windows

# **Product Specifications**

#### Simplified Deployment

- Customer self-service sign-up
- Guided workflow for network policy deployment
- On-screen step-by-step guided configuration
- RF planner with map import and export
- Design with simulated APs on RF Planner map, then seamlessly swap these for real APs when deployed
- Devices automatically connect to ExtremeCloud<sup>™</sup> IQ for provisioning
- Devices auto-provision with network policy and firmware udpates

#### **Centralized Configuration**

- Guest Access functionality
- Device templates for switches, routers and APs
- Act as RADIUS server or RADIUS proxy, and as DHCP server
- · Centralized view of all configuration objects
- Ability to bulk edit device properties
- · Ability to schedule firmware upgrade
- Command Line Interface (CLI) access to Extreme devices
- Active directory/LDAP
- IPv6 support
- Syslog and SNMP server configuration
- Auto-provisioning
- Configuration audit, backup, restore, import and export
- Support for Extreme VPN gateway (VG-VA)
- Multi-tenant capability: supports multiple virtual organizations

#### **Centralized Policy Management**

- Device classification by location & timezone
- Customer application definition
- Client classificaion by location, OS type, MAC address
- Multiple user profiles for each SSID
- Time-based firewall and QoS policy
- Application, network and MAC layer firewall policy rules
- WIPS policy for rogue AP detection and mitigation

#### **Security and Privacy**

- Role-based access control
- Customer and network data is private and secure
- No customer data traverses Extreme Cloud network
- SSO for ExtremeCloud™ IQ administrators via SAML
- Optional multi-factor authentication with Google Authenticator for administrators
- EU General Data Protection Regulation (GDPR) features including:
  - Search for, download and delete personal data for specific users
  - Creation of reports to document the above actions

#### Dashboard

- Graphical widgets and status cards with drill-down capabilites
- Time-range slider on dashboard for historical view
- 360° views of Extreme network policies, AP, client devices, users and apps
- Global search function by network policy, MAC address, serial number, user, hostname or application name
- 30-days of historic monitoring and reporting data
- Interactive Network Summary Report with easy sharing
- Savable contextual filters by location, SSID, policy, user, profile and client OS type
- Comparitive Analytics to anonmously compare operational and performance metrics against other cloud customers of a similar size and industry

#### **Guest Access**

- Onboarding and management of visitor and employee personal devices (BYOD)
- Provides multiple onboarding workflows via Captive Web Portal, Kiosk app and Guest Check-In applications
- Private PSK (PPSK), 802.1X (RADIUS) and PSK authentication
- Supports 3rd party and customized CWPs including HTML upload for added deployment flexibility

#### Troubleshooting

- Client 360° behavioral analysis; real-time and historical network performance monitoring and optimization
- Help-desk optimized interface with problem summary and suggested remedy
- Dedicated Helpdesk user role
- Real-time troubleshooting with probe messages and stage filters
- Historical troubleshooting with automatic issue detection
- Mark issue resolved or escalate issue with email notification
- Built-in Command Line Interface (CLI) and remote SSH
- RADIUS test
- AP technical data download
- VLAN probe tool for simplified troubleshooting of the wired network
- Optional packet capture analysis with partner solution (CloudShark)

#### Monitor

- WIPS history report
- Drill-down capability from client list to client 360° view
- Device list with rich utilities for advanced configuration and investigation
- Real-time client list with SNR, RSSI, data usage and connection status
- Savable and reusable filters shared across dashboard and monitor
- · Alarm and event lists with historical and real-time data
- PCI DSS 3.2 compliant reporting
- Rogue AP and rogue client monitoring
- Real-time data for connection clients and users
- Google Maps integration and navigation with floorplan upload capability

#### Supported Languages

• English, German, Spanish, French, Italian, Japanese, Korean, Portugese, Chinese

#### Reliability

- Data centers with SOC Type 1 compliance (formally SAS 70 and/or SSAE 16), Type 2 and 3 compliance
- High availability with disaster recovery and redundancy
- 99.99999% Uptime SLA
  (excluding maintainance windows)
- Scheduled backups
- 24x7 monitoring

### Warranty

As a customer-centric company, Extreme Networks is committed to providing quality products and solutions. In the event that one of our products fails due to a defect, we have developed a comprehensive warranty that protects you and provides a simple way to get your product repaired or media replaced as soon as possible.

Software warranties are ninety (90) days and cover defects in media only. For full warranty terms and conditions please go to <u>extremenetworks.com/support/policies</u>.

### Service and Support

Extreme Networks provides comprehensive service offerings that range from Professional Services to design, deploy and optimize customer networks, customized technical training, to service and support tailored to individual customer needs. Please contact your Extreme Networks account executive for more information about Extreme Networks Service and Support.

### Additional Information

For additional technical information on ExtremeCloud™ IQ, please go to <u>extremenetworks.com/product/extremeCloudIQ</u>.

For more information, please contact Chi Corporation, your authorized Extreme Networks partner.



John Thome, President jthome@chicorporation.com 440-498-2310 ChiCorporation.com



http://www.extremenetworks.com/contact

©2019 Extreme Networks, Inc. All rights reserved. Extreme Networks and the Extreme Networks logo are trademarks or registered trademarks of Extreme Networks, Inc. in the United States and/or other countries. All other names are the property of their respective owners. For additional information on Extreme Networks Trademarks please see http://www.extremenetworks.com/company/legal/trademarks. Specifications and product availability are subject to change without notice. XXXXX-0119-XX