

ExtremeCloud IQ

Highlights

Unified Management

- Native cloud management for access points, switches, and SD-WAN
- Real-time and historical view of client and device health with built-in remediation tools
- Visibility and control of application usage for professional and recreational applications and network services

Insights and Recommendations

- Machine Learning (ML) derived insights drive a comprehensive visual dashboard of location, devices, and users
- Explainable ML algorithms are built with transparency to help you see, verify, and trust the recommendations

Mobile Companion

- Securely supports device management from iOS and Android based devices
- QR and bar code onboarding
- Installation photography, validation, and reporting
- Troubleshooting tools, device monitoring, and alerts

Integrated Essentials Applications

- ExtremeGuest™
- Extreme AirDefense®
- ExtremeLocation™

Auto-Provisioning and Enhanced Reporting

- With near zero-touch deployment, automatically apply configuration policies
- Compliance reports for more informed network decision-making



A core component of Extreme's 1 Cloud, 1 Network strategy that supports access points, switches, and SD-WAN. ExtremeCloud IQ provides unified management driven by Machine Learning (ML). It features intuitive configuration workflows, realtime and historical monitoring, comprehensive troubleshooting, and integrated network applications

ExtremeCloud™ IQ is an industry-leading approach to cloud-driven networking, designed to take full advantage of Extreme's end-to-end networking solutions. It delivers unified, full-stack management of access points, switches, and SD-WAN. ExtremeCloud IQ uses innovative ML technologies to analyze and interpret millions of network and user data points, from the edge to the data center, to power actionable business and IT insights. This innovative platform streamlines operations by delivering new levels of network automation and intelligence.

ExtremeCloud IQ Offerings

ExtremeCloud IQ operates on Extreme's 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 built-in disaster recovery capabilities. The ExtremeCloud IQ offers rapid feature velocity, increased availability, and advanced flexibility desired for modern access network management.

ExtremeCloud 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.

ExtremeCloud IQ offers:



End-to-End Solution
Edge to Data Center



Highest Quality
Real time,
ML/AI continuous innovation



Cloud Choice
Do it your way...
public, private, or on-premises



Depth of Capability
Management,
Intelligence, assurance

Deployment Choices

We offer three cloud deployment options – Public, Private or ExtremeCloud Edge. Our goal is to provide maximum flexibility, continuous innovation, and a consistent user experience. Moreover, our 100% software-centric architecture is cloud-hosting agnostic, supporting Amazon Web Services (AWS), Google Cloud Platform (GCP), and Microsoft Azure.

- **Public Cloud:** Extreme provides access to a hosted service which removes infrastructure management and costs, provides data privacy and protection, unmatched reliability, and continuous delivery of innovations.
- **Private Cloud:** For organizations that want or need to isolate management services in their own controlled environment, Extreme packages ExtremeCloud IQ into a private cloud offering which enables the same services as the public cloud (e.g. ML, AI, data stores etc.) all hosted within a private cloud instance.
- **ExtremeCloud Edge:** An elastic platform for edge deployment that has been designed to host Extreme's application portfolio as scalable microservices. It can seamlessly run Extreme's entire application set across the cloud continuum.

ExtremeCloud IQ offers a range of deployment options. As your requirements change, so too can your deployment.

Deployment Type	Public Cloud	Private Cloud	ExtremeCloud Edge
Description	SaaS-based delivery of services in a public Regional Data Center (RDC)	Dedicated customer instance in public cloud	Extreme orchestration of applications in on-prem UCP cluster
Product Hosted	ExtremeCloud IQ, ExtremeCloud SD-WAN	ExtremeCloud IQ	ExtremeCloud IQ, ExtremeCloud SD-WAN
Deployment Options	AWS, Azure, or GCP	AWS, Azure, or GCP	UCP Cluster On-Premises
Application Management	Extreme	Extreme	Extreme
Value / Differentiator	Simple SaaS delivery model	Data privacy and isolation	Data sovereignty and low latency performance

ExtremeCloud IQ CoPilot

The ExtremeCloud IQ CoPilot license tier is an add-on to the Pilot license tier. It includes all the capabilities of the ExtremeCloud Pilot and Navigator license tiers. CoPilot serves as more than a centralized point of management. It is a trusted digital advisor for your Extreme cloud-managed Wi-Fi networks that proactively reduces risk and provides the fastest time to the best experience. This includes advanced anomaly detection and capabilities to ensure the user experience of wireless and wired devices.

ExtremeCloud IQ Pilot

The ExtremeCloud IQ Pilot license tier streamlines every aspect of network management from deployment and maintenance to problem resolution. It includes all the capabilities of the ExtremeCloud Navigator tier and ExtremeCloud IQ Essentials. The Essentials component provides key capabilities for guest management, WIPS, and location services with associated services: ExtremeGuest, ExtremeAirDefense, and ExtremeLocation.

ExtremeGuest

ExtremeGuest is a robust and comprehensive guest engagement solution that enables managers and network operators to use analytical insights for a deeper dive into how their guest networks are utilized. For example, knowing how many customers use the guest network, how often they visit, and how much time they spend on the network are all metrics that can be measured through ExtremeGuest. Analytics of social networking behavior of customers can be used to increase patronage and expand brand exposure.

Extreme Air Defense

Extreme AirDefense simplifies the protection, monitoring and compliance of your Wireless LAN networks. Extreme AirDefense continuously safeguards the network from external threats 24x7x365 and notifies IT staff when attacks occur, enabling an immediate response. Using existing infrastructure with AirDefense, organizations can protect their air waves from unwanted behavior. It is deployed as a set of access points serving as sensors to monitor the airwaves together with this application. Sensors can be access points configured in radio share or dedicated sensing modes and can also be used as overlay security network in any environment. Sensors can be deployed as either dedicated sensors or in radio-share mode.





ExtremeLocation

Location services are crucial in helping enterprises personalize customer engagement and enhance operational efficiencies. ExtremeLocation is a resilient and scalable cloud-driven solution, that provides enterprises powerful multi-tier location services across all sites. Supporting Wi-Fi and/or BLE technologies, enterprises can monitor workflows and assets, in real-time or historically, to improve their overall operations and efficiency.

This service provides granular location accuracy resolution to support diverse industry-specific use cases. For example, retailers can track new and repeat visitors, engagement times and associates or asset locations, to provide a contextual-based personalized experience to their customers. Healthcare providers may view real-time dashboards and monitor trends of users and assets, to deliver enhanced patient care.

Your Network. Your Way. Solution Flexibility with ExtremeCloud IQ

Extreme Networks makes it easier for you to scale with value-based licensing tiers.

	ExtremeCloud™ IQ Connect	ExtremeCloud™ IQ Pilot		ExtremeCloud™ IQ CoPilot [†]
Deployment Options	 Public	 Public	 Private	 ExtremeCloud Edge
Feature Set	Free management for access points, switches, and/or routers	Advanced infrastructure management reporting and remediation tools Additional management functions for third-party and non-cloud native devices		PREMIUM LICENSE ON TOP OF PILOT: Explainable ML derived insights and intelligence; algorithmically detected anomalies
Unique Features	<ul style="list-style-type: none"> Onboarding Basic Configuration Basic Monitoring Basic Troubleshooting Maximum 10 devices, 2 network policies and 4 SSIDs 	<ul style="list-style-type: none"> Onboarding and configuration Comprehensive monitoring Application visibility Advanced topology views Troubleshooting heuristics Contextualized optimization Role based profiling Advanced 360 reporting 	<ul style="list-style-type: none"> Additional automation and security with Site Engine Comparative analytics Companion mobile app Support for OpenAPI SSH proxy Web proxy to WING Controller Web proxy to Extreme Campus Controller 	<ul style="list-style-type: none"> Digital Twin Wired/Wireless AIOps Anomaly detection Explainable ML Remediation recommendations Automated GTAC support Client experience

[†] Only available for cloud-native devices

Available only for cloud-native devices

- **ExtremeCloud IQ Connect** is our base level tier. It provides subscription-free cloud management for supported devices, enabling organizations to deploy enterprise-grade connectivity with basic network management. Adding additional license tiers is simple and seamless.
- **ExtremeCloud IQ Navigator** is for organizations that have deployed the ExtremeCloud IQ Controller based solution. It provides enhanced policy enforcement, visibility, reporting, and advanced configurations. Navigator delivers configuration and management of WiNG infrastructure systems at scale including advanced policy, advanced segmentation, advanced SSH, etc.
- **ExtremeCloud IQ Pilot** is the primary deployment mode for ExtremeCloud IQ. It is for organizations that require enhanced policy enforcement, visibility, reporting, and advanced configurations. Pilot delivers configuration and management of infrastructure devices at scale including advanced policy, advanced segmentation, advanced troubleshooting, advanced guest, advanced SSH, etc.
- **ExtremeCloud IQ CoPilot** is an AIOps solution that unlocks additional explainable ML. It features device simulation capabilities with Networking's first Digital Twin. CoPilot constantly scans, compares, and computes network data to alert IT Administrators and recommend actions to mitigate issues or anomalies before they result in a disruption of service. This simplifies and facilitates troubleshooting and customer resolution so Network Administrators can spend less time fixing the network and more time on essential activities. CoPilot simplifies and facilitates troubleshooting and customer resolution, allowing IT operations teams to become more data driven and proactive.

Product Specifications

Simplified Deployment

- Customer self-service sign-up
- Guided workflow for network policy deployment
- API-based integration with leading third-party RF planning applications
- Devices automatically connect to ExtremeCloud IQ for provisioning
- Devices auto-provision with network policy and firmware updates
- QR and bar code onboarding via XIQ Mobile Companion app for iOS and Android based devices

- Mobile Companion app also supports installation photography, validation, and reporting

Centralized Configuration

- Guest Access functionality
- Device templates for switches, routers and APs
- APs and Routers act as RADIUS server or RADIUS proxy, and as DHCP server
- Centralized view of all configuration objects
- Bulk edit device properties
- Schedule firmware upgrades
- 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)

Centralized Policy Management

- Device classification by location and time zone
- Customer application definition
- Client classification 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

- ExtremeCloud IQ cloud platform conforms to ISO/ IEC 27017 and is certified by DQS to ISO/IEC 27001 and ISO/IEC 27701 by the International Standards Organization (ISO)
- CSA STAR certified
- Role-based access control
- No customer data traverses ExtremeCloud network
- Restricts to traffic to enterprise data
- 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

- 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
- Enhanced retention of historical data for monitoring and reporting usage
- Interactive Network Summary Report with easy sharing
- Savable contextual filters by location, SSID, policy, user, profile, and client OS type

Guest Access

- Onboarding and management of visitor and employee personal devices (BYOD)
- Multiple onboarding workflows via Captive Web Portal
- Private PSK (PPSK), Enhanced Open (OWE), and PSK authentication
- Supports 3rd party and customized CWPs and cloud-based hotspot applications

Troubleshooting

- Client 360° behavioral analysis; real-time and historical network performance monitoring and optimization
- Historical troubleshooting with automatic issue detection
- Anomaly detection supported with CoPilot
- 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) or local download

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
- Alerts and event lists with historical and real-time data
- PCI DSS 3.2 compliant reporting
- Rogue AP and rogue client monitoring
- Google Maps integration and navigation with floorplan upload capability

Supported Languages

- English, German, Spanish, French, Italian, Japanese, Korean, Portuguese, 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
- Scheduled backups
- 24x7 monitoring warranty

Security and Operation

- Accounts are password protected and accessed via secure SSL
- Management traffic is encrypted and restricted using HTTPS and industry-proven CAPWAP protocol protected by DTLS
- Out-of-band operation ensures no customer data traverses Extreme's Cloud Services
- Single-Sign-On (SSO) to ExtremeCloud IQ
- 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 IQ roles and permissions to different administrators
- VAR and partner management capabilities including account provisioning and maintenance
- ExtremeCloud IQ connectivity does not impact network operations servicing end users

Ordering Information

ExtremeCloud IQ Subscriptions

Category	Model Number	Model Description
ExtremeCloud IQ Pilot Subscription	XIQ-PIL-S-C-EW	ExtremeCloud IQ Pilot SaaS Subscription and EW SaaS Support for one (1) device (1 year).
ExtremeCloud IQ Pilot Subscription	XIQ-PIL-S-C-PWP	ExtremeCloud IQ Pilot SaaS Subscription and PWP SaaS Support for one (1) device (1 year).
ExtremeCloud IQ Pilot On-Prem Software	XIQ-PIL-VA-DL	ExtremeCloud IQ Pilot SW, delivered via download. Can be used with XIQ On-Premises Subscription SKU or XIQ Perpetual SKUs. One time buy.
ExtremeCloud IQ Navigator Subscription	XIQ-NAV-S-C-EW	ExtremeCloud IQ Navigator SaaS Subscription EW SaaS Support for one (1) device (1 year).
ExtremeCloud IQ Navigator Subscription	XIQ-NAV-S-C-PWP	ExtremeCloud IQ Navigator SaaS Subscription PWP SaaS Support for one (1) device (1 year).

ExtremeCloud IQ AIOps Subscriptions

Category	Model Number	Model Description
ExtremeCloud IQ CoPilot Subscription	XIQ-COPILOT-S- C-EW	ExtremeCloud IQ CoPilot SaaS Subscription and EW SaaS Support per device, per year (Requires active XIQ Pilot SaaS Subscription)
ExtremeCloud IQ CoPilot Subscription	XIQ-COPILOT-S- C-PWP	ExtremeCloud IQ CoPilot SaaS Subscription and PWP SaaS Support per device, per year (Requires active XIQ Pilot SaaS Subscription)

Other Subscriptions

Category	Model Number	Model Description
ExtremeCloud IQ Cloud Ops	XIQ-CLOUDOPS- S-EW	Subscription for On-Premises Cloudops Software Management of Distributed Cloud installations (1year), Min 3 years. For deployments with a minimum of 1,000 and up to 10,000 managed devices.

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.

Contact your Extreme Networks account executive for more information about Extreme Networks Service and Support:
www.extremenetworks.com/support

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 your organization and provides a simple way to get 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, go to extremenetworks.com/support/policies.

Additional Information

For additional technical information on ExtremeCloud IQ, go to extremenetworks.com/extremecloud-iq.



©2023 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. 17aug23