



The Value of Cloud Managed Networking

Given the higher performance, ease of use, reliability, and operating efficiency of managing networks from the cloud, every enterprise customer should consider moving their network management to the cloud. Cloud offers speed and continuous delivery of new capabilities and provides secure environments that can handle the most risk-sensitive customers.

Here's a quick look at the problems cloud-managed networks can solve for organizations, the product features that address these problems, and how these features come together to help IT run more efficiently.

Lack of Troubleshooting Ability/Access→Faster/ Smarter Troubleshooting

Key product features:

- Real-time troubleshooting with probe messages and stage filters
- Historical and real time troubleshooting with automatic issue detection
- Help-desk optimized interface with problem summary and suggested remedy
- Ability to troubleshoot and resolve issues remotely

- Less time spent analyzing data to find issues
- Streamlined problem resolution with recommended workflow makes resolving issues much easier
- Faster time to resolution with less network disruption means happier users
- Business driver: Improve operating efficiency, reduce risk, enhance customer experience

Selected Client	9CF48E60	CAB21						
Troubleshooting Duration	30 minutes	2 hours 4 h	ours 8 hours	24 hours				lour 4 Ho
Please select up to 10 acc	ess points to	begin troublesho	oting.					
Select Devices (0 Selected)								
				-				
Y							Q	
		Mode	ALL	-	Status All	-		16:00
en	🗖 St	atus Host Name	IPv4 A	kddress M/	AC Address	Serial Number		
Unassigned		Store01-AP12	134.14	1.96.23 885	5BDD0C8060	0130150318016	53	
+ 🦳 Retail Demo		Store01-AP11	134.14	1.96.21 885	BDD7BAA80	0130160412316	53	
		Store01-AP13	134.14	1.96.27 885	BDD53F1C0	0130151210148	16	
m		Store01-AP5	10.15	5.10.6 348	35842AE700	0630190610032	21	
		Store01-AP4	10.00	5.10.5 348	35842ADC80	0630190610027	10	
ECT								

Hands-on/Complex Deployment (Not Enough Hours in the Day!) \rightarrow Efficient On-boarding and Configuration

Key product features:

- Customer self-service sign-up for cloud application
- Planning tools: get a complete inventory of your devices, bandwidth usage, client models, and applications to plan for the future
- Guided workflow for infrastructure device onboarding and network policy configuration and deployment
- On-screen step-by-step guided configuration
- Devices auto-provision with network policy and firmware updates if desired
- Zero on-site support; no truck rolls required

- Faster time from purchase to implementation
- Ability to deploy more rapidly with less IT intervention leading to a quick ROI
- Less disruption for users
- Less hours required from IT, more time to spend on other issues and needs
- Intuitive workflows = sophisticated yet simplified configuration = better network performance
- Business driver: drive your topline, improve operating efficiency, enhance customer experience

🔁 Extreme	Add Devices		0						
	STEP 1: ADD DEVICES STEP 2: ASSIGN LOCATION	Device Type DEVICES O Real O Simulated							
ADD NETWORK	ORK STEP 3: ASSIGN BRANCH ID STEP 4: CREATE NETWORK POLICY	If you've already purchased your devices, you can add them to your network below. Otherwise, you can skip this step.	No devices added						
CSE-Mart-L	STEP 5: CONFIGURE INTERNAL SSID STEP 6: CONFIGURE GUEST SSID	Extreme-Aerohive Dell EXOS VOSS W/NG	LOCATION No location added						
4 SSIDS Igm Show CSE-Mart-Corp	STEP 7: REVIEW SUMMARY	Please enter the serial numbers of your Extreme - Aerohive devices	NETWORK						
CSE-Mart-IoT 6 DEVICE TEMPLAT ATOM SR_2204P		Externe Networks - Aerothve Senial numbers Example: 02501705210101 Senial Yumbers (Lepanded by a comma)	No policy added						
CSE-Mart-F		Import hom CSV any this Londe ID Choose all for oring directly here Choose Choo							
3 SSIDS I Stow CSE-Mart-PPSK-Reg CSE-Mart-Empkyee-									
2 DEVICE TEMPLAT ATOM AP_150W									
ADD NETW									
	reenshot		Skip Next Finish						

Dumb Network \rightarrow Smart Network That Collects Data and Provides Smarter Insights

Key product features:

- 5+ petabytes of customer network device data gathered, organized, analyzed, and "learned from" daily
- Comparative analytics provide context for networking benchmarks: easy to compare your devices vs. others in your network/deployment as well as anonymously with other customers in the similar industry
- Network 360, Client 360, Device 360
- High volume of data is available/storable for ML to help automate processes using AI

- Organized data = information = knowledge = intelligence
- Machine learning and artificial intelligence technologies analyze and interpret data and turn it into actionable business and IT insights
 - Example: predict when an AP is likely to fail, replace it before it disrupts network connectivity
- Business driver: drive your topline, improve operating efficiency, reduce risk, enhance customer experience



Lack of Visibility→Application Visibility and Control

Key product features:

- Layer 2-7 application visibility and control
- Tracking individual/clients/applications/infrastructure devices
- Client and device list with rich utilities and drill-down capability

How this benefits IT:

- Opportunity for advanced insight into network activity and client capabilities leading to more advanced configuration capabilities and performance metrics
- More control over network usage and utilization insures that business critical initiatives receive top priority to increase ROI
- The ability to pinpoint problems and resolve quickly
- Business driver: improve operating efficiency, enhance customer experience



Onsite Management Only→Manage Anywhere

Key product features:

- Remote access
- Centralized management and visibility of distributed locations
- Single pane of glass from network edge to core

- IT personnel not required at each site
- Issues at any location can be addressed remotely
- Performance of different locations can be compared and analyzed
- Business driver: improve operating efficiency, reduce risk, enhance customer experience



Inefficient Support or Lack of Support Access \rightarrow Better Support

Key product features:

• Dedicated helpdesk user role with access to streamline and log relevant information

How this benefits IT:

- Remotely access network to solve issues in real-time
- Mark issues resolved or escalate with email notifications
- IT personnel not required at each site, saving cost
- Less hours required for IT support means more time to spend on other issues and needs
- Business driver: improve operating efficiency, enhance customer experience

Association		0	Authentication		1	Networking	
owing All Issues fro	m Tue (Jun 9, 2020) 19:0	8 to Wed (Jun 1	0, 2020) 19:08	0			
TROUBLESHOOT SELE	TROUBLESHOO	OT ANY CLIENT	TAKE ACTIO	N			L DOWNLOAD
CLEAR FILTER		AC Address	۲) Issue T	pe 👻 Issue Status	*	Show User Sessions	
Status					Extreme Notworks Device		
3 🕴		1063C8F77779	Authentication	PPSK Rejected by Guest Access	Store23- RSCH1	>> Store23	From 2020-06-10 18:03:38 - to 2020- 06-10 18:08:16
2		1063C8F77779	Authentication	PPSK Rejected by Guest Access	Store23- RSCH1	>> Store23	From 2020-06-10 17:00:08 - to 2020- 06-10 17:02:17
0		1063C8F77779	Authentication	PPSK Rejected by Guest Access	Store23- BSCH1	>> Store23	2020-08-10 16:57:59
3		1063C8F77779	Authentication	PPSK Rejected by Guest Access	Store23- RSCH1	>> Store23	From 2020-06-10 15:53:25 - to 2020- 06-10 15:57:43
3		1063C8F77779	Authentication	PPSK Rejected by Guest Access	Store23- RSCH1	>> Store23	From 2020-06-10 14:50:31 - to 2020- 06-10 14:52:42
3		1063C8F77779	Authentication	PPSK Rejected by Guest Access	Store23- RSCH1	>> Store23	From 2020-06-10 13:48:10 - to 2020- 06-10 13:50:21
3		1063C8F77779	Authentication	PPSK Rejected by Guest Access	Store23- RSCH1	>> Store23	From 2020-06-10 12:42:53 - to 2020- 06-10 12:47:11
3		1063C8F77779	Authentication	PPSK Rejected by Guest Access	Store23- RSCH1	>> Store23	From 2020-06-10 11:36:55 - to 2020- 06-10 11:41:13
· 3 🕕		1063C8F77779	Authentication	PPSK Rejected by Guest Access	Store23- RSCH1	>> Store23	From 2020-06-10 10:31:40 - to 2020- 06-10 10:34:55
Screenshot		1063C8F77779	Authentication	PPSK Rejected by Guest Access	Store23- BSCH1	>> Store23	From 2020-06-10 09:26:44 - to 2020- 06-10 09:31:02

Delays in Bug Fixes or a New Feature Release \rightarrow Continuous Delivery

Key product features:

- Continuous innovation and rapid feature velocity, including bi-weekly bug fixes and new feature enhancement without affecting the network
- Automatically scheduled backups

How this benefits IT:

- Ensures the most up-to-date technology to keep the network running efficiently
- No disruption to users
- · Continuous updates mean better business outcomes
- Business driver: improve operating efficiency, reduce risk, enhance customer experience

••	Extr	emeCloud IQ Pilot
≙ ≎>	MONITOR	New In ExtremeCloud IQ
*>	RK 360 P	This page is updated to include brief descriptions of recently added ExtremeCloud IQ features and enhancements.
ili >	NETWORK 360	New Features and Enhancements
ê	- STHBIGHTS -	To see the new features and enhancements in ExtremeCloud IQ, visit <u>Learning What's New</u> .
	INS	Find Information
	Σ	Extreme Networks provides easy access to technical information for ExtremeCloud IQ. The main page for ExtremeCloud IQ documents is the Documentation Portal. Use the following links to obtain related information quickly:
		ExtremeCloud IQ: Release Information for the current release of ExtremeCloud IQ, with links to previous release information
		Release Notes: Release Notes for ExtremeCloud IQ, IQ Engine, IQAgent, and FASTPATH operating system used on some switches
		Supported Hardware: Hardware and accessory information for devices that are supported by ExtremeCloud IQ
		CLI Reference Guides: HTML-formatled CLI reference guides for devices currently supported by ExtremeCloud IQ
		Legacy Guides: PDF-formatted documents for legacy features and deployment guides
		MIB Files: Management Information Base files for a select set of hardware devices

Network Downtime for Upgrades→Containerized Microservices

Key product features:

- Dynamically deploy and adjust the management application to right-size services with cloud portability and flexibility
- Restart specific services without affecting other services
- Only management plane traffic is sent to cloud, your data flows directly to the destination
- Your network continues to operate even if the connection to XIQ is momentarily lost

How this benefits IT:

- No nines uptime (100% uptime)
- · Connectivity does not impact network operations servicing end-users
- Ensures most up-to-date technology to keep the network running as efficient as it can
- Business driver: drive your topline, improve operating efficiency, reduce risk, enhance customer experience

Lack of Security → Security Without Complexity

Key product features:

- Geographically distributed data centers
- ISO27001 certified plus international compliance/data privacy compliance
- Private PSK to replicate 802.1X level security with less complexity and overhead

How this benefits IT:

- Proven in the most risk-sensitive environments
- Less hours required to focus on security means more time for other network issues and needs
- Automatic compliance validation means IT doesn't have to do the timeconsuming, manual work
- Visibility of applications, users, and devices enables IT to monitor the entire network efficiently
- Easy to apply the latest security patches across all deployments
- Business driver: reduce risk, enhance customer experience



One Size Fits all Offering \rightarrow Grow as You go

Key product features:

- Cloud agnostic
- Device/license portability
- Infinite scalability

- IT has maximum flexibility to create the network they need, as they need it
- Scale up or down with business needs (no need to worry about the scaling and upkeep of a wireless LAN controller)
- No waste of time, resources, or budget
- Ability to plan and budget for future network needs
- Business driver: drive your topline, improve operating efficiency



Lack of Interoperability With Third Party Systems→Hybrid/ Multi-cloud/Gated Garden in Cloud/APIs

Key product features:

• Fully RESTful API ecosystem

How this benefits IT:

- Pull and process data with a variety of different tools or applications to meet your business needs
- Business driver: drive your topline, enhance customer experience

Lack of Management Unanimity \rightarrow Guaranteed Policy Consistency and Access

Key product features:

- Cloud config groups
- Templates
- Global view of deployments
- Upcoming third party device management (via Extreme Site Engine)

How this benefits IT:

- Global network policy can be pushed out enterprise-wide from one location, or customized per location, depending on customers' needs
- When a threat is detected anywhere, IT can quickly patch everywhere with one push guaranteeing security policy consistency
- Business driver: drive your topline, improve operating efficiency, reduce risk, enhance customer experience

- Ex	tremeClo	oud IQ Pilo	t				Q 🕓 🏚 🏧	Alexandra Gater Retall Demo
e s	Network	Policies > CSE	Mar > Deploy Policy					
	POL	JCY DETAILS	WIRELESS NETWORKS	DEVICE TEMPLATES	ROUTER SETTINGS	ADDITIONAL SETTINGS	DEPLOY POLICY	
NET V	T . 0	Apply th	e network policy to	selected devices				
, iii		Only show dev Assigned	rices that are: Eligible Filtered					
CONFIGURE								
CONF U		STATUS	DEVICE NAME	DEVICE MODEL	IP ADDRESS	MAC ADDRESS	SERIAL # / SERVICE TAG	LAST UPDATED ON
		- •	StoreOI-AP2	AP630	10.15.10.4	3485842AD880	06301906100263	2020-08-28 07:58:08
			StoreOl-Router1	XR600P	10.15.10.1	F4EAB52E3AC0	60019052100019	2020-06-23 07:37:10
		- •	StoreOI-AP3	AP630	10.15.10.2	3485842ADA00	06301906100269	2020-08-28 07:58.09
		🔲 📥 📋	StoreOI-SwitchO1	SR2324P	10.15.10.8	B87CF20261F8	23241812210226	2020-06-23 07.37.36
		- •	HQ-L3-VPN	VGVA	192.168.84.1	005056926F72	91019092790003	2020-06-23 07.48.55
		- 2	StoreOI-API	AP630	10.15.10.3	3485842AACOD	06301906100085	2020-08-28 07.56.58

Complex Reporting→Simplified Reporting

Key product features:

- Customizable reports
- System wide reports or individual site analytics can be pulled from one screen
- Detail needed to assess issue can be drilled into quickly
- Performance of different sites/locations can be easily compared

- Access the data you need, when you need it
- Share appropriate network data with other stakeholders outside IT= greater cohesion and visibility among teams
- Business driver: improve operating efficiency, reduce risk

•••	Ext	remeClou	ud IQ Pilot					Q
۵	STS	CONNECTION STATUS 27 Online / 12 Offline		C TOTAL APPS 31	CLIENTS	42	USERS 3	ALARMS 0
¢>	REPORTS	My Repor	ts > New Report					
*>	MANAGE -	T.	NETWORK SUMMARY	PCI DSS 3.2	WIPS HISTORY	WIFI STATISTICS SUMMARY	r	
dt >	MAN		CREATE REPORT	Time Range: Day	• 1 Hour 2 Hours 4	Hours 8 Hours 24 Hours		
•			Name Report *			Choose Format		
ê			Report-2020-9-30			O URL		
			Select Widgets			Also download raw	data in CSV format	
			Access (Default)	-				
			SELECT ALL			Recurrence of Report		
			Top Application Grou	ps	=	Once		
			✓ Top Applications	ihow Top 20 👻	≣	Dally	(
			Top Usage Users	Show Top 20 👻	≡	Weekly on Sund	day + at	
			Top Wired Show T	op 20 =	≡			
			Unique Clients 2.4	GHz 👻	≡	Share With		
			Top Access Points		ow Top 20 👻 📃	Enter Comma-Separa Addresses	ted Email	
2			Maximum Number of	Simultaneous Connectio	ons 24 GHz =	-		

Cloud Based Support for Multiple Customer→Hierarchical Management on Single Pane of Glass

Key product features:

- Single login to service multiple customers
- Utilize common templates and network policies across customers, or deploy unique policies
- Pooled licensing

How this benefits IT:

- Less overhead
- Streamlined management and visibility= less time doing mundane tasks
- Business driver: drive your topline, improve operating efficiency, enhance customer experience

Additional Values ExtremeCloud IQ Brings to Organizations:

Attractive pricing

• Flexible and attractive pricing model and management tiers based on customer needs

Flexible licensing

- Licenses are portable among access points, switches, and routers; no serial number tied to an individual license
- Ability to switch on the license when deployed (term start period) and off if a customer cancels. Can use the remaining months to switch on again for another customer (MSP model).