HiveManager Public Cloud

HiveManager is an enterprise-class cloud-based management solution for enabling converged, next-generation campus networks. Providing management for Dell EMC Networking switches as well as Dell EMC and Aerohive wireless access points (APs). HiveManager sets a new standard for simplicity and flexibility in unified networking through streamlined configuration workflows, real-time and historical monitoring, simplified troubleshooting and integrated RF planner tools.

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

ACS 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.

HiveManager is bundled with the Dell EMC and Aerohive access points with basic features enabled and is free for the lifetime of the device. The Dell EMC HiveManager licenses unlock a slew of advanced features and capabilities that enhance network management, security and visibility, as well as management of Dell EMC Networking switches.

Key Features of HiveManager

Auto-Provisioning: With zero-touch deployment, automatically apply a configuration policy, upgrade software and more.

Dashboard: Intuitive, visual dashboard with contextual filters for a comprehensive overview of network assets, application and data usage as well as user activity

Comparative Analytics: Anonymous compare of operational and performance-based metrics to those of other organizations of a similar size and vertical.

Application Visibility and Control: Visibility and control of application usage on the network, for professional and recreational applications and network services.

Monitoring: Real-time and historical view of devices, clients, alarms and events with automated out-of-band alerting.

Simplified Deployment: Guided workflows for creating and deploying network policies, with optional advanced configuration.

Guest Access: Flexible onboarding and management options for visitor and BYOD devices including intuitive Captive Web Portals, Social Login and PPSK.

Network Health: Real-time and historical view of client and device health with built-in remediation tools.

Deployment Scalability: Centrally manage over 1 million network connected devices including access points and switches.

Troubleshooting: Help-desk optimized interface to triage historical and real-time client problems with actionable data to reduce escalations and provide a better end-user experience.

Wired and Wireless Management: Single pane-of-glass management and visibility of wired and wireless.

Multi-tenancy: Allows MSPs and large corporations to efficiently manage multiple customers or subsidiary accounts from one master account with VHM switching or Hierarchical Management (HHM).

IoT Management: Securely connect IoT devices with AES encryption using Aerohive's unique Private Pre-Shared Key (PPSK).

Open APIs: A full suite of REST APIs and webhooks including: monitoring, identity, presence and location, configuration.

Features

Optional Free Cloud Based Management

HiveManager is available completely free and optimized for those who want to use enterprise-grade Dell EMC and Aerohive APs to deliver a streamlined user experience and management simplicity but operate on a limited budget. Using the optional Dell EMC HiveManager license offers the full capabilities of HiveManager with the application visibility and QoS features and comprehensive management of APs and Dell EMC Networking switches, security, policy, analytics and troubleshooting requirements, as well as better support services.

CLOUD-MANAGED ENTERPRISE WI-FI*	ADVANCED IT MANAGEMENT SUITE*	
Enterprise-class connectivity	Dell EMC Networking switch management	Dell technical support for HiveManager
Unied Cloud Network Management	360º Device & Client Monitoring	Customizable L7 Firewall
Auto-Provisioning Tools	Historical Dashboard & Troubleshooting	Rogue Detection and PCI Compliance
Network Device & Client Monitoring	Aerohive Private Pre-Shared Key	Role-Based Access Controls
RF Planning	Application Visibility and Control	Advanced Quality of Service
Guided Network Conguration	Real-Time Heat Maps	Advanced Switch & Router Management
802.1X and PSK Secured Networks	VPN and GRE Tunneling	Comparative Analytics
Forum based support	Private Cloud / On-Premises	Spectrum Analysis
	Multiple Network Policies	Integrated Presence and Location

* Dell EMC HiveManager Licenses enable the non-basic features, comprehensive Dell ProSupport for Software, and Dell switch management

Distributed Control

HiveManager is a Network Management System (NMS). It leverages Aerohive's unique distributed control architecture (built into APs) and eliminates the needs for centralized network controllers. The control and data planes operate at the edge. With this **out-of-band control plane**, no control or data plane information traverses ACS.

As a result, network devices can operate without having to connect to HiveManager. This is essential to support continous operation in the event the WAN connection to the HiveManager Cloud is interrupted. It also enables HiveManager to meet stringent regulatory restrictions and achieve optimal network performance.


MGMT
CONTROL
DATA

DISTRUBUTED CONTROL
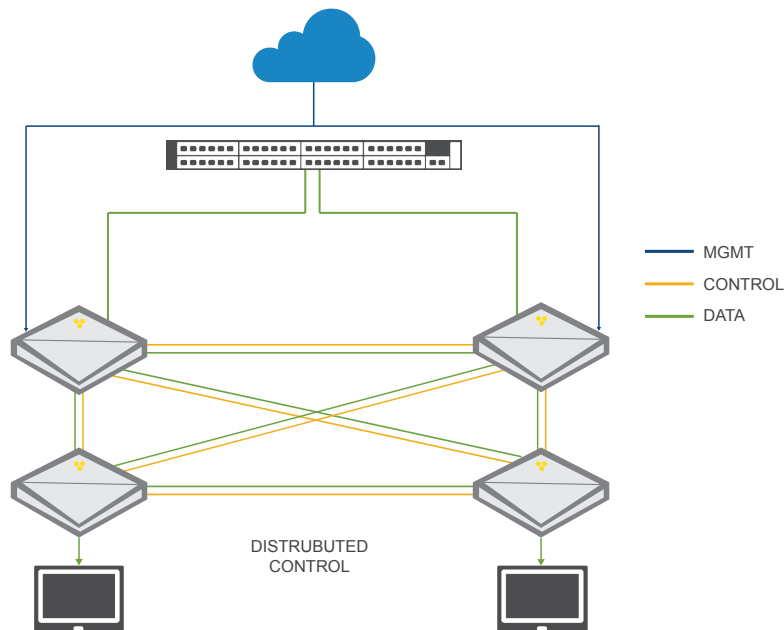
Security and Operation

- 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 Aerohive's Cloud Services (ACS)

- Single-Sign-On (SSO) to HiveManager Public Cloud 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 HiveManager roles and permissions to different administrators

- VAR and partner management capabilities including account provisioning and maintenance

- HiveManager Cloud connectivity does not impact network operations servicing end-users

- 99.99% uptime, excluding maintenance windows

Intuitive Interface
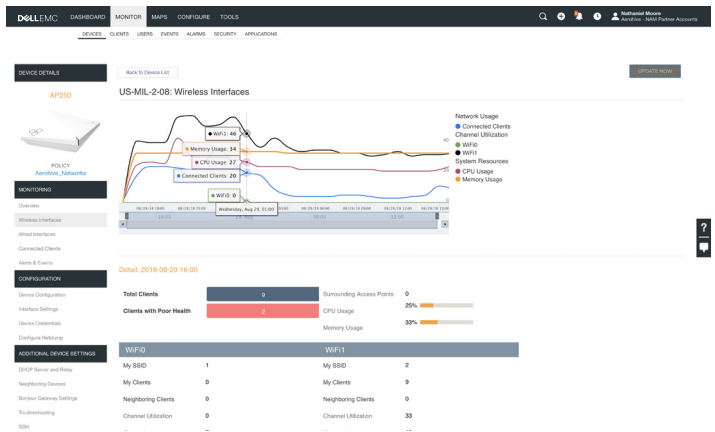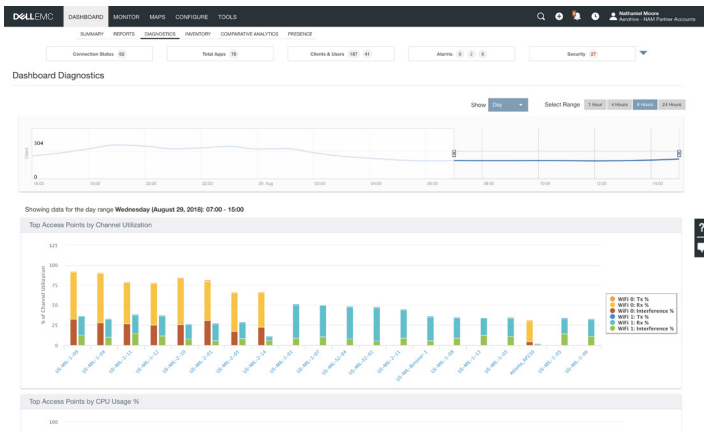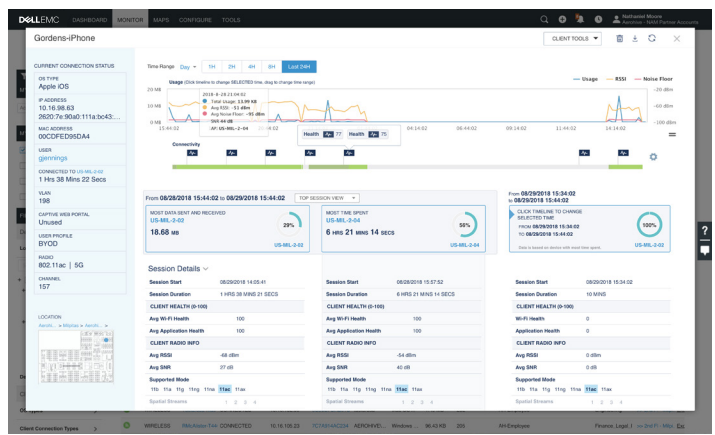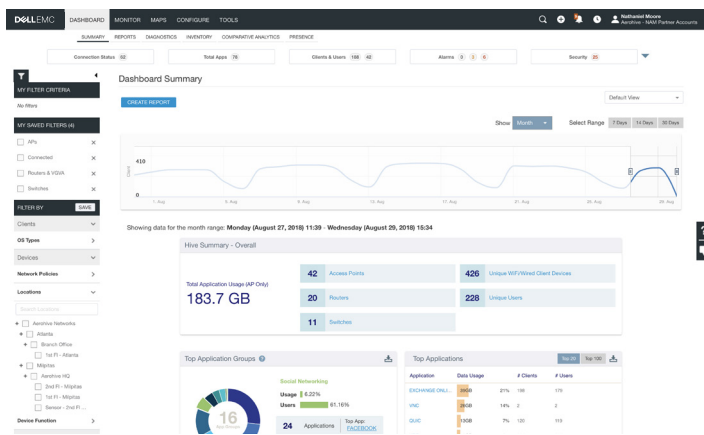
Product Specifications

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
- Ability to swap simulated APs with real APs on RF planner map
- Devices automatically connect to HiveManager for provisioning
- Devices auto-provision with network policy and firmware udpates

Centralized Configuration

- Guest Access functionality
- Device templates for switches, routers and APs
- Aerohive device as RADIUS server or RADIUS proxy, and as DHCP server
- Centralized view of all configuraiton objects
- Ability to bulk edit device properties
- Ability to schedule firmware upgrade
- Command Line Interface (CLI) access to Aerohive devices
- Support for select Dell N-Series switches
- Active directory/LDAP
- IPv6 support
- Syslog and SNMP server configuration
- Auto-provisioning
- Configuration audit, backup, restore, import and export
- Support for Aerohive's VPN gateway (VG-VA) supported by Aerohive
- 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 Aerohive's network
- SSO for HiveManager 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 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

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

Product Specifications

- 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

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

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
- 99.99% Uptime SLA (excluding maintainance windows)
- Scheduled backups
- 24x7 monitoring

Supported Dell EMC Networking switches

These switches are supported in HiveManager, including stacked switches within each family:

- N1100-ON
- N1500
- N2000
- N2128PX-ON
- N3000
- N3000E-ON
- N3132PX-ON

Ordering Information

HiveManager Public Cloud - SKUs

SKU	DESCRIPTION
210-AHTO	HiveManager subscription license for Access Point (1/3/5 Year options)
210-AHTP	HiveManager subscription license for Dell switch (1/3/5 Year options)

Warranty, Support and Services

Select products are backed by a Dell EMC Extended Limited Hardware Warranty (ELW). For warranty terms Go to Dell.com/LifetimeWarranty.

When an Access Point is managed with an active Dell HiveManager License, it includes ProSupport for Software HiveManager coverage. Additional Access Point hardware and software support is available with the Dell EMC ProSupport Enterprise Suite.

Installation and configuration services are also available with the Dell EMC ProDeploy Enterprise Suite

Learn more at DellEMC.com/Services

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