DATA SHEET

ARUBA CLEARPASS POLICY MANAGER

The most advanced Secure NAC platform available

Aruba’s ClearPass Policy Manager provides role- and device-based network access control for employees, contractors and guests across any multivendor wired, wireless and VPN infrastructure.

With a built-in context-based policy engine, RADIUS, TACACS+ protocol support, device profiling and comprehensive posture assessment, onboarding, and guest access options, ClearPass is unrivaled as a foundation for network security in any organization.

For wider security coverage, using firewalls, EMM and other existing solutions, ClearPass Exchange allows for automated threat protection and workflows to third-party security and IT systems that previously required manual IT intervention.

In addition, ClearPass supports secure self-service capabilities for end user convenience. Users can securely configure their own devices for enterprise use or Internet access. Aruba wireless customers can provide registration of AirPlay-, AirPrint-, DLNA-, and UPnP-enabled devices for sharing.

The result is a comprehensive and scalable policy management platform that goes beyond traditional AAA solutions to deliver extensive enforcement capabilities for IT-owned and bring-your-own-device (BYOD) security requirements.

KEY FEATURES

- Role-based network access enforcement for multivendor Wi-Fi, wired and VPN networks.
- Industry-leading performance, scalability, high availability and load balancing.
- Intuitive policy configuration templates and visibility troubleshooting tools.
- Supports multiple authentication/authorization sources (AD, LDAP, SQL db) within one service.
- Self-service device onboarding with built-in certificate authority (CA) for BYOD
- Guest access with extensive customization, branding and sponsor-based approvals.
- Supports NAC and EMM/MDM integration for mobile device assessments.
- Comprehensive integration with third party systems such as SIEM, Internet security and EMM/MDM.
- Single sign-on (SSO) and Aruba Auto Sign-On support via SAML v2.0.
- Advanced reporting of all user valid authentications and failures.
- Built-in profiling using DHCP and TCP fingerprinting.
- Hardware and virtual support for ESXi and Hyper-V appliances.
- Automatic cluster upgrade.
- Advanced threat protection ingress engine
- Network access device attribute discovery

THE CLEARPASS DIFFERENCE

The ClearPass Policy Manager is the only policy platform that centrally enforces all aspects of enterprise-grade access security for any industry. Granular policy enforcement is based on a user’s role, device type and role, authentication method, EMM/MDM attributes, device health, traffic patterns, location, and time-of-day.

ClearPass offers extensive multivendor wireless, wired and VPN infrastructure support which enables IT to easily rollout secure mobility policies across any environment.

Deployment scalability supports tens of thousands of devices and authentications which surpasses the capabilities offered by legacy AAA solutions. Options exist for small to large organizations, from local to distributed environments.
ADVANCED REPORTING AND ALERTING WITH INSIGHT
Policy Manager includes advanced reporting capabilities via customizable data – authentications, profiled devices, guest data, onboarded devices, and endpoint health, all in an at-a-glance dashboard. Also includes granular alert capabilities.

ADVANCED POLICY MANAGEMENT
Enforcement and visibility for wired and wireless
With ClearPass, organizations can deploy wireless using standards-based 802.1X enforcement for strong authentication. ClearPass also offers a way to create non-802.1X policies on wired networks with OnConnect – for those organizations not ready to go full 802.1X and AAA throughout their wired infrastructure. ClearPass allows for a hybrid approach to enable IT to gain insights about all devices – computers, smartphones and IoT – accessing the network.

Concurrent authentication methods can be used to support a variety of use-cases. It also includes support for multi-factor authentication based on login times, posture checks, and other context such as new user, new device, and more.

Attributes from multiple identity stores such as Microsoft Active Directory, LDAP-compliant directory, ODBC-compliant SQL database, token servers and internal databases across domains can be used within a single policy for fine-grained control.

Contextual data from these profiled devices allows for IT to define what devices can access either the wired, VPN, or wireless network.

Device profile changes are dynamically used to modify authorization privileges. For example, if a Windows laptop appears as a printer, ClearPass policies can automatically revoke or deny access.

Secure device configuration of personal devices
ClearPass Onboard provides automated provisioning of any Windows, Mac OS X, iOS, Android, Chromebook, and Ubuntu devices via a user driven self-guided portal. Required SSIDs, 802.1X settings and security certificates are automatically configured on authorized devices.

Customizable visitor management
ClearPass Guest simplifies workflow processes so that receptionists, employees and other non-IT staff can create temporary guest accounts for secure Wi-Fi and wired Internet access. Self-registration, sponsor and bulk credential creation supports any guest access need – enterprise, retail, education, large public venue.

Device health checks
ClearPass OnGuard, leverages persistent and dissolvable agents, to perform advanced endpoint posture assessments over wireless, wired and VPN connections. OnGuard health-check capabilities ensures compliance and network safeguards before devices connect.

ADDITIONAL POLICY MANAGEMENT CAPABILITIES
Integrate with security and workflow systems
ClearPass Exchange interoperability includes REST-based APIs and forwarding of syslog data flows both from and to ClearPass on demand that can be used to facilitate workflows with MDM, SIEM, firewalls PMS, call centers, admission systems and more. Context is shared between each component for end-to-end policy enforcement and visibility.

Connect and work apps are good to go
ClearPass Auto Sign-On capabilities make it infinitely easy to access work apps on mobile devices. A valid network authentication automatically connects users to enterprise mobile apps so they can get right to work.

Single sign-on (SSO) support works with Ping, Okta and other identity management tools to improve the user experience to SAML 2.0-based applications.
**SPECIFICATIONS**

**ClearPass Policy Manager Appliances**

ClearPass Policy Manager is available as hardware or a virtual appliance that supports 500, 5,000 and 25,000 authenticating devices. Virtual appliances are supported on VMware ESX/i and Microsoft Hyper-V.

- ESX 4.0, ESXi 4.1, up to 6.0
- Hyper-V 2012 R2 and Windows 2012 R2 Enterprise

Virtual appliances, as well as hardware appliances, can be deployed within an active cluster to increase scalability and redundancy.

**Platform**

- Built-in AAA services – RADIUS, TACACS+ and Kerberos
- Web, 802.1X, non-802.1X, RADIUS authentication and authorization
- Advanced reporting, analytics and troubleshooting tools
- External captive portal redirect to multivendor equipment
- Interactive policy simulation and monitor mode utilities
- Multiple device registration portals – Guest, Aruba AirGroup, BYOD, un-managed devices
- Deployment templates for any network type, identity store and endpoint
- Admin/Operator access security via CAC and TLS certificates
- IPSec tunnels

**Framework and protocol support**

- RADIUS, RADIUS CoA, TACACS+ and RADIUS authentication, SAML v2.0
- EAP-FAST (EAP-MSCHAPv2, EAP-GTC, EAP-TLS)
- PEAP (EAP-MSCHAPv2, EAP-GTC, EAP-TLS, EAP-PEAP-Public, EAP-PWD)
- TTLS (EAP-MSCHAPv2, EAP-GTC, EAP-TLS, EAP-MD5, PAP, CHAP)
- EAP-TLS
- PAP, CHAP, MSCHAPv1 and 2, EAP-MD5
- NAC, Microsoft NAP
- Windows machine authentication
- MAC auth
- Audit (rules based on port and vulnerability scans)
- Online Certificate Status Protocol (OCSP)
- SNMP generic MIB, SNMP private MIB
- Common Event Format (CEF), Log Event Extended Format (LEEF)
- TLS 1.2

**Supported identity stores**

- Microsoft Active Directory
- RADIUS
- Any LDAP compliant directory
- Any ODBC-compliant SQL server
- Token servers
- Built-in SQL store, static hosts list
- Kerberos

**RFC standards**

- 2246, 2248, 2548, 2759, 2865, 2866, 2869, 2882, 3079, 3576, 3579, 3580, 3748, 4017, 4137, 4849, 4851, 5216, 528, 7030

**Internet drafts**

- Protected EAP Versions 0 and 1, Microsoft CHAP extensions, dynamic provisioning using EAP-FAST, TACACS+

**Information assurance validations**

- FIPS 140-2 – Certificate #2577

**Profiling methods**

- DHCP, TCP, MAC OUI, ClearPass Onboard, SNMP, Cisco device sensor
<table>
<thead>
<tr>
<th></th>
<th>ClearPass 500 Appliance (JW770A)</th>
<th>ClearPass 5K Appliance (JX921A)</th>
<th>ClearPass 25K Appliance (JX920A)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>APPLIANCE SPECIFICATIONS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardware Model</td>
<td>Unicom S-1200 R4</td>
<td>HPE DL20 Gen 9</td>
<td>HPE DL360 Gen 9</td>
</tr>
<tr>
<td>CPU</td>
<td>(1) Eight Core 2.4GHz Atom C2758</td>
<td>(1) Xeon 3.5GHz E3-1240v5 with Four Cores (8 Threads)</td>
<td>(2) Xeon 2.4GHz E5-2620_V3 with Six Cores (12 Threads)</td>
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<tr>
<td>Memory</td>
<td>8 GB</td>
<td>16 GB</td>
<td>64 GB</td>
</tr>
<tr>
<td>Hard drive storage</td>
<td>(1) SATA (7.3K RPM) 1TB hard drive</td>
<td>(2) SATA (7.2K RPM) 1TB hard drives, RAID-1 controller</td>
<td>(6) SAS (10K RPM) 600GB Hot-Plug hard drives, RAID-10 controller</td>
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<tr>
<td>Out of Band Management</td>
<td>N/A</td>
<td>HPE Integrated Lights-Out (iLO) Standard</td>
<td>HPE Integrated Lights-Out (iLO) Advanced</td>
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<tr>
<td>Serial Port</td>
<td>Yes (RJ-45)</td>
<td>Yes (Virtual Serial via ILO)</td>
<td>Yes (DB-9)</td>
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<tr>
<td><strong>APPLIANCE SCALABILITY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum endpoints</td>
<td>500</td>
<td>5,000</td>
<td>25,000</td>
</tr>
<tr>
<td><strong>FORM FACTOR</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions (WxHxD)</td>
<td>17.2&quot; x 1.7&quot; x 11.3&quot;</td>
<td>17.11&quot; x 1.70&quot; x 15.05&quot;</td>
<td>17.1&quot; x 1.7&quot; x 27.5&quot;</td>
</tr>
<tr>
<td>Weight (Max Config)</td>
<td>8.5 Lbs</td>
<td>Up to 19.18 Lbs</td>
<td>Up to 33.3 Lbs</td>
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<tr>
<td><strong>POWER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power supply</td>
<td>200 watts max</td>
<td>HPE 900W AC 240VDC</td>
<td>HPE 500W Flex Slot Platinum</td>
</tr>
<tr>
<td>Power Redundancy</td>
<td>N/A</td>
<td>Optional</td>
<td>Optional</td>
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<tr>
<td>AC input voltage</td>
<td>100/240 VAC auto-selecting</td>
<td>100/240 VAC auto-selecting</td>
<td>100/240 VAC auto-selecting</td>
</tr>
<tr>
<td>AC input frequency</td>
<td>50/60 Hz auto-selecting</td>
<td>50/60 Hz auto-selecting</td>
<td>50/60 Hz auto-selecting</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>5º C to 35º C (41º F to 95º F)</td>
<td>10º to 35ºC (50º to 95ºF)</td>
<td>10º C to 35º C (50º F to 95º F)</td>
</tr>
<tr>
<td>Operating vibration</td>
<td>0.25 G at 5 Hz to 200 Hz for 15 minutes</td>
<td>Random vibration at 0.000075 G²/Hz, 10Hz to 300Hz, (0.15 G’s nominal)</td>
<td>Random vibration at 0.000075 G²/Hz, 10Hz to 300Hz, (0.15 G’s nominal)</td>
</tr>
<tr>
<td>Operating shock</td>
<td>1 shock pulse of 20 G for up to 2.5 ms</td>
<td>2 G’s</td>
<td>2 G’s</td>
</tr>
<tr>
<td>Operating altitude</td>
<td>-16 m to 3,048 m (-50 ft to 10,000 ft)</td>
<td>3,050 m (10,000 ft).</td>
<td>3,050 m (10,000 ft)</td>
</tr>
</tbody>
</table>

* The HPE 900W Redundant Power Supply supports 100VAC to 240VAC and also supports 240VDC.
**ORDERING GUIDANCE**

Ordering the ClearPass Policy Manager involves the following steps:

1. Determine the number of authenticated endpoints/devices in your environment. Additionally, select optional functionality, such as guests per day, total BYO devices being configured for enterprise use, and total number of computers requiring health checks.

2. Choose the appropriate platform (either virtual or hardware appliance) sized to accommodate the total number of devices and guests that will require authentication for your deployment.

**NOTE:** Virtual appliances should be provided the same resources to match hardware appliance specifications.

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### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hardware Appliances</strong></td>
<td></td>
</tr>
<tr>
<td>JW770A</td>
<td>Aruba ClearPass 500 Unique Endpoints with 25 Enterprise Licenses V2 HW Appliance</td>
</tr>
<tr>
<td>JX921A</td>
<td>Aruba ClearPass DL20 5000 Unique Endpoint and 25 Enterprise Licenses Hardware Appliance</td>
</tr>
<tr>
<td>JX920A</td>
<td>Aruba ClearPass DL360 25000 Unique Endpoint and 25 Enterprise Licenses Hardware Appliance</td>
</tr>
<tr>
<td><strong>Virtual Appliances</strong></td>
<td></td>
</tr>
<tr>
<td>JW335AAE</td>
<td>Aruba ClearPass 500 Unique Endpoints with 25 Enterprise Licenses Virtual Appliance E-LTU</td>
</tr>
<tr>
<td>JW336AAE</td>
<td>Aruba ClearPass 5000 Unique Endpoints with 25 Enterprise Licenses Virtual Appliance E-LTU</td>
</tr>
<tr>
<td>JW337AAE</td>
<td>Aruba ClearPass 25000 Unique Endpoints with 25 Enterprise Licenses Virtual Appliance E-LTU</td>
</tr>
<tr>
<td><strong>Power Supplies</strong></td>
<td></td>
</tr>
<tr>
<td>JX923A</td>
<td>Aruba ClearPass DL20 Spare Power Supply</td>
</tr>
<tr>
<td>JX922A</td>
<td>Aruba ClearPass-Airwave DL360 500W Spare Power Supply</td>
</tr>
<tr>
<td><strong>Expandable application software</strong></td>
<td></td>
</tr>
<tr>
<td>ClearPass Onboard – device configuration and certificate management</td>
<td></td>
</tr>
<tr>
<td>ClearPass OnGuard – endpoint device health</td>
<td></td>
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<tr>
<td>ClearPass Guest – visitor access management</td>
<td></td>
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<tr>
<td><strong>Warranty</strong></td>
<td></td>
</tr>
<tr>
<td>Hardware</td>
<td>1 year parts/labor**</td>
</tr>
<tr>
<td>Software</td>
<td>90 days**</td>
</tr>
</tbody>
</table>

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* Expandable application software is available in the following increments: 100, 500, 1,000, 2,500, 5,000, 10,000, 25,000, 50,000 and 100,000.

** Extended with support contract