# ARUBA CLEARPASS DEVICE INSIGHT

Full-spectrum visibility and identification of network connected devices



Today's networks have become increasingly more complex, due in part to the rapid adoption of Internet of Things (IoT) devices which are often difficult to detect and manage. In order to leverage the operational efficiencies of mobile and IoT, many organizations are deploying a wide range of devices, without fully understanding the security and compliance implications.

Aruba ClearPass Device Insight provides a full-spectrum of visibility across the network by intelligently discovering and profiling all connected devices. This includes detailed device attributes such as device type, vendor, hardware version, and behavior including applications and resources accessed. This allows organizations to create more granular access policies, reduce security risks and meet key compliance requirements.

As a part of Aruba's ClearPass family of industry-leading access control solutions, ClearPass Device Insight provides the visibility needed to make better informed network access control decisions. Integration with ClearPass Policy Manager delivers comprehensive policy control and real time enforcement. This makes the visibility provided by ClearPass Device Insight actionable and increases the overall level of security and compliance for all devices connected to the network.

## FULL-SPECTRUM VISIBILITY

ClearPass Device Insight addresses the most stringent visibility requirements for the most diverse network environments. This includes the ability to broadly and accurately identify all wireless and wired devices connected to the network - from traditional IT managed devices to previously undetected IoT devices such as cameras, medical equipment and other hard to detect endpoints.

## KEY FEATURES

- · Provides full spectrum visibility of network connected devices to eliminate blind spots
- · Behavioral analysis goes beyond traditional hardware-based profiling for precise identification
- · Provides risk scoring by analyzing device vulnerability and security posture attributes
- · Utilizes advanced machine-learning to identify unknown devices and speed time-to-identification
- · Seamlessly integrates with ClearPass Policy Manager for real-time enforcement and accelerated response
- · Cloud-based solution simplifies deployment and management for faster time-to-value and cost savings

ClearPass Device Insight utilizes a unique set of both active (NMAP, WMI, SNMP, SSH) and passive discovery methods (SPAN, DHCP, NetFlow/S-flow/IPFIX) in order to discover and classify a wider range of device types. These capabilities are further enhanced through the use of deep packet inspection which provides additional context and behavioral information that can further identify difficult-to-detect devices connected to the network.

## RICH CONTEXT AND BEHAVIORAL INTELLIGENCE

By utilizing data collection and deep packet inspection techniques, ClearPass Device Insight is able to analyze the characteristics and behavioral patterns of any device and extract specific attributes for each. Some of these attributes include domain name lookup, destination IP addresses, applications accessed, and frequency of communication. These attributes can then be used to identify a device using a set of known fingerprints. If there is not a match, machine learning models are used to group unknown devices that exhibit similar characteristics.
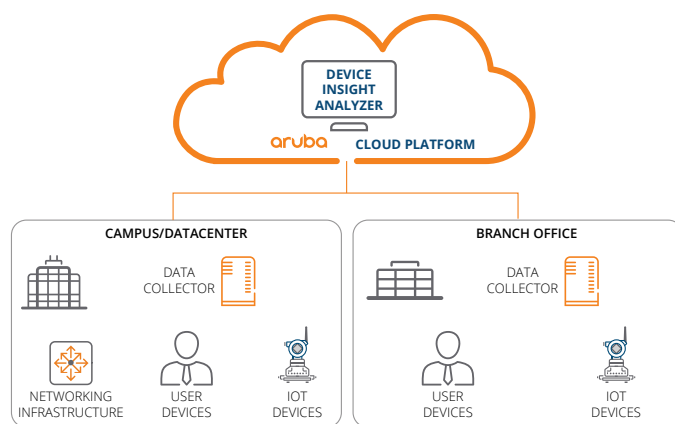


**Attributes collected on the network are sent to ClearPass Device Insight Analyzer to accurately identify connected devices.**

## EVALUATING DEVICE SECURITY POSTURE

Understanding the inherent risk of each connected device is a critical component of implementing effective security controls and reducing risk. ClearPass Device Insight provides device risk scoring that is calculated based on a number of device security attributes. These attributes include potential vulnerabilities and related CVE scoring, as well as detailed information related to what security controls are enabled on each device such as a host firewall.

## ADVANCED MACHINE LEARNING

ClearPass Device Insight analyzes device attributes including communication and behavior patterns to dynamically build clusters of similar devices. Machine learning models are used to constantly learn and update these attributes to dynamically update fingerprints and provide

classification reccomendations. ClearPass Device Insight uses crowd-sourcing technology to validate fingerprints at multiple customer sites before adding them to the Aruba classification database. This increases the precision and comprehensiveness of the classification engine.

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## SEAMLESS INTEGRATION WITH CLEARPASS POLICY MANAGER

Visibility without proper control can leave organizations open to security and compliance risks. The integration of ClearPass Device Insight with ClearPass Policy Manager provides closed loop, end-to-end access control from visibility to automated enforcement. Devices that are discovered through ClearPass Device Insight can automatically be segmented based on a given policy or even quarantined in the event they are behaving in a malicious or insecure manner. With additional visibility and actionable insight, ClearPass Device Insight can increase overall levels of security and compliance for all devices connected to the network.

## ACCELERATING TIME-TO-VALUE

Managing business critical applications across expanding mobile environments are driving heightened availability, performance and security expectations. ClearPass Device Insight leverages a multi-tiered, cloud architecture to speed deployment time and accelerate time-to-value. Data Collectors on-site are used to continuously gather device attributes, which are sent to the ClearPass Device Insight Analyzer hosted in the cloud. This approach provides centralized, continuous discovery and monitoring of network connected devices.

## SPECIFICATIONS

### Data Collector

Data Collectors are available as turn-key hardware appliances, or as virtual appliances. Virtual appliances are available in two configurations: DC1000V supports up to 2,000 devices and DC2000V supports up to 20,000 devices. Each virtual appliance requires VMWare ESXi 6.0 or higher.

| DATA COLLECTOR HARDWARE APPLIANCE SPECIFICATIONS | |
|---|---|
| Hardware Model | HPE DL360 Gen10 |
| CPU | 12-core 2.4 GHz XEON-G 5115 |
| Memory | 64GB |
| HPE SmartDrives | 2 x HPE 480GB SATA 6G Mixed Use SFF |
| Serial port | DB-9 |
| Supported devices | 20,000 |
| Throughput | 2Gbps |
| **Form Factor** | |
| Rackmount | 1U SFF Easy Install Rail |
| Dimensions (H x W x D) | 1.69" x 17.1" x 27.8" (4.29 x 43.46 x 70.7 cm) |
| Weight | 35.89 lbs. (16.27 kg) max |
| Networking | 4 x 1GbE Embedded + FlexibleLOM slot<br>4 x 1GbE 366FLR Adapter<br>2 x 10GbE 562SFP+ Adapter |
| VGA/Serial/USB ports | Front VGA, Rear VGA, DB-9, 3 x USB |
| MicroSD slot | 1 Micro SD slot |
| **Power** | |
| Power supply | HPE 500W FS Plat Ht Plg LH Pwr Sply Kit |
| Power redundancy | Optional redundant power supply |
| AC Input Voltage | 100/240 VAC Auto-Selecting |
| AC Input Frequency | 50/60 Hz Auto-Selecting |
| **Environmental** | |
| Operating Temperature | 10°C to 35°C (50°F to 95°F) |

| ORDERING INFORMATION | |
|---|---|
| **Part number** | **Description** |
| **Hardware Appliances** | |
| R1P62A | Aruba Central Data Collector – DC2000 |
| HC8S2E | Aruba 1 Year Foundation Care Next Business Day Exchange Data Collector Service |
| HC8T0E | Aruba 3 Year Foundation Care Next Business Day Exchange Data Collector Service |
| HC8X6E | Aruba 5 Year Foundation Care Next Business Day Exchange Data Collector Service |

## ORDERING INFORMATION

| Part number | Description |
|---|---|
| **Subscription Licenses (1 Year)** | |
| R0Z66AAE | Aruba ClearPass Device Insight New License for 100 Devices for 1-year E-STU |
| R0Z67AAE | Aruba ClearPass Device Insight New License for 500 Devices for 1-year E-STU |
| R0Z68AAE | Aruba ClearPass Device Insight New License for 1K Devices for 1-year E-STU |
| R0Z69AAE | Aruba ClearPass Device Insight New License for 2500 Devices for 1-year E-STU |
| R0Z70AAE | Aruba ClearPass Device Insight New License for 5K Devices for 1-year E-STU |
| R0Z71AAE | Aruba ClearPass Device Insight New License for 10K Devices for 1-year E-STU |
| R0Z72AAE | Aruba ClearPass Device Insight New License for 25K Devices for 1-year E-STU |
| R0Z73AAE | Aruba ClearPass Device Insight New License for 50K Devices for 1-year E-STU |
| R0Z74AAE | Aruba ClearPass Device Insight New License for 100K Devices for 1-year E-STU |
| **Subscription Licenses (3 Year)** | |
| R0Z75AAE | Aruba ClearPass Device Insight New License for 100 Devices for 3-year E-STU |
| R0Z76AAE | Aruba ClearPass Device Insight New License for 500 Devices for 3-year E-STU |
| R0Z77AAE | Aruba ClearPass Device Insight New License for 1K Devices for 3-year E-STU |
| R0Z78AAE | Aruba ClearPass Device Insight New License for 2500 Devices for 3-year E-STU |
| R0Z79AAE | Aruba ClearPass Device Insight New License for 5K Devices for 3-year E-STU |
| R0Z80AAE | Aruba ClearPass Device Insight New License for 10K Devices for 3-year E-STU |
| R0Z81AAE | Aruba ClearPass Device Insight New License for 25K Devices for 3-year E-STU |
| R0Z82AAE | Aruba ClearPass Device Insight New License for 50K Devices for 3-year E-STU |
| R0Z83AAE | Aruba ClearPass Device Insight New License for 100K Devices for 3-year E-STU |
| **Subscription Licenses (5 Year)** | |
| R0Z84AAE | Aruba ClearPass Device Insight New License for 100 Devices for 5-year E-STU |
| R0Z85AAE | Aruba ClearPass Device Insight New License for 500 Devices for 5-year E-STU |
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| R0Z90AAE | Aruba ClearPass Device Insight New License for 25K Devices for 5-year E-STU |
| R0Z91AAE | Aruba ClearPass Device Insight New License for 50K Devices for 5-year E-STU |
| R0Z92AAE | Aruba ClearPass Device Insight New License for 100K Devices for 5-year E-STU |

**Cyber Catalyst**

In the Cyber Catalyst℠ program, leading cyber insurers evaluate and identify solutions they consider effective in reducing cyber risk. Participating insurers include Allianz; AXIS; AXA XL, a division of AXA; Beazley; CFC; Munich Re; Sompo International; and Zurich North America. Microsoft is a technical advisor to the program.

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