



Aruba ClearPass Services

HPE Network and Mobility Consulting

Aruba ClearPass Services from HPE for wired and wireless local area networks (WLAN) provide you with access to Aruba Mobile First technology expertise to help enable pervasive wireless infrastructures with security features that can support communication in a wide range of locations and deliver business apps wherever people work. These services are an integral part of a family of Aruba Mobile First services that are designed to help you support reliable bring your own (BYO) everything connectivity while also helping to simplify the day-to-day operation of managing a more secure and flexible infrastructure.

Aruba ClearPass Services focus on the lifecycle of consulting and professional services needed to help implement Aruba ClearPass network access security features for your indoor, outdoor, public, and private enterprise networks. Depending on your specific access requirements, these services can include:

- Pre-deployment strategy, product, and service planning to help you prepare for your wired and wireless LAN security project
- A wired and wireless LAN access assessment of existing security mechanisms
- Design of a network with ClearPass security features that are aligned to mobile application and unified wired and wireless security strategies
- Implementing Aruba ClearPass Policy Manager to help IT to manage network access security and policy enforcement
- A knowledge transfer session for your IT team to help them take ownership of the new wired/wireless network and HPE security related best practices
- End-to-end program management and the HPE Trusted Network Transformation approach and methodology designed to help you to manage costs while delivering the kind of pervasive, flexible (BYO anything) wireless connectivity that you want

The service features in the table below provides information on the service features available under these network consulting services. The specific service features provided will be custom priced and scoped in a mutually agreed and executed Statement of Work (SOW) based upon the Customer's requirements.

Service benefits

Expert assistance designed to help you take full advantage of Aruba ClearPass features, which can help provide network access with security features based upon your needs for your mobile environment such as:

- ClearPass OnBoard to enable and/or improve your BYOD solutions
- ClearPass OnGuard Client posture checking that can help you avoid certain vulnerabilities
- ClearPass integration with other external identify systems such as:
 - Microsoft® Active Directory (AD)
 - Lightweight Directory Access Protocol (LDAP)
 - Structured Query Language (SQL)
 - Mobile Device Management (MDM)

- Access to Aruba Mobile First technology expertise to help expedite wired and wireless LAN security assessment, design, deployment, and integration
- Comprehensive profile and policy customization assistance
- HPE validated network access policy design and integration verification
- Help to deliver successful deployment and integration of Aruba ClearPass
- Additional skills that can help you reduce implementation time and help to mitigate costly installation risks and configuration errors

Service feature highlights

- Aruba ClearPass service planning
- Aruba ClearPass network access assessment
- Aruba ClearPass custom skin development
- Aruba ClearPass network access design
- Aruba ClearPass pre-deployment integration verification and planning
- Aruba ClearPass deployment and integration
- Knowledge transfer
- Project management

Table 1. Service features

Feature	Delivery specifications
<p>Aruba ClearPass service planning</p>	<p>An HPE technology consultant will conduct service planning meetings with the Customer’s stakeholders to verify security strategies, define requirements, collect information, document the initial consensus, and present wired and wireless LAN security service plans.</p> <p>During these meetings HPE will:</p> <ul style="list-style-type: none"> • Work with the Customer to review the SOW service details, deliverables and estimated timelines • Review Customer-provided documents, which include, but are not limited to, current network architecture, principles, and security requirements, in order to effectively scope and plan for the services • Identify any additional changes to the existing network required to prepare for the integration of new Aruba ClearPass Policy Manager and document them in the SOW and project plan • Detail any product licensing and network prerequisites that must be fulfilled in order for HPE to perform the services • Identify any additional information required to allow HPE to deploy resources and begin service delivery • Identify possible dates for design completion, verification testing, implementation/integration, and optimization <p>The assigned HPE technology consultant will create a mutually agreeable project plan and schedule, and determine the appropriate mix of technical and business resources necessary to implement the project.</p> <p>Deliverables can include the following:</p> <ul style="list-style-type: none"> • A preliminary project plan • A preliminary bill of materials
<p>Aruba ClearPass network access assessment</p>	<p>This service is designed to help the Customer to understand how their existing network access solution is performing, and to identify any deficiencies. The results, in the form of recommendations are intended to lead to an enhanced network access security solution, improved Quality of Experience for employees, and efficiencies for IT staff.</p> <p>An HPE technology consultant will conduct a network access assessment that can address the following areas:</p> <ul style="list-style-type: none"> • Identification of current mechanisms used to control access to the network • Identification of current, or planned, security policies that may dictate how network access is controlled • Comparison of the current and end-state network to determine what network infrastructure (if any) may be required to help achieve the desired end state

Deliverables can include the following:

- A Network Access Assessment report that includes the initial findings of the wired and wireless LAN network access assessment and HPE's analysis and recommendations for HPE best practice security design and deployment

Aruba ClearPass custom skin development

HPE will develop a customized skin to the ClearPass cluster that will transform any ordinary Web portal into the same branding experience that guests and end users are accustomed to seeing on the Customer's public-facing Web presence.

The customized skin process typically works as follows:

- Confirm the end-user website URL that HPE can use to design a guest portal template (this is usually included on the order PO)
- Optionally, the end user may provide a fully packaged template (HTML, CSS, and high-resolution images) that can be converted into a skin plug-in
- Provide HPE with your ClearPass subscription ID number (license keys)

Deliverables can include the following:

- The skin plug-in will include
 - A larger screen-optimized skin and mobile-optimized skin
 - A customized email receipt skin for credential delivery

Aruba ClearPass network access design

An HPE technology consultant will assist in the development of a network access security design that includes Aruba ClearPass.

The design can include a focus on:

- Network security network topology
- The required bill of materials
- An end-state use case matrix
- User experience workflow
- Network access security policy by profile
- Plans for mobile application security integration

Deliverables can include the following:

- A network access security design report that provides detailed design specifications for Aruba ClearPass. This report will include:
 - A wired and wireless LAN security policy detailed design in the form of a use case matrix
 - Detailed user experience workflow diagrams
 - Logical network topology diagrams
 - A final bill of materials
 - The necessary information and data needed to support the planning phase of the HPE wired/wireless LAN security integration project

Aruba ClearPass pre-deployment integration verification and planning

Using the approved Network Access Security Design, the HPE technology consultant can also perform the following activities to verify readiness and prepare for ClearPass deployment and integration:

- Verify that the ClearPass Policy Manager nodes are ready
- Identify any prerequisites or dependencies that need to be addressed prior to the ClearPass implementation
- Work with all stakeholders to understand the Customer's network change order processes
- Identify any required changes to the Customer's current network infrastructure prior to the start of this service
- Gain Customer approval for the implementation of required changes to the Customer's current network security design and associated Aruba ClearPass implementation
- Define baseline testing criteria to be performed on the network after the Aruba ClearPass implementation
- Perform a readiness check to ensure that all external systems are ready for the integration

Deliverables can include the following:

- Pre-deployment Planning and Integration Verification report that includes:
 - A comprehensive list of prerequisites and tasks to be completed in the Aruba ClearPass integration and deployment service
 - A project plan detailing the tasks and activities that will take place prior to and during the deployment and integration service, including the organization of individuals responsible for completing each one

Aruba ClearPass deployment and integration

The Aruba ClearPass deployment and integration service uses a multiphase deployment approach, and prepares Aruba ClearPass for operation on the Customer's network.

The phased approach includes:

- Phase I: Initial Integration and Network Architecture Build-out
- Phase II: Preliminary Deployment and Verification
- Phase III: Production Deployment

Phase I—Initial Integration and Network Architecture Build-out

Using the steps defined in the preliminary planning and integration report, the HPE technology consultant can perform steps such as:

- Apply the initial configuration to each ClearPass Policy Manager node
- Create the services, Web portals, and workflows required to meet the technical design
- Configure applicable SSIDs and supporting profiles in a lab environment to perform initial verification testing
- Validate that the services and workflows operate as expected in the pre-production environment

Phase II—Preliminary Deployment and Verification

The HPE technology consultant can develop and test the configuration against a small set of production network access devices (NADs) and can perform the following activities:

- Validate that the services and workflows operate as expected
- Integrate the test (NADs) with Aruba ClearPass
- Execute any acceptance testing if set forth in the SOW

Phase III—Full Production Deployment

Using the project plan developed in the planning service, the following activities can be performed:

- Execute a final review of the full deployment plan with all stakeholders
- Assist the Customer in developing a communication strategy to communicate any changes in business process or user experience to the user community
- Follow change order processes to ensure that all stakeholders and internal organizations are aware of upcoming changes
- Make the required changes and modifications to the production environment
- Verify that all equipment, software, and licensing is ready and accounted for
- Prepare infrastructure to be installed into the production environment
- Install, integrate, and configure the production infrastructure
- Conduct the test plan to verify each use case identified in the use case matrix
- Verify that the network infrastructure is deployed and integrated against intended designs,

Deliverable can include the following:

- Completed test plan results summary

Knowledge transfer and acceptance

To close out the Aruba ClearPass Services engagement, the HPE technology consultant will present the Customer with documentation deliverables for each of the services as may be set forth in the SOW. Using the final documentation, the HPE technology consultant will also provide a knowledge transfer session to the appropriate Customer stakeholders.

The activities associated with this service may include:

- Perform an onsite knowledge transfer session to facilitate a transfer of network operational control to the Customer or the network operator, including:
 - Provide an overview of the completed implementation, including the broad steps taken to achieve the implementation together with the functionality of the deployment
 - Review each included service deliverable with the Customer
- Gather all ClearPass and NAD configurations, and develop a detailed as-built document that the Customer can use as a reference

Deliverables can include the following:

- A complete as-built report that documents the following:
 - Final documented configuration of the following:
 - ClearPass
 - Wired infrastructure
 - WLAN infrastructure
 - Final network topology drawings
 - Final use case matrix
 - Final detailed user experience workflow diagrams

Project management

HPE provides comprehensive project management capabilities that combine a powerful, proven methodology that is aligned with industry best practices and is delivered by professional program and project managers.

HPE's program managers implement a team partnership at different levels of each respective organization to manage the overall project. While taking a structured approach to project planning and implementation, HPE project managers help to manage and monitor project deliverables and communicate progress until completion. These activities are inherent to the HPE project management methodology.

To assist the Customer with the execution of Aruba ClearPass Services, HPE can provide a single-point-of-contact HPE project manager who is dedicated to directing services execution, answering questions, and providing documented status updates during all phases of the Customer's wired and wireless infrastructure solution deployment.

The HPE program manager will:

- Provide help in managing HPE and/or partner resources that can help to reduce impact and allow the Customer's IT resources to stay focused on their core tasks and priorities

- Provide a cohesive and well-managed phased execution of services and assist in reducing deployment-related impact to the Customer's business operation
 - Help provide definition and clear project expectations, objectives, milestones, and deliverables
 - Provide monitoring and tracking of implementation of the ClearPass solution
 - Execute effective and flexible communication methods to help ensure that there is a common understanding of the project's status
 - Manage changes to scope that can impact the schedule, quality, and pricing, and align the changes with priorities
- Deliverables can include the following:
- Documented project plans
 - Weekly progress reports
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Service limitations

HPE will not modify any configurations of any equipment that is not part of Aruba ClearPass Services.

Customer responsibilities

The Customer will:

- Ensure that all service prerequisites identified during the 'Pre-deployment service planning' activity have been met
- Be responsible for all current-state and future-state network architectures, designs, and integration projects, etc., within the network environment
- Assign stakeholders to participate in planning meetings
- Provide HPE with the current network architecture, standards, and detailed design documentation that may include, but is not limited to:
 - Project plans and schedules
 - Network topology diagrams
 - Rack placement diagrams
 - Cable maps (device and end station cable numbers, patch panel designation and port numbers, device port numbers, and VLAN information)
 - IP address maps
 - Network environment administrative and management parameters and variables (hostname, administration, users, authorization, administrative IP address, management passwords, SNMP, NTP, DNS server addresses, DHCP, and logging)
 - Current-state information for Spanning Tree, Layer 2 protection mechanism, link aggregation, and advanced VLAN configuration
 - Migration documentation from the Customer's existing network infrastructure equipment
 - Integration specifications and documentation for any non-HPE equipment
 - SSID-to-VLAN mapping
 - Security for each SSID
 - LDAP or RADIUS server to facilitate wired and wireless LAN security where required
- Verify that the existing network this service will use is installed, configured, and operating in a proper state; this includes hostname, administrative management interfaces, SNMP, NTP, DNS server addresses, DHCP, logging, IP address assignments to all ports, VLANs, bridge groups, and trunks
- Make any modifications to the existing network that are required and identified during the planning stages of this service, prior to HPE arriving onsite to perform configuration and integration tasks

- Be responsible for developing (with HPE's assistance) and applying any configurations to third-party network equipment that are required in order to integrate with Aruba ClearPass
- Be responsible for all existing and new cabling required
- Be responsible for any notifications to network operations and any change control documentation that must be completed
- Be responsible for formal cutover with HPE's assistance
- Be responsible for end-user and/or application testing
- Be responsible for providing a final signoff and acceptance from a designated authority in writing within three (3) business days after the submission of final reports
- Install Customer-installable firmware updates and patches
- Be responsible for all data backup and restore operations
- Designate a person from the Customer's staff who, on behalf of the Customer, will grant all approvals; provide information; ensure that all hardware, firmware, and software that the HPE service specialist will need in order to deliver this service are available and that software products are properly licensed; and otherwise be available to assist HPE in facilitating the delivery of this service
- Adhere to licensing terms and conditions regarding the use of any HPE service tools used to facilitate the delivery of this service, if applicable
- Perform other reasonable activities to help HPE identify or resolve problems, as requested by HPE
- Provide a suitable work area for delivery of the service, including access to an outside telephone line, power, and any network connections required
- Allow HPE full and unrestricted access to all locations where the service is to be performed

Coverage

- This service is available on regular HPE work days excluding weekend days and HPE holidays, and during country-specific HPE standard business hours.

General provisions/Other exclusions

HPE's ability to deliver this service is dependent upon the Customer's full and timely cooperation with HPE, as well as the accuracy and completeness of any information and data the Customer provides to HPE.

Ordering information

Availability of service features and service levels may vary according to local resources and may be restricted to eligible products and geographic locations. To obtain further information or to order Aruba ClearPass Services, contact a local HPE sales representative and reference the following product number:

- H1Y14A1#012 for Aruba ClearPass Services

A mutually agreed and executed SOW will detail the precise Aruba ClearPass Services that will be provided and is required in order for the Customer to order and for HPE to provide these services. Depending on the point of purchase and the requested service options, other product part numbers may apply. Please consult a local HPE representative or HPE reseller regarding the product number that will best meet your specific needs.

For more information

For more information on Aruba Mobile First services, contact any of our worldwide sales offices or visit our website at:

www.hpe.com/services

