Provide a guest network for company visitors, hospital patients, hotel guests, and others to improve user satisfaction. Separate guest and employee networks to realize a safe and secure network.

Do you wish to provide the following guest services?

- **Enterprise/Government**
  - Control access destination based on user profile e.g. employee (full time, part time), sub-contractor, or guest. Provide secure Wi-Fi access for visitors within the company network.

- **Hospital**
  - Separate accessible information by department. Provide internet services for patients within the hospital network.

- **Hotel**
  - Separate the network and set role-based access control (meeting room user, guest, employee, etc.). Provide guests with best in-class experience and guest services.

- **Education**
  - Control leakage of confidential information from unauthorized access by separating faculty and student networks.

Don't know how each guest is using the network because login IDs and passwords are shared.

Employees can access the guest network without authorization, which is a security risk that may result to information leakage.

Solve these issues with our SDN-based Wi-Fi solution!
Office LAN Optimization Solution (Guest Network)

This solution is realized by linking Aruba products with NEC SDN products.

**Features**

- When guests connect to the network, traceability is low because IDs and passwords are shared. This also makes troubleshooting difficult.
- Employees can access the guest network from company-owned devices. This increases security risks such as information leakage.
- Separating network for security in a fixed-line LAN environment requires installation of individual switches. Configuration errors during expansion may result in network failures.

- The traceability of guest connections is improved by assigning unique IDs and passwords with Aruba ClearPass when guests connect to the network.
- Prohibit employees from accessing the internet from company-owned devices.
- SDN-based centralized control realizes secure network separation and safe and secure infrastructure. Systems can also be scaled out quickly.

**Sample Configuration**

[Diagram showing typical operation and Aruba and SDN operation]

- Guest IDs and passwords are shared: Low traceability
- Guest devices can be accessed by employees as well.

- Guest IDs and passwords are unique: High traceability

[Example of Guest Connection]
- Guest SSID is accessed. Connect to ClearPass via Captive Portal.
- After entering user information, ID and password are issued.
- ClearPass authenticates the user with the issued ID and password and allows network connection.

[Example of Employee Connection]
- Employee SSID is accessed. 802.1X authentication (ID/password or certificate) is carried out.
- ClearPass authenticates the user, identifies the device, and allows network connection.

**Typical Operation**

- SDN Controller
- PFC: Programmable Flow Controller
- PFS: Programmable Flow Switch
- SDN Switch
- Edge Switch (Layer 2)
- Aruba Access Point
- Authentication Server Aruba ClearPass
- Wireless LAN Controller
- DHCP Server
- Operations Administrator

**Aruba and SDN Operation**

- SDN
- Guest VTN
- Guest Access Point
- Authentication Server Aruba ClearPass
- VTN: Virtual Tenant Network
- Wireless LAN Controller
- Aruba Wireless Controller
- Accesses by employees are blocked by authentication

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