IP Address Management

This playbook outlines the process for managing the allocation, classification, and tracking of IP addresses within large-scale networks to ensure organized and efficient network operation.

Step 1: **Preparation**

Gather all necessary documentation and tools required for IP address management. This includes access to the IPAM tool, network diagrams, and existing IP address allocations.

Step 2: **Audit**

Conduct an audit of current IP address usage across the network. Identify all allocated, reserved, and unused IP addresses.

Step 3: **Classification**

Classify IP addresses based on purpose, like dynamic allocation (DHCP), static allocation, infrastructure, virtual interfaces, and services.

Step 4: **Allocation**

Allocate new IP addresses based on classification needs and availability. Ensure that no IP addresses are duplicated and that they fit into the proper subnet architecture.

Step 5: **Documentation**

Document the allocation and classification of IP addresses in the IPAM tool or system. Include details such as device names, locations, and purpose.

Step 6: **Monitoring**

Set up monitoring systems to track the usage and status of IP addresses. Use this data to identify trends and anticipate future needs.

Step 7: **Review**

Regularly review and update the IP address management records to reflect any changes in the network, such as new devices, decommissioned devices, or reconfigured networks.

Step 8: **Policy Update**

Update organizational policies and procedures to reflect any changes in IP address management practices and ensure compliance with current network standards.

General Notes

IPAM Software

Consider using dedicated IPAM software to automate many of the tasks associated with IP address management for efficiency and accuracy.