Chapter 13 IP Address Management

This chapter describes how to manage your networks and IP addresses through the Infoblox IPAM (IP Address Management) implementation. It contains the following sections:

- About IP Address Management
- About Host Records
  - Assigning Multiple IP Addresses to a Host
  - Adding Host Records
  - Copying and Modifying Host Records
- About Network Containers
  - Adding IPv4 and IPv6 Network Containers and Networks
  - Modifying IPv4 and IPv6 Network Containers and Networks
  - Deleting Network Containers
- Managing IPv4 Networks
  - IPv4 Network Map
  - IPAM Home
  - Resizing IPv4 Networks
  - Splitting IPv4 Networks into Subnets
  - Joining IPv4 Networks
  - Discovering Networks (Under Network Insight only)
- Viewing and Managing IPv4 Addresses
  - IP Map
  - IP Address List
  - Managing IPv4 Addresses
  - Managing IPv4 Addresses
- Managing IPv6 Networks
  - IPv6 Network Map
  - IPv6 Network List
  - Splitting IPv6 Networks into Subnets
  - Joining IPv6 Networks
- Viewing IPv6 Data
- Viewing Identity Mapping Information
  - Viewing Active Network Users
  - Viewing Network Users Login History
- Managing IPv4 and IPv6 Addresses
  - Converting Objects Associated with IP Addresses
  - Reclaiming Objects Associated with IPv4 and IPv6 Addresses
  - Pinging IP Addresses
  - Clearing Active DHCP Leases
- Configuring Thresholds for IPAM Utilization
- About Network Insight
- Viewing Identity Mapping Information
  - Viewing Active Network Users
  - Viewing Network Users Login History
  - Configuring Active User Timeout Session

About IP Address Management

IPAM is the allocation, administration, reporting, and tracking of public and private IP spaces, network devices, and their associated data. It comprises the deployment of DNS and DHCP services and the monitoring of network devices and performance to ensure data integrity and security of your networks. The Infoblox IPAM implementation is a feature-rich and easy-to-use solution that encompasses support for IPv4, IPv6, network discovery, and automated monitoring.

Infoblox IPAM provides tools that integrate the allocation, administration, reporting, and tracking of your entire network space. Figure 13.1 highlights the Infoblox IPAM implementation.

Figure 13.1 Infoblox IPAM Features
You can perform the following IPAM tasks to effectively manage and control your network:

- Create host records. Host records integrate the DNS records and DHCP data of a network device. You can use a host record to manage a network device from one central point. For more information, see About Host Records.
- Create IPv4 and IPv6 networks. For information, see About Network Containers.
- Discover devices in IPv4 and IPv6 networks and other Objects created in IPAM. For more information, see Adding IPv4 and IPv6 Network Containers and Adding Host Records and other sections throughout this chapter. View your IPv4 network and address utilization in a graphical mode. For information, see IPv4 Network Map and IP Map.
- When necessary, resize, join, or split networks. For information, see Resizing IPv4 Networks, Splitting IPv4 Networks into Subnets, Joining IPv4 Networks, Splitting IPv6 Networks into Subnets, and Joining IPv6 Networks.
- Manage IPv4 and IPv6 address data. For information, see Viewing and Managing IPv4 Addresses, Viewing IPv6 Data, and Managing IPv4 and IPv6 Addresses.
- Add and manage DNS resource records associated with IP addresses. For information, see DNS Resource Records.
- Monitor your core service network data using the Dashboard, audit log, syslog, and reports. For information, see Part 7 Monitoring and Reporting.
- Discover and track network devices. For information, see IP Discovery and vDiscovery and DHCP Fingerprint Detection.