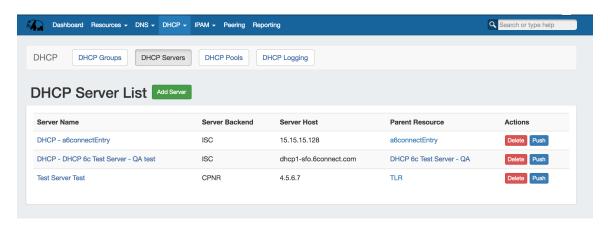# DHCP Administration

DHCP Administration

DHCP Administration is primarily handled under the **DHCP** tab **DHCP Servers** sub-tab.

The **DHCP Servers** tab is only accessible to Admin users, and contains functions for adding, updating, and managing DHCP servers as well as scheduling server tasks.

Additional DHCP Admin tasks occur in other ProVision areas, and not all management tasks require Admin-level permissions - some only require appropriate resource permissions on the DHCP Groups, Zones, and servers involved. See additional sections on this page for more detailed information:

- DHCP Administration
    - DHCP Overview
        - DHCP Permissions
        - DHCP Administrative Tasks
    - Manage DHCP Servers
    - DHCP Pool Pushes
        - Manual DHCP Pushes:
        - Scheduled DHCP Pushes:
    - Additional Information:

DHCP Overview

The **DHCP** Tab organizes ProVision's DHCP system into a more unified and accessible interface, combining both admin and non-admin DHCP tasks together under the **DHCP** tab.

DHCP pools are gathered under DHCP Groups and servers are attached to those Groups. Pools, attached servers, and failovers are managed at a per-Group level.

Users can then view and manage Groups, individual pools, failover values, attach servers, and perform pushes all on the same page.

DHCP Permissions

DHCPv2 (ProVision 7.0.0 and later) more effectively utilizes ProVisions resource permissions system to allow fine-grain permissions in DHCP.

In order for a user to work with DHCP Groups, Pools, and servers, they must have User Group permissions for:

- One or more Parent Resources under which the DHCP Group and DHCP Pools will be associated (it can be a specific resource, or the all-encompassing "TLR")
- IPAM permissions sufficient to access and manage the desired blocks from which to assign DHCP Pools

- Permissions on the specific DHCP Server(s) in order to attach, detach, and push.

Creation and management of DHCP servers, as well as scheduled DHCP pushes, are Admin-only tasks.

DHCP Administrative Tasks

Admin-only tasks in DHCP include scheduling pushes, and creating / managing DHCP servers.

These tasks may be accessed in the following areas:

- Scheduling DHCP Pushes:
  - May be set up from the Scheduler Tab or,
  - Set by server from the **DHCP Servers** page, or
  - Set by DHCP Group from the **DHCP Groups** page, or
  - Set by individual pool from the Pool Details page
- Managing DNS Servers: The **DHCP Servers** page

Tasks such as working with pool, DHCP Groups, editing Group Settings, attaching servers to Groups, and manually pushing pools do not require ProVision Admin permissions.

Instead, these tasks simply require that the user be included in a User Group that has appropriate permissions (either direct, or inherited) on the Parent Resources, DHCP Groups, and servers involved.

Manage DHCP Servers

Adding, configuring, and managing DHCP Servers occurs in the Admin-only **DHCP Servers** page under the **DHCP** Tab.

Supported DHCP server service types include:

- ISC DHCP
- Cisco Prime Network Registrar

For detailed information on adding, editing, and deleting DHCP Servers, see Working with DHCP Servers.

DHCP Pool Pushes

In DHCPv2, pools may be pushed manually or scheduled for a future time, and may be performed for a single pool, all pools in a DHCP Group, or a full DHCP server.

Scheduling DHCP pushes requires administrative access, but manual pushes only require permissions on the DHCP Group / Parent Resource, and the server(s) attached.

Manual DHCP Pushes:

Manual DHCP pushes may be performed from the following locations in ProVision:

- Single Pool: From the DHCP Groups pool list "Push" button. See Working with DHCP Pools - Pushing DHCP Pools
- Single Pool: From the DHCP Pool Details page "Push Now" button. See See Working with DHCP Pools - Pushing DHCP Pools
- Group: From the DHCP Groups list "Push Group" button. See Working with DHCP Groups - Pushing a DHCP Group
- Server: From the DHCP Servers list "Push" button. See Working with DHCP Servers - Pushing a server
- Server: From the DHCP Server Settings page "Push Pools" button. See Working with DHCP Servers - Pushing a server

Scheduled DHCP Pushes:

Scheduled pushes may be performed from the following locations in ProVision:

- May be set up from the Scheduler Tab for a DHCP Group or server
- Set by server from the **DHCP Servers** page, or
- Set by DHCP Group from the **DHCP Groups** page, or
- Set by individual pool from the Pool Details page

Additional Information:

For more information on DHCP Adminsitrative tasks, see the following sections:

- Working with DHCP Servers

For non-admin level tasks, see:

- DHCP Tab
- Working with DHCP Groups
- Working with DHCP Pools
- Working with DHCP Gadgets