

# DHCP Administration

## DHCP Administration

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### DHCP Server List

Server Name	Server Backend	Server Host	Parent Resource	Actions
QA DHCP VM	ISC	test-tools.6clabs.com	TLR	DeletePushPerms
Test Server 1	ISC	test.com	QA Test Resource 2	DeletePushPerms
Approvals Test Server	ISC	test.com	TLR	DeletePushPerms
Centos DHCP Managed DHCP	PVDHCPMYSQL	empty-centos1.6clabs.com	Centos DHCP	DeletePushPerms

DHCP Administration is primarily handled under the [DHCP](#) tab **DHCP Servers** sub-tab.

The **DHCP Servers** tab contains functions for adding, updating, and managing DHCP servers as well as scheduling server tasks.

Users with resource "read" permissions may view DHCP Server information, however only those with either Admin permissions or granted group-level server permissions can manage DHCP server creation, edits, and deletion.

Additional DHCP Admin tasks occur in other 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 Overview](#)
- [DHCP Permissions](#)
  - Permission Shortcut Button ("Perms")
    - [DHCP Approvals](#)
    - [DHCP Administrative Tasks](#)
- [Manage DHCP Servers](#)
- [DHCP Pool Pushes](#)
  - [Manual DHCP Pushes:](#)
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## DHCP Overview

The [DHCP](#) Tab organizes the 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

Users with resource "read" permissions may view DHCP Server information, however only those with either Admin permissions or granted group-level server permissions can manage DNS server creation, edits, and deletion.

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.

## Permission Shortcut Button ("Perms")

On the DHCP Server List a shortcut permissions button ("Perms") is available, accessible only to Admin users.

This permissions button allows for direct, point-of-use permissions adjustments to DNS Servers for permission groups. It uses the same CRUD permissions and groups available in the Admin Users tab, but removes the need to remember and search for the DHCP item name.

To open the Change Resource Permissions module, click on the "Perms" Button for any DHCP server.

Server Name	Server Backend	Server Host	Parent Resource	Actions
QA DHCP VM	ISC	test-tools.6clabs.com	QA Test Resource	<a href="#">Delete</a> <a href="#">Push</a> <a href="#">Perms</a>
Example DHCP Server	ISC	216.239.32.10	TLR	<a href="#">Delete</a> <a href="#">Push</a> <a href="#">Perms</a>
50281 DHCP Module	ISC	1.2.3.4	MyNewEntry	<a href="#">Delete</a> <a href="#">Push</a> <a href="#">Perms</a>

Edit the CRUD permissions for any user group by clicking the checkbox for the desired group and permission type. When done, click "Save Changes".

Change Resource Permissions

Resource Permissions

UserGroup Name	Read	Create	Update	Delete
Global Admins	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Global Read-Only	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approvee Group	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Approver Admin Group	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Limited 1 - QA Test Resource	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

You can also restrict certain actions for the User Group in [Approvals - Actions & Permissions](#).

Close

Save changes

The permission changes will be also be reflected in the Admin [User](#) tab Group settings.

## DHCP Approvals

The Approvals module stores and queues DHCP actions made by selected User Groups, and sends those actions to a Pending Changes list for administrative review. Later, an administrator (or combination of administrators) can approve or reject these stored actions.

Approvals is primarily set up and managed via the Admin [Approvals](#) Tab. See the [Approvals Tab](#) for details on setting up and using Approvals from the Administrative viewpoint.

In the [DHCP](#) Tab, a "Resources Awaiting Approval" module will display near the top of DHCP Groups, DHCP Servers, DHCP Pools Lists, and DHCP Pool pages, if a change has been submitted on that page that is pending approval.

DHCP

DHCP Groups

DHCP Servers

DHCP Pools

DHCP Classes

DHCP Logging

Add Server

### DHCP Server List

Resources Awaiting Approval

Approval Action	Name	Resource Data	Approval Info	Actions
Delete	Test Server 1	<a href="#">Details</a> DHCP Service : ISC	Submitter : test3@6connect.com	<a href="#">Approve</a> <a href="#">Reject</a>
Push	QA DHCP VM	<a href="#">Details</a> DHCP Service : ISC	Submitter : test3@6connect.com	<a href="#">Approve</a> <a href="#">Reject</a>
Update	Test Server 11	<a href="#">Details</a> DHCP Service : ISC	Submitter : test3@6connect.com	<a href="#">Approve</a> <a href="#">Reject</a>

Server Name	Server Backend	Server Host	Parent Resource	Actions
QA DHCP VM	ISC	test-tools.6clabs.com	TLR	<a href="#">Delete</a> <a href="#">Push</a> <a href="#">Perms</a>
Test Server 1	ISC	test.com	QA Test Resource 2	<a href="#">Delete</a> <a href="#">Push</a> <a href="#">Perms</a>
Approvals Test Server	ISC	test.com	TLR	<a href="#">Delete</a> <a href="#">Push</a> <a href="#">Perms</a>
Centos DHCP Managed DHCP	PVDHCPMYSQL	empty-centos1.6clabs.com	Centos DHCP	<a href="#">Delete</a> <a href="#">Push</a> <a href="#">Perms</a>

Users who submitted a change for approval will see the details of their change request in this module.

Admin users with permissions to approve or reject the request will have the option to Approve or Deny the change.

## 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 pools, DHCP Groups, editing Group Settings, attaching servers to Groups, and manually pushing pools do not require 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 the DHCP module, 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:

- Single Pool: From the DHCP Groups pool list "Push" button.
- Single Pool: From the DHCP Pool Details page "Push Now" button.
- Group: From the DHCP Groups list "Push Group" button.
- Server: From the DHCP Servers list "Push" button.
- Server: From the DHCP Server Settings page "Push Pools" button.

For details on performing pushes in the above areas, see the following sections:

- [Working with DHCP Groups](#)
- [Working with DHCP Pools](#)
- [Working with DHCP Servers](#)

### **Scheduled DHCP Pushes:**

Scheduled pushes may be performed from the following locations:

- 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 Administrative 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](#)