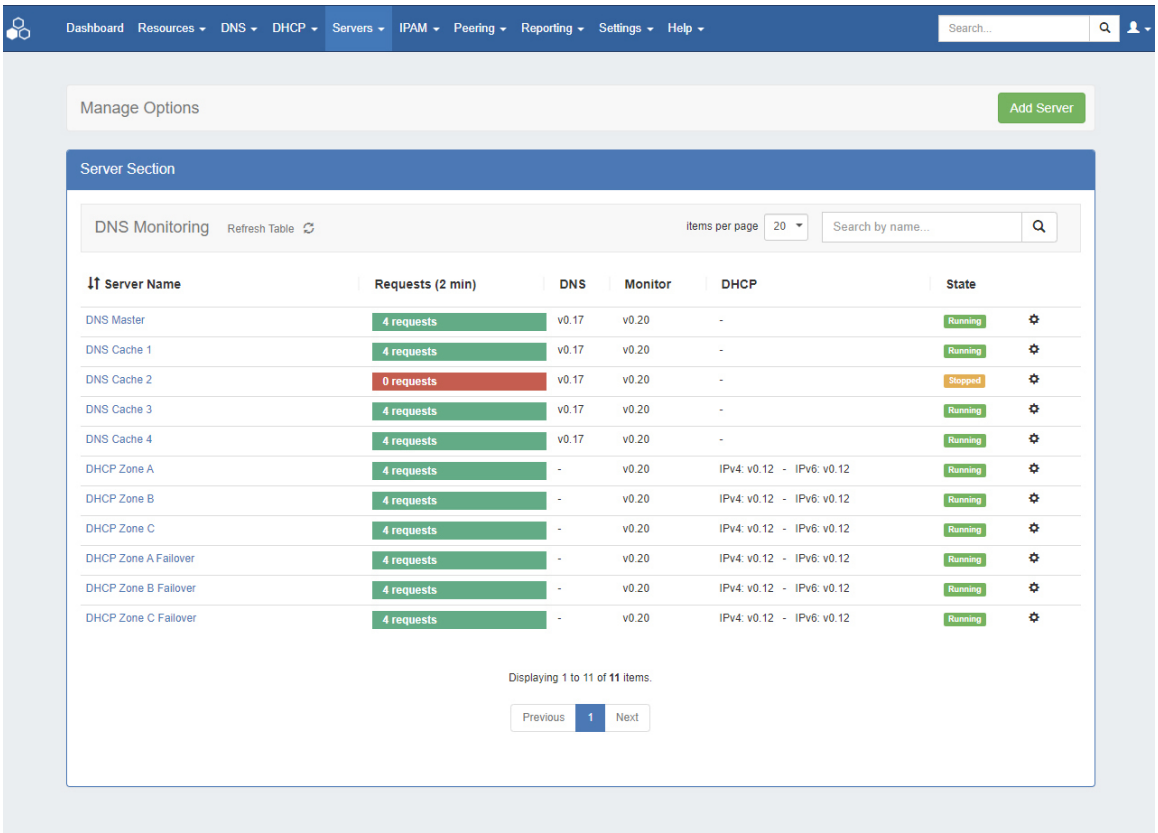
Managed Servers

Managed Servers



The Managed Servers tab allows for servers to be created, installed, managed, and monitored from within ProVision.

Managed Servers is handled via two main areas of the GUI: the **Managed Servers** Tab and in Admin **Admin Settings - Managed Servers** sub-tab. Managed servers actions are also available via APIv2 and the command line.

> **Requirements**
>
> Note: Managed Servers requires Python3 and Docker to be installed to support this feature.

Overview

ProVision's Managed Servers tab allows for DNS (Knot-based) and DHCP(Kea-based) VMs to be created, managed and monitored from within ProVision, either from the GUI or command line.

Managed Server Features include:

- VM creation, management, and monitoring from within ProVision
- Minimal requirements - Managed Servers only requires Python3 and Docker as dependencies

- OS options include CentOS and Ubuntu
- Supports both remote and manual setups
- Supports both root and non-root installations (for the latter, some root steps may be required)
- Installation and upgrade may be performed either via internet connection or locally:
    - Remote internet install/upgrade connects to 6connect's servers to get new versions
    - Local installs/upgrades will require users to upload the new version locally into their ProVision instance
    - No kernel updates or other system updates are required for local updates - only the Docker container will be updated.
- Pre-defined Pre-and-Post Commands

Monitoring Features include:

- DNS Monitoring includes hit count for given period for each host/resource, total hit count, and last access time
- System monitoring Includes CPU load, Disk usage, connection information, swap memory, and virtual memory monitoring.
- Monitoring is available via GUI or API.
- Both "Push" and "Pull" options for statistics data are available
- Heartbeat service independent of Docker to provide monitoring data

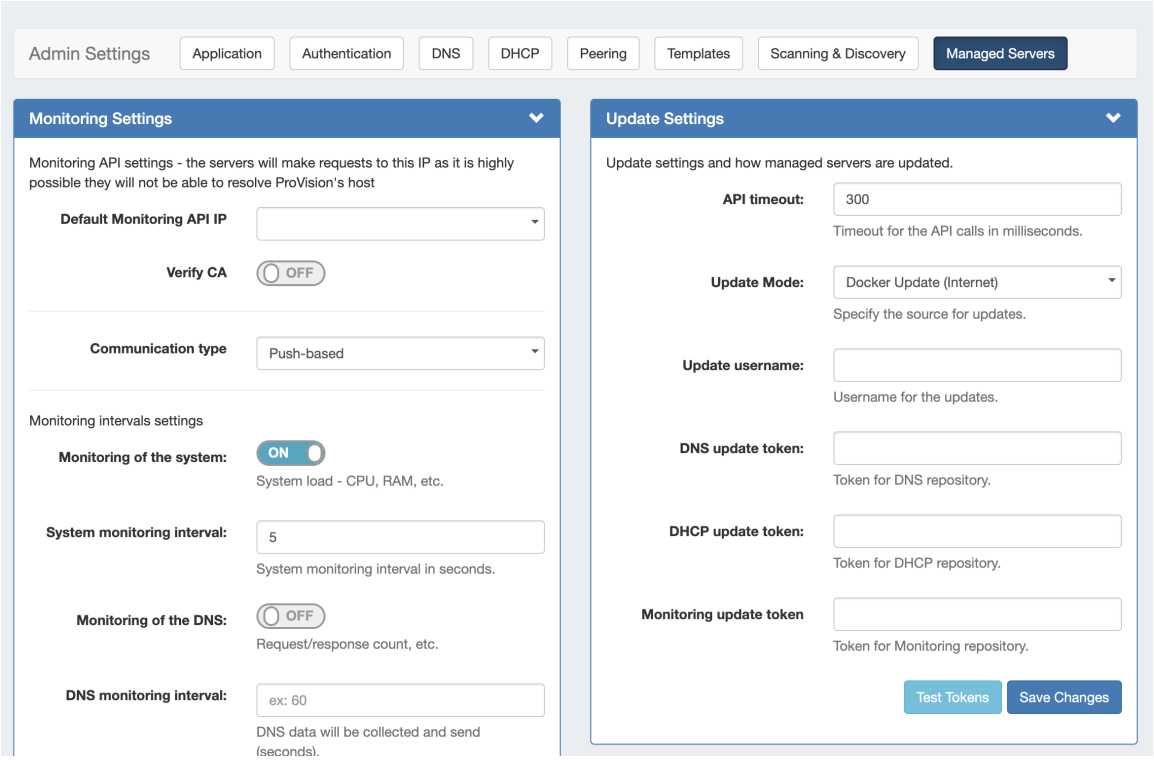
Permissions

Managed Servers uses a "6c servers" user group, under which automatic or manual "server users" are created. The "6c servers" user group gives permissions to all 6c server resources.

The "server users" are necessary to allow access and permissions for the managed server(s). When new server is created with an empty user (instead of a user-provided existing user) a random new user is automatically created under that group. Only that server user has permission to update the associated managed server.

Administration

The "Managed Servers" sub-tab under Admin Settings includes modules for global setup of Monitoring Settings, Update Settings, Monitoring Services, and RabbitMQ settings.



After making any settings updates, be sure to click "Save Changes" under the updated module.

For additional details, see Managed Servers Settings.

Managed Servers API

APIv2 endpoints are available for Managed Servers and Managed Server Monitoring.

To view these endpoints from your instance, go to the API Tab APIv2 Swagger Documentation, then click the Swagger links for the family categories "PVServers" and "Monitoring". For information on using the API, see APIv2.

Managed Servers Endpoints:

default

GET	/pvservers	Get pvserver resources
POST	/pvservers/addDHCPService	Add DHCP Service to Managed Server
POST	/pvservers/addDNSService	Add DNS Service to Managed Server
GET	/pvservers/config/{id}	GET setup bundle for PVserver
GET	/pvservers/downloaddebug/{id}	Download debug bundle from PVserver
GET	/pvservers/imgversions	List the versions of given docker image
POST	/pvservers/manageService	Manage service of PVserver
POST	/pvservers/pushAllZones	Push all DNS zones to PVserver
POST	/pvservers/pushconfig	Push configuration and install PVserver
POST	/pvservers/pushupdate	Execute update on PVServer
POST	/pvservers/runDiagnostics	Run diagnostics on PVserver
POST	/pvservers/testdockercred	Test Docker Credentials

Monitoring Endpoints:

default

GET	/monitoring/dns/aggregate	Get aggregated dns monitoring data
GET	/monitoring/dns/raw	Get dns monitoring data
GET	/monitoring/dns/rps	Get dns requests per second
POST	/monitoring/heartbeat	PVServers heartbeat
GET	/monitoring/heartbeat	PVServers heartbeat
GET	/monitoring/pvips	ProVision IPs
GET	/monitoring/system/aggregate	Get aggregated system monitoring data
GET	/monitoring/system/raw	Get system monitoring data
POST	/monitoring/testrabbitmqcred	Test RabbitMQ Credentials

Working with Managed Servers

For information on creating a new managed server, working with the managed server list, and viewing monitoring, see the following sections:

- Working with Managed Servers

Additional Information

For Admin-level managed server setting information, see:

- Managed Servers Settings