

First Steps

ProVision First Steps

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Overview Video: First Steps - Part 1

This video gives a high level overview of the "Before you Begin" content on this page, as well as an introduction to ProVision's Resource System.

Note: Recorded in ProVision v5.1.x, newer versions may have interface updates.

This video may also be viewed at <https://www.youtube.com/watch?v=apJRcQv3ZQ0>.

Before you Begin

We recommend that new users work through the following questions with their internal team to plan their ProVision instance:

Need Help?

Remember that 6connect's engineers are here to help. If you have questions, or want to test out some ideas, our team has worked with a variety of data sets and can help get you started on the right path. You can reach us any time at support@6connect.com.

1) What type of physical and non-physical components do you wish to track?

Impacts: What Sections and Resources are created

An important first step is determining what items you currently are (or will be) tracking, and what relationship they have with each other.

ProVision's flexible resource system allows you create and customize detailed entries for any type of item you may want to track: customers, contacts, data centers, routers, VMs, and more. These types of resources are labeled as "Sections" in ProVision. Once a Section is made, individual items (resources) may be created as a part of that Section. Each Section may have different Gadgets selected, which then provide additional functionality on a resource entry page.

See: [Resources](#), [Customizing Sections](#), [Gadgets](#)

2) What is your current data structure? What is your ideal data structure?

Impacts: Resource Hierarchy, Assignment Behavior

The resource hierarchy structure in ProVision allows for "child" resources to be created under a parent resource (for example: servers as children under a datacenter resource entry, or subsidiaries under a parent company, who then share IP aggregates). The structure decided upon will influence how resources are set up in ProVision, as well as the behaviors of functions while working with items such as IP blocks or DNS zones.

See: [Resources](#), [The Resource System](#)

3) Who needs access to what data?

Impacts: User and Group Permissions

In ProVision, standard user permissions are set by resource and functional area (IPAM, Resource, Peering, etc), with fine-grained permissions able to be set for specific resources.

Global Admin permissions give access to additional functions such as configuration settings, importing, and Scheduler tasks. Determine which users will require administrative access, and which will have access to only specific resources or functional areas. You will need to get more specific later, but having some high level groups to work with is a great start.

See: [Users & Permissions](#)

Overview Video: First Steps - Part 2

This video gives a high level overview of the "Getting your Data into ProVision" content on this page.

Note: Recorded in ProVision v5.1.x, newer versions may have interface updates.

This video may also be viewed at <https://www.youtube.com/watch?v=2e0H1H4rTTs>.

Getting your Data into ProVision

After determining your internal goals and processes, it's time to get your data into ProVision!

Start Small

When importing data into ProVision, data validation is a key step to ensure that everything is accurate. Upon importing your data, you may see some errors that result in a stop in the import process! It is recommended that you break up your imports to both keep them manageable and give you a chance to normalize your data prior to importing.

1) Gather and Prep your data

Determine where your data will be from:

Excel / Spreadsheets:

May be used to import: Resources, IP Aggregates/ Blocks, DNS BIND Zones

If you currently use Excel or other spreadsheet program for tracking, you will need to verify that your spreadsheets are "cleaned up" according to the information on the [Importing Your Data](#) page under "Preparing for Data Import":

- Make sure that you use UTF-8 encoding, remove extraneous blank rows, and compare your data to the data fields available in ProVision, shown under "[Which Import Tool Should I Use?](#)".
- Review [sample files](#) if desired to see example formats.
- If you plan to track custom types of resources by creating Sections, you will need to [create a Section](#) with [custom fields](#), and verify that your spreadsheet contains the same fields.

Once your verification / cleanup is complete, export your spreadsheet as a .csv file.

See: [Importing Your Data](#), [Resources](#), [Import DNS Zones](#)

RIR

May be used to import: IP Aggregates

No advance preparation is needed for aggregates imported from RIR. ProVision's built-in importer will ask for your ORGID or an IP, and then populate an aggregate list from that information. Simply choose which aggregates you wish to import.

See: [Import Aggregate Blocks](#)

DNS Servers

May be used to import: DNS Zones

ProVision provides automated tools for importing DNS zones from the following server types: BIND, PowerDNS, InfoBlox, NS One, Dyn DNS, and DNSMadeEasy servers, as well as IPPlan MySQL Databases.

Before importing DNS zones, it is recommended that a [DNS Group be created](#) to hold the zones being imported, and that the [DNS server be added into ProVision](#) so that zone updates may be pushed.

For general DNS task, see: [DNS Administration](#), [DNS Tab](#), [Working with DNS Groups](#), [Working with DNS Servers](#)

For specific DNS zone import instructions for each DNS server type, see: [Import DNS Zones](#)

Manually Adding Data

ProVision allows manual adding of data at any time. We recommend verifying that the item has not already been added beforehand (to prevent duplicates), and keeping your desired data structure in mind.

2) Import or Manually Add Data

The order in which items are added will depend on what ProVision functional area (Resources, IPAM, DNS) you will be using, and what the current / desired data structure is.

In general, the following order is recommended:

A) Resources

Importing or creating your resources first allows subsequent items to be associated with those resources.

Note: If you already have "Resource" data associated with your IP block data (ie, as fields in a spreadsheet with Resource Name and Resource ID), you may choose not to create those resources ahead of time. The [IP Import from CSV](#) tool will give you an option to create those resources during the IP import process.

Import customers, physical devices, locations, and so forth through the [Resource Import from CSV](#) tool. If you wish for additional customization, you may [create a custom Section](#), [add the desired fields](#), and import resources under that Section through the [Resource Import Tool](#).

Adding resources manually may be done at any time under the [Resources](#) tab, by clicking the "Add Entry" button.

See: [Resources](#), [Importing Your Data](#)

B) IP Aggregates and Blocks

Import your IP Aggregates through the [Import from RIR](#) tool, or from a .csv file via [IP Import from CSV](#).

The Import from CSV tool will create Top-Level Aggregates and place blocks under those aggregates based on the following method:

First, the importer will parse through the provided data, order all blocks from largest to smallest, then attempt to split the largest block out of an existing block matching the IP space and RIR. If that fails (no larger block exists), then that block is added in the system as its own Top-Level-Aggregate. Subsequent blocks will undergo the same process.

This method ensures that your list of IP blocks does not need to be organized in any particular order.

If your import includes a large number of small blocks (/30s, /32s), be sure you've included at least one large block which encompasses them (/24, /22). This will ensure that the smaller blocks are neatly organized under the larger block, rather than imported as their own Top-Level Aggregates.

See: [Importing Your Data](#)

C) Add DNS servers and zones

If using the DNS module in ProVision, you will need to add your servers prior to importing zones.

Add DNS Servers

Adding DNS servers requires administrative access.

Servers are added under the [DNS](#) tab of ProVision, under "DNS Servers". Click on "Add Server" and fill out the server information.

See: [Working with DNS Servers](#)

Information for specific server types and options is available under the following sections:

- [Configuring ISC BIND Support](#)
- [Configuring PowerDNS Support](#)
- [Configuring Secure64 Support](#)
- [Configuring Split Horizon and Views](#)
- [Configuring DNSSEC](#)

Import DNS Zones

After creating the applicable servers in ProVision, you may import or manually add DNS zones.

ProVision offers multiple DNS zone import options, available under the [Data Import](#) tab in the Admin section. For more information on importing DNS zones, see [Importing your Data](#) and [Import DNS Zones](#).

BIND Zone Import

- Imports using the named.conf configuration file tied to the zones you are uploading, a .zip or .tar file of the zones themselves, and an optional .csv file mapping zones to customers.

PowerDNS Zone Import

- Option is available after configuring a PowerDNS server with a MySQL backend. Connects to the selected server and imports all zones.

InfoBlox Zone Import

- Imports DNS zones using a provided host, username, and password. The InfoBlox import pulls all zones on the InfoBlox LOCAL grid and adds them to a designated group. It is advised to [create a DNS Group](#) prior to the import with default parameters and NS records to be inherited by the imported records.

NS One Zone Import

- Imports DNS zones using a NS One API Key. It is advised to [create a DNS Group](#) prior to the import with default parameters and NS records to be inherited by the imported records.

Dyn DNS Zone Import

- Imports DNS zones using a Dyn DNS customer name, username, and password. It is advised to [create a DNS Group](#) prior to the import with default parameters and NS records to be inherited by the imported records.

DNSMadeEasy Zone Import

- Imports DNS zones using a DNSMadeEasy API Key and API Secret. It is advised to [create a DNS Group](#) prior to the import with default parameters and NS records to be inherited by the imported records.

IPPlan Zone Import

- Imports DNS zones using IPPlan MySQL database options. It is advised to [create a DNS Group](#) prior to the import with default parameters and NS records to be inherited by the imported records.

Manually adding zones may be done at any time from the [DNS](#) tab. See [Working with DNS Zones](#) and [DNS Zones Overview](#).

3) Add Users and Groups

In ProVision, the permissions structure is handled by assigning users to groups, then setting specific resource-level C/R/U/D permissions for that group. It is designed to give you as much flexibility as you need to accommodate most use cases. When mapping out the permissions structure for your organization, keep in mind who you want to access to application:

- Internal users and roles (Admins, Read-Only, etc.)
- Partners related to multiple specific resources or accounts
- Customers / departments with limited view to only their respective resources or accounts

See: [Users & Permissions](#), [Working With Users](#)

Users and groups may be added at any time. However, assigning permissions to users and groups is best done after the applicable resource hierarchy has been added into ProVision.

Working In Provision

With the basic data now imported, and users set up, you (and your team) are ready to work in ProVision!

Refer to our [User Guide](#) and [Admin Guide](#) for details on standard user and admin level areas of ProVision. Or, follow the links below for additional details grouped by specific task areas:

Concepts:

- [The Resource System](#)
- [Workflow Concepts](#)

Resources:

- [Resources](#)
- [Customizing Sections](#)
- [Customizing Fields](#)
- [Gadgets](#)

IPAM:

- [IPAM Tab](#)
- [Working with IP Blocks](#)
- [Working with IP Rules](#)
- [IPAM Administration](#)

DNS:

- [DNS Tab](#)
- [Working with DNS Groups](#)
- [Working with DNS Zones](#)
- [DNS Zones Overview](#)
- [DNS Administration](#)
- [Working with DNS Servers](#)

DHCP:

- [DHCP Tab](#)
- [Working with DHCP Groups](#)
- [Working with DNS Zones](#)
- [Working with DHCP Gadgets](#)
- [DHCP Administration](#)

Peering:

- [Peering](#)
- [Peering Exchanges](#)
- [Peering Routers](#)
- [Peering Sessions](#)
- [Import Peering Sessions](#)