

## Using Sentry Power Manager (SPM) Bulk Setup for PDU Mass Import and Configuration

### Purpose

The Bulk Setup feature of SPM allows a quick and convenient method for SPM system administrators (and power users) to import a wide range of PDUs and to configure several parameters for those PDUs, all at one time, and directly within the SPM user interface. Bulk Setup is readily available at SPM login and does not require a separately purchased feature or license key.

A downloadable template (Excel worksheet) is provided by Bulk Setup to use for supplying the PDU names you want to include in the SPM network, as well as for setting various parameter values for those PDUs.

Uploading the configured template initiates the importing of all listed PDUs *in bulk* (up to 250 devices at a time), into the SPM system. Key to the Bulk Setup feature is its PDU mass import (discovery) and configuration within seconds from a single GUI upload action.

### Before You Begin

To use Bulk Setup, you will need:

- Sentry Power Manager (SPM), version 6.1 or later.
- An SPM user account for administrator (or power user) level.
- Microsoft Excel, current version. (Also accepted: Excel 2007, Excel 2003 XML, and Excel5.)

### Overview

The two main functions of Bulk Setup are:

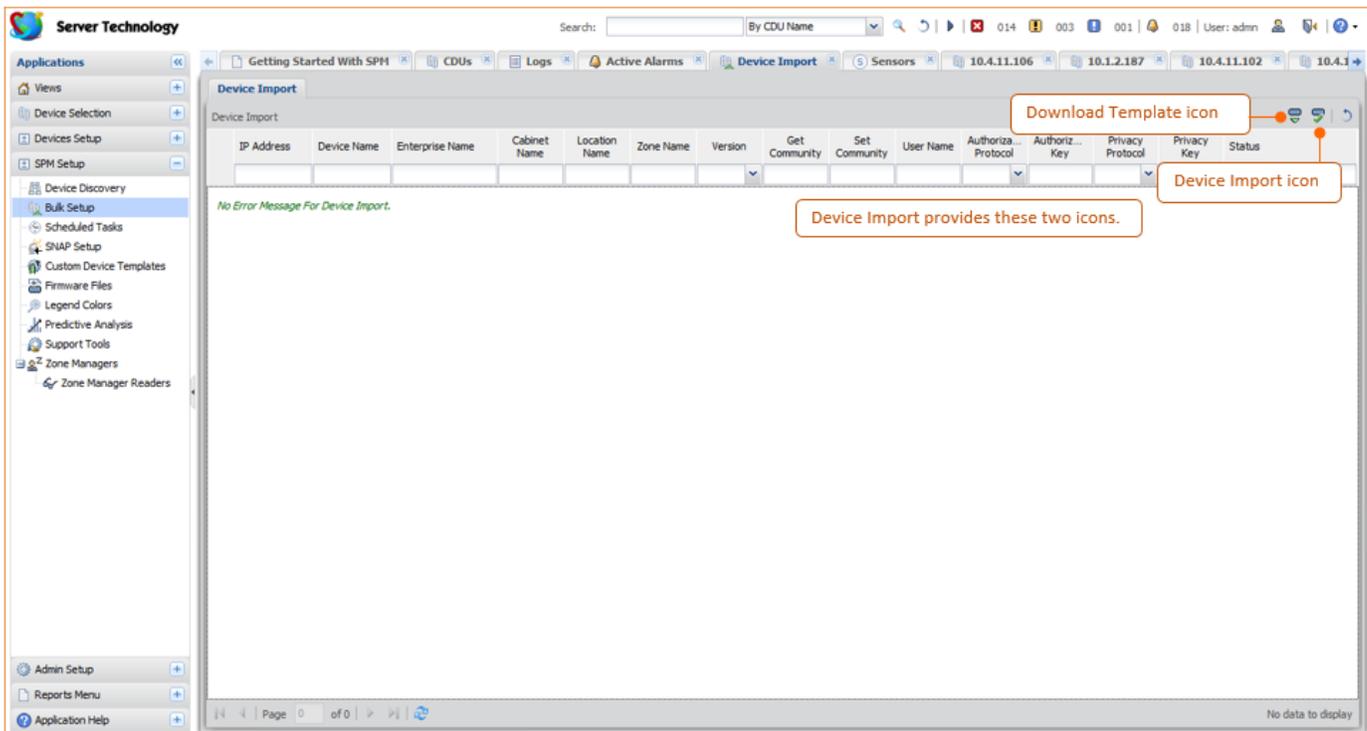
- **Download Template:** Downloads a read-only, SPM-designed Excel spreadsheet with pre-determined parameter headings, including the name of the PDU you want to add to SPM and several fields of operating parameter fields that you can edit.
- **Device Import:** Uploads your populated spreadsheet into a viewable device import list. If error-free, you can commit the bulk setup to SPM by simply clicking the **Apply** button. SPM will then import all PDUs in the list, as well as configuring those PDUs with your specified operational values.

### What Is Not Supported

- SPM Hub and Node systems.
- SPM's SNAP feature.
- Cabinet capacity.
- Linked PDUs for non-Server Technology devices.
- An IP with a port, for example, non-Server Technology devices using this IP format: 10.1.2.159:48.
- Re-using the **Device\_Import\_Template.xlsx** file name; the spreadsheet is read-only and to keep your changes, the file must be saved to a different Excel file name or saved to a different location. SPM does not keep the file to repeat an upload using the same file.
- Editing the template after a download. Any revisions to the Excel template require re-uploading.
- Deleting the Device Import template from within the SPM user interface.

## Getting Starting with Bulk Setup

Log in to SPM and go to **SPM Setup > Bulk Setup**. The Device Import window is displayed

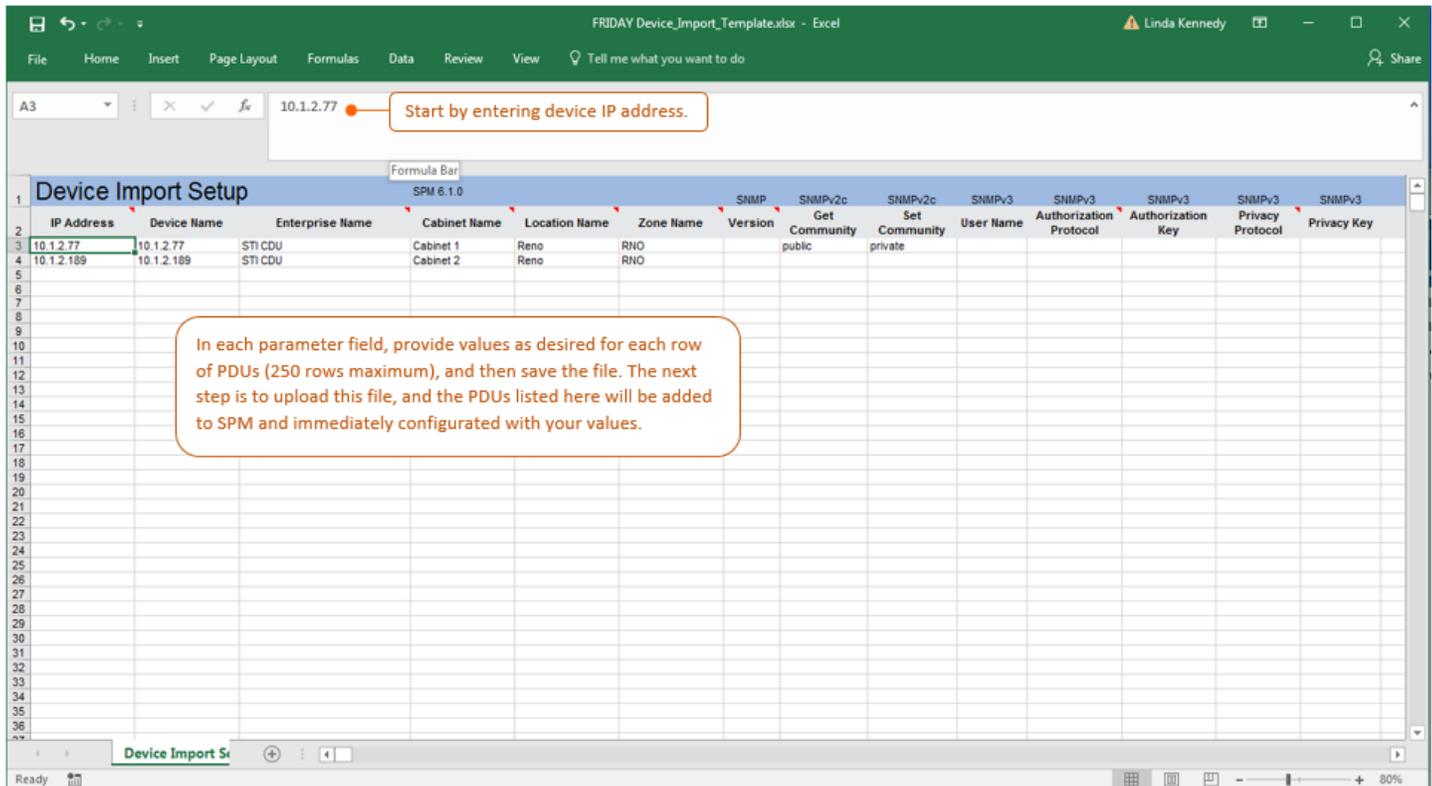


### Step 1. Downloading the Blank Template

Click the Download Template icon (shown in the window example above), and open or save the Excel file **Device\_Import\_Template.xlsx** locally as typically instructed by your web browser.

## Step 2. Configuring Parameters

Open the downloaded, local template and provide the values in the template fields for the PDUs you want to include in the SPM system, along with specified values, or accept any defaults. When finished editing, save the template.



## Editing Guidelines

**Note:** Only the IP Address field is required. All other fields in the template are optional..

**IP Address:** This address will be added to SPM. IPv4 and IPv6 addresses are supported. If an IP address is already in SPM, the new parameter data you provide will override/update the existing data for the IP address (device name, cabinet, location, zone, and SNMP settings).

### Enterprise Name:

For a full list of supported device enterprise names, see the SPM product License page.

- **For a Server Technology PDU:** If left blank, Enterprise Name defaults to “STI CDU”.
- **For a competitor device:** If left blank, Enterprise Name defaults to “STI CDU”, SPM will not recognize the device, and the device will fail to be managed. If you provide a name, you must type the name accurately in the Enterprise Name field. If the name is incorrect (even by one character), SPM will not recognize the competitor PDU, will note this as a device status error, and the template will be rejected.

**Cabinet Name:** The PDU will be placed in a cabinet with this name. If the cabinet does not exist, the cabinet will be created. See **Note** below about Cabinets and Zones.

## **Location:**

The PDU will be placed in a location with this name. If the location does not exist, the location will be created.

- For an existing PDU, you can leave the Location field blank and it will be reported as blank. If a location already exists for the PDU, the location will be overlaid with a blank.
- If a new location is applied for an existing IP address through device import, then the CDU parent will be changed with the new location and in the locations page, a new location will be created. In this case, old location will also be existing in the locations page.

## **Zone:**

The PDU will be placed in a zone with this name. If the zone does not exist, the zone will be created.

- For an existing PDU, you can leave the Zone field blank and it will be reported as blank. If a zone already exists for the PDU, the zone will be overlaid with a blank.
- If a new zone is applied for an existing IP address through device import, then the new zone will be added to SPM and the device will be tied to that. Old zone will also be in the zones list, and it will have the same device associated to that.

See **Note** below about Cabinets and Zones.

**SNMP Version:** Valid values are 1, 2c (default), and 3. If you specify SNMPv3 values, SNMP Version must be 3.

*For SNMPv3:*

- SNMPv3 Authorization Protocol: Valid values are None (default), MD5, and SHA.
- SNMPv3 Privacy Protocol: Valid values are None (default), AES, and DES.

**SNMP Get Community:** If left blank, the default is public.

**SNMP Set Community:** if left blank, the default is private.

## **Note:**

*Cabinets and Zones:*

- If the device import file has a cabinet and a zone, the PDU will assign to the cabinet, and the cabinet will assign to the zone.
- If the device import file does not have a cabinet and only has a zone, then the PDU will be removed from the previous cabinet and will be assigned to the zone. However, the previous cabinet will still remain in the zone.

**Tool Tips**

To assist in data entry, click a red triangle in a field for a tool tip, as shown here for IP Address:

Device Import Setup	
IP Address	Enterprise Name
10.1.2.77	10.1.2.77
10.1.2.189	10.1.2.189

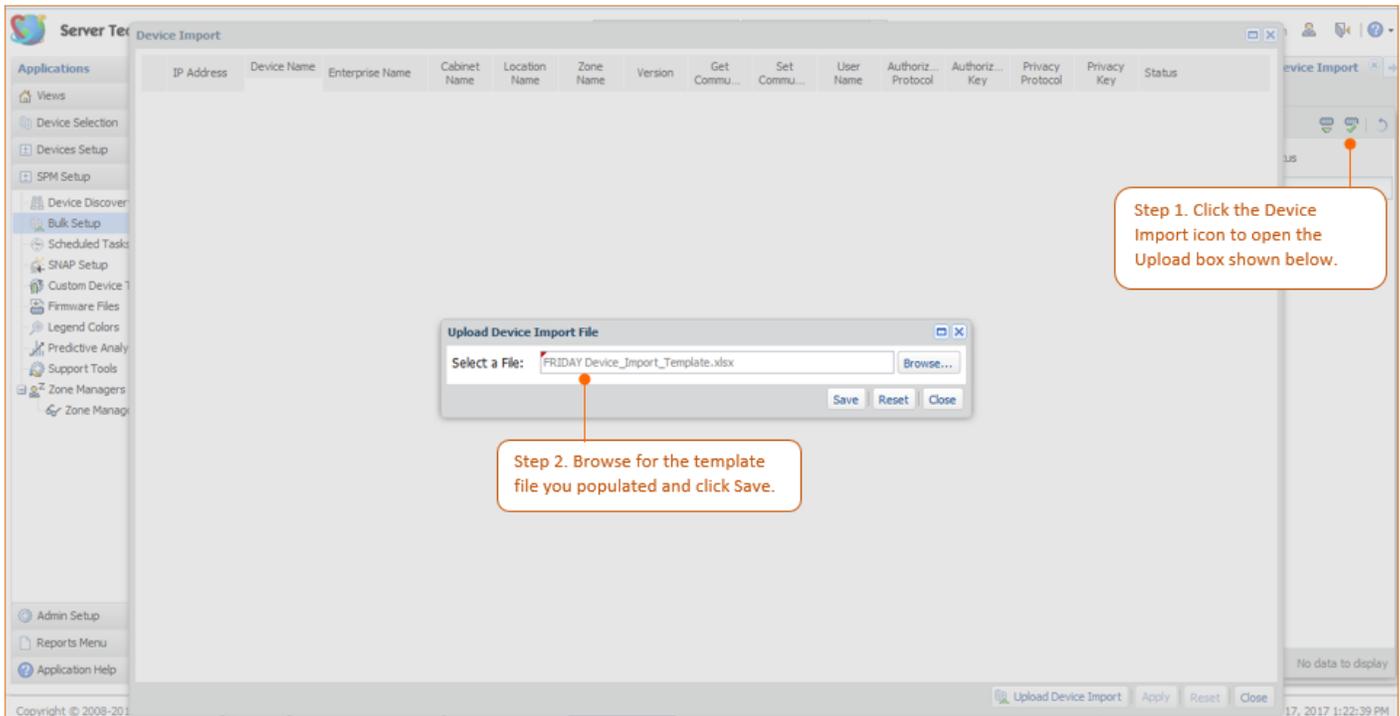
**Template File Guidelines**

When working with the **Device\_Import\_Template.xlsx** file, a few things to consider:

- The template supports CSV with a comma delimiter.
- Only the IP Address field is required; all other columns are optional.
- Do not change labels in heading line 1 “Device Import Setup” or in the column heading line 2.
- The maximum total rows are 250 in preview before committing to the SPM system.
- After the heading line 2, any data below 1 blank line will be ignored. Although other Excel applications may allow the blank row, it will cause the SPM user interface to time out. Make sure there are no blank rows above populated rows.

Step 3. Uploading the Device Import

To start the upload process, click the Device Import icon as illustrated, and then browse for the template file.



If the template file is error-free, the Status field will show a green "OK", as illustrated here:

IP Address	Device Name	Enterprise Name	Cabinet Name	Location Name	Zone Name	Version	Get Commu...	Set Commu...	User Name	Authoriz... Protocol	Authoriz... Key	Privacy Protocol	Privacy Key	Status
							public	private		None		None		OK
							public	private		None		None		OK

Step 4. Previewing the Device Import

When uploaded, the device import list displays so you can preview the PDUs and parameter values you entered. The following example shows the full list for two PDU entries in normal status.

IP Address	Device Name	Enterprise Name	Cabinet Name	Location Name	Zone Name	Version	Get Commu...	Set Commu...	User Name	Authoriz... Protocol	Authoriz... Key	Privacy Protocol	Privacy Key	Status
10.1.2.77	10.1.2.77	STI CDU	Cabinet 1	Reno	RNO	2c	public	private		None		None		OK
10.1.2.189	10.1.2.189	STI CDU	Cabinet 2	Reno	RNO	2c	public	private		None		None		OK

Do you want to save changes?

The Device Import list displays, showing the green "OK" status to indicate the setup in this list can be imported to SPM.

If all entries in the list show a green "OK" status, you can click Yes to apply the entire list and import the PDUs and values into SPM.  
 The Yes option works just like the Apply button (shown in Step 4 below) to perform the device import.  
 If there is an error in the list, the Yes option will not be available.

After previewing the list, if you click the Close button (or the "X" in the upper right corner of the window) the box shown above: "Do you want to save changes?" will be displayed.

Upload Device Import Apply Reset Close

If you want to make changes to the data in this preview, simply revise the template and upload it again as described in Step 3.

## Step 5. Applying the Setup

When the Device Import list displays, to commit the setup to the SPM system and apply your values to the PDU, click the **Apply** button.

**Note:** As described in Step 4 above, an option is to click **Close** and then click **Save**. This 2-click process works exactly like clicking the **Apply** button to perform the device import.

Note that the Device Import list must be error-free (all entries must be in normal "OK" status) to import the list to SPM.

The screenshot shows a 'Device Import' window with a table containing two entries. The table has columns for IP Address, Device Name, Enterprise Name, Cabinet Name, Location Name, Zone Name, Version, Get Commu..., Set Commu..., User Name, Authoriz... Protocol, Authoriz... Key, Privacy Protocol, Privacy Key, and Status. Both entries have a status of 'OK'. At the bottom right, there are buttons for 'Upload Device Import', 'Apply', 'Reset', and 'Close'. A callout box points to the 'Apply' button with the text: 'Step 4. Click Apply to save the setup to the SPM database, and to import the PDUs and values into the SPM system.'

IP Address	Device Name	Enterprise Name	Cabinet Name	Location Name	Zone Name	Version	Get Commu...	Set Commu...	User Name	Authoriz... Protocol	Authoriz... Key	Privacy Protocol	Privacy Key	Status
10.1.2.77	10.1.2.77	STI CDU	Cabinet 1	Reno	RNO	2c	public	private		None		None		OK
10.1.2.189	10.1.2.189	STI CDU	Cabinet 2	Reno	RNO	2c	public	private		None		None		OK

## Device Import Error Reporting

If a Device Import list has any error, note that **none** of the entries in the list will be applied to the SPM system, even those entries with a normal, green “OK” status.

This means that the **Apply** button will be disabled, none of the PDUs listed in your template can be imported, and none of your parameter values can be applied to the PDUs.

If a Device Import list has one or more errors, you will need to correct the template (Excel file), save it again, and upload it again until every entry in the report shows is normal, like the two entries shown in the previous window example.

To avoid data entry errors when preparing the template for upload, consider the areas SPM inspects:

- Any columns or fields with invalid values.
- Duplicate IP addresses.
- Duplicate device names.
- An Enterprise Name field that is incorrect for the device (even by one character in the name). The Enterprise Name field must be completely accurate.

The following example shows an error in a Device Import list:

IP Address	Device Name	Enterprise Name	Cabinet Name	Location Name	Zone Name	Version	Get Commu...	Set Commu...	User Name	Authoriz... Protocol	Authoriz... Key	Privacy Protocol	Privacy Key	Status
10.4.11.70	10.4.11.70	STI CDU					public	private		None		None		OK
10.1.7.55	10.1.7.55	STI CDU					public	private		None		None		OK
10.1.2.159	10.1.2.159	Avocent ACS					public	private		None		None		Not OK, Enterprise does not exist
10.1.2.160	10.1.2.160	Avocent ACS 5000					public	private		None		None		OK

**Warning**  
There are errors in the device import file. Please check the file and make corrects, then upload the file again.

Correct errors in the template, upload the template again, preview the device import list, and when error-free, apply the list to be imported to SPM.

## Contact Technical Support



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Server Technology, Inc.

1040 Sandhill Drive

Tel: 1-800-835-1515

Web: [www.servertech.com](http://www.servertech.com)

Reno, Nevada 89521 USA

Fax: 775-284-2065

Email: [support@servertech.com](mailto:support@servertech.com)



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