

VoIP Integration

Phone Inventory 1.1 (1012)



Installation and Administration Guide



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Product Overview

VoIP Integration Phone Inventory allows you to track all of your Cisco IP Phones no matter the model and maintain your inventory records.

Phone Inventory connects to both your Call Manager servers as well as the phones on your network to gather all available information on your phones to allow you to track configuration.

Requirements

Application Requirements

- Windows PC with Microsoft Dot Net 3.5 or greater.

Call Manager

- Call Manager 5+ (Tested on Call Manager 5 through 10.5).
- Call Manager User with AXL, RIS and User Admin permissions.
- AXL Service activated and running on Call Manager Server.

Network Connectivity

- The PC running Phone Inventory must be able to connect to all phones on TCP port 80
- The PC running Phone Inventory must be able to connect to the Call Manager on TCP port 8443
- The phones must be able to reach the Authentication URL (See the troubleshooting section for more information)
- Phone Inventory should work through NAT and over VPN.

IP Phones

- The phones that are being inventoried need to have http enabled.

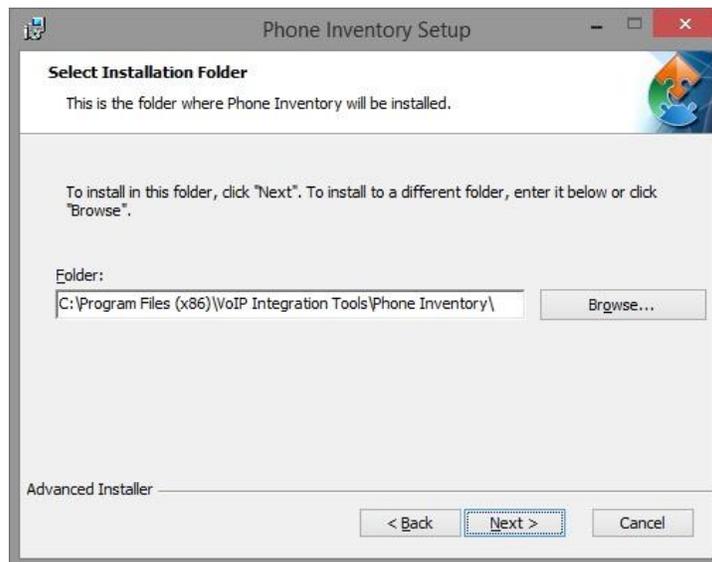
Installation Process

Loading Phone Inventory

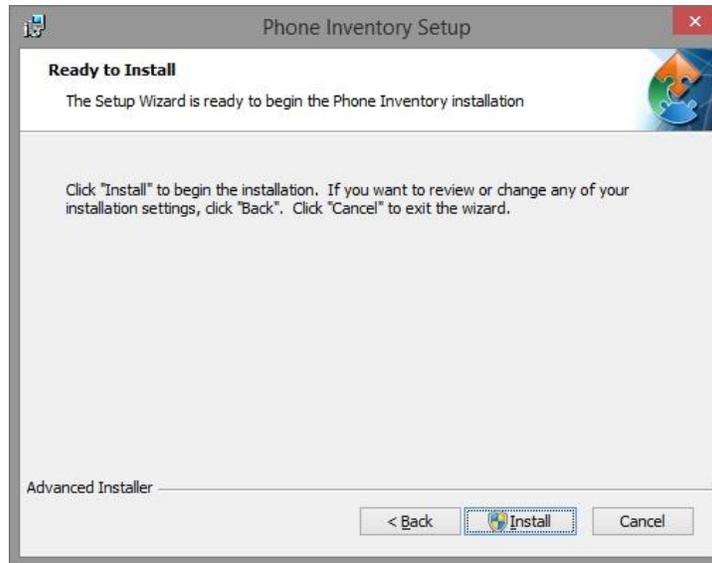
To begin the installation, download the installer from our website at <http://www.voipintegration.com>. Then double-click the saved file.



Click "Next>"



Enter the installation path you would like Phone Inventory installed in and click "Next>."



Click “Install” to begin the installation, click on “Yes” if the Windows UAC prompt comes up.



Click on the “Finish” button to complete the installation and exit the Setup Wizard.

Application Use

Launching Phone Inventory

Navigate through Windows Start -> Programs -> VoIP Integration Tools -> Phone Inventory and select Phone Inventory.

Phone Inventory will start up and check for an upgrade, it is strongly recommended that you click yes to download the upgrade if any are found.

Loading your License Key

Upon program startup you will be show the following screen. Enter your Name, Company and Registration Key exactly as you receive them in the registration email. The Registered User Name and Registered Company Name are case sensitive.



Adding and Connecting to a Cluster

Phone Inventory can save cluster information to easily run reports without having to enter the same credentials repeatedly. To add a cluster to the list simply fill out the cluster information and then press the “Save” button.

If you need to change the information for a cluster just click on the cluster, change the information and then click the “Save” button again.

To connect to a cluster, highlight the desired Saved Cluster on the left drill down, then click the connect button. You also double click on the Saved Cluster and it will begin to connect.



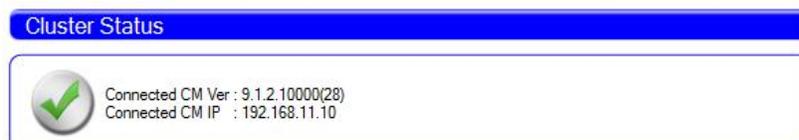
Call Manager Administration User

Ensure you have met the requirements for enabling AXL and assigning permission described in Appendix A.

- In the in the Username field, enter the username with Admin/AXL permissions
- In the Password field, enter the password
- Click Save (if desired to automatically connect to this server upon startup)
- Click Connect

The Cluster Status will indicate a successful connection and display the version of the connected Call Manager.

You are now ready to run a report on the selected Call Manager Cluster.



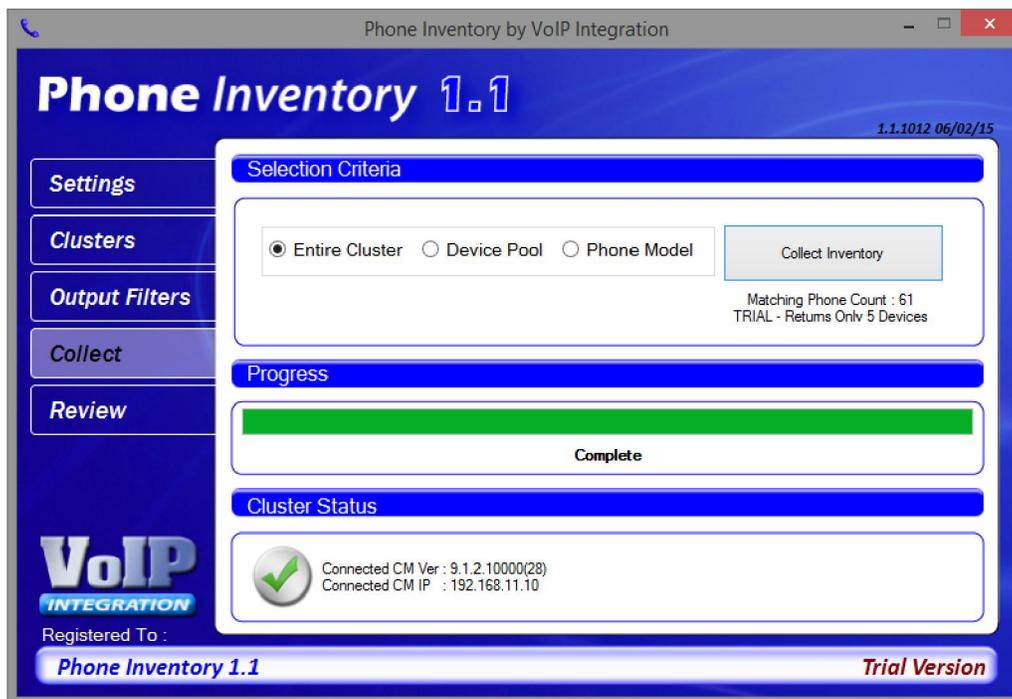
Collecting Data

Once Phone Inventory is connected to a Call Manager you can select the “Collect” button in the left pane, this will open the Selection Criteria and Collection List page. A report can be run on any one of the following groups of phones:

- The entire cluster
- Specific Device Pool
- Specific Device Type

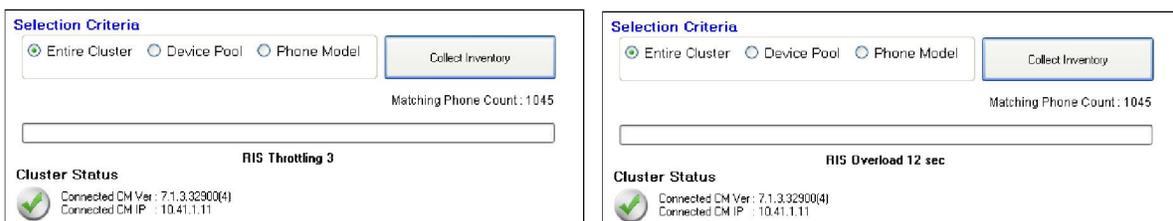
Selecting “Device Pool” and “Phone Model” will produce a drop down bar where you can select the specific device pool or phone model respectively. Click on the “Collect Inventory” button to run the report.

Once the report has been completed, the Progress Bar will indicate the report has finished running.



RIS Throttling

In the event that the number of phones is large enough, Phone Inventory may need to throttle the RIS requests made to the Call Manager server. If that occurs, you may be shown the status below.



Output Filters

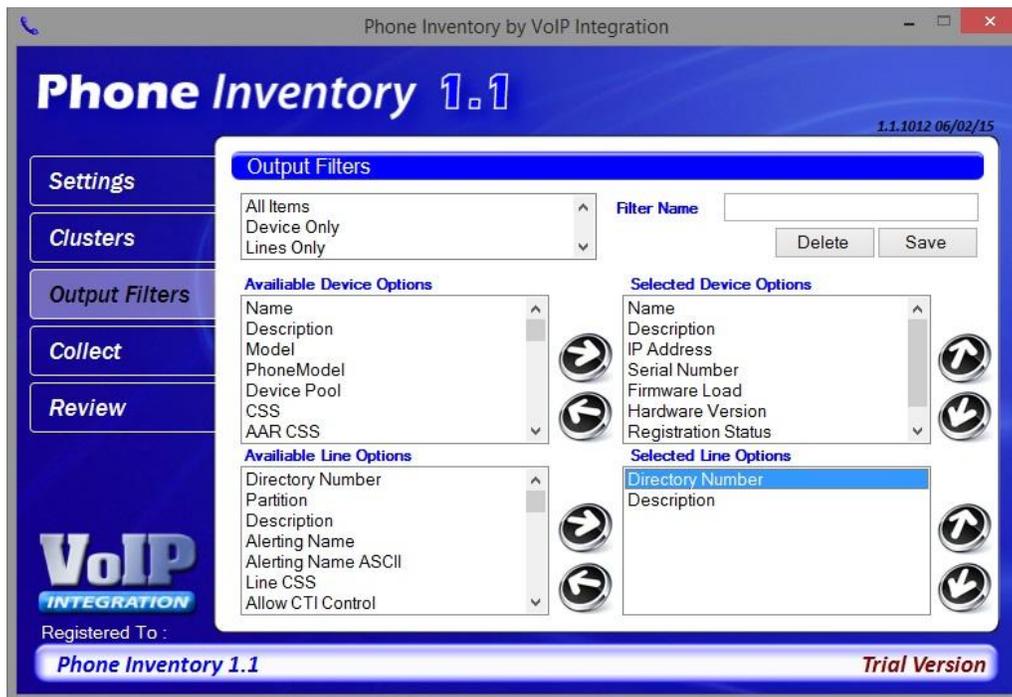
On the Output Filters page of Phone Inventory are the filters that you can apply to the data collections to view a specific set of data. The filters are customizable so that you can create reports that output only the data that you are interested in.

To add a new filter, move the items that you are interested in seeing in your report, type a new name in the “*Filter Name*” field, and click the save button.

To edit an existing filter, click on the name of the filter in the “*Output Filter*” list and then edit the selected options and then click “*Save*”.

To delete a filter, click on the name of the filter in the “*Output Filter*” list and then click “*Delete*”.

There are 5 preconfigured filters that cannot be edited: *All Items*, *Device Only*, *Lines Only*, *Typical Search*, and *Phone Web Page*.



Reviewing Data

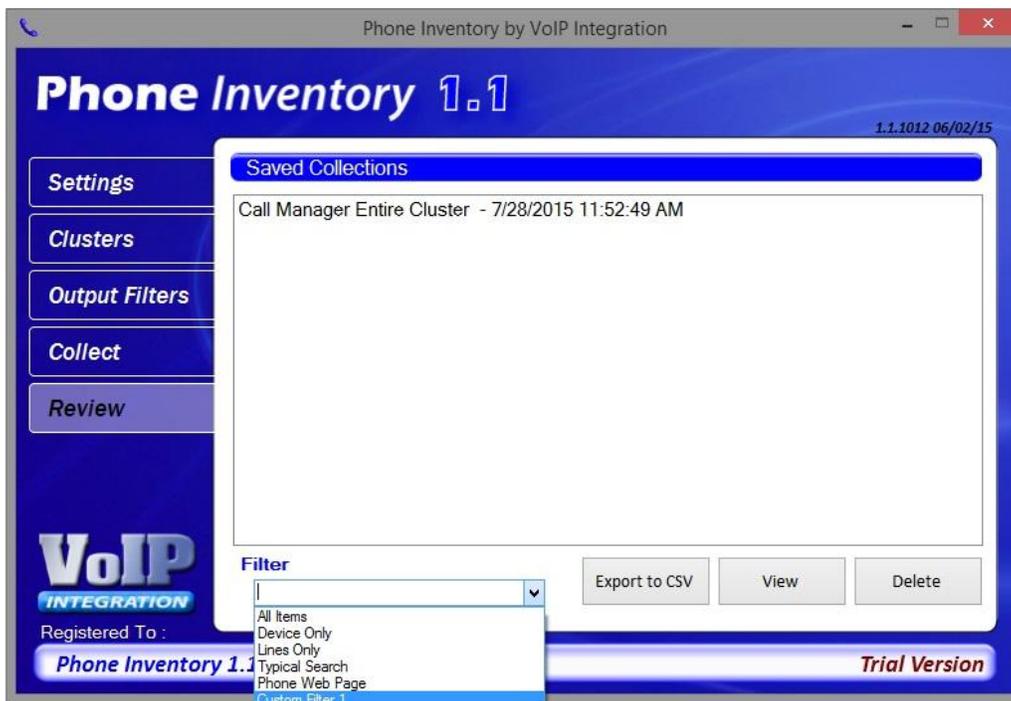
After running a report, select the “Review” button in the left pane, this will display the Saved Collections. Here you have a list of previous data collection reports.

From this section, you can choose to apply a filter to any of the saved collections in order to list only the data you would like to view. This allows you to go back at a future date to track data that you may not have otherwise collected.

If you no longer wish to keep a Saved Data Collection, you can highlight the selection and click on the “Delete” button.

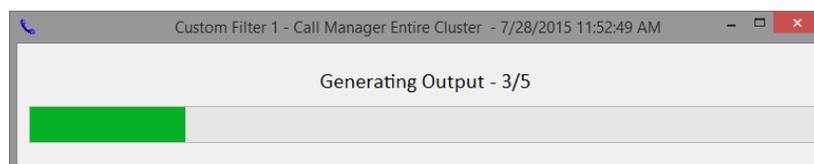
To create a report, select a filter from the “Filter” dropdown bar. Once a filter has been selected, click on the “View” button to generate and view the report.

You can also export the data to a .CSV file that will open in which ever program your system is configured to open them in, most commonly Microsoft Excel. Click on the “Export to CSV” button to view the report as a CSV file.



Once the Collection and Filter have been selected and the output method has been chosen, Phone Inventory will apply the filter and gather the data for the output.

WARNING! Depending on the size of the collection and the number of items ion the filter, the output process can take quite some time. A collection containing 1000 phones with the All Items filter can take over 30 minutes to compile depending on line counts and computer processing power.



Report Output Types

If you choose to view the output from Phone Inventory, an additional window will open containing the data:

Name	Description	IP Address	Serial Number	Firmware Load	Hardware Version	Registration	MWI Status	Line 1 Directory	Line 1 Description	Line 2 Directory	Line 2 Description	Line 3 Directory	Line 3 Description	Line 4 Directory	Line 4 Description
SEP885A9:LAB-7821	LAB-7821	192.168.11.45	WZP174503KD	sp78xx.1C V01	V01	Registered	OFF	3073							
SEP00041345F6:	SEP00041345F6:	192.168.11.43				Registered		121	SNOM Phone						
SEP0817351599:		192.168.11.42	FCH14488CXJ	*SCCP42.9-4-2-15*	12.0	Registered	OFF	221							
SEP1C17D346C:		192.168.11.41	FCH14178KG9	*SCCP42.9-4-2-15*	11.0	Registered	OFF	222		288					
SEP0020967940:	Auto 3084					Not Registered		3084							

If you choose to export to CSV, your default program for handling CSV files will open the report:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Name	Description	IP Address:	Serial Nur	Firmware	Hardware	Registrati	MWI Statu	Line 1 Dir	Line 1 Des	Line 2 Dir	Line 2 Des	Line 3 Dir	Line 3 Des
2	SEP885A9:	LAB - 7821	192.168.11	WZP1745C	sp78xx.1C	V01	Registere	OFF	3073					
3	SEP00041:	SEP00041345F6D3	192.168.11.43				Registered		121	LAB-121				
4	SEP08173:	LAB - 221	192.168.11	FCH14488	*SCCP42.5		12	Registere	OFF	221	LAB-221			
5	SEP1C17D	LAB - 222	192.168.11	FCH14178:	*SCCP42.5		11	Registere	OFF	222	LAB-222	288		
6	SEP00209	Auto 3084					Not Registered		3084					

Appendix A: Call Manager Pre Requisite Configuration

AXL Service

For Phone Inventory to function with Call Manager you will need to ensure you have the AXL service active and running on your server and will need.

To Validate you have the AXL service running:

- Use a web browser to access the Call Manager Serviceability web page.
- <https://<Call Manager>/ccmservice>
- Select the **Tools > Service Activation** menu
- Under the Database and Admin Section
- Ensure that the Cisco AXL Web Service is activated. If not, click the checkbox and then click the save button at the top of the page.
- Select **Tools > Control Center - Feature Services** menu
- Ensure that the Cisco AXL Web Service is running. If not, click the radio button and then click the start service button at the top of the page.

Service Activation

Database and Admin Services		
	Service Name	Activation Status
<input checked="" type="checkbox"/>	Cisco AXL Web Service	Activated
<input type="checkbox"/>	Cisco UXL Web Service	Activated
<input type="checkbox"/>	Cisco Bulk Provisioning Service	Activated
<input type="checkbox"/>	Cisco TAPS Service	Deactivated

Control Center – Feature Services

Database and Admin Services					
	Service Name	Status	Activation Status	Start Time	Up Time
<input type="radio"/>	Cisco AXL Web Service	Started	Activated	Mon Feb 15 13:38:55 2010	20 days 20:56:57
<input type="radio"/>	Cisco UXL Web Service	Started	Activated	Mon Feb 15 13:38:55 2010	20 days 20:56:57
<input type="radio"/>	Cisco Bulk Provisioning Service	Started	Activated	Mon Feb 15 13:37:17 2010	20 days 20:58:35
<input type="radio"/>	Cisco TAPS Service	Not Running	Deactivated		

AXL User

You may choose to use a Call Manager administrator username and password with Phone Inventory or assign the required permissions to new or existing users.

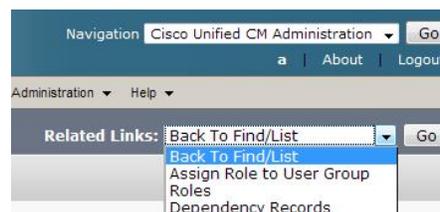
Any user who has the group membership of **Standard CCM Super Users** will be able to use Phone Inventory to gather phone data without adding the following process.

If you choose to add a user new group for permissions and want to restrict permissions to the minimum required. You will need to work through the following process. This new group can then be added to new or existing end users in Call Manager.

From within Call Manager Administration

- Select User Management
- Select User Groups
- Click Add New

- Enter a Group Name such as (AXL Access)
- Click Save
- Select the Assign Role to User Group from the related links



- Click Assign Role to Group button
- Add the following Role

Standard AXL API Access

Status	
i Status: Ready	
User Group Information	
Name* AXL Access	
Role Assignment	
Role	Standard AXL API Access
<input type="button" value="Assign Role to Group"/> <input type="button" value="Delete Role Assignment"/>	
<input type="button" value="Save"/>	

- Click Save

Now find your user in Call Manager Administration, User Management, End Users and add the group created above and the Standard CCM Admin Users group. This will allow the user to access the AXL service but no access to any of the Call Manager Admin web pages

Permissions Information	
Groups	AXL Access Standard CCM Admin Users
<input type="button" value="Add to User Group"/> <input type="button" value="Remove from User Group"/>	
Roles	Standard AXL API Access Standard CCM Admin Users Standard CUReporting
View Details View Details	
<input type="button" value="Save"/> <input type="button" value="Delete"/> <input type="button" value="Add New"/>	

- Click Save.