

LiveAction™ Quick Start Guide

LiveAction Net LineDancer Network Change and Configuration Management

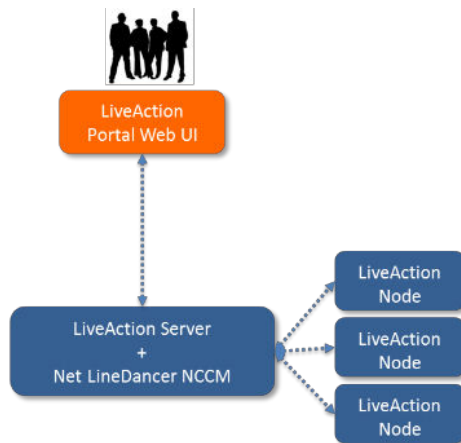
1. Overview

Net LineDancer (NetLD) provides Network Change and Configuration Management (NCCM) capabilities.



- Configuration management
 - Scalable 20,000+ devices
 - Scheduled and real time backup and restore
 - Historical configuration and change reports
 - Compliance rule engine
- Change management
 - Scheduled and on-demand network wide changes
 - Abstracted multi-vendor change deployment
- Inventory management
 - Scheduled and automatic discovery process
 - Network device IOS and HW module inventory
 - Device IOS upgrades
- Terminal proxy
 - One click SSH and telnet to any device

LiveAction and netLD System



The LiveAction server and netLD work together as a system.

- netLD can be installed using a separate installer either on the same machine as LiveAction server or another server.

- User accounts can be local and separate between LiveAction and netLD or use the same Active Directory system for common accounts (only available on netLD 14.0 or higher)
- netLD is accessed via the portal web UI on the LiveAction server with a separate login page to netLD.

Licensing

- NetLD is provided via subscription license separate from the LiveAction server license.
- The subscription license can be requested from LiveAction directly.

2. Installation Steps

The following is the windows installer steps for netLD. More detailed information and for Linux install, please refer to the netLD download webpage and user manual.

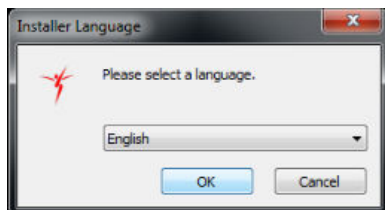
<http://www.logicvein.com/download.html>

Installing on server without Internet:

If the install server has no internet connection, please contact support@logicvein.com with the MAC Address of the install server. If there are multiple NIC, send the MAC for one of the connections that is plugged into the network and is active.

Installation:

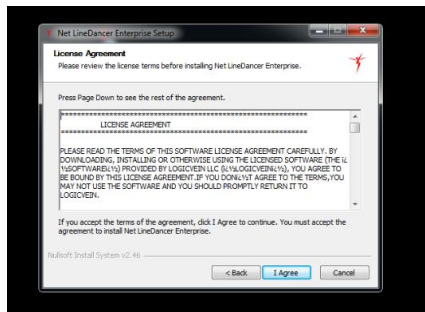
1. Start the netLD installer and select the language.



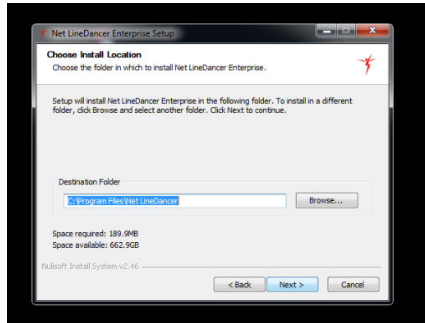
2. Welcome screen in English should display



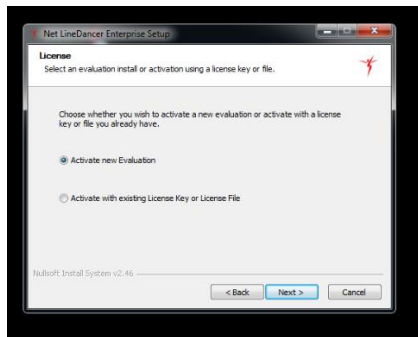
3. Agree to license



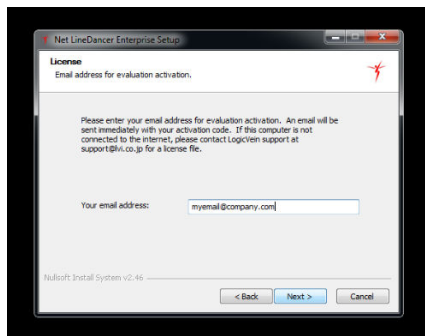
4. Location of install



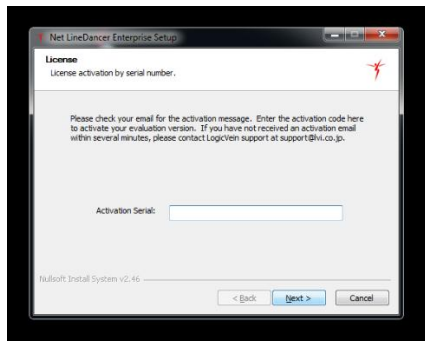
5. Choose new activation



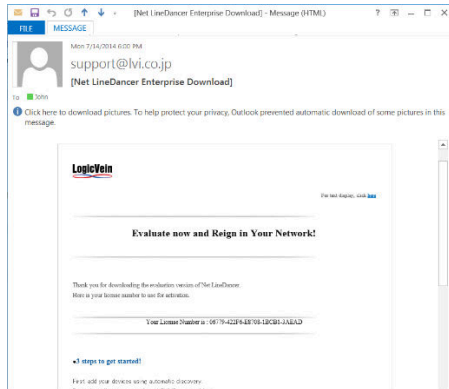
6. Enter email address to receive license key to activate. Response is automated so the email should be sent almost immediately.



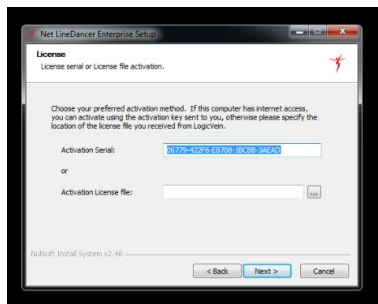
7. Wait for email to enter into activation screen



8. Receive automated email with license key



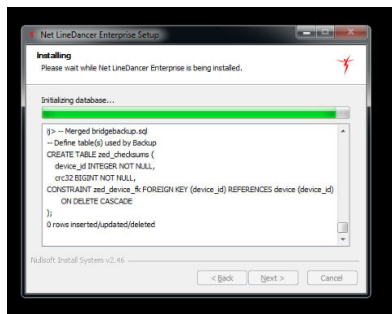
9. Enter license key



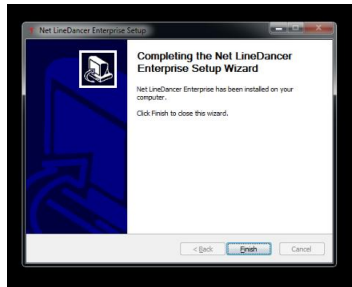
10. Enter SSL information to generate secure connection capability.



11. Continue install



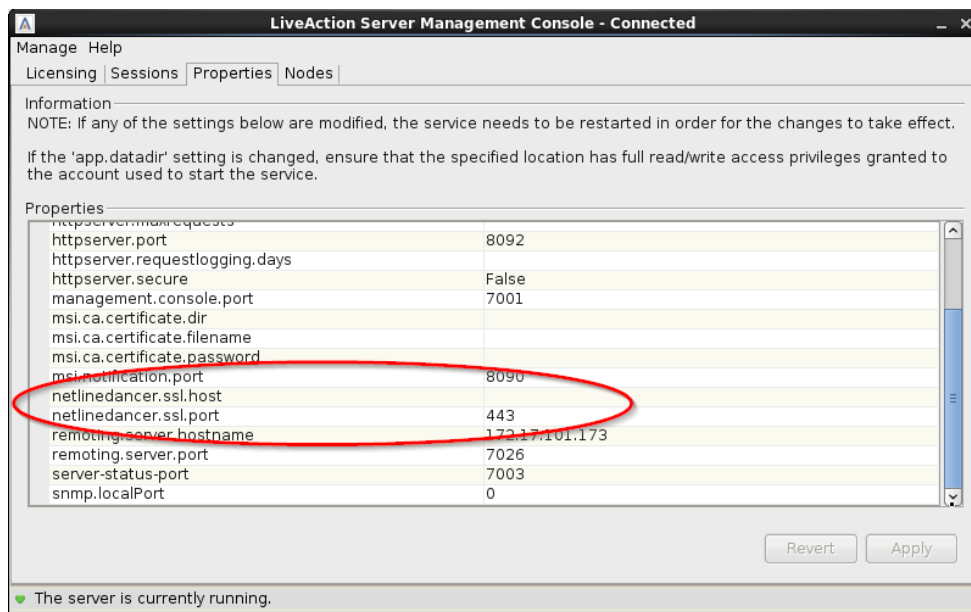
12. Done



3. Setup and Administration

Setup

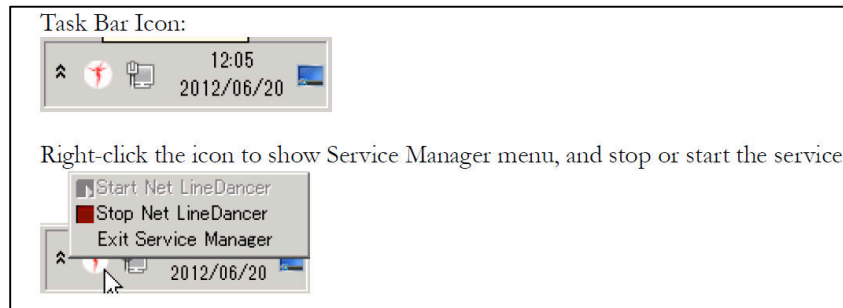
If netLD was installed on a server that is separate than LiveAction server, then the LiveAction server console properties need to be modified to specify the IP address in `netlinedancer.ssl.host` and `netlinedancer.ssl.port` to communicate to netLD to integrate into the LiveAction server web pages. Typically the port should remain 443 for SSL use.



License Setup

To update the license from evaluation to a subscription version, request a subscription license from LiveAction. LiveAction will then provide a license.enc file which will be copied to the netLD install directory under the folder osgi-config/security.

Once the license.enc file is placed in that directory, restart the netLD service for the license to take effect. NetLD can be restarted by clicking on the netLD icon in the windows task bar service on the server.

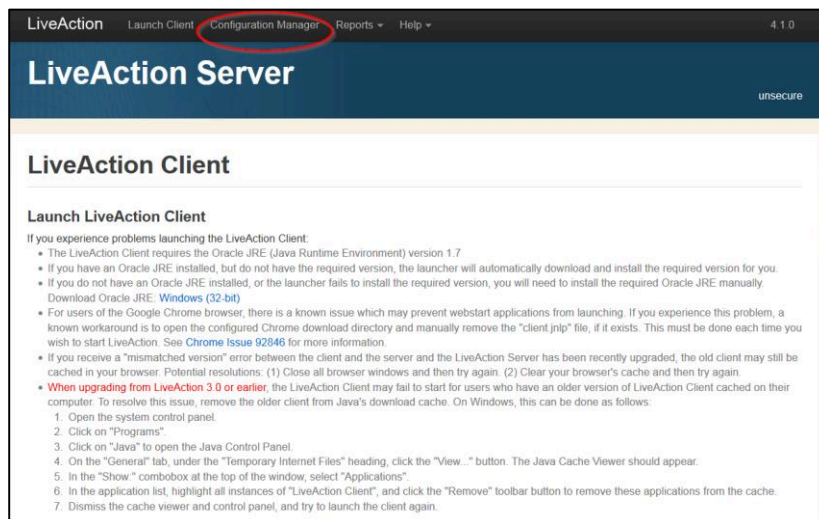


Administration

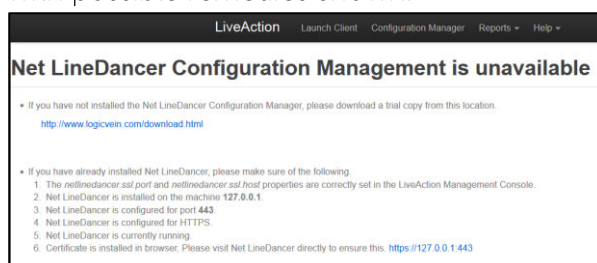
netLD is accessed from the LiveAction server portal via the "Configuration" link. Most browsers are compatible with netLD although Microsoft IE maybe issue some security certificate warnings.

Initial steps are listed below.

1. Click "Configuration" menu to bring up the netLD screen.



If netLD was not installed or cannot communicate to the netLD server, the page below will be shown with possible remedies shown.



2. Login to netLD

When prompted, login with netLD credentials, initially it defaults to:

- Username: admin
- Password: password

3. Run startup wizard

This will run automatically on first login and go through steps needed to bring in devices and backup the configurations. The process will bring in devices and perform the device discovery.

4. Manual device add

Alternatively, devices can be added manually if the startup wizard was not utilized.

Manual add is done by providing a list of IP address of the devices to be added. LiveAction could be used to export the inventory list of IP address which are inserted into the excel template provided by netLD.

In the template, the exact Network and Adapter ID for each device has to be specified and will be validated by the template usually set to Default and Cisco IOS. The information can be filled down for large number of devices. The list can then be imported back into netLD.

A	B	C	
IP Address	Network	Adapter ID	Host
172.16.1.1	Default	Cisco IOS	
172.16.1.2	Default	Cisco IOS	
172.16.1.3	Default	Cisco IOS	
172.16.1.4	Default	Cisco IOS	
172.16.1.5	Default	Cisco IOS	
172.16.1.6	Default	Cisco IOS	
172.16.1.7	Default	Cisco IOS	

See section 9-1-2 of the netLD user manual on "Adding Devices Manually" for more information.

5. Setup additional user account

- If using active directory, then setup the AD settings, and the login will be identical for both systems. The permissions for users will need to be setup specifically in netLD to the authorized capabilities of that user in performing actions within netLD.
- If local user accounts are used on LiveAction and in netLD, then the users need to be created on the netLD side for single sign on to work. Otherwise they can be kept separate if needed.
- Add additional roles and access restrictions as needed, please see netLD manual.

6. Upgrading netLD

Upgrading netLD will be done using a separate netLD installer.

7. Accessing netLD

- a. netLD is accessible from the LiveAction web portal.
- b. A separate login step is required at this time into netLD.

4. Usage and Workflow

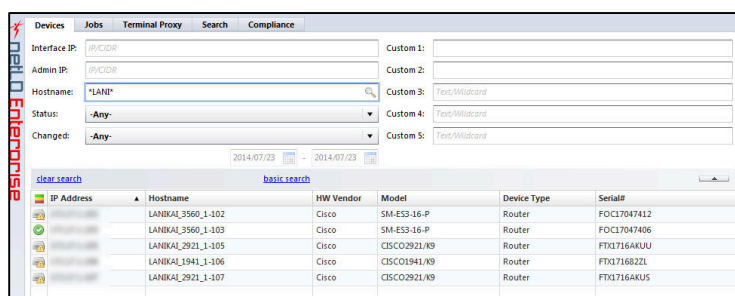
netLD can be used as a standalone NCCM capability but can be used in conjunction to compliment LiveAction capabilities.

- NCCM Capabilities
 - Setup daily backup of configurations
 - Setup syslog to netLD for config change notification
 - Restoration and comparison of configurations
 - Sending out CLI commands and templates adhoc or scheduled to large number of devices
 - Verify configuration settings and compliance
- Complimentary workflows with LiveAction
 - Scheduled QoS configuration changes
 - Large scale QoS device configuration changes requiring multiple actions
 - Customized auditing of QoS settings via graphical rule engine
 - ACL changes across large number of devices

4.1 How to share tag, group and site information

From netLD, you can export the inventory of all the devices into an excel file and use the LiveAction exported csv file information to populate information into the excel file and re-imported back into netLD for use in searching.

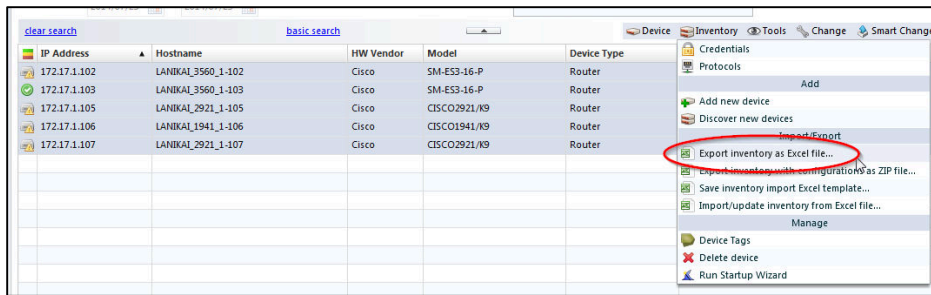
For example, for this particular set of routers, the inventory excel will be exported.



The screenshot shows the netLD web interface with a table of device inventory. The table has columns for IP Address, Hostname, HW Vendor, Model, Device Type, and Serial#. The data rows show five Cisco routers with various models and serial numbers.

IP Address	Hostname	HW Vendor	Model	Device Type	Serial#
LANIKAL3560_1-102	LANIKAL3560_1-102	Cisco	SM-ES3-16-P	Router	FOC17047412
LANIKAL3560_1-103	LANIKAL3560_1-103	Cisco	SM-ES3-16-P	Router	FOC17047406
LANIKAL2921_1-105	LANIKAL2921_1-105	Cisco	CISCO2921/K9	Router	FTX3716AKUJ
LANIKAL1941_1-106	LANIKAL1941_1-106	Cisco	CISCO1941/K9	Router	FTX3716B22L
LANIKAL2921_1-107	LANIKAL2921_1-107	Cisco	CISCO2921/K9	Router	FTX3716AKU5

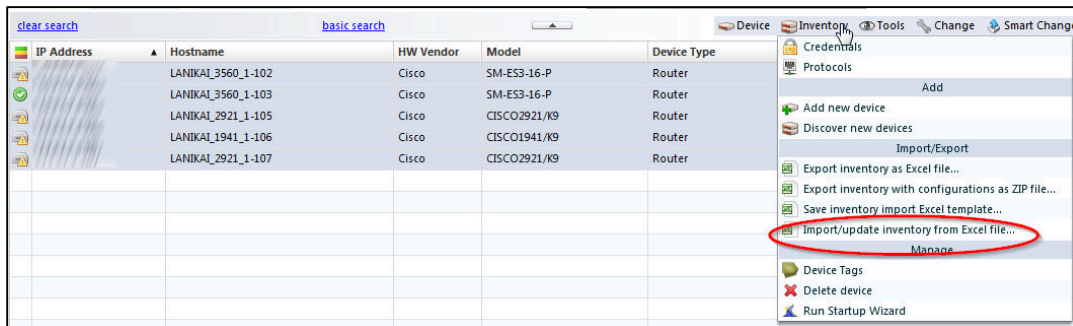
Select the devices and choose "Export inventory as ..." from the Inventory menu.



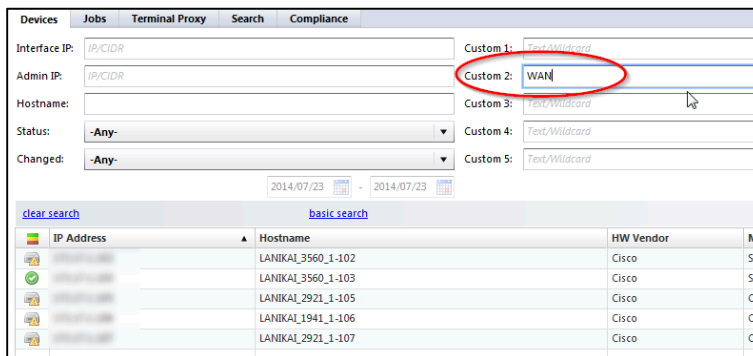
In the file there are 5 custom fields that can be used to map to sites, group and other tag information.

Network	Adapter ID	Hostname	Type	Vendor	Model	OS Version	Serial Number	Memo	Custom 1	Custom 2	Custom 3	Custom 4	Custom 5
Default	Cisco IOS	LANIKAI_3560_1-102	Router	Cisco	SM-ES3-16-P	12.2(58)SE2	FOC17047412		San Francisco	WAN	West		
Default	Cisco IOS	LANIKAI_3560_1-103	Router	Cisco	SM-ES3-16-P	12.2(58)SE2	FOC17047406		New York	WAN	East		
Default	Cisco IOS	LANIKAI_2921_1-105	Router	Cisco	CISCO2921/K9	15.4(1)T	FTX1716AKUU		Seattle	WAN	West		
Default	Cisco IOS	LANIKAI_1941_1-106	Router	Cisco	CISCO1941/K9	15.4(1)T	FTX171682ZL		Honolulu	WAN	West		
Default	Cisco IOS	LANIKAI_2921_1-107	Router	Cisco	CISCO2921/K9	15.4(1)T	FTX1716AKUS		Miami	WAN	East		

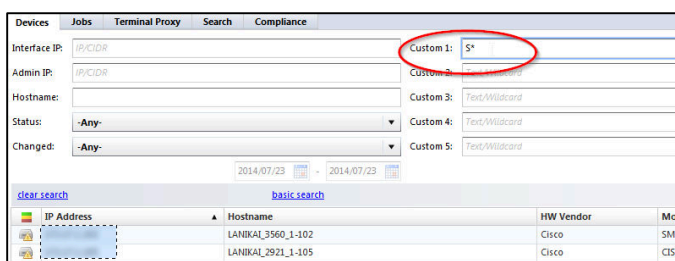
The file is then re-imported back into netLD.



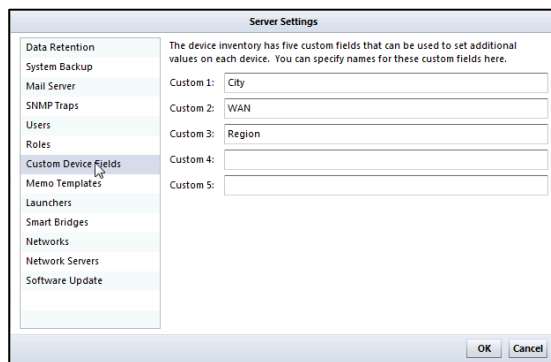
Now those fields can be used for advanced searching to find devices including wildcard based searches. In this example find all WAN devices.



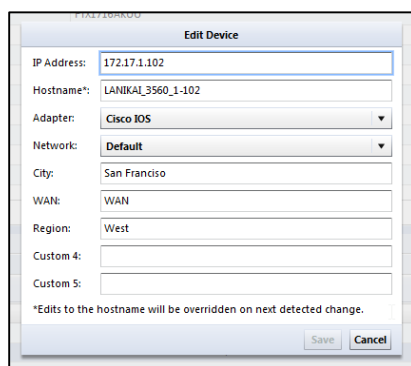
All sites that start with a "S"



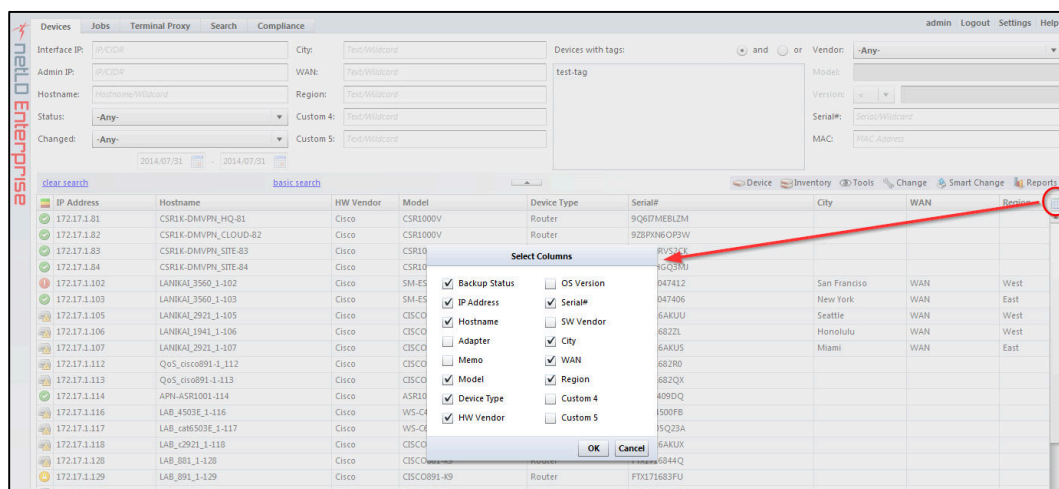
You can also rename the title for Custom fields from the settings.



Now the custom fields show up as City, WAN and Region.



Use the device list setting button to bring in custom fields City, WAN and Region in to the table view.

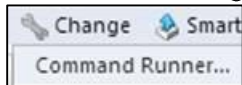


4.2 How to change flow exporter settings to multiple devices

1. Select the devices that you want to use the "Command Runner..." tool.

neto Enterprise						
Devices Jobs Terminal Proxy Search Compliance						
Search IP/Hostname: PFR		advanced search				
IP Address	Hostname	HW Vendor	Model	Device Type	Serial#	
172.17.1.135	PfRv3_HUB-MC_1-135	Cisco	IOSv	Router	9AFKH66Z1JOI8PS7EOGJP	
172.17.1.136	PfRv3_R2_1-136	Cisco	IOSv	Router	9T9MMSQNLZ838DLW5R9T	
172.17.1.137	PfRv3_HUB-BR1_1-137	Cisco	IOSv	Router	945TQIUVL88CQKZA7MBO9	
172.17.1.138	PfRv3_HUB-BR2_1-138	Cisco	IOSv	Router	9Z8U4WO0T1I7LOCF5ULEL	
172.17.1.139	PfRv3_R8_1-139	Cisco	IOSv	Router	967GFBNA10ZA88FMV4I6N	
172.17.1.140	PfRv3_R9_1-140	Cisco	IOSv	Router	9L26P5M8GD9IEAMO5MBM	
172.17.1.141	PfRv3_BR1-MC-BR_1-141	Cisco	IOSv	Router	9560GYFBUQTGOE998U2NP	
172.17.1.142	PfRv3_BR2-MC-BR_1-142	Cisco	IOSv	Router	9N8HVXIIYFRWLF3PRVUJX	

2. Select "Change --> Command Runner"



3. Set the commands to run in Command Runner

Command Runner

Specify the commands to run against the devices

```

conf t
flow exporter LIVEACTION-FLOWEXPORTER
destination 172.17.101.141
end
write

```

Override the default prompt regex:

Response timeout (seconds):

☐ Perform backup after tool completes

Execute **Cancel**

4. Confirm execution

Confirm Tool Execution

 This tool will change a device. Do you want to continue?

8 devices selected.

☐ Don't show this dialog again

Yes **No**

5. Verify Command Runner results:

neto Enterprise

admin Logout Settings Help

Search IP/hostname: PR

Advanced Search

IP Address	Hostname	HW Vendor	Model	Device Type	Serial
172.17.1.135	PRR-3_HUB-AMC_1-135	Cisco	IOSv	Router	SAFMH6Z1CHNP5TEGIP
172.17.1.136	PRR-3_R2_1-136	Cisco	IOSv	Router	9F9AH5CQNZ33DLVSR9T
172.17.1.137	PRR-3_HUB-SR1_1-137	Cisco	IOSv	Router	9437QUV18CQKZATMB09
172.17.1.138	PRR-3_HUB-SR2_1-138	Cisco	IOSv	Router	92ZU4W00T17LQCF5ULEL
172.17.1.139	PRR-3_R3_1-139	Cisco	IOSv	Router	967GFBN10ZAB8F4V48EN
172.17.1.140	PRR-3_R3_1-140	Cisco	IOSv	Router	9L2P9M8GD98AANQ45MBM
172.17.1.141	PRR-3_SR1-AC-RR_1-141	Cisco	IOSv	Router	95A00P8QJGCE9RU0J9P
172.17.1.142	PRR-3_SR2-AC-RR_1-142	Cisco	IOSv	Router	9N8H4XN9F8V4L3FRV0UX
172.17.1.143	PRR-3_SERVER_1-143	Cisco	IOSv	Router	9UM3SD4VNBVZLS4VC34
172.17.1.144	PRR-3_P	Cisco	IOSv	Router	9UM3SD4VNBVZLS4VC34
172.17.1.145	PRR-3_PMOD2_1-145	Cisco	IOSv	Router	9UM3SD4VNBVZLS4VC34
172.17.1.146	PRR-3_B1CHT_1-146	Cisco	IOSv	Router	9UM3SD4VNBVZLS4VC34
172.17.1.147	PRR-3_B2CHT_1-147	Cisco	IOSv	Router	9UM3SD4VNBVZLS4VC34

1 - 13 of 13

Results per page: 254

Command Runner

Default/Command Runner (2014/07/22 16:15)

Find text:

Device	Duration (seconds)
172.17.1.135	4
172.17.1.141	5
172.17.1.142	0
172.17.1.140	5
172.17.1.139	4
172.17.1.138	4
172.17.1.137	4
172.17.1.136	4

```

conf t
#exec configuration commands, one per line. End with CNTL/Z
PRR-3_HUB-AMC_1-135 (config)#flow exporter LIVEACTION-FLOWEXPORTER
PRR-3_HUB-AMC_1-136 (config-flow-exporter)# destination 172.17.101.141
PRR-3_HUB-AMC_1-136 (config-flow-exporter)# send
PRR-3_HUB-AMC_1-136 write
Building configuration...
[OK]
PRR-3_HUB-AMC_1-135#
PRR-3_HUB-AMC_1-136#
  
```

LiveAction™

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