

# netLD External Authentication

## Setup Guide

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### Overview

netLD is able to integrate with authentication servers such as Active Directory and FreeRADIUS. When using this integration, you do not need to create the individual users in netLD.

netLD can apply specific networks and permissions to the groups sent from authentication servers.

### 1. Integration with a RADIUS Server

netLD will send an **Access-Request** packet to the RADIUS server and expects an **Access-Accept** packet in return. This **Access-Accept** packet will need to contain a Filter-Id containing a group name that netLD can, using **External group mappings**, map to the netLD roles and networks.

Here is an example of a user configured in FreeRADIUS:

```
LogicVein  Cleartext-Password := "password"  
          Filter-Id += "GROUP",
```

In this example, when netLD sends an **Access-Request** packet including the username "LogicVein" and password "password", the RADIUS server sends back an **Access-Accept** packet which has the Filter-Id field set. The Filter-Id is used as the **External Group** in which the authenticated user will belong. Available contents are as follows.

#### <<Setting Procedures>>

In order to integrate with a RADIUS server, the settings can be configured in the **External authentication** page of the **Server Settings** dialog.

1. Select **RADIUS** for **Enable external authentication**.

**Server Settings**

- Data Retention
- System Backup
- Mail Server
- SNMP Traps
- Users
- Roles
- External Authentication
- Custom Device Fields
- Memo Templates
- Launchers
- Smart Bridges
- Networks
- Network Servers
- Cisco Plug and Play
- Software Update

Enable external authentication: **Disabled** ▼

- Disabled
- ActiveDirectory
- RADIUS

External group mappings:

Roles
Networks

External Group	Role

+
✎
↑
↓
✕

OK
Cancel

2. Set the IP address (or Hostname) and the Shared Secret of the RADIUS server.

**Server Settings**

- Data Retention
- System Backup
- Mail Server
- SNMP Traps
- Users
- Roles
- External Authentication
- Custom Device Fields
- Memo Templates
- Launchers
- Smart Bridges
- Networks
- Network Servers
- Cisco Plug and Play
- Software Update

Enable external authentication: **RADIUS** ▼

Hostname:  Port:

Shared Secret:  Test

Character Encoding: **UTF-8** ▼

External group mappings:

Roles
Networks

External Group	Networks

+
✎
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✕

OK
Cancel

- After configuring the above settings, you can confirm the integration with the RADIUS server by clicking **Test** and providing a Username and Password. If there is no problem, the **Authentication successful** message will be shown.

**Test Authentication**

Username:

Password:

Authentication successful

3. Assign **Roles** using **External group mappings**. A mapping is added by clicking the **[+]** button.

**Server Settings**

- Data Retention
- System Backup
- Mail Server
- SNMP Traps
- Users
- Roles
- External Authentication**
- Custom Device Fields
- Memo Templates
- Launchers
- Smart Bridges
- Networks
- Network Servers
- Cisco Plug and Play
- Software Update

Enable external authentication:

Hostname:  Port:

Shared Secret:

Character Encoding:

External group mappings:

**Roles**

Networks

External Group	Networks

+

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4. Enter the group that was set in the Filter-Id of the RADIUS server into **External Group** field and select a role to apply to the group.

**External Group Mapping**

External Group:

Role:

5. Assign **Networks** using **External group mappings**. A mapping is added by clicking **[+]** button.

Server Settings

Enable external authentication: **RADIUS**

Hostname: 10.0.0.95 Port: 1812

Shared Secret: \*\*\*\*\* Test

Character Encoding: UTF-8

External group mappings:

Roles	Networks

OK Cancel

6. Enter the group that was set in the Filter-Id of the RADIUS server into the External Group field and select the networks that the users of the group should be able to see.

External Group Networks Mapping

External Group: GROUP

Restrict user's access to the following networks.

<input type="checkbox"/> Default
<input checked="" type="checkbox"/> Labo

Select All Select None

OK Cancel

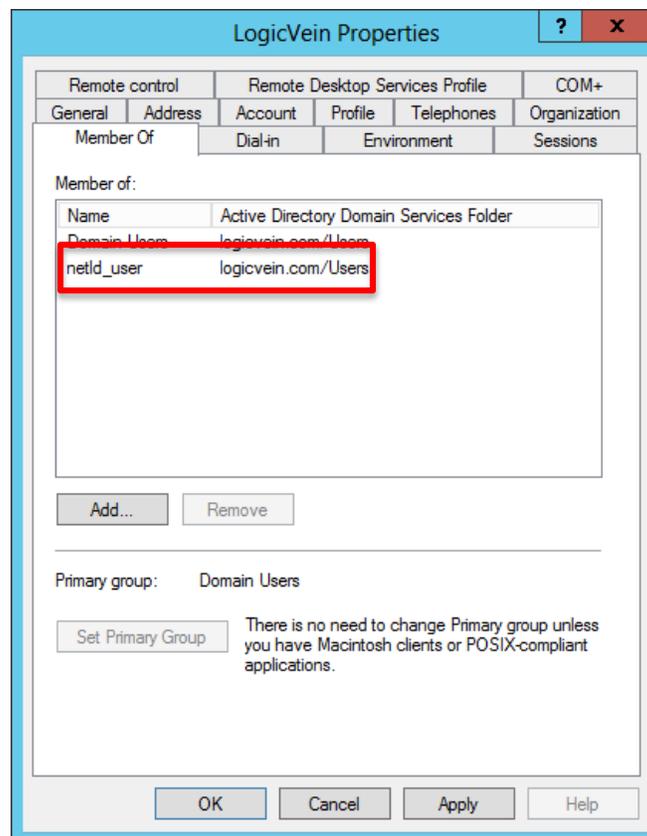
- Users in this group will be given permission to see the selected networks.

Setup is now complete. After saving the server setting by clicking **OK**, logout once and Login with the user configured in the RADIUS server.



## 2. Integration with ActiveDirectory Server

When integrating with an ActiveDirectory server, determine netLD roles and networks by using the ActiveDirectory groups that the registered users are members of.



### <<Setting Procedures>>

In order to integrate with ActiveDirectory server, the settings can be configured in the **External authentication** page of the **Server Settings** dialog.

1. Select **ActiveDirectory** for **Enable external authentication**.

The screenshot shows the 'Server Settings' dialog box. On the left is a navigation pane with 'External Authentication' selected. The main area shows 'Enable external authentication:' with a dropdown menu open, displaying options: 'Disabled', 'ActiveDirectory', and 'RADIUS'. A red box highlights this dropdown menu. Below it, there are 'External group mappings' sections for 'Roles' and 'Networks', each containing an empty table with columns 'External Group' and 'Role'. At the bottom right are 'OK' and 'Cancel' buttons.

2. Set the domain name and IP address (or Hostname) of the ActiveDirectory server.

The screenshot shows the 'Server Settings' dialog box. The 'Enable external authentication:' dropdown is now set to 'ActiveDirectory'. Below it, the 'Domain:' field contains 'logicvein.com' and the 'URL:' field contains 'ldap://192.168.0.1'. A red box highlights these two fields. A 'Test' button is located to the right of the URL field. Below the mappings section, there are 'OK' and 'Cancel' buttons.

- After setting the above, you can confirm the integration with ActiveDirectory server by clicking **Test** and providing a Username and Password. If there is no problem, the **Authentication successful** message will be shown.

**Test Authentication**

Username:

Password:

Authentication successful

- Assign **Roles** using **External group mappings**. A mapping is added by clicking the **[+]** button.

**Server Settings**

- Data Retention
- System Backup
- Mail Server
- SNMP Traps
- Users
- Roles
- External Authentication
- Custom Device Fields
- Memo Templates
- Launchers
- Smart Bridges
- Networks
- Network Servers
- Cisco Plug and Play
- Software Update

Enable external authentication:

Domain:

URL:

ex: ldap://192.168.0.1/

External group mappings:

**Roles**

Networks

External Group	Role

+

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- Enter an ActiveDirectory group that the user belongs to in the **External Group** field and select a netLD role to apply to the group.

**External Group Mapping**

External Group:

Role:

5. Assign **Networks** using **External group mappings**. A mapping is added by clicking the [+] button.

Server Settings

Enable external authentication: **ActiveDirectory**

Domain: logicvein.com

URL: ldap://192.168.0.1 **Test**

ex: ldap://192.168.0.1/

External group mappings:

Roles	Networks

OK Cancel

6. Enter an ActiveDirectory group that the user belongs to in the **External Group** field and select the netLD networks that users of the group can see.

External Group Networks Mapping

External Group: netld\_user

Restrict user's access to the following networks.

<input type="checkbox"/> Default
<input checked="" type="checkbox"/> Labo

Select All Select None

OK Cancel

- Users in this group will be given permission to see the selected networks.

Setup is now complete. After saving the server settings by clicking **OK**, logout and Login with a user configured in the ActiveDirectory server.

