

LDAP/AD Guide

HIAB Integration with LDAP or Active Directory

Table of Contents

1	INTRODUCTION.....	4
2	LDAP/AD SETUP	4
3	INTEGRATE USERS.....	9
4	VERIFY USERS.....	11
5	INTEGRATE TARGETS.....	12

About This Guide

The main purpose of this document is to provide information on how to set up and utilize either a **LDAP** (Lightweight Directory Access Protocol) or an **AD** (Active Directory) server with your HIAB. The HIAB can be set up to authenticate users against a defined LDAP/AD solution and the main benefit is that you don't have to retain user information in multiple places within your organization.

For support information, visit <https://www.outpost24.com/support>.

Copyright

© 2020 Outpost24 ®. All rights reserved.

This document may only be redistributed unedited and unaltered. This document may be cited and referenced only if clearly crediting Outpost24® and this document as the source. Any other reproduction and redistribution in print or electronically is strictly prohibited without explicit permission.

Trademark

Outpost24® and OUTSCAN™ are trademarks of Outpost24® in Sweden and other countries.

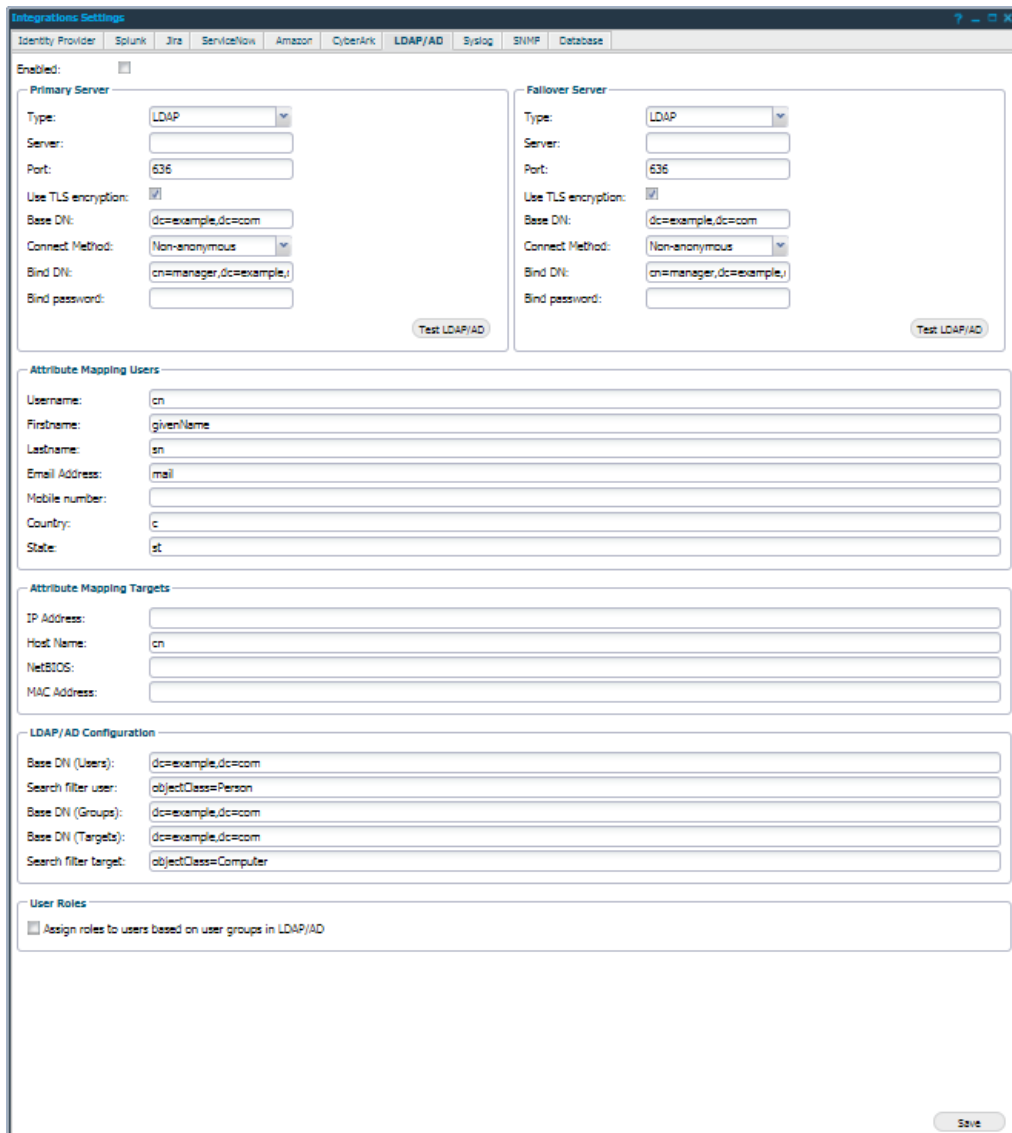
1 Introduction

This document provides information on how to set up and use either a Lightweight Directory Access Protocol (LDAP) or an Active Directory (AD) server with the HIAB. The HIAB can be set up to authenticate users against a defined LDAP/AD solution and the main benefit is that user information does not need to be retained in multiple places.

2 LDAP/AD Setup

To set up LDAP/AD, follow the below procedure:

1. Go to **Main Menu** → **Settings** → **Integrations**.
2. Select **LDAP/AD** tab.



The screenshot shows the 'Integrations Settings' window with the 'LDAP/AD' tab selected. The interface is divided into several sections:

- Enabled:** A checkbox that is checked.
- Primary Server:**
 - Type: LDAP (dropdown)
 - Server: (text input)
 - Port: 636 (text input)
 - Use TLS encryption:
 - Base DN: dc=example,dc=com (text input)
 - Connect Method: Non-anonymous (dropdown)
 - Bind DN: cn=manager,dc=example, (text input)
 - Bind password: (text input)
 - Test LDAP/AD button
- Fallover Server:**
 - Type: LDAP (dropdown)
 - Server: (text input)
 - Port: 636 (text input)
 - Use TLS encryption:
 - Base DN: dc=example,dc=com (text input)
 - Connect Method: Non-anonymous (dropdown)
 - Bind DN: cn=manager,dc=example, (text input)
 - Bind password: (text input)
 - Test LDAP/AD button
- Attribute Mapping Users:**
 - Username: cn
 - Firstname: givenName
 - Lastname: sn
 - Email Address: mail
 - Mobile number: (text input)
 - Country: c
 - State: st
- Attribute Mapping Targets:**
 - IP Address: (text input)
 - Host Name: cn
 - NetBIOS: (text input)
 - MAC Address: (text input)
- LDAP/AD Configuration:**
 - Base DN (Users): dc=example,dc=com
 - Search filter user: objectClass=Person
 - Base DN (Groups): dc=example,dc=com
 - Base DN (Targets): dc=example,dc=com
 - Search filter target: objectClass=Computer
- User Roles:**
 - Assign roles to users based on user groups in LDAP/AD

A 'Save' button is located at the bottom right of the window.

The elements of the LDAP/AD tab are described below:

- ▶ **Enabled:** Tick to enable the use of LDAP/AD feature.

Primary Server and Failover Server

The system allows you to define both **Primary Server** and **Failover Server**. The **Failover Server** is accessed if the **Primary Server** is unavailable when required. The following options are available for both **Primary** and **Failover** servers.

Option	Description
Type	Select if you want to use an LDAP or an AD server to authenticate users against the directory, importing targets and users into HIAB.
Server	Define the network location of the LDAP or AD server.
Port	Displays the default port used by LDAP or AD server when TLS encryption is enabled. <i>Note: Can be changed if required.</i>
Use TLS Encryption	Must be checked if the server use TLS (Transport Layer Security) during the connection phase.
Base DN	Enter the base domain name, ex: "dc=ad,dc=local" <i>Note: If you have an Active Directory server, then you should also provide the Domain in a simple form like "ad.local". This is used when we supply the username in the authentication process against the active directory server.</i>
Connect Method	Define if the connection should be Anonymous or Non-anonymous. <i>Note: Base DN is the domain where AD is located and Bind DN is the account which the HIAB should use to access the AD.</i>
Bind DN	If the connection method is non-anonymous, provide the domain name to use when authenticating with the server.
Bind Password	Supply Bind password for the above domain name.
Test LDAP/AD	Once all the required settings are supplied, check the configuration by pressing Test LDAP/AD button for respective sections.

Import and specific mapping settings for the user and target integration are located under respective settings sections.

Attribute Mapping Users

Provide the attribute names on the LDAP server that corresponds to the user fields mentioned below.

Option	Description
Username	Your username.
Firstname	Your first name.
Lastname	Your last name.
Email Address	Your email address.
Mobile number	Your mobile number.
Country	Your country name.
State	Your state name.

Attribute Mapping Targets

Provide the attribute names on the LDAP server that corresponds to the target fields mentioned below.

Option	Description
IP Address	Target IP address.
Host name	Target hostname.
NetBIOS	Target NetBIOS name.
MAC Address	Target MAC address.

LDAP/AD Configuration

Option	Description
Base DN (Users)	Enter the base domain name. This is used only when importing users.
Search filter user	Provide any phrase to filter further.
Base DN (Groups)	Enter the base domain name. This is used to import user groups when a user is authenticated.
Base DN (Targets)	Enter the base domain name. This is used only when importing targets.
Search filter target	Provide a phrase to filter further.

User Roles

The **User Roles** section allows you to define if roles should automatically be assigned to imported user, based on already defined group belongings in the LDAP/AD tree. If enabled, you can define a matching field on each user role in the HIAB. If they match, that user role will then automatically be assigned to the imported user. The matching field is present in the **Maintaining User Role** section when you edit or create a new role.

Example:

Maintaining User Role

Role Name:

LDAP/AD Group:

Target Management

Administrate Targets/Target Groups:

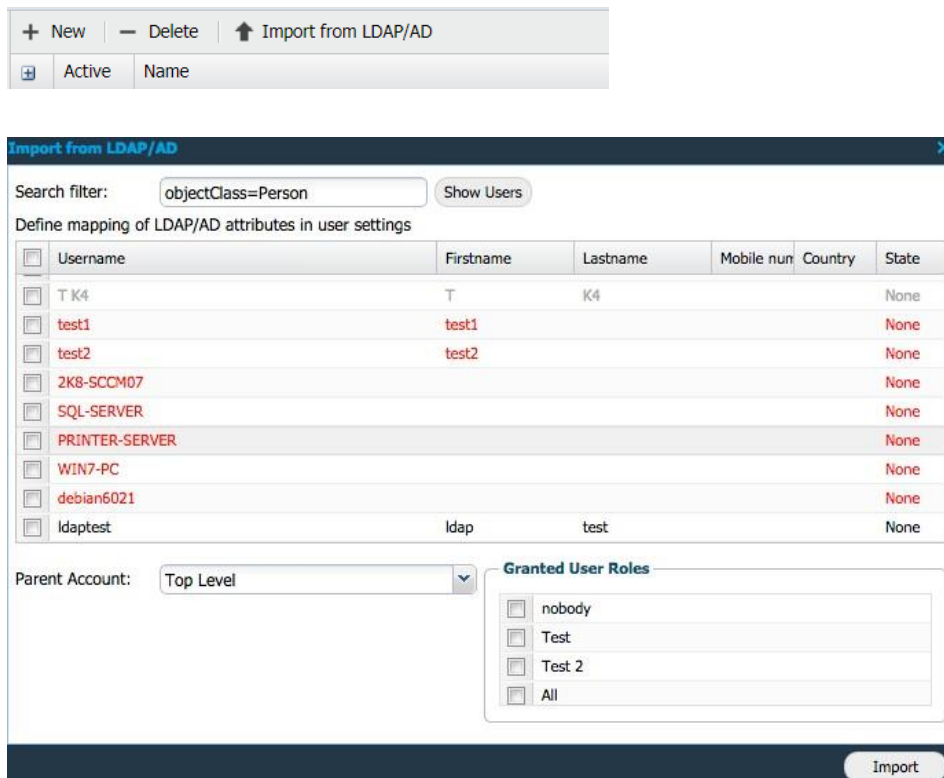
In the above example, **HIAB.Administrator** is automatically assigned to users that belong to the group **admin** in the LDAP/AD tree.

Click **Save** to save the current settings.

3 Integrate Users

Once the LDAP/AD feature has been enabled,

1. Go to **Main Menu → Settings → Manage Users**.
2. Click on Import from **LDAP/AD** in the **Manage User Accounts** section to open a window where you can filter which users to import into the system.



Active
 Name

Import from LDAP/AD ✕

Search filter:

Define mapping of LDAP/AD attributes in user settings

<input type="checkbox"/>	Username	Firstname	Lastname	Mobile num	Country	State
<input type="checkbox"/>	T K4	T	K4			None
<input type="checkbox"/>	test1	test1				None
<input type="checkbox"/>	test2	test2				None
<input type="checkbox"/>	2K8-SCCM07					None
<input type="checkbox"/>	SQL-SERVER					None
<input type="checkbox"/>	PRINTER-SERVER					None
<input type="checkbox"/>	WIN7-PC					None
<input type="checkbox"/>	debian6021					None
<input type="checkbox"/>	ldaptest	ldap	test			None

Parent Account:

Granted User Roles

- nobody
- Test
- Test 2
- All

If the text is marked red as above, it implies that the user details either does not contain all required fields or it has content which is not allowed to use. Grey text indicates that the user already exists in the system.

A user is valid if the following criteria are fulfilled:

- ▶ Username must be longer than 1 character.
- ▶ First name must exist.
- ▶ Last name must exist.
- ▶ Email address must be valid.

Note: Do not use any comma sign in any of the above inputs as it will be interpreted as a comma separation.

Note: If the country is omitted or not available, then it is set to the country of the logged in user. The country is used when selecting the time zone for the user so that the time is reported correctly in the GUI.

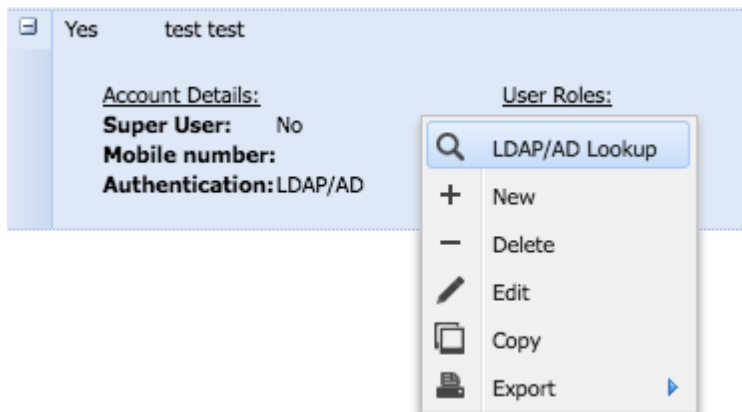
The **Parent Account** setting allows you to import users in different levels if required.

***Note:** Mapping can be changed in **Main Menu** → **Settings** → **Integrations** → **LDAP/AD**.*

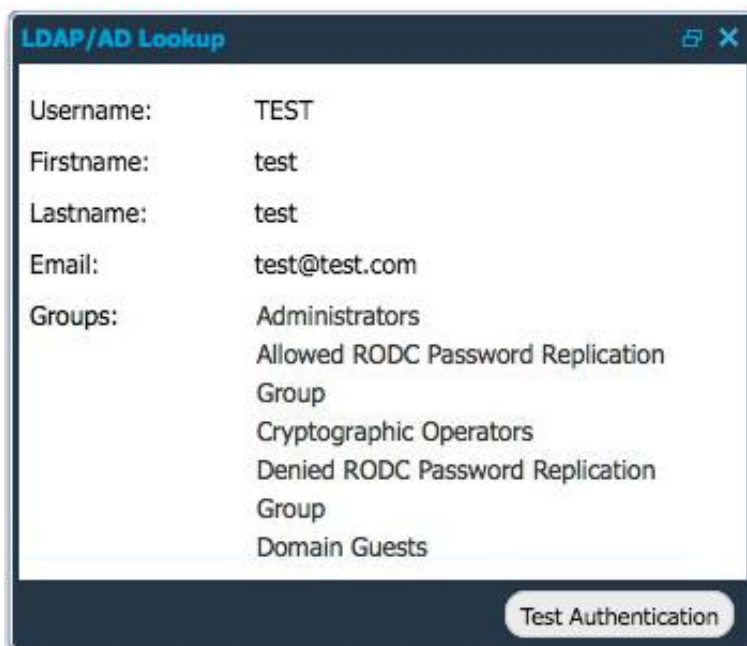
4 Verify Users

Once the user is imported, you can verify the authentication and see the associated groups for that user.

Go to **Manage User Accounts**, right click on the user and select **LDAP/AD Lookup** as shown below.



This displays the LDAP/AD Lookup window:



Note: Only 10 groups are visible when doing the test authentication.

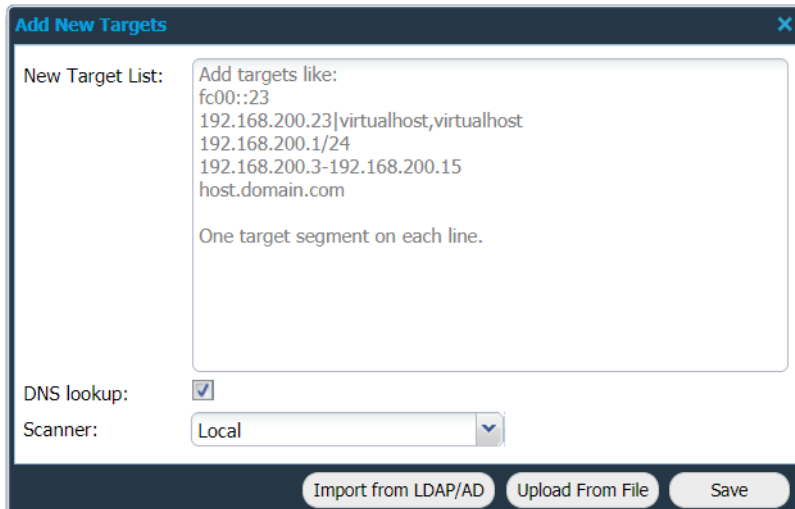
Here, you can view the different values for the user along with the defined groups associated with him/her.

Click on **Test Authentication** to verify the user's authentication.

5 Integrate Targets

Once the LDAP/AD feature has been enabled:

1. Go to **Main Menu → Manage Targets**.
2. Click on **Import from LDAP/AD** while adding **+New** targets.



Add New Targets

New Target List:

Add targets like:
 fc00::23
 192.168.200.23|virtualhost,virtualhost
 192.168.200.1/24
 192.168.200.3-192.168.200.15
 host.domain.com

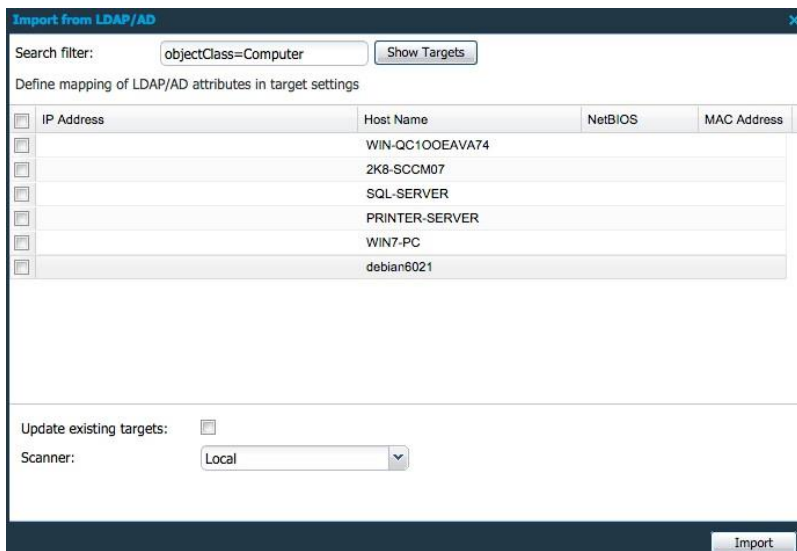
One target segment on each line.

DNS lookup:

Scanner: Local

Import from LDAP/AD Upload From File Save

This opens a new window where you can filter which targets to import into the system. If the line is marked red then the target details either does not contain all required fields, or it has content that is not allowed to use.



Import from LDAP/AD

Search filter: objectClass=Computer Show Targets

Define mapping of LDAP/AD attributes in target settings

IP Address	Host Name	NetBIOS	MAC Address
<input type="checkbox"/>	WIN-QC1OEEAVA74		
<input type="checkbox"/>	2K8-SCCM07		
<input type="checkbox"/>	SQL-SERVER		
<input type="checkbox"/>	PRINTER-SERVER		
<input type="checkbox"/>	WIN7-PC		
<input type="checkbox"/>	debian6021		

Update existing targets:

Scanner: Local

Import

A target is valid if the following criteria is provided:

- ▶ IP address or hostname.
- ▶ MAC address is formatted correctly. If applicable.

If **Update existing targets** checkbox is ticked, the **Import** updates the available targets. The Scanner option is only available if you have a distributed environment (multiple HIAB instances connected) and it determines which scanner will execute the scans against those targets associated with it.

Note:** Mapping can be changed in **Main Menu → Settings → Integrations → LDAP/AD.