Synchronizer - Les logs du module Cfg-password

Overview

This document describes how you can import hosts and users from OpenLDAP.

There are some steps you'll need to follow in order to be able to import users :

- Enable the OpenLDAP source,
- Configure the OpenLDAP module,
- Configure the connection to OpenLDAP,
- Configure the mapping rules,
- Configure the import rules.

On this page

What is already available in the Shinken Installation

To make your life a bit easier, a few configuration tasks have already been done for you:

1. Installation of the OpenLDAP import module,
2. Availability of an example of pre-configured OpenLDAP source ready to be customized for your first try.

Setup the pre-installed source

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Installation and update script of Shinken will set up a default OpenLDAP source already configured:

- You can see it in the source table of the UI Configuration home page.
- This source uses 2 kinds of configuration files
  - **Source definition files**
  - **Configuration files** to customize the data mining.
    - the example is available in folder (/etc/shinken-user/source-data/source-data-open-ldap-sample).

Advice

The first time, we are advising you to only update Configuration files.

You will then decide if you want to have 1 or more active directory sources (if you have a big directory, it might be interesting to have many sources pointing of specific entries for performance gain).

Source definitions:

Enable the openldap-import Source

In the **Automatic Detection Modules** panel, click on the button to enable the module.	? Unknown Attachment

You can find the following parameters in the source file **/etc/shinken/sources/openldap.cfg** :

Property	Example	Description
source_name	openldap-example	Name of this source displayed in the UI configuration home page. **Must be unique**.
order	2	Order in the merge algorithm of this source data. Look in the Synchronizer page for more information about merging order.

import_interval	5	The source will be run automatically every *import_inverval* minutes. • if set to 0, the source will never be run automatically. **Advise** For your initial test, we advise you to set it to 0. Clicking on the button in the home page will allow you to start the source whenever you want. ? Unknown Attachment
modules	openldap-example	*(module definition used by Shinken to parse OpenLDAP data)*
enabled	0	Activate or Disable the source. This property is also edited by automaticaly when you use the Enabled button.
description	This source is about loading hosts and contacts from OpenLDAP	

Configure the OpenLDAP Module

Modify if necessary, the file **/etc/shinken/modules/*openldap-import*.cfg**

Property	Value	Description
module_name	openldap-example	Module's name. **Must be unique**.
module_type	ldap-import	Type of module. Don't change it as it refers to the shinken composant
connection_configuration_file	/etc/shinken-user/source-data/source-data-openldap-sample/_configuration/openldap-connection.json	Connection information.
mapping_configuration_file	/etc/shinken-user/source-data/source-data-openldap-sample/_configuration/openldap-mapping.json	Mapping rules. Mapping of attribute can be different between 2 Openlapd installation. You can specify in this file for example what will be the attribute's name of the user phone number
rules_configuration_file	/etc/shinken-user/source-data/source-data-openldap-sample/_configuration/openldap-rules.json	Rules configuration. You can choose which kind of host and user will be retrieved and define criteria to set automatically template attachment.

Connection configuration

This file is used to make the connexion to your OpenLDAP server.

? Unknown Attachment	Edit the file **/etc/shinken-user/source-data/source-data-openldap-sample/_configuration/openldap-connection.json**

Property	Default	Description
url	ldap://YOUR-DC-FQDN/	URL of your Active Directory server.
base	dc=YOUR,dc=DOMAIN,dc=com	Base OU for your objects discovery.
hosts_base	OU=DataCenter Servers,dc=YOUR,dc=DOMAIN,dc=com	Base OU for the hosts discovery.
contacts_base	dc=YOUR,dc=DOMAIN,dc=com	Base OU for the contacts discovery.
username	SHINKEN@YOURDOMAIN.com	Username used to connect to the Ldap server.

password	PASSWORD	Password used by the user to connect to the Ldap server.

Example

/etc/shinken-user/source-data/source-data-openldap/_configuration/openldap-connection.json

```
{
  "url": "ldap://vm-w2k8r2.shinkendom.local/",
  "ldap_protocol":3,
  "base": "dc=shinkendom,dc=local",
  "hosts_base": "OU=serveurs,dc=shinkendom,dc=local",
  "hostgroups_base": "OU=serveurs,dc=shinkendom,dc=local",
  "contacts_base": " OU=utilisateurs,DC=shinkendom,DC=local",
  "username": "administrateur@shinkendom.local",
  "password": "P@ssword1"
}
```

Tip

The account used to request LDAP only need read-only access. You should create a user account with read-only access dedicated to the OpenLDAP import module.

Mapping rules configuration

This file allow you to do the mapping between OpenLDAP and Shinken properties.

Unless you know what you're doing here, you should keep this file unmodified.

You can find some customization in the How to section.

File **/etc/shinken-user/source-data/source-data-openldap-sample/_configuration/openldap-mapping.json**

/etc/shinken-user/source-data/source-data-openldap/_configuration/openldap-mapping.json

```
# IMPORTANT: Do not edit this file.
# To have your own mapping, copy it under the /etc/shinken-users directory and edit your copy instead.
# Note: comments should be with a # starting the line, NOT after a value
{
# first hosts propertyes (computer object in openldap)
   "host.name": "name",
   "host.dNSHostName": "dNSHostName",
   "host.operatingSystem": "operatingSystem",
   "host.operatingSystemServicePack":"operatingSystemServicePack",
   "host.distinguishedName": "distinguishedName",
   "host.filter": "(objectClass=computer)",

# Now contact properties
    "contact.ClassFilter":"inetOrgPerson",
    "contact.name": "uid",
    "contact.member":"uniqueMember",
    "contact.telephoneNumber":"telephoneNumber",
    "contact.mobile":"mobile",
# Co: for country
    "contact.co":"co",
# l: for city
    "contact.l":"l",
    "contact;company":"company",
    "contact.filter":"(objectClass=inetOrgPerson)",
# By default hostgroup are not requested. Setup a filter to enabled it
    "hostgroup.filter":""
}
```

Import rules configuration

This file is used to apply **host template**, **contact template** and tags to the hosts and contacts while the import.

? Unknown Attachment	Edit the file **/etc/shinken-user/source-data/source-data-openldap-sample/_configuration/openldap-rules.json**

Tip

A host template called **windows** is already available in Shinken checking : Cpu, Disks, EventLogApplication, EventLogSystem, Memory, Network Interface, Reboot, Services, Swap.

As a good start, you can configure the property **hosts_tag** in this way :

hosts_tag	windows

The mandatories properties to modify are in green.

Property	Default	Description
hosts_tag	yourdomain	Shinken host template applied during the import
contacts_tag	generic-contact	Shinken contact template applied during the import
contacts_group_filter	CN=Domain Admins,CN=Users,DC=YOUR,dc=DOMAIN,dc=com | CN=OTHERGROUPS,OU=Groups,OU=Users Groups,DC=YOUR,dc=DOMAIN,dc=com	User group to import
hosts_tag_citrix	OU=Terminal Servers,OU=DataCenter Servers,DC=YOUR,dc=DOMAIN,dc=com	host tag citrix
hosts_tag_database	OU=Database Servers,OU=DataCenter Servers,DC=YOUR,dc=DOMAIN,dc=com	host tag database
hosts_tag_exchange	OU=Email Collaboration Servers,OU=DataCenter Servers,DC=YOUR,dc=DOMAIN, dc=com	host tag exchange
hosts_tag_fileprint	OU=Files Print Servers,OU=DataCenter Servers,DC=YOUR,dc=DOMAIN,dc=com	host tag fileprint
hosts_match_operatingSystem_windows	windows	host tag windows
hosts_match_operatingSystem_windows2008	windows*.*2008(?!.*.(?:r2))	host tag windows2008
hosts_match_operatingSystem_windows2008r2	windows*.*2008*.*r2	host tag windows 2008r2
hosts_match_operatingSystem_windows2003	windows*.*2003	host tag windows2003
hosts_match_operatingSystem_windows2012	windows*.*2012(?!.*.(?:r2))	host tag windows2012
hosts_match_operatingSystem_windows2012r2	windows*.*2012*.*r2	host tag windows2012r2
hosts_match_operatingSystem_windows2000	windows*.*2000	host tag windows 2000
hosts_match_operatingSystem_windowsxp	windows*.*xp	host tag windows xp
hosts_match_operatingSystem_enterprise	Enterprise	host tag Enterprise
hosts_match_operatingSystemServicePack_sp1	Service Pack 1	host tag Service Pack 1

hosts_match_operatingSystemServicePack_sp2	Service Pack 2	host tag Service Pack 2
hosts_match_operatingSystemServicePack_sp3	Service Pack 3	host tag Service Pack 3
contacts_match_memberOf_domain-admins	CN=Domain Admins,CN=Users,DC=YOUR,dc=DOMAIN,dc=com	Contact tag domains-admins

Tip

See below about the tag functionnality.

Example :

/etc/shinken-user/source-data/source-data-openldap/_configuration/openldap-rules.json

```
{
  "hosts_tag": "windows",
  "contacts_tag": "generic-contact",
  "contacts_group_filter": "CN=paris_shinken_users,OU=utilisateurs,DC=shinkendom,DC=local |
CN=bordeaux_shinken_users,OU=utilisateurs,DC=shinkendom,DC=local",
  "hosts_tag_citrix": "OU=citrix,OU=serveurs,dc=shinken,dc=local",
  "hosts_tag_database": "OU=database,OU=serveurs,dc=shinken,dc=local",
  "hosts_tag_exchange": "OU=exchange,OU=serveurs,dc=shinken,dc=local",
  "hosts_tag_fileprint": "OU=fileprint,OU=serveurs,dc=shinken,dc=local",
  "hosts_tag_windows": "OU=infra,OU=serveurs,dc=shinken,dc=local",
  "hosts_match_operatingSystem_windows": "windows",
  "hosts_match_operatingSystem_windows2008": "windows*.*2008(?!.*.(?:r2))",
  "hosts_match_operatingSystem_windows2008r2": "windows*.*2008*.*r2",
  "hosts_match_operatingSystem_windows2003": "windows*.*2003",
  "hosts_match_operatingSystem_windows2012": "windows*.*2012(?!.*.(?:r2))",
  "hosts_match_operatingSystem_windows2012r2": "windows*.*2012*.*r2",
  "hosts_match_operatingSystem_windows2000": "windows*.*2000",
  "hosts_match_operatingSystem_windowsxp": "windows*.*xp",
  "hosts_match_operatingSystem_enterprise": "Enterprise",
  "hosts_match_operatingSystemServicePack_sp1": "Service Pack 1",
  "hosts_match_operatingSystemServicePack_sp2": "Service Pack 2",
  "hosts_match_operatingSystemServicePack_sp3": "Service Pack 3",
  "contacts_match_memberOf_domain-admins": "OU=shinken_admins,OU=utilisateurs,DC=shinkendom,DC=local"
}
```

If you want to import all objects of an OU instead of groups, set no **contact_group_filter**.

All objects inside **contacts_base** (file *openldap-connection.json*) filtered via **contact.filter** (file *openldap-mapping.json*) will be imported.

Import the objects

After each source modification, you have to restart the Synchronizer Daemon.

	? Unknown Attachment	Restart the Synchronizer Daemon **/etc/init.d/shinken-synchronizer restart**

Go in the Administration website, if your configuration is ok you should have an ouput "OK: Import clean."

Now do a "**Force import**" in clicking on ? Unknown Attachment

In the "**Elements >**" panel you will see new elements appearing (Hosts and Contacts).

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The next step will be to import those new objects.

HOW TO

Import users of multiple groups

? Unknown Attachment	Edit the file **/etc/shinken-user/source-data/source-data-openldap/_configuration/openldap-rules.json**

/etc/shinken-user/source-data/source-data-openldap/_configuration/openldap-rules.json

```
  "contacts_filters": "CN=shinken_admins,OU=utilisateurs,DC=shinkendom,DC=local | CN=shinken_users,
OU=utilisateurs,DC=shinkendom,DC=local",
```

In **contact_filters,** add the LDAP path to the different user groups separated by a pipe.

```
hosts_tag_exchange  OU=Email Collaboration Servers,OU=DataCenter Servers,DC=YOUR,dc=DOMAIN,dc=com
```

Tag hosts and users to add more properties before import

This source also includes other parameters that will allow you to automatically “tag” your servers based on your active directory information:

- ***hosts_tag***: each loaded hosts will have at least this tag
- ***contacts_tag***: each loaded contacts will have at least this tag

Contacts to load can be easily filtered with the ***contacts_filters*** parameter.

Tagging hosts based on their OU (Organization Unit) is possible. This is done with the ***hosts_tag_**** parameters.

For example, if you want to add the **exchange** tag to all the servers which are below

the OU=Email Collaboration Servers,OU=DataCenter Servers,DC=YOUR,dc=DOMAIN,dc=com OU,

you can set this parameter:

hosts_tag_exchange OU=Email Collaboration Servers,OU=DataCenter Servers,DC=YOUR,dc=DOMAIN,dc=com

Setting up ldap object matching with the ***hosts_match_**** parameters is also possible.

For example, if you want to add the **enterprise** tag to all the ldap object that match the string **Enterprise** in their **operatingSystem**property,

you only need to setup :

hosts_match_operatingSystem_enterprise Enterprise

This also works with **groups**.

For example, if you want to add the **domain-admins** tag to the users that are in the CN=Domain Admins, CN=Users,DC=YOUR,dc=DOMAIN,dc=com OU,

setup :

contacts_match_memberOf_domain-admins CN=Domain Admins,CN=Users,DC=YOUR,dc=DOMAIN,dc=com

Creation of your own sources

Having multiple sources can help you if you have a huge directory and want to have the control on what to import at any time. As an example, you have an OU containing Paris users and another OU containing Bordeaux users. At a given time, you want to import only Bordeaux users. If you create two sources, you can activate just the Bordeaux source and import its objects.

Every time you have to customize Shinken Sources, you have to do it in the /etc/shinken-user folder.

You will have to do the following to create your own source :

- Create a module
- Create a source
- Configure the source-data
- Configure the Synchronizer daemon to take the new module in consideration

Create a module

```
cd /etc/shinken/modules/
cp openldap-import.cfg openldap-import-Bordeaux.cfg
```

? Unknown Attachment	Edit the file openldap-import-Bordeaux.cfg Delete the 4 lines beginning from **# Shinken Enterprise** to **# End of Shinken Enterprise part**

Modify

```
    module_name          openldap-example
```

With

```
    module_name          openldap-Bordeaux
```

Modify the following lines to point to the new source data (see below for the source data configuration)

```
connection_configuration_file
rules_configuration_file
mapping_configuration_file
```

Example :

```
    # Configuration file for your Active Directory connection (server, user, password, ...)
    connection_configuration_file   /etc/shinken-user/source-data/source-data-openldap-Bordeaux
/_configuration/openldap-connection.json

    # Configuration file for your import rules (like OU=>template rules)
    rules_configuration_file       /etc/shinken-user/source-data/source-data-openldap-Bordeaux/_configuration
/openldap-rules.json

        # Configuration file for your ldap fields mapping (like for openldap users)
    mapping_configuration_file     /etc/shinken-user/source-data/source-data-openldap-Bordeaux/_configuration
/openldap-mapping.json
```

Create a source

```
cd /etc/shinken/modules/
cp openldap.cfg openldap-Bordeaux.cfg
```

	? Unknown Attachment	Edit the file openldap-Bordeaux.cfg Delete the 4 lines beginning from # **Shinken Enterprise** to # **End of Shinken Enterprise part**

Modify

```
    source_name           openldap-example
        modules                                 openldap-example
```

With

```
    source_name                          openldap-Bordeaux
    modules                             openldap-Bordeaux
```

Configure the source data

To create your own import source, do the following :

```
cd /etc/shinken-user/source-data
cp -r source-data-openldap-sample source-data-openldap-Bordeaux
```

In our example :

```
cp -r source-data-openldap-sample source-data-openldap-Bordeaux
```

Tip

Let's consider that the folder in which you will have your new OpenLDAP source is : /etc/shinken-user/source-data/source-data-openldap-Bordeaux/
inside it, the folder _configuration contain all configuration file to customize the source behavior.

See above on how to configure the source data

Configure the Synchronizer Daemon

	? Unknown Attachment	Edit the file **/etc/shinken/synchronizers/synchronizer-master.cfg** At the end of the "sources" lien, add you new source.

Example :

```
    sources              syncui,cfg-file-shinken,active-dir-example,sync-vmware,cfg-file-nagios,discovery,
openldap-example,openldap-Bordeaux
```

	? Unknown Attachment	Restart the Synchronizer Daemon **/etc/init.d/shinken-synchronizer restart**

you can see your now source :

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