# Authentication of Ezeelogin gateway users using Public keys fetched from Open LDAP server

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## Integrating SSH Public Key Authentication with OpenLDAP on Ezeelogin

**Overview:** This article describes how to integrate SSH public key authentication on an Ezeelogin gateway server by exporting the public key from an OpenLDAP server. It includes steps for updating the LDAP schema, adding user attributes, creating a fetching script, and configuring SSH to use the public keys retrieved from LDAP.

Integrate SSH Public key authentication on Ezeelogin gateway server by exporting the Public Key from Openldap server for a centralized ssh key based authentication.

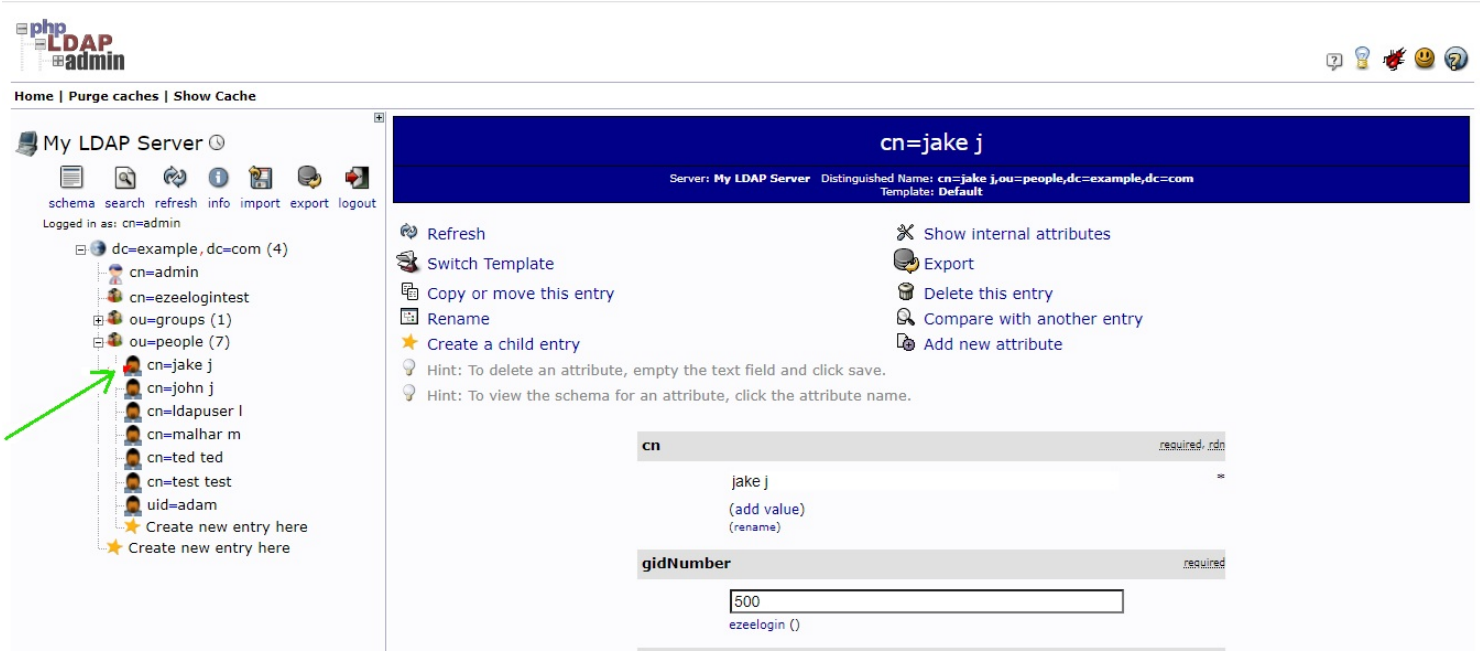
**Step 1.** First you need to update Openldap LDAP server with a schema to add the sshPubicKey attribute for users:

```
root@ldapserver:~  cat << EOL >~/openssh-lpk.ldif
dn: cn=openssh-lpk,cn=schema,cn=config
objectClass: olcSchemaConfig
cn: openssh-lpk
olcAttributeTypes: ( 1.3.6.1.4.1.24552.500.1.1.1.13 NAME 'sshPublicKey'
DESC 'MANDATORY: OpenSSH Public key'
EQUALITY octetStringMatch
SYNTAX 1.3.6.1.4.1.1466.115.121.1.40 )
olcObjectClasses: ( 1.3.6.1.4.1.24552.500.1.1.2.0 NAME 'ldapPublicKey' SUP top AUXILIARY
DESC 'MANDATORY: OpenSSH LPK objectclass'
MAY ( sshPublicKey $ uid )
)
EOL
```

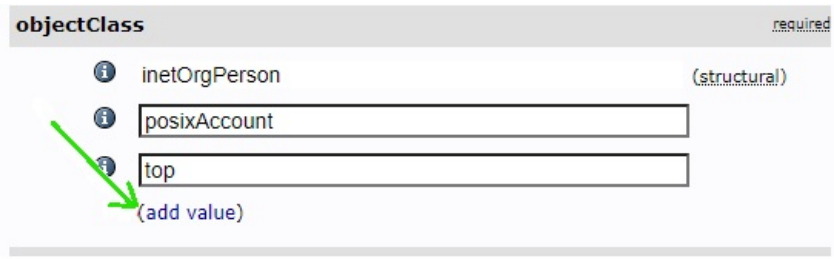
**Step 2.** You need to run the following command to add ldif :

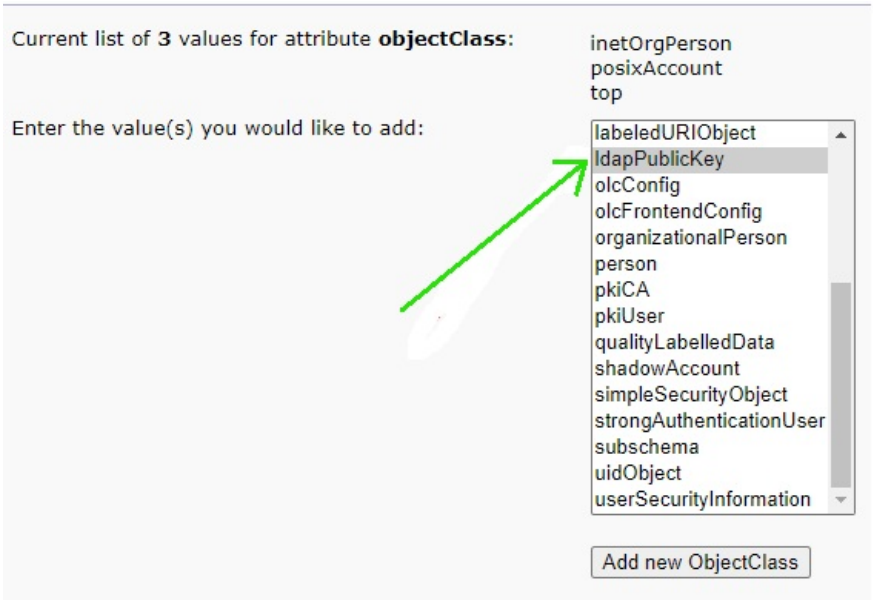
```
root@ldapserver:~ldapadd -Y EXTERNAL -H ldapi:/// -f ~/openssh-lpk.ldif
```

**Step 3.** Login to the GUI of your ldap server. Create a user with the “Generic: User Account” template. Select the user "jake" as shown below



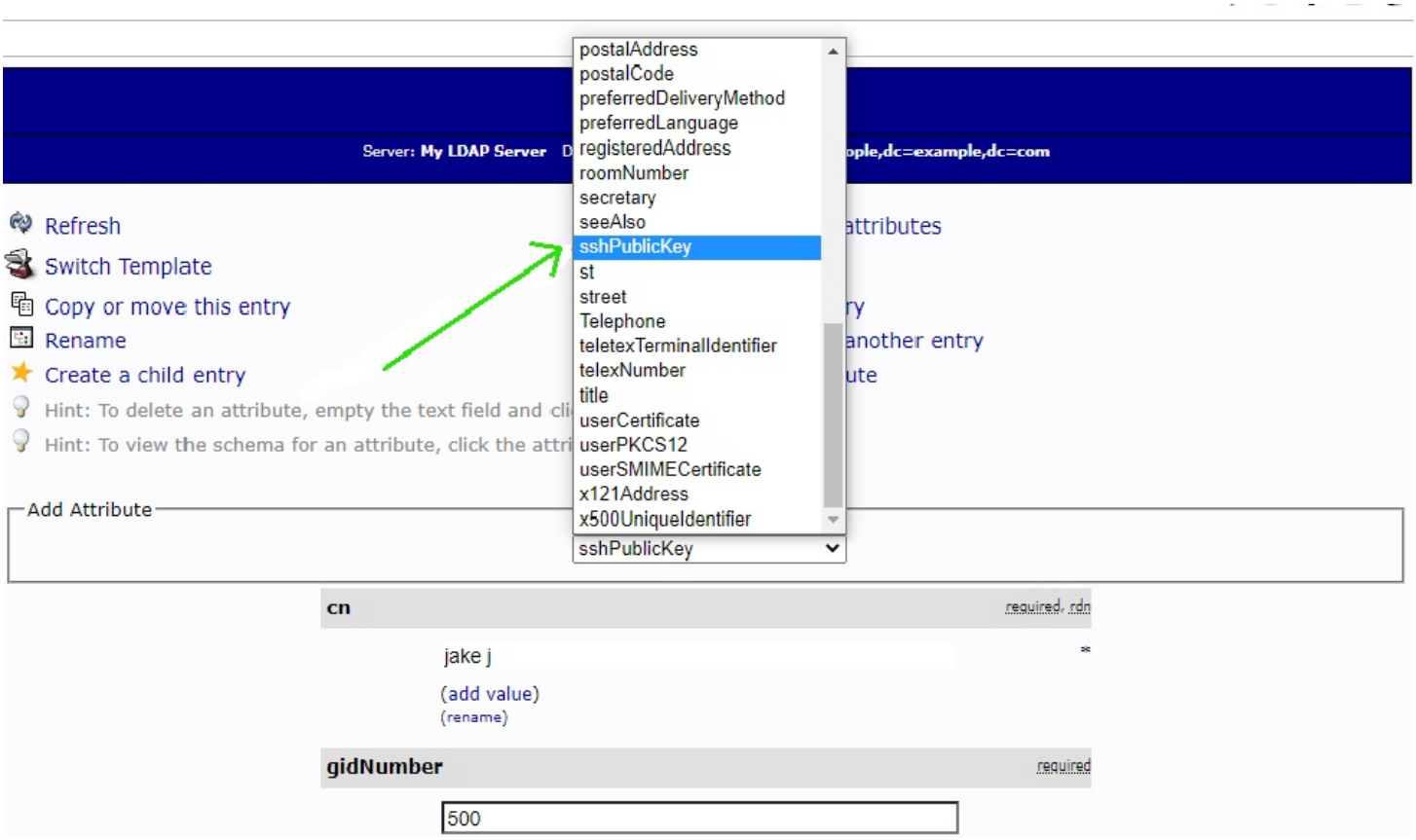
**Step 4.** Go to the “objectClass” attribute section, click “add value”, and choose the “ldapPublicKey” attribute.

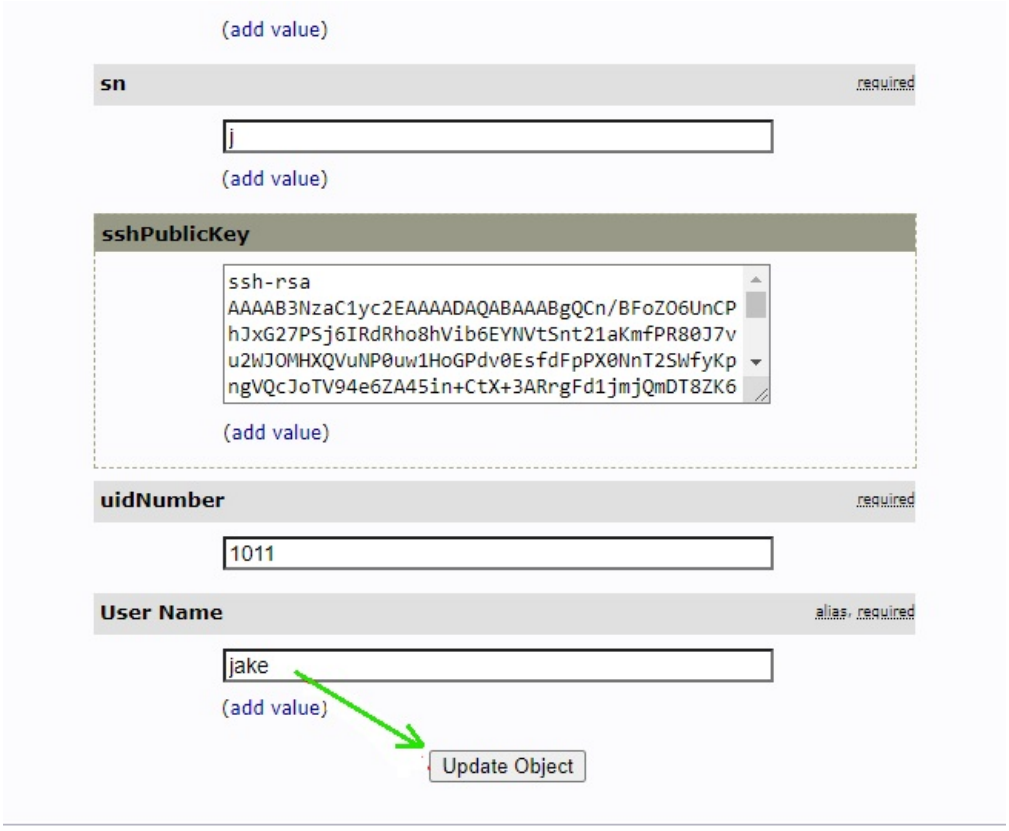



**Step 5.** After you submit, go back to the user edit page, click “Add new attribute” on the top part, and choose “sshPublicKey”, paste the public key into the text area, and finally click “Update Object”."






**Step 6.** Create a script on your Ezeelogin server that queries LDAP for a user's public key under /usr/local/fetchsshkeys

```
#!/bin/sh

ldapsearch -x '(&(objectClass=ldapPublicKey)(uid='"$1"'))' 'sshPublicKey' | \
sed -n '/^ /{H;d};/sshPublicKey:/x;$g;s/\n *//g;s/sshPublicKey: //gp'
```

## TROUBLESHOOTING

**Ensure that the public key is fetched for the user jake from the Openldap server by running the following command**

```
root@jumpserver:~ ldapsearch -x '(&(objectClass=ldapPublicKey)(uid='"jake j"'))' 'sshPublicKey' | sed -n '/^ /{H;d};/sshPublicKey:/x;$g;s/\n *//g;s/sshPublicKey: //gp'
```

**Note:** Install the script on your system and make it executable by running: `chmod 0500 /usr/local/fetchsshkeys`

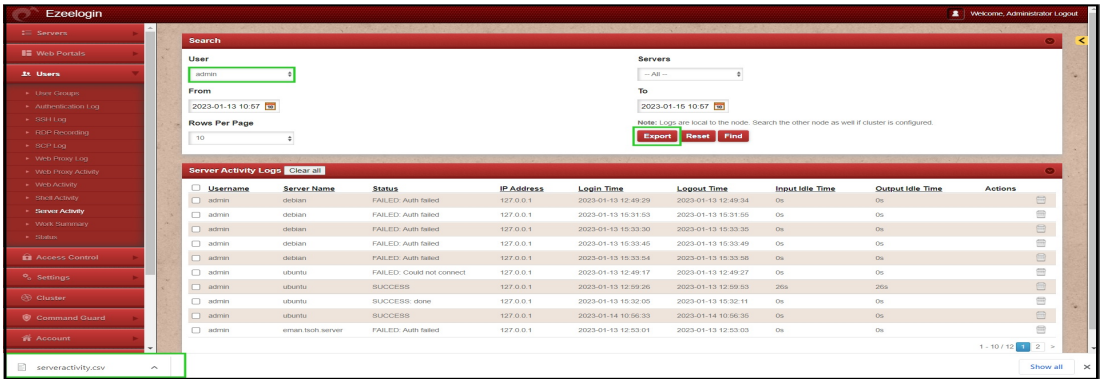
**Step 7.** Make sure your `/etc/ldap/ldap.conf` or `/etc/openldap/ldap.conf` file is configured to point to the right Open LDAP server For example:

```
BASE dc=example,dc=com
URI ldap:// ldap.example.com
```

**Step 8.** Add the following lines on the gateway server to your `sshd_config` file to point to the script

```
AuthorizedKeysCommand /usr/local/fetchsshkeys
AuthorizedKeysCommandUser root
```

**Step 9.** Now, the user "jake" will be authenticated using the public key fetched from the Open ldap server




**Make sure that you have installed ldapsearch on your Ezeelogin server.**

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Online URL: https://www.ezeelogin.com/kb/article/authentication-of-ezeelogin-gateway-users-using-public-keys-fetched-from-open-ldap-server-400.html