

# Windows AD ??

?? RedHat ??????? Windows AD ???

## RedHat 7/8 (?????)

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- [Chapter 7. Configuring a RHEL host to use AD as an authentication provider Red Hat Enterprise Linux 8 | Red Hat Customer Portal](#)

???????

```
yum install sssd sssd-tools krb5-workstation krb5-libs
```

??????? AD ????

```
useradd AD_user
```

?? `/etc/nsswitch.conf`

```
# Add 'sss' for AD authentication
passwd:  files sss systemd
shadow:  files sss
group:   files sss systemd
```

?? `/etc/krb5.conf`

```
[logging]
default = FILE:/var/log/krb5libs.log
kdc = FILE:/var/log/krb5kdc.log
admin_server = FILE:/var/log/kadmind.log

[libdefaults]
dns_lookup_realm = false
ticket_lifetime = 24h
```

```
renew_lifetime = 7d
forwardable = true
rdns = false
pkinit_anchors = FILE:/etc/pki/tls/certs/ca-bundle.crt
# Change this as required
default_realm = EXAMPLE.COM
default_ccache_name = KEYRING:persistent:%{uid}

[realms]
# Change this as required
EXAMPLE.COM = {
    kdc = ad.example.com
    dmin_server = ad.example.com
}

[domain_realm]
# Change this as required
.example.com = EXAMPLE.COM
example.com = EXAMPLE.COM
```

?? `/etc/sss/sssd.conf`

```
[sssd]
    services = nss, pam
    domains = EXAMPLE.COM

[domain/EXAMPLE.COM]
    id_provider = files
    auth_provider = krb5
    krb5_realm = EXAMPLE.COM
    krb5_server = ad.example.com
```

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```
chmod 0600 /etc/sss/sssd.conf
```

?? sssd ??

```
systemctl start sssd
systemctl enable sssd
```

?? `/etc/pam.d/system-auth`

```
#%PAM-1.0
# This file is auto-generated.
# User changes will be destroyed the next time authconfig is run.
auth    required    pam_env.so
auth    required    pam_faildelay.so delay=2000000
auth    sufficient   pam_unix.so nullok try_first_pass
auth    requisite    pam_succeed_if.so uid >= 1000 quiet_success
# AD Authentication
auth    sufficient   pam_sss.so forward_pass

auth    required    pam_deny.so

account  required    pam_unix.so
account  sufficient   pam_localuser.so
account  sufficient   pam_succeed_if.so uid < 1000 quiet
# AD Authentication
account  [default=bad success=ok user_unknown=ignore] pam_sss.so

account  required    pam_permit.so

password requisite    pam_pwquality.so try_first_pass local_users_only retry=3 authtok_type$
password sufficient    pam_unix.so sha512 shadow nullok try_first_pass use_authtok
# AD Authentication
password sufficient    pam_sss.so use_authtok

password required    pam_deny.so

session  optional    pam_keyinit.so revoke
session  required    pam_limits.so
-session optional    pam_systemd.so
session  [success=1 default=ignore] pam_succeed_if.so service in crond quiet use_uid
session  required    pam_unix.so
# AD Authentication
session  optional    pam_sss.so
```

?? /etc/pam.d/password-auth ??????????

??AD??

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```
#> kinit AD_user
Password for AD_user@EXAMPLE.COM:

#> klist
Ticket cache: KEYRING:persistent:0:0
Default principal: AD_user@EXAMPLE.COM

Valid starting    Expires          Service principal
11/02/20 04:16:38 11/02/20 14:16:38 krbtgt/EXAMPLE.COM@EXAMPLE.COM
[renew until 18/02/20 04:16:34
```

?? SSH ??

???? AD\_user ( ??? @example.com )?? SSH?

????

Displaying user authorization details

```
sssctl user-checks -a acct -s sshd AD_user
```

Display a list of available domains

```
sssctl domain-list
```

## RedHat 7/8 (????)

- [How to join a Linux system to an Active Directory domain | Enable Sysadmin \(redhat.com\)](#)
- [Windows Integration Guide Red Hat Enterprise Linux 7 | Red Hat Customer Portal](#)
- [How to join a Linux system to an Active Directory domain](#)

??????

```
yum install sssd realmd oddjob oddjob-mkhomedir adcli \
samba-common samba-common-tools krb5-workstation \
openldap-clients policycoreutils-python
```

?? realmd ? Linux ???? AD ??

“ NOTE: ???? /etc/krb5.conf ?????????????????? /etc/sss/sss.conf ???

?? AD ?????? AD ????????? AD ?? ?? adm1?

????????????????????

```
realm discover ad.example.com
```

```
realm join ad.example.com -U adm1
```

```
realm list
```

???? `/etc/sss/sss.conf`, `/etc/krb5.conf`

```
[sss]
```

```
domains = example.com
```

```
config_file_version = 2
```

```
services = nss, pam
```

```
[domain/example.com]
```

```
ad_server = ad.example.com
```

```
ad_domain = example.com
```

```
krb5_realm = EXAMPLE.COM
```

```
realmd_tags = manages-system joined-with-adcli
```

```
cache_credentials = True
```

```
id_provider = ad
```

```
krb5_store_password_if_offline = True
```

```
default_shell = /bin/bash
```

```
ldap_id_mapping = True
```

```
use_fully_qualified_names = True
```

```
fallback_homedir = /home/%u@%d
```

```
access_provider = ad
```

```
[libdefaults]
    dns_lookup_realm = false
    ticket_lifetime = 24h
    renew_lifetime = 7d
    forwardable = true
    rdns = false
    pkinit_anchors = FILE:/etc/pki/tls/certs/ca-bundle.crt
    default_ccache_name = KEYRING:persistent:%{uid}

    default_realm = EXAMPLE.COM
[realms]
    EXAMPLE.COM = {

[domain_realm]
    example.com = EXAMPLE.COM
    .example.com = EXAMPLE.COM
```

Optional: AD ??

```
# AD Administrator
realm leave ad.example.com

# 
realm leave ad.example.com -U 'EXAMPLE.COM\user'
```

??????

AD AD /etc/sss/sssd.conf?

?? /etc/sss/sssd.conf

```
# ACL for AD Login
#access_provider = ad
access_provider = simple
#simple_allow_users = ad-user1, ad-user2
simple_allow_groups = ad-group
```

?? sssd ??

```
systemctl restart sssd  
realm list
```

????

?? ad-user ?????

```
usermod -aG local-group aduser@ad.domain.com  
getent group local-group  
groups aduser@ad.domain.com
```

????

?? AD ??? uid

```
id ADDOMAIN\aduser@ad.domain.com  
  
getent passwd aduser@ad.domain.com
```