OPTIT TECHNOLOGIES

HOW TO - Configure Samba4 Domain Controller

Now it takes a few minutes to Control your domain

VIJAYKUMAR
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Over View

Samba is a free Open Source software which provides a standard interoperability between **Windows OS** and **Linux/Unix** Operating Systems.

Samba can operate as a standalone file and print server for Windows and Linux clients through the **SMB/CIFS** protocol suite or can act as an **Active Directory Domain Controller** or joined into a **Realm** as a **Domain Member**. The highest **AD DC** domain and forest level that currently **Samba4** can emulate is **Windows 2008 R2**.

Scenario

Configure a Samba4 Domain Controller and connect windows and Linux clients through centralized Login credentials.

Prerequisite

- A static IP address = 10.0.2.15
- Hostname = samba
- Domain Name = optit.com

Samba4 Configuration

Step1:

Set you machine hostname

```
optit@test:~$ hostnamectl set-hostname samba_
```

Step 2:

Edit the Hosts, so the hostname resolves to its IP Address

```
:~$ echo "10.0.2.15  samba  samba.optit.com" >> /etc/hosts_
```

Step 3:

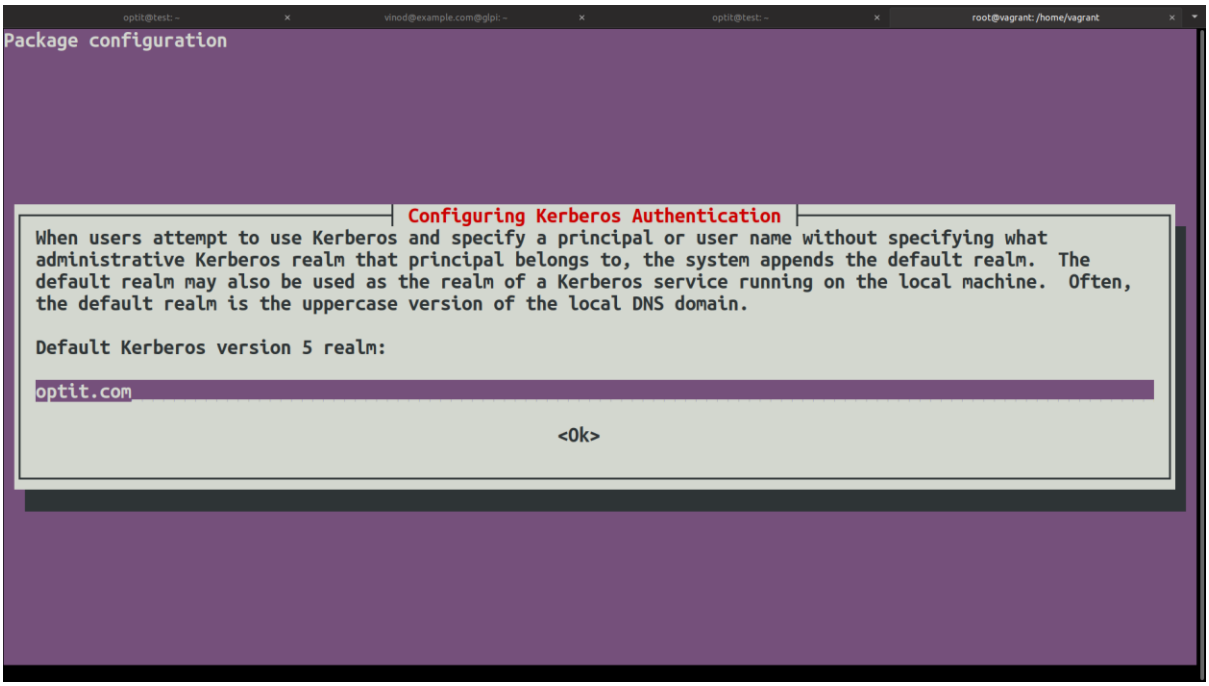
Update the system

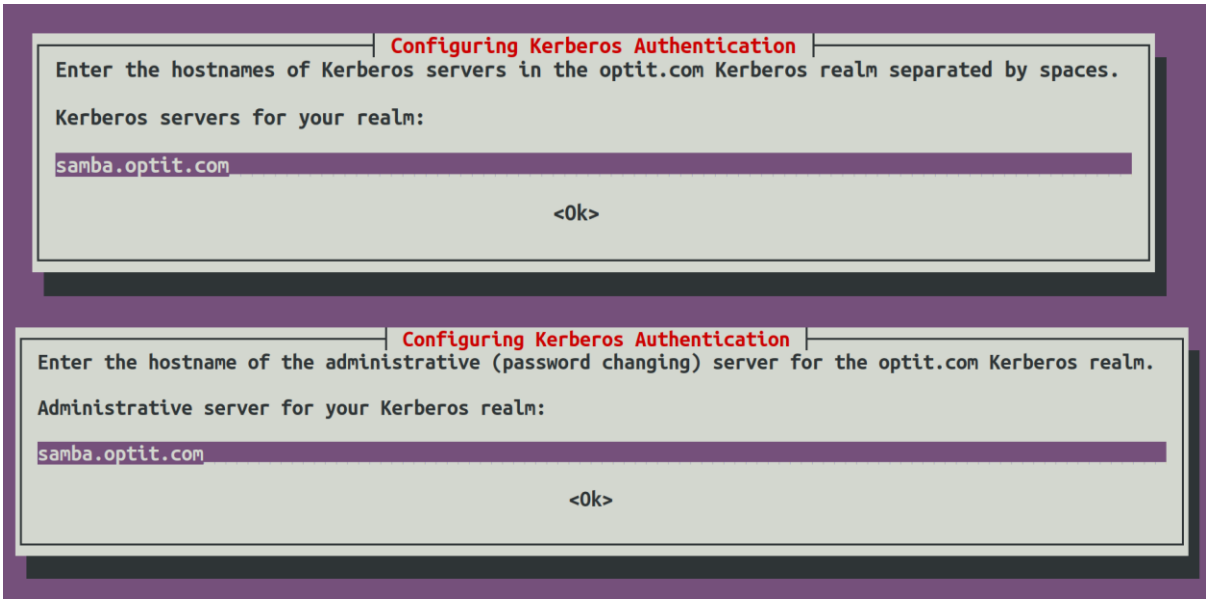
```
# #sudo apt-get update -y
# #sudo apt-get upgrade -y
```

Step 4:

Install the required packages for samba, winbind and Kerberos and Configure

```
root@vagrant:/home/vagrant# sudo apt install samba smbclient winbind libpam-winbind libnss-winbind krb5-kdc libp
am-krb5 -y_
```





Step 5:

Rename samba and Kerberos files

```
root@vagrant:/home/vagrant# sudo mv /etc/samba/smb.conf /etc/samba/smb.conf.orig && sudo mv /etc/krb5.conf /etc/
krb5.conf.orig
```

Step 6: Run Samba AD Setup

```
root@vagrant:/home/vagrant# sudo samba-tool domain provision --use-rfc2307 --interactive
Realm [VM]: optit.com
 Domain [optit]:
 Server Role (dc, member, standalone) [dc]:
 DNS backend (SAMBA_INTERNAL, BIND9_FLATFILE, BIND9_DLZ, NONE) [SAMBA_INTERNAL]:
 DNS forwarder IP address (write 'none' to disable forwarding) [127.0.0.53]: 8.8.8.8
Administrator password: _
```

```
Setting up sam.ldb configuration data
Setting up display specifiers
Modifying display specifiers
Adding users container
Modifying users container
Adding computers container
Modifying computers container
Setting up sam.ldb data
Setting up well known security principals
Setting up sam.ldb users and groups
Setting up self join
Adding DNS accounts
Creating CN=MicrosoftDNS,CN=System,DC=optit,DC=com
Creating DomainDnsZones and ForestDnsZones partitions
Populating DomainDnsZones and ForestDnsZones partitions
Setting up sam.ldb rootDSE marking as synchronized
Fixing provision GUIDs
A Kerberos configuration suitable for Samba AD has been generated at /var/lib/samba/private/krb5.con
Setting up fake yp server settings
Once the above files are installed, your Samba AD server will be ready to use
Server Role:           active directory domain controller
Hostname:              vagrant
NetBIOS Domain:        OPTIT
DNS Domain:            optit.com
DOMAIN SID:            S-1-5-21-3419280859-2191864393-300103654
```

Step 7:

copy the Kerberos Configuration File

```
t# sudo cp /var/lib/samba/private/krb5.conf /etc
```

```
# sudo systemctl stop systemd-resolved
# sudo systemctl disable systemd-resolved
m/multi-user.target.wants/systemd-resolved.service.
m/dbus-org.freedesktop.resolve1.service.
# sudo unlink /etc/resolv.conf
# _
```

Step 8

Add following entries to /etc/resolv.conf

```
root@vagrant:/home/vagrant# cat /etc/resolv.conf
nameserver 10.0.2.15
search optit.com
root@vagrant:/home/vagrant# _
```

Step 9:

Test DNS so everything looks Fine

```
root@vagrant:/home/vagrant# sudo samba
root@vagrant:/home/vagrant# host -t SRV _ldap._tcp.optit.com
_ldap._tcp.optit.com has SRV record 0 100 389 vagrant.optit.com.
root@vagrant:/home/vagrant# host -t SRV _kerberos.udp.optit.com
Host _kerberos.udp.optit.com not found: 3(NXDOMAIN)
root@vagrant:/home/vagrant# host -t A samba.optit.com
Host samba.optit.com not found: 3(NXDOMAIN)
root@vagrant:/home/vagrant# host -t A optit.com
optit.com has address 10.0.2.15
root@vagrant:/home/vagrant#
```

Step 10:

Test Samba with following Commands

#kinit Administrator

#klist

Step 11:

Unmask the samba-ad-dc service

```
#sudo systemctl unmask samba-ad-dc
#sudo systemctl start samba-ad-dc
#sudo systemctl enable samba-ad-dc
_
```

Joining Windows 10/ 7 machine to Samba Domain Controller

Note: Goto network adapter settings and make sure the DNS is poiniting Towards Samba server IP

- Open File Explorer
- Right click on **This Pc > properties**
- Select Change Settings under the Computer name, domain and workgroup setting
- Click the change button
- Select Domain and enter **optit.com**
- Click ok & enter the **Administrator Username/Password** for domain and reboot