

AINUX

— TASTE OF LINUX —

WELCOME TO THE WORLD OF
LINUX

DAY - 6

RedHat Identity Management Services

THE GOAL OF REDHAT IDENTITY MANAGEMENT.

Red Hat Identity Management (IdM) provides a centralized and unified way to manage identity stores, authentication policies, and authorization policies in a Linux-based domain like Microsoft Active Directory.

IdM is one of the few centralized **Identity**, **Policy**, and **Authorization (IPA)** software solutions that support Advanced features of Linux operating system environments Unifying large groups of Linux machines Native integration with Active Directory.

IdM creates a Linux-based and Linux-controlled domain:

IdM servers and clients are Red Hat Enterprise Linux machines. However, even though IdM does not support Windows clients directly, it allows integration with Active Directory environment.

Examples of Benefits Brought by IdM

- Maintain the identities in one central place.
- Apply policies to multiple machines at the same time.
- Set different access levels for users by using host-based access control and other rules.
- Centrally manage privilege escalation rules.
- Reduce the security risk of passwords being written down or stored insecurely.
- Improve usability.
- Integrate the Linux systems with the Windows systems, thus preserving a centralized user store.

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IPA is a combination of 389 Directory Server, Kerberos, HTTP Server, NTP, DNS, Dogtag (certificate system), making it as a single integrated security solution to manage the Identity, Policy, and perform Audit trail.

Identity: *(machine, user, virtual machines, groups, authentication credentials)*

Policy: *(configuration settings, access control information)*

Audit Trail: *(events, logs, analysis)*

Prerequisites

1. Set Host Name

EXP: - # hostnamectl set-hostname srv.iant.com

2. Set Static IP Address

```
EXP: - # nmcli connection add con-name static type ethernet ifname ens33
      # nmcli connection modify static ipv4.address 192.168.1.5/24 ipv4.gateway
      192.168.1.1      ipv4.dns 192.168.1.1 +ipv4.dns 8.8.8.8
      # nmcli connection modify static ipv4.method manual
```

4. Setup a Network based (FTP)YUM server.

5. Add the following services to your firewall list

Ex: - ftp, http, https, ldap, ldaps, kerberos, dns.

Connecting to Network-Defined Users and Groups

LAB Scenario



Host Name: SRV.IANT.COM
Role: IPA Server
IP Address: 192.168.1.1/24
DNS: 192.168.1.1 / 8.8.8.8

IPA Server Configuration

```
# yum install ipa-server ipa-server-dns bind bind-dyndb-ldap
Server]
```

```
# ipa-server-install --setup-dns
```

Note: - Now you have to declare the credentials as follows.

1. Do you want to configure integrated DNS (BIND)? [no]: **yes**
2. Server host name [IPASRV.IANT.COM]: **ipasrv.iant.com**
3. Please confirm the domain name [iant.com]: **iant.com**



Host Name: CLI-1
Role: IPA Client
IP Address: 192.168.1.2/24
Gateway: 192.168.1.1
DNS: 192.168.1.1 / 8.8.8.8

[Install Packages from YUM

[install the IPA server]

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4. Please provide a realm name [IANT.COM]: **iant.com**
5. Do you want to use IANT.COM as realm name? [yes]: **yes**
6. Directory Manager password: **admin123#**
7. Password (confirm): **admin123#**
8. IPA admin password: **admin@123**
9. Password (confirm): **admin@123**
10. Continue to configure the system with these values? [no]: **yes**

Add UDP ports into firewall

```
# firewall-cmd --permanent --add-port=88/udp  
# firewall-cmd --permanent --add-port=464/udp  
# firewall-cmd --permanent --add-port=123/udp  
# firewall-cmd --reload
```

Now check with user admin.

```
# kinit admin
```

Note: - Put the password which you have entered prior.

To display the details of admin user.

```
# ipa user-find admin
```


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To see the status of IPA Server

```
# ipactl status
```

To add an user in data base of IPA Server

```
# ipa user-add
```

To set password for user tanima

```
# ipa passwd tanima
```

To set password for user tanima

```
# ipa user-find tanima
```

CLIENT CONFIGURATION

Configure Hostname

```
# hostnamectl set-hostname cli1.iant.com
```

Create a network profile

```
# nmcli connection add con-name lan type ethernet ifname ens33
```

Set and IP, Gateway and DNS

```
# nmcli connection modify lan ipv4.addresses 192.168.1.6/24 ipv4.gateway 192.168.1.5 ipv4.dns  
192.168.1.5 +ipv4.dns 8.8.8.8
```

```
# nmcli connection modify lan ipv4.method manual
```

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Configure YUM Client

```
# scp 192.168.1.5:/etc/yum.repos.d/srv.repo /etc/yum.repos.d/client.repo
```

Install Client packages through YUM server

```
# yum install ipa-client nss-pam-ldapd pam_krb5
```

Configure IPA client

```
# ipa-client-install
```

Note: - Now you have to declare the credentials as follows.

```
# Provide the domain name of your IPA server (ex: example.com): iant.com
```

```
# Provide your IPA server name (ex: ipa.example.com): srv.iant.com
```



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THANK YOU