



```
[root@ipa-client01 carlos]# yum install ipa-server ipa-admintools
```

```
[root@ipa-client01 carlos]# kinit admin
```

```
Password for admin@EXAMPLE.COM:
```

```
[root@ipa-client01 carlos]# klist
```

```
Ticket cache: KEYRING:persistent:0:0
```

```
Default principal: admin@EXAMPLE.COM
```

```
Valid starting Expires Service principal
23/02/17 23:29:14 24/02/17 23:29:10 krbtgt/EXAMPLE.COM@EXAMPLE.COM
```

```
[root@ipa-client01 carlos]# ipa-replica-install --principal admin --password FFFFFFFF
```

```
Run connection check to master
```

```
Connection check OK
```

```
Configuring NTP daemon (ntpd)
```

```
[1/4]: stopping ntpd
```

```
[2/4]: writing configuration
```

```
[3/4]: configuring ntpd to start on boot
```

```
[4/4]: starting ntpd
```

```
Done configuring NTP daemon (ntpd).
```

```
Configuring directory server (dirsrv). Estimated time: 1 minute
```

```
[1/44]: creating directory server user
```

```
[2/44]: creating directory server instance
```

```
[3/44]: updating configuration in dse.ldif
```

```
[4/44]: restarting directory server
```

```
[5/44]: adding default schema
```

[6/44]: enabling memberof plugin
[7/44]: enabling winsync plugin
[8/44]: configuring replication version plugin
[9/44]: enabling IPA enrollment plugin
[10/44]: enabling ldapi
[11/44]: configuring uniqueness plugin
[12/44]: configuring uuid plugin
[13/44]: configuring modrdn plugin
[14/44]: configuring DNS plugin
[15/44]: enabling entryUSN plugin
[16/44]: configuring lockout plugin
[17/44]: configuring topology plugin
[18/44]: creating indices
[19/44]: enabling referential integrity plugin
[20/44]: configuring certmap.conf
[21/44]: configure autobind for root
[22/44]: configure new location for managed entries
[23/44]: configure dirsrv ccache
[24/44]: enabling SASL mapping fallback
[25/44]: restarting directory server
[26/44]: creating DS keytab
[27/44]: retrieving DS Certificate
[28/44]: restarting directory server
[29/44]: setting up initial replication
Starting replication, please wait until this has completed.
Update in progress, 5 seconds elapsed
Update succeeded

[30/44]: adding sasl mappings to the directory
[31/44]: updating schema
[32/44]: setting Auto Member configuration
[33/44]: enabling S4U2Proxy delegation
[34/44]: importing CA certificates from LDAP
[35/44]: initializing group membership
[36/44]: adding master entry
[37/44]: initializing domain level
[38/44]: configuring Posix uid/gid generation
[39/44]: adding replication acis
[40/44]: enabling compatibility plugin
[41/44]: activating sidgen plugin
[42/44]: activating extdom plugin
[43/44]: tuning directory server
[44/44]: configuring directory to start on boot
Done configuring directory server (dirsrv).
Configuring ipa-custodia
[1/5]: Generating ipa-custodia config file
[2/5]: Generating ipa-custodia keys
[3/5]: Importing RA Key

/usr/lib/python2.7/site-packages/urllib3/connection.py:251: SecurityWarning: Certificate has no `subjectAltName`, falling back to check for a `commonName` for now. This feature is being removed by major browsers and deprecated by RFC 2818. (See <https://github.com/shazow/urllib3/issues/497> for details.)

SecurityWarning

[4/5]: starting ipa-custodia

[5/5]: configuring ipa-custodia to start on boot

Done configuring ipa-custodia.

Configuring Kerberos KDC (krb5kdc). Estimated time: 30 seconds

[1/4]: configuring KDC

[2/4]: adding the password extension to the directory

[3/4]: starting the KDC

[4/4]: configuring KDC to start on boot

Done configuring Kerberos KDC (krb5kdc).

Configuring kadmind

[1/2]: starting kadmind

[2/2]: configuring kadmind to start on boot

Done configuring kadmind.

Configuring ipa_memcached

[1/2]: starting ipa_memcached

[2/2]: configuring ipa_memcached to start on boot

Done configuring ipa_memcached.

Configuring the web interface (httpd). Estimated time: 1 minute

[1/20]: setting mod_nss port to 443

[2/20]: setting mod_nss cipher suite

[3/20]: setting mod_nss protocol list to TLSv1.0 - TLSv1.2

[4/20]: setting mod_nss password file

[5/20]: enabling mod_nss renegotiate

[6/20]: adding URL rewriting rules

[7/20]: configuring httpd

[8/20]: configure certmonger for renewals

[9/20]: setting up httpd keytab

[10/20]: setting up ssl

[11/20]: importing CA certificates from LDAP

[12/20]: publish CA cert

[13/20]: clean up any existing httpd ccache

[14/20]: configuring SELinux for httpd

[15/20]: create KDC proxy user

[16/20]: create KDC proxy config

[17/20]: enable KDC proxy

[18/20]: restarting httpd

[19/20]: configuring httpd to start on boot

[20/20]: enabling oddjobd

Done configuring the web interface (httpd).

Applying LDAP updates

Upgrading IPA:

[1/9]: stopping directory server

[2/9]: saving configuration

[3/9]: disabling listeners
 [4/9]: enabling DS global lock
 [5/9]: starting directory server
 [6/9]: upgrading server
 [7/9]: stopping directory server
 [8/9]: restoring configuration
 [9/9]: starting directory server

Done.

Configuring ipa-otpd

[1/2]: starting ipa-otpd
 [2/2]: configuring ipa-otpd to start on boot

Done configuring ipa-otpd.

The screenshot shows the Identity Management web interface in Mozilla Firefox. The browser address bar shows `https://ipa-server.example.com/ipa/ui/#/p/topology-graph`. The interface has a sidebar on the left with a menu containing 'Topology', 'Topology suffixes', 'IPA Servers', 'Server Roles', 'Domain Level', 'Topology Graph' (highlighted), and 'IPA Locations'. The main content area is titled 'Topology Graph' and contains a 'Refresh' button, '+ Add' button, and 'Delete' button. Below these buttons, the text 'ca' and 'domain' is visible. To the right, a topology graph shows three green circular nodes: 'ipa-client01' at the top, 'ipa-server' in the middle, and 'ipa-replica' at the bottom. Orange arrows point from 'ipa-client01' to 'ipa-server' and from 'ipa-server' to 'ipa-replica'. The bottom of the browser window shows the URL `https://ipa-server.example.com/ipa/ui/#/e/location/search`.

[root@ipa-client01 carlos]# klist

Ticket cache: KEYRING:persistent:0:0

Default principal: admin@EXAMPLE.COM

Valid starting	Expires	Service principal
23/02/17 23:30:46	24/02/17 23:29:10	HTTP/ipa-server.example.com@EXAMPLE.COM
23/02/17 23:30:44	24/02/17 23:29:10	ldap/ipa-server.example.com@EXAMPLE.COM
23/02/17 23:29:14	24/02/17 23:29:10	krbtgt/EXAMPLE.COM@EXAMPLE.COM

