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Centrify Server Suite 2015.1

Centrify Identity and Access Management for Couchbase

September 2015

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Couchbase 4.1

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Benefits of integrating with Centrify

Centrify Server Suite is an enterprise-class solution that supports NoSQL Couchbase big data environments. Together, Centrify and Couchbase allow you to use your organization's existing Active Directory infrastructure to deliver access control and privilege management.

By installing the Centrify agent on NoSQL nodes you can provide single sign-on identity and access management for the users who will log on to clusters in the big data environment with their Active Directory credentials, by extending the power of Active Directory's capabilities using SASL.

The Centrify agent reduces identity-related risks by enforcing access controls and least-privilege security across nodes and clusters, and increases regulatory compliance through control over user access and the ability to trace activity back to an individual user.

Preparing for integration with Centrify

The following sections describe how to install and configure Couchbase for integration with the Centrify agent. For detailed instructions on preparing your NoSQL environment, go to <http://docs.couchbase.com/admin/admin/Install/RHEL-install-intro.html>

Basic prerequisites

- Active Directory must be installed and at least one domain controller must be available.
- You should have a Windows workstation joined to the domain where you can run administrative consoles.
- You should have appropriate Centrify Server Suite Enterprise Edition software installed or available to be installed. For example, to install Couchbase on a machine running RedHat Enterprise Linux 6, you would download centrify-suite-2015.1-rhel: <http://centrify.com/support/customer-support-portal/download-center/#2015.1>

You can request a free trial of Centrify Server Suite by filling out the <http://www.centrify.com/free-trial/server-suite-form/> on the Centrify website and specifying NoSQL in the Comments field.

- You should have Centrify Server Suite documentation available for reference. You can download documentation from <http://community.centrify.com/t5/custom/page/page-id/Centrify-Documentation> after you register your free trial and set up your Centrify account.

- You should have the latest version of Couchbase enterprise software available. Couchbase 4.1 can be downloaded from <http://www.couchbase.com/nosql-databases/downloads>.
- You should install Cyrus-SASL (saslauth). You can find installation instructions at <http://www.linuxfromscratch.org/blfs/view/svn/postlfs/cyrus-sasl.html>

Integrating Couchbase and Centrify

The following sections describe how to install and integrate your Couchbase environment with Centrify on a Linux machine running RedHat Enterprise Linux (RHEL) 6.0.

You must log on as root to complete the installation.

Install the Centrify agent on each node

- 1 Download the appropriate .tgz file.
- 2 Unzip and extract the agent package.

For example:

```
gunzip centrify-suite-2015.1-rhel4-x86_64.tgz
tar -xvf centrify-suite-2015.1-rhel4-x86_64.tgz
```

- 3 Install the Centrify Agent.

For example: `rpm -Uvh centrifydc-5.2.3-rhel4-x86_64.rpm`

- 4 Install the Centrify Enterprise Agent.

```
./install.sh -ent-suite
```

- 5 Ensure that you can join to your Active Directory domain by executing the `adcheck` command.

In the following example, our domain controller is `dd-demo.test`:

```
adcheck dd-demo.test
```

Note You should not see an error prompt if the machine is able to connect to an available domain controller.

- 6 Join to the Active Directory domain.

In the following example, the zone is `Analytics`, the user is `Tim`, and the domain is `dd-demo.test`.

```
adjoin -z "Analytics" -u Tim dd-demo.test
```

Enable SASL on the Couchbase Console Server

- 1 Install cyrus-sasl (saslauthd).

```
yum install cyrus-sasl
```

- 2 Configure SASL.

In `/etc/sysconfig/saslauthd`, set the MECH parameter to ldap.

```
MECH=ldap
```

- 3 Locate the config file in `/etc/saslauthd.conf`. If this file does not exist, create it.

- 4 In `/etc/saslauthd.conf`, add the following parameters:

```
ldap_servers: ldap://dd-demo.test
```

```
ldap_search_base: dc=DD-DEMO,dc=TEST
```

```
ldap_filter: (samAccountName=%u)
```

This attribute corresponds to a user name. You can use an Active Directory name (`samAccountName`) or the UID contained in the `PosixAccount` class.

In a production environment you will secure LDAP on multiple proxies.

```
ldap_bind_dn: CN=Tim Wilson,cn=Users,dc=DD-DEMO,dc=TEST
```

```
ldap_bind_pw: password
```

- 5 Restart the saslauthd service

```
service saslauthd restart
```

Note You can also use `chkconfig` to set the saslauthd service to start automatically.

- 6 Test that the saslauthd service is running with LDAP authentication.

```
In -s /var/run/saslauthd/ /var/run/sasl2
```

```
/usr/sbin/testsasauthd -u tim -p password -f /var/run/saslauthd/mux
```

If everything has been configured correctly, you should see the following result:

```
0: OK "Success."
```

Enable Couchbase with the Centrify LDAP Proxy

- 1 Install Couchbase.

Detailed information can be found on the Couchbase website at <http://developer.couchbase.com/documentation/server/4.1/install/installation-guide-intro.html>

- 2 Configure Couchbase.

Detailed information on how to set up Couchbase can be found on their website at <http://developer.couchbase.com/documentation/server/4.1/getting-started/index.html>

3 Access the Administrator Interface console.

`http://your-hostname:8091`

4 Go to **Settings > LDAP Auth Setup**

5 In **Setup**, select **Enable** and click **Save**.

6 Add a Full or Read-Only administrator using your Active Directory name.

For example, `Tim`.

7 In the **Validate** field, enter the user name and password and click **Validate** to view the user's status.

8 Sign out of the console.

9 Log on with to the console using the newly created user.

Administrators with full access can change the settings, while those with read-only permissions cannot.

For additional information on securing Couchbase nodes, go to <http://docs.couchbase.com/admin/admin/Concepts/security-intro.html>