

GENESYS

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Web Services and Applications Deployment Guide

Prerequisites

Prerequisites

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The following prerequisites must be met before you can install and configure Workspace Web Edition & Web Services:

- The Genesys Platform has been installed, configured, and tested.
- Review the Deployment Scenarios.
- Jetty has been installed and configured.
- Cassandra has been installed and configured.

Genesys Platform Support

Required Components

• Management Framework 8.1

Optional Components

The following Genesys components are required to support the specified features:

Feature	Component
Voice API	 SIP Server 8.1, TServer for Avaya Communications Manager 8.1, or TServer Avaya TSAPI 8.1 MCP 8.1.603.62+ is recommended if using in conjunction with SIP Server
Multimedia API	• eServices 8.1.3
Reporting	• StatServer 8.1

Deployment Scenarios

There are generally three common Cassandra topologies used for Workspace Web Edition & Web Services:

- ullet Development 1 Cassandra node (appropriate for a development or lab environment)
- Single Datacenter 1 datacenter with a minimum of three Cassandra nodes
- Two Datacenters 2 datacenters with a minimum of three Cassandra nodes in each datacenter

The number of Workspace Web Edition & Web Services nodes in your deployment scenario depends on a variety of factors. Please consult with Genesys for help to determine the correct number of nodes for your solution.

For Development scenarios, you can install Cassandra and Workspace Web Edition & Web Services on the same host. For Single Datacenter and Two Datacenter scenarios, you must install Cassandra and Workspace Web Edition & Web Services on separate hosts.

Installing and Configuring Jetty

Jetty version 8 is a mandatory component that must be installed and configured on each Workspace Web Edition & Web Services node prior to starting the installation and configuration of Workspace Web Edition & Web Services.

Important

For more information about Jetty, refer to the Jetty documentation.

Prerequisites

 You have installed the latest Java 1.7 JDK 64bit for Linux. For more information, refer to the Java documentation.

Start of Procedure

- 1. Download Jetty version 8 from Eclipse.
- 2. Copy the Jetty archive to the installation directory. For example, /opt/jetty
- 3. Use a tar utility to extract the files. For example, tar -zxvf jetty-distribution-8.1.14.v20131031.tar.gz
- 4. Start Jetty to confirm it has been installed correctly:

```
[java_path]/java -jar [jetty_path]/start.jar
```

- [java_path] The path to your Java installation. For example, /user/bin.
- [jetty_path] The path to your Jetty installation. For example, /opt/jetty.
- Test Jetty by entering the following URL in a web browser: http://[host]:8080
 - [host] The host name (fully qualified domain name) or IP address where you installed Jetty.

You should see a Jetty Test application page similar to the following:



Welcome to Jetty 8 - REMOTE ACCESS!!

This is the Test webapp for the Jetty 8 HTTP Server and Servlet Container. For more information about Jetty, please visit website or documentation. Commercial support for Jetty is available via webtide.

This test context serves several demo filters and servlets that are not safe for deployment on the internet, since (by design) contain cross domain scripting vulnerabilities and reveal private information. This page is displayed because you have accepthis context from a non-local IP address.

You can disable the remote address checking by editing contexts/test.d/override-web.xml, uncommenting the definition of TestFilter, and changing the "remote" init parameter to "true".

This webapp is deployed in \$JETTY_HOME/webapp/test and configured by \$JETTY_HOME/contexts/test.xml and \$JETTY_HOME/contexts/test.d/override-web.xml

Jetty test application page

Stop Jetty by pressing Ctrl+c.

End of Procedure

Installing and Configuring Cassandra

Cassandra 1.1 is mandatory for Workspace Web Edition & Web Services and must be installed and configured prior to starting the installation and configuration of Workspace Web Edition & Web Services.

Important

For more details about Cassandra, refer to the Cassandra documentation for version 1.1.

The following steps are intended to serve as a quick guide to installing and configuring Cassandra.

Installing Cassandra

Complete this procedure for each Cassandra node.

Prerequisites

You have installed the latest Java 1.7 JDK 64bit for Linux. For more information, refer to the Java documentation.

Start of Procedure

- 1. Download the latest 1.1.x version of Cassandra.
- 2. Copy the Cassandra archive to the installation directory. For example, /usr/local
- 3. Use a tar utility to extract the files. For example, tar -zxvf apache-cassandra-1.1.11-bin.tar.gz
- 4. Add directories for data, commitlog, and saved_caches. You can create these directories anywhere or in the default locations configured in the cassandra.yaml. For example:
 - /var/lib/cassandra/data
 - · /var/lib/cassandra/commitlog
 - /var/lib/cassandra/saved_caches
- 5. Add a directory for logging. You can create this directory anywhere, such as /var/log/cassandra/.

End of Procedure

Next Steps

· Configure Cassandra

Configuring Cassandra

This procedure shows you how to configure a three-node Cassandra cluster in a single datacenter.

Important

The files modified in this procedure are typically found in the [Cassandra install dir]/conf directory.

Start of Procedure

Complete the following steps for each Cassandra node:

- 1. Modify the cassandra.yaml file:
 - a. Set the cluster_name. It must be the same name on all nodes.
 - b. Set the initial_token according to the node's place in ring. It must be one of the following:

Node #1: 0 Node #2: 56713727820156410577229101238628035242 Node #3: 113427455640312821154458202477256070484

Important

The tokens shown here can be used for a three-node Cassandra cluster in a single datacenter. If you are using a different topology or cluster size, consult the Cassandra documentation.

- c. Set seeds to the list of host names of all nodes. For example: -seeds: "node1, node2, node3"
- d. Set listen address and rpc address to the host name.

- e. Set data_file_directories, commitlog_directory, and saved_caches_directory to the directories you created in Step 4 of the Installing Cassandra procedure.
- f. Change endpoint snitch to PropertyFileSnitch.
- g. Save your changes and close the file.
- 8. Open the log4j-server.properties file and set the log4j.appender.R.File property to the directory you created in Step 5 of the Installing Cassandra procedure.
- 9. Save your changes and close the file.
- 10. Open the cassandra-topology.properties file and update for you cluster topology. For each node in your cluster, add the following line:

```
[node]=[datacenter]:[rack]
```

- [node] The IP address of the node
- [datacenter] The name of the datacenter for this node.
- [rack] The name of the rack for this node.

The following is a sample cassandra-topology.properties file for a Single Datacenter scenario:

```
192.0.2.10=datacenter1:rack1
192.0.2.11=datacenter1:rack1
192.0.2.12=datacenter1:rack1
```

• Save your changes and close the file.

End of Procedure

Next Steps

• Verifying the Cassandra installation

Verifying the Cassandra Installation

Start of Procedure

1. Start all Cassandra nodes using the following command:

```
[cassandra install dir]/bin/cassandra
```

2. Use the nodetool utility to verify that all nodes have connected by entering the following command:

```
[cassandra install dir]/bin/nodetool -h [cassandra host] ring
```

The following is sample output for a Single Datacenter scenario:

```
/genesys/apache-cassandra-1.1.6/bin$ ./nodetool ring
Address DC Rack Status State Load Owns Token
192.0.2.10 datacenter1 rack1 Up Normal 14.97 MB 100.00% 0
192.0.2.11 datacenter1 rack1 Up Normal 14.97 MB 100.00%
56713727820156410577229101238628035242
192.0.2.12 datacenter1 rack1 Up Normal 14.97 MB 100.00%
113427455640312821154458202477256070484
```

End of Procedure

Next Steps

• Install Workspace Web Edition & Web Services