Workspace Desktop Edition Deployment Guide

Business Continuity for SIP Server, Configuration Server, and Statistic Server

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[**Modified:** 8.5.106.19, 8.5.108.11, 8.5.109.16, 8.5.111.21]

Contents

Business Continuity Using High Availability Paired Servers (SIP Server, Statistic Server, Configuration Server Proxy)

Business Continuity relies on pairs of servers. A pair is composed of regular linked Primary and Back-up Servers. Two Server pairs are considered peers when they support each other in a Business Continuity model.

You can specify the name of the preferred connection site and the Business Continuity connection site, and the time-out interval for switch-over to the Business Continuity site.

> **Tip**
> All Workspace Business Continuity-related (disaster recovery) options can be configured for any object in the configuration hierarchy (Application, Tenant, Agent Group, and Person).

Use the Procedure: *Configuring Workspace for Business Continuity* to enable Business Continuity for your agents. By using that procedure, you specify the site name in the options of the corresponding server application (SIP Servers, Stat Servers and Configuration Servers) in the `interaction-workspace` section.

Procedure: Configuring Workspace for Business Continuity

Purpose:

To manage server and switch connections to enable Workspace to connect to an alternate (Peer) Server in the event of a disaster at the Preferred agent login site. This Configuration applies to SIP Servers, Stat Servers and Configuration Server (Proxies)

Prerequisites

- Genesys Administrator 8.0.2 or higher, configured to show Advanced View, or Genesys Administrator Extension.
- A working knowledge of Genesys Administrator Extension.
- A Workspace Desktop Edition `Application` object exists in the Configuration Database.
- Two synchronized sites, each with configured High Availability (HA) pairs.

Start

1. On the Server object at the Preferred site, configure the `disaster-recovery.site` option in the `interaction-workspace` section with a symbolic name, such as `Site X`, for the server. The symbolic name is how the server will be identified to the Business Continuity functionality. The Preferred site for one agent or group of agents will also be the Peer site for another agent or group of agents. The

concept of Preferred site and Peer site is then configured agent by agent (or agent group by agent group) as described below.

2. You can also use the optional `disaster-recovery.name` option in the `interaction-workspace` section of both SIP Server objects of an HA pair to identify two SIP Servers as belonging to the same pair. If no name is specified for his option, the value `default` is assumed.
3. On the Server object at the Peer site, configure the `disaster-recovery.site` option in the `interaction-workspace` section with a symbolic name, such as `Site Y`, for the server. The symbolic name is how the server will be identified to the Business Continuity functionality.
4. For each agent, agent group, or tenant, configure the `disaster-recovery.preferred-site` option in the `interaction-workspace` section by specifying the symbolic site name of the Server that you specified with the `disaster-recovery.site` option.
5. For each agent, agent group, or tenant, configure the `disaster-recovery.peer-site` option in the `interaction-workspace` section with the symbolic site name of the Server that you specified with the `disaster-recovery.site` option.
6. Enable Business Continuity for each agent, agent group, or tenant and specify the Business Continuity behavior by configuring the other Business Continuity options that are listed in the Business Continuity Configuration Options reference.

End

Then, use the following options in the `interaction-workspace` section of the Interaction Workspace Application object to configure Business Continuity:

- `disaster-recovery.enabled`: Specifies whether Business Continuity is enabled.
- `disaster-recovery.preferred-site`: Specifies the name of the preferred connection site for the application, tenant, agent Group, or agent. It must correspond to the value of the `disaster-recovery.site` option on the server object at the preferred site.
- `disaster-recovery.peer-site`: Specifies the name of the site that is to be the Business Continuity-peer. It must correspond to the value of the `disaster-recovery.site` option on the server object at the peer site.
- `disaster-recovery.timeout`: Specifies the timeout interval in seconds after loss of connection to the High Availability (HA) Pair of servers and before Business Continuity switchover is initiated.

SIP Server specific options

For more information about SIP Server High-Availability, refer to Framework SIP Server High-Availability Deployment Guide.

To ensure that the switchover from the peer to the preferred site occurs correctly when the preferred site is restored, use the following options in the `interaction-workspace` section of the Interaction Workspace Application object to configure SIP Server Business Continuity:

- `disaster-recovery.wait-for-sipphone-timeout`: Specifies the time interval in seconds to wait for SipPhone (SIPEndpoint) registration before initiating the Business Continuity switchover if the current SipPhone(SIPEndpoint) connection was lost or registration was expired.
- `disaster-recovery.auto-restore` (for T-Server only): Specifies whether or not switching back to the Preferred site should occur if it becomes available.

The default values for the following configuration options can cause the switchover to the preferred

site to be delayed in some environments:

- sipendpoint.proxies.proxy0.reg_timeout=3600
- sipendpoint.proxies.proxy1.reg_timeout=3600

> **Important**
>
> These options are used by Workspace to configure Workspace SIP Endpoint or Genesys Softphone (since the end of 2018). It is not applicable to any other SIP Endpoint, hard or soft.

The default values of 3600 seconds means that the first SIP Endpoint re-registration attempt will occur after one hour. In scenarios where the preferred site is returned to service in a few minutes, there is a significant delay between the preferred site being available and the SIP Endpoint attempting to re-register with the preferred site.

You can choose much shorter re-registration attempt intervals by setting the values of these options to a value between 30 and 60 seconds.

If the agent is configured to restore the last seen state after switchover (the value of `disaster-recovery.restore-agent-state` is set to `true`), Workspace postpones automatic restoration of the last seen agent state until the agent closes all stacked interaction windows. In earlier releases of Workspace, the application restored the last seen state immediately after login on paired DR sites, but this made it possible to accept new calls while the last call was still in progress.[**Modified:** 8.5.105.12]

> **Important**
>
> - For SIP Server Business Continuity, the preferred Extension DN and the peer Extension DN must be assigned to the same Place. This equally applies to environments with Voice/IM only medias and to environments with "blended agents" (agents who have a SIP Business Continuity Voice/IM DN and at least one eServices media).
> - Stat Server 8.1.2 or above must be used to properly support SIP Business Continuity environment.

Provision Workspace Client with Configuration Server HA settings

[**Added:** 8.5.111.21]

Genesys recommends that you edit the `InteractionWorkspace.exe.config` file that you deliver to agents to provide Configuration HA/Pair information to the client for the first time that Workspace is launched in a Configuration Server HA/Pair environment. This file is in the Workspace installation directory. Those settings are updated based on central configuration once Workspace is connected to a Configuration Server Proxy.

Edit or add the following keys:

```
<appSettings>
...
<add key="login.url" value="tcp://MyConfigEnvironment/ApplicationName" />
<add key="login.nodes.preferred-site.MyConfigEnvironment"
value="[CSP1Host:CSP1Port][CSP2Host:CSP2Port],Timeout=10" />
<add key="login.nodes.peer-site.MyConfigEnvironment"
value="[CSP3Host:CSP3Port][CSP4Host:CSP4Port],Timeout=10" />
...
</appSettings>
```

- **MyConfigEnvironment**: The name of the Configuration Environment that is displayed in the Login window.
- **ApplicationName**: The name of the Workspace Desktop application in Management framework
- **CSP1Host:CSP1Port,...,CSP4Host:CSP4Port**: CSP1 is the Primary Preferred, CSP2 the backup Preferred, CSP3 the Primary Peer, CSP4 the backup Peer of your configuration HA/Pair. The order indicates the preference (Primary first).
- **Timeout**: Specifies the delay, in seconds, that is applied after connections to primary and backup have been checked and failed. This parameter applies only after initial successful connection has been lost.

Business Continuity using clustered servers (Statistic Server and Configuration Server Proxy)

Instead of using Primary/backup pairs on each site, Workspace Desktop can be configured to connect to a cluster on each site to provide less down time and load balancing.

To properly set up clusters for Business Continuity, you must provision one cluster of Configuration Server Proxies and one cluster of Statistic Servers on the preferred site and similar clusters on the peer site. Use the procedures in the Load Balancing Using Clusters topic to create load balancing clusters.

Use the Procedure: *Configuring Workspace for Business Continuity based on Clusters* to enable Business Continuity for your agents.

Procedure: Configuring Workspace for Business Continuity based on clusters

Purpose:

To manage server to enable Workspace to connect to an alternate (Peer) cluster in the event of a disaster has affected the Preferred cluster.

This Configuration applies to Statistic Servers and Configuration Server Proxies.
Prerequisites

- Genesys Administrator 8.0.2 or higher, configured to show Advanced View, or Genesys Administrator Extension.
- A working knowledge of Genesys Administrator Extension.

- A Workspace Desktop Edition `Application` object exists in the Configuration Database.
- A cluster of Configuration Server Proxies or Statistic Servers has been defined for each Business Continuity site.

Start

1. On the object representing the cluster at the Preferred site, configure the `disaster-recovery.site` option in the `interaction-workspace` section with a symbolic name, such as `Site X`, for the server. The symbolic name is how the server will be identified to the Business Continuity functionality.
2. On the object representing the cluster at the Peer site, configure the `disaster-recovery.site` option in the `interaction-workspace` section with a symbolic name, such as `Site Y`, for the server. The symbolic name is how the server will be identified to the Business Continuity functionality.
3. For each agent or agent group, configure the `disaster-recovery.preferred-site` option in the `interaction-workspace` section by specifying the symbolic site name of the Server that you specified with the `disaster-recovery.site` option.
4. For each agent or agent group, configure the `disaster-recovery.peer-site` option in the `interaction-workspace` section with the symbolic site name of the Server that you specified with the `disaster-recovery.site` option.
5. The Preferred site for one agent or group of agents can also be the Peer site for another agent or group of agents.
6. Use option `disaster-recovery.enabled` to enable Business Continuity for each agent or agent group and use option `disaster-recovery.timeout` to specify the Business Continuity switch over behavior.

End

Provision bootstrap configuration cluster settings in Workspace configuration file

Genesys recommends that you edit the `InteractionWorkspace.exe.config` file that you deliver to agents to provide Configuration cluster information to the client for the first time that Workspace is launched in a Configuration Server Cluster environment. This file is located in the Workspace installation directory. Those settings are updated based on central configuration once Workspace is connected to a Configuration Server Proxy.

Edit or add the following keys:

```
<appSettings>
 ...
 <add key="login.url" value="tcp://MyConfigEnvironment/ApplicationName" />
 <add key="login.cluster.nodes.preferred-site.MyConfigEnvironment"
value="[CSP1Host:CSP1Port][CSP2Host:CSP2Port][CSP3Host:CSP3Port],Timeout=10" />
 <add key="login.cluster.nodes.peer-site.MyConfigEnvironment"
value="[CSP4Host:CSP4Port][CSP5Host:CSP5Port][CSP6Host:CSP6Port],Timeout=10" />
 ...
</appSettings>
```

- **MyConfigEnvironment**: The name of the Configuration Environment that is displayed in the **Login** window.
- **ApplicationName**: The name of the Workspace Desktop application in Management framework
- **CS1PHost:CSP1Port...CS6PHost:CSP6Port**: The `host:port` pairs of your configuration cluster.
- **Timeout**: Sets the value in seconds of the `warm-standby.retry-delay` option.