

Test Bed 1: Call Flows and Redundancy

This topic provides configuration information for a variety of sample call flows that were tested and verified in Test Bed 1 in the contact center environment for Cisco Unified Communications System Release 9.0(1). This topic also describes specific test cases that were executed as a part of Cisco Unified Communications System Release 9.0(1) failover testing.

This topic contains the following sections:

- Tested Call Flows
- Failure, Failover and Recovery

Tested Call Flows

The Cisco Unified Customer Voice Portal (Unified CVP) test bed handles the following types of call flows:

- Unified CVP Post-Routed call flow, where the call arrives at the branch offices/retail centers and the call is handled by agents at these sites.
- MediaSense call flows:
 - Recordings forked by agent phone:

```
PSTN Ph1->SIP-Gateway->Unified CVP->Unified CCE->Unified CVP->Unified CCE->Unified CM 1->Agent1->MediaSense
```

- Recordings forked by Cisco Unified Border Element (Unified Border Element):

```
Ph1->SIP TRUNK->Unified Border Element->Unified CVP->Unified CCE->Unified CVP->Unified CCE->Unified Communications Manager1->Agent1->MediaSense
```

Finesse call flow:

PSTN Phone->SIP Gateway->Unified CVP->Unified CCE->Unified Communications Manager ->CTI Server->Finesse Server->Finesse Agent

- Unified Border Element call flows:
 - IP PSTN call to Cisco Unified Contact Center Enterprise (Unified CCE)/ Unified CVP solution via Unified Border Element:

Phone->IP PSTN->SIP/UDP->Unified Border Element-> SIP/TCP->Unified CVP->Unified CCE->Unified CVP->Unified Communications Manager->Agent

- Hold/Retrieve call in Unified Border Element High Availability Mode:

Phone->SIP/UDP->Active Unified Border Element (A1)->SIP/TCP->Unified CVP-Unified CCE->Unified CVP->Unified Communications Manager->Agent 1(Hold)
Phone-IP->PSTN-SIP/UDP->Active Unified Border Element (A2)->SIP/TCP->CVP->Unified CCE->Unified CVP->Unified Communications Manager->Agent 1(Retrieve)

Call Flows

Call flows generated in the Unified CCE with Unified CVP test bed receive the following general call treatment by the system:

- Unified CVP plays announcements and collects digits from caller.
- Agent configured for auto answer by Cisco Unified Communications Manager (Unified Communications Manager).
- Agent greeting and Whisper announcement are played.
- If agent is logged on and available, the call transfers directly to agent.
- If no agent is available, the call is queued locally.
- Caller terminates call by hanging up.

Failure, Failover and Recovery

This topic includes the following section:

- Failure without Failover Testing
 - Supervisor Disconnects Network During Unified Communications Manager Based Silent Monitored Session
 - Agent Disconnects Network on Unified Communications Manager Based Silent Monitored Session
 - Agent Fails Desktop During Unified Communications Manager Based Silent Monitored Session
- Failure with Failover Testing
 - Duplexed Peripheral Gateway Active Side Fails During Unified Communications Manager Based Silent Monitored Session
 - Active Side CTI Manager Service Fails During Unified Communications Manager Based Silent Monitored Session
 - Duplexed Peripheral Gateway Network Cable Disconnected During Unified Communications Manager Based Silent Monitored Session
 - Active Side Duplexed Rogger Fails During Unified Communications Manager Based Silent Monitoring Session
 - Stopped Unified Communications Manager Service Fails Unified Communications Manager Subscribers
 - Network Cable Disconnected Fails Unified Communications Manager Subscribers
 - Finesse Agent Desktop Stopped Service Fails MediaSense Servers
 - Finesse Agent Desktop Disconnecting Primary MediaSense Server Network Fails MediaSense Servers

- Cycle Duplexed Peripheral Gateway Active Side During Unified Communications Manager Based Silent Monitoring Session
- Stopped Service Fails Unified Communications Manager Subscribers
- CTI OS Agent Desktop Disconnecting Primary MediaSense Server Network Fails MediaSense Servers
- Finesse Agent Desktop Stopped Service Fails MediaSense Servers
- CTI OS Agent Desktop Disconnecting Primary MediaSense Server Network Fails MediaSense Servers on Cisco SRE Module
- CTI OS Based Silent Monitor Call using IP Phone as Agent Phone (69XX)
- Cisco TelePresence Content Server Failover Video Prompt Streaming
- Transfer Service Provider Call (High Availability)
- Conference Service Provider Call (High Availability)
- Hold/Retrieve Service Provider Call (High Availability)
- Supervisor Silent Monitoring (High Availability)
- Supervisor Intercept & Barge (High Availability)
- Consultative Transfer Service Provider Call via Cisco Unified Border Element to Remote CTI OS Agents (High Availability)
- Transfer Service Provider Call via Cisco Unified Border Element to CTI OS Agents in other Clusters (High Availability)
- Transfer Service Provider Call via Cisco Unified Border Element to Finesse Agent
- Consultative Transfer Service Provider Call via Cisco Unified Border Element to CTI OS Agents on VXC 6xxx/2xxx Clients (High Availability)
- Agent Greeting (High Availability)

Failure without Failover Testing

This section discusses the failover testing that was done with contact center components that did not provide redundancy capabilities in the event of a failure.

Supervisor Disconnects Network During Unified Communications Manager Based Silent Monitored Session

Pre-Test Conditions

- One agent
- One customer
- · One supervisor
- Two IP phones
- Unified Communications Manager based Silent Monitoring
- Cisco MediaSense separated over WAN from Unified Communications Manager

The following describes the failover testing that was performed:

- 1. Log in an agent.
- 2. Make a call from customer to agent.
- 3. Supervisor selects agent from Real-time Status grid to enable silent monitoring.
- **4.** Supervisor presses the Silent Monitor start button.
- 5. Supervisor is able to hear audio data from agent and customer.
- **6.** Supervisor ends silent monitoring session by unplugging network cable (15 second default limit and Supervisor will also lose CTI OS connection) Do this in two passes: 5 seconds and 25 seconds.
- 7. Verify the system behavior immediately after the network failure as described in After the Network Failure.
- 8. Supervisor plugs network cable back in.
- 9. Verify the system behavior after the network recovery as described in After the Network Recovery.

Results

The following results were verified:

After the Network Failure

• Supervisor can recover.

After the Network Recovery

- Supervisor can select agent again.
- Supervisor's desktop reflects the correct agent being monitored.
- Agent's desktop does not show the Silent Monitored call.
- Able to monitor the live session.
- Able to record and playback the session.

Agent Disconnects Network on Unified Communications Manager Based Silent Monitored Session

Pre-Test Conditions

- · One agent
- One customer
- · One supervisor
- Two IP phones
- Unified Communications Manager based Silent Monitoring
- MediaSense separated over WAN from Unified Communications Manager

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Make a call from customer to agent.
- 3. Supervisor selects Agent from Real-time Status grid to enable Silent Monitor.
- **4.** Supervisor presses the Silent Monitor start button.
- **5.** Supervisor is able to hear audio data from agent and customer.
- **6.** Agent ends Silent Monitor session by unplugging network cable (15 second default limit and Supervisor will also lose CTI OS connection).
- 7. Verify the system behavior immediately after the network failure as described in After the Network Failure.
- 8. Agent plugs network cable back in.
- 9. Verify the system behavior after the network recovery as described in After the Network Recovery.

Results

The following results were verified:

After the Network Failure

• Agent can recover and be in Silent Monitored session.

After the Network Recovery

- Supervisor's desktop reflects the correct agent being monitored.
- Agent's desktop does not show the Silent Monitored call.
- Able to monitor the live session.
- Able to record and playback the session.

Agent Fails Desktop During Unified Communications Manager Based Silent Monitored Session

Pre-Test Conditions

The following describes the test conditions:

- One agent
- One customer
- · One supervisor
- · One IP phone
- Unified Communications Manager based Silent Monitoring
- MediaSense separated over WAN from Unified Communications Manager

Test

The following describes the failover testing that was performed:

1. Login an agent.

- 2. Make a call from customer to agent.
- 3. Supervisor enables silent monitoring by selecting agent from Real-time Status grid.
- **4.** Supervisor presses the Silent Monitor start button.
- **5.** Supervisor is able to hear audio data from agent and customer.
- **6.** Agent ends silent monitoring session by failing desktop (15 second default limit and the agent will also lose CTI OS connection).
- 7. Verify the system behavior immediately after the failure as described in After the Agent Desktop Failure.
- **8.** Agent relaunches desktop.
- 9. Supervisor monitors agent again.
- 10. Verify the system behavior after the restoration as described in After the Agent Desktop Restored.

Results

The following test results were verified:

After the Agent Desktop Failure

• Silent Monitor session ends.

After the Agent Desktop Restored

- Supervisor can monitor agent again.
- Supervisor's desktop reflects the correct agent being monitored.
- Agent's desktop does not show the Silent Monitored call.
- Able to monitor the live session.
- Able to record and playback the session.

Failure with Failover Testing

This section discusses the failover testing that was done with contact center components that did provide redundancy capabilities in the event of a failure.

Duplexed Peripheral Gateway Active Side Fails During Unified Communications Manager Based Silent Monitored Session

Pre-Test Conditions

- One agent
- · One customer
- One supervisor
- One IP phone
- Unified Communications Manager based Silent Monitoring
- Duplexed system that recovers if one side fails

MediaSense separated over WAN from Unified Communications Manager

Test

The following describes the failure testing:

- 1. Login an agent.
- 2. Login a supervisor.
- **3.** Place call to agent.
- 4. Agent answers call.
- 5. Supervisor monitors agent.
- 6. Fail active side of the duplexed peripheral gateway using Stop All button.
- 7. Verify the system behavior immediately after the failure as described in After the Active Peripheral Gateway Failure.
- **8.** Verify the system behavior after the restoration as described in After the Stand-by Peripheral Gateway Becomes Active.

Results

The following results were verified:

After the Active Peripheral Gateway Failure

Stand-by Peripheral Gateway becomes active.

After the Stand-by Peripheral Gateway Becomes Active

- Supervisor's desktop reflects the correct agent being monitored.
- Agent's desktop does not show the Silent Monitored call.
- Able to monitor the live session.
- Able to record and playback the session.

Active Side CTI Manager Service Fails During Unified Communications Manager Based Silent Monitored Session

Pre-Test Conditions

- One agent
- · One customer
- One supervisor
- One IP phone
- Unified Communications Manager based Silent Monitoring
- MediaSense separated over WAN from Unified Communications Manager

The following describes the failure testing that was performed:

- 1. Login an agent.
- 2. Make a call from customer to agent.
- 3. Supervisor enables silent monitoring by selecting agent from Real-time Status grid.
- **4.** Supervisor presses the Silent Monitor start button.
- 5. Supervisor is able to hear audio data from agent and customer.
- **6.** Ensure both CTI Manager Services are up and running on Unified Communications Manager subscribers.
- 7. Fail active side of the duplexed CTI Manager Service.
- **8.** Verify the system behavior immediately after the failure as described in After the Active CTI Manager Service Failure.
- **9.** Verify the system behavior after the restoration as described in After the Stand-by CTI Manager Service Becomes Active.

Results

The following results were verified:

After the Active CTI Manager Service Failure

Stand-by CTI Manager Service becomes active

After the Stand-by CTI Manager Service Becomes Active

- Supervisor's desktop reflects the correct agent being monitored.
- Agent's desktop does not show the Silent Monitored call.
- Able to monitor the live session.
- Able to record and playback the session.

Duplexed Peripheral Gateway Network Cable Disconnected During Unified Communications Manager Based Silent Monitored Session

Pre-Test Conditions

- One agent
- One customer
- One supervisor
- · One IP phone
- Unified Communications Manager based Silent Monitoring
- Duplexed system that recovers if one side fails
- MediaSense separated over WAN from Unified Communications Manager

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Login a supervisor.
- **3.** Place call to agent.
- 4. Agent answers call.
- 5. Supervisor monitors agent.
- **6.** Fail active side of the duplexed Peripheral Gateway by pulling out the network cable.
- 7. Verify the system behavior immediately after the failure as described in After the Peripheral Gateway Failure.
- **8.** Verify the system behavior after the restoration as described in After the Stand-by Peripheral Gateway Becomes Active.

Results

The following results were verified:

After the Peripheral Gateway Failure

• Stand-by Peripheral Gateway becomes active.

After the Stand-by Peripheral Gateway Becomes Active

- Supervisor's desktop reflects the correct agent being monitored.
- Agent's desktop does not show the Silent Monitored call.
- Able to monitor the live session.
- Able to record and playback the session.

Active Side Duplexed Rogger Fails During Unified Communications Manager Based Silent Monitoring Session

Pre-Test Conditions

- One agent
- One customer
- One supervisor
- One IP phone
- Unified Communications Manager based Silent Monitoring
- Duplexed system that recovers if one side fails
- MediaSense separated over WAN from Unified Communications Manager

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Login a supervisor.
- **3.** Place call to agent.
- 4. Agent answers call.
- 5. Supervisor monitors agent.
- **6.** Fail active side of the duplexed Rogger by pulling out the network cable.
- 7. Verify the system behavior immediately after the failure as described in After the Active Rogger Failure.
- **8.** Verify the system behavior after the restoration as described in After the Stand-by Rogger Becomes Active.

Results

The following results were verified:

After the Active Rogger Failure

• Stand-by Rogger becomes active.

After the Stand-by Rogger Becomes Active

- Supervisor's desktop reflects the correct agent being monitored.
- Agent's desktop does not show the Silent Monitored call.
- Able to monitor the live session.
- Able to record and playback the session.

Stopped Unified Communications Manager Service Fails Unified Communications Manager Subscribers

Pre-Test Conditions

The following describes the test conditions:

- One agent
- One customer
- Agent phone registered to Subscriber 1

Test

The following failover testing was performed:

- 1. Login an agent.
- 2. Place call to agent.
- 3. Agent answers call.
- 4. Stop Unified Communications Manager service in Subscriber 1.

5. Verify the system behavior immediately after the failure as described in After the Service Failure.

Results

The following results were verified:

After the Service Failure

- Subscriber 2 becomes active
- Active session is recorded
- Able to monitor the live session
- Able to record and playback the session

Network Cable Disconnected Fails Unified Communications Manager Subscribers

Pre-Test Conditions

The following describes the test conditions:

- One agent
- One customer
- Agent phone registered to Subscriber 1

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place call to agent.
- 3. Agent answers call.
- **4.** Disconnect the network cable in Subscriber 1.
- 5. Verify the system behavior immediately after the failure as described in After the Subscriber 1 Failure.

Results

The following results were verified:

After the Subscriber 1 Failure

- Subscriber 2 becomes active
- Active session is recorded
- Able to monitor the live session
- Able to record and playback the session

Finesse Agent Desktop - Stopped Service Fails MediaSense Servers

Pre-Test Conditions

The following describes the test conditions:

- One agent
- One customer
- Agent phone Finesse desktop
- MediaSense separated over WAN from Unified Communications Manager
- Primary and Secondary: Database service, Configuration service, API Service
- On all servers: MediaSense media service, Call control service

Test

The following describes the failover testing that was performed:

- 1. Log in an agent.
- 2. Place call to agent.
- 3. Agent answers call.
- 4. Stop each MediaSense service and check for the current active call.

Results

The following results were verified:

- Able to monitor the live session of the new call after the failover
- Able to record and playback the session of the new call which happened after the failover

Finesse Agent Desktop - Disconnecting Primary MediaSense Server Network Fails MediaSense Servers

Pre-Test Conditions

The following describes the test conditions:

- One agent
- One customer
- Agent phone Finesse desktop
- MediaSense separated over WAN from Unified Communications Manager

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place call to agent.
- 3. Agent answers call.

4. Pull out the network cable of primary MediaSense server.

Results

The following results were verified:

- Able to monitor the live session
- Able to record and playback the session

Cycle Duplexed Peripheral Gateway Active Side During Unified Communications Manager Based Silent Monitoring Session

Pre-Test Conditions

The following describes the test conditions:

- One agent
- · One customer
- · One supervisor
- One IP phone
- Duplexed system that recovers if one side fails
- MediaSense separated over WAN from Unified Communications Manager

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Login a supervisor.
- **3**. Place call to agent.
- 4. Agent answers call.
- **5.** Supervisor monitors agent.
- 6. Fail active side of the duplexed peripheral gateway by cycling it.

Results

The following results were verified:

- Idle Peripheral Gateway becomes active.
- Able to record and playback the session

Stopped Service Fails Unified Communications Manager Subscribers

Pre-Test Conditions

- · One agent
- One customer

Agent phone registered to Subscriber 1

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place call to agent.
- 3. Agent answers call.
- **4.** Stop Unified Communications Manager service in Subscriber 1.

Results

The following results were verified:

- Subscriber 2 becomes active.
- Active session is recorded.
- Able to monitor the live session.
- Able to record and playback the session.

CTI OS Agent Desktop - Disconnecting Primary MediaSense Server Network Fails MediaSense Servers

Pre-Test Conditions

The following describes the test conditions:

- One agent
- One customer
- Agent phone CTI OS desktop
- MediaSense separated over WAN from Cisco Unified Border Element

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place call to agent.
- 3. Agent answers call.
- **4.** Pull out the network cable of primary MediaSense server.

Results

The following results were verified:

- Able to monitor the live session.
- Able to record and playback the session.

Finesse Agent Desktop - Stopped Service Fails MediaSense Servers

Pre-Test Conditions

The following describes the test conditions:

- One agent
- · One customer
- Agent phone Finesse desktop
- MediaSense separated over WAN from Unified Communications Manager
- Primary and Secondary: Database service, Configuration service, API Service
- On all servers: MediaSense service, Call control service, Silent Monitoring Agent service

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place call to agent.
- 3. Agent answers call.
- 4. Stop each MediaSense service

Results

The following results were verified in this test:

- Able to monitor the live session.
- Able to record and playback the session.

CTI OS Agent Desktop - Disconnecting Primary MediaSense Server Network Fails MediaSense Servers on Cisco SRE Module

Pre-Test Conditions

The following describes the test conditions:

- · One agent
- One customer
- Agent phone CTI OS Desktop
- MediaSense on Cisco Services-Ready Engine (SRE) Module separated over WAN from Unified Border Element

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place call to agent.
- 3. Agent answers call.

4. Pull out the network cable of primary MediaSense server on SRE Module.

Results

The following results were verified in this test:

- Able to monitor the live session.
- Able to record and playback the session.

CTI OS Based Silent Monitor Call using IP Phone as Agent Phone (69XX)

Pre-Test Conditions

The following describes the test conditions:

- Agent on IP phone (69xx)
- Supervisor on video phone
- CTI OS based Silent Monitor
- Customer on PSTN/IP phone

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place call to agent.
- 3. Agent answers call.
- 4. Supervisor silently monitors call.
- **5.** Fail one side of CTI OS Server.

Results

The following results were verified:

- Silent Monitor session ends and recovers on other active CTI OS Server
- All IP phones are active on secondary CTI OS Server

Cisco TelePresence Content Server Failover - Video Prompt Streaming

Pre-Test Conditions

The following describes the test conditions:

- Unified CVP and Unified CCE are setup for Video queuing
- Both primary and secondary TelePresence Content Servers are setup as Video media server

Test

The following describes the failover testing that was performed:

1. Cisco EX90 in a remote site makes a call to contact center.

- 2. Agent is unavailable.
- **3**. EX90 receives a video while in the queue.
- 4. While video streaming is under way, Cisco TelePresence Content Server goes down.
- **5.** Observe progress of current call.
- **6.** Check if Cisco Unified Border Element is failing over to the secondary TelePresence Content Server for the next call on queue.

Results

The following results were verified:

• Cisco Unified Border Element fails over to the secondary TelePresence Content Server for the next call in queue.

Transfer Service Provider Call (High Availability)

Pre-Test Conditions

The following describes the test conditions:

- Incoming service provider call over Unified Border Element.
- Record Route disabled on service provider network.

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place service provider call to agent.
- 3. Agent answers call.
- 4. Agent transfers call.
- 5. Reload or shut down interface of active Cisco Unified Border Element.
- 6. Agent transfers call once again.

Results

The following results were verified in this test:

- Stand-by Cisco Unified Border Element becomes active.
- Agent can transfer the call successfully.

Conference Service Provider Call (High Availability)

Pre-Test Conditions

- Incoming service provider call over Unified Border Element.
- Record Route disabled on service provider network.

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place service provider call to agent.
- 3. Agent answers call.
- 4. While Agent conferences in second agent.
- 5. Reload or shut down interface of active Cisco Unified Border Element.

Results

The following results were verified:

- Stand-by Cisco Unified Border Element becomes active.
- Conference call is re-established.

Hold/Retrieve Service Provider Call (High Availability)

Pre-Test Conditions

The following describes the test conditions for this test:

- Incoming service provider call over Unified Border Element.
- Record Route disabled on service provider network.

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place call to agent.
- 3. Agent answers call.
- 4. Agent places call on hold.
- 5. Reload or shut down interface of active Cisco Unified Border Element.
- 6. Agent retrieves call

Results

The following results were verified:

- Stand-by Cisco Unified Border Element becomes active.
- Conference call is re-established.

Supervisor Silent Monitoring (High Availability)

Pre-Test Conditions

The following describes the test conditions:

• Incoming service provider call over Unified Border Element.

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place service provider call to agent.
- 3. Agent answers call.
- 4. Supervisor silently monitors call.
- 5. Reload or shut down interface of active Cisco Unified Border Element.

Results

The following results were verified:

- Stand-by Cisco Unified Border Element becomes active.
- Silent monitoring is still functioning.

Supervisor Intercept & Barge (High Availability)

Pre-Test Conditions

The following describes the test conditions:

• Incoming service provider call over Unified Border Element.

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place service provider call to agent.
- 3. Agent answers call.
- **4.** Supervisor barges in/intercepts call.
- 5. Reload or shut down interface of active Cisco Unified Border Element.

Results

The following results were verified:

- Stand-by Cisco Unified Border Element becomes active.
- Supervisor barge/intercept is still functioning.

Consultative Transfer Service Provider Call via Cisco Unified Border Element to Remote CTI OS Agents (High Availability)

Pre-Test Conditions

The following describes the test conditions:

- Incoming service provider call over Unified Border Element.
- Record Route disabled on the service provider

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place service provider call to agent.
- **3**. Agent answers call.
- 4. Agent transfers call to remote CTI OS agent.
- **5**. Remote CTI OS Agent answers the call.
- 6. Unplug active Cisco Unified Border Element power cable.
- 7. Agent completes the transfer.

Results

The following results were verified:

- Stand-by Cisco Unified Border Element becomes active.
- Agent can complete the transfer to remote CTI OS Agent.

Transfer Service Provider Call via Cisco Unified Border Element to CTI OS Agents in other Clusters (High Availability)

Pre-Test Conditions

The following describes the test conditions for this test:

• Incoming service provider call over Unified Border Element.

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place service provider call to agent.
- 3. Agent answers call.
- 4. Reload or shut down interface of active Cisco Unified Border Element.
- 5. Agent transfers call to CTI OS agent in other cluster.

Results

The following results were verified:

- Stand-by Cisco Unified Border Element becomes active.
- Agent can transfer the call to CTI OS in other cluster.

Transfer Service Provider Call via Cisco Unified Border Element to Finesse Agent

Pre-Test Conditions

The following describes the test conditions for this test:

• Incoming service provider call over Unified Border Element.

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place service provider call to agent.
- 3. Agent answers call.
- 4. Agent transfers call to Finesse agent.
- 5. Finesse Agent answers the call.
- **6.** Unplug active Cisco Unified Border Element power cable.
- 7. Agent completes the transfer call.

Results

The following results were verified:

- Stand-by Cisco Unified Border Element becomes active.
- Agent can complete the transfer to Finesse Agent.

Consultative Transfer Service Provider Call via Cisco Unified Border Element to CTI OS Agents on VXC 6xxx/2xxx Clients (High Availability)

Pre-Test Conditions

The following describes the test conditions for this test:

• Incoming service provider call over Unified Border Element.

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place service provider call to agent.
- 3. Agent answers call.

- 4. Agent does consultative transfers call to CTI OS agent on VXC 6xxx/2xxx clients.
- **5.** CTI OS agent on VXC 6xxx/2xxx client answers the call.
- **6**. Unplug active Cisco Unified Border Element power cable.
- **7.** Agent completes the transfer.

Results

The following results were verified:

- Stand-by Cisco Unified Border Element becomes active.
- Agent can complete the transfer to CTI OS Agent on VXC 6xxx/2xxx client.

Agent Greeting (High Availability)

Pre-Test Conditions

The following describes the test conditions:

• Incoming service provider call over Unified Border Element.

Test

The following describes the failover testing that was performed:

- 1. Login an agent.
- 2. Place service provider call to agent.
- **3.** Agent greeting plays.
- 4. During Agent Greeting playing, unplug active Cisco Unified Border Element power cable.

Results

The following results were verified:

- Stand-by Cisco Unified Border Element becomes active.
- Agent greeting completes successfully.