Client Help Desk
Connectivity Issues
CET251

Agenda

- Centra Server Architecture
- Troubleshooting CMS connectivity
- Troubleshooting log in issues
- Troubleshooting CSS connectivity
  - Adaptive Connect
  - Client-side log files
  - Working with Proxy Servers
- Troubleshooting event issues
- Tools and Utilities
Where to Get Help?

• Centra Support site at http://support.centra.com
  ▪ Site contains: Technical Bulletins, FAQs, product documentation, Troubleshooting guides, Technical specifications

• Centra documentation

• Centra Technical Support
  ▪ 781-994-1110 or support@centra.com
  ▪ +44 (0) 870 241 1391 or emeasupport@centra.com

• Centra online Education classes

Checklist at a Glance

✓ Run the System Check
✓ Check JVM and browser settings
✓ Close all other applications
✓ Reboot the machine
✓ Check Centra client log for errors and connection type
✓ Check ports (Telnet)
✓ Check connection speed (Tracert)
✓ Verify Centra Server is running
✓ Uninstall and re-install client with SetupJ.exe
✓ Contact Network Administrator
The Centra Server Architecture

- User Machine
  - Browser
  - Client
- Web Pages
- Centra Server
  - Web
  - CMS
  - CCS
  - CSS
  - CRS
  - Database

Relational Database

- Stores
  - User accounts
  - Subjects
  - Events
  - Event groups
  - User groups
  - Programs
  - Addresses of server components
  - ....
**Centra Management Server**

- Connects to database for user and event information
- Pre-configured for port 80 via HTTP
- Generates and manages front-end web pages
- Handles all non-real time functionality
- Streams session evaluations and web content during live events
- Requires a Web Server to send web pages and content to client

**Centra Collaboration Server**

- Handles all real-time functionality in live events
  - Choreography (raised hands, yes/no)
  - Audio
  - Mark up
  - Application Sharing
  - Text Chat
  - ...

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Centra Satellite Server

- Efficiently routes Centra traffic across your Wide Area Network (WAN)
- Client connects to optimal satellite
- Automatic fail over

Without Satellites

Network

Bandwidth usage:

- LAN
- 42 kbps
- 77 kbps

Clients

London Office

Boston Office

Data Center

Presenter speaks 7 kbps - VOIP
With Satellites

Data Center
Centra Server

Network
Centra traffic
Bandwidth usage

WAN

7 kbps
14 kbps

7 kbps
7 kbps

Satellite 1
Satellite 2

clients

Boston Office
London Office

Presenter speaks
7 kbps - VOIP

Centra Recording Server

• Automatically records events/meetings and publishes the recordings to the CMS for immediate playback when the live session is over
• Recordings are stored on and played back from the CMS

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Common Problems

- Accessing the CMS (Log In page)
- Logging into the CMS (My Schedule page)
- Enrolling in an event
- Attending an event (CSS and CCS)
- In-session and tool problems
  - Staying connected to the event
  - Delays in slide transitions
  - Choppy audio
  - ...

Troubleshooting Connectivity

1. Troubleshoot CMS connectivity
2. Troubleshoot Login issues
3. Troubleshoot CSS/CCS connectivity
4. Troubleshoot event issues
1. Troubleshoot CMS Connectivity

• Cannot get to the Log In page

**What could go wrong?**

Connecting to the CMS

<table>
<thead>
<tr>
<th>If...</th>
<th>Then...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caller receives a “page not found” error</td>
<td>Ensure caller is typing in the URL address correctly. Ask caller to login by typing in the DNS name as well as the IP address of the server.</td>
</tr>
<tr>
<td>Caller can get to the server via the IP, but not the DNS name</td>
<td>Contact your network administrator -- the DNS is configured incorrectly.</td>
</tr>
<tr>
<td>If caller (and you) cannot get to the server via the DNS name or the IP address</td>
<td>The server may not be up. Contact your Centra administrator.</td>
</tr>
<tr>
<td>Caller receives a JavaScript required error</td>
<td>Check the browser settings. JavaScript must be enabled.</td>
</tr>
</tbody>
</table>

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Connecting to the CMS

<table>
<thead>
<tr>
<th>If...</th>
<th>Then...</th>
</tr>
</thead>
<tbody>
<tr>
<td>The CMS is probably down.</td>
<td>The CMS is probably down.</td>
</tr>
<tr>
<td>Try to hit version.txt (<a href="http://%3Cserver%3E/%3Csite%3E/version.txt">http://&lt;server&gt;/&lt;site&gt;/version.txt</a>)</td>
<td>Try to hit version.txt (<a href="http://%3Cserver%3E/%3Csite%3E/version.txt">http://&lt;server&gt;/&lt;site&gt;/version.txt</a>)</td>
</tr>
<tr>
<td>If no, machine down or IIS down.</td>
<td>If yes, machine and IIS up.</td>
</tr>
<tr>
<td>Address mapping could be wrong.</td>
<td>Address mapping could be wrong.</td>
</tr>
<tr>
<td>Contact the Centra administrator in either case.</td>
<td>Contact the Centra administrator in either case.</td>
</tr>
</tbody>
</table>

Caller receives a “The page cannot be displayed” error

Contact your Centra administrator. Centra server is not returning correct address to client. Requires an address mapping.

Then...

2. Troubleshoot Login Issues

- Cannot get to the My Schedule page

Frank Leigh

- My Schedule
  - Attend Meeting
  - Create Meeting
  - Event List
  - My Profile
  - Downloads
  - Tools

<table>
<thead>
<tr>
<th>Event</th>
<th>Start Time</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generating Leads</td>
<td>1/5/02 2:30 PM PST</td>
<td>2h 00m</td>
</tr>
<tr>
<td>Making the Close</td>
<td>1/6/02 3:30 PM PST</td>
<td>2h 00m</td>
</tr>
<tr>
<td>Negotiating Techniques</td>
<td>1/7/02 3:30 PM PST</td>
<td>2h 00m</td>
</tr>
<tr>
<td>Retirement Plan Update</td>
<td>1/8/02 3:30 PM PST</td>
<td>2h 00m</td>
</tr>
</tbody>
</table>

What could go wrong?
Centra Client Help Desk Training

Logging into the CMS Issues

<table>
<thead>
<tr>
<th>If...</th>
<th>Then...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caller receives a “System could not log you in” error</td>
<td>User is typing their user ID and/or password incorrectly, or they do not have an account on the Centra Server. Remind user that ID and Password are case sensitive. Login / password might be for a different Centra server.</td>
</tr>
<tr>
<td>The browser says “Done” on the status bar but nothing happens</td>
<td>Check the browser settings and the JVM. Have caller run the System Check.</td>
</tr>
<tr>
<td>The browser eventually times out and says that it cannot find a page</td>
<td>Within the error that is being returned to the client, there will be an IP address or a DNS name. Make sure that the IP or DNS name that is getting returned by the Centra server is the correct address. Contact the Centra administrator.</td>
</tr>
</tbody>
</table>

3. Troubleshoot CSS Connectivity

User Machine
- Browser
  - Client

Centra Server
- Web
  - CMS
  - CCS
  - CSS
  - CRS
  - Database

User clicks attend/lead
Adaptive Connect Overview
Connecting to the CSS

• The client is launched from the browser on Attend/Lead
• SmartClient runs and verifies installation
• The client connects to the optimal satellite (CSS) via any of the following methods:
  § Direct socket connect on port 1709
  § Direct socket connect on port 443
  § Primary tunnel on port 443
  § Secondary tunnel on port 80 tunnel to CMS (CMS will redirect to CSS)
• If none of the above successful, Connection fails
  § Can the user attend via dial-up / ISP
  § Contact your Centra Administrator

Determining the Connection Type

• Use the Centra log files
• Logs contain (scroll to bottom)
  § JVM version
  § Available satellites
  § Fastest satellite selected
  § Connection attempts
  § Connection type
  § Connection errors or poor connection warnings
  § Other errors that occur during the event
### Client-Side Log Files

- There are several log files. Most useful:

<table>
<thead>
<tr>
<th>Log</th>
<th>Filename</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client</td>
<td>Centra_&lt;date/time&gt;.log</td>
<td>Generated after SmartClient when a user clicks Attend or Lead. It displays connection and error information during the event.</td>
</tr>
<tr>
<td>Network Check</td>
<td>NetworkCheck_&lt;date/time&gt; .log</td>
<td>Generated by running the System Check. It will display the connection information.</td>
</tr>
<tr>
<td>Launcher</td>
<td>Launcher_log.txt</td>
<td>Contains information about proxy servers used.</td>
</tr>
<tr>
<td>Smart Client</td>
<td>Sclog.txt</td>
<td>Contains information about SmartClient and client downloads.</td>
</tr>
</tbody>
</table>

Default path is C:\Program Files\CentraOne\Logs

### Sample Client Logs

- 6/22/202 11:47:43 AM
- 6/22/202 11:47:42 AM
- 6/22/202 11:47:42 AM directtop -443 - successful: 131
- 6/22/202 11:47:42 AM primary tunnel - 443 - DnF
- 6/22/202 11:47:42 AM secondary tunnel - 80 - successful: 100
- 6/22/202 11:47:42 AM
- 6/22/202 11:47:41 AM primary tunnel - 443 - DnF
- 6/22/202 11:47:41 AM secondary tunnel - 80 - DnF
- 6/22/202 11:47:41 AM Connecting via a Direct TCP connection to 10.200.0.180 on port 1709
- 6/22/202 11:47:41 AM Connection Type: Direct TCP
### Sample Client Logs

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Log Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/22/02 10:32:46 AM</td>
<td>Connection Report</td>
</tr>
<tr>
<td>9/22/02 10:32:46 AM</td>
<td>Server IP Address: sym1.centre.com -- Associated DNS IP Address: sym1.centre.com</td>
</tr>
<tr>
<td>9/22/02 10:32:46 AM</td>
<td>Connection Type: Direct Port 443</td>
</tr>
<tr>
<td>9/22/02 10:32:46 AM</td>
<td>Direct Port 443 - DNS</td>
</tr>
<tr>
<td>9/22/02 10:32:46 AM</td>
<td>Primary Tunnel - 443 - successful: BD</td>
</tr>
<tr>
<td>9/22/02 10:32:46 AM</td>
<td>Secondary Tunnel - 80 - DNS</td>
</tr>
<tr>
<td>9/22/02 10:32:46 AM</td>
<td>Connecting via a Primary Tunnel connection to sym1.centre.com on port 443</td>
</tr>
</tbody>
</table>

### How are you Connecting?

**Check your log. How are you connecting?**

- **Connection Type**
  - 1709 Direct
  - 443 Direct
  - Primary Tunnel (Port 443)
  - Secondary Tunnel (Port 80)
Tools

- Disk Cleanup Tool
  - Launch the Disk Cleanup Tool
  - If it launches, then connection issue
  - If does not launch, then installation issue
- Log Files Tool
  - Use to email all client logs to you

Attending the Event Issues

<table>
<thead>
<tr>
<th>If...</th>
<th>Then...</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is the first time caller has attended a Centra event.</td>
<td>Troubleshoot installation issues</td>
</tr>
<tr>
<td>Caller receives error &quot;login ID already in use.&quot;</td>
<td>Caller is either already attending an event on another PC, using the same login ID or caller may have clicked the Attend button too often and Centra was attempting to log them in twice</td>
</tr>
<tr>
<td>Caller sees the Preparing Centra window appear and then disappear.</td>
<td>User most likely needs to upgrade their Java Virtual Machine. Log out of CMS. Log back in and try to attend</td>
</tr>
</tbody>
</table>
Attending the Event Issues

<table>
<thead>
<tr>
<th>If...</th>
<th>Then...</th>
</tr>
</thead>
<tbody>
<tr>
<td>The CCS or all the Satellites (CSSs) might be down. Confirm by looking at the client log. Contact your Centra administrator.</td>
<td></td>
</tr>
<tr>
<td>The user clicks attend and nothing happens</td>
<td>Check the client log for errors and connection type. Verify the JVM. Run System Check.</td>
</tr>
<tr>
<td>Contact your Centra administrator. Centra server is not returning correct address to client. Requires an address mapping.</td>
<td></td>
</tr>
</tbody>
</table>

Sample Client Logs

9/24/02 12:20:28 PM
9/24/02 12:25:28 PM Connecting via a Direct TCP connection to 206.34.211.33 on port 1709
9/24/02 12:26:28 PM
9/24/02 12:26:28 PM Connection Type: Direct TCP
9/24/02 12:26:28 PM
9/24/02 12:26:28 PM Client heartbeat interval set to 15 seconds
9/24/02 12:26:28 PM Client heartbeat tolerance set to 1
9/24/02 12:26:28 PM Issuing login
9/24/02 12:26:29 PM Login failed: satellite is unable to register with the CCS
9/24/02 12:26:29 PM Server: 206.34.211.33 failed to register with the CCS
9/24/02 12:26:29 PM Selecting a new optimal server
9/24/02 12:26:30 PM Client exited gracefully
Logs – Poor and Lost Connections

Poor Connection
2/7/02 2:11:07 PM Poor connection rating [ONEho]
2/7/02 2:11:17 PM Connection rating improved, was poor.
2/7/02 2:21:02 PM Poor connection rating [ONEho]
2/7/02 2:21:14 PM Connection rating improved, was poor.
2/7/02 2:25:15 PM Poor connection rating [ONEho]

Lost Connection
2/14/02 1:26:17 PM Server not responding to client heartbeats, closing connection.
2/14/02 1:26:17 PM run: TCP connection broken unexpectedly [ONEhp]
2/14/02 1:26:17 PM Attempting to relogin to server
2/14/02 1:26:17 PM Reconnect to server succeeded, sending relogin request
2/14/02 1:26:23 PM Successful relogin, response size: 12605

Working with Proxy Servers

• A proxy server is software that filters network traffic at the "application" level and creates a new connection on behalf of the user, acting as an intermediary between the user and the server.
### Working with Proxy Servers

- **Use the Launcher log**
  - [01/24/02 15:33:00] Proxy disabled
    - No proxy used or transparent proxy
  - [01/24/02 15:33:00] Proxy Settings (Manual): host: 192.168.6.9 port: 80 exceptions:
    - Browser settings used
      - Contact your Network Administrator
  - [01/24/02 15:33:00] Proxy Settings (Auto-config): pacfile:
      - Browser pointing to PAC file with Proxy settings
        - Contact your Network Administrator

### Are You Using a Proxy?

**Check your Launcher log (scroll to bottom). How are you connecting?**

<table>
<thead>
<tr>
<th>Connection Type</th>
<th>✔</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proxy disabled</td>
<td></td>
</tr>
<tr>
<td>Manual</td>
<td></td>
</tr>
<tr>
<td>PAC Files</td>
<td></td>
</tr>
</tbody>
</table>
Proxy Server Considerations

• If Attend / Lead fails, consider:
  ▪ Is there proxy information present when it shouldn’t be?
  ▪ Is needed proxy information missing? Incorrect?
  ▪ For most of these issues, you will need to get your Network Administrator involved

4. Troubleshoot Event Issues

<table>
<thead>
<tr>
<th>Common Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Cannot stay connected</td>
</tr>
<tr>
<td>▪ Choppy Audio</td>
</tr>
<tr>
<td>▪ Delays in displaying content</td>
</tr>
<tr>
<td>▪ Poor network status indicator</td>
</tr>
<tr>
<td>▪ The interface does not respond properly</td>
</tr>
</tbody>
</table>

What could cause these issues?
## Event Issues

<table>
<thead>
<tr>
<th>If...</th>
<th>Then...</th>
</tr>
</thead>
</table>
| Caller continually gets kicked out of session | Check client log. A secondary tunnel can explain this.  
What browser are they running? AOL can be problematic.  
If direct connect, do they have a slow connection? Run Tracert or check connection speed.  
http://www.dslreports.com/ |
| Caller complains the interface has locked up | Exit the event and re-attend – caller probably lost connection. Client log should verify. |

---

## Event Issues

<table>
<thead>
<tr>
<th>If...</th>
<th>Then...</th>
</tr>
</thead>
</table>
| Caller says audio is choppy or slides are transitioning slowly, interface did not respond, ... | Does caller have minimum machine and connection requirements?  
Check log for connection type. Secondary tunnel can explain this.  
Check log for poor connection warnings or re-logins.  
Run Tracert or use other utility to check connection speed.  
Close all applications. |
Tools and Utilities

- To help you troubleshoot, try these utilities:
  - Ping
  - Tracert
  - Telnet

---

**Description**: Use the `Ping` command to check if the client can see the Centra server.

**Steps**

1. Open a command prompt
2. Type `ping` followed by the IP address or DNS name
3. Press Enter

**Examples**: `ping education.centra.com`  `ping 206.10.10.233`

**Example**

```
Microsoft Windows [Version 6.1.7601]
(C) Copyright 1985-2007 Microsoft Corp.
C:\>ping education.centra.com
--- education.centra.com ping statistics ---
1 packets transmitted, 1 packets received, 0% packet loss
Round trip time min/avg/max = 0.000/0.000/0.000 (ms)
```

**Results**

- Packets lost:
  - 0: The client can see the server. Try tracert to test connection speed.
  - 4: The client cannot hit the server. Firewall issue or extremely poor connection.
**Description:** Use the **Tracert** command to obtain the network times between the client and a Centra Server. This command indicates if the network is running slow.

**Steps**

1. Open a command prompt
2. Type `tracert` followed by the IP address or DNS name
3. Press Enter

**Examples:**
- `tracert education.centra.com`
- `tracert 63.76.1.11`

**Results**

Times greater than 100 indicate a slow network, connection or bandwidth issues.
Times greater than 250 are problematic for Centra sessions.
Any timeouts indicate a very slow network or connection.

---

**Description:** Use the **Telnet** command to test a connection to a Centra server or a proxy server.

**Steps**

**Windows 2000, NT**

1. Open a command prompt
2. Type `telnet` followed by the IP and Port
3. Press Enter

**Example:**
- `telnet education5.centra.com 1709`

**Results**

If connection successful, the IP and port number will appear in the title bar.
If Telnet cannot connect on port 1709, a connection error will pop up.
The port is closed. See your IT department.
<table>
<thead>
<tr>
<th>Description</th>
<th>Use the <code>Telnet</code> command to test a connection to a Centra server or a proxy server.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steps</td>
<td>Windows 98, XP, ME&lt;br&gt;1. Open a command prompt&lt;br&gt;2. Type <code>telnet</code> and press Enter. A second window opens.&lt;br&gt;3. Select Connect</td>
</tr>
<tr>
<td>Example</td>
<td><img src="image" alt="Telnet Example" /></td>
</tr>
<tr>
<td>Results</td>
<td>If connection successful, the host name will appear in the title bar.&lt;br&gt;If <code>Telnet</code> cannot connect, a connection failed error will pop up.&lt;br&gt;The port is closed. See your IT department.</td>
</tr>
</tbody>
</table>

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**What's Next?**

- **Product Related**
  - Leader / Participant<br>  - CET001, CET120 A & B, CET200 A & B, CET201
  - Agenda Builder<br>  - CET101, CET105 A & B
  - Event Manager<br>  - CET110 A & B, CET210

- **Problem Related**
  - CET250 Overview & Installation
  - CET251 Connectivity Issues
  - CET252 Audio Issues