



Saba Centra 7.6

Client Troubleshooting Guide



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Preface

Welcome to Saba Centra

Saba Centra is an open architecture Web platform for knowledge delivery that features real-time collaboration, content management, and authoring. Saba Centra includes Symposium, Conference, and eMeeting for live eLearning and business collaboration, and Saba Centra Knowledge Center for content management.

The Saba Centra product suite of software solutions includes:

- **Saba Centra for virtual classes (Symposium)** - Enables globally dispersed Participants and a Leader to communicate and interact through integrated, Web-based audio and video conferencing, while sharing applications and viewing dynamic content over an Intranet, a single phone line dial-up connection, or the Internet. Symposium features rich user interactivity for collaborative training or meetings.
- **Saba Centra for web seminars (Conference)** - Enables large scale (up to 1000 simultaneous Participants and a Leader) presentations, demonstrations, and conferences over the Internet or Intranet without requiring client software installation, firewall modification, or high bandwidth network connections. Conference includes live application viewing, streaming slide presentations, real-time response capabilities, and Text Chat. It uses the same administration, scheduling, user management and Agenda Builder tools as Saba Centra Symposium
- **Saba Centra for e-meetings (eMeeting)** - Supports face-to-face meetings, sales presentations, partner briefings, and other ad hoc business interactions in a secure, highly interactive, online work environment. This powerful, easy-to-use virtual meeting facility enables easy coordination of all aspects of meeting scheduling, attendee participation, information, and content for the Web meetings. Participants only need a PC and Web browser to begin meeting online.
- **Saba Centra Knowledge Center** - A standards-based content repository that facilitates the capture, storage, delivery, and centralized management of custom and third-party knowledge assets.

Saba Centra Technical Support

Saba Centra's dedicated Technical Support team welcomes your questions and comments, all of which can help us improve our products and services.

You can reach the Saba Centra Technical Support staff at <http://support.saba.com>

Also located on the support site is the Saba Centra Technical Support Knowledge Base, which describes support issues and their resolutions for a variety of topics and products.

Saba Centra Education and Training Services

The effectiveness of Administrators, Event Managers, Agenda Builders, and Event Leaders, whether novice or experienced, depends on their knowledge of how best to use Saba Centra tools, controls, and features.

Consider joining one of Saba Centra's Training, Education and Certification programs to increase your knowledge of Saba Centra products.

Saba Centra Education and Training Services offers online Symposium sessions, workshops, and programs designed specifically for each type of user. Work with Saba Centra staff and other Leaders to learn about and gain experience with Saba Centra products.

For more information about Saba Centra Education and Training Services, to browse the training catalog, take online courses, or to purchase a subscription for additional online training, please visit <http://www.saba.com/education/centra.htm>.

Saba Centra Documentation

Saba Centra documentation for each release is available from the Documentation Library on the Saba Support site at: <http://support.saba.com>. While most of the end-user documentation is available to general public, the release-specific, installation, and administrative documentation is only displayed to registered users.

In the Saba Centra application, you can access online help from the following areas:

- (All users) Click **Help** in the top-right corner of the application.
- (System Administrators only) Click **Administrator Help** in the left-hand-side navigation panel.
- (All users) In a Saba Centra session, select **Help** from the **Help** menu, or press **F1**.

Chapter 1

Introduction

Topics:

- [Product Training](#)
- [Unresolved Issues](#)
- [Requirements and Setup](#)
- [The Check-In Session](#)
- [Centra Technical Support](#)
- [Training, Education and Certification](#)
- [Other Information Resources](#)

This guide provides troubleshooting tools and tips to help resolve user issues around the Centra client, audio, and video features.

The most common issues fall into two categories:

Product training - users wanting information about using the Centra interface and tools.

Troubleshooting - users asking for solutions to product problems.

Product Training

To help users with product related questions, you must be able to:

- Create a user account and log into a Centra server
- Attend an Event from the My Schedule page
- Enroll in an Event from the Enrollment page
- Play back the recording for an Event
- Use the System Check and Centra Audio Wizard
- Add, modify, and remove an Event
- Edit the enrollment for an Event
- Add, modify, and remove a Subject
- Check in and check out an Agenda for a Subject
- Use the Participant interface
- Use the Leader interface
- Use the collaboration tools (Application Sharing, Web Safari, Breakout Rooms etc.)
- Import content into an Event and/or Agenda Builder

Product Training Resources

The following resources are available for product knowledge training:

- Centra Education online classes and/or the physical classroom Boot Camp (www.centra.com/education)
- Online tutorial (click Tutorial link on the Centra Server Web page)
- Centra documentation (available from the Documentation tab on the Customer Support Site at <http://support.centra.com/login.asp>)
- Documentation and Knowledge Object CD

Unresolved Issues

This guide provides a set of steps, tools, and approaches to isolating and resolving the most common client-related issues. Any issues you are able to diagnose, but not resolve should be escalated to the Network Administrator, Centra Server Administrator, or Centra Technical Support.


Escalating Unresolved Issues

When escalating an issue to Centra Tech Support, be sure to have the following information ready:

- Specific steps to reproduce the problem. If these are unknown or if the problem is not consistently reproducible, please state this.
- When the problem occurred, what was happening in the session, on the server, and/or on the network.
- The specific text of the error message or screen captures.
- Centra log files (Participant Home Page, **Tools, Log File Tools**).
- Connection type of the client that experienced the problem (as pertinent).
- Any system parameters pertinent to the troubleshooting process. For example:
 - Operating system version and service pack level.
 - Operating system localized language and regional settings
 - Centra software version, patches, and service pack level
 - Version of Microsoft Java Virtual Machine (JVM) for 7.2 and older playback
 - Video card brand and driver versions
 - Display driver versions, resolution, and color depth settings
 - Audio brand and driver versions
 - Audio codec selected in the event
 - Other network traffic at that time
 - Personal or corporate firewall and /or proxy server settings

Requirements and Setup

The proper hardware setup is essential for Centra to work properly. When troubleshooting a technical issue with Centra, begin by confirming that the required hardware and configuration are correct.

 **Note:** For updated Server and Client requirements, please visit: <http://support.centra.com/documentation> and locate Centra 7.5 SP1 Server and Client Requirements.

The Check-In Session

A check-in session is a short Event (approximately 15 minutes) run specifically for first time users two or more days before their first scheduled Event. This session is often led or supported by technical personnel and helps identify client related problems before a scheduled Event.

During the check-in session, do the following:

- Make sure each user can connect to the Centra Server and attend an Event
- Make sure each user can view content, especially any content requiring a viewer or player
- Make sure each user has the audio (speaker and microphone) properly tuned
- Optionally, teach the user the basics of the Centra interface
- Optionally, make sure the user can view an application and/or browser shared by the Leader

Example

For a Symposium Event scheduled for a Thursday:

1. Create a check-in Event for Monday of that week under Manage Events. Enroll yourself and all the first-time users in this Event. Make yourself the Leader.
2. Associate the appropriate content for this check-in Event. For example, if the Thursday Event includes PowerPoint slides, a video clip, and a Flash file, include all these types of content in the check-in Event.
3. Provide the Guest Attend URL or instructions for logging in to Centra server with a registered user account and then tell them their user names and passwords). Provide a phone number in case they cannot install and need assistance before entering the event.
4. Promote Participants clicking the System Check link prior to attending the check-in Event to install the client.
5. Once in the event, ensure each Participant can hear you. One at a time, give Participants a microphone and let them speak.
6. Go through the different types of content and make sure each Participant can see the content correctly.
7. (Optional) Provide the users with a basic overview of the Participant interface. For instance, teach them how to raise their hand, click Yes/No, step out, use and tune VoIP audio, and use text chat.

Conducting the check-in session in advance allows time to resolve critical issues before the real event and gives users a chance to familiarize themselves with the tools and interface.

Centra Technical Support

Centra's dedicated Technical Support team welcomes your questions and comments, all of which can help us improve our products and services.

You can reach the Centra Technical Support staff at <http://www.centra.com/supportinfo.asp>

Documentation for Centra products is located on the support site.

Training, Education and Certification

The effectiveness of Administrators, Event Managers, Agenda Builders, and Event Leaders, whether novice or experienced, depends on their knowledge of how best to use Centra tools, controls, and features.

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For more information about Centra Education and Training Services, visit our Online Course Catalog at http://www.centra.com/education/course_catalog.asp

Other Information Resources

Access online help from the following areas:

- From the Centra Home Page, click **Help** .
- For Administrator access, go to the Administrator menu and click **Administrator Help** .
- For documentation, public or private (requires login), go to <http://support.centra.com/documentation/index.asp>.

Chapter

2

Client Installation


Topics:

- [*About the Install Process*](#)
- [*General Troubleshooting Guidelines*](#)
- [*Methods for Installing the Client*](#)
- [*Troubleshooting Client Installs*](#)
- [*ActiveX is Blocked*](#)
- [*User Cannot Install Applications Due to Security Restrictions*](#)

This chapter covers issues, symptoms and fixes for problems encountered during the client installation process.

About the Install Process

Centra is a client-server based application. Before a user can attend, lead, or play back a recording for a Centra Event, the Centra client must be successfully installed on each user's computer.

 **Note:** Playbacks created in older versions of the Centra client (7.2 or older) will also require Microsoft's JVM. If the client PC has Sun JVM enabled there could be a conflict when launching the client.

General Troubleshooting Guidelines

The most common installation problems involve users with locked down work stations that do not allow programs to be installed or clients accessing the Centra server through firewalls or proxy servers.


If a user experiences difficulty installing the client:

- Verify the browser, browser version and browser settings
- Verify that the user granted permission to install the client
- Verify that users can install programs to their computers
- Run the System Check and verify connection information
- Close all instances of the browser and then open a new instance and retry
- Install the Centra client via setup.exe
- Turn off pop-up blockers or personal firewalls
- Ensure client is not being filtered by proxy or firewall
- Reboot the computer

Methods for Installing the Client

Centra has a one-time client install required for all users. The client can be installed on a user's computer by one of the following methods:

- SmartClient Automatic Download - If the client is not already installed, it is automatically downloaded when the user attends an Event or runs the System Check.
- Setup . exe - Download and run setup.exe from the Centra Server to install the client.
- Push technology - Client setup.exe can be pushed to end user community via SMS or other push technologies.

 **Note:** Once the client is installed, the Centra client application automatically handles client software versioning and upgrades itself when the Centra Server is upgraded or a new patch is installed on the server.

SmartClient Automatic Downloading

SmartClient is Centra technology that checks for a current version of the client, and installs or upgrades as needed.

SmartClient checks the client install when the user:

- Runs the System Check
- Clicks Attend, Lead, Record, Remote Host or Playback
- Enrolls in an Event with downloaded content
- Checks in or checks out a Subject
- Uses the Cleanup Tool

SmartClient installs the client in components. For example, when attending an Event, only the base-client software is installed. Remaining components, such as the Import tool or Application Sharing, are installed as needed. If the user is accessing Agenda Builder, only Agenda Builder is installed.

Using the Setup.exe Program

If the users are unable to install the client using the SmartClient technology, they can download and install the full client using setup.exe from the Centra Server. The setup.exe program installs the base-client along with all the optional components, such as, Agenda Builder, Application Sharing and Video tools.

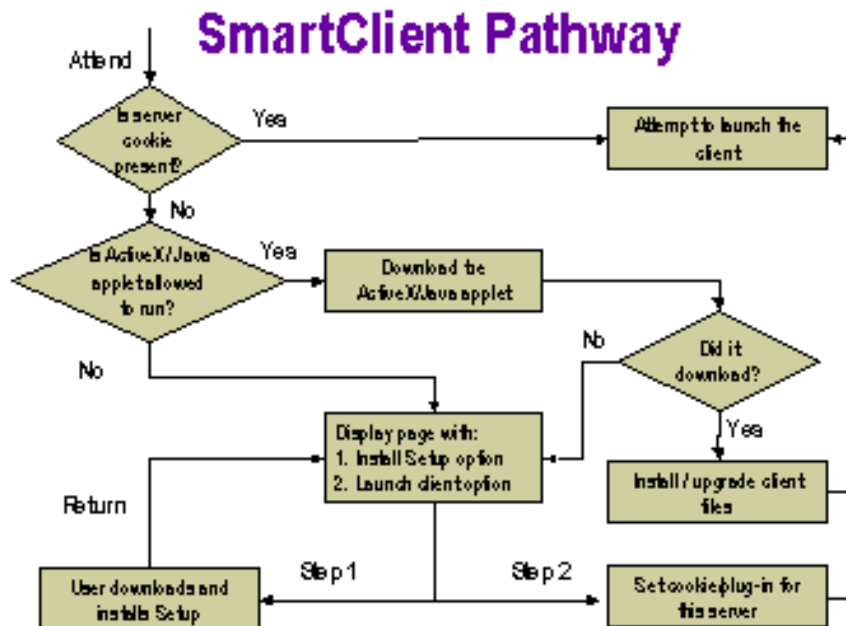
1. Login to Centra.(No special user name or password is required).
2. The setup . exe is found on the Downloads page, Client Installer link.
3. Follow the instructions to download and install the Centra client.

Push Technology

If the users are in a locked down workstation environment, you can proactively install the client on everyone's computer using common push technologies, such as, Microsoft's Systems Management Server (SMS). Use the setup.exe or full client install, not the SmartClient base client version with these technologies. It's also better to use the setup.exe if creating a PC image that includes the Centra client.

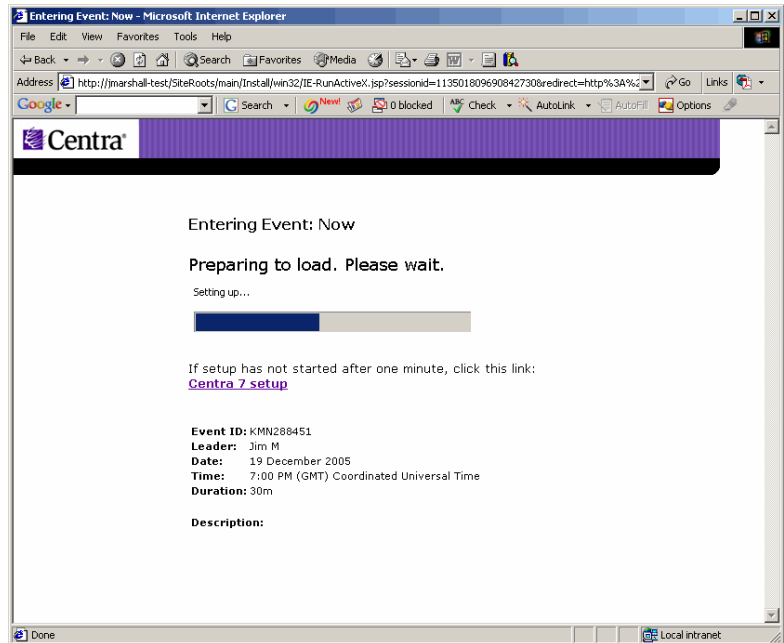
Troubleshooting Client Installs

The following diagram shows the SmartClient install process.

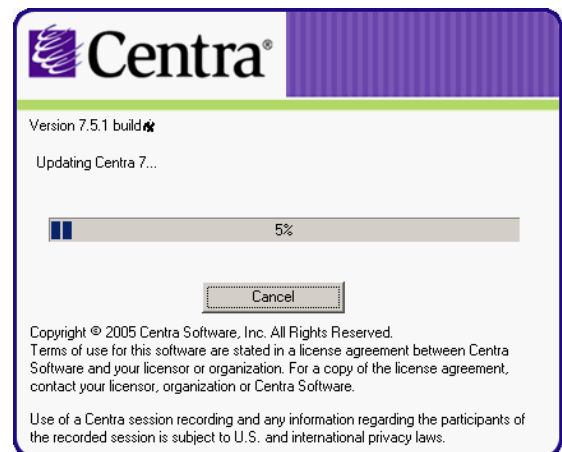


The user will see the following screen after clicking Attend. In the right-hand column are some common problems associated with client installation.

1. If the user does not see a blue progress bar on the 'Preparing to load' screen, they probably do not allow Active X either locally in the IE browser or through their firewall. If using Netscape or Firefox browsers, the Java applet will install Centra and the user will not see a progress bar at all even though it is downloading.




- The Centra Splash screen appears on top of the Preparing to Load page and provides information including the version of the Centra client and where the client is in the process.



- Checking the server for new client files... means a client has already been installed and the SmartClient is verifying it matches the version on the server.
- The components directory will only exist if you have launched different versions of the client. The SmartClient checks here for the version that matches the server. If it's there, then we do not need to download those files from the CMS again. The client will swap out the necessary files from the components directory to the current client directory, saving the current version files in the components directory for future use.
- Updating means there was a mismatch between the version installed on the client and the version of the server. It's either downloading the necessary files from the server or copying them from the components folder to the current client folder.
- At this point the client is launching, based on the parameters passed from the CMS. Those parameters are stored in the launch***.cccf file in the %tmp% folder.
- From the parameters in the launch***.cccf file Centra figures out what UI to present to the user (i.e. what event type, the user's event role, video enabled, etc.).
- Adaptive connection technology tests ports 1709, 443 and 80 on all available satellite servers (if auto-select satellite server enabled) to find the best connection. If user selection enabled, only server selected will be tested.

9. Failure here means the CCS or CSS(s) chosen for the event are down or the client cannot connect via any of the ports listed above.
10. Checking Login ID to verify ID is not already in use on this event or another and the Enrollment limit for the event/meeting is not exceeded.

The approximate download size of the client is 3.5 MBs. If the user is on a slower connection, the installation will be slow and possibly unsuccessful due to their connection timing out.

 **Note:** The Java applet install does take more time than Active X. It may take a minute or more even on a high-speed connection.

ActiveX is Blocked

If ActiveX is blocked, Centra will automatically try to install via the Java applet. Whichever method is successful for Centra the first time, Centra will use that method for future launches. If neither of those options are possible, it directs the user to a client installer page (setup.exe).

User Cannot Install Applications Due to Security Restrictions

The following lists common problems caused by security restrictions:


Issue 1: Users cannot install to default Centra client install locations

Users may not be allowed to install software to the default folder for the Centra client install. They may receive a standard Windows message such as Permission Denied. Could not write to the specified directory.

The user should log on with Administrator privileges and reattempt the installation via the setup.exe. This will give the user the full client install. If SmartClient is used to install, additional files/components may need to be installed in the future depending on the user's Centra role and event settings.

If the user does not have an Administrator account on the PC, contact IT. Have an IT professional log on to the PC as an Administrator and reattempt the installation.

The Administrator can also change the default install to another folder, which may not be locked-down through a domain property setting on the Centra Server.

 **Note:** This change then applies to all future Centra client downloads from that domain.

In addition to the default client folders, Centra also needs to write to the registry. For detailed information about all changes incurred by the Centra client installation please refer to the Centra Client File System Registry documentation.

Issue 2: Windows 2000 was upgraded from NT Workstation and NTFS file system properties were not preserved

Users require administrator privileges to install applications in C:\Program Files. Contact IT for assistance.

Chapter 3

Diagnosing Issues

This chapter discusses a few decisions trees to follow when diagnosing issues with Saba Centra servers.

Some issues produce error messages that allow you to quickly pinpoint the problem. Some issues produce error messages that tell of symptoms that may point to any of several problems. Some issues do not produce error messages, and you need to find other clues to the problem.

The suggestions here are in order of most likely to least likely based on the experience of Centra's field service and technical support staff.

1. Gather information about the incident:

- Was there an error message? If so, capture it as precisely as possible.
- When in the course of use did the problem occur?

- | | |
|--|-------------------------------|
| • During an upgrade | recover and try again |
| • During an installation | delete and try again |
| • During domain, site, user or event management tasks? | |
| • At the beginning of a session | |
| • While joining | client or services |
| • While leading an event? | connectivity |
| • While joining an event | connectivity or database |
| • in mid-session | connectivity |
| • During playback | check for old install folders |

- Was the onset sudden or gradual?
- Were there recent changes to the computer, network, database, or Centra installation?
- Is the Centra system using SSL? Was it in use for this event?
- Is there a (known) firewall in the network? If so, where is it and what type?

2. Determine whether this is a Centra Server issue or a client issue.

Check client information, looking for the versions of:

- Centra Server? `servername/SiteRoots/main/version.txt`
- Client version? Look in client log.
- Operating system version? "My computer > Properties
- Browser version?" **Help > About** browser
- JVM version? (Only for Saba Centra 7.2 or earlier playbacks) `cmdprompt > jview`

Ensure that these are all viable versions.

If the client side is not all correct...	If all checks out...
Have the client correct these issues before continuing. See the Client and Audio Troubleshooting Guide for more detail.	Look to possible connectivity issues

3. Gather information about the Centra installation:

- What is the Centra Configuration?
 - One box (web service, CMS and all component services on one box)
 - Two tier (one CMS, separate component servers)
 - 3-Tier (web service, CMS, and database on separate servers)
 - 3-Tier Cluster
 - Is there a directory service in use?
 - Is the Centra system using SSL? Was it in use for this event?
 - Is there a (known) firewall in the network? If so, where is it and what type?

1. Try to classify connectivity issues:

Can the user...	If not...
Connect to the login page?	Troubleshoot CMS connectivity.
If so, can the user... Log in?	Troubleshoot login issues.
If so, can the user... Attend or lead an event? "No CCS available" message?	Troubleshoot CCS/CSS connectivity. (Check if the CCS available/allocated? Check pools for that domain. Is there failover available?)
If so ... Can they stay connected?	Troubleshoot event issues or connection speed issues.
If not a connection issue, can the leader connect to the agenda?	Troubleshoot agenda storage root issues

	<p>Is the agenda storage root (ASR) location accessible?</p> <p>If you are using a 3-tier cluster configuration, were the application servers restarted but not yet logged into? Is the ASR location shared properly with the application servers?</p>
--	--

2. Check these logs to see if something odd has occurred on the server outside of Saba Centra:

- OS install logs
- OS event logs
- Web server logs
- Dr. Watson log
- JRun logs

See [Location of Server Logs](#) for the location of the various logs.

Check the logs for interruptions of service, breaks in communication, or signs of improper configuration.

If the server has problems beyond Centra...	If all checks out...
Correct these issues and see if that corrects the Centra issue before continuing.	Look at the Centra logs

3. Check Centra server logs for the component servers, as well as any installation and upgrade logs and database logs.

Check connection speeds using any one of several URLs. For example:


<http://www.dslreports.com/stest/0>

4. Check the License key.

- Is it up to date?
- Does it cover the number of users at the time of the issue?

5. Check the Server address mapping and Proxy settings.

The Server mapping, the proxy settings for the server, and the proxy settings for the clients can affect each other. If a server or client system is enabled to use a proxy server for their LAN, then the server or client system is set to go through the proxy server unless it sees a server address that matches an exception. The MSIE proxy setting for the server and the clients are retrieved the same way:

 **Note:** checked means that the checkbox should have a check in it. If any of the settings marked checked are *not* checked, set them properly and try the connection again.

Open MSIE | Tools | Internet Option | Connection | LAN Settings | Proxy Server and look for the following settings:

checked - Automatically detect settings

checked - Use automatic configuration script

Address: <http://www.server.com/pac/pacfile>

checked - Use a proxy server for your LAN | Advanced | Exceptions

Open Control Panel | Internet Options | Connection
| LAN Settings | Proxy Server and look for the following
settings:

checked - Automatically detect settings

checked - Use automatic configuration script

Address: <http://www.server.com/pac/pacfile>

checked - Use a proxy server for your LAN | Advanced | Exceptions

Open Control Panel | Admin Tools | Computer Mgmt | System
Info | Internet Explorer | Connectivity and note the
following settings for later use:

AutoConfigProxy = ?

AutoProxyDetectMode = ?

Proxy = ?

6. Check (in order)

- the Server-side proxy settings
- any internal client-side proxy settings
- any external client-side proxy settings

These steps should provide an idea of where the problem lies.

Chapter

4

Audio

Topics:

- [General Troubleshooting Guidelines](#)
- [Setting up Headsets, Speakers, and Microphones](#)
- [Common Audio Issues](#)
- [Issue 1: The user does not hear any audio when launching the Audio Wizard](#)
- [Issue 2: The user cannot hear the recording in the Audio Wizard](#)
- [Issue 3: The user cannot hear any audio while in the Event](#)
- [Issue 4: The user can barely hear other people's audio](#)
- [Issue 5: Other Participants cannot hear the user or say the user's volume is very low](#)
- [Issue 6: Other Participants say the user's audio is garbled or there is an echo](#)
- [Tools and Utilities](#)
- [Windows Multimedia Settings](#)

Use this section to identify and resolve problems encountered when setting up or using audio in Centra.

General Troubleshooting Guidelines

- Verify hardware requirements
- Verify proper headset, speaker, and microphone setup
- Have Leader try to adjust audio
- Replace headset, speakers, or microphone
- Shut down all applications not needed for the Event
- Run the Centra Audio Wizard
- Verify the Sounds and Multimedia properties on the computer
- Run the Sound Recorder
- Reinstall the client with Setup.exe
- Check possible connection problems

Setting up Headsets, Speakers, and Microphones

To attend a Centra session, a user needs either:

A headset with an earpiece, microphone, and two plugs at the end of the headset cord. One plug is for the speaker (to hear), and the other plug is for the microphone (to speak).

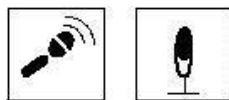
Or

A separate external microphone and speakers (internal or external).

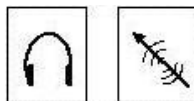
Or

If the microphone is USB, plug it in and test it before launching the Centra client.

The microphone connects to the microphone jack on the computer. The microphone jack usually has a red or pink plug, and may have the word “mic” or a picture of a microphone similar to one the following:



The speaker connects to the speaker jack on the computer. The speaker jack may have the word “out” or a picture similar to one of the following:



Before attending the Centra session, verify the following:

- If using external speakers, make sure they are turned on and the volume is turned up.
- If using the computer's internal speaker, make sure the volume on the computer is turned up.
- If using a laptop with a docking station, make sure the volume is turned up on both the laptop and the docking station. Plug your headset/speakers into the laptop, not the docking station.
- If the microphone has an on/off switch, turn it on. If it has a volume control, turn it up.
- The microphone is positioned an appropriate distance from the mouth. (Please refer to the information supplied with the microphone.)

Known issue: If users have an IBM ThinkPad 600E laptop, they need a microphone T100 adapter to boost the microphone volume. Plug the adapter into the microphone port on the laptop, and then plug the microphone on the headset into the adapter.



Order this part from Andrea Electronics to correct problem:

www.andreaelectronics.com/Buy/ProductDesc/T100.htm

1-800-442-7787

Audio Tips

To further maximize audio quality, keep these tips in mind:

Run the Centra Audio Wizard before every session.

Use a high quality headset and microphone.

Use high quality speakers. Adjust the volume control (the OFF/ON VOLUME control on most speakers) to set the best audio volume level.

Experiment with speaking at different voice levels until you find the best quality.

Speak at varying distances from the microphone until you find the best quality.

How to Speak

There are 3 ways to speak using a computer in Centra Events:

- Press and hold down the CTRL or F12 key while speaking, dependant on client settings in **Tools, Options, Audio** tab.
- Click Talk. Left -click and hold the mouse button.



- Click Lock-to-talk by selecting the padlock. Select the 'lock-to-talk' button once to switch on and then once again to switch off.



Adjust the Recording and Playback Volume

During a session, adjust the record and playback volumes from the microphone and speaker volume panel on the user interface.



Move the slider left or right to tune the audio or use the Centra Audio Wizard.

Common Audio Issues

The following lists common audio Issues and solutions:

“Issue 1: The user does not hear any audio when launching the Audio Wizard” on page 24

“Issue 2: The user cannot hear the recording in the Audio Wizard” on page 24

“Issue 3: The user cannot hear any audio while in the Event” on page 25

“Issue 4: The user can barely hear other people's audio” on page 25

“Issue 5: Other Participants cannot hear the user or say the user's volume is very low” on page 26

“Issue 6: Other Participants say the user's audio is garbled or there is an echo” on page 26

Issue 1: The user does not hear any audio when launching the Audio Wizard

When running the Centra Audio Wizard, users do not hear any audio.

- Check the speaker connections (correct port, secure).
- If using external speakers, make sure they are turned on and increase the volume.
- If using a headset with a mute or on/off switch, turn on (unmute).
- If the computer has a volume control, increase the volume.
- Check the microphone and speaker icons in the upper left hand corner of the Centra interface. If red slashes appear across the icons, the system audio is not available in Centra. Another application may be using the audio on the system. Do the following:
 - Close out all other applications.
 - Re-attend the Event.
- Using a laptop?

Using a docking station? If so, plug the microphone into the laptop instead of the docking station.

- Check the Windows Sound and Multimedia Settings. See [Windows Multimedia Settings](#).
- Try different speakers (new headset, different external speakers, or switch to the internal speakers).
- Verify the system requirements, especially the sound card. Install new audio drivers from manufacturer.
- If sound is OK on a different computer, check with IT. The PC may have hardware issues.

Issue 2: The user cannot hear the recording in the Audio Wizard

When running the Centra Audio Wizard, the user cannot hear the recording. (The microphone is not working.)

- Check the speaker and microphone connection.
- Check the Windows Sound and Multimedia Settings, and adjust settings (microphone muted). See Windows Multimedia Settings.
- If using a headset with a mute or on/off switch, turn on (unmute).
- Using a laptop?

If so, IBM Think Pad 600E series require adapter.

Using a docking station? If so, plug the microphone into the laptop instead of the docking station.

- Check the Windows Sound Recorder. See Sound Recorder Test.
- If the user cannot hear the recording:

Try a different microphone.

Verify the system requirements, especially the sound card.

Contact IT; the user may have hardware issues.

- If the user can hear the recording:

Verify the system requirements, sound card, microphone and connection.

Reinstall the Centra client from setup.exe. Audio DLLs may not be installed properly.

Issue 3: The user cannot hear any audio while in the Event

When in a session, the user cannot hear the audio.

- Run the Audio Wizard and follow the troubleshooting tips below.
- If the user can hear the Audio Wizard, but cannot hear the Leader/Participants.
- Is audio muted (red slash through speaker)? Click the speaker so the slash disappears. (If the slash does not disappear, Audio Wizard should not work).
- Is there a yellow halo around the Leader's microphone? If yes, log out and re-attend.

If no:

- Are you sure they are using Voice Over IP? Are they using a Conference call?
- Is the user still connected? (Click Raise Hand - see anything?)
- Log out and re-attend.
- Check connection speed (tracert). See Tracert.
- Check the client log for apparent error messages.
- Connecting through proxy server? If yes, escalate to IT.

Issue 4: The user can barely hear other people's audio

While in a session, the user can barely hear other people.

- Run the Audio Wizard and follow the troubleshooting tips below.
- Use the speaker slider to increase the volume.
- Is it just one person that's hard to hear or is it everyone? If everyone then consider replacing the speakers. If just one person, the other user who is speaking may have a poor microphone or connection. Have that user tune their audio.
- If the user can hear the playback in the Audio Wizard clearly, but the session audio is still sound choppy, then this is probably a connection issue.
 - Log out and re-attend.
 - If the problem still occurs, refer to Connectivity Troubleshooting.
 - Check the connection speed with Tracert. See Tracert.
 - Check client log for apparent error messages or indications that the connection is going through a proxy.
 - If connecting through proxy server, escalate to the next level of technical support.

Issue 5: Other Participants cannot hear the user or say the user's volume is very low

While in session, the other Participants say that they cannot hear the user or that they can barely hear the audio.

- Run the Audio Wizard and follow the troubleshooting tips (the volume levels may be set too low).

If user can hear the recording in the Audio Wizard, but others still cannot hear them:

- Does the user have a microphone?
- Is anyone else speaking? The session may only allow one speaker at a time. Leader/Co-Presenter audio has priority over Participants.
- Is the user holding down the CTRL or F12 key the entire time while speaking? Does the user see a yellow halo around the microphone?
- Close Centra client and run the Sound Recorder. See Sound Recorder Test.

Issue 6: Other Participants say the user's audio is garbled or there is an echo

While in session, other Participants say the user's audio is garbled.

- Run the Audio Wizard and follow the troubleshooting tips below.
- If the user can hear the playback in the Audio Wizard clearly, but the session audio still sounds choppy, then this is probably a connection issue.
- Check the connection speed with Tracert. See Tracert.
- Check client log for apparent error messages or indications the connection is going through a proxy.
- If connecting through proxy server, escalate to the next level of technical support.
- Turn off “echo cancellation” in Tools, Options, Voice tab if using a headset.
- Take lock-to-talk off when someone else is speaking if you are using Speaker mode and concurrent speakers is set to greater than one.

Tools and Utilities

When troubleshooting audio in Centra, use the following tools and utilities:

- Centra Audio Wizard
- Windows Multimedia Settings
- Sound Recorder

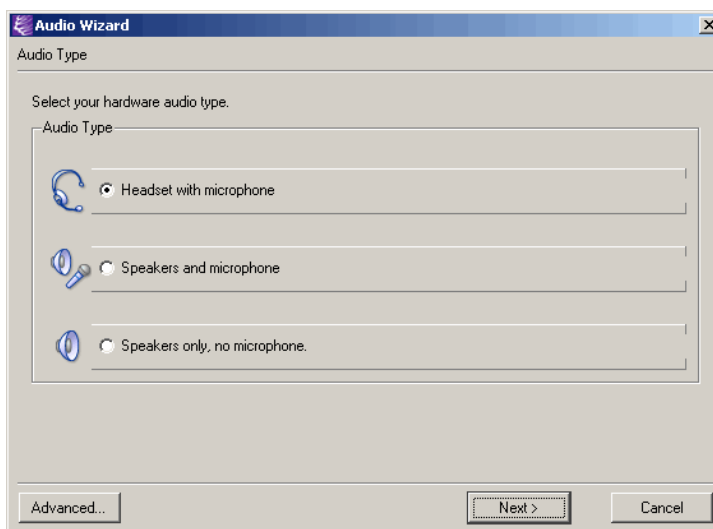
Centra Audio Wizard

The Centra Audio Wizard sets controls on the microphone and speakers for optimal sound quality.

For new users, the Centra Audio Wizard automatically launches upon login. Otherwise, the user must open the Centra Audio Wizard from the Tools menu in the Centra client or run System Check.

Configuring the Audio Wizard

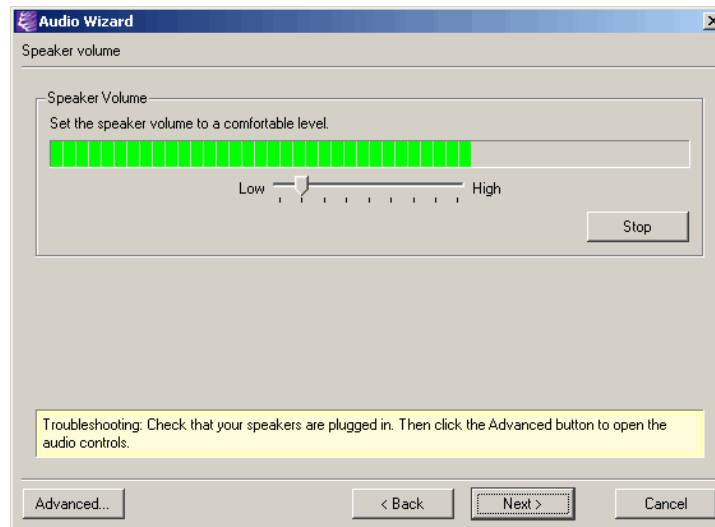
1. Click **Tools, Audio Wizard**.
2. Put the headset on (or listen through speakers), a pre-recorded message should start immediately.
3. Listen and adjust the Speaker Volume using the slider. Click **Next**.



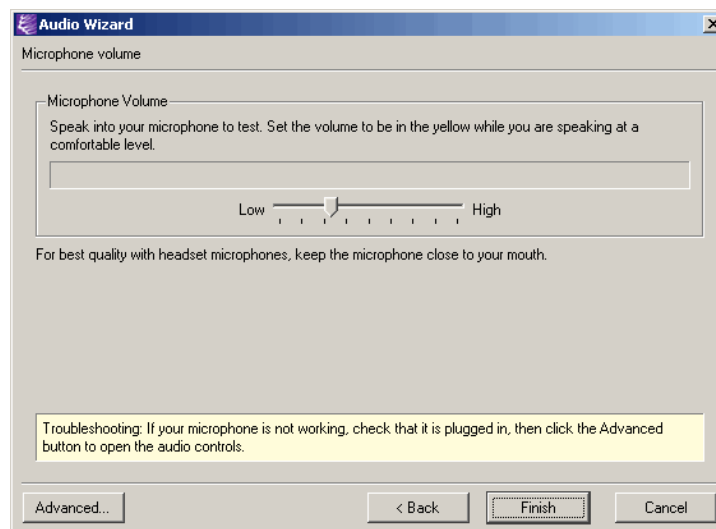
4. Choose the appropriate speaker type. Speakers will allow you to hear others only when you are not speaking (half-duplex audio). Headset will allow you to hear others even when you are speaking (full-duplex audio). Click **Next**.




Note: The default of either speakers or headphones can be set as a Domain property.



1. Speak into the microphone to record a sample of the speaking volume.

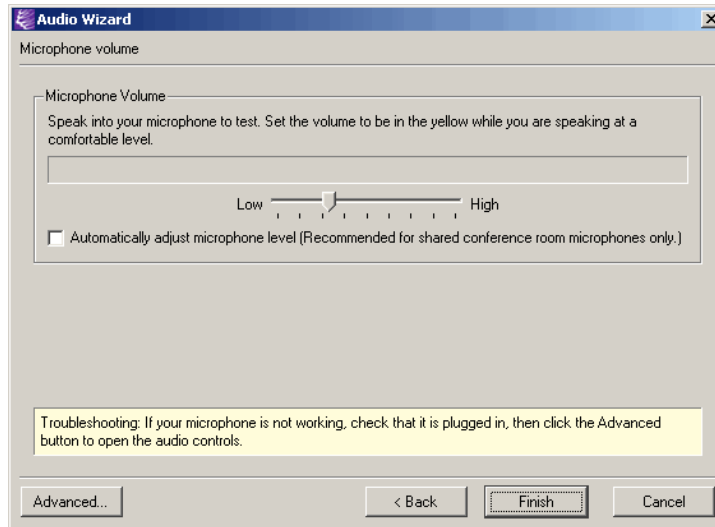


 **Note:** The microphone must be about 2 to 3 inches away from the mouth. Optimal speaking levels are in yellow, beginning to reach red. The Centra Audio Wizard automatically records a five-second sample then plays back the recording automatically. If necessary, adjust the Recording Volume slider and record another sample.

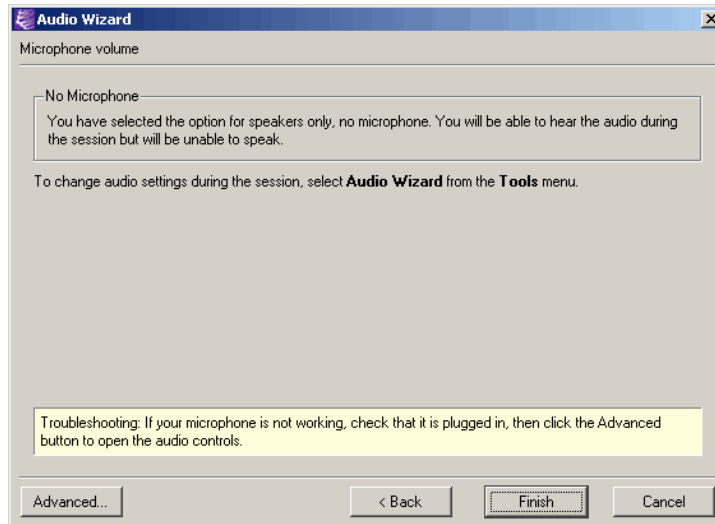
2. Click **Advance** to adjust the Sounds and Multimedia settings.
3. When done click **Finish**.

Alternate Audio Wizard Options

If you selected Speakers with Microphone, you will then have the option to automatically adjust microphone level for a shared microphone (i.e. array or omni-directional microphone).



If you selected Speakers only audio type, this message will appear.



Windows Multimedia Settings


If audio problems continue after verifying the computer's required audio hardware, verify the correct settings in Windows Multimedia.

Checking the Windows Sounds and Multimedia Properties

1. From the Audio Wizard, click **Advanced**. The Sounds and Multimedia Properties window opens.




2. Click the **Audio** tab.
3. Verify the appropriate audio device appears in the Preferred device drop-down list of the Sound Playback section.

 **Note:** By default, the device appears in both the Sound Playback and Sound Recording areas. If “None” is the only item in the Preferred device drop-down list, install a sound card and driver.


4. Click **OK** to confirm the audio settings.

Checking the Recording and Playback Settings

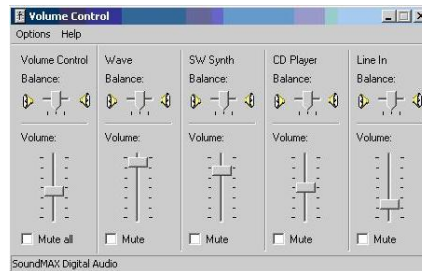
 **Note:** The location and appearance of the Recording and Playback settings is different in different operating systems.

1. Click **Sound Recording, Volume**.
2. Verify that **Mute all** is *not* selected in the Volume Control column.



 **Note:** In some situations the word “Select” may appear. Clear the check marks in the Volume Control section if Mute, check if Select.

3. From the Audio Wizard, click **Advanced**.
4. Click **Sound Recording, Volume**.




5. Select the **Microphone**.
6. Click **Options, Advanced Controls**.
7. Click **Advanced** (if available). The Advanced Controls for Microphones box opens.
8. Select/Deselect **1+ 20db Gain**.



9. Click **Close**.

Sound Recorder Test

If audio problems continue after verifying the audio hardware with the microphone and the Windows Multimedia settings, try to test the computer with the Sound Recorder.

 **Note:** To work in Centra or other applications, the microphone and speakers must function correctly in Windows.

The location of the Sound Recorder may differ depending on the version of Windows.

1. Close all the applications on the computer that use sound.
2. From the Windows Start button, click **Programs, Accessories, Entertainment (or Multimedia), Sound Recorder**. The Sound - Sound Recorder window opens.



3. Click **Record** (red dot) to begin recording.
4. Speak into the microphone at a normal volume and pace for a few seconds. The green line changes as during the voice recording.
5. Click **Stop** (black rectangle) to stop recording.
6. Click **Play** (single triangle) to listen to the recording.

Chapter 5

Tools, Log Files and Utilities

Topics:

- [Client Log](#)
- [Updater Log](#)
- [Network Check Log](#)
- [Tools and Utilities](#)
- [System Check](#)
- [Ping](#)
- [Ping -a](#)
- [Telnet](#)
- [IPCONFIG](#)

Centra creates several log files when running the various Centra applications. Check the log files for useful information to help troubleshoot issues.

Logs can be found by opening the DOS prompt or the Run command from the Start menu and typing “%temp%”.

The following logs are available:

Log	Description	File Name
Builder	Contains information about Agenda Builder. A new version of this log is created each time the user launches Agenda Builder. Use to troubleshoot Agenda Builder issues.	Consists of 'Builder' followed by the date and time. Example: Builder_12_13_2001_15_46_39.log Always use the log file with a date and time closest to the time the problem occurred.
Client	Contains information about the session: the connection type, ports used, whether the session is multicast, etc. A new version of this log is created each time the user clicks the Attend, Lead, or Remote Host link.	Consists of 'Centra' followed by the date and time. Example: Centra_051301_1301.log Always use the log file with a date and time closest to the time the problem occurred.
Centra Updater	Contains the proxy settings the client is using to connect to the server. Use log to troubleshoot connectivity or SmartClient issues.	Consists of 'CentraUpdater' followed by the date and time. Example: CentraUpdater_051301_1301.log Always use the log file with a date and time closest to the time the problem occurred
Network Check	Running the System Check generates this log. This log shows the user's browser version, operating system, and connection information.	Consists of 'NetworkCheck' followed by the date and time. Example: NetworkCheck_052401_1538.log

Log	Description	File Name
	Use log to troubleshoot installation and connectivity issues.	Always use the log file with a date and time closest to the time the problem occurred
Playback	Contains information about a playback session. A new version of this log is created each time the user clicks the Playback link to view an Event recording. Use log to troubleshoot playback issues.	Consists of Playback followed by the date and time. Example: Playback_051201_1826.log Always use the log file with a date and time closest to the time the problem occurred.

Client Log

The client log provides useful information for troubleshooting connectivity issues or issues that occur while in an Event.

The top part of the log contains parameters related to the Event such as the server, the user's role in the Event, whether the connection is multicast or unicast, etc. This information is most useful to Centra Technical Support.

The bottom part of the log, which starts with a date and time stamp, contains connection information and possible error information that might have occurred during the Event. Two of the most important lines indicate the Centra version and Connection Report.

Example:

```
07:02:40.884 74 general 50 Version 7.5.0 build 418
```

```
*****
```

```
07:02:51.860 74 backbone 50 *** Connection Report ***
```

```
07:02:51.860 74 backbone 50 Server IP Address : 205.247.223.222 --- Associated CTS IP Address :
centraeducation.centra.com.
```

```
07:02:51.860 74 backbone 50 direct tcp - 1709 - successful : 361
```

```
07:02:51.860 74 backbone 50 direct tcp - 443 - successful : 160
```

```
07:02:51.860 74 backbone 50 secondary tunnel - 80 - DNF
```

```
07:02:52.200 74 general 30 Connecting via Direct TCP to 205.247.223.222 on port 443
```

Successful Connections

The following examples show what successful connections looks like in a client log for the different connections the client can make. The client tries to establish the best possible connection to the server by testing all possible connections simultaneously. If the client fails to connect, the user is not able to attend the Event (or play back the recording).

Sample Connection

```
07:02:51.860 74 backbone 50 *** Connection Report ***
```

```
07:02:51.860 74 backbone 50 Server IP Address : 205.247.223.222 --- Associated CTS IP Address :
centraeducation.centra.com.
```

```
07:02:51.860 74 backbone 50 direct tcp - 1709 - successful : 361
```

```
07:02:51.860 74 backbone 50 direct tcp - 443 - successful : 160
```

```
07:02:51.860 74 backbone 50 secondary tunnel - 80 - DNF
```

```
07:02:52.200 74 general 30 Connecting via Direct TCP to 205.247.223.222 on port 443
```

When Centra opens a socket to the Centra Satellite Server (CSS), it tests the connection to the server by sending a packet. The time that it takes for this packet to get from the client to the server and back is measured and written to the log. The different types of connection to the server are tested simultaneously. When the first test is successful, the remaining tests have 1 second to complete before being marked DNF (Did Not Finish). If multiple Satellite servers are configured for the Centra Collaboration Server (CCS) the event is to be held on and the satellite option is set to auto-select, all configured CSSs will be sent packets and tested for each port simultaneously.

Example:

```
07:02:51.860 74 backbone 50 secondary tunnel - 80 - DNF
```

Completed connections are marked successful followed by their round trip time (in milliseconds).

Example:

07:02:51.860 74 backbone 50 direct tcp - 443 - successful : 160

Attempts that fail the connection test are marked as such.

The connection that returns the fastest is used. This is confirmed in log, in the first line after the connection test timer has completed:


Example:

07:02:52.200 74 general 30 Connecting via Direct TCP to 205.247.223.222 on port 443

The last line in the connection report displays the type of connection. This could be any one of the following:

- Direct TCP (over port 1709 or port 443)
- Primary Tunneling (over port 443)
- Secondary Tunneling (over port 80)
- IP Multicast (see below for more information about IP Multicast connections)

The log displays a Connection Report for each of the CSSs available. If your Centra Server configuration contains multiple CSSs, the CSS that returns the fastest connection time (the Optimal CSS) is used.

 **Note:** In a multiple CSS configuration, your Centra Administrator may enable the option for you to choose a CSS when attending an event. The CSS you choose is considered your Preferred CSS. The Administrator may also assign you a Preferred CSS based on the IP Address of your PC. In these cases your Preferred CSS is used whether or not it is fastest, as long as a connection to it is possible. If a connection is not possible, then you will fail over to the Optimal CSS.

Comparing the Connection Methods

The following table lists how the various connection types compare.

Connection type	Performance
Direct TCP (1709)	Best performance possible
Direct TCP (443)	As good as a direct connection on 1709
Primary Tunneling ("Fast tunnel")	Packet inspection diminishes performance slightly, but almost as good as 443 Direct connection
Secondary Tunneling ("Slow tunnel")	Performance is considerably poorer than the other connection types. Users may experience choppy audio, slow updates or may be dropped from the session

Updater Log

The Updater log indicates the proxy settings the client is using to connect to the server.

Connecting Through a Proxy Server

Example:

```
18:22:10.843 79c CentraHttp 50 Getting proxy info from Internet Explorer HKEY_CURRENT_USER
```

```
18:22:10.843 79c CentraHttp 50 No proxy info found under HKEY_CURRENT_USER
```

```
18:22:10.843 79c CentraHttp 50 Getting proxy info from Internet Explorer HKEY_LOCAL_MACHINE
```

```
18:22:10.843 79c CentraHttp 50 Proxy Settings (None)
```

Interpretation:

The “No Proxy found” message indicates the client is not attempting to connect through a proxy server. If you know there is a proxy server configured on the network and the client cannot connect to the Centra Server, consult the Network Administrator. The proxy settings in the user's browser may need to be set to specify the location of the proxy server.

Using Proxy Information Set in the Browser

Example:

```
18:22:10.843 79c CentraHttp 50Proxy Settings (Manual): host: 192.168.6.9 port: 80 exceptions:
```

Interpretation:

(Manual) indicates the browser is set to connect through a proxy server. The Centra Client is reading the proxy information stored in the browser. This information may not be correct. Contact the Network Administrator.

- If you are not using a proxy server, the proxy information in the browser must be cleared.
- If you are using a proxy server, the proxy information in the browser may need to be set to specify the location of the proxy server.

Using Proxy Auto Configuration (PAC) Files.

Example:

```
18:22:10.843 79c CentraHttp 50 Proxy AutoConfig URL is set in Registry
```

```
http://ISAFIREWALL:8080/array.dll?Get.Routing.Script
```

Interpretation:


The Auto Config URL indicates the browser is set to connect through a proxy server. The connection information to the proxy server is stored in a PAC file located at the specified URL. Contact the Centra Server Administrator.

If you are not using a proxy server, the proxy information in the browser must be cleared.

Network Check Log

The Network Check log is created when a user runs the System Check. It contains the same connection test information as the client log. It also contains more detailed information about the round trip times measured during the connection test.


If the connection failed or an HTTP tunnel connection was established over port 80, contact the Network Administrator. This could lead to problems when using Centra.

 **Note:** The Network Check part of System Check only checks the client's connection to the Centra Satellite Server (CSS). It does not validate the connection all the way to the Collaboration Server (CCS). You may successfully run System Check, but not connect to a live session. In this situation, please ask the Centra Server Administrator to check the status of the CCS.

Tools and Utilities

Use the following tools and utilities when troubleshooting the client:

Utility	Use to...
System Check	Verify browser version and settings. Verify the network connection. Tune audio.
Ping	Check if the client can see the Centra Server over the network.
Ping -a	Resolve a DNS name from an IP address and check to see if the client can see the Centra Server over the network.
Telnet	Test a connection to a Centra server or a proxy server.
Tracert	Get the network times between the client and another object such as a Centra Server.
IPCONFIG	Find out the IP address of the client or server machine. (XP, NT or Windows 2000)

 **Note:** Some of these tools run from a DOS command window.

Opening a DOS window Command Prompt


1. Click the **Start** on the desktop and select **Run**.
2. Type cmd.
3. Click **OK**. A DOS command window opens.

System Check

Use the Centra System Check utility to:

- Verify browser version and settings.
- Verify the network connection.
- Tune audio.

Begin the troubleshooting process of most issues by running System Check. Check the results on the screen and additionally, the Network Check log for more information about the connection type and connection speed. See Centra Log Files for information about this log.

 **Note:** System check does not consume a user license or track attendance. System check can 'fail' if you do not complete the audio portion of the check, even if your audio is working properly. Failing system check due to not completing the audio wizard does not mean you will have audio issues in a live Centra event.

Ping

Use the Ping command to check if the client can see the Centra Server over the network. To run this command, use the DNS name or IP address of the server.

1. Open a DOS window.
2. Type `ping`, the IP address or DNS name of the Centra Server.

Example: `ping 192.168.6.7`

3. Press **Enter**.

The results appear in the DOS window if the client can find the server.

4. Check the Packets lost as follows:

If packets lost is	Then
0	The client can see the server. Try the Tracert command to test connection speed.
1-3	The client has a poor connection to the server and/or there are bandwidth issues.
4	The client cannot access the server. Either the connection is extremely poor or a firewall is dropping ping commands.

Ping -a

Use the Ping -a command to resolve a DNS name from an IP address and check to see if the client can see the Centra Server over the network. To run this command, use the IP address of the server.

1. Open a DOS window.
2. Type `ping -a` and the IP address of the Centra Server.

Example: `ping -a 192.168.6.7`

3. Press **Enter**.

The first line returns the DNS name of the server.


Telnet

Use the Telnet command to test a connection to a Centra server or a proxy server. To run this command successfully, you need the IP address of the server and the port that you are trying to contact the server on. This command allows you to verify the client can connect to the Centra Server when trying to launch a client.

Use the following instructions appropriate for the operating system:

Telnet for Windows 2000 & XP

1. Open a DOS window.
2. Type `telnet` followed by the IP and Port.
Example: `telnet yourserver.company.com 1709`
3. Press **Enter**.

 **Note:** Try port 1709 and port 80. If the connection is successful, the IP and port number appear in the title bar.

If Telnet cannot connect on the port, a connection error appears. The port is closed. Contact the Network Administrator.

Tracert

Use the Tracert command to obtain the network times between the client and another object such as a Centra Server. This command indicates if the network is running slowly. Send the results of the tracert to a text file for tracking purposes.

1. Open a DOS window.
2. Type `tracert` followed by the IP address or DNS name of the server.

Examples:


`Tracert 10.100.0.106` or

`Tracert yourserver.company.com`

3. Press **Enter**. The results appear in the DOS window.

The numbers on the far left of the window are the number of hops that the request is taking. The next three columns list the time that it took to go from one network object to another.

If times are ...	Then ...
Above 100 ms	The connection is slow, or there may be a slow network or bandwidth issues.
50 ms or less	The connection is good.
Above 250 ms	The connection is extremely poor and may be problematic for Centra sessions.

 **Note:** Time-outs indicate either a very slow network/connection or a firewall that is dropping tracert commands. If the latter is true, then this utility is useful only for testing the connection up to the firewall. If the connection times up to the firewall are good, there still may be connection problems from the firewall to the Centra Server. Contact the Network Administrator for more help.

IPCONFIG

Use the IPCONFIG command to find out the IP address of the client or server machine. IPCONFIG is used in XP, NT or Windows 2000.

1. Open a DOS window.
2. Type IPCONFIG.
3. Press **Enter**.
4. The results of the command appear in the DOS window.

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