MEETINGHOUSE TECHNOLOGY
Newsletter

December 2011

Featured Topics
Introducing Personal Video Conferencing

What is Personal Video Conferencing (PVC)?
Personal Video Conferencing is a telecommunication technology that allows for two-way video and audio transmissions. The Church provides this technology to leaders worldwide for face-to-face communications in meetings, interviews, training, and so forth without needing to travel long distances. It is especially valuable in units that are spread out over large geographic areas.

PVC is for Church use only.

Who is authorized to use PVC?
Those authorized to use PVC include bishops, branch presidents, ward and stake executive secretaries, stake and branch clerks, stake technology specialists, stake and district presidencies, stake high councilors, mission presidencies, MTC presidencies, temple presidencies, Area Presidencies, Seventies, and LDS Church employees (see a complete list on the PVC wiki).

Stake and ward leaders in Utah, however, are not authorized to use PVC. Because Utah-based leaders generally live close to their ward and stake members, they have less need to communicate over long distances via PVC. If Utah-based leaders feel that they have a legitimate need for PVC, they may contact the Global Service Center to request an account on an exception to this policy.

Authorized individuals who wish to use PVC can go to the PVC login page, click **Request an Account**, sign in using their LDS

Tips & Tricks
Where is the best place to put the meetinghouse firewall?

A working firewall filters and secures a meetinghouse's Internet access. The meetinghouse firewall can easily be mounted to a wall or placed on a horizontal surface, such as a shelf, but deciding on the best place to put it can be challenging in some situations. Consider the following factors when making this decision:

Physical security
The modem and meetinghouse firewall should be placed in locations that are out of the way or that have limited access, such as lockable closets, attics, or crawl spaces. Avoid putting these devices in offices or other common areas where someone would easily be able to bypass the firewall.

Ease of Access
Make sure that your modem and firewall are also in places that are easy for appropriate individuals to access when needed. For example, stake technology specialists and facilities management personnel occasionally need access to troubleshoot problems and verify that all connections are being made through the firewall and that the firewall is the only device that is connecting directly to the Internet service provider (ISP). For this reason, the ports and the status lights on the modem and the firewall should be easy for these individuals to see. Often the most convenient place for the meetinghouse firewall is close to the Internet source and to the router.

Environment
Do not put firewalls in places with restricted airflow. Be aware that firewalls require the temperature and humidity to stay in a specified range

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Account user name and password, and begin using the system without any additional authorization. Your current calling or Church employment status information is stored in your LDS Account, and the system automatically authorizes approved users.

When should I use PVC?

PVC is especially valuable for leaders of Church units that are spread across large geographic areas. They can meet with others over long distances and still have face-to-face interaction. This can save travel costs and reduce the amount of time away from home.

Leaders should use PVC to conduct interactive, personal meetings, such as presidency meetings, council meetings, training sessions, and personal priesthood interviews. For example, a member of the Sixth Quorum of the Seventy recently held several meetings with stake presidents in his area using PVC. They were all located some distance from each other, but were able to have a face-to-face experience without the travel.

In some cases, you may want to include someone on a PVC call who is not on the authorized leaders list. For example, a bishop may wish to hold a ward council meeting using PVC. He can invite the participants as guests even though they do not have PVC accounts. PVC does allow you to invite people that are not authorized PVC users to your PVC meeting; however, there is a charge every time the PVC software is downloaded, so this feature should be used with discretion. For instructions on how to invite participants without PVC accounts, view "How to Invite a Guest" on the LDSTech wiki.

PVC is not meant to replace personal contact. If all of your leaders and meeting participants can easily travel to your local meetinghouse, you should continue to meet there.

What are the system requirements and tools?

To use PVC, you will need six things:

1. **Be in one of the authorized leadership positions or be a Church employee.**
2. **LDS Account**. You sign up for PVC using your LDS Account. If you don't have an LDS Account, you can sign up for one on LDS.org. For instructions on creating an LDS Account, visit the wiki (tech.lds.org).
3. **Broadband Internet connection**. Your broadband Internet should have minimum download and upload speeds of

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in order to operate properly. For example, the following are operating ranges for the Cisco 881W:

- Temperature
  - At sea level: 32 to 104°F (0 to 40°C)
  - Up to 10,000 feet: 32 to 77°F (0 to 25°C)
- Humidity: 10 to 85% relative humidity (noncondensing)

Wireless

If your firewall has integrated wireless (Wi-Fi), such as the 881W, you may choose to put the firewall in a location that optimizes the wireless signal. Putting it in a different location than where the ISP enters the building or where the network is distributed to the rest of the building will require additional cabling, but it can be done. To optimize wireless coverage, avoid placing the device inside a cabinet or near a lot of metal. Also make sure to position the antennas vertically (up or down).

Facilities managers and area offices have the final say with where a meetinghouse firewall gets placed.

To learn more about the meetinghouse firewall, visit https://tech.lds.org/wiki/Meetinghouse_firewall.

Local Highlight

Note: Guidelines for technology vary by area, and not all solutions are appropriate in all areas. Please be sure to check with your area office before implementing any new solutions.

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500 kbps (1 Mbps or higher is preferred). It's also better to use a wired Internet connection (instead of wireless) while making PVC calls.

4. **PC or Mac computer**. Make sure your PC is plugged into AC power when using PVC. CPU performance is usually lower when on battery, which will negatively affect PVC performance.

5. **Camera**. Built-in cameras on laptops are adequate. However, USB webcams (Logitech webcams work well) give a much higher quality picture and have better lighting auto-adjustments.

6. **Audio equipment**. Using the built-in microphone and the built-in speakers on a laptop is not recommended. Built-in mics are generally poor quality, and using the mic and speakers together will create an echo for everyone else on your PVC call. Instead, try using a USB headset or USB speakerphone, or use earphones and the webcam microphone (if available).

For more information about recommended PVC equipment (including specific webcams, audio solutions, and headsets, visit the wiki articles "Get started with Personal Video Conferencing" and "Personal Video Conferencing requirements".

Where can I go for more information and training on PVC?

Most of your questions about PVC can be answered through the wiki, where there are articles, tutorials, and links to instructional screencasts about PVC. You can also ask your stake technology specialist for help.

Since the Global Service Center (GSC) serves a large volume of users, you should contact the GSC only *after* seeking help from other resources.

Church Broadcasts for the Hearing Impaired

When showing a Church broadcast to your ward or stake, consider resources such as closed-captioning and American Sign Language interpretation to help members who are deaf or hard of hearing participate.

American Sign Language

American Sign Language or ASL is a visual language; a member must be able to see a person signing to understand. Many Church broadcasts, but not all, are available in ASL. A signed broadcast includes a large image of the signer in the foreground with a smaller inset image of the unsigned broadcast

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In Cairo, Georgia, USA, a tiny town where there are many different churches to choose from, Branch President Travis Robbins decided to create exposure for his branch by improving his chapel's rank in Google searches. His intention was to help people find the church building when they used Google to search for a place to worship in Cairo. Before President Robbins began this project, the Cairo meetinghouse did not show up at all in Google results for general church-related searches in his area of Georgia. So he worked with the Church's search engine optimization (SEO) team to make the LDS meetinghouse in Cairo easier to find for visiting members and other people seeking a Christian church.

President Robbins coordinated with the SEO team to "claim" the meetinghouse in the SEO team's Google Places account by add information about the meetinghouse, like the correct address and phone number. This easy step ensured that when people find the meetinghouse through Google Maps, they see the correct address and phone number. In addition to making sure the meetinghouse's Google Places page was updated, President Robbins and others posted reviews on the page describing what it is like to go to the LDS meetinghouse in Cairo.

They also wrote reviews for the meetinghouse on review web sites like yelp.com. In addition, they submitted the meetinghouse's information to several online church directories, including ChurchAngel.com and patheos.com. Even though there are over 150 different churches in Grady County, Georgia, the LDS church building rose in the search results and at one point was the first church listed for the search terms "Church, Cairo, GA."

Just a month after the SEO team began working with the Cairo Branch, someone walked in off the street to attend Sunday meetings, saying he found the church on Google. Soon other people came. President Robbins feels listing the church building online can lead to excellent

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to the side of the signer. Members who need ASL broadcasted will usually inform their priesthood leaders.

How to watch ASL

When a broadcast is signed, it is usually available on LDS.org or the Church Satellite Network, and sometimes it is available in both places.
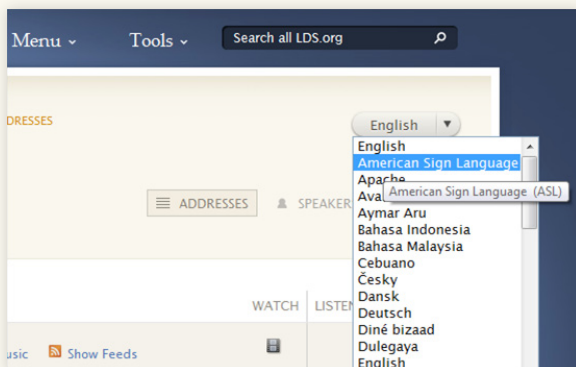

Internet

To view an ASL broadcast on LDS.org, go to the broadcast you would like to view in ASL, and select **American Sign Language** from the language list (upper right hand corner).

Setup to view ASL broadcasts via streaming

When viewing a broadcast via the web, a wired connection is preferred because it provides a higher picture quality (ASL is a visual language, so picture quality is important). The streaming encoder used for ASL is "rate adaptive." This means that the player will often adjust the data rate in an attempt to deliver the maximum image quality possible.

Because the Internet ASL channel and the satellite non-ASL channel are processed through different encoding and transmission devices, the broadcasts will be several seconds out of sync, which

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missionary opportunities. "[SEO] is absolutely worth your while," he says. "It lets people know where you are, and who you are. Plus the members think it is cool when they type themselves into Google and they find themselves first on the map."

Adding information (such as address, ratings, and reviews) about specific meetinghouses to different sites on the Internet makes it more likely that search engines like Google will determine that that church building is relevant to searches. And the more relevant the search engine determines it to be, the closer to the top of the search results information about that church building appears. The closer to the top the information appears, the more likely people are to see it. By helping with SEO efforts for their meetinghouses, members can help bring people to church, giving the missionaries opportunities to spend more time teaching and less time finding.

You can do this for any Church facility, including meetinghouses, institute buildings, temples, historic sites, visitors' centers, LDS Family Services centers, LDS employment centers, and family history centers. On LDS.org, on the "Sharing the Gospel Online" page, you can learn about Internet tasks that promote the Church and other ways you can share the gospel online at http://lds.org/church/share. Share your experiences by sending an e-mail to the SEO team at STGO@ldschurch.org.

How has your stake or ward used technology to bless the Saints in your area? Share stories about Church technology experiences, such as sharing the gospel online, participating in Meetinghouse Technology webinars, and encouraging your ward members to create LDS Accounts. Send your story to MHTechNewsletter@ldschurch.org, and we may use it in an upcoming newsletter!

Training Calendar

Coming in January will be a Meetinghouse

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may be distracting to viewers. In order to avoid this distraction, it may be best to set up the Internet-delivered ASL broadcast in a room separate from the non-ASL broadcast, such as a classroom.

Satellite

Many meetinghouses already have a receiver set up to receive non-ASL broadcasts; in order to simultaneously receive an ASL broadcast, an additional receiver is usually needed. Once both receivers are set up, the meetinghouse's dish or antenna will feed the different signals to each receiver. The total cost to enable a site to receive ASL broadcasts is about U.S. $1,000. Priesthood leaders should coordinate requests for ASL equipment with their facilities manager. Your building may already have the additional receiver set up; to find out if it does, go to mhtech.lds.org to view a list of ASL-broadcast-enabled buildings in North America.

In North America, the Church uses two different satellite systems for broadcasts. They are known as the traditional large-dish (C Band) system and the smaller-dish (Ku Band) system. The C Band system has an ASL signal all the time. During non-broadcast times, the ASL channel is identified with the letters ASL in the upper left corner of the receiver screen. On the Ku Band system the ASL channel appears just before a broadcast and then disappears after the broadcast is over.

Setup to view ASL broadcasts via satellite

After the equipment receiving the ASL satellite broadcast has been installed, the ASL picture will be available on a TV channel. The TV can be set up in any room in the meetinghouse that has a TV jack, such as a classroom or the chapel. If the ASL broadcast is being shown in the same room as the non-ASL broadcast, TVs for those viewing the ASL broadcast are often set up in the front of one of the side seating areas. Sometimes ASL users prefer to view the broadcast in a separate classroom of their own, while others prefer to be in the chapel with the rest of the members; either way is acceptable. The ASL broadcast and the non-ASL broadcast will be slightly out of sync with each other. If both broadcasts are being shown in the same room, be sure to turn the volume down on the ASL TV set.

Closed-captioning

For many years the Church has offered English closed-captioning for its major broadcasts. Captions in both Spanish and Portuguese have recently been made available for viewers in North and South America.

The term "closed-captioning" indicates that the captions are visible

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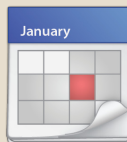
Technology Monthly Training Seminar on Clerk Resources on LDS.org. Broadcasts of this training will be held multiple times throughout the day to accommodate different time zones. See https://tech.lds.org/wiki/Meeting-house_technology_training for more information, to view past training webinars, and find the e-mail address to participate in this monthly training.

Subscription Information

To receive this newsletter directly to your inbox, subscribe to "Meetinghouse Technologies" with your LDS Account. For instructions on how to do this, see the "Meetinghouse technology e-mail list" page on the "Meetinghouse Technology Wiki" (mhtech.lds.org).

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only to those who choose to turn them on. The North American TV standard (NTSC) can embed the captions within the video signal itself. Generally, after a program has been captioned, the caption data is forever included within program.

Setup to view closed-captioning

To show a broadcast with captions, set up a TV at the front of one of the side seating areas. Many chapels are wired so that a projector and screen as well as TV sets can be used in the chapel. After the TV is cabled, ensure that the captioning is enabled. This is usually done by using the remote and the TV's menu system to select one of the following languages:

CC1- English   CC2 - Spanish   CC3- Portuguese

Every TV is different; please refer to your TV's documentation if you have questions about how to set up the closed-captioning. Closed-captioning data is broadcast at least one hour previous to any major broadcast for setup and testing purposes. If you are responsible for setting up the system, come early to get things set up and tested well before the meeting starts.

Closed-captioning on the main screen

Displaying the captions on the main screen for all to view is not usually recommended. The speech and captions can be out of sync with each other, and sometimes there is a discrepancy between what is spoken and what is captioned. Sometimes the message has to be restated or rephrased, and it is not uncommon for small sections of speech to be totally omitted. Because of these differences between the captions and speech, the captions often frustrate or distract those who don't need them.

Closed-captioning troubleshooting

If you are having problems with satellite closed-captioning, please call satellite support at 1-801-240-3454, option 2. Many of the issues can be fixed with a simple software command from Salt Lake City. Below are a couple of known closed-captioning issues:

a) Some receivers will not send captions through to the TV.
b) Sometimes receivers will default automatically to turn closed-captioning on either of these can be solved with a slight configuration modification that the support agent can easily perform.

To learn more about viewing Church broadcasts, see the wiki articles "Viewing Church broadcasts (meetinghouse)" and "Viewing Church broadcasts using satellite."

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