



For Everyday Conferencing

Terra Firma conferencing solutions are designed for remote meetings, allowing users to save time and money and conveniently communicate their message. Moderators simply dial a toll-free number and use their unique conference ID and PIN to begin a conference with up to 125 participants with the ability to add visuals over the web. Terra Firma distinguishes itself as a truly integrated web and audio conferencing provider with a published uptime of 99.99%. Our services are reliable, cost-effective, reservationless and do not require any additional internal resources for implementation or ongoing support.

Security

Terra Firma fully understands and supports the ever-growing need for increased security measures and currently maintains three levels of security - premises, data and access control. The physical integrity of our data center is of the utmost importance. Our technologically advanced security system ensures that only authorized individuals have access to the data center. The data stored within our secure facilities can also be protected with industry-standard, 128 bit encryption methods, including SSL, Secure Sockets Layer, which verifies authenticity as well as the integrity of the data. Access to this data is further protected by a uniquely assigned conference ID and PIN with the ability to use a passcode and other security features determined by the moderator.

Premises Security

Terra Firma's physical infrastructure is constructed to exceed industry up-time, reliability and security standards. Privately held servers are housed within a secure data center to ensure their safety. Terra Firma restricts data center entry to selected members of our engineering staff who must pass through biometric, multiple-authentication locks and video monitoring. Engineers monitor the data center 24/7 for maintenance and troubleshooting.

Data Security

Uploaded presentations, slides and reports are protected when accessed over the web via a SSL-secured site and are safe from unwarranted viewers. In addition, Terra Firma offers a secure SSL/HTTPS environment, which authenticates and encrypts communication between clients and servers and ensures protection of confidential materials from unauthorized participants.

Access Control

Terra Firma assigns each moderator a unique conference ID and PIN required to initiate a conference on the phone or web. To add another layer of security, moderators can create a security passcode unique to each conference. Terra Firma provides the following features allowing the moderator to control conference access.

Conference Lock	The conference lock function ensures no other participants enter the conference, including the conference operator
Entry/Exit Announcements	A tone or a participant's name notifies the moderator who is on the conference call
Participant List	The web interface lists names and ANI to verify participant identification as well as give a participant count
Conference Operator	By simply pressing *0 during your conference, a conference operator joins the conference to answer questions or provide technical assistance



Data Center

Terra Firma utilizes a \$40 million platform to provide a reliable service with a published uptime of 99.99%. The data center currently operates at only 50% of capacity ensuring that the full 125 ports are available to every conference moderator at any time.

The Terra Firma infrastructure includes:

- 400+ T-1s - over 10,000+ phone lines
- Redundant Tier 1 Internet and voice communications providers
- Redundant systems, servers and communications hardware
- 6 terabytes of real-time storage
- 3 OC-12's of local loop on redundant data feeds
- 450+ Mbps of Internet bandwidth

Network Architecture

Terra Firma utilizes a robust solution for our network architecture that is comprised several highly redundant telephony and data connections. Our systems are monitored 24/7 by designated engineers who focus solely on the Etherspeak network.

Multiple Telephony Carriers

Terra Firma utilizes multiple vendors for our entire communications network to ensure technical issues do not interrupt conferences. Through several top-tier service providers, our services are built on a highly reliable and scalable backbone. Our redundancy includes the following layers.

Phone Bridging	Terra Firma uses several telephony providers and SS7 routing to dynamically load-balance calls. This means that even if one bridge is having technical problems, conferences are automatically rerouted to ensure conferences continue as planned
ISPs / Fiber providers	Three top-tier Internet Service Providers (ISPs) allow Terra Firma to distribute content over the Internet on several backbones to drastically reduce bandwidth problems. They also provide flexible local loop access, which disseminates users to supply almost unlimited scalability.
Border and Distribution Routers	Network border routers handle all incoming and outgoing traffic via the Internet with distribution routers managing distribution of data traffic to the company's integrated service offerings.

Firewall Compatibility

Terra Firma protocol is HTTP-based, allowing corporate end-users to easily gain access. State-of-the-art firewall security ensures all incoming and outgoing messages are thoroughly filtered to meet stringent security criteria. The standard port 80 is required to be open on the firewall.

System Requirements

Terra Firma's conferencing system requirements are minimal and have little impact on company infrastructures. This means that implementing and managing Terra Firma services require little or no internal resources and there is no ongoing technical support required. If users ever do experience a problem, customer support is available by phone or email 24 hours a day, seven days a week, 365 days a year.

Users simply begin an audio conference from any touchtone phone. Web conferencing services run on most computer platforms that use a standard browser, and no client downloads or plug-ins are required. The following requirements anticipate the use of both phone and web components.

Audio Requirements

Users only need a phone and Terra Firma conference ID and PIN to begin a conference anytime, anywhere.

Web Requirements

Hardware	A computer with a sound card and speakers
Software	Netscape Navigator 4.51-4.79 or Microsoft Internet Explorer 5.xx or higher
Operating System	Windows 98/2000/NT4/XP
Bandwidth Minimum	56 kbps dialup or faster recommended
Media Player	RealPlayer or RealOne Player is required to listen to live or recorded conferences on the web