

VOLUME 1, SECTION 4.5:
WEB CONFERENCING SERVICES
(WCS)





4.5 WEB CONFERENCING SERVICE (WCS) [C.2.8.3]

This section of our proposal addresses Level 3's offering to provide Web Conferencing Services (WCS) to Government agency customers through the Networx program. Our service meets or exceeds the requirements for WCS as defined in Section C.2.8.3 of the Networx RFP.

Our WCS is offered [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Through [REDACTED], Level 3 offers a solid, competitive streaming product. Based on the RFP and our understanding of the Government's current and future requirements, we believe that our flexible, state-of-the-art WCS offers the scalability and cost-effectiveness that will be needed to fulfill Agency requirements over the coming years.

4.5.1 Technical Description of Web Conferencing Services [C.2.8.3.1]

The Level 3 Web Conferencing Service fulfills the mandatory service requirements for WCS contained in RFP Section C.2.8.3.1. This section presents a technical description of our offering, and demonstrates our capabilities in the following areas:

- Standards
- Connectivity



- Technical Capabilities
- Features
- Interfaces

Our WCS offering is based on [REDACTED], a Web-based, hosted service that will allow authorized users to share applications, presentations, documents, Web browsers, and even their desktops in real time. [REDACTED] is accessed via a Web browser, allowing online meetings to be held from any computer with a network connection. Features of this service include:

- Ability to start a meeting with a single mouse click. Inviting participants, demonstrating products, and annotating documents are also easily accomplished.
- Real-time collaboration with remote partners.
- Ability to demonstrate products and services to anyone at anytime, show presentation material, highlight product features, and review contracts and documentation.
- Ability to view, annotate, or edit documents in real time and conduct spontaneous question and answer sessions – this allows collaboration on presentation material and communication via the Internet.

No additional hardware or software is required to run Meeting Center.

Level 3 will also deploy [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Working with powerful session management features to run , Agencies can start a meeting from any application, then integrate live audio, video, and data; share multiple presentations; annotate documents and record; and edit and playback meeting content. Other features include:

[REDACTED]

4.5.1.1 STANDARDS [C.2.8.3.1.2]

Level 3’s WCS offering is compliant with the standards listed in RFP Section C.2.8.3.1.2. Members of our team are active in a variety of industry forums and working groups, such as Internet Engineering Task Force (IETF), the North American Network Operators Group (NANOG) and the American Institute of Electrical Engineers (IEEE) and committed to implementing future standards as technologies are developed and standards are defined and become commercially available.

Our WCS offering complies with the HTTP, HTTPS, optional ITU-T T.120 series, SSL, and TCP/IP protocols. It also complies with the mandatory IETF RFC 3261 protocol for Session Initiation.



[Redacted]

[Redacted]

[Redacted]

[Redacted]

**4.5.1.3.4 Browser Compatibility and User Compatibility Testing
[C.2.8.3.1.4 (4), C.2.8.3.1.4 (5)]**

The Level 3 WCS is compatible with most commercially available Internet Web browser software packages. Our services have been successfully tested with Internet Explorer, Netscape, Firefox, Safari, and Opera for Microsoft Windows, Apple Macintosh, and Linux operating systems.

[Redacted]

[Redacted]

[Redacted]



[REDACTED]

4.5.1.3.5 Dynamic Content Support [C.2.8.3.1.4 (6)]

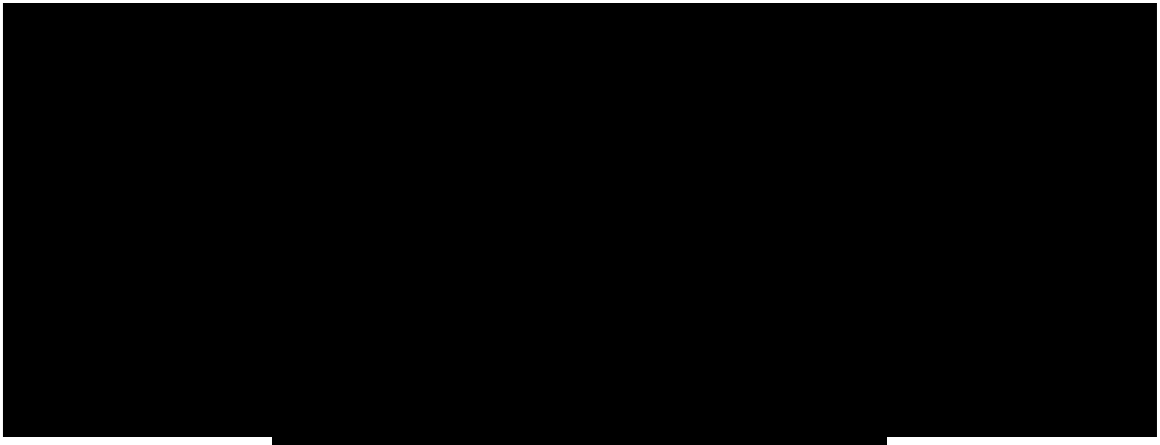
[REDACTED]

4.5.1.3.6 On Demand and Scheduled Reservations [C.2.8.3.1.4 (7), C.2.8.3.1.4 (8)]

Level 3's WCS offering is available on demand within [REDACTED] prior to the requested conference time. A presenter may start a presentation without any notice. Meeting reservations may also be scheduled for up to [REDACTED] beyond the current date.

Authorized users can schedule, reserve, and cancel one or more Web conferences at least [REDACTED] in advance. [REDACTED]

[REDACTED]



4.5.1.3.7 E-Mail Notification [C.2.8.3.1.4 (9)]

Meeting notifications and RSVP requests can be sent to invited participants. Notifications are sent via E-mail and include the information necessary to access the Web conference. Authorized users may add participants at any time, without advance notice, through a provided Web interface.

4.5.1.3.8 Extending WCS Times [C.2.8.3.1.4 (10)]

The subscribing Agency will be able extend the scheduled conference time as necessary. [REDACTED]

4.5.1.3.9 Security [C.2.8.3.1.4 (11)]

[REDACTED] sessions are secured through the use of [REDACTED]
[REDACTED] Meeting participants and Agency administrators are authenticated by [REDACTED]
[REDACTED]
[REDACTED]



4.5.1.3.10 Accessibility [C.2.8.3.1.4 (12)]

Web conferences are accessible via a URL address. As discussed previously, users will be [REDACTED]

4.5.1.3.11 Leader and Participant Authentication [C.2.8.3.1.4 (13)]

Level 3 will provide conference leaders and participants with the passwords necessary to use our services. [REDACTED]

4.5.1.3.12 Simultaneous Conferencing Support [C.2.8.3.1.4 (14)]

Our service supports up to [REDACTED] simultaneous participants in a single Web conference, substantially exceeding the minimum requirement of 31 participants listed in Section C.2.8.3.1.4 (14) of the Networx RFP. The maximum number of concurrent conferences is not restricted.

4.5.1.3.13 Firewall Traversal [C.2.8.3.1.4 (15)]

Web conferences will successfully operate through most firewalls and security layers using standard protocols. Our services communicate through standard [REDACTED]. Agencies are not required to reconfigure their firewalls to enable online meetings. Level 3 will work with the Agency to verify that the Agency firewall is compatible with our service.

4.5.1.3.14 Technical Support [C.2.8.3.1.4 (16)]

Operator assistance is available via a toll free number, providing immediate help to resolve technical problems or service issues. Online Help is also available to presenters and conference participants.



4.5.1.3.15 Annotation Support [C.2.8.3.1.4 (17)]

The presenter can provide annotation during a Web conference, using [REDACTED]. With the conference leader's authorization, participants will be allowed to annotate and make notes on documents as if on a white-board, for concise and clear communication or editing.

4.5.1.3.16 Participant List [C.2.8.3.1.4 (18)]

Through the Web interface, participants and presenters will be able to view a list of attendees currently participating in a conference. All participants have the option of seeing this. In addition, E-mail addresses will be requested from the participants, allowing the presenter to send follow-up material.

4.5.1.3.17 Remote PC Control and Sharing [C.2.8.3.1.4 (19)]

[REDACTED] Authorized participants will also be able to access a conference participant's personal computer. Participants are notified when an authorized party is requesting remote access to their personal computer. The participant will be prompted to approve or reject the request before control of their desktop is granted.

4.5.1.3.18 Group Web Surfing [C.2.8.3.1.4 (20)]

Our service provides the capability for group Web surfing, allowing multiple participants to see what the presenter is doing.

4.5.1.3.19 File Transfer Support [C.2.8.3.1.4 (21)]

Participants will have the ability to transfer files while using the services provided by Level 3. Once a file is uploaded, conference participants will have the option to download it during the meeting or event. Files can be sent to all

participants or selected participants, and participants will have the option to accept or reject the file transfer.

4.5.1.3.20 Multiple Presenter Support [C.2.8.3.1.4 (22)]

Multiple presenters are allowed within a meeting or event. The presenters can be changed dynamically during the course of the meeting when necessary.

4.5.1.3.21 Polling and Voting Capability [C.2.8.3.1.4 (23), C.2.8.3.1.4 (24)]

Level 3's WCS provides polling and voting capabilities. Polls can be established before a Web conference. Presenters will have the capability to instantly view polling and voting results.

4.5.1.3.22 Meeting Privacy [C.2.8.3.1.4 (25)]

Conference leaders can lock a conference through the Web interface, preventing additional users from joining and participating.

4.5.1.3.23 Presentation Printing and Access [C.2.8.3.1.4 (26)]

Conference leaders have the capability to print or save to file the presentation used during the event. The conference leader can grant participants the same capabilities if desired.

4.5.1.3.24 Text Chat [C.2.8.3.1.4 (27)]

Text chat capabilities are supported as part of our WCS. Chat sessions can be made public, where the chat is visible to all conference participants, or kept private between select participants.

The system also signals when a participant has a question. Questions may be asked in a chat-like environment if allowed by the conference leader.

4.5.1.3.25 Participant Survey [C.2.8.3.1.4 (28)]

The Level 3 WCS has the ability to present a survey to all, or to a random percentage of participants. This can be used to gather feedback and/or capture customer satisfaction data. The survey can be established before the Web conference or afterwards. In addition, this survey data can be aggregated and displayed in either HTML format or as a Comma Separated Values (CSV) document for analysis in a spreadsheet application.

4.5.1.4 FEATURES [C.2.8.3.2]

Level 3 supports the following features through our WCS offering:

1. Streaming Audio

If requested, we will deliver one-way audio over the Internet during a WCS session. [REDACTED]

2. Streaming Video

If requested, we will deliver one-way video over the Internet during a WCS session. [REDACTED]

3. Web-based Presentation Replay

Web conferences and presentations can be recorded as a [REDACTED]

4.5.1.5 INTERFACES [RFP C.2.8.3.3]

There are no interface requirements for WCS, per Section C.2.8.3.3 of the Network RFP.

4.5.2 Required Performance Metrics [C.2.8.3.4]

Level 3 has tools, systems, and processes in place to ensure the performance metrics are met. Our WCS solution complies with the WCS Key Performance Indicators shown in Table 4.5-1.

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

4.5.1 Proposed Service Enhancements

Level 3 offers the Government a robust WCS solution compliant with the requirements for capabilities, features, and interfaces. As additional enhancements become commercially available, we will offer them to the Government.

4.5.4 Experience Delivering WCS

Level 3 [REDACTED] has been providing broadcast audio and video over the Internet since [REDACTED]. The firm's customer base includes more than [REDACTED] clients worldwide.

Offering best-of-breed services at competitive prices, [REDACTED] serves over [REDACTED] monthly for clients including [REDACTED] [REDACTED] [REDACTED] [REDACTED]

Level 3 offers Networkx User Agencies a dedicated, knowledgeable, and qualified Team to fulfill the Government's needs in a timely manner, and ensuring that Agency personnel and constituents experience optimum responsiveness.

4.5.5 Verification of Individual Services

Working closely with our team throughout the life of the contract, Level 3 will verify that individual services delivered function at acceptable and contractually established performance levels. At a minimum, they will meet the Government's KPIs and AQLs. Our procedures include [REDACTED]

[REDACTED]

[REDACTED] This ensures that our services are operating as required and that any out-of-bound performance ratios are corrected immediately.

4.5.6 Impact on Network Architecture

The requested WCS features being offered are currently supported and in commercial use. Delivery of these services will have no impact on the security, quality, reliability, or performance of the network other than would normally be expected for the volume of traffic. Level 3 will not deploy any additional services or infrastructure without thoroughly testing them in our laboratory environment. We will ensure that any additions to our systems do



not negatively impact our network architecture. Additional services must either have a zero impact or a positive impact on our infrastructure.

We will provide secure and universal connectivity to our [REDACTED] [REDACTED] via the Internet, allowing Agencies to connect and collaborate at any time from any place without requiring modifications to the network or security infrastructure. Further, we encrypt all presentation content using [REDACTED] delivering the high level of protection required for data communications. Session content is [REDACTED] [REDACTED] This reduces opportunities for invasion or theft of private data and information.

4.5.7 NS/EP Functional Requirements

Based on our understanding of NS/EP requirements, Level 3 has determined that they are not applicable to WCS as defined in Section C.5.2.2 of the Network RFP.

4.5.8 Assured Service in the National Capital Region

Section 2.5.3 of this Technical Volume discusses in detail how the network architecture will satisfy the requirements in RFP Section C.5.2.7 for all of Level 3's proposed services.

4.5.9 Section 508 Compliance

Level 3 will be fully compliant with the requirements in Sections C.6 of the Network RFP, which identify the technical provisions for Network services used by an Agency that must meet provisions of Section 508, Subparts B, C and D. Subpart B, Technical Standards, paragraph 1194.22, 'Web-based Intranet and Internet Information and Applications', Subpart B, Technical Standards, paragraph 1194.21, 'Software Applications and Operating

Systems', Subpart C, Functional Performance Criteria, paragraph 1194.31 and Subpart D, Information, Documentation and Support, paragraph 1194.41 apply to WCS. To satisfy these RFP requirements, Level 3 has included the applicable Voluntary Product Accessibility Templates (VPATs) for WCS in Section 2.5 of this Technical Volume.

4.5.10 Infrastructure Enhancements and Emerging Services

A detailed response to this requirement is provided in Section 3.4.11 of this Technical Volume.