

# Oracle® iMeeting

Implementation and Setup Guide

Release 11*i*

November 2001

Part No. A95117-01

Use this guide to install and setup Oracle iMeeting.

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Oracle iMeeting Implementation and Setup Guide, Release 11i

Part No. A95117-01

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## Glossary



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Oracle iMeeting Implementation and Setup Guide, Release 11i

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Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this document. Your input is an important part of the information used for revision.

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Redwood City, CA 94065  
USA

If you would like a reply, please give your name, address, telephone number, and (optionally) electronic mail address.

If you have problems with the software, please contact your local Oracle Support Services.



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# Preface

## Intended Audience

This guide is aimed at the following users:

- System Administrators responsible for installation and setup of iMeeting.
- Customer Service Representatives
- Implementation Engineers

## Related Documents

For additional information regarding the Oracle E-Business Suite, consult the following:

- *Installing Oracle Applications, Release 11i (11.5.5), Part No. A 90805-01.*
- *Upgrading Oracle Applications, Release 11i (11.5.5), Part No. A 90806-01.*
- *Oracle CRM Technology Foundation, Concepts and Procedure, Release 11i, Part No. A 95278-01*
- *Oracle CRM Technology Foundation, Implementation Guide, Release 11i, Part No. A90497-01*
- *Oracle Applications System Administrator's Guide*

## Conventions

The following table lists conventions that are used in this manual:

| Convention           | Meaning  |
|----------------------|--|
| .<br>.<br>.          | Vertical ellipsis points in an example mean that information not directly related to the example has been omitted.                                     |
| ...                  | Horizontal ellipsis points in statements or commands mean that parts of the statement or command not directly related to the example have been omitted |
| <b>boldface text</b> | Boldface type in text indicates a term defined in the text, the glossary, or in both locations.  |
| < >                  | Angle brackets enclose user-supplied names.  |
| [ ]                  | Brackets enclose optional clauses from which you can choose one or none.   |

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# Product Overview

## 1.1 Introduction

Oracle iMeeting facilitates real-time collaboration using the Corporate Intranet and the Public Internet. It uses the standard web browsers like Microsoft Internet Explorer to provide real-time online meetings. It does not require any prior software installation for meeting participants.

Oracle iMeeting is part of the E-Business Suite, it enables customers, employees, teams, and partners to collaborate online in real-time within the context provided by the content, commerce, and processes of the e-Business Suite.

Listed below are some of the many different ways iMeeting can be used:

Oracle iMeeting provides real-time collaboration for all aspects of an e-Business including:

- Sales – customer presentations and demos, group sales meetings, and collaborative input to online forms including collaboration and review with channel, product, and service partners
- Marketing – online seminars and marketing events with integrated support for interactive online polls with real-time capture of attendee responses
- E-Commerce – assisted or guided sales on web-store with interaction center agent or sales representative.
- Interaction Center – blended support for real-time web and telephony based communications.
- Support – assisted support with customer and agent able to synchronously browse support site or even customers HTML application, jointly provide input to online forms, and allowing agent to lead customer through to problem resolution.

- Exchanges – real-time online interactions for exchange members for group meetings, presentations, demos, requirements collaboration, etc.
- Professional Services – client and team collaboration including presentations, demos, web tours, requirements gathering, etc.

### 1.1.1 Functional Overview

Major functional components of Oracle iMeeting are:

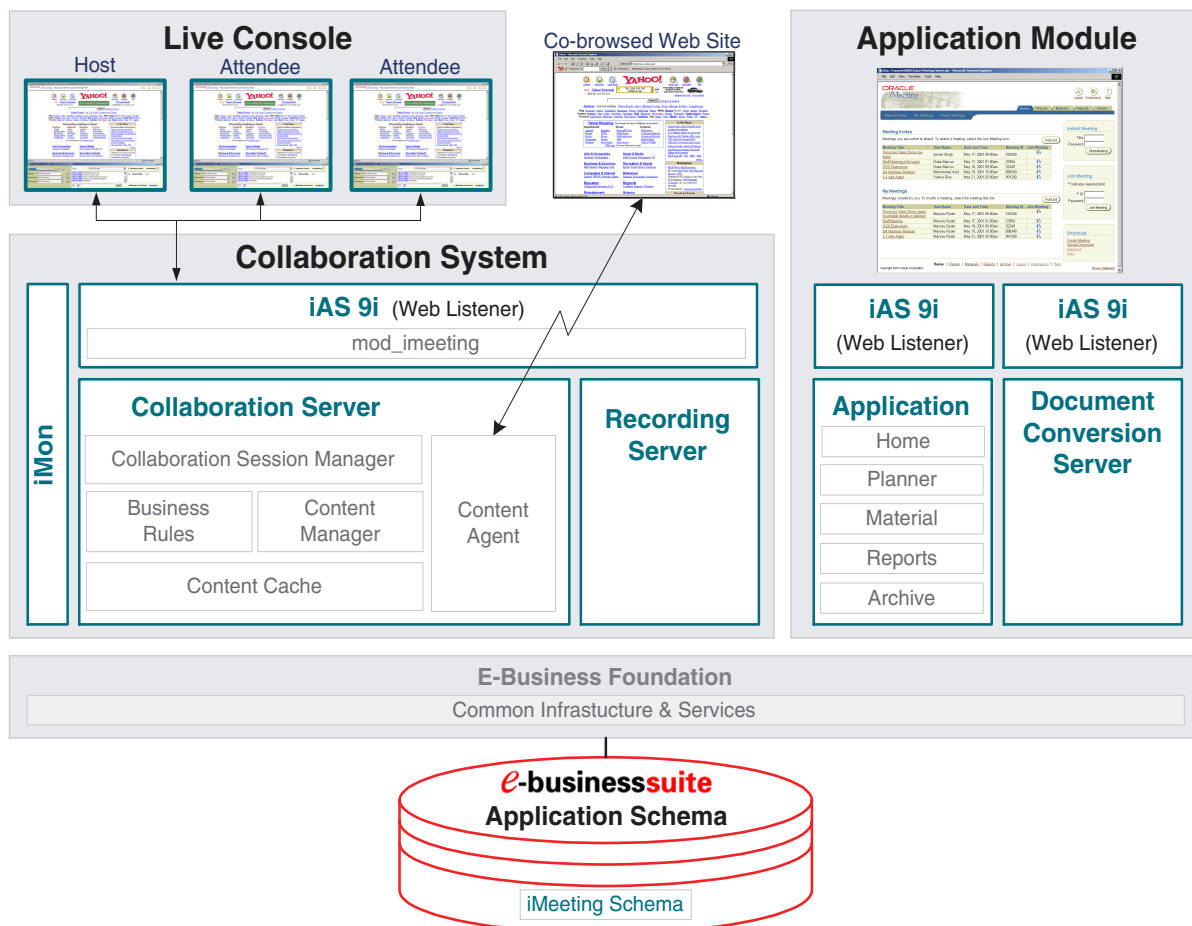
- **Live Console.** The Live Console facilitates real-time online collaboration among attendees.
- **Meeting Creation & Scheduling.** Using iMeeting Application Module you can create and schedule meetings and invite attendees and publish meeting material for the meeting.
- **Meeting Material Management.** Using iMeeting's material management capabilities, users have the ability to upload document, create bookmarks, compose canned chat messages for use during meetings.
- **Reporting and Meeting Archives.** iMeeting provides extensive reporting and archiving capabilities which allow meeting hosts to create meeting related reports as well as publish meeting proceedings.
- **Administration & Monitoring.** This functionality allows iMeeting system managers to monitor the system as well as manage and configure the system.

### 1.1.2 iMeeting Architecture

iMeeting is part of the Application-tier of the E-Business Suite. It consists of the following three software components:

- **Live Console,**
- **Collaboration System**
- **Application Module**

## Oracle iMeeting Architecture Overview



### 1.1.2.1 Live Console

In every iMeeting session, the Host and the Attendees collaborate in real-time using the Live Console. The Live Console is similar in concept to a telephone set we use today for audio conference. The Live Console uses multiple **Channels** of communication like Co-browsing, Chat and Polling, (Voice, Video and Windows Collaboration channels will be available in future releases).

The Live Console consists of the Browser and the **iMeeting Applets**. The applets are typically 40K to 200K and depend on the channels active in the meeting.

### 1.1.2.2 Collaboration System

The Collaboration System provides the real-time collaboration functionality. It conducts the meeting between the host and attendees using the Live Console and also records and replays the meetings.

The Collaboration System consists of:

- the **Collaboration Server**, which is the real-time engine for the Collaboration System. The Collaboration server conducts the meeting. It materializes the new content, transforms the content, if necessary (cobrowsing channel) and broadcasts the content to all the meeting participants. The Collaboration Server communicates over HTTP in real-time with all the meeting attendee Live Consoles using the Web Listener. It is a multi-threaded server designed to pallelly communicate with multiple attendees. One Collaboration Server can host one or more meetings.
- the **Web Listener** (standard E-Business Suite iAS configured with iMeeting's Apache module, **mod\_imeeting**). **mod\_imeeting** is used to provide the communication link between the Live Console and the Collaboration Server. The communication protocol is HTTP or HTTPS. There is one Web Listener for each Collaboration Server.
- the **Recording Server**, which provides the recording and archiving service for iMeeting. It records the meeting asynchronously. It does not affect the performance of the Collaboration Server. There is one Recording Server for each Collaboration Server.
- the **iMon** is the watchdog process for the Collaboration System. It monitors system health, it acts as a dispatcher and as a load balancer for the Collaboration System. There is only one iMon per machine.

For scalability and load balancing, there can be more than one instance of the Collaboration System on the same machine or multiple machines. When there are multiple Collaboration servers, the iMon decides where to host the next request for a meeting based on the current load of the Collaboration Servers.

### 1.1.2.3 Application Module

The Application Module consists of the HTML screens that provide the business logic for iMeeting. The Application Module handles authentication, authorization of

meeting attendees, management of meeting materials, meeting planning, document conversion and uploading, etc. It is well integrated with other E-Business Suite modules. It consists of:

- iMeeting Schema
- iMeeting JSP and HTML pages
- Conversion Server, which provides the service of converting any Microsoft Office document to HTML

## 1.2 Deployment Options

Depending on the requirements, iMeeting can be deployed in many ways. iMeeting is a customer facing application as well as an application required by internal users or employees of an organization. This application can be accessed by users of the system that are outside the firewall of an organization along with users that are inside the firewall.

During an iMeeting session, attendees from outside the firewall may want to share documents with attendees from inside the firewall. Since it is very difficult to provide a generic deployment recommendation, we will attempt to provide a few typical deployment scenarios. Actual deployment will depend on requirements at each site. Each deployment will also need to have its own user management and security architecture defined, which may have an impact on the way the system can be used.

The following table lists various iMeeting deployment options.

**Table 1–1 iMeeting Deployment Options**

| <b>Attendee Location</b> | <b>Host Location</b>  | <b>Content Location</b> | <b>iMeeting Location</b> |
|--------------------------|-----------------------|-------------------------|--------------------------|
| Intranet Only            | Intranet              | Intranet and Internet   | Intranet                 |
| Intranet and Internet    | Intranet and Internet | Intranet and Internet   | DMZ                      |
| Internet Only            | Internet              | Internet                | DMZ or Internet          |

### 1.2.1 Intranet Deployment

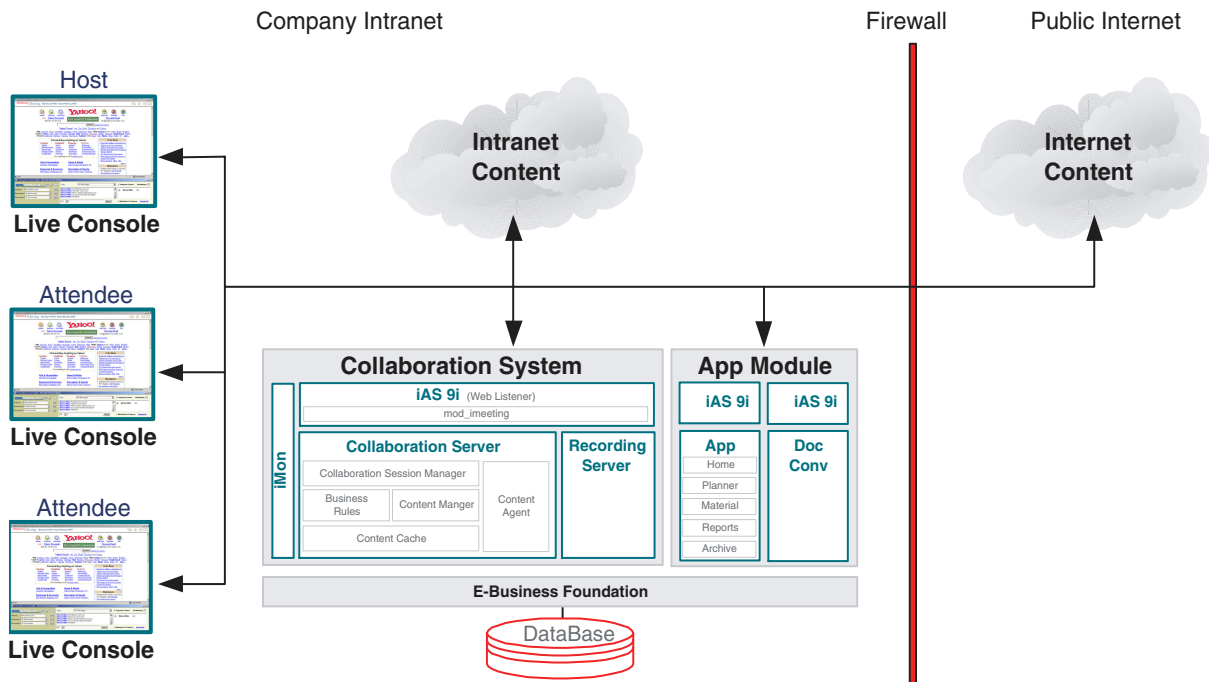
iMeeting system can be deployed completely within the Intranet of an enterprise. This is the most secure deployment but also the most restrictive. Only people within

the Intranet can create a meeting or participate in a meeting. No user from outside the Intranet can create or participate in any meeting hosted by this system. The only valid users of this system are employees of the enterprise who are within the firewall in the Intranet.

Many different user management schemes can be employed for this deployment. Self service registration may be enabled which will allow each user to register themselves and provide their particulars which are required by iMeeting. Manual approval may not be required in this model since everyone is trusted.

In a slightly different model, self service registration is provided, but the users are validated by going against a central database where employee records are maintained.

### Oracle iMeeting Intranet Deployment



## 1.2.2 Internet Deployment

This is the least restrictive deployment. However, this is also the most insecure deployment. In this deployment scenario, iMeeting system is deployed on machines that are outside any firewall. In this case anyone in the Internet can create a meeting and participate in a meeting and access any publicly accessible document during the meeting.

User management is a challenge here since it is very difficult to verify the identity of the user. The registration process has to be customized to include automated approval process.

## 1.2.3 DMZ Deployment (Intranet and Internet access)

This is the recommended deployment, if iMeeting system needs to support meetings where attendees from the Internet (outside the company firewall) as well as attendees from the Intranet (inside the company firewall) participate in the same iMeeting session.

### 1.2.3.1 Firewall & DMZ Configuration

In this deployment scenario, the iMeeting System is located in a DMZ while the database server and the Document Conversion server are located inside the firewall in the Intranet. The firewall is configured so that the iMeeting System can communicate with the database server using SQL\*Net (on a specified port) and the Document Conversion server using HTTP on a particular port (usually port 80).

### 1.2.3.2 Cobrowsing Intranet Sites

The firewall is also configured so that it allows specific HTTP traffic to certain ports from the iMeeting server. This allows specific sites with the Intranet to be co-browsed during an iMeeting session.

(The recommended method: configure the firewall to allow access to port 80 using HTTP protocol from iMeeting server. All web sites that need to be accessed during iMeeting should listen on port 80)

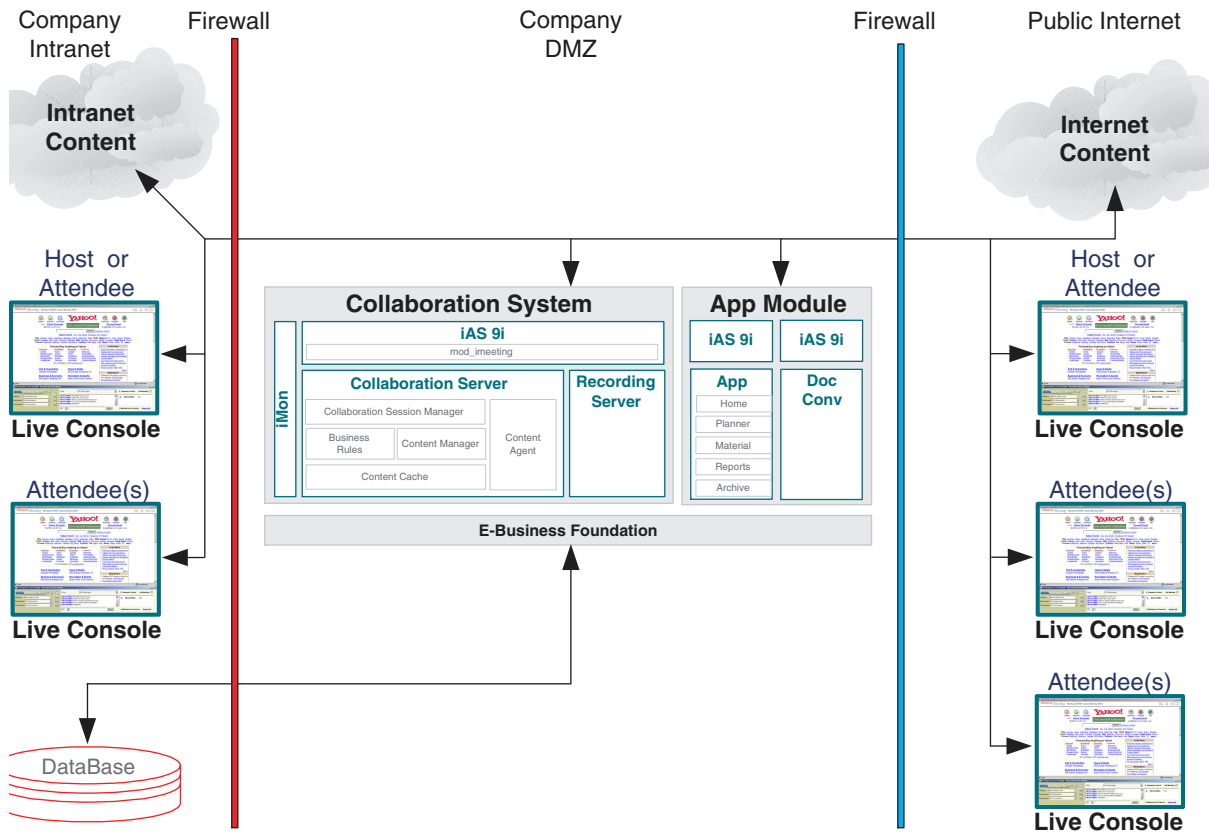
### 1.2.3.3 Security Issues

If iMeeting is deployed in the DMZ and the firewall is configured so that it allows the iMeeting system to access documents in the Intranet, then there are certain security issues that one must be aware of. During a meeting a document residing in the Intranet can be retrieved by the host (creator) of a meeting. So any user who has any of the iMeeting Roles gets automatic access to the Intranet sites. Hence only

those users who are trusted should be given iMeeting Roles when the firewall is configured to give iMeeting Server access to Intranet sites.

One way of achieving this is to let only Intranet users (employees) have the privilege of creating (hosting) meetings, while Internet users can simply attend these meetings if they are invited. They do not get meeting creation privilege. That way they do not get access to any Intranet site unless the host (who is a trusted user) accesses it for them.

### Oracle iMeeting DMZ Deployment



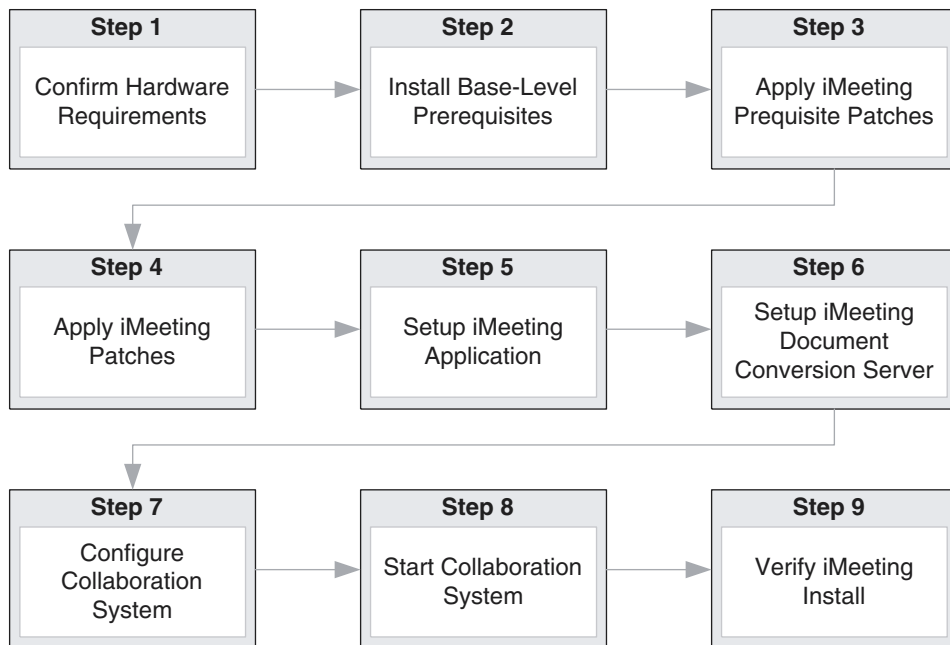
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# Getting Started

## 2.1 Installation Flow Chart

### Oracle iMeeting Installation Overview



A typical iMeeting install has to follow the steps outlined above. It is highly recommended that system administrators diligently follow the chart outlined here to have a quick and successful installation.

## 2.2 Hardware Requirements

The suggested hardware configuration for Oracle iMeeting is one or more mid-tier machines containing a Collaboration System and a high performance database server machine in the back end. In addition if document conversion service is required, then one or more NT or Windows 2000 server is recommended.

Oracle recommends the following machine requirements for Oracle iMeeting:

- E-Business Suite database server machine - high throughput at fast speed (CPU)
- Mid-tier machines hosting Web Listeners, iMeeting Collaboration System and Application modules
- One NT or Windows 2000 server for document conversion service (Conversion Server).
- One Forms Server for Administration (could be on the same mid-tier as the iMeeting System).

You can determine the actual sizing of the machines after completing capacity planning.

Specific hardware requirements depend on the particular installation that you perform. The hardware requirements listed in the following table are guidelines only, and assume a single-node environment. The following table lists guidelines for middle-tier machines.

**Table 2-1 Hardware Requirements for Middle-tier servers**

| Hardware   | Requirement                                  |
|------------|--|
| CPU        | 2 CPUs minimum, 4 or more highly recommended |
| Memory     | 1GB, 2GB or more highly recommended          |
| Disk Space | 22GB   |

**Table 2-2 Hardware Requirements for Conversion servers**

| Hardware | Requirement     |
|----------|-----------------|
| Platform | NT/Windows 2000 |

**Table 2–2 Hardware Requirements for Conversion servers**

| Hardware   | Requirement                                    |
|------------|--|
| CPU        | 2 CPUs minimum                                 |
| Memory     | 512 MB minimum, 1GB or more highly recommended |
| Disk Space | 40GB   |

The table above lists hardware requirements for Conversion servers.

## 2.3 Base-Level Software Prerequisites

The software requirements for iMeeting are listed in the following table

**Table 2–3 Software Requirements**

| Software                           | Requirement   |
|------------------------------------|---|
| Database                           | Oracle8i version 8.1.7 or higher  |
| Application-tier (base code level) | iAS 1.0.2.2,<br>E-Business Suite Version 11.5.4 (see ARU readme for specific pre requisite patches) |
| Conversion Server                  | Windows NT SP5, Office 2000 Standard edition, iAS 1.0.2.2   |

Please note that iMeeting System works only with Oracle 9i Applications Server (9iAS) 1.0.2.2 or higher. Upgrade instructions are found in the metalink Note Doc ID 146468.1

### 2.3.1 Checkpoint for Base-Level Prerequisites

If the pre-requisite software is installed correctly then, the following URL should display the jtflogin page in the E-Business Suite:

`http://<hostname>:<port number of iAS Apache>/OA_HTML/jtflogin.jsp`

and you should be able to login to the E-Business Suite using an existing account such as SYSADMIN.

## 2.4 Installing iMeeting System

iMeeting is a new application that is available as a standard part of Oracle E-Business Suite release 11.5.6. It is part of the Oracle E-Business Suite Rapid Install for 11.5.6. iMeeting is also available as a E-Business Suite ARU patch. Application of this patch will install iMeeting software components in your Oracle eBuisness Suite environment.

The iMeeting patch contains one or more driver files that can be applied with AutoPatch. For specific directions on applying this patch to an E-Business Suite environment please follow the instructions given in the README for this ARU.

Note Oracle iMeeting (IMT) is a new application. So before you apply this patch, please register and integrate Oracle iMeeting with your E-Business Suite by using the **adsplce** utility. The details for using this utility are available in Metalink Note Doc ID 76708.1

This specific patch will modify database and the Application tier (APPL\_TOP) or middle-tier.

For specific instructions on how to install Oracle Application products, please refer to *Installing Oracle Applications, Release 11i*.

### 2.4.1 Installing mod\_imeeting

iMeeting System requires an apache module called **mod\_imeeting** that works with Apache that is installed with iAS. This is available as a separate ARU (mod\_imeeting patch # 1898384). Please refer to the README of this ARU to get specific instructions on how to install this module.

## 2.5 Setting up the Application Module

In order to use Oracle iMeeting, an E-Business Suite user needs to have certain roles and responsibilities associated with that user account. These roles and responsibilities can be assigned to the user using Oracle Forms and the JTF's administration pages.

### 2.5.1 Setting up iMeeting Guest User Account (IMTGUEST)

iMeeting Application module requires an iMeeting guest user account to for its internal use. Without this account iMeeting will not work correctly.

Check if an user account called IMTGUEST already exists on the system. If it does not exist then create an user called IMTGUEST with password IMTGUEST.

Assign *iMeeting Guest User responsibility* and *iMeeting End User responsibility* to IMTGUEST using Oracle Forms. Make *iMeeting Guest User responsibility* the default responsibility for this account.

## 2.5.2 Setting up a Sysadmin Account (IMTSYSADMIN)

Create an iMeeting System Administrator account who will have access to all components of the system. This user account will be initially used to set up and configure the Collaboration System. Create an user (example IMTSYSADMIN) with the following responsibilities (use Oracle Forms):

- a. iMeeting System Configure Responsibility
- b. CRM Html Administration Responsibility

Make iMeeting System Configure Responsibility, the default responsibility.

Then assign that user the following Roles:

- a. JTF\_SYSTEM\_ADMIN\_ROLE
- b. JTF\_PROPERTY\_ADMIN
- c. IMT\_CONFIGURE\_USER\_ROLE

To assign Roles to an user, login as sysadmin/sysadmin using either the generic E-Business Login page or the iMeeting Login Page. Click on "Users" --> Users --> Enter Search Criteria -> Type the user name (example IMTSYSADMIN) and click on Go. Click on User details and then click on Roles. Assign the required roles to this user.

## 2.5.3 Checkpoint for Application Module Setup

After the setup is complete please do the following to see if the iMeeting system has been installed and configured correctly.

From a browser type in the following URL:

```
http://<imeeting hostname>:<port number>/OA_HTML/imtprelogin.jsp
```

where <imeeting hostname> is the hostname of the machine where iMeeting has been installed. <port number> is the port number of the Apache being used as the Web Listener (iAS Apache).

The iMeeting Login page should display correctly. If you login as IMTSYSADMIN, you should be able to see the following tabs in the Menu: Home, Planner, Material, Reports, Archive, Monitor and Configure.

## 2.5.4 Installing the Application Module Conversion Server

iMeeting Conversion server is part of the Application module and provides document conversion to HTML in the Application module.

Before installing any iMeeting Conversion server please make sure you have installed Oracle iMeeting on the middle-tier server (see [Section 2.4, "Installing iMeeting System"](#)).

After the iMeeting patch is successfully applied to the E-Business Suite environment in the middle tier, a directory called \$IMT\_TOP/windows is created. This directory contains all the files related to the conversion server. Please follow the instructions below to copy these files to the appropriate locations.

### 2.5.4.1 Pre-requisites

Before installing and configuring the Conversion Server please make sure that your machine has the following software installed.

- Microsoft Office 2000 Standard edition
- Oracle 9i Application Server (iAS) version 1.0.2.2

### 2.5.4.2 Setup Conversion Server

Perform the following steps to setup and configure the Conversion Server. For the purpose of this section it is assumed that iAS is installed in the following location in the NT/2000 server:

```
E:\Oracle\iAS
```

Shut down the iAS HTTP listener if it is running.

1. Add an alias in Apache configuration file <httpd.conf> in E:\Oracle\iAS\Apache\Apache\conf directory.

If this alias exists skip to Step 4.

```
Alias /OA_HTML/ "E:\Oracle\iAS\Apache\Apache\html/"
```

2. Create the html directory

Create a directory under iAS\Apache\Apache called **html**.

```
E:\Oracle\iAS\Apache\Apache\html
```

3. Create a directory for support files

Create a <lib> directory E:\Oracle\iMeetingConverter\lib on Conversion Server

Example,

```
E:\Oracle\iMeetingConverter\lib
```

4. Copy iMeeting conversion files from mid-tier machines to the Conversion server.

After iMeeting is installed in the mid-tier machine, several files required for Conversion Server are stored in a directory called \$IMT\_TOP/windows on that machine. Some of these files need to be copied to the appropriate directories in the Conversion server.

5. Copy **imtconv.jsp** into the html directory created under Apache in Step 2.
6. Copy the apps.zip file in \$JAVA\_TOP/apps.zip to the <lib> directory created in Step 3.
7. Copy imt\_add\_converter.cmd and imt\_populate\_converter.cmd to the <lib> directory 3
8. Unzip the IMTConv.zip file in \$IMT\_TOP/windows directory. Then copy IMTConv.dll to the <lib> directory.
9. Copy the configured **DBC** file from \$FND\_TOP/secure directory into the <lib> directory. Note the correct dbc file name is specific for that installation and depends on the database that the mid-tier machines is connecting to.

```
$FND_TOP/secure/<myhost_mysid>.dbc
```

10. Configure JServ

Add the following parameters to the iAS JServ configuration file <jserv.properties> on the Conversion Server:

```
wrapper.bin.parameters=-DJTFDBCFILE=<Fully qualified DBC file name>
wrapper.classpath=<lib>\apps.zip
```

Example,

```
wrapper.bin.parameters=-DJTFDBCFILE=E:\Oracle\iMeetingConverter\lib\<myhost_
mysid>.dbc
wrapper.classpath=E:\Oracle\iMeeting\lib\apps.zip
```

Locate the jdbc classes12.zip file under iAS and add the following parameter.

```
wrapper.classpath=<location of jdbc class12.zip file in iAS>
```

Example,

```
wrapper.classpath=E:\Oracle\iAS\jdbc\lib\classes12.zip
```

Modify parameter wrapper.env to add <lib> directory to the path

```
wrapper.env=PATH=E:\Oracle\iAS\bin;<lib>
```

Example,

```
wrapper.env=PATH=E:\Oracle\iAS\bin;E:\Oracle\iMeeting\lib
```

## 11. Register the Conversion Server with iMeeting

Open the file <lib>\imt\_add\_converter.cmd for editing. Enter the appropriate information and run the script.

```
E:\Oracle\iMeetingConverter\lib\imt_add_converter.cmd
```

This process registers the conversion server with the iMeeting system so that it knows where to direct all conversion requests.

## 2.5.5 Checkpoint for Conversion Server Installation

Use any browser and go to the following URL to check if the conversion server is setup correctly.

```
http://<conversion server hostname>:<conversion server port number>/OA_HTML/imtconv.jsp?ping=true.
```

If you get a response like

```
Oracle iMeeting document converter is alive. [Wednesday, October 10, 2001 11:42:22] ...
```

your Conversion Server is setup correctly.

## 2.6 Configuring Collaboration System

At this point it is assumed that the user has successfully applied the iMeeting patch so that all global environment variables like \$APPL\_TOP and \$COMMON\_TOP are set correctly. For this section, it is assumed that the following environment variables are already defined.

\$APPL\_TOP: E-Business Suite installation directory.

`$COMMON_TOP`: The common location where all E-Business Suite related html, java and admin files are hosted. It may be same as `$APPL_TOP`.

## 2.6.1 Setting up the Environment

In order for the Collaboration System to work properly, all iMeeting System parameters like port numbers for various servers, dbc files name, pathnames to various components need to be specified. These parameters are specified using environment variables in a file called **imt\_setenv.sh**.

1. Go to `$IMT_TOP/admin/scripts`
2. Edit the file **imt\_setenv.sh** to enter the following information about the environment where iMeeting will be running:

```
#####
# Global environment variables.
#####

IMT_APACHE_HOME=<full path of directory where IAS is installed>
IMT_JDK_HOME=<full path of directory where Java is installed>
                (Minimum supported JDK version is 1.2.2P as required by JTT)
IMT_COMMON_TOP=$COMMON_TOP
IMT_APPL_TOP=$APPL_TOP
IMT_DBC_FILENAME=<mydbcfile>.dbc
IMT_LOG_DIR=$APPL_TOP/imt/11.5.0/admin/logs

#####
# Machine Parameters
#####

# Platform of the machine on which iMeeting system is deployed
# Valid values: unix, NT
IMT_INS_PLATFORM=unix

# Hostname of the machine.
IMT_INS_HOSTNAME=<server hostname>

# Port on which the monitoring/admin process (iMon) needs to be started.
# Enter any available listening port on the machine.
IMT_INS_IMON_PORT=8009

#####
# iMeeting Default Instance Parameters
```

```
#####  
  
# Port on which Apache needs to be run  
# Specified in httpd.conf  
IMT_INS_APACHE_PORT=8004  
  
# Secure port for Apache to listen on.  
# Fill in the value if you want to setup SSL for Apache.  
IMT_INS_APACHE_SECURE_PORT=8005  
  
# Port on which jserv is set to listen  
# Specified in jserv.conf, jserv.properties  
IMT_INS_JSERV_PORT=8006  
  
# Port on which Collaboration Server will listen.  
# This should match the entry in httpd.conf for IMEETING_PORT directive.  
  
# Set it to any available port on the machine.  
IMT_INS_COLLAB_SRV_PORT=8007  
  
# Port on which iMeeting Recorder will listen.  
# Set it to any available port on the machine.  
IMT_INS_RECORDER_PORT=8008  
  
#####  
# SITE Specific Parameters  
#####  
# SMTP host: Mail server through which iMeeting can send emails.  
IMT_INS_SMTPHOST=<smtp host name>  
  
### Proxy Settings: This settings are similar to the ones that are set  
### in a web-browser.  
  
# Proxy host: Proxy server used to access the internet.  
IMT_INS_PROXY_HOST=<proxy hostname>  
  
# Secure proxy port: Port for the above secure proxy host.  
IMT_INS_SECURE_PROXY_PORT=80  
  
# Domains for which proxy host should be bypassed.  
IMT_INS_BYPASS_DOMAINS=<list of domains to bypass, separated by commas>  
  
#####
```

3. Execute the shell script to define all the environment variables.

```
$IMT_TOP/admin/scripts/imt_setenv.sh
```

## 2.6.2 Configuring Apache

iMeeting software comes with an apache module called **mod\_imeeting**. To configure Apache to integrate with **mod\_imeeting** please do the following (Note these instructions are already part of the README that is included in mod\_imeeting ARU). Also note that you should shutdown Apache before making any of these changes.

1. Open the file <\$IAS\_HOME>/Apache/Apache/conf/**httpd.conf** for editing.
2. Append the contents of <\$IAS\_HOME>/Apache/modimeeting/mod\_imeeting.conf to httpd.conf.
3. Add the following two lines at the end:

```
IMEETING_SERVER <hostname>
IMEETING_PORT <collab server port>
```

The IMEETING\_SERVER is the hostname of the middle-tier machine where iMeeting is being deployed. The <hostname> specified here should match the entry specified for IMT\_INS\_HOSTNAME in **imt\_setenv.sh**. The IMEETING\_PORT is the port number of the default Collaboration Server. The <collab server port> specified here should match the entry specified for IMT\_INS\_COLLAB\_SRV\_PORT in **imt\_setenv.sh**.

Please note that if iAS Apache has been configured correctly (standard E-Business Suite login should work using this Apache) to work with E-Business Suite, it should have the following lines in the <IfModule mod\_alias.c> section of the httpd.conf:

```
Alias /OA_HTML/ "<$APPL_TOP>/html/"
Alias /OA_MEDIA/ "<$APPL_TOP>/java/oracle/apps/media/"
```

Without this entry E-Business Suite web pages will not work properly with this Apache.

## 2.6.3 Configuring JServ

1. Open the file <\$IMT\_TOP>/admin/scripts/**imtserv.properties** for editing. Edit the following entries according your installation:

```
IMT_SRV_APACHE_HOST=<hostname of server where iAS is installed>
```

```
IMT_SRV_APACHE_PORT=<iAS apache port number>
IMT_SRV_APACHE_SSL_PORT=<iAS apache's SSL port number>
(This entry is optional)

IMT_APP_TRACE_FILE=<${IAS_HOME}/Apache/Apache/logs/imtApp.log
DOCUMENT_TEMP_PATH=<${IMT_TOP}/admin/logs/temp
(The owner of the httpd processes should have write permission to this
directory)

IMT_APP_IMAGEPATH=<${APPL_TOP}/java/oracle/apps/media/
(This should match the /OA_MEDIA/ alias in the httpd.conf file.)

TRUSTDBFILE=<${IAS_HOME}/Apache/Apache/conf/ssl.crt/ca-bundle.crt
```

2. Open <\${IAS\_HOME}/Apache/Jserv/etc/**jserv.properties** for editing.
3. Insert the following lines:

```
wrapper.bin.parameters=-DIMT_COM_PROPERTY_FILE=<${IMT_
TOP}/admin/scripts/imtjserv.properties
```

Please note that if iAS Apache has been configured correctly to work with E-Business Suite, it should have the following lines in `jserv.properties` file:

```
wrapper.bin.parameters=-DJTFDBCFILE=<${APPL_TOP}/fnd/11.5.0/secure/<dbcfilename>
wrapper.bin.parameters=-Dservice.Logging.common.filename=<logdir>/common.log
wrapper.bin.parameters=-Dframework.Logging.system.filename=<logdir>/fwsys.log
wrapper.classpath=<${APPL_TOP}/java/apps.zip
```

*(Make sure that apps.zip is defined before any other classes in the classpath.)*

### 2.6.4 Starting the Collaboration System

1. Start the iAS Apache using your startup script. Usually it is

```
<${IAS_HOME}/Apache/Apache/bin/apachectl start
```

2. Invoke the following command:

```
${IMT_TOP}/admin/scripts/imt_start_system.sh
```

This will start the Collaboration System consisting of Web Listener (iAS Apache), iMon, Collaboration Server, and Recording Server.

To stop the Collaboration server invoke the following command:

```
$IMT_TOP/admin/scripts/imt_stop_system.sh
```

## 2.6.5 Checkpoint for Collaboration Server Configuration

Login as IMTSYSADMIN (or any user that has the iMeeting Configure Responsibilities and Roles assigned to it).

Go the following URL:

```
http://<hostname>:<port number>/OA_HTML/imt_test_configuration.jsp
```

This performs basic configuration testing and verifies that core functionality is available.

Click on the Instant Meeting Button under the Home Tab. This should start an Instant meeting with the IMTSYSADMIN as the host. The Live Console should come up and say "The Meeting is in Progress" in the lower righthand corner of the control window.

At this point the iMeeting System is installed and configured correctly!

To do a complete validation of the installation, please follow the checklist provided in the next section.

## 2.7 Verification of iMeeting Install

The following table lists some tests you can conduct to verify your iMeeting installation.

| Test # | Description             | Path and Action   | Expected Results   | Pass? | Comments |
|--------|-------------------------|---|--|-------|----------|
| imt1   | iMeeting Login Page     | Type the iMeeting Login page URL from a browser.  | The Login Page should display correctly, with a list of all public meetings (if any)   |       |          |
| imt2   | Logging into iMeeting   | Log into iMeeting using a user account that has the iMeeting End User responsibility                      | Page loads properly. All 5 tabs displayed: "Home, Planner, Materials, Reports, Archive"  |       |          |
| imt3   | Document Upload         | Using upload document function, upload 3 types of documents. Convert them to HTML using the convert link. | Documents uploaded successfully. All 3 types of documents converted to HTML successfully. Able to view the documents by clicking on the documents. |       |          |
| imt4   | Create Instant Meeting. | Enter Title and Password. Click Start Meeting.  | iMeeting Live Console starts up. All of the tools and choices displayed correctly.   |       |          |

| Test # | Description  | Path and Action   | Expected Results  | Pass? | Comments |
|--------|--|---|---|-------|----------|
| imt5   | Cobrowsing Intranet, Internet and Secure web sites | In the Live Console enter a URL (s) in the Intranet, Internet and location using secure connections.<br><br>Example, try the following links:<br>http://www.yahoo.com<br>,<br>http://<some intranet site><br>http://www.amazon.com<br>and add item to the shopping cart | All 3 web pages displayed correctly.  |       |          |
| imt6   | Chat & Polling                                     | Log into iMeeting from a different PC (browser) as an attendee. As a Host, send a message to the attendee. Create a poll to see if he can see the results.  | A message is displayed in the Message box.<br><br>Reply received from a participant.<br><br>Polling information displayed in the Poll window. |       |          |
| imt7   | Viewing uploaded documents                         | From the Live Console select one of the documents uploaded earlier.<br><br>Select .DOC, .XLS then .PPT file   | All the documents should be displayed correctly   |       |          |
| imt8   | Meeting Scheduling                                 | Schedule a meeting with multiple attendees. Check if Email invite is sent to each attendee with information of this meeting.  | Conference has been scheduled successfully. Email invites sent and received by attendees.   |       |          |

| Test # | Description                         | Path and Action   | Expected Results   | Pass? | Comments |
|--------|-------------------------------------|---|--|-------|----------|
| imt9   | Annotation in Live Console          | Highlight a part of a text using Highlighter. Mark a text using Marker.<br><br>(Note you can highlighting and Marker are turned off by default.)                  | Selected text becomes highlighted. Able to "stick" a marker at the desired location on the document.                           |       |          |
| imt10  | Control Passing                     | Give an attendee permission to control the meeting. Remove permission to control the meeting form a attendee.   | Attendee can take over the control. Checking the functions from the attendee's end. Control finally removed from the attendee. |       |          |
| imt11  | Monitor and Configure Functionality | Login as a user with iMeeting Configure responsibility and switch to iMeeting Configure responsibility.<br><br>Click on Configure tab and the Monitor Tab in turn | Pages load properly. Both the graph and the detailed information is displayed properly.  |       |          |
| imt12  | Exiting the meeting.                | Close the meeting using the Exit Meeting button in the Live Console and check Reports   | iMeeting is closed. Report displays meeting's information correctly.   |       |          |

---

---

## Advanced Configuration

### 3.1 Creating iMeeting Users: Responsibilities and Roles

iMeeting ships with four Responsibilities and three Roles. When you create a new user who wants to use iMeeting assign the appropriate Responsibilities and Roles to that user as specified in the following section.

#### Responsibilities

1. iMeeting End User responsibility
2. iMeeting System Monitor responsibility
3. iMeeting System Configure responsibility
4. iMeeting Guest User responsibility

#### Roles

1. IMT\_REGISTERED\_USER\_ROLE
2. IMT\_MONITOR\_USER\_ROLE.
3. IMT\_CONFIGURE\_USER\_ROLE

**iMeeting End User responsibility** is the normal responsibility that should be assigned to any regular user of iMeeting. Users having this responsibility will see regular iMeeting Tabs like Home, Planner, Materials, Reports, Archive.

In order to have access permissions to these pages, the user also needs to be assigned the IMT\_REGISTERED\_USER\_ROLE.

**iMeeting System Monitor responsibility** provides access to the Monitoring tab in addition to all the tabs accessible to a user with End User responsibility. This tab provides functionality to monitor the iMeeting System.

In order to have access permissions to these pages, the user also needs to be assigned the `MT_MONITOR_USER_ROLE`.

**iMeeting System Configure responsibility** provides access to the Configure tab in addition to all the tabs accessible to a user with Monitoring responsibility. The Configure tab provides access to functionality that allows an administrator to configure and administer the iMeeting system.

In order to have access permissions to these pages, the user also needs to be assigned the `IMT_CONFIGURE_USER_ROLE`.

**iMeeting Guest User responsibility** is a special responsibility that is used for iMeeting's internal use. It should not be assigned to any user. It does not have any role associated with it.

After you create a new user to use iMeeting (using any of the mechanisms in E-Business Suite), use the standard E-Business Suite mechanisms to assign the user the correct Responsibility and Role.

## 3.2 Cobrowsing SSL Websites using iMeeting

iMeeting can be used to cobrowse SSL web sites. No additional iMeeting configuration is necessary if the web sites have web server certificates from the following Certificate Authorities: RSA, GTE CyberTrust, Baltimore Technologies and Entrust.

The above set is not comprehensive and it is possible you may want to cobrowse a web site deploying a certificate from a Certificate Authority not included in the default set. In such a event you will get an error message in the Live Console such as:

```
IMT_SRV_CM_SSL_HANDSHAKE_FAILED.  
The certificate submitted by the site has either expired or is not trusted  
by the iMeeting server. Please request your iMeeting server administrator to  
update the  
Trusted Signer Certificates Database with the certificate for the site you  
are visiting.  
[https://www.securewebsite.com/uri/]  
...
```

If you get the above error you need to add additional Trusted Root Certificate Authority certificates to iMeeting Server as described below.

### 3.2.1 Adding 'Trusted Root Certificate Authority' Certificates

SSL communications involves among other things digital certificates. Certificates are issued by a third party, called a Certificate Authority (CA). When you use your browser to visit a SSL secured website, your browser validates that the website is who it claims to be by verifying the website's certificate. Your browser has a set of Trusted Root Certificate Authority Certificates it comes bundled with and uses it to validate any certificate presented by the websites. Also, occasionally your browser will prompt on whether you want to proceed and also optionally install a certificate when a website presents a new certificate signed by a CA.

iMeeting Server which browses websites on behalf of the meeting attendees', comes bundled with a default set of Trusted Root Certificate Authority certificates. When an attendee co-browses a website deploying a certificate from a CA vendor not included in the default set, you need to add the Trusted Root Certificate to the Collaboration Server configuration. Please follow the steps outlined below to do this.

You will need to use Internet Explorer 5.0 or later version to install the CA root certificate into the browser and export it as a Base64 encoded X.509 (.CER) file. (Unfortunately, you can not use Netscape because it does not allow the export of the root certificates to a file).

1. From a Internet Explorer browser (not using iMeeting) go to the SSL secured website which gave an error through iMeeting.
2. Access secured areas of the website using your browser till you see the yellow lock in your browser status bar at the bottom.
3. Click on the yellow lock and then on the 'Certification Path' tab in the pop-up window.
4. Select all the certificates one by one from the certificate chain. Click on the 'General' tab to read the description of the certificate. It will contain the name of the issuer, its validity period, etc.
5. If you are comfortable trusting the issuer (CA) then click on the 'Details' tab.
6. Click on the 'Copy To File' button and the 'Next' button on the following screen.
7. On the subsequent screen choose the format you want to export in as 'Base64 encoded X.509 (.CER)' and click on the 'Next' button.
8. Enter a filename for the certificate to be stored into. e.g. cavendor.cer and save the CA certificate. Repeat the steps 4. to 8. for all the certificates in the chain.

9. Append the one or more files saved in step 8. to the certdb.txt file specified by the iMeeting server property TRUSTDBFILE. Each of the files saved in step 8. will contain a certificate in the format:

```
-----BEGIN CERTIFICATE-----  
MIICYzCCAdACEAuZ4ibKgW0066lustIp2TowDQYJKoZIhvcNAQEEBQAwXzELMAkG  
A1UEBhMCVVMxIDAeBgNVBAoTF1JTSBEYXRhIFNlY3VyaXR5LCBJbmMuMS4wLAYD  
VQQLeyVTZWN1cmUgU2VydmVyIENlcnRpZmljYXRpb24gQXV0aG9yaXR5MBA4XDTAw  
...  
-----END CERTIFICATE-----
```

### 3.3 Enabling Secure Meetings

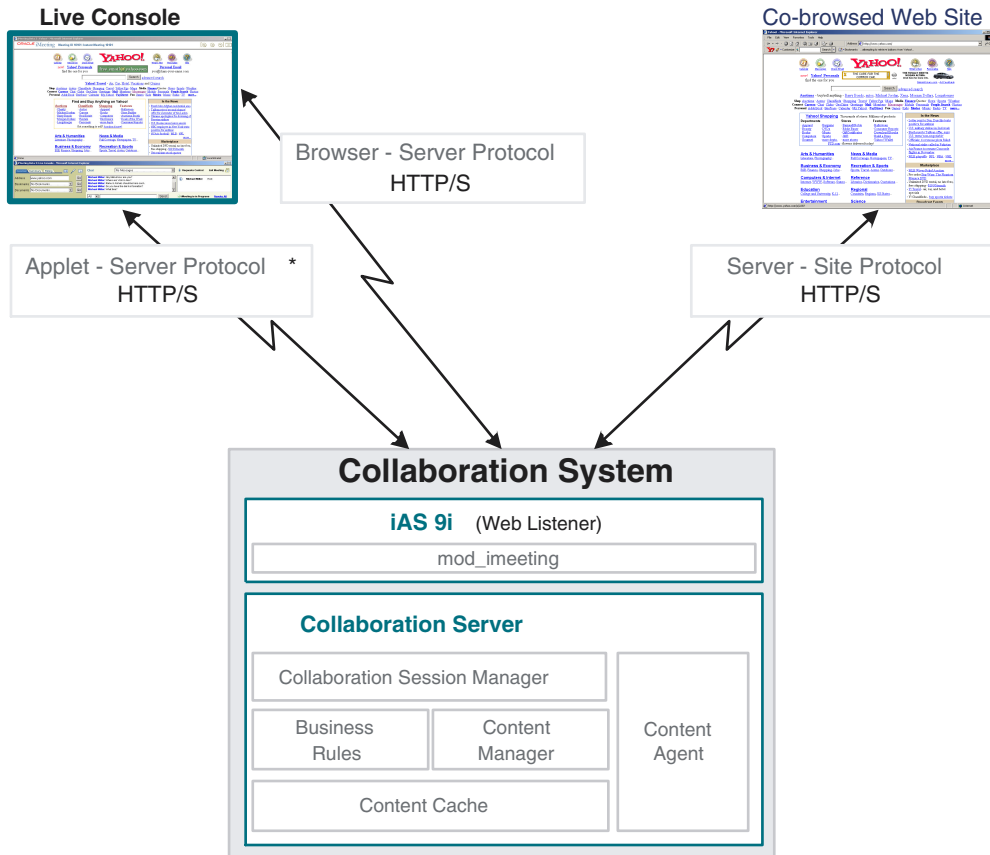
There are multiple communication links in the iMeeting system as illustrated in the figure below.

- Live Console Applet to Collaboration Server
- Live Console Browser to Collaboration Server
- Collaboration Server to Co-Browsed Website

To ensure all communication (both data and control information) during an iMeeting session is totally secure, all the above communication links (especially the Live Console to Collaboration Server part) should be secure.

To enable SSL communication between the Live Console and the Collaboration Server please follow the steps outlined below:

## Oracle iMeeting Secure Communications



\* Applet - Server Protocol for Netscape browser is 3DES encryption rather than HTTPS

### 3.3.1 Enable SSL for the Web Listener

Please refer to the Oracle 9i Application Server Installation Guide for specific information. The Oracle 9i Application Server documentation for various platforms can be found at <http://otn.oracle.com/docs/products/ias/content.html>

For Solaris platform, refer to Oracle9i Application Server Installation Guide, Release 1 (v1.0.2.2.1) for Sun SPARC Solaris (Part Number A92196-01), *Appendix D Enabling SSL for Oracle HTTP Server*

### 3.3.2 Configure iMeeting Server to have Secure Meetings.

Set the following properties for the iMeeting Server to **secured** and **HTTPS** respectively.

The following table lists the properties you must set to enable secure communication.

**Table 3-1 iMeeting Properties for Enabling Secure communication**

| PROPERTY_NAME                | VALUE               | Description  |
|------------------------------|---------------------|--|
| IMT_COM_PAGE_SECURITY_POLICY | unsecured (default) | No secure protocol is used to communicate with the Collaboration Server. |
|                              | secured             | Secure protocol is used to communicate with the Collaboration Server.    |
| APPLET_TO_SERVER_PROTOCOL    | HTTP (default)      | HTTP protocol used for applet to iMeeting server communication           |
|                              | HTTPS               | HTTPS protocol used for applet to iMeeting server communication          |

## 3.4 Tracing and Logging in iMeeting

iMeeting system stores all the logs corresponding to the iMeeting system in \$IMT\_TOP/admin/logs directory. One directory is created for each of the servers running in the iMeeting system, viz., Web Listener (Apache), Collaboration Server, Recording Server. (Note: Logs for the Apache of the Master instance is created in the logs directory defined in httpd.conf, and iMeeting system doesn't affect those logs) For e.g., if Collaboration Server is running on port 8000, there will a directory named 8000 under \$IMT\_TOP/admin/logs. These server-specific directory contain all the configuration files used to start the system, and a logs directory which contains the logs corresponding to the server. When a server is shutdown, the directory corresponding to that server is moved to oldLogs directory within \$IMT\_TOP/admin/logs directory, and the directory name is appended with a timestamp. For, e.g., if the Collaboration Server running on port 8000 is shutdown, directory 8000 will be renamed as 8000\_1003262267 (timestamp number) and will be moved to the oldLogs directory.

### 3.4.1 iMeeting Application Logs

Apache's logs directory contains its standard logs (`error_log`, `access_log`, `httpd.pid`, and `jserv.log`), and iMeeting Application specific log **imtApp.log** specified as an iMeeting-specific property `IMT_APP_TRACE_FILE`, defined in `imtserv.properties`. The level of this logging is determined by `IMT_APP_TRACE_LEVEL` described in the tracing levels.

### 3.4.2 Collaboration Server Logs

Collaboration Server logs directory contains 3 log files: `imtCollab.out`, `imtCollab.trace`, and `imtCollab.pid`. Any output from the Collaboration Server is directed to `imtCollab.out`. `imtCollab.trace` contains all the logging and tracing information from Collaboration Server. The level of this logging is determined by `IMT_SRV_TRACE_LEVEL` described in the tracing levels. `imtCollab.pid` contains the pid of the process corresponding to the Collaboration Server.

### 3.4.3 Recording Server Logs

Recording Server logs directory contains 2 log files: `imtRecorder.out` and `imtRecorder.pid`. Any output from the Recording Server is directed to `imtRecorder.out` whereas the pid of the process corresponding to the Recording Server is stored in `imtRecorder.pid`.

### 3.4.4 iMon (iMeeting Monitor) Logs

iMon stores its logs in `$IMT_TOP/admin/logs`. It maintains 2 logs: `imtImon.out` and `imtImon.trace`. Any output from the iMon is directed to `imtImon.out`. `imtImon.trace` contains all the logging and tracing information from the iMon. The level of this logging is determined by `IMT_SYS_TRACE_LEVEL` described in the tracing levels.

The following table lists iMeeting properties for configuring the tracing level.

**Table 3–2 iMeeting Properties for Configuring the Tracing Level**

| PROPERTY_NAME       | VALUE          | Description  |
|---------------------|----------------|--|
| IMT_APP_TRACE_LEVEL | NONE           | Disable all tracing output for the Application Module.                                       |
|                     | FATAL          | Write only fatal messages to the Application Module trace file                               |
|                     | ERROR          | Write fatal and non-fatal error messages to the Application Module trace file.               |
|                     | WARN (default) | Write all error messages and warnings to the Application Module trace file.                  |
|                     | INFO           | Write all error, warning, and informational messages to the Application Module trace file.   |
|                     | DEBUG          | Write extensive debugging messages to the Application Module trace file.                     |
| IMT_SRV_TRACE_LEVEL | NONE           | Disable all tracing output for the Collaboration Server.                                     |
|                     | FATAL          | Write only fatal messages to the Collaboration Server trace file.                            |
|                     | ERROR          | Write fatal and non-fatal error messages to the Collaboration Server trace file.             |
|                     | WARN (default) | Write all error messages and warnings to the Collaboration Server trace file.                |
|                     | INFO           | Write all error, warning, and informational messages to the Collaboration Server trace file. |
|                     | DEBUG          | Write extensive debugging messages to the Collaboration Server trace file.                   |
| IMT_SYS_TRACE_LEVEL | NONE           | Disable all tracing output for the iMon.   |
|                     | FATAL          | Write only fatal messages to the iMon trace file.  |
|                     | ERROR          | Write fatal and non-fatal error messages to the iMon trace file.                             |
|                     | WARN (default) | Write all error messages and warnings to the iMon trace file.                                |

**Table 3–2 iMeeting Properties for Configuring the Tracing Level**

| PROPERTY_NAME | VALUE | Description  |
|---------------|-------|--|
|               | INFO  | Write all error, warning, and informational messages to the iMon trace file. |
|               | DEBUG | Write extensive debugging messages to the iMon trace file.                   |

## 3.5 Collaboration Server Proxy Setting

The Collaboration Server can retrieve web pages directly or via an HTTP/S proxy server. This allows the server to retrieve pages both inside and outside firewalls. Proxy settings are configured based on the settings in the environment file discussed in [Section 2.6.1, "Setting up the Environment"](#).

## 3.6 Configuring Document Upload Functionality

There are a few properties available for fine tune the default behavior of the iMeeting Document Management functionality. They are listed in the following table:

**Table 3–3 iMeeting Properties for Configuring Document Upload Functionality**

| PROPERTY_NAME                    | VALUE    | Description  |
|----------------------------------|----------|--|
| DOCUMENT_UPLOAD_DEFAULT_QUOTA    | <number> | Specifies per-user quota in bytes for document uploading. The default is 40MB.   |
| DOCUMENT_UPLOAD_TEMP_MAXKEEPTIME | <number> | Specifies how long (in hours) the temporary document files can be kept on file-system. This value affects how much disk space will be eaten up (on average) to store temporary document files. The default is 720 hours. |

## 3.7 Office XP Support for Document Conversion Server

The default Document Conversion Server for iMeeting is based on Microsoft Office2000. iMeeting can also be configured to support Microsoft Office XP. iMeeting ships with two DLLs

- IMTConv.dll for Office2000, and
- IMTConvX.dll for OfficeXP.

iMeeting is configured to use IMTConv.dll by default which supports Office2000. If you want to use OfficeXP for conversion, you need to rename IMTConvX.dll to IMTConv.dll (Make a copy of the original IMTConv.dll and rename it IMTConv2000.dll).

### 3.7.1 Additional Prerequisite

To use the OfficeXP version of the conversion DLL the following is a prerequisite:  
Windows NT Service Pack 6a (or later) or Window 2000.

### 3.7.2 Security Issues Addressed by OfficeXP

When user's documents are converted on NT, small programs called Macros inside user's documents may be invoked to yield undesired effects. To prevent such macros (including Virus Melissa) from running, we need to adjust Office security level to HIGH.

However, older Office versions can only run at LOW security level when started from another program. Microsoft addressed this issue by adding new APIs into its latest OfficeXP, but not previous versions such as Office2000.

Using iMeeting Conversion Server with OfficeXP solves this Macro security issue. It also enables user to convert documents that are created in the latest Office formats.

## 3.8 Deregistering Document Conversion Server

Currently, we do not have an automatic way to deregister a Document Conversion Server once it is registered with iMeeting using the mechanism described in [Section 2.5.4.2, "Setup Conversion Server"](#). Normally, this is not a problem since iMeeting only uses Conversion Servers that are currently available.

However, if you want to manually deregister a Conversion Server that you have registered earlier, you can directly connect to the E-Business Suite database and execute the following SQL commands:

```
DELETE FROM IMT_CONF_INSTANCES
WHERE INSTANCE_ID IN
  (SELECT INSTANCE_ID FROM IMT_CONF_SERVERS
   WHERE HOSTNAME='<hostname>' AND SERVER_PORT=<port>
  );
DELETE FROM IMT_CONF_SERVERS
WHERE HOSTNAME='<hostname>' AND SERVER_PORT=<port>;
```

---

---

# Customization

iMeeting allows various customizations of the application look and feel and behavior to suit different customer requirements. iMeeting allow customization through a set of iMeeting Properties that have been defined.

To modify any iMeeting property you need to login as a user who has "CRM Html Administration Responsibility". After logging in, navigate to Settings -> System -> Advanced; then Choose IMT application and then click on the property to modify.

For any property change to take effect, you should delete Jserv's cache and restart Apache.

## 4.1 Customizing the iMeeting Login Page

The iMeeting Login page (imtprelogin.jsp) provides access to the iMeeting Application module. This page can be customized to suit individual installation requirements.

### 4.1.1 Configuring the iMeeting Guest Account

The iMeeting requires a guest user account to be setup for the Login page to display correctly. The guest user account is also required for meetings where an unregistered user is allowed to join a meeting. An unregistered user joins the meeting using this guest account. The iMeeting guest user account is an internal account and should not be used for any other purpose.

If the installation has been done correctly, you should have a guest user IMTGUEST with password IMTGUEST. This account is assigned the **iMeeting Guest User responsibility** and **iMeeting End User responsibility**.

For security reasons you can change the guest user account password, or make a new guest account. You can change the default guest user password or create a completely new guest user account.

The following table shows the properties that are used to manage the guest user account.

**Table 4–1 iMeeting Properties for Guest User Customization**

| PROPERTY_NAME          | VALUE              | Description                |
|------------------------|--------------------|----------------------------|
| IMT_APP_GUEST_USERNAME | imtguest (default) | The guest account username |
| IMT_APP_GUEST_PASSWD   | imtguest (default) | The guest account password |

Note that if you create a new guest account you must also assign that user the **iMeeting Guest User responsibility** and **iMeeting End User responsibility** with iMeeting Guest User responsibility as the default responsibility

## 4.1.2 Customizing User Registration Link

By default, the Registration link in the iMeeting Login page is not enabled. This link should be customized based on the registration policies in place.

The following tables shows the iMeeting properties you can use to control the behavior of the Registration links.

**Table 4–2 iMeeting Properties for Configuring Registration**

| PROPERTY_NAME        | VALUE           | Description   |
|----------------------|-----------------|---|
| IMT_APP_REGN_ENABLED | False (default) | The Registration links in iMeeting Login page is not configured.  |
|                      | True            | The Registration links are enabled. It points to the appropriate link as specified in IMT_APP_REGN_TYPE property. |

**Table 4–2 iMeeting Properties for Configuring Registration**

| PROPERTY_NAME            | VALUE         | Description  |
|--------------------------|---------------|--|
| IMT_APP_REGN_TYPE        | JTF (default) | The Registration link points to the JTF generic registration page.   |
|                          | CUSTOM        | Registration points to a custom implementation of registration. This value is set, then the corresponding JSP file should be specified in IMT_APP_REGN_CUSTOM_LINK |
| IMT_APP_REGN_CUSTOM_LINK | <jsp file>    | Should be set to a JSP file that implements custom registration. Application only if IMT_APP_REGN_TYPE is set to CUSTOM  |

### 4.1.3 Configuring the 'Highlights' Bins

You can configure the 'Highlights' bin in the iMeeting Login page using the properties in the following table.

**Table 4–3 iMeeting Properties for Configuring the Highlight Bins**

| PROPERTY_NAME         | VALUE       | Description   |
|-----------------------|-------------|---|
| Highlightsbin.length  | 0 (default) | Number of links in the highlight bin. 0 means none available. |
|                       | N           | N is the number of links to be displayed.                     |
| Highlightsbin.anchorX | <text>      | Visible name of the link, where X is a number between 1 and N |
| Highlightsbin.hrefX   | <URL>       | Actual URL of the link, where X is a number between 1 and N   |

Note that if the value of N is greater than 1, then there should be as many entries for anchor and href as the number N.

### 4.1.4 Configuring Miscellaneous Attributes

The following table lists iMeeting properties for configuring miscellaneous attributes on the login page.

**Table 4–4 iMeeting Properties for Configuring Miscellaneous Attributes on Login Page**

| PROPERTY_NAME          | VALUE  | Description   |
|------------------------|--|---|
| IMT_APP_CONTACTUS_LINK | imt_feedback.jsp<br>(default)                | This could be any custom jsp page or even a tag like:<br>mailto:xyz@company.com             |
| IMT_APP_CORP_MSG       | Oracle<br>iMeeting<br>brings...<br>(default) | Any corporate message or text can go here.  |
| IMT_APP_SYS_MSG        | null<br>(default)                            | Any system related message can go here. For example, site downtime info, upgrade info, etc. |
| IMT_APP_PRIVACYLINK    | imtprivacystatement.jsp<br>(default)         | Can be any custom jsp page.   |

## 4.2 Enabling Email Invites for iMeeting

Oracle iMeeting uses email for registration, meeting invites and for server status tests. The following table lists the properties you must configure in order to enable email capabilities in iMeeting.

**Table 4–5 Properties to Configure Email in iMeeting**

| PROPERTY_NAME    | VALUE                               | Description  |
|------------------|-------------------------------------|--|
| IMT_APP_FROMMAIL | imeeting@localhost.com<br>(default) | This is substituted in the from field of the email that goes out in an email invite or any communication from iMeeting system. |
| IMT_APP_SMTPHOST | smtphost.localhost.com              | This is the SMTP server where iMeeting can send its outgoing email   |

## 4.3 Configuring iMeeting Global Link

The Global iMeeting Button is a link that can appear at the top of all E-Business Suite modules. Using this link any E-Business Suite user in any module can instantly create a meeting or join any iMeeting session without explicitly having iMeeting responsibility. This is an easy way for E-Business Suite users to get the services of Oracle iMeeting without extensive upgrade process for existing users.

Global iMeeting Button can be enabled/disabled sitewide using a property called `IMEETING_DESTINATION`. When you install iMeeting, an IMT property called `IMEETING_DESTINATION` is seeded with a value of "null". This enables the Global iMeeting Button on every application page. When an user clicks on the button they will get a message: "iMeeting service is not available".

To enable iMeeting service, please perform the following steps:

1. Make sure that the iMeeting service is setup and configured correctly as specified in [Chapter 2, "Getting Started"](#).
2. Configure iMeeting Global Button to point to the local installation, by setting the value of IMT property `IMEETING_DESTINATION` to **`imt_glb_button_launch.jsp`**
3. To completely remove the iMeeting Global Button sitewide, delete `IMEETING_DESTINATION` property from the JTF as well as the IMT application

Note: The `IMEETING_DESTINATION` property could either belong to IMT or JTF application. If both are set then the value belonging to IMT takes precedence.



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# Troubleshooting & Administration

## 5.1 Troubleshooting Tips

**Problem : Registration Error**

Users get the following error when trying to register:

IMT-1023 User registration is currently not available. Please contact the iMeeting System Administrator

**Cause:** By default registration is not enabled. It needs to be enabled.

**Action:** To enable registration, follow the directions to configure imtprelogin page, "Configuring the registration link". Make sure to delete the cache, .java and .class files of imtprelogin.jsp page and bounce the Apache for the new settings to take place.

**Problem: Graphs in the Monitoring Tab do not render correctly**

**Cause:** Image (graph) generation and rendering is a memory expensive operation which cause Jserv to run out of memory.

**Action:** Make sure you start Jserv with large enough memory. For example, to change the memory settings of Jserv to 256MB, use the following in the jserv.properties configuration file:

```
wrapper.bin.parameters=-mx256m
```

**Cause:** The X Display server is not running.

**Action:** To enable run-time image generation from Cabo functionality on Unix, you must specify the X Server that will be used to generate dynamic images. This server does not have to be a dedicated server for Applications; however, it

does need to be accessible by the Apache server that will call it. This can be done through "xhost +", or through a more secure "xauth" Unix command. You can also reference a Windows NT Machine that is running a Unix emulator like Exceed. See the man pages for "xhost" and "xauth" for more information.

Note: This step is not required if you are installing the JTF framework on a Windows-based operating system (Windows NT or Windows 2000).

"To implement the Display Server identifier update <ORAHTTP\_TOP>/Jserv/etc/jserv.properties with the following changes: Add the following DISPLAY parameter immediately below the wrapper.bin variable.

1) wrapper.env=DISPLAY=<xserver-hostname>:<xserver-displayport>  
Replace <xserver-hostname> and <xserver-displayport> with the machine name and port number where the X Server is running. For Example:  
wrapper.env=DISPLAY=myxserver.mycorp.com:0

**IMPORTANT NOTE:** This step would be done only if you start the Apache Jserv in the Automatic mode. If you are starting the Jserv in Manual mode then you need to set the DISPLAY environment variable, either in the script that starts the jserv or on the shell that will (re)start the apache.

setenv DISPLAY <xserver-hostname>:<xserver-displayport>

2) Also add \$JAVA\_TOP/sax2.zip to the jserv classpath. You can do this by adding the above line to the CLASSPATH if it is not already there.

3) This Patch has a runtime dependency on JDK1.2.2. However you would need a JDK 1.2.2P for Solaris Installations. Please refer to the metalink notes to update your JDK Version.

4) restart Apache.

Please refer to 1883175 Patch Readme file for more details.

# 6

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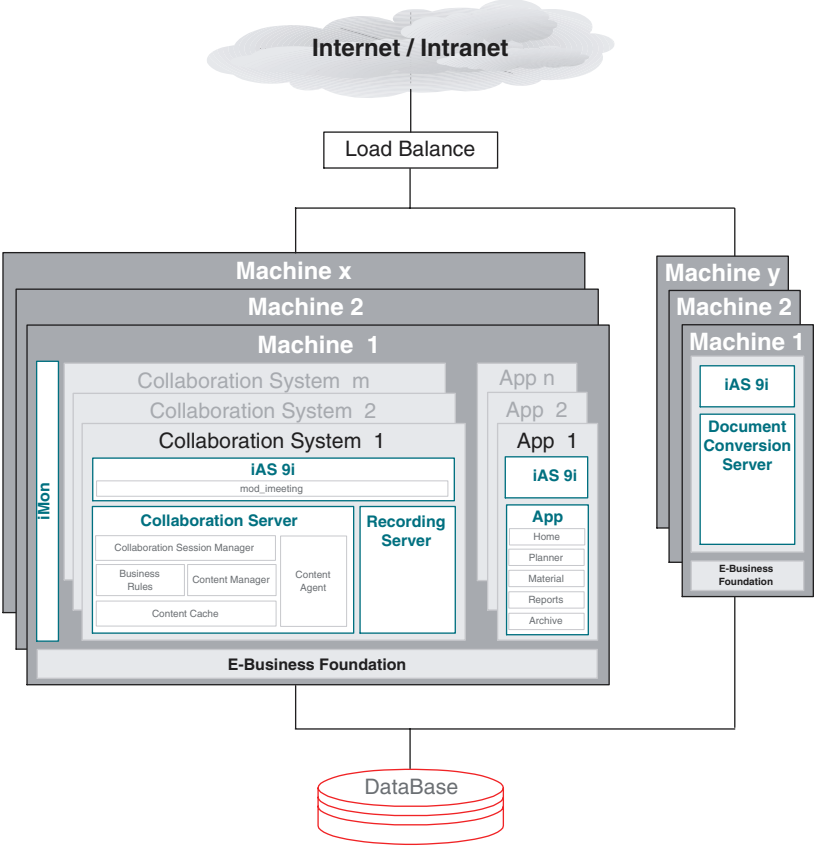
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## Sizing Guide

iMeeting can be scaled out to support more number of meeting by using more Collaboration System instances. You can have multiple Collaboration Systems per machine and you can also have multiple machines. iMeeting can load balance across Collaboration Systems in the same machine or across machines.

iMeeting also supports multiple Document Conversion Servers per iMeeting Systems. This is useful for fault tolerance as well as load balancing.

# Oracle iMeeting Deployment Scalability



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# Glossary

**Apache**

Industry standard HTTP listener maintained by open source community. It is used by Oracle Internet Application Server (iAS).

**Archive(s)**

Repository of the a Meeting(s) for later playback.

**Attendee(s)**

Person(s) joining a meeting.

**Bookmarks**

A list of URLs stored on an individual basis.

**Host**

Person starting the meeting.

**Codec**

The proprietary compression format for storing, sending and playback of the Meeting content. Oracle iMeeting has its own patented compression format.

**HTML Conversion**

Converting the Microsoft PowerPoint, Word, and Excel documents to HTML format for Web Collaboration.

**iAS**

Oracle's Internet Application Server that uses Apache as the HTTP listener.

**iMeeting Apache Mod**

The extensions made to Apache to talk to Collaboration Server for the duration of a meeting.

**HTTP Listener**

Apache listener, part of iAS, that communicates with iMeeting Collaboration Server.

**Collaboration Server**

Real-time server that part of the iMeeting system. The number of collaboration servers on a system varies by the load and the hardware capacity.

**Recording Server**

Server used for recording an iMeeting session. This server runs only if a meeting is being recorded.

**iMon**

Monitoring server for iMeeting Collaboration servers. It ensures that iMeeting Collaboration servers are available to conduct meetings. There is one iMon Server per physical machine.

**Live Help**

Help on a given HTML Page.

**Private Meeting**

A Meeting which is NOT published on the site, attendees can join only if they know the meeting particulars.

**Public Meeting**

A Meeting which is published on the site for anyone to join provided they are informed of meeting particulars.

**Real-Time**

Any system that give 1-5 second response times between meeting attendees. Telephones today provide good real-time service for voice conversations. iMeeting is a real-time system for collaboration.

**Streaming**

Sending content using Microsoft Media Player or Real Player. Both Audio and Video data is send using Streaming.

**Web Collaboration**

People collaborating on the same Web Page that can be viewed separately by any browser (Netscape/ IE).

**Windows Collaboration**

People collaborating on a give desktop running Microsoft operating system. It could be Windows98, Windows2000 or Windows NT desktop.

