USER GUIDE

Enterprise IP Solutions

OfficeServ Messenger



Every effort has been made to eliminate errors and ambiguities in the information contained in this guide. Any questions concerning information presented here should be directed to SAMSUNG TELECOMMUNICATIONS AMERICA, 1301 E. Lookout Dr. Richardson, TX. 75082 telephone (972) 761-7300. SAMSUNG TELECOMMUNICATIONS AMERICA disclaims all liabilities for damages arising from the erroneous interpretation or use of information presented in this guide.
Samsung Telecommunications
Publication Information
SAMSUNG TELECOMMUNICATIONS AMERICA reserves the right without prior notice to revise information in this publication for any reason. SAMSUNG TELECOMMUNICATIONS AMERICA also reserves the right without prior notice to make changes in design or components of equipment as engineering and manufacturing may warrant.
Copyright 2010
Samsung Telecommunications America
All rights reserved. No part of this manual may be reproduced in any form or by any means—graphic, electronic or mechanical, including recording, taping, photocopying or information retrieval systems—without express written permission of the publisher of this material.
PRINTED IN USA

TABLE OF CONTENTS

Introduction	Chapter 11
What is OfficeServ Messen	ger?
Installation	Chapter 22
Things to Know Before Ins	tallation
Keyphone Requiremen	ts
PC Requirements	
30 Day Free Trial Perio	od
OfficeServ Messenger	Components
Finding the Messenger	· IP Address
OfficeServ Messenger	Connection Map 5
How to Install OfficeServ N	Messenger6
Installing the Messeng	er Server 6
Installing the SIMPLE	Gateway 9
Installing the XCAP Se	rver11
Licensing	Chapter 314
How Licensing Works	14
How the 30 Day Free Trial	License Works14
How to View Your License	
How to Enter a New Licens	se16
Configuration	Chapter 418
Gathering Configuration Ir	nformation18
Configuring OfficeServ	Messenger in IIS 5.119
Configuring OfficeServ	Messenger in IIS 6.022
Configuring OfficeServ	Messenger in IIS 7.0 or IIS 7.525
Configuring Messenger Op	tions
Configuring Multi-System	Settings28
Configuring User Accounts	30
Creating Departments	30
_	30
_	ually31
_	Spreadsheet
Assigning Unfiled User	s to Departments35

Backing Up the User List35		
Operation	Chapter 5	37
Connecting Office	ceServ Messenger	37
Using the Web I	Interface	38
The Messen	ger Server Status Page	39
Sending a B	Broadcast Message	40
Viewing Adr	ninistrative Logs	41
Clearing Ad	ministrative Logs	41
Viewing / D	eleting Message Logs	42
Viewing Unr	read Message Headers	43
Viewing / D	eleting File Transfer Logs	43
Viewing Cor	nference Status	44
Viewing Cor	nference Statistics	44
Software Licens	e Agreement and Limited Warra	anty46

INTRODUCTION

CHAPTER 1

What is OfficeServ Messenger?

OfficeServ Messenger is a server application that provides instant messaging, collaboration, and presence awareness to the OfficeServ Communicator application and users of the SMT-i5243 IP keyset.

OfficeServ Messenger communicates with OfficeServ 7000 Series systems through the OfficeServ Link V3 application. OfficeServ Link permits the OfficeServ Messenger to connect to up to eight systems simultaneously, allowing multi-system applications to take advantage of the OfficeServ Messenger features across the organization. This not only brings your whole business closer together, but also prevents you from having to maintain a separate server for each system.

OfficeServ Messenger provides users with the following features:

- Instant Messaging
- Presence Awareness
- Buddy Lists
- Video Chat
- Whiteboard Collaboration
- Desktop Sharing
- Application Sharing
- File Sharing



Be careful when installing OfficeServ Messenger in multi-site locations; data routing issues and/or data latency may hinder performance and cause unintended errors in the application. Multi-system connections are intended primarily for single-site multi-system locations, such as a corporate headquarters.

Installation

CHAPTER 2

Things to Know Before Installation

Keyphone Requirements

OfficeServ Messenger is compatible with any of the OfficeServ 7000 Series keyphone systems, including:

- OfficeServ 7030
- OfficeServ 7100
- OfficeServ 7200-S
- OfficeServ 7200
- OfficeServ 7400

PC Requirements

The OfficeServ Messenger application is has a web-based admin interface, so it requires a version of Windows that supports the Internet Information Services (IIS) module. It is strongly recommended that you run OfficeServ Messenger on the same PC as the OfficeServ Link V3 application, and that this machine be dedicated solely to Samsung applications. This PC must meet the following **minimum** requirements (requirements may be higher for multisystem and other high usage environments):

Operating System	Microsoft® Windows XP or higher including but not limited to: Windows 7, XP Professional, Vista, 2003, and 2008 With Internet Information Services (IIS) installed	
Database Platform	Microsoft SQL Express 2005 or higher including SQL Express 2005, SQL Express 2008, SQL Server 2005, and SQL Server 2008	
СРИ	Pentium 4 – 2.0 GHz	
RAM	1 GB	
Hard Disk Space	20 GB	



OfficeServ Messenger is only supported on Microsoft® Windows operating systems. Samsung will not support OfficeServ Messenger on Mac OS® or Linux systems.



Local Administrator rights are ${\bf required}$ in order to install ${\bf \underline{and}}$ operate OfficeServ Messenger.



Windows 7, Vista, and XP limit the number of simultaneous internet connections to 10. Although this connection limit can be overridden Microsoft, and therefore Samsung, does not recommend it.

Each user who connects to OfficeServ Messenger will use at least 1 connection which can quickly overwhelm the available limit. So if you intend to have OfficeServ Messenger available to all users it is strongly recommended that you install it on a server version of Windows (2003 or 2008) where unlimited connections are allowed.



OfficeServ Messenger requires the Microsoft SQL Server software to have Mixed Mode Authentication enabled. Consult Microsoft documentation for information on how to enable Mixed Mode Authentication.

30 Day Free Trial Period

Samsung provides a 30 day free trial period for OfficeServ Messenger to allow users to experience and evaluate the applications risk-free. This free trial period allows the OfficeServ Messenger to connect to OfficeServ Link without the need for a Messenger license key. The trial expires 30 days from the date of installation. After expiration a valid Messenger license key must be entered in order to continue use of OfficeServ Messenger. For specific details see the 30 Day Free Trial section in Chapter 3.

OfficeServ Messenger Components

The OfficeServ Messenger application consists of 3 separate components:

- 1. The Messenger Server
- 2. The SIMPLE Gateway
- 3. The XCAP Server

The Messenger Server is the main application that communicates with the other two components as well as OfficeServ Link, the Messenger Admin web interface, and users connecting with the OfficeServ Communicator application.

The SIMPLE Gateway passes data between the Messenger Server and the XCAP Server; this includes buddy list status data, login requests, etc. This component is only required when you have users connecting with their SMT-i5243 keysets.

The XCAP Server formats the data provided by the SIMPLE Gateway into XML displays that are sent to SMT-i5243 keyset users. This component is only required when you have users connecting with their SMT-i5243 keysets.

Finding the Messenger IP Address

During the installation process you will need to know the IP address of the server OfficeServ Messenger is being installed on. To find the IP address, perform the following:

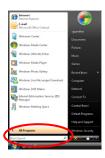
1. Click Start



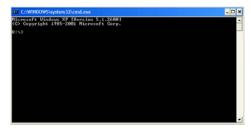


2. In Windows XP/2003 click Run.... In Windows 7/Vista/2008 click where it says Start Search.





3. Type cmd and press enter to launch a DOS command prompt



4. Type ipconfig and press Enter



5. The IP address list is displayed. Your PC may have more than 1 connection listed; you are looking for one that says Ethernet adapter Local Area Connection. The IP address of the system will be listed as IP Address or IPv4 IP Address. Make note of this address.

```
Vindows IP Configuration

Ethernet adapter Local firea Connection:

Connection specific DNS Suffix:

Involved 12.0 find sees : 18.0 d. 1.211

Subset Mack : 18.0 d. 1.211

Subset Mack : 18.0 d. 1.211

Iunnel adapter Local firea Connection* 6:

Media State . : 18.0 d. 1.

Iunnel adapter Local firea Connection* 6:

Media State . : Media disconnected

Connection-specific DNS Suffix :

Iunnel adapter Local firea Connection* 7:

Connection-specific DNS Suffix : 19.0 diddress . : 2801:8:4137:9e76:2c1c:429:f5ff:fe2c

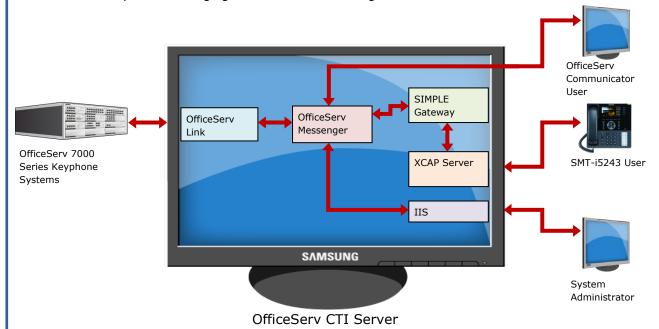
Link-local IPo6 fiddress . : 5880::2c1c:429:f5ff:fe2cv9

Default Gateway . : ::
```

OfficeServ Messenger Connection Map

Users connect to OfficeServ Messenger server using the OfficeServ Communicator client application or their SMT-i5243 keyset. The Messenger then connects to OfficeServ Link which will in turn establish communications between the OfficeServ Messenger and the OfficeServ 7000 Series systems.

The OfficeServ Messenger system administrator connects to the Messenger Admin interface using the Internet Explorer web browser that ships standard with Windows operating systems. Internet Explorer connects to the Messenger Server through the Windows Internet Information Services (IIS) web server. This configuration allows the system administrator much more flexibility when managing the OfficeServ Messenger.





OfficeServ Messenger communicates with OfficeServ Link on TCP port 6005 and with OfficeServ Communicator on TCP and UDP port 5070. The SIMPLE Gateway communicates on UDP port 15060. The XCAP Server communicates with the SIMPLE Gateway on UDP port 25060, and with SMT-i5243 keysets on TCP port 18080. This may be useful information when installing in a tightly controlled data network.

How to Install OfficeServ Messenger

Installing OfficeServ Messenger is a fairly simple, straightforward process. Every effort has been made to ensure a fast and trouble-free installation. To begin, obtain the OfficeServ Messenger setup files from your authorized Samsung installation company.

There are 3 setup files: the Messenger Server setup, the SIMPLE Gateway setup, and the XCAP Server setup. The SIMPLE Gateway and XCAP Server are only required if you have users logging in to the OfficeServ Messenger with SMT-i5243 keysets.

If you are installing all 3 components they must be installed in the following order: Messenger Server then SIMPLE Gateway then XCAP Server.

Installing the Messenger Server

Double-click the file to launch the setup. Initialization of the setup will begin. Proceed with installation by configuring the following settings:

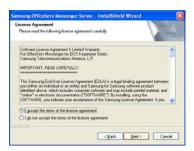
1. Choose the language you wish to read the End User License Agreement (EULA) in and then click Next. The default setting is United States (English).



2. Click Next.



3. Carefully read the EULA then select "I accept the terms of the license agreement" and Click Next.



4. Enter the IP address of the OfficeServ Link V3 server (if it is installed on the same PC as OfficeServ Messenger you may enter 127.0.0.1). After entering the IP address click Next.



5. Enter the port number OfficeServ Link is using. In almost all cases this field does not need to be changed from the default value of 6000. Check with the OfficeServ Link V3 installer to determine if you need to change this value. Click Next after verifying the port.



6. Enter a domain name for OfficeServ Messenger. This simply determines how to format user logins. Samsung recommends leaving this at the default setting of osm.com. Click Next after setting the domain you wish to use.



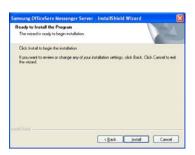
7. If you have already obtained your license key for OfficeServ Messenger you may enter it here (the OfficeServ Messenger license key is **NOT** the same key as your OfficeServ Link license key) and click Next. If you do not have your license key you may click Next and enter it after installation through the Messenger Admin web interface. Licensing is discussed in Chapter 3.



8. Select or confirm the location where the Messenger Server will be installed and then click Next. The default location is C:\Program Files\Samsung Electronics\Samsung OfficeServ Messenger Server.



9. Click Install to begin installing files.



10. Enter the connection details for the SQL Server. This information can be obtained from the SQL system administrator. Note that the SQL Server instance must be specified if it exists (ie. 127.0.0.1\SQLExpress). After configuring the connection click Next.



11. The Messenger database will be installed next. This is the database used to store user accounts and activity logs. After setting up the database the installation is done and a screen will appear alerting you to click Finish to exit setup.



Installing the SIMPLE Gateway

Double-click the file to launch the setup. Initialization of the setup will begin. Proceed with installation by configuring the following settings:

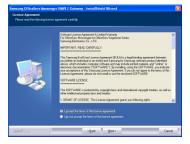
1. Choose the language you wish to read the End User License Agreement (EULA) in and then click Next. The default setting is United States (English).



2. Click Next.



3. Carefully read the EULA then select "I accept the terms of the license agreement" and Click Next.



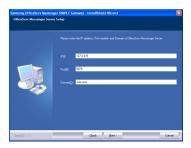
4. Enter the user and company names the software is being installed for and then click Next.



5. Enter the IP address and port number the SIMPLE Gateway should use. The IP field should be the IP address of the Messenger PC (ie. 192.168.1.24). In almost all cases the port field does not need to be changed from the default value of 15060. Click Next after setting the IP address and port number.



6. Enter the connection information for the Messenger Server. For the IP field you should enter 127.0.0.1, the Port field should be 5070, and the Domain field will be whatever domain you chose in step 6 of the Messenger Server installation (the default is osm.com).



7. Select or confirm the location where the SIMPLE Gateway will be installed and then click Next. The default location is C:\Program Files\Samsung Electronics\Samsung OfficeServ Messenger SIMPLE Gateway.



8. Click Install to begin installing files.



9. After installing the necessary files the installation is done and a screen will appear alerting you to click Finish to exit setup.



Installing the XCAP Server

Double-click the file to launch the setup. Initialization of the setup will begin. Proceed with installation by configuring the following settings:

1. Choose the language you wish to read the End User License Agreement (EULA) in and then click Next. The default setting is United States (English).



2. Click Next.



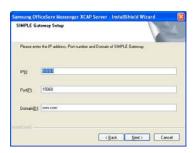
3. Carefully read the EULA then select "I accept the terms of the license agreement" and Click Next.



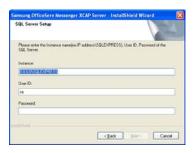
4. Enter the IP address and port numbers the XCAP Server should use. The IP field should be the IP address of the Messenger PC (ie. 192.168.1.24). Port is the UDP port used to communicate with the SIMPLE Gateway and Req is the TCP port used to communicate with SMT-i5243 keysets. In almost all cases the Port and Req fields do not need to be changed from the default values of 25060 and 18080. Click Next after setting the IP address and port numbers.



5. Enter the connection information for the SIMPLE Gateway. For the IP field you should enter 127.0.0.1, the Port field should be 15060, and the Domain field will be whatever domain you chose in step 6 of the Messenger Server installation (the default is osm.com).



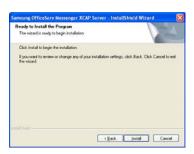
6. Enter the connection details for the SQL Server. This information can be obtained from the SQL system administrator. Note that the SQL Server instance must be specified if it exists (ie. 127.0.0.1\SQLExpress). After configuring the connection click Next.



7. Select or confirm the location where the XCAP Server will be installed and then click Next. The default location is C:\Program Files\Samsung Electronics\Samsung OfficeServ Messenger XCAP Server.



8. Click Install to begin installing files.



9. After installing the necessary files the installation is done and a screen will appear alerting you to click Finish to exit setup.



LICENSING CHAPTER 3

How Licensing Works

In order to use OfficeServ Messenger you will need a valid software license. Licenses are used to regulate the number and types of users who may connect to and use the OfficeServ Messenger. The advantage of licensing is that you can reduce your overall costs by purchasing only the number of connections you need without having to manage a hardware dongle or a complicated middleware licensing application.

The license used for the OfficeServ Messenger is not the same as the OfficeServ Link license used by other CTI applications; it is a separate license key used only by and for the OfficeServ Messenger.

When a user attempts to connect to OfficeServ Messenger the user type is checked against the list of licensed connections. If there are no available licenses for the connection a licensing error will be returned to the user. As an example, if an SMT-i5243 keyset attempts to connect, but the current license allows only OfficeServ Communicator connections the SMT-i5243 connection will be rejected.

If there are available licenses the OfficeServ Messenger will then proceed to check the supplied login credentials against the user database to see if the login is correct. If the login does not match an existing user list an error is returned to the user. If a valid account is found the OfficeServ Messenger will log the user in and begin communications.

How the 30 Day Free Trial License Works

Samsung understands that sometimes you want to test out an application to see if it works for your company before making a committed purchase. In order to fill this need the OfficeServ Messenger installation process creates a free 30 day trial license. This free trial license allows up to 10 OfficeServ Communicator users and up to 10 SMT-i5243 keyset users to connect to OfficeServ Messenger for up to 30 days without the need to purchase a software license key.

The 30 day trial period begins the moment you install OfficeServ Messenger, it is not tied to application run time. If you intend to use the trial you should install OfficeServ Messenger only after you are prepared to start testing. Once the trial expires you must purchase a license key from Samsung in order to continue using OfficeServ Messenger

How to View Your License

In order to view your current license you need to log in to the Messenger Admin web interface. To launch the web interface:

1. Click Start then click Internet to open Internet Explorer.



2. Load the Messenger Admin website by typing http://[IPAddress]/osm (i.e. http://192.168.1.24/osm) into the address bar and clicking Go or pressing Enter.



3. You will be prompted to log in to the server. You **must** enter the username and password of a user on the server that has administrative rights (such as the Administrator user). Enter the login information and then click OK. If you want to save this login information so you don' have to enter it again check the Remember my password box before clicking OK.



4. This will load the Messenger Admin login page.



5. The default username is admin, and the password is also admin. Enter these and then click OK. The Server Status page will be shown. The License Key is shown at the top of the page. Just below that are the quantities that license provides. PC: shows the number of licensed OfficeServ Communicator users and PHONE: shows the number of licensed SMT-i5243 keyset users. System(s) will always be 8 (the maximum number of OfficeServ 7000 Series systems that can be simultaneously connected). PDA: is reserved for future use and will always be 0.



How to Enter a New License

After obtaining a valid OfficeServ Messenger license key you must implement the key via the Messenger Admin web interface Update License page. The Update License page transfers the key to the Messenger Server application for verification to ensure it is valid and authentic.

Follow these steps to load the Update License page:

1. Click Start then click Internet to open Internet Explorer.



2. Load the Messenger Admin website by typing http://[IPAddress]/osm (i.e. http://192.168.1.24/osm) into the address bar and clicking Go or pressing Enter



3. You will be prompted to log in to the server. You **must** enter the username and password of a user on the server that has administrative rights (such as the Administrator user). Enter the login information and then click OK.



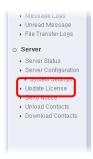
4. This will load the Messenger Admin login page.



5. The default username is admin, and the password is also admin. Enter these and then click OK. The Server Status page will be shown.



6. On the left menu bar click the Update License menu item.



7. The Update License page is displayed. Enter your new license in the License Key text box and then click Verify.



8. The Messenger Server will decode the license and display the results. To activate the new license click Update.





Be sure to retain a backup copy of your license key in the event of catastrophic failure of the OfficeServ Messenger PC.

CONFIGURATION

CHAPTER 4

Gathering Configuration Information

The biggest portion of configuration is setting up the accounts users will log in to when connecting to the OfficeServ Messenger. This requires gathering a certain amount of detail about each user. You will need the following information for each person who will be logging in to the OfficeServ Messenger:

- First and last name
- Preferred name (nickname)
- Preferred username (login id)
- Preferred password
- System id (only required in multi-system environments)
- Station number
- Cell phone number (optional)
- Job description (optional)
- Job position (optional)
- Email address
- Work street address (optional)
- Department (optional)

It is recommended that if you have more than a few users you put this information into a spreadsheet. The reason for this is that you can later use this spreadsheet to create all the users at one time. This is discussed in more detail later in this chapter.

After gathering all the user data you can begin the process of configuring the user accounts through the Messenger Admin web interface. However, before doing this you will need to verify a few settings to ensure that the web interface is running optimally. You will also need to check OfficeServ Messenger Server application settings and configure multi-system settings (if necessary).

For multi-system environments you will need to obtain the following information for each system from the OfficeServ 7000 Series system administrator:

- IP address
- Network Node ID

Verifying IIS Settings

Internet Information Services (IIS) is the Microsoft component that allows a PC to act as a web server. Microsoft Windows currently supports 4 versions of IIS depending on which Windows version you are running, as shown below.

OPERATING SYSTEM	IIS VERSION
Windows XP Professional, Windows XP Media Center	V5.1
Windows 2003	V6.0
Windows 2008, Windows Vista (Home Premium, Business, Enterprise, Ultimate)	V7.0
Windows 2008 R2, Windows 7	V7.5



The installation process for IIS is also operating system dependant. For details on installing IIS on your system consult Microsoft's documentation.



In order to install OfficeServ Messenger on a PC running IIS 7.0 or higher you must ensure that all **IIS 6 Compatibility** options are also installed.

Configuring OfficeServ Messenger in IIS 5.1

Begin by launching the IIS Admin Panel:

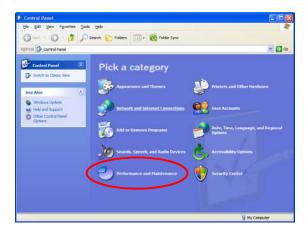
1. Click Start



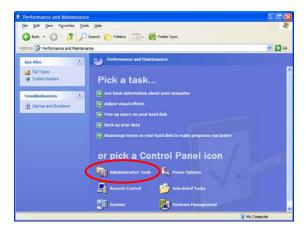
2. Click Control Panel



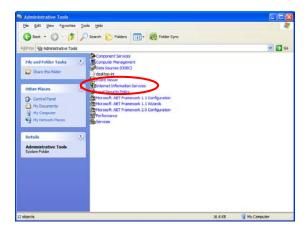
3. Click Performance and Maintenance



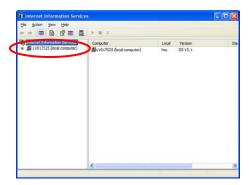
4. Click Administrative Tools



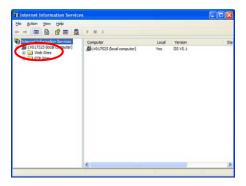
5. Double-Click Internet Information Services to launch the IIS Admin Panel



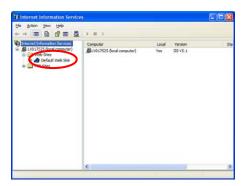
6. Expand Local Computer



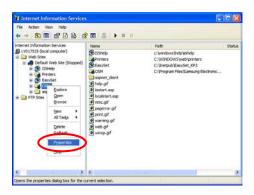
7. Expand Web Sites



8. Expand Default Web Site



9. Right-click OSM and choose Properties



10. Click the Documents tab.



11. Check the Enable Default Document checkbox.



12. Verify that the list of documents contains an entry called "index.php" and click OK to close the OSM properties window. If the "index.php" entry does not exist, click the Add... button and create it.



13. The website is now configured and you can move to the next section.

Configuring OfficeServ Messenger in IIS 6.0

Begin by launching the IIS Admin Panel:

1. Click Start



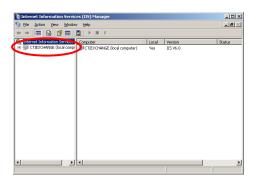
2. Click Administrative Tools



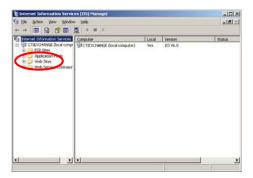
3. Click Internet Information Services (IIS) Manager to launch the IIS Admin Panel



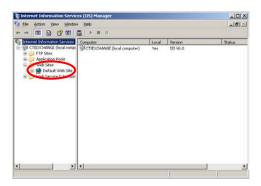
4. Expand Local Computer



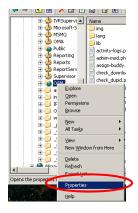
5. Expand Web Sites



6. Expand Default Web Site



7. Right-click OSM and choose Properties



8. Click the Documents tab.



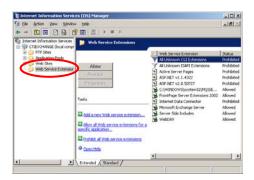
9. Check the Enable default content page checkbox.



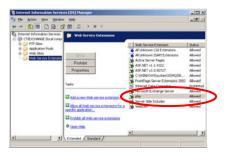
10. Verify that the list of documents contains an entry called "index.php" and click OK to close the OSM properties window. If the "index.php" entry does not exist, click the Add... button and create it.



11. In the IIS Admin Panel click Web Service Extensions



12. Verify that the php entry says Allowed. If it doesn't, select it and then click Allow.



13. The website is now configured and you can move to the next section.

Configuring OfficeServ Messenger in IIS 7.0 or IIS 7.5

The OfficeServ Messenger installation process automatically configures options for the IIS 7.0 and IIS 7.5 web servers, so no further modifications should be required. You can skip ahead to the next section.

Configuring Messenger Options

Messenger options include items such as the location of debugging logs and the login information for the SQL server. In most cases these options do not require changing, but it is important to know where they are in the event you need to change them at some point. This may happen if you change SQL servers at some point or change the IP address of the CTI server.

To begin, log in to the Messenger Admin web interface:

1. Click Start then click Internet to open Internet Explorer.



2. Load the Messenger Admin website by typing http://[IPAddress]/osm (i.e. http://192.168.1.24/osm) into the address bar and clicking Go or pressing Enter



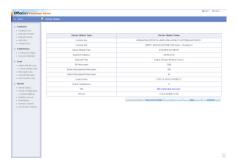
3. You will be prompted to log in to the server. You **must** enter the username and password of a user on the server that has administrative rights (such as the Administrator user). Enter the login information and then click OK. If you want to save this login information so you don' have to enter it again check the Remember my password box before clicking OK.



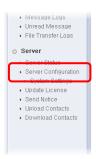
4. This will load the Messenger Admin login page.



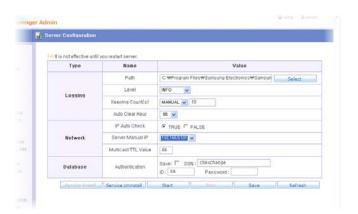
5. The default username is admin, and the password is also admin. Enter these and then click OK. The Server Status page will be shown.



6. Click the Server Configuration menu item on the left menu.



7. The Server Configuration screen is displayed. Fields are discussed below.

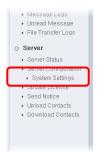


OPTION	DESCRIPTION
Path	Set the location for debug log files. The default is the LOG folder under the location you installed the Messenger Server software to.
Level	Set the detail level of debug logs: System – log only messages sent to the Windows Event system ERROR – log only error events and system messages WARNING – log error and warning events and system messages INFO – log all of the above and also include informational messages (this is the default) DEBUG – log all events and messages generated by the Messenger
Keeping Count(s)	Set the method for deleting log files (this is done to save hard drive space): OFF – keep all logs 2, 7, 30, 60, 365 – keep log files the specified number of days and then delete them MANUAL – specify the number of days to keep log files manually (this is the default)
Auto Clear Hour	Set the hour of the day to delete log files that have expired (the default is 5am).

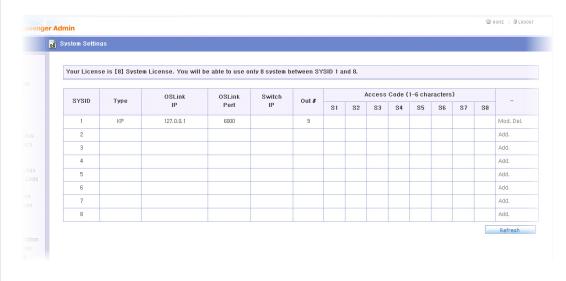
OPTION	DESCRIPTION	
IP Auto Check	Automatically detect the server's IP address. The default, TRUE, is appropriate for most situations. It should be set to FALSE only if the server has multiple active network interface cards (NICs).	
Server Manual IP	Specify which IP address the Messenger server should listen on (when more than one NIC is active). When IP Auto Check is set to TRUE this field will be a drop-down list of all the NIC cards in your server. When IP Auto Check is set to FALSE this field is a type-in box.	
Multicast TTL Value	Set the Time-To-Live value for broadcast messages. This value should not require modification.	
Authentication	Set the login information for the SQL server. This should only be modified if you know that SQL server settings have changed.	
Service Install	These buttons allow you to create or delete the Windows Service used for launching the OfficeServ Messenger Server. The service is installed by default.	
Service Uninstall	When installed the Service Install button is disabled, otherwise the Service Uninstall button is disabled.	
Start	The Start and Stop buttons control the Windows Service used for launching the OfficeServ Messenger Server.	
Stop		
Save	Save the current changes.	
Refresh	Refresh the screen to reflect any changes that may have been made.	

Configuring Multi-System Settings

Multi-System settings only need to be modified when you are connecting the OfficeServ Messenger Server to more than one OfficeServ 7000 Series system. They are set through the web interface's System Settings menu:



The System Settings screen allows you to configure the systems OfficeServ Messenger should connect to. By default only a single system is configured, as shown below, with blank entries for the other 7.



To configure a new system click the "Add." link on the far right. To modify an existing system click the "Mod." link and to delete a system click the "Del." link. Click the "Mod." link for system 1. The Modify System screen will appear. Configure the necessary systems and proceed to user account creation.

	terisk (*) are required.	
SYSTEM ID		1
OSLink Type (*)		€ KP C IAP
OSLink IP (*)		127.0.0.1 V3 Switch IP
OSLink Port (*)		6000
Disting Desiden	Country/Region (*)	Korea
Dialing Position	Area Code (*)	2
	Access Code for Local Calls (*)	9 Use Area Code for Local Calls
01	other area code for local calls	Use comma to seperate area codes.
Dialing Rule	Access Code for Long-Distance Calls (*)	9
	Carrier Code for Long-Distance Calls	
	Carrier Code for International Calls	
	System 1	
	System 2	
	System 3	
Access Code	System 4	
Access voice	System 5	
	System 6	
	System 7	
	System 8	

OPTION	DESCRIPTION
SYSTEM ID (read only)	Display the Messenger System ID for the OfficeServ 7000 Series system being configured.
OSLink Type	Set the messaging format for OfficeServ Link. In the U.S.A. this value will always be KP and you shouldn't change it.
OSLink IP	Set the IP address of the OfficeServ Link. In most cases this will be 127.0.0.1. When using multiple systems you must check the V3 checkbox and enter the IP address of the OfficeServ 7000 Series system in the Switch IP field. The OfficeServ IP address con be obtained from the system administrator.
OSLink Port	Set the TCP port number OfficeServ Link is configured to listen on. In most cases this will be the default value of 6000.
Dialing Position	Set the regional dialing properties for the OfficeServ 7000 Series system.
Country/Region	Set the country the system is in.
Area Code	Set the system's local area code (i.e. 214).
Dialing Rule	Configure how the OfficeServ Messenger places external calls.
Access Code for Local Calls	Set the digit dialed to access a local CO line. In most cases this is the default setting of 9.
other area for local calls	If your area has more than 1 area code, enter the remaining code(s) here. Codes should be separated by commas (i.e. 972,214)
Access Code for Long-Distance Calls	Set the digit dialed to access a local CO line. In most cases this is the default setting of 9.
Carrier Code for Long-Distance Calls	Set the carrier code for national long-distance. You will usually leave this field blank.
Carrier Code for International Calls	Set the carrier code for international long-distance. You will usually leave this field blank.
Access Code	Configure how the OfficeServ Messenger routes calls between users in different systems.
System 1 – System 8	Set the Node ID of the other systems. Node IDs can be obtained from the OfficeServ 7000 Series system administrator from MMC 820.

Configuring User Accounts

The configuration of user accounts in OfficeServ Messenger is done through the Messenger Admin web interface. User accounts can be created individually through the web interface or a batch at a time by uploading a properly formatted spreadsheet file.

Creating Departments



In order to add, edit, or remove Departments the OfficeServ Messenger service must be stopped. For more information on stopping the service see Chapter 5.

The first step to creating user accounts is to create all necessary department groups in your company. Though this step is optional, it is extremely useful in organizing and viewing users when you will have many of them.

Click the Manage Group item on the web interface's left menu:



The Manage Group screen will be displayed:



OPTION	DESCRIPTION
Group Name	Set the name of the department (ie. Sales, Support, etc.).
Group Description	Set a brief description of the department. This optional field is not used and is purely for reference.
Group Code	Set a short code for the department. This optional field is not used and is purely for reference.
Group Rank	Set the rank of this department. Rank simply determines the order of appearance in the department list.
Upper Group	If the department is a sub-group of another department (ie. Sales Engineering as a sub-department of Sales), choose the master department here.

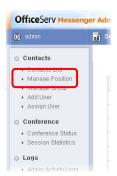
Creating Job Positions



In order to add, edit, or remove Job Positions the OfficeServ Messenger service must be stopped. For more information on stopping the service see Chapter 5.

The next step to creating user accounts is to create all necessary job positions in each department in your company. Like Departments, Job Positions are an optional piece of information, but are useful in sorting and searching users.

Click the Manage Position item on the web interface's left menu:



The Manage Position screen will be displayed:



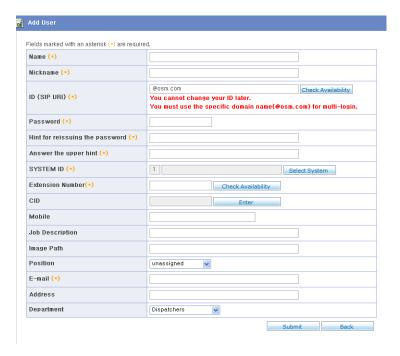
OPTION	DESCRIPTION
Position Name	Set the name of the position (ie. Manager, Engineer, etc.).
Position Code	Set a short code for the position. This optional field is not used and is purely for reference.
Position Weight	Set the rank of this job position. Rank simply determines the order of appearance in the position list.

Creating Users Individually

Click the Add User item on the web interface's left menu:



The Add User screen will be displayed:



You will notice that some items are marked with an orange asterisk. These items are mandatory and must be set for each user. The full description of each field can be found below. After entering all necessary data click Submit to create the user.

OPTION	DESCRIPTION
Name	Set the user's full name. This name is displayed in user's contact lists.
Nickname	Set the user's preferred name. This name is displayed during chat sessions.
ID(SIP URI)	Set the user's login ID. This is also sometimes referred to as a SIP URI (Session Initiated Protocol Universal Resource Identifier), because it is a unique identifier that is assigned to a specific person.
	After entering an ID you must click the Check Availability button to ensure that the ID doesn't already exist.
Password	Set the user's login password.
Hint for reissuing the password	Set the password retrieval question. This feature is not currently implemented and is reserved for future use. This field is mandatory, though, so you must enter something in it.
Answer the upper hint	Set the answer for the password retrieval question. This feature is not currently implemented and is reserved for future use. This field is mandatory, though, so you must enter something in it.
SYSTEM ID	Select the system the user is connected to by clicking Select System and then clicking the OSLink IP that corresponds to the OfficeServ 7000 Series system this user's phone is connected to.
Extension Number	Set the user's 2, 3, or 4 digit phone extension. After entering an extension number you must click Check Availability to ensure that the number isn't already assigned to another user.
CID	Set the Caller ID display for this user. This is shown only in other users' contact lists. To set the number click Enter and then type the desired number in the box (ie. (972) 555-1234) and click Use.
Mobile	Set the user's cell phone number. This number can be used by other users to call this user's cell phone from within OfficeServ Communicator.
Job Description	Enter a short description of the person's job duties (ie. "CTI engineer"). This information is optional and is only displayed in other users' contact lists.
Image Path	This field is reserved for future use and can be ignored.
Position	Select the user's job position (ie. "Engineer") from the drop-down.
E-mail	Set the user's email address. This is used to allow other users to email this user from within OfficeServ Communicator.

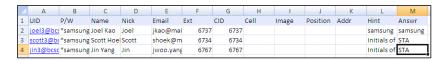
OPTION	DESCRIPTION	
Address	Set the user's street address. This information is optional and is only displayed in other users' contact lists.	
Department	Select the user's department (ie. "Product Engineering") from the drop-down.	

Creating Users from a Spreadsheet

When you have many users to create it isn't practical to create them one at a time. Because of this the OfficeServ Messenger allows you to upload a simple spreadsheet that will create all users listed in the sheet.

The spreadsheet is a basic CSV (Comma-Separated Values) file, which means you can create it through spreadsheet applications, such as Microsoft Excel[©], or through a normal text editor like Microsoft Word or Notepad. This is because in a CSV file you simply list out data with a comma separating each "column" (i.e. column1, column2, column3). This is handy on occasions where you may not have access to a spreadsheet application.

The columns of the spreadsheet contain much of the same information as when you create a single user, and are created as follows (note that you should begin entering data on row 2, row 1 is ignored as it is assumed to be a title row):



COLUMN	OPTION	DESCRIPTION	MAX LENGTH
A	ID	The user's login ID.	50 characters
В	Password	The user's login password.	16 characters†

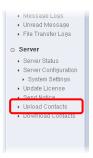
†When entering a password you must place an asterisk (*) at the beginning of the password (i.e. "samsung" should be entered as "*samsung") so that it may be properly encrypted when being written to the OfficeServ Messenger database.

С	Name	The user's full name.	50 characters
D	Nickname	The user's preferred name.	50 characters
Е	E-mail	The user's email address.	255 characters
F	Extension Number	The user's 2, 3, or 4 digit phone extension.	4 characters
G	CID	The Caller ID display for this user.	8 characters
Н	Mobile	The user's cell phone number.	50 characters
I	Image	Reserved for future use, leave it blank.	255 characters
J	Position	The user's job position.	50 characters
К	Address	The user's street address.	255 characters
L	Password Hint	The password retrieval question.	50 characters
М	Hint Answer	The answer for the password retrieval question.	50 characters

After entering all your data in the correct format you will need to save the file as a CSV file. To do this you simply select the **CSV (Comma delimited) (*.csv)** entry from the **Save as type:** field of the Save window when you are saving the spreadsheet.



Once the CSV file is created you are ready to upload it to the server so your users can be created. Begin by clicking the **Upload Contacts** menu item from the left menu of the web interface:



The Upload Contacts screen will be displayed:



Click **Browse...**, locate your CSV file then click **Open** and then **OK**. The file will be uploaded to the server and verified. If contacts cannot be loaded you will be shown which users had errors and what the errors are. Otherwise the following screen is displayed:



Save to SYSTEM ID allows you to set which OfficeServ 7000 Series system (in multi-system environments) to create the user under. **Save to Group** allows you to set the department the users will be created under. After setting these values click **Save**. You will be asked if you want to create the users. Click **OK** to proceed.



A summary screen is displayed showing you the results of the upload. You may click **Back** to return to the Upload Contacts page (in the event that you have more files to upload).



Assigning Unfiled Users to Departments

When importing or creating users sometimes it isn't convenient to add them to a department, such as when the department has not been created yet. In these cases it is not efficient to add users to a department one at a time, so the Messenger web interface contains a menu option specifically designed to let you assign users to departments quickly.

To begin, click the **Assign User** menu option in the left menu.



The Assign User screen will be displayed:



Any users who do not have a department specified will appear in the Unfiled Users list. The Groups list contains all the departments you have created. Select one or more users from the Unfiled Users list, then select a department, and then click Submit. The selected users will be assigned to the selected department.



The Assign User screen is intended only for assigning unfiled users, and can't be used to reassign users from one department to another.

Backing Up the User List

After creating and configuring all users you will want to back up your user list in case anything should happen to the server in the future. To do this click on the **Download Contacts** item in the left menu of the web interface.



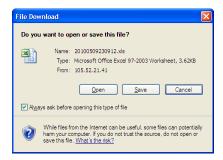
The Download Contacts screen is displayed:



Select the department you wish to back up from the list (or leave it at the default setting of All to get all users) and then click Create. The backup file will be created and a download page will be displayed:



The blue text to the right of the word Download is a link to the backup file. Click the link and you will be prompted to open or save the file.



Click Save to store the backup file. You will be prompted to choose a download location. Choose the location and then click Save. Be sure to keep the file in a secure location for future use, as it can be uploaded through the Upload Contacts screen later through the same process as described earlier in this chapter.

After backing up your user list you are ready to start the OfficeServ Messenger services and begin connecting clients.

OPERATION CHAPTER 5



This chapter deals only with Administration of the OfficeServ Messenger. For details on how your users will interface to the Messenger see the **SMT-i5243 Keyset User Guide** and/or the **OfficeServ Communicator User Guide**.

Connecting OfficeServ Messenger

Normally the OfficeServ Messenger will start automatically with the server PC. However, it is not always practical to reboot the server, so it is important to know how to launch the application manually. This is done from the Windows Services Snap-In. You can get to the Snap-In as follows:

1. Click Start.





2. In Windows XP/2003 click Run.... In Windows 7/Vista/2008 click where it says Start Search.

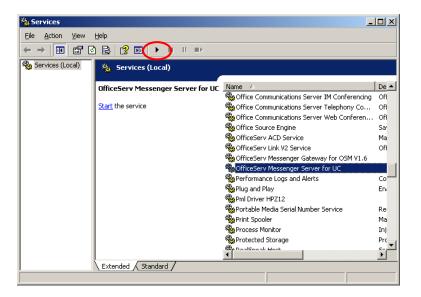




3. Type services.msc and then press Enter to launch the Windows Services Snap-In.



4. Scroll down until you find a service with the name **OfficeServ Messenger Server for UC**, then click the Start button in the upper right of the title bar (shown below).



5. The service will start after a few seconds and then return you to the Services panel.

If you have installed the XCAP Server and the SIMPLE Gateway, you will need to locate and start those services as well. The SIMPLE Gateway's service name is **OfficeServ Messenger Gateway for OSM**, and it should be located directly above the Messenger service you located in step 4. The XCAP Server's service name is **XCAP Server for Samsung UC**, and it is usually the last service in the list. Once all services are started you have successfully connected the OfficeServ Messenger and you may proceed to the next section.

Using the Web Interface

Once the OfficeServ Messenger is launched and connected you are can begin exploring the web interface, which is the central administration point for the program. The web interface is designed specifically for use with Microsoft's Internet Explorer (IE) line of browsers, and is intended for use on versions 6.0 or higher, including version 8 that ships with Windows 7. Because it is customized for IE the interface may display incorrectly or completely fail to function in other browsers.

To begin, log in to the Messenger Admin web interface:

1. Click Start then click Internet to open Internet Explorer.



2. Load the Messenger Admin website by typing http://[IPAddress]/osm (i.e. http://192.168.1.24/osm) into the address bar and clicking Go or pressing Enter



3. You will be prompted to log in to the server. You **must** enter the username and password of a user on the server that has administrative rights (such as the Administrator user). Enter the login information and then click OK. If you want to save this login information so you don' have to enter it again check the Remember my password box before clicking OK.



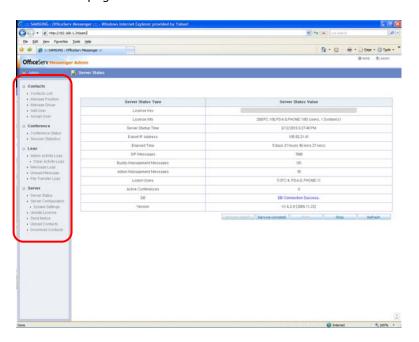
4. This will load the Messenger Admin login page.



5. The default username is admin, and the password is also admin. Enter these and then click OK.

The Messenger Server Status Page

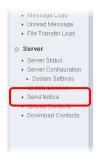
After logging in you are presented with the Messenger Server Status Page. You can use the left menu (highlighted below) to access the rest of the Messenger web interface. This page is used to get a quick view of the state of various parts of the OfficeServ Messenger as described on the next page.



OPTION	DESCRIPTION	
License Key	The license key that is currently active for the Messenger.	
License Info	The user quantities granted by the above license.	
Server Startup Time	The time that the Messenger services were last started.	
Export IP Address	The IP address users will enter in OfficeServ Communicator to connect to the system.	
Elapsed Time	The amount of "uptime" between Server Startup Time and now.	
SIP Messages	The total number of call activity logs.	
Buddy Management Messages	The number of logs records relating to buddy lists.	
Admin Management Messages	The number of log records relating to administrative user actions.	
Logon Users	The number of users currently logged in to the system.	
Active Conferences	The number of users currently in a video conference.	
DB	Displays whether the SQL database connection is active or if there was an error.	
Version	The software version of the OfficeServ Messenger.	
Service Install	These buttons allow you to create or delete the Windows Service used for	
Service Uninstall	 launching the OfficeServ Messenger Server. The service is installed by default. When installed the Service Install button is disabled, otherwise the Service Uninstall button is disabled. 	
Start	The Start and Stop buttons control the Windows Service used for launching	
Stop	the OfficeServ Messenger Server.	
Refresh	Refresh the screen to reflect any changes that may have been made.	

Sending a Broadcast Message

When you want to send a broadcast message to all users who are currently logged in to the system simply click the Send Notice menu item.



The Send Notice screen will be displayed:



Type the message you want to send into the text box (it must be less than 600 characters) and then click Send. A confirmation window will appear. Click OK to send your message.



Viewing Administrative Logs

The Messenger tracks all operations performed by someone who logs into the web interface. This is for security in the event that a user makes unauthorized changes. To view these logs click the **Admin Activity Logs** item in the left menu.



The Admin Activity Logs screen is displayed. Use the date ranges at the top to select the time period you wish to search for (the default search range will pick up all records) and then click Submit.



OPTION	DESCRIPTION
NO.	The log record identifier. This is for reference only.
User	The user who performed the action. This will usually be OfficeServAdmin, which is the default administrator login created by the installation.
Time	The time and date the activity occurred.
Туре	The type of activity, such as adding a user or modifying a system.
Table	The SQL Database table that was modified. For example, if the Type is ADD and the Table is USERS it means that a new user was created.
Description	The details of the activity. This includes such data as which user account was created or the IP address an administrator logged in from.

Clearing Administrative Logs

While administrative logs are very useful, they can eventually grow to a large number of items and it becomes difficult to find what you're looking for. To clear out old logs you can click the Clear Activity Logs item in the left menu to set the parameters for which records to delete.



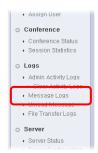
The Clear Activity Logs screen is displayed.



Select the date range for the records you want to delete and then click Submit. The default date range when you load the page will delete all administrative logs.

Viewing / Deleting Message Logs

The Messenger also tracks unread administrative broadcast messages and unread user-to-user messages. You can view the summary of how many unread messages are in the system by clicking the **Message Logs** item in the left menu.



This will open the Message Logs screen.



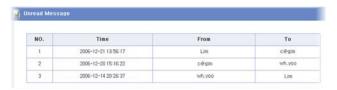
OPTION	DESCRIPTION
Period	The time period the message records span.
Notice	The number of unread administrative broadcast messages.
Note	The number of unread user-to-user messages.
Total	The total number of unread messages.
Type:	Set which types of message logs to delete: all (Total), broadcasts (Notice), or user-to-user (Note).
Status:	Set the status type of message logs to delete: all (Total) or messages already read (Read).
Period: [2005/01/01] ~	Select the age of logs you wish to delete. The beginning date is always January 1 st 2005 to ensure all old records are removed. The end date you specify MUST be 2 or more months in the past. This ensures you don't accidentally delete logs pertaining to messages still in the system.
Delete	Deletes the message logs specified by the above parameters. Messages themselves are not deleted, only the activity logs for them.

Viewing Unread Message Headers

Sometimes it is useful to see who has unread messages waiting in order to determine if they can be deleted (such as if an employee is terminated). To see the list of unread messages click the **Unread Messages** item in the left menu.



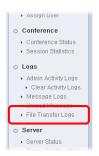
The Unread Messages screen will be displayed.



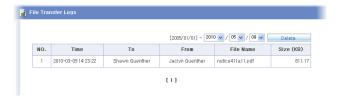
The screen shows all unread messages in the system as well as the time they were sent (**Time**), who they were sent by (**From**), and who they were sent to (**To**).

Viewing / Deleting File Transfer Logs

The OfficeServ Messenger allows OfficeServ Communicator users to share files through the collaboration interface. All file transfers are logged by the system so that administrators can monitor this activity. To view the logs click the **File Transfer Logs** item in the left menu.



The File Transfer Logs screen will be displayed.



This screen shows all file transfer activity as well as when the transfer occurred (**Time**), who the file was transferred to (**To**), who it was transferred from (**From**), what the name of the file was (**File Name**), and the size of the file (**Size (KB)**).

To delete logs select the date range at the top, then click **Delete**.

Viewing Conference Status

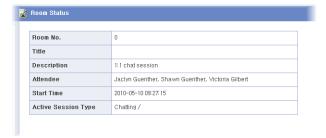
When more than two users are involved in a chat, video chat, whiteboard, or audio conference session the Messenger will track the activity as a conference. To view active conferences click the **Conference Status** item in the left menu.



The Conference Status screen displays all conferences currently in progress as well as a quick status overview of the conference, such as the number of participants (**Attendant(s)**), when the conference was created (**Start Time**), and a brief description of the conference (**Description**). Click on the conference ID (**Room No.**) to view details about the conference.

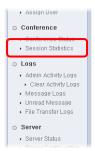


The Room Status window displays a detailed record of the conference, including the list of participants (**Attendee**) and the type(s) of resources being used (**Active Session Type**), including Chatting, Whiteboard, Video chatting, etc.

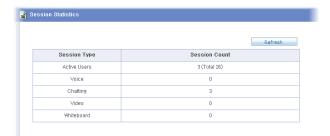


Viewing Conference Statistics

To see a quick summary of the types of conference resources currently being used click the **Session Statistics** item in the left menu.



The Session Statistics screen displays a summary of all the currently active resources. Clicking Refresh will update the screen to reflect any new activity since you loaded the page.



OPTION	DESCRIPTION
Active Users	The number of user currently involved in a conference of some type.
Voice	The number of users in an audio conference.
Chatting	The number of users in an instant message chat session.
Video	The number of users in a video chat.
Whiteboard	The number of users involved in a collaborative white boarding session.



For more details on how your users will interface to the Messenger see the SMT-i5243 Keyset User Guide and/or the OfficeServ Communicator User Guide.



SOFTWARE LICENSE AGREEMENT AND LIMITED WARRANTY

For OfficeServ CTI Applications for OfficeServ Keyphone Series

IMPORTANT, READ CAREFULLY

This Samsung End-User License Agreement (EULA) is a legal binding agreement between you (either an individual or an entity) and Samsung for Samsung software product identified above, which includes computer software and may include printed material, and "online" or electronic documentation ("SOFTWARE"). By installing, using the SOFTWARE, you indicate your acceptance of this Samsung License Agreement. If you do not agree to the terms of this License Agreement, please do not install or use the enclosed SOFTWARE.

SOFTWARE LICENSE

The SOFTWARE is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties.

- 1. GRANT OF LICENSE. This License Agreement grants you following rights:
 - a. SOFTWARE: Samsung grants to you a personal, non-exclusive license to make and use one (1) copy of the SOFTWARE accompanying this Agreement on any single computer, provided the SOFTWARE is in use on only one computer at any time. If you have multiple Licenses for the SOFTWARE, then at any time you may have as many copies of the SOFTWARE in use as you have Licenses.
 - b. Electronic Documents: Solely with respect to electronic documents included with the SOFTWARE, you may make an unlimited number of the copies, provided that such copies shall be used only for internal purpose and you shall not publish or distribute such to any third party, without Samsung Electronics Co., LTD. written and expressed consent.
 - c. Limitation on Reverse Engineering, Decompilation, Disassembly: You shall not reverse engineer, decompile or disassemble the SOFTWARE, except to the extent that this restriction is expressly prohibited applicable law.
 - d. Separation of Components: The SOFTWARE is licensed as a single product. Its component parts may not be separated for use on more than one computer.
 - e. Rental: You may not rent, lease and/or lend the licensed SOFTWARE.
 - f. Support Services: Samsung may provide you with support services related to the SOFTWARE, according to Samsung policies and programs and in for the country in which the SOFTWARE was purchased. With respect to technical information you provide to Samsung as part of the support services, Samsung may use such information for its business purpose, including for product support and development. Samsung will not utilize such technical information in a form that personally identifies you.
 - g. SOFTWARE Transfer: You may permanently transfer all of your rights according to this agreement, provided you retain no copies, you transfer all of the SOFTWARE, and the recipient agrees to the terms of this agreement by notifying in writing to authorized Samsung VAR, outfit and/or dealer in which the SOFTWARE was purchased. And including all prior versions of SOFTWARE, if the SOFTWARE is an upgrade.
 - h. Termination: Without prejudice to any other rights, Samsung may terminate this agreement if you fail to comply with the terms and condition of this agreement. In such event, you must destroy all copies of the SOFTWARE and all of its component parts.

2. SOFTWARE ACTIVATION

a. Software Activation; Samsung will provide a software activation code that will allow use of the purchased OfficeServ CTI products. The activation code will be associated with the MAC address of the LAN interface of the Samsung telephone system. In the event of hardware failure associated with the LAN interface Samsung will issue a replacement software activation code when requested by a Samsung authorized dealer. In the event that a replacement software activation code is issued the defective hardware associated with the original software activation code must be returned to Samsung. If the hardware associated to the software activation code is not returned to Samsung by the dealer the dealer will be billed for the original purchase price of the OfficeServ CTI application.

3. UPGRADES & COPYRIGHT

- a. Upgrade: If the SOFTWARE is an upgrade of a component of a package of software programs that you licensed as a single product, the SOFTWARE may be used and transferred only as an part of that single product package and may not be separated for use on more than one computer.
- b. Copyright: The SOFTWARE is owned by Samsung or its suppliers and protected by copyright laws and international treaty provisions. Therefore, you must treat the SOFWARE like any other copyrighted material except that you may install the SOFTWARE on a single computer provided you keep the original solely for backup or archival purpose. You may not copy the printed materials accompanying the SOFTWARE.

LIMITED WARRANTY

Samsung warrants that (a) the SOFTWARE will perform substantially in accordance with the accompanying written materials for a period of ninety (90) days from the date of receipt, and (b) any Samsung supplied hardware accompanying the SOFTWARE will be free from defects in materials and workmanship under normal use and service for a period of one(1) year from the date of receipt. During the warranty periods specified above, Samsung will replace or repair any software or hardware found to be defective. Warranty claims should be made through the Samsung dealer from whom the products were purchased, and must be made within the applicable warranty period.

NO OTHER WARRANTIES

TO THE MAXIMUM EXTENT PERMITTED BY THE APPLICABLE LAW, SAMSUNG DISCLAIMS ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, WITH RESPECT TO THE SOFTWARE, THE ACCOMPANYING PRODUCT MANUAL(S) AND WRITTEN MATERIALS, AND ANY ACCOMPANYING HARDWARE.

NO LIABILITY FOR DAMAGES

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL SAMSUNG OR ITS SUPPLIERS BE LIABLE FOR ANY DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF OR INABILITY TO USE THE SOFTWARE PRODUCT, EVEN IF SAMSUNG HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Samsung Telecommunications America, L.P.