METREOS

IP Communications Applications for Business Advantage

APPLICATION SUITE ADMINISTRATOR GUIDE

Metreos Communications Environment 2.2

www.metreos.com **Part Number M-2400-AS-02**
10/2005

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About This Guide

This Metreos Communications Environment 2.2 Application Suite Administrator Guide describes how to deploy and configure the Metreos Application Suite to the Metreos Communications Environment (MCE). This guide also describes each application in the suite and details how each application is used.

Target Audience

This Metreos Communications Environment 2.2 Application Suite Administrator Guide is intended for administrators who plan to manage the MCE using the Metreos Management Console and the Metreos Application Suite using the Metreos Application Suite Administrative Console.

Organization

This guide is organized into the following sections:

- About This Guide
- Chapter 1: The Metreos Application Suite — Overview the Metreos Application Suite
- Chapter 2: Metreos VoiceTunnel™ — Allows a remote user to connect to any enterprise IP communications system and place calls as if they were local to the system. The Metreos VoiceTunnel functionality includes the capability to:
  - Place all calls locally avoiding international and long-distance toll charges
  - Authenticate call usage and apply a broad range of policies to the billing and accounting of communications costs
  - Manage, monitor, and report on the use of the communications system
- Chapter 3: The Metreos Application Suite Administrator — Introduction to the Application Suite administrative console
- Chapter 4: Metreos Application Suite Management Interface — Procedures for configuring the Metreos Application Suite
- Chapter 5: Application Suite Reports — Procedures for configuring and using application suite reports
- Chapter 6: Application Configuration — Procedures for configuring each Metreos application
- Appendix A: Cisco CallManager - Procedures for setting up Cisco **CallManager** for the Metreos Application Suite
- Index

Notational Conventions

The following section summarizes the notational conventions used in this Metreos guide.

Notes, Cautions, and Warnings

NOTE: *A Note provides important information, helpful suggestions, or reference material.*

CAUTION: *A Caution indicates a potential risk for damage to hardware or loss of data, and describes how to avoid the problem.*

WARNING: *A Warning indicates a potential hazardous risk that could result in serious bodily harm or death.*

Typographical Conventions

This section defines the general typographical conventions followed in this Metreos guide.

- **Bold** typeface — Represents literal information:
  - Information and controls displayed on screen, including menu options, windows dialogs and field names
  - Commands, file names, and directories
  - In-line programming elements such as class names and XML elements when referenced in the main text
- *Italics* typeface — Represents:
  - New concepts
  - A variable element such as *filename*.**mca**
- `Courier` typeface — Represents code or code fragements or text that you enter. For example, type `xxxxx`.
- ...(elllipsis) — Represents omitted content in code fragments.
- <UPPERCASE> — Typeface enclosed in angle brackets represents keys and keystroke combinations that type. For example, <CTRL + ALT + DEL>.

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Metreos Application Suite 1

The Metreos Application Suite™ is a collection of voice over IP applications for the enterprise. Each application in the suite is a complete IP telephony application ready to deploy and run at your site. The applications are built using Metreos tools and execute within the Metreos Application Runtime Environment. Because the applications are built using Metreos tools, each application is easily and quickly customizable by your staff or integrator if needed.

The following sections summarize the Metreos Application Suite IP telephony applications.[1]

The following applications are not necessarily licensed and avalible in your deployment.

Metreos ActiveRelay

Metreos ActiveRelay™ lets you receive calls at a single number, regardless of your physical location. For example, it can bridge your cellular telephone to your office telephone and simultaneously ring both phones so you can answer either phone.

After you are connected, you can easily transfer the call to other devices that are configured with ActiveRelay. The call also does not exhibit multiple ring sequences as do older style call forwarding applications.

Metreos ClickToTalk

Metreos **ClickToTalk**™ is a speed dialing application allowing calls to any party in a contact list with a single click. Anyone in a Cisco CallManager group using a Cisco 7940, 7960 or 7970 IP telephone can use Metreos **ClickToTalk**.

Call a Microsoft Outlook contact using **ClickToTalk** by highlighting a contact and clicking a button on the Outlook toolbar. Then, **ClickToTalk** dials the selected contact from the user's IP phone. Conferencing and recording of calls are also supported. Recorded calls can be sent by e-mail to all call participants.

Metreos Intercom

Metreos **Intercom**™ provides instant communication over IP phones without the need to dial a number. Users select from a contact group on the IP phone display and audio connectivity is established.

Metreos **Intercom** can also be configured to act as a group paging system—similar to a traditional paging system—for broadcasting voice messages or pages. Using the **TalkBack** feature, an intercom listener can press the **Reply** button and instantly conference with each party in the intercom group.

Metreos RapidRecord

Metreos **RapidRecord**™ automatically records calls placed to and from a configured group of devices, thus providing seamless, hands-off call recording. Play back recorded calls back from a Web interface.

1. The presence of any individual application in your deployment is dependent on the license in effect.

Metreos ScheduledConference

Metreos **ScheduledConference**™ is a Web-scheduled, dial-in and dial-out conferencing system. Schedule conferences from an easy-to-use Web interface, eliminating the need for operator or administrative assistance. Features include the adding of conference parties, party mute and unmute and the removal of participants from conference.

Metreos VoiceTunnel

Metreos **VoiceTunnel**™ allows a remote user to connect to any enterprise IP communications system and place calls as if they were local to the system. Metreos VoiceTunnel allows you to:

- Place all calls locally, thus avoiding international and long-distance toll charges.
- Authenticate call usage and apply a broad range of policies to the billing and accounting of communications costs.
- Manage, monitor and report on the use of the communications system.

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Metreos Application Suite Administrator 2

Communications system administrators manage the Metreos Application Suite using the Metreos Application Suite Administrator. The Administrator console includes configuration facilities of applications in the suite, and provides easy access to a comprehensive set of reporting and accounting functions.

Navigate to the administration URL (http://yourserver/appsuiteadmin/) using a Web browser to display the login page as shown in Figure 1.

NOTE: In the URL example presented above, the yourserver *name represents the name for your specific server.*

Figure 1: Application Suite Login

The initial default **Username** is *administrator* and the **Password** default is *metreos*. After the first initial login, you can change the password, and then access the configuration and reporting options of the Metreos Application Suite.

After you log in, the system presents the Main Page of the Metreos Application Suite Administrator.

Figure 2: Main Configuration Page

The Application Suite Administrator Main Page is divided into three groups of related management services that provide:

- Management — User and system configuration.
- Reports — Management of application reports.
- Application Suite — Configuration of specific applications.

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Metreos Application Suite Management Interface 3

The Metreos Application Suite Management Interface supports the following management elements.

- System Management — Provides system and application management facilities such as administrator login and password, system-level application configuration and lockout thresholds.
- Account Management — Permits creation and maintenance of application user accounts.
- Settings & Records Backup — Allows storage of the current Metreos Application Suite state.
- Settings & Records Restore — Allows restoration of a previous Metreos Application Suite state.

System Management

Selecting **System Management** from the main configuration page displays the System Management page.

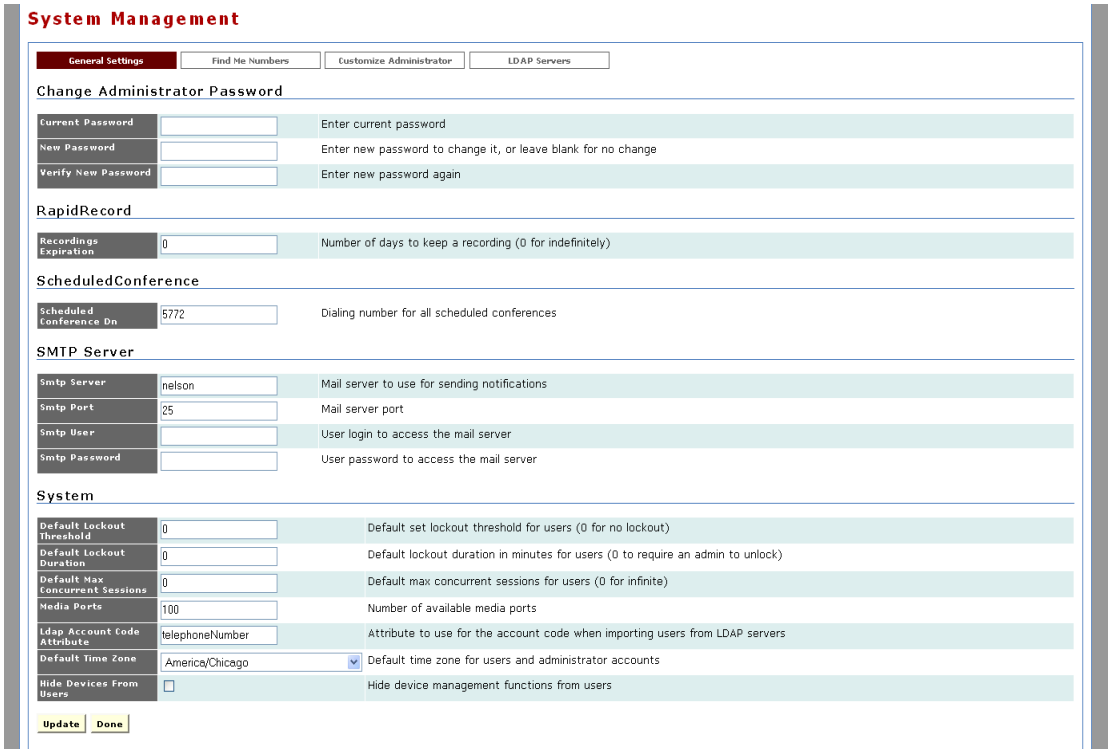

Figure 3: System Management

The System Management page is divided into the following sections:

- Change Administrator Password
- RapidRecord
- ScheduledConference
- SMTP Server
- System

Change Administrator Password

Change the Metreos Application Suite administrator password by following steps 1-5.

1. Enter the current password in the **Current Password** field.
2. Enter the new password in the **New Password** field.
3. Enter the new password in the **Verify New Password** field.
4. Click the **Update** button to apply the change.
5. Click the **Done** button to return to the Main Page.

RapidRecord

Specify the expiration interval (in days) for call recordings that are produced by Metreos RapidRecord by following steps 1-3.

1. In the **Recordings Expiration** field, enter the number of days that a voice recording is retained.
2. Click the **Update** button to apply the change.
3. Click the **Done** button to return to the Main Page.

NOTE*: Enter a zero value to specify that recordings do not expire automatically. Recordings must be deleted manually if this option is used.*

ScheduledConference

Specify the dial-in number for scheduled conference following steps 1-3.

1. In the **Scheduled Conference Dn** field, enter the dial-in number of a currently scheduled conference.
2. Click the **Update** button to apply the change.
3. Click the **Done** button to return to the Main Page.

SMTP Server

This section describes the configuration of the SMTP server used for sending e-mail to Metreos ScheduledConference invitees. Populate this section with the following information.

- Smtp Server — Enter the server name or the IP address for the ScheduledConference SMTP e-mail server.
- Smtp Port — Enter the port used by the ScheduledConference SMTP e-mail server.
- Smtp User — Enter the username for the ScheduledConference SMTP e-mail server.
- Smtp Password — Enter the password for the ScheduledConference SMTP e-mail server.

System

This section describes configuration of the Metreos Application Suite support system. Populate this section with the following information.

- Default Time Zone Offset — The time zone to use as the default when creating new user accounts.
- Default Lockout Threshold — Enter the number of consecutive failed logins before an account is locked to prevent further login attempts. This threshold does not apply to individual accounts when the lockout is overridden.
- Default Lockout Duration — Enter the duration (in minutes) that an account remains locked out. This duration does not apply to individual accounts when the lockout is overridden.
- Default Max Concurrent Sessions — Some applications allow multiple concurrent sessions and users can concurrently use multiple applications. Enter the maximum number of concurrent active sessions user accounts are permitted. This parameter does not apply to individual accounts when the maximum concurrent sessions setting is overridden.
- Hide Devices From Users — Hide the devices configuration section from non-administrative users in the user account management page.

Account Management

Select the **Account Management** link from the Main Page to display the Account Management page.

Figure 4: Account Management

Account Management page options are:

- **Create User**
- **Edit User**
- **Delete Users**
- **Import Users**
- **Search**

Create User

Use the following procedure to create a new user account.

1. Click the **Create User** button on the Account Management page to display the Create User page.

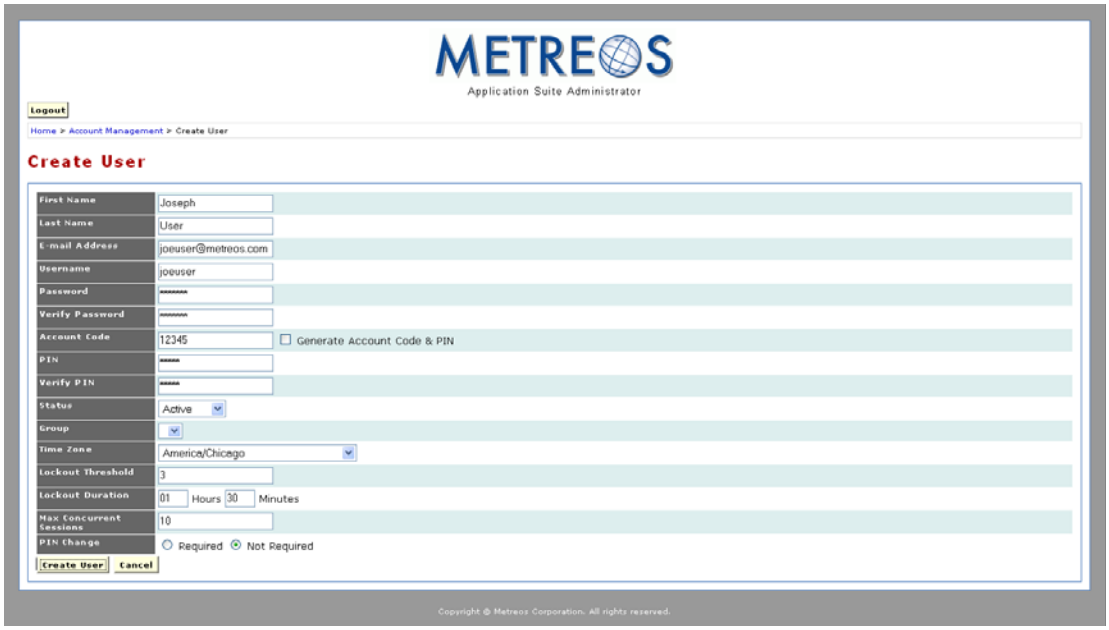

Figure 5: Create User Account

2. For the new account, complete the fields described in the following list.

- First Name — Enter the first name of the user.
- Last Name — Enter the last name of the user.
- E-mail Address — Enter the user's e-mail address for receiving Application Suite notifications.
- Username — Enter the username you assign to the user. The username identifies by the user.
- Password — Enter the password used to authenticate the user.
- Verify Password — Enter the password used to authenticate the user.
- Account Code — Re-enter the account number you assign to the user. The account number identifies the user.
- PIN — Enter the Personal Identification Number (PIN) used to authenticate the user.
- Verify PIN — Re-enter the PIN used to authenticate the user.
- Status — Enter the user account status by selecting from the following list using the dropdown menu.
  - Active
  - Disabled
  - Locked
  - Deleted
- Time Zone — The time zone in which this user is located. A default value may have already been set. Refer to "System" on page 7 for information on default system values.
- Lockout Threshold — Enter the number of consecutive times the user may have a login rejected before the account is forced into a locked out state to prevent further login attempts. A default value may have already been set. Refer to "System" on page 7 for information on default system values.
- Lockout Duration — Enter the duration (in minutes) that an account remains locked out. If no entry is supplied for **Lockout Duration**, the Metreos Application Suite does not automatically unlock a locked account. If this happens, you must manually unlock the account. A default value may have been set previously. Refer to "System" on page 7 for information on default system values.
- Max Concurrent Sessions — Some applications allow multiple concurrent sessions and users have access to multiple applications. Enter the maximum number of concurrent sessions for the user. A default value may have been set previously. Refer to "System" on page 7 for information on default system values.
- PIN Change — Selecting the **Required** radio button specifies that the user must change the account PIN at the next login attempt. Selecting the **Not Required** radio button eliminates the requirement to change the account PIN at the next login attempt.
- Record Calls — Selecting the **Record Calls** box specifies that all calls initiated by this account are to be recorded.
- Recordings Visible — Selecting the **Recordings Visible** box specifies that the user's phone displays that the call is being recorded. A button is also displayed to stop and start recording.

NOTE*:* *CallManager must be configured for each recorded device. Refer to Appendix A "Cisco CallManager Configuration" on page 49 for more information.*

3. Click the **Create User** button to create the user account.

Edit Account

Use the following procedure to edit a user's account.

1. Click the **Edit** button on the Account Management page for the user account you want to edit. The system displays the edit account page.

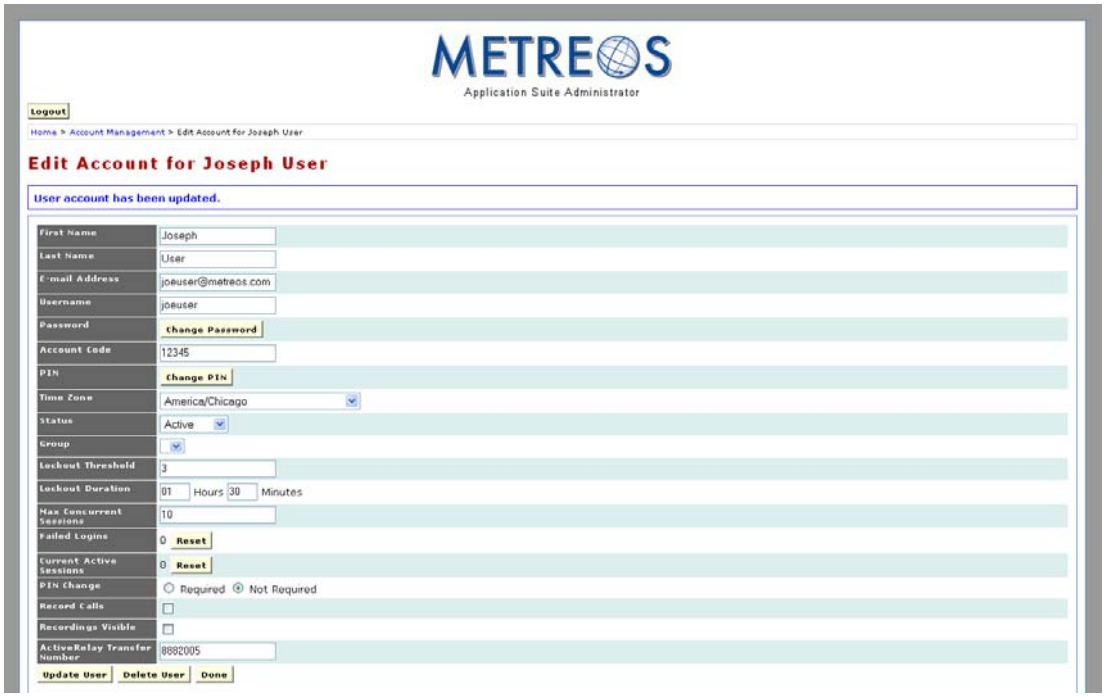

Figure 6: Edit Account Page

2. Make any required changes to the user account. Refer to "Create User" on page 8 for field descriptions.

3. Click the **Update User** buttton to apply the change. Click the **Done** button to return to the Account Management page.

Scroll down the Edit Accounts to view the following additional sections.

- Devices
- Find Me Numbers
- Remote Agent

Devices

The Devices section lists device MAC addresses and associated user phone directory number.

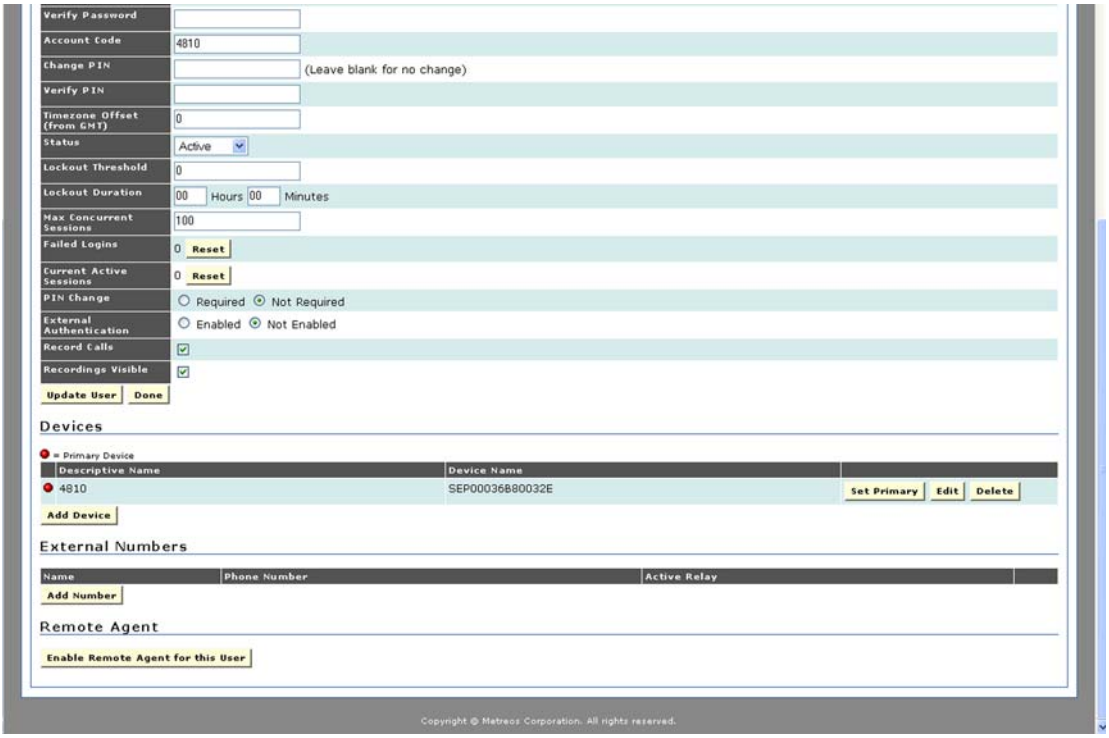

Figure 7: Devices Section

Use the following procedure to add a new device.

1. Click the **Add** button.

Figure 8: Add Device Page

2. Add a descriptive name for the device in the **Descriptive Name** field.

3. Enter the MAC address in the **Device Name** field. You can retrieve the MAC address from your phone. Each supported IP phone has three labels affixed to the bottom of the phone, and each label contains a human-readable, 12-digit, alphanumeric string and barcode. The MAC address is the 12-digit string located on the center label. In some cases, the user may not have an IP phone. In that case uncheck the IP phone checkbox.

4. Click the **Create Device** button to add the device. The system displays the Edit Device page.

Figure 9: Edit Device Page

5. Enter the directory number listed in CallManager for the device in the **Add Number** field. Add as many numbers for each device as necessary.

Add as many devices as necessary. One of the devices must be set as the *primary device*. The designation of a primary device is strictly for the use of applications that require a single device. These applications will call only the device designated as primary. The Devices section of the edit user account contains a **Set Primary** button for each device.

Figure 10: Devices Section of Edit User Containing Set Primary Button

Click the **Set Primary** button associated with the user's primary device. You can also edit and delete numbers using the **Edit** and **Delete** buttons for each device.

Find Me Numbers

The **Find Me Numbers** section allows the specification of numbers for use with Metreos ActiveRelay, a presence and mobility application.

Figure 11: Find Me Numbers Section of Edit User

ActiveRelay routes calls placed to the primary device and makes them available on all enabled devices in the Find Me Numbers section. Refer to "Metreos ActiveRelay Configuration" on page 25 for more information about ActiveRelay and its configuration.

Use the following procedure to specify external numbers and enable ActiveRelay.

1. Click the **Add Number** button. The system displays the Add Number page.

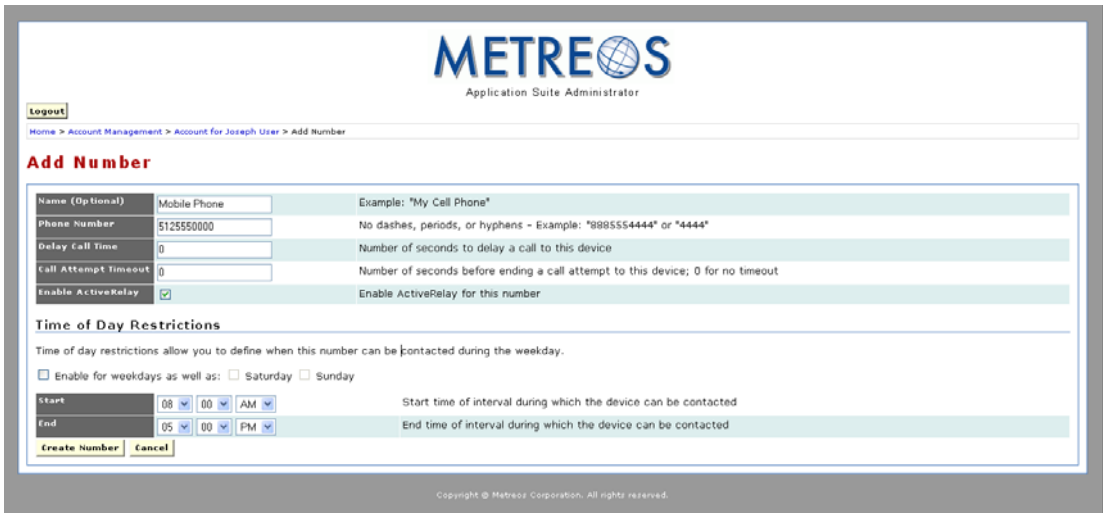

Figure 12: Add Number Page

2. Enter a descriptive name in the Name (Optional) field.

3. In the Phone Number field, enter the fully qualified directory number of the user's physical phone used to receive calls.

4. Check the **Active Relay** box.

Remote Agent

The Remote Agent section is used to configure the Metreos RemoteAgent application. Contact your Metreos representative for information about Metreos RemoteAgent.

Settings & Records Backup

Use the following procedure to back up the Metreos Application Suite.

1. Click the **Settings & Records Backup** link on the Main Page. The system displays the All Backups Page.

Figure 13: All Backups Page

2. Click the **Perform a Backup** button. The system displays the Performing a Backup page.

Figure 14: Performing a Backup Page

3. Click the **Perform Backup** button. The system displays a message that indicates if the backup completed succesfully.

Figure 15: Backup Successful Message

4. Click the **Done** button to return to the All Backups page. The system automatically populates the All Backups page with your backups.

Figure 16: Updated All Backups Page

Click the **Download** button to download the backup file or delete the backup file by clicking the **Delete** button.

Settings & Records Restore

Use the following procedure to restore the Metreos Application Suite to a previously stored state.

1. Click the **Settings & Records Backup** link on the Main Page. The system displays the Restore page:

Figure 17: Restore Page

Use one of the following two options to restore the Application Suite.

- Select a backup file from the **Select a Backup** dropdown list and click the **Restore From Backup** button.
- Browse for a previously downloaded backup file using the **Browse**... button and click the **Upload File** button after locating the file.

The system displays the Perform a Restore page.

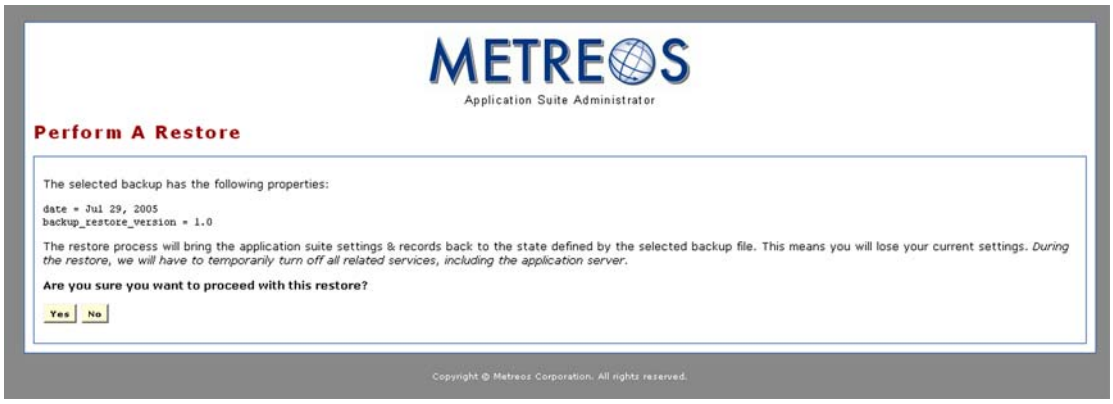

Figure 18: Perform A Restore Page

2. Click the **Yes** button to procede. The system displays a message that indicates if the restoration completed succesfully.

Figure 19: Restoration Complete

3. Click the **Done** button to return to the Restore page.

METREOS

Application Suite Reports 4

The Metreos Application Suite reporting facility permits the accumulation and presentation of statistics and metrics pertaining to the account usage of each application in the suite. Reported statistics are commonly used for billing calls, detecting intrusion and maintaining a record of customer contacts. All administration reports can be accessed from the Main Page of the Application Suite Administrator:

Figure 20: Main Configuration Page

The following reports are available.

- Account Summaries — Presents calls by account code, filtered by selected criteria
- Call Statistics — Presents calls placed to selected clients and is associated with selected projects
- Security and Access Control — Presents statistics on each device accessing each account

Account Summaries

Click the **Account Summaries** link to display the Account Summary page.

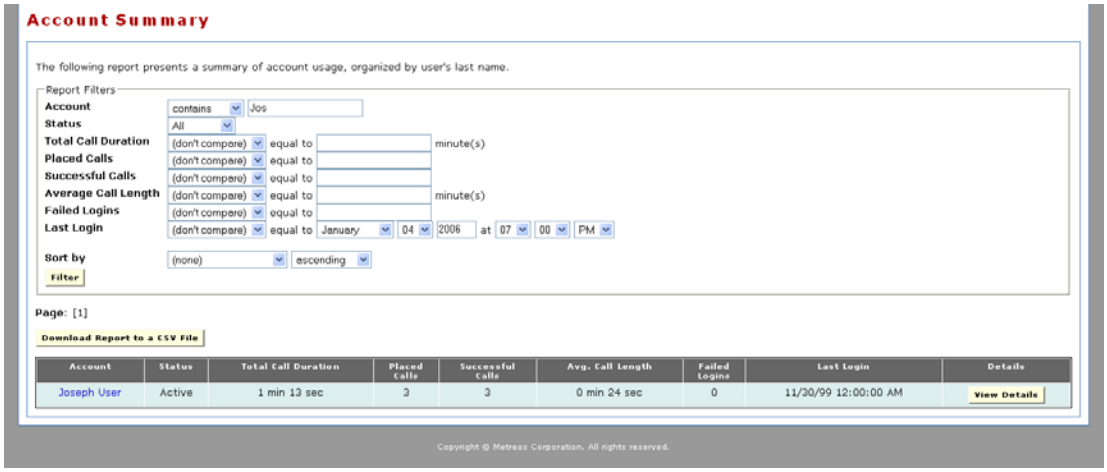

Figure 21: Account Summary Page

Account Summary reports present statistics for each account code, such as cumulative call duration, average call length and last login.

Call Statistics Reports

Click the **Call Statistics** link to display the Call Statistics page.

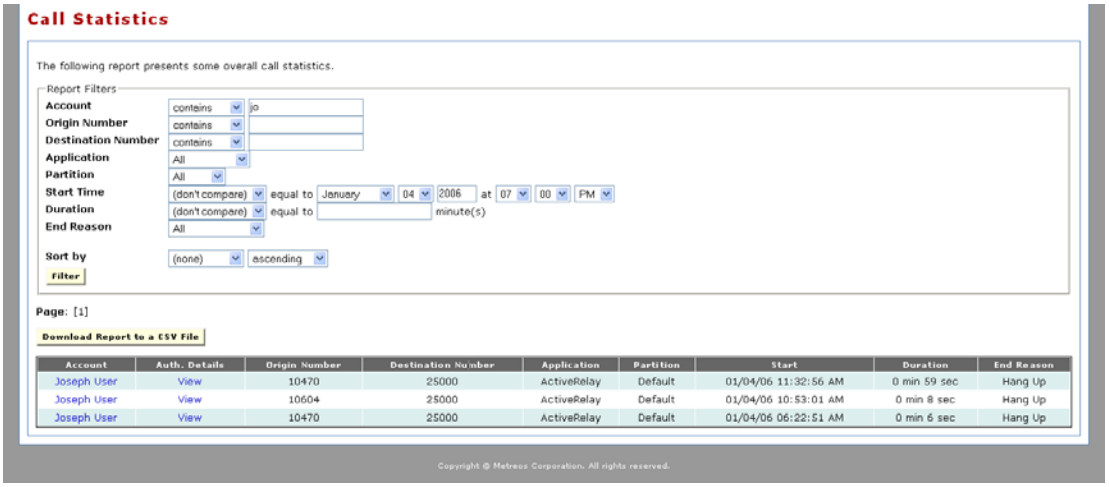

Figure 22: Call Statistics Report Page

Call Statistics reports show statistics of calls placed from selected accounts to specific clients, and call statistics that are associated with selected projects.

Security and Access Control Reports

Click the **Security & Access Control Reports** link to display the Security & Access Control Reports page.

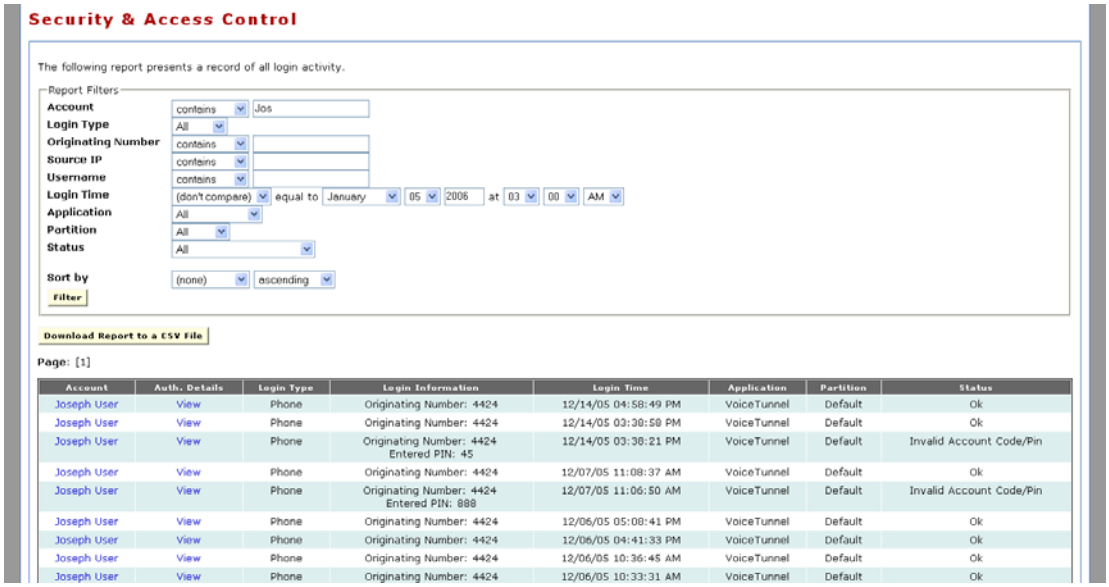

Figure 23: Security And Access Control Reports

Security and Access Control reports display detailed information on which devices are using which account codes. If an account is locked out or an unexpected concurrent sessions exceeded error occurs, this page can be used to determine the device from which the offending attempt was initiated.

Application Configuration 5

Applications in the Metreos Application Suite require installation and configuration. Cisco CallManager may also require application-specific configuration. Refer to Appendix A: “Cisco CallManager Configuration” on page 49 for information on application specific settings in CallManager.

Setting the Trigger Parameter for Metreos Applications

Each application script in the Metreos Application Suite has a set of triggering parameters. The parameters are set in the MCE using the Metreos Management Console. Detailed information about the Metreos Management Console is provided in the Metreos Communications Environment 2.2 Management Console User Guide. Cisco CallManager must also be configured so that calls are routed to the Metreos Application Runtime Environment.

The following procedure describes how to set the trigger value for applications in the Metreos Application Suite.

1. Launch the Metreos Management Console and log in.

Figure 24: Metreos Management Console

2. Click the Applications link to display the Applications page.

Figure 25: Metreos Management Console Applications Page

3. Select the application to set the trigger parameter. For example, select ScheduledConference.

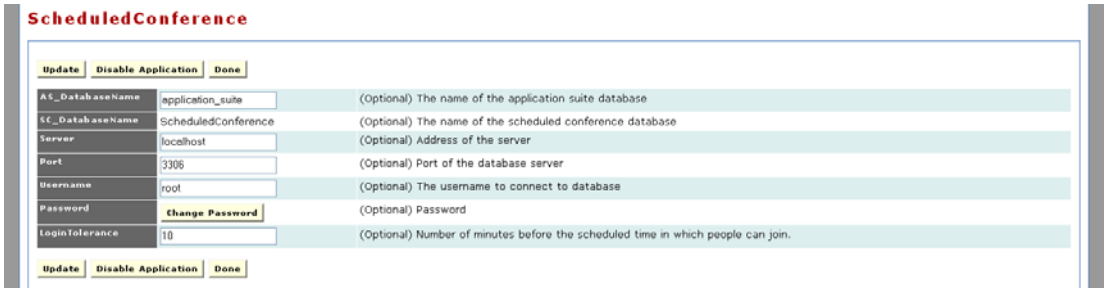

Figure 26: Application Configuration Page for Metreos ScheduleConference

4. Click the **Edit** button at the bottom of the page in the Partitions section.

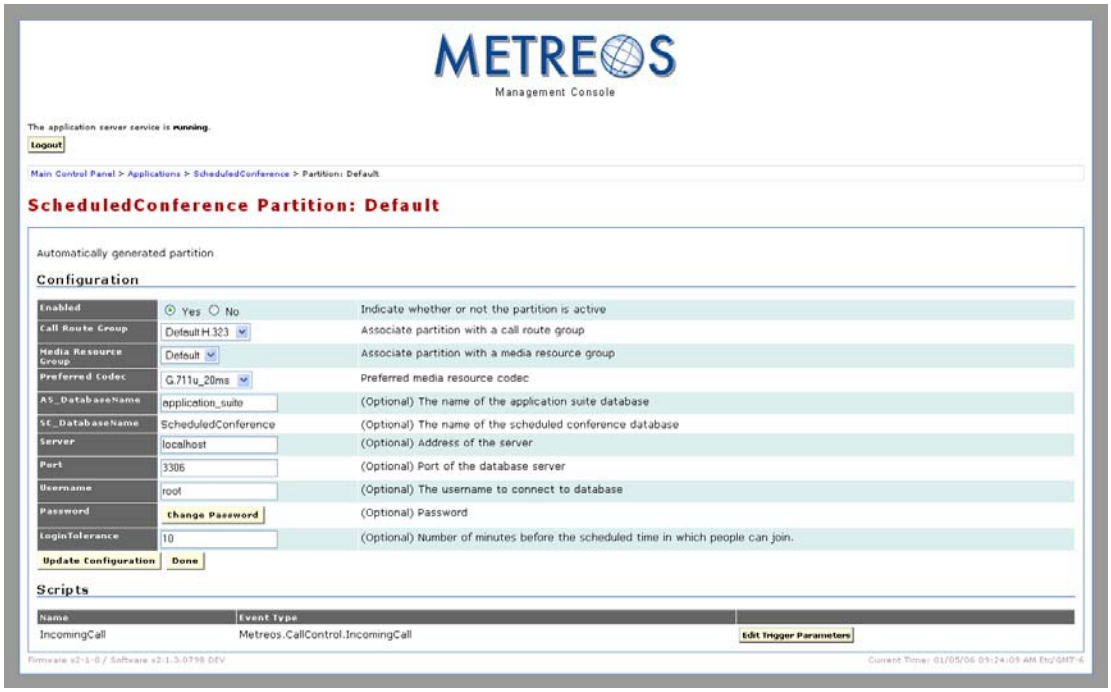

Figure 27: Default Application Partition Page for Metreos ScheduleConference

The Scripts section lists the script name (IncomingCall) and the event type (Metreos.CallControl.IncomingCall).

5. Click the **Edit Trigger Parameters** button to set the trigger event script parameters.

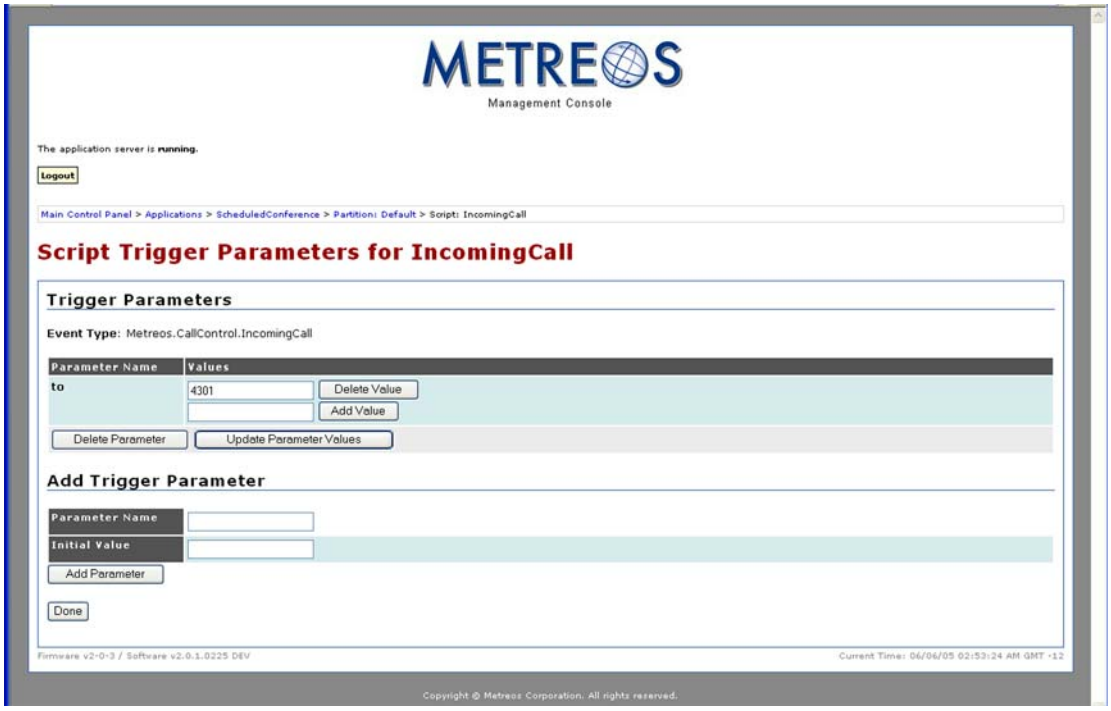

Figure 28: Trigger Parameter Page for Metreos ScheduleConference

In the ScheduledConference example, the trigger event is Metreos.CallControl.IncomingCall, which occurs when the system receives an incoming call. On receipt of this event, the application runtime seeks a match between the extension in the trigger parameter and the extension of the incoming call. If a match is found—the script-in this case—IncomingCall-is executed. The administrator sets the extension by entering it in the **Add Value** field and clicking the **Add Value** button.

Although Metreos applications may be triggered by various event types, all triggering events in the Metreos Application Suite are incoming calls or HTTP events. HTTP events have URL trigger parameters rather than extensions associated with incoming calls. In the Application Suite, a URL trigger is used either to execute a query or to display information on a phone.

Some applications have multiple scripts and each script has a trigger event. Table 1. presents each Metreos application, all of its trigger event scripts and the required trigger parameter value.

Table 1. Application Triggering Event Parameters

Application	Trigger Event Script	Event Type	Name/ Value Pair
Metreos ActiveRelay	IncomingCall	OnIncomingCall	**to** = set by administrator (per user)
	SwapScript	HTTP	**url = /ActiveRelay**
Metreos ClickToTalk	Ping	HTTP	**url = /click-to-talk/validate**
	StopRecording	HTTP	**url = /click-to-talk/stopRecord**
	GetErrors	HTTP	**url = /click-to-talk/errors.xml**
	AppImage	HTTP	**url = /click-to-talk/image.xml**
	Call_Initiator	HTTP	**url = /click-to-talk/initiateCall**
	AddCallToConference	OnIncomingCall	**to** = set by administrator
Metreos Intercom	IntercomAddWorker	HTTP	**url = /IntercomAddWorker**
	ShowIntercomGroups	HTTP	**url = /ShowIntercomGroups**
	LaunchIntercom	HTTP	**url = /LaunchIntercom**
Metreos RapidRecord	Record	OnIncomingCall	**to** = regex:99999.+
	InitiateRetrieveControlKeys	HTTP	**url = InternalSendEvent**
Metreos ScheduledConference	IncomingCall	OnIncomingCall	**to** = set by administrator
Metreos VoiceTunnel	CallRouter	OnIncomingCall	**to** = set by administrator

Metreos ActiveRelay Configuration

Metreos ActiveRelay lets you receive calls at a single number, regardless of your physical location. For example, it can bridge your cellular telephone to your office telephone by ringing both phones simultaneously so you can answer either phone.

After you are connected, you can easily transfer the call to other devices that are configured with ActiveRelay. The call does not exhibit multiple ring sequences as do older style call forwarding applications.

Installing the Cisco IP Phone Service

Before Metreos ActiveRelay can be used, the phone service must be installed on CallManager, and the participating phones must be subscribed to the service. Refer to "Cisco IP Phone Services Setup" on page 51 for details.

Configuring Metreos ActiveRelay

Use the following procedure to configure Metreos ActiveRelay.

1. Launch the Metreos Management Console and log in:

Figure 29: Metreos Management Console

2. Click the Applications link.

Figure 30: Metreos Management Console Applications Page

3. Click the ActiveRelay link.

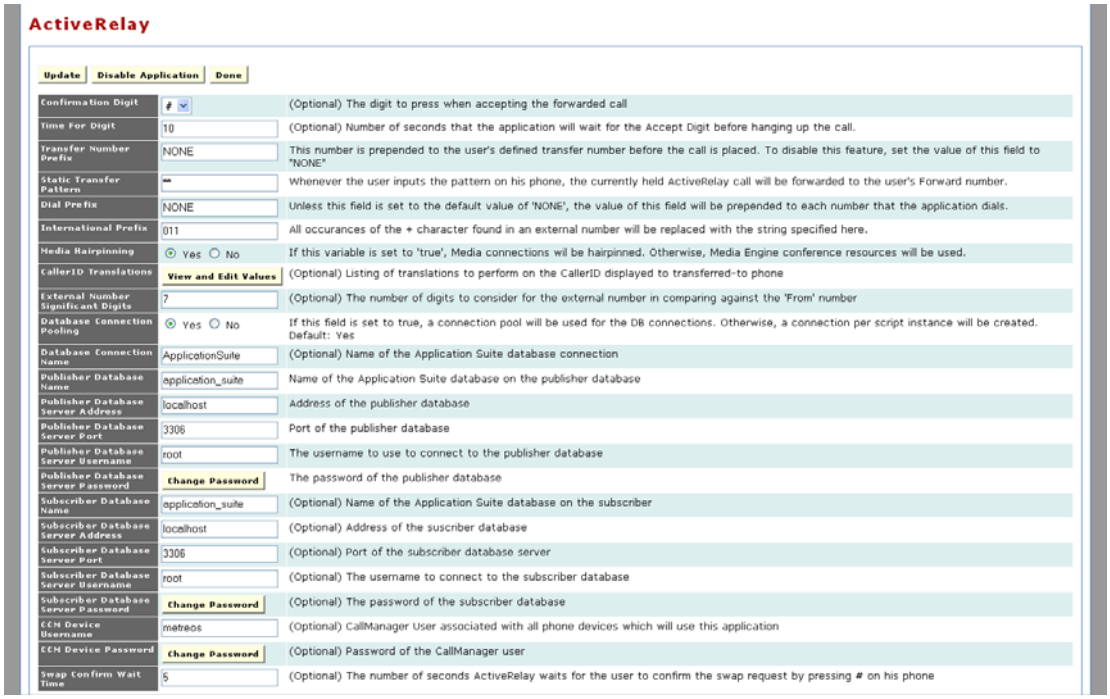

Figure 31: Metreos ActiveRelay Configuration Page

4. Fill out the form using the information provided in the following list.

- Digit Required — ActiveRelay provides the option of requiring the user to press a specified key on the phone keypad to accept a forwarded call. The **Yes** radio button enables this feature. The **No** radio button disables this feature.
- Confirmatino Digit — Enter the key the user presses to accept a forwarded call when that feature is enabled.
- Time For Digit— Enter the maximum interval (in seconds) the user can wait before pressing the key to accept a forwarded call when that feature is enabled.
- CCM Device Username — Enter the Cisco CallManager username associated with phones that use Metreos ActiveRelay.
- CCM Device Password — Click the **Change Password** button to change the password for the CallManager username. You will be prompted for your current password, the new password and to verify the new password. After entering the new password, click the **Update** button.
- Dial Prefix — Enter the number required to connect to an external phone.
- CallerID Translations — This parameter permits identification of internal calls. When a call is forwarded to your phone, your phone displays the incoming call number. The incoming call number is a fully qualified directory number if the call is external.However, internal calls typically do not require dialing the full number.

In regard to CallerID Translations, common practice is to configure your internal dial plan to allow users to dial only the last four digits of the outside line associated with another user in the system. Another common practice for large systems is to allow users to dial a 5-digit number

where the first digit signifies a physical location and the last 4 digits are used to match the user being called. The CallerID Translations parameter is used to construct a fully qualified directory number for internal calls so that the full number can be displayed when the call is forwarded.

The CallerID Translations parameter uses a key/value pair to construct the fully qualified directory number. A regular expression is used to determine whether the call is internal. If so, the regular expression adds an area code and prefix to the internal number. Refer to http://msdn.microsoft.com/library/default.asp?url=/library/en-us/cpgenref/html/cpconRegularExpressionsLanguageElements.asp for information about regular expressions.

- If the internal dial plan specifies the last four digits plus a leading number representing a physical location, use the following regular expression:

  Key ^[0-9*#](?<internal>[0-9*#]{4})$ Value xxxyyy${internal}

The first expression in brackets ([ ]) causes deletion of the initial digit, isolating the last four digits in preparation for constructing the fully qualified directory number.

The 4 in curly braces at the end of the Key field is used to identify incoming calls with four digit numbers. If your facility uses a different number of digits for internal calling, you can vary this number to match the number of digits used for your internal calls.

The characters in the Value field represent the area code and prefix for your facility.

- If the internal dial-plan specifies the last four digits of the directory number, use the following regular expression:

  Key ^(?<internal>[0-9*#]{4})$ Value xxxyyy${internal}

The 4 in curly braces at the end of the Key field is used to identify incoming calls with four digit numbers. If your facility uses a different number of digits for internal calling, you can vary this number to match the number of digits used for your internal calls. The characters in the Value field represent the area code and prefix for your facility.

- If the internal dial plan is different than the two dial plans described in this section, refer to http://msdn.microsoft.com/library/default.asp?url=/library/en-us/cpgenref/html/cpconRegularExpressionsLanguageElements.asp for information about regular expressions.

When you have identified the required regular expression:

a. Click the **View and Edit Values** button:

Figure 32: CallerID Translations Page

b. Enter the key regular expression in the Key field.
c. Enter the area code and prefix for your facility followed by the regular expression ${internal} in the Value field as shown below:

Figure 33: Example CallerID Translations Key/Value Pair

d. Click the **Add** button.
e. Click the **Update** button.

5. Click the **Update** button on the ActiveRelay Configuration page.

6. Set the trigger parameter using the procedure in "Setting the Trigger Parameter for Metreos Applications" on page 21.

Adding a User to Active Relay

Use the following procedure to add a user to Active Relay.

1. Launch the Metreos Management Console and login.

Figure 34: Metreos Management Console

2. Click the Applications link.

Figure 35: Metreos Management Console Applications Page

3. Click the Active Relay link.

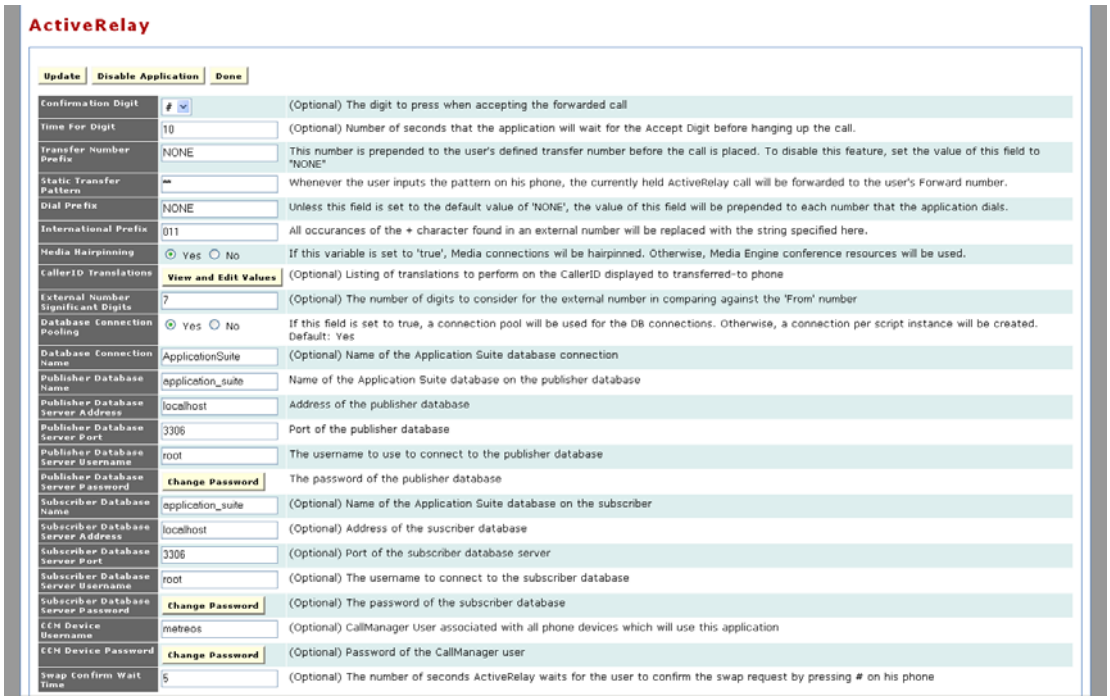

Figure 36: Metreos ActiveRelay Configuration Page

4. Click the **Edit** button associated with the partition for which you want to add a user.

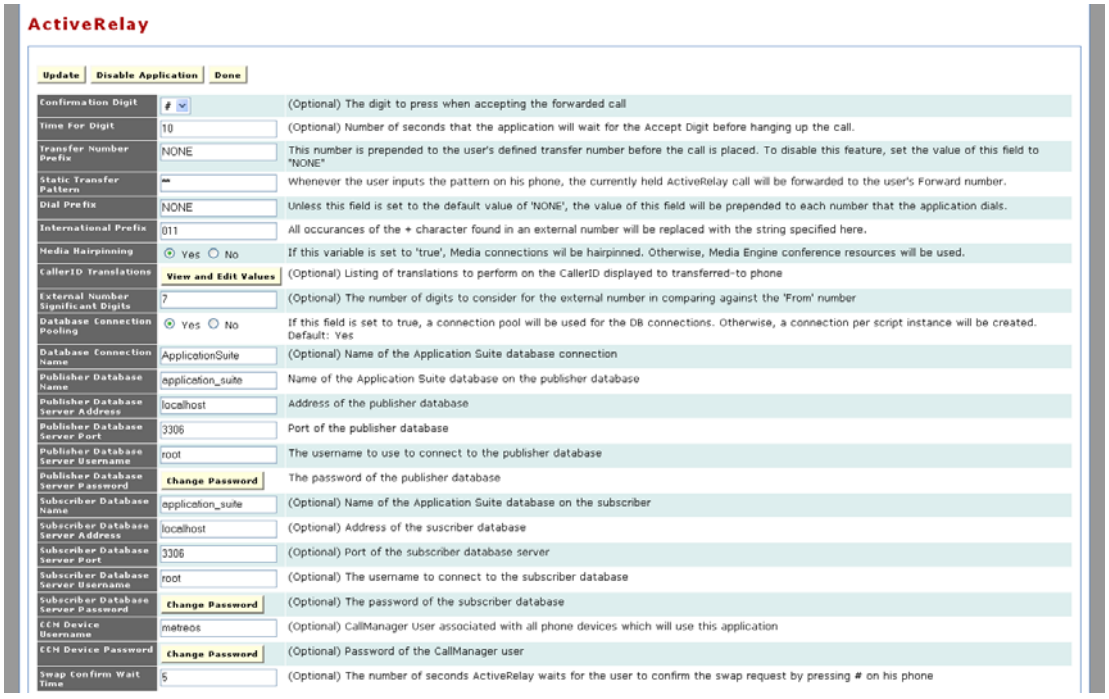

Figure 37: Active Relay Partition Configuration Page

5. Click the **Edit Triggering Parameters** button for the IncomingCall script.

Figure 38: Active Relay IncomingCall Script Trigger Parameters Page

6. Enter a directory number for the user you want to add in the **Add Value** field.

7. Click the **Add Value** button.

8. Click the **Done** button.

Metreos ClickToTalk Configuration

Metreos ClickToTalk is a speed dialing application allowing calls to any party in a contact list with a single click. Metreos ClickToTalk can be used by anyone in a Cisco CallManager group using a Cisco 7940, 7960 or 7970 IP telephone.

A ClickToTalk user can call a Microsoft Outlook contact by highlighting a contact and clicking a button on the Outlook toolbar. ClickToTalk then dials the selected contact from the user's IP phone. Conferencing and recording of calls are also supported. Recorded calls can be sent by e-mail to all call participants.

Use the following procedure to configure Metreos ClickToTalk.

1. Launch the Metreos Management Console and login.

Figure 39: Metreos Management Console

2. Click the Applications link.

Figure 40: Metreos Management Console Applications Page

3. Click the ClickToTalk link.

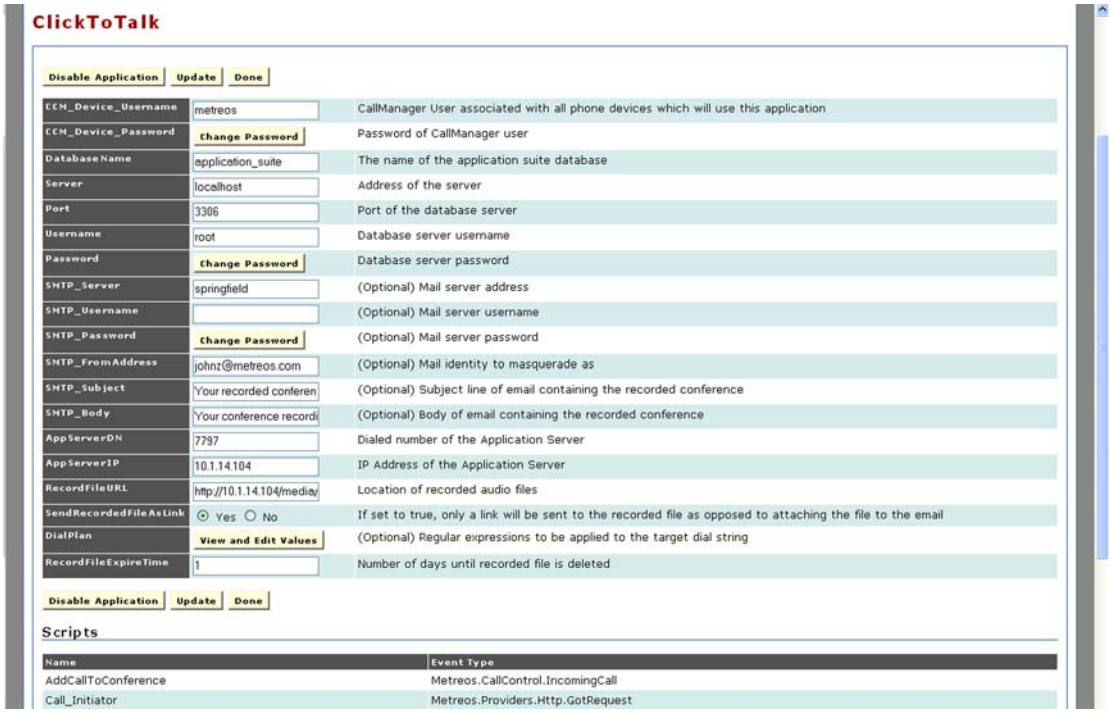

Figure 41: Metreos ClickToTalk Configuration Page

4. Fill out the form in accordance with the following list.

- CCM_Device_Username — Enter the Cisco CallManager username associated with phones that use Metreos ClickToTalk.
- CCM_Device_Password — Click the C**hange Password** button to change the password used to connect to the database. You will be prompted for your current password and the new password and to verify the new password. After you have done so, click the **Update** button.
- Database Name — Enter the name of the Metreos Application Suite database.
- Server — Enter the application server address.
- Port — Enter the database port number.
- Username — Enter the username used to connect to the database.
- Password — Click the **Change Password** button to change the password used to connect to the database. You will be prompted for your current password, the new password and to verify the new password. After you have done so, click the **Update** button.
- SMTP_Server — Enter the e-mail server address used to send recorded calls.
- SMTP_Username — Enter the username used for access to the mail server designated above.
- SMTP_Password — Click the **Change Password** button to change the password used to connect to the database. You will be prompted for your current password, the new password and to verify the new password. After you have done so, click the **Update** button.
- SMTP_FromAddress — E-mail address used to identify the sender of forwarded call recordings.
- SMTP_Subject — Enter the subject line of the e-mail message used to send recorded calls.
- SMTP_Body — Enter the information you want to include in the body of the e-mail message used to send recorded calls.
- AppServerDN — Enter the to value of the trigger parameter for Metreos ClickToTalk. Refer to "Setting the Trigger Parameter for Metreos Applications" on page 21 for details about Metreos application trigger parameters.
- AppServerIP — Enter the IP address of the application server.
- RecordFileURL — Enter the URL for the recorded messages file location.
- SendRecordedFileAsLink — Click the **Yes** radio button if recordings are to be sent as links. Click the **No** radio button if recordings are to be sent as e-mail attachments.
- DialPlan — ClickToTalk supports external calls. Most systems are configured to require users making outside calls to precede a fully qualified directory number with a digit such as 9.

The DialPlan parameter uses a key/value pair in the form of a regular expression to add the preceding digit. Refer to http://msdn.microsoft.com/library/default.asp?url=/library/en-us/cpgenref/html/cpconRegularExpressionsLanguageElements.asp for more information about regular expressions.

If the dial plan is configured to require a leading 9 for external calls, use the following regular expression:

Key ^(?<extNum>[0-9*#]{7,99})$ Value 9${extNum}

If the dial plan requires a digit other than 9, replace the 9 in the Value field with the required digit. To configure the external call digit for ClickToTalk:

a. Click the V**iew and Edit Values** button:

Figure 42: CallerID Translations Page

b. Enter the Key expression in the Key field, and enter the Value expression in the Value field as shown:

Figure 43: Example DialPlan Translations Key/Value Pair

c. Click the **Add** button.
d. Click the **Update** button.

- RecordFileExpireTime - Enter the interval in days you want to keep call recordings before expiration.

5. Click the **Update** button on the ClickToTalk configuration page.

6. Set the trigger parameter using the procedure in "Setting the Trigger Parameter for Metreos Applications" on page 21.

Metreos Intercom Configuration

Metreos Intercom permits instant communication over IP phones without the need to dial a number. Users select from a contact group on the IP phone display, and audio connectivity is established.

Metreos Intercom can also be configured to act as a group paging system for broadcasting voice messages or pages similar to a traditional paging system. Using the TalkBack feature, an intercom listener can press the **Reply** button and instantly conference with each party in the intercom group.

Configuring Metreos Intercom by following steps 1-3.

1. Install the Cisco IP phone service.

2. Create intercom groups.

3. Configure Metreos Intercom.

Installing the Cisco IP Phone Service

Before Metreos Intercom can be used, the phone service must be installed on CallManager, and the participating phones subscribed to the service. Refer to "Cisco IP Phone Services Setup" on page 51 for details.

Creating Intercom Groups

Metreos Intercom employees the concept of an intercom group. An intercom group is an aggregation of Metreos Intercom users created by the administrator. To broadcast a Metreos Intercom message, select an intercom group on the IP phone display. Then, you can speak normally without lifting the handset, and the voice message is broadcast to the phone speaker of each group member.

If the administrator has defined the intercom group as public, anyone can join or leave the group after it has been created. If the administrator has designated the group as private, its membership is determined solely by the administrator.

Use the following procedure to create an intercom group.

1. Select Metreos Intercom from the Main page of the Metreos Application Suite Administrator. The system presents the Metreos Intercom page.

Figure 44: Metreos Intercom Page

2. Click the **Create Group** button. The system displays the Create Intercom Group page.

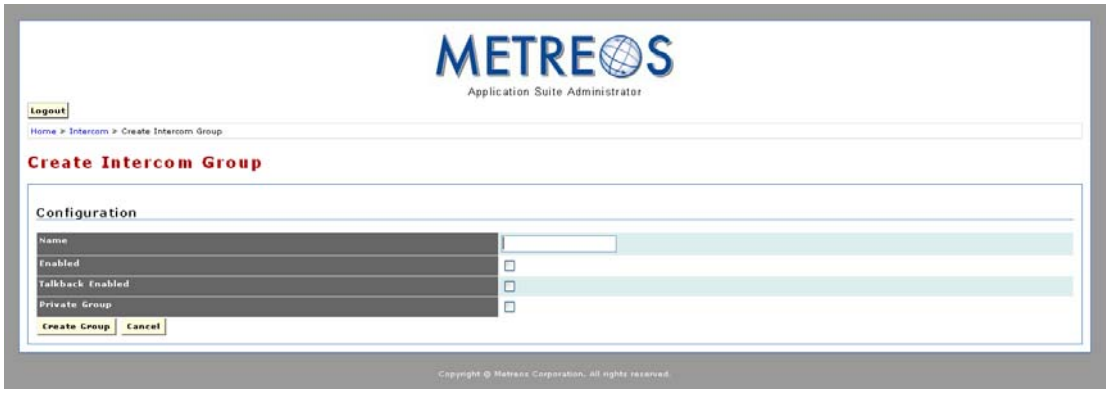

Figure 45: Create Intercom Group

3. Fill out the form in accordance with the following list.

- Name — Enter the group name.
- Enabled — Check the box to enable the intercom group.
- Talkback Enabled — Check the box allow non-initiating members of the group to talk over the intercom channel rather than only listen.
- Private Group — Check the box to designate the intercom group private (only the administrator can add and remove users). Leave unchecked to designate the intercom group as public (any user can join or leave the group at will).

4. Click the **Create Group** button.

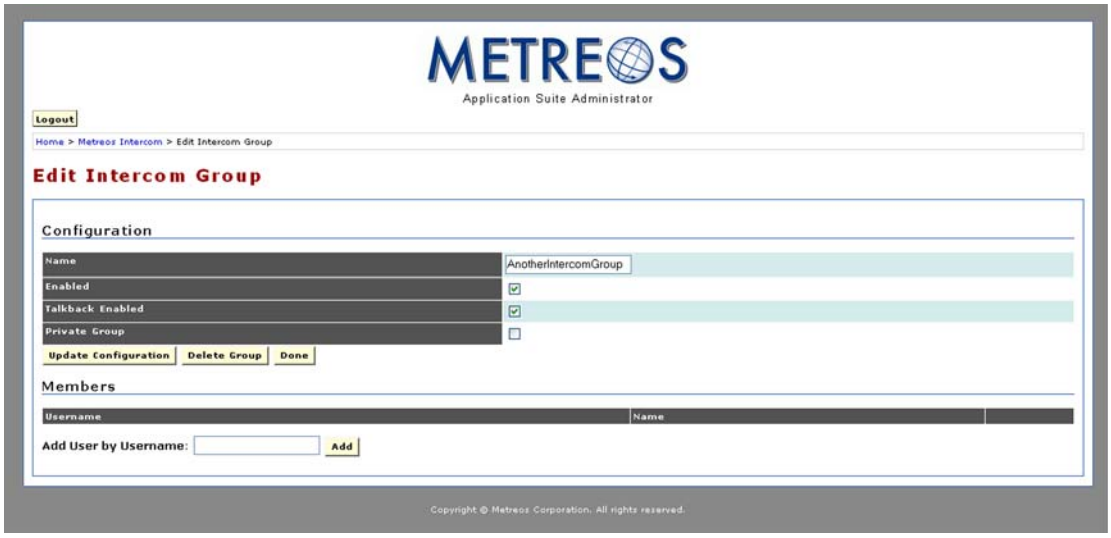

Figure 46: Edit Intercom Group Page

You can now add members to the intercom group. To do so, enter the username in the Username field and click the **Add** button. Refer to "Create User" on page 8 for information on account usernames.

Configuring Metreos Intercom

Configure Metreos Intercom using the following procedure.

1. Launch the Metreos Management Console and login.

Figure 47: Metreos management Console

2. Click the Applications link.

Figure 48: Metreos Management Console Applications Page

3. Click the IntercomAndTalkback link.

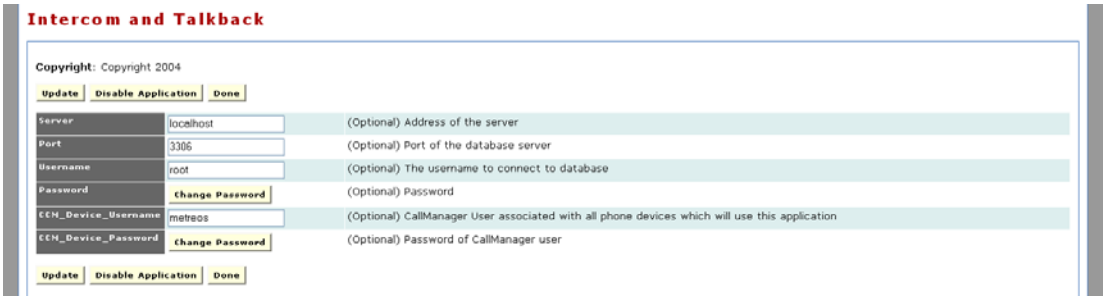

Figure 49: Metreos InterCom Configuration Page

4. Fill out the form in accordance with the following list.

- Server — Enter the application server address.
- Port — Enter the database port number.
- Username — Enter the username used to connect to the database.
- Password — Click the **Change Password** button to change the password that is used to connect to the database. You will be prompted for your current password, the new password and to verify the new password. After you have done so, click the **Update** button.
- CCM_Device_Username — Enter the Cisco CallManager username associated with phones that use Metreos Intercom.
- CCM_Device_Password — Click the **Change Password** button to change the password for the CallManager username. You will be prompted for your current password, the new password and to verify the new password. After entering the new password, click the **Update** button.

5. Click the **Update** button on the Intercom configuration page.

6. Set the trigger parameter using the procedure in "Setting the Trigger Parameter for Metreos Applications" on page 21.

Metreos RapidRecord Configuration

Metreos RapidRecord automatically records calls placed to and from a configured group of devices, permitting seamless, hands-off call recording. Recorded calls can be played back from a Web interface or directly from the IP phone that placed or received the call.

Configuring Metreos RapidRecord

Metreos RapidRecord is configured using the Metreos Management Console. Use the following procedure:

1. Launch the Metreos Management Console and log in.

Figure 50: Metreos Management Console

2. Click the Applications link.

Figure 51: Metreos Management Console Applications Page

3. Click the RapidRecord link.

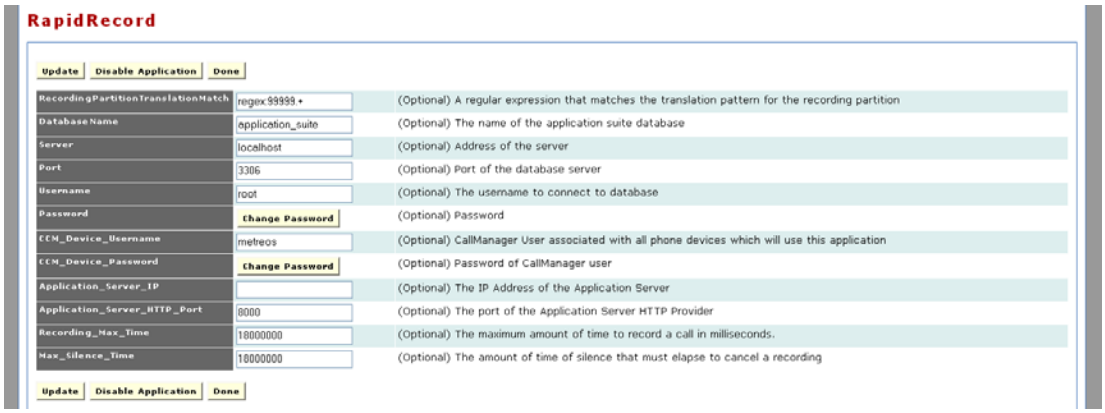

Figure 52: RapidRecord Configuration Page

4. Fill out the form in accordance with the following list.

- RecordingPartitionTranslationMatch - Enter regex:99999.+

The RecordingPartitionTranslationMatch specifies instructions used by RapidRecord to remove leading digits added to directory numbers of calls to be recorded.

To enable use of RapidRecord, Cisco CallManager is configured to modify the directory number of each call made to a recorded device. CallManager adds five nines (99999) to the beginning of the directory number for all such calls.

As described in Table 1 on page 25, the RapidRecord trigger parameter should be set to regex:99999.+. regex:99999.+ is a regular expression, interpreted by RapidRecord as any number preceded by 99999. Because directory numbers of calls to recorded devices are preceded by five nines, each such call triggers RapidRecord.

- RapidRecord uses the value of the RecordingPartitionTranslationMatch parameter (regex:99999.+) to remove leading nines from the dialed number, leaving the original, fully-qualified directory number.
- Database Name - Enter the name of the Metreos Application Suite database.
- Server - Enter the application server address.
- Port - Enter the database port number.
- Username - Enter the username used to connect to the database.
- Password - Click the **Change Password** button to change the password used to connect to the database. You will be prompted for your current password, the new password and to verify the new password. After you have done so, click the **Update** button.
- CCM_Device_Username - Enter the Cisco CallManager username associated with phones that use Metreos RapidRecord.
- CCM_Device_Password - Click the **Change Password** button to change the password for the CallManager username. You will be prompted for your current password, the new password and to verify the new password. After entering the new password, click the **Update** button.
- AppServerIP - Enter the IP address of the application server.
- Application_Server_HTTP_Port - Enter the application server port number.
- Recording_Max_Time - Enter the maximum recording time in milliseconds.
- Max_Silence_Time - Enter the maximum interval in milliseconds a call can remain silent before recording is cancelled.

5. Click the **Update** button on the RapidRecord configuration page.

6. Set the trigger parameter using the procedure in "Setting the Trigger Parameter for Metreos Applications" on page 21.

Metreos ScheduledConference Configuration

Metreos ScheduledConference is a Web-scheduled dial-in and dial-out conferencing system. Conferences can be scheduled from an easy-to-use Web interface, eliminating any need for operator or administrative assistance. Features include the adding of conference parties, party mute and unmute and removal of participants from conference.

Metreos ScheduledConference is configured using the Metreos Management Console. Use the following procedure.

1. Launch the Metreos Management Console and log in.

Figure 53: Metreos Management Console

2. Click the Applications link.

Figure 54: Metreos Management Console Applications Page

3. Click the ScheduledConference link.

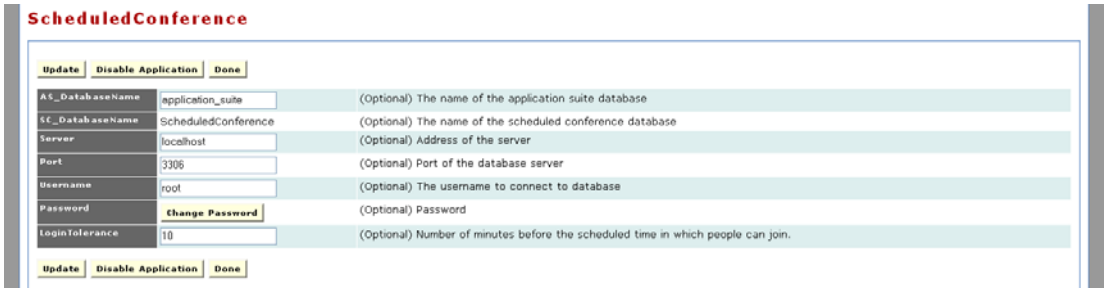

Figure 55: Metreos ScheduledConference Configuration Page

4. Fill out the form in accordance with the following list.

- AS_DatabaseName — Enter the name of the Metreos Application Suite database.
- SC_DatabaseName — Enter the name of the ScheduledConference database.
- Server — Enter the application server address.
- Username — Enter the username used to connect to the database.
- Password — Click the **Change Password** button to change the password used to connect to the database. You will be prompted for your current password, the new password and to verify the new password. After you have done so, click the **Update** button.
- LoginTolerance — The length of time in minutes prior to the conference that participants can join the conference.

5. Click the **Update** button on the ScheduledConference configuration page.

6. Set the trigger parameter using the procedure in "Setting the Trigger Parameter for Metreos Applications" on page 21.

Metreos VoiceTunnel Configuration

Metreos VoiceTunnel allows a remote user to connect to any enterprise IP communications system and place calls as if they were local to the system. With Metreos VoiceTunnel, you can:

- Place all calls locally, avoiding international and long-distance toll charges.
- Authenticate call usage and apply a broad range of policies to the billing and accounting of communications costs.
- Manage, monitor and report on the use of the communications system.

Use the following procedure to configure Metreos VoiceTunnel.

1. Launch the Metreos Management Console and login.

Figure 56: Metreos Management Console

2. Click the Applications link.

Figure 57: Metreos Management Console Applications Page

3. Click the VoiceTunnel link.

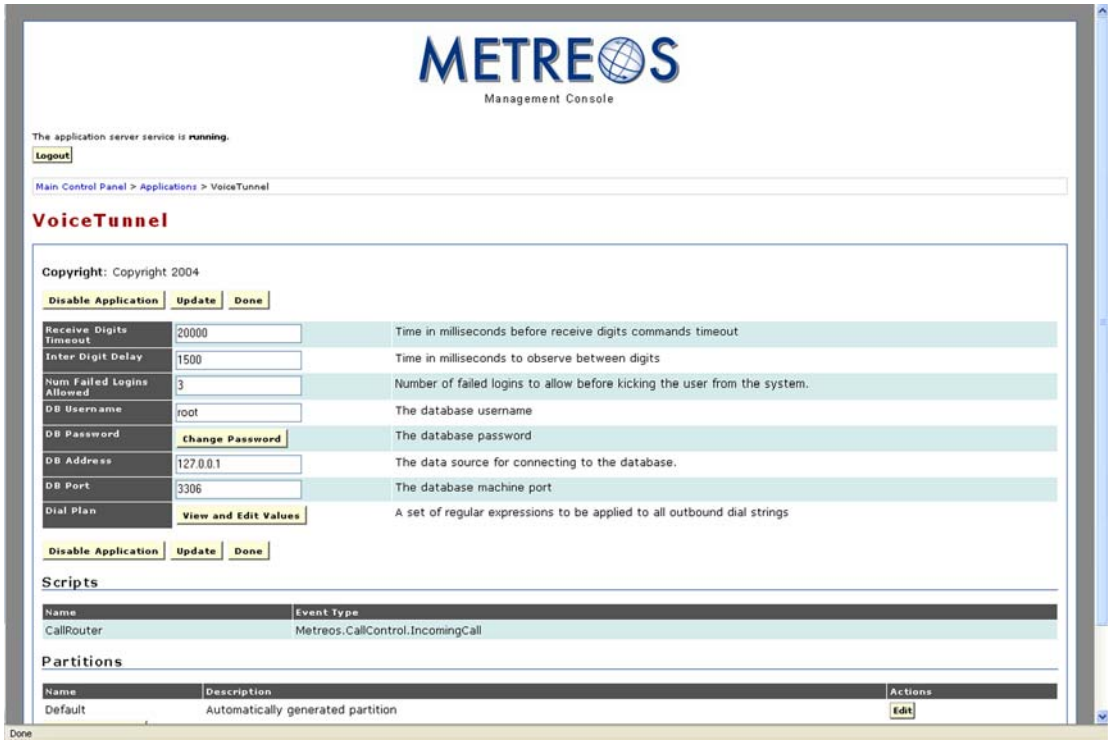

Figure 58: Metreos VoiceTunnel Configuration Page

4. Fill out the form in accordance with the following list.

- Receive Digits Timeout — Enter the maximum interval (in milliseconds) that the system will wait for users to dial a number before timing out.
- Inter Digit Delay — VoiceTunnel monitors the amount of time from the entry of one digit to the next in the number a user is calling. Enter the maximum time (in milliseconds) that may occur between any two dialed digits. If the specified time is exceeded, VoiceTunnel will not recognize the second digit as part of the digit sequence.
- Num Failed Logins Allowed — Enter the number of failed login attempts by a user before that user is prevented from logging in without administrative action.
- DB Username — Enter the username used to connect to the database.
- Password — Click the **Change Password** button to change the password used to connect to the database. You will be prompted for your current password, the new password and to verify the new password. After entering the new password, click the **Update** button.
- DB Address — Enter the database IP address.
- DB Port — Enter the database port number.
- Dial Plan — The purpose of this parameter is to properly identify internal calls. When a call is forwarded to your phone, your phone displays the incoming call number. The incoming call number is a fully qualified directory number if the call is external. However, internal calls typically do not require dialing the full number.

For example, a common practice is to configure the internal dial plan to allow users to dial only the last four digits of the outside line associated with another user in the system. Another common practice for large systems is to allow users to dial a 5 digit number, in which the first

digit signifies a physical location and the last 4 digits are used to match the user being called. The CallerID Translations parameter is used to construct a fully qualified directory number for internal calls so the full number can be displayed when the call is forwarded.

The Dial Plan parameter uses a key/value pair to construct the fully qualified directory number. A regular expression is used to determine whether the call is internal and-if so-the regular expression adds an area code and prefix to the internal number. Refer to http://msdn.microsoft.com/library/default.asp?url=/library/en-us/cpgenref/html/cpconRegularExpressionsLanguageElements.asp for more information about regular expressions.

- If the internal dial plan specifies the last four digits plus a leading number representing a physical location, use the following regular expression:

  Key ^[0-9*#](?<internal>[0-9*#]{4})$ Value xxxyyy${internal}

The first expression in brackets ([ ]) causes deletion of the initial digit, isolating the last four digits in preparation for constructing the fully qualified directory number.

The 4 in curly braces at the end of the Key field is used to identify incoming calls with four digit numbers. If your facility uses a different number of digits for internal calling, you can vary this number to match the number of digits used for your internal calls.

The characters in the Value field represent the area code and prefix for your facility.

- If the internal dial-plan specifies the last four digits of the directory number, use the following regular expression:

  Key ^(?<internal>[0-9*#]{4})$ Value xxxyyy${internal}

The 4 in curly braces at the end of the Key field is used to identify incoming calls with four digit numbers. If your facility uses a different number of digits for internal calling, you can vary this number to match the number of digits used for your internal calls. The characters in the Value field represent the area code and prefix for your facility.

- If the internal dial plan is different than other the two dial plans described in this section, refer to http://msdn.microsoft.com/library/default.asp?url=/library/en-us/cpgenref/html/cpconRegularExpressionsLanguageElements.asp. Use the information on that Web site to construct a regular expression for your system.

5. Click the **Update** button on the VoiceTunnel configuration page.

6. Set the trigger parameter using the procedure in “Setting the Trigger Parameter for Metreos Applications” on page 21.

METREOS

Appendix A
Cisco CallManager Configuration

Cisco CallManager must be properly configured to work with the Metreos Application Suite. This appendix provides the information and procedures necessary for the proper CallManager configuration.

Most of the Metreos Application Suite applications can use either the H.323 or JTAPI protocol to perform call control, but RapidRecord cannot be used with JTAPI.

ActiveRelay also cannot use JTAPI to watch for the incoming call that triggers the application, but it can use JTAPI to place its outbound calls. This Appendix outlines the Metreos Application Suite-specific CallManager configuration required by the H.323 and JTAPI protocols.

Common Procedures

Many of the setup procedures are unique for each protocol. Some procedures, however, are common to both. This section describes the configuration procedures common to H.323 and JTAPI.

Global Metreos User Setup

From the CallManager Administration Web page, go to User ' Add a new user. Create a new user with a user ID of metreos, and a password of metreos. Check the Enable calling party number modification box. Every device to be used with the Application Suite must be associated with the metreos user account to run most applications in the Metreos Application Suite.

Partitions

The following three Partitions are required:

- RecordedDevices partition - Lines that will be used with RapidRecord must reside in the RecordedDevices partition.
- Unrestricted partition - Lines that will not be used with RapidRecord must be placed in the Unrestricted partition.
- ApplicationServer partition - Route patterns designed to intercept all calls must reside in the ApplicationServer partition. This technique serves to route all incoming calls to the MCE so that the MCE can in turn route them to the appropriate Metreos application as necessary.

Calling Search Spaces

The following three Calling Search Spaces are required:

- Unrestricted CSS — The Calling Search Space used by unrestricted devices. Every phone device in the Unrestricted Partition has the Unrestricted Calling Search Space.
- RecordedDevices CSS — Every phone device in the RecordedDevices Partition has the RecordedDevices Calling Search Space.

- ApplicationServer CSS — The Application Server Calling Search Space. The ApplicationServer CSS is used by the Application Runtime Environment for the outbound calls that it must place.

Calling Search Space Setup

Configure the three Calling Search Spaces listed in the previous section Calling Search Spaces to contain the following Partitions:

- Unrestricted CSS:
- Unrestricted Partition
- RecordedDevices Partition
- RecordedDevices CSS:
- ApplicationServer Partition
- ApplicationServer CSS:
- RecordedDevices Partition
- Unrestricted Partition

When a line that uses the Unrestricted CSS makes a call, CallManager will first search the Unrestricted Partition for a match. If it does not find a suitable match, the CallManager will search the RecordedDevices Partition.

When a line that uses the RecordedDevices CSS places a call, CallManager will search only the ApplicationServer Partition. That Partition should contain a route pattern to intercept all calls as described in Route Patterns for Recording section on page 77. CallManager then routes that call through the Metreos Application Runtime Environment.

The ApplicationServer CSS is used by application server. When the application server places a call, it will first look for the destination number in the RecordedDevices Partition.

Adding Cisco IP Phone Devices

When configuring phone devices for use with the Metreos Application Suite, be aware of the following:

- Ensure the device is associated with the metreos user. If the user does not need ActiveRelay or RapidRecord, associate each line on the device with the Unrestricted CSS, and place it in the Unrestricted Partition.
- To use Metreos ActiveRelay
- Each user must have two lines residing in the Unrestricted Partition and using the Unrestricted CSS
- the primary line must rollover to a secondary line

To meet these two requirements set the Forward Busy field on the first line to the number of the secondary line.

- To use Metreos RapidRecord, each line that is to be recorded must be placed in the RecordedDevices Partition, and must use the RecordedDevices CSS. Calls can be forwarded to other lines as necessary.
- After configuring the lines for the device, the device must be reset.
- A user can not be configured to use both Metreos RapidRecord and Metreos ActiveRelay at the same time.

Cisco IP Phone Services Setup

Two applications in the Metreos Application Suite provide Cisco IP Phone Service functionality:

- Metreos ActiveRelay
- Metreos Intercom

In order for a phone to access these services, the phone must be subscribed to the corresponding service using CallManager Administrator.

This section presents the procedure for configuring IP phone services using the default triggering criteria for Metreos ActiveRelay and Metreos Intercom.

The Application Server, by default, listens for HTTP requests on port 8000. Proceed to Feature ' Cisco IP Phone Services page in CallManager Administrator. For each of the following services, click Add a New IP Phone Service:

ActiveRelay IP service:

1. Specify ActiveRelay for the Service Name field

2. Specify http://MCE_IPAddress:8000/ActiveRelay?device=#DEVICENAME# for the Service URL field

3. Click Insert

Intercom IP service:

1. Specify Intercom for the Service Name field

2. Specify http://MCE_IPAddress:8000/ShowIntercomGroups?device=#DEVICENAME# for the Service URL field.

3. Click Insert.

NOTE*: Each device that uses Metreos ActiveRelay must be subscribed to the ActiveRelay service and each device that uses Metreos Intercom must be subscribed to the Intercom service.*

The #DEVICENAME# token is recognized by the Cisco IP phone, and then replaced with the Device Name of the phone, before the request is sent out to the application server.

Creating CallManager Clusters

You must set up a CallManager cluster using the Metreos Management Console. Refer to the Creating CTI Telephony Devices section of the Metreos Communications Environment Management Console User Guide for details.

H.323 configuration

The Application Server is almost always configured as an H.323 gateway in CallManager. Not as common, though equally as valid, is configuring the MCE as an H.323 device. The application server must have two IP addresses associated with its network adapter to configure both gateway and device.

- An IP address for a H.323 gateway configuration
- An IP address for H.323 phone device

Refer to the Network Configuration of the Metreos Communications Environment Management Console User Guide for more information on network settings configuration.

H.323 Gateway Setup

To create a H.323 Gateway:

1. In CallManager Administrator, click Device ' Gateway. Select Add a New Gateway.
2. Select H.323 Gateway for the Gateway type field
3. Click the Next button.
4. Set the Device Name field to the first IP address of the application server network adapter you configured earlier.
5. Set the Device Pool to Default.
6. Set the Calling Search Space field to ApplicationServer.
7. Click the Insert button.
8. Configure a MCE H.323 gateway using the Metreos Management Console. Refer to the Creating H.323 Call Route Groups and Gateways section of the Metreos Communications Environment Management Console User Guide for details.

H.323 Device Setup

To create a H.323 phone device:

1. In CallManager Administrator, click on Device ' Phone.
2. Select Add a New Phone.
3. Select H.323 Client for the Phone type field
4. Click the Next button.
5. Set the Device Name to the second IP address of the appliance.
6. Set the Device Pool to Default.
7. Click the Insert button.

The H.323 Phone Device is required by two applications: Metreos RapidRecord and Metreos ActiveRelay.

Metreos RapidRecord requires that you add a new line on the H.323 device for each line in the RecordedDevices Partition a corresponding line must be added to the H.323 device. Configure each line that you add to the H.323 device in accordance with the following requirements:

- Configure the line to be in the Unrestricted Partition, and to have the Unrestricted CSS.
- Set the Forward All ' Destination field to the same number as the Directory Number field for this line.
- For every recorded line that you configure for H.323 devices, the

Forward All ' Calling Search Space field should be set to RecordedDevices.

Metreos ActiveRelay requires that you add a new line on the H.323 phone device for every ActiveRelay-enabled primary device. This line number should be the same as the primary line number of the primary device for the user in question. The primary device and the primary line number are both listed on the edit account page for the user in Main Page ' Account Management ' edit user. Use the following procedure in the CallManager Administrator to add the required lines on the H.323 phone device:

1. Configure each line to be in the Unrestricted Partition.

2. 2Configure each line to have an Unrestricted CSS.

3. Set the Forward Busy field to the directory number of the second line for the device in question.

4. Reset the device.

5. Add the line number to the values of the to trigger parameter in the ActiveRelay Default partition. Refer to Setting the Trigger Parameter for Metreos Applications on page 34 for details.

NOTE*: The use of the Metreos ActiveRelay and Metreos RapidRecord applications on the same line is not supported.*

Route Patterns for Recording

Route patterns allow you to intercept calls using symbols that represent a dial pattern. The route patterns described in this section must route to the application server gateway you previously created. Depending on your local configuration, you might be required to add two or more route patterns to the ApplicationServer partition.

The application server has its own unique CSS, so that all calls placed by the Application Runtime will be routed by its CSS. All calls made from a recorded device, for example, will have the same CSS as the application server. These calls have the same CSS as the application server, because RapidRecord must intercept them and connect them to the intended party.

The following route patterns are supported:

- @ — Intercepts all call patterns for a given Numbering Plan, such as the North American Numbering plan. Depending on the dial plan for your facility you might want to change this pattern to 9.@ to match your local and long distance prefix digit calling pattern. The

Prefix Digits (Outgoing Calls) field in the Called Party Transformations section should contain the value 99999, a requirement of Metreos RapidRecord. The pattern should reside in the ApplicationServer partition.

- 1XXX — Intercepts all calls containing four digits, for which the first digit is 1. This pattern is required for internal calls. Some phone systems support internal calling with multiple dialing patterns. A system might, for example, require four digits for some numbers or devices and five digits for others.

In such cases a route pattern of this form must be created for each dialing requirement. In our example of a four-digit and five-digit dialing system a 1XXX route pattern and a 1XXXX route pattern must be created.

You should create a route pattern of this form for all numbers that the recorded user might dial. If, for example, the user has a need to dial 4 digit numbers beginning with 1 and five digit numbers beginning with 2, you must create route patterns that intercept those dialing patterns.

The Prefix Digits (Outgoing Calls) field in the Called Party Transformations section should contain the value 99999, a requirement of Metreos RapidRecord. These patterns should reside in the ApplicationServer partition, and they should point to the previously created gateway.

You must also set the to field of the trigger parameter in the RapidRecord Default partition to regex: 99999.+. Refer to Setting the Trigger Parameter for Metreos Applications on page 34 and Configuring Metreos RapidRecord on page 60 for details.

Other Route Patterns

The VoiceTunnel, ClickToTalk, and ScheduledConference applications are accessed by dialing directory numbers specific to each application. Use the following procedure to create a route pattern for each of these three applications:

1. Create a route pattern containing no wildcard digits, such as 7000, and point it to the IP address of the application server gateway. The route patterns should reside in the Unrestricted partition.

2. Enter the route pattern in the to field of the trigger parameter of the Default partition for each application except Metreos ActiveRelay. Refer to Setting the Trigger Parameter for Metreos Applications on page 34 for details.

3. Create duplicates of the VoiceTunnel and ScheduledConference patterns, but not that of ClickToTalk. Use the previously described procedure-but place these duplicates in the ApplicationServer partition. Also, set the Prefix Digits (Outgoing Calls) field in the Called Party Transformations section to the value 99999. Doing so allows devices in the RecordedDevices Partition to access these applications.

NOTE*: Metreos ActiveRelay and Intercom do not require route patterns.*

JTAPI configuration

To configure JTAPI you must create several CTI Route Points, some of which require multiple lines. The MCE uses these CTI Route Points for two purposes:

- To monitor and control calls coming into a Route Point's lines
- To place outbound calls

Refer to the Creating CTI Telephony Devices section of the Metreos Communications Environment Management Console User Guide for information on how to configure the MCE to use a CTI Route Point.

NOTE*: Metreos RapidRecord does not support JTAPI. Also, Metreos ActiveRelay cannot use JTAPI to watch for incoming calls, such as triggering call, but it can use JTAPI to place outbound calls.*

CTI Route Point Setup

Use the following procedure to set up a CTI route point:

1. From the CallManager Administrator page, navigate to Device ' CTI Route Point.
2. Click the Add a New CTI Route Point link.
3. Set the Device Name field to MCE_RT_PT_GEN, or to another name of your choice. You must use this name later when configuring CTI Device Pools for the MCE.
4. Set the Device Pool field to Default.
5. Click the Insert button to add the route point to CallManager. If CallManager prompts you as to whether you want to add a line to this route point, select either No or Cancel.

The MCE_RT_PT_GEN route point can be used by Metreos VoiceTunnel, Metreos ScheduledConference, and Metreos ClickToTalk. If you plan to use JTAPI with Metreos ActiveRelay to place outbound calls, you must configure an additional route point for this purpose. To add this ActiveRelay-specific route point, follow the procedure presented in the first paragraph of this section-but set the Device Name field to MCE_RT_PT_AR.

Associate the CTI Route Points with the metreos User

The newly-created route points must be associated with the metreos user. Details about the metreos user are provided in the Global Metreos User Setup section of this Appendix. Use the following procedure to associate CTI route points with the user:

1. From the CallManager Administrator, navigate to User ' Global Directory, and then locate and select the metreos user.
2. Follow the Device Association link from the User Configuration page.
3. Locate the route point devices that you created earlier.
4. Check the checkbox next to each of the devices.
5. Click the Update Selected button.

Adding lines to the CTI Route Points

Users access Metreos VoiceTunnel, Metreos ClickToTalk, and Metreos ScheduledConference through unique directory numbers. You must add a line to the MCE_RT_PT_GEN route point for each of these applications. Use the following procedure:

1. Add a new line to the MCE_RT_PT_GEN route point.

2. Set the Directory Number field to app_directory_number.

3. Enter app_directory_number in the to field of the trigger parameter of the Default partitions for each application. Refer to Setting the Trigger Parameter for Metreos Applications on page 34 for details.

4. Set the Partition field to Unrestricted.

5. Set the Calling Search Space field to ApplicationServer.

6. Click the Add button.

If you created the MCE_RT_PT_AR route point for Metreos ActiveRelay, you must add one new line. The directory number you assign to this line will be the CallerId number that is displayed on all outbound calls placed by ActiveRelay. Use the following procedure:

1. Add a new line to the MCE_RT_PT_AR route point.

2. Set the Directory Number field to your_directory_number

3. Set the Partition field to Unrestricted.

4. Set the Calling Search Space field to ApplicationServer.

5. Click the Add button