



**Call Accounting System  
User Manual Version 7.0.0**

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# Call Accounting System

## Overview

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*by Syn-Apps*

*Call Accounting is a web based application that generates IP Phone usage reports. Call Accountings' intuitive web interface and ability to extract Communications Manager data make it extremely easy to use. IP Phone devices can be grouped into categories for easy management of report generation for large organizations. Reports can be output in either HTML or Microsoft Excel format. Call Accounting also provides automated report generation and emailing as well as customizable cost and location assignments.*

## About Syn-Apps

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*Syn-Apps L.L.C. was founded in 2000 as a consulting firm focused on developing software for IP telephony. Since that time Syn-Apps has more than tripled in size and has expanded its consulting services to include enterprise application development. We believe that our relatively small firm is able to fulfill the needs of our customers more efficiently and inexpensively than our larger competitors.*

*Syn-Apps has an extensive knowledge base in numerous technologies, including .NET, C#, VB.Net, SQL Server, Java, C++ and other mainstream development tools. Syn-Apps additionally has a strong background in network design and networking fundamentals. We believe this combination of experience in a broad range of technologies allows us to offer our customers an end-to-end application development solution.*

*We believe that in order to have a successful application deployment one should not only understand the development environment but also understand how the application will interact with the rest of network. Syn-Apps employs one of the Cisco Systems Engineers that was responsible for the network development and design for many Fortune 100 companies. We believe that this enables us to become a valuable asset to any development team.*

*Syn-Apps developers have a wide variety of development experience in many diverse industries. Our developers have been employed by, or consulted for companies such as Microsoft, Cisco, General Motors, General Dynamics, Bloomberg, and many others. All of our developers have a keen understanding of the software development life cycle and know how to develop successful applications.*

*At Syn-Apps we understand the importance of a team environment and are comfortable developing and sharing information to ensure that the best of breed product is produced.*

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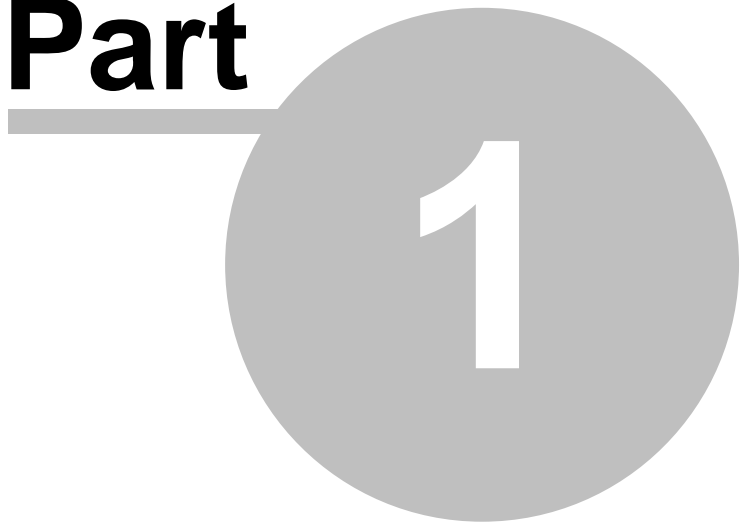
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# Application Features

**Part**



# 1 Application Features

## Syn-Apps Call Accounting [7.0.0]

Call Accounting is a call data record viewer and accounting system that couples to Cisco Unified Communications Manager and allows users to quickly search millions of calls. Call Accounting delivers report types that range from aggregate to fully detailed (one record per call). The Call Accounting system contains a built in scheduler service that allows reports to be automatically emailed at scheduled intervals. Call costs can be assigned in the configuration interface, this allows Call Accounting to provide cost based reporting.

Syn-Apps Call Accounting contains a phone categorization interface for partitioning the phones on the system into hierarchical categories. Once the phones are categorized reports can be generated, the top level report (aggregate) is a list of all categories with roll-up at the root level (roll-up can also be performed at other levels). Aggregate reports contain totals for a categories inbound / outbound calls (number and time), the outbound calls have a cost associated with them based on the call costs configuration information the user provides.

The next level of report is a category report, category reports contain an entry for each phone in the category. Category reports have two types, inbound and outbound, each type list the total calls, total/average call time and average ring time. The category outbound report also contains a total cost for the calls from each phone for the given report filters.

Finally, detailed reports can be run on a particular category, a detailed report contains an entry for each call (inbound and outbound) in the category for the given report filters.

Any report can be filtered on the following information (note that once in HTML view mode further filters can be applied to any displayed field):

- Date and Time Range
- Calling Number or Called Number
- Forced Authorization Code
- Client Matter Code

The Call Accounting System has been created using ASP.NET 3.5 to provide a rich user interface. Menus and lists that contain multiple items are searchable, simply highlight the menu or list in question and begin to type, the selection indicator will select the first matching item in the list. Tables and grids are sortable by clicking on the column header or the column you wish to sort on, all fields of the grid are filterable using the "Search" box provided, simply enter a search term and press enter. All entries in the GUI are validated on the client side to prevent typographical errors. Tables and grids that can contain thousands of entries use a client side caching model that will allow for good performance without overloading the client or server system.



# System Requirements

**Part**



**2**

## 2 System Requirements

In order for Call Accounting to function properly, there are a few system requirements that need to be met.

### 2.1 Application Server Requirements

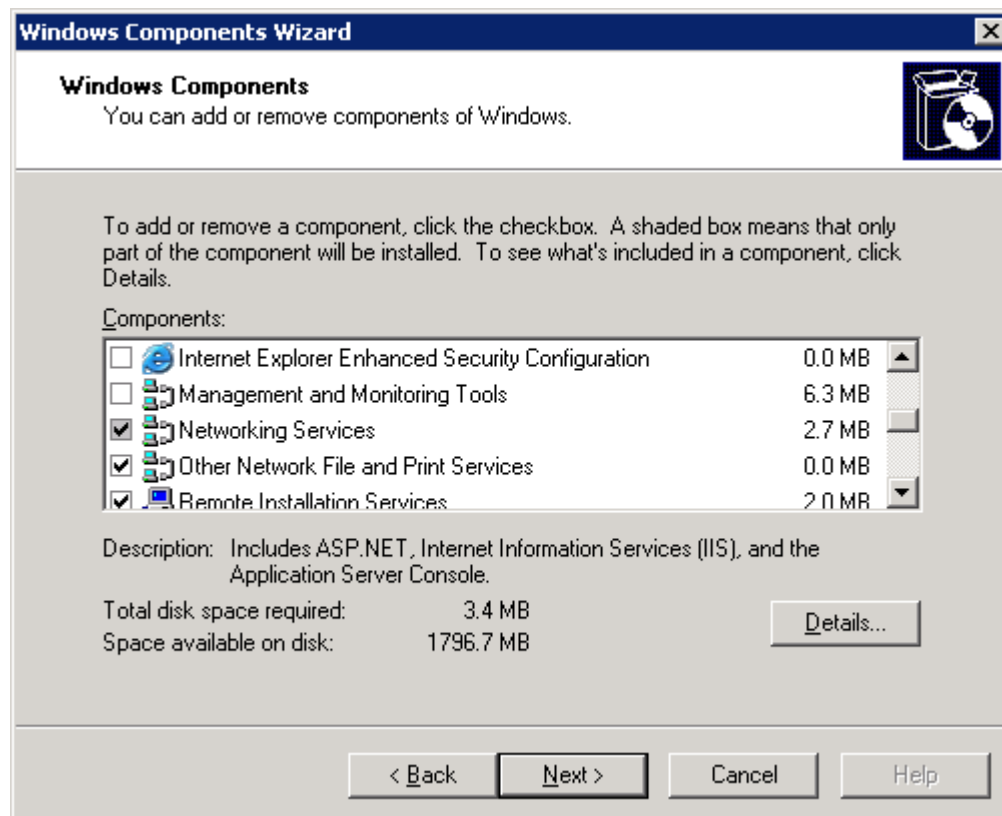
The Application Server must meet the following requirements:

- Windows 2000, Windows 2003 or Windows 2008
- Microsoft .Net 3.5 (URL: <http://download.microsoft.com/download/6/0/f/60fc5854-3cb8-4892-b6db-bd4f42510f28/dotnetfx35.exe>)
- Microsoft SQL Server 2000 / 2005 or MSDE (URL: <http://download.microsoft.com/download/e/a/4/ea4b699b-bec4-4722-96d3-254580ed7f9e/SQLEXP32.EXE>)
- 2 gigabyte of system memory (minimum requirement)
- 10 gigabytes of hard disk space (minimum requirement)

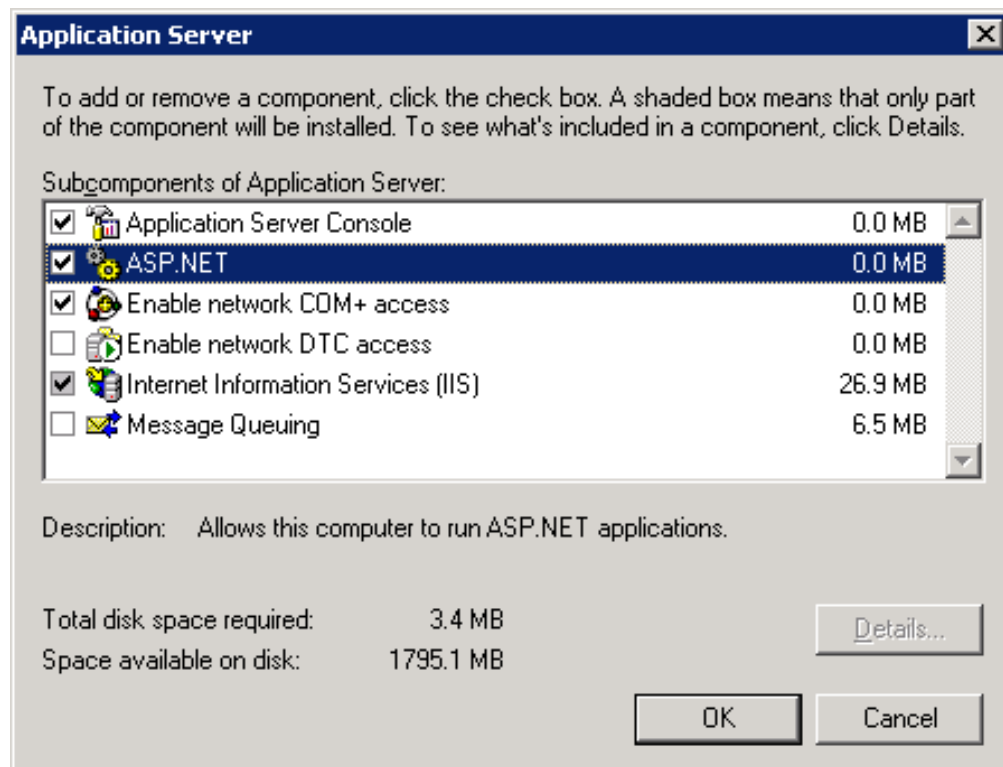
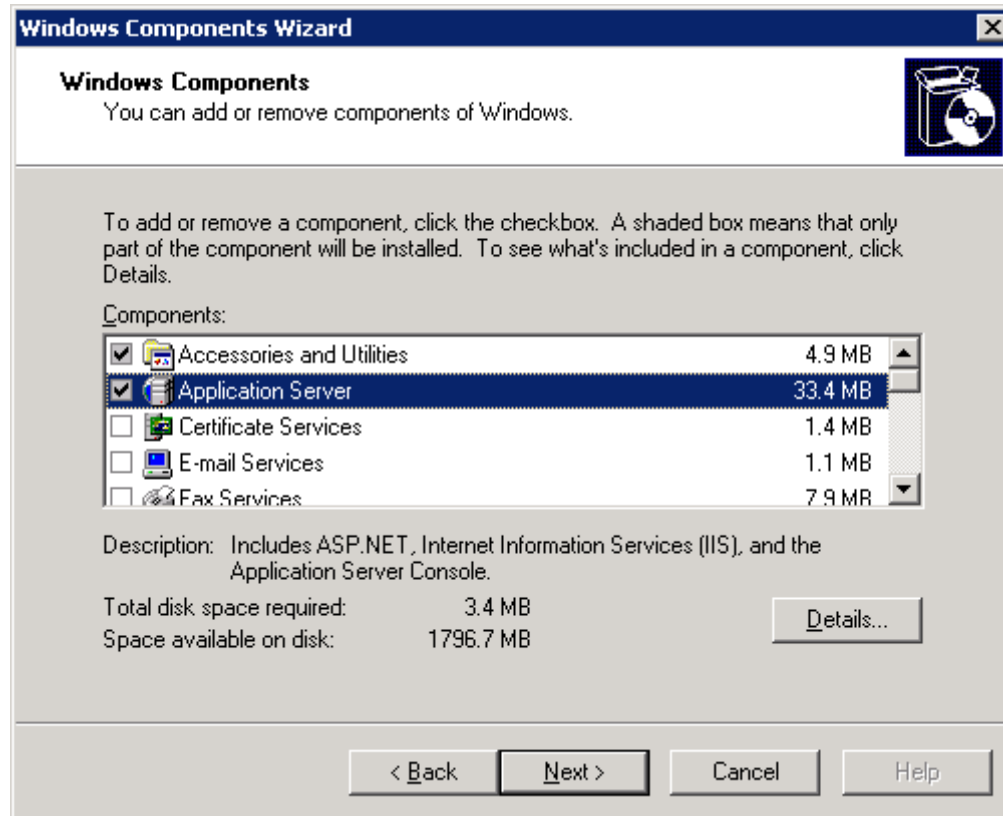
**Windows 2003 / 2008 Server Requirements** (not required for Windows 2000 Server)

**Windows Components:** Open windows components on the application server (Start>Control Panel>Add Remove Programs>Windows Components).

- a. Internet Explorer Enhanced Security Configuration Box must be unchecked.



b. Under Application Server the ASP.NET check box must be checked.



## 2.2 Cisco Communications Manager Requirements

### Cisco Communications Manager Support

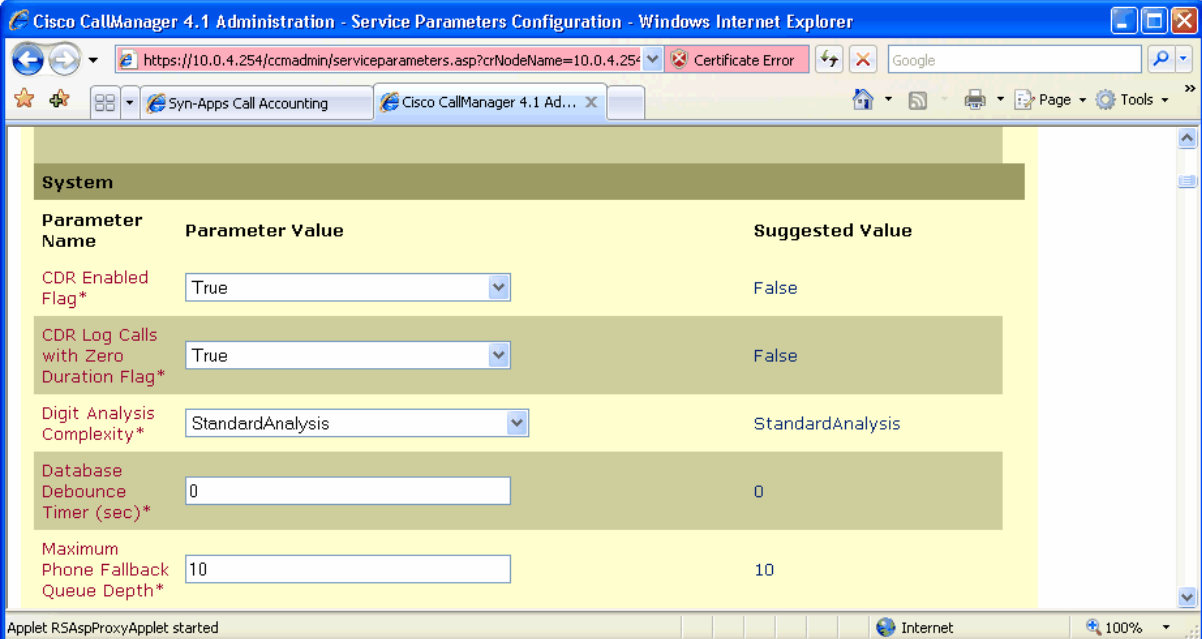
- Cisco Communications Manager versions 4.x, 5.x, 6.x, 7.x
- Proper IP access to Communications Manager required

Note: Communications Manager 3.x is no longer supported except for legacy installations.

### 2.2.1 Communications Manager 4.x

If you are using Communications Manager 4.x, you must be logged into the Syn-Apps application server with the same user name and password that exists on the Communications Manager. This must be the local Administrator account and must have the same password as the Administrator account on Communications Manager 4.x.

Users of Cisco Unified Communications Manager 4.x must enable CDR on each Communications Manager in the cluster. This is located under Cisco Unified Communications Manager> CCMADMIN> Service>Service Parameters: Cisco CallManager Service. Set the CDR Enabled Flag to "True", set the CDR Log Calls with Zero Duration Flag to "True" if you want to log calls with zero duration (useful for determining who dialed 911 and hung up before emergency services answered).



Parameter Name	Parameter Value	Suggested Value
CDR Enabled Flag*	True	False
CDR Log Calls with Zero Duration Flag*	True	False
Digit Analysis Complexity*	StandardAnalysis	StandardAnalysis
Database Debounce Timer (sec)*	0	0
Maximum Phone Fallback Queue Depth*	10	10

### 2.2.2 Communications Manager 5.x / 6.x / 7.x

Users of Cisco Unified Communications Manager must enable CDR on each Communications Manager in the cluster. This is located under Cisco Unified Communications Manager> CCMADMIN>



System>Service Parameters: Cisco CallManager Service. Set the CDR Enabled Flag to "True", set the CDR Log Calls with Zero Duration Flag to "True" if you want to log calls with zero duration (useful for determining who dialed 911 and hung up before emergency services answered).

The screenshot shows the Cisco Unified CM Administration web interface. The browser title is "Service Parameter Configuration - Windows Internet Explorer". The address bar shows the URL: <https://10.0.0.21:8443/ccmadmin/serviceParamEdit.do?server=1631b56f>. The page header includes the Cisco logo and "Cisco Unified CM Administration For Cisco Unified Communications Solutions". The user is logged in as "ccmadministrator".

The main content area is titled "Service Parameter Configuration" and shows a list of parameters for the "System" group. The parameters are:

Parameter Name	Current Value	Default Value
CDR Enabled Flag *	True	False
CDR Log Calls with Zero Duration Flag *	True	False
Digit Analysis Complexity *	StandardAnalysis	StandardAnalysis
Database Debounce Timer *	0	0
Maximum Phone Fallback Queue Depth *	10	10
Maximum Number of Registered Devices *	5000	5000
System Initialization Timer *	60	60

Below the System group, there is a note: "There are hidden parameters in this group. Click on Advanced button to see hidden parameters."

The "SDL Trace" group parameters are:

Parameter Name	Current Value	Default Value
SDL Trace Data Flags *	0x00000110	0x00000111
SDL Trace Flush Immediately *	False	False
SDL Trace Data Size *	0	0
SDL Trace Flag *	True	True
SDL TraceType Flags *	0x8000EB15	0x8000EB15
SDL XML Trace Flag *	False	False

The browser status bar at the bottom shows "Done" and "Internet" with a zoom level of 100%.



For CUCM 5/6/7 and greater the application server and CUCM will require additional setup in order for Call Accounting to gather the Call Data Records.

Setup the application server (after install so the program base directory exists):

1. Install FTP server using ControlPanel>Add Remove Programs>Windows Components, select IIS>FTP Server.
2. Go to Computer Management>Services and Applications>IIS>FTP>Default FTP site(right click and select properties).
3. Point the Home Directory Tab to C:\program files\Syn-Apps\CallAccounting\CDR.
4. Click OK on the properties page to exit.

Setup the Communications Manager:

1. Go to Communications Manager>Serviceability>Tools>CDR Management.
2. Add a new Application Server using the interface on the page.
3. Enter the application server IP and administrator credentials, select SFTP or FTP (depending on how you configured the ftp server above) and enter "/" for the path.
4. Click Add to add the new application server, CUCM will now deliver CDR records to the Call Accounting server.

## 2.3 Firewall Ports

**Firewall requirements/port usage:**

**Call Accounting Server to Communications Manager:**

HTTP/SOAP/AXL TCP: 80, 443, 8443

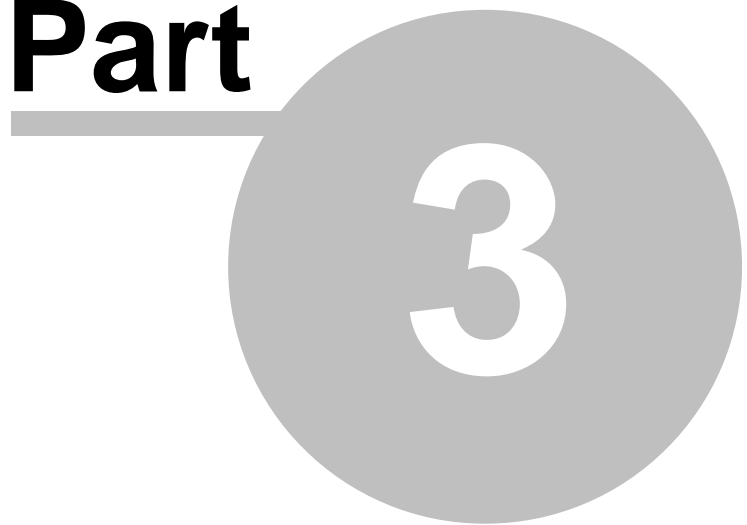
FTP/SFTP: 23, 22

You can also refer to the Communications Manager port usage guide and treat Syn-Apps Call Accounting just like a standard IP Phone.

[http://www.syn-apps.com/Download.aspx?download\\_guid=2e52b417-817a-45a8-b88b-fc5140d113f3](http://www.syn-apps.com/Download.aspx?download_guid=2e52b417-817a-45a8-b88b-fc5140d113f3)

# Installation Procedure

**Part**



### 3 Installation Procedure

If the application server you are installing Call Accounting on has internet access proceed to the next paragraph. If the application server does not have internet access then please make sure the required components ASP.NET 3.5 and SQL Express 2005 have been installed (see the Application Server Requirements section for the download URLs).

You must be logged onto the application server as an administrator (local or domain) to properly complete the installation.

To begin the installation, place the Syn-Apps application CD into the drive. The Syn-Apps Splash screen will start automatically. Select the **Install Applications** link.

Next, click on the **Install Call Accounting** link from the Syn-Apps application CD.

*If you acquired Call Accounting from the Syn-Apps website then start the installation by double clicking the setup program.*

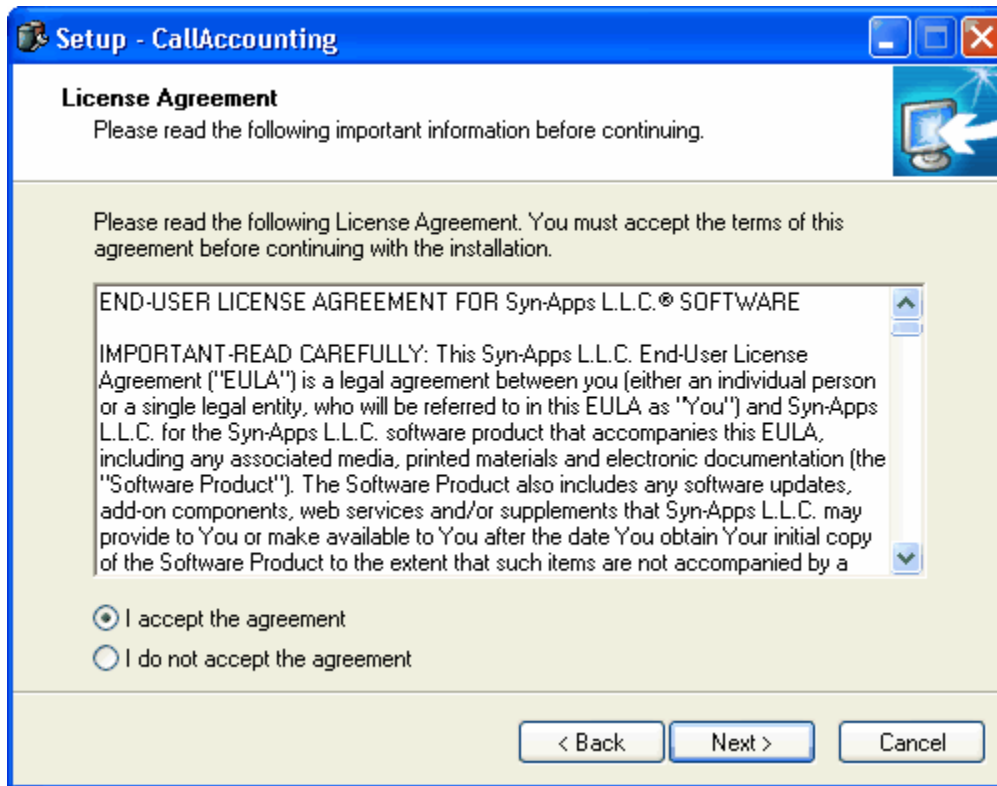
If the Install Wizard does not start installation, manually begin installation by:

- o Click **Start** off of the Desktop
- o Select **Run**
- o Type in: **E:\CallAccounting\CallAccounting.exe** (where E: represents your CD drive)



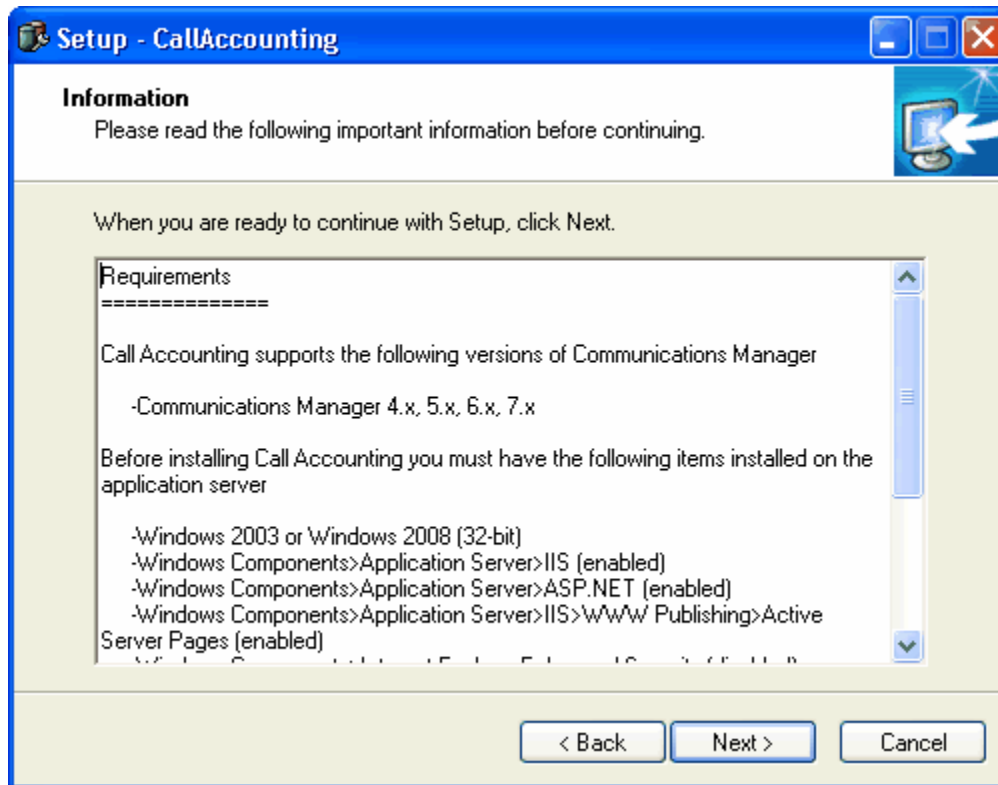
## License Agreement

You will be prompted to read your License Agreement to use the Syn-Apps Call Accounting product. You may use your page down key to view by page. Once you agree with the terms, Click **Next** to proceed.



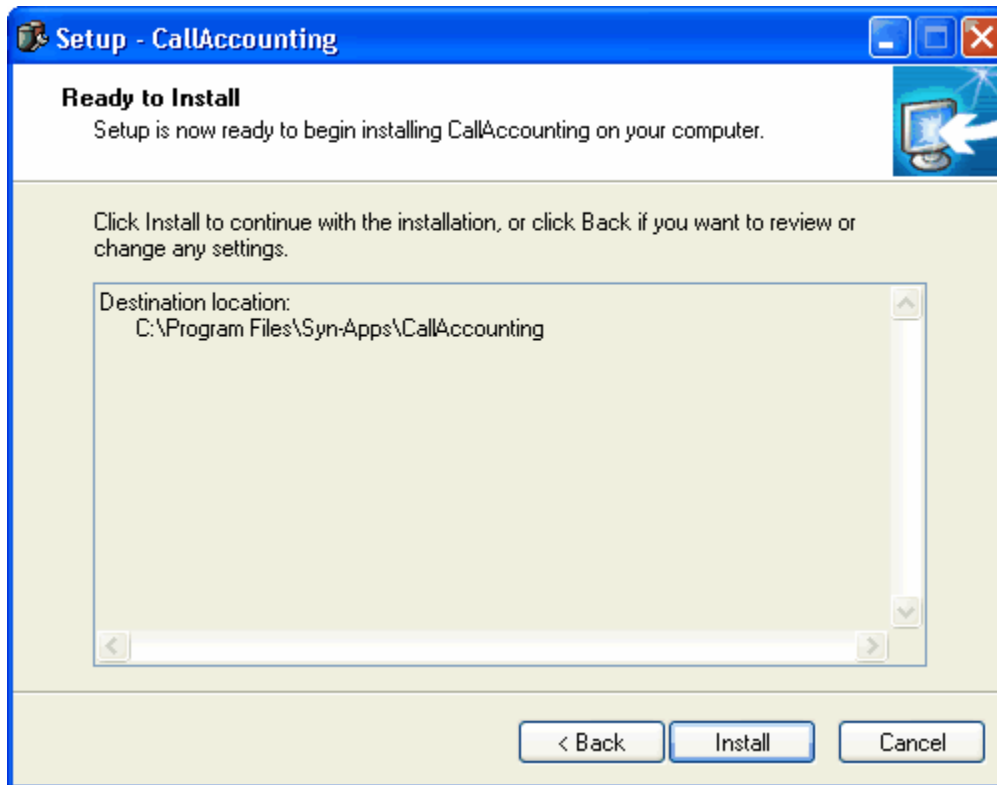
## Information

Click **Next** after you have reviewed and verified the software product and version requirements.



### Ready to Install

Click **Install** if you are ready to proceed with the SA-Announce installation.



## Install Complete



If you are using Communications Manager 5.x or 6.x, please complete Communications Manager 5.x / 6.x / 7.x before continuing.

Click **Finish** to finalize the installation and launch the Call Accounting configuration utility.



# Configuration Steps

**Part**

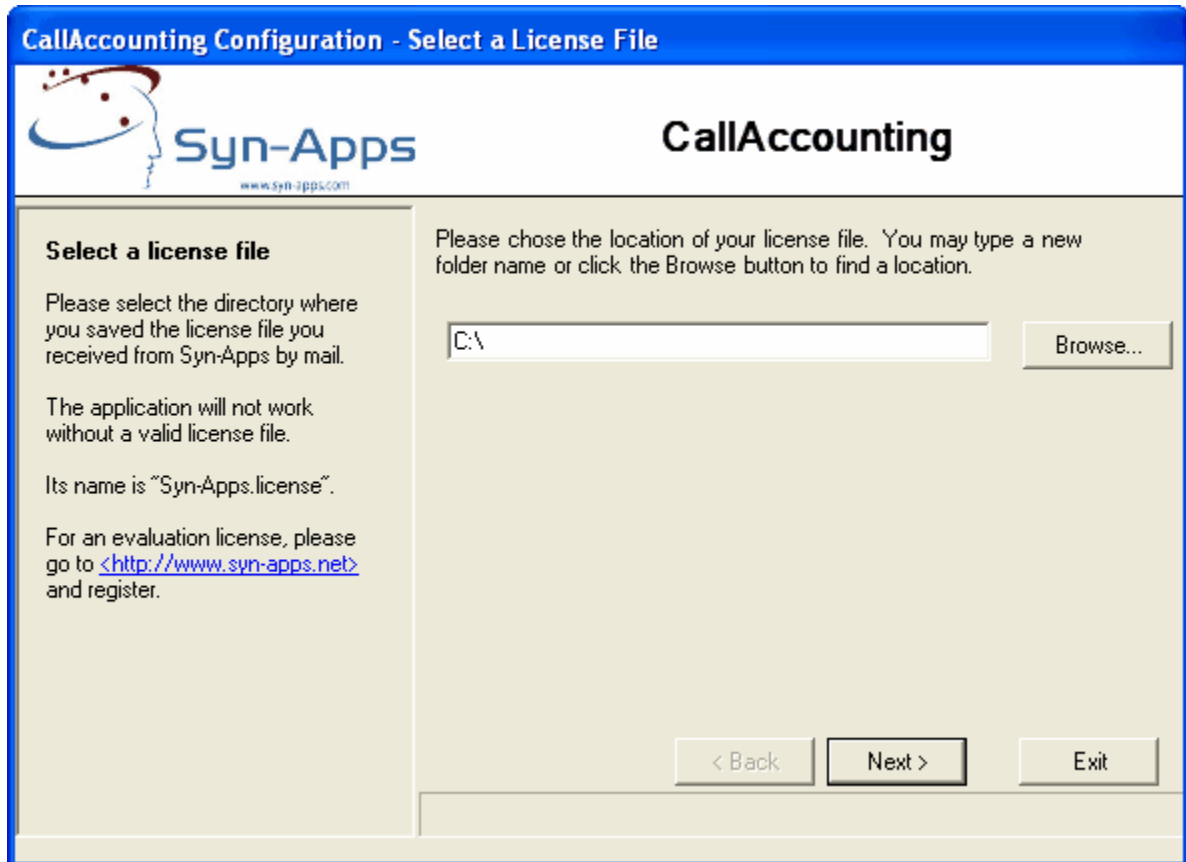


**4**

## 4 Configuration Steps

In order to use the Call Accounting software, a valid license key must be obtained. You can register and obtain product licenses by visiting the Syn-Apps website at [www.syn-apps.com](http://www.syn-apps.com). If you have already obtained your key, click **Browse** to locate the license file that you acquired separately.

Click the **Next** button to proceed.



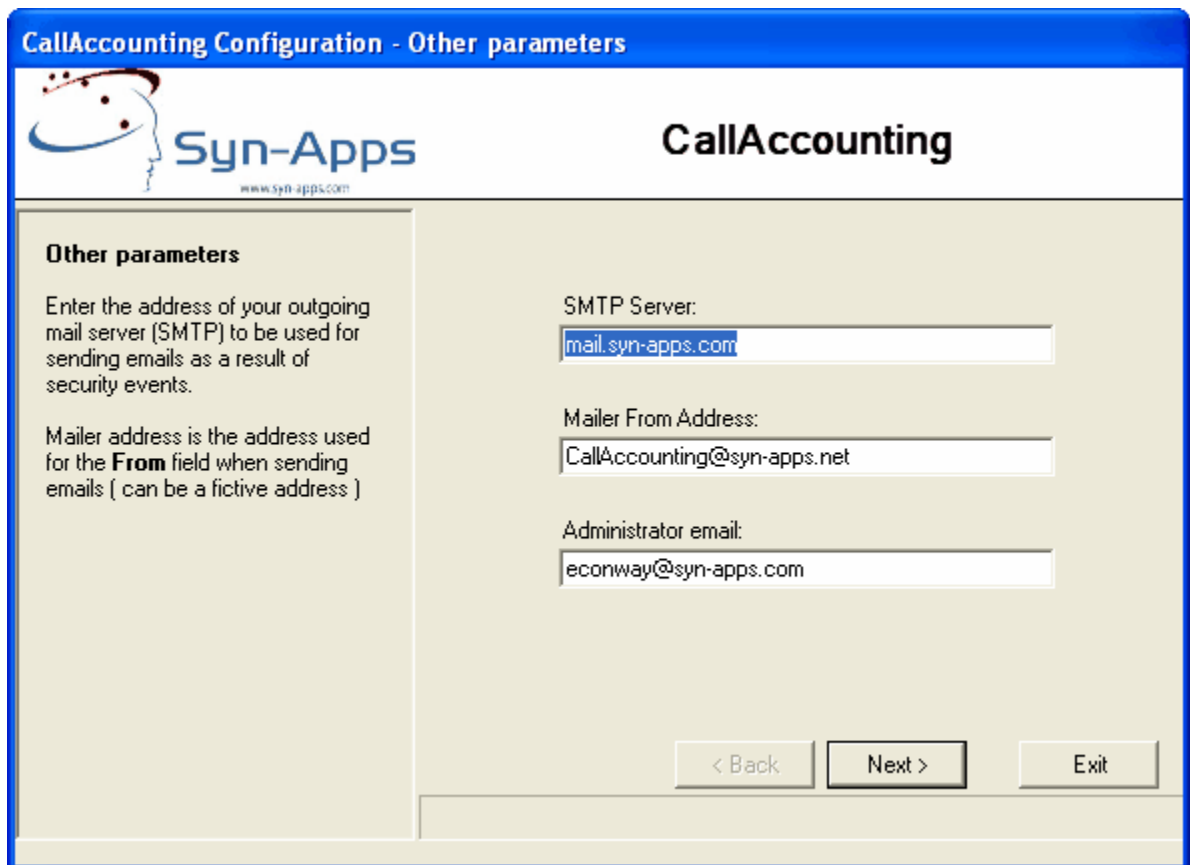
The screenshot shows a Windows-style dialog box titled "CallAccounting Configuration - Select a License File". The dialog has a blue header bar with the title. Below the header, there is a logo for "Syn-Apps" on the left and the text "CallAccounting" on the right. The main area is divided into two columns. The left column contains instructions: "Select a license file", "Please select the directory where you saved the license file you received from Syn-Apps by mail.", "The application will not work without a valid license file.", "Its name is 'Syn-Apps.license'.", and "For an evaluation license, please go to <http://www.syn-apps.net> and register." The right column contains the text "Please chose the location of your license file. You may type a new folder name or click the Browse button to find a location." Below this text is a text input field containing "C:\\" and a "Browse..." button. At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Exit".



## Configuring Email Information

Enter the following information in the provided fields:

- **SMTP Server:** Enter the address of the outgoing mail server.
- **Mailer From Address:** Enter the email address to be used in the From field of mail sent from the Call Accounting application.
- **Administrator Email:** Enter the email address of the Call Accounting administrator (for system event notifications).



The screenshot shows a configuration window titled "CallAccounting Configuration - Other parameters". The window has a blue header bar with the title. Below the header, there is a logo for "Syn-Apps" on the left and the text "CallAccounting" on the right. The main content area is divided into two sections. On the left, under the heading "Other parameters", there is explanatory text: "Enter the address of your outgoing mail server (SMTP) to be used for sending emails as a result of security events." and "Mailer address is the address used for the **From** field when sending emails ( can be a fictive address )". On the right, there are three input fields: "SMTP Server:" with the value "mail.syn-apps.com", "Mailer From Address:" with the value "CallAccounting@syn-apps.net", and "Administrator email:" with the value "econway@syn-apps.com". At the bottom right of the window, there are three buttons: "< Back", "Next >", and "Exit".



### Configuring Communications Manager Addresses

Type the IP address of your Communications Manager Server(s). You are allowed to input a maximum of five Communications Manager Servers. The first IP address field populated designates the primary Communications Manager server. In the event that you wish to designate a secondary Communications Manager for the Call Accounting Messaging system to rollover to in case of system failure, you may designate up to 4 back up Communications Manager servers.

If you are using CUCM 4.x all servers are required to have the same administrator user ID and password as the application server. Additionally all back-up Communications Manager servers must be using the same SQL SA password.

Click **Next** to proceed.

## Local NT Authentication

Enter the user account information for the local machine administrator (or an account with administrator access). Note that for Communications manager versions 3 and 4 it is required that you have a local administrator account that matches an administrator account on the CUCM servers (preferred method is to make the two machines have matching local administrator accounts). Make sure you are currently logged in as the user you provide to this interface.

Click **Next**

**CallAccounting Configuration - Local NT Authentication**

**Syn-Apps**  
www.syn-apps.com

**CallAccounting**

**Local NT Authentication**

**Call Manager 5.x / 6.x / 7.x**

Enter the local NT administrator account credentials.

**Call Manager 3.3 / 4.x:**

Enter the user and password for Call Manager NT administrator account.

The application requires you to be logged on local machine (not on the domain) with an identical user as the Call Manager NT Administrator, with an identical password.

Using the "administrator" account, with the password identical to the

Local NT User:  
administrator

Local NT Password:  
xxxxxxxx

< Back    Next >    Exit




## Application Database Server

If you have installed the Syn-Apps Core Components or if the installer automatically installed SQL Express 2005 please enter **SynApps** as your **Instance Name**. Otherwise enter the instance name you would like to use.

Click **Next** to proceed.

**CallAccounting Configuration - Application Database**

 **CallAccounting**

**Application Database Server**

Enter SQL Server instance where you want to install the application database.

If you installed *Syn-Apps Core Components* (recommended), use "SynApps" for the instance name.

Syn-Apps Core Components can be downloaded from [http://www.syn-apps.net/Downloads.aspx?project\\_id=12](http://www.syn-apps.net/Downloads.aspx?project_id=12).

If you don't have a named instance, leave the instance name field blank.

You can only use a local database.

SQL Server:  
ECONWAY-WXP

Instance Name (leave blank for default):  
SYNAPPS

Database Name:  
CallAccounting 1.0

< Back    Next >    Exit



## Call Manager Authentication

Enter the ccmadministrator credentials.

Press **Configure** to complete configuration.

The screenshot shows a web browser window titled "CallAccounting - Call Manager Authentication". The page header includes the Syn-Apps logo and the text "CallAccounting". The main content area is divided into two columns. The left column contains the following text:

**Communications Manager  
ccmadministrator  
Authentication**

Enter the user and password for the Communications Manager ccmadministrator account. (It is not always the same as the Call Manager NT administrator account).

Common account names include:  
*administrator, ccmadmin,  
ccmadministrator.*

This account is used for access to special URLs and APIs of Communications Manager.

The right column contains two input fields for authentication:

Communications Manager ccmadministrator

Communications Manager ccmadministrator

At the bottom right of the form are three buttons: "< Back", "Configure", and "Exit".



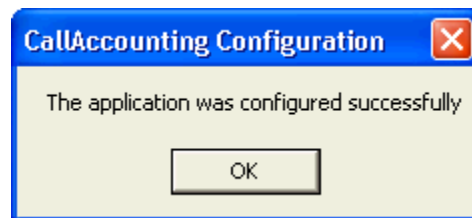
## Successful Configuration

After clicking the Configure button:

You will see a series of windows and the status bar will be updated as steps are completed.

When the application is configured you will see the following success window.

Click **OK** to proceed.



## Activation Type

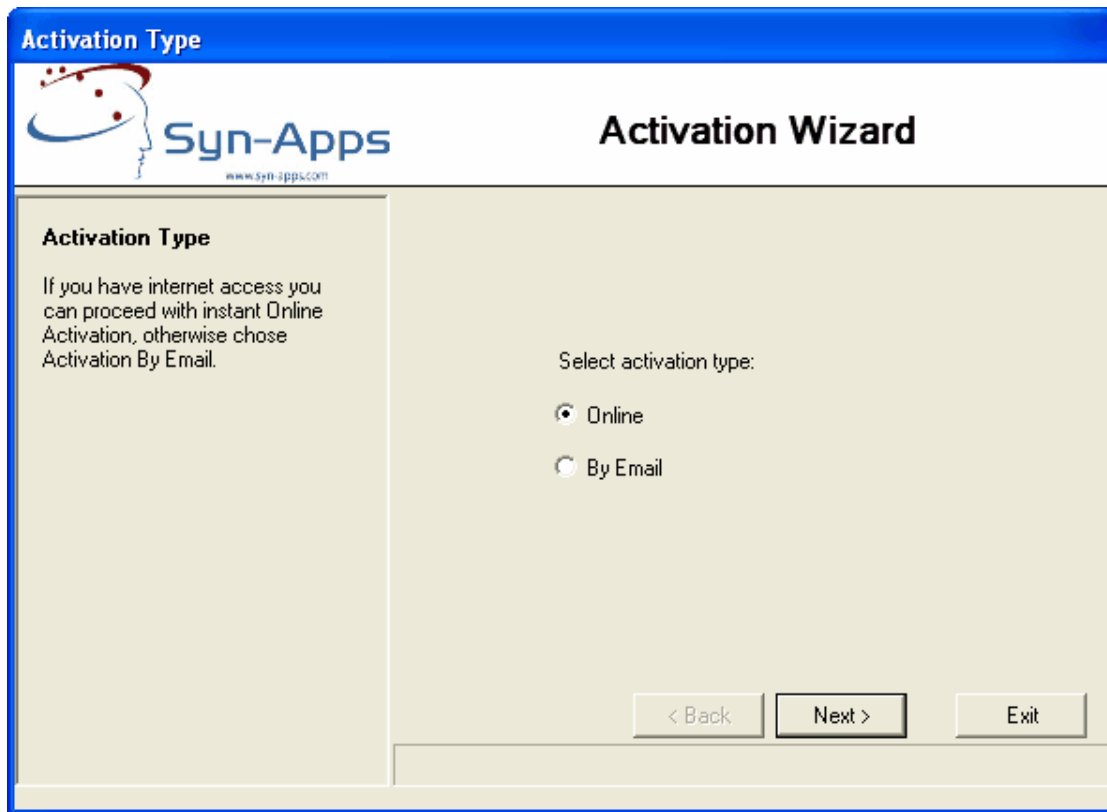
You are now required to activate your copy of Call Accounting.

Select **Online** if your Call Accounting server has access to the Internet.

Select **By Email** if your Call Accounting server does not have access to the Internet.

Click **Next** to proceed.





The screenshot shows a software dialog box titled "Activation Type" with a blue header bar. The header bar contains the Syn-Apps logo on the left and the text "Activation Wizard" on the right. The logo consists of a stylized head profile with a red and blue arc above it and the text "Syn-Apps" and "www.syn-apps.com" below. The main content area is light beige and is divided into two sections. The left section is titled "Activation Type" and contains the text: "If you have internet access you can proceed with instant Online Activation, otherwise chose Activation By Email." The right section is titled "Select activation type:" and contains two radio button options: "Online" (which is selected) and "By Email". At the bottom right of the dialog box, there are three buttons: "< Back", "Next >", and "Exit".

**Activation Type**

If you have internet access you can proceed with instant Online Activation, otherwise chose Activation By Email.

Select activation type:

- Online
- By Email

< Back    Next >    Exit



## Online Activation

If you selected the Online option you will be presented with a success window once your application is activated (Internet access required).

If you select the By Email option you will be presented with a dialog box with the activation information, copy the text out of the window and email it to [activation@syn-apps.com](mailto:activation@syn-apps.com).

Click **OK** to continue.

Once the Install Wizard has completed the installation you will see a shortcut on the desktop labeled **Call Accounting**.

**This completes the Call Accounting Configuration.**



# Phone Categorization

**Part**



**5**

## 5 Phone Categorization

Once installation is complete the Call Accounting application is ready for further configuration. Double click the **Call Accounting** shortcut that was created on your desktop. After logging in to the system (use the local credentials you configured the application with) the **Main>>Phone Categorization** page should appear (shown below).

The **Categories** page is where phones are grouped into logical units. Aggregate reports in Call Accounting are displayed by Category. The Company category is the default root category. To rename a category, select it twice, the tree view functions just like windows explorer in this regard; enter the new name of the category and press outside the edit box to save changes.

Add levels below any category by pressing the **+Add** link button with a category selected; a new category will be added under the currently selected category. To remove a category, select the category to remove and press the **-Delete** link button.

By default no phones are assigned to any categories, this must be done manually for the application to function correctly. To accomplish this, simply select the category to add the devices to and press the **+Add Phones to Category** link button located at the bottom right of the table. The table will change to "Add Phones" mode, see the following section () for more detail.

When the table is in "Show Phones" mode you can remove phones from the selected category using the **-Remove Selected** link button in the lower right hand section of the table. Select phones in the list using the mouse (ctrl-click and shift-click work as well), note that when shift-clicking only unique phones will be selected, even though phones can be listed multiple times (this is because they are listed by line for easy searching). Filter the list using the provided **Search** box, enter the filter text and press enter to filter the list. The table is paged, use the buttons at the bottom of the table to navigate the pages.

Note: Phones cannot be added to the root category, this is because each category represents a level in the aggregate report, levels without phones will roll-up all levels below them in the hierarchy. So by leaving the root category blank it will roll-up every category below it and provide an appropriate total (IE if phones were added to the root level then the root level row in the aggregate report would represent the total for the phones in the root category plus the total for everything below it). This concept is also useful in categories other than the root, leave a category without phones to provide an extra roll-up level.



The screenshot shows the 'Phone Categorization' screen in the Syn-Apps Call Accounting application. The interface includes a navigation menu with options like 'Phone Categorization', 'Report Generation', 'Scheduled Reporting', and 'Configuration Settings'. Below the menu, there's a 'Categories List' on the left and a main table of phone records. The table has columns for Phone Name, Description, Line #, Line Label, Device Pool, CSS, and Category. The current category is 'Mesa', and the table shows 38 items. At the bottom, there are navigation buttons and a 'Selected Category: Mesa' indicator.

Phone Name	Description	Line #	Line Label	Device Pool	CSS	Category
SEP00146A743DCD	Auto 1012	1012		Arizona	Local_CSS	Mesa
SEP001E7AC3611D	Auto 1108	1108		Arizona	Local_CSS	Mesa
SEP001EF72817F2	Auto 1125	1125		Arizona	Local_CSS	Mesa
SEP003094C30E1B	Auto 1127	1127		Arizona	Local_CSS	Mesa
SEP001E7AC46E2A	Auto 1129	1129		Arizona	Local_CSS	Mesa
SEP001E4A0FF83	Auto 1130	1130		Arizona	Local_CSS	Mesa
ATA1B5484A7DC01	Auto 1133	1133		Arizona	Local_CSS	Mesa
SEP001BD4C713B8	Auto 1136	1136		Arizona	Local_CSS	Mesa
SEP001BD4C713B8	Auto 1136	1136		Arizona	Local_CSS	Mesa
SEP001EF7281839	Auto 1160	1160		Arizona	Local_CSS	Mesa
SEP001B5452DA89	Auto 1162	1162		Arizona	Local_CSS	Mesa
SEP001EF7C35E2	Auto 1170	1170		Arizona	Local_CSS	Mesa
SEP001469A95641	Auto 1171	1171		Arizona	Local_CSS	Mesa
SEP0019306F16EC	Auto 1172	1172		Arizona	Local_CSS	Mesa
SEP001EF7C26202	Eric Conway	8100	Sales Voicemail	Arizona	International_CSS	Mesa
SEP001EF7C26202	Eric Conway	8200	Support Voicemail	Arizona	International_CSS	Mesa
SEP001EF7C26202	Eric Conway	2826		Arizona	International_CSS	Mesa
SEP001AA1927682	Eric Conway 7921	3826	6826	Arizona	International_CSS	Mesa
SEP001B5452DAB7	Greg Banse	8100	Sales Voicemail	Arizona	International_CSS	Mesa
SEP001B5452DAB7	Greg Banse	8200	Support Voicemail	Arizona	International_CSS	Mesa
SEP001B5452DAB7	Greg Banse	2821		Arizona	International_CSS	Mesa
SEP001EF7C2613E	Ian Pitts	8100	Sales Voicemail	Arizona	International_CSS	Mesa
SEP001EF7C2613E	Ian Pitts	8200	Support Voicemail	Arizona	International_CSS	Mesa
SEP001EF7C2613E	Ian Pitts	2829	Ian Pitts	Arizona	International_CSS	Mesa
SEP001AA19284A9	Ian Pitts 7921	2829	2829	Arizona	International_CSS	Mesa
SEP000C29483A08	Ian Pitts IPC	2829		Arizona	International_CSS	Mesa
SEP001B0CDB4183	Jane Luo	2822		Arizona	International_CSS	Mesa
SEP001AE22A64C4	Mac Workstation	2820		Arizona	International_CSS	Mesa
SEP001AE22A64C4	Mac Workstation	2821		Arizona	International_CSS	Mesa
SEP001B2A8945BA	Ryan Brown	8100	Sales Voicemail	Arizona	International_CSS	Mesa
SEP001B2A8945BA	Ryan Brown	8200	Support Voicemail	Arizona	International_CSS	Mesa
SEP001B2A8945BA	Ryan Brown	2824		Arizona	International_CSS	Mesa

## 5.1 Adding Phones

After clicking the **+Add Phones to Category** link button the table will change to "Add Phones" mode. To show phones that are already categorized click the **All Phones** radio button, to show only uncategorized phones select the **Uncategorized Phones** radio button.

*Note the message in the window;* a phone can only be part of one category per schema. If you add a phone that is already a member of a category to a new category, the application will first remove the phone from its current category and then add it to the new one.

Select the phones to be added to the current category, use **ctrl-click** to select multiple items that are not in order, use **shift-click** to select multiple items in order. Note that when shift-clicking only unique phones will be selected, even though phones can be listed multiple times (this is because they are listed by line for easy searching). Filter the list using the provided **Search** box, enter the filter text and press enter to filter the list. The table is paged, use the buttons at the bottom of the table to navigate the pages.

Click the **Add Selected Phones to Category** link button to add the selected phones to the current category.



Syn-Apps Call Accounting - Windows Internet Explorer

http://localhost/CallAccounting3.0Dev/Categories.aspx

Syn-Apps Call Accounting

Call Accounting

Main Help Log Off syn-apps\econway

Phone Categorization Report Generation Scheduled Reporting Configuration Settings

Main>>Phone Categorization

Categories List + Add - Delete

Categories

- Syn-Apps LLC
  - Mesa
  - Off-Site
  - Virtual Phones

Show Phones:  Uncategorized Phones  All Phones

A phone can only be part of one category. When adding an already categorized phone it will first be removed from its current category.

Mode: Adding phones to selected category...

Search:

Phone Name	Description	Line #	Line Label	Device Pool	CSS	Category
SEPFFFF43DBB60A	Auto 1010	1010		Arizona	Local_CSS	Virtual Phones
SEPFFF88082D1D	Auto 1011	1011		Arizona	Local_CSS	Virtual Phones
SEP00146A743DCD	Auto 1012	1012		Arizona	Local_CSS	Mesa
SEPFFF7829A1CF	Auto 1013	1013		Arizona	Local_CSS	Virtual Phones
SEPFFF89E4E997	Auto 1014	1014		Arizona	Local_CSS	Virtual Phones
SEPFFF69FA723	Auto 1015	1015		Arizona	Local_CSS	Virtual Phones
SEPFFF45FE7BCC	Auto 1016	1016		Arizona	Local_CSS	Virtual Phones
SEPFFFA03E907	Auto 1017	1017		Arizona	Local_CSS	Virtual Phones
SEPFFFCASAA871	Auto 1018	1018		Arizona	Local_CSS	Virtual Phones
SEPFFF44D24B00	Auto 1019	1019		Arizona	Local_CSS	Virtual Phones
SEP001E7AC3611D	Auto 1108	1108		Arizona	Local_CSS	Mesa
SEPEEEEDAC40300	Auto 1115	1115		Arizona	Local_CSS	Virtual Phones
SEPEEEEDAC40301	Auto 1116	1116		Arizona	Local_CSS	Virtual Phones
SEPEEEEDAC40302	Auto 1117	1117		Arizona	Local_CSS	Virtual Phones
SEPEEEEDAC40303	Auto 1118	1118		Arizona	Local_CSS	Virtual Phones
SEPEEEEDAC40304	Auto 1119	1119		Arizona	Local_CSS	Virtual Phones
SEPEEEEDAC40305	Auto 1120	1120		Arizona	Local_CSS	Virtual Phones
SEPEEEEDAC40306	Auto 1121	1121		Arizona	Local_CSS	Virtual Phones
SEPEEEEDAC40307	Auto 1122	1122		Arizona	Local_CSS	Virtual Phones
SEPEEEEDAC40308	Auto 1123	1123		Arizona	Local_CSS	Virtual Phones
SEPEEEEDAC40309	Auto 1124	1124		Arizona	Local_CSS	Virtual Phones
SEP001EF72817F2	Auto 1125	1125		Arizona	Local_CSS	Mesa
SEP003094C30E1B	Auto 1127	1127		Arizona	Local_CSS	Mesa
SEP001E7AC46E2A	Auto 1129	1129		Arizona	Local_CSS	Mesa

Page 1 of 4 (93 items)

Selected Category: Mesa + Add Selected Phones to Category x Cancel

# Configuration Settings

**Part**



**6**

## 6 Configuration Settings

Select **Main>>Configuration Settings** from the menu to access the configuration settings page.

The **Main>>Configuration Settings** page is where call costs and location codes are assigned. There are also basic configuration settings and logging level settings contained on this page.

### 6.1 Call Costs

The **Call Costs** tab is the default view of the **Main>>Configuration Settings** page. This is where costs can be associated with dialed numbers. Click the **Add** button to create a new **Call Costs** item. Enter the following information in the provided fields:

- **Description:** Enter a description of the **Call Costs** item.
- **Number Pattern:** Enter the number pattern of the item (Note: examine a detailed report to see if prefix digits are contained in the external numbers, if so make sure to include them in the filters. Sample filters for Mesa, Arizona are provided (480, 602, 623 are toll-free local area codes).
  - Use the underscore as a single digit wildcard (IE use four underscores to indicate a 4 dialed digits phone call).
  - Use the percent sign to match any character zero or more times (IE enter "91%" to match calls that begin with "91").
- **Cost per Increment:** Enter the items cost per billing increment (IE if the cost is 0.10 dollars per minute enter 0.10 as the cost per increment).
- **Billing Increment:** Enter the billing increment in seconds (IE 60 for a per minute billing increment).



Call Accounting

Main Help Log Off syn-apps\veconway

Phone Categorization Report Generation Scheduled Reporting Configuration Settings

Main>>Configuration Settings

Call Costs Location Codes Settings Logging Levels

Configure call costs and location codes...

Call Costs The interface below is used to create and edit call cost filters.

Description	Number Pattern	Cost Per Increment	Billing Increment (seconds)	Edit Command
Toll Free	91800%	0	60	Edit Delete
Toll Free	91888%	0	60	Edit Delete
Toll Free	91866%	0	60	Edit Delete
Information	91411%	0.25	60	Edit Delete
Long Distance	91%	0.1	60	Edit Delete
International	9011%	0.2	60	Edit Delete
InState AZ	9602%	0	60	Edit Delete
InState AZ	9623%	0	60	Edit Delete
InState AZ	9480%	0	60	Edit Delete
Local	9_____	0	60	Edit Delete
Internal	_____	0	60	Edit Delete
Test123	1976%	5	60	Edit Delete

Page 1 of 1 (12 items)

Add

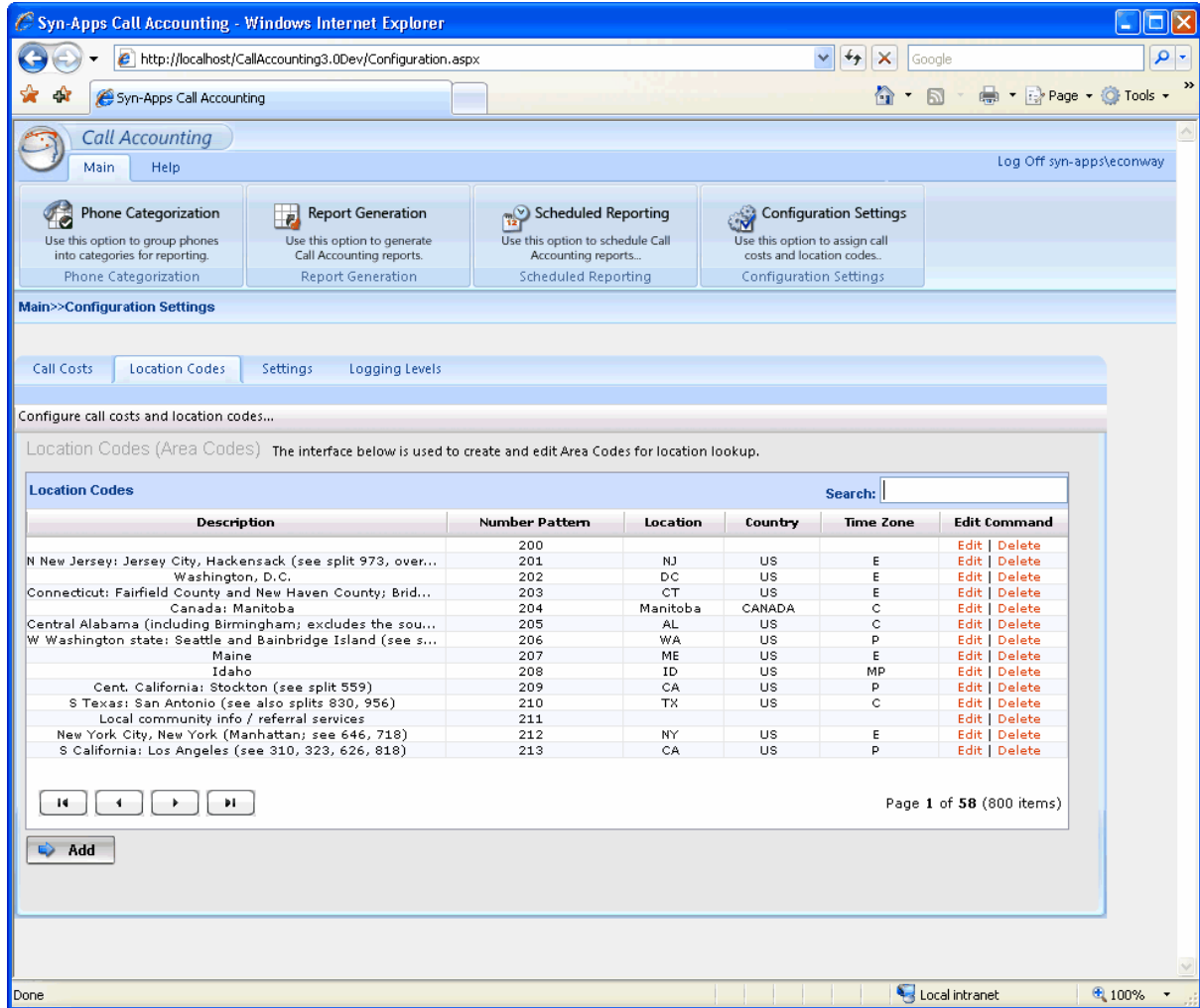
## 6.2 Location Codes

The **Location Codes** tab of the **Main>>Configuration Settings** page contains a list of location codes used in reports.

Standard location codes (area codes) are provided for most states. Custom location codes can be created by pressing the **Add** button. Enter the information for the custom location code in the provided fields:

- **Number Pattern:** Enter the area code of the new location (custom codes can be entered, IE if functional entity "X" has line numbers in the 5200 range enter "52\_\_").
- **Location:** Enter a description of the new location, this will be shown in reports and should be kept short.
- **Country:** Enter the country of the new location (not used currently).
- **Time Zone:** Enter the time zone of the new location (not used currently).
- **Description:** Enter a description of the new location, this is purely for informational purposes, long descriptions are fine.



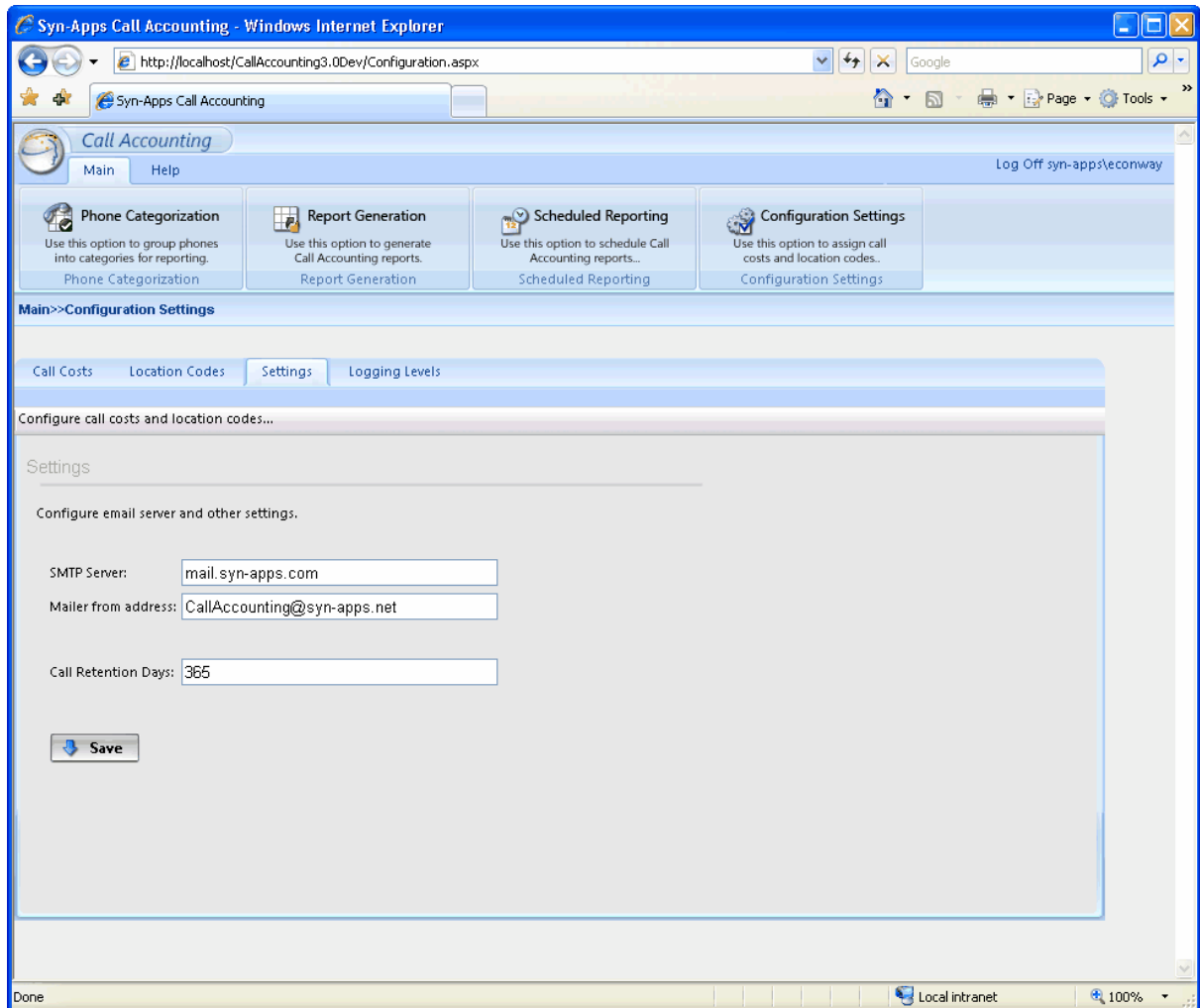


### 6.3 Settings

The **Configuration Settings: Settings** tab contains basic configuration settings for email and call data records retention.

The call retention can be set from 1 to 365 days (365 default). **Note:** On large systems or systems with high call volume it is possible that the MSDE / SQL Express database could surpass the maximum size of 2GB. On such systems a licensed SQL server installation or lowering the retention setting will be required.

After making settings changes press the **Save** button to save the changes.



## 6.4 Logging Levels

The **Configuration Settings: Logging Levels** tab contains an interface for setting the logging levels for the scheduler service (File minimum error level) and for the web site.

These settings should only be changed if requested by Syn-Apps Support.



Syn-Apps Call Accounting - Windows Internet Explorer

http://localhost/CallAccounting3.0Dev/Configuration.aspx

Call Accounting

Main Help Log Off syn-apps\veconway

Phone Categorization Report Generation Scheduled Reporting Configuration Settings

Main>>Configuration Settings

Call Costs Location Codes Settings Logging Levels

Configure call costs and location codes...

Logging Levels

Set the application logging levels below.

File Minimum Error Level. For TraceFiles located in the service folder Error

Web Site Minimum Error Level. For web site logging Error

Done Local Intranet 100%



# Scheduled Reporting

**Part**



**7**

## 7 Scheduled Reporting

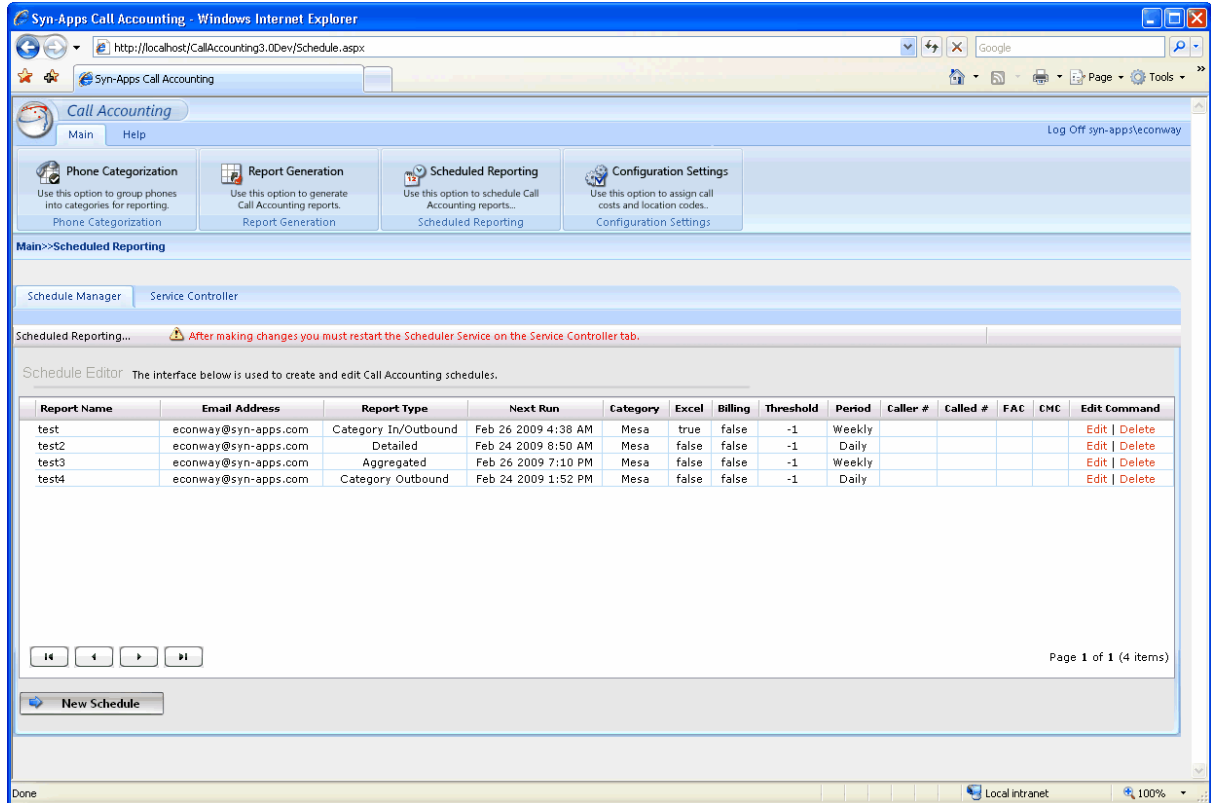
Select **Main>>Scheduled Reporting** from the main menu to access the schedules page.

### 7.1 Schedule Manager

To create a scheduled report, click the **New Schedule** button. Enter the following information in the provided fields:

- **Report Name:** Enter a title for the report.
- **Email Address:** Enter email address to send the report to. Delimit multiple addresses with a semicolon.
- **Report Type:** Select the type of report from the drop-down menu.
  - **Aggregate:** Reports totals for all categories.
  - **Category:** Reports usage by phone for the selected category.
    - **Category Inbound:** Reports on all inbound calls.
    - **Category Outbound:** Reports on all outbound calls.
    - **Category In/Outbound:** Reports on both in/outbound calls.
  - **Detailed:** Reports usage by call for the selected category.
- **Next Run:** Select the date of the next report generation (use the arrow keys to edit the date / time).
- **Category:** Select the category to run the report on (NA for aggregate).
- **Excel:** If checked Call Accounting will change your report to an excel format.
- **Billing:** If true this setting will suppress all zero cost calls (Only valid for Detailed reports).
- **Threshold:** Suppress phones with less than the number of calls entered, -1 for no suppression (Only valid for Categories reports).
- **Period:** Select the time between reports from the drop-down menu.
- **Caller #:** Enter a calling number to filter the report on. Leave blank to match all.
- **Called #:** Enter a called number to filter the report on. Leave blank to match all.
- **FAC:** Enter a Forced Authorization Code to filter the report on, leave blank to match all.
- **CMC:** Enter a Client Matter Code to filter the report on, leave blank to match all.

Click **Update** to save the schedule. **You must restart the service for changes to take effect.**



The screenshot shows the Syn-Apps Call Accounting web application in a Windows Internet Explorer browser. The page title is "Syn-Apps Call Accounting - Windows Internet Explorer" and the URL is "http://localhost/CallAccounting3.0Dev/Schedule.aspx". The application has a navigation menu with "Main" and "Help" links. The main content area is titled "Call Accounting" and includes a "Log Off syn-apps@econway" link. There are four main sections: "Phone Categorization", "Report Generation", "Scheduled Reporting", and "Configuration Settings". The "Scheduled Reporting" section is active, showing a "Schedule Manager" tab and a "Service Controller" tab. A warning message states: "After making changes you must restart the Scheduler Service on the Service Controller tab." Below this is a "Schedule Editor" section with a table of scheduled reports.

Report Name	Email Address	Report Type	Next Run	Category	Excel	Billing	Threshold	Period	Caller #	Called #	FAC	CMC	Edit Command
test	econway@syn-apps.com	Category In/Outbound	Feb 26 2009 4:38 AM	Mesa	true	false	-1	Weekly					Edit   Delete
test2	econway@syn-apps.com	Detailed	Feb 24 2009 8:50 AM	Mesa	false	false	-1	Daily					Edit   Delete
test3	econway@syn-apps.com	Aggregated	Feb 26 2009 7:10 PM	Mesa	false	false	-1	Weekly					Edit   Delete
test4	econway@syn-apps.com	Category Outbound	Feb 24 2009 1:52 PM	Mesa	false	false	-1	Daily					Edit   Delete

Page 1 of 1 (4 items)

New Schedule

## 7.2 Service Controller

The **Service Controller** tab of the **Scheduled Reporting** page provides buttons for managing the Call Accounting scheduler service.

Click the **Restart** button to restart the service after adding a new schedule.

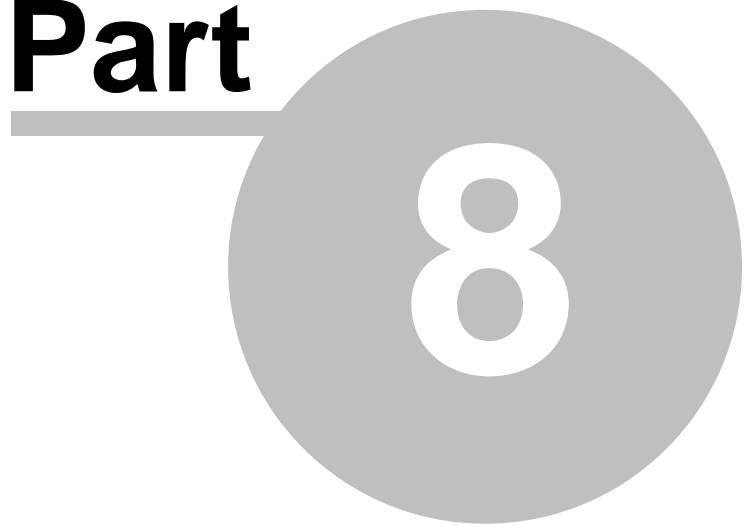


The screenshot shows a web browser window titled "Syn-Apps Call Accounting - Windows Internet Explorer". The address bar displays "http://localhost/CallAccounting3.0Dev/Schedule.aspx". The page content includes a navigation menu with "Main" and "Help" options, and a "Log Off syn-apps@econway" link. Below the menu are four main sections: "Phone Categorization", "Report Generation", "Scheduled Reporting", and "Configuration Settings". The "Scheduled Reporting" section is active, showing a "Schedule Manager" and "Service Controller" tab. A warning message states: "After making changes you must restart the Scheduler Service on the Service Controller tab." Below this, the "Scheduler Service Controller" section indicates that the "CallAccounting service is running." and provides buttons for "Start", "Stop", "Restart", and "Refresh Status". The status bar at the bottom shows "Done", "Local intranet", and "100%" zoom.



# Report Generation

**Part**



## 8 Report Generation

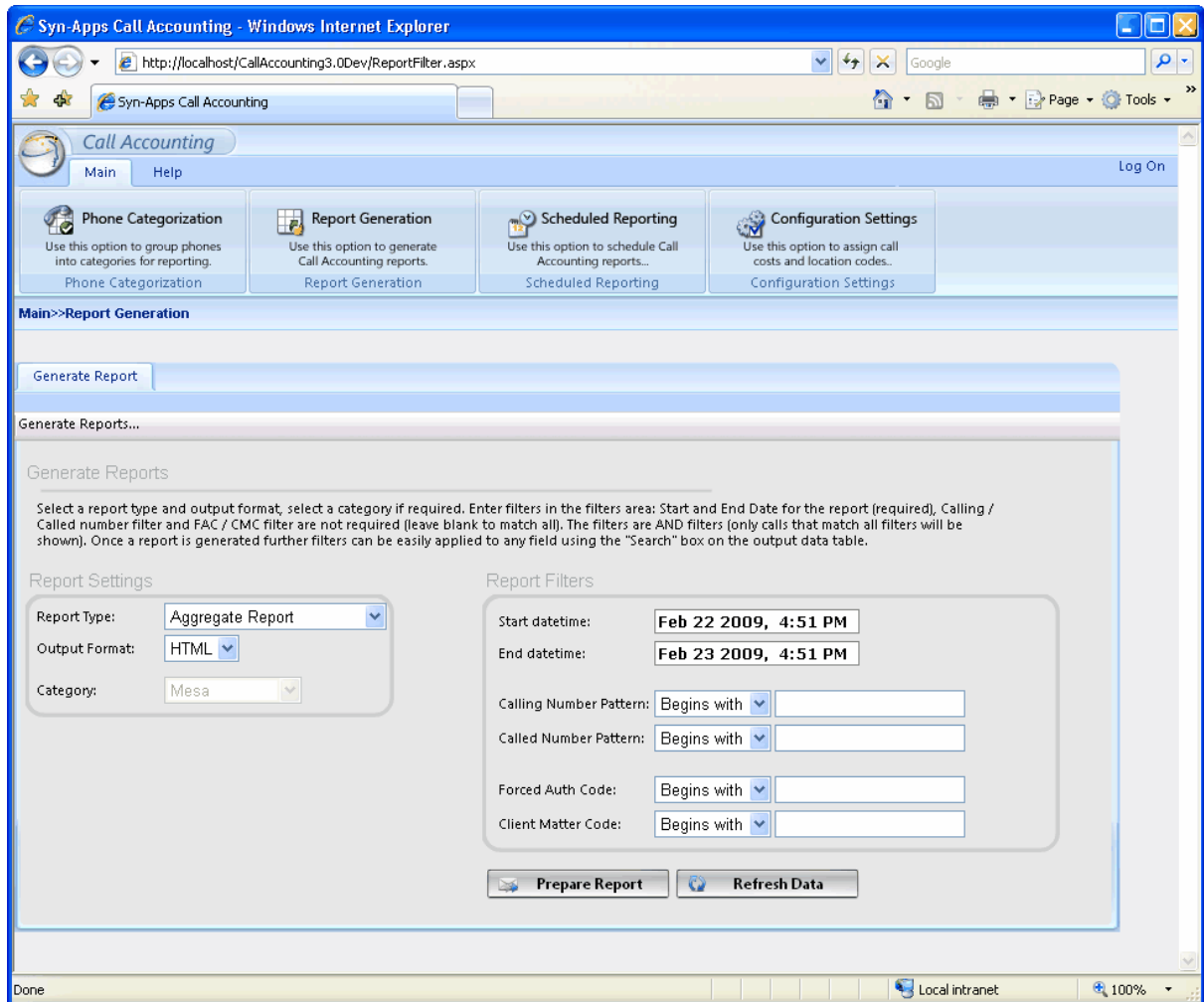
The **Report Generation** page provides a method for manually generating reports. Enter the following information in the provided fields:

- **Report Type:** Select the report type from the drop-down menu.
  - **Aggregate:** Reports totals for all categories containing phones.
  - **Category:** Reports usage by phone for the selected category.
  - **Detailed:** Reports usage by call for the selected category.
- **Output Format:** Select the output format from the drop-down menu (HTML, Excel).
- **Category:** Select the category to run the report on (NA for aggregate).
- **Suppress Zero Cost Calls:** Suppresses the calls with no company cost from the report (only valid for categories reports).
- **Start Datetime:** Select the start date and time for the report (use the arrow keys to change the date / time fields)
- **End Datetime:** Select the end date and time for the report (use the arrow keys to change the date / time fields)
- **Calling Number Pattern:** Select the filter type from the drop-down menu (**Begins with** appends a percent sign, **Like pattern** adds percent to both ends of the search pattern). Enter the pattern to match in the provided field. Leave blank to match all.
- **Called Number Pattern:** Select the filter type from the drop-down menu. Enter the pattern to match in the provided field. Leave blank to match all.
- **Forced Auth Code:** Select the filter type from the drop-down menu. Enter the pattern to match in the provided field. Leave blank to match all.
- **Client Matter Code:** Select the filter type from the drop-down menu. Enter the pattern to match in the provided field. Leave blank to match all.

Click the **Refresh Data** button to update the calls database if it has not been done recently (this process is automatically performed every two hours when the scheduler service is running).

Click the **Prepare Report** button to run the report.





## 8.1 Sample Aggregate Report

A sample **Aggregate** report is shown below. The aggregate report displays a high level report for all categories. In the sample shown below the root level "Syn-Apps LLC" is the only level without phones in it (so it rolls up all levels beneath it). The following information is displayed in a category report:

- **Category:** The category which the information pertains to.
- **Num Phones:** The number of phones in the category (if the category is a roll-up category then this will be the total number of phones underneath the roll-up category).
- **Total Cost:** The total cost calculated for the category.
- **Cost %:** The percentage of the total cost for the category.
- **Num Outbound:** The total number of outbound calls for the category.
- **Num %:** The percentage of the report total that the Num Outbound represents.
- **Outbound Length:** The total length of outbound calls for the category.
- **Length %:** The percentage of the report total that the Outbound Length represents.
- **Av Length:** The average length of outbound calls for the category.
- **Num Incoming:** The total number of incoming calls for the category.
- **Num %:** The percentage of the report total that the Num Incoming represents.



- **Incoming Length:** The total length of incoming calls for the category.
- **Length %:** The percentage of the report total that the Outbound Length represents.
- **Av Length:** The average length of incoming calls for the category.

The report can be re-queried using the provided fields. Press the **Exec Query** button to re-query with the new filters. Use the **Export to Excel** button to export the report to Excel.

Each category row has a link to the category inbound and outbound report (**Inbound** and **Outbound** respectively).

The screenshot shows the Syn-Apps Call Accounting web application interface. At the top, there are navigation tabs for Phone Categorization, Report Generation, Scheduled Reporting, and Configuration Settings. Below these is the 'Aggregate Report Output' section, which includes input fields for Calling#, Called#, FAC, and CMC, along with Start and End Date pickers. There are 'Exec Query' and 'Export to Excel' buttons. The main area contains a table with the following data:

Category Name	Num Phones	Total Cost	Cost %	Num Outbound	Num %	Outbound Length	Length %	Av Length	Num Incoming	Num %	Incoming Length	Length %	Av Len
Syn-Apps LLC <a href="#">Inbound</a> <a href="#">Outbound</a>	79	\$162.90	100.00...	1,623.00	100.00...	4:17:49:50	100.00...	03:16	1,286.00	100.00...	3:04:10:10	100.00...	04:33
Mesa <a href="#">Inbound</a> <a href="#">Outbound</a>	26	\$162.80	99.94 %	1,187.00	73.14 %	3:00:35:39	81.72 %	04:40	804.00	62.52 %	2:11:40:23	77.03 %	04:22
Off-Site <a href="#">Inbound</a> <a href="#">Outbound</a>	1	\$0.10	0.06 %	212.00	13.06 %	0:15:26:12	17.38 %	04:22	249.00	19.36 %	0:17:08:24	22.50 %	04:07
Virtual Phones <a href="#">Inbound</a> <a href="#">Outbound</a>	52	\$0.00	0.00 %	224.00	13.80 %	48:59	0.90 %	00:12	233.00	18.12 %	21:23	0.47 %	00:05

At the bottom of the table, there are navigation buttons (First, Previous, Next, Last) and a page indicator 'Page 1 of 1 (4 items)'. The browser status bar at the bottom shows 'Done' and 'Trusted sites'.

## 8.2 Sample Category Report

Sample **Category** reports are shown below. The category report displays a mid-level report for all phones in the specified category. The following information is displayed in a **Category** report.

- **Phone Name:** The phone which the information pertains to.
- **Description:** The phones Communication Manager description.
- **Extension(s):** The lines associated with the phone.
- **# Dials:** The total number of calls that the phone received (inbound report).
- **# Calls:** The total number of calls that the phone made (outbound report).
- **Call Time:** The total call time for the phone (IE inbound time for inbound report, outbound time for outbound report).
- **Avg Call Time:** The average call time for the phone.
- **Avg Ring Time:** The average ring time for the phone.
- **Total Cost:** The total cost calculated for the phone (outbound only).

The report can be re-queried using the provided fields. Press the **Exec Query** button to re-query with the new filters. Use the **Export to Excel** button to export the report to Excel. Use the tables **Search** box to filter any field on the input pattern (press enter to apply the filter).

There are 2 types of Category Reports, Inbound Call Reports and Outbound Call Reports; below there are examples of each:

- A. **Category Inbound Report:** A summary of the inbound calls received by the phones in the category.



Syn-Apps Call Accounting - Windows Internet Explorer

http://10.0.2.69/CallAccounting3.0Dev/CategoryInboundReport.aspx?category\_id=2&startTime=1/1/2009%20:00:50%20AM&endTime=1/31/2009%20:08:00

Syn-Apps Call Accounting

Call Accounting

Main Help Log Off syn-apps@econway

Phone Categorization Report Generation Scheduled Reporting Configuration Settings

Category Inbound Report

Category: **Mesa** Calling#: % FAC: % Start Date: **Jan 1 2009, 4:00 AM** Exec Query Export to Excel  
 Suppress: **-1** (-1 for none) Called#: % CMC: % End Date: **Jan 31 2009, 8:00 PM** Outbound Rpt Detailed Rpt Aggregate Rpt

Category Inbound Report: Enter search text in the Search box (press enter to search). Search:

Phone Name	Description	Extension(s)	# Dials	Call Time	Avg Call Time	Avg Ring Time
SEP001AE22A64C4	Mac Workstation	2821 2820	189	03:46:46	00:01:11	00:00:02
SEP001B5452DCF2	Stephanie Sandro	8200 8100 2827	140	09:14:51	00:03:57	00:00:04
SEP001B2A8945BA	Ryan Brown	2824 8200 8100	130	04:21:45	00:02:00	00:00:07
SEP001B5452DAB7	Greg Banse	2821 8200 8100	114	1.02:56:12	00:14:10	00:00:09
SEP001EF7C2613E	Ian Pitts	2829 8200 8100 4803556829	107	05:17:01	00:02:57	00:00:03
SEP001EF7C26202	Eric Conway	2826 8200 8100	84	05:48:15	00:04:08	00:00:09
SEP001AA19284A9	Ian Pitts 7921	2829 4803556829	18	02:54:39	00:09:42	00:00:08
SEP00146A743DCD	Auto 1012	1012	13	00:15:42	00:01:12	00:00:04
SEP001AA19276B2	Eric Conway 7921	3826	5	00:00:08	00:00:01	00:00:00
SEP001EF72817F2	Auto 1125	1125	2	00:05:04	00:02:32	00:00:04
SEP001B0CDB4068	Shipping/Receiving	2823	2	00:00:00	00:00:00	00:00:00
SEP0019306F16EC		1172	0	00:00:00	00:00:00	00:00:00
SEP001469A95641		1171	0	00:00:00	00:00:00	00:00:00
SEP001EF7C354E2		1170	0	00:00:00	00:00:00	00:00:00
SEP001B5452DA89		1162	0	00:00:00	00:00:00	00:00:00
SEP001EF7281839		1160	0	00:00:00	00:00:00	00:00:00
SEP001BD4C71388		1150 1136	0	00:00:00	00:00:00	00:00:00
ATA1B5484A7DC01		1133	0	00:00:00	00:00:00	00:00:00

Page 1 of 2 (27 items)

**B. Category Outbound Report:** A summary of the outbound calls made by the phones in the category.

The screenshot displays the 'Category Outbound Report' page in a web browser. The page title is 'Syn-Apps Call Accounting - Windows Internet Explorer'. The browser address bar shows the URL: `http://10.0.2.69/CallAccounting3.0Dev/CategoryOutboundReport.aspx?category_id=2&startTime=1/1/2009%204:00:50%20AM&endTime=1/31/2009%208:00:00`. The application interface includes a navigation menu with 'Main' and 'Help' options, and a 'Log Off syn-apps\econway' link. Below the menu are four main sections: 'Phone Categorization', 'Report Generation', 'Scheduled Reporting', and 'Configuration Settings'. The 'Category Outbound Report' section is active, showing filter controls for 'Category: Mesa', 'Calling#: %', 'FAC: %', 'CMC: %', 'Start Date: Jan 1 2009, 4:00 AM', and 'End Date: Jan 31 2009, 8:00 PM'. There are also buttons for 'Exec Query' and 'Export to Excel'. On the right side, there are buttons for 'Inbound Rpt', 'Detailed Rpt', and 'Aggregate Rpt'. The main content area contains a search box and a table of call records. The table has the following columns: Phone Name, Description, Extension(s), # Calls, Call Time, Avg Call Time, Avg Ring Time, and Total Cost. The table contains 27 rows of data, with the first row being 'SEP001B5452DAB7' and the last row being 'SEP001469A95641'. The page footer indicates 'Page 1 of 2 (27 items)'.

Phone Name	Description	Extension(s)	# Calls	Call Time	Avg Call Time	Avg Ring Time	Total Cost
SEP001B5452DAB7	Greg Banse	2821 8200 8100	296	1.01:25:30	00:05:09	00:00:08	\$103.20
SEP001EF7C26202	Eric Conway	2826 8200 8100	131	05:03:35	00:02:19	00:00:04	\$22.00
SEP001AE22A64C4	Mac Workstation	2821 2820	22	01:52:46	00:05:07	00:00:11	\$12.00
SEP001EF7C2613E	Ian Pitts	2829 8200 8100 4803556829	195	10:05:07	00:03:06	00:00:08	\$7.20
SEP001AA19284A9	Ian Pitts 7921	2829 4803556829	47	07:21:52	00:09:24	00:00:12	\$7.10
SEP001B5452DCF2	Stephanie Sandro	8200 8100 2827	170	11:21:53	00:04:00	00:00:08	\$6.10
SEP001B2A8945BA	Ryan Brown	2824 8200 8100	123	05:55:38	00:02:53	00:00:06	\$5.20
SEP00146A743DCD	Auto 1012	1012	17	00:00:49	00:00:02	00:00:01	\$0.00
SEP001AA19276B2	Eric Conway 7921	3826	160	00:10:07	00:00:03	00:00:00	\$0.00
SEP001B5452DA89	Auto 1162	1162	3	00:00:00	00:00:00	00:00:00	\$0.00
SEP001EF7281839	Auto 1160	1160	6	00:00:00	00:00:00	00:00:00	\$0.00
SEP001BD4C71388	Auto 1136	1150 1136	3	00:00:00	00:00:00	00:00:00	\$0.00
SEP001EF72817F2	Auto 1125	1125	2	00:00:34	00:00:17	00:00:03	\$0.00
SEP00E075F31047	Syn-Apps Conference Room	2812	10	05:16:26	00:31:38	00:00:04	\$0.00
SEP001B0CDB4068	Shipping/Receiving	2823	1	00:00:00	00:00:00	00:00:00	\$0.00
ATA001B5484A7DC	Shipping ATA	1132	1	00:00:22	00:00:22	00:00:17	\$0.00
SEP0019306F16EC		1172	0	00:00:00	00:00:00	00:00:00	\$0.00
SEP001469A95641		1171	0	00:00:00	00:00:00	00:00:00	\$0.00



## 8.3 Sample Detailed Report

The detailed report displays a low-level report for all calls in the specified category. The report has roll-up rows that are colored and have the following meaning:

- A light red row is the grand total, totaling the cost and duration of calls for the entire report.
- A light yellow row is a phone total row, totaling the cost and duration of calls for that phone.
- A light gray row is a line total row, totaling the cost and duration of calls for that line.

A Detailed report provides the following information:

- **Category Phone:** The category phone name.
- **Category Line:** The line of the category phone used for this call.
- **Calling Line:** The caller number.
- **Calling Description:** The caller Communications Manager description, if applicable.
- **Calling Location:** The caller location code.
- **Called Line:** The number dialed.
- **Called Description:** The called person's Communications Manager description, if applicable.
- **Called Location:** The called person's location code.
- **Start Time:** The call start time.
- **Duration:** The call duration.
- **Cost Description:** The description **Call Costs** item that is applied to the call, if applicable.
- **Cost:** The cost that is applied to the call, if applicable.
- **FAC:** The Forced Authorization Code used for the call if applicable.
- **CMC:** The Client Matter Code used for the call if applicable.

The report can be re-queried using the provided fields. Press the **Exec Query** button to re-query with the new filters. Use the **Export to Excel** button to export the report to Excel. Use the tables **Search** box to filter any field on the input pattern (press enter to apply the filter).

The detailed report can also be grouped by dragging a column header into the light blue table header. Suggested use is to drag the **Category Phone** column into the header, this will group all calls on the category phone they belong to. To remove the grouping on the report drag the Group By: "column" text back into the table.

A sample **Detailed** report is shown below.

Syn-Apps Call Accounting - Windows Internet Explorer

http://10.0.2.69/CallAccounting3.0Dev/DetailedReport.aspx?category\_id=2&calledNumberPattern=%25&callingNumberPattern=%25&startTime=1/1/2009%2...

Syn-Apps Call Accounting

Call Accounting

Main Help Log off syn-apps/econway

Phone Categorization Report Generation Scheduled Reporting Configuration Settings

Detailed Report Output

Category: Mesa Calling#: % FAC: % Start Date: Jan 1 2009, 4:00 AM Exec Query Export to Excel

Billing Report:  (Suppress zero cost) Called#: % CMC: % End Date: Jan 31 2009, 8:00 PM Inbound Rpt Outbound Rpt Aggregate Rpt

Enter search text in the Search box (press enter to search). Search:

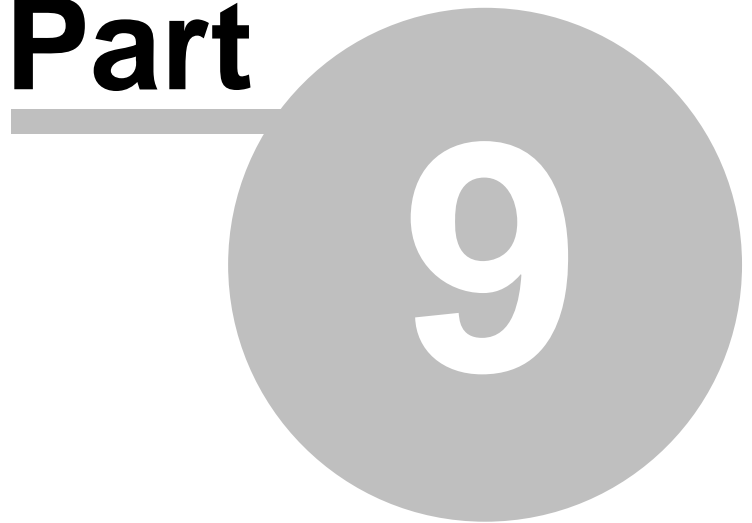
Category Phone	Category Lin	Calling Line	Calling Description	Calling Locatic	Called Line	Called Description	Called Locatic	Start Time	Duration	Cost Desc	Cost	FAC	CMC
<b>Grand Total</b>									Jan 1 0001 12:0...	5:11:0...	\$162...		
<b>ATA001B5484...</b>									Jan 1 0001 12:0...	00:00:22	\$0.00		
<b>ATA001B5484...</b>									Jan 1 0001 12:0...	00:00:22	\$0.00		
<b>SEP00146A743...</b>									Jan 1 0001 12:0...	00:16:31	\$0.00		
<b>SEP00146A743...</b>									Jan 1 0001 12:0...	00:00:49	\$0.00		
<b>SEP00146A743...</b>									Jan 29 2009 3:5...	00:00:00	\$0.00		
<b>SEP00146A743...</b>									Jan 15 2009 2:4...	00:00:02	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 27 2009 9:1...	00:00:04	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 26 2009 6:1...	00:00:00	\$0.00		
<b>SEP00146A743...</b>									Jan 26 2009 2:3...	00:00:00	Long Dis... \$0.00		
<b>SEP00146A743...</b>									Jan 9 2009 7:55...	00:00:00	\$0.00		
<b>SEP00146A743...</b>									Jan 9 2009 7:55...	00:00:02	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 5 2009 3:11...	00:00:00	\$0.00		
<b>SEP00146A743...</b>									Jan 29 2009 2:0...	00:00:08	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 20 2009 6:1...	00:00:00	\$0.00		
<b>SEP00146A743...</b>									Jan 30 2009 12:...	00:00:24	InState AZ \$0.00		
<b>SEP00146A743...</b>									Jan 29 2009 1:5...	00:00:05	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 5 2009 3:25...	00:00:00	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 26 2009 6:1...	00:00:00	\$0.00		
<b>SEP00146A743...</b>									Jan 30 2009 3:3...	00:00:00	\$0.00		
<b>SEP00146A743...</b>									Jan 5 2009 3:25...	00:00:04	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 22 2009 12:...	00:00:00	\$0.00		
<b>SEP00146A743...</b>									Jan 29 2009 3:5...	00:00:00	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 30 2009 9:3...	00:00:00	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 30 2009 10:...	00:00:00	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 30 2009 10:...	00:00:00	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 29 2009 1:4...	00:05:07	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 29 2009 2:3...	00:01:52	Internal \$0.00		
<b>SEP00146A743...</b>									Jan 29 2009 12:...	00:01:02	Internal \$0.00		

Page 1 of 68 (2013 items)



**Information  
Center**

**Part**



## 9 Information Center

Cal Accounting 7.x introduces a new information center that provides quick access to the following items:

- **Changes:** This section provides access to the Call Accounting change log. Please refer to this section to learn about application enhancements and bug fix information.
- **Info:** This section provides access to the application registry key settings. This is useful when Syn-Apps support asks system configuration information. You can also use this section to quickly verify system settings.
- **License:** The License section provides access to the currently installed license information including your maintenance contract number and start/end dates.

All of this information can be accessed by clicking on the Syn-Apps head graphic located in the upper left corner of the administration interface. Once you are done viewing the data please click on the **Exit Menu** button in the lower right corner or simply click back on the main Call Accounting web page to close the window.

The screenshot displays the Syn-Apps Call Accounting administration interface. The browser window title is "Syn-Apps Call Accounting - Windows Internet Explorer". The address bar shows the URL "http://10.0.2.69/CallAccounting3.0Dev/Configuration.aspx". The main content area is titled "Call Accounting" and features a navigation menu on the left with "Changes", "Info", and "License" options. The "Changes" section is active, displaying "Call Accounting release notes" for version 7.0.0, released on 02/27/2009. The release notes include "New Features" and "Bug Fixes" sections. Below the release notes is a table with columns for "Increment (seconds)" and "Edit Command". The table contains 12 rows, each with a value of 60 and "Edit | Delete" commands. The interface also includes an "Exit Menu" button and a status bar at the bottom showing "Done" and "Trusted sites".



# Help and Support

**Part**

**10**

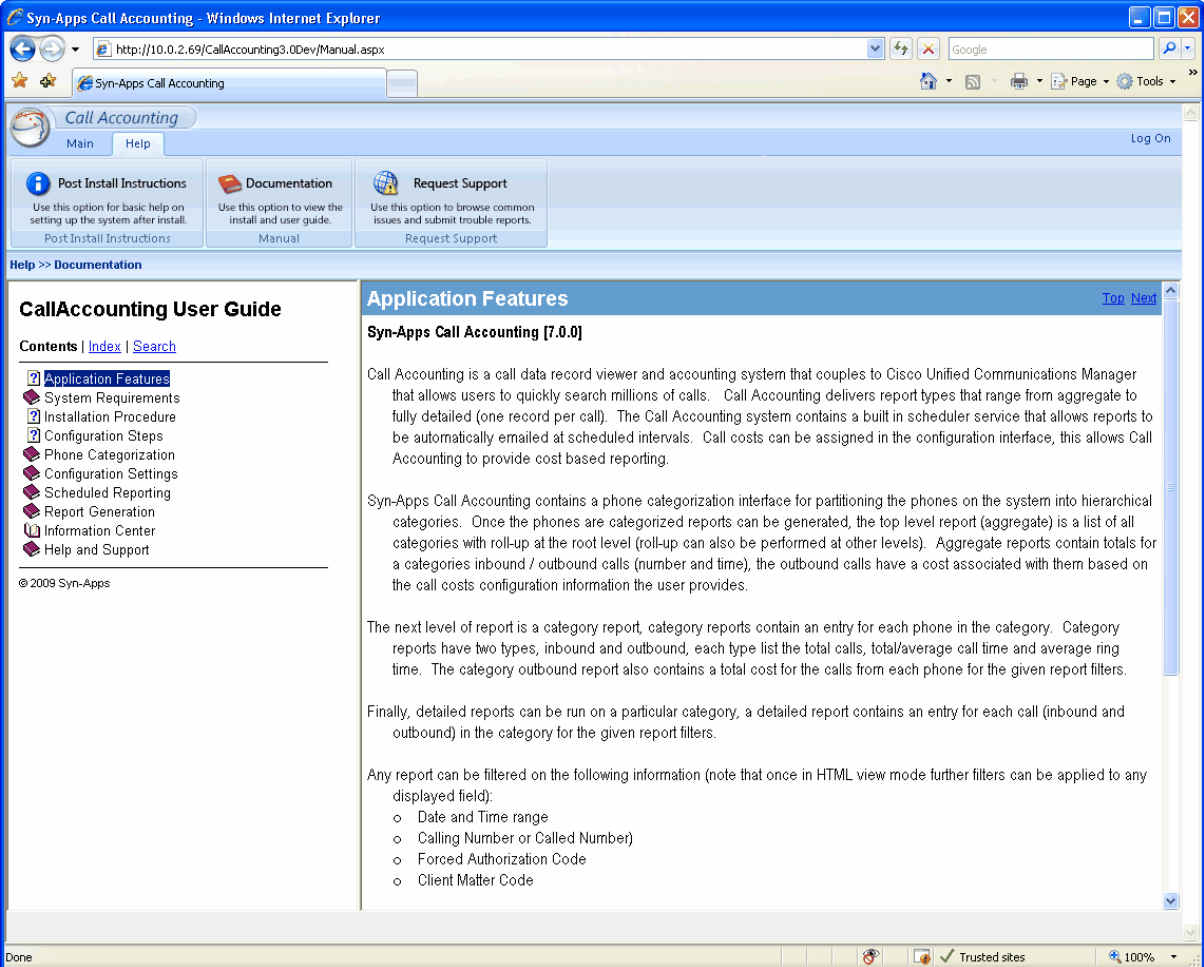
## 10 Help and Support

This section describes the items contained in the Help tab of the Call Accounting interface.

### 10.1 Documentation

#### Help>>Documentation

The **Help>>Documentation** page contains the Call Accounting User Guide in HTML format, complete with index and search functions.



Syn-Apps Call Accounting - Windows Internet Explorer

http://10.0.2.69/CallAccounting3.0Dev/Manual.aspx

Call Accounting

Main Help Log On

Post Install Instructions Use this option for basic help on setting up the system after install. Post Install Instructions

Documentation Use this option to view the install and user guide. Manual

Request Support Use this option to browse common issues and submit trouble reports. Request Support

Help >> Documentation

### CallAccounting User Guide

Contents | [Index](#) | [Search](#)

- Application Features
- System Requirements
- Installation Procedure
- Configuration Steps
- Phone Categorization
- Configuration Settings
- Scheduled Reporting
- Report Generation
- Information Center
- Help and Support

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### Application Features

[Top](#) [Next](#)

#### Syn-Apps Call Accounting [7.0.0]

Call Accounting is a call data record viewer and accounting system that couples to Cisco Unified Communications Manager that allows users to quickly search millions of calls. Call Accounting delivers report types that range from aggregate to fully detailed (one record per call). The Call Accounting system contains a built in scheduler service that allows reports to be automatically emailed at scheduled intervals. Call costs can be assigned in the configuration interface, this allows Call Accounting to provide cost based reporting.

Syn-Apps Call Accounting contains a phone categorization interface for partitioning the phones on the system into hierarchical categories. Once the phones are categorized reports can be generated, the top level report (aggregate) is a list of all categories with roll-up at the root level (roll-up can also be performed at other levels). Aggregate reports contain totals for a categories inbound / outbound calls (number and time), the outbound calls have a cost associated with them based on the call costs configuration information the user provides.

The next level of report is a category report, category reports contain an entry for each phone in the category. Category reports have two types, inbound and outbound, each type list the total calls, total/average call time and average ring time. The category outbound report also contains a total cost for the calls from each phone for the given report filters.

Finally, detailed reports can be run on a particular category, a detailed report contains an entry for each call (inbound and outbound) in the category for the given report filters.

Any report can be filtered on the following information (note that once in HTML view mode further filters can be applied to any displayed field):

- o Date and Time range
- o Calling Number or Called Number)
- o Forced Authorization Code
- o Client Matter Code

Done Trusted sites 100%



## 10.2 Knowledge Base

### Help>>Request Support: Knowledge Base

The Request Support page contains a Knowledge Base tab that can be used to look at known issues and to add feature requests. Please consult the knowledge base for solutions to known problem before proceeding to the Prepare Report tab to enter a new trouble ticket.

The screenshot shows a web browser window titled "Syn-Apps Call Accounting - Windows Internet Explorer". The address bar shows the URL "http://10.0.2.69/CallAccounting3.0Dev/Support.aspx". The page content includes a navigation menu with "Main" and "Help" tabs, and a "Log Off syn-apps\econway" link. Below the menu are three main sections: "Post Install Instructions", "Documentation", and "Request Support". The "Request Support" section is active, showing a "Help >> Request Support" breadcrumb and tabs for "Knowledge Base" and "Prepare Report". The "Knowledge Base" tab is selected, displaying a forum header for "Syn-Apps LLC IP Telephony Application support Forum" with a search bar and "Advanced search" link. Below the header is a "Board index" section with links for "FAQ", "Register", and "Login". The current date and time are shown as "It is currently Mon Feb 23, 2009 6:05 pm". A table lists forum topics, with the first row showing "General Documents" with 2 topics and 2 posts, last posted by "rbrown" on Wed Feb 14, 2007 9:42 am. The table has columns for "GENERAL", "TOPICS", "POSTS", and "LAST POST".

GENERAL	TOPICS	POSTS	LAST POST
General Documents Moderator: <b>rbrown</b>	2	2	by <b>rbrown</b> on Wed Feb 14, 2007 9:42 am
SA-ANNOUNCE 7.X			



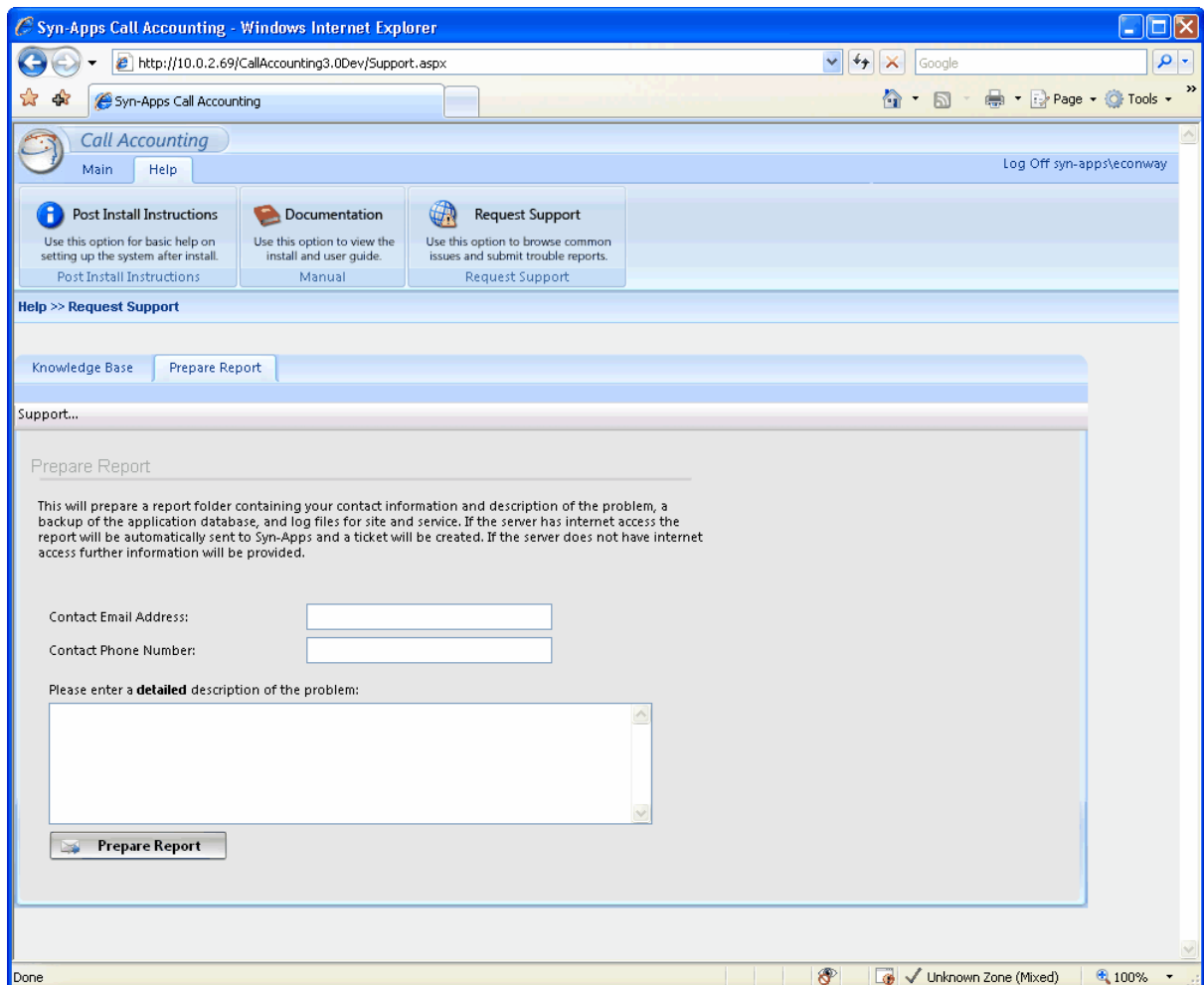
## 10.3 Prepare Report

### Help>>Request Support: Prepare Report

The Request Support page contains a Prepare Report tab that can be used to generate a Syn-Apps support request. This is the preferred method of obtaining support as all log files will be automatically sent to Syn-Apps Support and a trouble ticket will be created. FTP and email access is required for the process to work fully automatically (See Email Settings to setup the email system before requesting support).

To request support please fill out the following information in the interface provided on the page:

- **Contact Email Address:** Enter the email address of the person Syn-Apps Support should contact in response to this trouble ticket.
- **Contact Phone Number:** Enter the phone number of the person Syn-Apps Support should contact in response to this trouble ticket.
- **Description:** Enter a **detailed** description of the problem in the provided text box, provide as much detail as possible as to how the problem is occurring.



The screenshot shows a web browser window titled "Syn-Apps Call Accounting - Windows Internet Explorer". The address bar shows the URL "http://10.0.2.69/CallAccounting3.0Dev/Support.aspx". The page content includes a navigation menu with "Main" and "Help" tabs, and a "Log Off syn-apps@econway" link. Below the menu are three buttons: "Post Install Instructions", "Documentation", and "Request Support". The "Request Support" button is selected, leading to the "Help >> Request Support" page. This page has two tabs: "Knowledge Base" and "Prepare Report", with "Prepare Report" being the active tab. The "Prepare Report" section contains a text box with the following text: "This will prepare a report folder containing your contact information and description of the problem, a backup of the application database, and log files for site and service. If the server has internet access the report will be automatically sent to Syn-Apps and a ticket will be created. If the server does not have internet access further information will be provided." Below this text are two input fields: "Contact Email Address:" and "Contact Phone Number:". Below these fields is a larger text area with the prompt "Please enter a **detailed** description of the problem:". At the bottom of the form is a "Prepare Report" button. The browser status bar at the bottom shows "Done", "Unknown Zone (Mixed)", and "100%".



## 10.4 Contact Syn-Apps Support

Please feel free to contact **Technical Support** directly with any issues you may have.

support@syn-apps.com or 866-664-6071, option 2.



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2812 N Norwalk  
Suite 112  
Mesa, AZ 85215  
Phone (866) 664-6071  
Fax (866) 659-8999  
sales@syn-apps.com  
www.syn-apps.com