



Broadcast Manager Audible Tone Scheduling System
Traditional CallManager IP Telephony User Guide Version 1.015

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Broadcast Manager: Overview

Broadcast Manager allows tone alerts and recorded messages to be managed and delivered over Cisco IP telephones as well as legacy overhead paging systems. Configuration is done through an easy to use web interface.

Broadcast Manager: Features

- Creates an easy to use desk-top bell system for schools, businesses and other organizations
- Requires minimal configuration
- Administrators can access and manage the Broadcast Manager application from any location, through a simple web interface
- Allows setup for custom notification schedules with complete control, down to the type of alert sound, duration, and how often per day
- Supports both overhead analog paging and Cisco IP phones
- DTMF multi-zone support
- CallManager 3.2, 3.3 , 4.x support
- Can be enhanced with private recordings
- Syn-Apps delivers only superbly engineered products. They all feature:
 - Setup with configuration wizard
 - Support for CallManager versions 3.2, 3.3, 4.x, 5.x, 6.x.
 - Supported IP phones – 7905, 7912, 7920, 7940, 7960, 7970, and IP Communicator
 - SQL Server or MSDE databases
 - Built-in support features, enabling us to quickly detect and correct problems if they appear
- Uses only Cisco approved methods to obtain phone information (AXL)
- Configure external phones to receive a scheduled Broadcast Manager “page” so that you are never too far away from alerts.
- Web interface built upon Microsoft .NET allows the user to manage bell schedules and customize phone groups and bell tones.



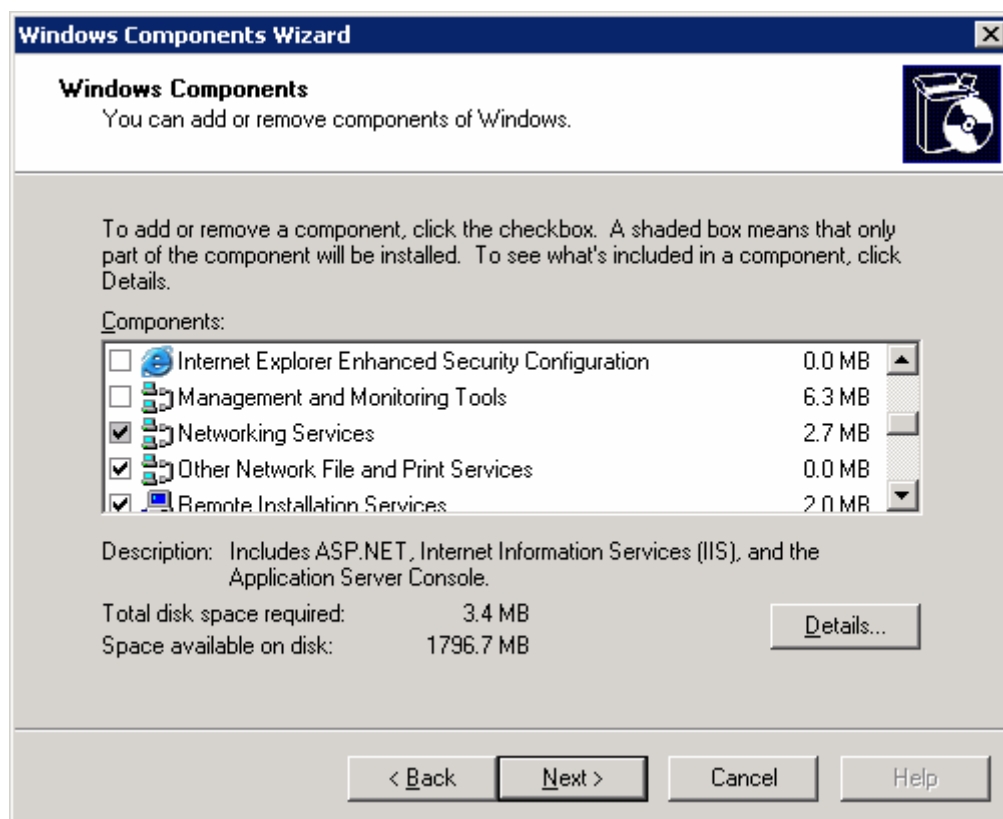
Broadcast Manager: System Requirements

Broadcast Manager Application Server

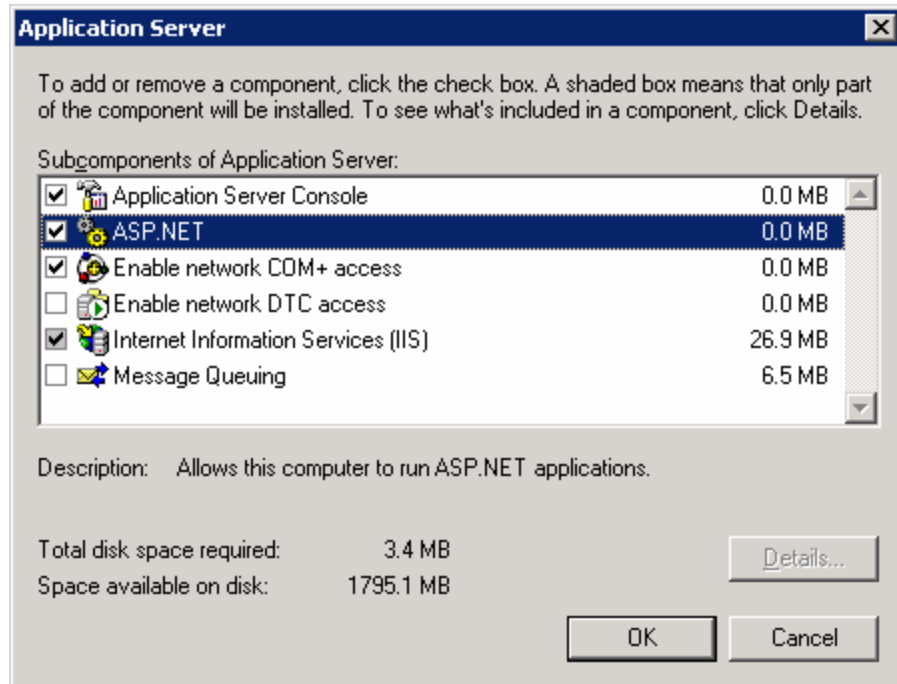
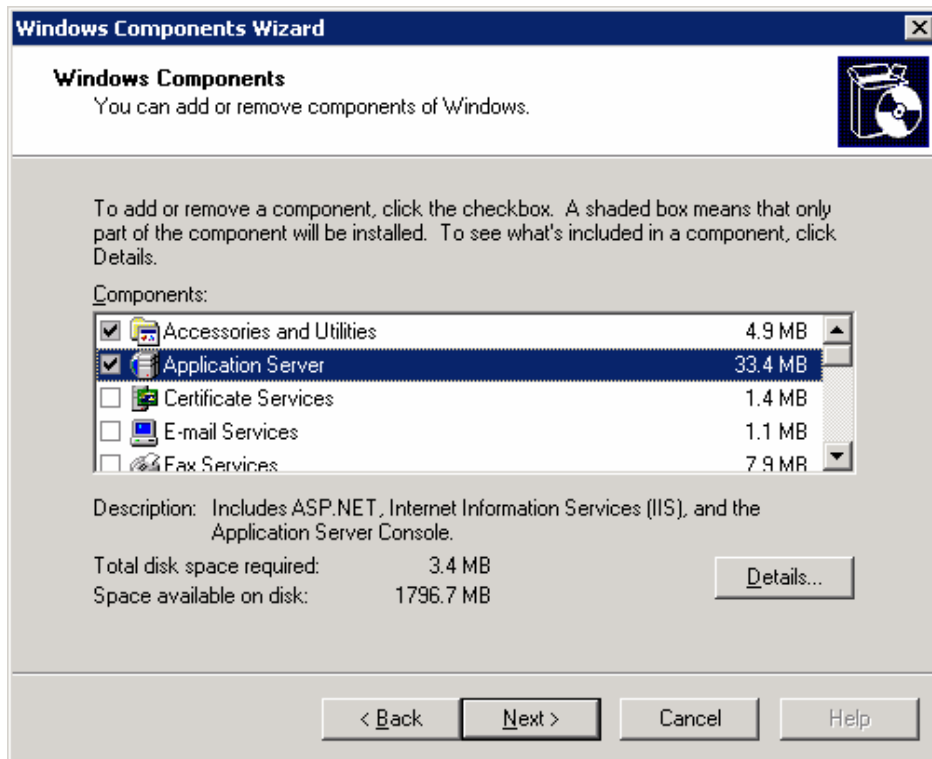
- Microsoft .Net 1.1
- Windows 2000 or Windows 2003
- Microsoft SQL Server 2000 or MSDE ([Core Components](#))
- Microsoft IIS
- 512 megabytes of system memory (minimum requirement)
- 1 gigabyte of hard disk space (minimum requirement)

The Server must meet the following requirements before the Broadcast Manager application will function correctly:
****The Following items must be performed on a supported OS while logged in as the local Administrator****

1. You must first download the [Core Components](#). Once the install process has completed you must start MSSQL\$SYNAPPS, please note you must start before continuing.
2. Windows Components:
 - a. Internet Explorer Enhanced Security Configuration Box must be unchecked.



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



3. Continue to Install Application



Broadcast Manager: System 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, install the **Core Components** first. Once the **Core Components** install has completed, please make sure the MSSQL\$SYNAPPS service is started on your machine.

Next, click on the **Install Broadcast Manager** link from the Syn-Apps application CD.

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

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

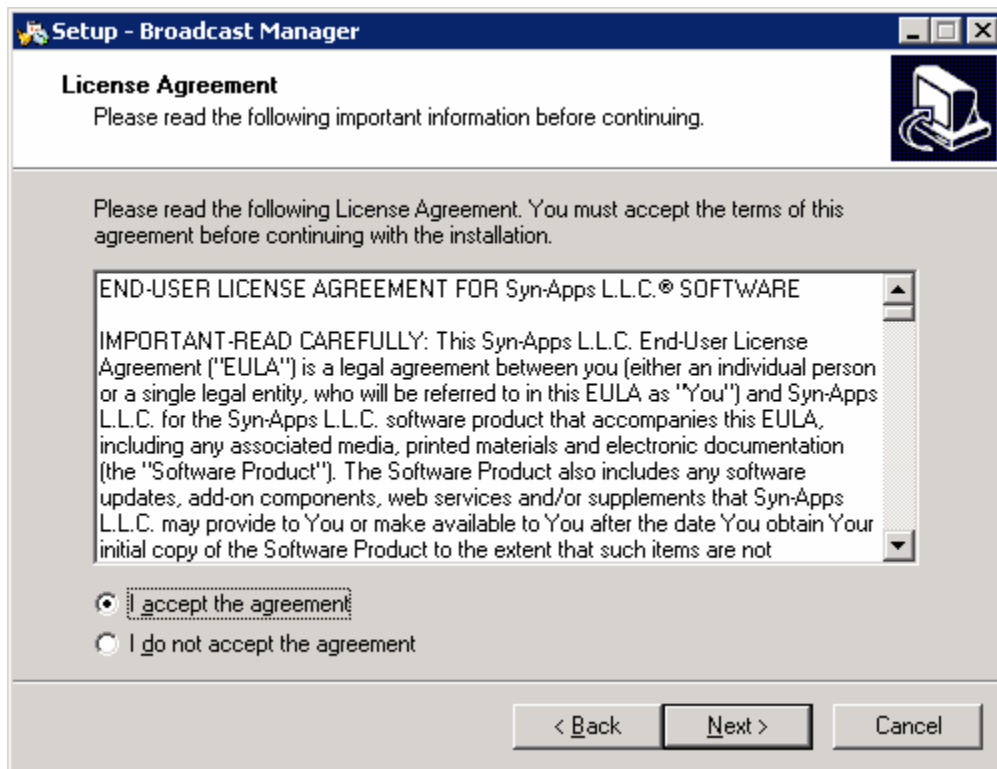
Click **Next**.



Broadcast Manager: License Agreement

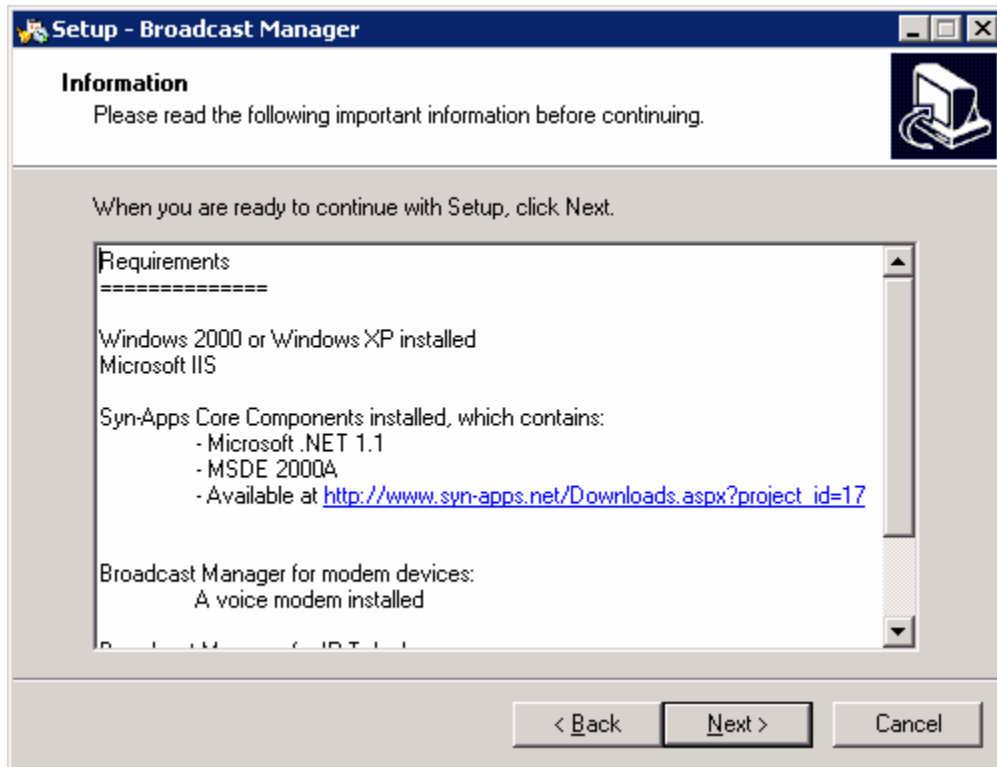
You will be prompted to read your License Agreement to use the Syn-Apps Broadcast Manager product. You may use your page down key to view by page. Once you agree with the terms,

Click **Next** to proceed.



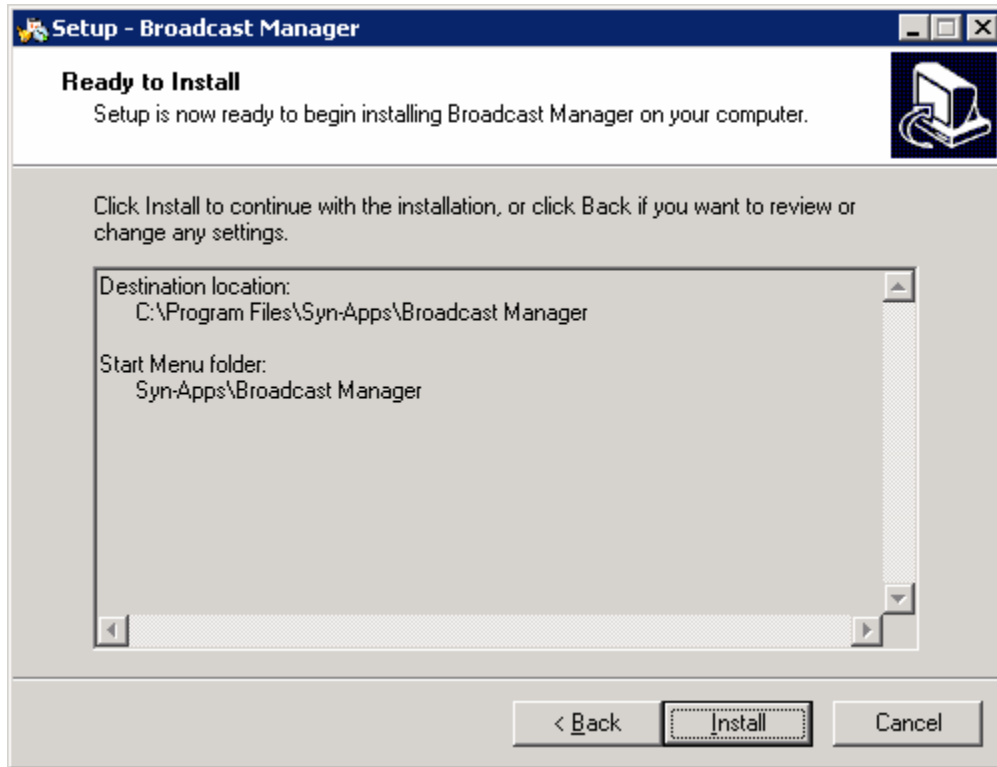
Broadcast Manager – Setup Information

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



Broadcast Manager – Ready to Install

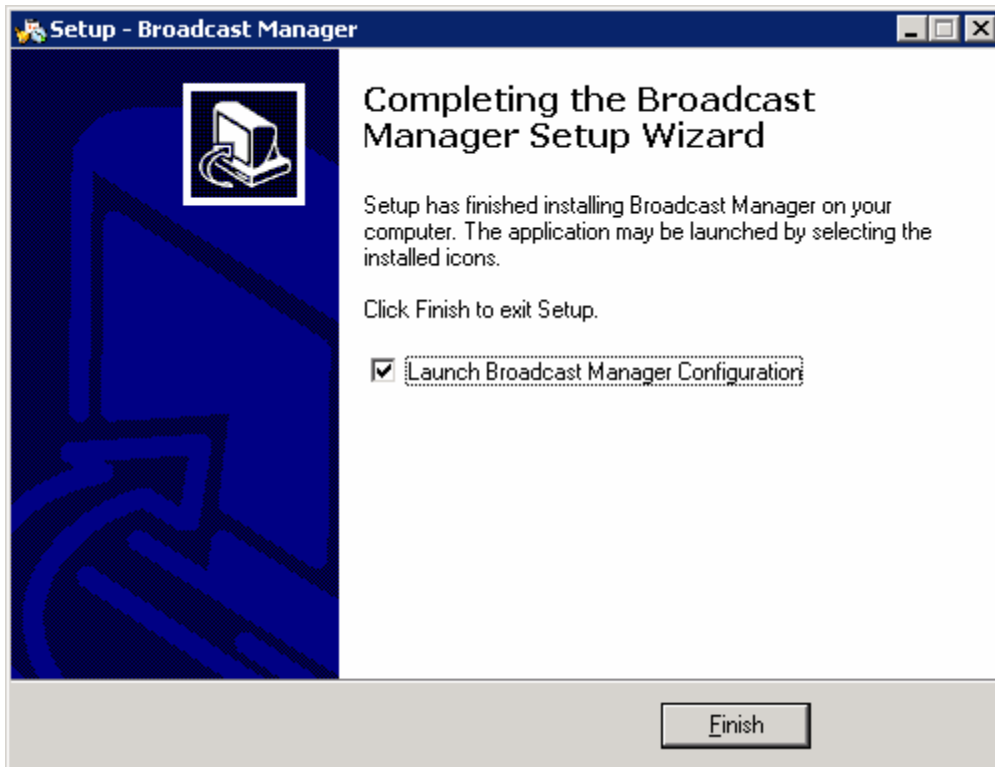
Click **Install** if you are ready to proceed with the Broadcast Manager installation.



Broadcast Manager - Installing

Once Broadcast Manager has been successfully installed, this message will appear.

Click Finish.



Broadcast Manager: CallManager Configuration

Configuring CallManager Addresses

Type the IP address of your CallManager Server(s). You are allowed to input a maximum of five CallManager Servers. The first IP address field populated designates the primary CallManager server. In the event that you wish to designate a secondary CallManager for the Broadcast Manager Bell Tone system to rollover to in case of system failure, you may designate up to 4 back up CallManager servers. All servers are required to have the same administrator user ID and password designated and must be running the same version of CallManager. Additionally all back-up CallManager servers must be using the same SQL SA password.

Click **Next** to proceed.

Broadcast Manager - Call Manager Address

Syn-Apps

Broadcast Manager

Call Manager Addresses

Please enter the addresses of your Call Managers.

Primary Call Manager:

Call Manager 2:

Call Manager 3:

Call Manager 4:

Call Manager 5:

< Back Next > Exit

Broadcast Manager – Configuring CallManager Authentication

In the CallManager Authentication dialogue window, populate the fields with the CallManager Administrator **User name** and **Password**.

Click **Next**.

Broadcast Manager - Call Manager Authentication

Syn-Apps

Broadcast Manager

Call Manager Authentication

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

Common account names include: *administrator, ccadmin, ccadministrator.*

This account is used for access to special URLs of CallManager.

Call Manager User:

Call Manager Password:

< Back Next > Exit

Broadcast Manager – NT Authentication

Enter the NT Administrator User Name and Password.

The NT Administrator User Name and Password must match the Cisco CallManager Administrator User Name and Password for authentication to work properly.

Broadcast Manager - NT Authentication

Syn-Apps

Broadcast Manager

NT Authentication

The application requires you to be logged on local machine (not on the domain) as administrator. Please enter the administrator name and password.

If you need to use Call Manager then log in with an identical user as the Call Manager NT administrator, with an identical password and enter the user and password for Call Manager NT administrator account. Using the "administrator" account, with the password identical to the one on CallManager is recommended. When it is not possible to change the local "administrator" user, there is the option of creating a user which is member of the Administrators group, with that same name and password as the local user, on all CallManagers.

NT Administrator User:
administrator

NT Password:
xxxxxxxx

< Back Next > Exit




Broadcast Manager – Application Database Server

Enter SQL Server Instance where you want to install the application database

If you have installed the Syn-Apps Core Components (Required) please enter *SynApps* as your SQL Server Instance Name.

Click **Configure** to proceed.

Broadcast Manager - Application Database

 **Broadcast Manager**

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.

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

You can only use a local database.

SQL Server:
synapps02

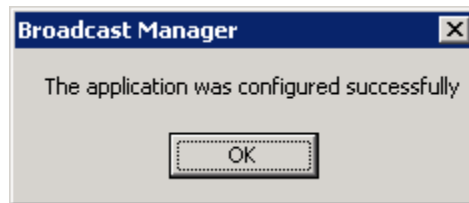
Instance Name (leave blank for default):
SynApps

Database Name:
Broadcast Manager 1.2

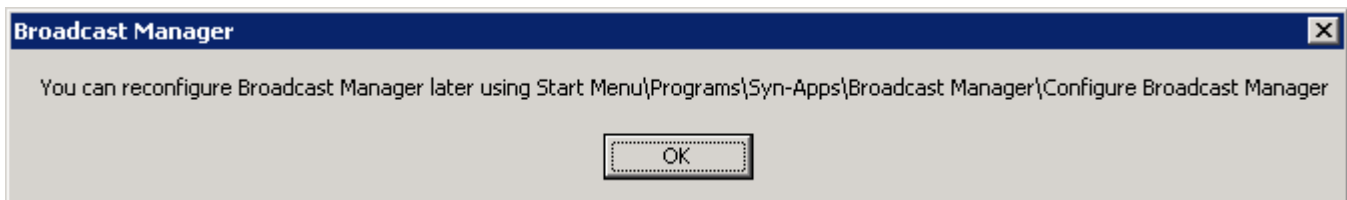
< Back Configure Exit

Broadcast Manager – Configuration Successful

The program will now test the database connection to validate the settings. Once the wizard has connected to the database server you will see the confirmation box below. Click **OK** to proceed.

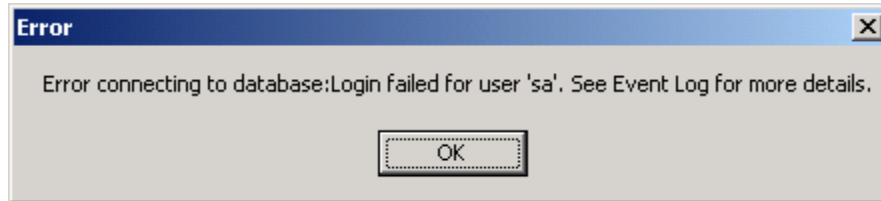


You can reconfigure Broadcast Manager later by accessing the application from the Start Menu. Click **OK** to proceed.



Broadcast Manager – Configuration Error Message

If the installation is unable to connect to the database server you will receive an error window. Click **OK** to acknowledge this message and you will be returned to the Database Configuration screen.



This completes the Broadcast Manager Software Installation.

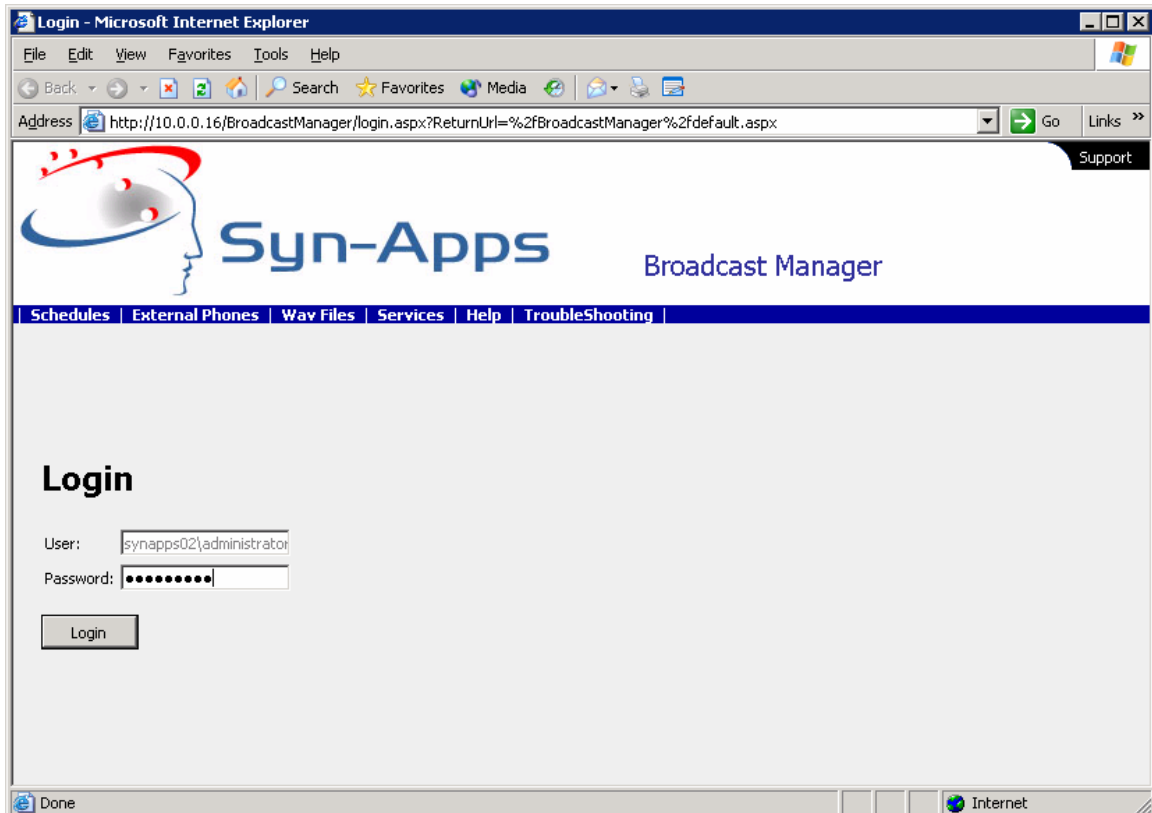


Broadcast Manager: Administering the Application

From a machine on the same network as the Broadcast Manager host, browse to the Broadcast Manager URL: <http://<BroadcastManager-host>/BroadcastManager> and enter the Password of the administrator user of the Broadcast Manager host machine.

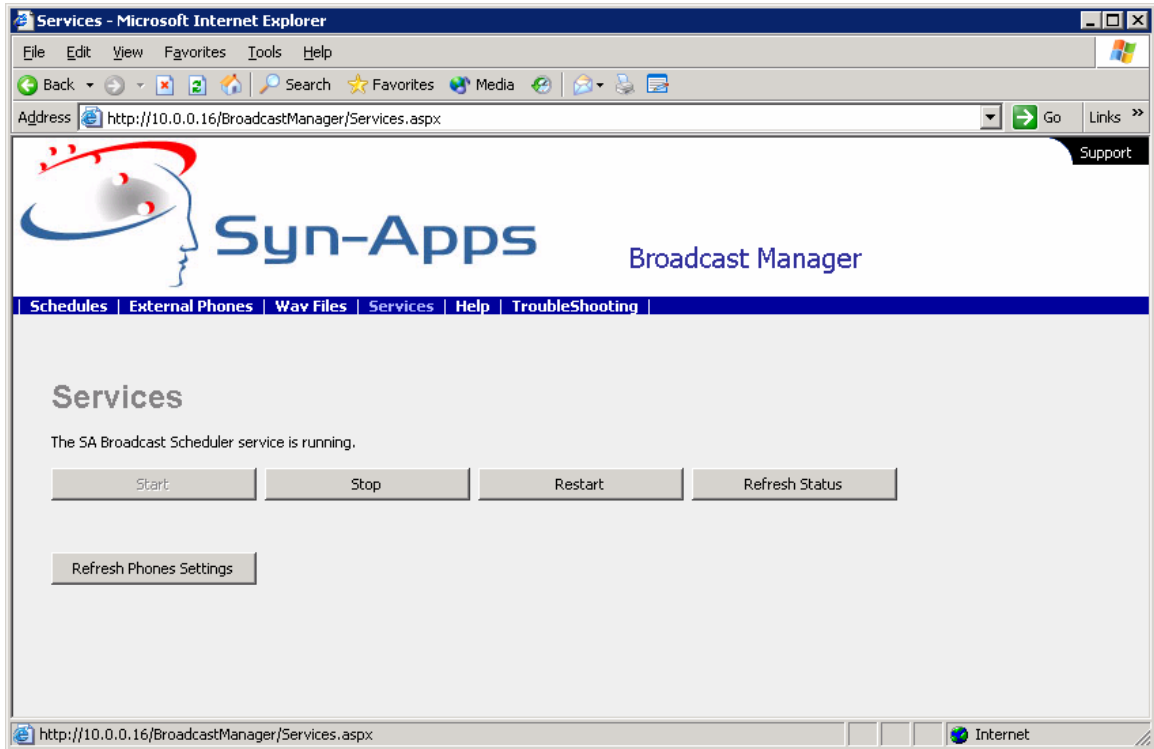
Alternatively, if on the host machine, the Windows Start Menu can be used to start the application: **Start>Programs>Syn-Apps>Broadcast Manager>Broadcast Manager Administration**.

There are six (6) main menu options to choose from that are located along the top of the page within the blue-colored bar: **Schedules, External Phones, Wav Files, Services, Help** and **TroubleShooting**



Broadcast Manager: Services

First, select the **Services** menu option, and verify that the SA Broadcast Scheduler service is running.



Broadcast Manager: Creating Schedules

The following section describes the process of creating a new schedule using the CallManager IP Telephony version of Broadcast Manager. Please refer to the Broadcast Manager: PBX User Guide if you are using the Modem version of Broadcast Manager.

Select the **Schedules** menu option and click on the **General** tab in order to begin creating a bell schedule.

Click on the **New Schedule** button located at the bottom-left portion of the screen.

Creating Schedules – Creating New Schedule Name

Create a unique name for your new schedule in the Schedule Name field.

Broadcast Manager Schedules - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media

Address http://10.0.0.16/BroadcastManager/default.aspx Go Links >>

Syn-Apps Broadcast Manager

Schedules External Phones Wav Files Services Help TroubleShooting

Schedules

Schedule Name:

General Digital Phones External Phones

Wav File:

Week days: Sunday Monday Tuesday Wednesday Thursday Friday Saturday

Bell Times (24H format - hh:mm):

Schedule Type: Play for a given time Repeat for a given number of times

Duration per interval (seconds):

Number of intervals:

Pause between intervals (seconds):

Page generated at 21/03/2005 13:49:25

Done Internet

Creating Schedules – Selecting Bell Tone

Then, choose your desired bell sound from the **Wav File** drop down list.

Note: The wav files must be in the CCITT u-law format in order to work properly. You can verify this by running the test located within the **Wav Files** menu option.

The screenshot shows a web browser window titled "Broadcast Manager Schedules - Microsoft Internet Explorer". The address bar shows "http://10.0.0.16/BroadcastManager/default.aspx". The page features the Syn-Apps logo and "Broadcast Manager" text. A navigation menu includes "Schedules", "External Phones", "Wav Files", "Services", "Help", and "TroubleShooting".

The main content area is titled "Schedules" and contains a form for creating a new schedule. The "Schedule Name" field is filled with "myNewSchedule". Below this, there are tabs for "General", "Digital Phones", and "External Phones".

In the "General" tab, the "Wav File" dropdown is set to "analog1.wav" with a "Play" button next to it. The "Week days" section has checkboxes for Sunday (unchecked), Monday (checked), Tuesday (checked), Wednesday (checked), Thursday (checked), Friday (checked), and Saturday (unchecked). The "Bell Times (24H format - hh:mm)" section has an empty input field, "Add", and "Remove" buttons, and a list box containing "09:00", "10:00", "11:00", and "12:00".

The "Schedule Type" section has two radio buttons: "Play for a given time" (unchecked) and "Repeat for a given number of times" (checked). Below this are three input fields: "Duration per interval (seconds)" with value "1", "Number of intervals" with value "1", and "Pause between intervals (seconds)" with value "0".

At the bottom of the form are three buttons: "Add Schedule", "Cancel", and "Test Schedule". The footer of the page indicates "Page generated at 21/03/2005 13:49:25".

Creating Schedules – Selecting Week Days

Select the days of the week by clicking on the **Week days** check boxes.

Add the exact times you want your new schedule to play the selected wav file (this is the bell schedule). Enter the times in the **Bell Times** field using a 24 hour format. Click **Add**.

Choose the **Schedule Type** (i.e. Play for a given time or Repeat for a given number of times) and provide the desired interval information.

Broadcast Manager Schedules - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://10.0.0.16/BroadcastManager/default.aspx

Syn-Apps Broadcast Manager

Schedules External Phones Wav Files Services Help TroubleShooting

Schedules

Schedule Name:

General Digital Phones External Phones

Wav File:

Week days: Sunday Monday Tuesday Wednesday Thursday Friday Saturday

Bell Times (24H format - hh:mm):

Schedule Type: Play for a given time Repeat for a given number of times

Duration per interval (seconds):

Number of intervals:

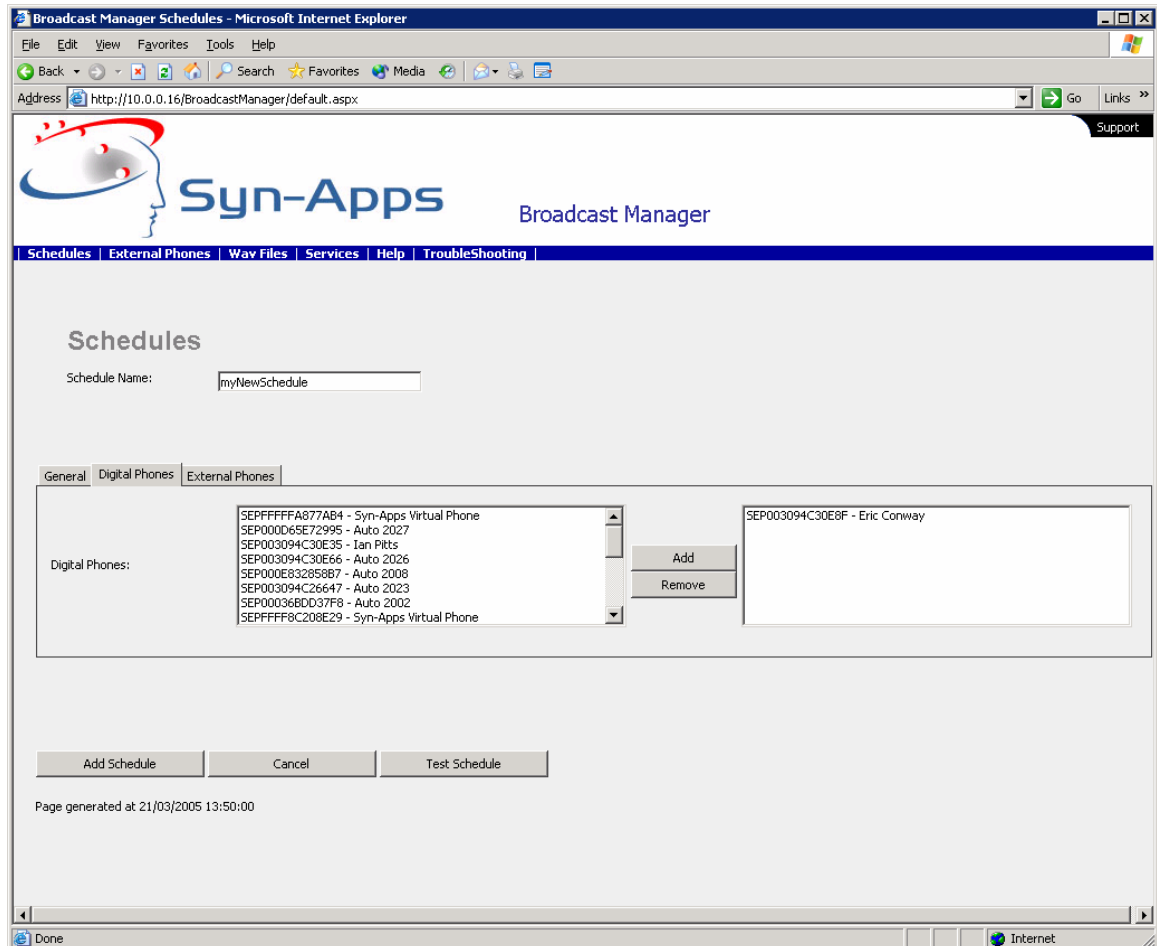
Pause between intervals (seconds):

Page generated at 21/03/2005 13:49:25

Done Internet

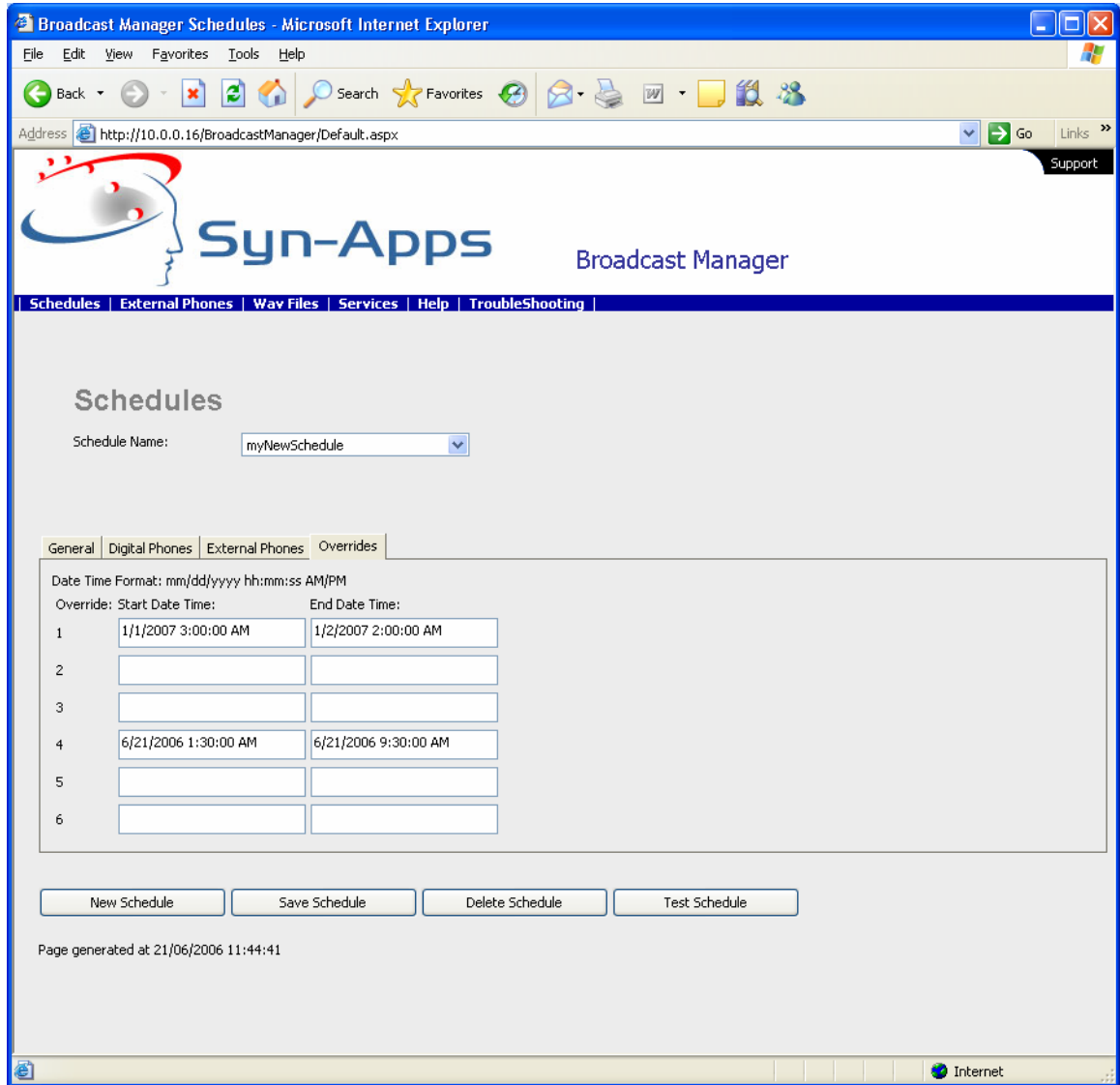
Creating Schedules – Adding Phones

Next, select the **Phones** tab and highlight the devices that you want participating in the new bell schedule that you have just created. Click **Add** to add the selected devices.



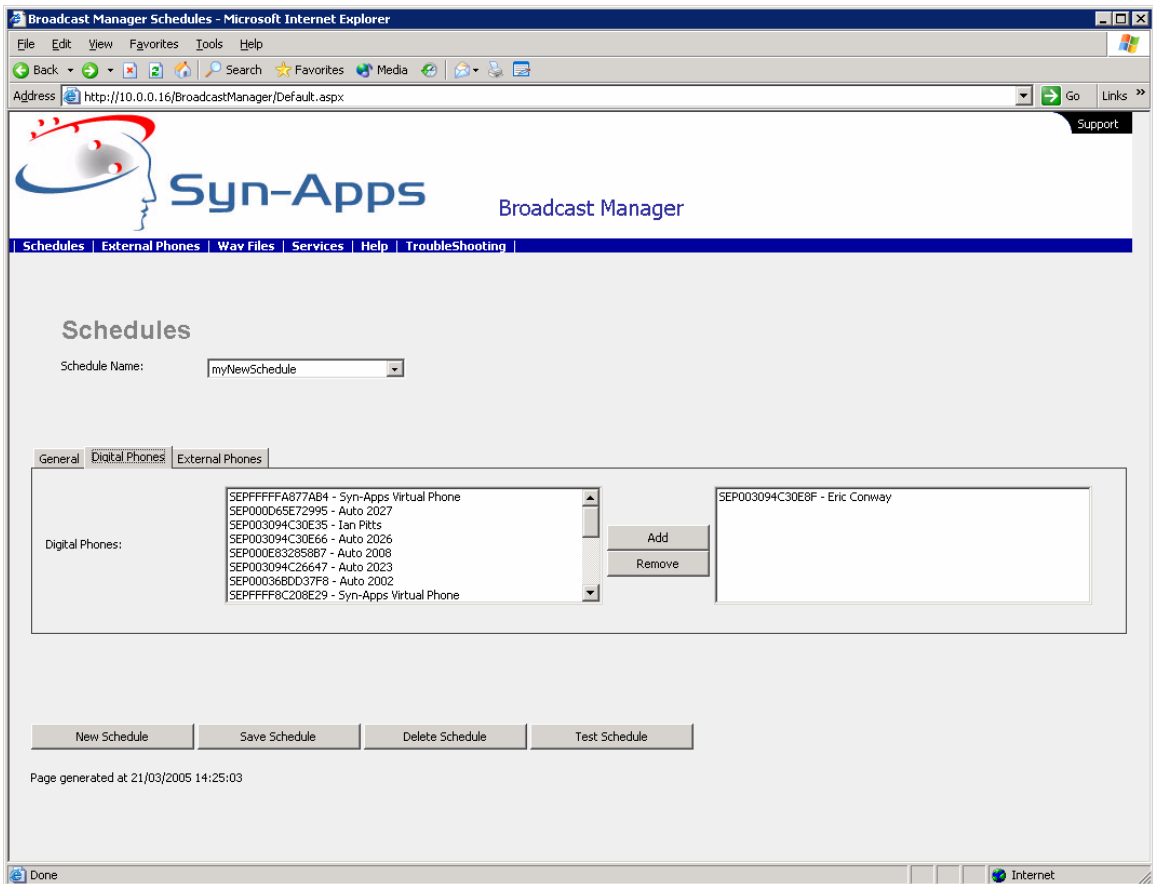
Creating Schedules- Overrides

After creating the desired schedule, which includes the name, days, times, tones, and which phones will be affected you will be able to create an override. An override will suspend the operation of the selected schedule during the specified times. Click the override tab and insert the date and time you would like the schedule to be overridden. Please note that this is not a global feature and you must set up an override for each individual schedule.



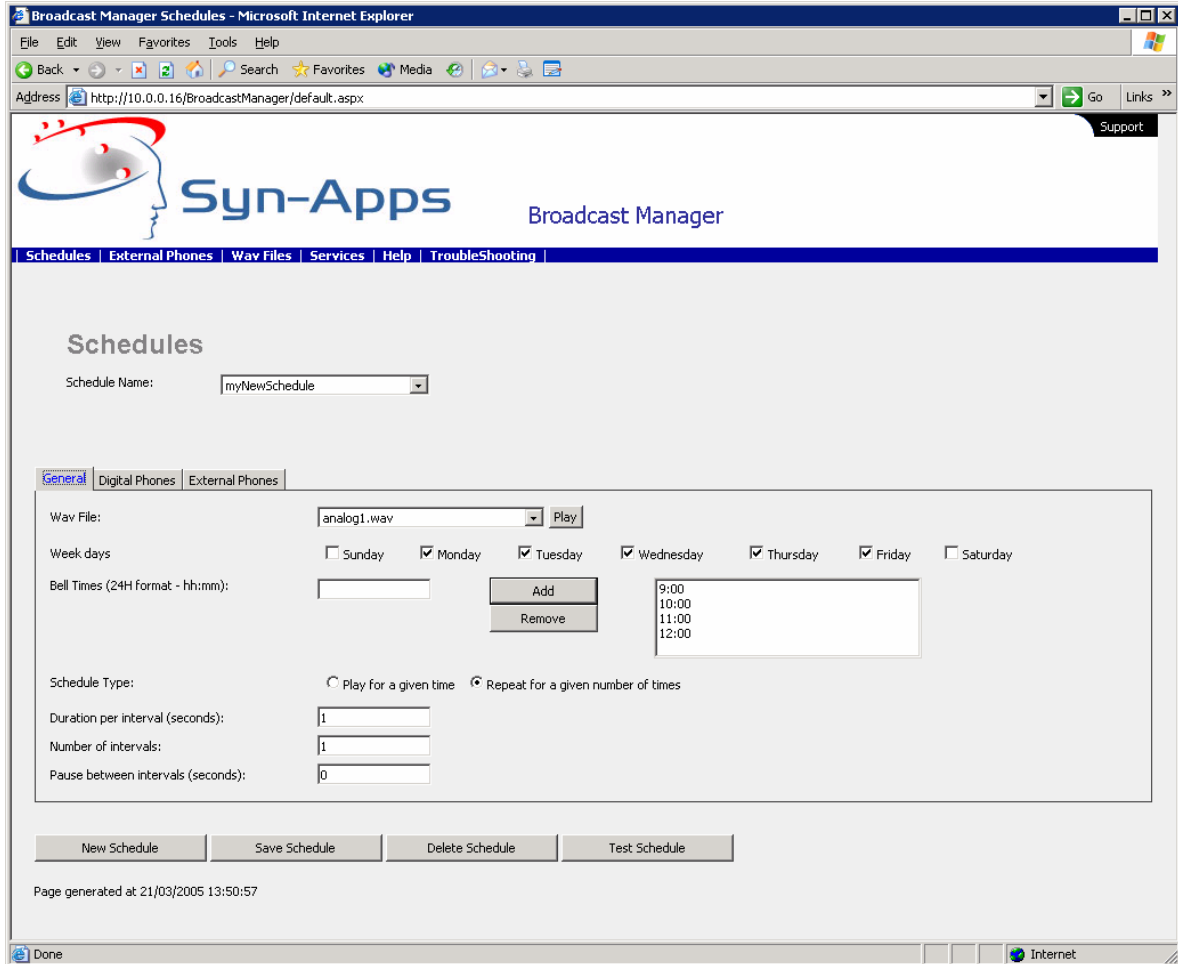
Creating Schedules – Adding the Schedule

Click the **Add Schedule** button, located at the bottom of the page, to save the new schedule.



Creating Schedules – Testing the Schedule

Next, click the Test Schedule button to verify that the new schedule functions properly.

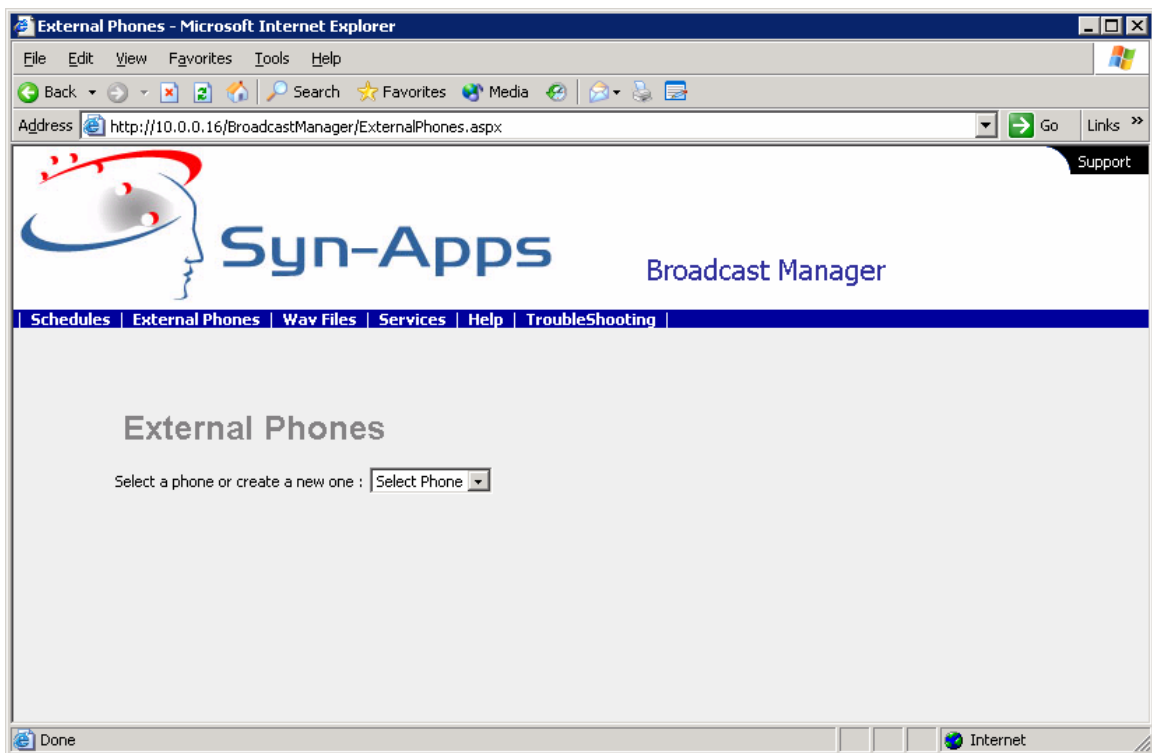


Broadcast Manager: Adding External Phones

This section describes the use of external phones in the IP Telephony version of Broadcast Manager. Generally, these are used to connect to legacy overhead paging systems.

Choose the **External Phones** tab along the menu bar.

Select **New Phone** in the **Select a phone or create a new one** field.

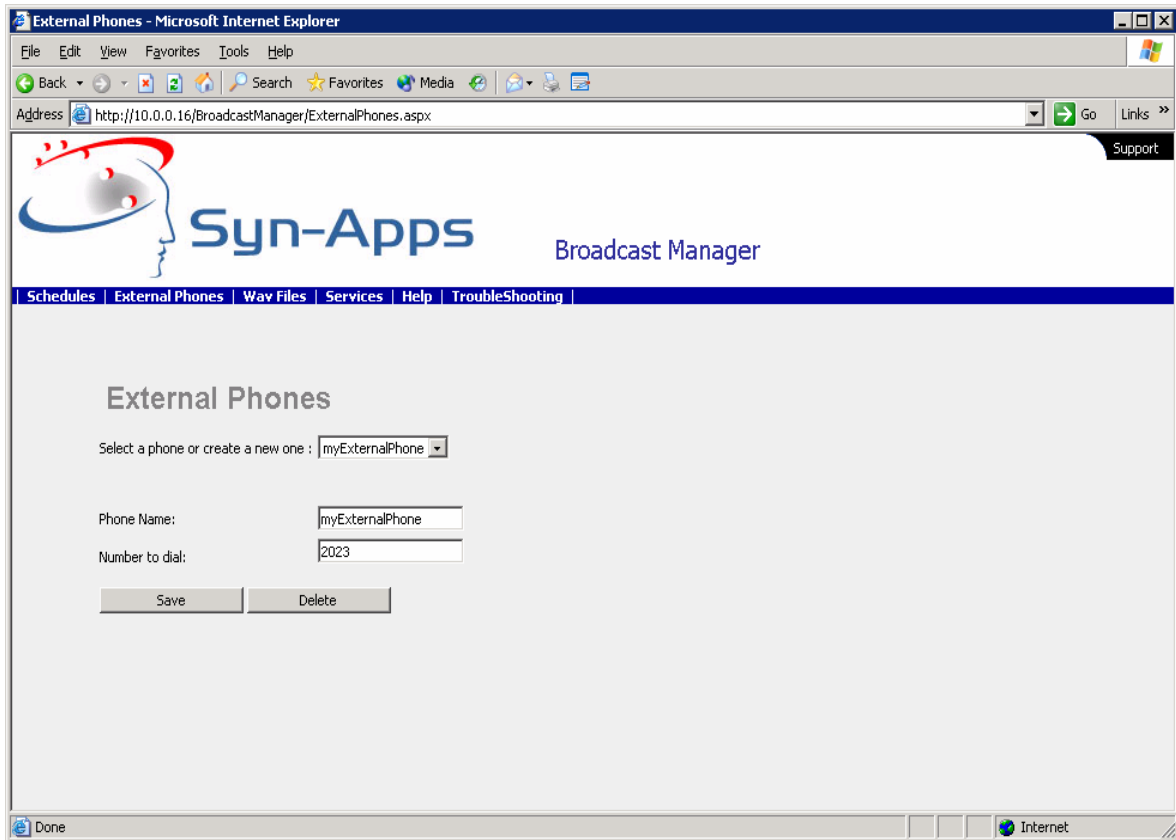


External Phones – Adding an External Phone

Enter a name for the new phone in the **Phone Name** field.

Enter the number of the external phone to be dialed in the **Number to dial** field.

Click **Save**.

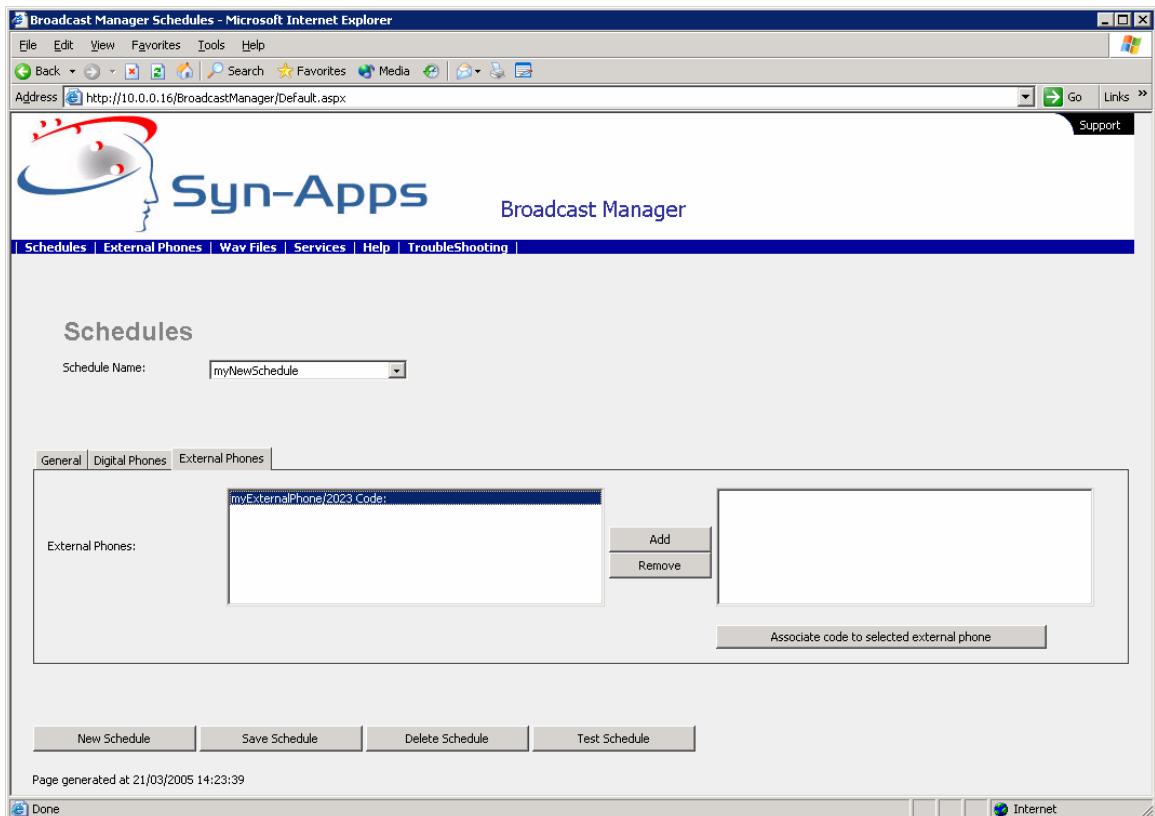


External Phones – Assigning an External Phone

Browse to the **Schedules** page and select the **External Phones** tab.

Select the schedule name to add an external phone in the **Schedule Name** field.

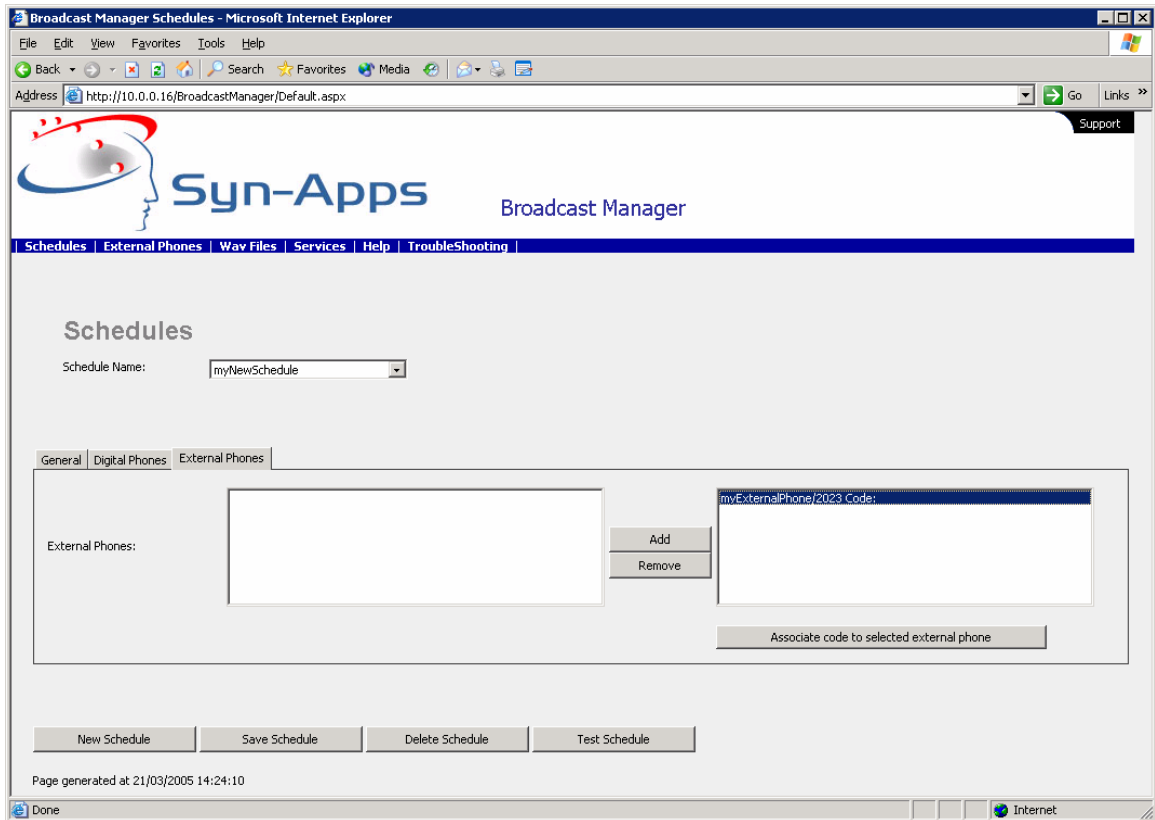
Select the external phones to add from the **External Phones** field. Click **Add**.



External Phones – Associating a DTMF Code

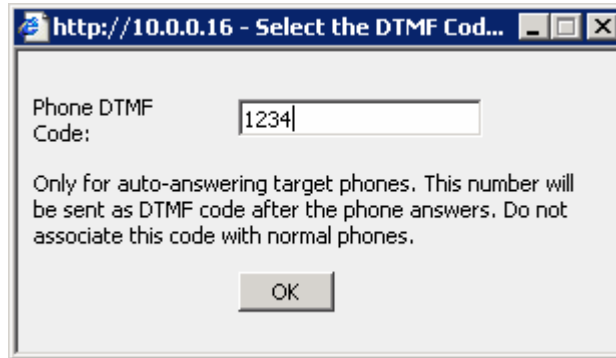
Select the external phone to associate a DTMF Code with and press the **Associate code to selected external phone** button.

Note: *The external phone must be in the right hand field (added) to associate a code.*



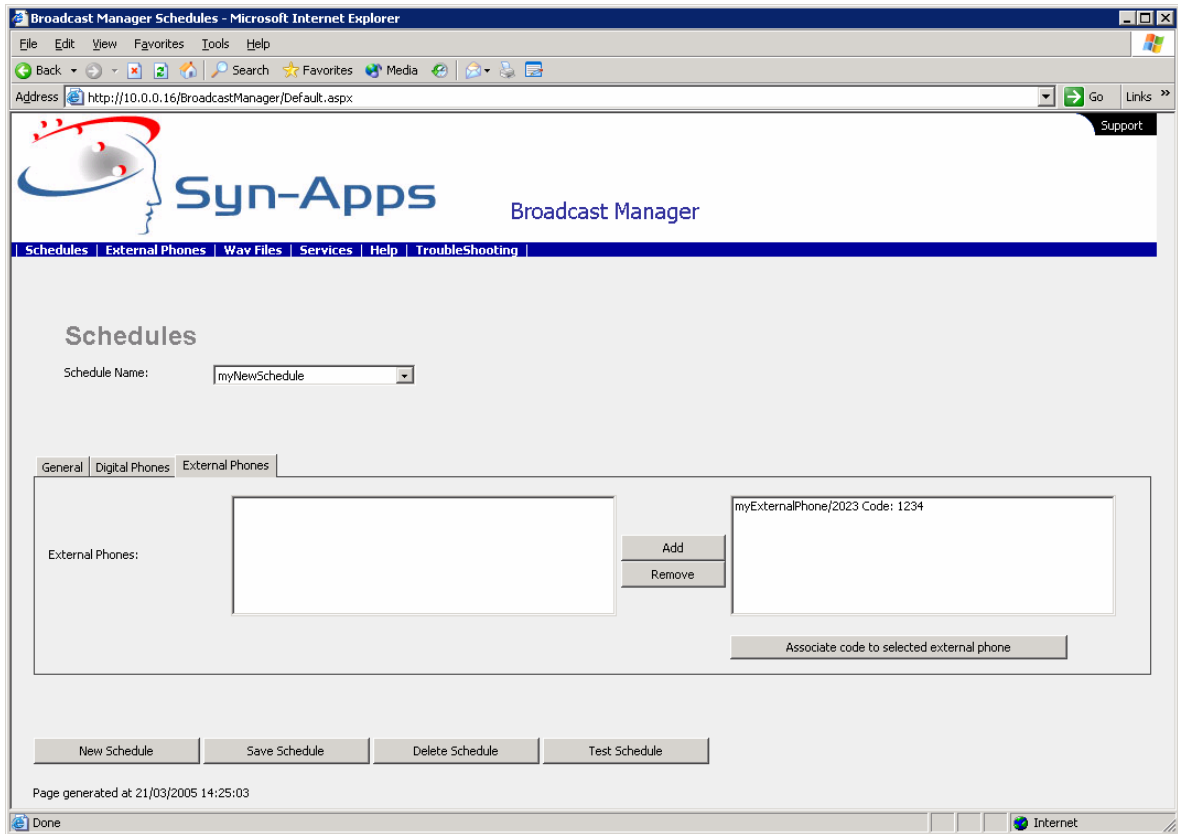
External Phones – Entering a DTMF code

Enter the DTMF code in the **Phone DTMF Code** field. Click **OK**.



External Phones – Saving Schedule Changes

Click the **Save Schedule** button to save changes.

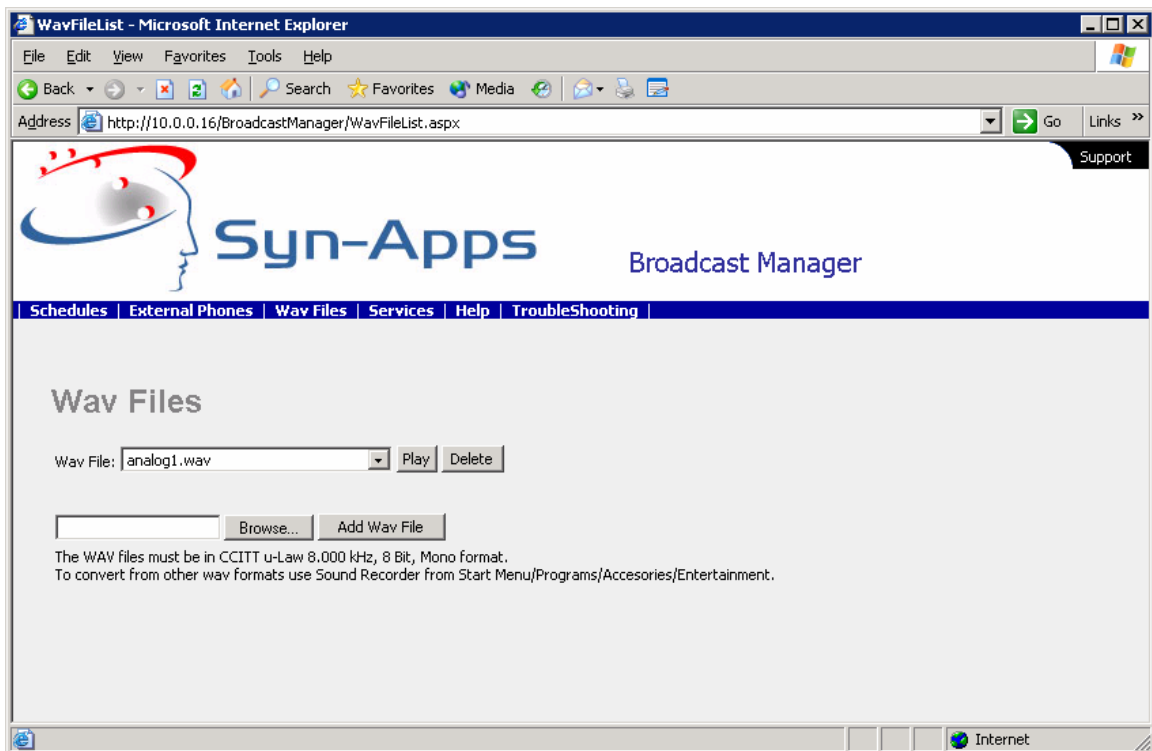


Broadcast Manager: Adding Wav Audio Files

Select the **Wav Files** menu option.

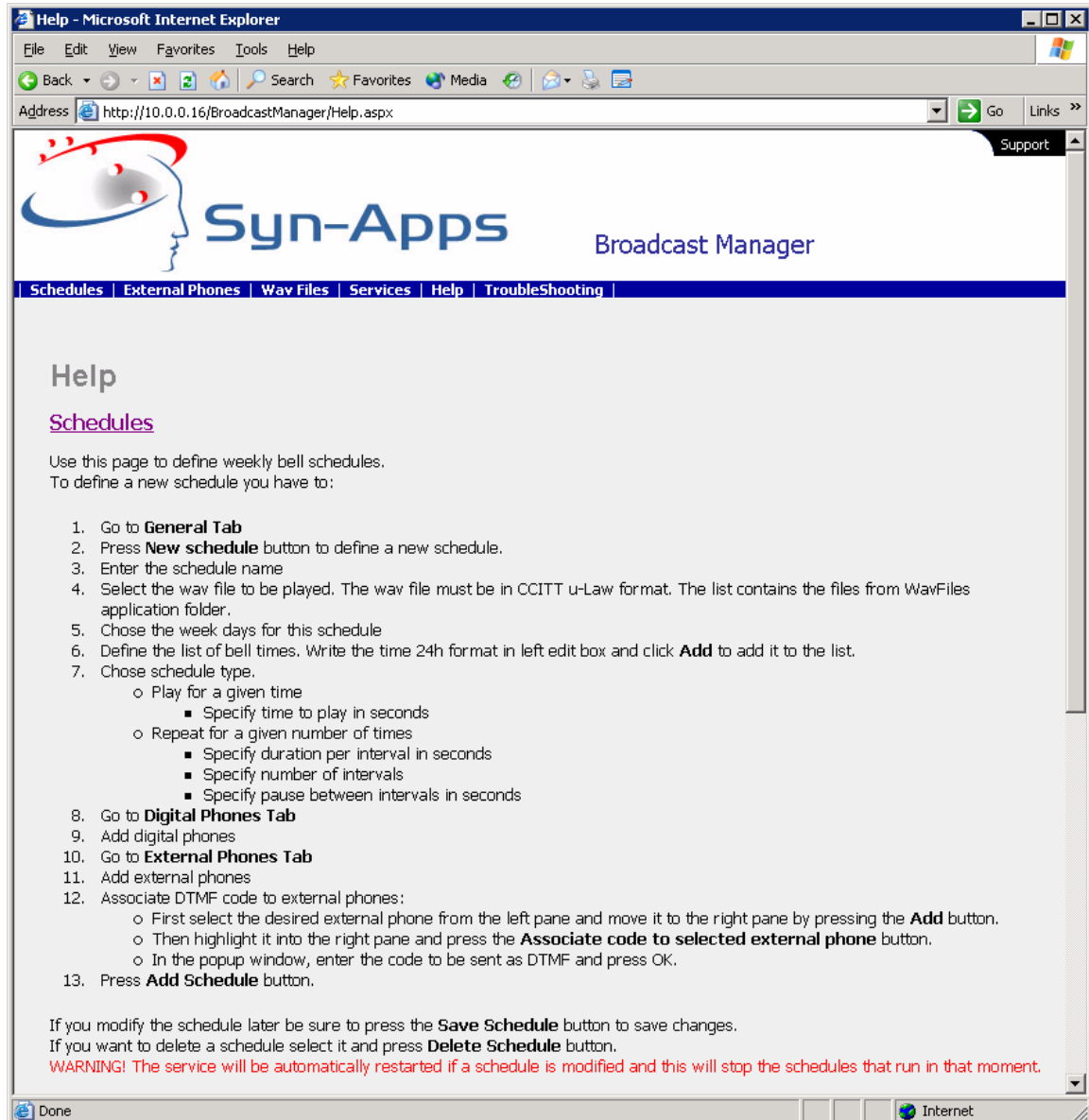
Add custom wav files to the list using the provided field. Click **Add Wav File** to add the file.

Note: The WAV files must be in CCITT u-Law 8.000kHz, 8 Bit, Mono format. To convert from other wav formats use the Windows Sound Recorder which can be found in the Start Menu:
Start>Programs>Accessories>Entertainment>Sound Recorder



Broadcast Manager: Help

To access the complete administrative guide, select the **Help** menu item.

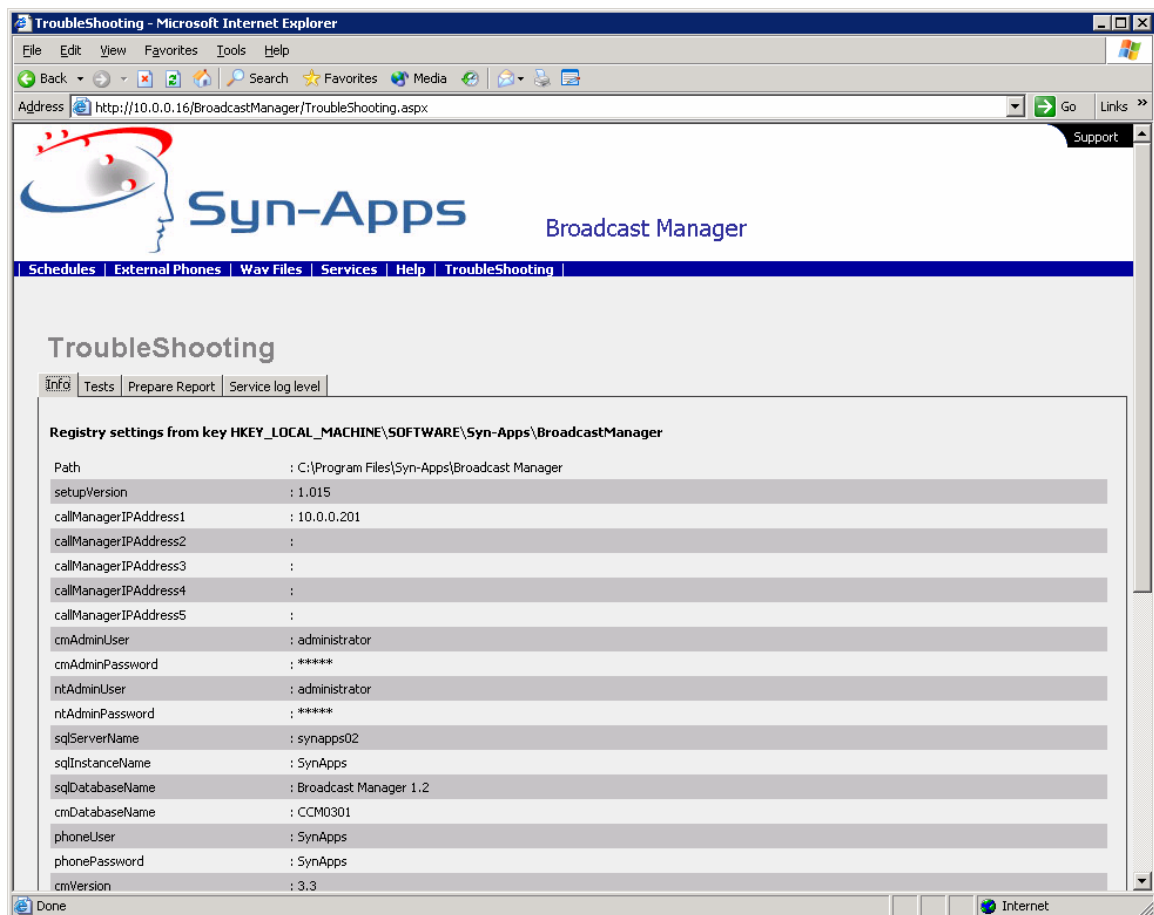


Broadcast Manager: TroubleShooting

Click the TroubleShooting button to access the associated utilities.

TroubleShooting – Info

The Info tab contains application registry settings.

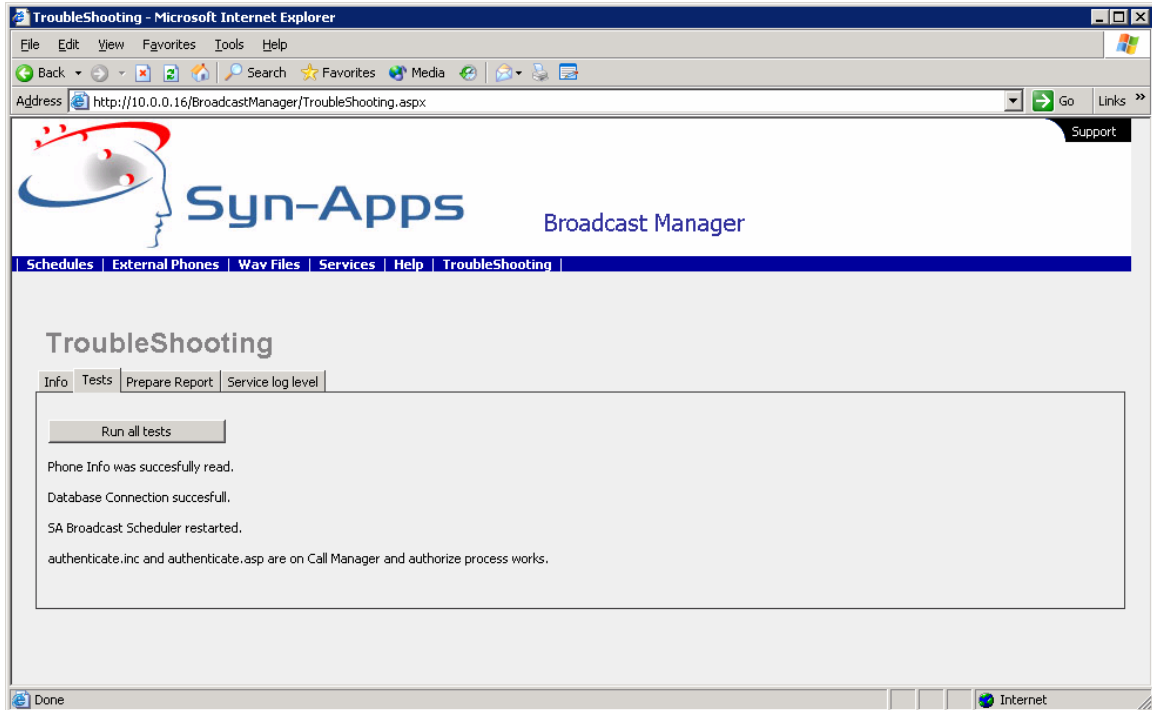


Troubleshooting – Tests

The Tests tab contains a button for testing basic system operation.

Click the **Run all tests** button to start the tests.

Below is a sample output of the troubleshooting test results.

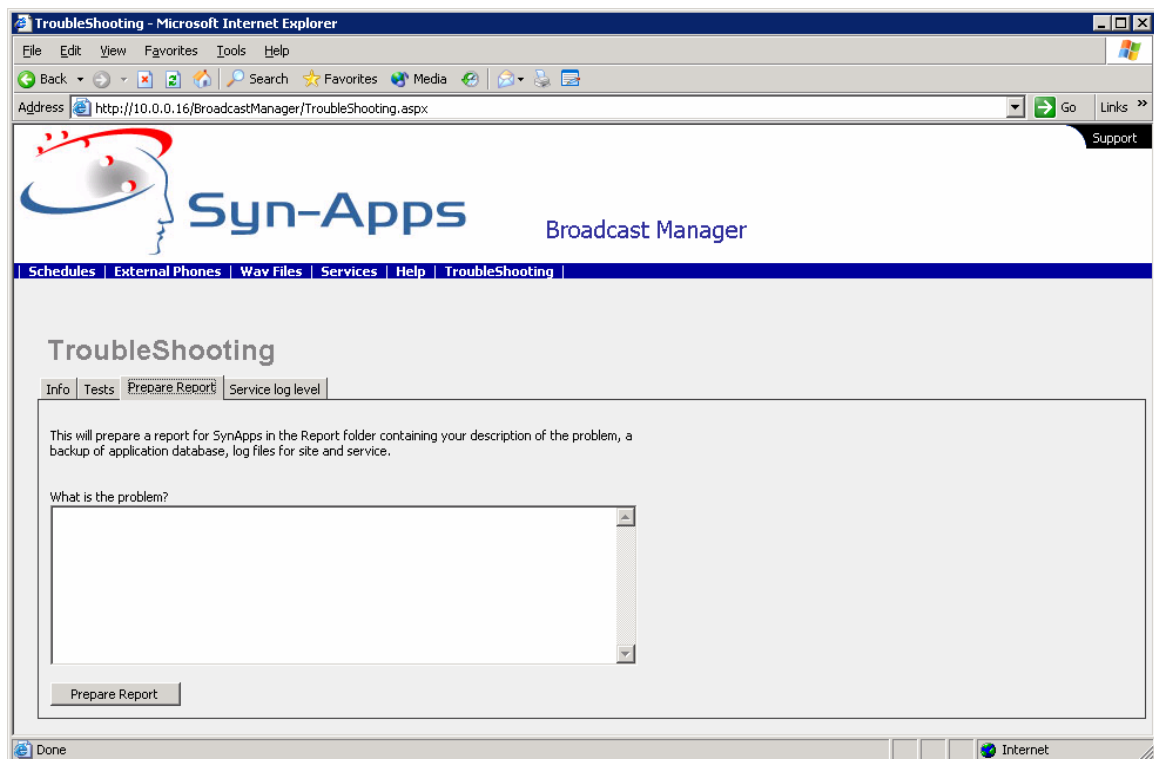


TroubleShooting – Prepare Report

The **Prepare Report** tab contains a method for preparing an error report for Syn-Apps Engineering.

To Prepare a Report, first make sure you have experienced the problem with the Service Log Level set to the appropriate selection (See: [TroubleShooting – Service Log Level](#) for more info).

Proceed by filling out a description of the problem in the provided field. Click the **Prepare Report** button to prepare the report. Once completed, the application will provide you with the location of the report (a directory under the application install). Zip up the directory and send it to support@syn-apps.net.



Troubleshooting – Service Log Level

The **Service Log Level** tab contains fields for setting the level of error reporting in the application.

The default settings are shown in the figure below. You must restart the service for any changes to take effect.

