

The Radiohost manual

# **New & changed features**

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## Table of Contents

Change history.....	3
How to read this manual.....	4
Introduction.....	6
New in Broadcast.....	7
Triggers and out pulses.....	7
Trigger setup .....	7
SS8 and K8055 setup to handle inputs .....	7
More information.....	8
Triggers using the game port .....	9
Connecting triggers at the game port .....	9
Game port connections .....	9
Installing joysticks in Windows 95/98 .....	10
Trigger events.....	11
Play from here.....	13
Play from here setup .....	13
Play from here setup in Heavy Rotation .....	14
Example PLAY FROM HERE setup for a network station.....	15
Out pulse.....	16
Adding an out pulse in Broadcast.....	16
Time stretch.....	17
Current playing log.....	18
New in Easy Spot.....	20
Central commercials.....	20
Data Server definition of the central station.....	20
Creating the commercial blocks.....	22

## Change history

The list shows changes made to this document.

### 2005-05-15

<b>Updated chapter name</b>	<b>Description for the update</b>
Current playing log	Reopen log files on every update
SS8 and K8055 setup to handle inputs	Poll interval

## How to read this manual

This manual is intended for first time users of the Radiohost system and will guide you through the setup and use of the system.

The Radiohost system is a comprehensive system and this manual and the system itself might seem overwhelming for first time users of the system. We hope you will take the time to read this manual carefully to understand the many extra features a mature radio automation system, can offer compared to smaller and simpler systems.

Before reading this manual you should read the information pages on [www.radiohost.com](http://www.radiohost.com), where the modules are explained shortly. The reader of this manual are expected to know the different modules in the Radiohost system briefly.

In this manual we use the following format conventions:

Named keys on the keyboard are simply capitalized, e.g., Enter, Shift, Ctrl. The space bar key is shown as `\{space\}`. When we wish you to use a letter, symbol or number key, they are shown in parens, e.g. (s)(+), or (2). All letter keys used as commands are lower case.

When a sequence of keys must be pressed at the same time, we represent this sequence by the key name and the plus (+) symbol. For example:Ctrl+Alt+Delete, Shift+(n)

Particular names of files are listed in upper case italic type, e.g. *FILENAME*

The names of Windows\\ file folders, are shown in lower case in brackets, e.g. [file], [window], while various file folders and commands appearing on pop-up menus in the Radiohost, Broadcast, Communicator, and Heavy Rotation software applications are shown by means of upper case names in brackets, e.g. [PREFERENCES-SETUP], [GET FROM FILE].

Named icons and buttons are simply shown in bold capitals, e.g. OK, START

When you are asked to type something without pressing the Enter key, you are directed to "type" the information.

When you are directed to type the information and press the Enter key, you will be directed to "enter" the information.

"Highlight" or Highlighting a file, means to move the cursor to a file shown in a list, and left-

clicking on the mouse. The display will change, "highlighting" the file you select.

When you need to make a selection of a particular command shown on the screen, you will be directed to "select" or "click" on that information by moving the cursor to an icon or "button" and clicking the left mouse button (left-click).

When asked to select an item from the mouse menu, it means right clicking the mouse to bring up a menu and select the item requested.

Windows, Windows95, Windows98, Windows NT, Windows 2000 and Windows XP are \\\ Microsoft Corp.

Radiohost, Broadcast, Communicator, Heavy Rotation, Easy Spot, and Data Server are \\\ Radiohost ApS

# Introduction

This document collects the new and changed features of the Radiohost system for the latest official release vs. the previous official release.

The document will be of interest for current users of the Radiohost system where new or coming users will find better information in other documents found at [www.radiohost.com](http://www.radiohost.com).

The features listed here are not described in any order or priority and the chapters should be read as fully independent chapters describing each feature in its own context.

## New in Broadcast

### Triggers and out pulses

Triggers are used for controlling the play list by an external switch. Triggers can be used to have the mixer switch starting, stopping, etc. the play list. Also, triggers are used in radio networks as satellite or remote setups.

Broadcast can generate out pulses. In this way you can make one Broadcast work as a master station and have all other Broadcasts in the radio network react on these out pulses triggers using triggers.

### Trigger setup

To make the triggers working you need an input device to handle the external switches. Broadcast can use 3 kind of input devices.

1. SS8 - Switch & Sense 8 from <http://www.measurementcomputing.com>
2. K8055 from [www.Velleman.be](http://www.Velleman.be)
3. The Game port (only for Win 95/98 and Win NT - not for Win 2000/XP)

For more information on the hardware setup of the SS8 and K8055, please contact your supplier or the reference manual for these products. Radiohost ApS does not distribute these products nor do we provide support for the hardware setup of the products.

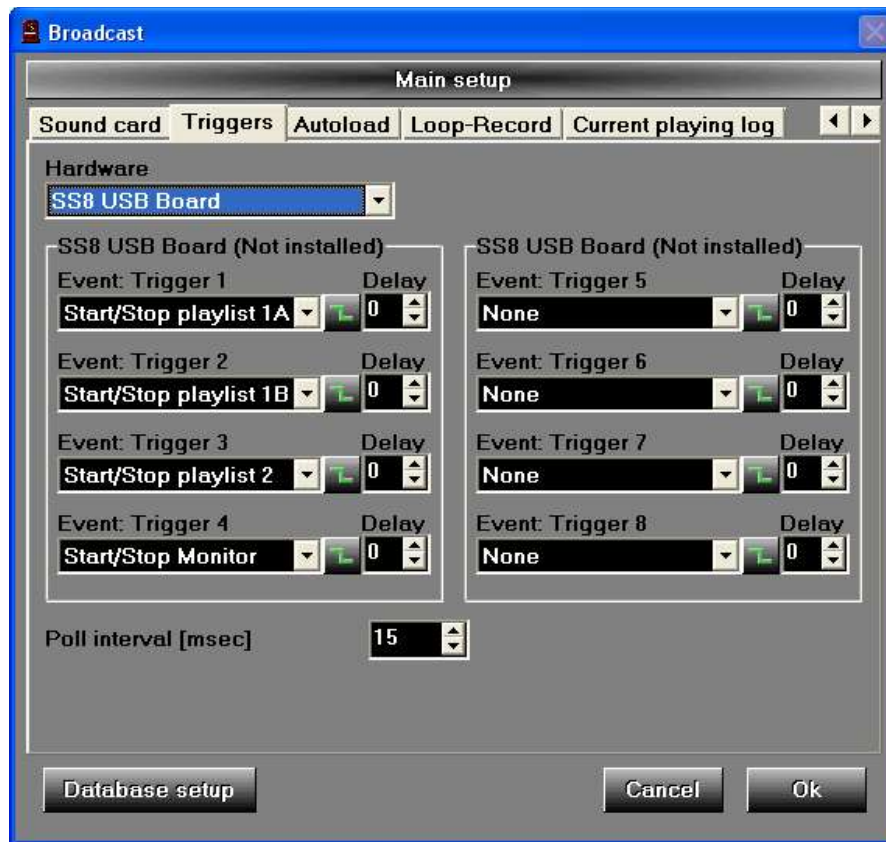
### SS8 and K8055 setup to handle inputs

Inputs from external cards is handled by Broadcast. The setup for these functions is entered at **SUPERVISOR SETUP - [SYSTEM] - SYSTEM SETUP - TRIGGERS**.

First select the input card to use from the HARDWARE drop down list. The numbers of triggers will change to show only the number of inputs on the cards. There is 8 for the SS8 card and 5 for the K8055 card.

The in ports on the SS8 card is numbered 1 to 8. In the setup the EVENT: TRIGGER 1 will react on a signal on port 1 on the SS8 card etc.

Each trigger can carry out the events in the table Trigger events.



For each trigger you can decide if the trigger should react on a low to high or a high to low (0V - 5V) by toggling the green step icon just beside the trigger event.

If the trigger should not react immediately on a pulse a delay is set by clicking the up/down arrows at the DELAY field. The values are in seconds.

To check if there is a trigger Broadcast will poll the I/O card frequently. The interval for polling is set at the POLL INTERVAL. For faster reaction you should lower the poll interval. A lower poll interval will increase the CPU usage of the PC, so you should find a propriate value by experimentation. K8055 card is somewhat slower then the SS8 card and you should expect to get a much better response time from the SS8 card.

## More information

The special trigger PLAY FROM HERE can be used in a network station setup. Please read the topic PLAY FROM HERE for more information.

## Triggers using the game port

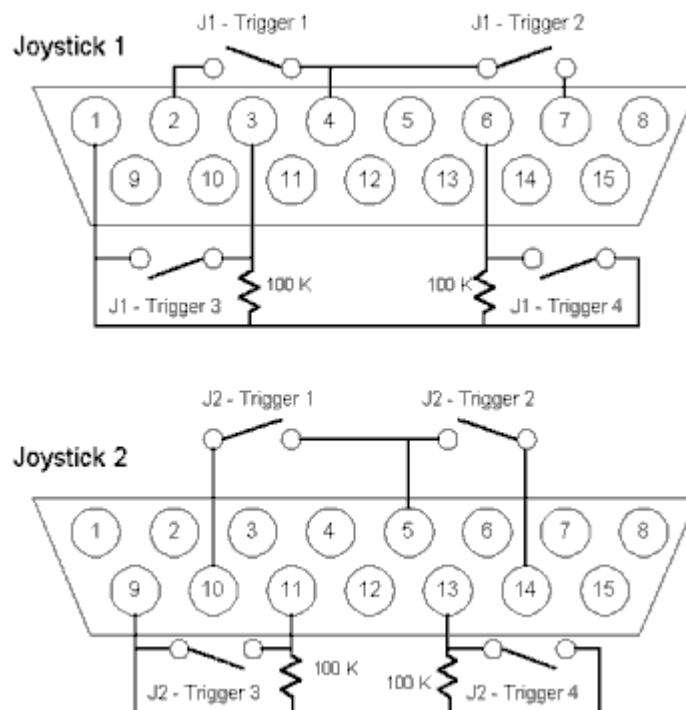
Please notice that triggers using the game port can be used only on Windows 95/98/NT. Windows 2000 and Windows XP does not support triggers using the game port.

### Connecting triggers at the game port

You can use two game ports to control Broadcast with external triggers. For example you can use the remote start at you mixer to start a play list.

### Game port connections

You need configure your game port as the diagram shows.



**NOTE!** There is one difference in the setup of a joystick port on a sound card versus the setup of a standard joystick port. When wiring your 15-pin port you would normally use pin 12 as a ground. However, most sound cards use pin 12 as midi out. There is a simple and easy solution to this. Pins 4 and 5 are common grounds on most sound cards. You can tie pin 12 to pins 4 and 5 and this will fix your grounding problem.

IF YOU ARE NOT USING ALL THE TRIGGERS, THE FOUR LOADING RESISTORS ON TRIGGERS 5 TO 8 MUST STILL BE INSTALLED IN ORDER TO PREVENT GHOST TRIGGERING.

## **Installing joysticks in Windows 95/98**

Windows 95/98 - The joystick must be installed as "new hardware" and then activated/calibrated from the control panel. Here are the procedures:

1. Install JOYSTICK1 as 2 BUTTON, 2 AXIS
2. CLOSE CONTACT 1 OR 2 in response to "Push button while centered" prompt
3. CLOSE CONTACTS 5 AND 6 in response to move joystick in circle prompt, then CLOSE CONTACT 1 OR 2
4. CLOSE CONTACT 1 OR 2 in response to second "Push button while centered" prompt
5. Install JOYSTICK2 as 2 BUTTON, 2 AXIS
6. CLOSE CONTACT 3 OR 4 in response to "Push button while centered" prompt
7. CLOSE CONTACTS 7 AND 8 in response to move joystick in circle prompt
8. CLOSE CONTACT 3 OR 4 in response to second "Push button while centered" prompt

## Trigger events

Trigger / Events	Description
Start/Stop playlist 1A	<p>Play list 1A will be started if the play list does not play and stopped if the play list is playing.</p> <p>This event works if play list 1 is running in A/B mode only.</p>
Start/Stop playlist 1B	<p>Play list 1B will be started if the play list does not play and stopped if the play list is playing.</p> <p>This event works if play list 1 is running in A/B mode only.</p>
Start/Stop playlist 2	<p>Play list 2 will be started if the play list does not play and stopped if the play list is playing.</p>
Start/Stop Monitor	<p>The monitor will be started if the monitor does not play and stopped if the monitor is playing.</p>
Play Next playlist 1	<p>The next file in the play list will be started and the file playing will be faded down and stopped.</p>
Play Next playlist 2	<p>The next file in the play list will be started and the file playing will be faded down and stopped.</p>
Stop playlist 1	<p>Play list 1 will stop playing.</p>
Stop playlist 2	<p>Play list 2 will stop playing.</p>
Recue playlist 1	<p>The play list will be recued.</p>
Recue playlist 2	<p>The play list will be recued.</p>
Loop-Record 1 & 2	<p>The next Loop-Record in both play list 1 and play list 2 will be started.</p>
Loop-Record 1	<p>The next Loop-Record play list 1 will be started.</p>
Loop-Record 2	<p>The next Loop-Record play list 2 will be started.</p>
Play Next playlist 1A	<p>The next file in the play list will be started and the file playing will be faded down and stopped.</p> <p>This event works if play list 1 is running in A/B mode only.</p>
Play Next playlist 1B	<p>The next file in the play list will be started and the file playing will be faded down and stopped.</p> <p>This event works if play list 1 is running in A/B mode only.</p>
PLAY FROM HERE 1	<p>The PLAY FROM HERE in play list 1, if any, will be started when the trigger is within the time window for the PLAY FROM HERE. Please read the instructions for the PLAY FROM HERE for more information.</p>

<b>Trigger / Events</b>	<b>Description</b>
PLAY FROM HERE 2	The PLAY FROM HERE in play list 1, if any, will be started when the trigger is within the time window for the PLAY FROM HERE. Please read the instructions for the PLAY FROM HERE for more information.

## Play from here

The play from here event will start any file in the play list by fading out the previous files and starting the file added the PLAY FROM HERE feature. This function is used to synchronize the play list. For example in a network the commercial blocks on the different stations should run simultaneously, but not at a specific time. Using the PLAY FROM HERE event the first file in the commercial block can "listen" for the trigger to arrive and when the trigger fires, all music and other files ahead of the commercial block will be faded down and the first file in the commercial block will start playing.

## Play from here setup

The PLAY FROM HERE can only be started by a trigger so the first thing you need to do is to set up a trigger for a PLAY FROM HERE event. Please read the Triggers subject for more information on setting up triggers.

Next the PLAY FROM HERE event should be added to a file in the play list. Select a file in the play list and select PLAY FROM HERE from the mouse menu.

This will bring up the PLAY FROM HERE setup window.



The START LISTEN and END LISTEN is the time window where the PLAY FROM HERE event will react on the trigger. In the example the trigger has to fire within the time span from 6:10:00 to 6:12:00 to work. Triggers outside this time span will not have any effect and the play list will continue to play as if no trigger has been detected.

Enter a START LISTEN and an END LISTEN time to define the active time window.

If no trigger has been detected within the time window the PLAY FROM HERE can be forced

to start by the time of the END LISTEN if the TIMER (END LISTEN) is selected.

The FADE OUT (1/100S) define the fade out time for the files ahead of the PLAY FROM HERE when the PLAY FROM HERE is started.

An icon is added to the files in the play list using the PLAY FROM HERE feature.

## Play from here setup in Heavy Rotation

The PLAY FROM HERE can also be added automatically when using Heavy Rotation for music scheduling.

The feature is added in the SCHEME definition in Heavy rotation. Select a position in the play list definition window and add the PLAY FROM HERE using the mouse menu.

The properties are the same as in the setup in Broadcast except that the time definitions is entered as a relative time to the start of the play list. In this way the SCHEME can be used in more than one hour per day.



The screen shot shows the time window is within 10 minutes from the start of the play list until 12 minutes past the start of the play list. If this scheme is supplied to the hour beginning 6.00 o'clock, the PLAY FROM HERE time window will be the same as described in the setup for Broadcast (6.10 to 6.12). If the scheme is supplied to the hour beginning 21.00 o'clock the time window of the PLAY FROM HERE will be from 21.10 to 21.12.

## **Example PLAY FROM HERE setup for a network station**

The example is for a network station where the master station is running music and commercials and the satellite station is using the music from the master station but is running its own local commercials. The commercial blocks are both 2 minutes exactly.

At the master station an out pulse is added the commercial blocks using Heavy Rotation. The out pulse will fire at the start of the intro jingle for the commercial block. The commercial block will start between 11.18 and 11.22 depending on the play list ahead of the commercial block.

At the satellite stations the play lists is a LOOP RECORD from 11.00 to 11.23, then the local commercial block with the commercial files and jingles, after that a new LOOP RECORD from 11.20 to 12.00.

Broadcast is setup to use a PLAY FROM HERE trigger event with a delay of 3 seconds. The delay is set as the LOOP RECORD has a 3 second delay in the sound due to an internal buffer.

In Heavy Rotation at the satellite stations a PLAY FROM HERE is added the commercial block with a time window from 11.18 to 11.22.

Now the LOOP RECORDs will play the signal from the master station, also if the signal is from a live show. When the commercial block on the master station is started the OUT PULSE will start the PLAY FROM HERE at the satellite stations, to start the local commercial blocks. When the local commercial blocks ends the next LOOP RECORD in the play list will take over to play the signal from the master station again.

## Out pulse

The out pulse is an activation of a relay made by an I/O card from Broadcast. The relay is activated for 600 mSec. Please read the documentation for TRIGGERS for information on the supported I/O cards and setup of the cards.

## Adding an out pulse in Broadcast

An out pulse is added in the Advanced monitor. Place the cursor where the pulse should fire and click the yellow button at the bottom of the play clock. A yellow line in the graphics indicates the out pulse.

The handle at the top of the line show a "1" indicating that the out pulse will be sent to the port 1 of the I/O card. To change the port hold down CTRL and click at the handle until the required port is selected.



The line can be moved by dragging it and it is deleted by clicking the yellow button again.

## Time stretch

Time stretch is used to change the duration of a file without changing it's pitch.

In Broadcast select one or more files in the play list and select TIME STRECH from the mouse menu.



Now enter a STRECHING % or the exact DURATION you need the file to be. Entering a STRECHING % will change the duration to show the duration when stretched the entered percent and vice versa.

A time stretched file will in the play list be shown with round brackets and the duration is the stretched duration.

<b>No time stretch</b>	[01:00] ARTIST, SONG TITLE
<b>Time stretch compression</b>	)00:54( ARTIST, SONG TITLE
<b>Time stretch expansion</b>	(01:06) ARTIST, SONG TITLE

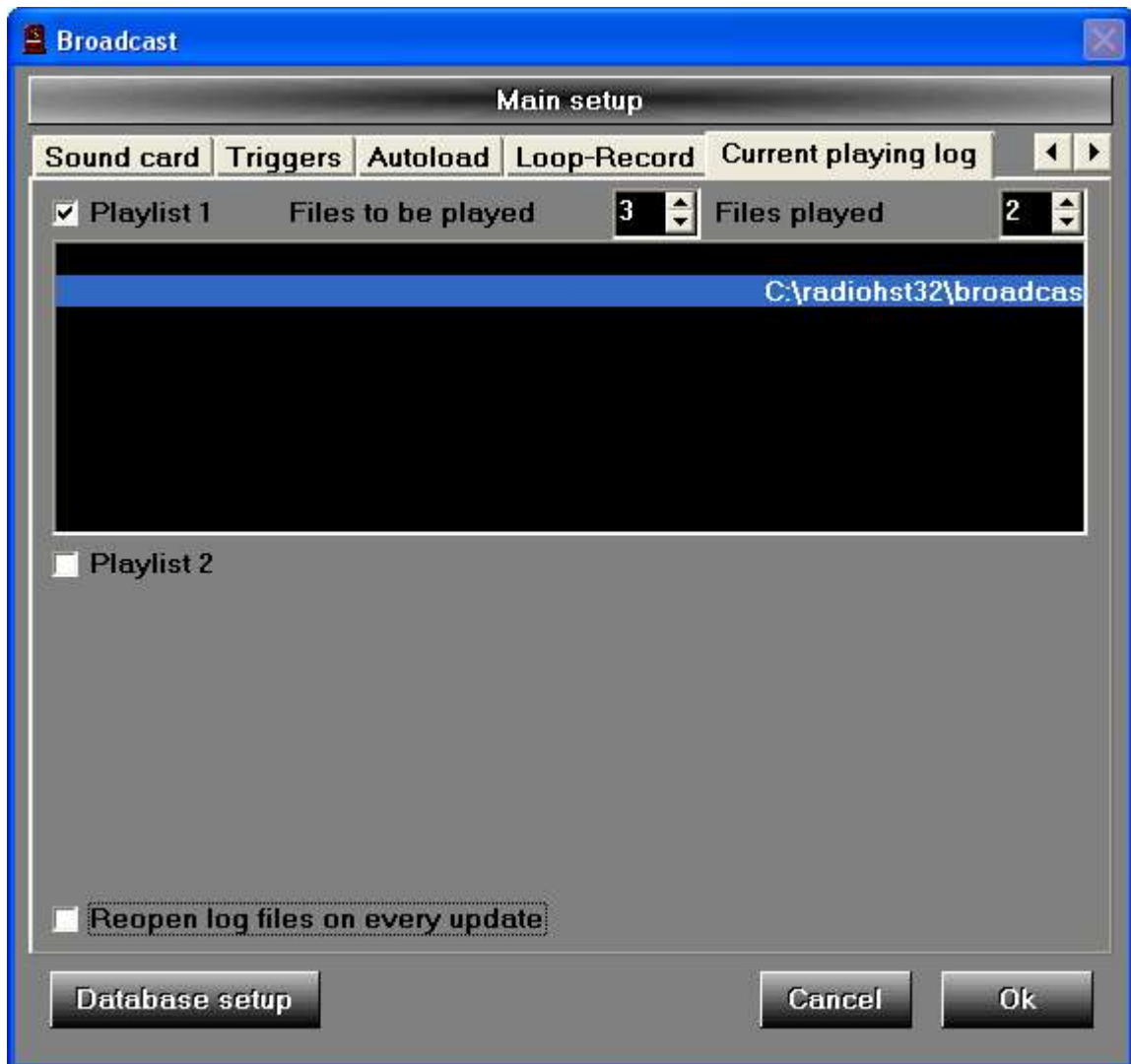
Please notice that time stretching a file will introduce some lost in sound quality and you should always prelisten a time stretched file before Broadcasting it. In future versions of Broadcast we hope to implement a better time stretching algorithm.

## Current playing log

Broadcast can make a log of the files currently playing, files that has been played and files that are near to be played. The log is saved as two text files named playing1.log or playing2.log.

You can have Broadcast save the log files in several locations in your stations network.

First you need to decide which play list are to be used when logging. Use the check box next to "Play list 1" and "Play list 2" to activate the logging.



Then place the cursor in the free area under the check boxes and right click the mouse to bring up a menu. Choose Add directory and select a directory where the log file are to be saved. If the log file are to be saved in several directories repeat the procedure.

Next to the label "Files to be played" a number selection box is present. The number here decide the number of files at the top of the play list that are to be logged. For example if you select 3 in the "Files to be played" the three files at the top of the play list will be written to the log file.

Likewise the selection box next to "Files played" decide the number of files that has been played that are to be saved in the log file. If you write 2 in the selection box, the 2 most recently played files will be written to the log file.

The log file is updated periodically to show the correct log at any time.

The log here shows a setup where "Files played" is 3 and "Files to be played is 2".

|04:10| Roxy Music - More Than This (1982)

|00:11| PHIL COLLINS, A GROOVY KIND OF LOVE

|00:06| MIKE & THE MECHANICS, OVER MY SHOULDER

|01:33| SIMPLY RED, SAY YOU LOVE ME

|00:13| SISTER SLEDGE, HE'S THE GREATEST DANCER

When writing to the file (playing1.log) Broadcast can either keep the file open which in some cases will prevent other application from reading the file or Broadcast can reopen the file (playing1.log) on every update of the file. If you have problems in reading the file (playing1.log) try to change the setting for REOPEN LOG FILES ON EVERY UPDATE.

NOTE!: Radiohost ApS can NOT help you enable the text file on the WEB. Please contact your WEB master for publishing the text file on your homepage.

NOTE!: If there is a problem in logging the files Broadcast will NOT log the files but simply continue playing. You will see no error messages or other indication of what is wrong. If you do not find the log files, check to see if write access is set up properly in your network.

## New in Easy Spot

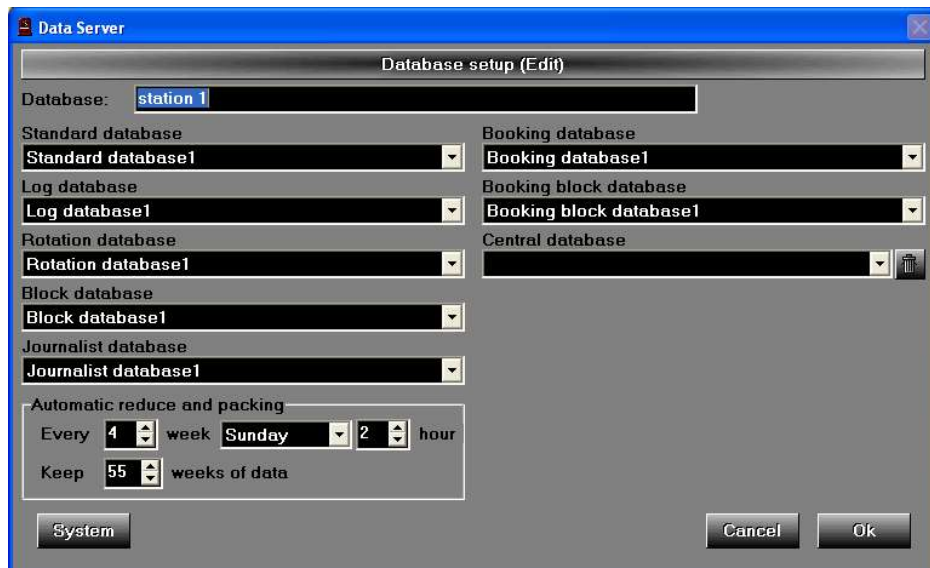
### Central commercials

In a network stations often have some commercial blocks with commercials targeted for the local market and other blocks of commercials targeted for all or at least several stations.

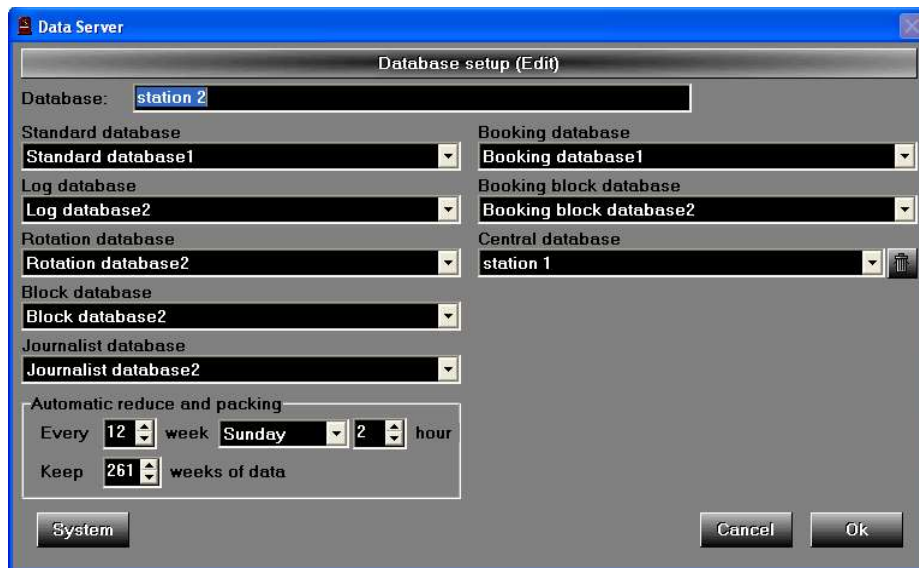
In the Radiohost it is possible to define a central commercial block where commercials are taken from another station. The functionality of this feature is shown by an example where one station is taking some commercial blocks from another station.

### Data Server definition of the central station

The first thing you have to do is to setup the database definition for the local stations defining which station the local station will get the central commercials from.



Station 1 uses all the database1 files in the setup. The CENTRAL database entry field is left empty as Station 1 is the central station from where Station 2 will get it's central commercials.



Station 2 uses the database2 files except for 3 databases.

The STANDARD database is database1 as station 1 and station 2 share the music database. Music entered into station 1 is available at station 2 and vice versa.

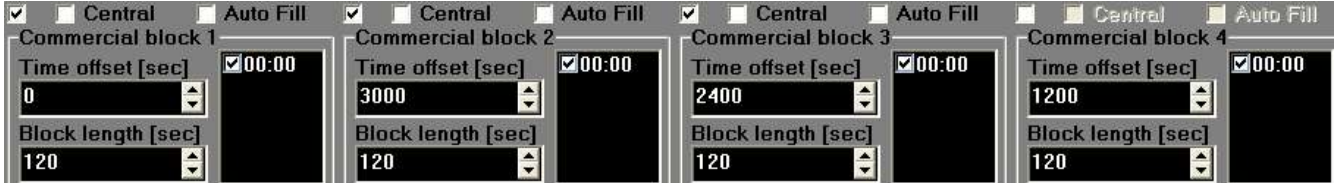
The BOOKING database is database1 as station 1 and station 2 share the client database. Clients, spots, packaged and contracts entered into Easy Spot at station 1 is available at station 2 and vice versa.

The CENTRAL database is database1. This means that when commercial blocks is defined as central in the week view setup for station 2 the central commercial blocks gets the commercials from station 1.

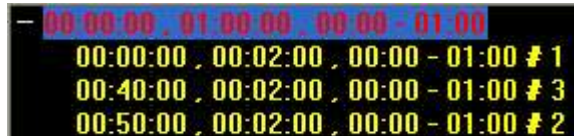
## Creating the commercial blocks

After setting up the databases for the station definitions in Data Server you will create the commercial blocks.

The commercial blocks for station 1 is created as show.



Station 1 has 3 commercial blocks running at xx:00, xx:40 and xx:50. Non of the commercial blocks are defined as central as central means that commercials for the block will be taken from another station. As station 1 will deliver the central block to the other station station 1 will not define any central blocks.

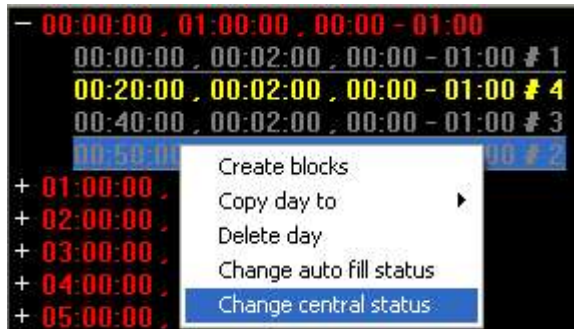


The commercial blocks for station 2 is created like this.



There are 4 commercial blocks where block#1, block#2 and block#3 are defined as CENTRAL. In the WEEK VIEW central block is indicated by a gray letters. You can toggle the central status for a block from the mouse menu.

Please notice that commercial blocks# are not in succeeding orders. The block# are positioned just as they where created. This gives a flexibility for arranging the central blocks for station 2 in a different order than station 1.



When the blocks have been properly created you can begin to book commercials. At station 1 we book one B.A. commercial in 00:00 block#1, two B.A. commercials in 00:50 block#2 and three B.A. commercials in 00:40 block#3. At station 2 we book an ESSO commercial in 00:20 block#4. Now, in Broadcast you see that the central and local blocks are positioned by their block#.