



# Ocularis

## Recorder Database Management Guide



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US patent # 8,390.684 B2 for Ocularis Client

Additional Patents Applied For in the U.S. and Abroad

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# Introduction

## **Overview**

The configuration settings used in the recorder for Ocularis Ultimate, Ocularis Enterprise or Ocularis Professional can and should be backed up regularly.

Similarly, the location(s) for storing the video data may be modified

This document identifies the process of how to manage the recorder databases.

## **Target Audience**

The target audience for this document is surveillance system administrators and/or database administrators who are responsible for data integrity and system maintenance.

# Configuration Database Management

All of the configuration for an Ultimate, Enterprise and Professional recorder is maintained in a configuration database (also known as the 'Management Database' or 'MaxDB'). This database also stores alarm data for events that takes place through the recorder.

## Backup of the Configuration Database

By default, the recorder included in Ocularis Ultimate, Ocularis Enterprise or Ocularis Professional is automatically set to back up its own configuration data. The backup default settings include:

- Use of automated backup
- Backup is performed daily
- The time for the backup is 1:01 a.m. (local time on the Master Core)
- The storage location for the backup file is: **...\Program Files\Ocularis Recorder\sapdb\backup**
- Old backups are automatically deleted

You may modify these settings from the Master Core computer by using the *Ocularis Recorder Manager*.

### To View or Modify the Backup Settings

1. Open the *Ocularis Recorder Manager* application.
2. In the Control Bar summary section, select **System (1)**.
3. In the Control Bar detail section, select **Backup (2)**.

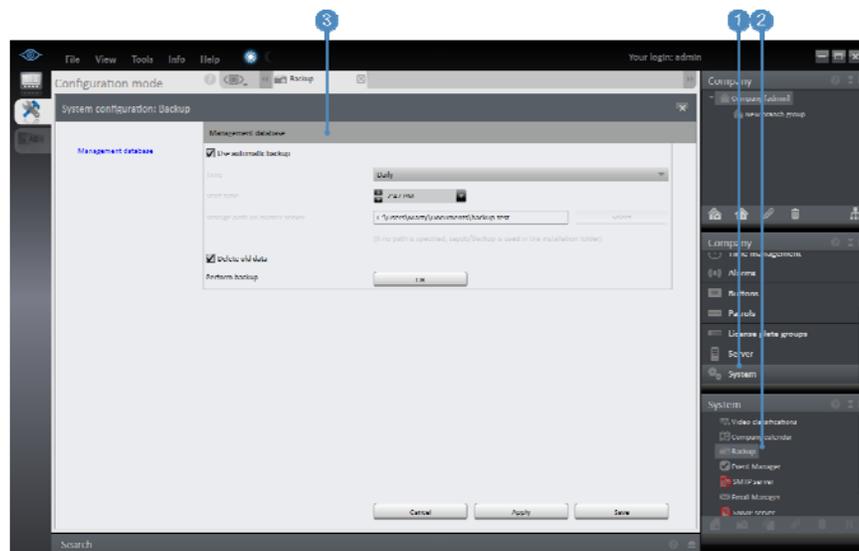


Figure 1 System Configuration: Backup Detail

4. In the detail section of the backup screen **(3)**, the checked box **Use automatic backup** will perform backups automatically based on the settings below this box. Uncheck if you want to disable the automatic backup (not recommended).
5. The **Time** drop-down list allows you to set the occurrence of when to do the back up. *Daily* is the default but you can select a specific day of the week for the backup.
6. The **Start time** of the backup is defaulted to 1:01 a.m. If you wish, you may change this time.
7. **Storage path on master server** allows you to change the directory where the backup is saved. If the *Ocularis Recorder Manager* that you are using is installed on the Master Core server, you may click the **Select** button to modify this path. Otherwise, you will need to enter the path manually.
8. The **Delete old data** checkbox instructs the system to delete existing backups before the data is backed up. This setting applies only to automated backups. There can be up to eight backup files.

**Note:**

*The backup folder should be backed up to a tape drive or other backup medium at regular intervals to ensure that the data backups are still available in the event of a hard drive crash.*

9. If you want to initiate a manual backup, click the **OK** button next to **Perform backup**. This will create a zip file in the designated location using the format:

**SeeTec\_M\_20yymmdd.hhmm.zip**

Where:

- M stands for manual; A appears for automated backups
- yy is the year
- mm is the month
- dd is the day of the month
- hh is the hour
- mm is the minute of the hour

10. Click **Apply** to save the settings and keep the *System configuration: Backup* screen displayed.
11. Click **Save** to save the settings and close the window.

## Manual Backup

There are two ways to perform a manual backup. One is through the *Ocularis Recorder Manager* and the other is through the *Ocularis Recorder Administration Tool*.

### ***To Perform a Manual Backup with the Ocularis Recorder Manager***

1. Open the *Ocularis Recorder Manager* application.
2. In the Control Bar summary section (see Figure 1), select **System (1)**.
3. In the Control Bar detail section, select **Backup (2)**.
4. To initiate a manual backup, click the **OK** button next to **Perform backup**. This will create a zip file in the designated location using the format:

**SeeTec\_M\_20yymmdd.hhmm.zip**

Where:

- M stands for manual; A appears for automated backups
  - yy is the year
  - mm is the month
  - dd is the day of the month
  - hh is the hour
  - mm is the minute of the hour
5. Click **Apply** to save the settings and keep the *System configuration: Backup* screen displayed.
  6. Click **Save** to save the settings and close the window.

## To Perform a Manual Backup with the Ocularis Recorder Administration Tool

1. On the Master Core computer, open the tool from the Windows Start menu:

**Start→All Programs→OnSSI→Ocularis Recorder→Ocularis Recorder Administration Tool**

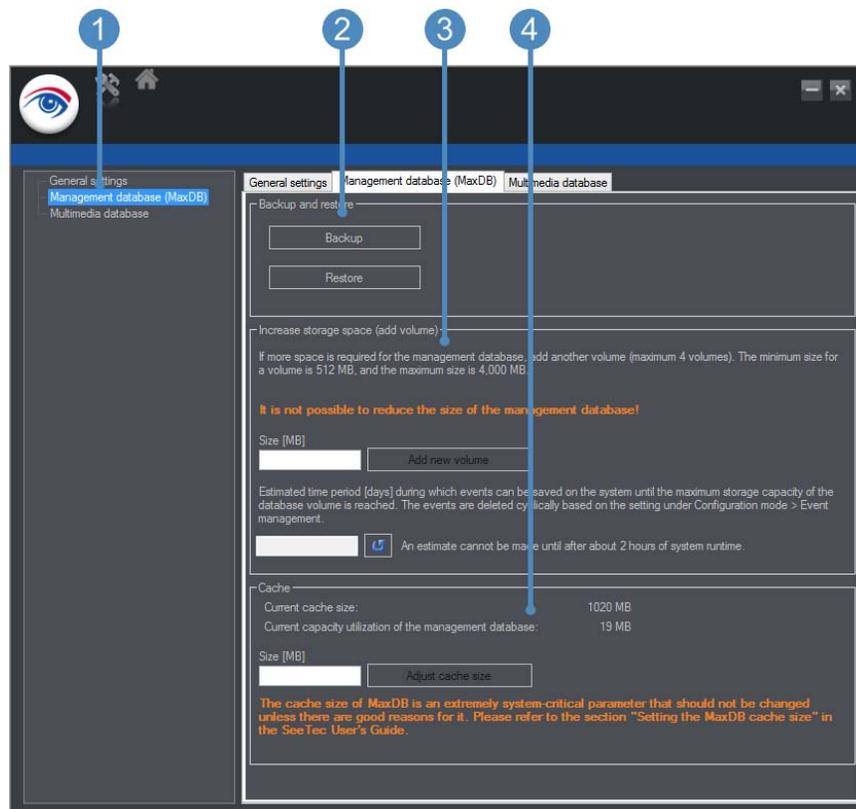


Figure 2 Ocularis Recorder Administration Tool-Database Configuration

2. Select the second item in the left panel: **Management Database (MaxDB) (1)**
3. Click the **Backup** button (2) to initiate a manual backup.
4. The first time you execute a backup from this screen you will be prompted for a user name and password. This is the administrator account on the Master Core. Enter the credentials and click **OK**.
5. An information message appears reminding you that the backup may take several minutes. Do not interrupt this process. Click **OK**.

The backup file is saved to: **...\Program Files\Ocularis Recorder\sapdb\backup**

**Note:**

Even if the destination folder path for the backup was modified in the Ocularis Recorder Manager, the Ocularis Recorder Administration Tool will save the backup to the default directory: ...**Program Files\Ocularis Recorder\sapdb\backup**.

## Restore the Configuration Database

In any event that may require you to restore a previously made backup, you must do so using the *Ocularis Recorder Administration Tool*.

1. On the Master Core computer, open the tool from the Windows Start menu:

**Start → All Programs → OnSSI → Ocularis Recorder → Ocularis Recorder Administration Tool**

(See Figure 2)

2. Select the second item in the left panel: **Management Database (MaxDB) (1)**
3. Click the **Restore** button to initiate a manual restore.
4. Select the backup you wish to restore from the Windows *Open* dialog and click **Open**.
5. An information message appears reminding you that the restoration may take several minutes. Do not interrupt this process. Click **OK**.

# Configuration Database Storage Space

If more storage space is needed for the recorder configuration database because, for example, the event data is to remain available for an extended period, an additional volume can be added to the configuration database. The default size for the database is 4 GB.

A maximum of four volumes can be added to the configuration database.

**Note:**

*This extension has no impact on the actual multimedia database.*

## To Increase the Size of the Configuration Database

1. On the Master Core computer, open the tool from the Windows Start menu:

**Start→All Programs→OnSSI→Ocularis Recorder→Ocularis Recorder Administration Tool**

(See Figure 2)

2. Select the second item in the left panel: **Management Database (MaxDB) (1)**
3. In the section *Increase storage space (add volume) (3)*, enter the Size (in MB) of the additional storage space for the expansion of the configuration database. The minimum amount is 512 MB and maximum amount 4000 MB.
4. Click **Add new volume**. The additional storage space is available immediately under DISK0000X in the database installation folder.
5. Click the **Refresh** button  for an estimate of how long (in days) the space in the configuration database will last at the current alarm/event rate. A reliable estimate can only be made if the system is running under normal load with reference to the alarm occurrence.

# Configuration Database Cache

If a large number of events occur on the recorder with resulting high loading times, the configuration database cache size can be increased. However, this value should be selected **carefully**. Enlarging the cache is not useful if the computer does not actually have enough available free RAM.

The current cache size of the RAM reserved for the configuration database is displayed. The actual size of the configuration database is shown under *Current capacity utilization of the management database*.

**Note:**

*The cache size of the configuration database is an extremely system critical parameter that **should not be changed** unless there are good reasons to do so. The throughput is optimal if the complete database is kept in the cache.*

## **To Modify the Configuration Database Cache Size**

1. On the Master Core computer, open the tool from the Windows Start menu:

**Start→All Programs→OnSSI→Ocularis Recorder→Ocularis Recorder Administration Tool**

(See Figure 2)

2. Select the second item in the left panel: **Management Database (MaxDB) (1)**
3. In the section *Cache (4)*, enter a value in MB for the desired size in the **Size [MB]** field.
4. Click **Adjust cache size**.

## Multimedia database

The multimedia database is where video is stored

The multimedia database tab is used for maintenance and editing of zones of the multimedia database. The zones are paths in which the multimedia database stores its image data. Both local drives and network drives can be addressed. The specified zone size is not reserved immediately but only used as required.

### About zones

Zones specify the maximum storage depth of the multimedia database and thus of the software. By default, the software does not set any limits on the zone of the multimedia database.

The default zone is placed in the following folder in a new installation: **c:\VideoDatabase**.

However, we recommend replacing it with a zone on a dedicated partition. If the volume of the existing zone is not sufficient, another zone can be added. A maximum of ten zones should be created. A larger number has a negative effect on the performance of the multimedia database. It is also better to have a few large zones than a larger number of small zones. If more storage space than is available on the zones or on the hard disk is assigned to the connected cameras, the database stops recording.

**Note:** We **strongly** recommend against setting a hard disk that is connected by USB or FireWire as a multimedia database zone, because this will have a very negative effect on the performance. The multimedia database should be placed on another hard disk or a RAID system to ensure satisfactory performance.

### **To Add a Zone (Local)**

1. Create a folder on a dedicated partition as a zone to store image data. The cluster size should be 64 KB.
2. On the Master Core computer, open the tool from the Windows Start menu:

**Start→All Programs→OnSSI→Ocularis Recorder→Ocularis Recorder Administration Tool**

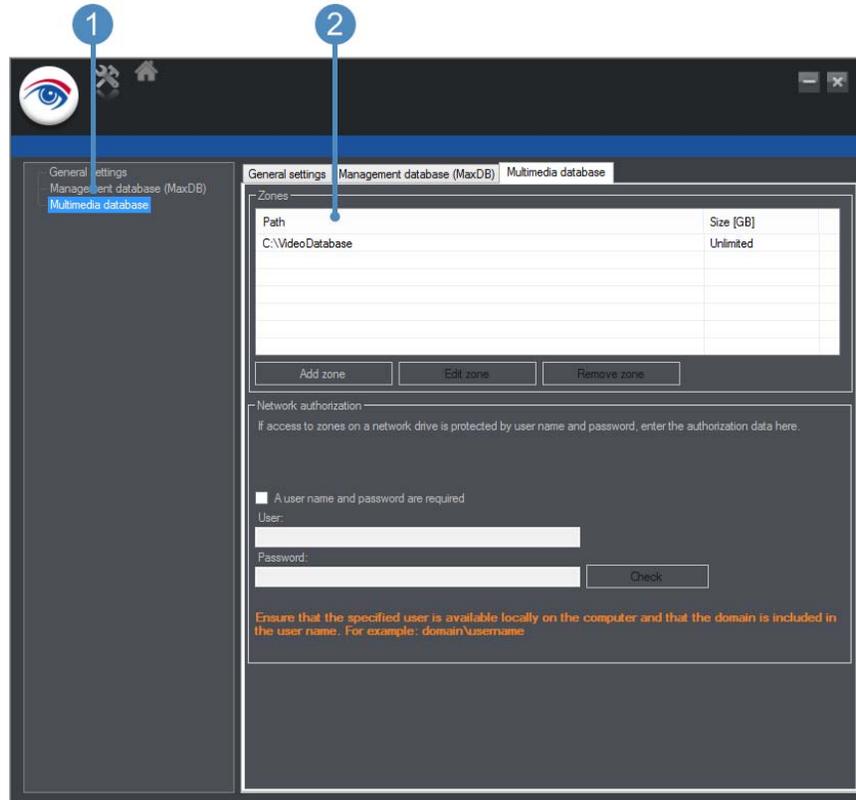


Figure 3 Ocularis Recorder Administration Tool - Configuring the Multimedia Database

3. Select the third item in the left panel: **Multimedia Database (1)**
4. In the *Zones* section (2), click **Add Zone**.
5. Enter the **Path** and the **Maximum size** (in GB). You can use the **Browse** button to select the path.
6. Click the **Unlimited** checkbox to use all the physical space in the partition.

**Note:** We recommend using no more than 90% of the physical space on a partition. Any more will adversely affect the performance of the operating system.

7. Click **OK**.

### To Add a Zone (Network)

1. Create a folder on a server in the network to store image data.
2. On the Master Core computer, open the tool from the Windows Start menu:

**Start→All Programs→OnSSI→Ocularis Recorder→Ocularis Recorder Administration Tool**

(See Figure 3)

3. Select the third item in the left panel: **Multimedia Database (1)**
4. In the *Zones* section (2), click **Add Zone**.
5. Enter the **UNC Path** and the **Maximum size** (in GB).

For example: **\\192.168.2.20\Path\To\Accept**

6. Click the **Unlimited** checkbox to use all the physical space in the partition.

**Note:** We recommend using no more than 90% of the physical space on a partition. Any more will adversely affect the performance of the operating system.

7. Enter the **user name** and **password**. The user must also be available locally on the computer and the domain is also required.

For example: **DOMAIN\firstname.lastname**

8. Click **Test** to check the availability and authorization on the network drive.

## To Edit a Zone

1. On the Master Core computer, open the tool from the Windows Start menu:

**Start→All Programs→OnSSI→Ocularis Recorder→Ocularis Recorder Administration Tool**

(See Figure 3)

2. Select the third item in the left panel: **Multimedia Database (1)**
3. Select the desired multimedia database in the zones field.
4. Click **Edit zone** to change the path and/or size.

**Note:** We recommend using no more than 90% of the physical space on a partition. Any more will adversely affect the performance of the operating system.

5. Click **OK** to confirm.

## To Remove a Zone

1. On the Master Core computer, open the tool from the Windows Start menu:

**Start→All Programs→OnSSI→Ocularis Recorder→Ocularis Recorder Administration Tool**

(See Figure 3)

2. Select the third item in the left panel: **Multimedia Database (1)**
3. Select the desired multimedia database in the zones field.
4. Click **Remove zone**.

The image data in the deleted zone is no longer available, but is not automatically deleted.