SeMSy® Recording Failover Module

Configuration of the SeMSy® Recording Failover module

1 SEMSY® SETUP CONFIGURATION

The HEMISPHERE® SeMSy® **Recording Failover** Module serves as a failover instance in hot standby for recording devices in a HEMISPHERE® SeMSy® environment. In case of a failure, the recording failover module secures the maintenance of channel connections and states of recording devices used in the HEMISPHERE® SeMSy® Video Management System.

- Open the **SeMSy® Setup**.
- Activate the **Expert Mode**.
- Confirm the following dialog with **Yes**.
- Select **SeMSy Failover Server** from the drop down list.

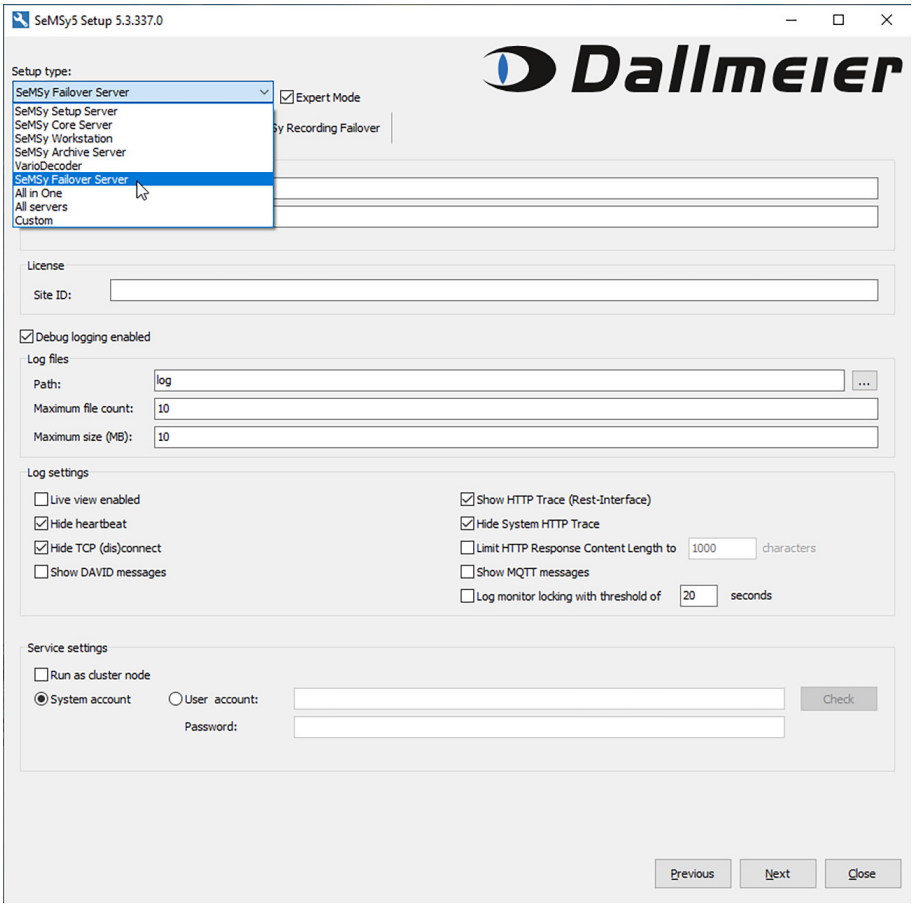

Fig. 1

General

The **General** tab manages basic parameters for the configuration of a SeMSy® Failover Server.

Site Login - credentials for the HEMISPHERE® login for all devices (default: admin/admin).
License - site id of the corresponding dongle.
Log settings - basic configuration for the visibility of failover server log messages.
Service settings - credentials for the login of an explicit user with certain rights. Recommended for a system configuration and operation of the failover server environment external to the system account.
The check box **Run as cluster node** is required for High Available Windows Cluster installations.

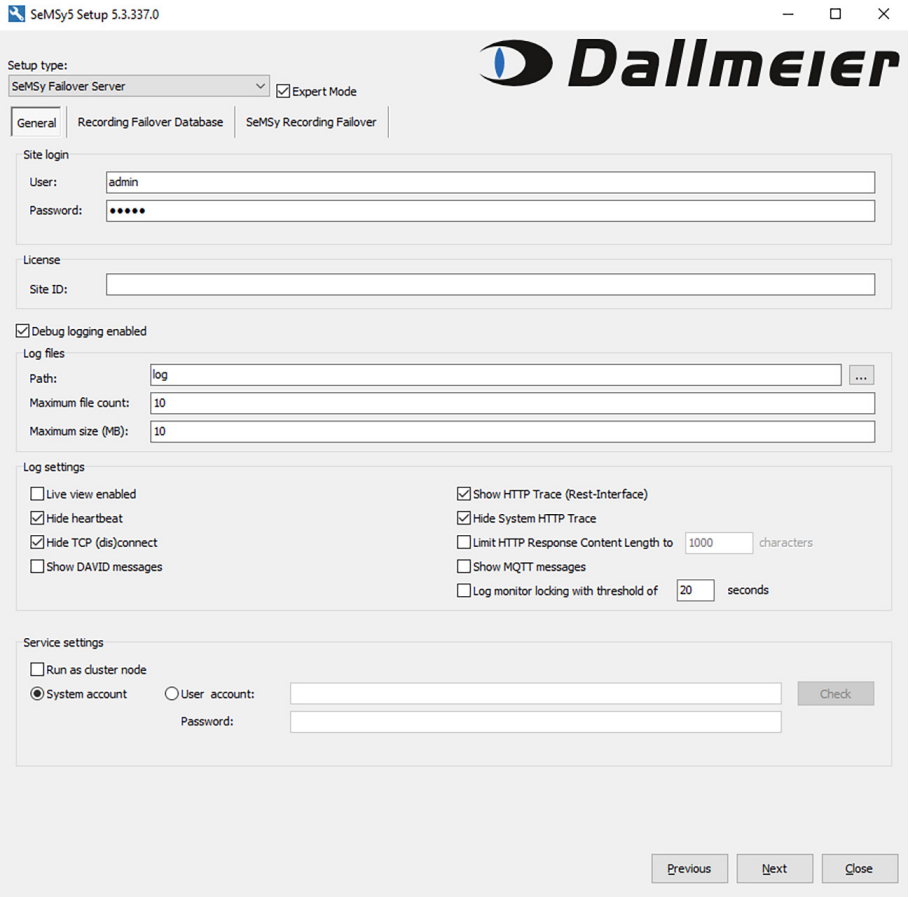

Fig. 2

Recording Failover Database

The **Recording Failover Database** tab manages essential parameters of the used failover data base.

Type - the MariaDB Database is set as the used failover data base by default.
Host - the host of the set failover data base.
Port - port of the failover server. Enable the check box **Default Port** to use the MariaDB default port (3306).
User - name of the MariaDB user (default: failover).
Password - password for the MariaDB user (default: failover12345). It is strongly recommended to change the MariaDB credentials after the installation.
Database - name of the data base in use (default: failover).
Re-Connect - time in seconds until the next attempt to reconnect.

Create User

- Click **Check Database** to search the selected database for any filed users.

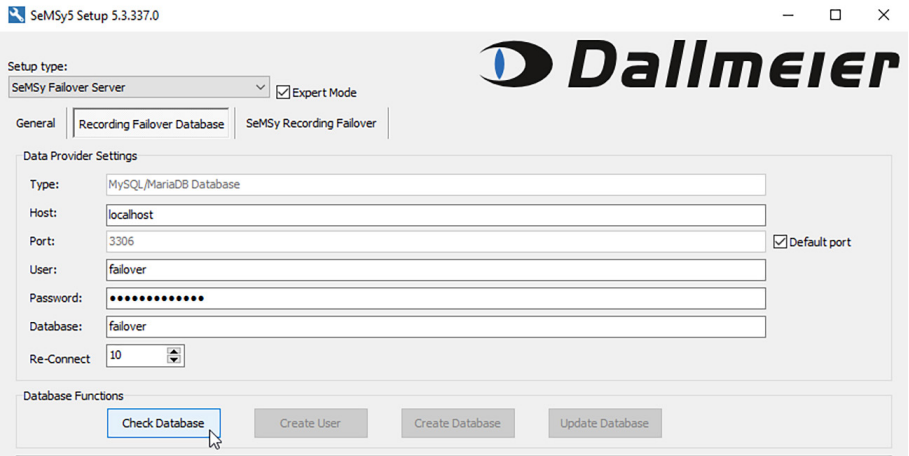

Fig. 3

If no user is filed in the database or the entered credentials are incorrect, the button **Create User** becomes available **after** the database check.

- Click **Create User**.

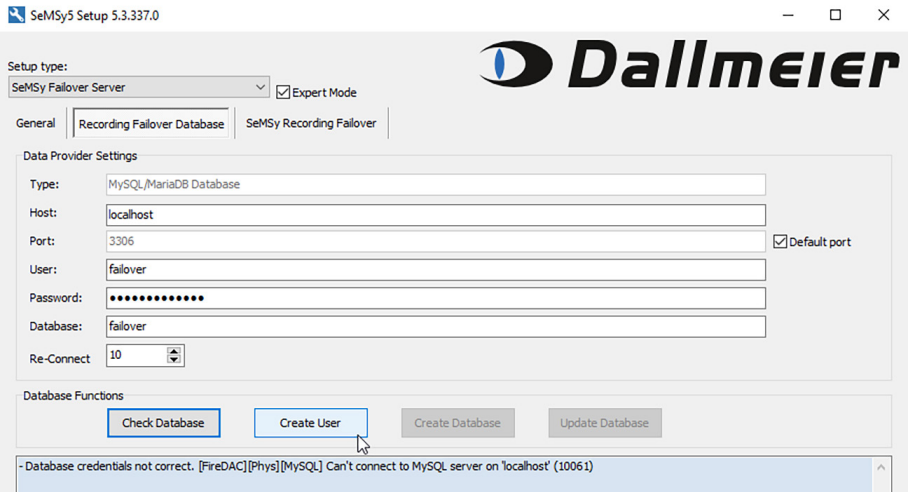

Fig. 4

- Enter the MariaDB credentials to create a new user.
- Confirm with **OK**.

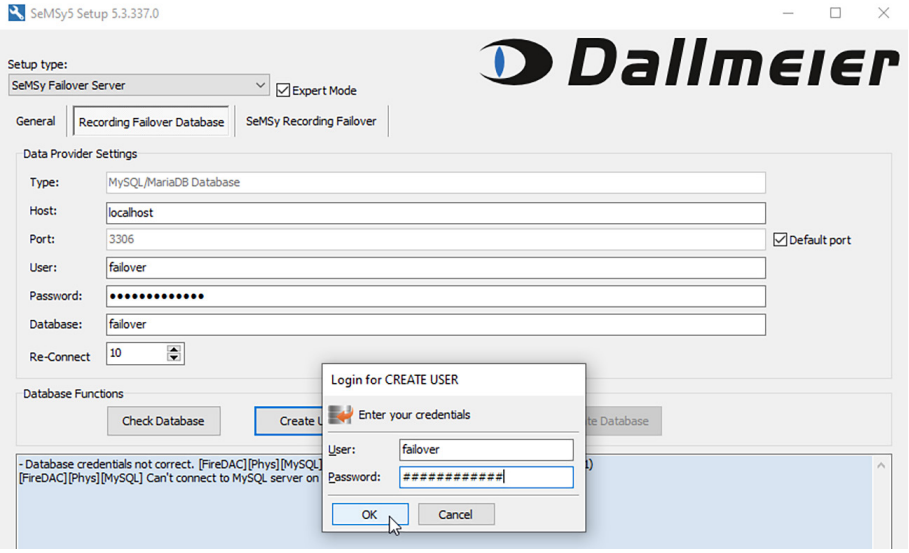

Fig. 5

Create Database

- Click **Check Database** to verify the correctness of the user creation process.
- Click **Create DataBase** to create a new failover data base in MariaDB.
- Click **Check DataBase** to verify the correctness of the data base creation process.

Update a data base

- Click **Check DataBase** to check the data base for available updates.
- Click **Update DataBase**.
- Click **Check DataBase** to verify the correctness of the data base update process.

SeMSy® Recording Failover

The **SeMSy® Recording Failover** tab manages parameters essential for the failover process in the HEMISPHERE® SeMSy® Video Management System.

Data Provider - manages the server data for the SeMSy® setup server such as the **server name (Host)** and corresponding **Port**. The check box **Default port** uses the port set as default (9000).
PGuard Interface - manages credentials of the PGuard Interface and enables/disables the forwarding of PGuard failover events to HEMISPHERE®(optional). Requires the PGuard Interface Client.
Manual Failover - manages the password needed for the execution of a manual failover.
Config - sets the destination of the failover config folder in case of a cluster installation.
General - sets the name of the failover server.
Delete failover-events - manages parameters for the deleting and export of failover data and events.
David - parameters for the configuration of the DaVid protocol.

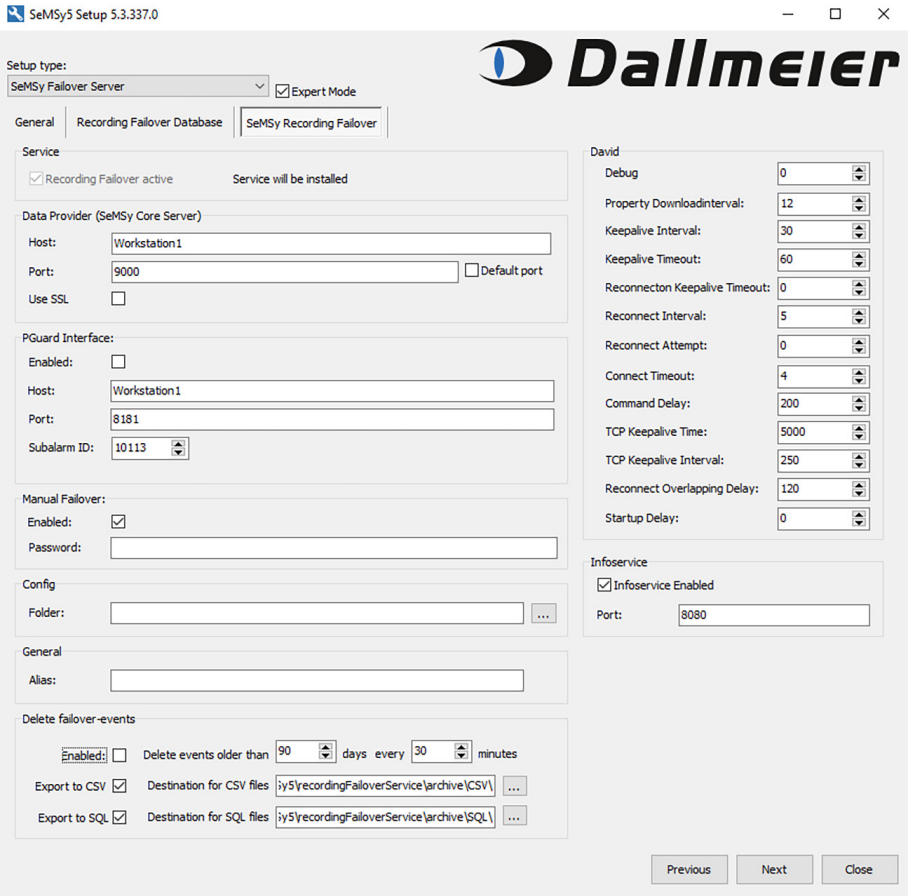

Fig. 6

- Click **Next**.
- Confirm the following dialog with **Yes** to save the configuration.

2 VMS FAILOVER CONFIGURATION

Create new Failover Server Instance

- Log into SeMSy® in **Configuration Mode**.
- Open the folder **System Configuration** A.
- Select the menu item **Failover Servers** B.
- Click **Add Server** to create a new failover server instance C.

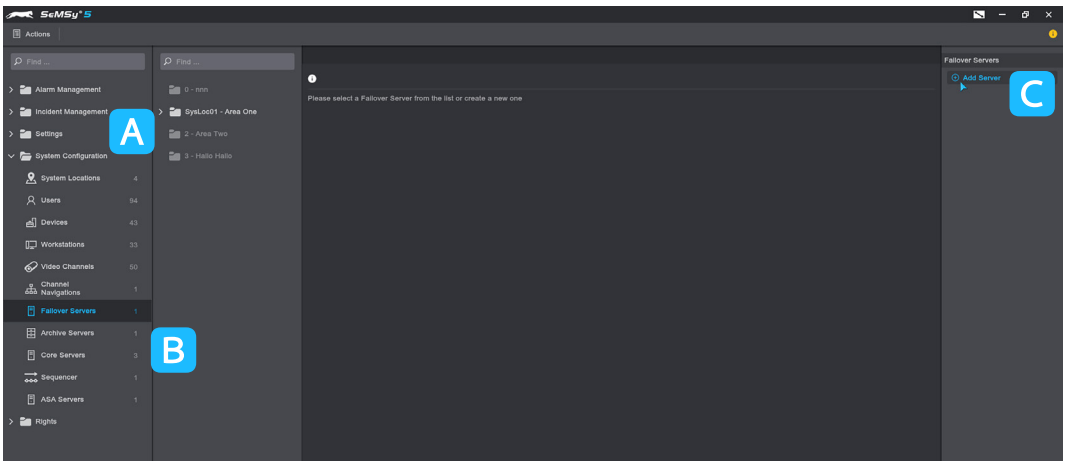

Fig. 7

The failover server **Settings** dialog opens.

System Location - name of the selected system location where the failover server is located.
Hostname - host name of the server where the record failover server is installed.
DB Schema - data base name that was set for the data base in use in the Record Failover Server dialog in the SeMSy® Setup (default: failover).
Description - short description of the selected failover server.
Port - port that was set for the MariaDB in the Recording Failover Database dialog of the SeMSy® Setup (default 3306).
Username - name of the MariaDB user set in the Recording Failover Database dialog in the SeMSy® Setup (default: failover).
Password - password of the MariaDB user set in the Recording Failover Database dialog in the SeMSy® Setup (default: failover12345).

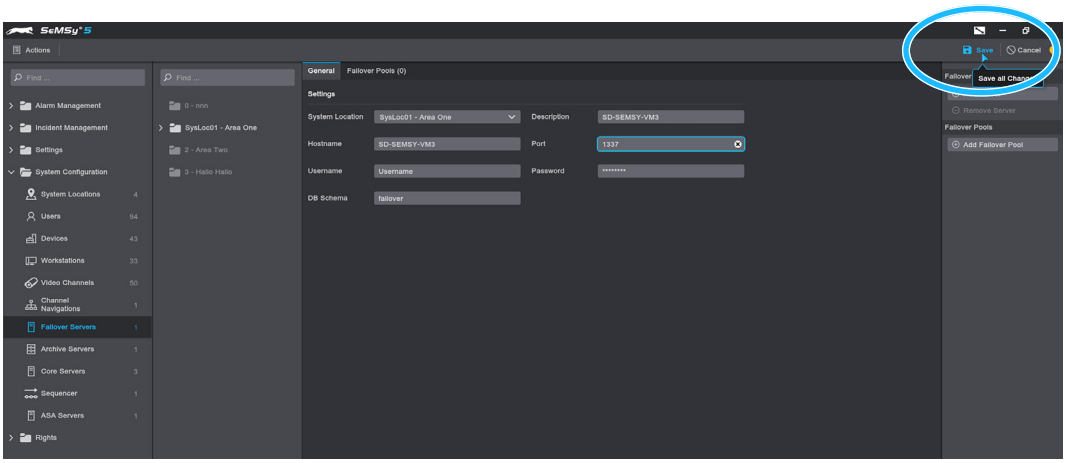

Fig. 8

- Click **Save** to add the failover server.

Delete Failover Server

- Select the required failover server.
- Right click the entry and select **Remove Server**.

or

- Click **Remove Server** in the **Failover Servers** column
- Confirm the following dialog with **Ok** to delete the selected failover server.

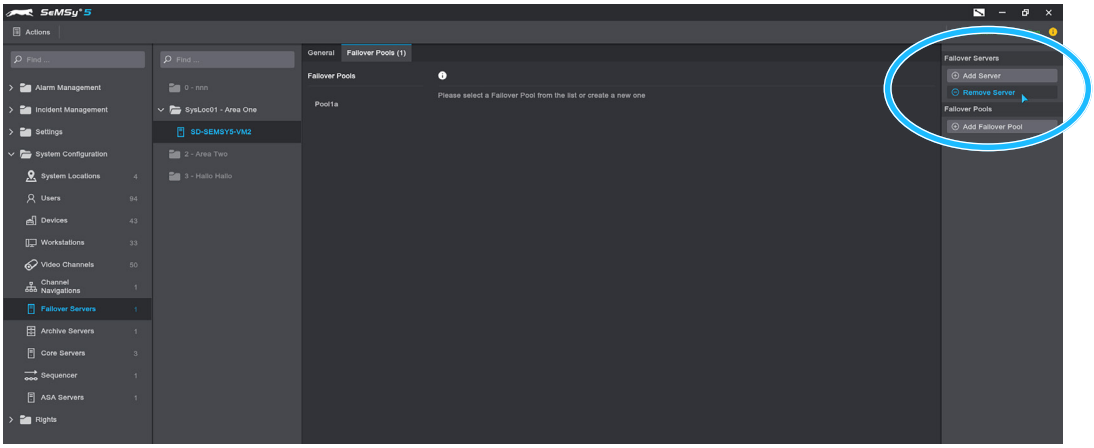

Fig. 9

Failover Pools

Failover pools organize selected recording devices that must remain operational in case of a system failure or downtime. Depending on the system environment and circumstances, multiple failover pools can be run on one failover server.

- Select the desired failover server in the system location folder.
- Select the tab **Failover Pools**.
- Click **Add Failover Pool** to create a new device pool.

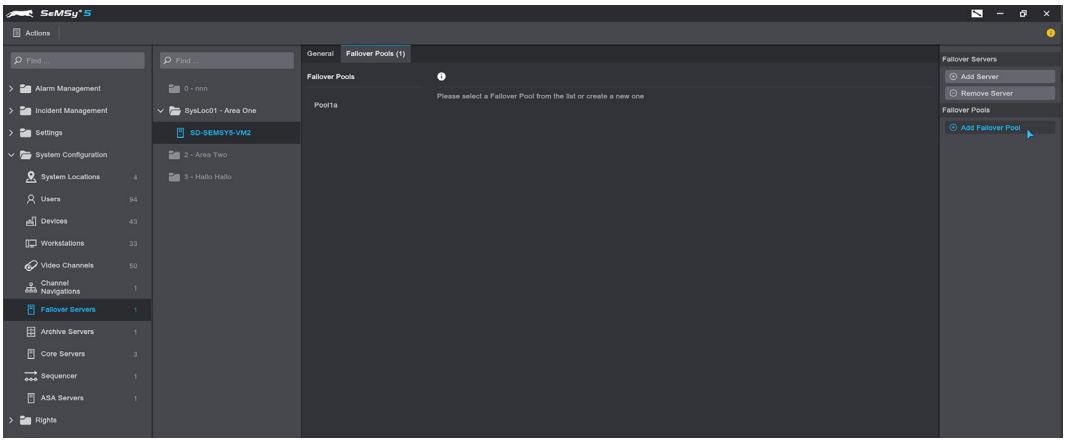

Fig. 10

The **Failover Pools** dialog opens.

Pool Number - a uniquely assigned number for the clear identification of a failover pool.
Name - name of the selected failover pool.
Description - clear description for better identification of the selected failover pool. Is displayed in the **Failover Pools** list.

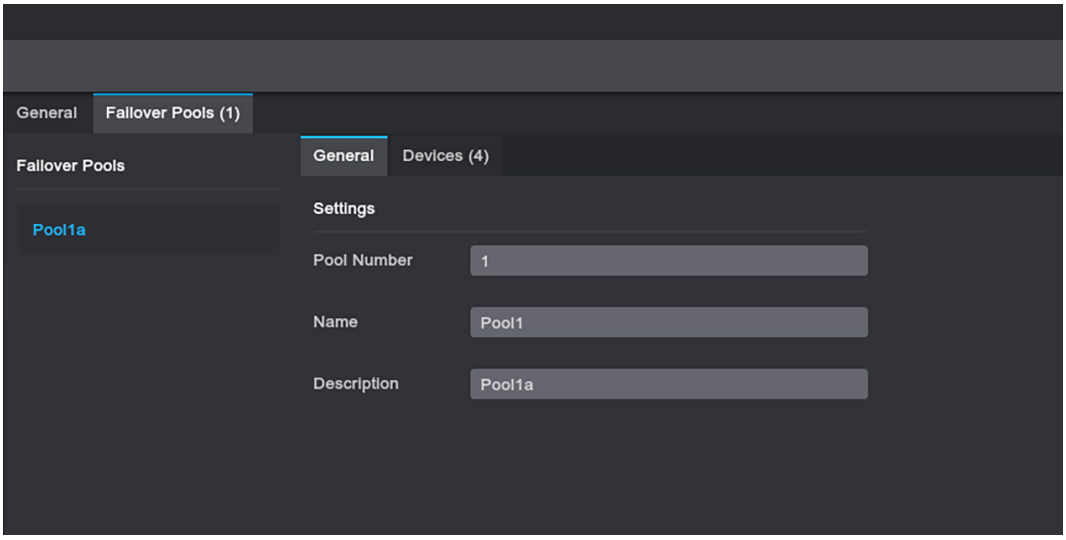

Fig. 11

Remove Failover Pool

- Select the required failover pool to be removed.
- Select **Remove Failover Pool** in the right hand column.
- Confirm the following dialog with **Ok** to delete the selected failover pool.

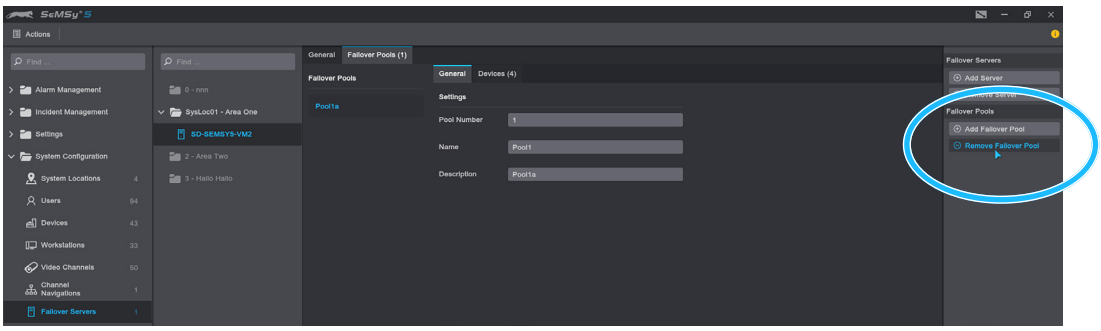

Fig. 12

Add Devices to a Failover Pool

Failover pools require devices to accessed during a failure in order to ensure the continuous functioning of a system. Devices must be added to the corresponding system location to be available for the use in failover pools.

- Select the tab **Devices**.
- Add devices to the failover pool by moving the required entries via drag and drop into the column **Selected Devices**.

Devices - available recording devices for the use in a failover pool from the corresponding system location.
Selected Devices - recording devices that are added to the selected failover pool.

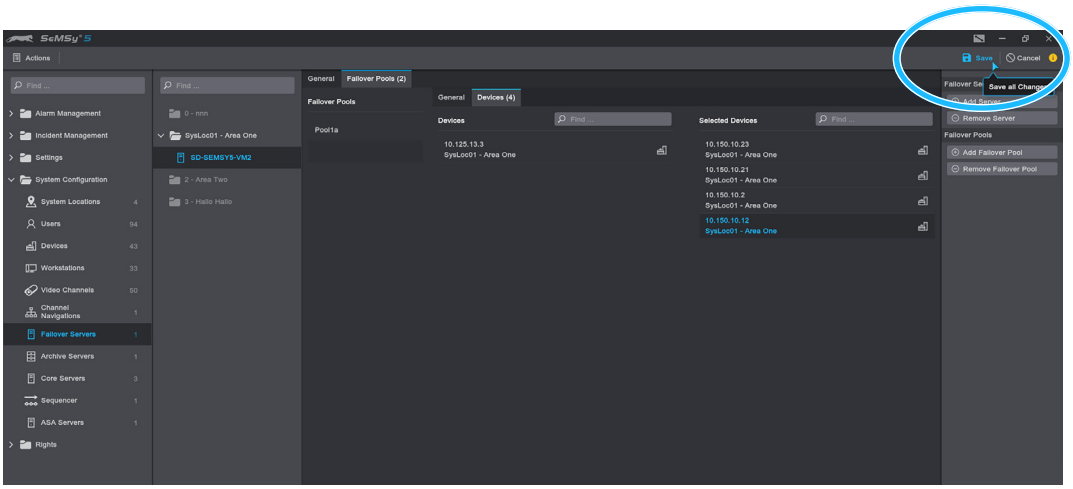

Fig. 13

► Click **Save** to confirm the configuration.

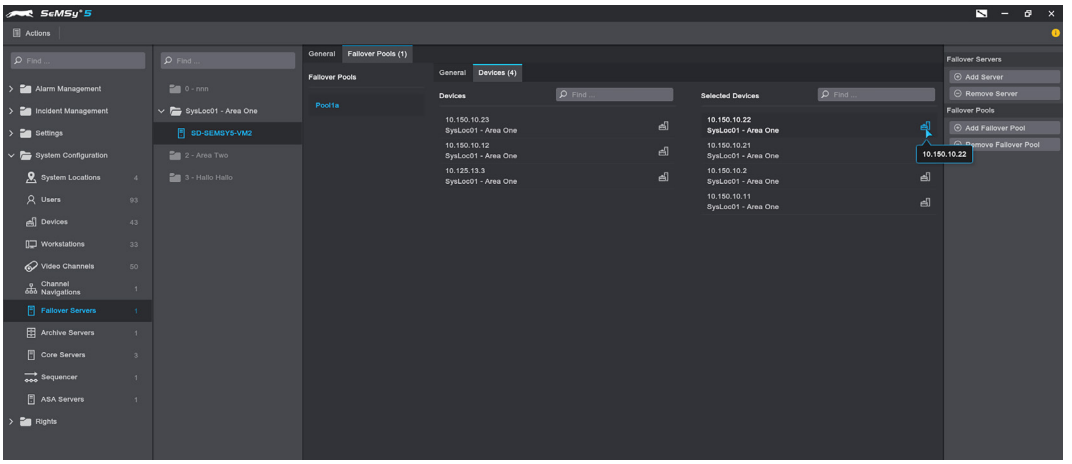

Fig. 14

For further information about the selected recording device such as the number and type of connected cameras (**Video Inputs**) click on the Device Icon to access the selected recording device in the **Devices** menu.

Add Devices to System Location

For further information about device management and how to add devices to the SeMSy® Video Management System see the document *c_HEMISPHERE_SeMSy_Configuration_Application_en* chapter **4.5 Devices** on page 51.

Configure Recording System as Spare Device

One or more empty recording systems can serve as spare devices. In case of a system failure the failover module uses the empty channels of a spare device to connect cameras according to priority thus maintaining the functionality of the system.

- Select the menu item **Devices**.
- Open the desired system location folder.
- Select the desired recording system from the list.
- Activate the check box **is Spare**.
- Click **Save** to confirm the configuration.

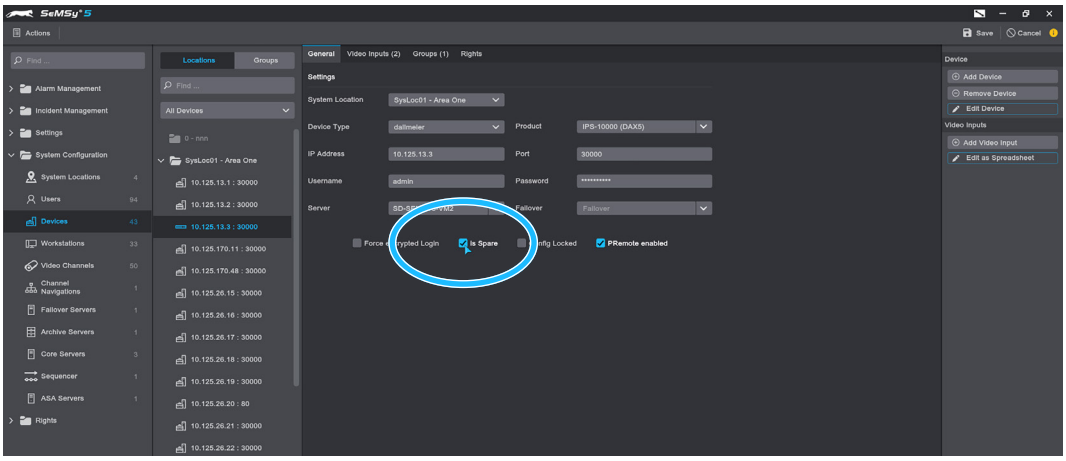

Fig. 15

The selected recording system is now declared as spare device.

3 SEMSY RECORDING FAILOVER CLIENT

The SeMSy® Recording Failover Client serves as a tool to overview states of SeMSy® failover servers and spare devices and is used to execute manual failover.

- Open the **SeMSyRecordingFailoverClient.exe**.

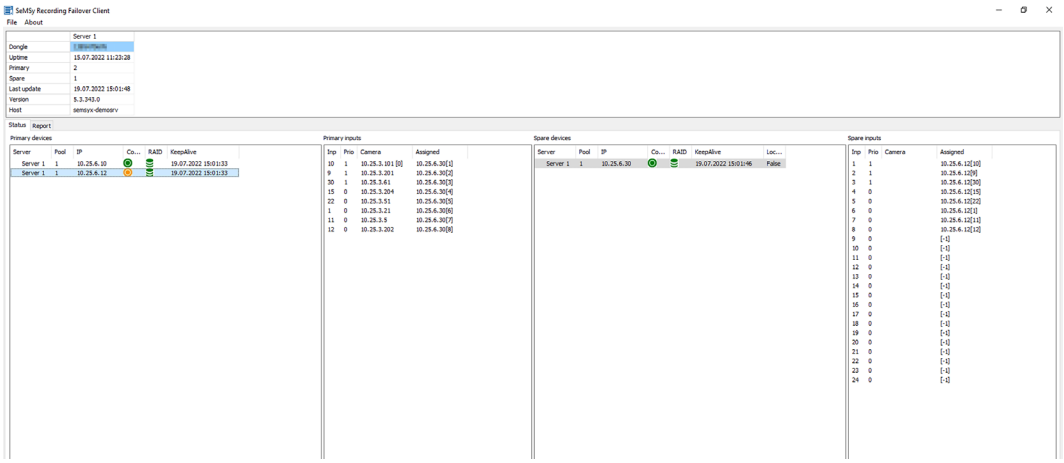

Fig. 16

Manual Failover

- Select the required server.
- Right click the entry.
- Select **Manual Failover** to execute a failover on the selected server.

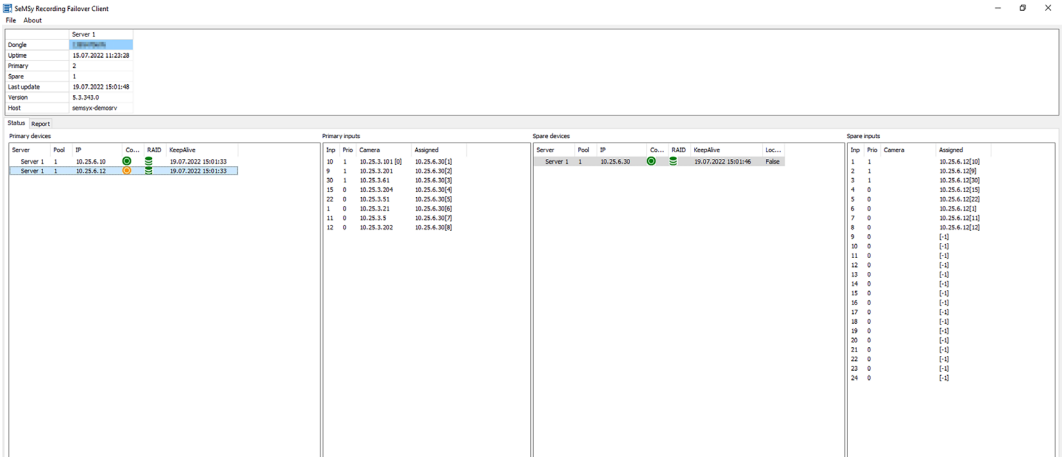

Fig. 17

Devices

Server - lists all failover servers by name.
IP - displays the corresponding server IP.
Connected - displays the connection state of failover servers. The following three connection states can be displayed.

- **Green** - the server runs without errors and incidents.
- **Yellow** - the server executes a failover and is temporary not available.
- **Red** - the server registered an incident or error and is not available.

RAID - the selected failover server performs verifications on each recording device to detect RAID failure.

- **Green** - no error detected.
- **Gray** - state can not be verified.
- **Red** - RAID failure detected. The red state appearance can be caused by an executed failover after the recorder has displayed a RAID error.
  or
  The recorder remains accessible after the execution of a failover but displays a RAID failure.

Keep Alive - displays the timestamp of the last keep alive call to the corresponding server.

Inputs

Inp - displays the single input channels of a selected failover server.
Prio - displays the priority value of the corresponding primary input. Priority values depends on the number of inputs. In addition, the priority value manages the order of distribution of inputs from the primary to the spare server.
Camera - displays the IP address of the connected camera.
Assigned - lists the IP address and channel number of spare inputs assigned to a primary input and vice versa. The value of **[-1]** indicates a not assigned channel.