Security Management System – Using Redundant Server

Security Management System includes ‘Redundant Server’ module. As the name suggests, ‘Redundant Server’ application is used for ‘redundant processing’ doing exactly same processing as the main server.

Redundant server is used in requirements where a copy of recorded data is needed at another physical location other than the main server location. So, in case there is any problem with the main server, data can be retrieved from the redundant server.

Typical use of redundant server is as follows –
1. Main server is installed at a location
2. Redundant server is installed at another physical location. But the computer hosting the redundant server application has access to all cameras, just like the main server and there is sufficient bandwidth available between the redundant server and the cameras.
3. A main server is assigned to the redundant server, from the redundant server user interface.
4. The main server’s configuration is synchronized with the linked redundant recording server automatically.
5. Redundant recording server starts video capture and recording from same cameras, working parallely with the main server to generate redundant data.

This document describes the configuration of the redundant server.
**Installation:**

1. Redundant server is part of the ‘Security Management Server’ installer. Please install the ‘Security Management Server’ on computer which is expected to work as a redundant server.

2. After the installation is complete, access the programs menu shortcut ‘[Programs Menu] -> Security Management System -> Server -> Manage Installation’

3. This will pop up the ‘Security Management System – Manage Installation’ application.

4. Select ‘Redundant Server’ option for ‘Desktop Shortcuts’.

5. Select ‘Redundant Server’ option for ‘Programs Menu Shortcuts’.

6. Click on the ‘Update button’. This will update the shortcuts and will give pop up a ‘success’ message, at the end of the processing.

7. Click on the ‘Close’ button to close the ‘Security Management System – Manage Installation’ application.
Configuration:

1. Execute the ‘Redundant server’ application from the programs menu shortcut ‘[Programs Menu] -> Security Management System -> Server -> Redundant Server’

2. The redundant server requires a separate license. If license is not activated, for the redundant server, licensing wizard will be displayed. Please follow the licensing wizard, request for a license activation file and activate the license. The licensing process is same as that for the main server.

3. If the license for the redundant server is activated, a login dialog will be displayed.

4. Default ‘User Name’ is ‘admin’ (without the quote characters) and default password is ‘admin’ (without the quote characters).

5. Type the user name and password and click on the ‘Login’ button.

6. This will display the redundant server application’s main user interface.

7. Please select the ‘Sites’ sub-tab under the ‘Redundant Server settings’ tab, from the navigation menu, available on the left side.

8. Click on the ‘Add site for redundant recording’ button.

9. This will pop up the ‘Add new site for redundant recording’ wizard
10. Please type the IP address of the main server, to which we need to link to.

11. Type the user name and password to connect to the main server. This should be for the user configured in the main server which has ‘Administrator’ privilege.

12. Click on the ‘Add’ button

13. After connecting to the main server, a success message text is displayed.

14. Click on the ‘Finish’ button to save the settings and to close the wizard.

15. The redundant servers queries the configuration from the main server and starts the processing immediately.
16. The toolbar buttons available at the top can be used to retrieve the data recorded by the redundant server:
   (a) Video view – this opens the video screen which can be used to view live video or playback the recorded video
   (b) Search alarms – this opens the search screen which can be used to search for alarms and to view video associated with any of the searched alarms
   (c) Export video – this opens the video export screen which can be used to export the recorded video

17. Recording drives for the redundant server can be configured from the ‘Data management’ tab in the navigation menu, available at the left side.

18. Watchdog application is available with the redundant server application. Please execute the watchdog application from the programs menu shortcut ‘[Programs Menu] -> Security Management System -> Server -> Watchdog - Redundant Server’
Notes:

1. The hardware recommendations for the redundant server are same as that of the main server. Since the redundant server continuously performs video capture, video recording and video retrieval operations, same as the main server.

2. Sufficient dedicated storage space should be allocated to the redundant server.

3. The redundant server uses almost same amount of resources as the main server. Especially the network bandwidth requirement for video capture is exactly same as the main server. Since main server and the redundant server are expected to run in same network (as they both need direct access to the cameras), it is important to calculate the network bandwidth requirements and ensure that sufficient bandwidth is available to support all components in the network – main server, client applications, and the redundant server.