Security Management System – Client Workstation Fine Tuning

A good configuration computer hardware is recommended for the client / workstation computer, in order to handle the video display for multiple cameras.
Most important hardware requirements are –
    (a) Processing power,
    (b) Graphics card
(Please refer to the 'Hardware recommendation' document for information about recommended hardware configurations)

The Security Management System Client software uses default settings, assuming sufficient hardware support. In most of the deployment situations, no changes are needed to the default settings of the client software.

However, if the hardware support is not available, performance issues may be observed at the client / workstation computers (in single site connection mode or multi-site connection mode).
In such cases, following configurations are recommended.

The sequence of the steps is important. When the performance improvement is observed, conclude the configurations for that client / workstation computer and skip further steps.
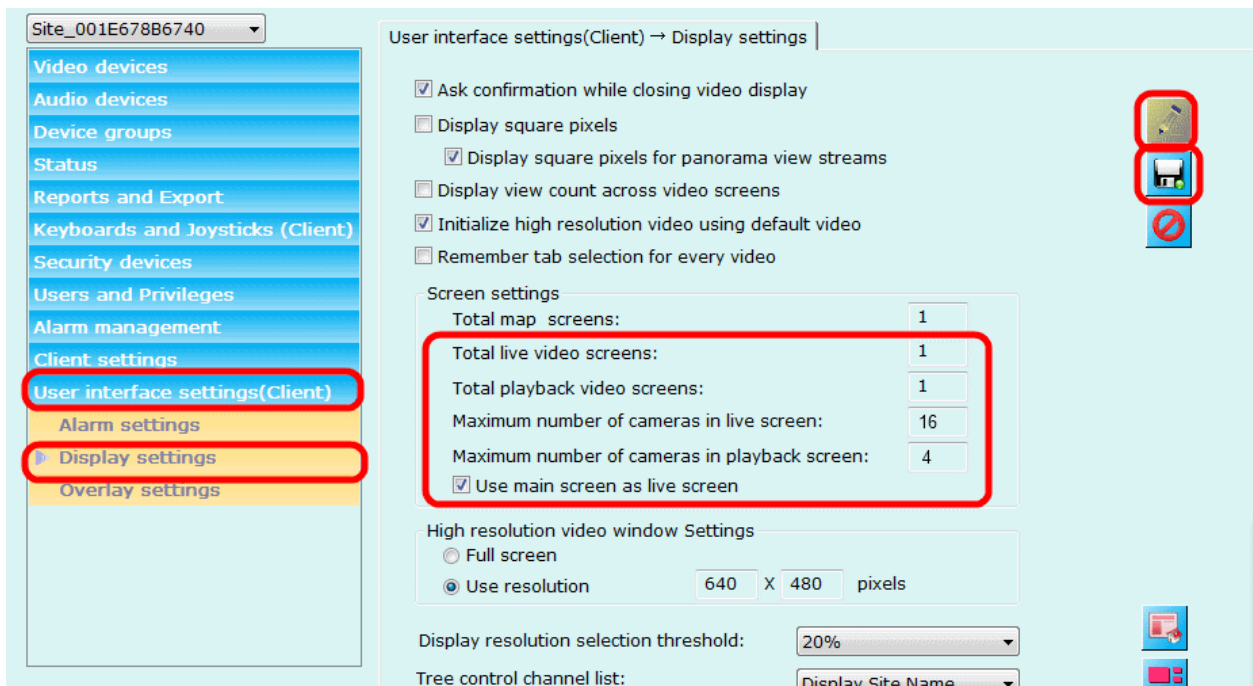
Following sections describe each of these steps in detail

Fine Tuning Steps

Control 'number of screens' and 'maximum number of cameras in a screen'

1. Access 'Settings -> Settings' menu, from the menu bar available at the top of the main screen of the client software.
2. Navigate to the 'User interface settings (Client) -> Display settings' settings page
3. Click on the 'Edit' button (available in the top-right corner of the settings page), to enable the user interface
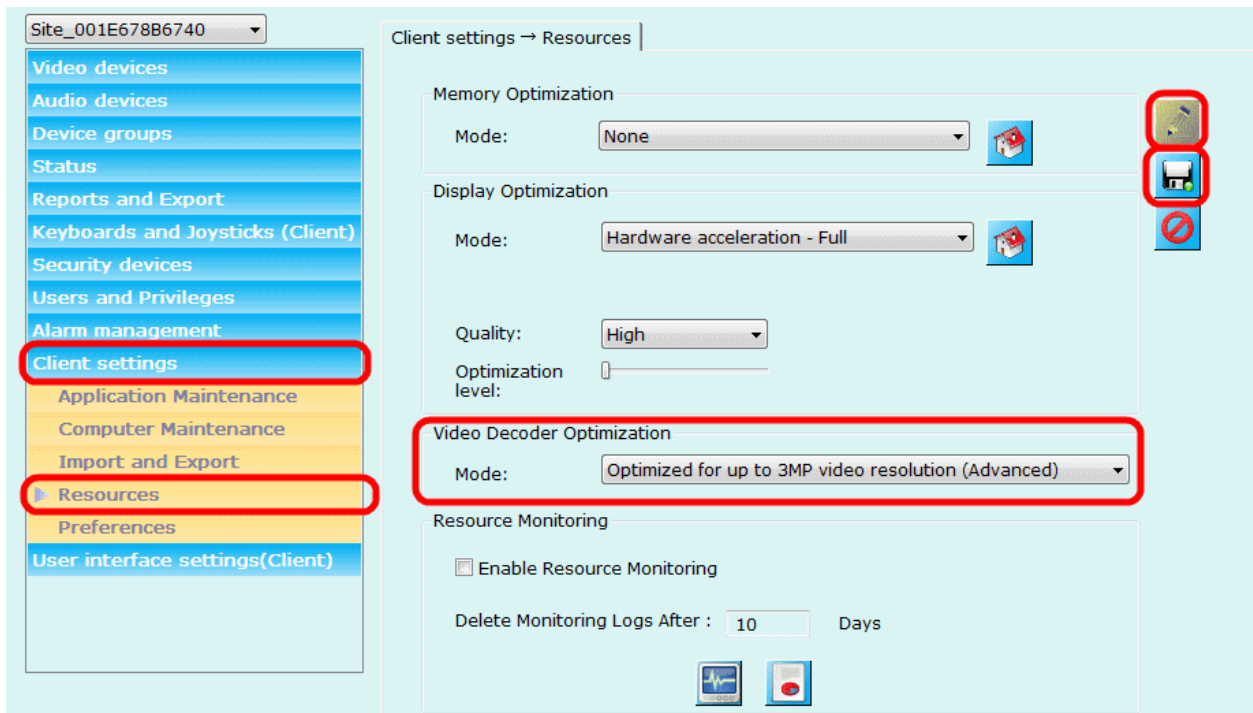

4. Under 'Screen Settings' group, set following options –
   (a) Enable 'Use main screen as live screen'
   (b) Set 'Total live video screens' as 1
   (c) Set 'Total playback video screens' as 1
   (d) Set 'Maximum number of cameras in live screen' to a lower value. This value should be minimum possible, as per the deployment requirement.
   (e) Set 'Maximum number of cameras in playback screen' to 4. If the hardware support is not good and if the recording is being done at high resolution and is the deployment requirements permit, this can be set to 1 as well.
5. Click on the 'Save' button (available in the top-right corner of the settings page), to save the settings and to disable the user interface. Accept any warnings displayed.
6. Close the settings dialog box, by clicking on the standard Windows Close ('X') button in the dialog title-bar

Important - Close the client software and restart it. This will apply the new settings.

Adjust 'Video Decoder Optimization' settings

1. Access 'Settings -> Settings' menu, from the menu bar available at the top of the main screen of the client software.
2. Navigate to the 'Client settings -> Resources' settings page
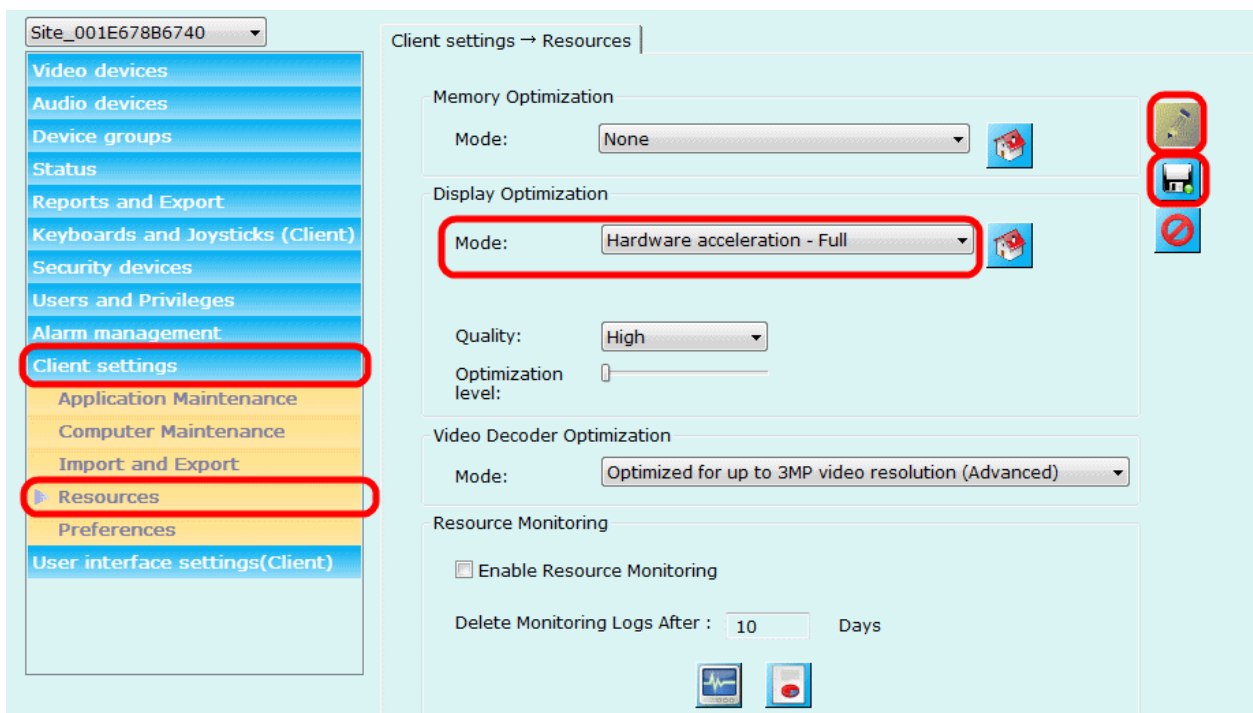3. Click on the 'Edit' button (available in the top-right corner of the settings page), to enable the user interface

4. Under 'Video Decoder Optimization' group, set following options –
   (a) Select 'Mode' as 'Optimized for up to 3MP video resolution (Advanced)'. (If there are video streams with resolution more than 3 megapixels, please select option 'Optimized for more than 3MP video resolution (Advanced)')
5. Click on the 'Save' button (available in the top-right corner of the settings page), to save the settings and to disable the user interface. Accept any warnings displayed.
6. Close the settings dialog box, by clicking on the standard Windows Close ('X') button in the dialog title-bar

Important - Close the client software and restart it. This will apply the new settings.

Adjust 'Display Optimizations' settings 1

(NOTE – this step should be used only if the client workstation computer has graphics card installed. The graphics card should be external PCI card. On-board video/graphics memory is not useful for optimizations, and hence should not be considered)

1. Access 'Settings -> Settings' menu, from the menu bar available at the top of the main screen of the client software.
2. Navigate to the 'Client settings -> Resources' settings page
3. Click on the 'Edit' button (available in the top-right corner of the settings page), to enable the user interface
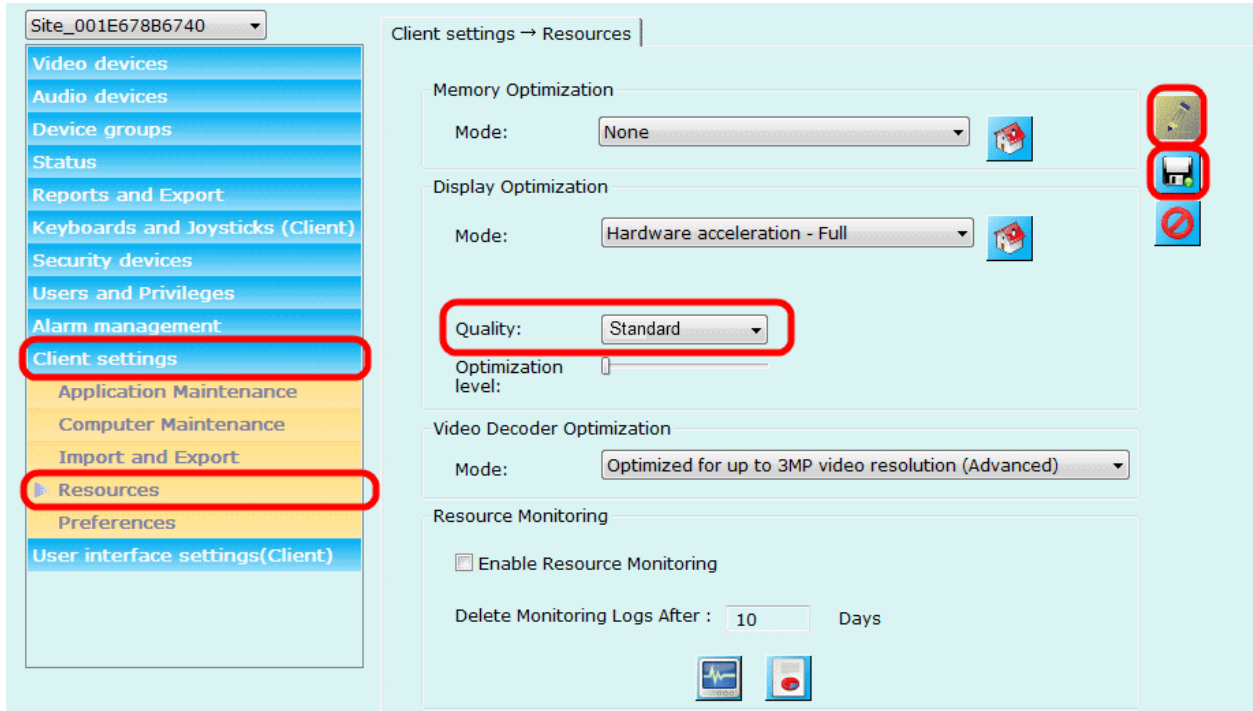

4. Under 'Display Optimization' group, set following options –
   (a) Select 'Mode' as 'Hardware acceleration – Full'
5. Click on the 'Save' button (available in the top-right corner of the settings page), to save the settings and to disable the user interface. Accept any warnings displayed.
6. Close the settings dialog box, by clicking on the standard Windows Close ('X') button in the dialog title-bar

Important - Close the client software and restart it. This will apply the new settings.

Important – if the client software is not able to display one or more videos after restart, or does not perform well, it indicates that the workstation computer does not have compatible graphics card installed. Hence the settings done in this step should be reverted back and the client software should be restarted again.

Adjust 'Display Optimizations' settings 2

1. Access 'Settings -> Settings' menu, from the menu bar available at the top of the main screen of the client software.
2. Navigate to the 'Client settings -> Resources' settings page
3. Click on the 'Edit' button (available in the top-right corner of the settings page), to enable the user interface
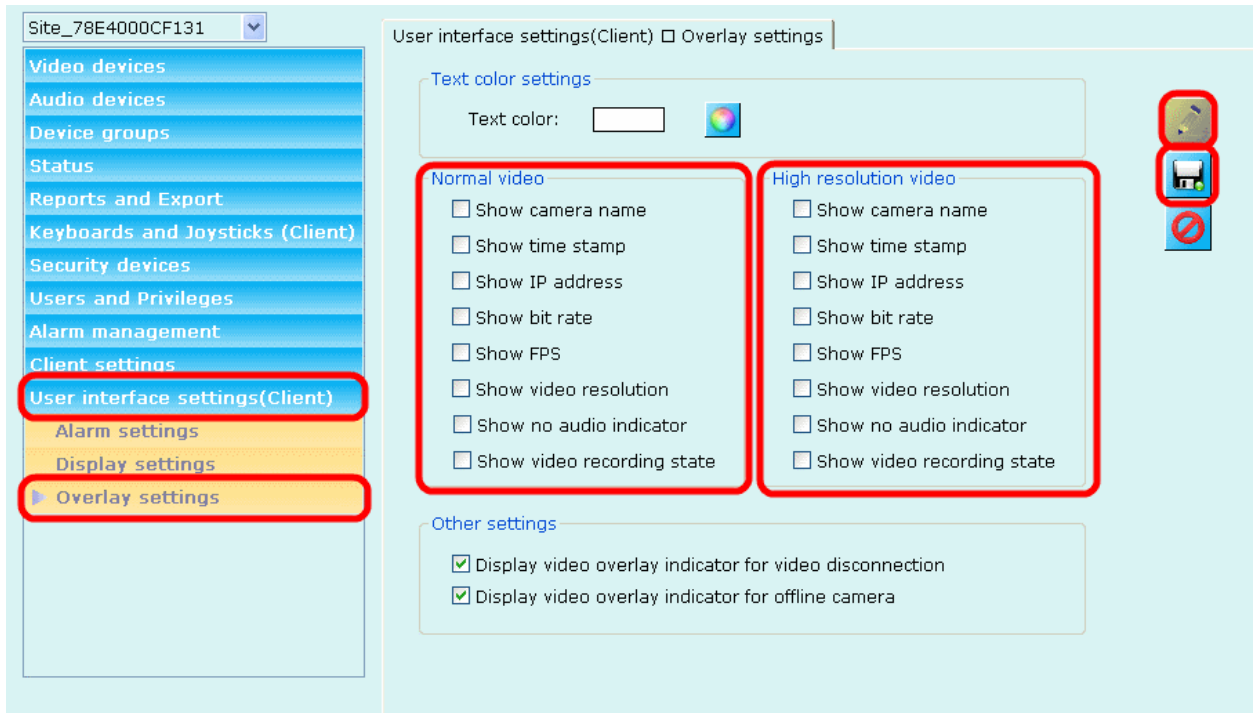

4. Under 'Display Optimization' group, set following options –
   (a) Select 'Quality' as 'Standard'
5. Click on the 'Save' button (available in the top-right corner of the settings page), to save the settings and to disable the user interface. Accept any warnings displayed.
6. Close the settings dialog box, by clicking on the standard Windows Close ('X') button in the dialog title-bar

Important - Close the client software and restart it. This will apply the new settings.

Disable video overlays

1. Access 'Settings -> Settings' menu, from the menu bar available at the top of the main screen of the client software.
2. Navigate to the User interface settings (Client) -> Overlay settings' settings page
3. Click on the 'Edit' button (available in the top-right corner of the settings page), to enable the user interface

4. Disable all overlay settings available under 'Normal video' and 'High resolution video' groups
5. Click on the 'Save' button (available in the top-right corner of the settings page), to save the settings and to disable the user interface.
6. Close the settings dialog box, by clicking on the standard Windows Close ('X') button in the dialog title-bar

Reduce monitor resolution

From the Windows standard Control Panel, access the 'Display' settings for the computer monitor. Set the monitor resolution to closes possible resolution to 1024X768. (In case of some monitors, especially HD monitors, 1024X768 display resolution option will not be available. Please select the closest available resolution, in such cases)

Important - Close the client software and restart it. This will apply the new settings.