Administrator Control Panel - WEB-console to control server settings. Part 2 Section Manage

Manage is the main section of management console, where detailed parameters of the server software modules are configured. The section contains horizontally arranged tabs in accordance with hardware and software components selected in Configure Server Components section.

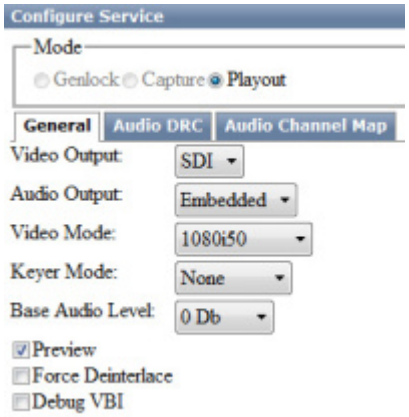
Video I/O Boards tab

The first tab of Manage section is Video IO Boards, where you can configure the capture and playback modules. The software modules of SL NEO platform directly interact with I/O boards/interfaces installed in the system, the windows displays the number and types of channels that support the devices: Genlock, Capture, Playout, and displays the current settings. The devices are sorted in the order in which they were selected in Configure Server Components.

The figure shows a variant of capture and playout module settings to work with the Matrox DSX.LE3/22 board in a 2 inputs + 2 outputs configuration.

The Genlock window is designed to activate the external synchronization mode of the output devices. You can change the settings by pressing the Edit button next to the current mode (Black-Burst, PAL in

the picture).



The Output 1 window displays the current settings for the first output of the Matrox DSX.LE3/22 board. You can change the settings using the Edit button, next to the current mode (SDI/Embedded, 1080i50).

In the Configure Service window that opens you can see and edit the current settings of the first output.

Mode=Playout is set for this channel, it cannot be changed to Capture because it is not provided by the board model.

The General tab allows selecting a video output format and audio output type from the list. Keyer Mode=None is set for normal full-screen playback, Keyer Mode=External is used when it is necessary for the server to generate a pair of FILL+KEY signals. In this case the second output of the board (Output 2) will be used for the KEY signal. This mode is available only for Matrox boards of certain models - DSX.SD, DSX.LE3/22 and DSX.LE/04.

If necessary, you can increase or decrease the level of the audio output in the Base Audio Level field (setting, non-operational adjustment in dB).

Activating the Preview item enables the function of permanent low stream ip-broadcasting to the network of the signal of the given channel. The network client application Multiscreen, a control multiscreen for input and output signals of SL NEO servers, serves as the receivers of the stream. In addition, the active Preview mode allows you to display an icon with video for this channel in the Status section of the web control console.

The Force Deinterlace item allows you to eliminate interlacing in the generated video sequences. CPU server resource is used for this process, you should take this into account for HD channels and control CPU load.

The Audio DRC tab allows you to activate the built-in software audio compressor/limiter and normalize the output audio level.

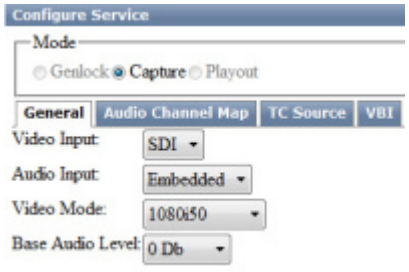
The Audio Channel Map tab allows you to assign audio output channels to groups in the SDI output signal.

Similar parameter setting actions are available for the second output channel of the board (Output 2 window).

When editing is complete, you must save the settings made - the Apply Changes button at the top of

the control console. In this case, the corresponding channel in which changes of parameters were made will be restarted, the playback will be paused at the moment of restart.

The algorithm of setting parameters of output signals is similar for other types of output devices. An example of configuring the Ethernet server port for encoding and generating the UDP/RTP IP TS output stream can be found here.



The Input 1 window displays the current settings for the Matrox DSX.LE3/22 board's first input. You can change the settings by clicking the Edit button, next to the current mode. In the Configure Service window you can see and change the capture channel settings.

The General tab allows selecting from the list and setting the video input format, resolution and frame rate parameters, audio signal type, adjusting the audio input level if necessary.

In the Audio Channel Map tab you can switch audio input channels extracted from groups in the SDI input signal.

The TC Source tab allows you to specify the source of the timecode, in particular to activate VITC decoding if it is present in the input signal.

The VBI tab allows you to activate the recording of information contained in the vertical blanking interval for later analysis by the developers.

When editing is complete, you must save the settings made - the Apply Changes button at the top of the control console.

The algorithm for configuring capture channels is similar for other types of input devices. Example of configuring Ethernet server port for receiving UDP/RTP/RTSP IP TS transport streams can be found here.

Storages tab

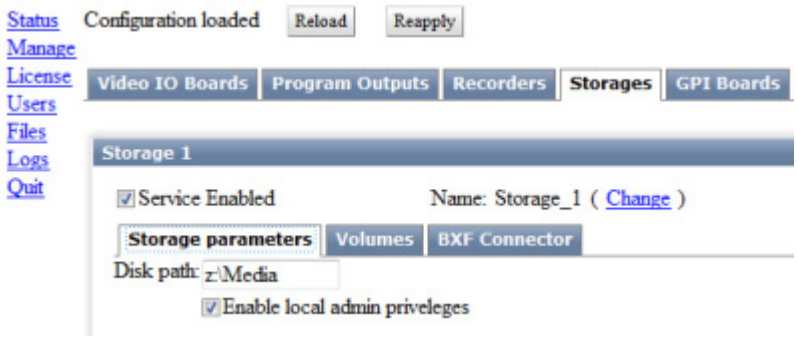
The Storages tab allows you to configure SL NEO Media Database - a server module that serves as a specialized database for the content stored on the server. In the Storage Parameters tab you should specify the path to the local disk that is physically connected to the server and to the folder where the media and metadata will be stored.

The technology of working with the server database does not provide for the direct user access to this folder by means of Windows - all operations with the materials located in this folder should be performed exclusively by the SL NEO client software: from the Media Browser and File Monitor windows of the News Cut and Air Manager applications.

The SL NEO platform allows you to set simultaneous functioning of several SL NEO Media Database

services on one server; you should set paths to the local disk on the server and to the folder, where the content is located, for each of them.

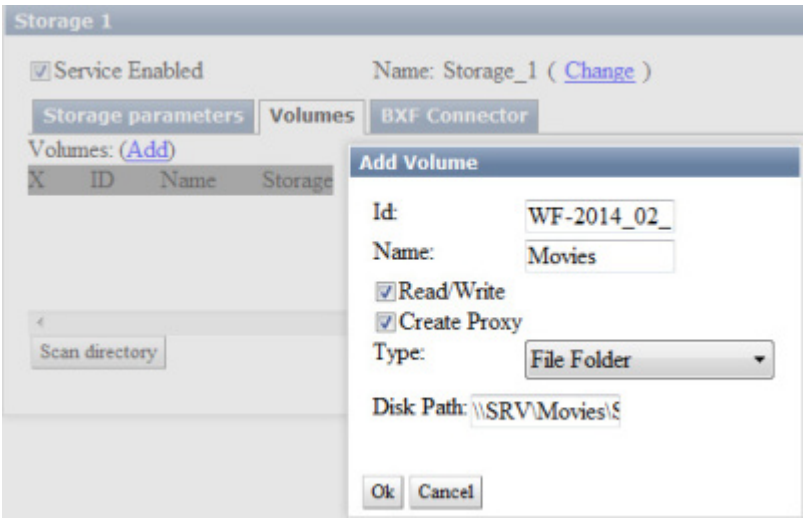
Enabling the Enable local admin priveleges item allows you to set full access rights for the server and client modules functioning locally on the server to the database service and content.



The server DB module allows you to store attributes (metadata) for audio/video/graphic materials and provide users with a set of services for content management (search by attributes, keyframes, setting “lifetime”, etc.), to import materials into and export from the server storage, with and without transcoding.

The key advantage of using SL NEO Media Database is the use of a single cached connection to the local server array, where all write-playback operations, all network user requests are done only through this single connection. As a result, Net Bios of Windows is not used and the artifacts associated with the use of SMB protocol and Shared-folders, the need to connect “network drives” are excluded, users do not work with OS files, but with “clips” (actually - with proxy-copies of materials, viewing and editing them), resulting in a significantly reduced load on the network and disk arrays.

The Volumes tab allows you to connect local or network attached storage (NAS) to the SL NEO Media Database module, index them, form attributes (text metadata) and then work with media materials through the database service, without using the file system tools.



The Add button in the Volumes tab creates a new connection to the array; in the window that opens, the name of the storage is specified in the Name field, which will later be displayed in the Media Browser window of the News Cut and Air Manager applications and identify the storage. The ID field displays the storage ID, assigned by the system.

The Create Proxy item allows activating in the background the proxy generation process for all files

stored on the connected array. The location for storing proxy files is a local disk of the server and the folder specified in the settings under the Storage Parameters tab (subfolder Proxy/ID of the storage). The separate storage of proxy and full res-content allows you to access the materials through the server's DB in the case when the external array is switched off for some reason.

SL NEO Media Database services can be configured several times on one server; each service should refer to the original folder for storing media and metadata. Adding new SL NEO Media Database modules is performed when the server software is stopped, in the configuration console of the basic hardware and software components of the SL NEO server - Configure Server Components.

When the editing is finished, you should save the settings made - the Apply Changes button at the top of the management console.