INSTALLATION AND CONFIGURATION MANUAL

LSM-VIA

Version 1.8 | July 2024

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The latest version of the user manual and other EVS product documentation can be found on the EVS documentation portal. The documentation portal can be accessed through the VIA Portal on the following webpage: https://viaportal.evs.com/.

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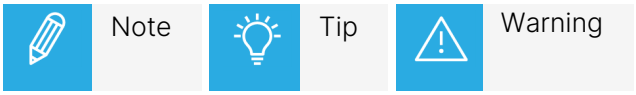
ICONOGRAPHY



What's New

In the Installation and Configuration Manual the icon NEW ! has been added next to the text to highlight information on new or updated features.

The changes linked to new and updated features in version 1.8 are listed below.

Supported servers and Multicam version.

- The current version works with Multicam 20.7.

  See section "Overview" on page 4.

- Possibility to use LSM-VIA with XT-VIA, XT-GO and XS-VIA.

  See section "Product Overview" on page 1.

  See section "Overview" on page 4.

  See section "Infrastructure Settings" on page 27.

Settings

- A new parameter is available to be able to create clips with identical or different IN/OUT points on the various camera angles.

  See section "System Settings" on page 32.

- Some parameters are not available with XS-VIA configurations: VarMax, Advanced Audio Editing, Audio Effect Duration.

  See section "System Settings" on page 32.

- A configuration can be exported from or imported to any XClient-VIA of the network.

  See section "Importing or Exporting a Configuration" on page 46.

1. Product Overview

Description

LSM-VIA is an IP-based solution that streamlines your live slow motion replay and highlights operations thanks to its usability, flexibility, speed and control.

NEW ! It works with the XT-VIA, XT-GO or XS-VIA servers and relies on EVS VIA microservices ecosystem, opening up new workflows and providing faster and direct access to all the content on the live production network.

The LSM-VIA Remote Panel offers a streamlined ergonomics. The console layout remains familiar to the LSM operators.

Its console and its integrated touchscreen provide a direct access to basic and advanced functions.

Both the console key display and the touchscreen are automatically adapted according to the mode you are working in or the action you are doing, giving you what you need, just when you need it.

The LSM-VIA Viewer is mainly used for content management. It gives access to the list of clips and the list of playlists from the whole network, as well as to a visual representation of the active playlist.

Compared to the legacy LSM Remote, the LSM-VIA solution provides the following features, among others:

- faster access to content: direct access by entering the LSM ID; access to all the record trains on the whole XNet network.
- faster metadata tagging
- new or improved ways of organizing content:
  - The Shotbox tool allows users to map media items to buttons, with a set of playout options.
  - The Trains screen gives the possibility to define filters on a selection of record trains on the whole XNet network.
- assignable shortcut buttons: possibility to map predefined functions, media or Dyvi macros to 6 buttons for a quick access or action triggering.

The operator relies on the Multiviewer of the EVS server to view the requested IN and/or OUT channels.

The LSM-VIA MultiReview is an advanced mode which allows the LSM-VIA user to operate on all the XT-VIA server and XS-VIA server recorder channels from the whole network. See section "Setting Up the LSM-VIA MultiReview Environment" on page 8 for a detailed description.

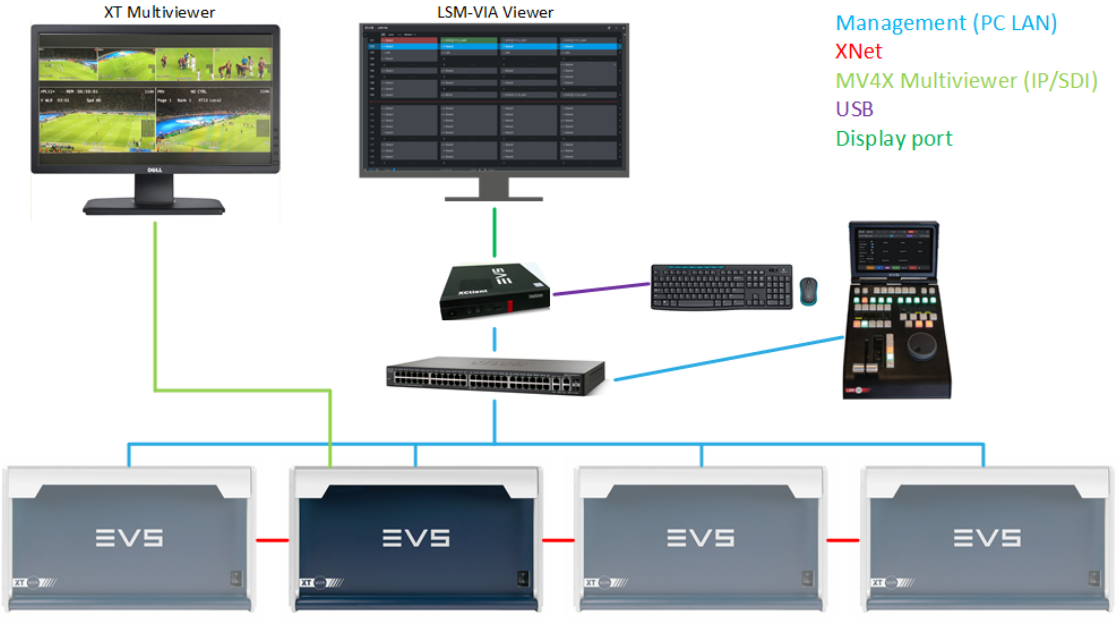
Setup

On a standard LSM-VIA setup, the operator works with LSM-VIA using the LSM-VIA Remote Panel and the LSM-VIA Viewer on a dedicated LSM-VIA workstation.

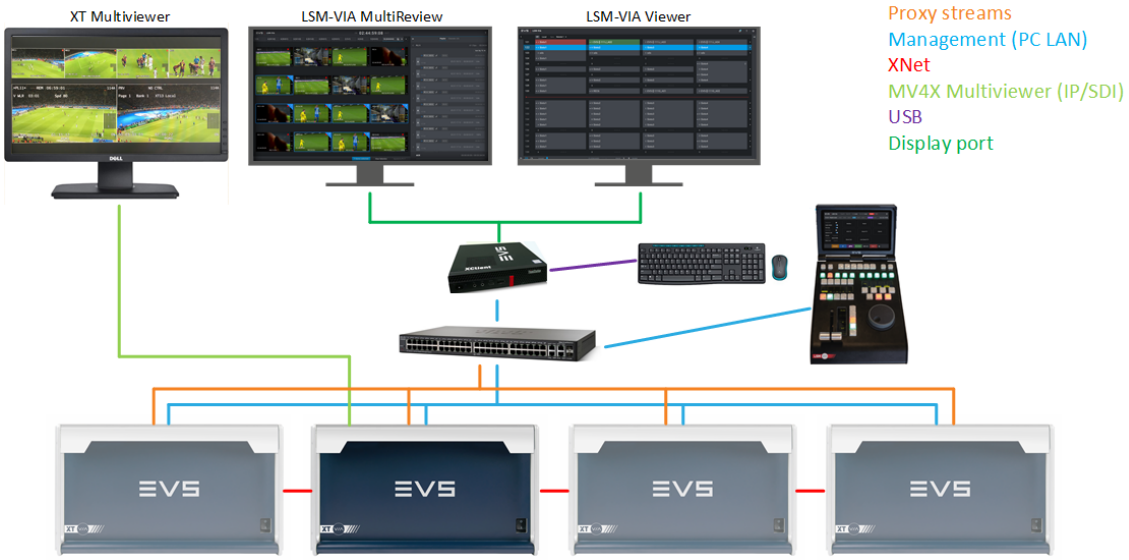
The LSM-VIA Viewer and the LSM-VIA Remote Panel both communicate and control the EVS servers via an Ethernet connection.

The user can access any EVS video server (XT3, XT4K) on the same XNet network as the EVS servers connected to LSM-VIA.

The operator relies on the Multiviewer of the EVS servers to view the requested IN and/or OUT channels.



On an LSM-VIA MultiReview setup, the XClient-VIA receive the proxy streams multicasted from the XT-VIA servers, and XS-VIA network servers, and routed to the Control Network (PC LAN) through the switch. See section "Setting Up the LSM-VIA MultiReview Environment" on page 8 for a detailed description.



NEW ! Limitations with XS-VIA Servers

The following restrictions exist with XS-VIA servers:

- VarMax functions are unavailable
- the lever is only used to play (100%) or pause (0%) the media but cannot change the playout speed
- the Split Screen mode is not available
- the Advanced Playlist Editing workflows are unavailable.

The following operations are possible:

- the lever can be used to edit playlists (including Second Lever Range support up to 400%)
- Search TC functions are available
- the Multi-operator mode is available.

NEW ! Limitations with XT-GO Servers

The following restrictions exist with XT-GO servers:

- the Split Screen mode is not available
- the MultiReview mode is not available.

2. Prerequisites

2.1. Overview

Prerequisites on the Network

The operator service, installed on the XClient-VIA, manages communication between the Remote Panel and the LSM-VIA Viewer. It also communicates with the VIA services on the XT-VIA server.

The LSM-VIA configuration tool can be accessed through a browser by entering the IP address of the XClient-VIA.

The following prerequisites apply regarding the network.

- The XClient-VIA and the Remote Panel must always be at the same location and should not be deployed in a distributed architecture.
- The round-trip time (RTT) between the XClient-VIA and the Remote Panel should be 20 ms max.

  Even if the LSM-VIA workstation is virtualized, the round-trip time between the LSM-VIA Remote and the virtual machine should not exceed 20 ms.
- When working in remote conditions (LSM-VIA and the EVS video server in different locations), the maximum recommended round-trip time (RTT) is 100 ms between the XClient-VIA and the EVS video server. The usability of the product and the overall user experience will be degraded with higher latencies.
- When the EVS video servers are in the same VLAN, no additional configuration is needed.

  When the EVS video servers are deployed in a different VLAN (MTPC) than the Remote Panel and the XClient-VIA, then the following ports must be opened to allow the XClient-VIA to communicate with the server:

  - TCP 8088 (for XT Operations).
  - TCP 8080 (to access the LSM-VIA configuration tool from a browser).

  Routing must be set accordingly (IT).
- The TCP 9002 and 9004 ports must be opened to allow LSM-VIA to communicate with VIA Xsquare.
- The TCP 6668 and 6669 ports must be opened to be able to use the search functions from the LSM-VIA Viewer.
- The TCP 2071 port must be opened for the integration of LSM-VIA with Cerebrum.
- To make the device more secure, the 80 port forwarding should be disabled.
  - With LSM-VIA versions prior to 1.2, the port forwarding was enabled by default during the installation.
  - On workstations upgraded with LSM-VIA version 1.2, the installation does not disable the port forwarding.

- On workstations where the first LSM-VIA version installed is 1.2 or upper, the port forwarding is disabled by default.

  See section "Disabling or Enabling Port 80 Forwarding" on page 6 for more information on how to proceed.

- IGMP Snooping must be properly configured on the switch of the PC LAN network connected to the XClient-VIA and to the LSM-VIA Remote consoles to avoid having the LSM-VIA network interfaces overwhelmed with Multicast packets not intended for them. Refer to the EVS Network Design Guide for more details.
- It is highly recommended that the display resolution of the XClient-VIA monitors used for the Viewer and the MultiReview is set to 1920 x 1080.

Prerequisites on the Controlled EVS Server

Most prerequisites to set up a functional environment for LSM-VIA are required on the EVS server side.

NEW ! • The controlled EVS servers have to be XT-VIA, XT-GO or XS-VIA servers.

NEW ! • The EVS server shall run at least Multicam 20.7.

- The LSM-VIA option must have been selected in the VIA Controller Settings area during the Multicam configuration (Channels tab):

- 2 EVS Remote must have been assigned to RS422 ports from the Port settings area during the Multicam configuration.

Prerequisites on the LSM-VIA Workstation

Some prerequisites are applicable to the LSM-VIA workstation.

- The appropriate configuration for the monitor connectivity has to be defined on the LSM-VIA workstation.

  See section "Setting up the Monitor Connectivity on LSM-VIA Workstation" on page 8.

- To use LSM-VIA with Active Directory, the appropriate configuration must be set.

  See section "Configuring an Active Directory on an XClient-VIA" on page 10.

- If Google Chrome needs to be updated, you will have to perform some actions manually.

  See section "Updating the Chrome Version on the XClient-VIA" on page 13.

Prerequisites on the LSM-VIA MultiReview Setup

The prerequisites to the use of the LSM-VIA MultiReview are described in section "Setting Up the LSM-VIA MultiReview Environment" on page 8.

2.2. Disabling or Enabling Port 80 Forwarding

Context of Use

- To make the device more secure, the port 80 forwarding should be disabled.
  - With LSM-VIA versions prior to 1.2, the port forwarding was enabled by default during the installation.
  - On workstations upgraded with LSM-VIA version 1.2, the installation does not disable the port forwarding.
  - On workstations where the first LSM-VIA version installed is the 1.2, the port forwarding is disabled by default.

If you need to edit the LSM-VIA configuration from another workstation, the port 80 must be open.

How to Check if the Port Forwarding is Enabled or Disabled

From the LSM-VIA workstation, run the following command:

```
sudo firewall-cmd --list-all
```

If the port 80 forwarding is enabled, you will get the following results:

```
evs-lan (active)
     target: default
     icmp-block-inversion: no
     interfaces: eno1
     sources:
     services: ssh samba-client dhcpv6-client evs-docker-infra evs-avahi evs-
     consul
     ports: 5093/tcp 5093/udp 5938/tcp 5556-5557/tcp
     protocols:
     masquerade: no
     forward-ports: port=80:proto=tcp:toport=8080:toaddr=
     source-ports:
     icmp-blocks:
     rich rules:
```

How to Disable the Port Forwarding

From the LSM-VIA workstation, run the following command:

```
sudo firewall-cmd --zone=evs-lan --remove-forward-
port=port=80:proto=tcp:toport=8080 --permanent

sudo firewall-cmd --reload
```

How to Enable the Port Forwarding

From the LSM-VIA workstation, run the following command:

```
sudo firewall-cmd --zone=evs-lan --add-forward-
port=port=80:proto=tcp:toport=8080 --permanent

sudo firewall-cmd --reload
```

2.3. Setting up the Monitor Connectivity on LSM-VIA Workstation

The required CentOS configuration differs depending on whether the monitor is plugged to the LSM-VIA workstation using a Mini-DP cable or a KVM switch.

The file `xorg.conf` stored in the folder `Computer/etc/X11` on the LSM-VIA workstation contains the display configuration of CentOS.

By default, the configuration is set for Mini-DP display.

To set the configuration for use with a KVM switch, proceed as follows:

1. On the LSM-VIA workstation, open a Linux command line by selecting `Applications > Favorites > Terminal`.
2. Log in with administrator rights (sudo) on the workstation
3. Execute the script `enable-kvm.sh` stored in `/opt/evs/scripts/`

The configuration required for KVM connection is applied.

If you need to restore the initial configuration for Mini-DP use, execute the script `disable-kvm.sh` stored in the folder `/opt/evs/scripts/`.

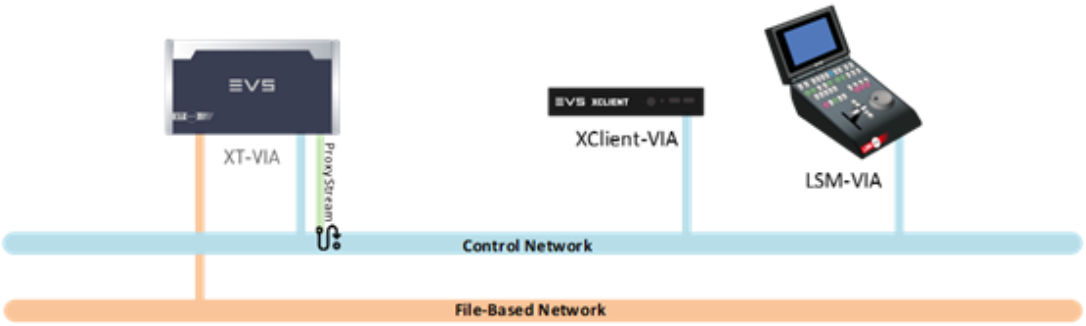
2.4. Setting Up the LSM-VIA MultiReview Environment

Introduction

The LSM-VIA MultiReview is an advanced mode which allows the LSM-VIA user to operate on the recorders from the whole network. It is used to view and browse the feeds from all the XT-VIA and XS-VIA server recorder channels of the network and select attractive camera angles to create and export clips or to build playlists.

Network Requirements

- The LSM-VIA MultiReview uses the proxy streams from the XT-VIA and XS-VIA servers. Those streams are multicasted from the B1 port of each XT-VIA and XS-VIA server of the network. The bandwidth consumed per each proxy stream is 2-3 Mbps.
- XClient-VIA will receive those proxy streams via the Control Network (PC LAN). Therefore, the proxy streams from the XT-VIA / XS-VIA port B1 need to be routed to the Control Network via the switch.



- As the video is streamed through Multicast, using a local network for the Control Network between XT-VIA / XS-VIA servers, XClient-VIA workstations and LSM-VIA remotes is highly recommended.
- The XT-VIA / XS-VIA Proxy Streaming Configuration must be configured with an IP address in the same range as the MTPC PC LAN address via the Multicam Configuration.
- An SFP+ to RJ45 convertor module might be needed to cable the port B1 (SFP+) to the PC LAN switch (RJ45).

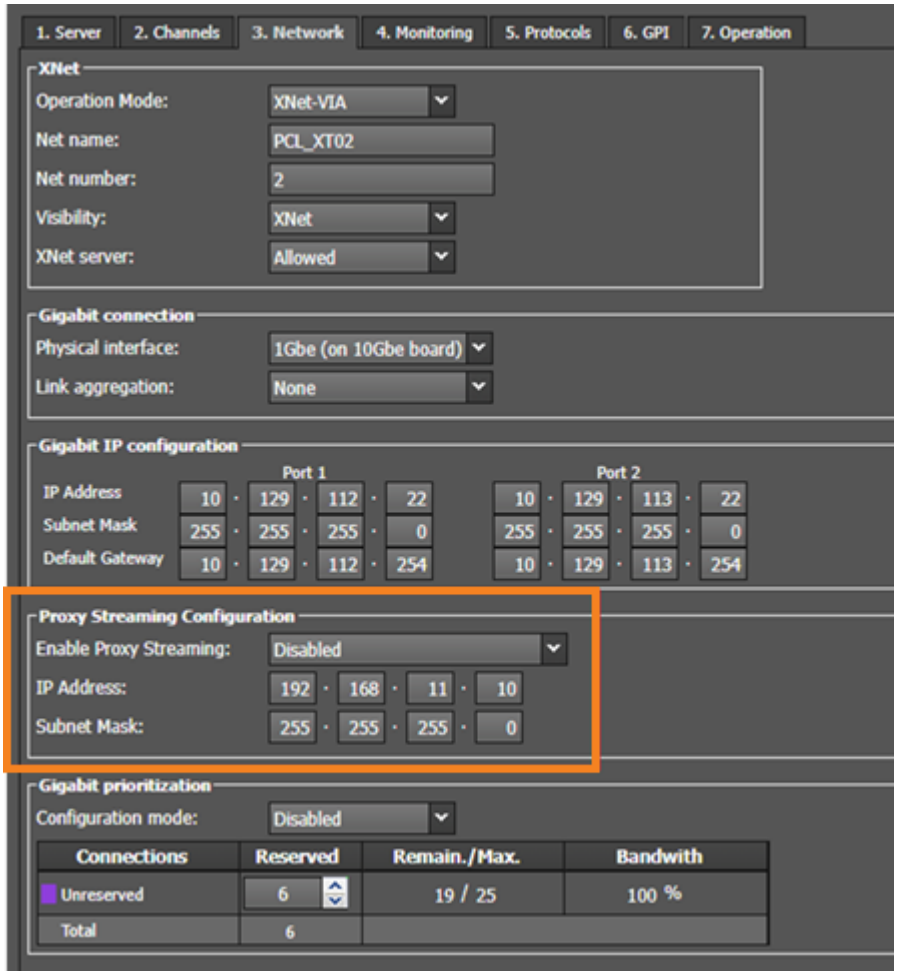
The convertor module used and validated by EVS is an Arista 1 Gigabit Ethernet SFP - Type 1000BASE-T, with the internal EVS reference ESSFP-A-1G-T.

LSM-VIA Requirements

- The MultiReview option must be enabled from the LSM-VIA configuration tool. See section "MultiReview " on page 46.
- The MultiReview license code LSM-VIA-MRV must be installed on the XClient-VIA. See section "Managing Licenses" on page 23.

Multicam Configuration Requirements

- The pool of XT-VIA and XS-VIA servers must be connected via XNet-VIA or XNet-SDTI to allow LSM-VIA MultiReview to discover all cameras from the XNet (3. Network – XNet).
- The Proxy must be enabled and set to H264 codec with 2Mbps bitrate (1. Server -Proxy).
- The Proxy Streaming must be enabled and configured with an IP address in the same range as the MTPC PC LAN address (3. Network – Advanced mode - Proxy Streaming).



2.5. Configuring an Active Directory on an XClient-VIA

Prerequisites

- The date and time must be the same on the XClient-VIA and on the Active Directory.
- There must be an entry for the XClient-VIA IP address in the DNS.

How to Configure the Active Directory on an XClient-VIA

1. Configure your network interface to access your DNS.
   a. Open the file `/etc/sysconfig/network-scripts/ifcfg-YOUR_NETWORK_INTERFACE_NAME` and add these lines:

```
DNS1=IP_ADDRESS_OF_YOUR_DNS

DOMAIN=YOUR_DOMAIN_ADDRESS_NAME
```

b. Open the file `/etc/hosts` and add

```
IP_ADDRESS_OF_YOUR_DNS YOUR_NAME YOUR_DOMAIN_ADDRESS_NAME (e.g.:
192.168.0.151 adserver)
```

c. Restart the network service so that it considers the changes:

```
systemctl restart network
```

d. Check if the configuration is correct by pinging your DNS or by typing the command:

```
nslookup YOUR_DNS_NAME
```

2. Join the Active Directory

a. Now you can join the Active Directory:

```
realm join --user=USER_NAME DOMAIN_NAME
```

b. Check if you can join correctly the active directory by typing:

```
realm list
```

c. You can also see the information of your user with the command:

```
id USER_NAME@DOMAIN_NAME
```

3. Give privileges to the Active Directory user:

a. Add the user in the evs-lsm-via-services group:

```
sudo usermod -aG evs-lsm-via-services USER_NAME@DOMAIN_NAME
```

example: sudo usermod -aG evs-lsm-via-services delivery-user@DELIVERY.EVS

b. For sudo add the user in the “wheel” group:

```
sudo usermod -aG wheel USER_NAME@DOMAIN_NAME
```

example: sudo usermod -aG wheel delivery-user@DELIVERY.EVS

c. If you did not install LSM-VIA with that AD user, you need to add this user in the docker group to be able to activate docker functionalities (e.g. for VIA Search):

```
sudo usermod -aG docker USER_NAME@DOMAIN_NAME
```

example: sudo usermod -aG docker delivery-user@DELIVERY.EVS

You may need to log out or to restart the XClient-VIA in order to apply the new membership of the user to a group.

The command **groups USER_NAME@DOMAIN_NAME** should display the new group of the user once the membership is properly applied.

4. Delete EVS users
   a. Connect to your new user.
   b. Execute these commands:

```
sudo userdel evs
sudo userdel evsadmin
```

Options

Do Not Specify the Domain Name during the Login

You can configure sssd not to use the full username with the domain name.

1. Open `/etc/sssd/sssd.conf`.
2. Modify the following lines:

```
use_fully_qualified_names = True
fallback_homedir = /home/%u@%d
```

   with

```
use_fully_qualified_names = False
fallback_homedir = /home/%u
```

3. Restart the sssd service:

```
systemctl restart sssd
```

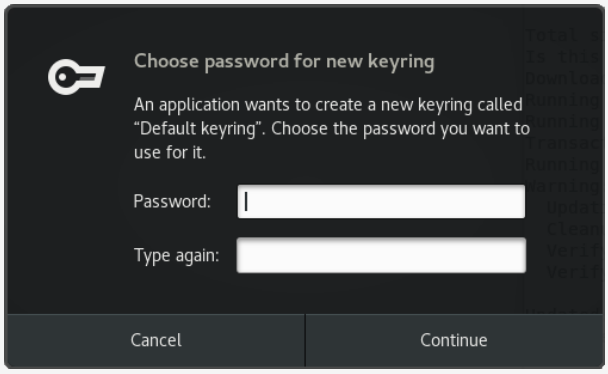
Copy the LSM-VIA Shortcuts to the Desktop

If you want the LSM-VIA shortcuts to be available on your desktop execute these commands:

- cp -p /usr/share/applications/evs-lsm-via-viewer.desktop /home/user-name/Desktop/
- cp -p /usr/share/applications/evs-gemalto-manager.desktop /home/user-name/Desktop/
- cp -p /usr/share/applications/evs-lsm-via-configuration-gio.desktop /home/user-name/Desktop/

2.6. Updating the Chrome Version on the XClient-VIA

In the most recent versions of Chrome, and when it is launched for the first time, it proposes to create a keyring to save the passwords and to choose a password to protect the keyring opening.



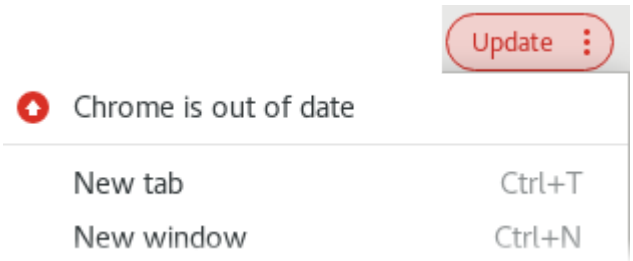
- If you do not want to create a keyring,
  a. Keep the **Password** and the **Type again** fields empty.
  b. Click **Continue**.
- If you want to create a keyring, be aware that you will have to remember the password each time it is required.
  a. Enter a password for the keyring and confirm it.
  b. Click **Continue**.

To update Chrome,

1. Make sure you have an internet connection properly configured on the XClient-VIA.
2. From Google Chrome, click the **Update** button at the top right corner of the window 

.

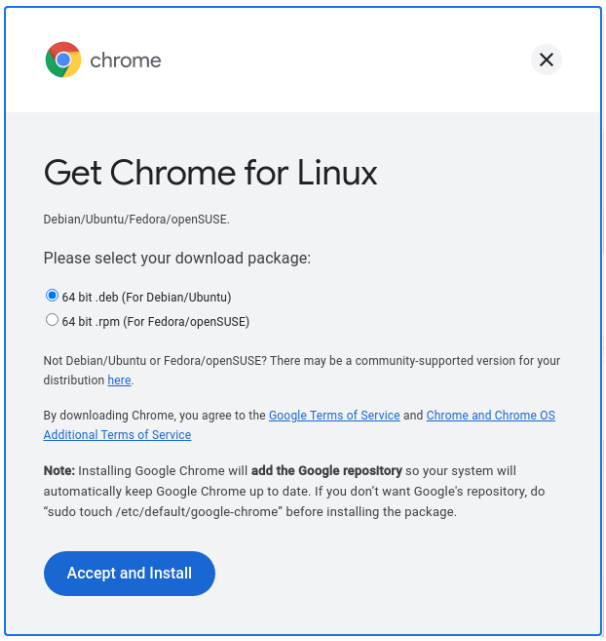
   A contextual menu is displayed:



3. Click **Chrome is out of date**.
4. Click **Reinstall Chrome**.

   A window opens.
5. Scroll down and click **Download Chrome now**.

   The following message is displayed:



6. Select **64 bit .rpm** and click **Accept and Install**.
7. The rpm file `google-chrome-stable_current_x86_64.rpm` is downloaded and stored in `/home/evs/Downloads/` by default.
8. Close Google Chrome.
9. Open a terminal.
10. Execute the following command: `sudo yum install /home/evs/Downloads/google-chrome-stable_current_x86_64.rpm` and presse **Enter**.
11. Enter **y** when you get the following message:

```
Transaction Summary
=====================
Upgrade  1 Package

Total size: 106 M
Is this ok [y/N]:
```

    The package is then being installed.

3. Upgrading LSM-VIA

Upgrade Process

The LSM-VIA upgrade is executed in two steps:

1. Upgrading LSM-VIA on the workstation

   This first step installs the LSM-VIA application and the VIA Licensing Manager.

2. Upgrading the LSM-VIA Remote Panel connected to the LSM-VIA workstation

   This second step is performed automatically when you switch on the Remote Panel and associate it with the upgraded LSM-VIA application. It first checks the Operating System version on the Remote Panel, then it checks the version of LSM-VIA on the Remote Panel.

The LSM-VIA version number will be displayed at the top of the configuration screen.

Considerations

- You do not need to remove the previous version before upgrading.
- When an OS upgrade is required on the LSM-VIA Remote Panel, which rarely occurs, this is automatically performed before the upgrade of the LSM-VIA version during step 2.
- After upgrading LSM-VIA, the parameters defined in the LSM-VIA configuration tool are kept. See section "Configuring LSM-VIA" on page 25.

Step 1 - Installing / Upgrading LSM-VIA Application on the Workstation

1. Copy the installer archive on the XClient-VIA:

   `LSM_VIA_Installer-<LSM-VIA version number>.tar.gz`

   where `<LSM-VIA version number>` is the full version number of LSM-VIA included in the package.

   This can be done in one of the following ways:

   - a USB key (formatted in FAT32)
   - TeamViewer
   - FTP transfer (e.g. FileZilla)

The full path of the RPM file (RPM filename and folder name) may not include any space character.

2. Unzip the file.
3. Double-click the extracted file:

   `LSM_VIA_Installer-<LSM-VIA version number>-x86_64.AppImage`

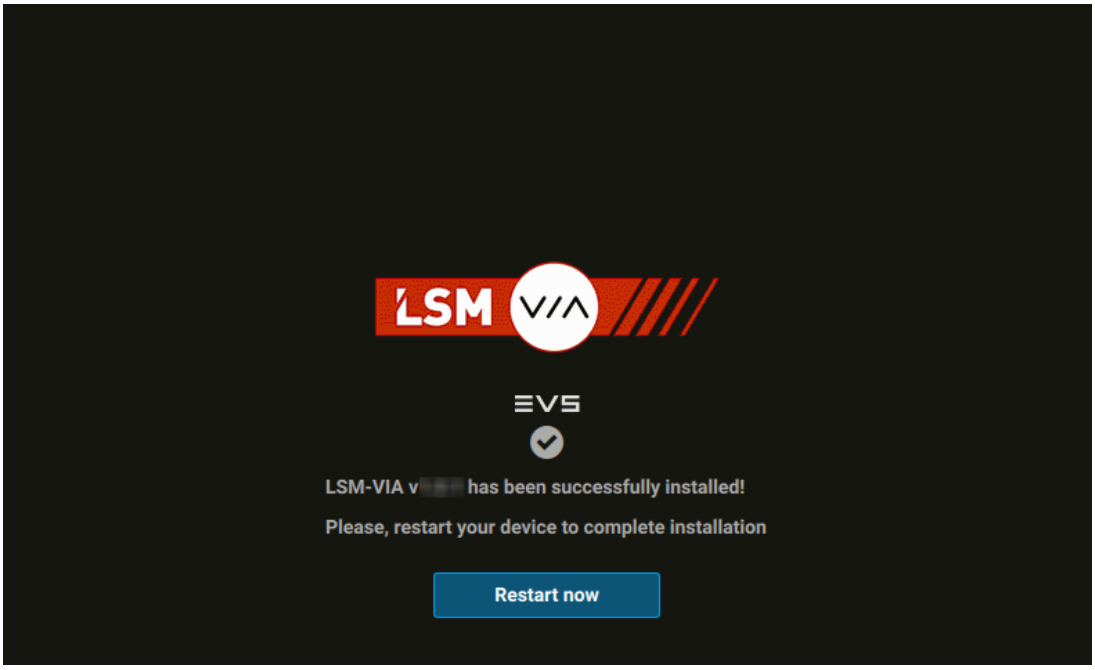
The LSM-VIA Installer window opens.

A warning message shows you the required Multicam version.

4. Click **Install LSM-VIA**.

   The installation process starts

5. Wait until the installation is done and the following message is displayed:



6. Click **Restart now**.

When the LSM-VIA application is installed, three shortcut icons are added on the desktop:

- LSM-VIA Configuration shortcut to access the LSM-VIA configuration tool.
- LSM-VIA shortcut to open the LSM-VIA application.
- VIA Licensing Manager shortcut to manage the required license key.

Step 2 - Upgrading LSM-VIA Remote Panel

Once you have upgraded the LSM-VIA application on the workstation, proceed as follows to upgrade the LSM-VIA Remote Panel.

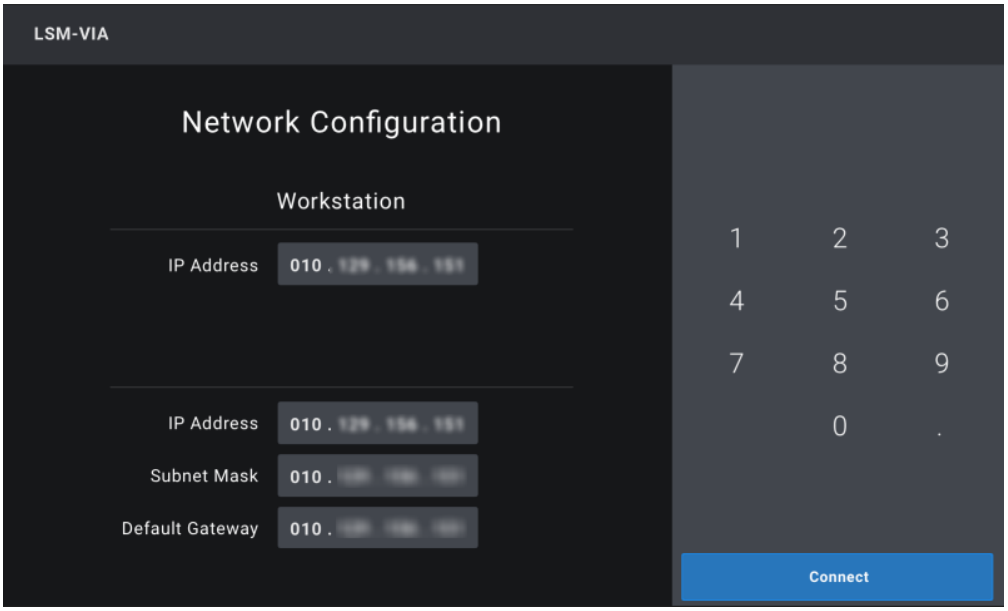
1. Double-click the **LSM-VIA Configuration** shortcut to open the LSM-VIA configuration tool.
2. In the Infrastructure tab, define the IP address of the EVS server to work with as described in the section "EVS Server Settings" on page 28.
3. Double-click the **LSM-VIA** shortcut to start the LSM-VIA application on the workstation.

   A valid license must have been installed. See section "Managing Licenses" on page 23.
4. Switch on the Remote Panel.

   The Network Configuration screen is displayed on the touchscreen.

5. On the Remote Panel touchscreen, in the **IP Address** field, enter the IP address of the LSM-VIA workstation.

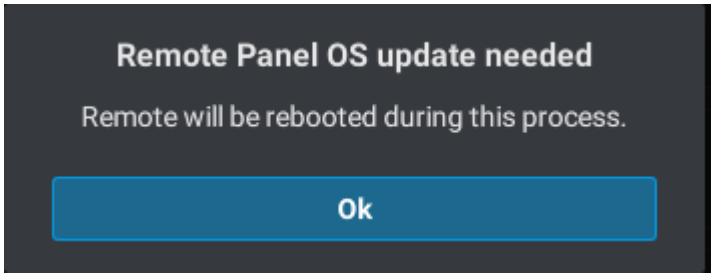
   When you enter three digits for an octet, the focus shifts directly to the next octet. Otherwise, you can tap the octet you want to edit.



6. In the same way, enter the IP address, subnet mask and default gateway for the LSM-VIA Remote Panel.
7. Tap **Connect** on the Remote Panel touchscreen.

   When the connection is being initialized, the version of the Operating System is checked.

   - If the version of the Operating System in the LSM-VIA rpm file does not correspond to the version on the Remote Panel, the following message is displayed:



     Proceed with step 8.

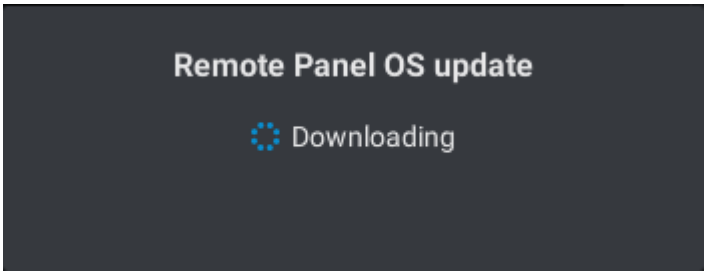
   - If the version of the Operating System on the Remote Panel is up-to-date, the version of LSM-VIA on the Remote Panel is checked.

     Proceed with step 10.

Upgrading the Remote Panel Operating System

8. Tap **OK** on the displayed message.

   The upgrade starts and the following message is displayed on the Remote Panel:



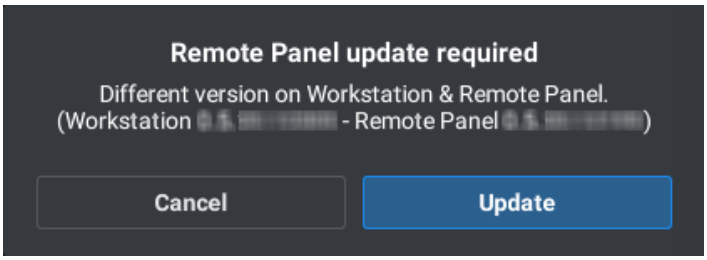
   At the end of the process, the Remote Panel displays the Network Configuration screen.

9. Repeat steps 5, 6 and 7: fill in the fields on the Network Configuration screen and tap **Connect**.

   When the connection is being initialized, the version of LSM-VIA on the Remote Panel is checked.

Upgrading the LSM-VIA Version

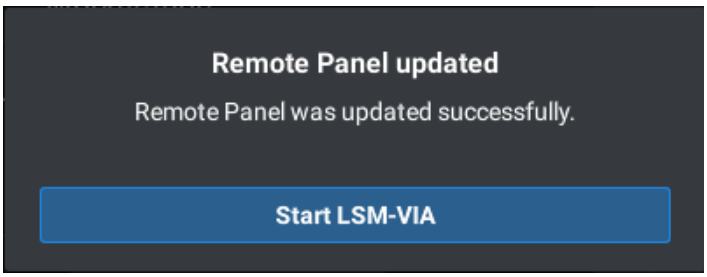
10. When the version on the LSM-VIA workstation does not correspond to the version on the Remote Panel, a message is displayed.



   Tap **Update** to launch the update process on the Remote Panel.

   During the update, messages inform about installation progress.

   When the Remote Panel has been updated, the following message is displayed which allows you to start LSM-VIA:



4. Deploying LSM-VIA on Several Workstations

Overview

A centralized deployment tool is available to deploy an LSM-VIA version on several XClient-VIA workstations at once. It can run on Linux and Windows.

It contains a configuration file, to set the IP addresses of the XClient-VIA to upgrade and a deployment script, which will retrieve the workstation IP addresses from the configuration file and send the installation package through sftp.

At the end of the deployment process, a file summarizes the installation status on the different workstations.

Prerequisites

- The TCP 22 port must be open for sftp transfer.
- On LSM-VIA workstations:
  - Users must be evs. The installation will not work with Active Directory users.
  - The password must be the same on all the workstations.

Procedure

1. Download the archive package from the EVS web site.

   `evs-lsm-via-centralized-installer-<tool version number>.tar.gz`

   where `<tool version number>` is the full version number of the tool.
2. Copy the package on the workstation from which you will deploy the version, either an XClient-VIA or a Linux or Windows PC on the same PCLAN network.

   This can be done in one of the following ways:

   - a USB key (formatted in FAT32)
   - TeamViewer
   - FTP transfer (e.g. FileZilla)
3. Unzip the package.

4. Open the configuration file (configuration.json).

   Here is generic example for Linux:

```
{
    "installerPath": "/folder/subfolder/installer.tar.gz",
    "forceInstall": false,
    "ipAddresses": [
        "x.x.x.x",
        "y.y.y.y",
        "z.z.z.z"
    ]
        }
```

   Here is generic example for Windows:

```
{
    "installerPath": "\\folder\\subfolder\\installer.tar.gz",
    "forceInstall": "false",
    "ipAddresses": [
        "x.x.x.x",
        "y.y.y.y",
        "z.z.z.z"
    ]
        }
```

   Then,

   a. Set the path to the LSM-VIA installer.
   b. Set the **forceInstall** parameter to **True** if you want the installation to be forced would the version already be present or not.
   c. Set the IP addresses of the XClient-VIA to upgrade.
   d. Save the file.

5. Run the deployment script:

   - On Windows, double-click the file `evs-lsm-via-centralized-installer-<tool version number>`.

- On Linux:
  i. Open a terminal and type the command to be located in the folder containing the tool.
  ii. (optional) In case the tool cannot be executed after the transfer, type **chmod 777 evs-lsm-via-centralized-installer-<tool version number>**.
  iii. Type **./evs-lsm-via-centralized-installer-<tool version number>**.

6. Enter the user password of the target workstations. See section "Prerequisites" on page 20.

The script first checks the **forceInstall** option.

- If the **forceInstall** parameter has been set to **True**, the version is deployed on all the workstations.
- If the **forceInstall** parameter has been set to **False**, the script checks the LSM-VIA version in the version.txt file on each workstation to be updated.
  - If the version in the version.txt file matches the version to be deployed, no version is installed.
  - If the versions do not match, the installation starts.

From the command prompt of the script, you can receive feedback related to:

- progress indication,
- installation status,
- error messages if any

At the end of the whole process, two log files are created.

- `evs-lsm-via-installation.log` lists all the logs.
- `evs-lsm-via-installation-summary.log` summarizes the installation status for each XClient-VIA specified in the IP Address text file:
  - Installation Status
  - Detailed error message if the installation failed on some units.

The files are stored in the following directory:

- on Linux: /var/log/EVSLogs/lsm-via/installation
- on Windows: C:\EVSLogs\lsm-via\installation

5. Managing Licenses

License Codes

Valid license keys must be installed from the VIA Licensing Manager on the XClient-VIA. Refer to the VIA Platform user manual for more information.

The list of available license codes is given hereafter.

Valid license keys must be installed on the XClient-VIA:

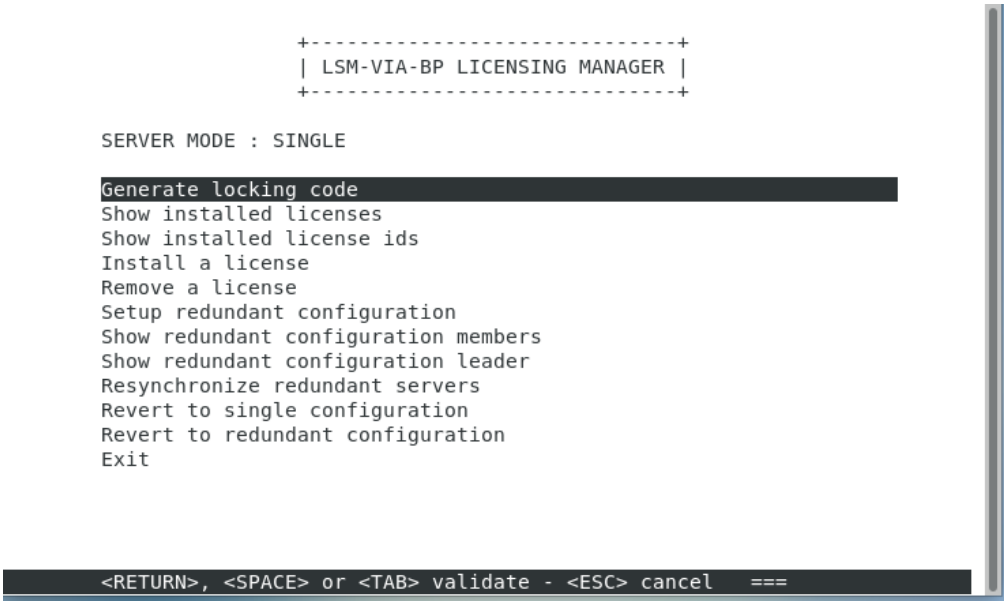
- LSM-Via-PACK: mandatory license dedicated to LSM-VIA
- LSM-VIA-MRV: license required for the MultiReview mode (optional).

How to Request and Import the License Key

1. Open the LSM-VIA Licensing Manager by clicking on the desktop shortcut: 

.

   The following panel opens with a command line and various menu options to perform the various steps.



2. Generate the locking code by selecting the first option.

   The screen will display the device's unique locking code.

3. Send this code to EVS support, in order to receive the specific license file for this device.

4. When you receive the file containing the license key from the EVS Support, install the license as follows:
    a. From the LSM-VIA Licensing Manager, select the **Install a license** option.
    b. Drag & drop the file or enter the file path on the displayed screen.
5. Once the license(s) are installed, select the **Show installed licenses** option to display them.

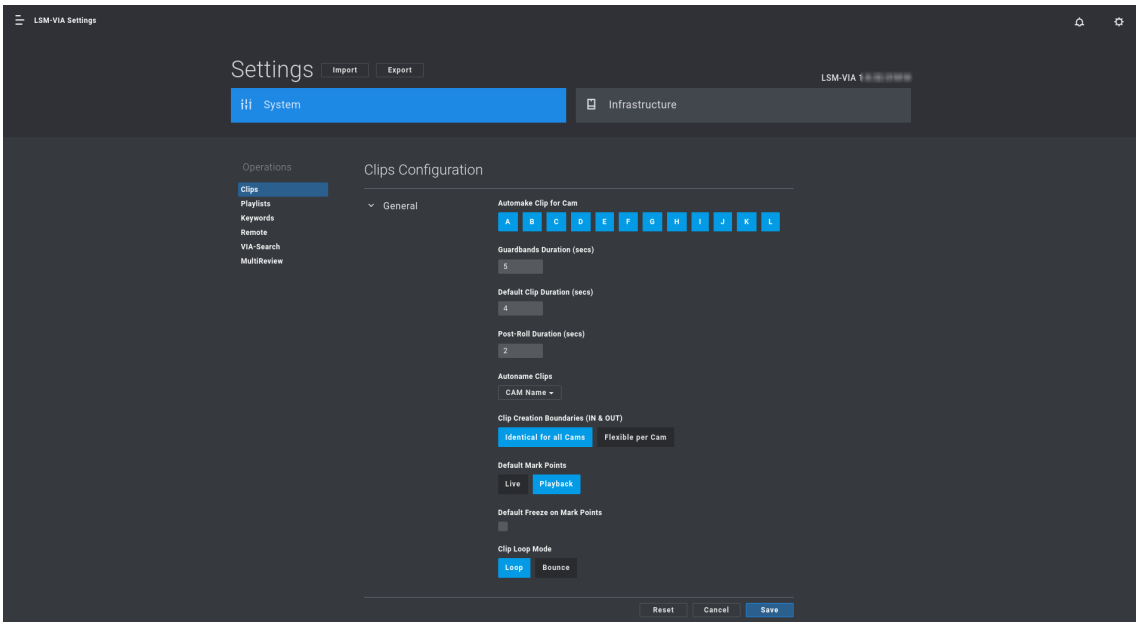
6. Configuring LSM-VIA

6.1. Introduction

About the LSM-VIA Settings

The settings of LSM-VIA allow you to configure different parameters.

Each time you upgrade (or downgrade) the LSM-VIA application, you do not need to redefine configuration parameters on the LSM-VIA workstation. The existing configuration is kept.



Prerequisite

The configuration tool is a web-based interface.

- Make sure that Google Chrome is the default web browser.

Settings Categories

The settings are grouped in the following categories:

- System: Clips, Playlists, Keywords, Remote, VIA-Search, MultiReview.
- Infrastructure: EVS Server, VIA Xsquare, Dyvi.

How to Edit the LSM-VIA Settings

1. Access the LSM-VIA configuration tool in one of the following ways:
   - From the LSM-VIA workstation, double-click the **LSM-VIA Configuration** shortcut. By default, it opens in Chrome.

   - As the configuration tool is a web-based interface, you can access it using a web browser.

     From any workstation, type the URL of the LSM-VIA workstation in a web browser: http:\\IP address:8080.

   - From the LSM-VIA Viewer window on the LSM-VIA workstation, click the  button and select **Settings**.

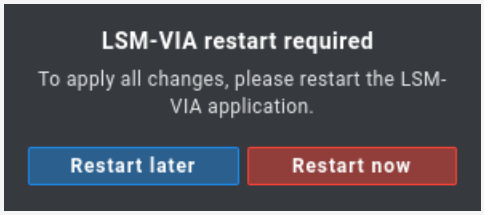
Make sure that the configuration tool opens in Chrome.

2. Edit the values of the relevant parameters. See sections "System Settings" on page 32 and "Infrastructure Settings" on page 27.
3. Click **Save**.

Reset, Cancel, Save

- The **Reset**, **Cancel** and **Save** buttons apply to all the tabs at once.
- After a reset, you must save the changes, but you can also cancel the reset operation.

Would you have changed a setting requiring a restart while LSM-VIA is running, a popup will allow you to restart it immediately from the configuration tool or to decide to restart it later on.



Parameters with Fixed Value on LSM-VIA

Some parameters, which cannot be edited in the LSM-VIA configuration tool, have a fixed value for the current version of LSM-VIA. This can therefore not be edited in the current version.

Enable PGM+PRV Mode

The PGM+PRV mode is always set to Active, that means available on the Remote Panel.

Video Effect

The transition between playlist elements is always a **Mix**.

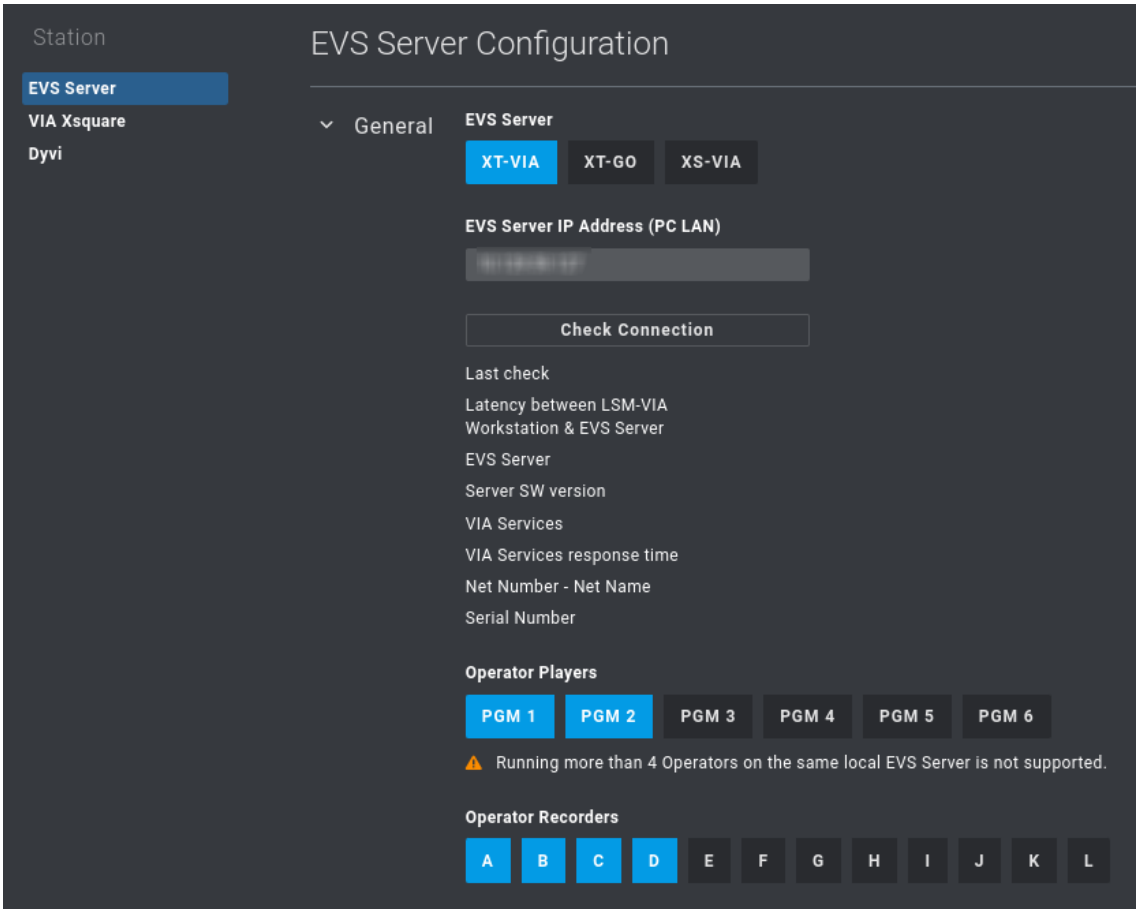
Should the parameter correspond to a parameter available in the Multicam configuration module of the controlled EVS server, the Multicam parameter will not be taken into account.

6.2. Infrastructure Settings

The Infrastructure settings are grouped according to the following categories:

- "EVS Server Settings" on page 28
- "VIA Xsquare Settings" on page 30
- "Dyvi Settings" on page 31

EVS Server Settings



NEW !

EVS Server

Click the button corresponding to your server to be able to configure it.

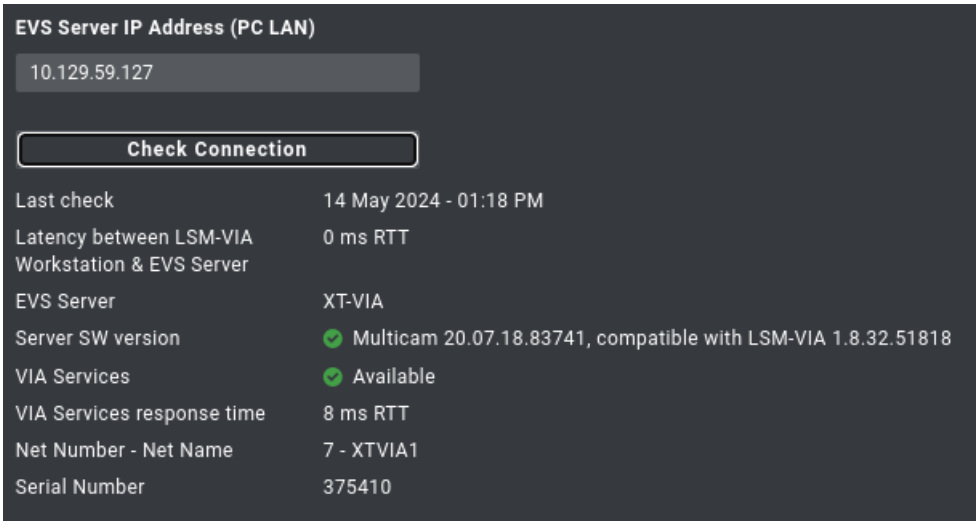
EVS Server IP Address (PC LAN)

This setting specifies the IP Address of the EVS video server to be controlled by LSM-VIA.

Check Connection

This button is used to check the connection with the EVS server.

The fields underneath are filled in as follows:



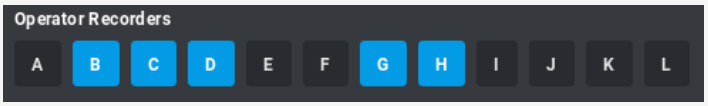
The check result shows whether

- The Multicam version is compatible or not with the LSM-VIA version.
- The connection between LSM-VIA and the VIA services can be established or not.

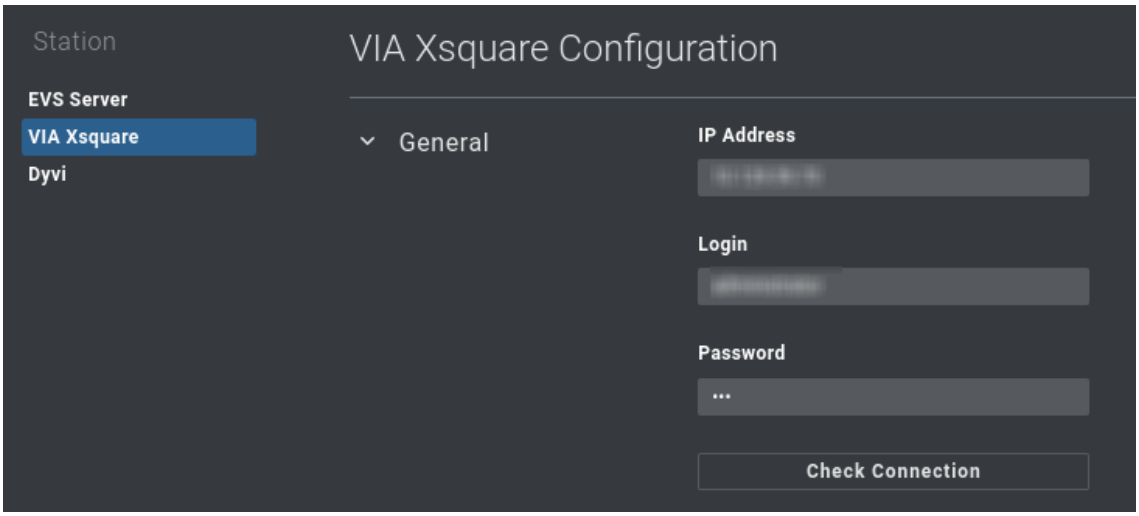
Operator Players

Description	Allows to select the local server player channels the connected operator will be able to work with. Running more than 4 operators on the same local EVS server is not supported.
Possible Values	**PGM1**, **PGM2**, **PGM3**, **PGM4**, **PGM5**, **PGM6** Up to 3 PGM may be selected per operator and they must be consecutive. Click the players buttons to select (highlight) the corresponding player channels. **Be careful when selecting players.** Indeed, the same players should never be selected by several operators. However, the system does not prevent different operators to select the same players. The remote buttons will automatically be mapped appropriately.
Default value	**PGM1** + **PGM2** + **PGM3**

Operator Recorders

Description	Allows to select the recorder channels the selected operator will be able to work with.
Possible Values	Recorder labels from A to L. Click the recorder buttons to select (highlight) the corresponding recorder channels.  The same recorders can be selected by several operators. The remote buttons will automatically be mapped appropriately.
Default value	No recorder selected.

VIA Xsquare Settings



IP Address

This setting specifies the IP Address of the machine hosting the VIA Xsquare to be used for export purposes.

Login

This field is used to enter the login of the VIA Xsquare user.

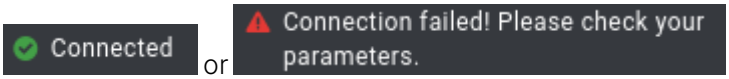
Password

This field is used to enter the password of the VIA Xsquare user.

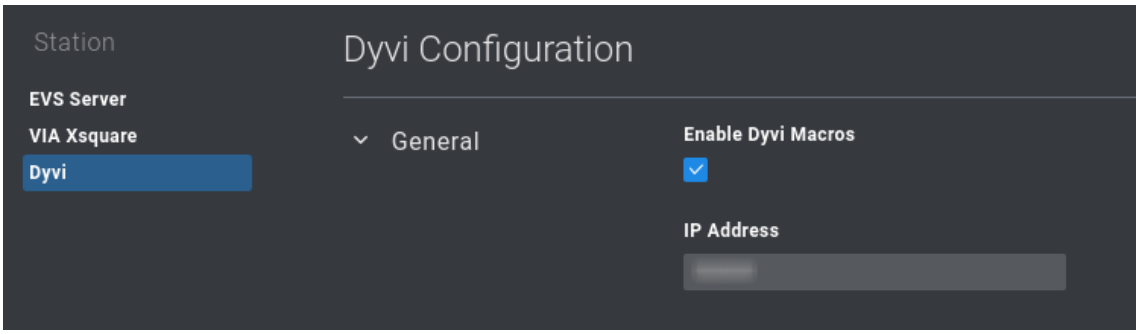
Check Connection

This button is used to check the connection with VIA Xsquare.

The result will be displayed in one of the following ways:



Dyvi Settings



Enable Dyvi Macros

Description	Allows the use of Dyvi macros from the Remote Panel. The Dyvi macros, if appropriately configured, will be available as functions to be mapped to Remote Shortcut buttons/keys. So, the operator will be able to trigger the Dyvi macros from the Remote Panel console or touchscreen. Up to 6 Dyvi macros can be used from LSM-VIA.
Possible Values	• **No** (cleared) means that the Dyvi macros will not be available from LSM-VIA. • **Yes** (selected) means that the Dyvil macros will be available for mapping to Remote Shortcut buttons/keys.
Default value	No (cleared)

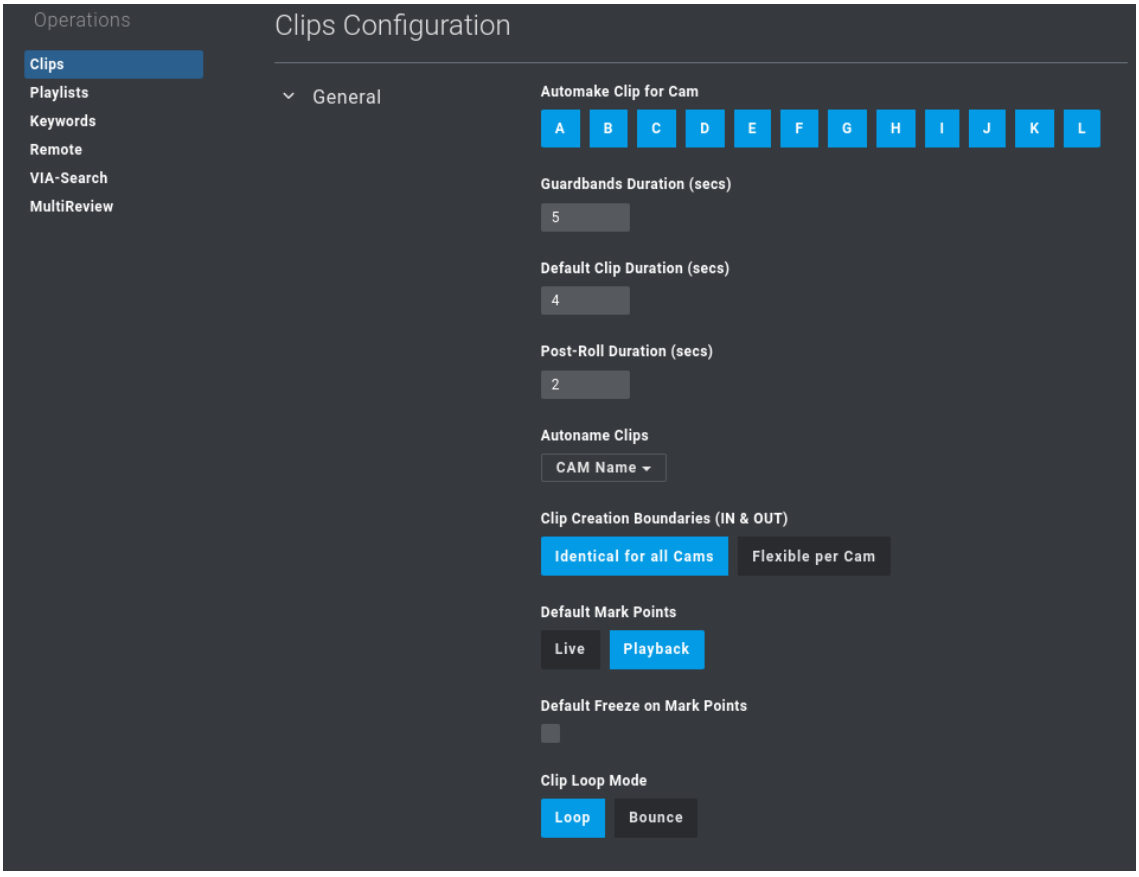
IP Address

Availability	This setting is only displayed when the **Enable Dyvi Macros** parameter has been selected.
Description	Specifies the IP Address of the Dyvi switcher to be connected to LSM-VIA.

6.3. System Settings

The System settings are grouped according to the following categories:

Clip Settings



Automake Clip for Cam

Context	When creating clips, the clip corresponding to the camera on which IN/OUT points have been marked is always saved. It is possible to do automatically the same action on the other cameras. Currently, the **Automake** setting does not take into account the number of IN channels defined on the EVS Server. The **Automake** parameter defined for unused cameras will therefore be ignored.
Description	Specifies that clips have to be created on the enabled cameras even if no IN or OUT point has been marked on that camera.
Possible Values	Camera labels from A to L. Click the camera buttons to select (highlight) the corresponding cameras.
Default value	All cameras selected (highlighted).

Guardbands Duration (secs)

Description	Specifies the duration of clip guardbands in seconds. This represents the additional material that should be added before the IN point and after the OUT point for preroll and postroll.
Possible Values	From 0s to 60s
Default value	5s

Default Clip Duration (secs)

Description	Specifies the duration of clips created with only one reference point (IN or OUT point).
Possible Values	From 0s (=inactive) to 14400s (240min)
Default value	4s

Post Roll Duration (secs)

Description	Specifies the duration of the Post Roll. When the Post Roll function is activated from the Live screen or Clip screen, the playout will continue for the duration defined by the Post Roll Duration parameter • after the OUT point of a clip, provided that there is enough media in the guardband • after the OUT point of the last playlist element, provided that there is enough media in the guardband
Possible Values	From 00s00fr to 600s00fr
Default value	02s00fr

Autoname Clips

Description	If this function is enabled, the value of the selected field will automatically be used to name the clip upon creation.
Possible Values	• Disabled: No name is assigned to the clip when it is created. • TC IN: The timecode of the IN point of the clip is used as clip name when the clip is created. • CAM Name The name of the record channel is used as clip name when the clip is created. • ID Louth/UmID The ID Louth (UmID) of the clip, i.e. the unique identifier for the clip on the XNet network, is used as clip name when the clip is created. • VarID 32 The VarID of the clip is used as clip name when the clip is created. Actually, the clip name will be limited to the first 8 characters of the VarID.
Default value	Disabled

NEW ! Clip Creation Boundaries (IN & OUT)

Description	Specifies if IN/OUT points must be identical or can be different for the different clip angles.
Possible Values	• Identical for all Cams: the clip is created with the same IN and OUT points on all clip angles, including the recorder channels (Cams) selected with the **Automake clip for cam** setting. • Flexible per Cam: different IN / OUT points can be manually set on the different recorder channel (Cams) and will be taken into account when you save the clip. The angles, selected with the **Automake clip for cam** setting, for which no other IN/OUT points have been manually set, will inherit the IN/OUT points defined by the operator on the reference player. The reference player is the first player on which an IN or OUT point has been defined.
Default value	Identical for all Cams

Default Mark Points

Description	Defines how a mark point will be set.
Possible Values	• Live: mark points are set on all the record trains, at the LIVE input timecode of the train loaded on the smallest controlled PGM. • Playback: mark points are set at the current timecode of the clip or the train loaded on the smallest controlled PGM.
Default value	Live

This default setting is only taken into account at startup of LSM-VIA. It is independent of the **Mark Live / Playback** setting available from the Live screen and the Clip screen of the Remote and any change of the **Mark Live / Playback** setting will have no impact on the default setting.

Default Freeze on Mark Points

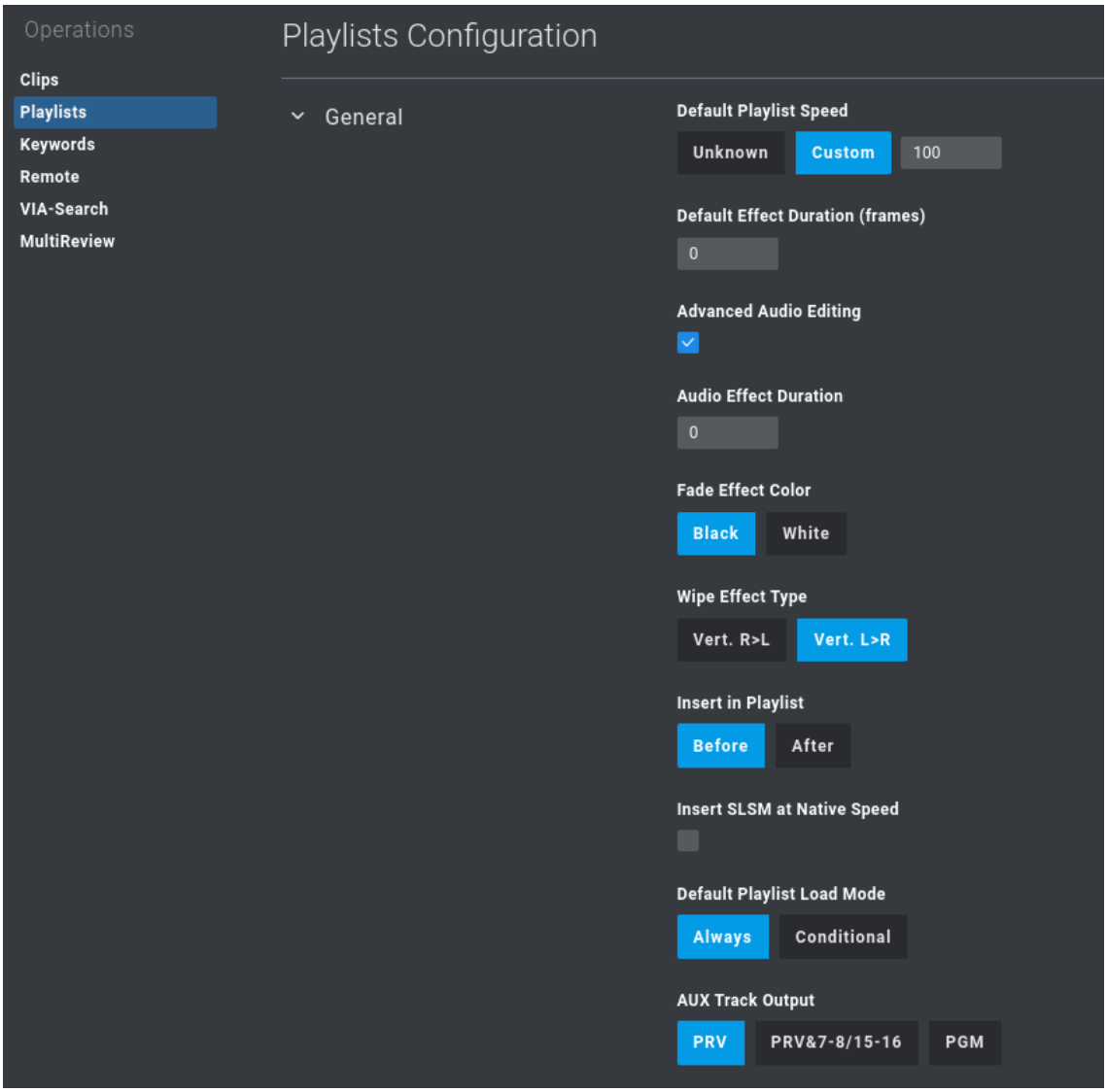
Description	Specifies whether Multicam will freeze or not when it reaches a mark point set on the clip and/or the record train that is being played back.
Possible Values	• **No** (cleared): the playout does not freeze on the mark points when playing clips or record trains. • **Yes** (selected): the playout freezes on the mark points when playing clips or record trains where mark points have been defined.
Default value	No (cleared)

This default setting is only taken into account at startup of LSM-VIA. It is independent of the **Freeze on Marks** setting available from the Live screen and the Clip screen of the Remote and any change of the **Freeze on Marks** setting will have no impact on the default setting.

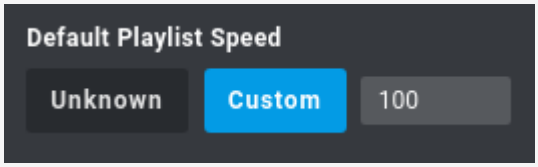
Clip Loop Mode

Description	Defines the behavior of the **Loop** function when the Loop mode is activated.
Possible Values	• Loop: plays the loaded clip in a continuous loop. • Bounce: plays the loaded clip from its IN point to its OUT point, then backwards from OUT to IN and so on.
Default value	Loop

Playlists Settings



Default Playlist Speed

Description	Defines the default speed value that the playlist elements will have when added to a playlist.
Possible Values	• **Unknown**: means that the speed of the previous element in the playlist will be used as a reference for the current element. • **Custom**: from 0 to 100%. ◦ **0%** will force the playlist to pause at the end of each element. ◦ **1% to 100%** will apply the specified speed as default speed for playlist elements. To set a custom speed: a. Click **Custom**. An additional field appears.  b. Select a value from 0 to 100%.
Default value	100 %

Default Effect Duration (Frames)

Description	Sets the duration of video transition effect. The specified value is used as default value in the Playlist Edit mode. The duration of the video transition when using the TAKE button in 1PGM+PRV mode has its own parameter, Effect Duration for Take, defined from the Remote settings.
Possible Values	From 0 fr to 600 fr
Default value	0 fr

Advanced Audio Editing

NEW !

Availability	• This setting is only available if the license code 112 is valid. • This setting is not available with XS-VIA configurations.
Description	Gives access to advanced audio settings, such as audio split, audio swap.
Possible Values	• **No** (cleared) means that it will not be possible to modify video and audio transition effects separately. • **Yes** (selected) means that it will be possible to change the video and audio transition effects separately.
Default value	No (cleared)

Audio Effect Duration

NEW !

Availability	• This setting is only available if the license code 112 is valid. • This setting is only displayed if the **Advanced Audio Editing** setting has been selected. • This setting is not available with XS-VIA configurations.
Description	Sets the duration of audio transition effect. The specified value is used as default value when a clip is added to a playlist in Playlist Edit mode.
Possible Values	From 0 fr to 600 fr (20 sec in NTSC)
Default value	0 fr

Fade Effect Color

Description	Defines the color displayed during the fade transition effects.
Possible Values	Black, White
Default value	Black

Wipe Effect Type

Description	Defines the direction of a wipe transition effect: from right to left or from left to right.
Possible Values	Vert. L>R, Vert. R>L
Default value	Vert. L>R

Insert in Playlist

Description	Specifies if the clips added to a playlist are inserted before or after the active clip in the playlist.
Possible Values	Before, After
Default value	Before

Insert SLSM Native Speed

Description	Defines whether an SLSM clip inserted into a playlist will automatically be set to be played out at its native speed, or at the value defined in the Default Playlist Speed parameter.
Possible Values	• **No** (cleared) means that playout speed of the SLSM clips depends on the value defined as the **Default Playlist Speed**. • **Yes** (selected) means that the playout speed of the SLSM clips is automatically set to its native speed.
Default value	No (cleared)

Default Playlist Load Mode

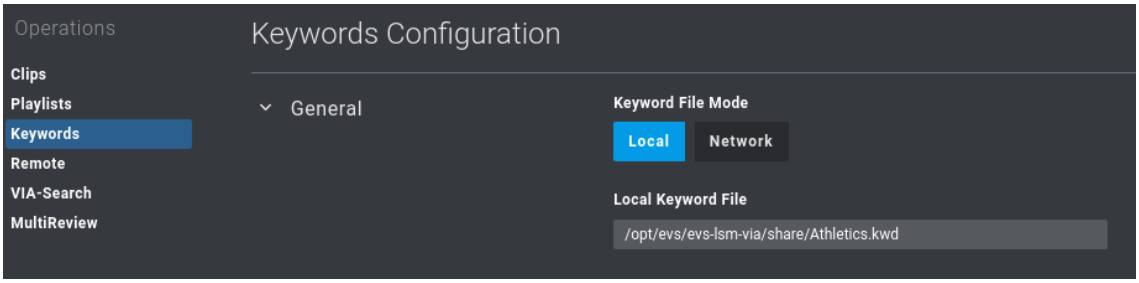
Description	Determine the way a playlist will be loaded.
Possible Values	• **Always**: the playlist is always loaded in PGM+PRV. • **Conditional**: the playlist is loaded in PGM+PRV, except in Multi-PGM mode when a single PGM is controlled, then only the first playlist element is loaded on the controlled channel. It allows loading and playing multiple playlists using a single Remote Panel.
Default value	Always

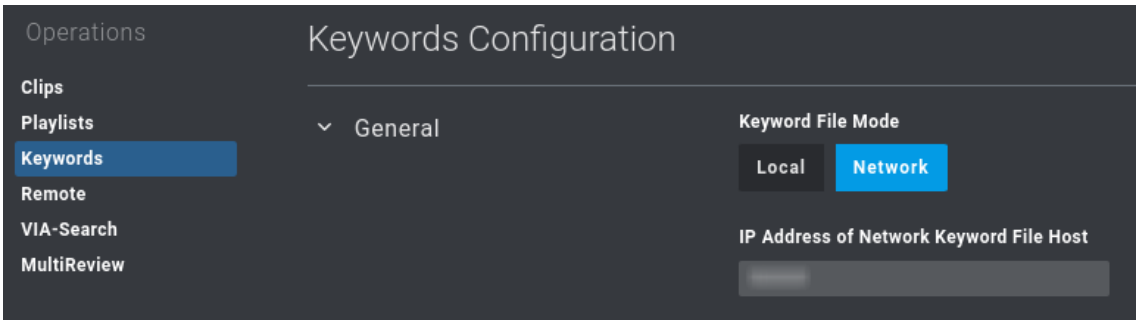
This default setting is only taken into account at startup of LSM-VIA. It is independent of the **Always / Conditional** setting available from the Live screen and the Clip screen of the Remote and any change of the **Always / Conditional** setting will have no impact on the default setting.

AUX Track Output

Description	Specifies to which audio outputs the auxiliary track of the playlist will be played out.
Possible Values	The following values are possible: • **PRV**: The auxiliary track will use the audio outputs normally assigned to the PRV channel. If no PRV channel is available, the Aux Track will not be assigned to any audio output. • **PRV&7-8/15-16**: The auxiliary track will use the audio outputs normally assigned to the PRV channel if there is one, plus all the audio outputs from 7-8/15-16 that have not yet been assigned to another channel. Use this option if you need an auxiliary track without PRV channel available. • **PGM**: The auxiliary track will use the audio outputs normally assigned to the PGM channel.
Default value	PRV

Keywords Settings





Keyword File Mode

Description	Specifies whether the local workstation works with a keyword file stored locally or on another LSM-VIA workstation of the network.
Possible Values	Local, Network
Default value	Local

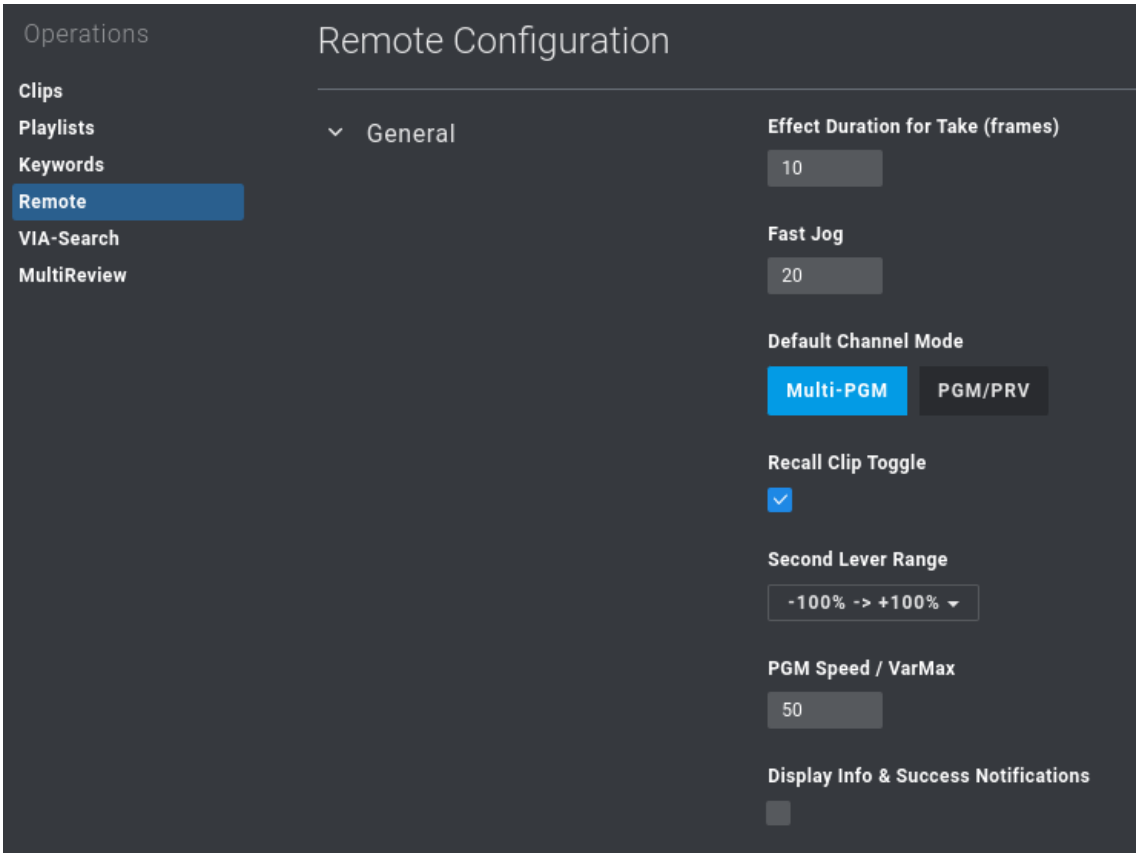
Local Keyword File

Availability	This setting is only displayed when the **Local** option for the **Keyword File Mode** parameter has been selected.
Description	This field gives the path to and name of the local keyword file used to manage clip keywords.

IP Address of Network Keyword File Host

Availability	This setting is only displayed when the **Network** option for the **Keyword File Mode** parameter has been selected.
Description	This setting specifies the IP Address of the LSM-VIA workstation hosting the keyword files.

Remote Settings



Effect Duration for Take (frames)

Description	Specifies the duration of the **Take** effect (swap between the media loaded on the PGM1 and the PGM2 or the PGM and the PRV).
Possible Values	From 0 to 600 frames
Default value	10 frames

Fast Jog

Description	Specifies how many times faster than the standard jog speed the loaded media is browsed when enabling the **Fast Jog** function on the Remote Panel.
Possible Values	From 1x to 20x (integer numbers)
Default value	20x

Default Channel Mode

Description	Specifies the default mode to control the channels of the EVS server.
Possible Values	Multi-PGM, PGM+PRV
Default value	Multi-PGM

This default setting is only taken into account at startup of LSM-VIA. It is independent of the **PGM+PRV / Multi PGM** setting available from the Live screen and the Clip screen of the Remote and any change of the **PGM+PRV / Multi PGM** Remote setting will have no impact on the default setting.

Recall Clip Toggle

Description	Enables/disables the selection of the camera of a clip through the Function keys: pressing several times the Function key of the clip position calls successively the various camera angles of the clip.
Possible Values	ON, OFF
Default value	ON

Second Lever Range

Context	The lever can be used in normal mode to play back clips at slow motion speed from 0 to 100%. A secondary range is available to playback material at other speed ranges. To gain access to the secondary speed from the remote panel console, press SHIFT + 2nd Lever/TAKE. The second lever range is also available when editing the speed of playlist elements.
Description	Specifies the secondary speed range on the Remote Panel.
Possible Values	• -100% → +100% • 0 → 200% • -200% → +200% • 0 → 300% • 0 → 400% • -400% → +400%
Default value	-100% → +100%

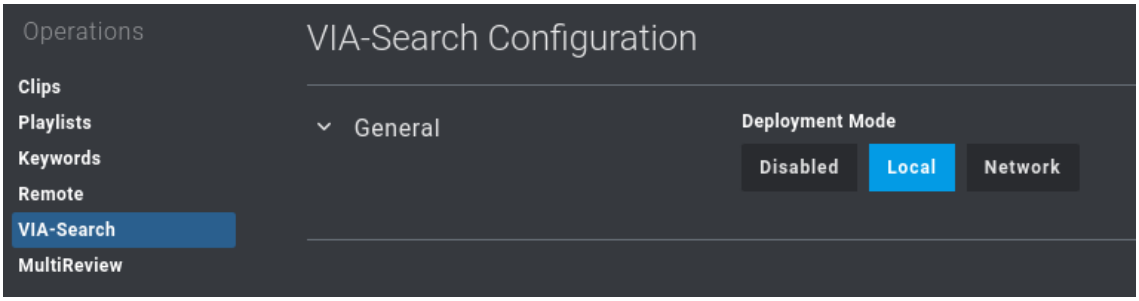
PGM Speed / VarMax

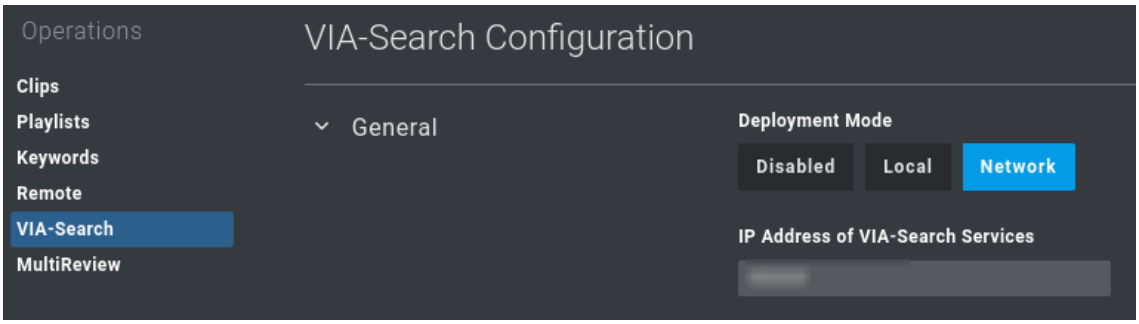
NEW !	Availability	The Var Max option is not available with XS-VIA configurations.
	Context	During playback, if **PGM Speed** or **Var Max** has been activated, the lever range will be adapted so that: • in **PGM Speed** mode: the only playback value for any position of the lever other than 0, is the one specified by this parameter. OR • in **Var Max** mode: the speed range defined by the lever corresponds to [0% - setting value].
	Description	Specifies the playback speed assigned to the lever when the **PGM Speed** mode is activated, or the speed range when the **Var Max** mode is activated.
	Possible Values	Range of values from 1 to 400 %
	Default value	50%

Display Info & Success Notifications

Description	Enables/disables the display of the notifications as pop-up for the Info and the Success categories on the LSM-VIA Viewer and on the Remote Panel touchscreen. Notifications for Error and Warning are displayed in any case.  This setting does not impact the notifications listed in the Notification pane which still displays the notifications from all the categories.
Possible Values	ON, OFF
Default value	OFF

VIA Search Settings





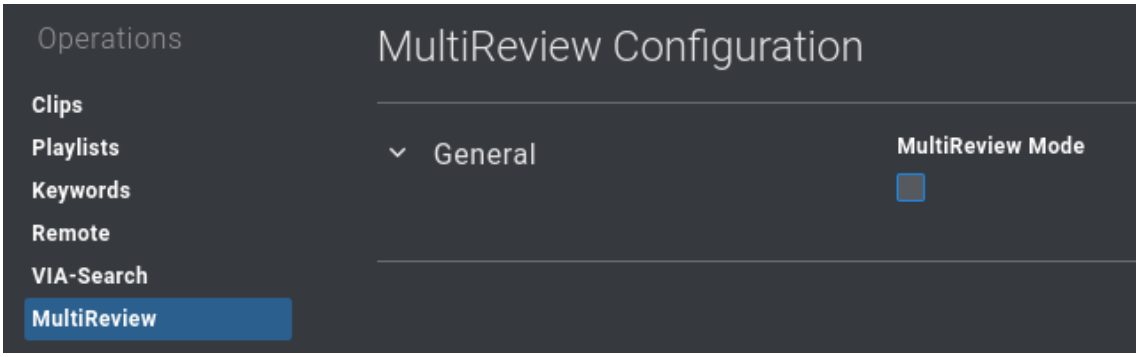
Deployment Mode

Description	Enables/disables the Search services and specifies where they are deployed.
Possible Values	• Disabled: VIA Search services will be disabled and the user will not be able to use the search feature. • Local: VIA Search services are deployed locally on the LSM-VIA workstation and started when LSM-VIA is launched. • Network: VIA Search services are deployed on a single LSM-VIA workstation of the network identified in the next field.
Default value	Local

IP Address of VIA Search Services

Availability	This setting is only displayed when the **Network** option for the **Deployment Mode** parameter has been selected.
Description	This setting specifies the IP Address of the network LSM-VIA workstation where the VIA Search services are installed.

MultiReview



MultiReview Mode

Description	Makes the MultiReview option available from the LSM-VIA Main menu, provided that a valid license has been installed. The MultiReview mode allows the users to view and browse the feeds from all the EVS server recorder channels of the network and to perform actions on the selected channels. See section MultiReview Mode in the user manual.
Possible Values	• **No** (cleared) means that the MultiReview mode is not available from LSM-VIA. • **Yes** (selected) means that the MultiReview mode will be available from LSM-VIA.
Default value	No (cleared)

6.4. Importing or Exporting a Configuration

NEW !

Context of Use

From the Configuration tool, a configuration can be exported from or imported to any XClient-VIA of the network.

This covers:

- the System settings
- LSM-VIA Remote assignable Shortcut keys
- the Shotbox content
- the Trains filter content.

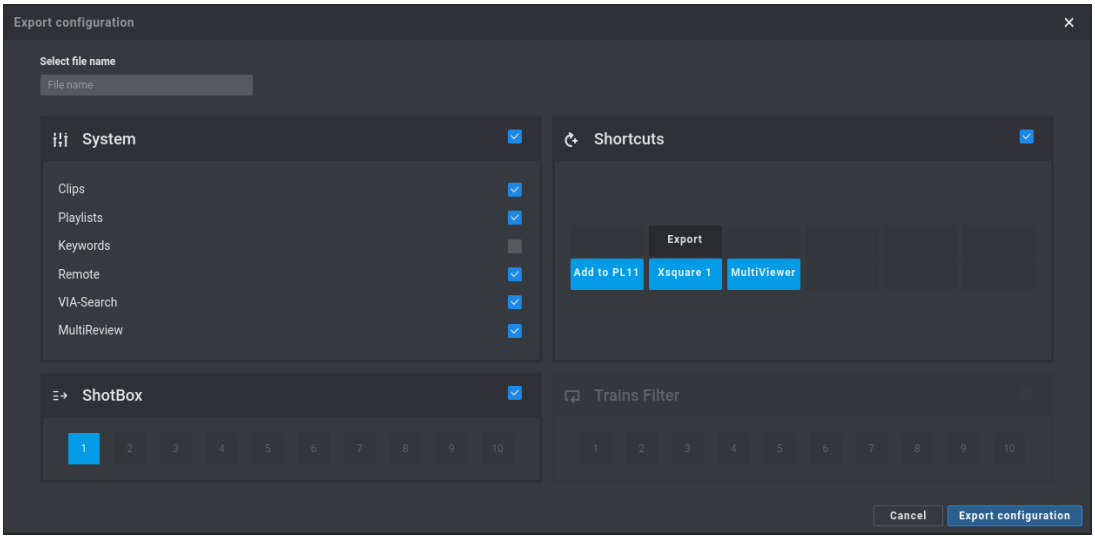
it is not possible to import Shortcuts, Shotbox and Trains filter between two major LSM-VIA versions (e.g. 1.X and 1.(X+1)).

How to Export a Configuration

1. Click the **Export** button at the top of the Configuration tool.

   The Export Configuration window opens.

2. (optional) Clear some parameters or categories you do not want to be part of the exported configuration.



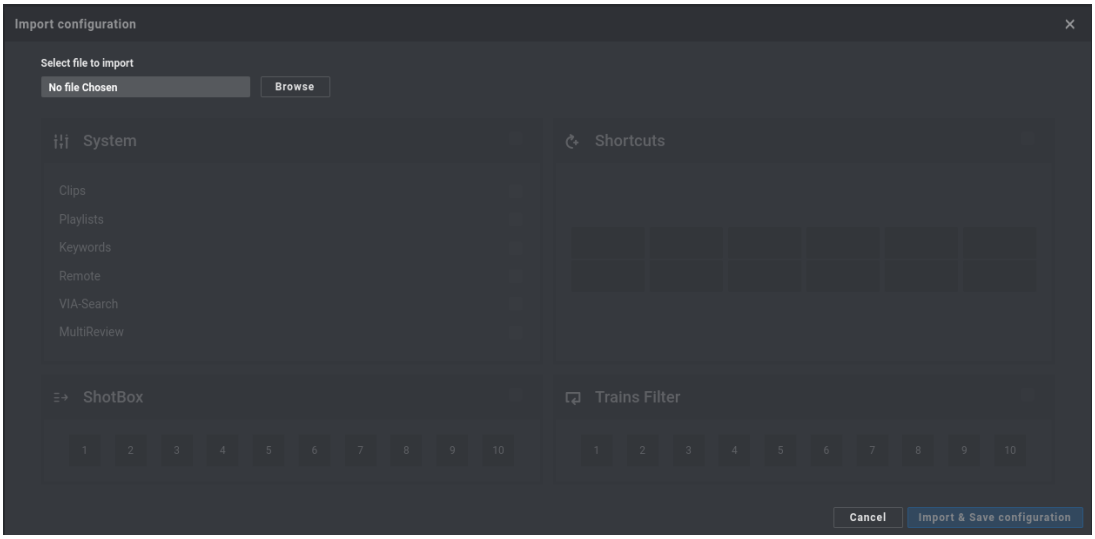
3. Enter a name for the configuration in the **Select file name** field.
4. Click **Export configuration**.

   The configuration is exported as a .json file in the Downloads folder.

How to Import a Configuration

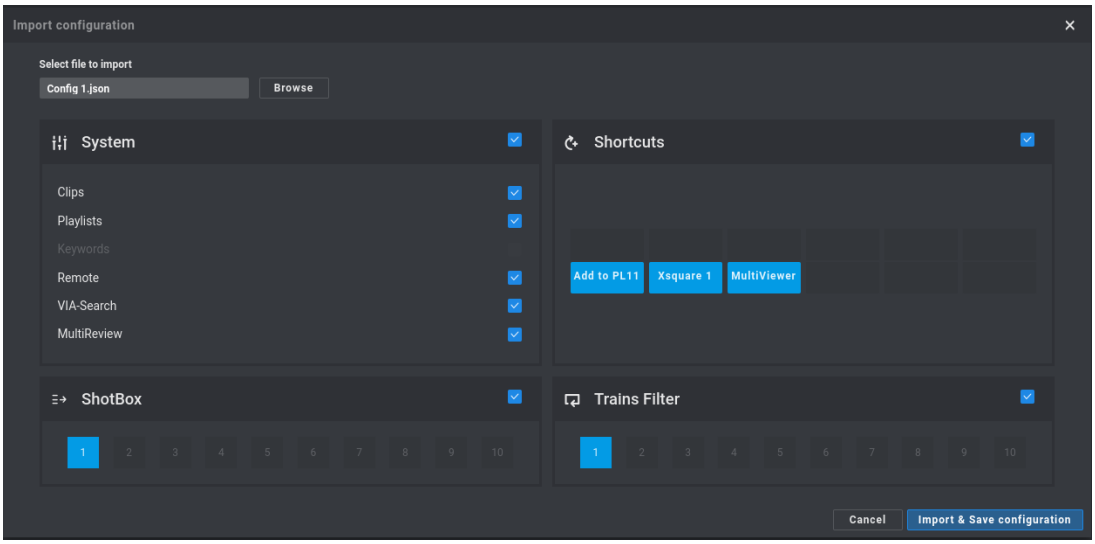
1. Copy the .json configuration file you want to import on your workstation.
2. From the Configuration tool, click the **Import** button.

   The Import Configuration window opens.



3. Click the **Browse** button to select a valid .json configuration file to import and click **Open**.

   The Import Configuration window displays the corresponding parameters.



4. (optional) Clear some parameters or categories you do not want to be part of the imported configuration.
5. Click the **Import and Save configuration** button.
6. If requested, restart LSM-VIA for the configuration to be taken into account.

7. Starting LSM-VIA

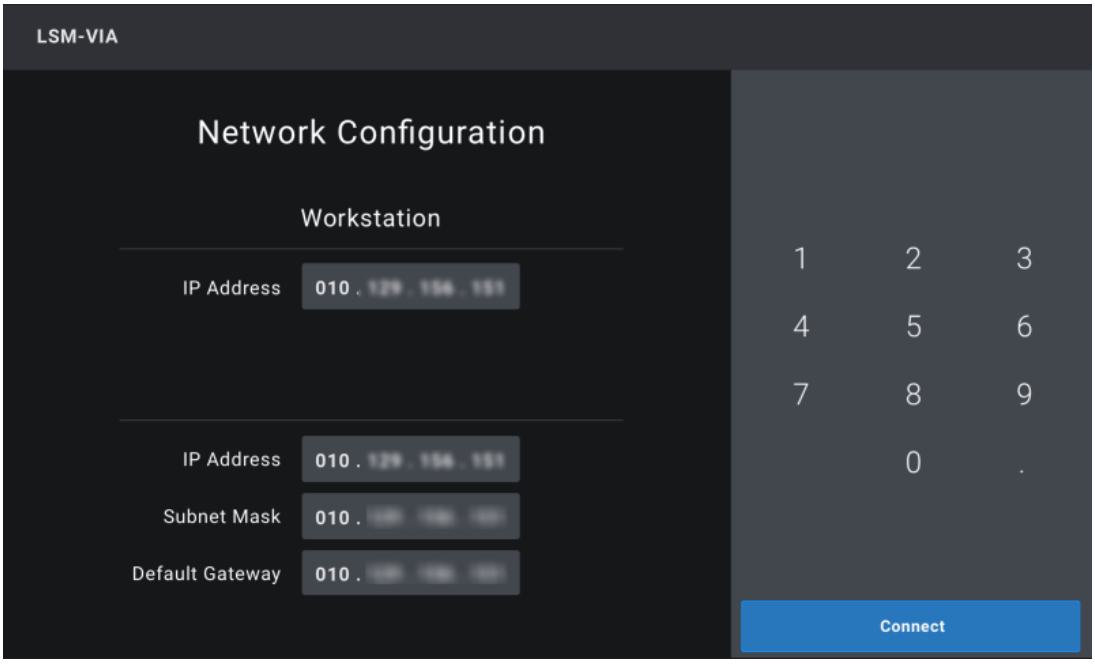
How to Start LSM-VIA

Starting LSM-VIA consists in launching the application on both the LSM-VIA workstation (LSM-Viewer) and the LSM-VIA Remote Panel.

1. Double-click the LSM-VIA icon on the desktop of the LSM-VIA workstation:

2. Switch on the Remote Panel using the power switch at the back of the Remote Panel, above the power supply.
3. On the Remote Panel touchscreen, in the **IP Address** field, enter the IP address of the LSM-VIA workstation.

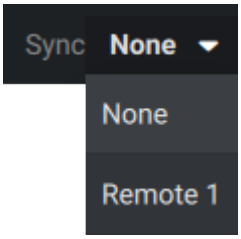
   When you enter three digits for an octet, the focus shifts directly to the next octet. Otherwise, you can tap the octet you want to edit.



4. In the same way, enter the IP address, subnet mask and default gateway for the LSM-VIA Remote Panel.
5. Tap 

on the Remote Panel touchscreen.

6. (Optional) In the LSM-VIA, you can select the Remote Panel in the **Sync** field so that the page and bank navigation is synchronized between LSM-VIA Viewer and LSM-VIA Remote Panel.



You are now ready to start working in LSM-VIA.

The IP addresses are stored in memory so that you can skip steps 3 and 4 for subsequent connections.

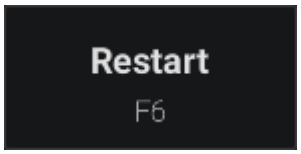
How to Close LSM-VIA

This closes LSM-VIA on the LSM-VIA workstation and on the LSM-VIA Remote Panel.

1. Switch off the Remote Panel using the power switch at the back of the Remote Panel, above the power supply.
2. Close the LSM-VIA application using one of the following keyboard shortcut sequences from the LSM-VIA Viewer:
   - Alt + F4
   - Alt + Q

How to Quit LSM-VIA on the Remote Panel

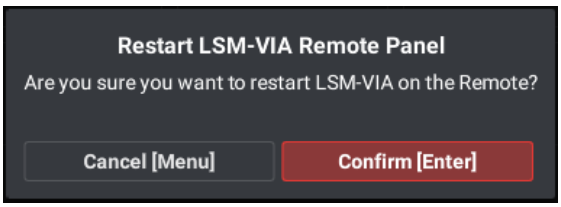
This closes the LSM-VIA application on the LSM-VIA Remote Panel.

1. Press SHIFT + MENU to access the main menu.
2. Tap 

or press 

.

   The following message is displayed on the touchscreen:



3. Tap Confirm [Enter] or press ENTER to confirm you want to close LSM-VIA on the Remote Panel.

The Network Configuration screen opens, allowing you to directly restart LSM-VIA on the Remote Panel if the LSM-VIA Viewer is still open on the workstation.

- If you switch off the Remote Panel, the Viewer will still be able to communicate with the EVS server. You can switch on the Remote Panel and connect again at any time.
- If you close the LSM-VIA Viewer, the LSM-VIA application on the Remote Panel will request you to quit the application.

8. Recovery Process of the Remote Panel

Introduction

Should the Remote Panel crash or no longer react to any command, you will have to perform a recovery process of the Remote Panel.

The recovery consists in reinstalling a minimalist version of the Remote Panel, and then updating the LSM-VIA components on the Remote Panel from the LSM-VIA workstation.

It is recommended to close the LSM-VIA application on the LSM-VIA workstation before you start the recovery.

How to Recover from a Crash

1. Power off the LSM-VIA Remote Panel.
2. Press and hold the recovery button located under the Remote Panel.
3. Power on the Remote Panel while keeping the recovery button pressed for at least 5 seconds, until the following message is displayed on the Remote panel:

   ```
   Installation in progress

   this might take some time, please wait.

   Do not turn off the remote.
   ```

   When you release the recovery button, a message displays the installation progress. It should take about 1 minute. When the application has been reset, you are requested to restart the Remote Panel.
4. Power off and on the Remote Panel when requested.

   The normal boot sequence is executed (about 20 seconds).

   At the end of the process, the Remote Panel displays the Network Configuration screen.
5. On the workstation, start the LSM-VIA application.
6. On the Remote Panel, fill in the fields in the Network Configuration screen with the touchscreen and tap 

.
7. The LSM-VIA application detects that the versions between the Remote Panel and the Workstation are different and prompts you to upgrade the version on the Remote Panel, as for a standard upgrade process.

   See section "Step 2 - Upgrading LSM-VIA Remote Panel" on page 17 for a full description of the version upgrade on the Remote Panel.

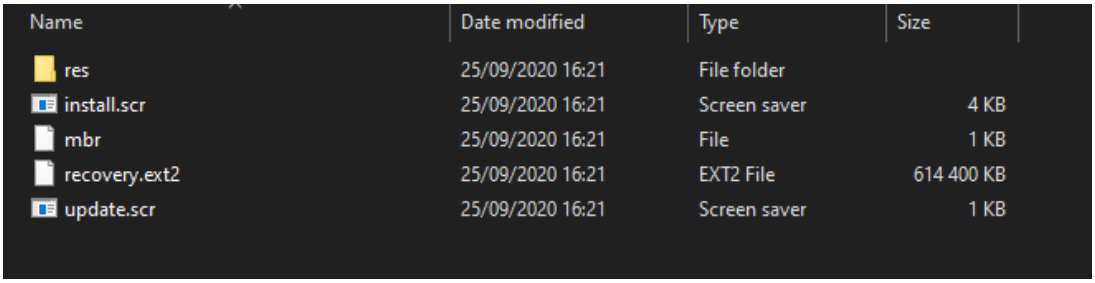
9. Upgrading the Remote Panel Operating System (Factory Install)

This operation will result in the lost of the Remote Panel configuration. Make sure you take note of your configuration from the Welcome screen.

When required by EVS, you may have to manually update the Operating System installed on the Remote Panel.

Use a USB stick formatted in FAT32 with up to 4GB memory.

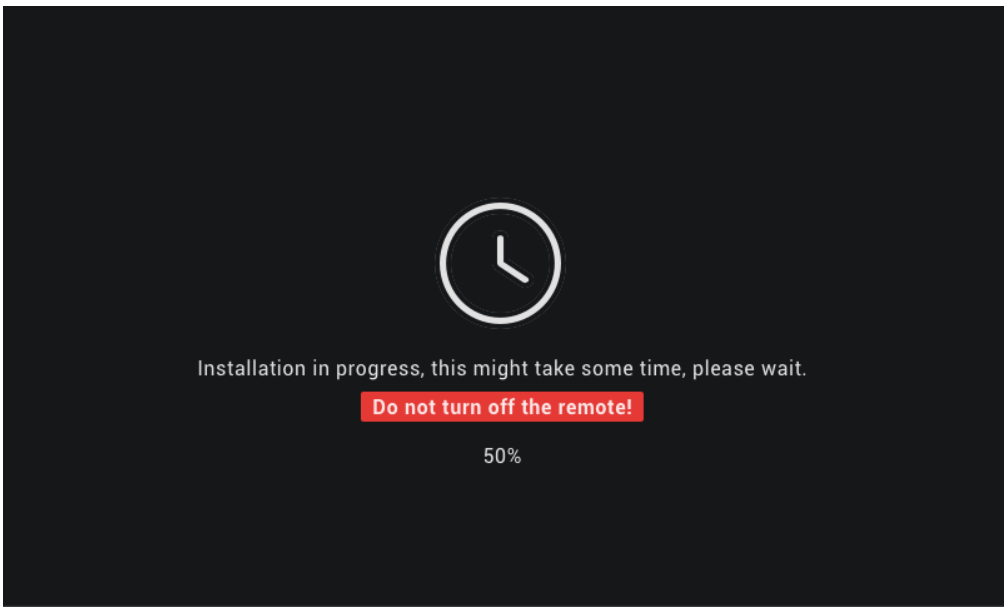
1. Extract the content of the Factory Install version of the Operating System archive (*.tar.gz) at the root location of a USB stick (unzipped content).



2. Power OFF the Remote Panel.
3. Plug the USB stick to one of the USB port of the Remote Panel.
4. Power ON the Remote Panel.

   The Operating System located on the USB stick will automatically be installed.

   The following message is displayed on the touchscreen:



5. Once the installation is done, power OFF the Remote Panel.
6. Remove the USB stick.
7. Power ON the Remote Panel.

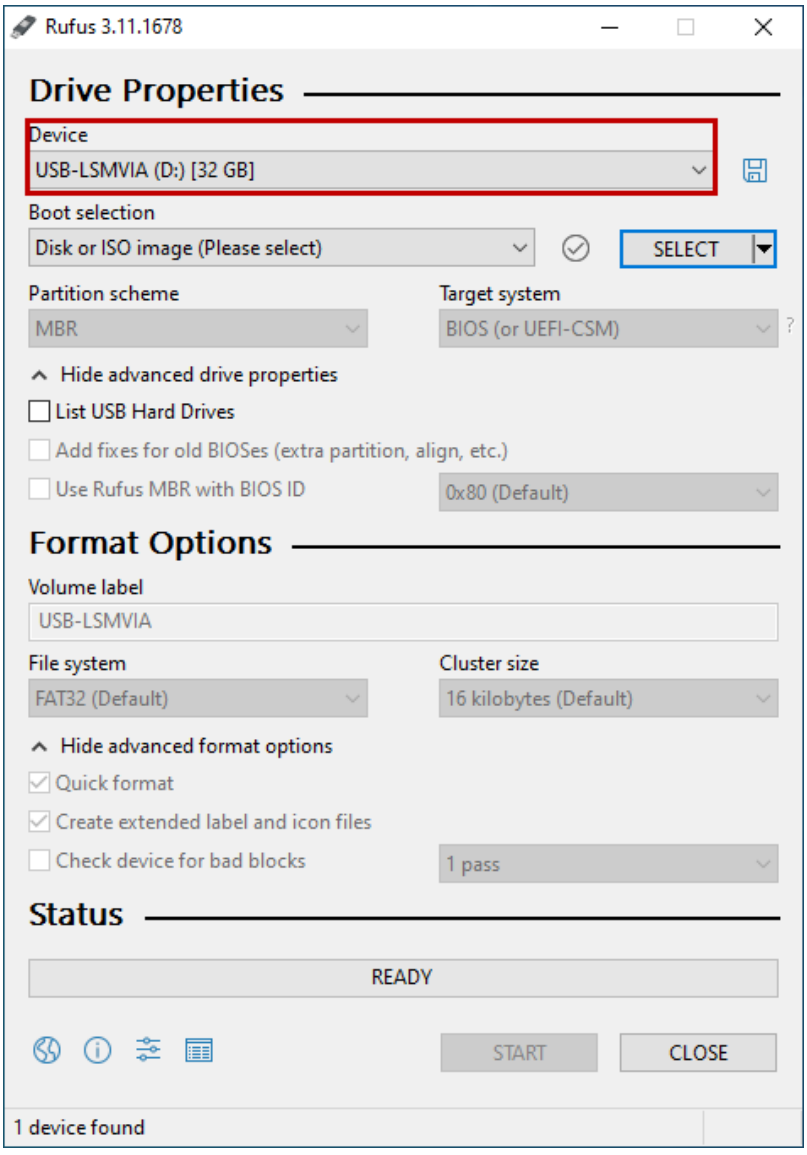
   The LSM-VIA Welcome Screen is displayed.

This update of the Remote Panel Operating System will update the recovery partition on the Remote Panel at the same time.

10. Deploying XClient-VIA

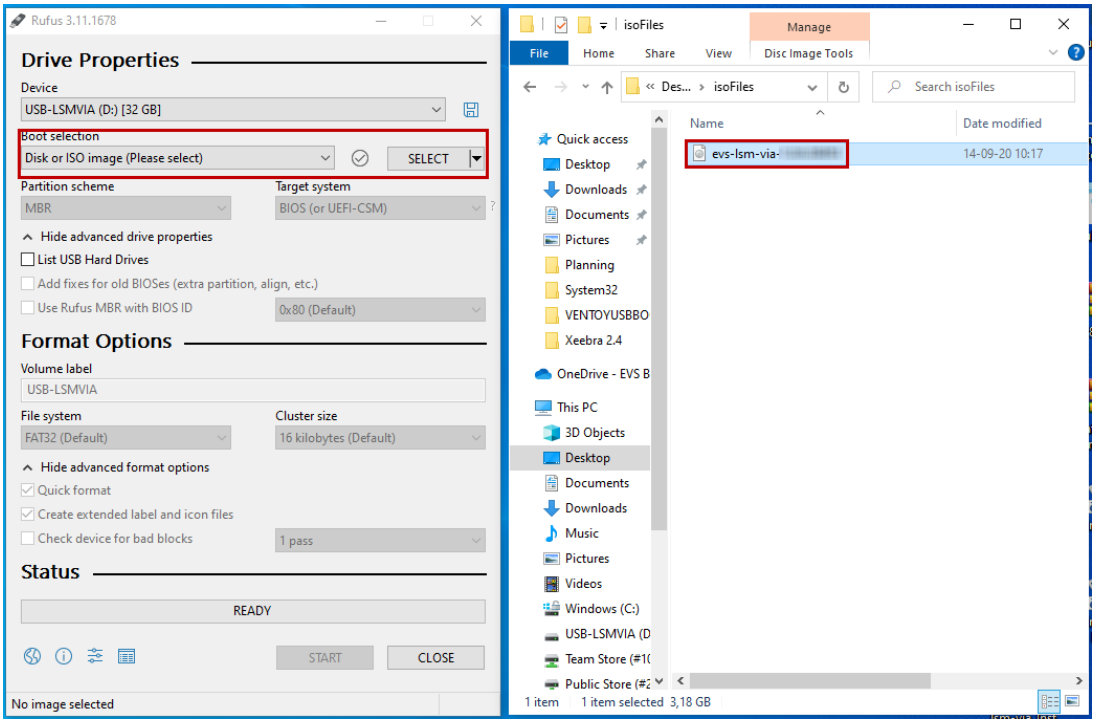
USB Key Preparation

1. Download Rufus on https://rufus.ie./
2. Launch Rufus and select the USB device

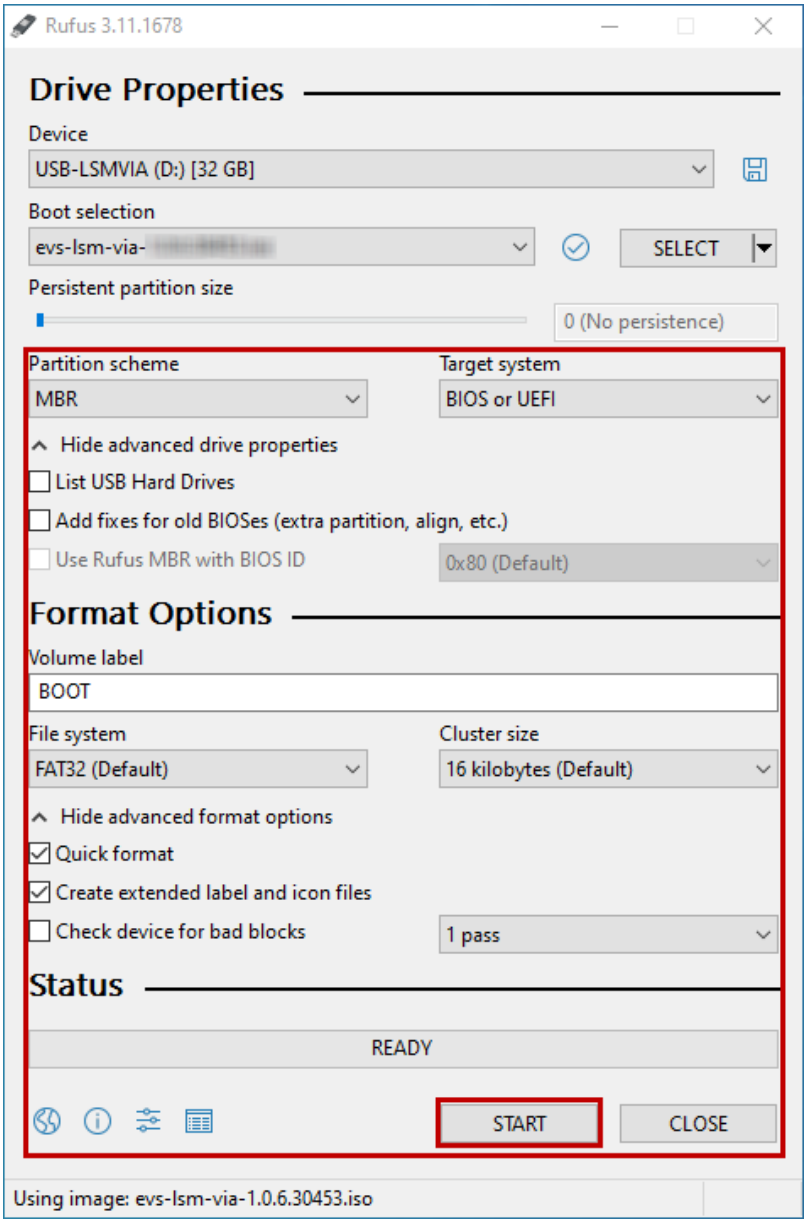


3. Select you LSM-VIA iso image.

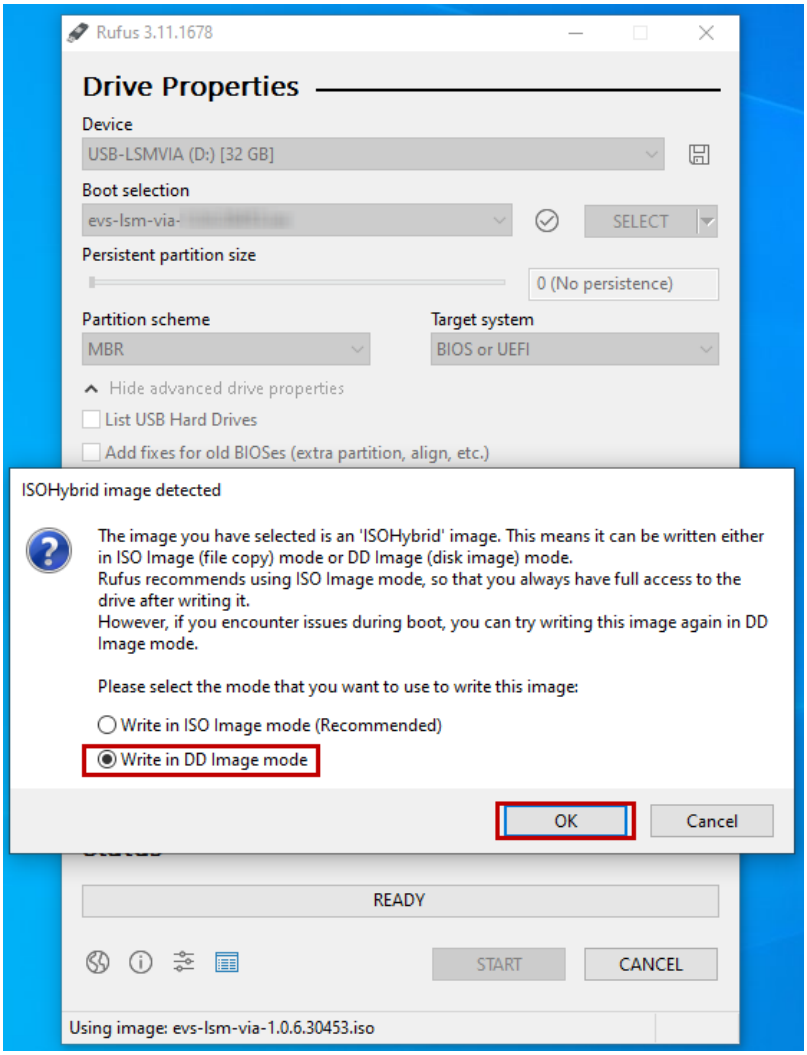
   Please contact the EVS Support team to confirm or obtain the right image version.



4. Check all the parameters and click **Start**.



5. Select the **Write in DD image mode** option and click **OK**.

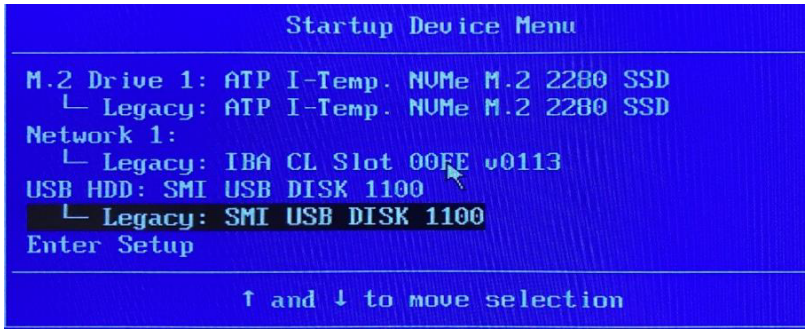


6. Wait a few minutes until the USB stick is ready to be used.

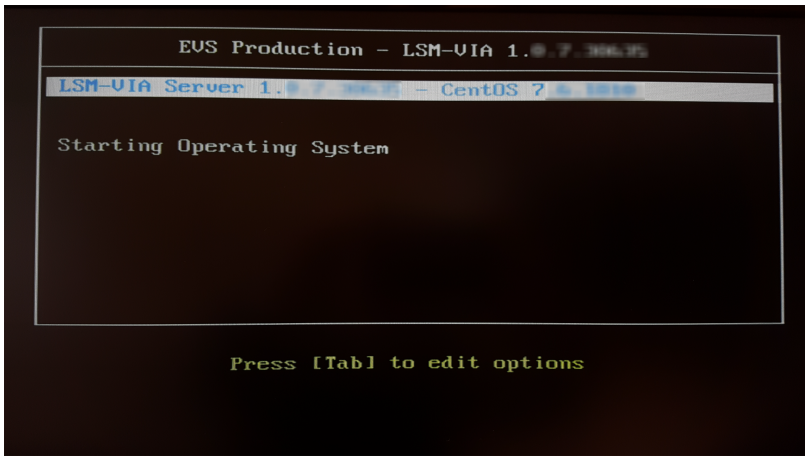
Client Installation

This operation will result in the lost of the XClient-VIA Infrastructure configuration and the existing licenses. Make sure you copy and save the license files and you take note of your configuration.

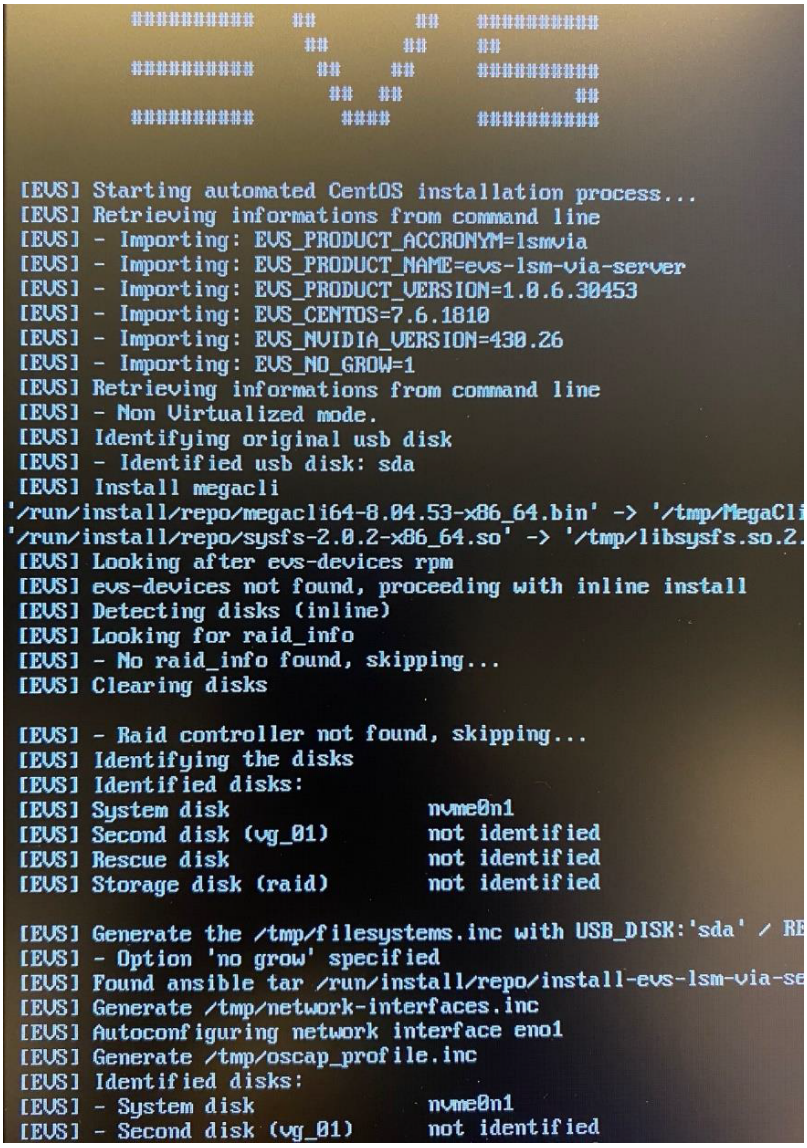
1. Plug the USB key on the computer.
2. Boot on the USB key:
   a. Press **F12** during startup.
   b. From the Startup Device menu, select the USB key created with Rufus.



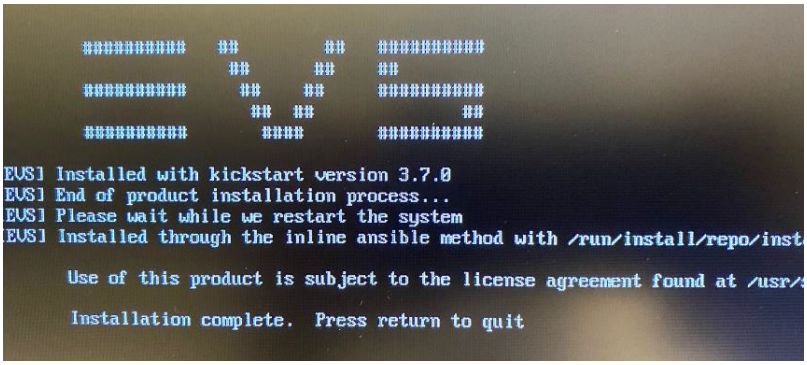
   c. From the next screen, select **LSM-VIA Server**.



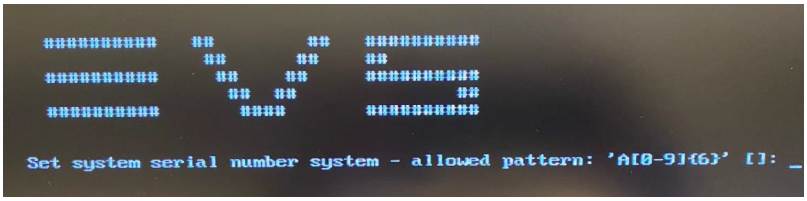
The installation process starts:



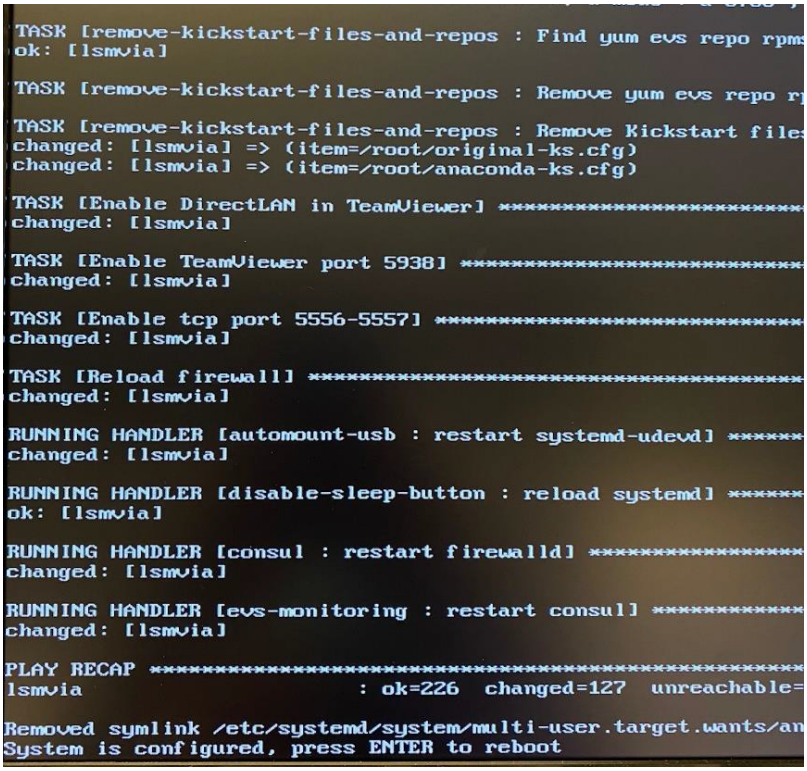
3. At the end of the first installation step, keep the USB key plugged to the XClient-VIA and reboot:



4. After the reboot, you will be asked to enter the serial number (available at the front of your computer).



5. At the end of this process, restart your computer to finalize the installation.



If you have any question(s), please contact us: support@evs.com.

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