TECHNICAL REFERENCE
PART 1

Version 6.1 - April 2013

IP.Director

Copyright

EVS Broadcast Equipment – Copyright © 2005-2013. All rights reserved.

Disclaimer

The information in this manual is furnished for informational use only and subject to change without notice. While every effort has been made to ensure that the information contained in this user manual is accurate, up-to-date and reliable, EVS Broadcast Equipment cannot be held responsible for inaccuracies or errors that may appear in this publication.

Improvement Requests

Your comments will help us improve the quality of the user documentation. Do not hesitate to send improvement requests, or report any error or inaccuracy on this user manual by e-mail to doc@evs.com.

Regional Contacts

The address and phone number of the EVS headquarters are usually mentioned in the **Help > About** menu in the user interface.

You will find the full list of addresses and phone numbers of local offices either at the end of this user manual (for manuals on hardware products) or on the EVS website on the following page: http://www.evs.com/contacts

User Manuals on EVS Website

The latest version of the user manual, if any, and other user manuals on EVS products can be found on the EVS download center, on the following webpage: http://www.evs.com/downloadcenter

Table of Contents

TABLE OF CONTENTS ..... **III**

WHAT'S NEW? ..... **IV**

1. HARDWARE **1**

2. CONNECTION TO SERVERS **4**

2.1 Configuration and Connection 4
2.1.1 One IP-Director and One Server 6
2.1.2 Multiple IP-Director Workstations and one Server 7
2.1.3 One IP-Director and a Network of Servers 8
2.1.4 Multiple IP-Director Workstations and a Network of Servers 9
2.2 Setup of Server for use with IP-Director 10
2.2.1 Multicam LSM Mode 11
2.2.2 IPDP SPOTBOX mode 12
2.3 SERIAL LINK REDUNDANCY 14
2.4 Gigabit Connection for Software Player and XML Unit 16

3. REMOTE INSTALLER **18**

3.1 Start the Remote Installer application. 19
3.2 Workstation LIST 23
3.3 Remote Installer menu 25
3.4 Workgroup functionalities 26
3.5 Plugins 28
3.6 Install Remote Installer Version 42
3.7 Install Package 44
3.8 Database Configuration 46
3.9 CONTEXTUAL MENUS 62
3.9.1 Workgroup Contextual Menu 62
3.9.2 Populate Hosts Files 65
3.9.3 Workstation Contextual Menu 69
3.10 Parameters Configuration 84
3.10.1 General Parameters Configuration 85
3.10.2 Storage Priorities Configuration 91
3.10.3 XT Network Configuration 93
3.10.4 Services Configuration 96
3.10.5 Lan and Wan Configuration 98
3.10.6 SynchroDB Configuration (Load Balancing) 101
3.10.7 XML Unit Configuration 103
3.10.8 Thumbnails and Grab Configuration 110
3.10.9 Targets Configuration 115
3.10.10 IP Logger Export Configuration 158
3.10.11 Near Line Management Configuration 162
3.10.12 Lo-Res Management Configuration 170
3.10.13 Define VarID Groups Configuration 172
3.10.14 As Will Run Log Configuration 174
3.10.15 Playlist Configuration 176
3.10.16 Redundancy Configuration 178
3.10.17 IP-API Configuration 180
3.10.18 Director's Cut Configuration 181

What's New?

The following table describes the sections updated to reflect the new and modified features on IPDirector 6.15 (compared to IPDirector 6.0).

In the user manual, the icon

has been added on left margin to highlight information on new and updated features.

Click the section number (or the description) in the table to jump directly to the corresponding section.

Section	Description
3.3	Open IP Browse Configurator added
3.10.1	Storage Priority removed from General tab
3.10.2	New tab Storage Priorities created

1. HARDWARE

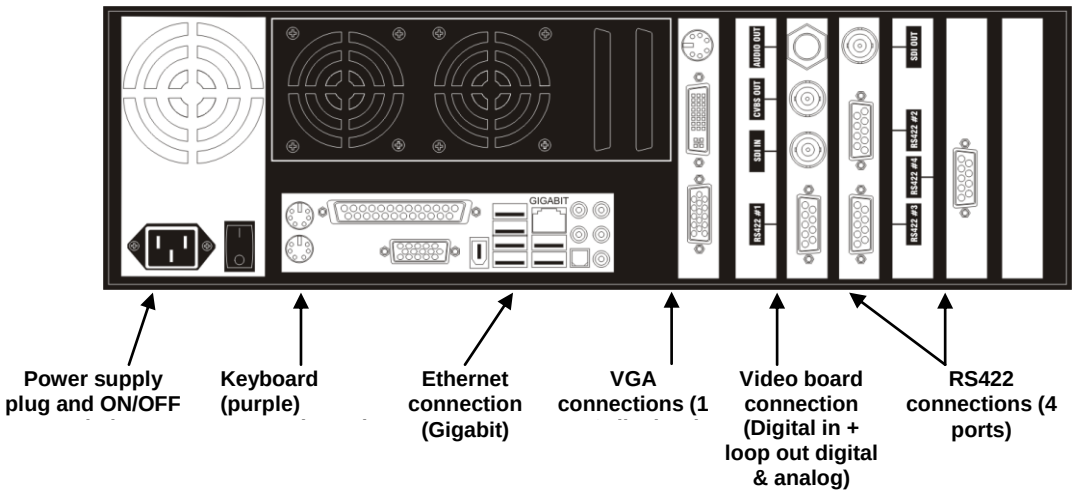
The IP-Director software is installed in a workstation operating under Windows XP (SP2 minimum – English).

The hardware components are housed in three different rack cabinets.

3U RACK (IPWS3 series):

Connections on the rear of the chassis:

- Intel motherboard & AVH video board: (SDI Video Card & RS422)



Important

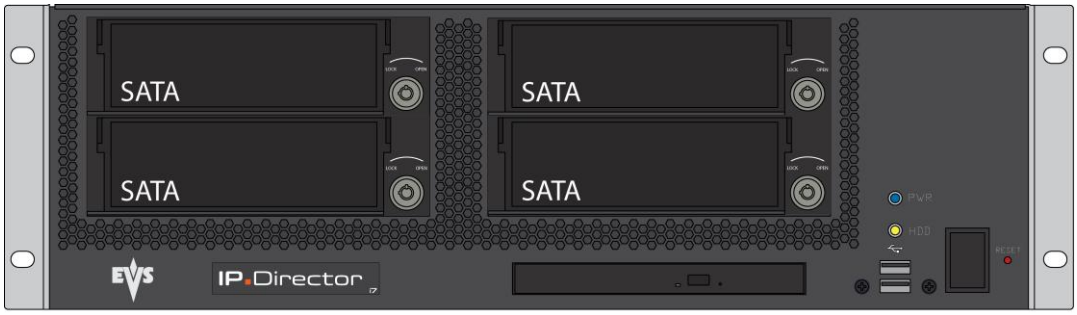
This 'old serie' 3U Racks were delivered with 1GB Ram and the new version 5.8 requires 2GB Ram minimum.

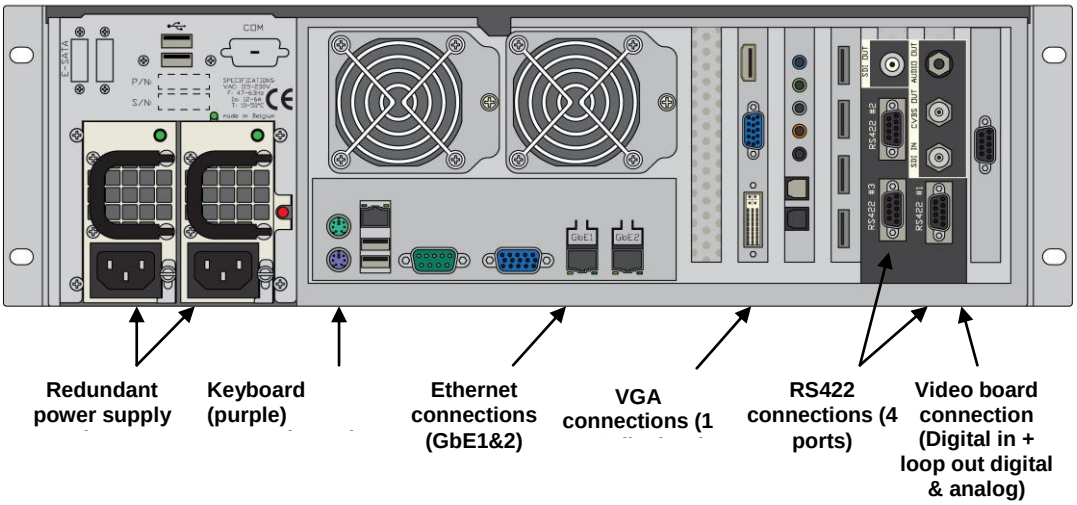
It is largely advised to contact the EVS support or the local office in order to upgrade these workstation series.

Old 3U Racks based on a TYAN Motherboard are no longer supported for an IP-Director version 6.

3U Rack (current IPDWS3J7 series):

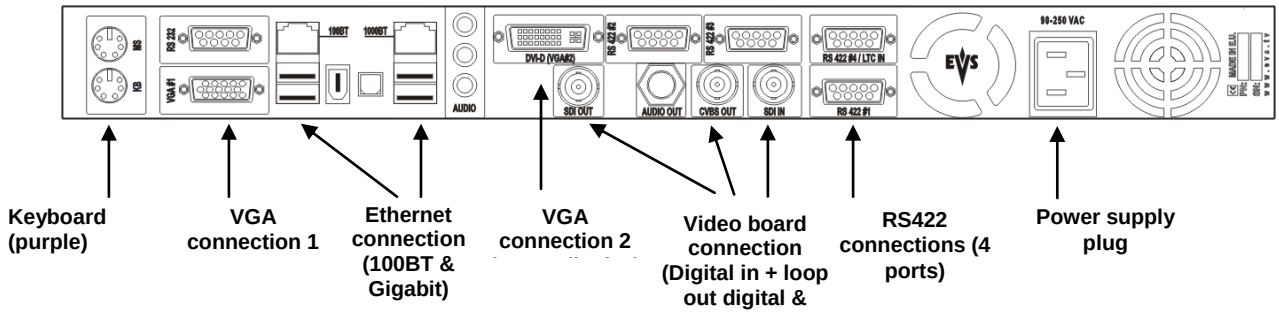
- SuperMicro i7 motherboard & AVH video board: (SDI Video Card & RS422)





1U RACK (IPWS1 series):

Connections on the rear of the chassis:



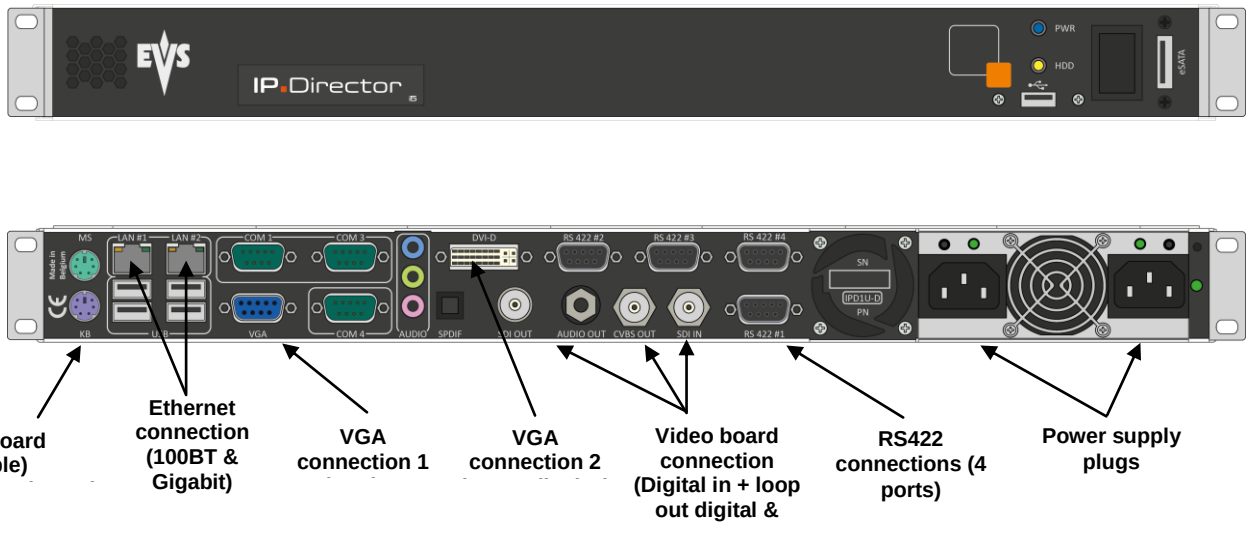
Important

Original IP-Director 1U Models were delivered with 1GB Ram and the new version 5.8 requires 2GB Ram minimum.

It is largely advised to contact the EVS support or the local office in order to upgrade these workstation series.

IP Director 1U models based on the Pentium mobile motherboard (MB 896) **cannot be used** with IP-Director version 6. These models are listed with a **P/N: IPD1U-M**

1U RACK (current IPDWS1HP series):



2. CONNECTION TO SERVERS

Introduction

The following section describes the physical connections and software configurations which are required to use IP-Director with Servers. It also includes sample configurations to illustrate various typical uses for the system.

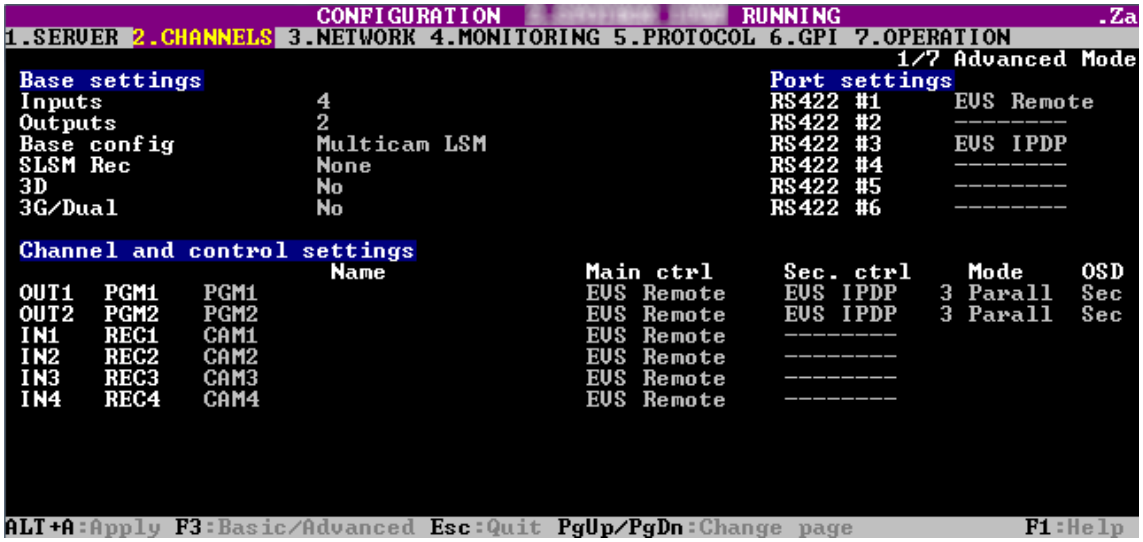
2.1 Configuration and Connection

Any IP-Director workstation can be connected to one or several servers via one physical RS-422 connection. If channel control is required on an individual server then a RS-422 connection must be made to that server. Each connection provides access to only one server for channel control but to the whole XNet that the server is present on for clip and train retrieval, together with all database functionality.

Each server has its channel configuration set individually by selecting an application from the list on the EVS Menu page of the Server's VGA screen.

Server Configuration:

When using an application line with a LSM or Spotbox base configuration, port configuration and protocols are set on the parameters (F8, tab 2) page of the Server's VGA screen (in the EVS Menu).



Since Multicam 11, the channel configuration can be changed while the Multicam application is running (SHIFT + F2).

Switch to Advanced Mode (F3) in order to display the Secondary Controller.

Refer to the **Setup of server for use with IP-Director chapter** for more details.

Note

Control of any channel of an individual server requires that an RS-422 connection exists between a workstation and that server. All channels of the connected server can be controlled by any workstation connected by an IP Network to the workstation with the RS-422 link to that server.

If a server has no RS-422 link to an IP-Director Workstation network its channels cannot be controlled.

2.1.1 One IP-Director and One Server

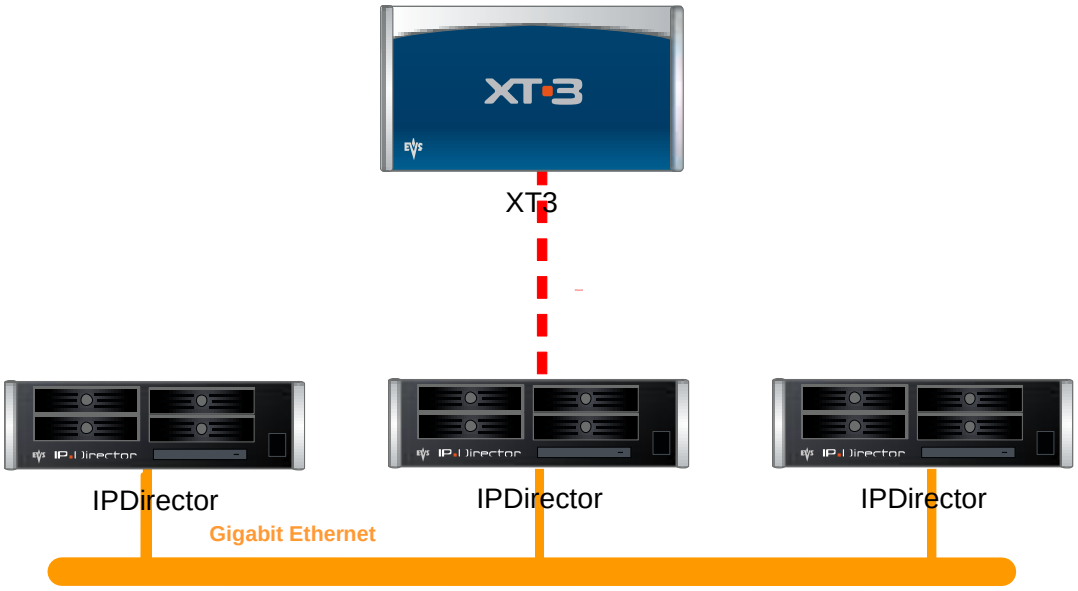
In its most basic configuration, connection is made between one IP-Director Workstation and a server using one RS-422 connection

IPDP Spotbox mode provides all of the functionality of IP-Director to a single server and allows control of all of the server channels from IP-Director or third party devices, but no control from an LSM remote panel. Configuration of the channels, ports and protocols to be used are set up before the server is operational and the configuration can be modified when the server is running since Multicam 11 (SHIFT + F2, Tab2).

LSM mode provides all of the functionality of IP-Director to a single server and allows control of all of the server channels from IP-Director or third party devices, but the primary control of Port 1 must be from an LSM remote panel. Configuration of the channels, ports and protocols to be used are set up before the server is operational and the configuration can be modified when the server is running since Multicam 11 (SHIFT + F2, Tab2).

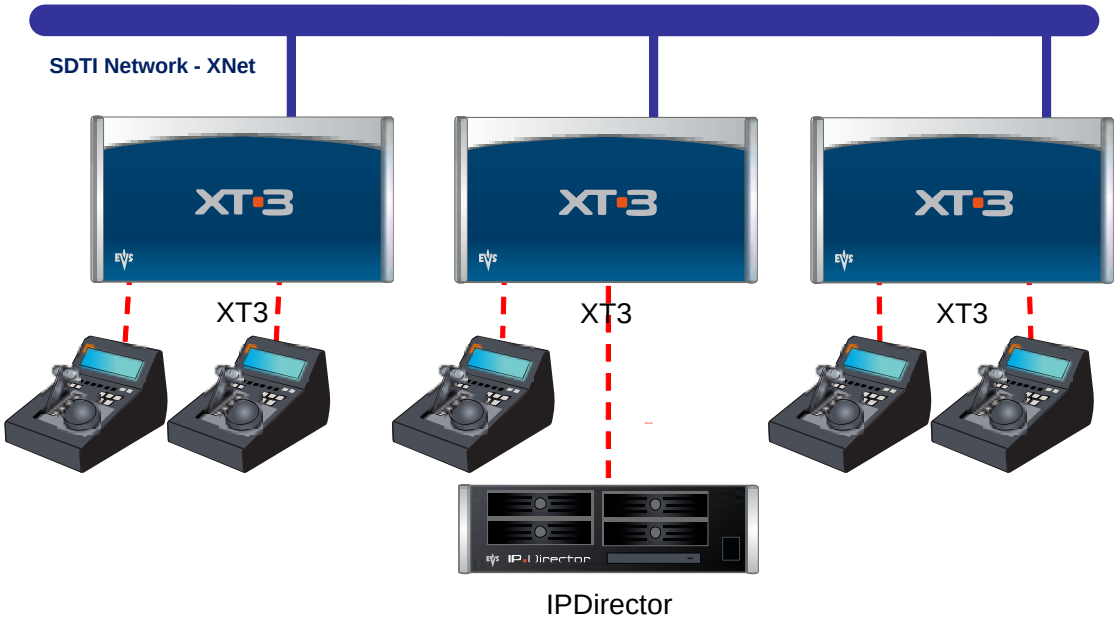
2.1.2 Multiple IP-Director Workstations and one Server

Several IP-Director Workstations can be inter-connected via Ethernet and with only one station of IP-Director which has a connection via an RS-422 with a server. Any of the IP-Director workstations can thus control the channels of the connected server, and access and manipulate the database of the single server. For example the first workstation can be used for clip creation and playback while the second creates a log sheet and another acts as a browse station, collating and organizing the media for later use.



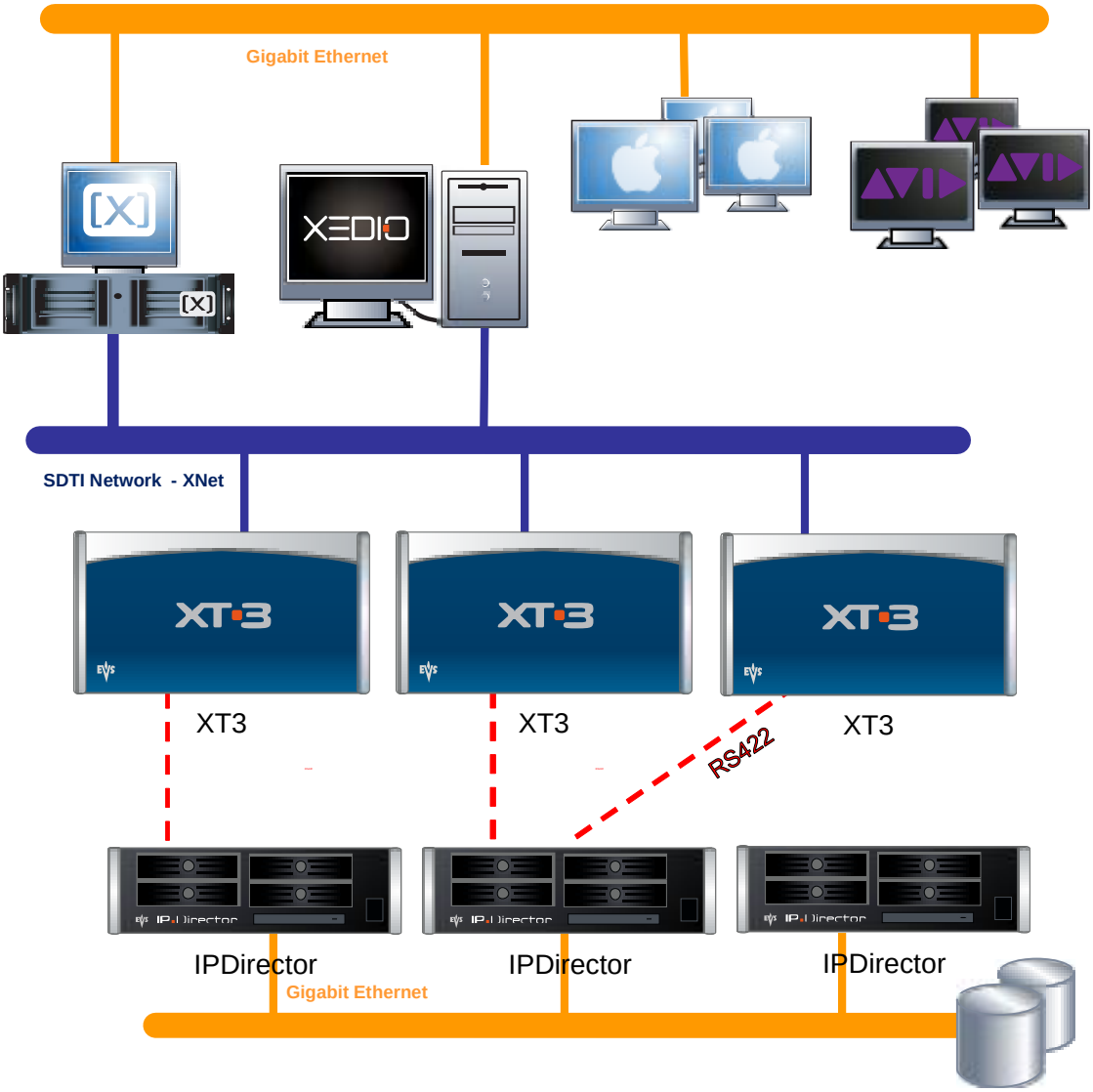
2.1.3 One IP-Director and a Network of Servers

All the media on an XNet[2] can be accessed. The connection via the RS-422 to a single server machine gives access to media and data from any server or XFile within the network, but **only** control of the channels on the RS-422 connected machine.



2.1.4 Multiple IP-Director Workstations and a Network of Servers

The example below integrates all previous configurations into a complete IP-Director environment. The possible combinations of connections of different devices to a workstation of IP-Director and a server make the architecture easy to connect and very flexible. It is possible to connect a network of up to 29 servers on an XNet[2] to up to 255 IP-Director Workstations. Each Workstation is capable of running all IP-Director Applications, or different workstations can each run an application each and a central database can collate all data from the IP network. As each server has an RS-422 connection to an IP-Director Workstation all channels can be controlled.



2.2 Setup of Server for use with IP-Director

General remark

This chapter describes the necessary steps to configure a primary and second control configuration for a channel but does not describe all the parameters which are necessary to fully configure a server.

Please refer to the EVS server user's manual for more information on how configuring the server.

Serial Link and Channel Configuration

Since Multicam 11 and the new servers hosting V3X and H3X boards, the server can be configured with all 8 channels controlled via one RS-422 connection allowing any combination between 6 record channels and no play channels, 6 play channels and no record channels.

8 channels configurations are supported (4 Play – 4 Rec, 2 Play – 6Rec,…)

The old server generation can be configured with 6 channels allowing any combination between 6 record channels and no play channels, 6 play channels and no record channels. But the servers are limited to 6 channels (3 Play – 3 Rec, 2 Play - 4Rec, 4 Play – 2 Rec…)

Since Multicam 11, the server serial port connections and assignment of secondary device control (SONY BVW75, VDCP, ODETICS …) to the channels can be defined in the EVS configuration menu (F8, tab2 Channels) on the server VGA screen before starting the Multicam application or while the server is running (SHIFT+F2, tab 2 Channels).

Note

The serial port configuration can be changed while the Multicam application is running and doesn't need a restart.

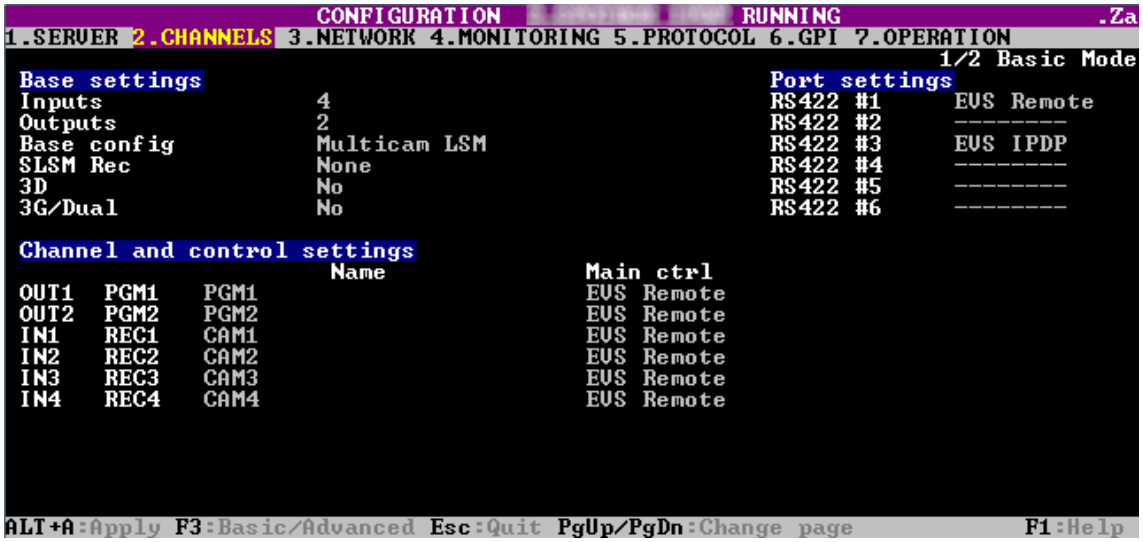
But the channel configuration changes while running require a restart of the application.

Also remember that the serial and channel configuration is stored in each line since Multicam 11. Thus restarting the Multicam on another line may change the serial port assignment.

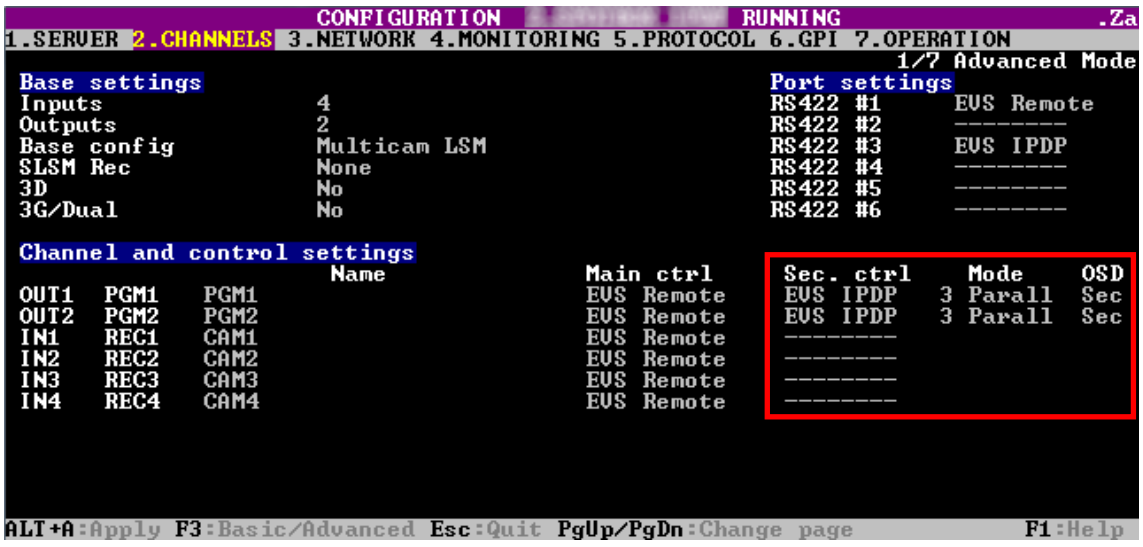
2.2.1 Multicam LSM Mode

In the configuration menu, while the application is running, then press SHIFT+F2 (tab2 channels).

The following window is displayed (the example below is a Multicam LSM 4 In and 2 Out configuration):



Press F3 to access the Advanced Mode configuration:



Use the TAB or SHIFT+TAB and ←, →, ↑, ↓ keys on the keyboard to pass from one parameter to the other. Use SPACE BAR to modify the value of a parameter.

For every channel, select the secondary device. You must specify the communication protocol used by the external device, the com port it is physically connected to, the control mode and which OSD will be displayed on the monitoring output of the channel.

The control mode can be:

Exclusive: the main controller and the secondary controller cannot control the channel at the same time. You will always give/get back the control of the channel to/from the main controller interface.

Parallel: the main and secondary controller can control the channel at the same time. It will typically be the case when the same operator wants to control a channel from 2 different devices at different times.

When working in parallel mode, you must specify which OSD settings will be used on the monitoring output of the channel: the OSD configuration of the main controller or that of the secondary controller.

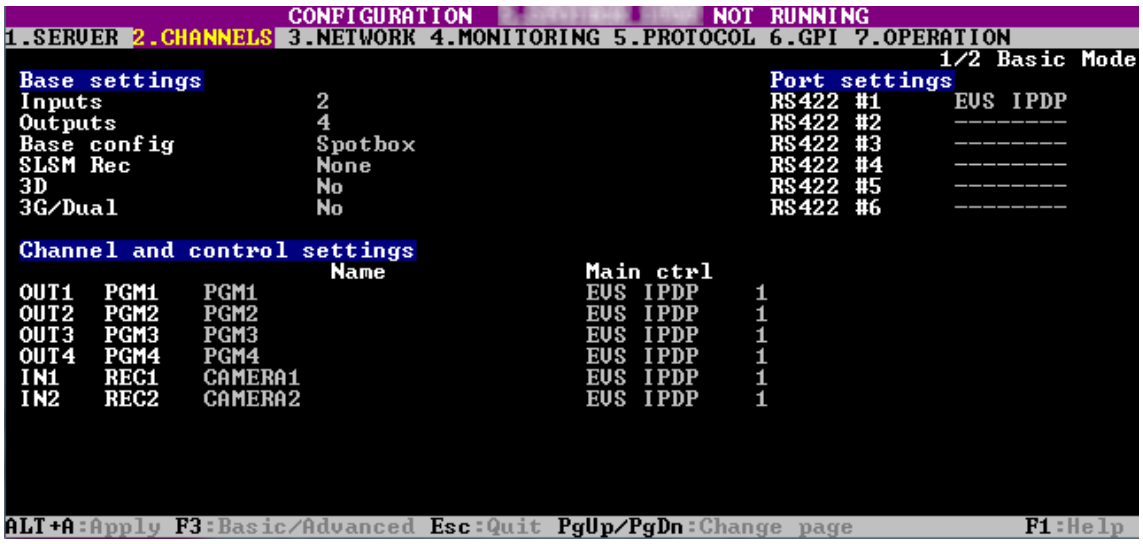
The particularities of that mode are:

- One EVS remote device must be connected on RS422 #1
- The EVS remote device must be defined as the main controller of PGM1. The IP-Director can be defined as secondary controller of this channel.
- The recorders can only be started / stopped from the EVS remote device. The IP-Director applications cannot start nor stop the recorder channels.
- The server can be set to be used as a standard LSM and then have up to five channels controlled using one RS-422 port.

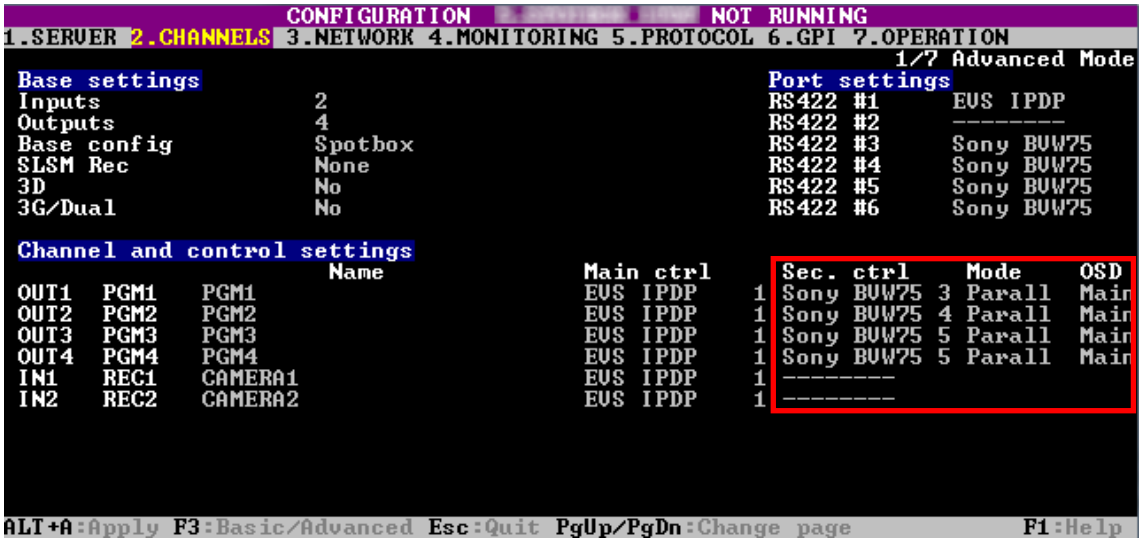
2.2.2 IPDP SPOTBOX mode

In the EVS configuration menu, in the application list, select the line corresponding to your configuration, then press F8 (tab 2 Channels).

The following window is displayed (the example below is a 2 In and 4 Out configuration):



Press F3 to access the Advanced Mode configuration:



Use the TAB or SHIFT+TAB and ←, →, ↑, ↓ keys on the keyboard to pass from one parameter to the other. Use SPACE BAR to modify the value of a parameter.

For every channel, select the secondary device. You must specify the communication protocol used by the external device, the com port it is physically connected to, the control mode and which OSD will be displayed on the monitoring output of the channel.

The control mode can be:

Exclusive: the main controller and the secondary controller cannot control the channel at the same time. You will always give/get back the control of the channel to/from the main controller interface.

Parallel: the main and secondary controller can control the channel at the same time. It will typically be the case when the same operator wants to control a channel from 2 different devices at different times.

When working in parallel mode, you must specify which OSD settings will be used on the monitoring output of the channel: the OSD configuration of the main controller or that of the secondary controller.

Please refer to the **Multicam user's manual** for more information on how to define main and secondary devices control of channels.

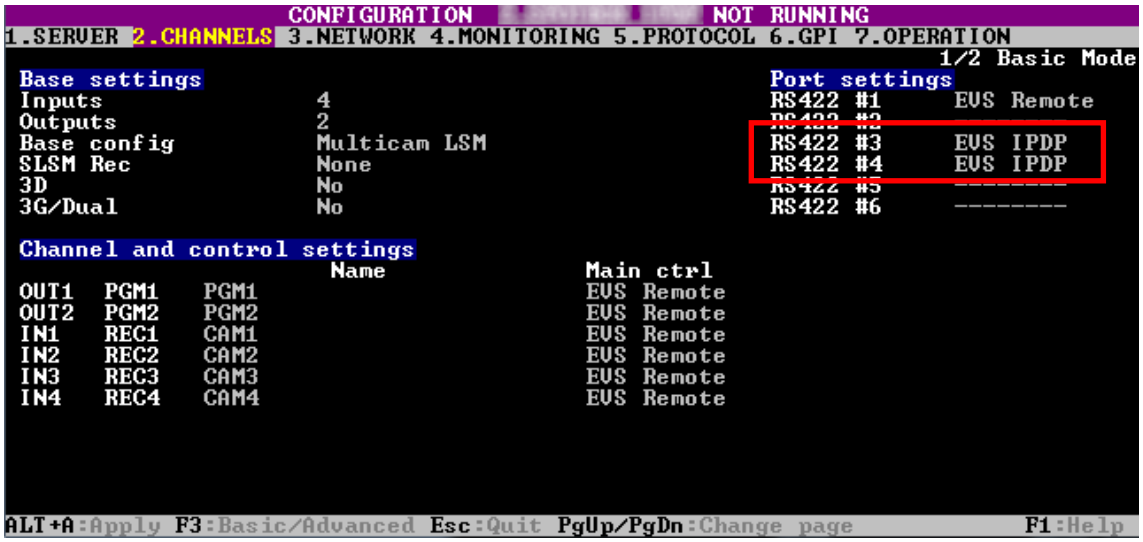
2.3 SERIAL LINK REDUNDANCY

Two serial links can now be connected to two serial ports of the same server. The two links are connected to two different IP-Director workstations. No special configuration is needed on the IP-Director side.

On the server side, protocol IPDP must be defined on the two serial ports to activate the redundancy mechanism. This is as simple as that. The Multicam will manage the two links automatically.

Mode Multicam LSM

In the configuration menu (Tab 2 Channels), two ports IP-Director (protocol IPDP) must be defined. In this situation, if a connection is lost, it connects the second connection defined.



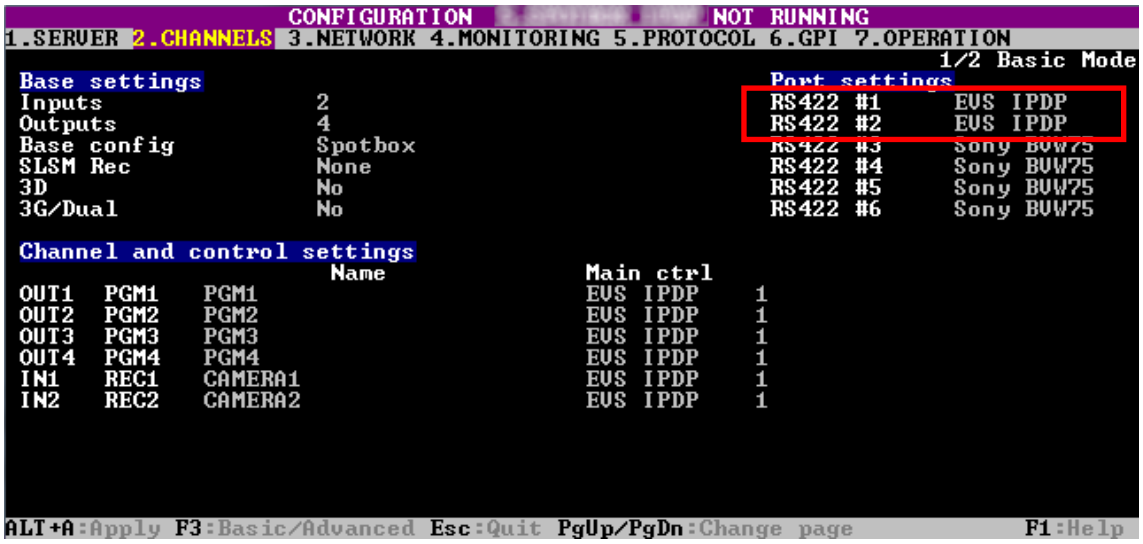
Note

At startup, the server will connect the IP-Director with the lowest local machine number.

Mode Spotbox

Since Multicam 11, the serial port redundancy configuration is the same for Spotbox and Multicam LSM mode.

In the configuration menu (Tab 2 Channels), two ports IP-Director (protocol IPDP) must be defined. In this situation, if a connection is lost, it connects the second connection defined.



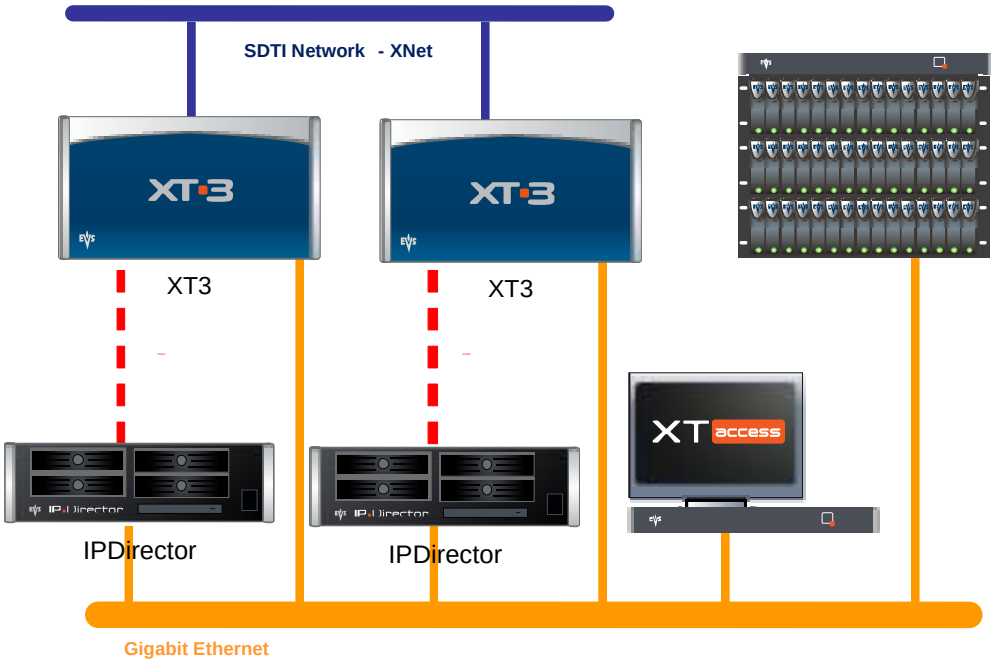
Note

At startup, the server will connect the IP-Director with the lowest local machine number.

2.4 Gigabit Connection for Software Player and XML Unit

The Gigabit connection of the EVS servers has become an essential element of any setup.

It is used to backup, stream and restore the video content on the servers, but it also allows accessing trains and clips from the interface of the IP-Director software player.



In order to use the software player within the IP-Director application, all the servers, where the trains and clips should be browsed, have to be connected on the same Gigabit Ethernet as the IP-Director workstations. The IP address range and the subnet mask should match the IP-Director and XT-Access LAN settings.

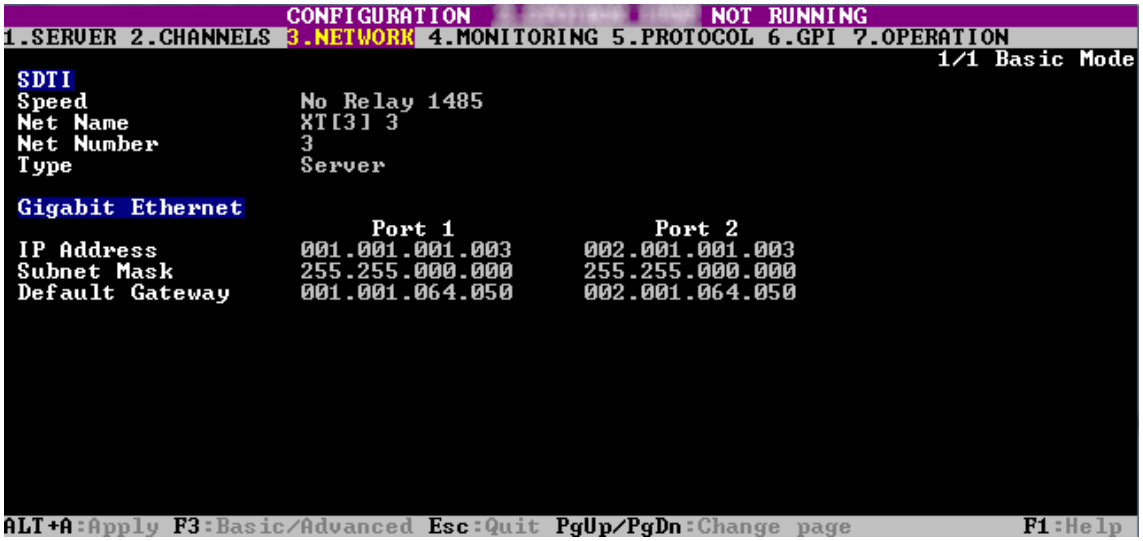
Default Gateway settings are available if the servers and workstations are spread in different VLANs.

Note

The Gigabit connections required a GBX module on the H3X (or HCTX) Board in the servers. Gigabit connectors can be present on the back of the server without a GBX module inside.

Please refer to the **Multicam Technical Reference Hardware** for more information.

Since Multicam 11, the Gigabit Ethernet configuration is available while the Multicam is running (SHIFT+F2, tab 3 Network) or, this is new, before launching the application line (Select the line, press F8, tab3 Network).



Set IP Address, Subnet Mask and Default Gateway and press ESC to apply the configuration modifications.

If the Gigabit Ethernet configuration is modified while the Multicam is running, a restart will be requested in order to apply the new addresses, masks or default gateway.

Note

The Gigabit settings are sent to the IP-Director database and would be monitored in the LAN and WAN tab within the Remote Installer.

Please refer to the **LAN and WAN Configuration chapter** for details.

Some limitations and recommendations exist on the Gigabit connections:

- 6 accesses maximum per HiRes server including backup, restore, streaming and software player browsing.
- 30 accesses per LowRes server could be done on a Hi-Lo IP-Director setup (advanced setup for large workflow).
- A software player browsing has the same impact on a server disk array as a local or distant PGM.
- Gigabit connections manage Ethernet frame size: Original (1500) or Jumbo Frames (9000 bytes of payload (MTU)) which offer better performances around 30%. If IPD and XT-Access workstations should negotiate jumbo frames with servers, all Gigabit Ethernet NICs and switches have to be configured in order to support this frame size.

3. REMOTE INSTALLER

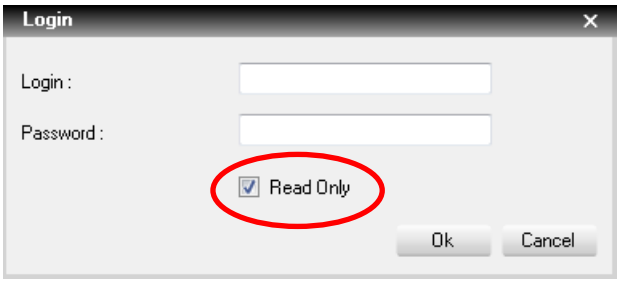
The Remote Installer allows you to install and configure all IP-Director workstations on the network from any IP-Director workstation.

The tool allows any administrator to remotely manage (configure, start, stop…) all IP-Director Workstations on the network.

The remote installer is a service and a configuration application.

The service is started automatically at start up and the configuration application (the GUI), can be run from the XP tool bar but can only be run on one workstation at one time for **editing**.

Since version 5.X and 6.X, it can be also run in a **Read Only** mode. This mode allows the administrator to open the Remote Installer on several workstations at one time. Only viewing configuration is allowed no editing. For editing, the rule is the same as before, only one instance of the Remote Installer at one time.

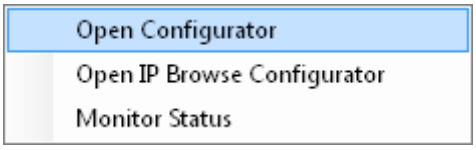


This new feature will be reviewed in detail in the following chapter.

3.1 Start the Remote Installer application.

To launch the IP-Director Remote Installer on one machine, right click on this icon in the XP toolbar:

Then choose the option “Open Configurator” in the contextual menu.



The login window appears.

Enter the **Login** and **Password** which have been provided by your administrator.

Check **Read Only** to open another Remote Installer on the network avoiding to close the open one. The Remote Installer opened in Read Only mode gives a limited access. The settings can’t be edited, only viewed.

Note for the administrator

If you are the administrator and if you log on for the first time, you must use the following login and password (case sensitive):

Login: administrator

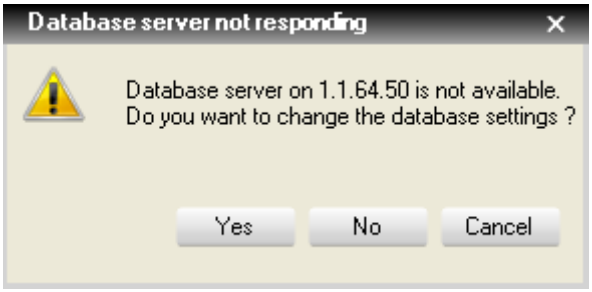
Password: evs

Note

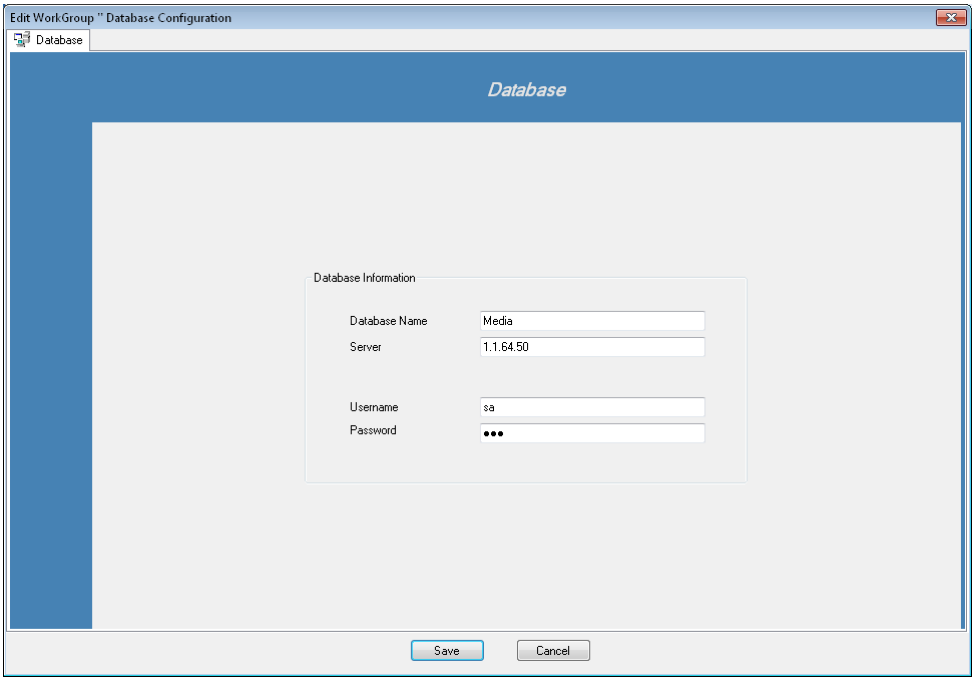
If no valid database has been restored, the administrator/evs login/password will not work.

If the database cannot be reached due to a network problem or the local database is stopped, the administrator/evs login/password may not work as well.

If your workstation is not connected anymore to the last used database, this window appears



Click Yes, to open the Database Configuration window:



Modify the Server name (Computer Name or IP address) to specify your new database containing a valid Login/Password.

Note

All IP-Director Workstations have their own database. In Standalone mode, specify the computer name or the IP address of your workstation.

If you have no Ethernet activity on any network adapter, restart your workstation. The remote installer will point automatically on the IP address 127.0.0.1 (which is the Windows default local host address)

You have started the application, the Remote Installer icon in your toolbar changes like this:

This Remote Installer splash window opens:

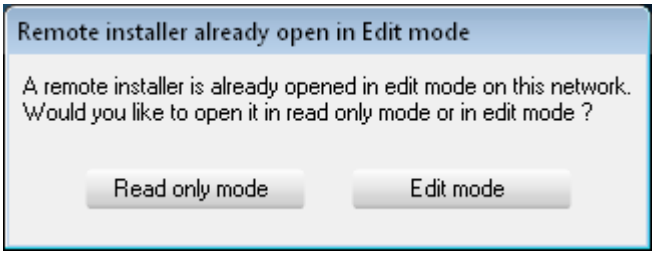
Note

This icon shows the existence of another Remote Installer already open on the network.

As described before, it is now possible to open a **Read Only** mode.

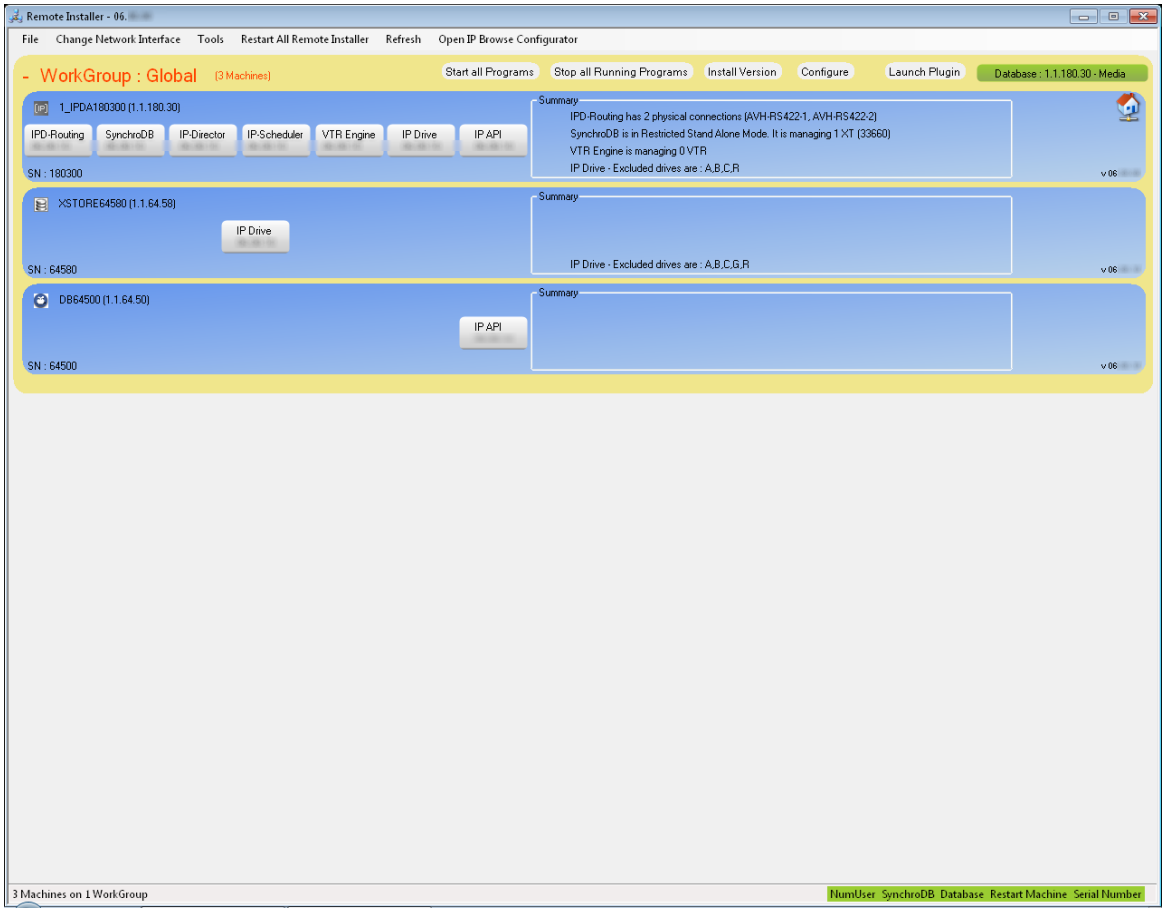
When logging, just check the box **Read Only** to access this 'view config' mode.

If another Remote Installer is already open and the administrator forget to check the **Read Only** option, a confirmation message is displayed.

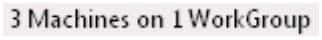


Pressing the **Edit mode** button will close the distant Remote Installer without prompting the administrator.

Once started, you can see all the workstations belongings to the Network:

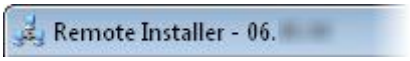


The lower left corner shows information about number of machine in the network.



At the far right side of each workstation, the remote Installer Version number is displayed:

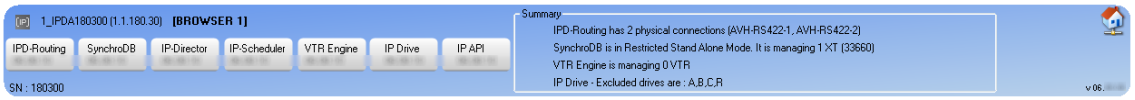
This information can be useful to check if all workstations have the right version of Remote Installer. This Version number should correspond with the Version number info shown in the upper left corner of the application



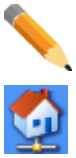
3.2 Workstation LIST

Each blue horizontal line represents an IP-Director workstation and is characterized by its computer Name, IP Address and an optional description:

Each workstation of the network is represented with its own:



A contextual menu with advanced features can be displayed on every workstation. Please refer to the **Workstation Contextual Menu** chapter for more information.



Note

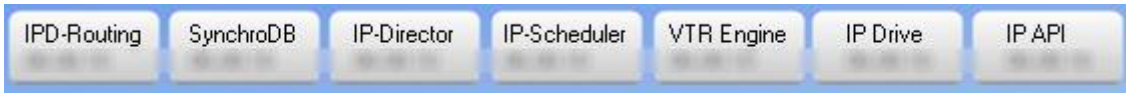
This icon shows the workstation where the Remote Installer is open.

This easily allows the user to locate the workstation that you are currently seated in the list.

Workstation color status:

- A **BLUE** color background indicates the machine has the same version as the first workstation in the list and no conflict is detected.
- A **YELLOW** color background means that some IP-Director software components have incompatible versions or that some workstations don't have the same version installed.
- A **RED** color background indicates a conflict has been detected in the configuration settings (SynchroDB server management, Local machine number, DB configuration, no serial number defined…)
- An **ORANGE** color background indicates that a restart of the workstation is needed.

Workstation modules:



IPD-Routing: Used to start the IPD-Routing Service (see IPD Routing service management Chapter)

This service starts automatically on IP-Director workstations.

SynchroDB: Used to start the SynchroDB Service (see SynchroDB Management Chapter)

This service starts automatically on IP-Director workstations.

IP-Director: Used to start the IP-Director Application (see IP-Director Configuration Chapter)

IP-Scheduler: Used to start the IP-Scheduler Service (see IP-Scheduler Chapter)

This service can be started automatically if configured to do so. Otherwise it starts manually on IP-Director workstations.

VTR Engine: Used to start the VTR Engine Service (see VTR Engine Chapter)

This service can be started automatically if configured to do so. Otherwise it starts manually on IP-Director workstations.

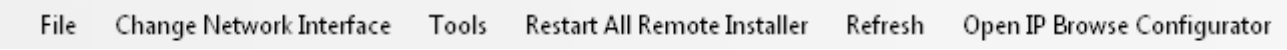
IP Drive: Used to start the IP Drive Service (see IP Drive Chapter)

This service can be started automatically if configured to do so. Otherwise it starts manually on IP-Director and Storage workstations.

IP API: Used to start the IP API Service (see IP API Chapter)

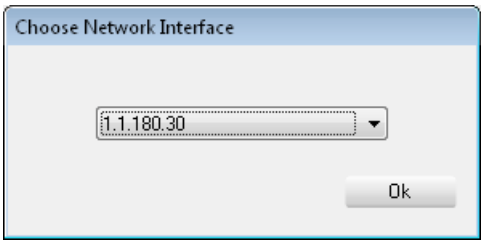
This service can be started automatically if configured to do so. Otherwise it starts manually on IP-Director and API Proxy workstations.

3.3 Remote Installer menu



File: Use to exit the Remote Installer.

Change Network Interface: Used to specify the network interface connected with the database and the other workstations.



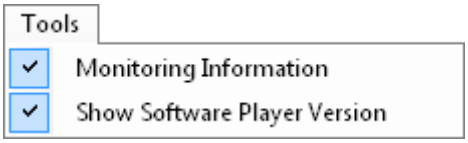
Select the IP address corresponding to the right interface if you forgot to specify it after installing the Remote Installer setup.

Note

This option appears only if several network interfaces are enabled and connected on the workstation.

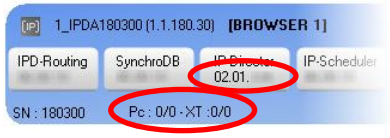
In the event of WAN connections, this network interface can have an impact on functions.

Tools: Used to activate the new Monitoring Information and show the Software Player version within the Remote Installer.



Checking the first option will display Monitoring Information on each IP-Director workstation when the services (SynchroDB, IP-Routing) are started.

The second option will display the Software Player version in place of the IP-Director version.



Restart All Remote Installer: Used to send a restart command to the Remote Installer of each workstation.

Refresh: Used to refresh the listed workstations detected by the Remote Installer. (Refresh is automatically done with a time out).

New!

Open IP Browse Configurator: Launch a configuration tool which is designed to define the database explorer views within the IPBrowse clients. **Please refer to the IP Browse Configurator chapter.**

3.4 Workgroup functionalities

For one workgroup you have 5 functionalities.

Start All Programs:

Click this button to start all programs (IPD-Routing, SynchroDB, IP-Director and IP-Scheduler, VTR Engine, IP Drive if Auto Start is enabled) on all IP-Director Workstations of your workgroup.

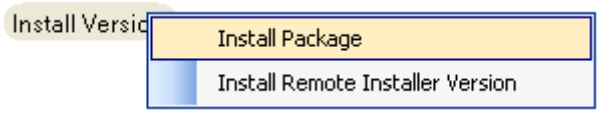
Stop All Running Programs:

Click this button to stop all running programs (IPD-Routing, SynchroDB, IP-Director, IP-Scheduler, VTR Engine and IP Drive) on all workstations of your workgroup.

Install Version:

Click this button to install a new **Package** or a new **Remote Installer Version**. This installation is applied to IP-Director Workstations within the current workgroup.

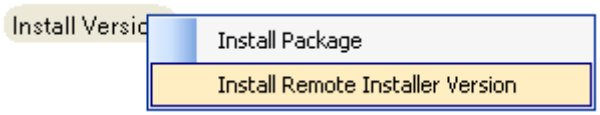
- Select **Install Package** to install an IP-Director package (the .ipd file)



The package will be imported and automatically activated. A package includes IPD Routing, SynchroDB, IP-Director, IP Scheduler and VTR Engine compatible versions.

Refer to the **Install Package** paragraph below in this document for more information.

- Select Install Remote Installer Version to force the installation of the current Remote Installer version.



The Remote Installer Version will be deployed on all IP-Director Workstations within the current workgroup.

Important

As the deployment is an automatic process, be careful when a Remote Installer is open when installing a new station with a newer version. This version will be spread over the whole workgroup.

Refer to the **Install Remote Installer Version** paragraph below in this document for more information.

Configure:

Click this button to configure all the workstations of your workgroup. (See also **General Parameters Configuration** Chapter)

Launch Plugin:

This button allows you to launch plug-in.

(See also **Plugin** Chapter)

Database:

Right click this button to configure your database, to backup your database, to restore your database, to clean your database or to execute script (See **Database Configuration** Chapter for more information)

Note

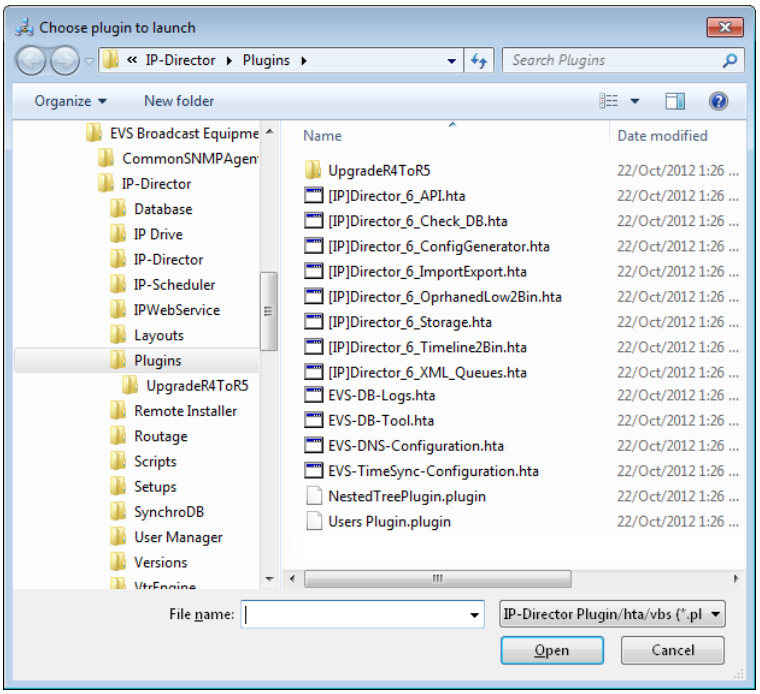
The workgroup functionalities are hidden in a **Read Only** mode and the **Configure** button is replaced with a **View Config** button.

Database configuration is displayed without access to right-click menu.

It gives a greyed view of the configuration's Tabs.

3.5 Plugins

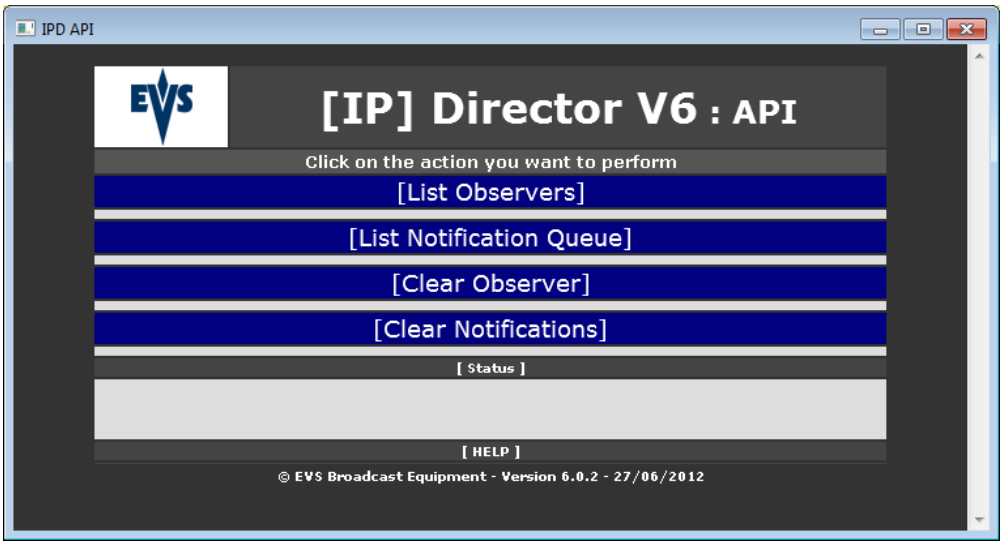
Click Launch plugin to open a browser of Plugins Folder.



Different plugins are available:

[IP]Director_6_API.hta:

This plugin lists and clears the Observer and Notification tables in the IP-Director database. When a third party software connects to the IP-API and by mistake register too much observers and fill the notifications table, this tool is quite useful to avoid the IP-API service being 'Out of Memory'.



[List Observers]

List of registered notifications observers (Name + ID + Notification type)

[List Notification Queue]

List of queued notifications

[Clear Observers]

This function deletes Notification observers from the IP-Director Database.

[Clear Notifications]

This function clears the Notification queue for all API Clients.

All IP-API Services (in server mode) should be restarted to take this clean into account.

[IP]Director_6_Check_DB.hta:

This plugin checks the compatibility of the database and the SQL server used by an IP-Director v6 workgroup.

It also checks the IP Engine License protecting the database.

[Check database configuration]

- Check the SQL version
- Check the Fulltext Search service installation
- Disable the Fulltext Search signature internet update
- Check that the database is Fulltext enabled
- Check that the Fulltext indexes are populated automatically
- Check that the Fulltext catalogs are correctly rebuilt
- Configure the Fulltext Search noise files
- Restart the Fulltext Search service to take the modifications into account

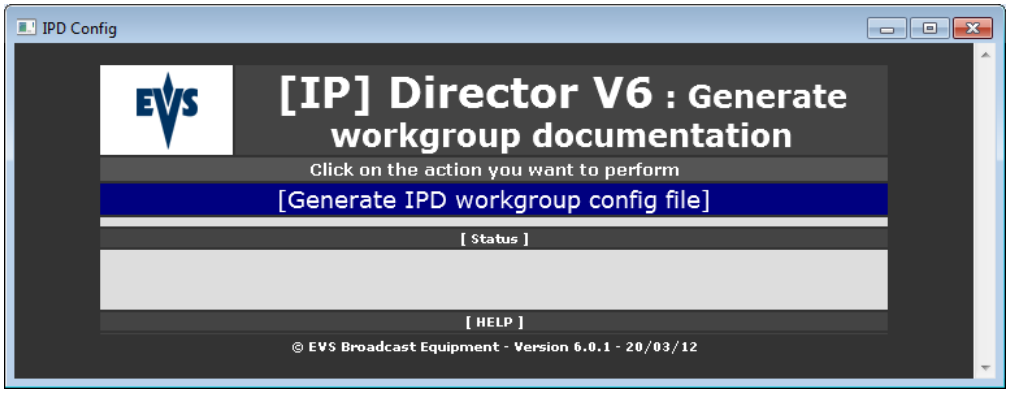
[Verify IPEngine License]

Select the Database where the licence check needs to be done and press the **Check IPEngine** button.

The results are displayed in the status zone.

[IP]Director_6_ConfigGenerator.hta:

This plugin exports the IP-Director workgroup configuration in an XLS file



[Generate IPD workgroup config file]

Select the group in the drop down menu and press the **Export config** button.

After a few seconds, an XLS file is generated and its location is displayed in the status zone.

[IP]Director_6_ImportExport.hta:

This plugin permits exporting a part of a workgroup configuration and importing it into another workgroup. You will be able to export/import Targets and XMLUnits.

[Export Targets and XML Units to file]

Allows browsing for an export folder and exporting the targets to a file.

[Import Targets and XML Units to file]

Allows browsing for a previously exported target file and importing the targets in the database.

Important

Never import the file twice. Never import the file exported from the same workgroup.

[IP]Director_6_OrphanedLow2Bin.hta:

This plugin puts any LoRes clip not associated to a Hires clip anymore into a specified bin.

[Add Orphaned LoRes Element to a Bin]

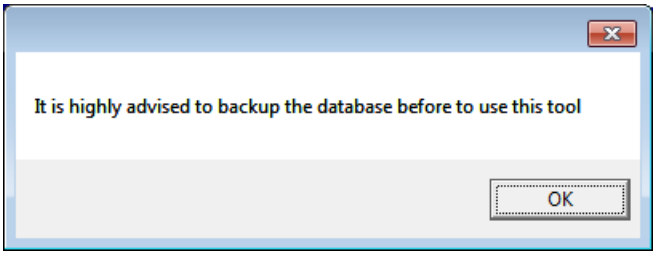
- The operator selects an existing bin where the clips must be added to
- The HTA adds the orphaned LoRes clips to the bin

[IP]Director_6_Storage.hta:

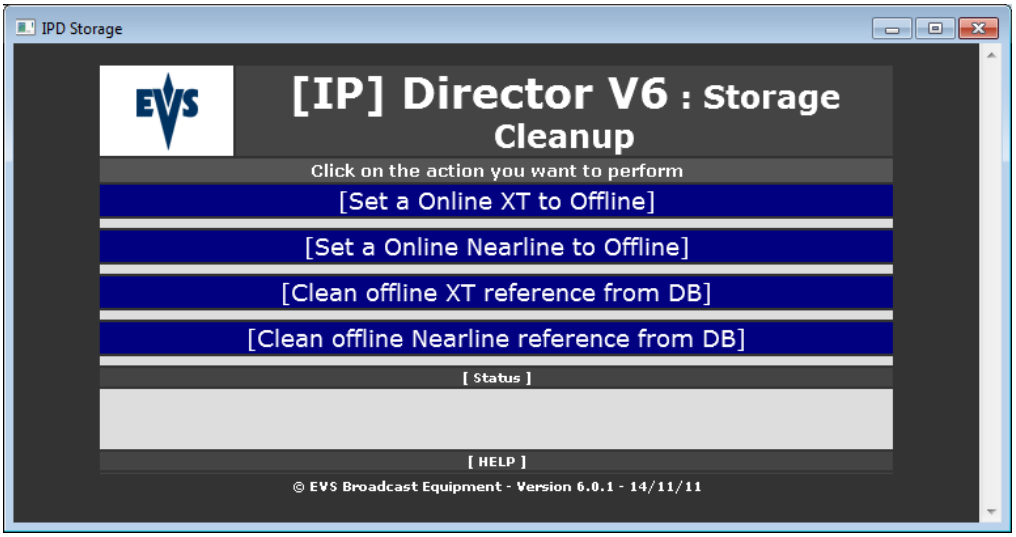
This plugin has been designed to clean a database coming from an [IP] Director setup and still showing servers and Nearline not present in the setup where this DB is used.

Typical scenario: take a database backup on a running workgroup and restore in another setup.

Starting this plugin, a warning message is displayed:



EVS strongly recommends performing a backup of the database before using this tool.



[Set an Online XT to Offline]

Set a server, its recorders, its players and its clips to the Offline status. They will not be seen online anymore in the IP-Director if no SynchroDB manages this server.

[Set an Online Nearline to Offline]

Set a Nearline directory and its clips to offline status. They will not be seen online anymore if no SynchroDB manages this Nearline.

[Clean offline XT reference from DB]

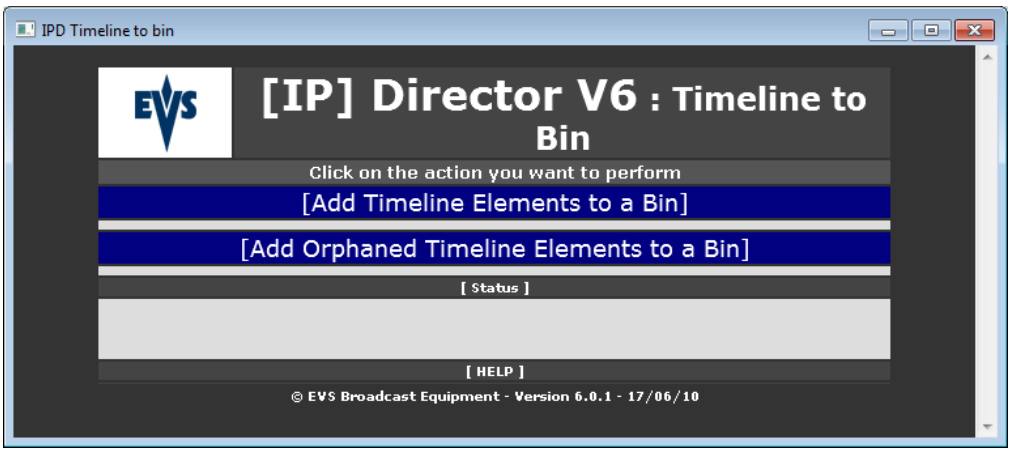
Deletes a server, its recorders, its players and any reference to this server (including the clips, log associations…) from the database.

[Clean offline Nearline reference from DB]

Deletes a Nearline directory and all the files and clips from the database. This Nearline will not be seen in the IP-Director anymore even in the offline view

[IP]Director_6_Timeline2Bin.hta:

This plugin adds the clips created or used by a timeline into a specified bin.



[Add timeline element to a bin]

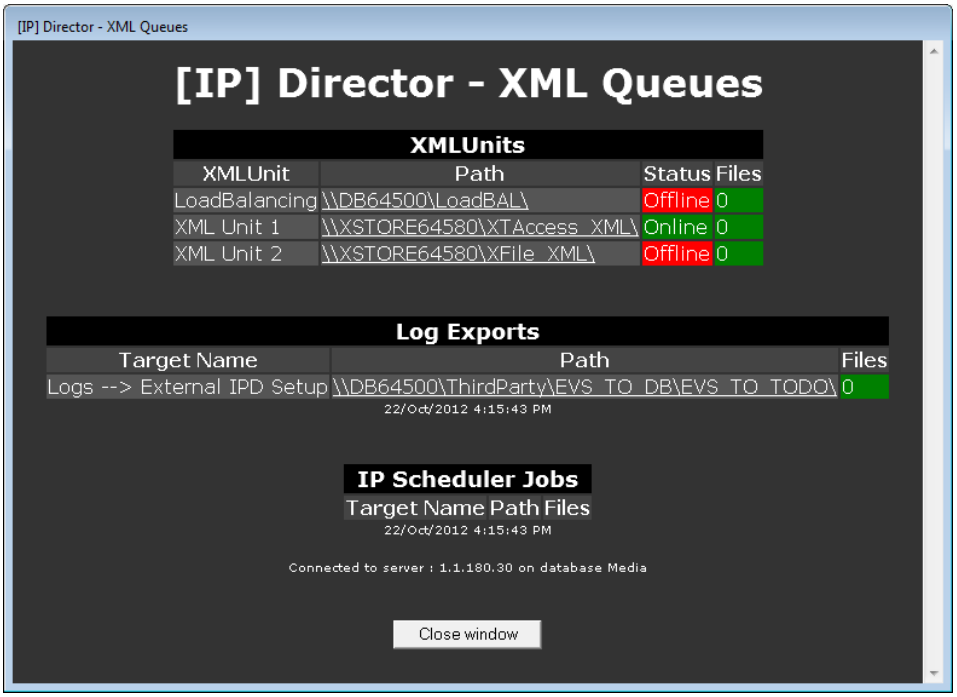
- The operator chooses a timeline and a bin
- The HTA adds the clips used by the timeline into the bin

[Add orphaned timeline elements to a bin]

- The operator chooses a bin
- The HTA adds to this bin the clips created by a timeline but not used in a timeline anymore.

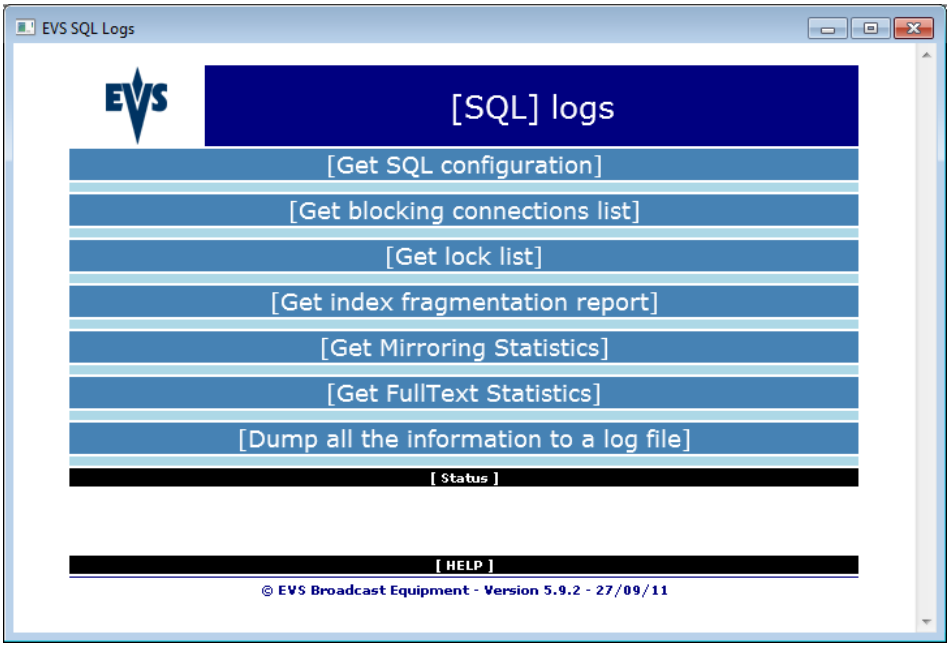
[IP]Director_6_XML_Queues.hta:

This plugin monitors the XML folders used by an IP-Director workgroup. It monitors the XMLUnit, the log export and the IP-Scheduler job folders. For each folder the plugin shows if the folder is online and how much files are currently in the folder. The values are automatically refreshed by the HTA. Color coding is used to highlight folders with a big amount of files.



EVS-DB-Logs.hta:

This plugin brings you information on the SQL database. This plugin must be executed locally on the workstation which hosts the database.



[Get SQL configuration]

Displays the SQL Server Version.

[Get blocking connections list]

List the SQL connexion that blocks other SQL connexions. This could be useful to determine which workstation / application locks a table and prevents other connexions to gain access to this table.

[Get lock list]

List the tables or objects locked by the SQL connexions.

[Get index fragmentation report]

Displays the fragmentation statistics on tables and indexes.

[Get Mirroring Statistics]

Displays the mirroring statistics and mirroring state.

[Get Fulltext Statistics]

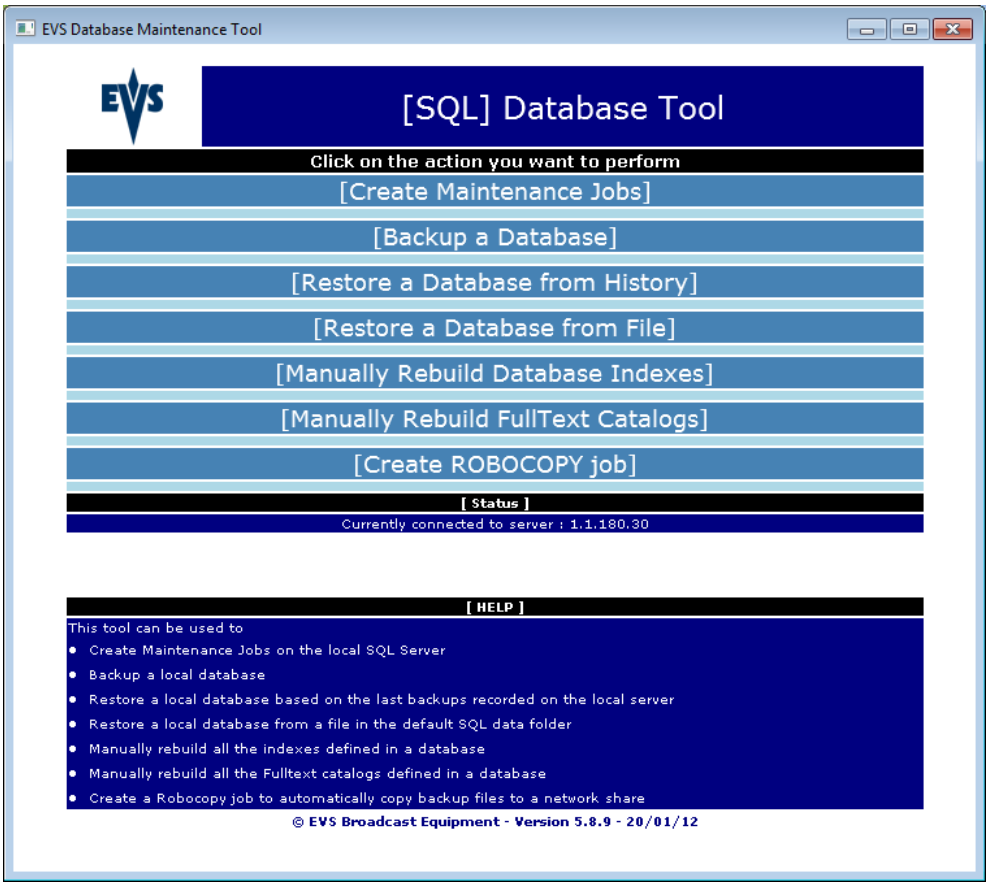
Displays the fulltext catalogs statistics, enabled or not, the tracking mode.

[Dump all the information to a log file]

Saves the above information in a text file. This file could be sent to EVS for debugging purpose.

EVS-DB-Tool.hta:

This plugin can create maintenance Jobs on the local SQL Server, Backup a local database, Restore a local database based on the last backups recorded on the local server, Manually rebuild Database Indexes / Fulltext Catalogs or Create Robocopy jobs.



[Create Maintenance Jobs]

This part of the tool creates the maintenance jobs explained in the first part of the document.

Jobs created are:

- A DB Full backup every hour
- A DB Transaction Log backup every 15 minutes
- A DB Index rebuild every day at 02:00
- The system database full backup every day at 03:00
- A MSDB cleanup and automatic backup every 15 minutes

[Backup a Database]

Creates a manual full or transaction log backup from the specified database.

[Restore a Database from History]

Restores a database from the lasts backups. The backup file list is obtained from the local SQL Server. It can be used to easily restore a previous version of the local database but not to restore a database coming from another server.

[Restore a Database from File]

Restores a database contained in a backup file.

The database will be restored with its original name in the local server default directory.

This part of the tool is specially designed to restore databases coming from another server especially with different database folder path.

[Manually Rebuild Database Indexes]

Rebuilds all the indexes defined in the specified database

[Manually Rebuild FullText Catalogs]

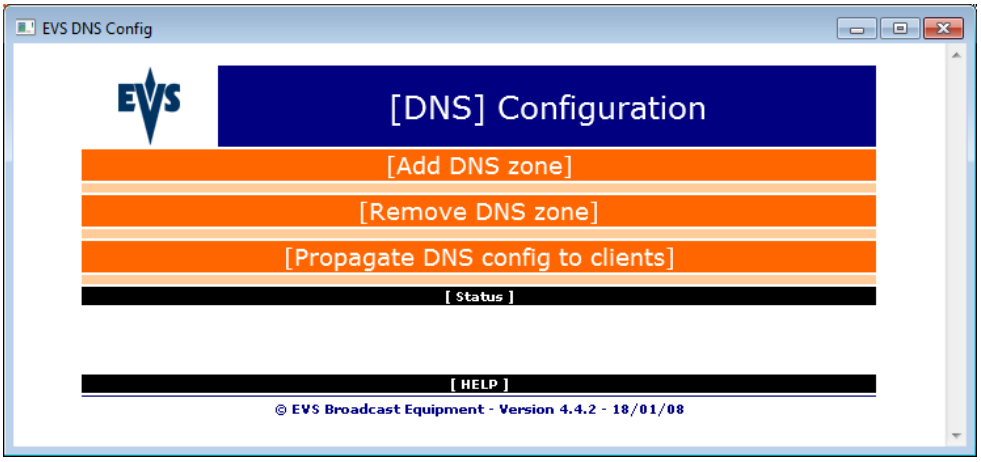
Rebuilds all the FullText catalogs associated to the database v5.

[Create ROBOCOPY Job]

Creates a job that replicates a folder to a network share (typically to replicate backup files to another storage)

EVS-DNS-Configuration:

This plugin helps you to enable, configure a DNS Server on an IP-Director network. It also populates configuration on all the workstations. The DNS Server reduces latencies on IP-Director.



[Add DNS zone]

Add a forward DNS zone and/or a reverse lookup zone to a Primary and a secondary DNS Server.

The tool checks:

- If the DNS server is installed (install it if needed).
- If the DNS service is started (start it if needed).
- If the DNS suffix is configured on both DNS servers.
- Creates the DNS Zones on the DNS servers.

[Remove DNS zone]

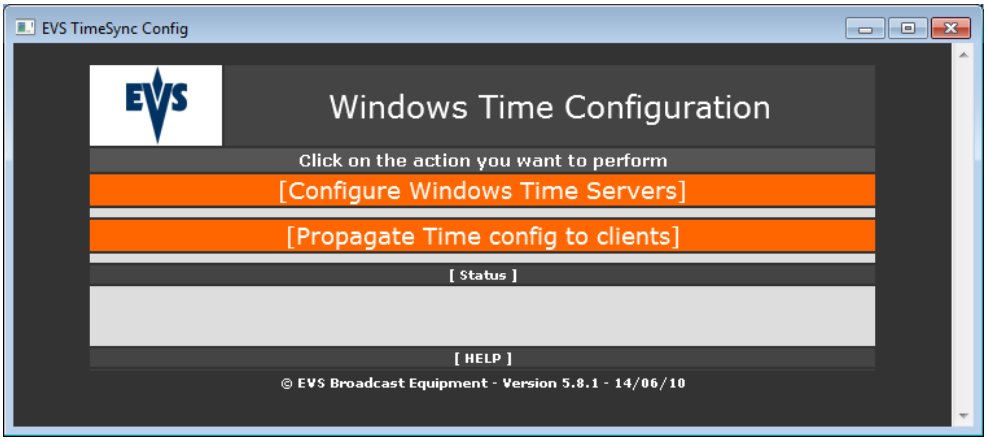
Disable the DNS zone on a DNS server.

[Propagate DNS config to clients]

- Apply a DNS configuration to remote workstations (in a client list).
- The client list file contains the list of all workstation where the DNS configuration will be propagated.
- The primary DNS will be configured as the Primary DNS Server on the Network Interface connected to the defined Network.
- The secondary DNS will be configured as the Secondary DNS Server on the Network Interface connected to the defined Network.
- DNS Suffix will be set as the primary DNS Suffix on the workstation.
- Network helps to determine on which network interface this configuration should be applied.

EVS-TimeSync-Configuration:

Since windows 2000, Windows OS uses an internal service to synchronize the time in a domain environment. This service (Windows Time aka w32time) can be configured to play either a client or a server role even in a workgroup environment. This service can use an external source (NTP server) as the time reference as well.



[Configure Windows Time]

Configures the “Windows Time” service on a Windows station as Time Server.

[Propagate Time config to clients]

Configures windows clients to use the” windows Time” servers as time references.

SERVER CONFIGURATION

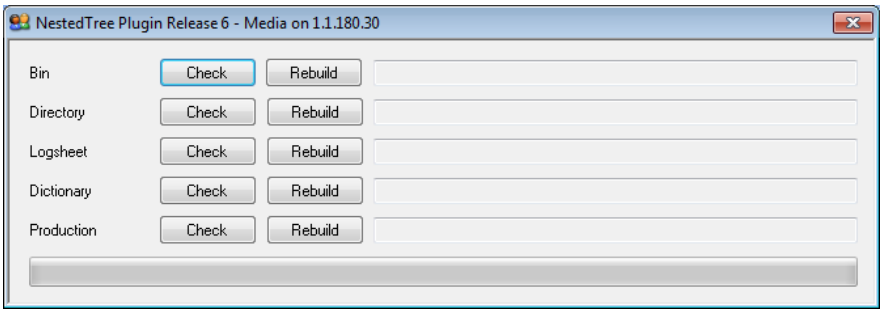
- **Primary Windows Time Server:** Computer name or IP address of the computer that will become the main time server on the network. The HTA will apply registry values on that computer and restart the Windows Time service.
- **Secondary Windows Time Server:** Computer name or IP address of the computer that will become the backup time server on the network. The HTA will apply registry values on that computer and restart the Windows Time service.
- **Time Reference (NTP)** : NTP server used by the 2 Time Servers to have a time reference
- **Deploy configuration to IP Director Workgroup:** Configure the IP Directors detected by the local remote installer to used the 2 Time Servers as time reference.

CLIENT CONFIGURATION

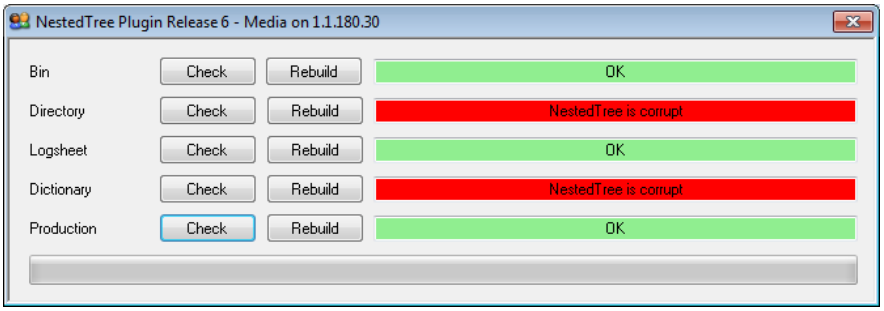
- **Client list (file):** Text file with the IP addresses of the windows client to configure.
- **Primary Windows Time Server:** Computer name or IP address of the computer used as Main Time Server.
- **Secondary Windows Time Server:** Computer name or IP address of the computer used as Backup Time Server.

NestedTreePlugin.Plugin:

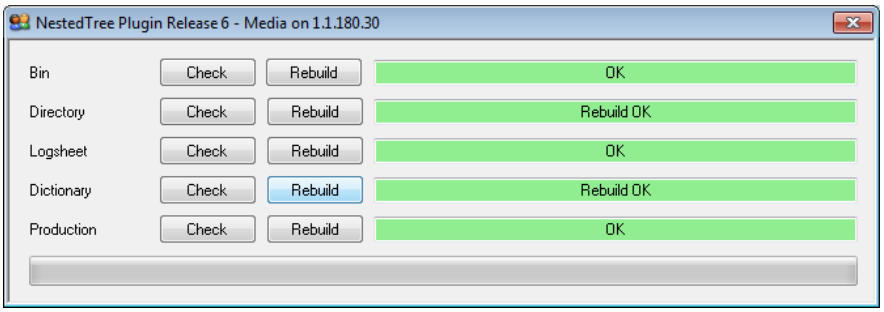
This plugin checks the DB Nested Trees and remove potential DB corruptions.



Press all the **Check buttons** to proceed Bin, Directory, Logsheet, Dictionary and Production verification.



Rebuild all the corrupted NestedTrees.



Once all the 5 lines display a green status, the DB is rebuilt.

Important

Rebuilding a nested tree “Bin/Logsheet/Dictionary/Production” must be followed as soon as possible by **a restart of all the IP-Director applications** in the workgroup.

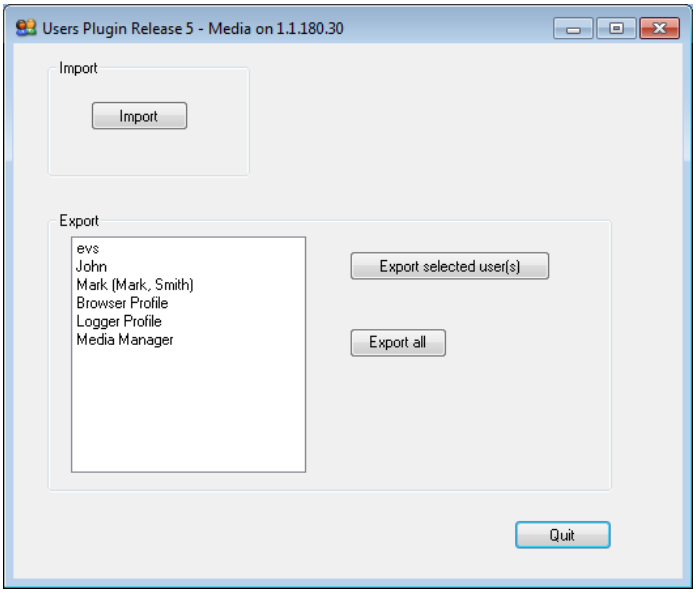
Rebuilding a nested tree “Diretory” must be followed as soon as possible by **a restart of all the IP-Director services** in the workgroup (stop all programs, start all programs).

This should be thus scheduled as a major maintenance.

Rebuilding trees and not restarting applications or services is worst than keeping the nested trees corrupted.

Users Plugin.plugin:

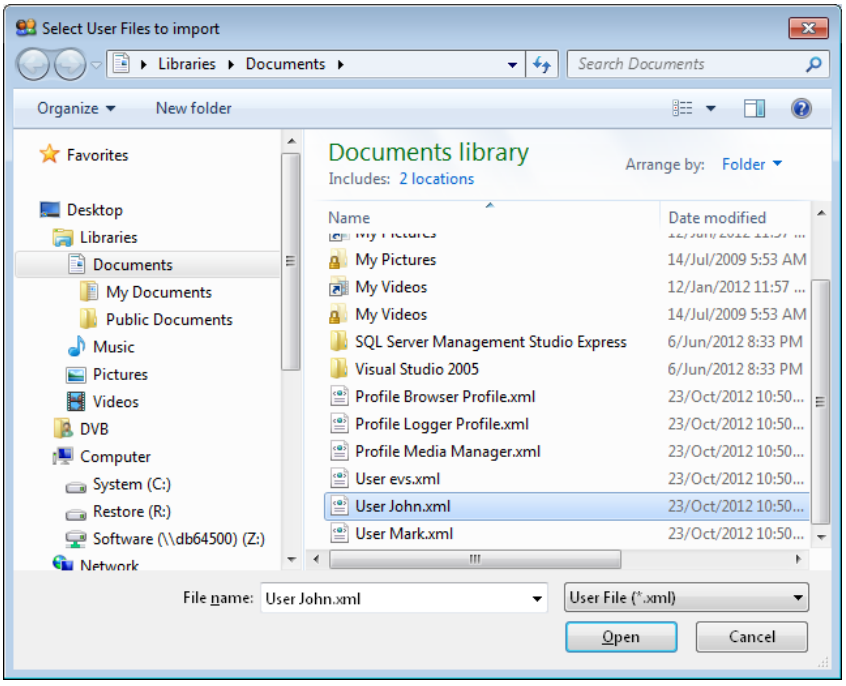
This plugin imports/exports user(s) or profile(s).



You have the possibility to export/import user(s)/profile(s).

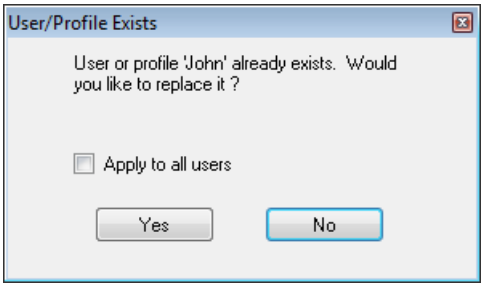
[Import]

To import user(s) /profile(s), click the Import button. A browser window appears.

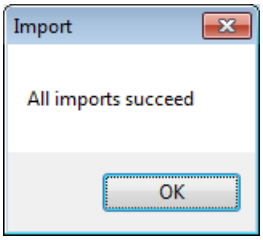


Select the folder where are saved the User XML files. Choose user(s) you want to import and click Open. The import is done.

If the user or profile already exists in the database a warning appears:



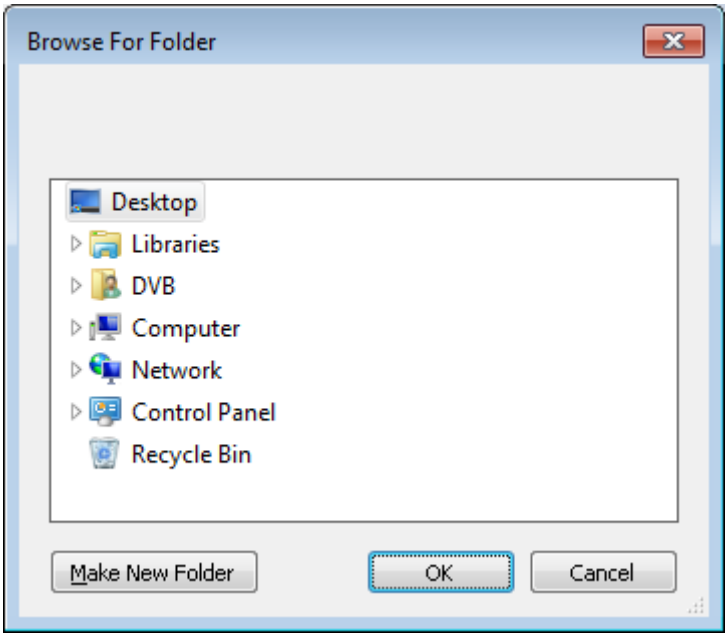
Choose Yes if you want to replace it or No if you don't want to overwrite this user or profile(s).



This window confirms successful importation.

[Export]

To export specific user(s) /profile(s), select them in the users' list and click the "Export selected user(s)" button. A browser window opens.

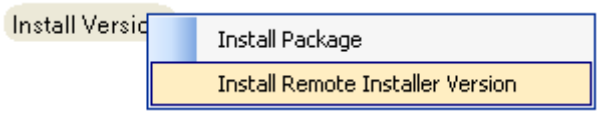


Select an export Users folder and click OK. A XML file is created for each selected user. To export all users, click the "Export all" button and choose the export Users folder in the browser window. A XML file is created for each user.

3.6 Install Remote Installer Version

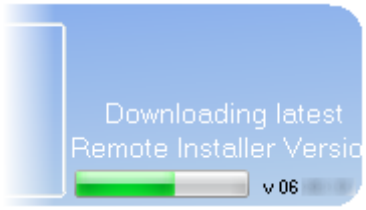
Within a workgroup, the Remote Installer Version is automatically deployed on all the IP-Director workstations.

Select **Install Remote Installer Version** in the Install Version menu.

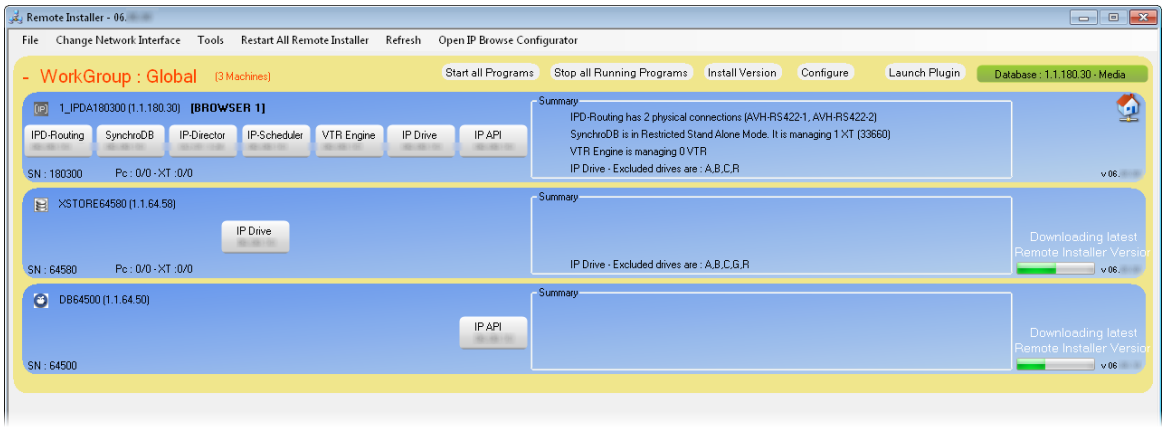


The Remote Installer starts to install the version on all workstations within the current workgroup.

On each workstation listed in the Remote Installer, this progression bar shows the advancement of the installation.



Wait until all progress bars are completed.

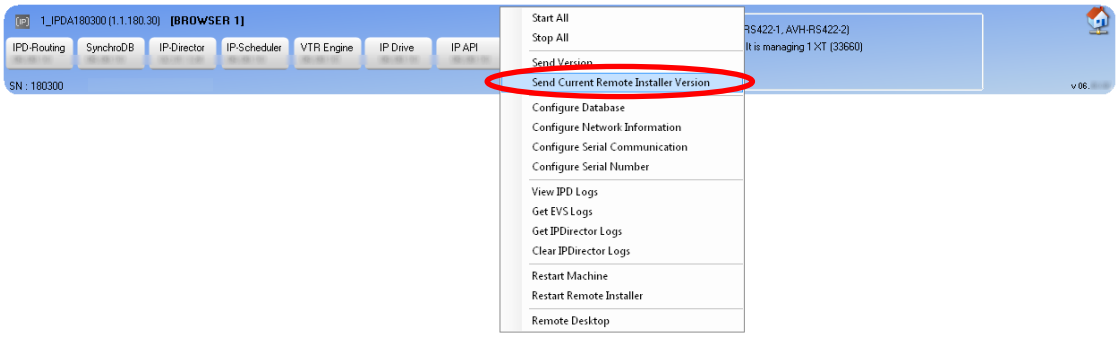


The Remote Installer will restart ending the installation.

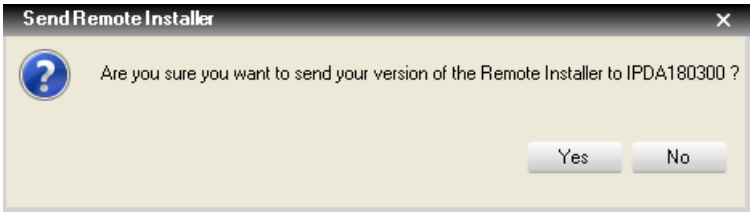
Note

There is a possibility to install the current Remote Installer Version on each workstation separately.

Right click the corresponding machine and select Send Current Remote Installer Version.



A popup message appears:



Select Yes and wait until the progress bar is completed and the Remote Installer Restarted.

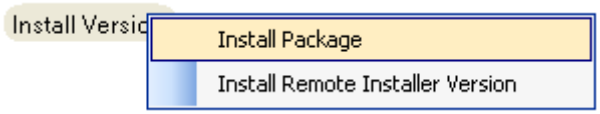
Note

In order to work properly, all IP-Director workstations connected to the network must be set to **the same Ethernet frame size**.

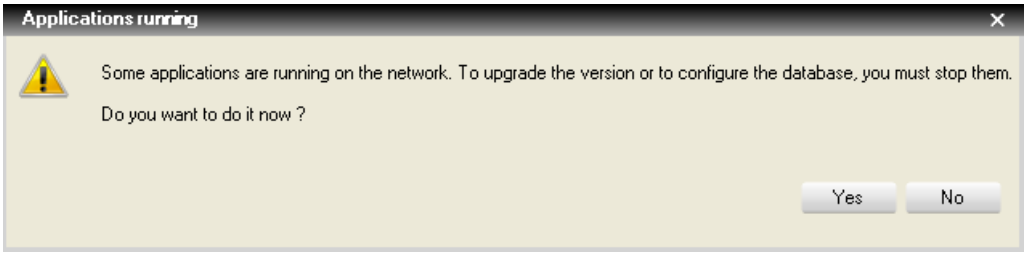
It is recommended to work with standard Ethernet frames (MTU 1500) or Jumbo Ethernet frames (MTU 9000). **Avoid mixing the two sizes.**

3.7 Install Package

Once the Remote Installer has been installed on every workstation, select **Install Package** in the Install Version menu.

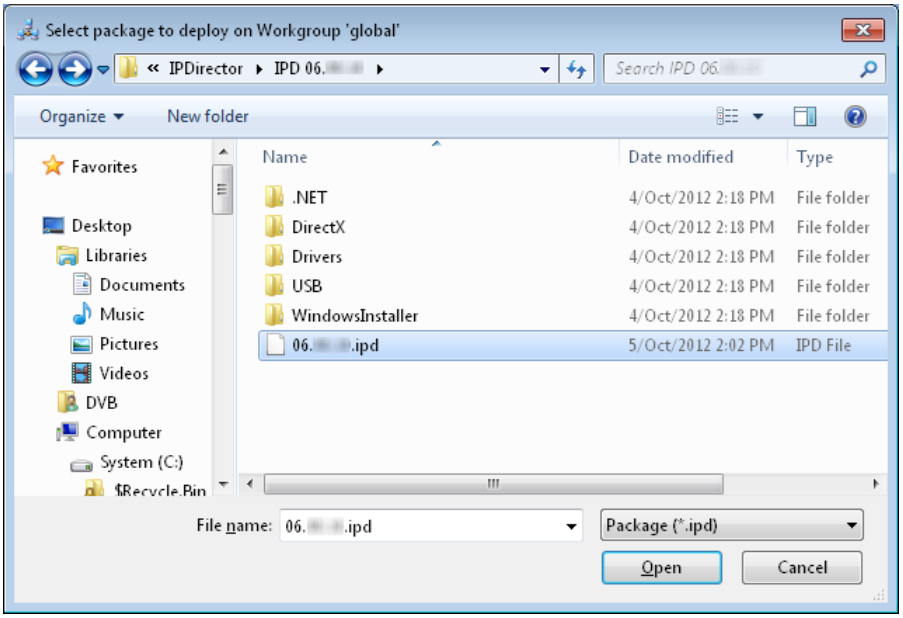


A popup message appears to alert you to stop running services (IPD-Routing, SynchroDB, IP-Director, IP-Scheduler, VTR Engine and IP Drive) on the network before installing version.



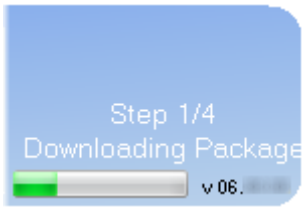
Once the services have been stopped on every workstation, select **Install Package** in the Install Version menu again.

A window opens to allow you to browse to the directory where the IP-Director Package file is located. The file has an .ipd extension. Usually it has the same name as the version of the IP-Director package.

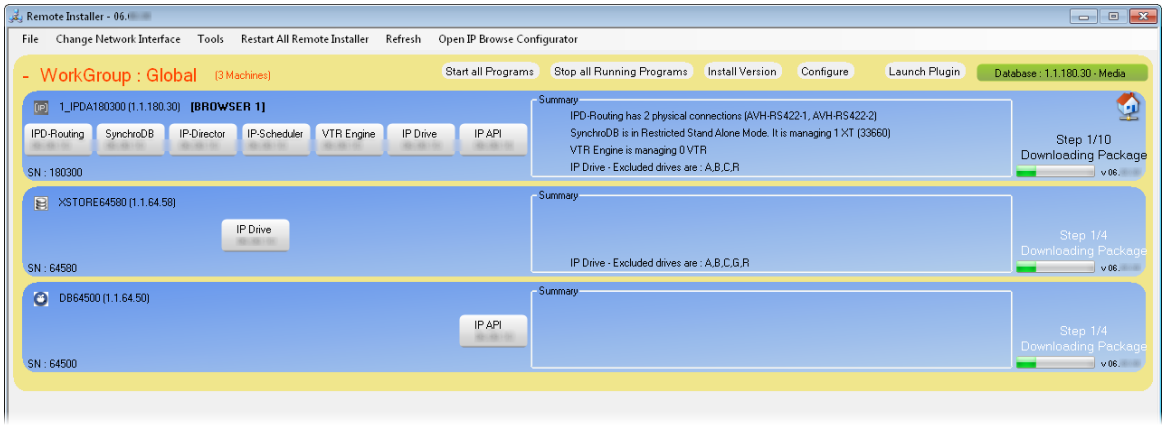


Click Open. The Remote Installer starts to install the package on all workstations.

On each workstation listed in the Remote Installer, this progression bar shows the advancement of the installation.



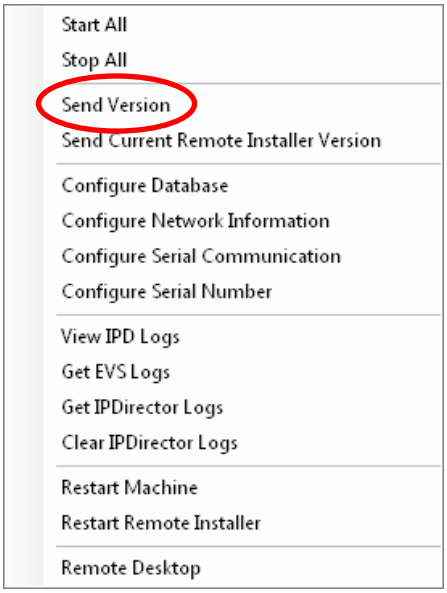
Wait until all progress bars are completed.



After refresh, the blue color indicates that the version has been installed successfully and all workstations are matching and compatible versions.

Note

There is a possibility to install one specific version on each workstation separately. Right click the corresponding machine and select Send Version.



A lot of new features are available in this menu. Please refer to the **Contextual Menus** chapter for more information.

3.8 Database Configuration

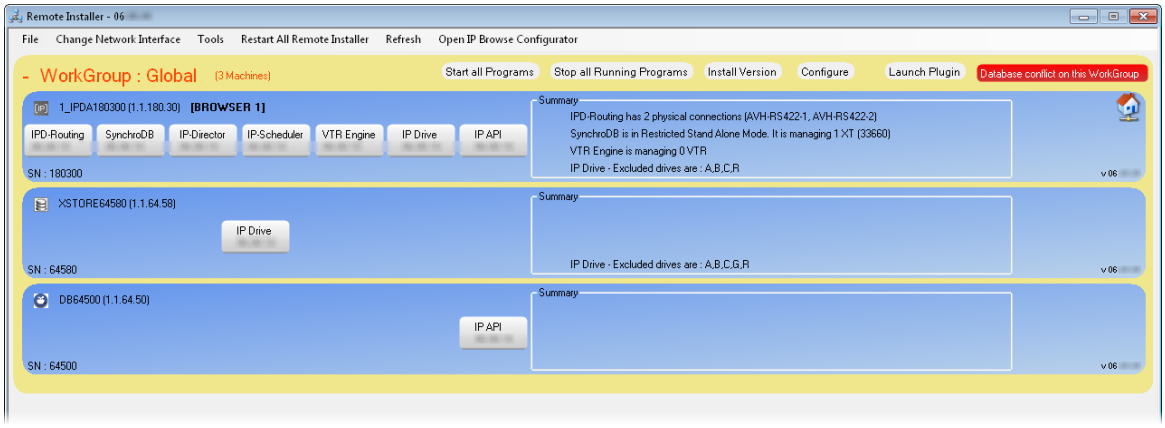
The Database button is used for the following:

- Defining all database parameters necessary to set up your IP-Director environment
- Backing up your database to a file
- Restore an empty or a previously backed up database file
- Clean the database
- Upgrade automatically the DB to the current version
- Execute scripts (for example, to upgrade an older version of the database to the current DB format or get DB info to identify the restored DB file or version)

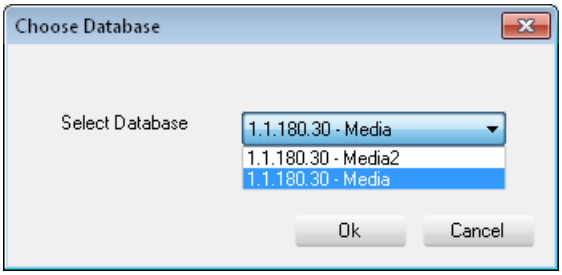
Database Status

Conflict (Red)

At the top right of the remote installer application, the database field in red also indicates a database conflict within the workgroup defined. One station or more point to another database.



Right-click the database button and select **Configure**, this new window pops up:



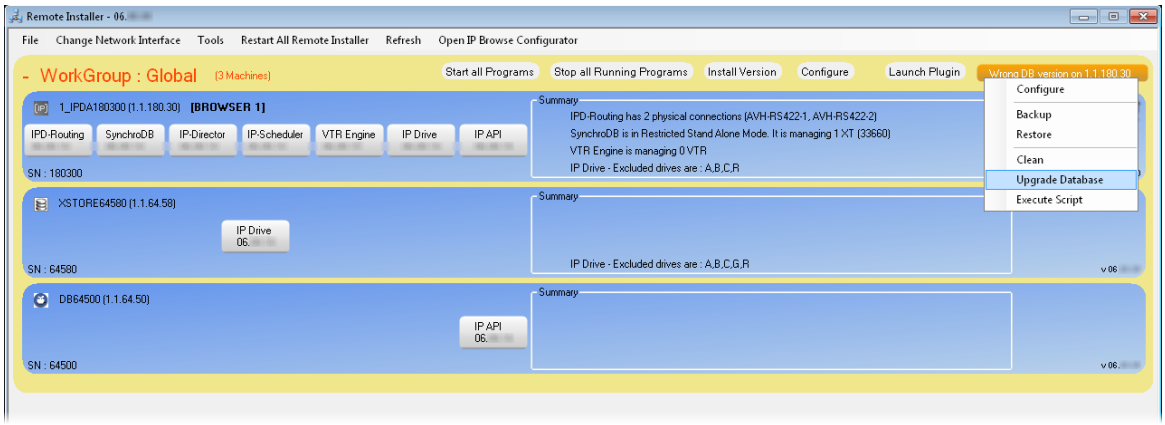
Select the Name or the IP address and **the DB instance name** of your database server.

Since Version 6, if two DB instances are hosted on the same DB Server, the instance name is displayed to ease the selection.

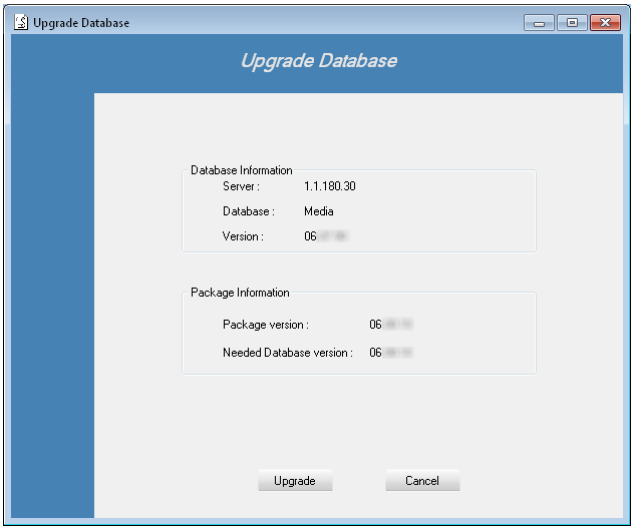
Wrong Version (Orange)

At the top right of the remote installer application, the database field in orange also indicates a wrong version of database within the workgroup defined. The DB version is linked with the IP-Director version.

This verification is performed roughly every 30 seconds, and cannot be initiated by a refresh.



In order to update the DB to the right version, right-click the database button and select **Update Database**, this window pops up:



Press the Upgrade button to apply the scripts from the old version to the needed BD version.

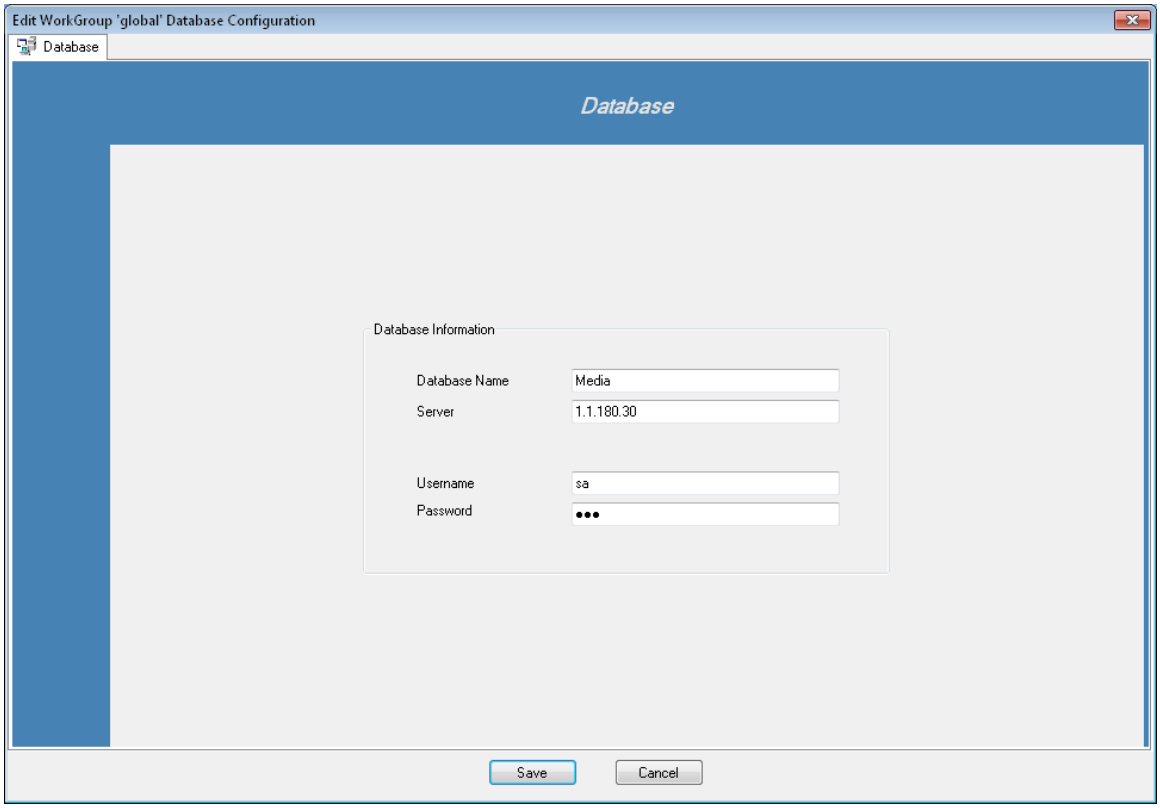
Database Ok (Green)

If the Database button is Green, this indicates the DB configuration was successful.

Configure Database

To configure your database, right click on the Database button to open the contextual menu and choose Configure.

Click OK, the Database window appears:



Database Name: (Under normal circumstances, this does not change)

By default, the name of the database on the network is **Media** since IP-Director version 5.

EVS strongly recommends keeping the default value.

Server:

Specify the name of your server where the database is located. This server can be the local IP-Director workstation, another IP-Director workstation or a dedicated SQL database server. You may specify the IP address of the workstation or the computer name.

Note

When more than 3 IP-Director Workstations are connected together on the same IP Network, the database must be run on a separate dedicated workstation. The SQL Server must be SQL Server 2005 Standard Edition running on a windows 2003 R2 server operating system (SQL 2008 on Windows Server 2008 coming soon).

Username: (Typically not changed)

Default value (sa). You can change this value, as long as the database Username has also been changed.

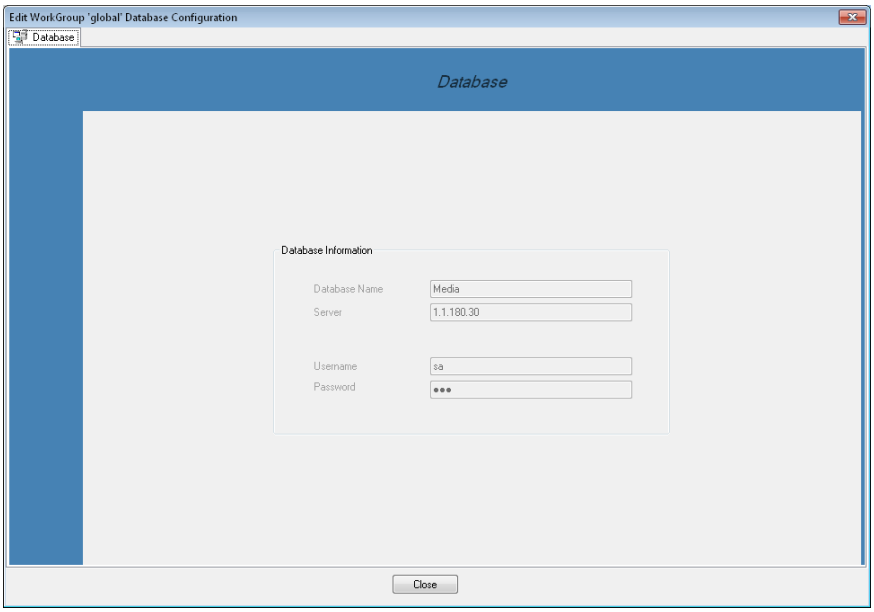
Password: (Typically not changed)

Default value (evs). You can change this value, as long as the database Password has also been changed.

Once the fields are specified, click Save.

Note

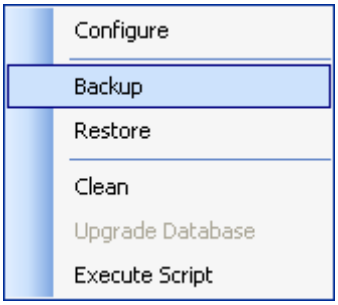
A left click on this button will automatically launch the Database Configuration window. But if several workstations are running in the network, the database configuration windows will be greyed.



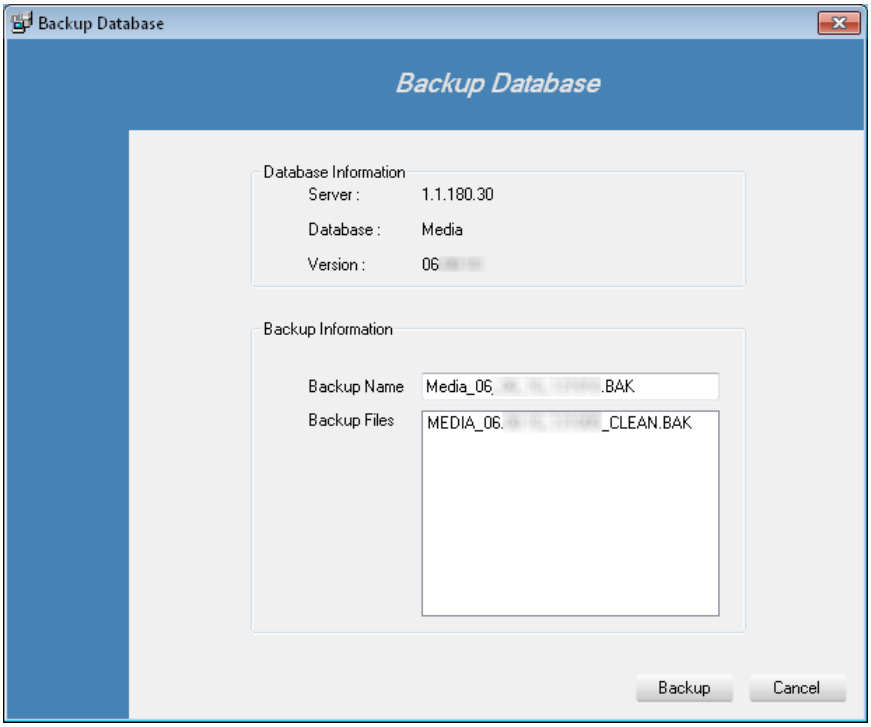
If the Database button is now Green this indicates the DB configuration was successful.

Backup Database

To create a backup file of your database, right click on the green Database button to open the contextual menu and choose Backup.



The backup database window opens.



Backup Name: Specify the name of the backup file.

Default value is the current DB Version Name + Date + .BAK

Note

It is not recommended to overwrite the original DB file that delivered with the software and named with a "_Clean" extension. It is recommended to modify the name of the file to best describe the contents of the database being backed up.

Example: Media_06_XX_XX_YYMMDD_**MyFacilityName**.BAK

Backup Files: Existing backup files (for the current database version) found on the local PC.

Check the parameters. If they are not correct, click Cancel and select the Configure database of the contextual menu to modify them.

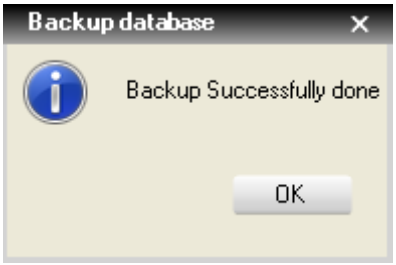
If parameters are correct, enter a name for the backup file.

The existing backup files (for the current database version) are displayed in the right-window list. Just select one.

If you would like to overwrite the existing file, select it here.

The backup file is created on the workstation were the backup function is performed and is stored in the c:\program files\EVS Broadcast Equipment\IP-Director\Database folder

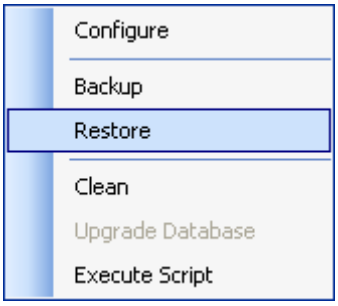
Click Backup to create the backup file.



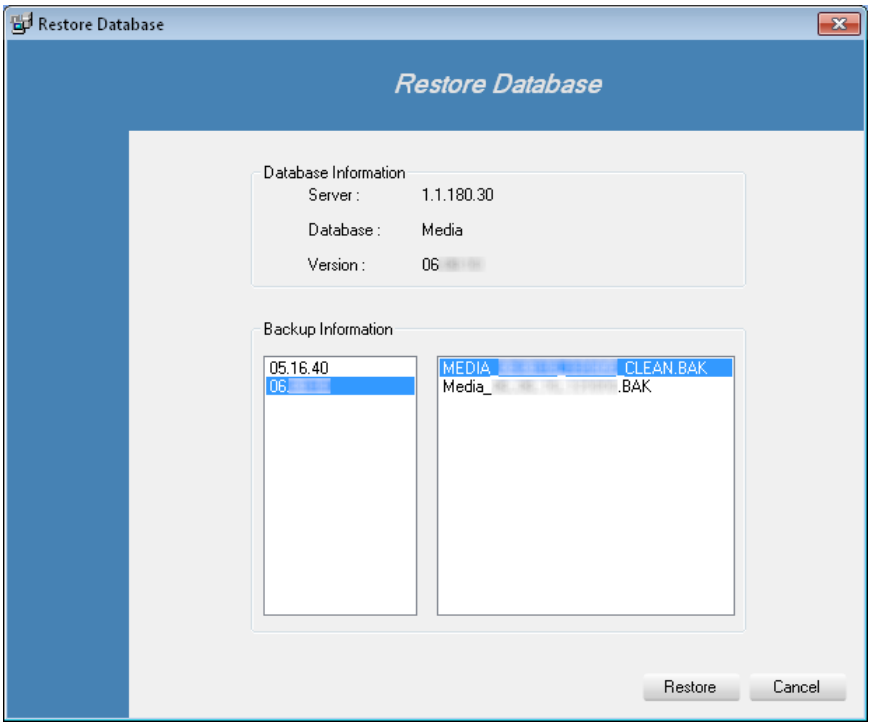
Click Ok.

Restore Database

To restore a backup file to your database, right click on the green Database button to open the contextual menu and choose Restore.



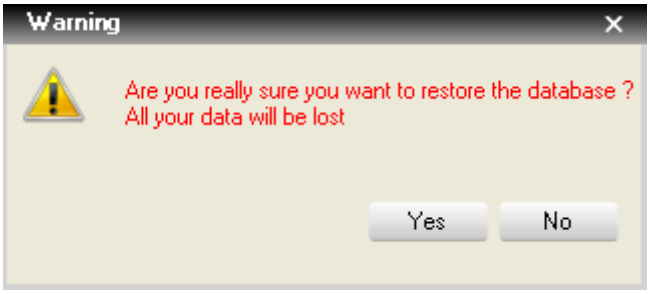
The Restore database window opens:



Check the Database information parameter. If they are not correct, click Cancel and select the Configure database of the contextual menu to modify them.

If parameters are correct, in the 'Backup Information' panel, in the left window list, select the database version of the backup you would like to restore. In the right window list, select the file.

Click Restore.



Click No to cancel the operation, click Yes to restore the database.

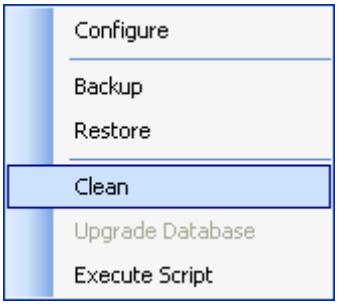
After completion, click Ok.

Clean Database

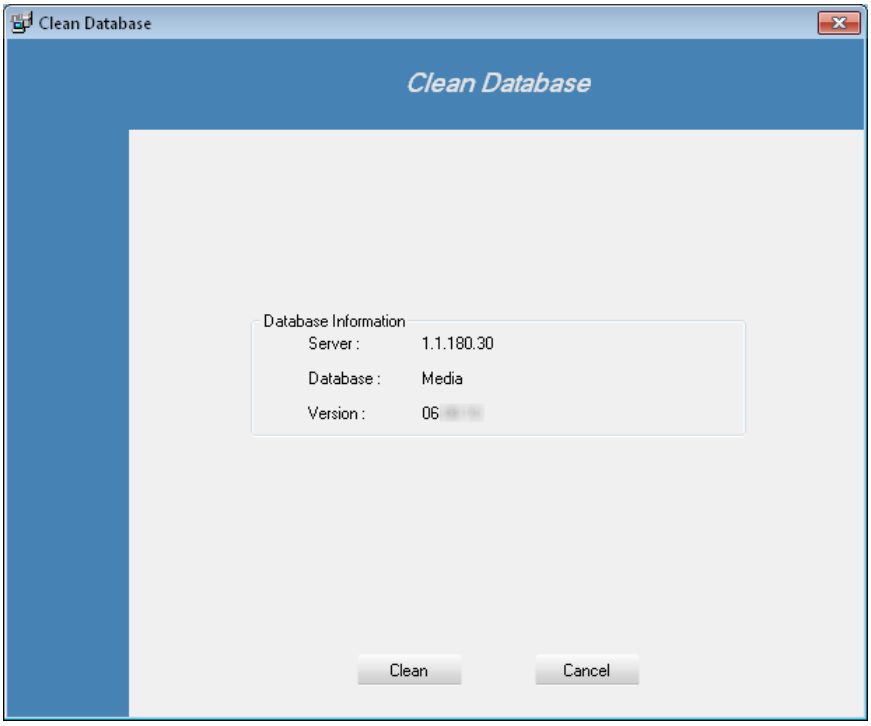
To clear your database, right click on the green Database button to open the contextual menu and choose Clean.

Important

All the database content will be removed (Configurations, User Rights, Medias...). The database returns to clean state.



The Clean database window opens.



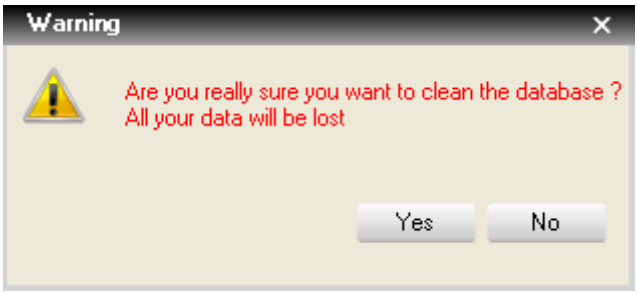
Server: displays the name of your server where the current database is located.

Database: Displays the name of the database currently configured.

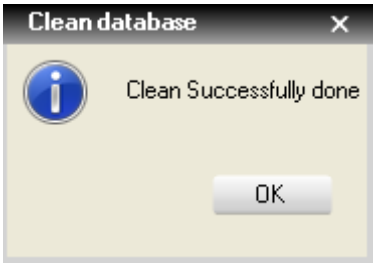
Version: Indicates the version of the DB currently active on the DB Server.

Check the parameters. If they are not correct, click Cancel and select the Configure database of the contextual menu to modify them.

If parameters are correct, click Clean.



Click No to cancel the operation, click Yes to clean the database.



After completion, click Ok.

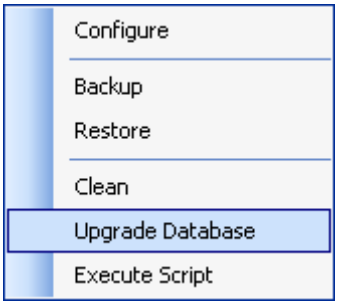
Upgrade Database

This option is designed to simplify the database version upgrade. The process will detect the database version needed regarding the IP-Director version installed, select the appropriated scripts and apply them in the right order.

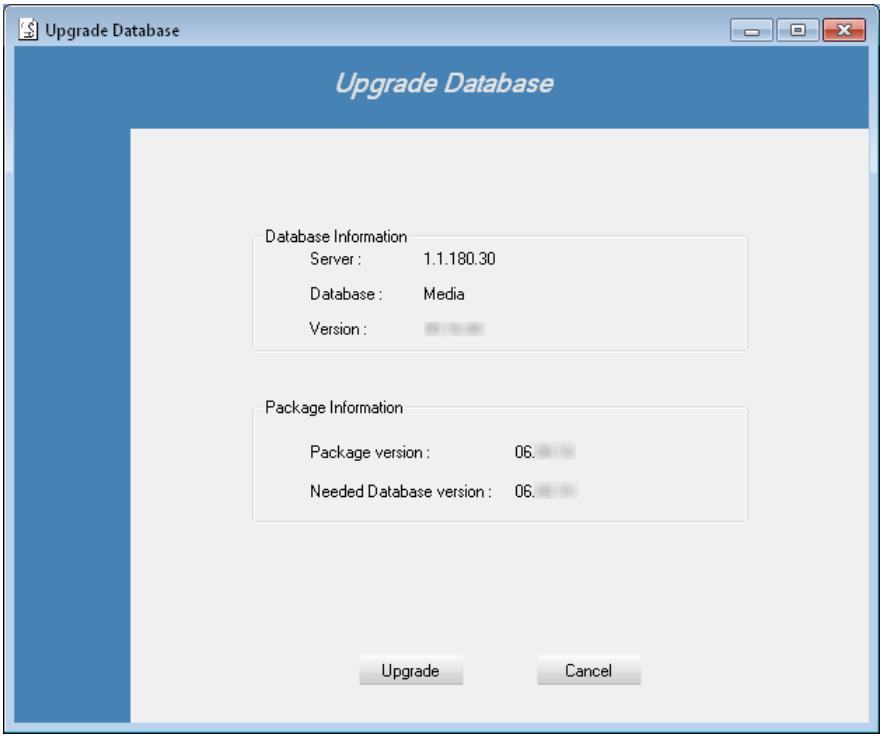
Note

This option is available in the database menu when the Remote Installer displays a “Wrong DB version on…”

To upgrade your database, right click on the orange Database button to open the contextual menu and choose Upgrade Database.



The Upgrade Database is opened.



Server: displays the name of your server where the current database is located.

Database: Displays the name of the database currently configured.

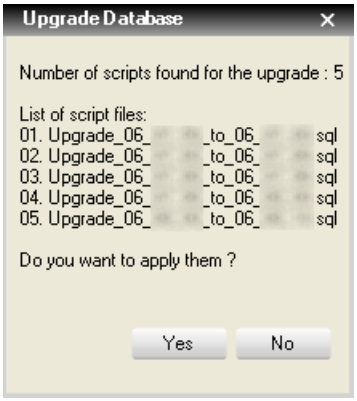
Version: Indicates the version of the DB currently active.

Package version: Indicates the version of the IP-Director installed.

Needed Database version: Indicates the target version needed with the IP-Director package.

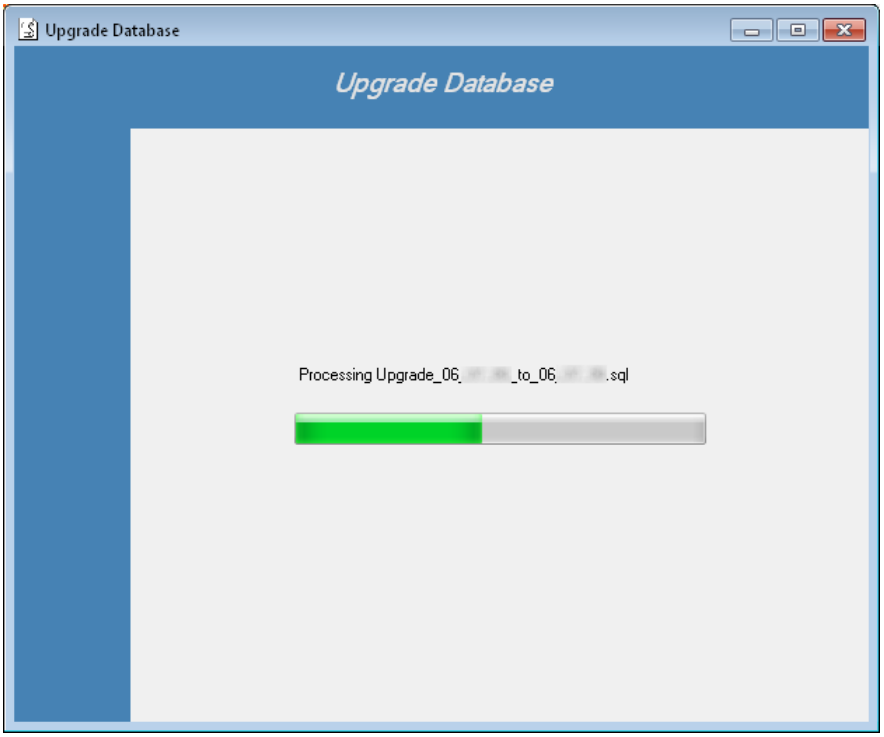
Check the parameters. If they are not correct, click Cancel and select the Configure database of the contextual menu to modify them.

If parameters are correct, click on the Upgrade button. This window pops up:

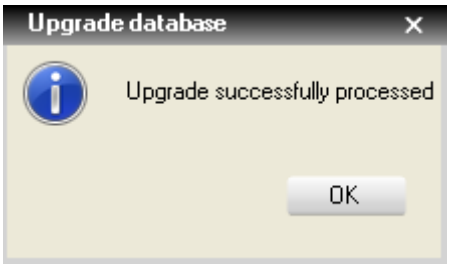


The upgrade process discovered 5 scripts to be applied.

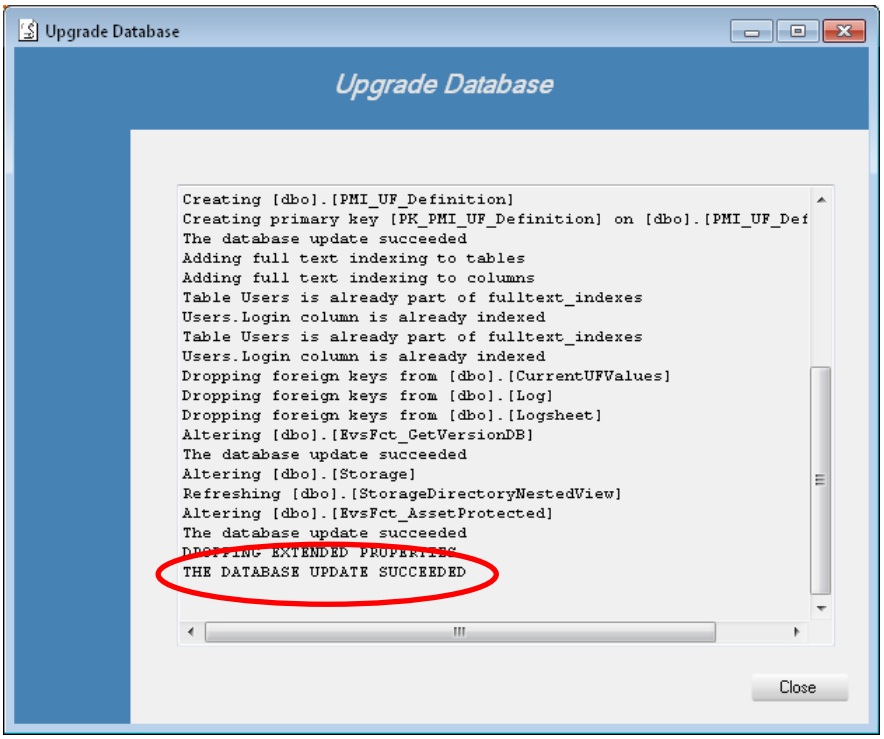
Press Yes to start the upgrade:



When the upgraded is done, the system tells you it has been successfully processed.



All steps can be checked in the final report:

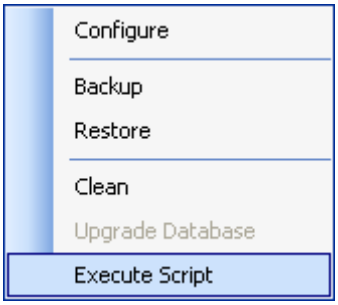


The message “The database update succeeded” certifies the good execution of the process.

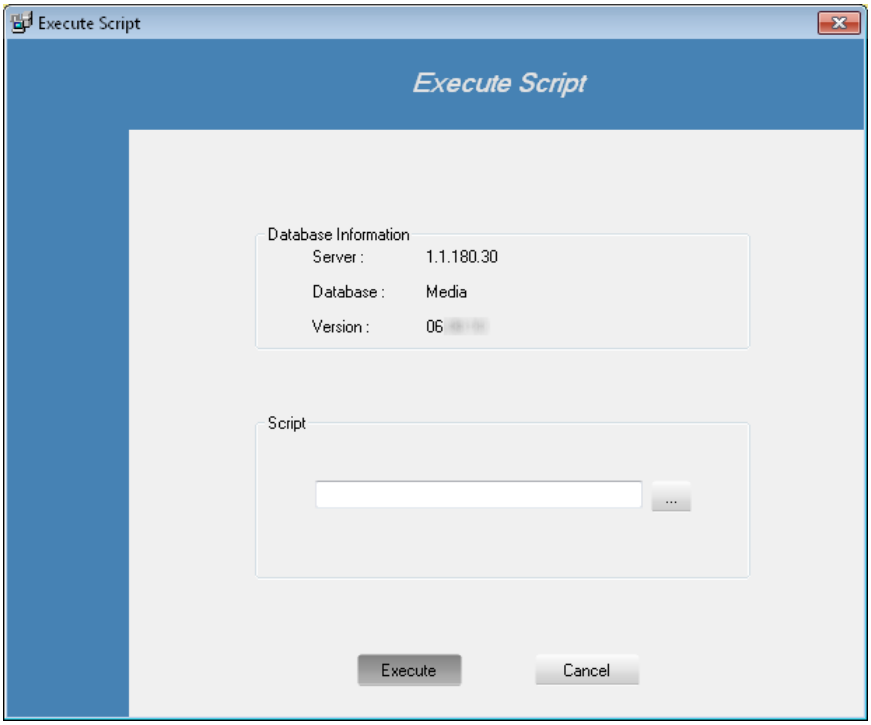
Execute Script

To execute SQL script on your database, right click on the green Database button to open the contextual menu and choose Execute script.

Before executing any script, be sure your SQL server engine is running on your database server.



The Execute Script window is opened.



Server: displays the name of your server where the current database is located.

Database: Displays the name of the database currently configured.

Version: Indicates the version of the DB currently active.

Note

The “Execute script” feature was the only way to upgrade the database before the IP-Director version 5.

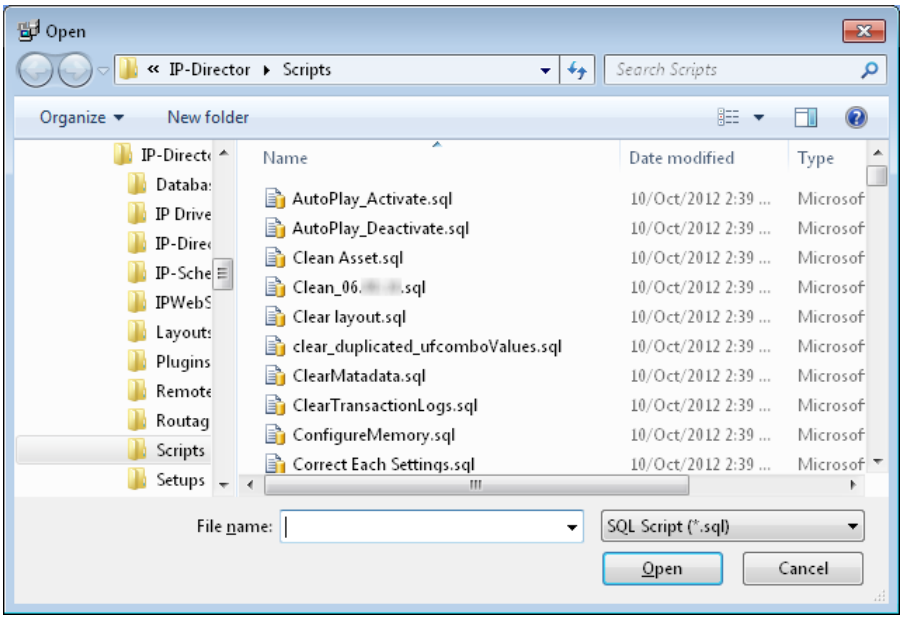
Now, it is highly recommended to proceed an automatic Upgrade Database since version 5 and not to execute a “script by script” upgrade.

This “Execute script” feature is now mainly used for applying technical script(s) of maintenance. These scripts can be provided by the EVS Support team to solve a specific issue on your setup.

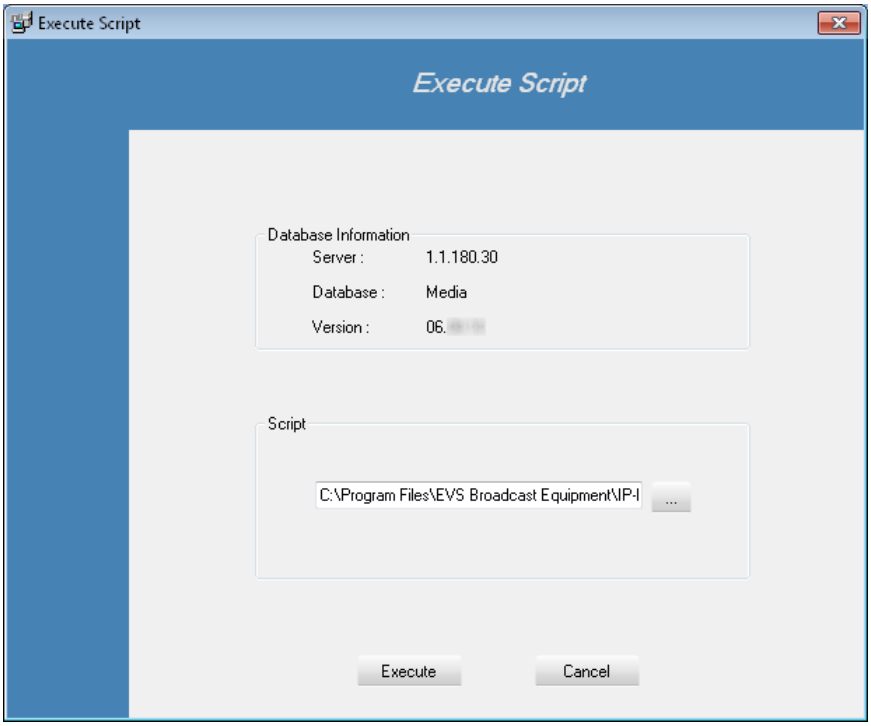
Check the parameters. If they are not correct, click Cancel and select the Configure database of the contextual menu to modify them.

If parameters are correct, click on the browse button ... to select the script to execute.

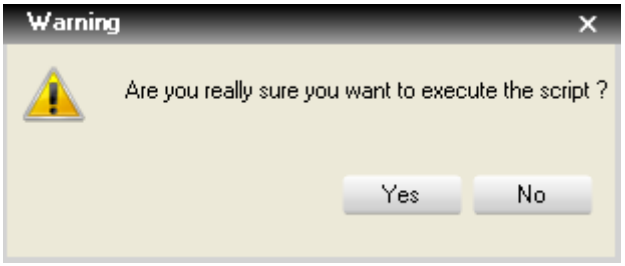
This window pops up:



Select the script file in the list and click Open.

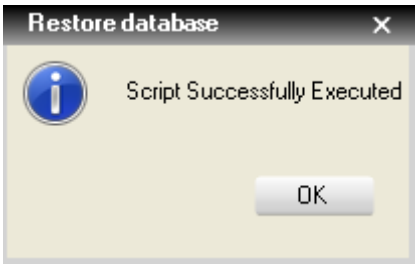


Then click Execute.



Click No to cancel the operation, click Yes to execute the script.

When the script is executed, the system tells you it has been successfully executed.

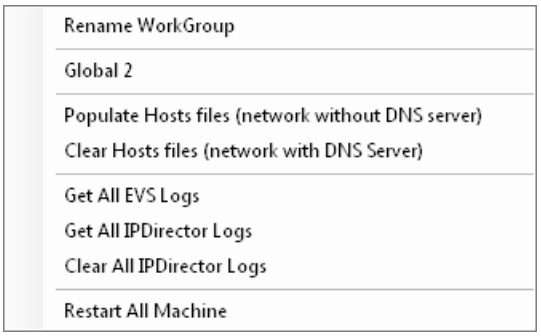


3.9 CONTEXTUAL MENUS

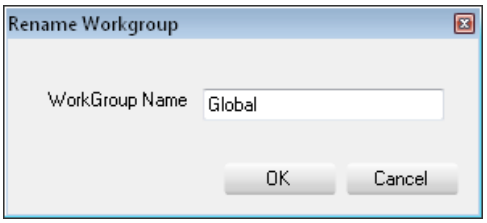
3.9.1 Workgroup Contextual Menu

Right click the workgroup name zone to open the contextual menu.

The menu is displayed:



Rename WorkGroup: Edit the name of the workgroup. All workstations inside this one will be affected.



Enter the new name and press Ok to apply the modification. Wait a few second or press refresh to display the new name inside the Remote Installer.

If other workgroups exist, they are listed below Rename Workgroup. Clicking on one workgroup name will move all the workstations within the other one (ex: Global2). Change DB settings and the Local Machine Number to avoid conflicts inside the destination workgroup.

Note

It is recommended to change the Workgroup name. This avoids auto-deployment of the Remote Installer when plugging new stations on a existing setup.

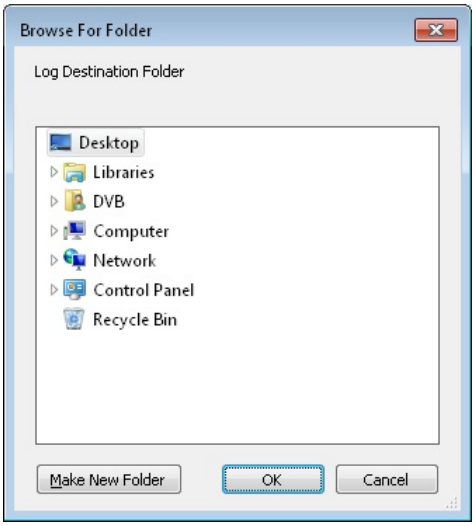
Populate Host files (network without DNS server): Please refer to the next Populate Hosts Files chapter.

Clear Host files (network with DNS Server): Please refer to the next Populate Hosts Files chapter.

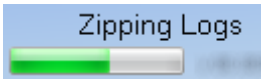
Get All EVS Logs: This remote process grabs and zips the complete EVS log folder on each workstation member of the workgroup.

It is now possible to grab technical logs from one workstation on the network, avoiding collecting them one by one.

First define a destination folder where the zip files will be created.



Wait for creating zipped files on each workstation. A progress bar is displayed per workstation.



Then collect the zip files created in the destination folder. The zip files created are named **IPDAXXXXXX – EVSLogs.zip** (XXXXX is the IP-Director serial number)

Note

Starting any IP-Director services create the EVSLogs folder on the system disk root. This folder is shared on the network with full access rights to allow this new grabbing logs feature.

Get All IPDirector Logs: This remote process grabs EVS critical logs on each workstation member of the workgroup.

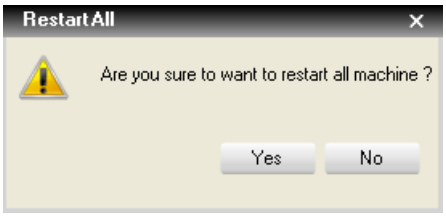
Follow the same procedure as described for the **Get All EVSLogs** feature.

The created zipped files are named **IPDAXXXXXX – IPDLogs.zip**

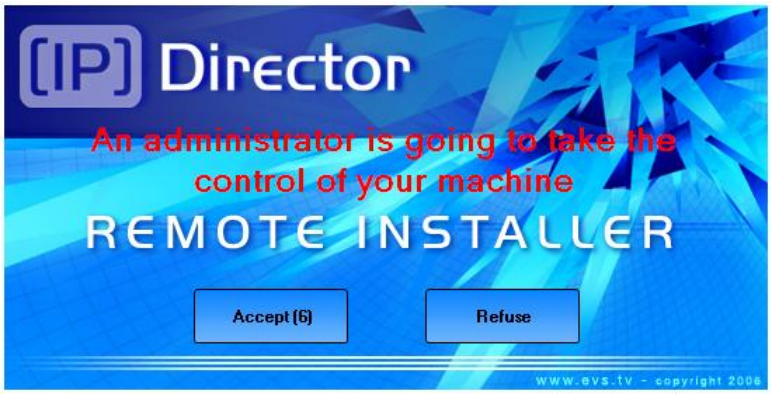
Clear All IPDirector Logs: This remote process clears all the C:\EVSLogs/IP-Director folders located on the workstation system disks.

Restart All Machines: This remote process allows restarting all the workstations within the current workgroup.

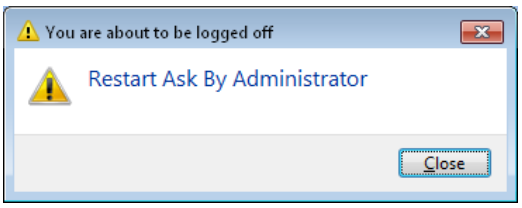
A popup window asks the administrator to confirm this action inside the Remote Installer:



Distant workstations are allowed to refuse (during 10 seconds) the remote shutdown process by clicking **Refuse** in the following splash window:



After accepting or waiting for 10 seconds, the shutdown process calls a Windows Shutdown command which displays this window for 20 seconds:



Once this window is displayed, you can't stop the system shutdown command. Please quickly save all work in progress and log off.

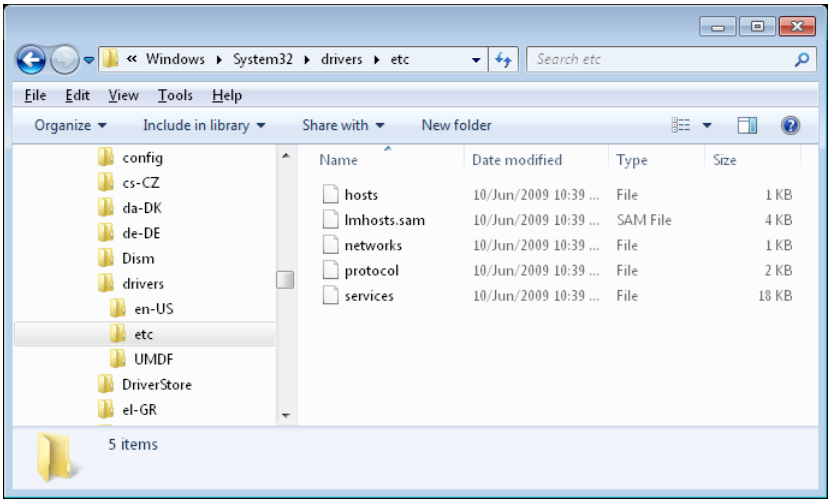
Therefore, the complete **Restart All Machine** sequences may take more than 30 seconds to begin on distant stations.

3.9.2 Populate Hosts Files

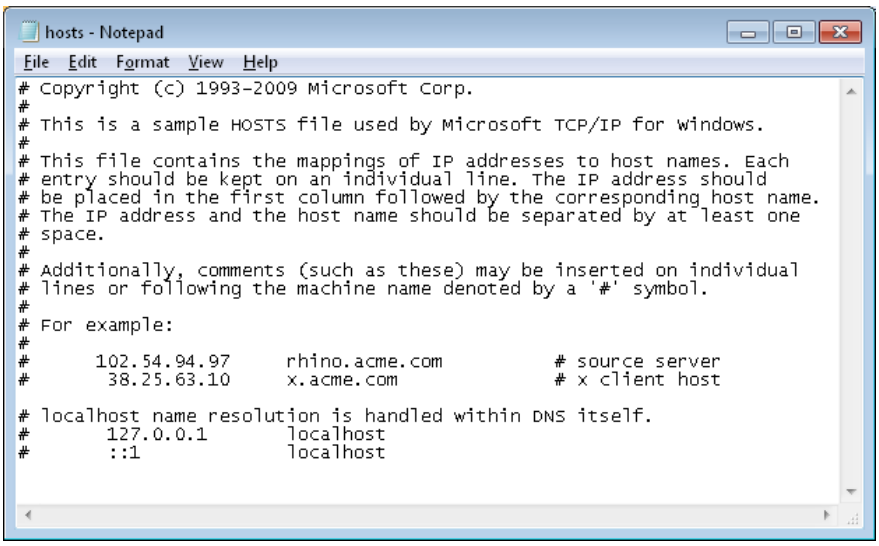
This new feature (since version 4.3) reduces IP-Director latencies due to LAN communications without DNS management.

IP-Director needs quick responses in name resolution. When a DNS sever is not installed on your network, the easiest way to configure the correspondence between **Computer Names** and **IP Addresses** is to edit the HOSTS file inside your operating system.

The HOSTS file is located in C:\Windows\system32\drivers\etc



The Windows original HOSTS file can be opened with Notepad.exe:



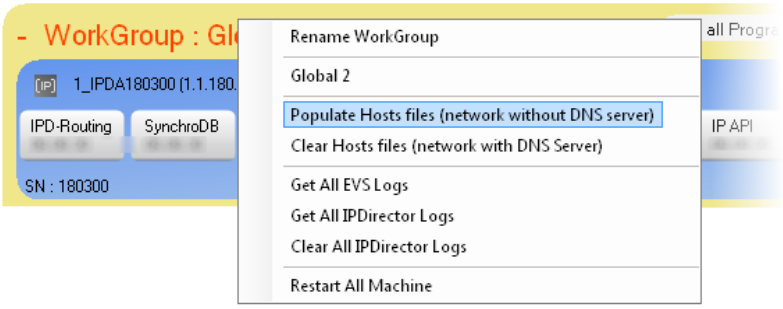
The entries (127.0.0.1 / ::1 local host) are written by default in this file.

Windows first consults this local file cache before sending its request to the DNS Sever. Without DNS Server or Hosts files, Windows introduces latencies inside our application when trying to resolve hostnames.

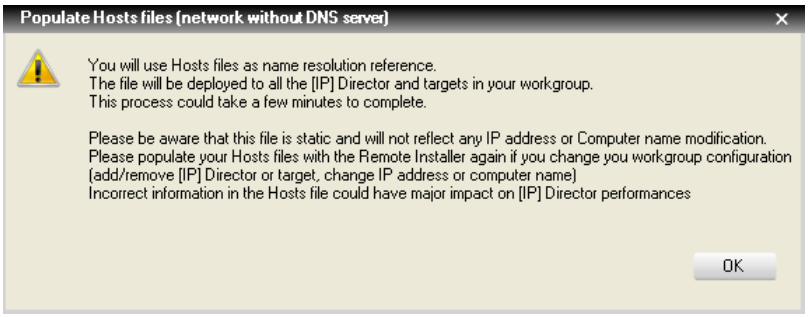
Populate new Hosts Files

There is a feature within Remote Installer that helps you to create and populate a common **HOSTS** file on all the IPD workstations, Databases or Targets used inside the IP-Director workgroup.

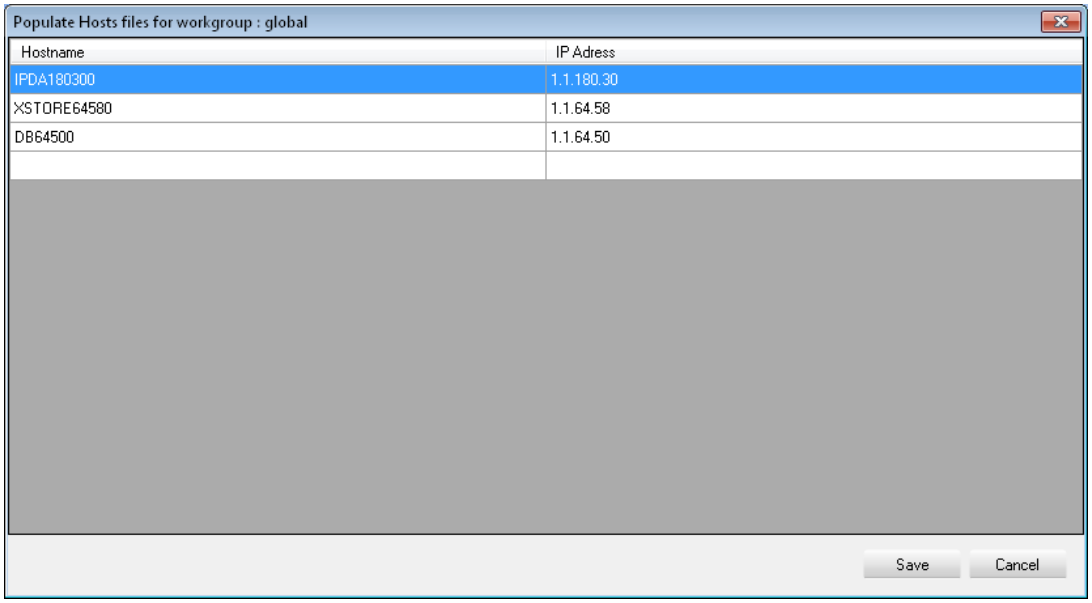
In the Remote Installer, right-click on the Workgroup's name to open this menu:



Select Populate Hosts files (network without DNS server), a popup window appears:



Press OK to open this window:



A list is automatically created including all workstations belonging to your Workgroup. This process could take a few minutes to complete.

Press Save to populate the HOSTS file.

Note

Manual entries are allowed:

Enter the hostname (computer name), the IP Address is automatically resolved.

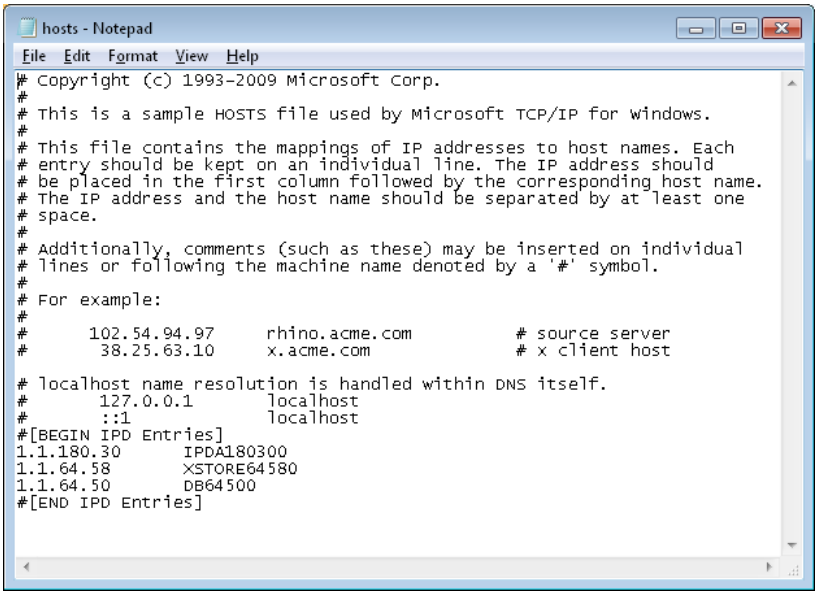
Enter the IP address, the hostname is automatically resolved.

Enter both hostname and IP address.

Note

If using a Mirrored database, the Virtual address will be populated into the list, but may not resolve a hostname. This is OK to leave blank as the virtual will never be used via a hostname lookup.

After population, the all IP-Director, SQL Databases and devices will have the same HOSTS file showing the new common entries:



Note

Entries done by the Remote Installer are inserted between these two tags: #[BEGIN IPD Entries] - #[END IPD Entries]. This section allows for replacement and deletion of this group by the remote installer at a later time.

These entries can also include database, target computer, XFile or third Party computer present in the workgroup configuration.

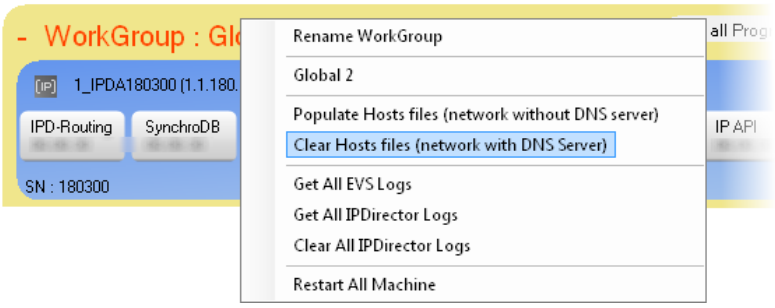
Note

Some Antivirus programs and settings block the ability to propagate the Host file to all workstations.

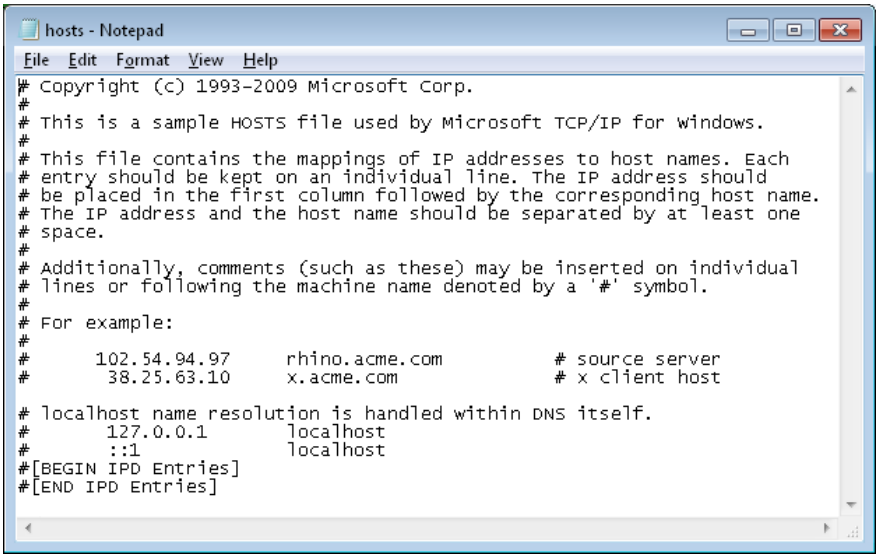
Clear populated Hosts Files

If a DNS Server is installed on your network, the HOSTS files must be cleared.

In the Remote Installer, right-click on the Workgroup's name to open this menu:



Select **Clear Hosts files (network with DNS server)** to remove IP-Director's entries inside the workstation HOSTS files. All HOSTS Files are cleared:



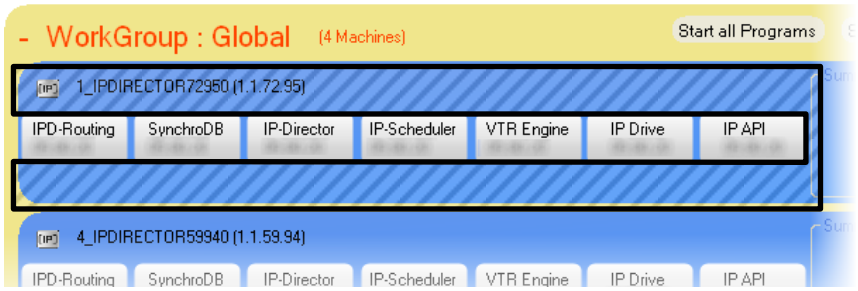
All entries inserted between tags # [BEGIN IPD Entries] - # [END IPD Entries] are deleted. If you insert manual entries in your HOSTS files for other IT application, write them outside the 'IPD Entries' tags.

Important

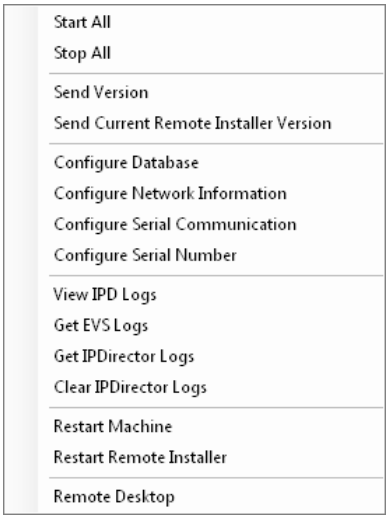
It is strongly recommended to clear the HOSTS files before dismantling your setup.

3.9.3 Workstation Contextual Menu

Right click this zone on a workstation tab to open its dedicated contextual menu:

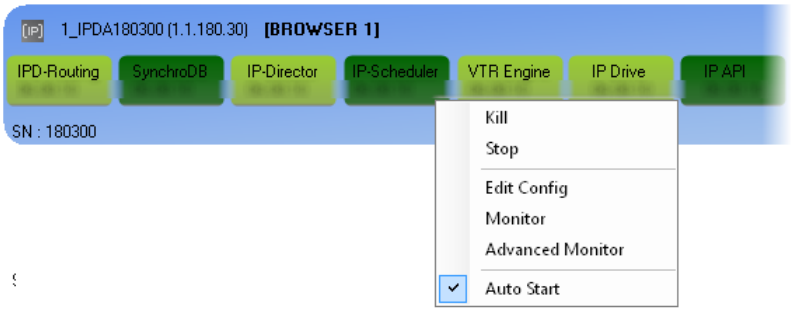


The menu is displayed:



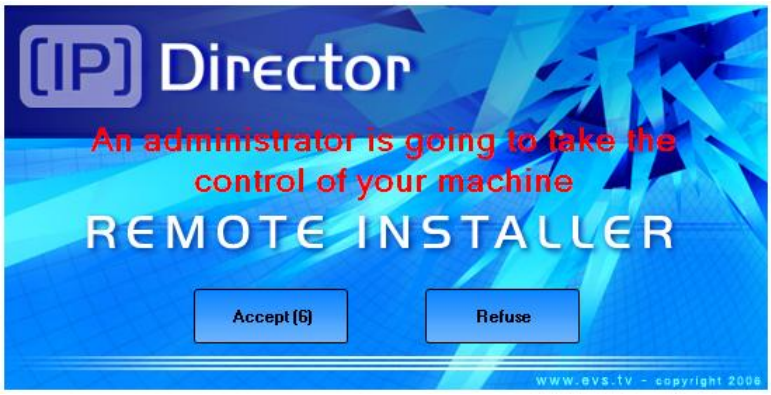
Start All: Used to start all IP-Director services on the selected workstation, including the mandatory services (IP-Routing and SynchroDB) and the configured for **Auto Start** ones (IP-Scheduler, VTR-Engine, IP-Drive and IP API).

All services are started and shown with a green status:

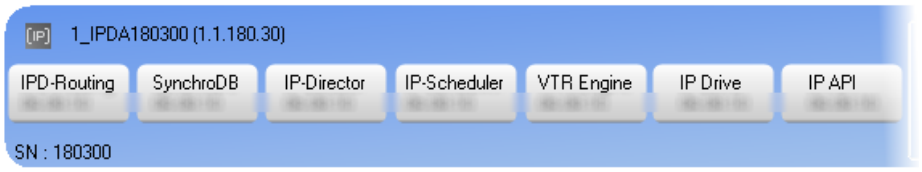


Stop All: Used to stop all IP-Director services on the selected workstation.

Distant workstations are allowed to refuse (during 10 seconds) the remote order by clicking **Refuse** in the following splash window:



All services are stopped and shown with a grey status:



Note

Once the services are stopped, their configuration can be edited.

Please refer to each service chapter for details.

Send Version: Used to send an IP-Director package on a specific workstation. It allows upgrading an incompatible workstation within a workgroup without stopping all programs on the other members.

Please refer to the previous **Install Package** chapter for details.

Send Current Remote Installer Version: Used to send the **current** Remote Installer version on a specific workstation.

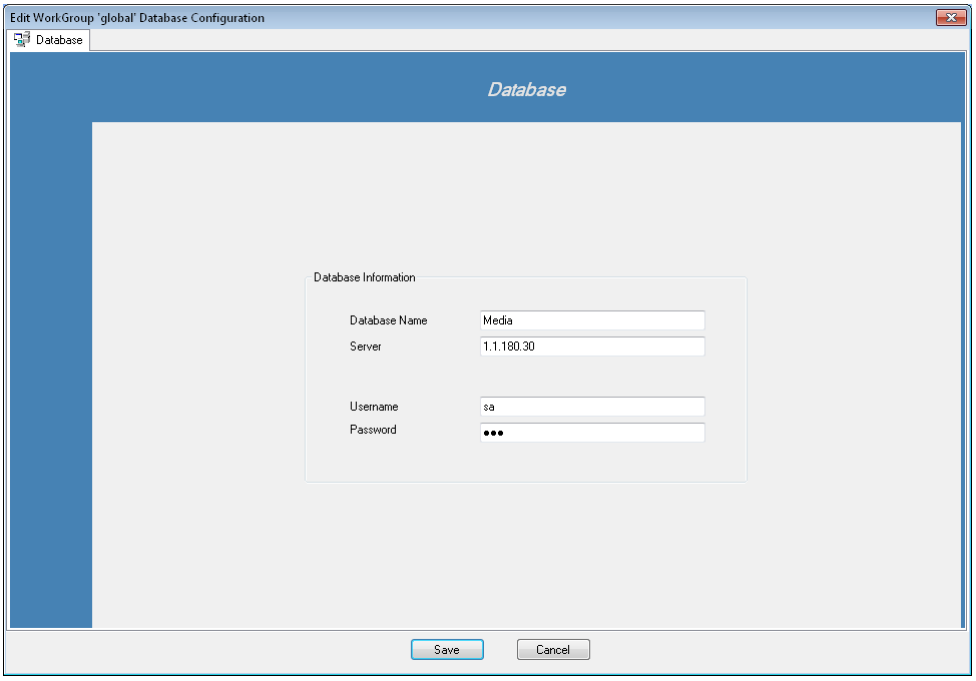
Please refer to the previous **Install Remote Installer Version** chapter for details.

Configure Database: Used to edit the database configuration on a specific workstation. It allows modifying database characteristics on a workstation in conflict with its own workgroup without stopping all programs on the other members.

Note

All Programs must be stopped on this workstation to open the database configuration window in **Edit** mode.

The Database configuration window is displayed:



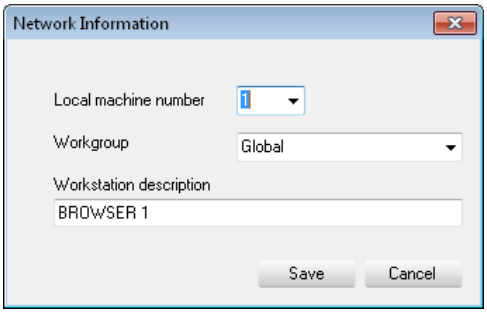
Please refer to the previous **Database Configuration** chapter for details.

Configure Network Information:

Used to configure the workstation network information.

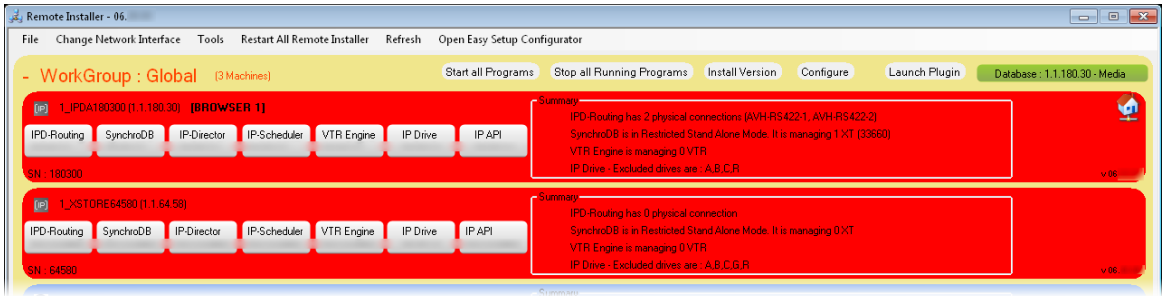
Previously configured inside the IP-Routing service, these settings are now separated.

The configuration window is displayed:



Local machine number: The Local machine number field is used to assign an ID to an IP-Director workstation in the network. All workstations in the network must have a different number and must be from 1 to 255.

If several machines have the same network number, a conflict is detected by the Remote Installer, in this case the color of theses involved machines turns red. At the lower right corner, the NumUser status box turns red also.



Workgroup: The Workgroup defines the workgroup name (16 characters maximum) to be used by this IP-Director Workstation. Normally all workstations MUST be in the same defined workgroup name.

Please refer to the **Workgroup Functionalities** and **Workgroup Contextual Menu** chapters for details.

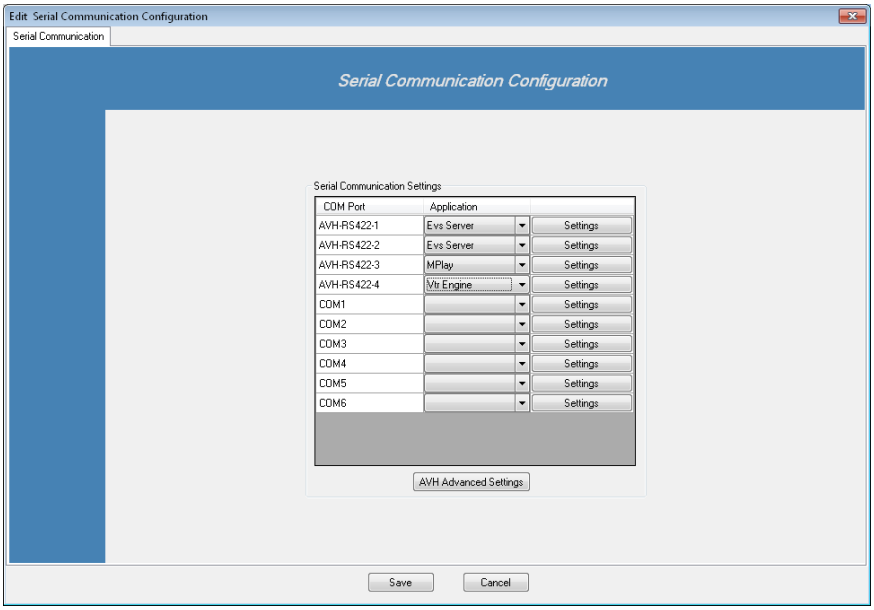
Workstation description: The description is a free-text entry displayed beside the Computer Name and IP address of the workstation. As a technical assistance, it can give you the identity of a workstation in the workgroup.

Example: The workstation is dedicated for a browsing usage in room 1.

Configure Serial Communication: Used to configure the workstation serial ports.

Previously configured inside the IP-Routing and VTR-Engine services, these settings are now re-grouped in one pop-up window.

The configuration window is displayed:



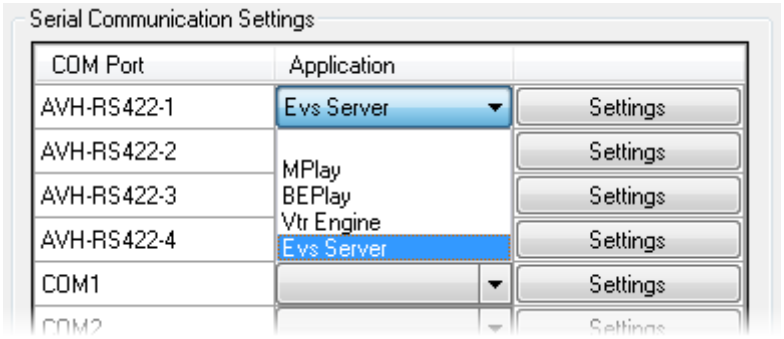
COM Port:

All the serial ports present on the workstation are listed here.

Two kind of RS422 connections exist: AVH-RS422 (using an internally mounted EVS USB to RS422 module) or COM (using a RS422/RS232 port on the station motherboard). 4 AVH-RS422 connections and 6 COM connections are possible. However, only 4 connections may be managed from one IP-Director workstation at any time.

Application:

Four different applications can now be assigned to a serial port. Select the application for each port using the dropdown menu. Leave it blank if the port is not used.



- MPlay (Remote P)

  This selection is needed when you connect the new MPlay device to an IP-Director workstation. This remote is mainly used to control 4 PGM outputs with 5 configurable buttons for each one.

  Its configuration is located in the Tools menu > Remote Control Manager of the IP-Director GUI. Limited by user rights, the operator can (or not) modify the functions attributed to each button.

  Settings:

  - Specify the **Baud rate**, **Data bits**, **Parity** and **Stop bits** of the serial protocol used by the Remote.

- BEPlay (Remote B)

  This selection is needed when you connect a BEPlay remote to an IP-Director workstation. This remote is mainly used to control channels assigned to IP Edit Timeline editor.

  Its configuration is located in the Tools menu > Remote Control Manager of the IP-Director GUI. Limited by user rights, the operator can (or not) modify the functions attributed to each button.

  Settings:

  - Specify the **Baud rate**, **Data bits**, **Parity** and **Stop bits** of the serial protocol used by the Remote.

- Vtr Engine

  This selection is used by the VTR Engine service to control a VTR using a free serial port on an IP-Director workstation.

  Pressing the “Settings” button gives you access VTR settings.

  Basic Settings:

  - COM Port:

    Shows the RS422 port connected to VTR (COM1 to COM6 or AVH-RS422-1 to AVH-RS422-4).

  - VTR Name:

    The VTR name is used in the VTR Control Panel in the IP-Director interface.

  - Description:

    Enter a description for your facility.

  - Default Recorder:

    Select the server Default Recorder connected to the VTR. The VITC of this recorder is taken for ingests.

  Advanced Settings:

  - Specify the **Baud rate**, **Data bits**, **Parity** and **Stop bits** of the serial protocol used by the VTR. Please refer the VTR manual to get information.

- EVS Server (server connection)

  This selection is used when the port is connected to an EVS server in order to manage it.

Note

This attribution of the serial port was previously set in the IPD-Routing service (V4 and previous versions)

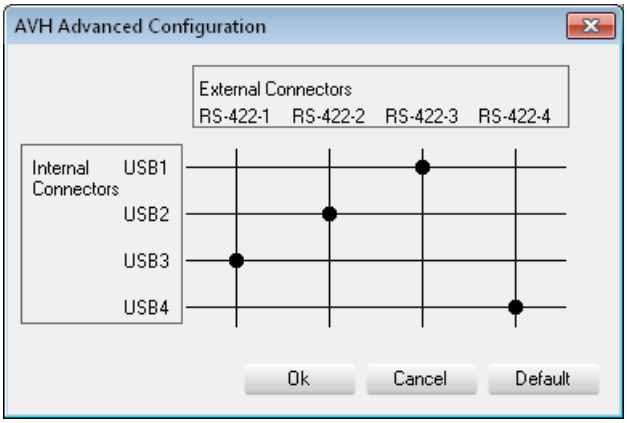
Note

This will be the most common selection in the Serial Communication.

No settings needed. The “Settings” button is not activated.

AVH Advanced settings:

Click on the AVH Advanced settings button to open this window:



AHV Advanced Configuration access to advanced patch features between physical external connectors and internal associated Windows USB ports.

Keep default parameters by clicking on Default then OK.

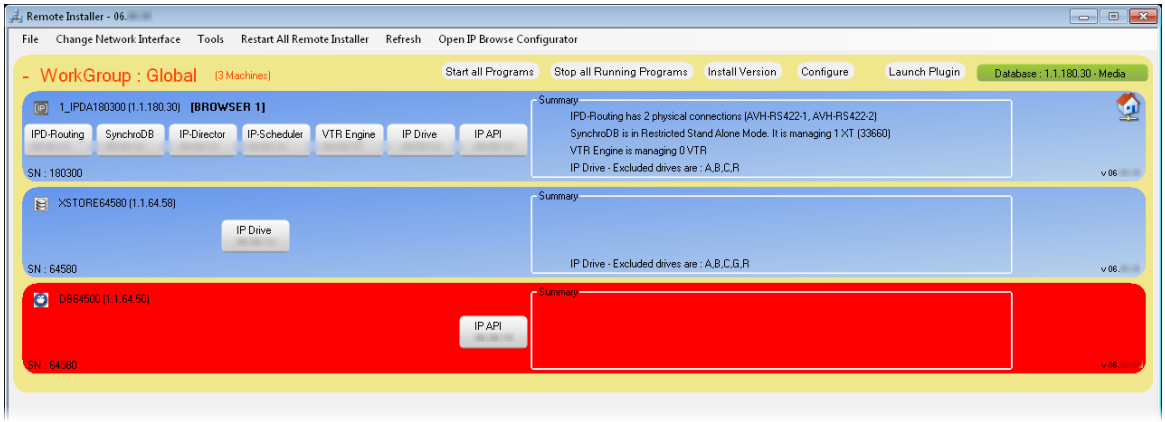
Note

All parameters are local to the IP-Director workstation and must be set independently on all IP-Director workstations.

All concerned services must be stopped in order to edit the application and the settings for each port.

Configure Serial Number: Used to define a serial number on all the workstations listed in the Remote Installer.

All EVS applications require a serial number in order to generate unique UmID for clips or files. Since IP-Director 5.8, the Remote Installer shows a RED status for workstations listed without a valid registered serial number.

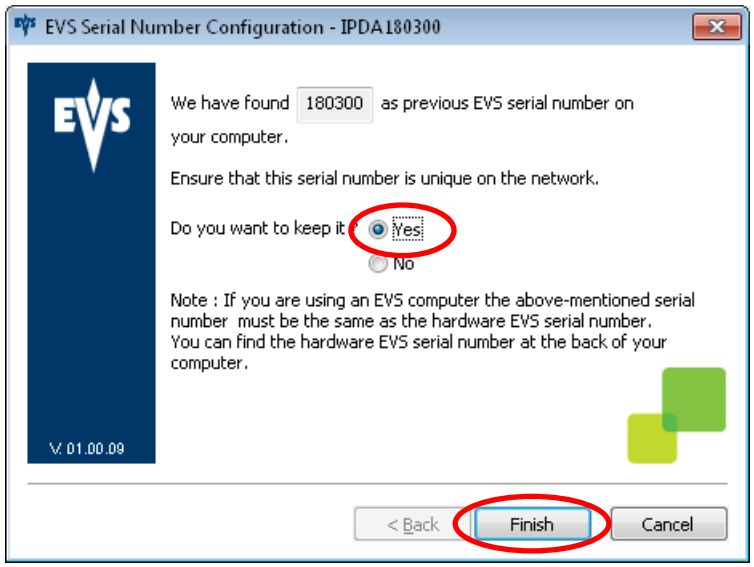


At the lower right corner, the Serial Number status box turns red also:

In order to get rid of this error status, open the workstation contextual menu and select **Configure Serial Number**.

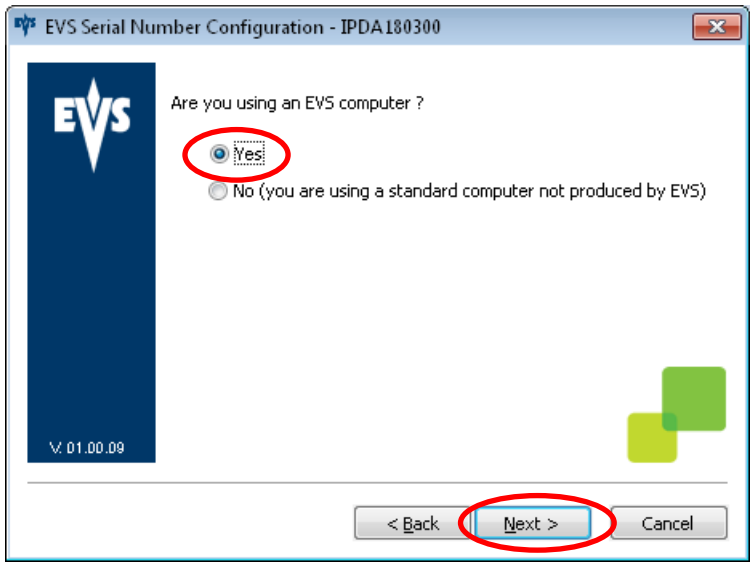
An EVS application (common to all EVS products) is launched:

- If a previous Serial Number is found in any configuration settings (file or registry), the application shows this message:

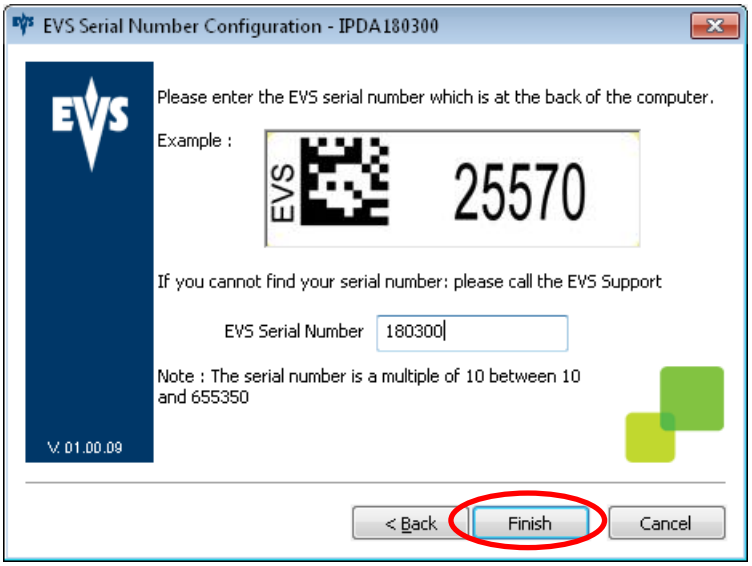


Check the serial number, keep the default value 'YES' and press Finish.

- If no Serial Number can be found on the system and the computer is produced by EVS, the application displays a series of questions:



Keep the default value 'YES' and press Next.



Enter the serial number found on the back (or side) of the computer.

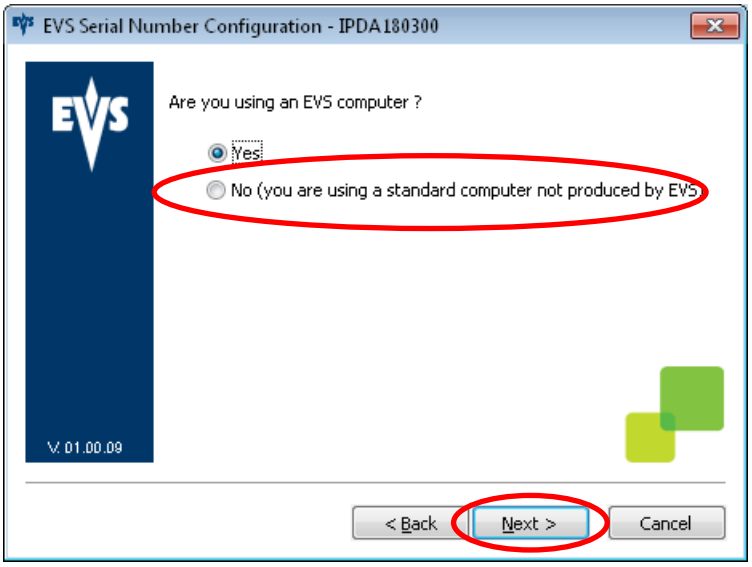
Press Finish.

Note

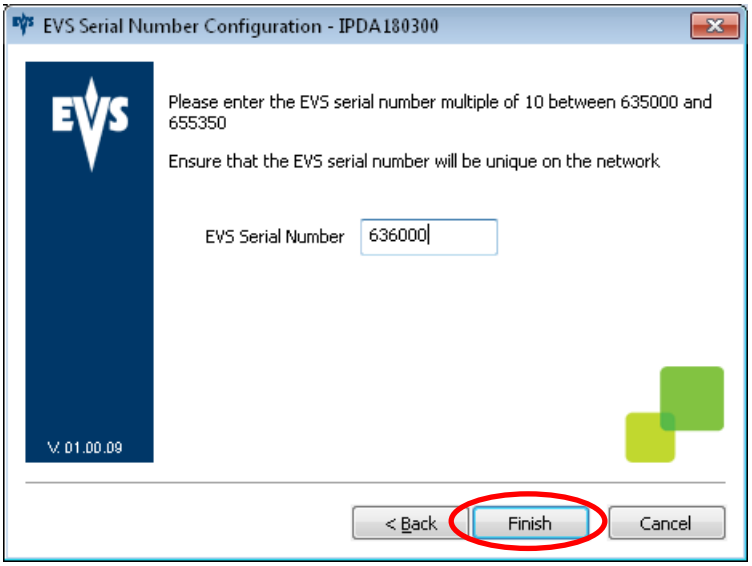
The serial number is a number is multiple of 10 between 10000 and 655350.

The serial number must unique.

- If no Serial Number can be found on the system and the computer is **not** produced by EVS, the application displays a series of questions:



Select the non default value 'NO' and press Next.



Enter a serial number multiple of 10 between 635000 and 655350.

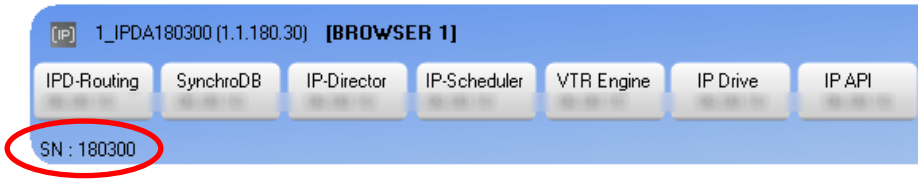
Press Finish.

Note

The serial number must unique.

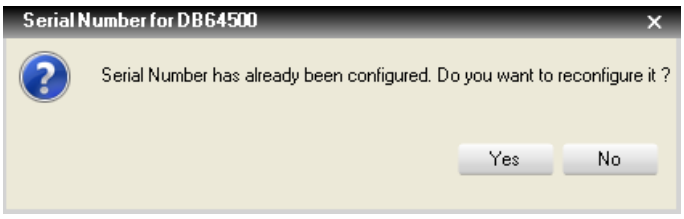
Once the Serial Number is configured, an entry in the registry of Windows will be used by any EVS application.

The status of the workstation becomes blue in the Remote Installer and the Serial Number is displayed on IP-Director station:



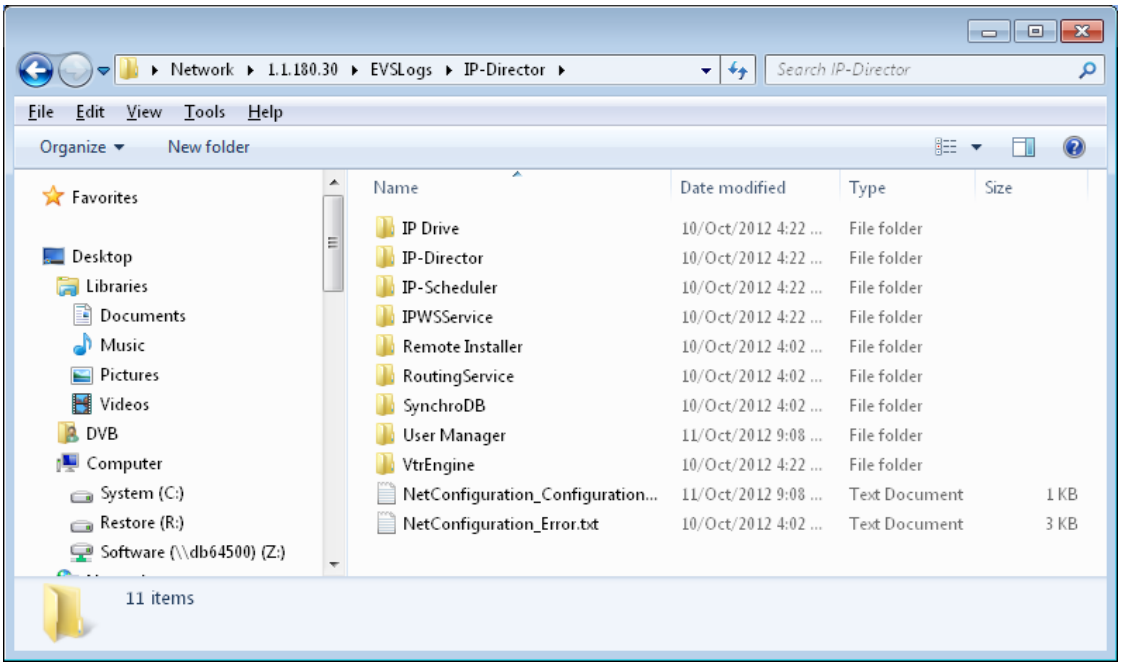
Note

If a Serial Number is already defined, trying to configure it again displays a pop-up window:



Press 'YES' and restart the previously described procedure.

View IPD logs: This remote process displays the distant EVSLogs\IP-Director folder in a local Explorer window.

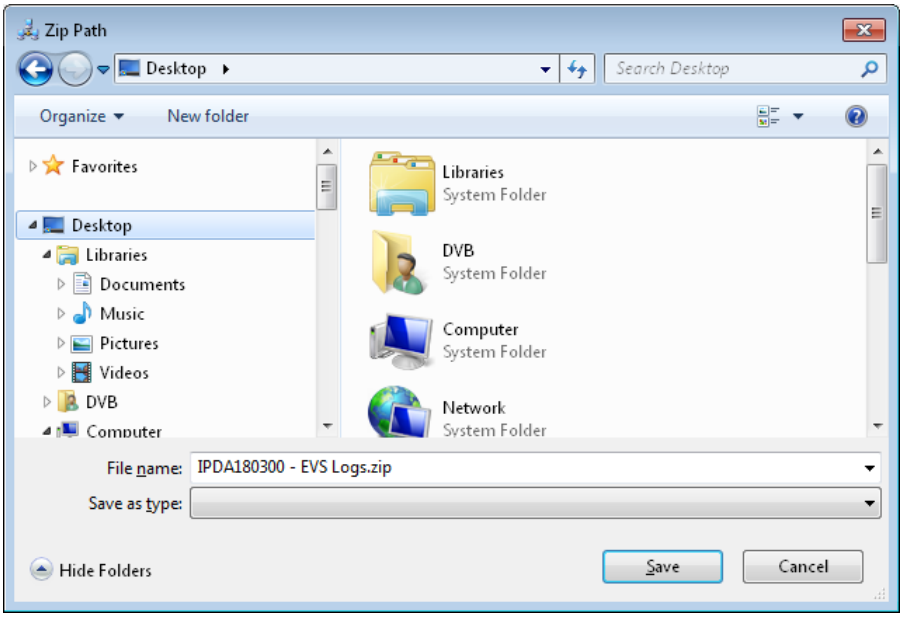


As soon as an IP-Director service is started on a workstation, it shares the EVSLogs folder. It allows opening the log folders from any location on the network using its UNC path.

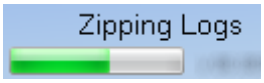
Get EVS Logs: This remote process grabs and zips the complete EVS log folder on a specific workstation.

It is now possible to grab technical logs from one workstation on the network.

First define a destination folder where the zip files will be created.



Wait for creating zipped file. A progress bar is displayed.



Then collect the zip file created in the destination folder. The zip file created is named **IPDAXXXXXX – EVSLogs.zip** (XXXXX is the IP-Director serial number)

Note

Starting any IP-Director services create the EVSLogs folder on the system disk root. This folder is shared on the network with full access rights to allow this new grabbing logs feature.

Get IPDirector Logs: This remote process grabs EVSLogs\IP-Director logs on a specific workstation.

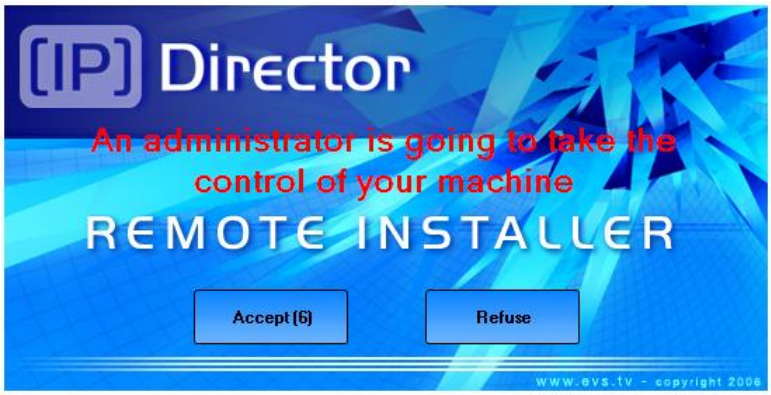
Follow the same procedure as described for the **Get EVS Logs** feature.

The created zipped file is named **IPDAXXXXXX – IPDLogs.zip**

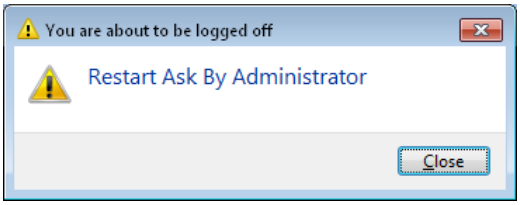
Clear IPDirector Logs: This remote process clears the EVSlogs\IP-Director folder located on the workstation system disk.

Restart Machine: This remote process allows restarting a specific workstation from the Remote Installer

The **distant** workstation is allowed to refuse (during 10 seconds) the remote shutdown process by clicking **Refuse** in the following splash window:



After accepting or waiting for 10 seconds, the shutdown process calls a Windows Shutdown command which displays this window for 20 seconds:

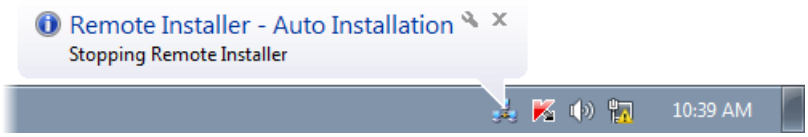


Once this window is displayed, you can't stop the system shutdown command. Please quickly save all work in progress and log off.

Therefore, the **Restart Machine** sequence may take more than 30 seconds to begin.

Restart Remote Installer: This remote process allows restarting the Remote Installer on a specific workstation.

The distant workstation displays message information:



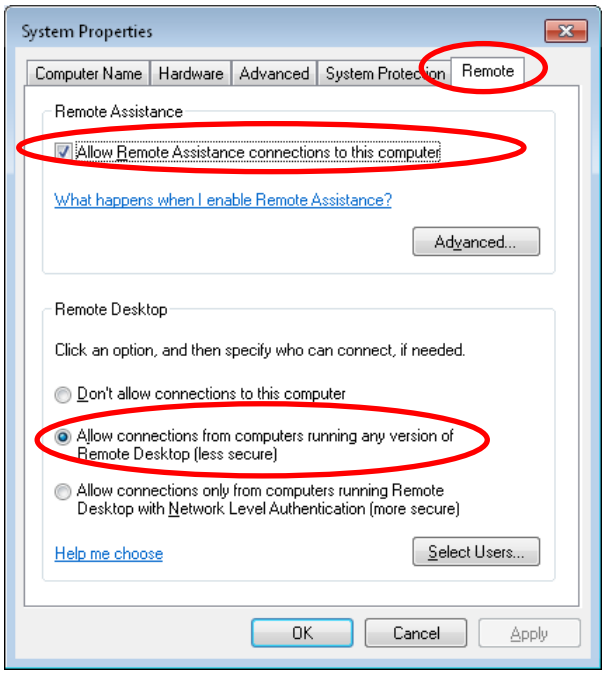
Then the Remote Installer icon appears and the workstation tab is again visible within the Remote Installer.

Remote Desktop: This remote process allows using the Remote Desktop Protocol included in the Windows OS. It displays the screen of another computer on your own screen. The program allows you to use your mouse and keyboard to control the other computer remotely.

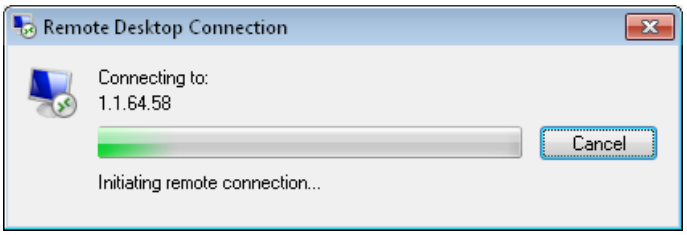
Important

The distant workstation must be configured to accept Remote connections. Our IPD stations are delivered with this option enable.

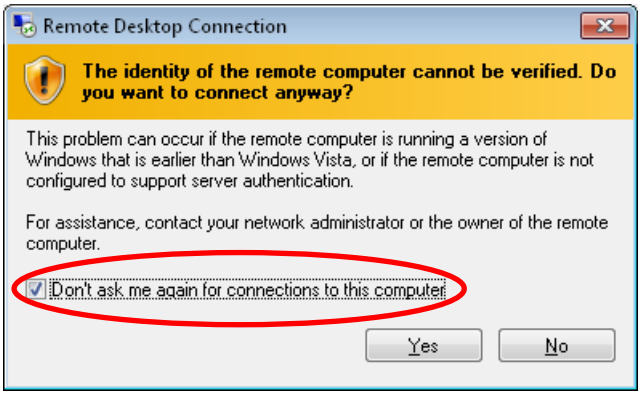
Press [WIN]+[Pause/Break] to open the System window, Go to the **Advanced system settings** and select the **Remote** TAB to check the configuration:



Select the Remote Desktop option in the workstation contextual menu and wait for connecting the distant IP-Director workstation:

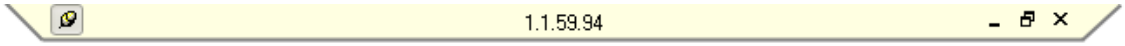


The first time you connect from an IP-Director Station Windows 7 to another IP-Director with an OS, the following window may be displayed:



Check the option 'Don't ask me again for connections to this computer' and the message won't be displayed next time.

Your screen turns black and a tab appears at the top of your desktop:

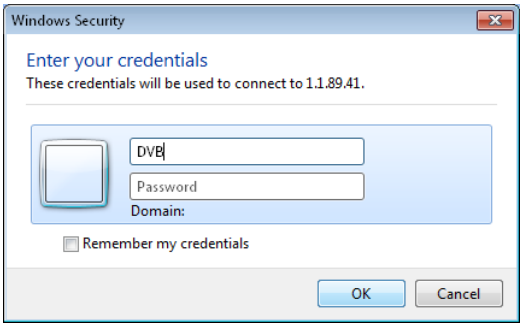


Note

The Remote Desktop feature is not a viewer. It switches off the Windows session on the distant workstation to open it on the local one.

A Log On window appears (for Windows XP stations)

Or Windows 7:



Enter DVB as User name, no password and press OK.

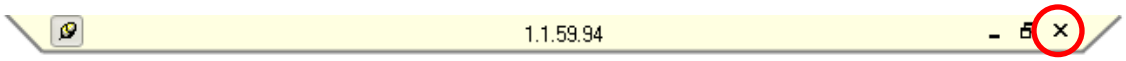
The distant desktop is open on the local one.

Note

EVS workstations are delivered with DVB/(no password) as a default user.

If you installed IP-Director on non-EVS hardware, use the custom user name and password.

To close the connection, press close on the top tab:

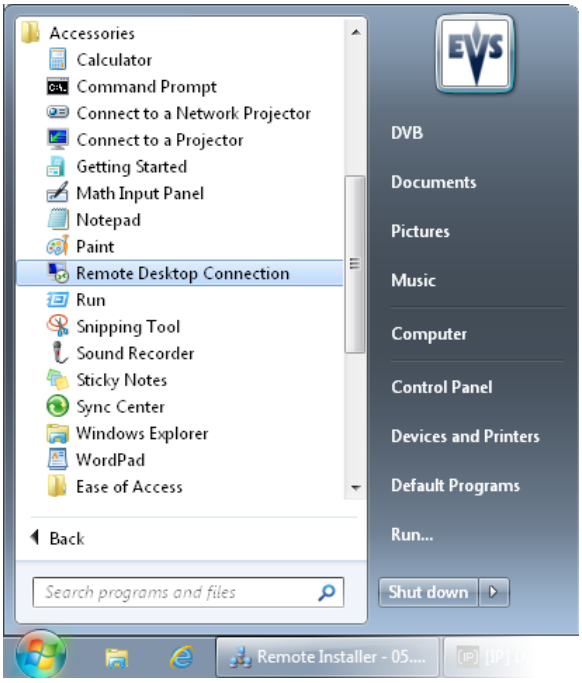


Note

This Remote Desktop feature can be used on any Windows based workstation, even if IP-Director is not installed.

The connection can be launched from the Windows start menu.

Select Start/Programs/Accessories/Remote Desktop Connection



3.10 Parameters Configuration

Click on the Configure button:

Important

Be sure your database parameters have been correctly defined before configuring all parameters. Refer to database configuration chapter for more information.

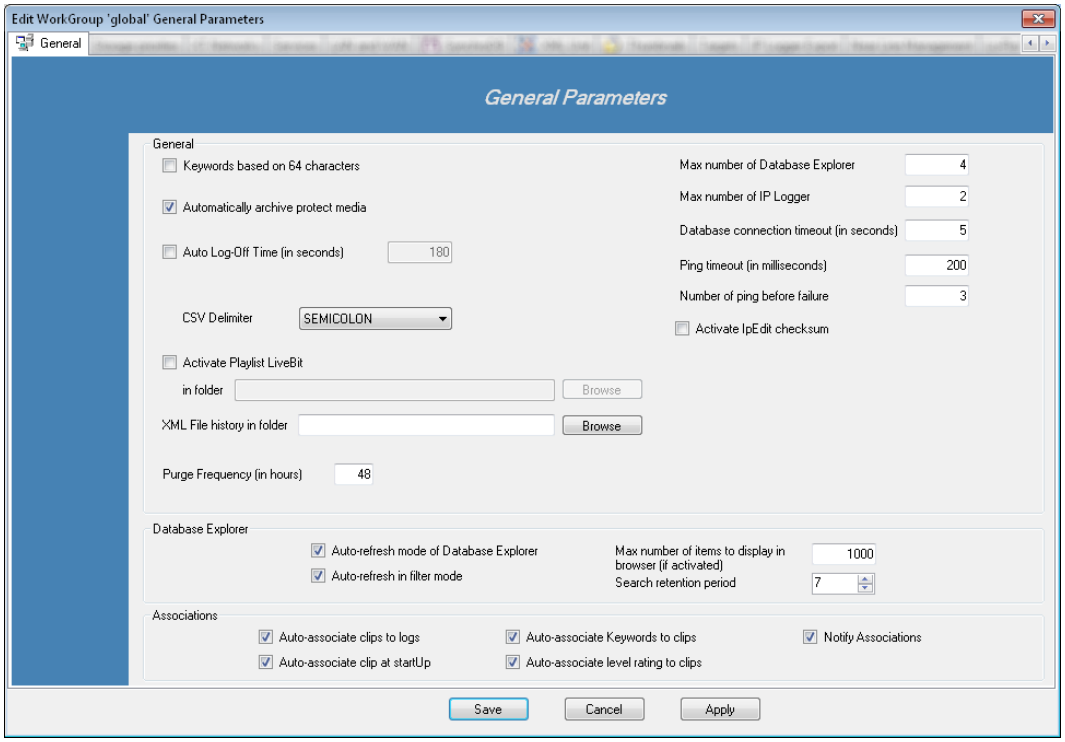
The Edit Workgroup window opens.

The Configuration window is used to define all parameters necessary to set up your IP-Director environment. These parameters are related to the following components:

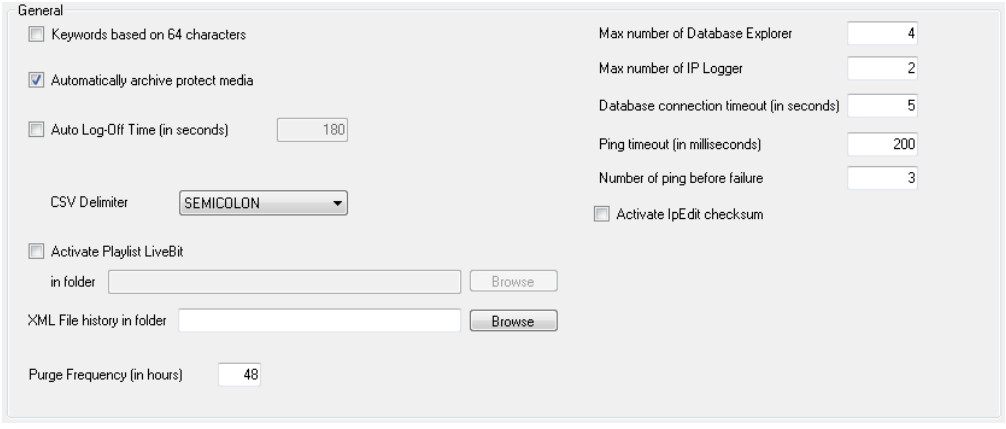
- **General** Parameter configuration used by the application
- New! **Storage Priorities** configuration used by the target engine and the software player.
- **XT Networks** configuration (logical server network creation)
- **Services** configuration (defines the user used for logging services)
- **LAN and WAN** Configuration (for advanced network configuration)
- Load Balancing configuration for **SynchroDB** network configurations.
- **XML Unit configuration** (defines which XFile or XTAccess/XSquare workstations will manage backup/restore/transcoding of clips)
- **Thumbnails** configuration (defines the automatic thumbnail creation).
- **Targets** configuration (standard Send to, AVID TM export, Clean edit export, server export and Final Cut Pro export)
- **IP Logger Export** settings regarding Third Party logging export.
- **Near Line Management** configuration (defines static directories managed on the network)
- **Lo-res Management** configuration (defines links between Hi and Lo channels on the servers)
- **Define varID groups** configuration (organizes servers in varID groups)
- **As will run log** configuration (defines PGM monitored and folder for the production playlist logging)
- **Playlist** configuration (defines 6 headers of the playlist element metadata)
- **Redundancy** configuration (defines master/slave servers for IpEdit and Edit to Air)
- **IP-API** configuration (defines general parameters used by all the IP API services)
- **Director's Cut** configuration (defines the gateways to be managed)

3.10.1 General Parameters Configuration

Select the General tab.



General section



Keywords based on 64 characters:

The IP-Director can work either with 12 characters keywords or with 64 characters keywords.

- In the 12 characters mode:

  Keywords are pushed to clips on the servers and are visible in server and IP-Director Interfaces (clip keywords are synchronized between the server database and the IP-Director database).

- In the 64 characters mode:

  Keywords can be 64 characters long but are no longer pushed to clips on the server. Keywords assigned to clips defined on the server are only visible in the server interfaces and keywords assigned to clips defined on IP-Director workstations are only visible in the IP-Director interfaces. Log keywords are no longer pushed to the clips associated to the logs. (No keyword synchronization between the IP-Director and the servers).

Default value: unchecked. IP-Director normally works in 12 characters mode.

Note

EVS suggests using the 64 characters mode only on major events or facilities where this function is required. It is not possible to return to a 12 characters keyword mode without clearing the IP-Director database.

Automatically archive protect media:

If this option is checked, all protect media created for a log sheet will be automatically archived on the XFile defined as the default backup XFile in the settings of the server. The clip always moves to the defined session folder on the XFile.

Default value: checked.

Auto log off:

Auto log off Time: the system will automatically log off if the IP-Director has not been used after 'X' seconds.

CSV Delimiter:

Allows choosing CSV delimiter in CSV files. You can select Semicolon, Comma, Tab or Space.

Default value: Semicolon

Note

If you intend to import the CSV file into Excel, you should use a delimiter that obeys your regional settings as defined inside Windows. For example: In Belgium the delimiter is Semicolon, whereas in North America the default delimiter is a comma.

Activate Playlist LiveBit:

Not available for usage without direct consultation with EVS staff. This mode requires specific software and setup provisions.

XML File history in folder:

Allows defining a specific history folder for all the XLM files exchanged by the system with the XML Unit(s).

If no folder is defined, the history folder is located by default in the “Jobs Done” folder of the first XML Unit.

Purge Frequency (in hours):

The purge frequency of the XML File history folder.

Default Value: 48

Max number of Database Explorer:

This parameter limits the number of Database Explorer windows open simultaneously by the IP-Director User.

It avoids forgotten Database Explorer windows in a complex layout. These windows are forgotten and overload the IP-Director database (thus create database latencies).

Default value: 4

Max number of IP Logger:

This parameter limits the number of IP Logger windows open simultaneously by the IP-Director User.

As the previous setting, the aim of this parameter is to avoid unwanted traffic to the database.

Default value: 2.

Database connection timeout:

This parameter set the previously hardcoded timeout connection request sent to the IP-Director database (in seconds).

Default value: 5 seconds.

Using a distant network connection, we encountered false database status. Increasing the period between two requests reduces the risk of bad status which freezes the user’s interface.

Ping timeout:

This parameter set the previously hardcoded timeout ping request sent to the IP-Director database (in milliseconds).

Default value: 200 milliseconds.

Number of ping before failure:

This parameter set the previously hardcoded number of ping sent to the IP-Director database before considering a failure.

Default value: 3

Note

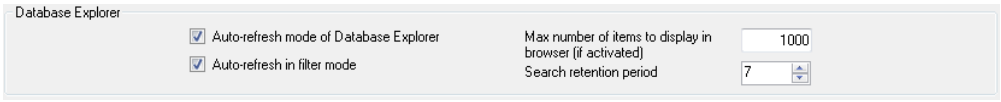
We recommend you to keep the default values for these 3 last settings.

Activate IpEdit checksum:

This parameter sets the IP-Edit in a specific verbose mode that displays messages according the synchronization status between server timeline engine and database.

This mode is not intended to be activated under normal operations.

Database Explorer section



Auto-refresh Mode of the Database Explorer:

This parameter automatically refreshes the Database explorer of IP-Director. This parameter should be disabled on very large setups (typically when more than 30 workstations are connected together on the same IP network).

Default value: checked.

Auto-refresh in filter mode:

This parameter automatically refreshes research items in filter mode in the Database explorer of IP-Director. This parameter should be disabled on very large setups (typically when more than 30 workstations are connected together on the same IP network).

Default value: checked.

Max number of items to display in browser (if activated):

Specify the maximum number of elements (clips, logs, etc.) that can be displayed at any one time in a list in the IP-Director application.

Default value: 1000

Search retention period

This number limits the auto-complete search feature results to the X last days of operation.

Default value: 7 (One week)

Associations section

Auto-associate clips to logs:

When this option is checked, clips which include log timecode are automatically associated to those logs. If this option is unchecked, the automatic association process between clips and logs is not activated.

Default value: checked.

Auto associate clips at start up:

If this option is checked, when the SynchroDB service is started, an automatic process will check the association of clips to logs.

Default value: checked.

Auto associate keywords to clips:

This option allows the logged keywords to be automatically pushed to their associated clips. If this option is unchecked, the keywords are disassociated from their corresponding clips.

Note that if the 'Keywords on 64 characters' option is checked, the keywords won't be pushed to the clips on the server side, they will only be pushed to clips on the IP-Director side.

Default value: checked.

Auto associate level rating to clips:

This option allows the logged level rating to be automatically pushed to their associated clips. If this option is unchecked, levels rating are disassociated from their corresponding clips.

Default value: checked.

Notify associations:

When this option is checked, as soon as a clip/log association is created or deleted, a notification is sent to all IP-Director Workstations to refresh their interfaces. If this option is unchecked, those notifications will not be automatically sent and a manual refresh should be done in the IP-Director interface to see the clip/log association modifications. It should only be unchecked for very large setups when the associations do not have to appear instantly and constantly refreshed. It will lead to less CPU database consumption and will improve the reactivity of the IP-Director interfaces.

Default value: checked.

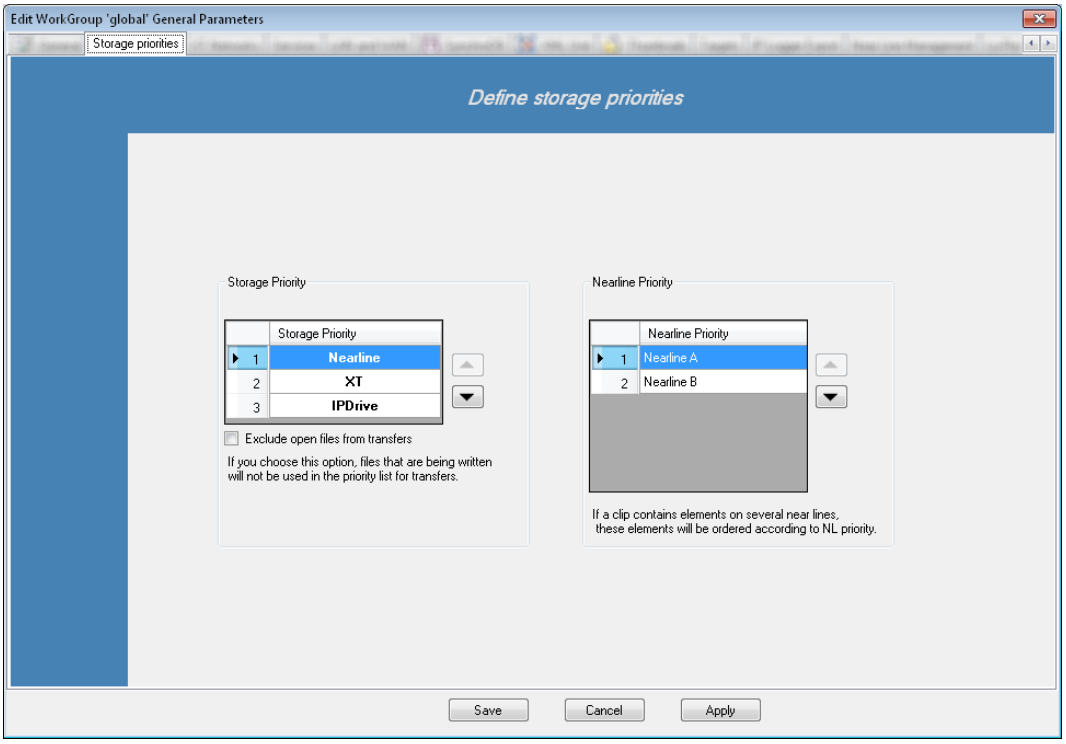
Note

All these parameters are global to all IP-Director workstations on the network. It must only be set once and can be defined on any workstation.

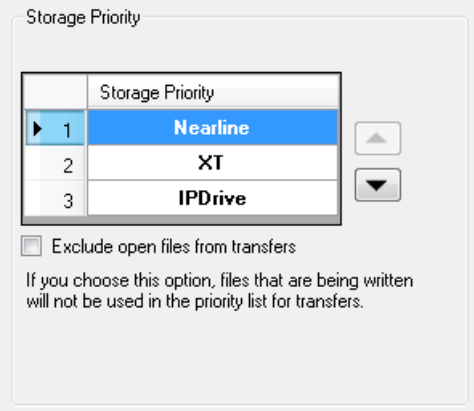
3.10.2 Storage Priorities Configuration

Previously defined in the General tab, the storage priorities are now defined in a separate tab.

Select the Storage priorities tab:



Storage Priority:



This parameter set the priority of the source used by the function ‘send to target’ or ‘send to nearline’. When ‘Clips’ (Asset) contain several sources in the database explorer, this priority manages which sources will be sent to the target or the nearline.

For example, a ‘Clips’ (Asset) owns a HiRes XT Clip element and a HiRes Nearline Clip element. When users request a ‘send to target’ or a ‘send to nearline’, the priority defines the source (Nearline or XT or IPDrive) used by the XML Unit (XFile or XTAccess/XSquare).

If the Nearline is set to Priority 1, the XML Unit copies the HiRes File Clip element to the target or nearline.

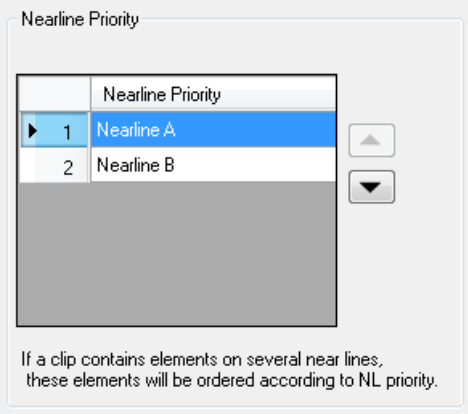
If the XT is set to Priority 1, the XML Unit backups the HiRes XT Clip element to the target or nearline.

If Nearline is set to Priority 1 and no HiRes File Clip element exists in the 'Clips' (Asset), the second priority is used and the XML Unit backups the HiRes XT Clip element to the target or nearline.

Exclude open files from transfers:

Check this option in order to exclude nearline growing files off the priority storage list. Online clips or closed files are privileged.

Nearline Priority:



This parameter orders the storages used under the 'Nearline' item of the previous Storage Priority table.

In a Clip (Asset), only one HiRes XT Clip Element should exist but several instances of the same HiRes file may be spread over different Nearline storages.

For transfer performance reasons, storages which have better access bandwidths should be used in priority beside the less efficient ones.

Note

These priority parameters are also involved in the software player usage, but the LoRes files & XL Clips are still favoured before the Storage Priority.

3.10.3 XT Network Configuration

The purpose of this function is to create logical networks for the servers.

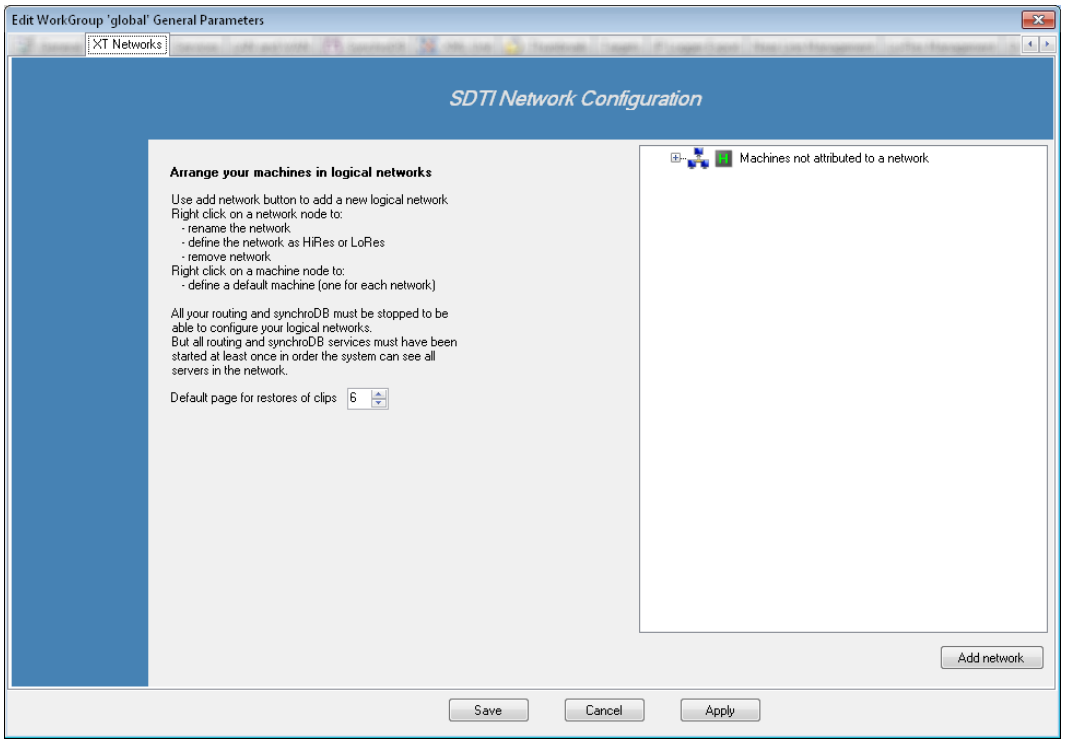
For now, it is used to include server LoRes and server HiRes in separate networks. It will help you to configure associations between LoRes and HiRes channels in the following **Lo-Res Management Tab**

Please refer to the **Lo-Res Management Configuration** chapter for details.

This tab is also used to specify the default page and server for restores of **Near Line** clips.

Please refer to the **Near Line Management Configuration** chapter for details.

Select the XT Network tab:

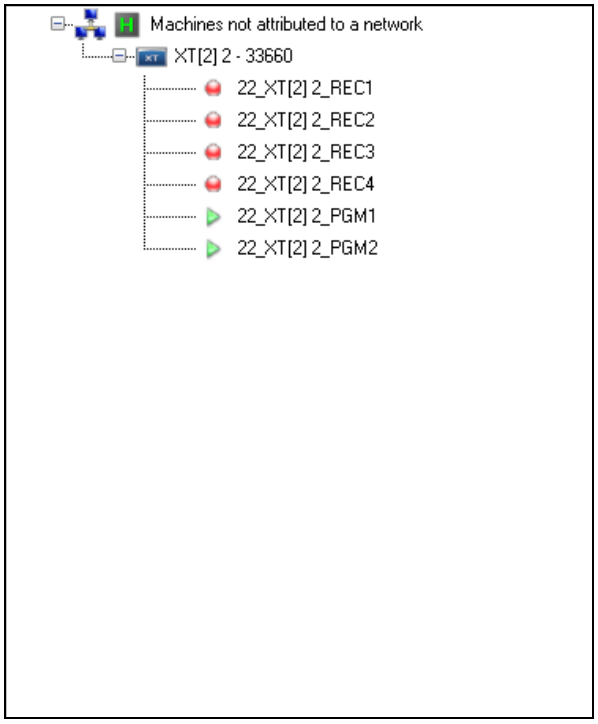


Note

All Services (IPD-Routing, SynchroDB, IP-Director, IP-Scheduler, VTR Engine, IP-Drive and IP API) must be stopped to visualize this tab.

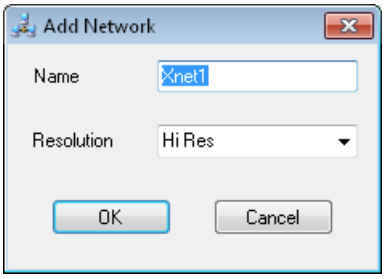
But unfortunately, the services (IPD-Routing and SynchroDB) must have been started once before to list the servers inside the IP-Director database.

The right white window displays all the servers found inside the database. As it is the first time configuring the system, all 'Machines' are not attributed to a network.



Press the button Add Network:

The popup window appears:

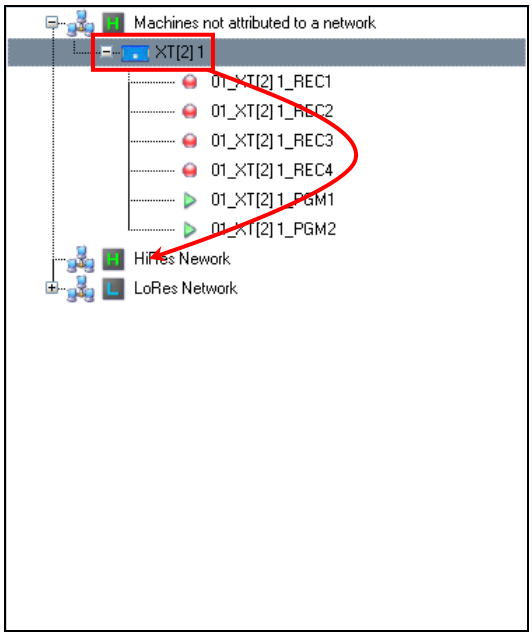


Enter a new logical network name (default names: Xnet1, Xnet2, Xnet3…) and select the network resolution (Hi Res or Lo Res).

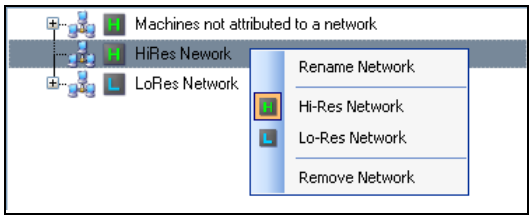
Press Ok to create the network and incorporate the list.

Repeat the **Add Network** operation to create all wanted Hi Res and Lo Res logical networks.

Drag and drop the servers from the **Machines not attributed to a network** list to the new networks.



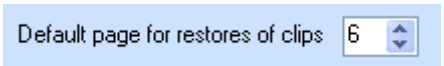
Once a logical network is created, right-clicking on its name allows renaming, changing the resolution designation or removing it.



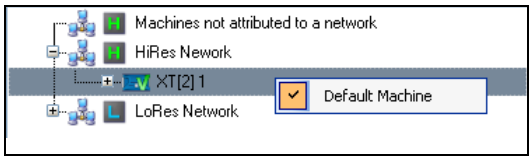
Default server and page for restoring near line clips:

Define, in the XT Network tab, the target server and page for receiving restored clips from the near line storages.

The default page is chosen with the following parameter:



The default server is tagged by a right-click on its name:



Once selected, the default machine is shown with this icon:

3.10.4 Services Configuration

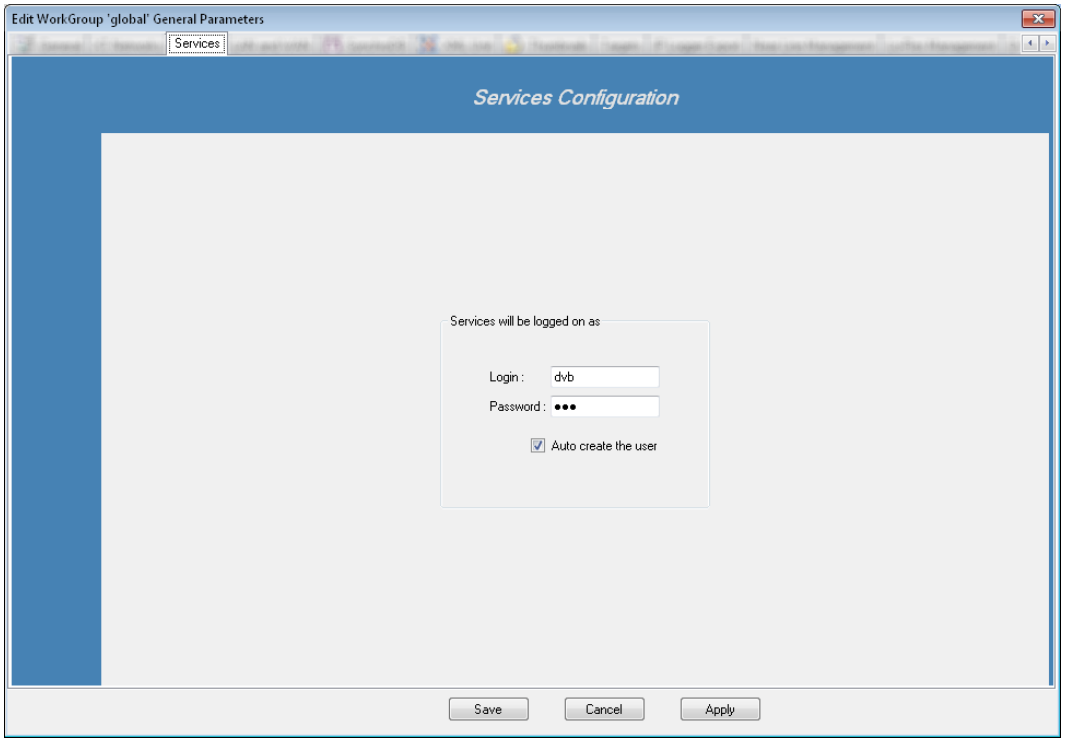
The purpose of this function is to allow an administrator to define a different user for the IP-Director services to be started with instead of the default user of DVB. This setting should only be changed with a complete understanding of its impact.

The IP-Director services can't be logged on as Local System to access network resources. The default user used is DVB. This user is present on every EVS systems to allow exchanges between products.

For example: IP-Scheduler sends XML files to an XFILE shared folder, the DVB user must also be present on the XFILE workstation to allow these files to be shared easily.

Changing the logon used by the services can have an important impact on file sharing and access between EVS products and other 3rd Party systems.

Select the Services tab.



Login:

Enter the login name of the user.

Default value: dvb

Password:

Enter the password of the user.

Default value: (blank)

Auto create the user:

If this option is checked, a new user is created on all the workstations detected by the Remote Installer (if this user doesn't already exist).

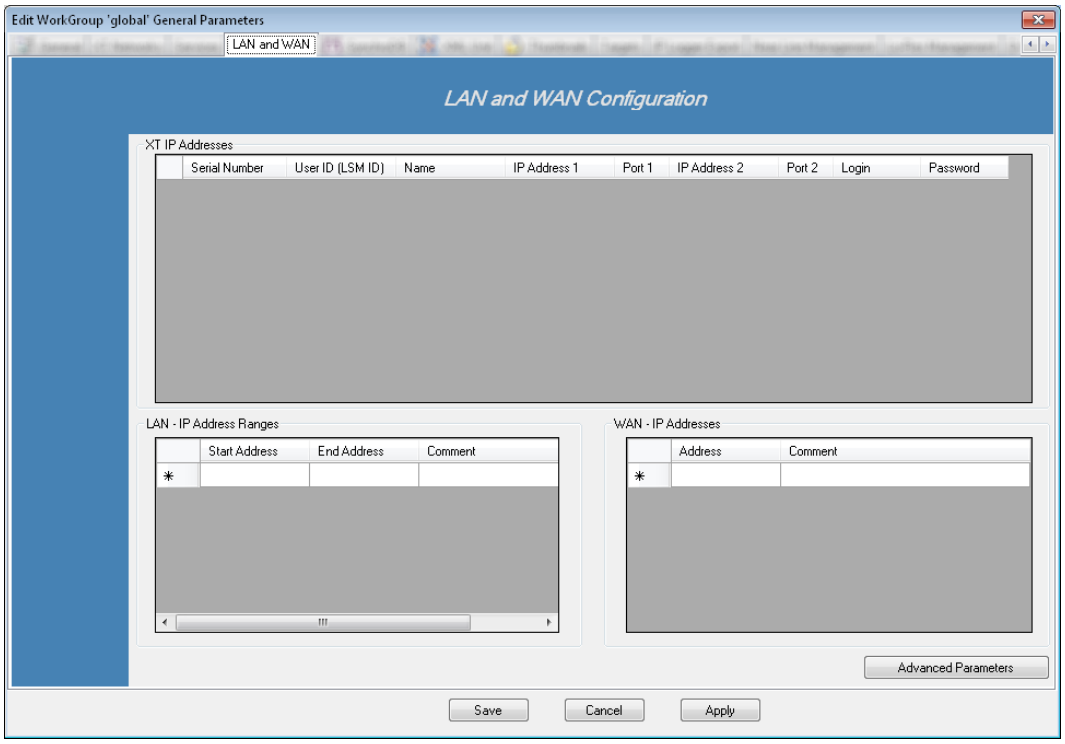
Default value: Unchecked.

Note

All Services (IPD-Routing, SynchroDB, IP-Director, IP-Scheduler, VTR Engine, IP-Drive and IP API) must be stopped to visualize this tab.

3.10.5 Lan and Wan Configuration

Select the LAN and WAN tab.



XT IP Addresses:

This box shows the Serial Number, Net number, Name, IP addresses, Ports, Login and Password of the server managed by the SynchroDB services inside the workgroup.

These **values are auto-obtained** and cannot be edited and are used for the XML processes (Send to / Export) when sending via the Gigabit Ethernet mechanism.

The SynchroDB and IPD-Routing services must be started to visualize the list. It may take some time for this list to appear once the services are started.

Important

The server Gigabit feature allows exporting and sending clips through a TCP/IP network. Your server must be upgraded with a GBX module on the H3X (or HCTX) card. Please contact EVS for more information.

Note

The Gigabit Ethernet settings are set inside the Multicam Configuration, Tab Network (SHIFT+F2, Tab 3 Network) while the application is running and pressing F8 on a line in the EVS Menu.

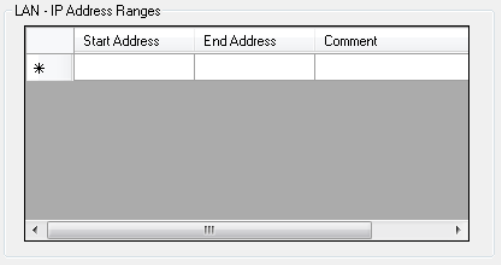
Please refer to the Server Software Technical reference manual.

LAN – IP Address Ranges:

While local IP-Director workstations inside the LAN utilize Multicast to communicate, distant IP-Director workstations (WAN) communicate by Unicast with the local IP-Director workstations (LAN) inside IP address range(s).

It is desirable to define small range(s) of IP addresses to reduce Unicast communication to a minimum number of addresses.

Default value: (blank)



WAN – IP Addresses:

Local IP-Director workstations (LAN) communicate by Unicast with the distant IP-Director workstation(s) defined in the WAN section.

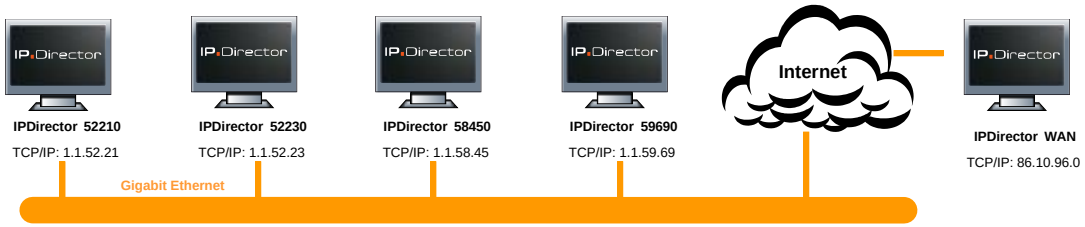
Default value: (blank)

Note

All Services (IPD-Routing, SynchroDB, IP-Director, IP-Scheduler, VTR Engine, IP Drive and IP-API) must be stopped to edit the LAN – IP Address Ranges, the WAN – IP Addresses and the Advanced Parameters.

For example:

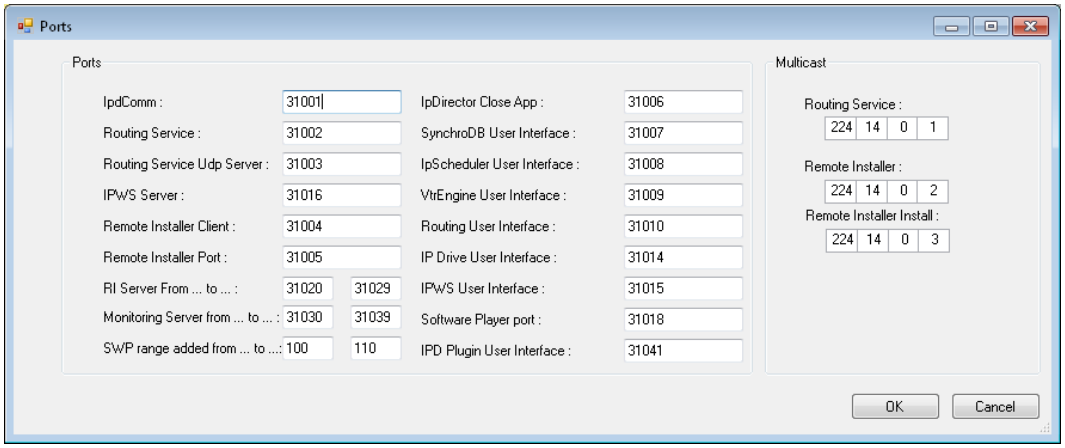
4 IP-Director workstations on an Ethernet network (LAN) and 1 IP-Director accessible by an Internet connection (WAN).



Specify the configuration as follow:

Advanced Parameters:

By clicking on the Advanced Parameters button, you access this window:



The LAN/WAN configuration give you the possibility to change ports used by IP-Director Application and all the services:

Ports: Default values	IpdComm:		31001
	Routing Service:		31002
	Routing Service Udp Server:		31003
	IPWS Server		31016
	Remote Installer Client:		31004
	Remote Installer Port:		31005
	IpDirector Close App:		31006
	SynchroDB User Interface:		31007
	IpScheduler User Interface:		31008
	VtrEngine User Interface:		31009
	Routing User Interface:		31010
	IP Drive User Interface		31014
	IPWS User Interface		31015
	Software Player port		31018
	RI Server From …to…	31020	31029
	Monitoring Server from …to…	31030	31039
	SWP range added from …to…	100	110

Multicast: Default values	Routing Service	224.14.0.1
	Remote Installer	224.14.0.2
	Remote Installer Install	224.14.0.3

Inside the LAN, IP-Director workstations communicate by multicast.

Note

We recommend you to keep the default values for these settings. Your network administrator provides you the new port numbers or multicast addresses if needed.

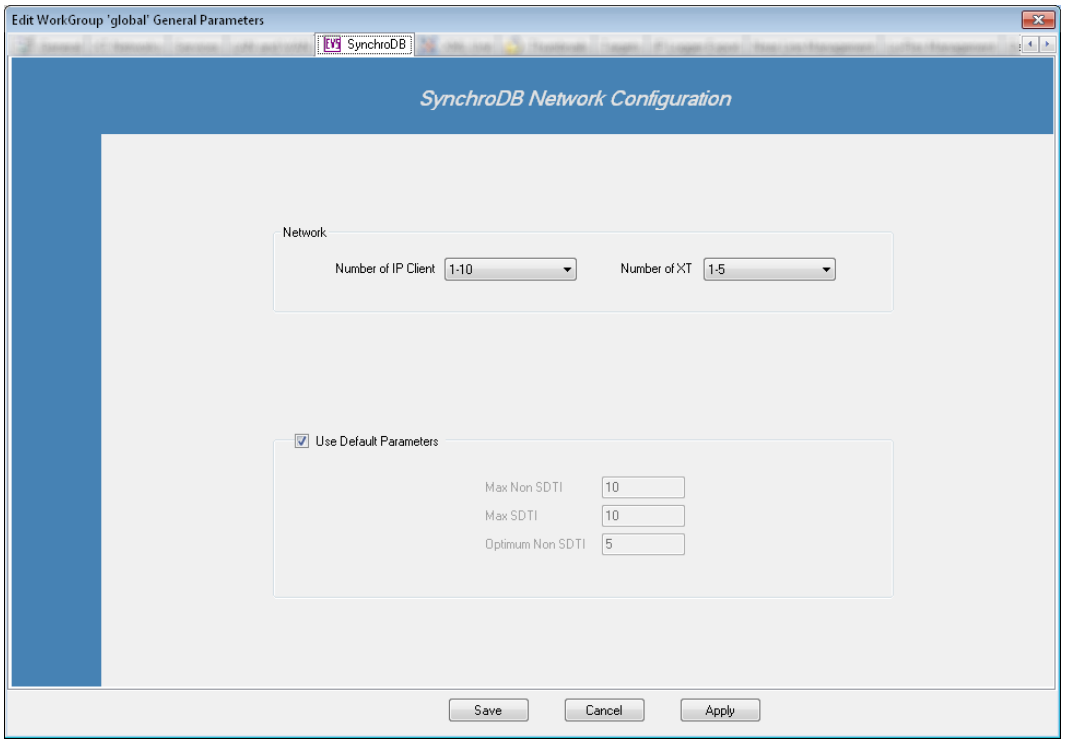
3.10.6 SynchroDB Configuration (Load Balancing)

The SynchroDB Load Balancing parameters are only relevant when some SynchroDB workstations are defined to operate in the Network mode.

Important

In **Restricted Stand Alone** and **None** mode, these parameters are not taken into account.

Select the SynchroDB tab.



Network:

Specify the appropriated IP Client (IP-Director workstation) and XT (server) ranges.

Use Default Parameters:

- **Automatic:** Check the 'Use Default Parameters' check box

  In this case, the system will automatically calculate the variables of the load balancing process. You only need to specify the Number of IP Client workstations present on the IP network and the number of XTs (All EVS Servers) available on the XNet network.

- **Manual:** Uncheck the 'Use Default Parameters' check box.

  If you want to manually define the automatic load balancing variable, uncheck the 'User Default Parameter' check box.

  3 variables must be defined:

  - Max Non-SDTI:

    The maximum number of servers (for which an RS422 connection to an IP-Director workstation exists) the SynchroDB in network mode should manage at one time when network mode is employed.

  - Max SDTI:

    The maximum number of server or XFile system(s) (for which no RS422 connection to an IP-Director workstation exists) the SynchroDB in network mode should manage at one time when network mode is employed.

  - Optimum Non SDTI:

    The optimum number of servers (for which an RS422 connection to an IP-Director workstation exists) the SynchroDB in network mode should manage at one time when network mode is employed.

Note

We recommend you to keep the default values for these settings.

3.10.7 XML Unit Configuration

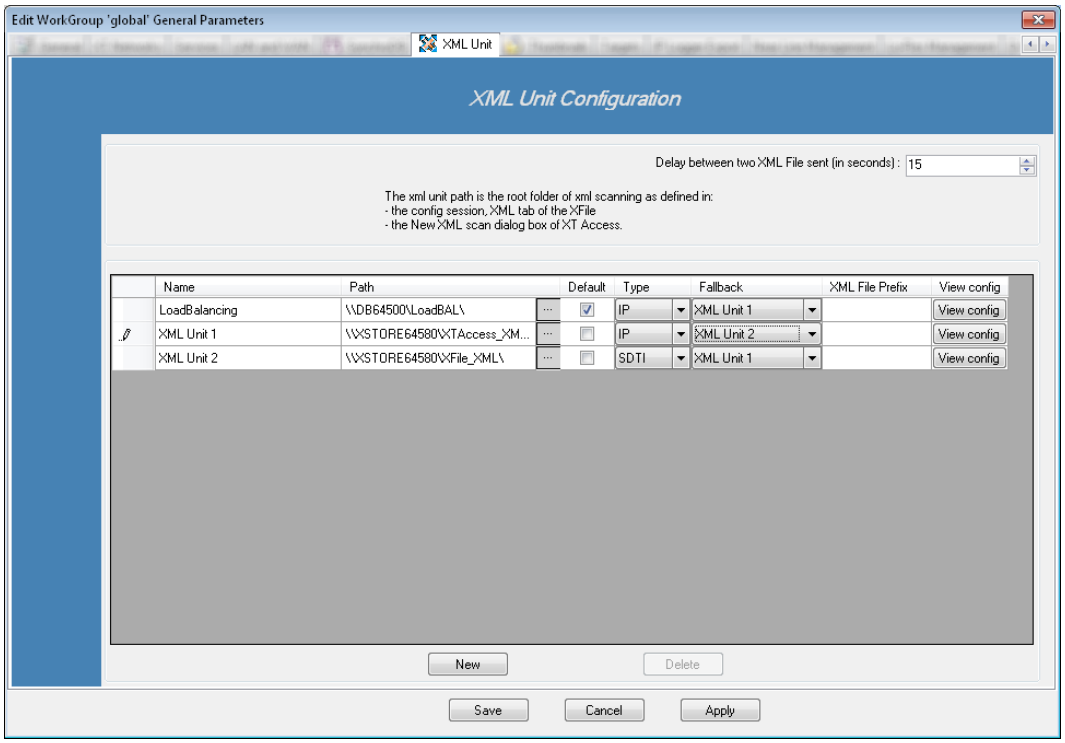
Select the' XML Unit' tab.

XML units must only be defined if you plan to:

- Manually select the destination folder where the clips will be moved to.
- Send a clip to a Clean Edit system.
- Send a clip to an Avid System using the Transfer Manager.
- Send a clip to a Final Cut Pro.
- Send a clip to a server using the Gigabit Interface.
- Create clip thumbnails and image grabs.

Note

The default archive procedure (send to → default archive) from the IP-Director interface, does not use XML unit process.



Delay between two XML file sent (in seconds):

This parameter indicates the time (in seconds) between 2 XML files sent to an XML unit from one IP-Director workstation.

What is it used for?

The XTAccess, XSquare or XFile system executes the XML instructions of one XML unit based on their creation time. If one IP-Director workstation on the network sends lots of instructions at one time, it could delay the execution time of other IP-Director instructions.

This parameter allows the system to minimize this kind of bottleneck by spacing the time in which one system can send consecutive instructions to an XML unit.

Default value: 15 Seconds

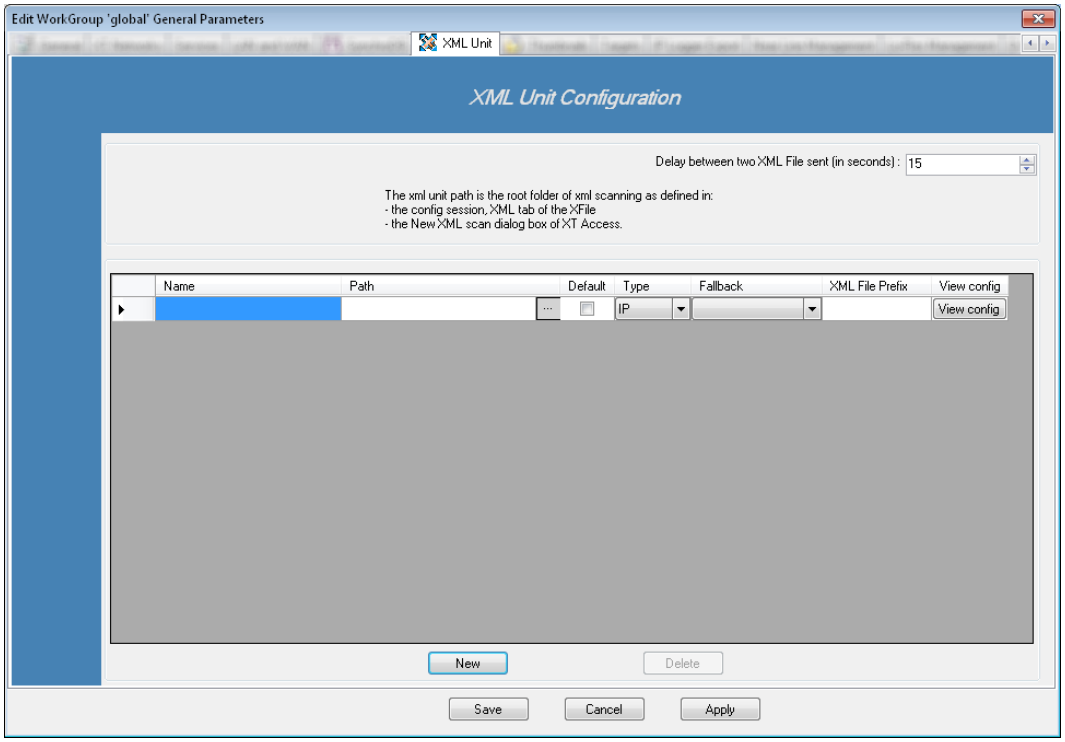
Create a new XML unit

Note

A XML unit (type SDTI) is an XML folder located on one XFile workstation where all XML files (corresponding to a backup request, a clip export to a Clean Edit, AVID system, FCP system or Nearline) will be sent.

XML unit (type IP) is also an XML folder located on the network and scanned by the XTAccess/XSquare application. XTAccess/Xsquare is designed to manage clip transfers on the network using the server Gigabit feature.

Click on the 'New' button to add a new unit.



A new line is added in the unit list.

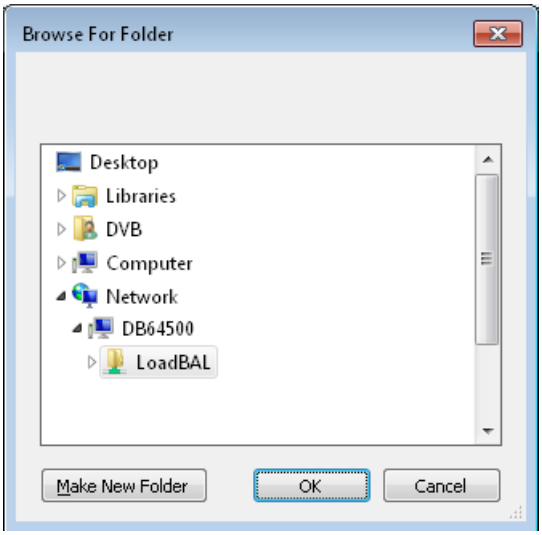
Name:

Click in the 'Name' column and give a name to the unit.

This name is mainly for purposes of administration, and defining the XML processing device later in the configuration.

Path:

Click on the browse button to select the folder where the XML files will be sent. This folder should be a UNC path to the network locations where the folder exists.



Note

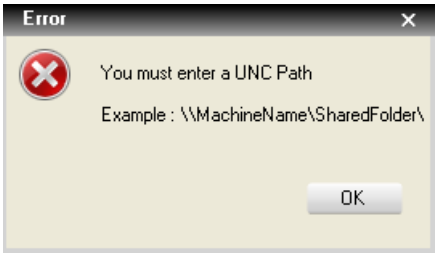
This folder must correspond to the XFile_XML folder on the XFile workstation or the XTAccess/XSquare XML folder which will effectively manage the clip. Be sure this folder is shared with full access rights.

Note

Only UNC DNS name or IP address path are valid. (Ex: \\XFile53210\XTAccess_XML\, \\1.1.1.100\XTAccess_XML\)

No local paths are valid.

A message appears if the selected path is not valid:



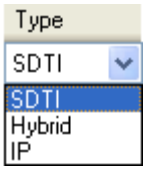
Default:

If the unit is to be defined as the default unit for all workstations, check the box in the default column of the unit.

Unit Type:

Specify the type of the XML Unit:

- SDTI: Use this option if the XML Unit is a XFile folder (XFile_XML)



- Hybrid: This mode is not used and will be removed in a future version.
- IP: Use this option if the XML Unit is an XTAccess/XSquare folder (Please refer to the XTAccess/XSquare User manual)

Fallback XML Unit:

Select another SDTI XML Unit to insure a failover process if this one is not responding (mostly use to switch from an IP XML Unit to a SDTI XML Unit).

Important

Create first the other XML Units and press Apply to add them in the Fallback XML Unit list.

XML File Prefix:

It adds a prefix value to all XML files being dropped in a specific XML unit. This allows for other device to append a unique prefix for identification purposes.

In previous IP-Director versions, this parameter was unique for all XML Unit in a workgroup and was located in the general tab.

Note

EVS suggests using the default value. This parameter is designed for custom projects. Please contact EVS staff for additional information about this parameter.

View config:

Press the View config button to display the XML Unit status.

This feature introduces the **Live Bit** status of the XML Unit.

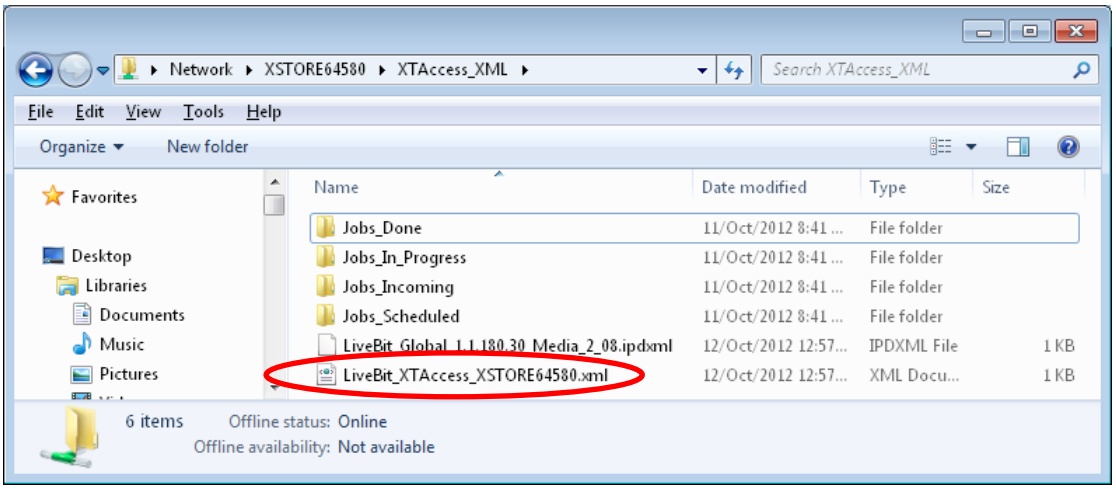
What is the XML Unit LiveBit?

Both kinds of EVS XML Unit (XFile and XTAccess/XSqaure) generate an XML file located on the root of the XML Unit.

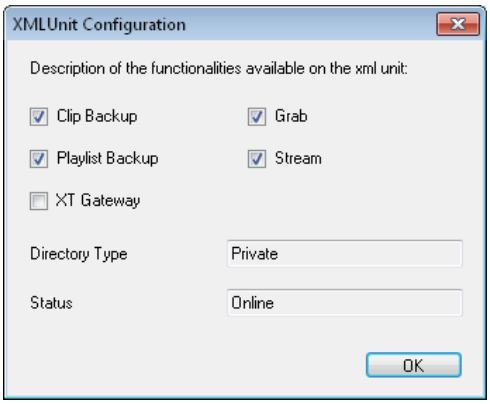
This file is refreshed every 30 seconds and updates its status and capabilities.

Before sending an order to an XML Unit, IP-Director can check if this one is online or not and if the wanted job can be done or not.

Example of an XTAccess/XSquare XML Unit folder:



Inside the XML Unit tab, the View config button will display this status as long as the XFile or XTAccess/XSquare is launched and scanning the XML Unit folders:



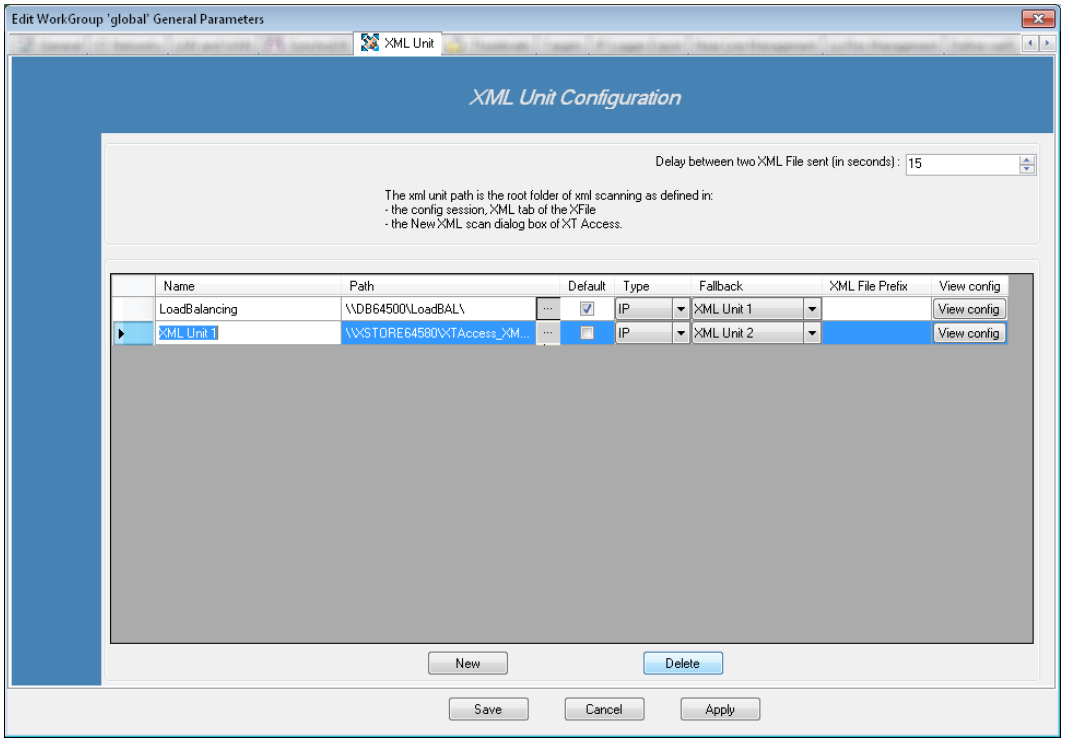
The status is Online or Offline and the Directory Type is Private or Load Balancing. The functionalities available on the XML Unit are shown with checked boxes.

Note

This “View config” feature is just a status window. It can’t be edited or modified.

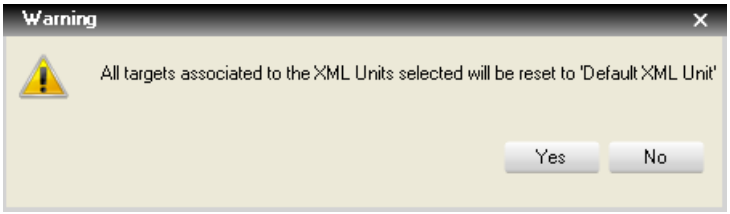
Delete a XML unit

Click on the XML unit line to select it.



Click on the ‘Delete’ button.

If the XML Unit is declared as a Fallback unit in another line, this message appears:



Click Yes to delete the XML Unit and reset the fallback association in other lines.

Click No to keep the XML Unit line and abort the delete order.

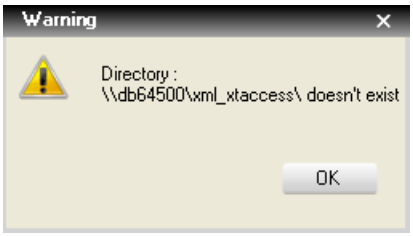
Important

Once all XML Units are configured, click on the Apply button.

'Apply' records XML Units in the database. It's mandatory to configure the following Send to, Clean Edit, Avid, FCP and server targets.

Note

All paths are checked when the configuration is applied. If a path is not reachable, this message appears:



The configuration is saved anyway.

3.10.8 Thumbnails and Grab Configuration

Select the Thumbnails tab.

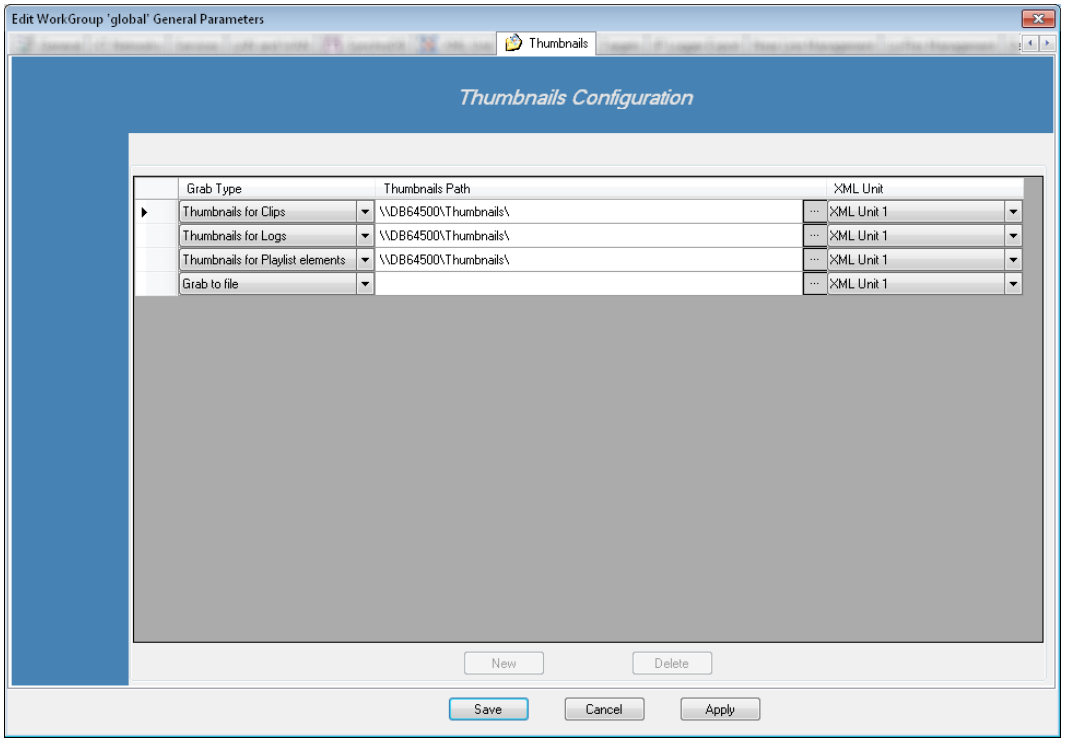
This must be configured if you plan to have thumbnails created automatically as clips, logs and playlists are created. It is also used to configure the Grab function.

Note

Thumbnails and Grab will physically be created by XFile or XTAccess/XSquare workstations. You need at least one XFile workstation on the XNet network or an XTAccess/XSquare on the Ethernet network to use this function.

Important

If a nearline or IP Drives are configured, EVS strongly recommends XTAccess for creating thumbnails. XFile cannot create thumbnails based on files.

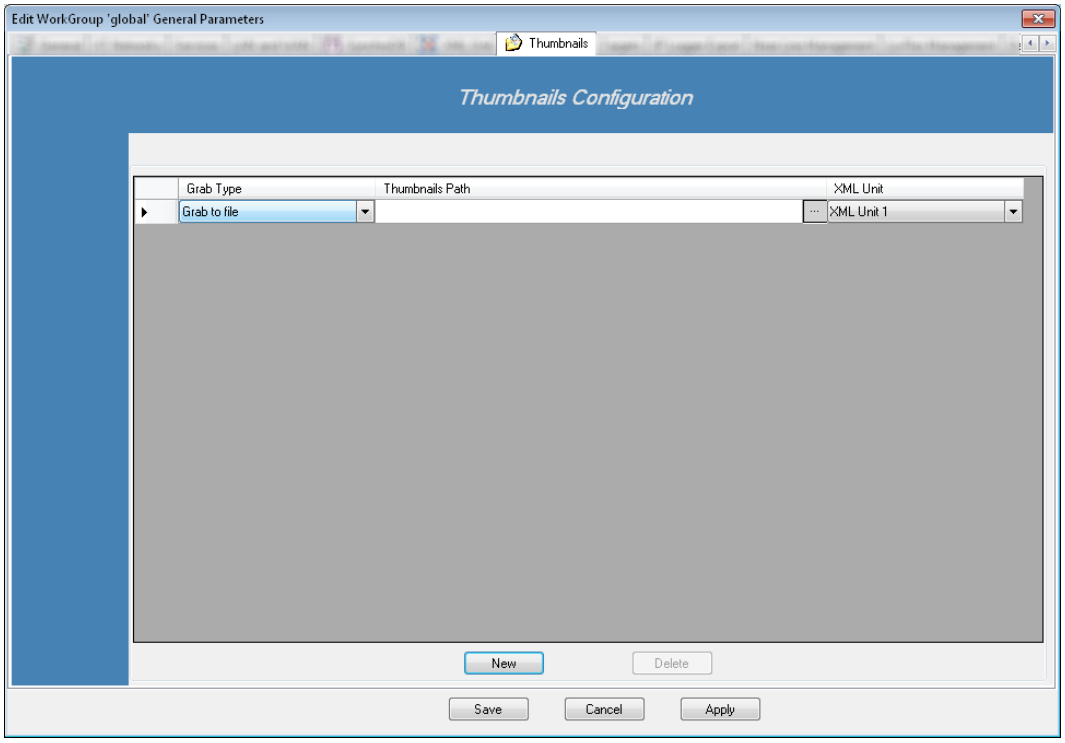


Note

The Thumbnails configuration refer to the XML Units previously defined in the dedicated tab.

Create a new Thumbnail or Grab unit

Click on the ‘New’ button to add a configuration line.



A new line is added in the unit list.

Note

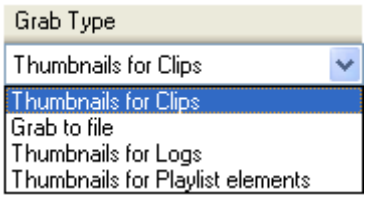
At least one Thumbnail unit must be defined to activate the automatic thumbnail creation process.

Thumbnails are created for clips, logs and playlist elements. One configuration line is needed for each grab type.

Maximum 4 lines of configuration can be added in this tab.

Grab Type:

Select the type of configuration.



'Thumbnails for clips' to send XML clip thumbnail requests.

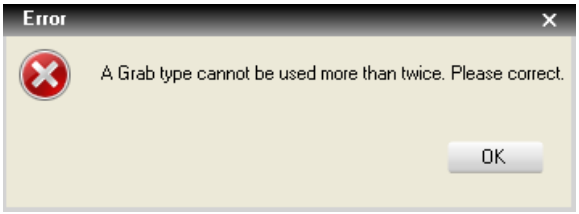
'Grab to file' to send XML Grab requests.

'Thumbnails for Logs' to send XML log thumbnail requests.

'Thumbnails for Playlist elements' to send XML Playlist element requests.

Note

Only one type of each grab type can be defined trying to set two identical type will bring you this message:



Thumbnail Path:

This is the directory (with its full path) where the thumbnail files (.jpg) will be stored.

Enter the UNC path in the text field, or click on the browse button ... to select the destination folder.

Note

No Path is needed for a 'Grab to file' grab type.

The path for grab files is defined by users inside the IPD Director interface (please refer to the IPD User Manual) or by the administrator in the Settings Tab inside the User Manager application (please refer to the User Manager chapter)

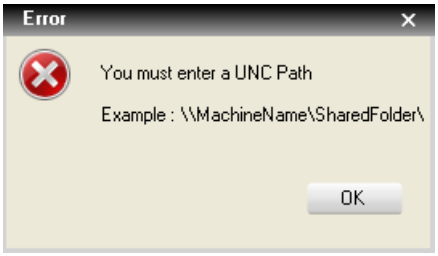
Note

Only UNC DNS name or IP address path are valid.

(Ex:\\servername\sharedfolder\, \\1.1.10.100\sharedfolder\)

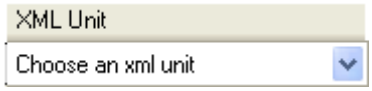
No local paths are valid. It is required to use an IP Address when working with IP-Director workstations connected in a WAN configuration as they may not be able to resolve the UNC Host Name of the computer.

A message appears if the selected path is not valid:



Be sure this folder is shared with full access rights. EVS recommends this directory should be located on the database server in the \thumbnails directory.

XML Unit: Click on the drop down button to select the XML Unit where the XML files (thumbnail or grab creation requests) will be sent.



Note

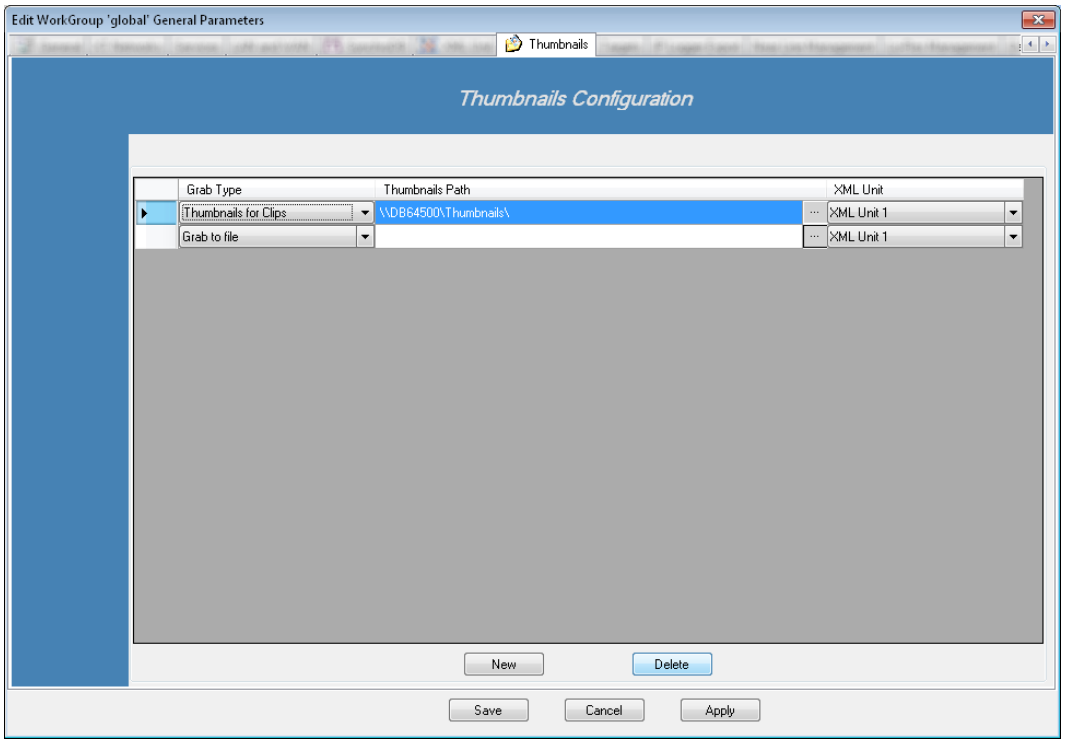
The same XML Unit can be defined for the two different grab types.

Note

Thumbnail and Grab units are global to all IP-Director workstations on the network. They should only be defined once and can be defined from any workstation.

Delete a Thumbnail or Grab unit.

Click on the unit line to select it.



Click on the ‘Delete’ button.

The unit is deleted.

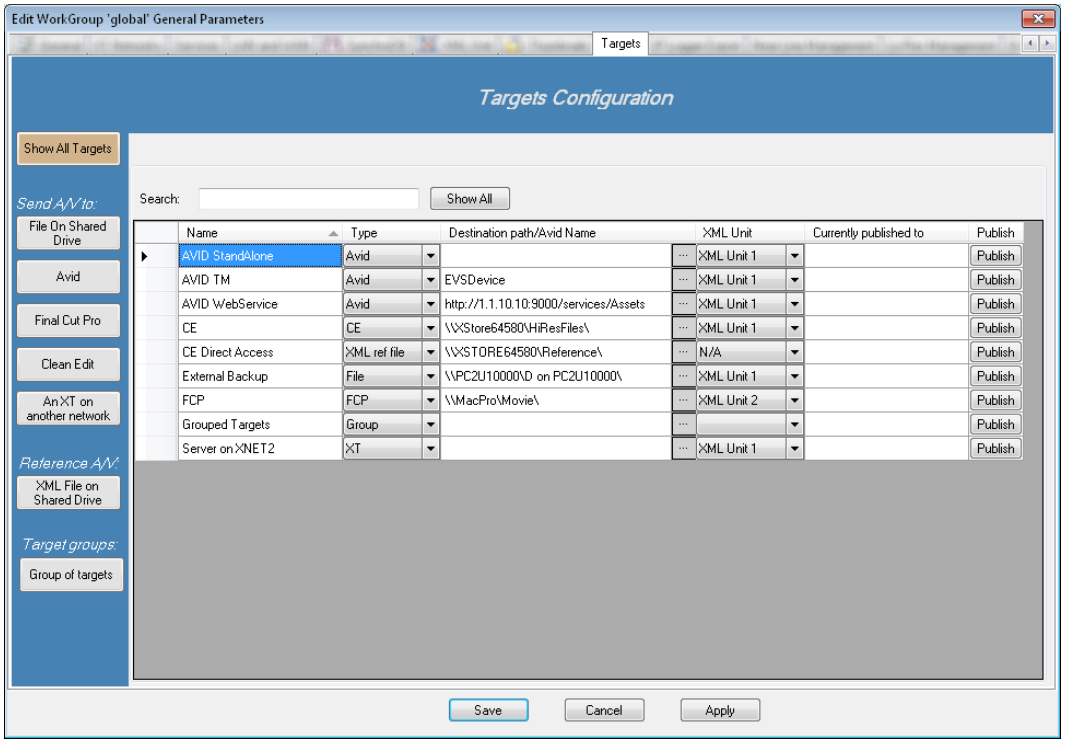
Note

If an XML unit does not have a valid XML Unit Path defined, the XML unit may not be able to be deleted. In this case, browse to a valid location, and then delete the UNIT.

3.10.9 Targets Configuration

This tab includes all the previous target tabs. It is now easier to configure all the different targets from the same place.

Select the Targets tab.



- **Show All Targets:** Displays all configured targets. Editing of the individual fields is not allowed with the exception of the publish feature which is available.

Send A/V to:

- **File On Shared Drive:** Allows configuring conventional folder targets.
- **Avid TM:** Allows configuring Avid targets via an AVID Transfer Manager, Web Services or Stand Alone mode.
- **Final Cut Pro:** Allows configuring dedicated Final Cut Pro targets.
- **Clean Edit:** Allows configuring Clean Edit targets with A/V material.
- **An XT on another network:** Allows configuring XT (server) Export targets.

Reference A/V:

- **XML File on Shared Drive:** Allows configuring targets which use a XML file for referencing the backup job. (Example: The Clean Edit Direct-Access).

Target groups:

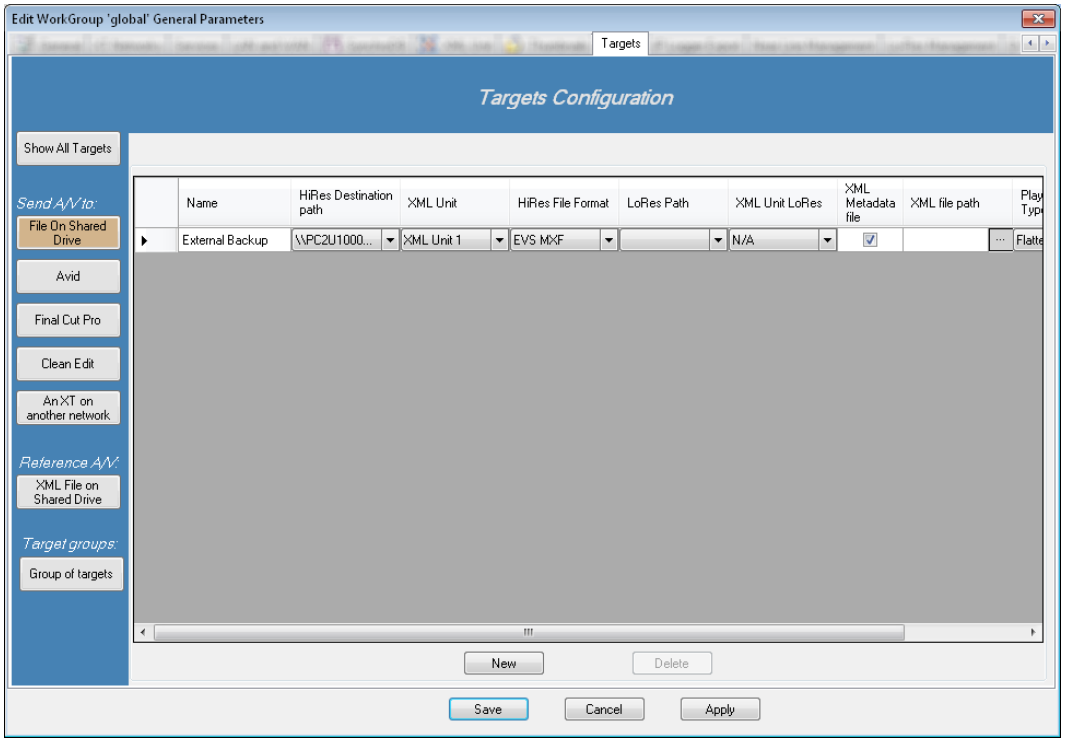
- **Group of targets:** Allows grouping several pre-defined targets into a single one.

'File On Shared Drive' Configuration

This tab should be used to pre-configure the destination directories where clips are to be sent from the IP-Director interface using the 'Send To' option.

Push the

button in the left menu:

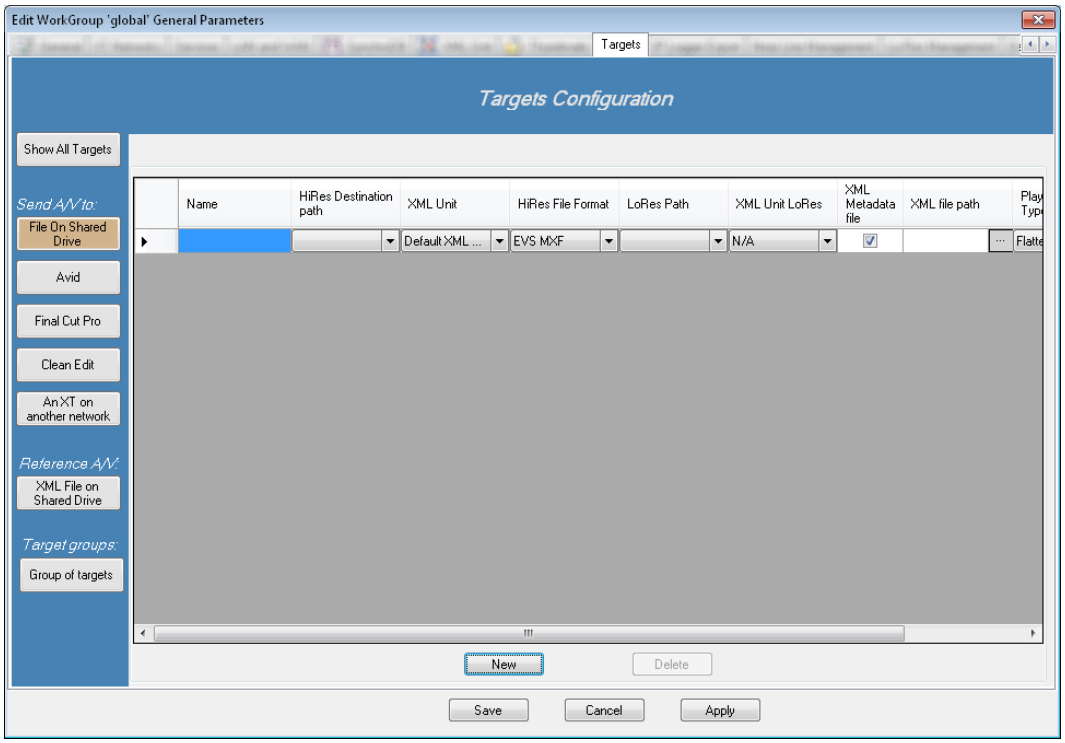


Note

XML Unit creation is required before configuring any target.

Create a new 'File On Shared Drive' target

Click on the 'New' button to add a new folder.



A new line is added in the unit list.

Note

A new destination target can also be created from the IP-Director GUI, from the 'Send To' menu.

Please refer to the IP-Director User Manual.

Name:

Click in the 'Name' column and give a name to the target. This name will appear in the IP-Director 'Send To' menu. It is used to identify the destination target in the IP-Director interface.

HiRes Destination Path:

Select in the list or browse the network to define the folder where the HiRes files are sent. This folder should be a UNC path to the network locations where the folder exists.

Note

Only UNC DNS name or IP address path are valid. (Ex: \\MachineName\Target\, \\1.1.1.100\Target\)

No local paths are valid.

Note

Be sure this folder is shared with full access rights.

XML Unit:

Select the XML unit used to perform the HiRes job (using the SDTI or the Gigabit network). Choose one specific unit in the list if the job must be performed by the XFile or an XTAccess/XSquare system where this XML unit is located (the XML unit is linked to the destination target).

HiRes File Format:

Choose the MXF EVS, OP1A MXF XDCAM, QuickTime Movie, QuickTime Reference, Avid MXF OPAtom, DV-DIFF, OP1A MXF SMPTE or Wave format. It defines the type of files created by the XFile or XTAccess/XSquare system.

LoRes Path:

Select in the list or browse the network to define the folder where the LoRes MXF files are sent. This folder should be a UNC path to the network locations where the folder exists.

Note

Only UNC DNS name or IP address path are valid. (Ex: \\MachineName\Target\, \\1.1.1.100\Target\)

No local paths are valid.

Note

Be sure this folder is shared with full access rights.

XML Unit LoRes:

Select the XML unit used to perform the LoRes job (using the SDTI or the Gigabit network). Choose one specific unit in the list if the job must be performed by the XFile or an XTAccess/XSquare system where this XML unit is located (the XML unit is linked to the destination target).

Note

The file format of a LoRes Clip is a MXF file by default.

The LoRes clips and feeds are coded in a proprietary EVS codec on the XL[2] hardware. The content can't be used outside EVS systems. The file format is therefore set to MXF EVS.

XML Metadata File:

If the box is checked, IP-Director sends metadata XML files linked to clips.

Note

IP-Director includes extended metadata stored in the IPD database. When clips are exported to targets, metadata can be joined in XML files created in the same target clip folder or in a different one.

XML File path:

Specify the target folder which receives the XML Metadata files. This folder can be the same folder as the Backup Destination Directory or a different one.

Note

Be sure this folder is shared with full access rights.

Playlist Backup Type:

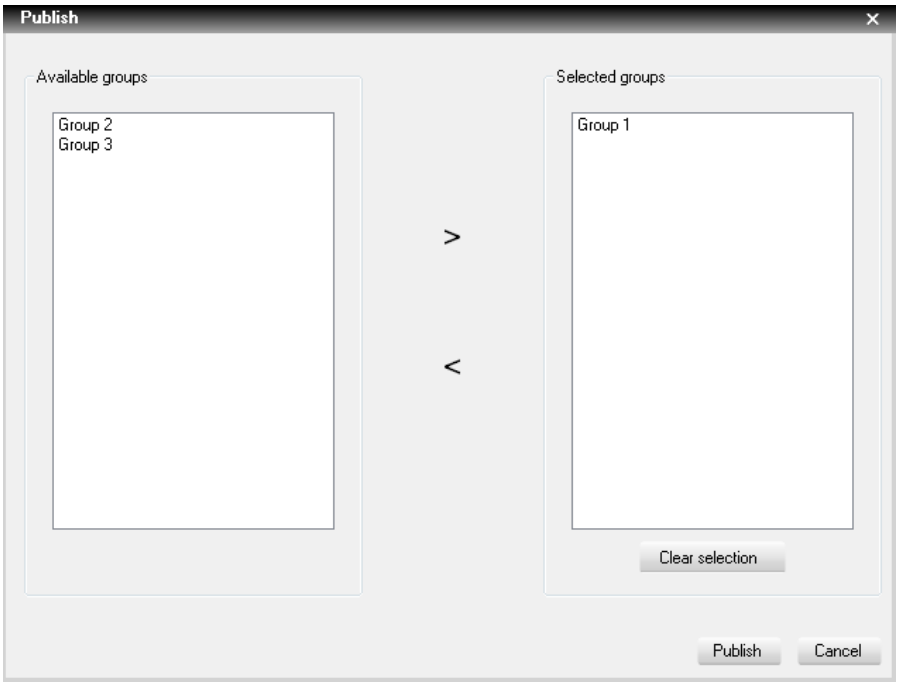
Select the wanted backup type of the playlist:

- EDL and clips: All playlist elements become files and an XML file is created in the same destination folder with the EDL information.
- EDL and flatten file: The playlist is rendered into a single file and an XML file is created in the same destination folder with the EDL information.
- EDL only: An XML file is created in the same destination folder with the EDL information.
- Flatten file only: All playlist elements become files and no XML file is created.

Publish:

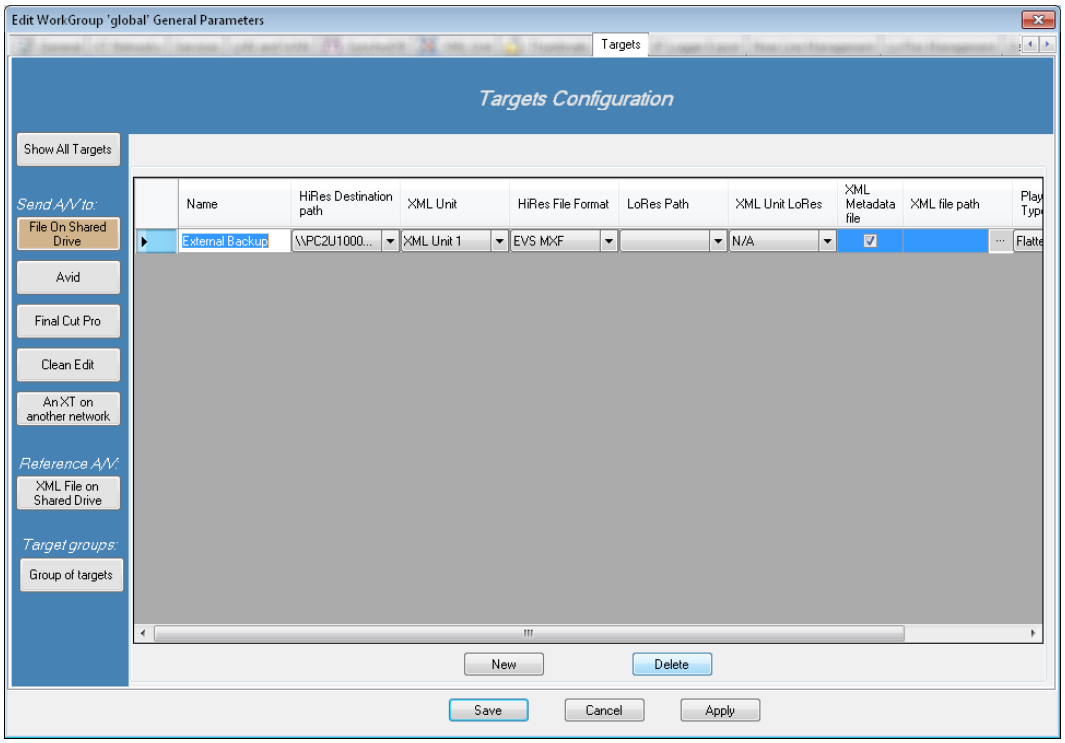
If this destination target must be visible to other groups, click on the Publish button and a new window pops up to allow you to publish to different groups. Select group(s) in the left side and click the arrow '**>**' to push group(s) to the right side. Finally, click on Publish.

Groups are created in the User Manager application (see User Manager Chapter).



Delete a 'File On Shared Drive' Target.

Click on the line header to select it.



Click on the 'Delete' button.

Note

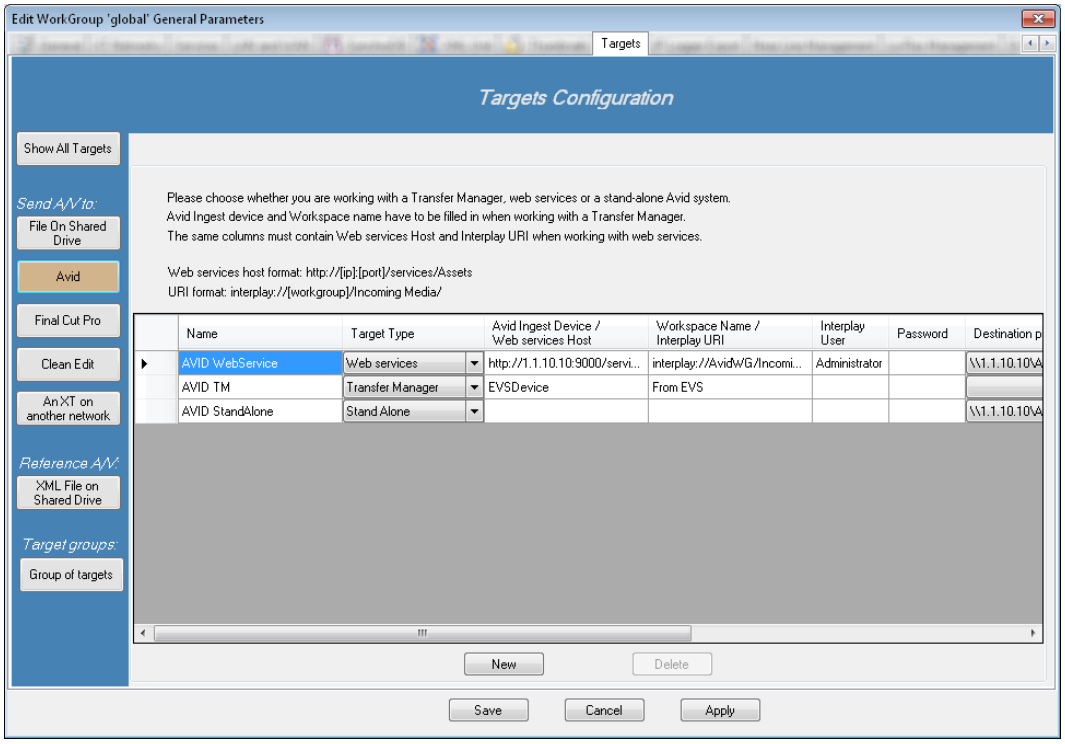
Once all 'File on Share Drive' targets are configured, click on the Apply button before configuring another target type.

'Avid' Configuration

This tab must be used to define and configure the different AVID destination target(s) available on the network where clips are to be sent from the IP Director interface using the 'Send To' option

Push the

button in the left menu:



There are now three kinds of AVID targets:

- The AVID Transfer Manager
- The AVID Webservices (allows sending playlists and timelines)
- The AVID StandAlone (without checking to an AVID Interplay)

Note

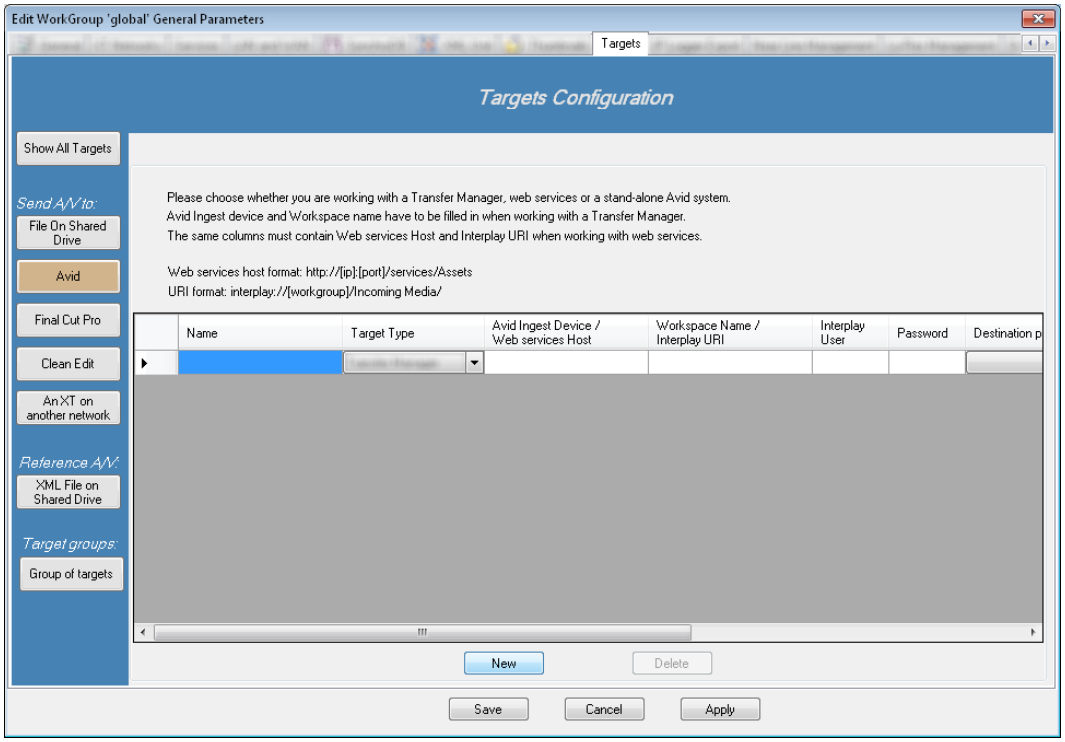
XML Unit creation is required before configuring any AVID target.

Note

Webservices requires the usage of AVID Interplay

Create a new AVID Transfer Manager target

Click on the 'New' button to add a new target. A line is added in the unit list.



Name:

Give a name to the AVID Transfer Manager target. This name will appear in the IP-Director 'Send To' menu. It is used to identify the AVID target in the IP-Director interface.

Target Type:

Select the target type **Transfer Manager**.

Avid Ingest Device (/Webservices Host):

Enter the name of the Ingest Name for the interface with Avid Transfer Manager Server. This information is used by Avid Transfer Manager Server to specify from which ingest device the transfer is initiated.

Default: EVSDevice

Workspace Name (/Interplay URI):

Enter the Avid workspace name dedicated to this target (optional). The exported clips could be sorted in different workspaces on the AVID side.

Use of this function requires an Asset Management system on the AVID system like Media Manager or Interplay.

Default: <Blank>

Interplay User – Password – Destination path

These fields are not used and can't be edited if the target type is 'Transfer Manager'

XML Unit:

Specify the XML unit which will be used to perform the job. This unit should be located on the XFile or XTAccess/XSquare workstation which will dialog with the AVID Transfer Manager Server.

Note

XFile or XTAccess/XSquare XML Unit can be selected for a 'Transfer Manager' target type.

Please refer also to the XFile or XTAccess/XSquare User Manual for an AVID Transfer Manager configuration.

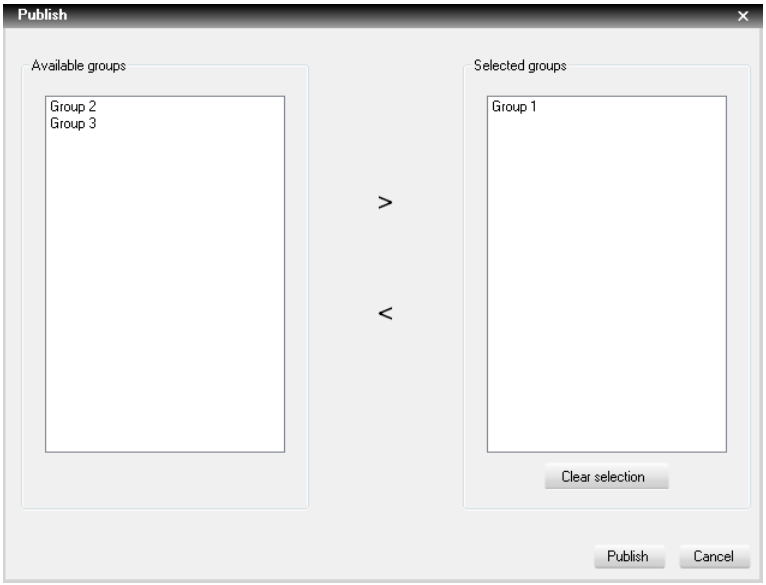
Playlist Backup Type:

This field is not used and can't be edited if the target type is 'Transfer Manager'.

It is not possible to send playlist or timeline through a Transfer Manager.

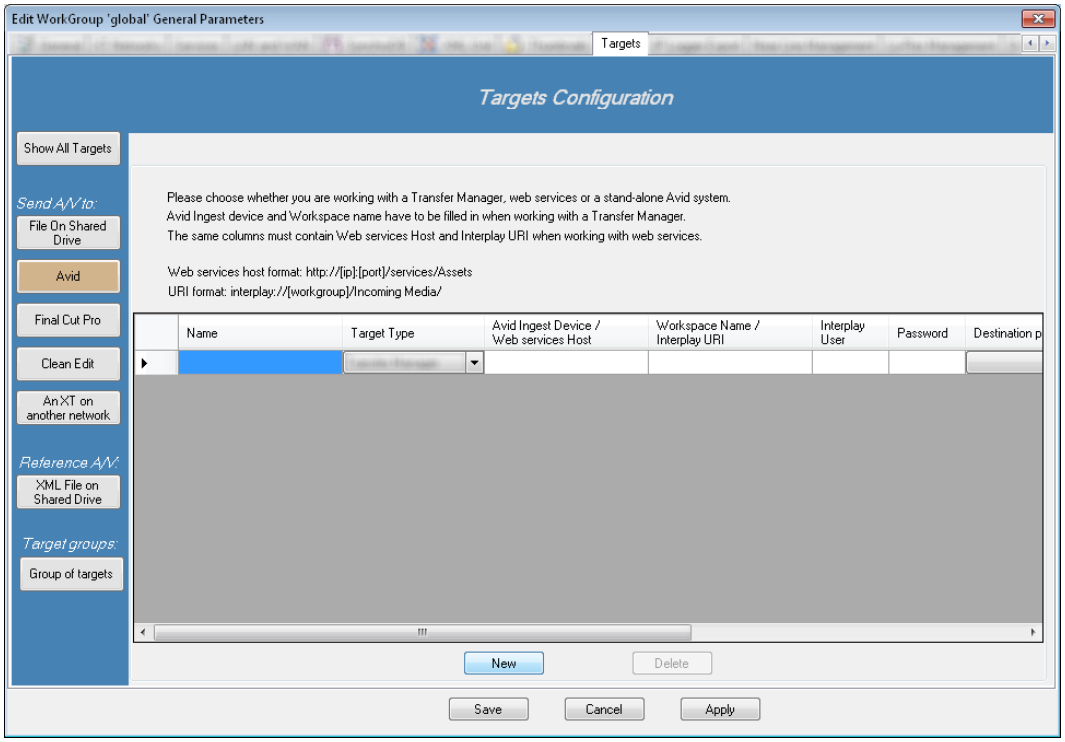
Publish:

If this destination target must be visible to other groups, click on the Publish button and a new window pops up to allow you to publish to different groups. Select group(s) in the left side and click the arrow '>' to push group(s) to the right side. Finally, click on Publish.



Create a new AVID Web services target

Click on the 'New' button to add a new target. A line is added in the unit list.



Name:

Give a name to the AVID Web services target. This name will appear in the IP-Director 'Send To' menu. It is used to identify the AVID target in the IP-Director interface.

Target Type:

Select the target type **Web services**.

(Avid Ingest Device/) Webservices Host:

Enter the host address link to the Webservices on the Avid Interplay System. This information is used by XTAccess/XSquare to connect specific host and ports dedicated to the target.

Default: http://[ip]:[port]/services/Asset

[ip]: IP address of the computer where the Avid Webservices are running.

[port]: The port configured for your Avid Webservices

(Workspace Name/) Interplay URI:

Select in the list or browse the network to define the path where the clip/playlist will be seen in the Interplay DB. Sub-folder can be added after the Incoming Media folder.

Default: interplay://[workgroup]/Incoming Media

[workgroup]:the AVID workgroup target.

Interplay User:

Enter the name of an AVID user which has the Interplay entry right.

Password:

Enter the password of the previously defined Interplay user.

Destination path:

Enter the path where the OPAtom files are saved on the AVID Storage.

Default: \\[ip]\Avid Mediafiles\

Note

The AVID Webservices target always sends OPAtom files. There is no file type configuration for this kind of target.

Note

The destination path should match with the Avid MXF OPAtom storage on the AVID system.

XML Unit:

Specify the XML unit which will be used to perform the job. This XML unit is located on an XTAccess/XSquare workstation which interacts with the AVID computer where the Webservices are running.

Note

Only XTAccess/XSquare XML Unit can be selected for a ‘Web services’ target type.

Please refer also to the XTAccess/XSquare User Manual for an AVID Webservices configuration.

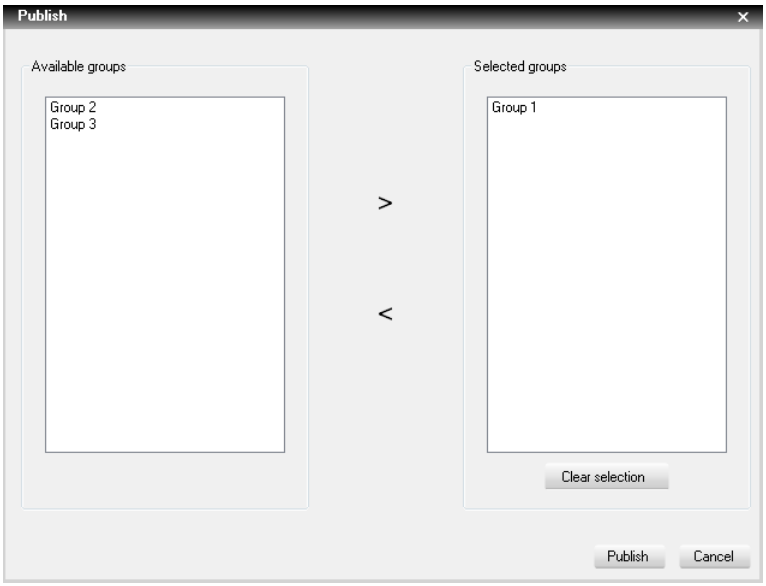
Playlist Backup Type:

Define the type of the backup for the playlist and timeline.

- EDL and Clips: XTAccess/XSquare transfers all the clips and create an AVID sequence which references all playlist and timeline elements.
- EDL only: not supported.
- Flatten file only: XTAccess/XSquare concatenates the playlist or the timeline in a single media file on the AVID storage.

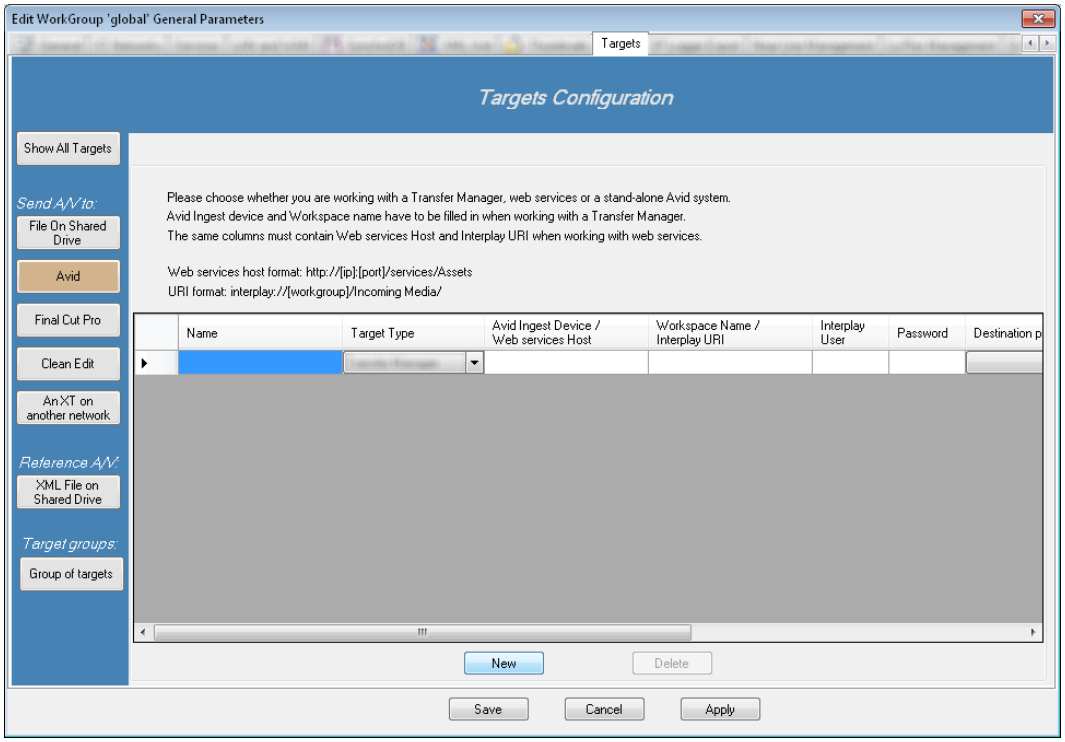
Publish:

If this destination target must be visible to other groups, click on the Publish button and a new window pops up to allow you to publish to different groups. Select group(s) in the left side and click the arrow '>' to push group(s) to the right side. Finally, click on Publish.



Create a new AVID StandAlone target

Click on the 'New' button to add a new target. A line is added in the unit list.



Name:

Give a name to the AVID StandAlone target. This name will appear in the IP-Director 'Send To' menu. It is used to identify the AVID target in the IP-Director interface.

Target Type:

Select the target type **StanAlone**.

Webservices Host - Interplay URI - Interplay User – Password:

These fields are not used and can't be edited if the target type is 'StandAlone', as there is Interplay referencing engine.

Destination path:

Enter the path where the OPAtom files are saved on the AVID Storage.

Default: \\[ip]\Avid Mediafiles\

Note

The AVID Webservices target always sends OPAtom files. There is no file type configuration for this kind of target.

Note

The destination path should match with the Avid MXF OPAtom storage on the AVID system.

XML Unit:

Specify the XML unit which will be used to perform the job. This XML unit is located on an XTAccess/XSquare workstation which interacts with the AVID computer where the Webservices are running.

Note

Only XTAccess/XSquare XML Unit can be selected for a 'Web services' target type.

Please refer also to the XTAccess/XSquare User Manual for an AVID Webservices configuration.

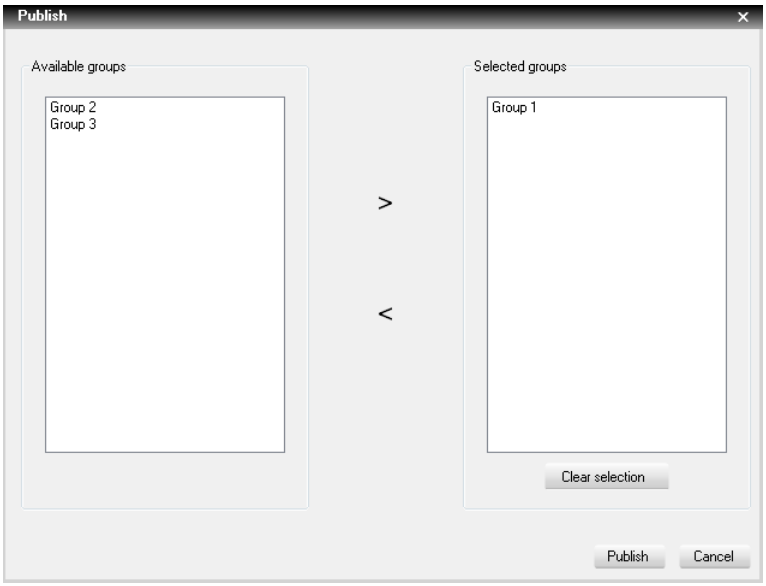
Playlist Backup Type:

Define the type of the backup for the playlist and timeline.

- EDL and Clips: XTAccess/XSquare transfers all the clips and create an AVID sequence which references all playlist and timeline elements.
- EDL only: not supported.
- Flatten file only: XTAccess/XSquare concatenates the playlist or the timeline in a single media file on the AVID storage.

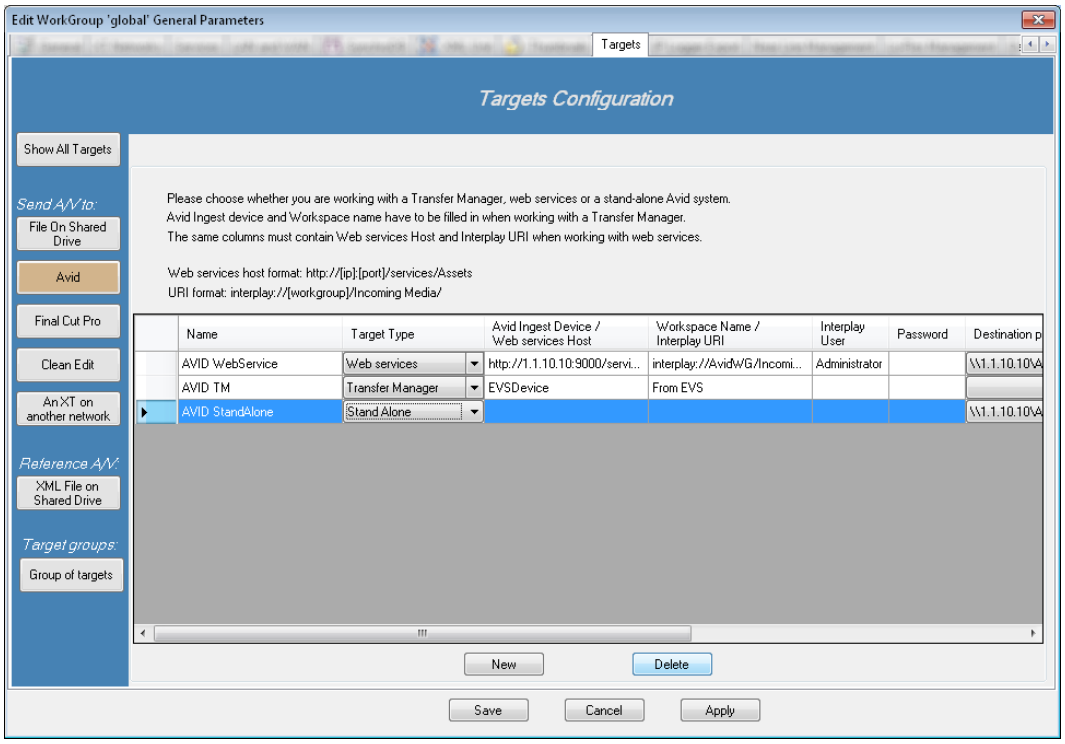
Publish:

If this destination target must be visible to other groups, click on the Publish button and a new window pops up to allow you to publish to different groups. Select group(s) in the left side and click the arrow '>' to push group(s) to the right side. Finally, click on Publish.


Publish
Available groups
Group 2
Group 3
>
<
Selected groups
Group 1
Clear selection
Publish
Cancel

Delete an AVID target.

Click on the line header to select it.



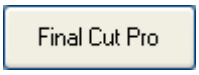
Click on the ‘Delete’ button.

Note

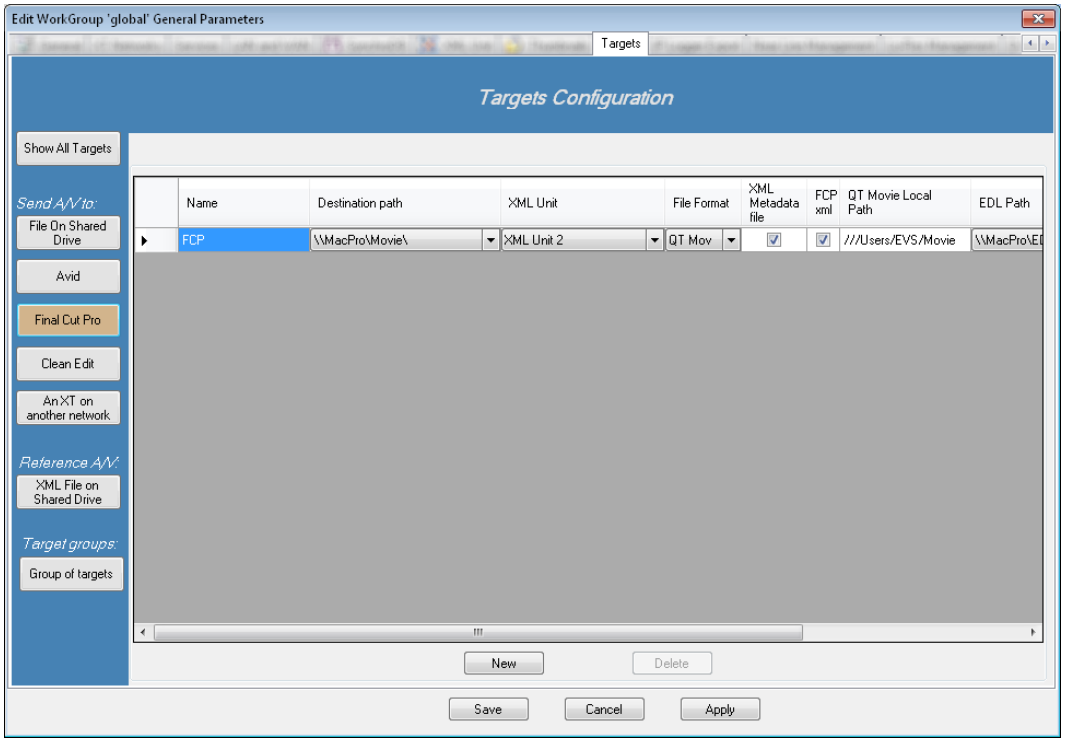
Once all AVID targets are configured, click on the Apply button before configuring another target type.

'Final Cup Pro' Configuration

This tab must be used to define and configure the different Final Cut Pro destination target(s) available on the network where clips are to be sent from the IP-Director interface using the 'Send To' option

Push the 

button in the left menu:

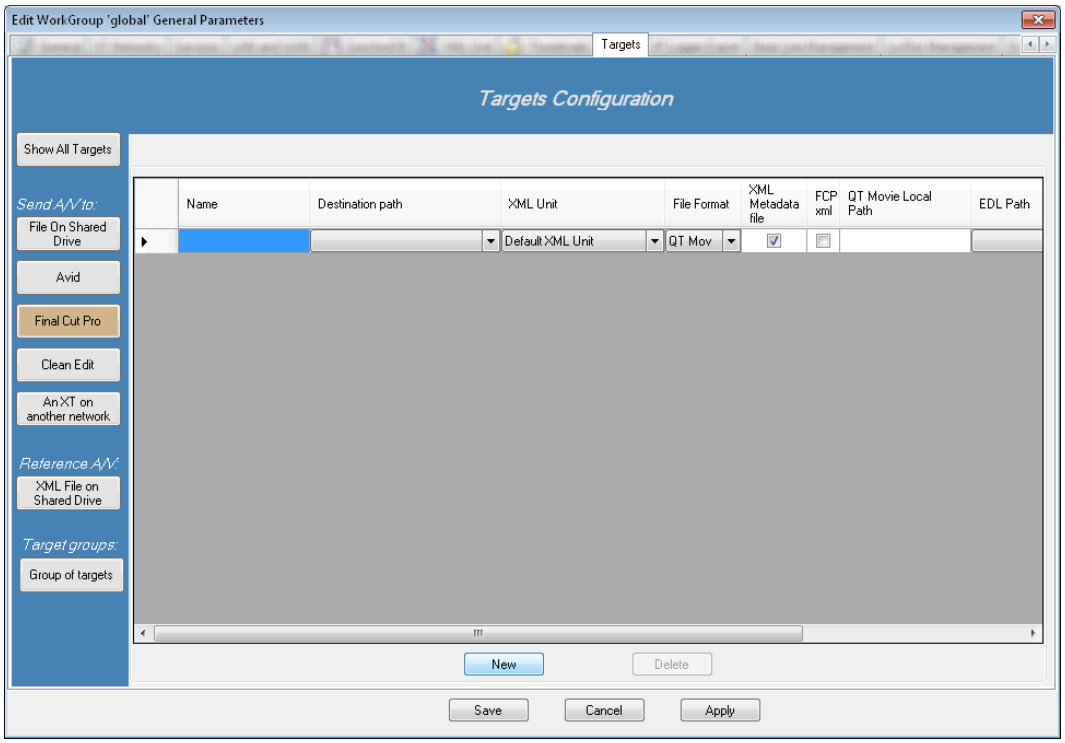


Note

XML Unit creation is required before configuring any FCP target.

Create a new Final Cut Pro target

Click on the 'New' button to add a new folder.



A new line is added in the unit list.

Name:

Click in the 'Name' column and give a name to the Final Cut Pro target. This name will appear in the IP-Director 'Send To' menu. It is used to identify the destination target in the IP-Director interface.

Destination Path:

Select in the list or browse the network to define the folder where the files are sent. This folder should be a UNC path to the network locations where the folder exists.

Note

Only UNC DNS name or IP address path are valid. (Ex: \\MachineName\Target\, \\1.1.1.100\Target\)

No local paths are valid.

Note

Be sure this folder is shared with full access rights.

XML Unit:

Select the XML unit used to perform the job (using the SDTI or the Gigabit network). Choose one specific unit in the list if the job must be performed by the XFile or an XTAccess/XSquare system where this XML unit is located (the XML unit is linked to the destination target).

File Format:

Choose the QuickTime Movie or QuickTime Reference format. It defines the type of files which will be created by the XFile or XTAccess/XSquare system.

XML Metadata file:

If the box is checked, IP-Director sends metadata XML files linked to clips.

Note

IP-Director includes extended metadata stored in the IPD database. When clips are exported to targets, metadata can be joined in XML files created in the same target clip folder.

FCP xml:

If the box is checked, IP-Director generates an XML file to be imported into Apple Final Cut Pro. This allows importing EVS custom metadata. Only 6 EVS custom metadata can be imported in Final Cut Pro Project fields:

- EVS Keyword 1 -> Master Comment 1
- EVS Keyword 2 -> Master Comment 2
- EVS Keyword 3 -> Master Comment 3
- EVS Rating -> Master Comment 4
- Clip Number -> Comment A
- Camera ID -> Comment B

QT Movie Local Path:

This path is the local path referenced into the XML FCP to point to the Quick Time Movies File. Final Cut Pro only supports local path and the format used is an APPLE UNC Path.

Note

It is mandatory to fill this parameter if the FCP XML box is checked. The path informs the FCP that clips are linked to the received XML metadata files.

EDL Path:

Select in the list or browse the network to define the folder where the EDL files are sent. This folder should be a UNC path to the network locations where the folder exists.

Note

Only UNC DNS name or IP address path are valid. (Ex: \\MachineName\Target\, \\1.1.1.100\Target\)

No local paths are valid.

Note

Be sure this folder is shared with full access rights.

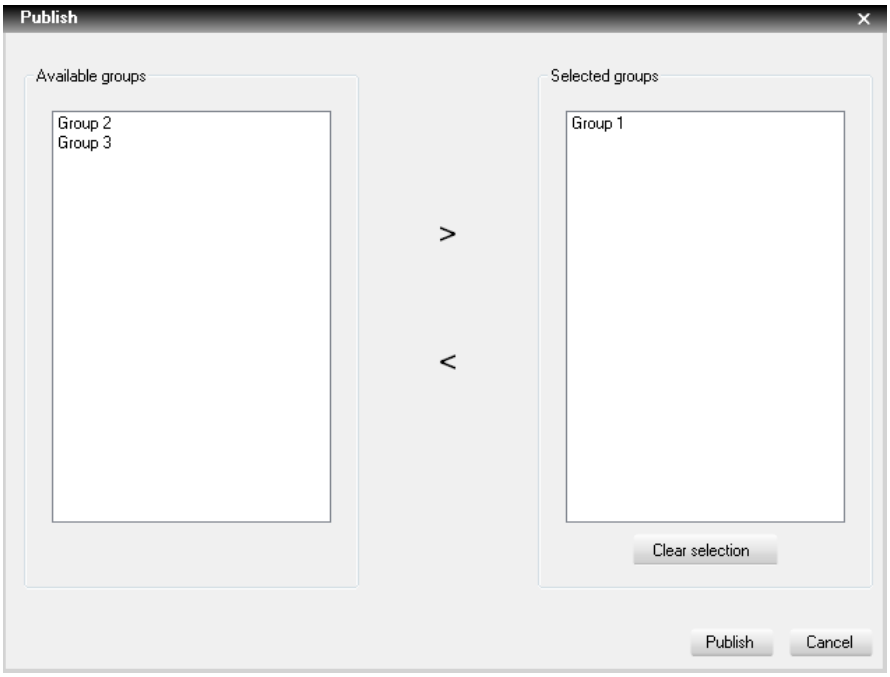
Playlist Backup Type:

Define the type of the backup for the playlist and timeline.

- EDL and Clips: XTAccess/XSquare transfers all the clips and create an EDL file which references all playlist and timeline elements. The EDL would be loaded in the Apple Final Cut Pro.
- EDL only: not supported.
- Flatten file only: XTAccess/XSquare concatenates the playlist or the timeline in a single media file on the Apple Final Cut Pro storage.

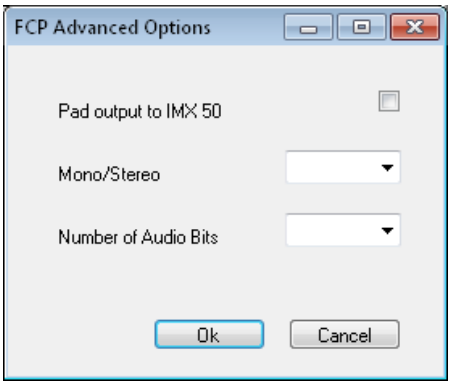
Publish:

If this destination target must be visible to other groups, click on the Publish button and a new window pops up to allow you to publish to different groups. Select group(s) in the left side and click the arrow '**>**' to push group(s) to the right side. Finally, click on Publish.



Advanced:

This new optional parameters allow forcing the Pad Output to IMX50, selecting Mono/Stereo for audio and selecting the number of audio bits between 16/24.



Pad output to IMX 50:

If the box is checked, the metadata of the exported clip flags it with an IMX 50 video codec even if the clip is coded in IMX 30 or IMX 40.

Mono/Stereo:

If the setting is blank, the original audio configuration is not affected.

If the setting is set to “Mono”, the audio tracks are identified as separated mono tracks.

If the setting is set to “Stereo”, the audio tracks are identified per pair of stereo tracks.

Number of Audio Bits:

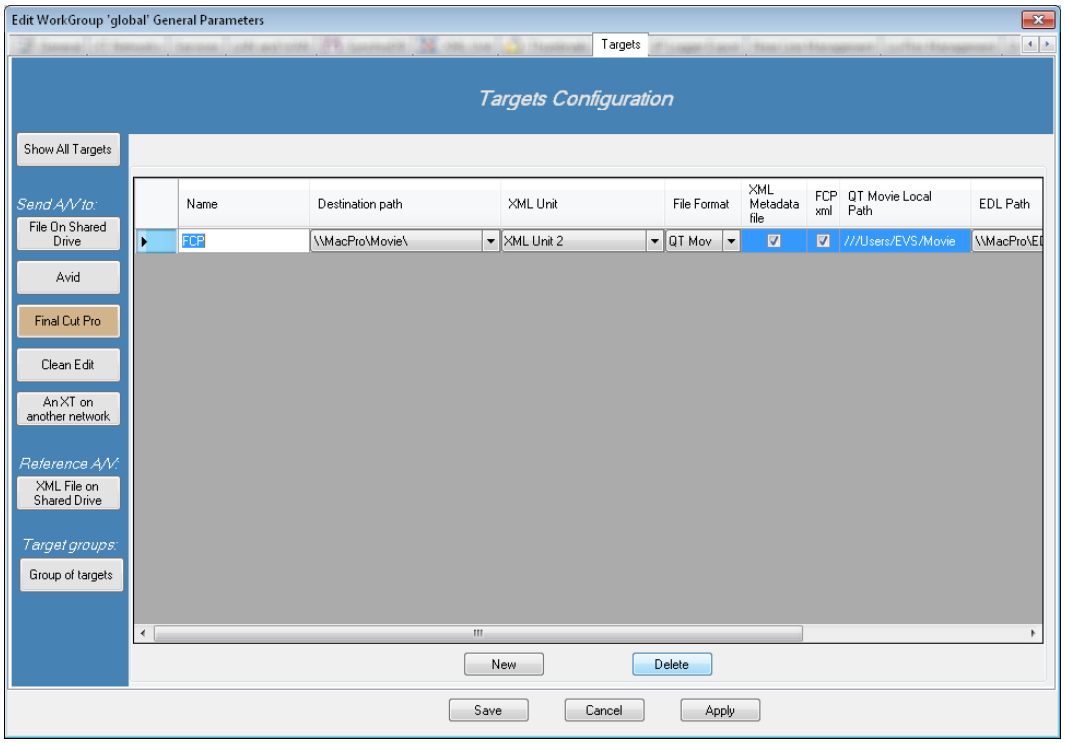
If the setting is blank, the original audio configuration is not affected.

If the setting is set to “16”, the audio format is converted to 16 bits.

If the setting is set to “24”, the audio bit format is converted to 24 bits.

Delete a Final Cut Pro Target.

Click on the line header to select it.



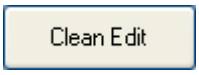
Click on the ‘Delete’ button.

Note

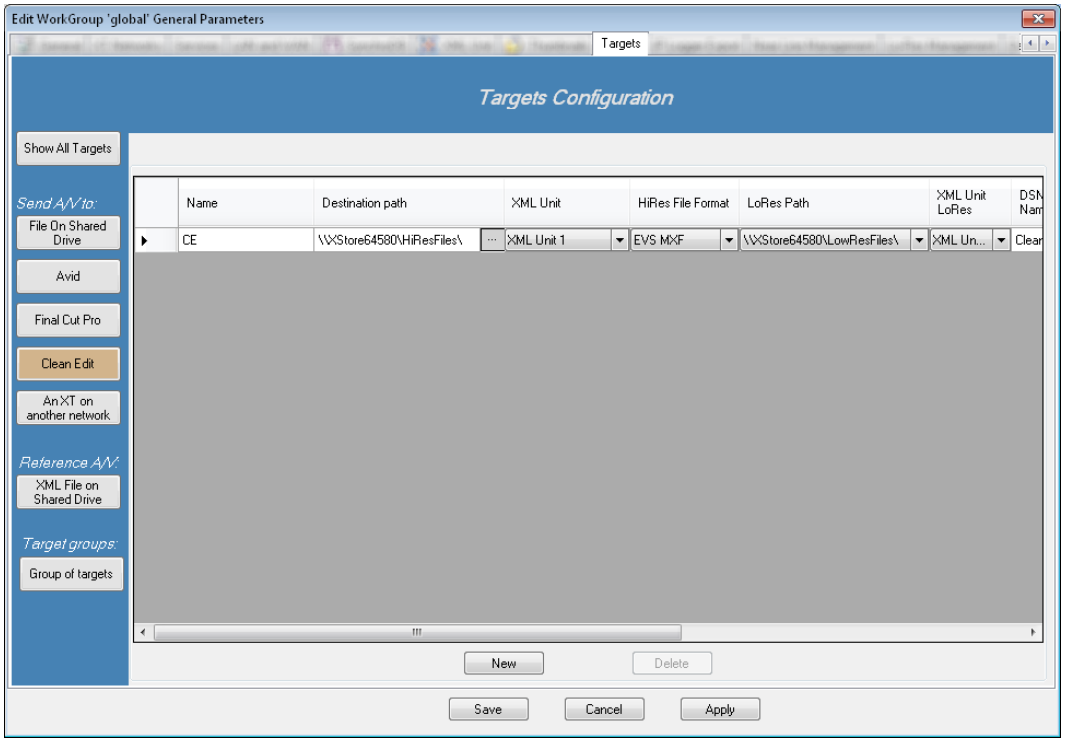
Once all FCP targets are configured, click on the Apply button before configuring another target type.

'CleanEdit' Configuration

This tab is used to define and configure the different Clean Edit destination target(s) available on the network where clips are to be sent from the IP-Director interface using the 'Send To' option.

Push the 

button in the left menu:



Note

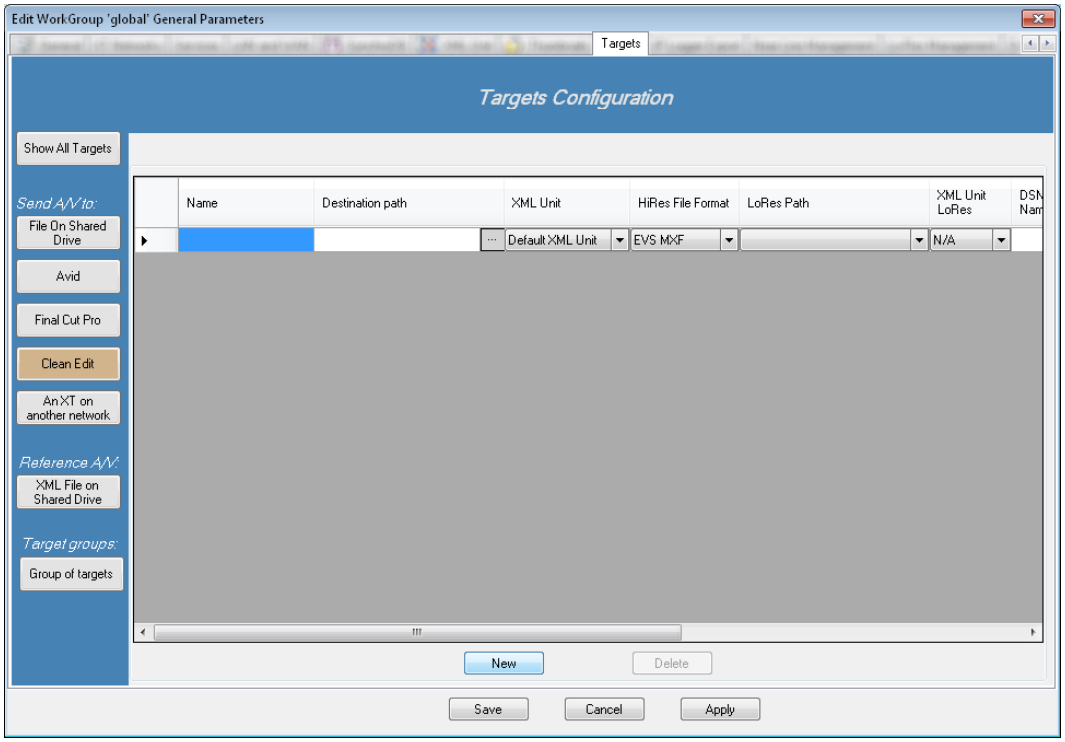
Create XML Unit(s) first to configure this tab.

Note

To operate Clean Edit with the Direct Access feature, please refer to the XML File on Shared Drive chapter.

Create a new Clean Edit target

Click on the 'New' button to add a new target. A line is added in the unit list.



Name:

Give a name to the target. This name will appear in the IP-Director 'Send To' menu. It is used to identify the Clean Edit target in the IP-Director interface.

Destination Path:

Select in the list or browse the network to define the folder where the HiRes files are sent. This folder should be a UNC path to the network locations where the folder exists. The path is usually \\HiResFiles.

Note

Only UNC DNS name or IP address path are valid. (Ex: \\XStoreName\HiResFiles\, \\1.1.1.100\HiResFiles\)

No local paths are valid.

XML Unit:

Specify the XML unit which will be used to perform the HiRes job. This unit should be located on the XFile or XTAccess/XSquare system which updates the CleanEdit database.

HiRes File Format:

Choose the MXF EVS, OP1A MXF XDCAM, QuickTime Movie, QuickTime Reference, Avid MXF OPAtom, DV-DIFF, OP1A MXF SMPTE or Wave format. It defines the type of files which will be created by the XFile or XTAccess/XSquare system.

LoRes Path:

Select in the list or browse the network to define the folder where the LoRes files are sent. This folder should be a UNC path to the network locations where the folder exists. The path is usually \\LoResFiles.

Note

Only UNC DNS name or IP address path are valid. (Ex: \\MachineName\Target\, \\1.1.1.100\Target\)

No local paths are valid.

Note

Be sure this folder is shared with full access rights.

XML Unit LoRes:

Select the XML unit used to perform the LoRes job (using the SDTI or the Gigabit network). Choose one specific unit in the list if the job must be performed by the XFile or an XTAccess/XSquare system where this XML unit is located.

Note

The file format of a LoRes Clip is a MXF file. Another format can't be selected.

The LoRes clips and feeds are coded in a proprietary EVS codec on the new XL[2] hardware. The content can't be used outside EVS systems. The file format is therefore set to MXF EVS.

DSN Name:

Enter a DSN Name (Data Source Name that will allow you to access to the CleanEdit Database).

Default: CleanEditDB

DSN User:

Enter the corresponding DSN User to access to CleanEdit Database.

Default: EVS

DSN Password:

Enter the corresponding DSN Password to access to CleanEdit Database.

Default: cleanedit

XML Metadata File:

If the box is checked, IP-Director sends metadata XML files linked to clips.

Note

IP-Director includes extended metadata stored in the IPD database. When clips are exported to targets, metadata can be joined in XML files created in the same target clip folder or in a different one.

XML File path:

Specify the target folder which receives the XML Metadata files. This folder can be the same folder as the Backup Destination Directory or a different one.

Note

Be sure this folder is shared with full access rights.

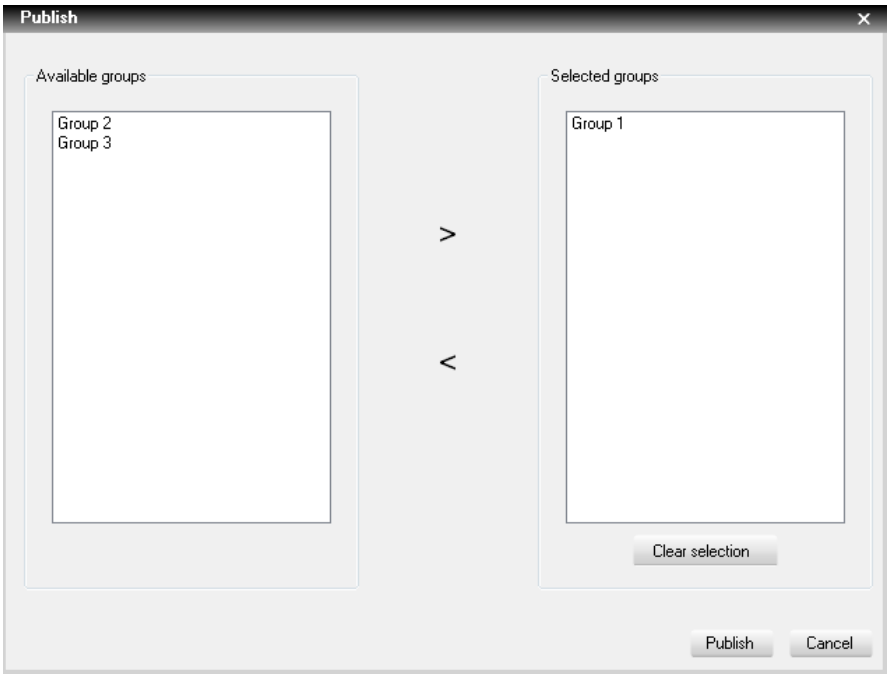
Playlist Backup Type:

Define the type of the backup for the playlist and timeline.

- EDL and Clips: XTAccess/XSquare will transfer all the clips and create an EVS EDL file which references all playlist and timeline elements (currently not supported)
- EDL only: not supported.
- Flatten file only: XTAccess/XSquare will concatenate the playlist or the timeline in a single media file on the CleanEdit storage (currently not supported)

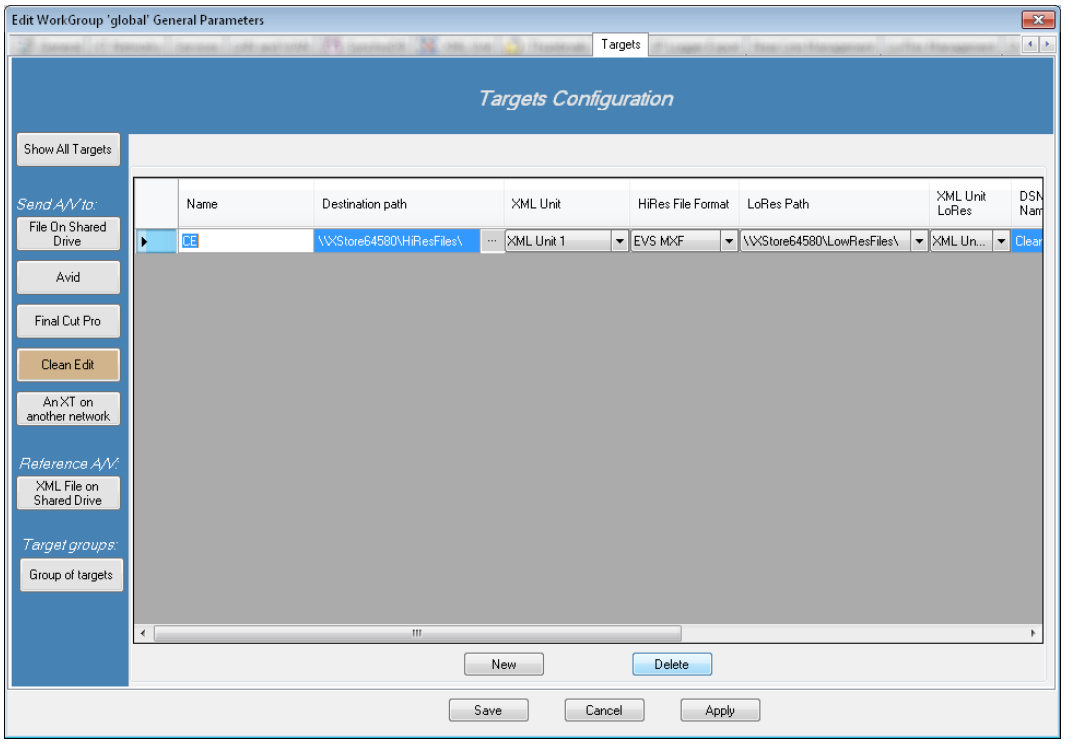
Publish:

If this Clean Edit target must be visible to other groups, click on the Publish button and a new window pops up to allow you to publish to different groups. Select group(s) in the left side and click the arrow '>' to push group(s) to the right side. Finally, click on Publish.



Delete a Clean Edit target.

Click on the line header to select it.



Click on the ‘Delete’ button.

Note

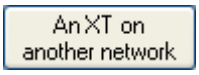
Once all CE targets are configured, click on the Apply button before configuring another target type.

'An XT on another network' Configuration

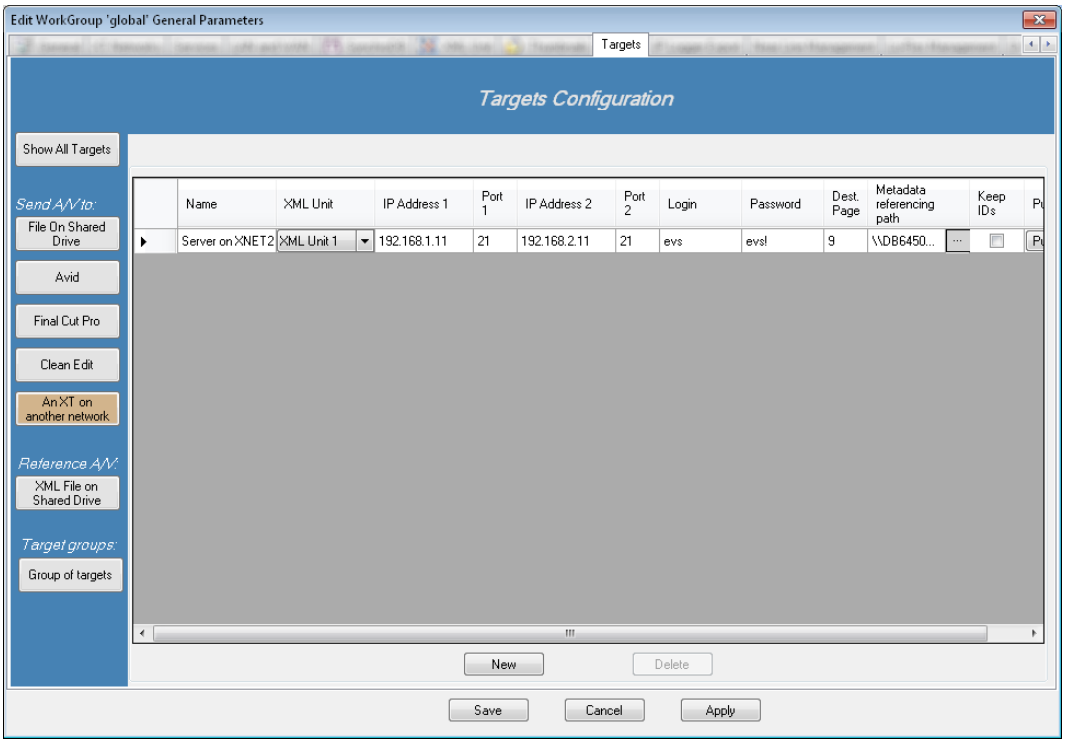
This tab must be used to define and configure the XT targets. With the new gigabit feature of the server, it is now possible to send clip to another server through a TCP/IP Network.

Important

This feature is only available on a server upgraded with a GBX module on the HCTX card. The XTAccess/XSquare software must be installed on a network computer. Please contact EVS for more information.

Push the 

button in the left menu:

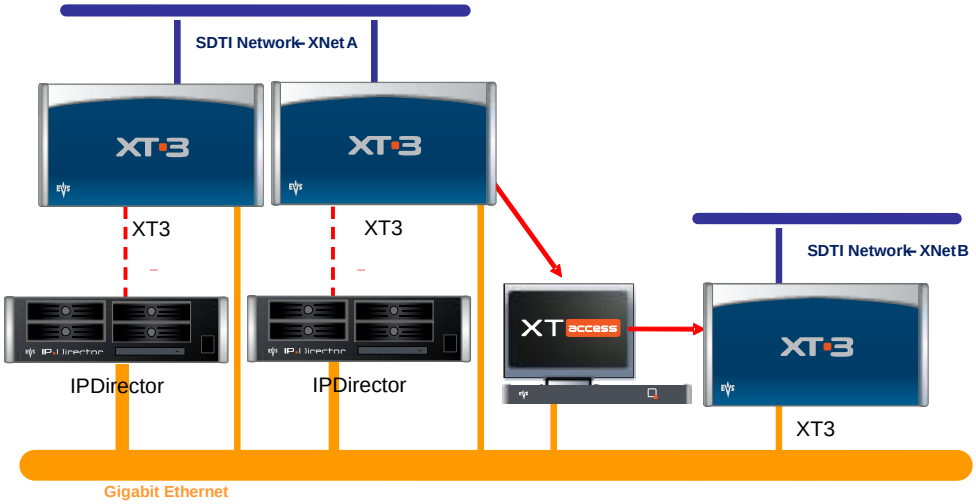


Clips can be transferred from an SDTI network to another one using a TCP/IP Network, even if this second SDTI network is not connected to IP-Director.

Sending a clip through a server target will initialize XTAccess/XSquare which manages the clip copy between the two servers.

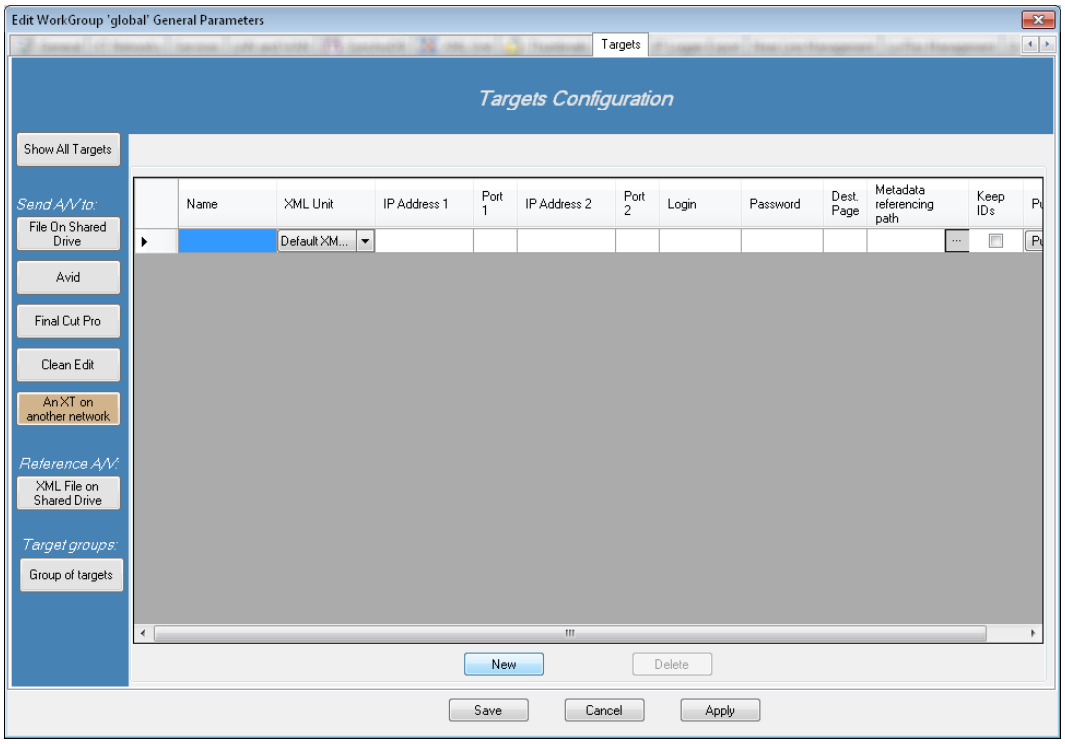
IP-Director sends a XML file to the shared folder scanned by XTAccess/XSquare (a previously defined XML Unit). This XML file contains source and target information. XTAccess/XSquare executes the job.

Please refer to the XTAccess/XSquare and Multicam Manuals for more information.



Create a new XT (server) target

Click on the ‘New’ button to add a new server target. A line is added in the list.



Name:

Click in the ‘Name’ column and give a name to the server target. This name will appear in the IP-Director ‘Send To’ menu.

XML Unit:

Specify the XTAccess/XSquare XML unit which will be used to perform the job.

IPAddress1:

Enter the IP address of the first destination server Gigabit port.

Port 1:

Enter the FTP port number corresponding to the first server gigabit port.

Default: 21

IPAddress 2:

Enter the IP address of the second destination server Gigabit port.

Port 2:

Enter the FTP port number corresponding to the second server gigabit port.

Default: 21

Login:

Enter the login username of the FTP server.

Default: evs

Password:

Enter the login password of the FTP server.

Default: evs!

Note

The H3X (or HCTX) Gigabit connection settings are set inside the Multicam Setup Configuration (SHIFT+F2, Tab 3 Network).

Please refer to the Server Software Technical reference manual.

Dest Page:

Specify a destination page on the target server to receive exported clips.

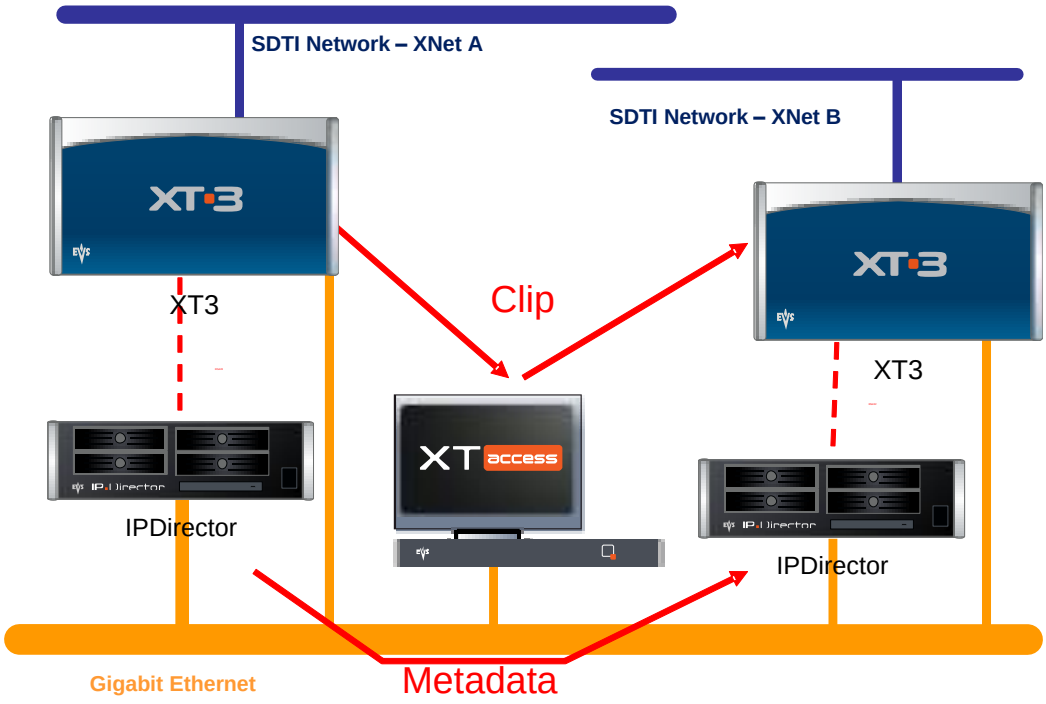
Value: 0-9

Metadata Referencing path:

Specify the target folder which receives the Metadata Referencing files.

This feature is typically used to send IP-Director metadata from a network to another one.

If the XT (server) target is used to transfer clips from an SDTI network to another one using a TCP/IP Network and if the both network are connected on two different IP-Director workgroup, then the clip metadata has to be exported to the IP-Director target workgroup. This workgroup will ingest the clip metadata and associate it with the transferred file.



Note

A dedicated job must be added within the IP-Scheduler on the target workgroup.

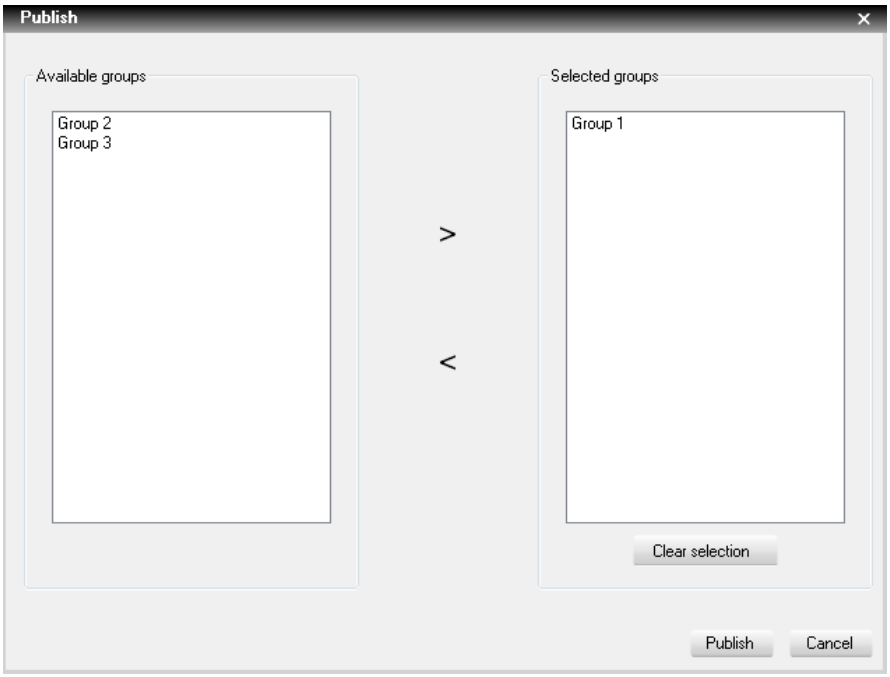
Please refer to the IP-Scheduler Chapter for details.

Keep ID's:

If the box is checked, the clip is transferred with the same UmID and VarID on the distant server.

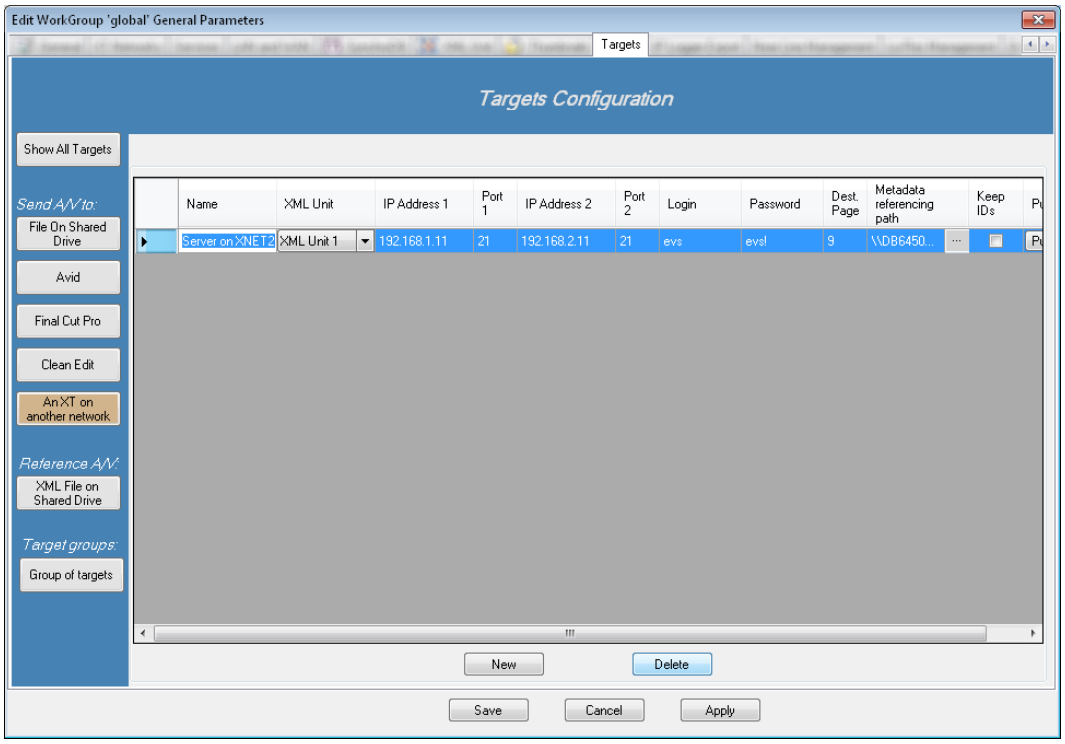
Publish:

If this XT (server) target must be visible to other groups, click on the Publish button and a new window pops up to allow you to publish to different groups. Select group(s) in the left side and click the arrow '**>**' to push group(s) to the right side. Finally, click on Publish.



Delete an XT (server) target.

Click on the line header to select it.



Click on the ‘Delete’ button.

Note

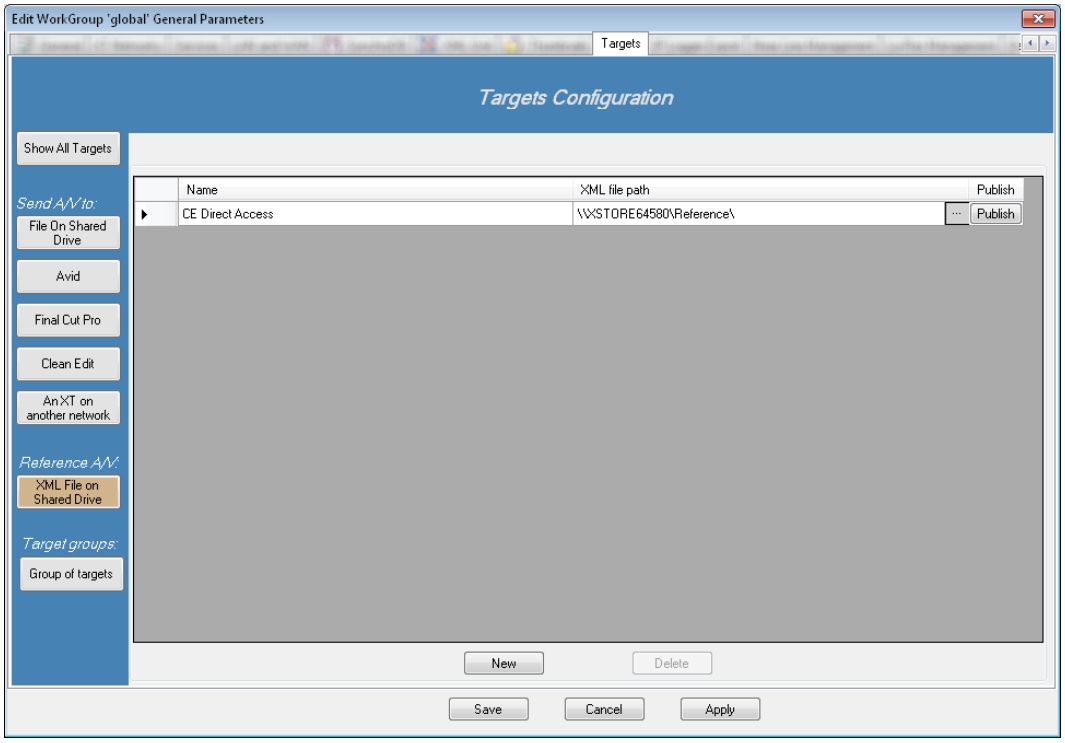
Once all XT (server) targets are configured, click on the Apply button before configuring another target type.

'XML File on Shared Drive' Configuration

This tab must be used to define and configure the different 'XML File on Shared Drive' target(s) available on the network where XML files are to be sent from the IP-Director interface using the 'Send To' option.

Push the

button in the left menu:



This kind of target is mainly used to send clip information on a system which is able to grab the clip by itself from the Server Network (XNet) or through the Server Gigabit Network.

The main EVS use is the CleanEdit Direct Access feature.

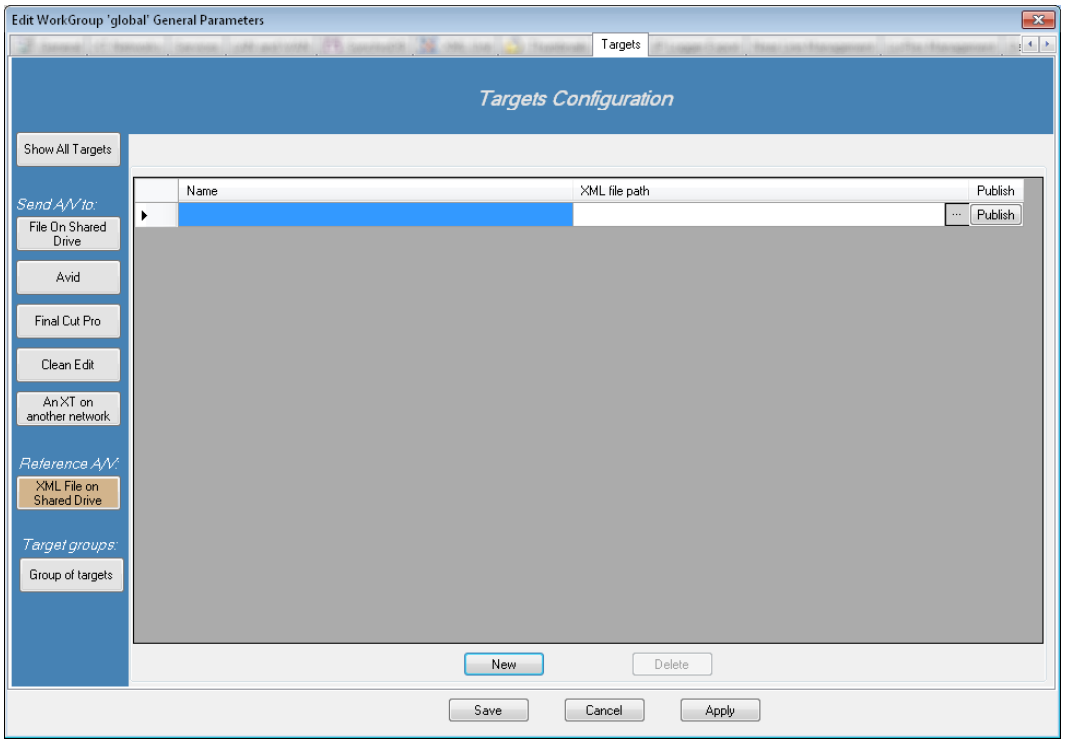
Note

To operate Clean Edit with the Direct Access feature, create an 'XML File on Shared Drive' pointing on a network shared folder. The Clean Edit Auto File Importer must scan the same shared folder.

Please refer to the Clean Edit User Manual for more information.

Create a new XML File target

Click on the 'New' button to add a new target. A line is added in the unit list.



Name:

Give a name to the target. This name will appear in the IP-Director 'Send To' menu. It is used to identify the XML file target in the IP-Director interface.

XML file path:

Select in the list or browse the network to define the folder where the XML files are sent. This folder should be a UNC path to the network locations where the folder exists.

Note

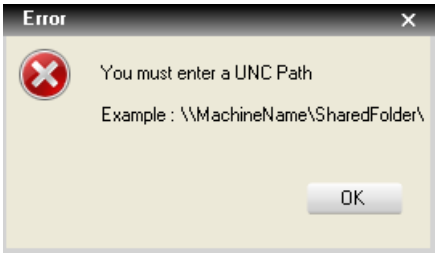
Be sure this folder is shared with full access rights.

Note

Only UNC DNS name or IP address path are valid. (Ex: \\XFile53210\XML_Files\, \\1.1.1.100\XML_Files\)

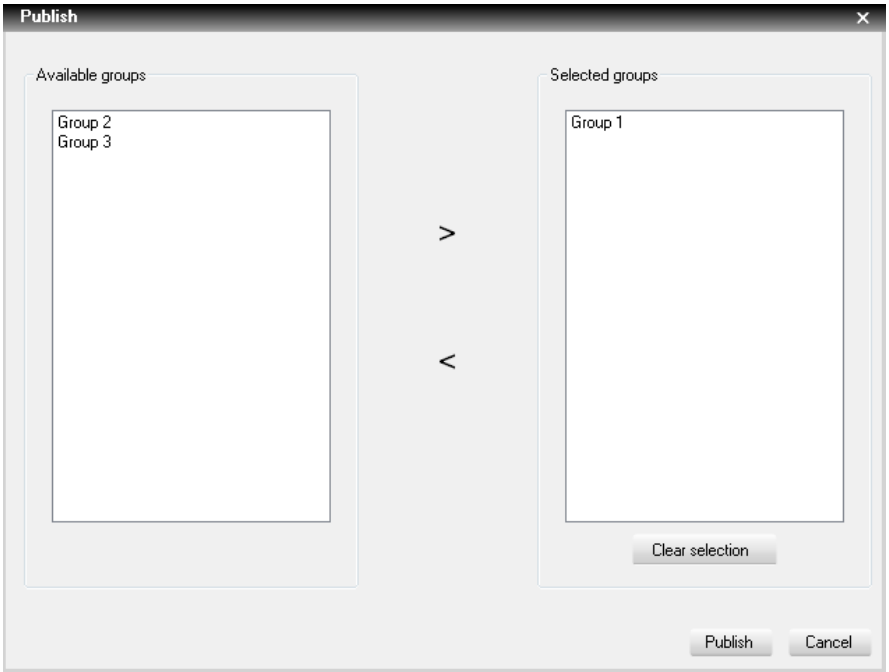
No local paths are valid.

A message appears if the selected path is not valid:



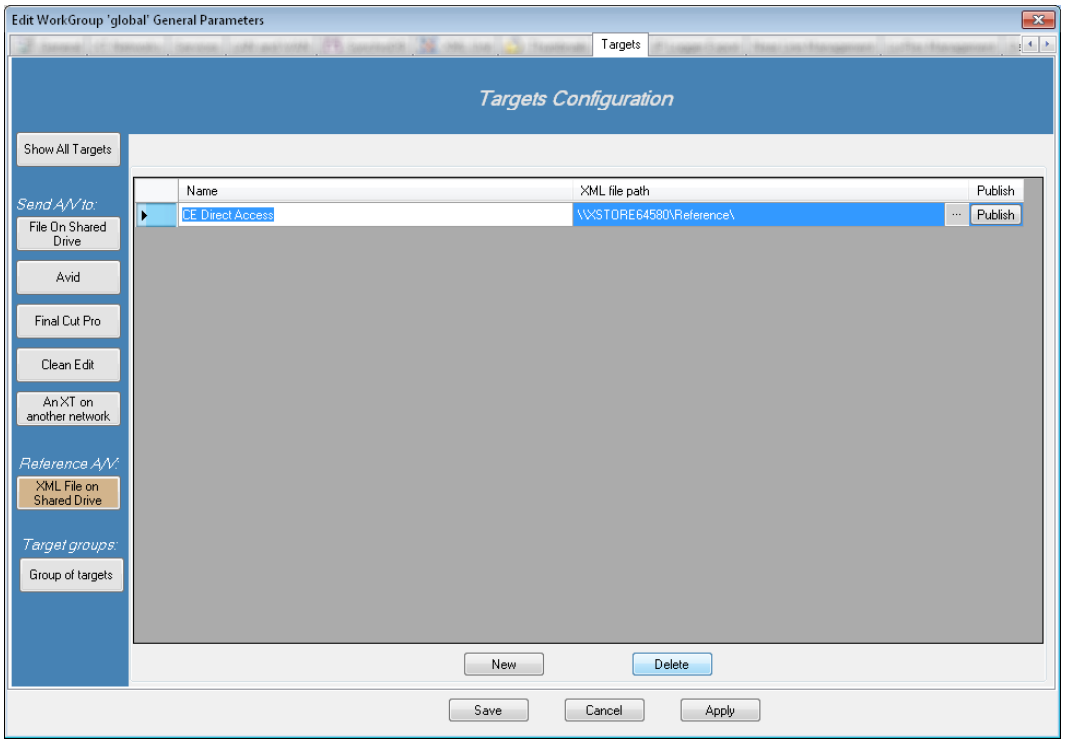
Publish:

If this XML File target must be visible to other groups, click on the Publish button and a new window pops up to allow you to publish to different groups. Select group(s) in the left side and click the arrow '>' to push group(s) to the right side. Finally, click on Publish.



Delete an XML File target.

Click on the line header to select it.



Click on the ‘Delete’ button.

Note

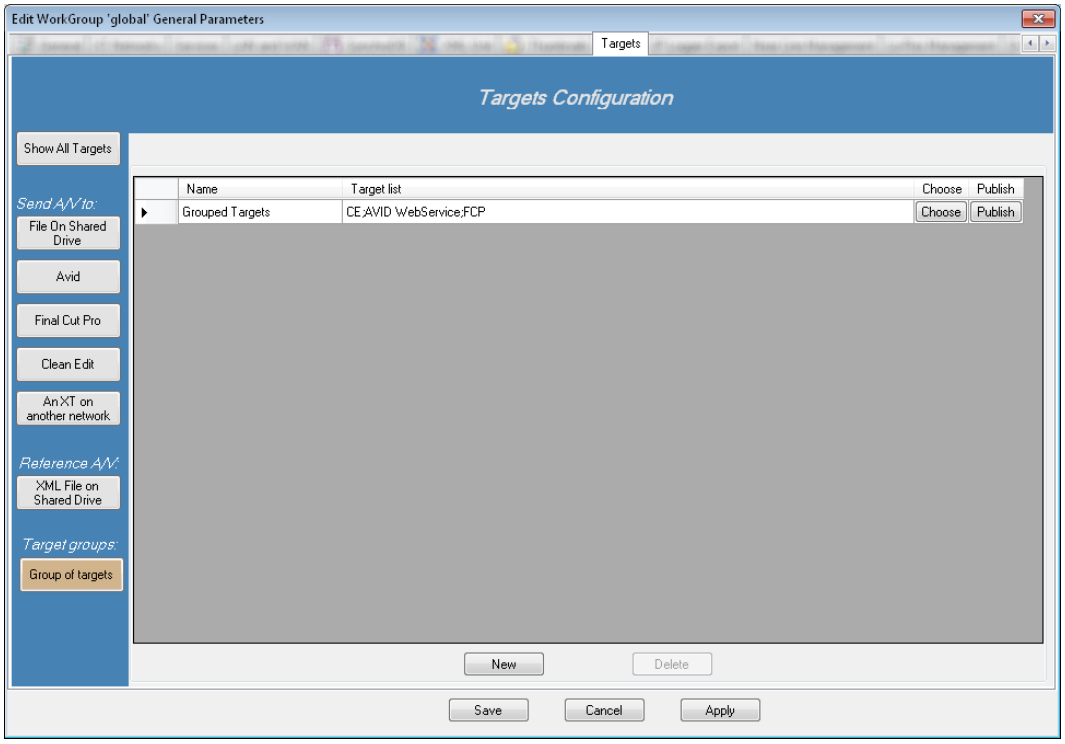
Once all XML File targets are configured, click on the Apply button before configuring another target type.

‘Group of Targets’ Configuration

This tab must be used to define and configure the different ‘Group of targets’ available on the network where XML files are to be sent from the IP-Director interface using the ‘Send To’ option.

This king of target is a list of previously defined targets. It allows, in one operation, to send clips to several targets.

Push the Group of targets button in the left menu:



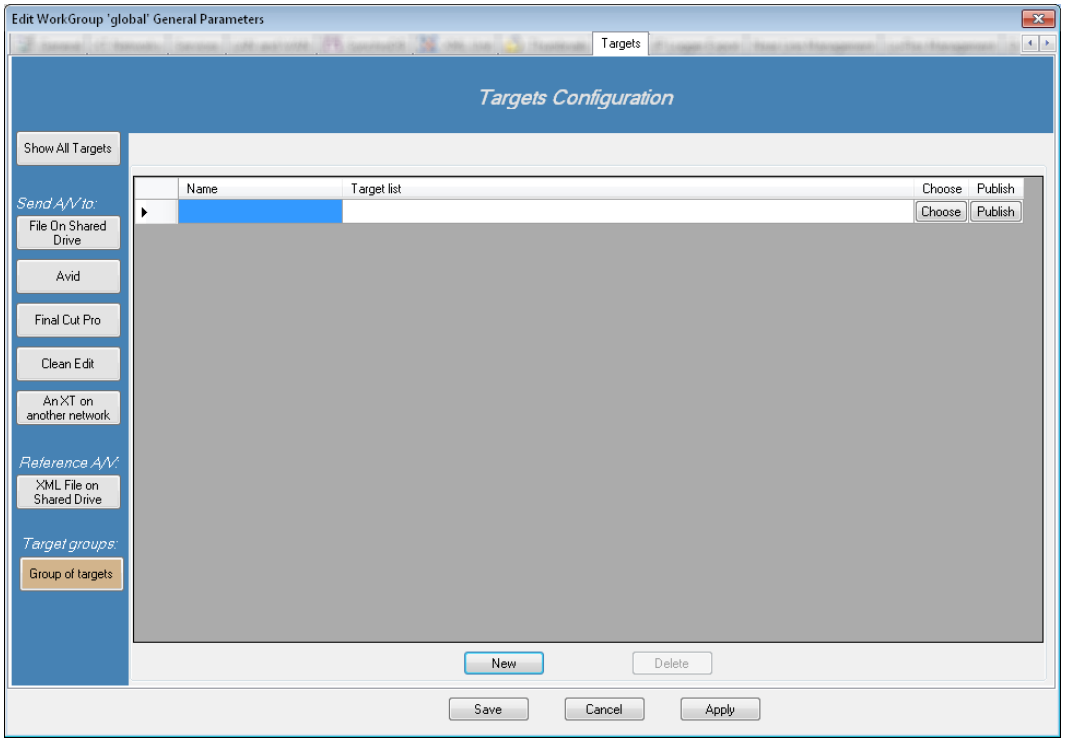
This king of target is a list of previously defined targets. It allows, in one operation for the IP-Director operator, to send clips to several targets.

Note

Target creations are required before configuring any Group of targets.

Create a new Group of targets

Click on the ‘New’ button to add a new group. A line is added in the unit list.



Name:

Give a name to the group of targets. This name will appear in the IP-Director ‘Send To’ menu. It is used to identify the target in the IP-Director interface.

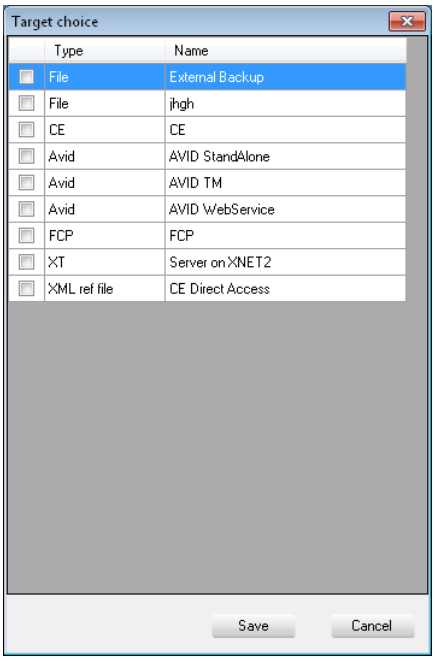
Target list:

This field displays a summary of the chosen targets, it can’t be edited.

Select the targets using the Choose button.

Choose:

Pressing the Choose button opens a pop-up window:



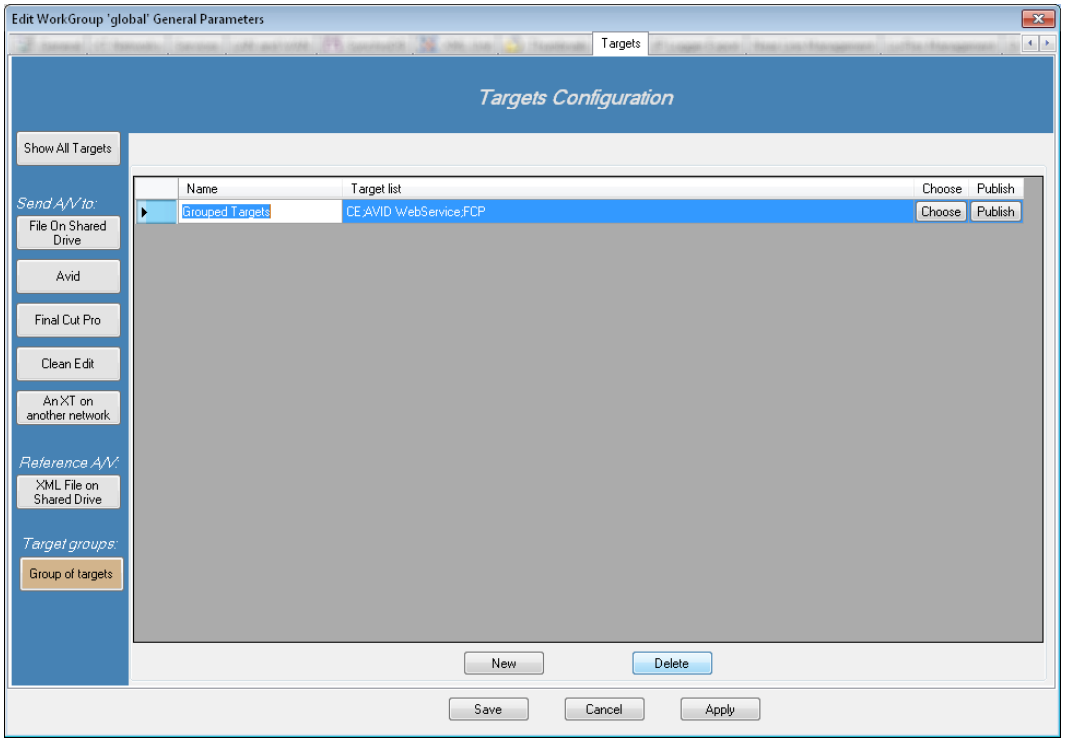
Simply check boxes in front of each wanted target and press Save.

Publish:

If this Group of targets must be visible to other groups, click on the Publish button and a new window pops up to allow you to publish to different groups. Select group(s) in the left side and click the arrow '>' to push group(s) to the right side. Finally, click on Publish.

Delete a Group of targets.

Click on the line header to select it.



Click on the ‘Delete’ button.

Note

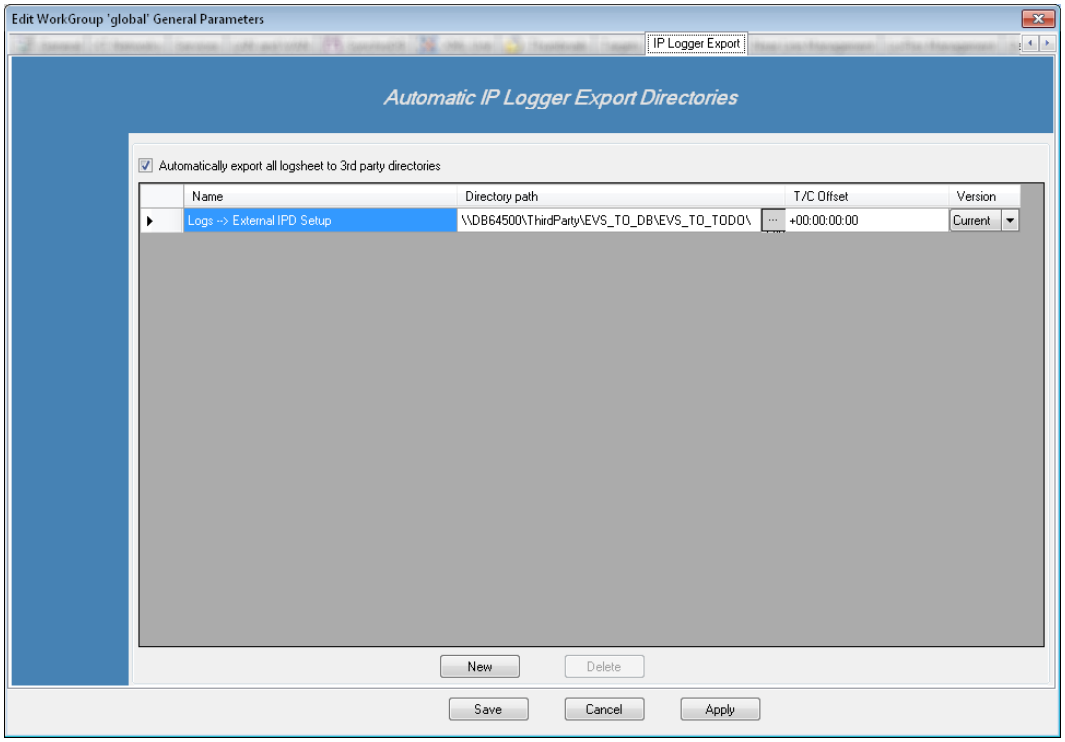
Once all targets and groups are configured, click on the Apply button in order to validate all the created targets.

If you press the ‘Show All Targets’ button, a target summary is displayed.

3.10.10 IP Logger Export Configuration

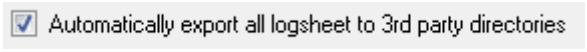
This tab should be used to define and configure the Log Export directories available on the network where logs, logsheets and modifications are sent as XML files.

Select the IP Logger Export tab.



Automatically export all logsheets to 3rd party directories:

Export all logging operations done on every new log sheet that will be created in the IP-Director workgroup.



If this option is disabled and the **Export Destination Directory** is defined, the IP-Director operator manually decides which logsheet will be exported. During the logsheet creation, this option is available inside the Step1 of its properties. Once the creation is completed, the option cannot be changed.

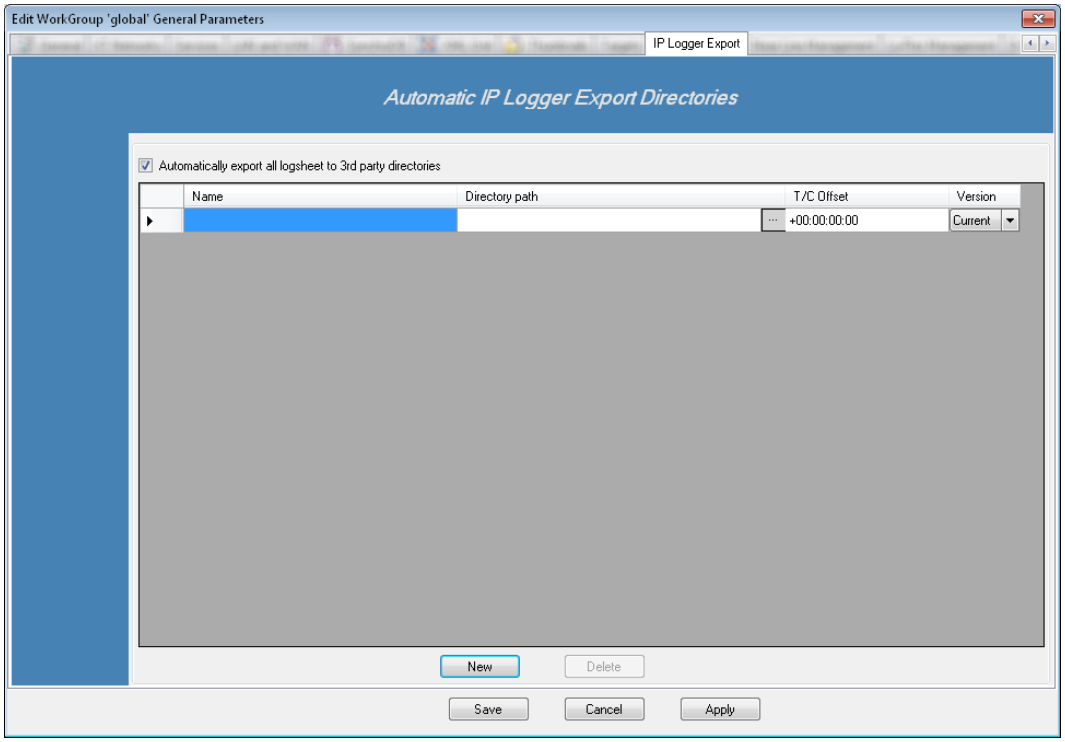
Please refer to the Logsheet Creation chapter in the **IP-Director user's manual.**

Note

Please contact EVS staff for additional information about third Party features.

Create a new IP Logger Export directory

Click on the ‘New’ button to add a new directory. A line is added in the list.



Name:

Click in the ‘Name’ column and give a name to the IP Logger Export Directory.

Directory path:

Select in the list or browse the network to define the folder where logging XML files are sent to Third Party systems or to other IP-Director workgroups.

Note

Only UNC DNS name or IP address path are valid. (Ex: \\ThirdParty\LOGfromEVS\, \\1.1.1.100\LOGfromEVS\)

No local paths are valid.

Note

The directories must be shared with full access control.

T/C Offset:

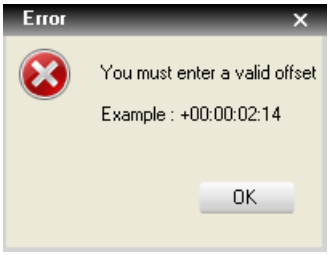
Enter a valid Timecode value. All logs exported in the specific directory will be updated with the new offset Timecode.

The aim of this parameter is to allow exporting logs on an external setup which is located on a different time zone.

Default value: +00:00:00:00 (Original log Timecode is kept)

Note

If the TC value entered is not correct, an error is displayed:



Version:

Select the export version between “Current” and “Legacy”.

Since IP-Director V5&6, the logging XML format has changed. This new ‘standard’ is the **Current** one. The old ‘standard’ is the **Legacy** one

If it’s planned to export log with an IP-Director V4 destination setup, it is mandatory to select “Legacy”.

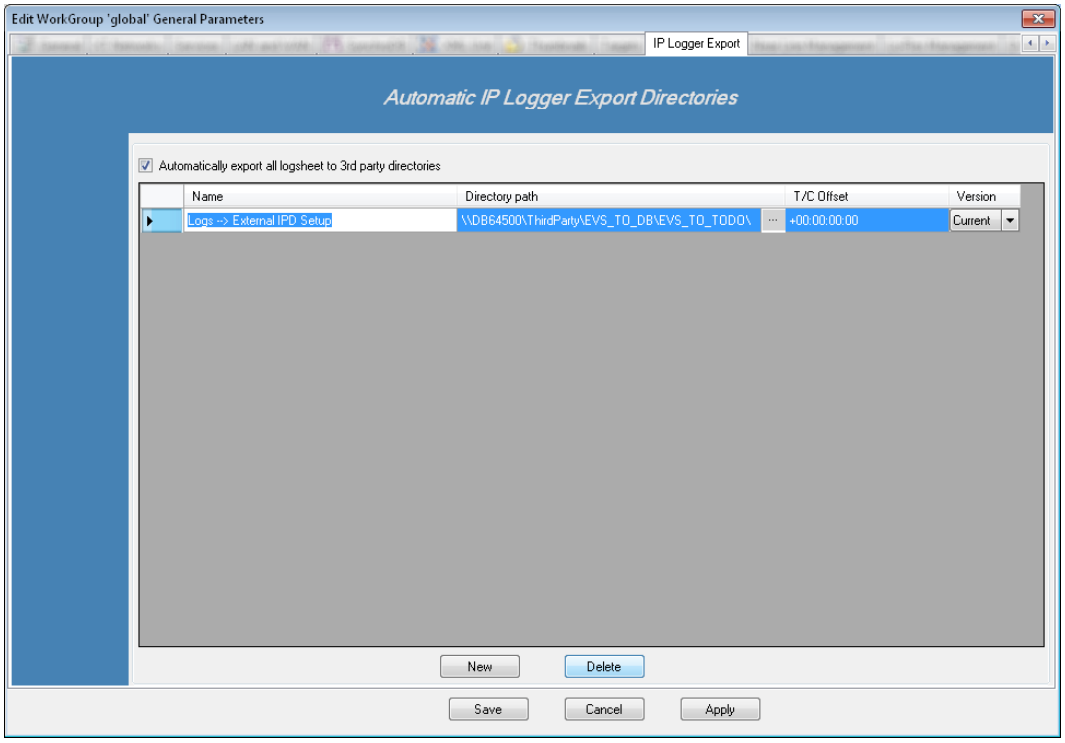
For an IP-Director V5 destination setup, it is strongly recommended to select “Current”.

The “Current” version of logging xml files contains XML version tags:

```
<?xml version="1.0" encoding="utf-8" ?>
- <Logsheet_With_Log Version="2.0.1">
  - <Logsheet Version="2.0.1">
      <Name>test V5</Name>
      <Date>23-Jul-2008</Date>
      <TCTable>0</TCTable>
      <ClipLogAssociation>1</ClipLogAssociation>
      <Description />
    - <Recorders>
        <Recorder SerialNumber="25660" LSMID="0" UmID="A1boOedX" Camera="A" PreviewRecorder="true" AssociationType="0" />
      </Recorders>
    - <MetadataDefinition Version="2.0.1">
      - <LogsheetProfiles>
        - <LogsheetProfile>
            <Name>Template Profile</Name>
            <Description />
            <LogsheetProfile GUID="73d8ab3540f54571b7161c687d925666">Template Profile_UF</LogsheetProfile>
            <AutomaticKeywordProfile GUID="6406a5f37ed742528dda366e4aff84ab">Template Profile_AK</AutomaticKeywordProfile>
          </LogsheetProfile>
        </LogsheetProfiles>
      - <Profiles>
        - <Profile GUID="73d8ab3540f54571b7161c687d925666">
            <Header>
```

Delete An IP Logger Export directory.

Click on the line header to select it.



Click on the ‘Delete’ button.

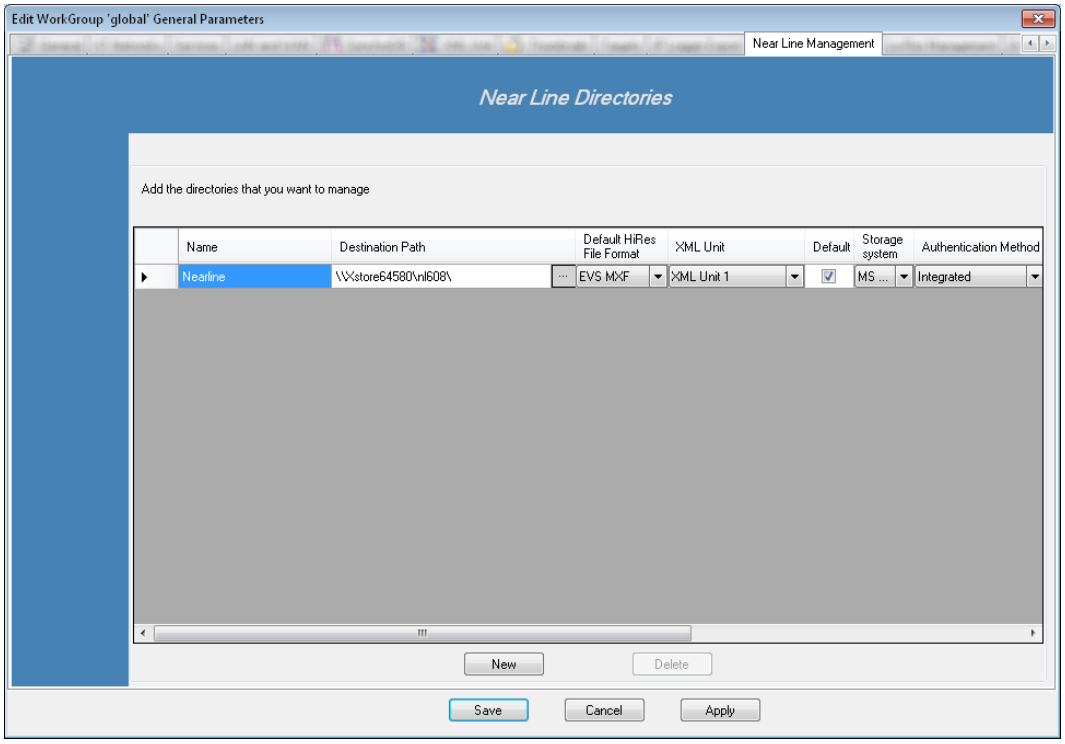
Note

Once all directories are configured, click on the Apply button before configuring another tab.

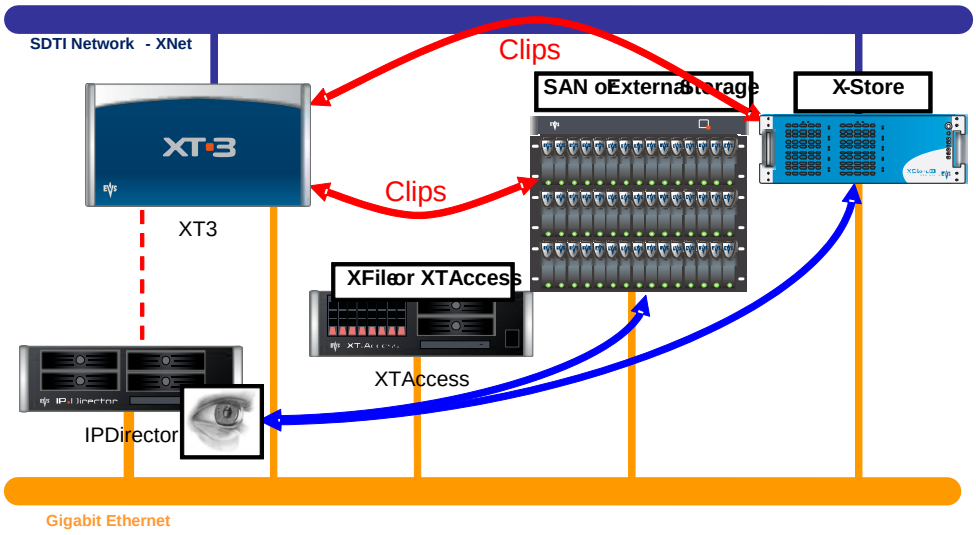
3.10.11 Near Line Management Configuration

This tab should be used to define and configure the Near Line directories available on the network where clips will be managed by IP-Director.

Select the Near Line Management tab.

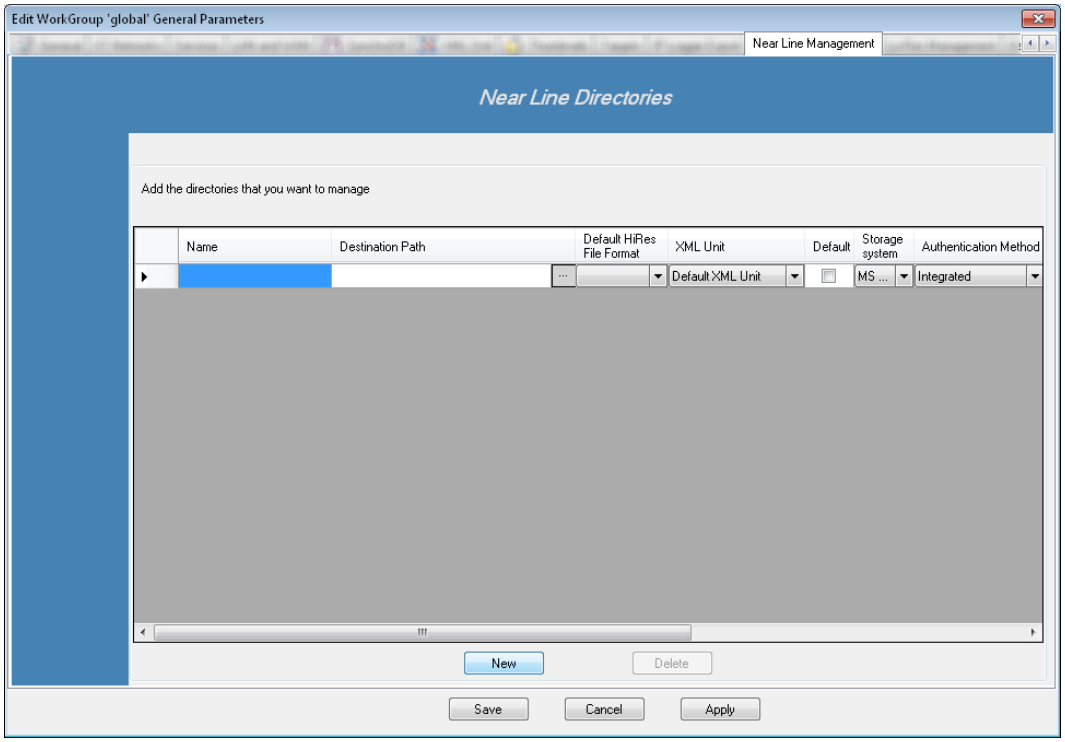


The aim of the Near Line management is to scan directories where clips are stored outside the server and waiting for an eventual restore. The clips are stored on a storage system which is referred to as a Nearline Directory.



Create a new Near Line Directory

Click on the 'New' button to add a new folder.



A new line is added in the directory list.

Name:

Click in the 'Name' column and give a name to the directory. This name will appear in the IP-Director 'Send To' menu. It is used to identify the Near Line directory in the IP-Director interface.

Destination Path:

Select in the list or browse the network to define the folder where the files are sent, scanned or restored from. This folder should be a UNC path to the network locations where the folder exists.

Note

Only UNC DNS name or IP address path are valid. (Ex: \\MachineName\Target\, \\1.1.1.100\Target\)

No local paths are valid.

Note

Be sure this folder is shared with full access rights.

Important

It is NOT advised to specify an XFile or IPDrive disk as a static Nearline Directory. This is because the management of removable disks is managed dynamically by the IP Drive service.

Default HiRes File Format:

Choose the MXF EVS, the OP1A MXF XDCAM, QuickTime Movie, Quicktime Reference, Avid MXF OPAtom, DV-DIFF or OP1A MXF SMPTE format. It defines the type of files which **will be created by the XFile or XTAccess/Xsquare system**.

Note

As the Near Line storage can be used as a target, it is mandatory to define a default file format for backup operations.

XML Unit:

Select the XML unit used to perform the backup and restore job (using the SDTI or the Gigabit network). Choose one specific unit in the list if the job must be performed by the XFile or an XTAccess/XSquare system where this XML unit is located (the XML unit is linked to the Near Line directory).

For example, if the Near Line directory is \\XSTORE64580\target, it should be interesting to link the XML unit to XSTORE64580 to be sure this XStore perform the clip backup. This will avoid network transfer between XFile and XStore on the IP network.

Default:

If the directory is to be defined as the default directory for all workstations, check the box in the default column of the unit.

This directory will be displayed on the top of the list in the IP-Director ‘Send To’ menu. It will also be the default Near Line directory for drag-n-dropping clips on the new ‘File’ tree available the IP-Director database explorer. Please refer to the IP-Director User Manual for details.

Storage system:

Define the family of the Near Line storage operating system:

- MS Windows for all OS Windows based. An auto-notification of files is received on this kind of storage.
- Others for all other OS (Linux, UNIX…). Manual refresh needed for incoming files and notification only available for transfer.

Note

The auto-notification is not supported with OS non-Windows based.

The EVS SAN storages are considered as “Others” Storage system if they were not produced or updated with a SAMBA OS version 3.0.33 (or higher). Please contact EVS Staff for further information.

Authentication Method:

This the method used by the SynchroDB to scan and receive notification from the Near Line Storage.

- Integrated: The IPD and Near Line network is built with a common user (administrator) on every workstations and storages.
- User/Pwd: The Nearline storages have a different user and password than the IPD Network. SynchroDB services should be identified on the storage system with this user and password.

Note

The EVS IP-Director workstations are all provided with a common Windows user called DVB (without password and member of the administrator's group). It highly simplifies the network sharing. Thus, if the Near Line directory is located on EVS storage (X-Store, XFile, IP-Drive…), the Authentication Method should be set to "Integrated".

Username:

Specify the username for the authentication method User/Pwd. If the authentication method is set to "Integrated", the username is not taken into account.

Password:

Specify the password for the authentication method User/Pwd. If the authentication method is set to "Integrated", the password is not taken into account.

Master:

This option generates and updates XML Metadata files on the nearline:

- If checked, the metadata of clips are updated on the nearline.
- If unchecked, the metadata of clips are modified in the IP-Director database only.

Note

Typically, if two IP-Director workgroups manage the same nearline, one should be 'Master' and the other not, avoiding update conflicts.

Playlist Backup Type:

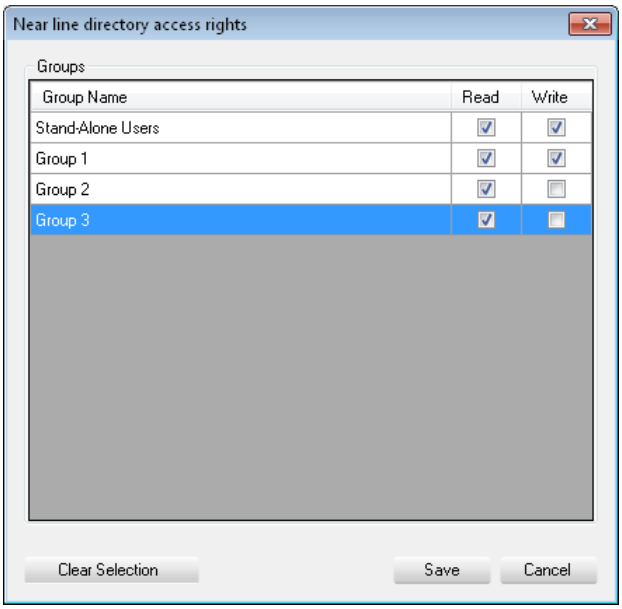
Define the type of the backup for the playlist and timeline.

- EDL and Clips: XTAccess/XSquare transfers all the clips and creates an EVS EDL file which references all playlist and timeline elements.
- EDL and flatten files: XTAccess/XSquare creates an EVS EDL file which references all playlist and timeline elements and concatenates them in a single media file on the Nearline storage.
- EDL only: IP-Director creates an EVS EDL file which references all playlist and timeline elements.
- Flatten file only: XTAccess/XSquare concatenates the playlist or the timeline in a single media file on the Nearline storage.

Access Rights:

Once group and user rights are defined inside the User Manager application, the directory access rights can be defined.

Press the white button to open the rights configuration:



Check all wanted Read or Write boxes for each group.

- Read:

Checking a 'Read' box gives access to the visibility of the directory inside IP-Director (Restoring clips is allowed).

- Write:

Checking a 'Write' box allows backup of clips from a server to a Near Line directory (Reading is automatically allowed).

Note

Administrator accounts can Read and Write in all directories even if the rights are not configured.

- Clear Selection:

Push the button to clear all checked boxes.

Press **Save** to record rights and close the window or **Cancel** to forbid the modifications.

Cluster:

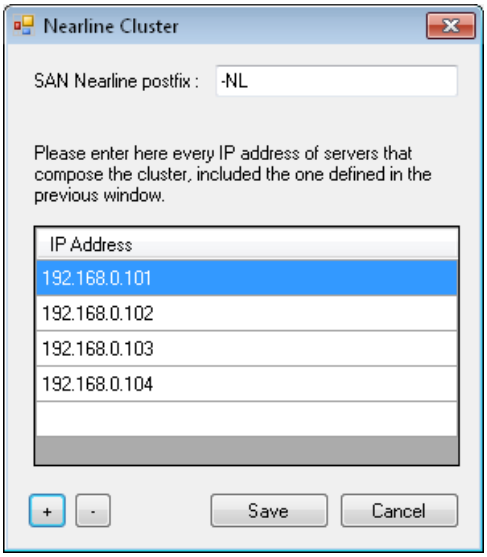
Note

The Nearline Cluster configuration is designed for Storage Area Network (SAN).

The configuration requires information provided by EVS Staff related to each specific project.

By default, keep this configuration window empty.

Press the white button to open the cluster configuration:



- San Nearline Postfix:

  Enter the postfix (for e.g. –NL) added to the nearline shared path name.

  A hidden shared path is created on the SAN server in order to disable the cache on client workstations which browse growing files. It avoids browsing problems in the software player with this kind of files.

  Thus normal shared path (\\Sanserver\Sharedpath) is used for standard browsing and the hidden shared path (\\Sanserver\Sharedpath-NL) for growing file browsing.

- IP Address:

  List all the server physical IP addresses (members of the SAN Cluster) in order to receive all file notifications.

  Once a SAN is built with several servers, a virtual shared path is configured and gives a single common access to the storage. This virtual path is thus entered in the Destination Path field.

  The notifications described previously in the **Storage System** section are only received from one member of the cluster if the all IP addresses are not listed.

  Enter the first server IP address in the default field.

  Press to add a new line and enter the second server IP address.

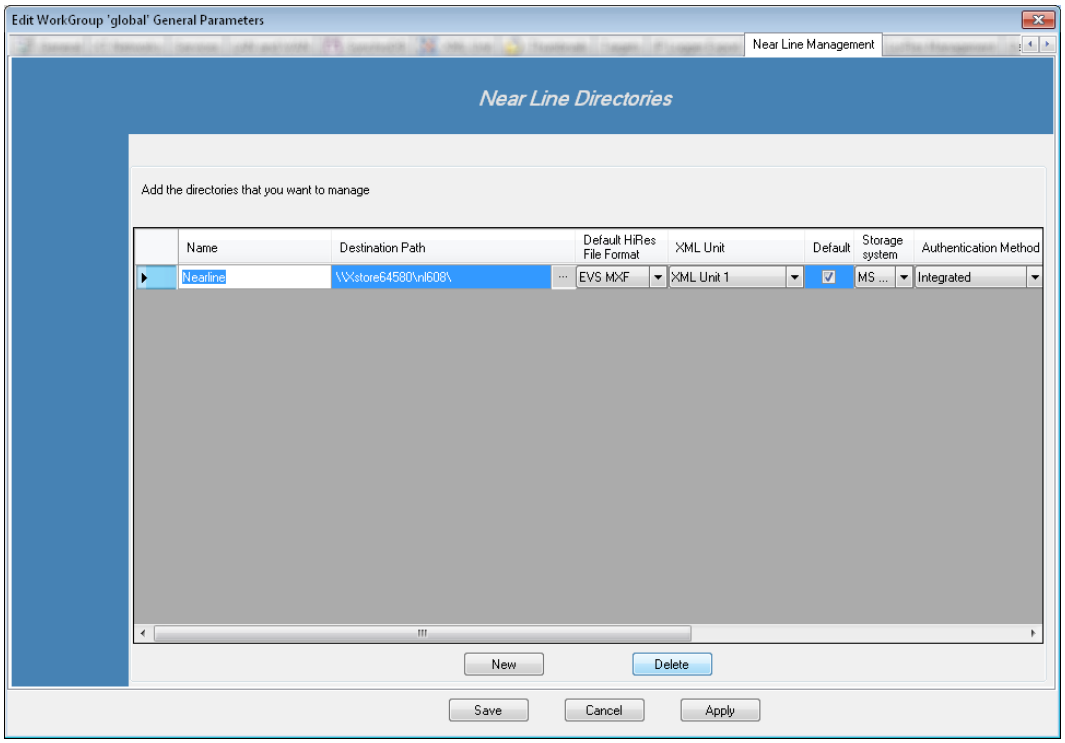
  Repeat the steps till all IP addresses are entered.

  Select a line and press to delete it.

  Finally, press Save to record the Cluster configuration.

Delete a Near Line Directory.

Click on the line header to select it.



Click on the ‘Delete’ button.

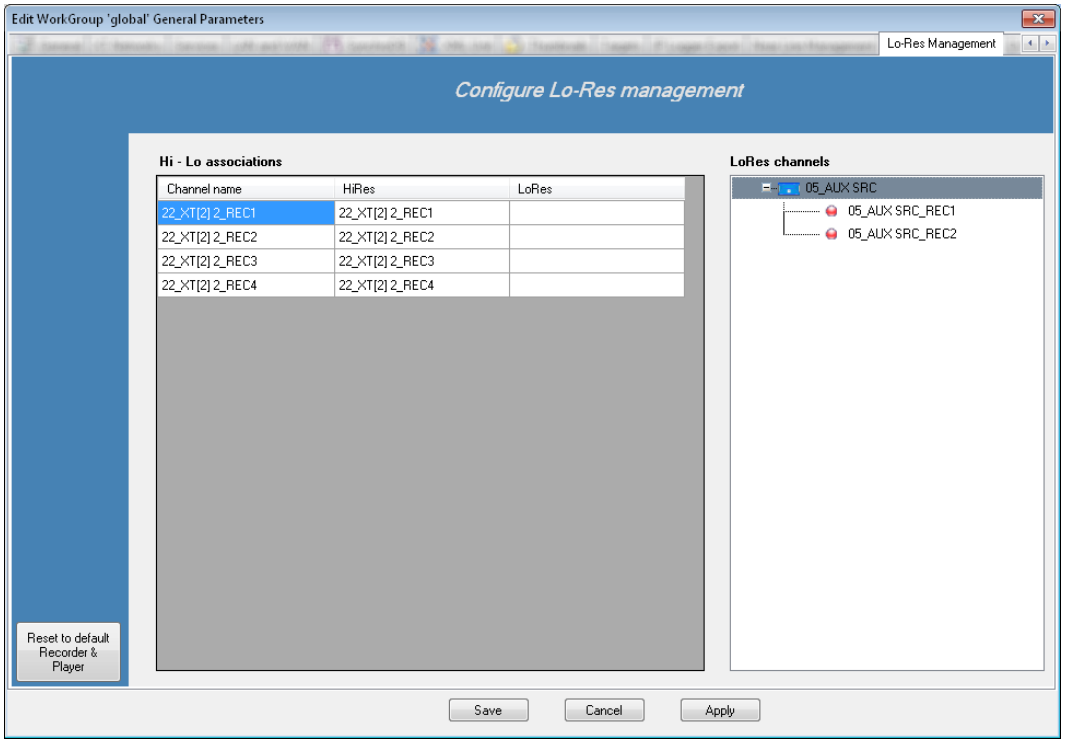
Note

Once all Near Line directories are configured, click on the Apply button before configuring another tab.

3.10.12 Lo-Res Management Configuration

This tab should be used to define and configure the association between HiRes and LoRes channels available on the SDTI Network.

Select the LoRes Management tab.



Hi – Lo associations:

Depending on the previously configured logical networks, the table lists all HiRes recorder available on the physical network.

LoRes channels:

Depending on the previously configured logical networks, the table lists all LoRes recorder available on the physical network.

Note

Please refer to the XT Networks configuration chapter for details.

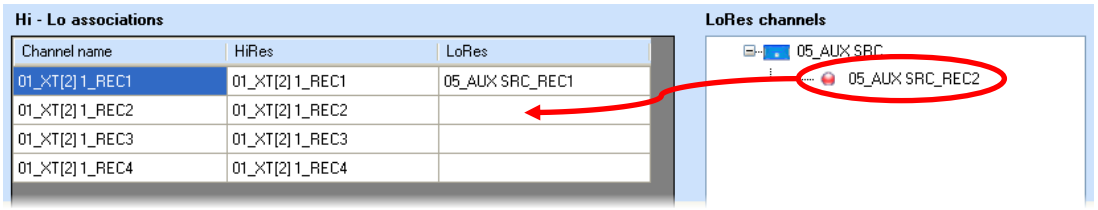
Defining the XT Networks is mandatory to configure the LoRes Management.

Note

All services must be stopped in order to configure the LoRes Management.

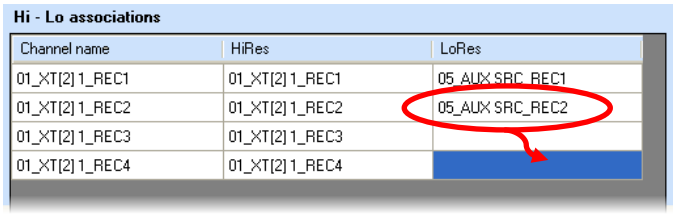
How to associate a LoRes channel to a HiRes channel?

Drag LoRes channels from the list and drop them in the table to create the associations:



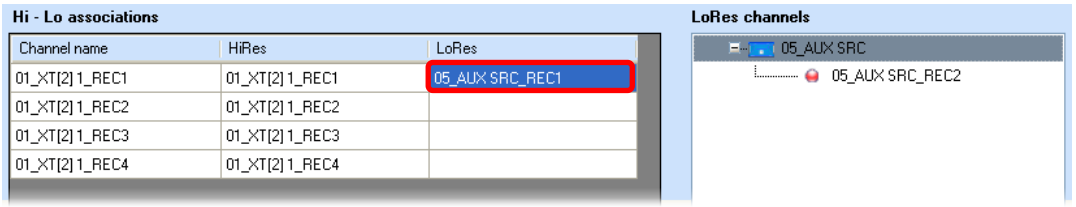
How to modify the LoRes channel associated to the HiRes channel?

Drag the LoRes channel from the LoRes column and drop them to its new place to modify the association:

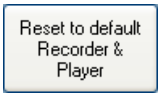


How to dissociate a LoRes channel and a HiRes channel?

Select the LoRes channel in the LoRes column and press the **DELETE** key to send it back to LoRes channels list:



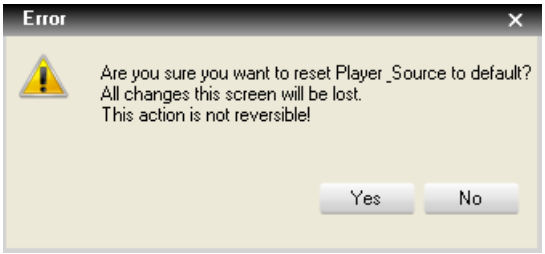
How to reset all the associations between HiRes and LoRes channels?



Press the “Reset to default Recorders & Players” button.

This button is not displayed when services are running.

This warning window pops up:



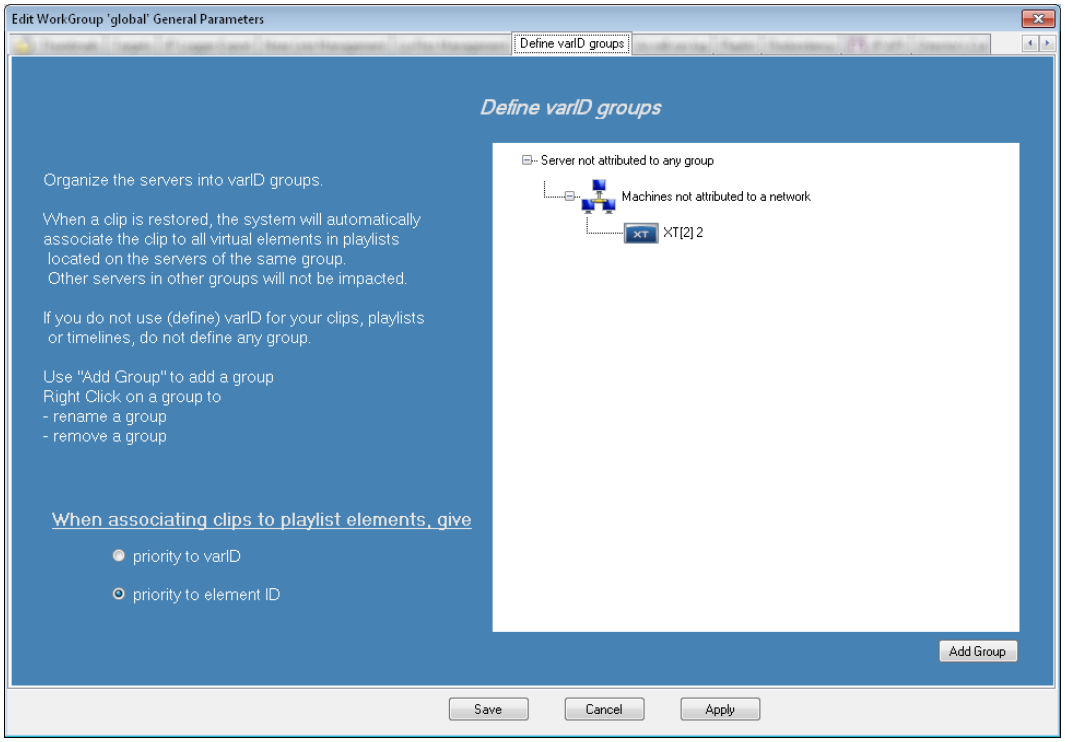
All LoRes channels are removed from the LoRes column. All server channels are removed from their logical networks and this action is not reversible even if Cancel is pressed!

3.10.13 Define VarID Groups Configuration

This tab should be used to organize the EVS servers into different varID groups. These groups delimit the server zone where a duplicated clip can be found in order to find a best element for a playlist.

An engine is running as a background task and is always optimizing playlists in order to play a maximum of local online elements. It also discovers restored clip and replaces virtual playlist elements matching by the varID. Thus, it could be necessary to define server groups to delimit the engine search.

Select the Define varID groups tab.



When associating clips to playlist elements, give:

- Priority to varID

  The engine replaces distant clips in playlists by local clips regarding the varID inside one of the defined groups.

- Priority to element ID

  The engine gives priority to the element ID within playlists when replacing virtual element by a clip. VarID is no lore used.

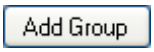
  This mode is the default behaviour.

Define varID groups

This zone is used for create and manage varID groups.

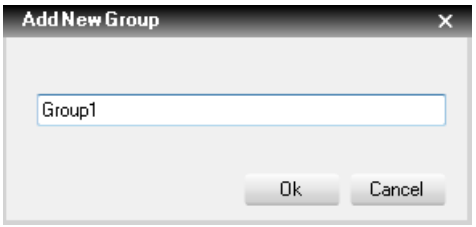
By default, the logical networks (defined in the **XT Networks** tab) are listed in the 'server not attributed to any group' branch. All servers are thus considered belonging to the same varID group.

How to create a new var ID group?



Press the Add Group button.

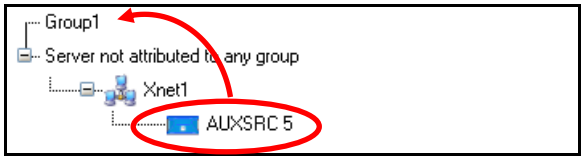
This window pops up:



Enter the group name and press Ok.

How to insert a server in a varID group?

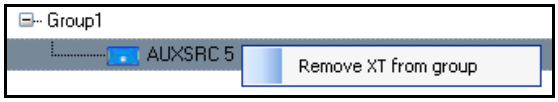
Open the logical network branches to display servers. Select the server and drag & drop it on the varID group name.



Once all servers are attributed to groups, the 'server not attributed to any group' branch is no more displayed.

How to remove a server from a varID group?

Right click on the server name and select 'Remove XT from group'.

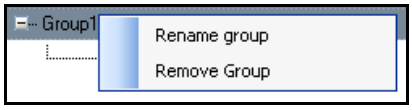


The server is brought back to its original position in the 'server not attributed to any group' branch.

How to rename or remove a group?

Right click the group name and select 'Rename group', a window pops up.

Edit the name and press ok.

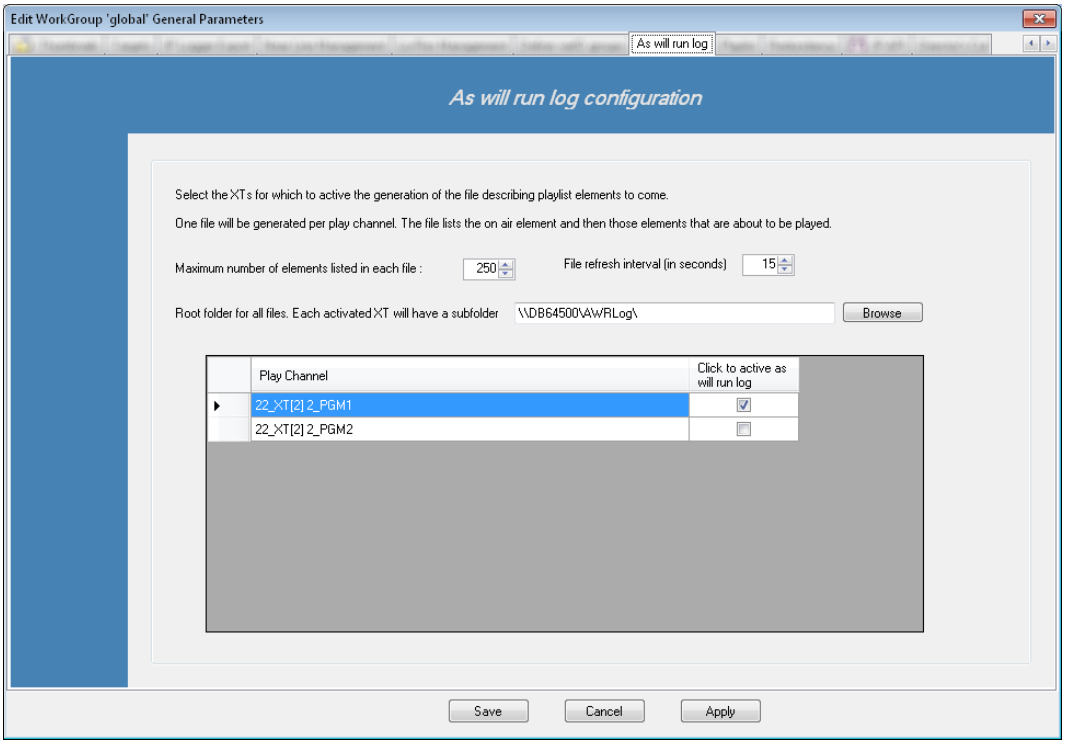


Right click the group name and select 'Remove group'. The group is no more displayed and all servers are brought back to their original places.

3.10.14 As Will Run Log Configuration

This tab should be used to configure the As Will Run Log feature. The process, once activated per player channel, generates text file(s) containing elements that are about to be played.

Select the “As will run log” tab.



Maximum number of elements listed in each file:

Define the maximum number of future elements that will be played on each PGM. This limitation avoids filling files with an infinite number of lines due to a playlist containing an infinite loop.

Once an element is finished, it is removed from the list. The list only displays the future, not the present and the past.

Default: 250 (lines)

File refresh interval:

Adjust the interval time (in seconds) between two updates of files.

Default: 15 (seconds)

Root folder for all files:

Define here the folder on the network where files are created and updated or click on the browse button [...] to select the folder. This folder should be a UNC path to the network locations where the folder exists.

Note

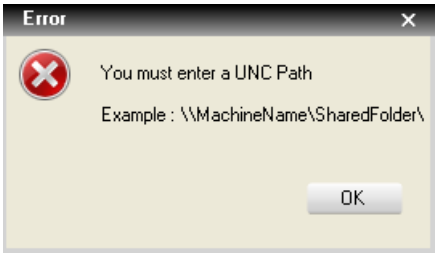
Be sure this folder is shared with full access rights.

Note

Only UNC DNS name or IP address path are valid.

No local paths are valid.

A message appears if the selected path is not valid:



A subfolder is created per server:

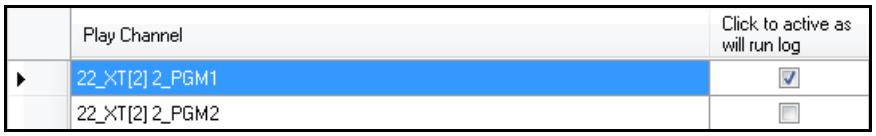
XXXXX (XXXXX=Server Serial Number)

A file is created for each monitored PGM within the subfolder of its server.

XXXXX_PGM**Y**.TXT (XXXXX=Server Serial Number and Y=PGM Number)

Selection of PGM monitored by the As Will Run Log:

Check PGM boxes to activate the process.

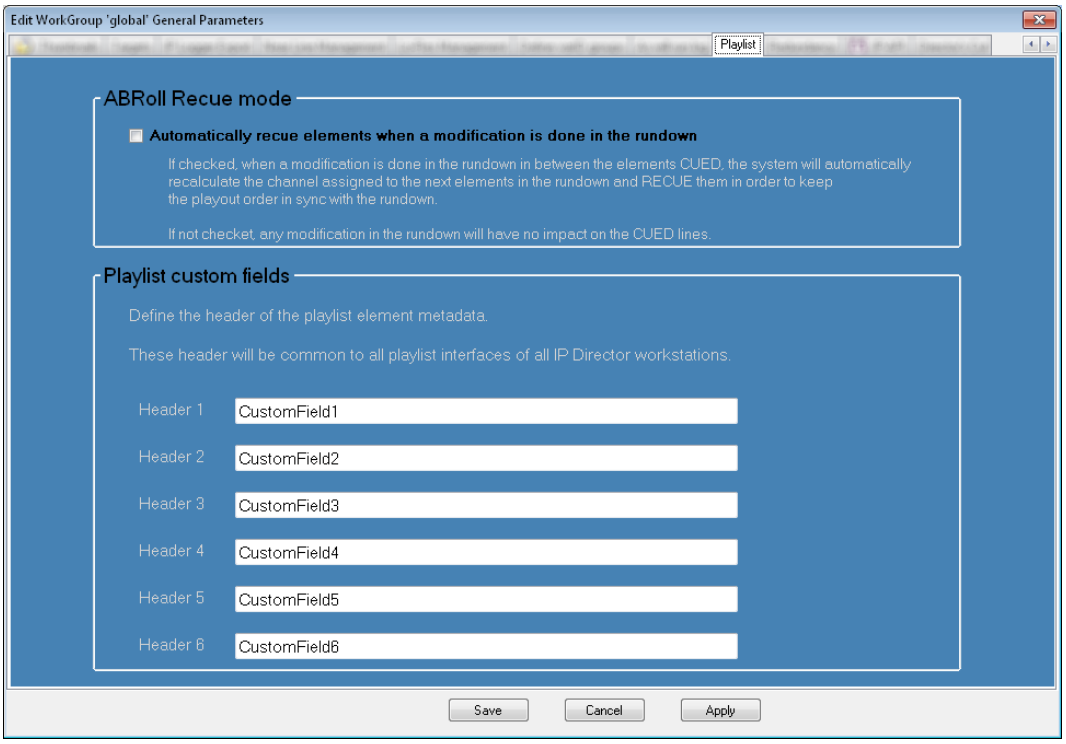


Note

Once the As Will Run Log settings are configured, click on the Apply button before configuring another tab.

3.10.15 Playlist Configuration

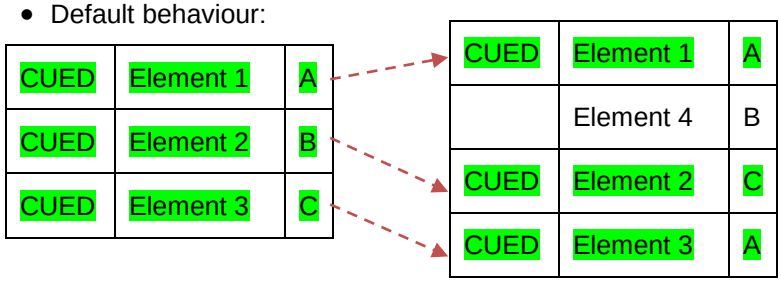
This tab has two separate zones which impacts different settings. The first zone is dedicated to an ABRoll Recue mode and the second one defines 6 custom fields for third party usage in a Playlist.



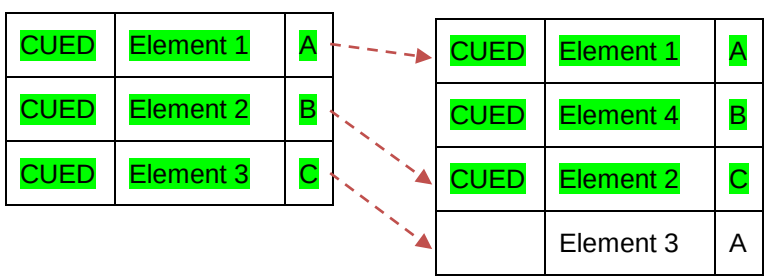
ABRoll Recue mode:

This option allows cuing automatically an ABRoll element inserted by a NRCS system between two elements which are already cued.

- Default behaviour:



- Behaviour when the option “Automatically recue elements when a modification is done in the rundown” is checked:



Playlist custom fields:

These settings are designed for **a third party usage** of the playlist metadata. The external Media Asset Management systems (MAM) import playlist in the IP-Director database using the EVS-to-DB job (IP-Scheduler) or the Webservices (IP-API). In these imports mode only, playlists can receive 6 custom fields. This tab allows defining the 6 headers of the playlist element metadata.

Note

The playlist custom fields can't be edited or created within the main interface of IP-Director. It is limited to a third party usage only!

Note

Once the Playlist settings are configured, click on the Apply button before configuring another tab.

3.10.16 Redundancy Configuration

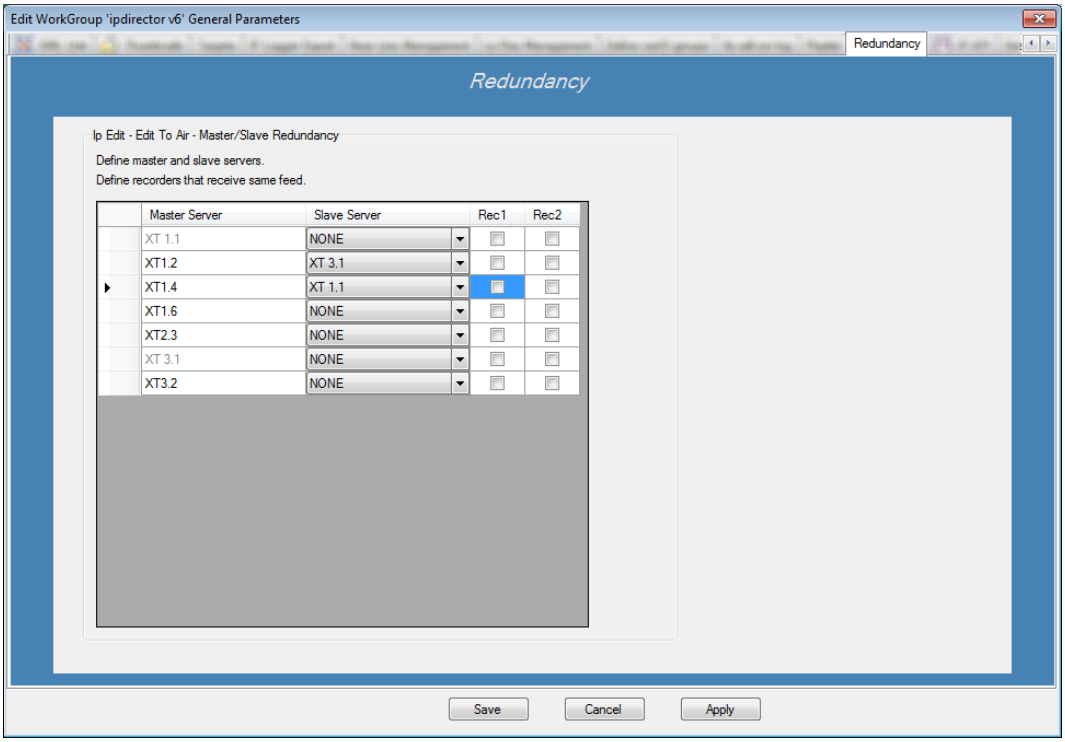
This tab should be used to configure the redundancy between two EWP servers.

On 6 channel server only, IpEdit can operate an Edit While Playout mode. Basically, PGM1&2 are used for playing the timeline live and the PGM3&4 for editing. The REC1&2 (or just REC1) are used to ingest feeds and clips.

The redundancy engine reproduces timelines, clip creations and all edits made on the Master server to the Slave server. The recording feeds REC 1&2 should be the same on both servers (Master & Slave).

Note

All services must be started in order to configure the Redundancy.



Ip Edit – Edit To Air – Master/Slave Redundancy

- Master Server:

  This list shows all 6 channels servers (not XS or XT 4 channels).

  All lines are available except the ones that contain server used as slave in another line. In this case, the line is greyed out.

- Slave Server:

  Select in the drop down menu the desired Slave server for redundancy.

  All 6 channels servers are listed except the ones already assigned slave in other lines.

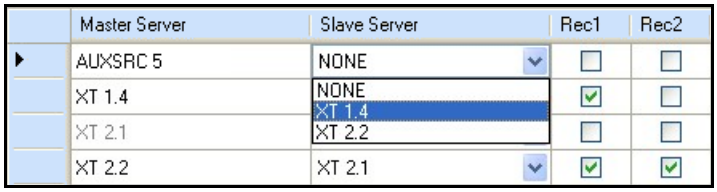
- Rec1&2:

  Define if recorders 1&2 of the server (Cam A&B) must be synchronized in term of clip re-creation.

  Once a recorder is defined, the two servers used for redundancy should receive the same feed for this channel.

How to assign a slave server to a master server?

Choose the line with the desired Master server, and assign it its slave companion. Select then the recorder channels which receive the same feed on both servers.



Only non-paired servers are listed in the Slave server list.

Once a server is selected as a Slave one, its line is greyed out.

How to unassign a slave server from a master server?

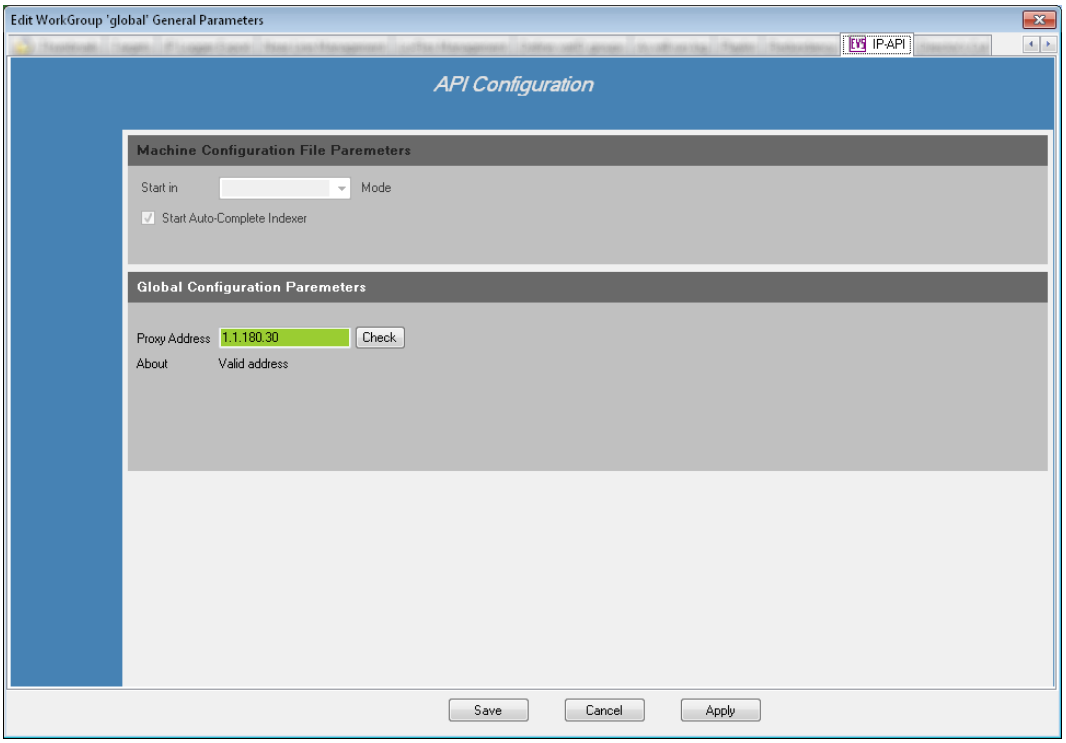
Re-open the Slave server drop down list and select NONE.

Note

Once the Redundancy settings are configured, click on the Apply button before configuring another tab.

3.10.17 IP-API Configuration

This tab is used to configure the API Webservices and the Auto-Complete engine.



Machine Configuration File Parameters

This setting is not configured from the IP-API tab.

The starting mode is different for every IP-Director or IP-API Proxy workstation and is set in the IP-API service configuration. Please refer to the **IP-API Service Management Chapter** for details.

Global Configuration Parameters

Enter the Proxy address and validate it by pressing the Check button.

By default, the database IP address is configured. It corresponds to 99% of cases since the proxy is usually installed on the database.

If the API-Proxy is installed on dedicated workstation, change the IP address.

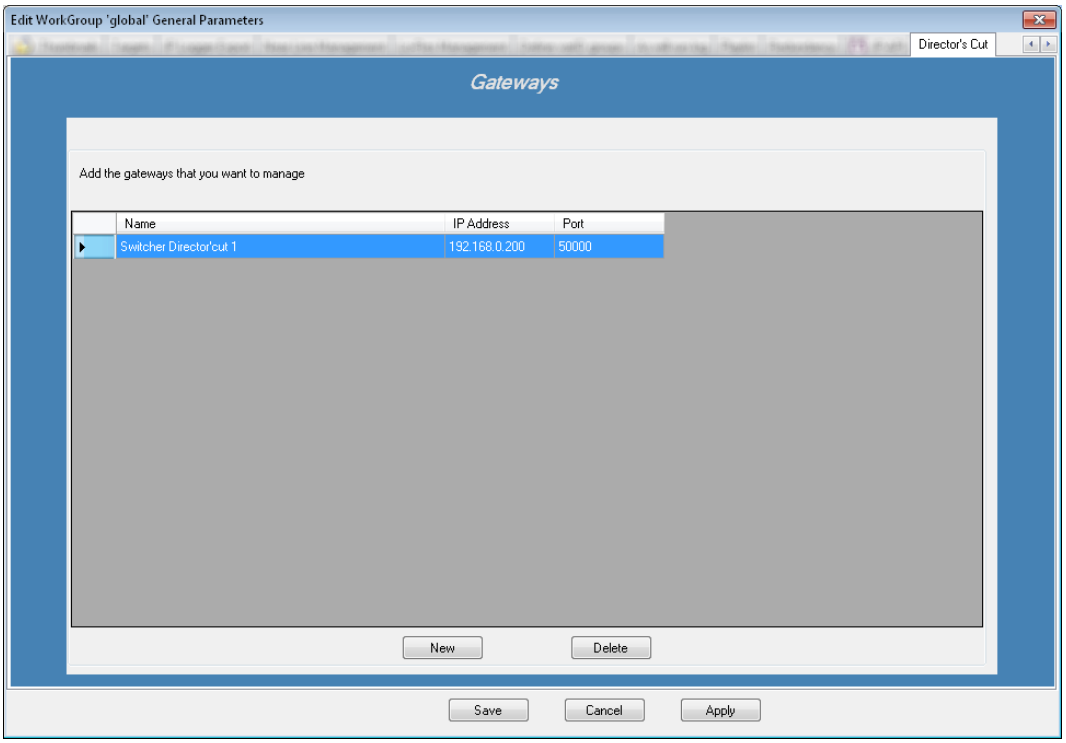
This configuration is not taken into account if only one IP-API service is running in server mode without any proxy workstation.

Note

Once the IP-API settings are configured, click on the Apply button before configuring another tab.

3.10.18 Director's Cut Configuration

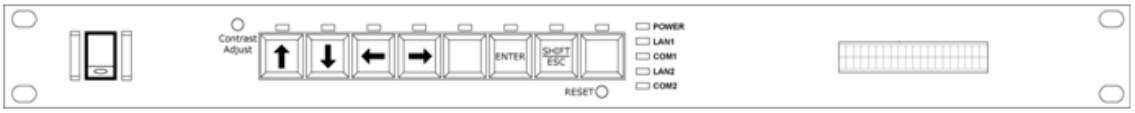
This tab is used to configure the Director's Cut Gateway (DC-100).



The DC-100 is the hardware gateway between the switcher and the IP-Director.

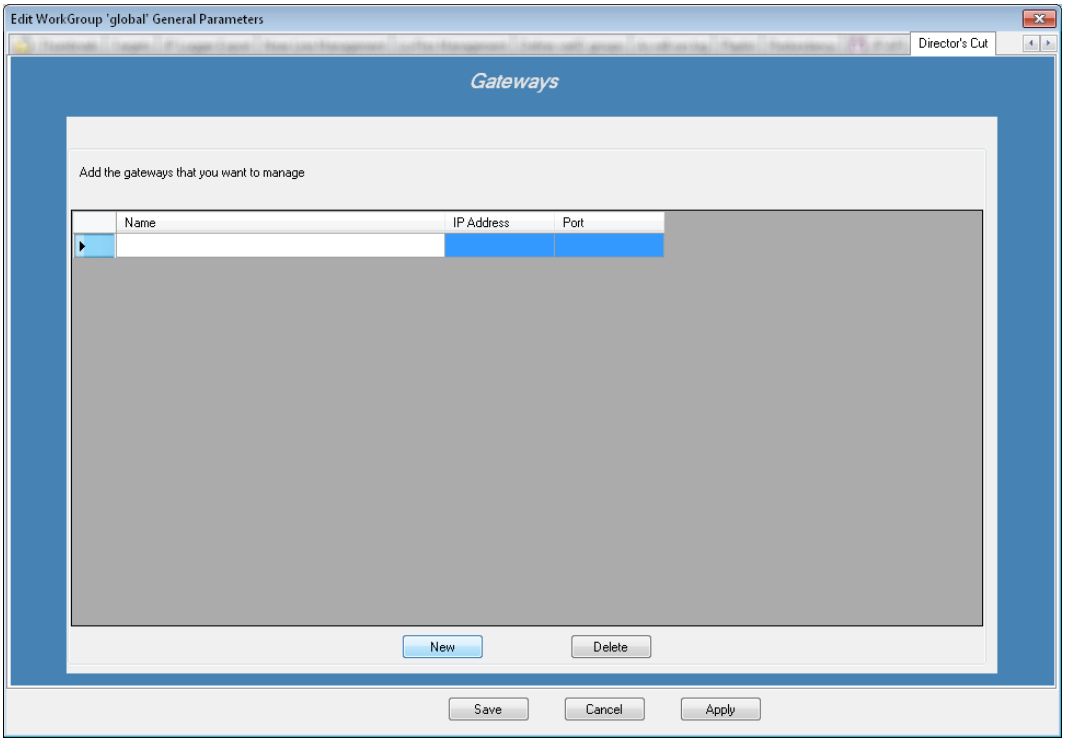
It will offer a generic XML protocol that will allow the IP-Director to speak one language that virtualize any switcher protocol.

The DC-100 is connected to an IP-Director workstation through an Ethernet link.



Adding a new Gateway DC-100

Click on the 'New' button to add a new Gateway.



Name:

Enter the name of the Gateway.

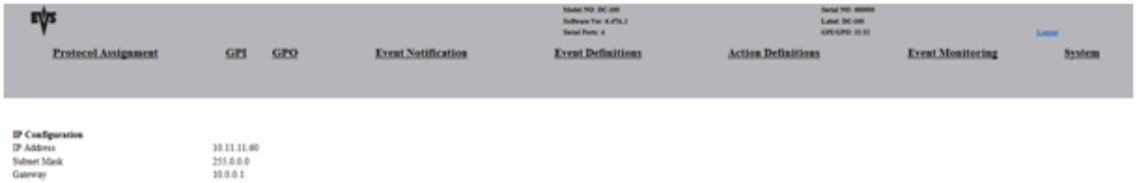
IP Address:

Enter the IP Address of the DC-100. This address is set on the LCD screen of the DC-100 and requires a restart of the unit.

Port:

Enter the port number of the DC-100.

The port number value can be found in the DC-100 configuration web page. Open a web browser (like Internet Explorer), enter the IP address of the DC-100. The DC-100 Home Page will be displayed:



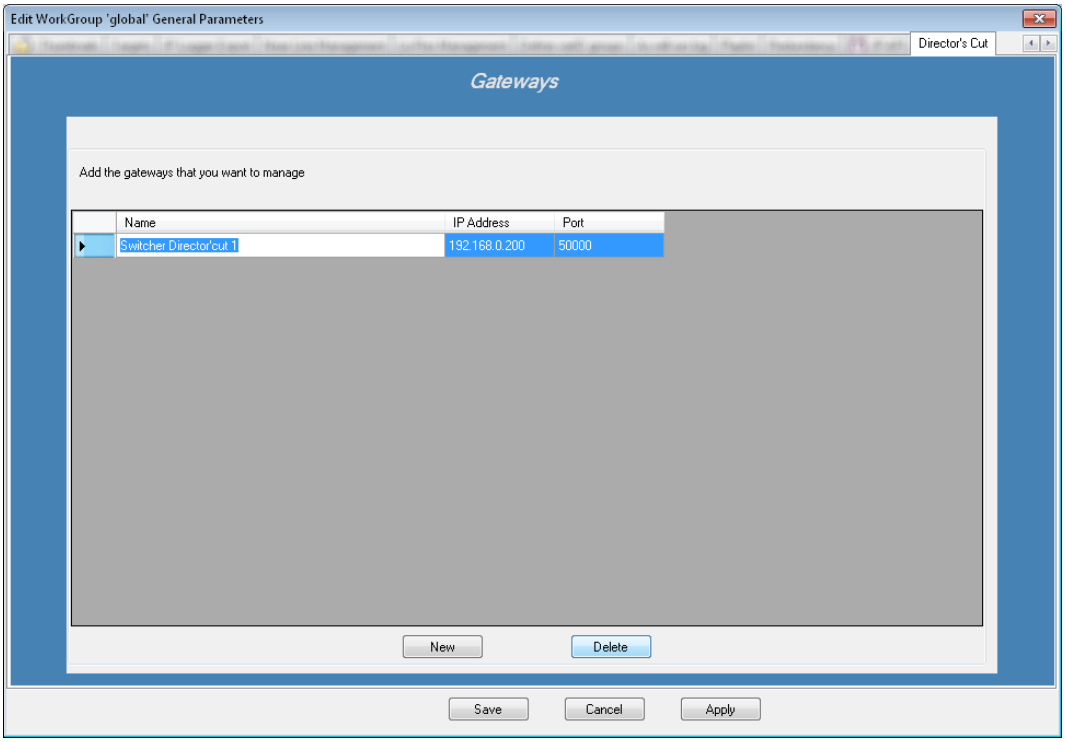
Default Value: 50000.

Note

Please refer to the DC-100 User Guide to configure the gateway unit.

Delete a gateway

Click on the line header to select it.



Click on the ‘Delete’ button.

Note

Once the Director’s Cut settings are configured, click on the Save button in order to validate the whole IP-Director configuration.

EVS Headquarters
Liège Science Park
16, rue Bois St Jean
B-4102 Seraing
Belgium

Corporate
+32 4 361 7000

North & Latin America
+1 973 575 7811

Asia & Pacific
+852 2914 2501

Other regional offices
www.evs.com/contact

To learn more about EVS go to **www.evs.com**

EVS Broadcast Equipment is continuously adapting and improving its products in accordance with the ever changing requirements of the Broadcast Industry.
The data contained herein is therefore subject to change without prior notice. Companies and product names are trademarks or registered trademarks of their respective companies.