# TECHNICAL REFERENCE
# PART 2

Version 6.1 - April 2013

IP.Director

# Copyright



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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

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# 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.

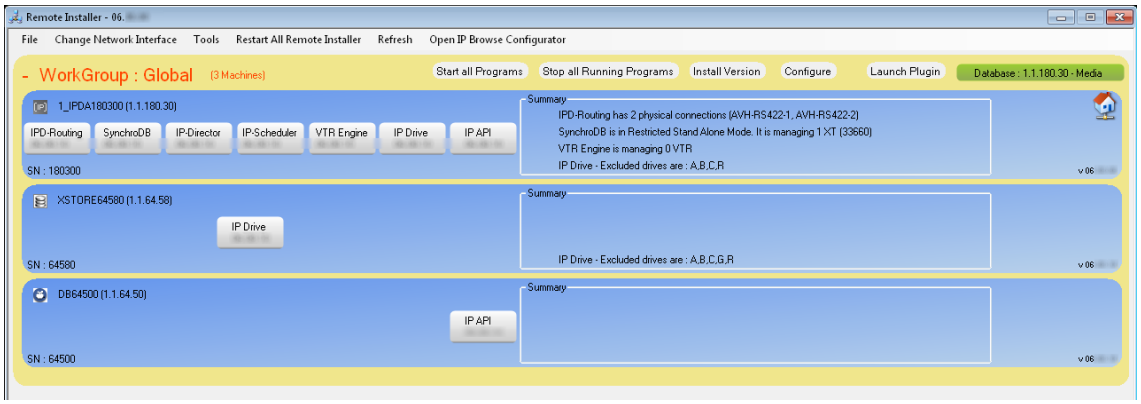
Click the section number (or the description) in the table to jump directly to the corresponding section.

| Section | Description |
|---|---|
| 5.3 | IP-Browse Installation |
| 5.3.1 | Deployment with a stand-alone installer |
| 5.3.2 | Deployment with Remote Installer |
| 5.3.3 | IP-Browse Configurator |

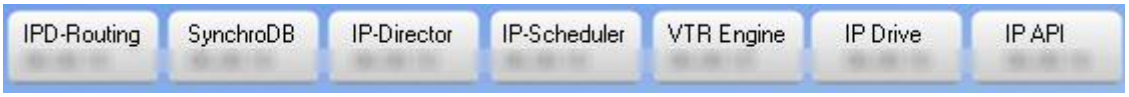
# 3. REMOTE INSTALLER Part 2

## 3.11 IPD-Routing service management

Each IP-Director workstation on the network is represented as follows:




A workstation configuration is divided in 7 modules:




Press ‘Stop All Running Programs’ to start configuring modules.


### Configure IPD-Routing

This service establishes communications between IPDirector stations and EVS Servers.

**Important**

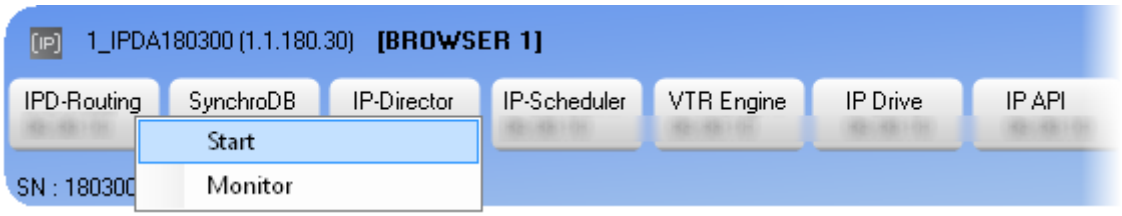
There are no more configurations in the IPD-Routing service.

All previous settings have moved to the **Configure Network Information** and **Configure Serial Communication** located in the workstation contextual menu.

Please refer to the **Workstation Contextual Menu** chapter for details.

# Start IPD Routing

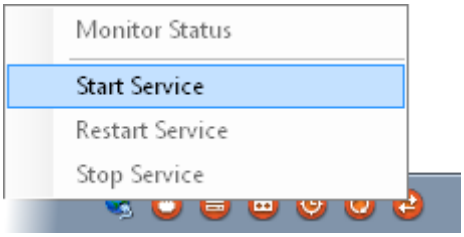
To start IPD Routing: Right click the IPD routing zone and select Start.

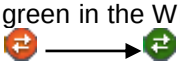



The IPD-Routing box turns green: the Routing has been successfully started.

The IPD-Routing can be also started from the icon in the Windows Taskbar.

Right click the icon and select Start.




The orange icon becomes green in the Windows Taskbar of the workstation where the service is started: 

**Note**

IPD Routing is a Windows service loaded at the Windows start up. Starting the Remote Installer displays an icon the Taskbar and gives a right-click interface to manage it.

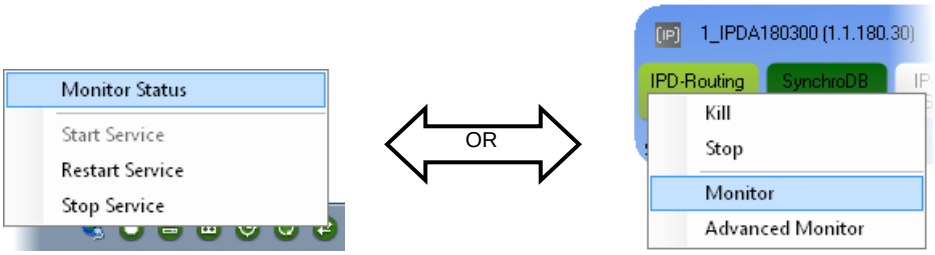

**Note**

The IPD Routing starts automatically when IP-Director is started from the Remote installer or by double-clicking on the desktop icon.

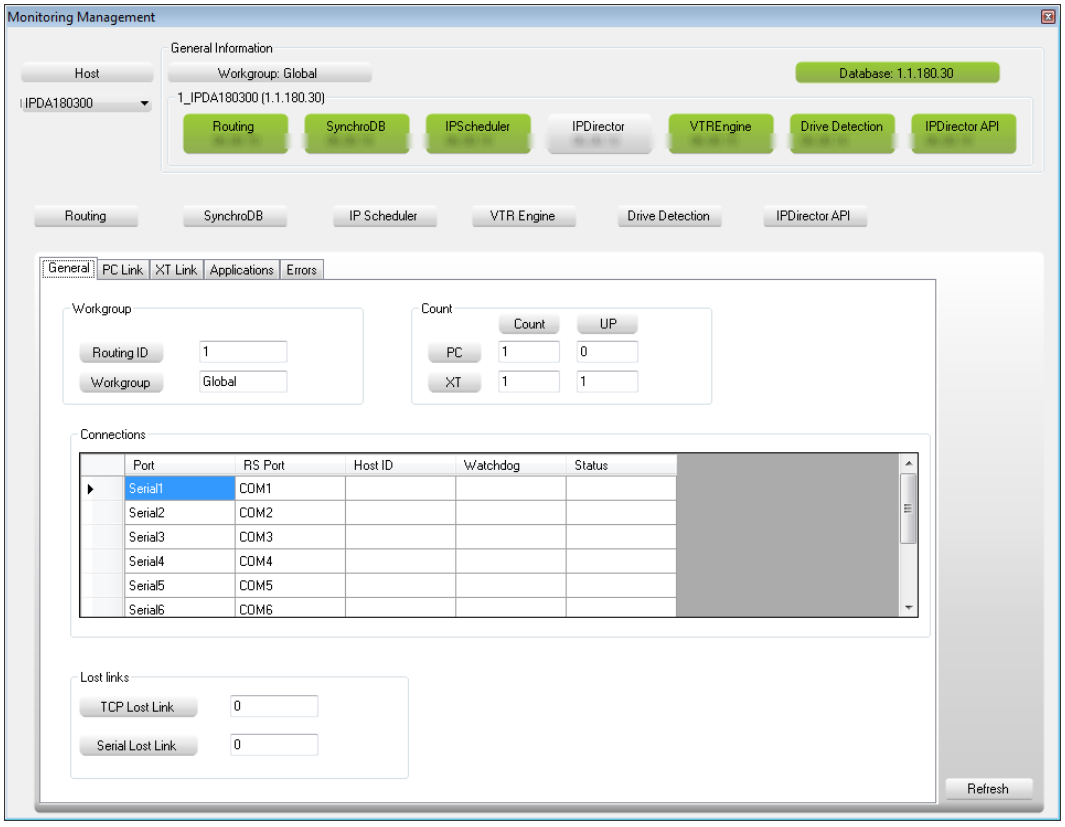
# Monitor IPD Routing

The IPD Routing service monitoring is accessible from its icon in the Taskbar and from the Remote Installer. Two kind of monitoring interface are available:

- The workstation monitoring (from Remote Installer and local icons in the Taskbar)




The window opens:




Select the tab to be monitored.

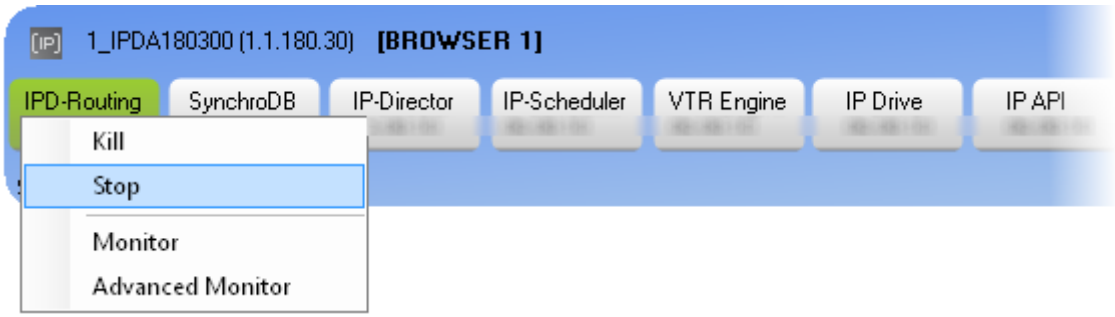
- The advanced monitoring.

By holding the CTRL key, right click the IPD Routing icon (Monitor Status) or just right click the icon within the Remote Installer (Advanced Monitor) when the service is started.

Please refer to the **Workstation Monitoring Chapter** for details.

# Stop IPD Routing

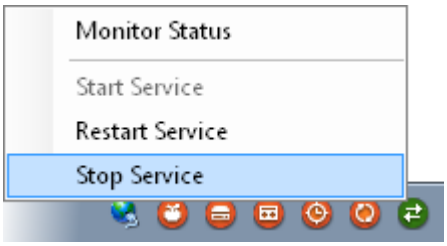
To stop the IPD Routing service, the IPD Routing zone must be green. Then, right click on it and select Stop.




'Stop' will close properly the IPD Routing service and 'Kill' will stop the IPD Routing Process. The 'Kill' must be used as a last resort if the service can't be stopped.

**Note**

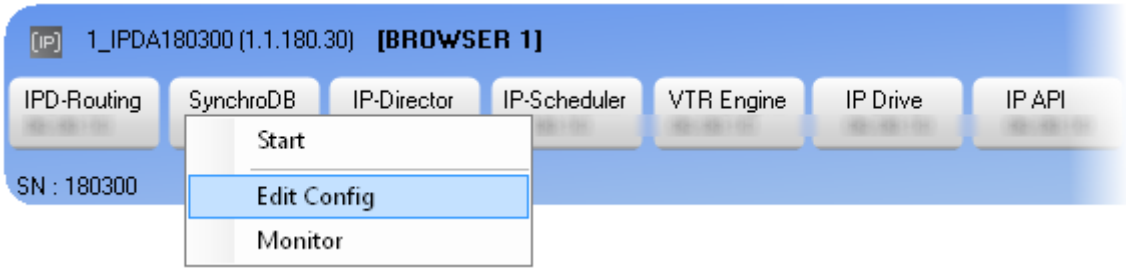
You can also stop or restart the IPD Routing service by right clicking the Taskbar icon and selecting "Stop Service" or "Restart Service".



# 3.12 SynchroDB Management

## Configure SynchroDB

Right click the SynchroDB button and select Edit Config from the contextual menu.

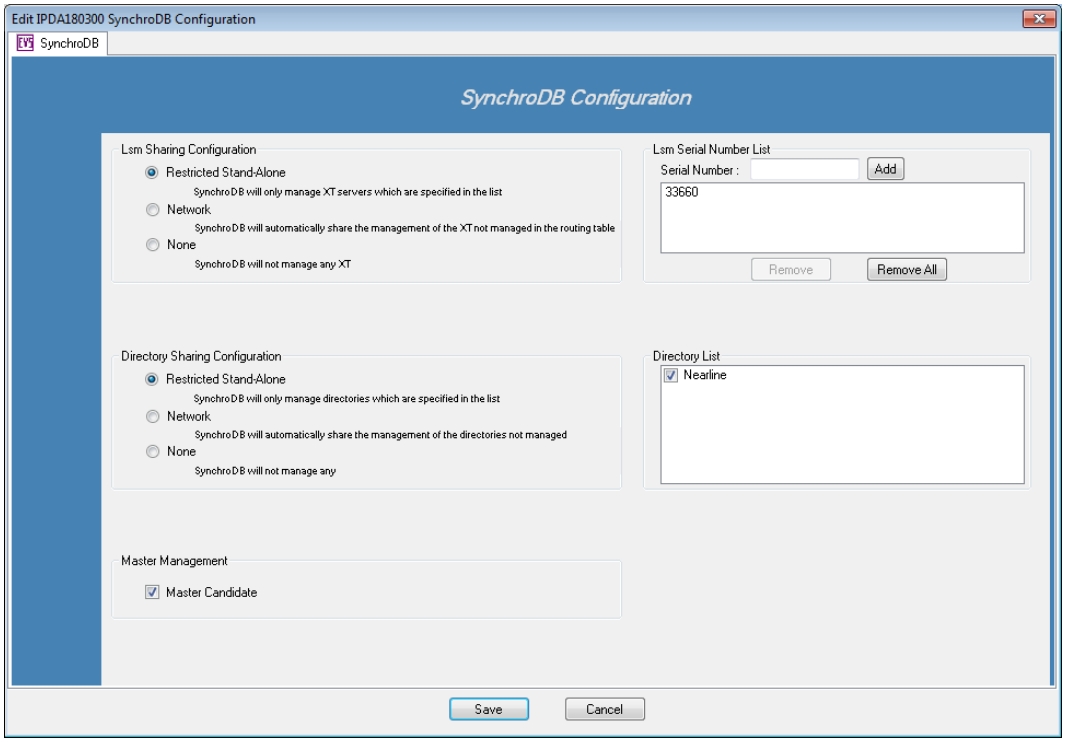



**Note**

The service must be stopped in order to be edited.

Once the SynchroDB Service is started, the configuration is only viewable.

The SynchroDB Configuration window opens:



The SynchroDB is a service running on every IP-Director workstation. All SynchroDB services on the network will manage database synchronization between the IP-Director SQL database and the XNet database. These SynchroDB services will manage all servers, XStore or XFile devices present on the XNet network. The SynchroDB is also managing the Near Line directories configured in the Remote Installer / Configure / Tab Near Line Management (and the IPDrives in network mode).

**Important**

Only one SynchroDB service should manage one server, XStore, XFile or directory at a time on the network.

Otherwise, a conflict is detected by the Remote Installer. In this case the colour of involved machines turns red.

It is important to specify which server, XStore, XFile and directory will be managed by which SynchroDB.

# LSM Sharing Configuration


**Restricted Stand-alone:**

This option allows you to spread the management of servers between many IP-Director Workstations by statically defining the server's serial numbers.

Specify the serial numbers of the servers the SynchroDB will manage on the XNet network. Enter the serial number of the server in the 'Serial Number' field and click on the 'Add' button. The server is added to the list.

**Note**

If the XNet network is already running, a convenient place to gather all the server serial numbers is from the [SHIFT] + [F4] screen on any of the Multicam user VGA stations.

**Important**

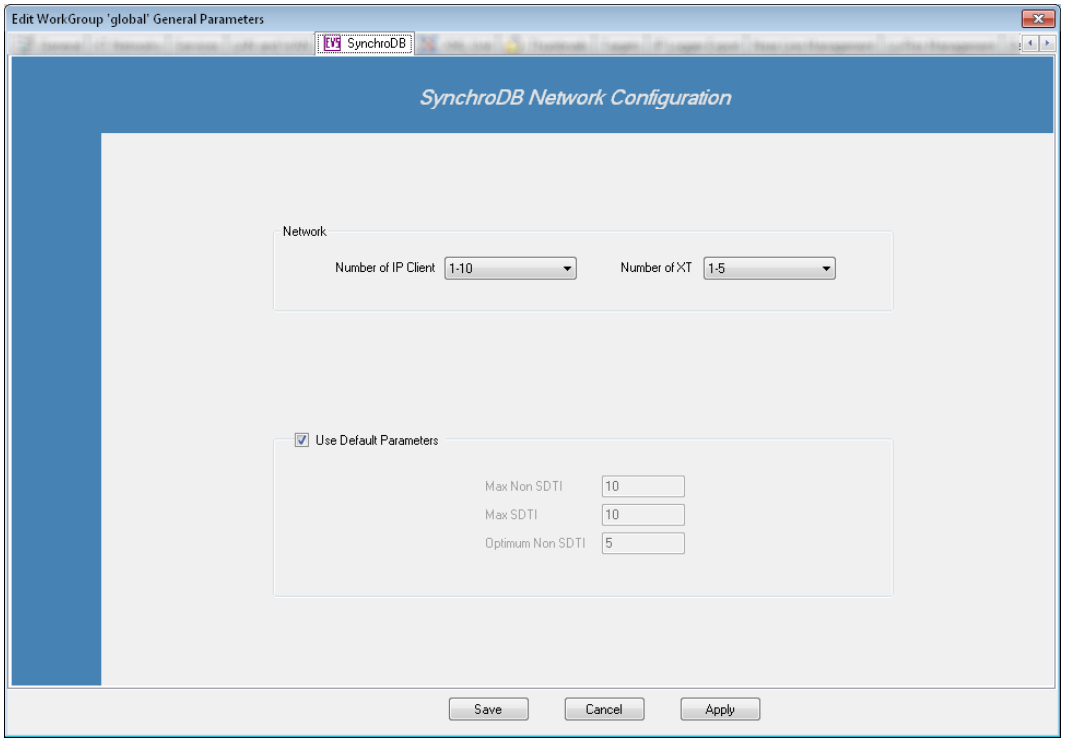
Be sure that any one server is only managed once on the IP-Director network's SynchroDB services.

**Network:**

Use this option to automatically assume the management of servers amongst different SynchroDB mainly for emergency purposes.

For example if a SynchroDB of one workstations stops, another SynchroDB can take the duties and manage the servers which were originally managed by the SynchroDB that has stopped.

The default settings of the network mode can be changed manually using the SynchroDB Tab of the main Remote Installer Configure tool.




In the case of a complete SynchroDB management using the network mode, you need to set the basics parameters comparing to your setup size.

Please refer to the SynchroDB Configuration in the previously described Parameters Configuration chapter.

**Note**

It is strongly recommended to keep the parameters by default.

**None:**

Check this option to indicate that no server will be managed by the local SynchroDB of this IP-Director workstation. After reviewing the SynchroDB configuration, you may notice that a selection of 'None' will appear as a Restricted Stand-Alone mode with an empty list. This is identical to selecting None.

**Note**

If one server is not managed by any SynchroDB on the IP-Director workstations, it will not appear in the channel explorer of the IP-Director application.

**Note**

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

# Directory Sharing Configuration


**Restricted Stand-alone:**

This option allows you to spread the management of the Static Near Line directories between many IP-Director Workstations.

Force the Near Line directory to be managed by this SynchroDB by checking the box in front of its name.

**Note**

The Near Line directories were previously defined in the Remote Installer / Configure / Near Line Management tab.

**Important**

Be sure that any one directory is only managed once on the IP-Director network's SynchroDB services.

**Network:**

Use this option to automatically assume the management of Near Line directories amongst different SynchroDB mainly for managing new drives detected by the IP Drive service.

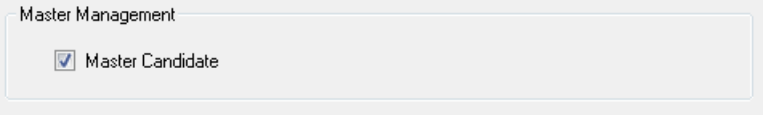
Please refer to the IP Drive chapter for details.

And if a SynchroDB of one workstation stops, another SynchroDB can take the duties and manage the directories which were originally managed by the SynchroDB that has stopped.

**None:**

Check this option to indicate that no directories will be managed by the local SynchroDB of this IP-Director workstation. After reviewing the SynchroDB configuration, you may notice that a selection of 'None' will appear as a Restricted Stand-Alone mode with an empty list. This is identical to selecting None.

# Master Management




Since version 5, IP-Director introduces a new notion: **The Master Candidate**.

A few jobs earlier executed by the IP-Scheduler (in version 4) are now managed by the Master Candidate.

These jobs are:

- Thumbnails creation
- Backup and restore status
- Target status
- LTC distribution
- Ingest scheduling
- Near Line directory status
- Warning management.

Only one SynchroDB manages jobs in a workgroup (the SynchroDB running with the Master role). Declaring more than one SynchroDB as a Master Candidate is allowed and brings you failover functionality.

**Important**

It is mandatory to declare at least one SynchroDB as a Master Candidate even if it's a standalone workstation.

This workstation may consume more CPU resources.

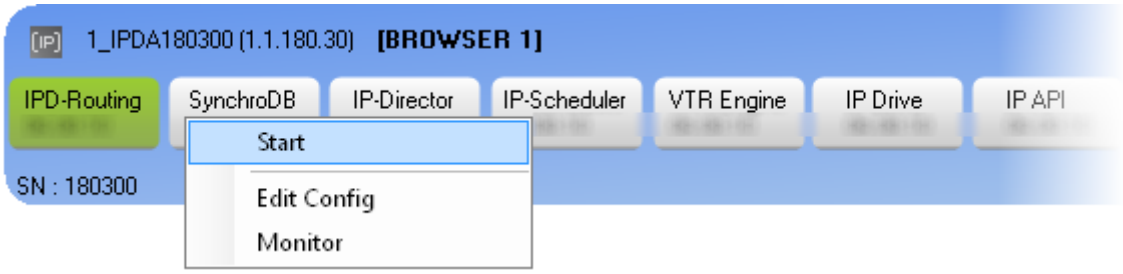
**Note**

This SynchroDB with the lowest routing number assume the Master role.

The "Master" role is clearly identified with a dark green status within the Remote Installer.

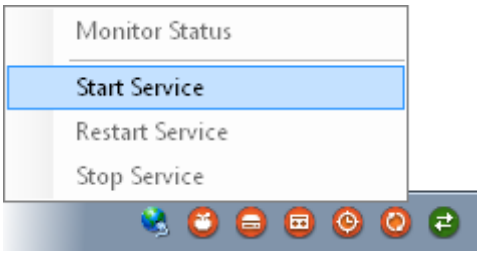
# Start SynchroDB

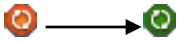
Once SynchroDB is configured, it can be started by right clicking the SynchroDB box and selecting Start.




The SynchroDB box turns green: the SynchroDB has been successfully started. The IPD-Routing starts automatically with the SynchroDB.

The SynchroDB can be also started from the icon in the Windows Taskbar. Right click the icon and select Start.




The orange icon becomes green in the Windows XP System Tray of the workstation where the service is started: 

**Note**

SynchroDB is a Windows service loaded at the Windows start up. Starting the Remote Installer displays an icon the Taskbar and gives a right-click interface to manage it.

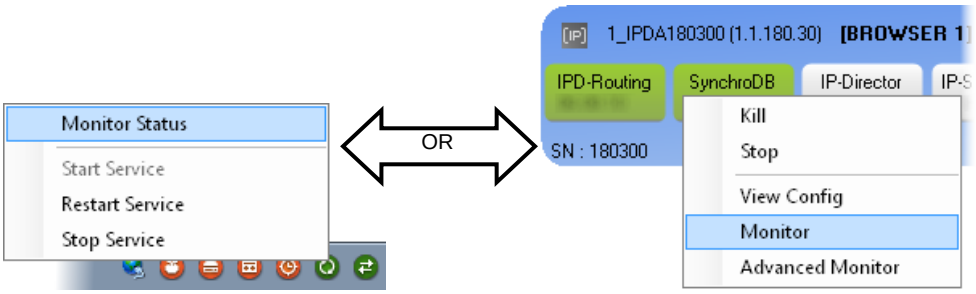

**Note**

The SynchroDB starts automatically when IP-Director is started from the Remote installer or by double-clicking on the desktop icon.

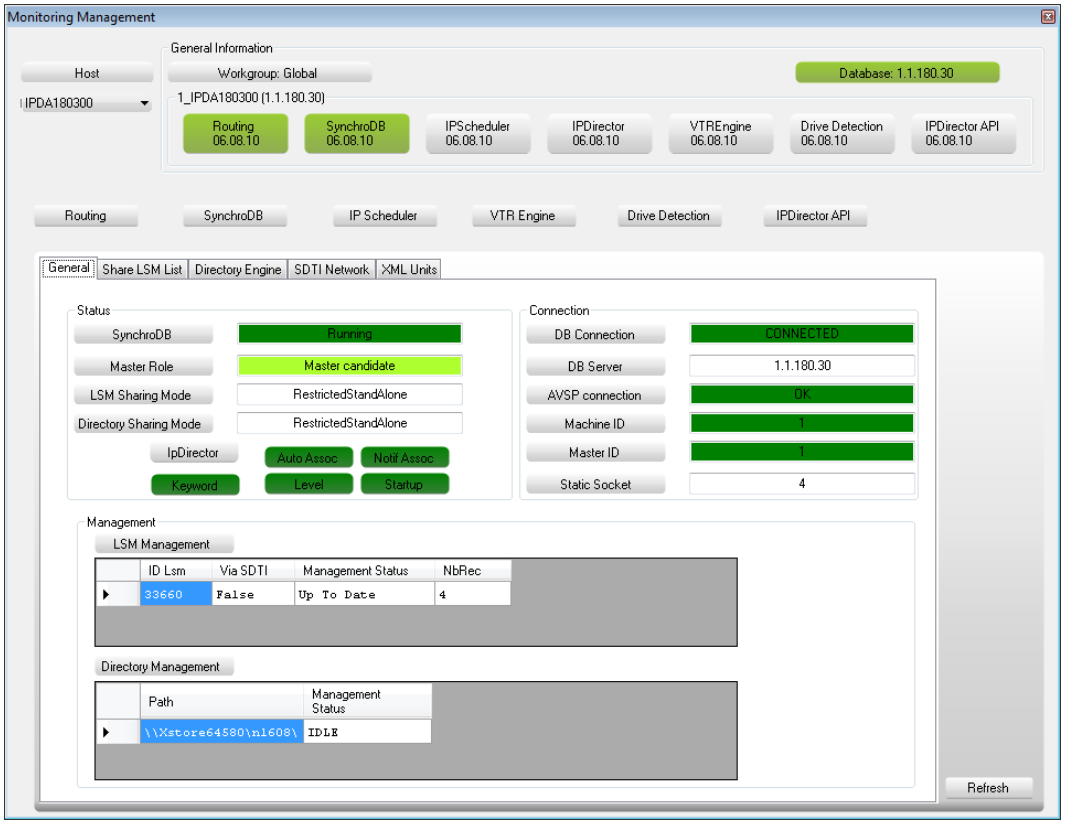
# Monitor SynchroDB

The SynchroDB service monitoring is accessible from its icon in the Taskbar and from the Remote Installer. Two kind of monitoring interface are available:

- The workstation monitoring (from Remote Installer and local icons in the Taskbar)




The window opens:




Select the tab to be monitored.

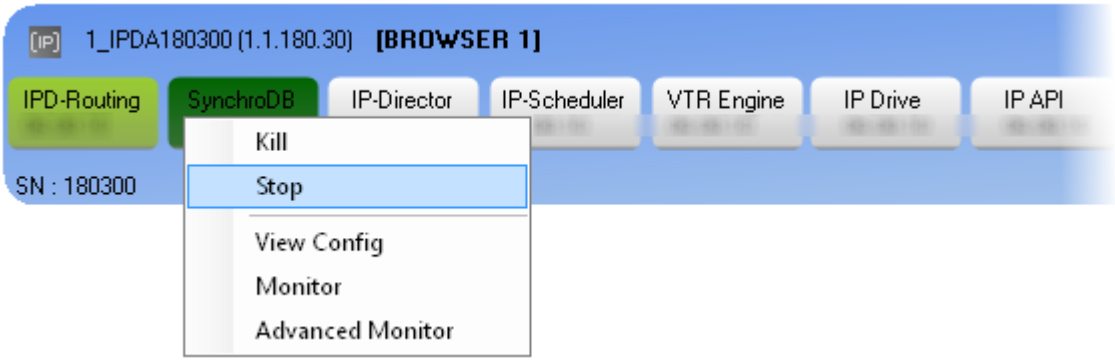
- The advanced monitoring.

By holding the CTRL key, right click the SynchroDB icon (Monitor Status) or just right click the icon within the Remote Installer (Advanced Monitor) when the service is started.

Please refer to the Workstation Monitoring Chapter for details.

# Stop SynchroDB

To stop the SynchroDB, the SynchroDB zone must be green. Then, right click on it and select Stop or Kill.

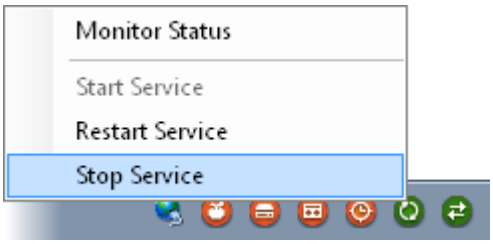



'Stop' will close properly the SynchroDB service and 'Kill' will stop the SynchroDB Process. The 'Kill' must be used as a last resort if the service can be stopped.

View Config previews the SynchroDB Configuration window while service is running. Parameters edition is disabled.

**Note**

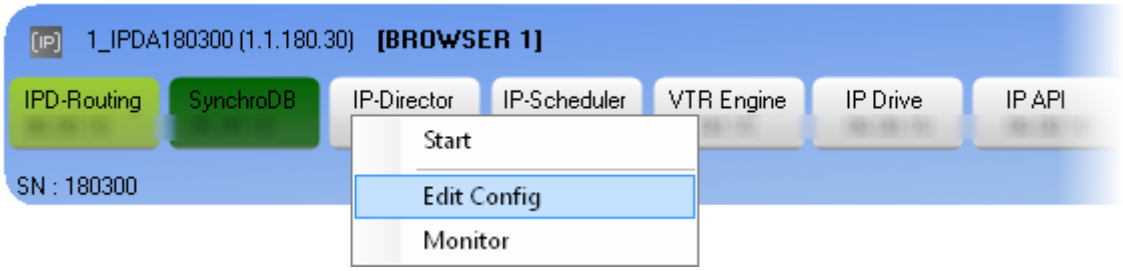
You can also stop or restart the SynchroDB service by right clicking the Taskbar icon and selecting "Stop Service" or "Restart Service".



# 3.13 IP-Director Configuration

## Configure IP-Director

After having configured Serial Communication (in the Workstation contextual menu) and SynchroDB, start both services, right click the IP-Director button and select Edit Config from the contextual menu.

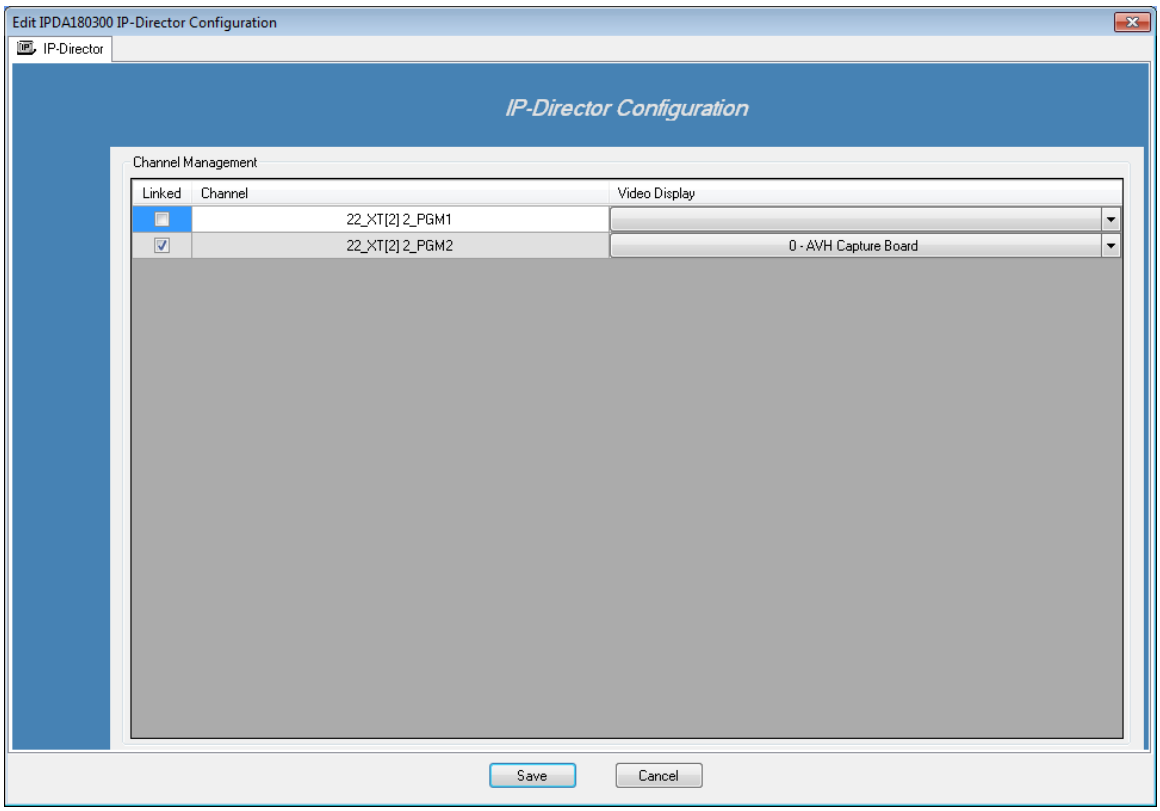



**Note**

The IP-Director application must be stopped in order to edit its configuration.

Once the IP-Director is started, the configuration is only viewable.

The IP-Director Configuration window opens:



**Channel Management:**

The area allows you to link a PGM channel of a specific server to one Video Display (Video Board). To define a link between a PGM and a video display:

Check the box in the 'Linked' column

Select which video display device it is linked to from the drop down list in the video display column.

**Note**

The IP Routing and SynchroDB services must be started to list the player channels available on the network.

The linked box can be checked without being linked to a Video Display. For example, this is used when an external monitor is connected to your workstation.

**Note**

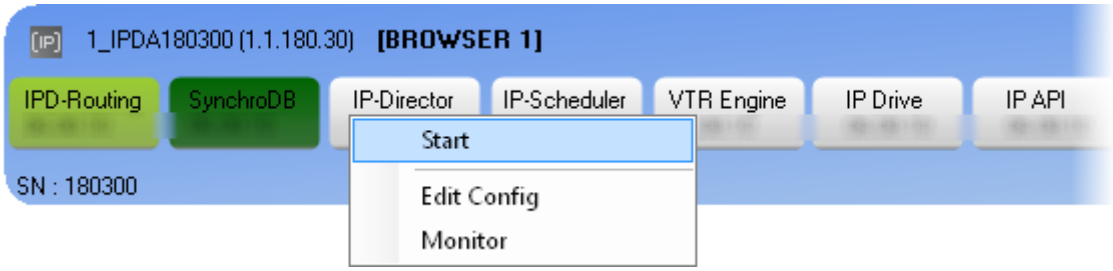
All these parameters are local to the IP-Director workstation and must be set independently on all IP-Director workstations.

**Note**

The linked PGM channel with a defined video display device opens automatically a video display inside the control panel of this channel.

# Start IP-Director

Once the IP-Director is configured, you can start it by right clicking the IP-Director button and selecting Start.




The IP-Director box turns green: the IP-Director has been successfully started. The IPD-Routing and the SynchroDB starts automatically with the IP-Director if they were not started.


**Note**

You can also start the IP-Director application by this way: Start Menu > Programs > EVS Broadcast Equipment > IP-Director > IP-Director. Or you just by double clicking the IP-Director Shortcut on your Desktop.

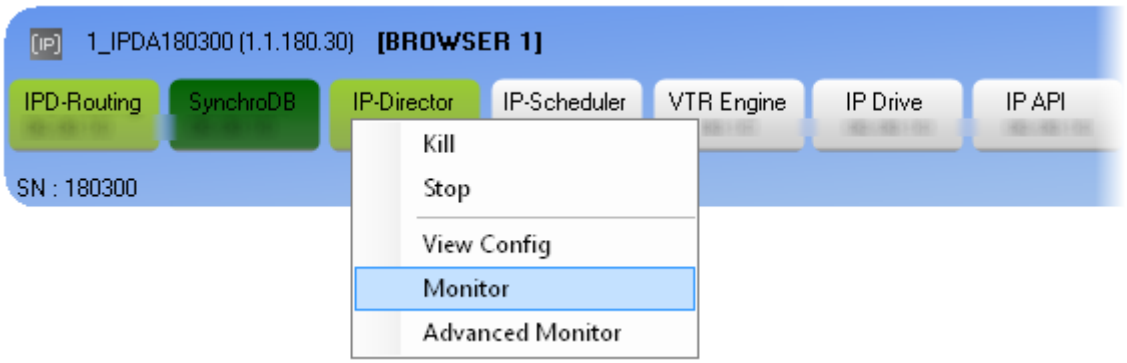
The IP-Director splash screen is displayed:


This splash screen automatically closes after libraries are loaded and main IP-Director interface opens.

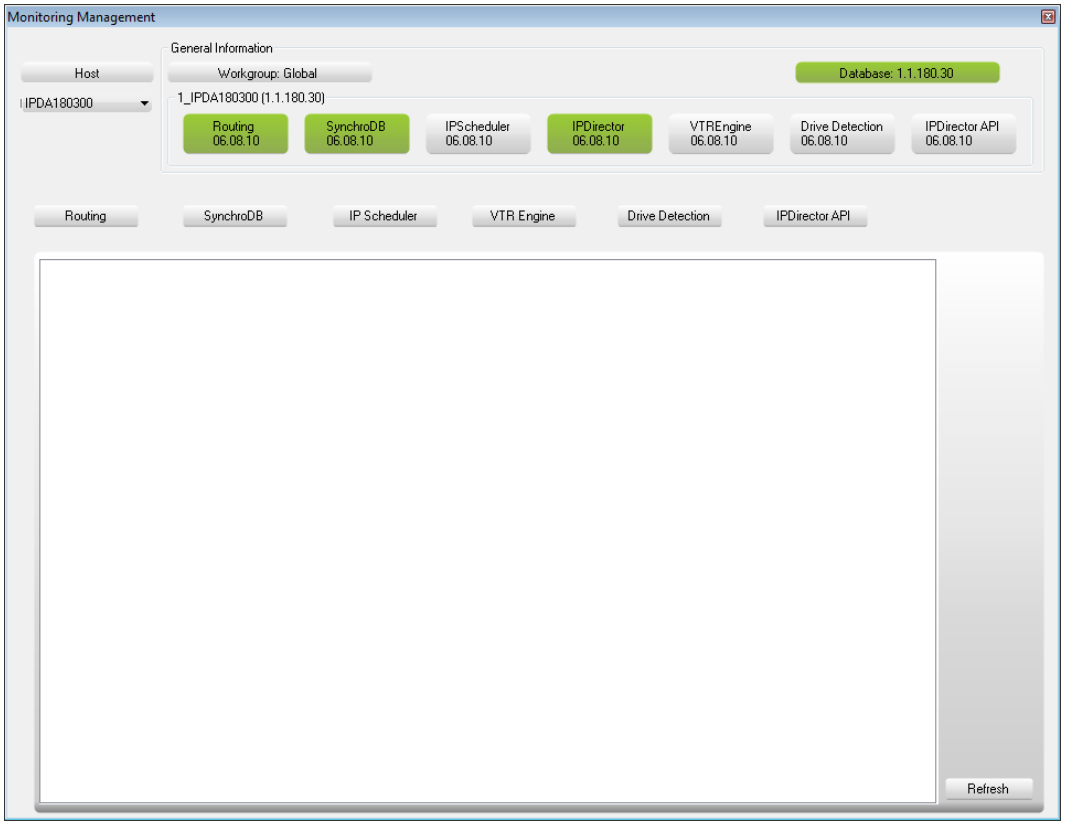
# Monitor IP-Director

The IP-Director application monitoring is accessible from its icon in the Taskbar and from the Remote Installer. Two kind of monitoring interface are available:

- The workstation monitoring (from Remote installer)




The window opens:




Select the tab to be monitored.

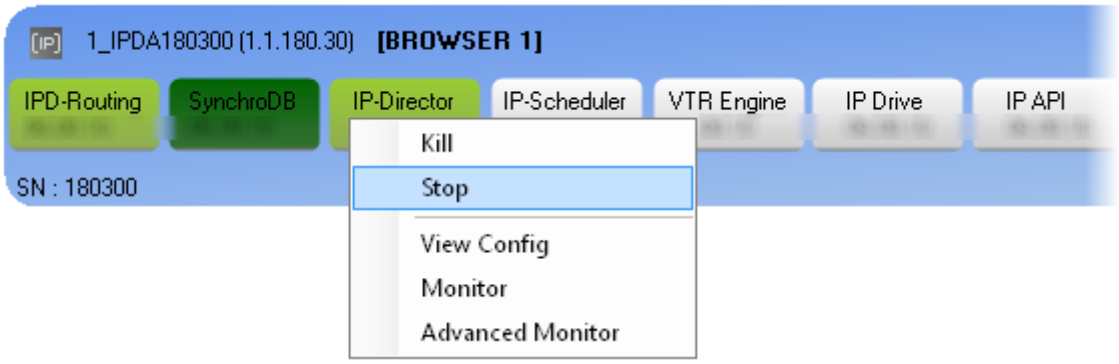
- The advanced monitoring.

Right click the icon within the Remote Installer (Advanced Monitor) when the service is started.

Please refer to the Workstation Monitoring Chapter for details.

# Stop IP-Director

To stop the IP-Director, the IP-Director button must be green. Then, right click on it and select Stop or Kill.



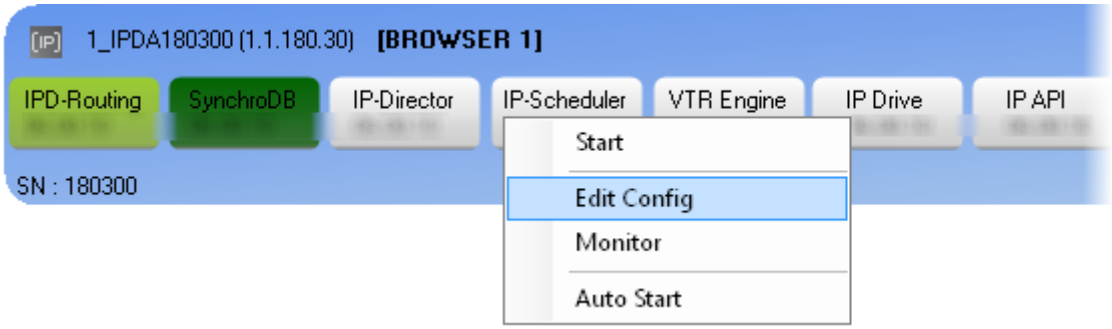

'Stop' will close properly the IP-Director application and 'Kill' will stop the IP-Director Process. The 'Kill' must be used as a last resort if the service can be stopped.

View Config previews the IP-Director Configuration window while application is running. Parameters edition is disabled.

# 3.14 IP-Scheduler

## Configure IP-Scheduler

After having configured Serial Communication (in the Workstation contextual menu), SynchroDB, IP-Director, right click the IP-Scheduler button and select Auto Start to automatically start IP-Scheduler with the IP-Director application.




Only one IP-Scheduler manages jobs in a workgroup (the IP-Scheduler running as the MASTER). Starting more than one IP-Scheduler is allowed and brings failover functionality.

**Note**

The IP-Scheduler with the lowest routing number takes the “Master” role. Other IP-Scheduler started in the workgroup has a “Waiting” status (Only as an automatic failover for the IP-Scheduler).

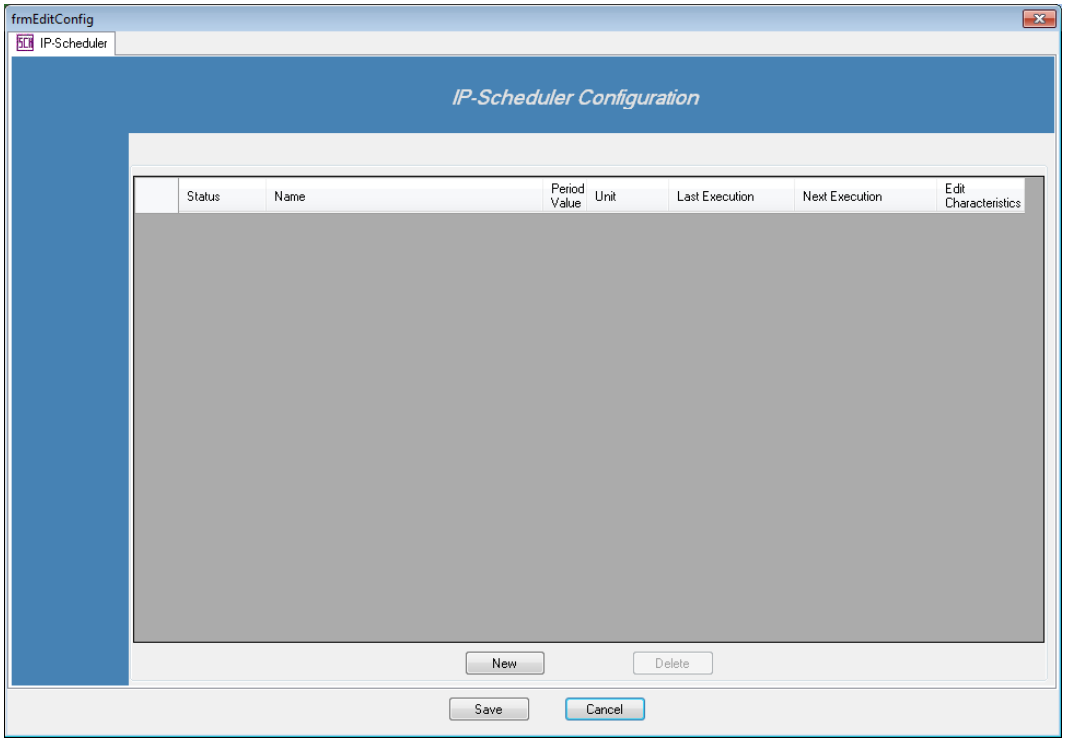
The “Master” role is clearly identified with a dark green status within the Remote Installer.


**Note**

The service must be stopped in order to be edited.

Once the IP-Scheduler service is started, the configuration is only viewable.

The IP-Scheduler Configuration window opens:

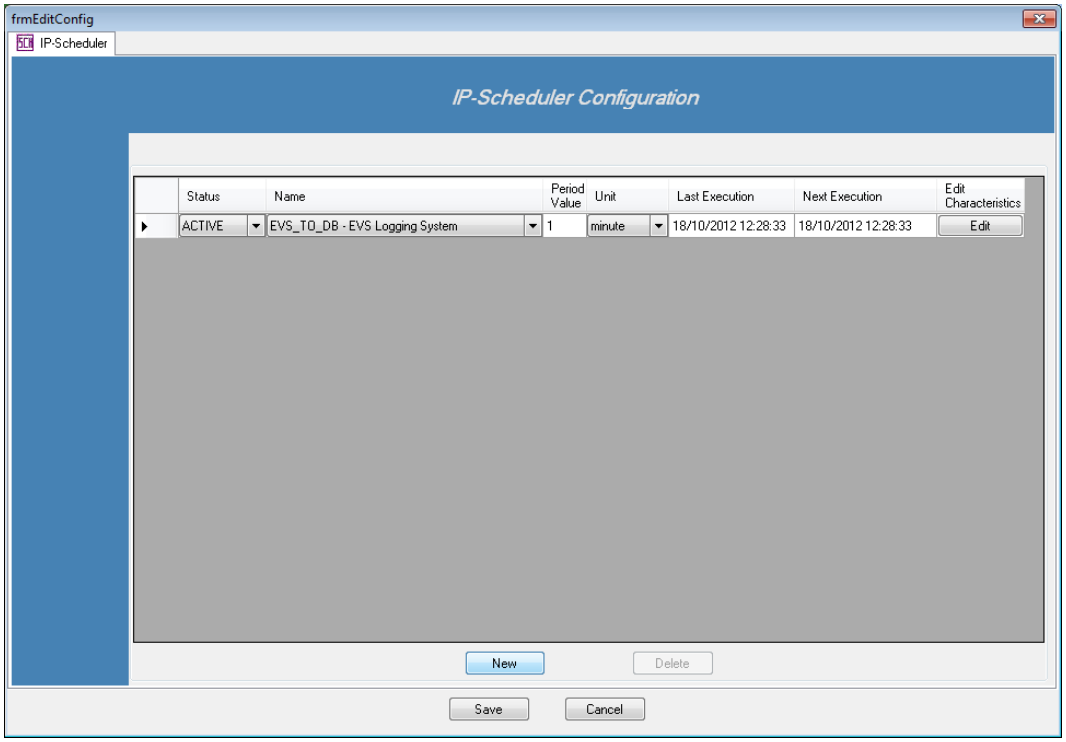



## Add a Job

Creating a new job is mainly useful for managing external information systems like a stats feed or other data coming from an XML managed system.

To create a new job, click on the 'New' button.

A line is added:



**Status:**

The configured job can be active or inactive.

Once a job is configured, it is possible to stop it temporally without having to delete it and loose its characteristics.

**Name:**

Select the type of job you want to create:

- EVS_TO_DB – EVS Logging System
- IDF_TO_EVS – Convert IDF Start List to Keyword Grid
- EQUIPRO – Handles communication with XML engine
- GetCleanEditEDL – Receives the CleanEdit edit timelines
- MoveFileTo – Move every files to another directory

**Period Value:**

The IP Scheduler will poll into one incoming directory, searching for new XML files. Select the periodicity of this polling process.

Default: 1

**Unit:**

Select the period unit (second, minute, hour or day)

Default: minute

**Last Execution:**

The last execution corresponds to the date and time when the job was lastly polled.

**Next Execution:**

The next execution corresponds to the date and time when the job will be polled next time.

**Edit characteristics:**

Job characteristics are the different directories involved in the job process.

Every job has different characteristics, refer to the corresponding paragraphs for more information.

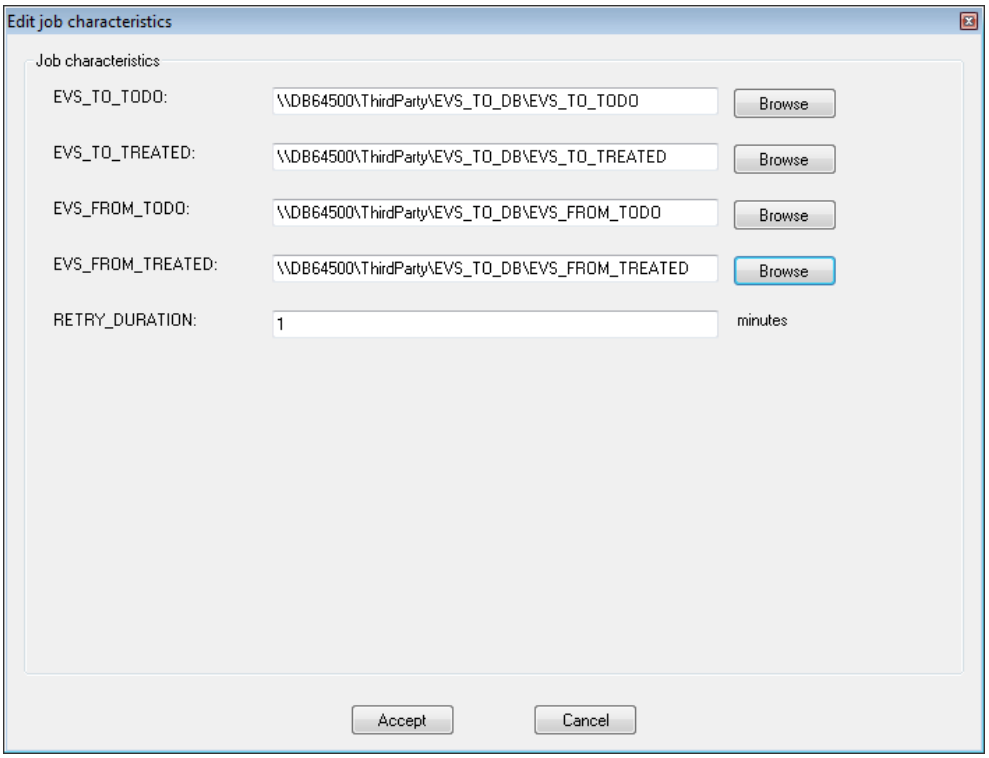
# EVS_TO_DB – EVS Logging System

This type of job is run when the IP-Director is interfaced to an external logging system or stats system. This external logging application will send XML files corresponding to logsheets, logs and/or keyword grids which will be inserted in the IP-Director database.

This job also includes the Clip Creation feature and ingest of the metadata referencing XML file.

The processed information is then available for browsing purposes in the IP-Director interfaces.

Press the Edit button to edit the job characteristics:

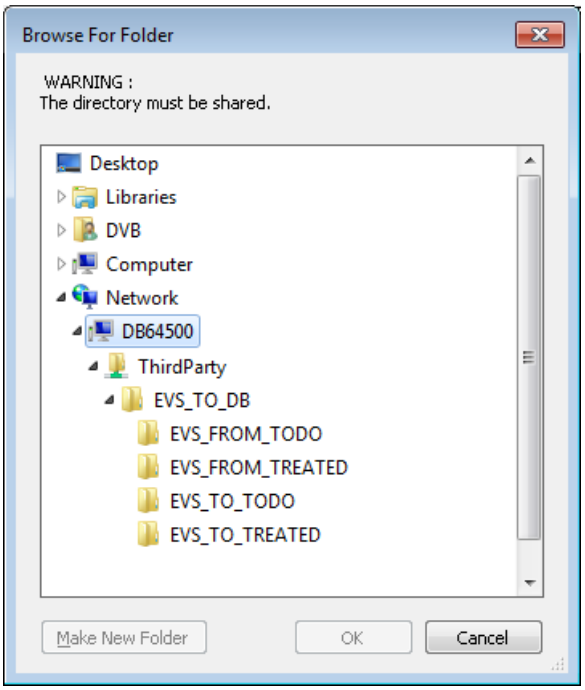



The IP Scheduler will poll on the EVS_TO_TODO directory to find all jobs (xml files corresponding to logsheet, logs or keyword grids) which must still be treated and insert the corresponding data in his/her database. When the EVS system has treated the job, the xml file will be moved into the EVS_TO_TREATED directory.

The third party system will poll on the EVS_FROM_TODO directory to find all jobs (xml files) which must still be treated and process the information. When the third Party system has treated the job, the xml file must be moved into the EVS_FROM_TREATED directory.

| Directory Name | Directory content |
|---|---|
| EVS_TO_TODO | Data to be treated from third party system to EVS system |
| EVS_FROM_TODO | Data to be treated from EVS system to third party system |
| EVS_TO_TREATED | Data treated from third party system to EVS system |
| EVS_FROM_TREATED | Data treated from EVS system to third party system |

Click on the 'browse' buttons in front of the characteristics to define the corresponding directories.




**Important**

The directories must be shared with full access control.

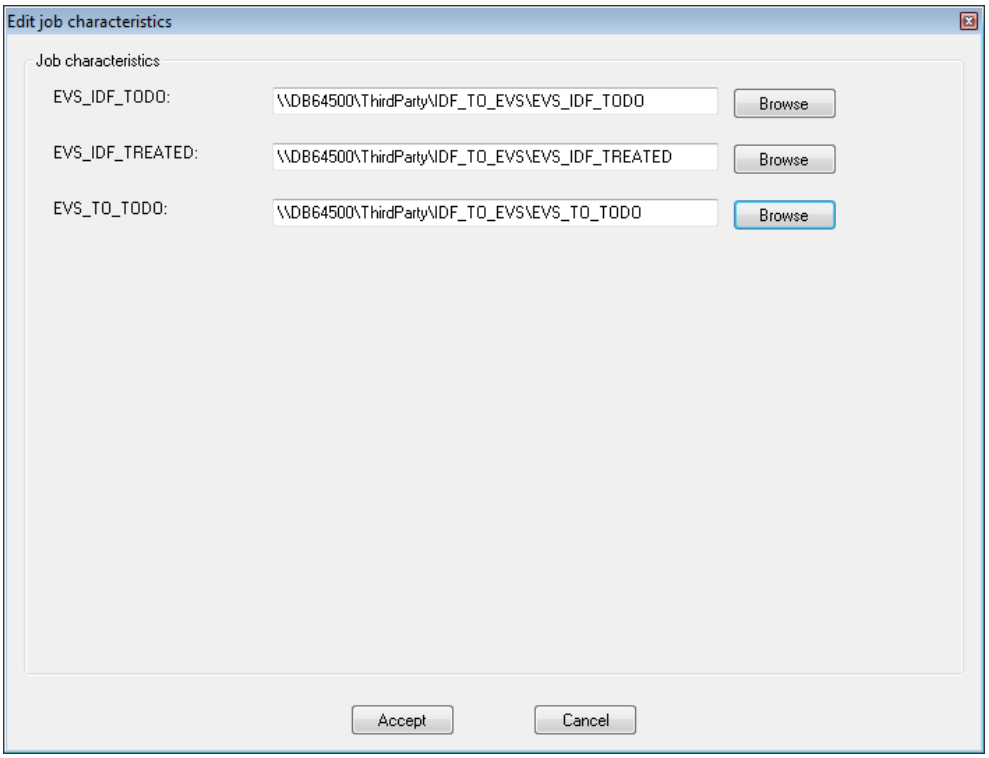
When all directories are defined, click on 'Accept' to validate the new job characteristics.

# IDF_TO_EVS – Convert Start List to Keyword Grid

This job is used to convert IDF XML files into keyword grids. IDF XML files contains athletes start list, players, teams or default keywords.

Select the IDF_TO_EVS job in the list

Press the Edit button to edit the job characteristics:




- EVS_IDF_TODO: this is the directory where the IDF XML files will be dropped. The IP Scheduler will poll in this directory for new files to be treated.
- EVS_IDF_TREATED: When the IP Scheduler has treated a file, it is moved to the EVS_IDF_TREATED directory.
- EVS_TO_TODO: The IP Scheduler transform and IDF XML file into an EVS Keyword grid XML file which, in turn, must be imported into the IP-Director database. In consequence, the EVS_TO_TODO directory of this job must correspond to the EVS_TO_TODO directory of the "EVS_TO_DB – EVS Logging System" job described here above.

Click on the 'browse' buttons in front of the characteristics to define the corresponding directories.

**Important**

The directories must be shared with full access control.

# EQUIPRO – Handles communication with XML engine

Please contact EVS for information. This job is used for a specific customer implementation.

# GetCleanEditEDL – Receives the CleanEdit edit timelines

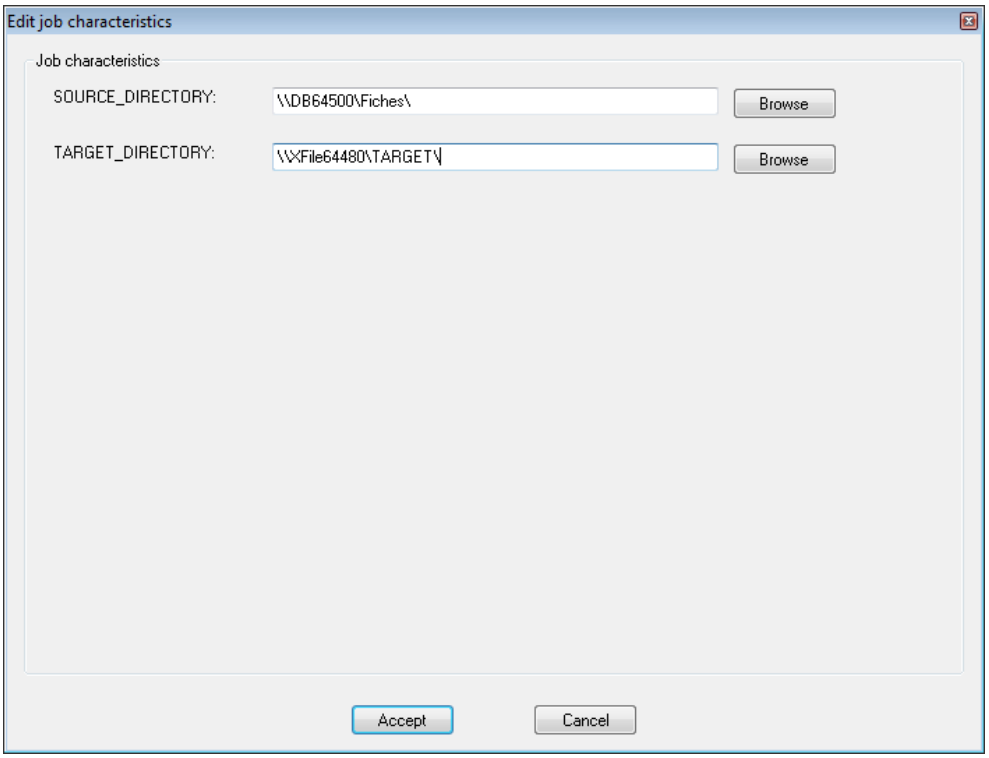
Please contact EVS for information. This job is used on specific custom applications.

# MoveFileTo – Move every files to another directory

This job is used to zip the content of a source folder and move the zipped file to another destination directory.

Select the MoveFileTo job in the list.

Press the Edit button to edit the job characteristics:




- SOURCE_DIRECTORY: the content of this directory is zipped and copied to the destination directory.
- TARGET_DIRECTORY: this directory receives the zipped files containing

the files found inside the source directory.

Click on the 'browse' buttons in front of the characteristics to define the corresponding directories.

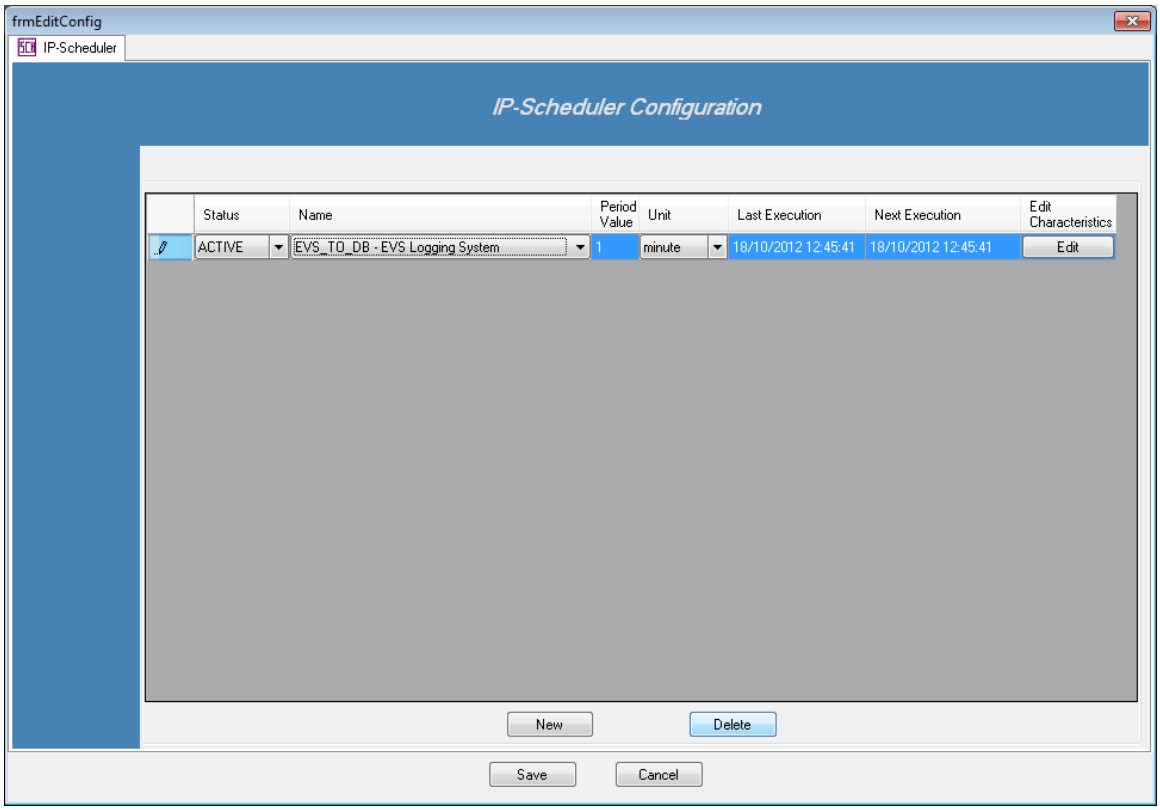
**Important**

The directories must be shared with full access control.

## Delete a job

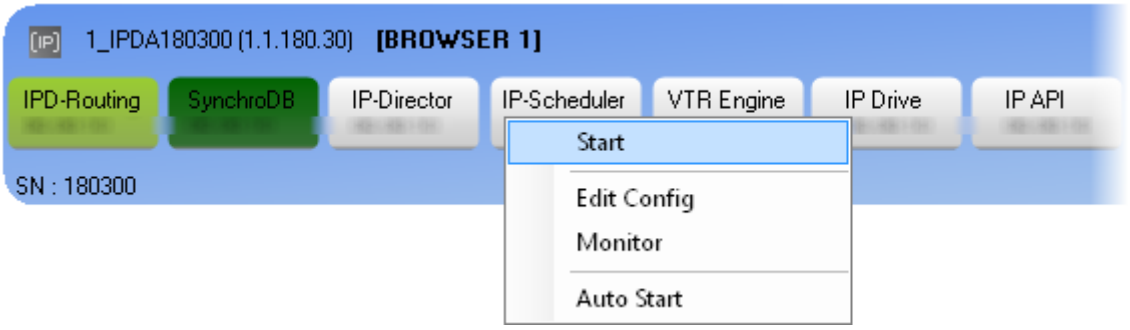
To delete a job, simply select the job by clicking on the header line.

Then, click on the DELETE button.



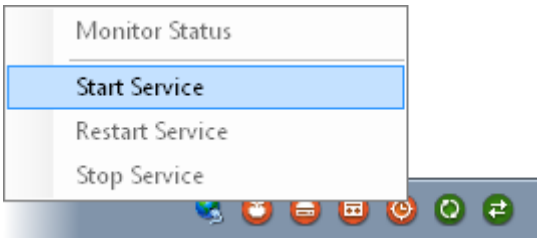
# Start IP-Scheduler

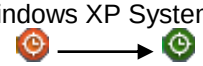
To start the IP-Scheduler, right click the IP-Scheduler box and select Start.




The IP-Scheduler box turns green: the IP-Scheduler has been successfully started. The IPD-Routing and the SynchroDB start automatically with the IP-Scheduler.

The IP-Scheduler can be also started from the icon in the Windows Taskbar. Right click the icon and select Start.




The orange icon becomes green in the Windows XP System Tray of the workstation where the service is started: 

**Note**

IP-Scheduler is a Windows service loaded at the Windows start up. Starting the Remote Installer displays an icon the Taskbar and gives a right-click interface to manage it.

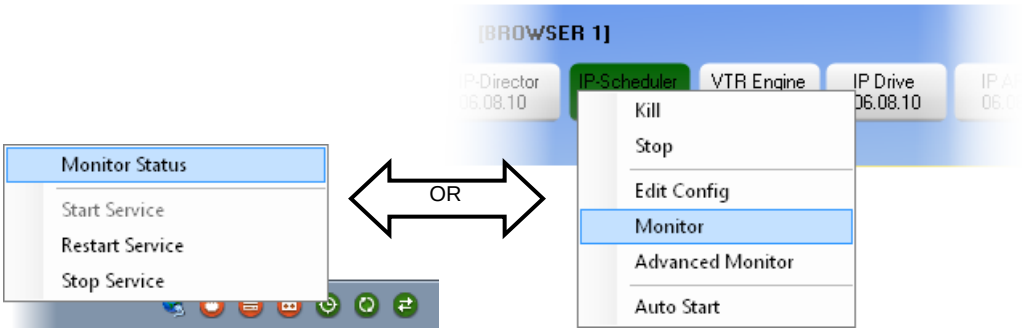

**Note**

The IP-Scheduler starts automatically (with option Auto Start) when IP-Director is started from the Remote installer or by double-clicking on the desktop icon.

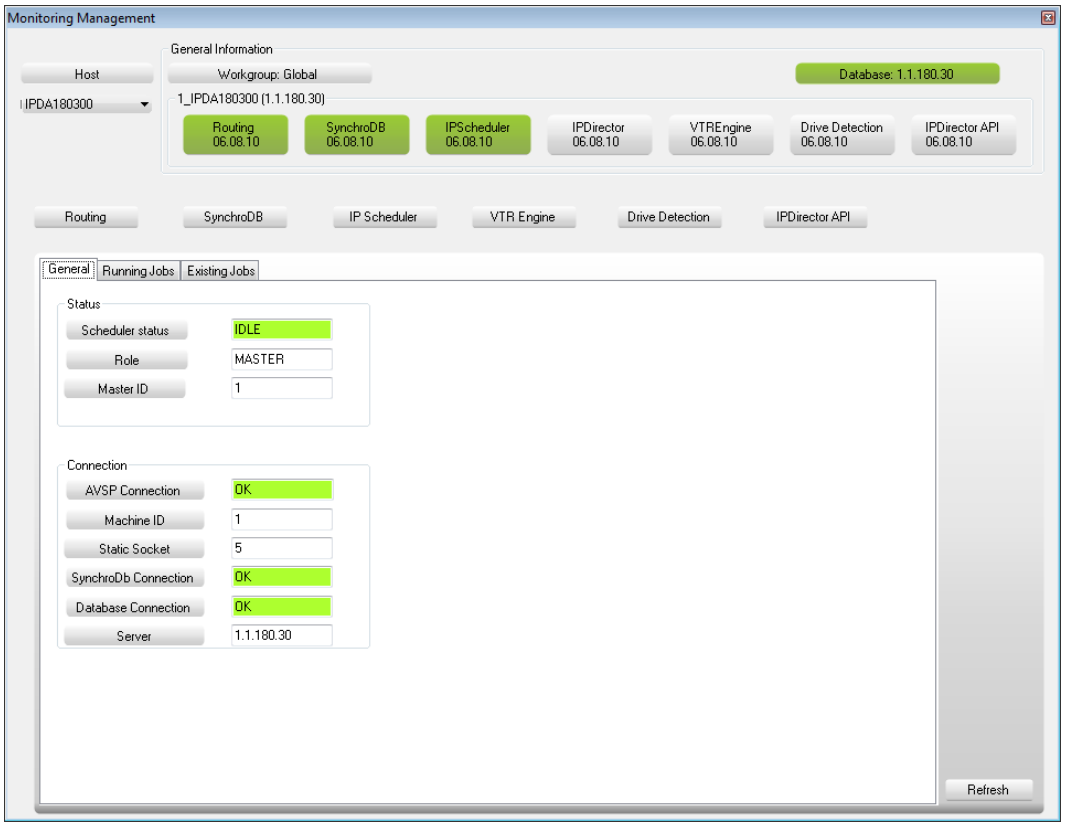
# Monitor IP-Scheduler

The IP-Scheduler service monitoring is accessible from its icon in the Taskbar and from the Remote Installer. Two kind of monitoring interface are available:

- The workstation monitoring (from Remote Installer and local icons in the Taskbar)




The window opens:




Select the tab to be monitored.

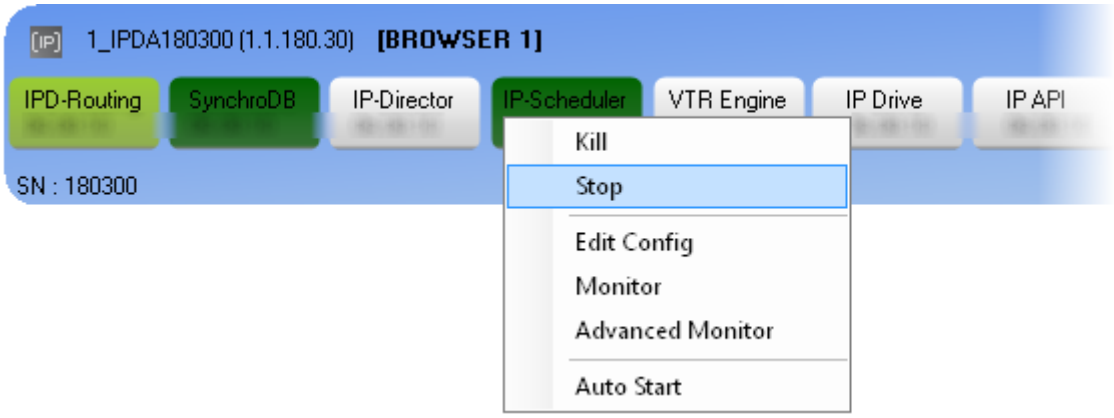
- The advanced monitoring.

By holding the CTRL key, right click the IP-Scheduler icon (Monitor Status) or just right click the icon within the Remote Installer (Advanced Monitor) when the service is started.

Please refer to the Workstation Monitoring Chapter for details.

# Stop IP-Scheduler

To stop the IP-Scheduler service, the IP-Scheduler zone must be green. Then, right click on it and select Stop or Kill.

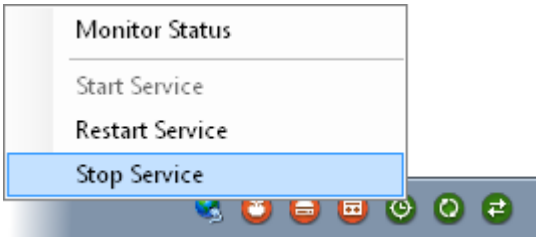



'Stop' will close properly the IP-Scheduler service and 'Kill' will stop the IP-Scheduler Process. The 'Kill' must be used as a last resort if the service can be stopped.

View Config previews the IP-Scheduler Configuration window while service is running. Parameters edition is disabled.

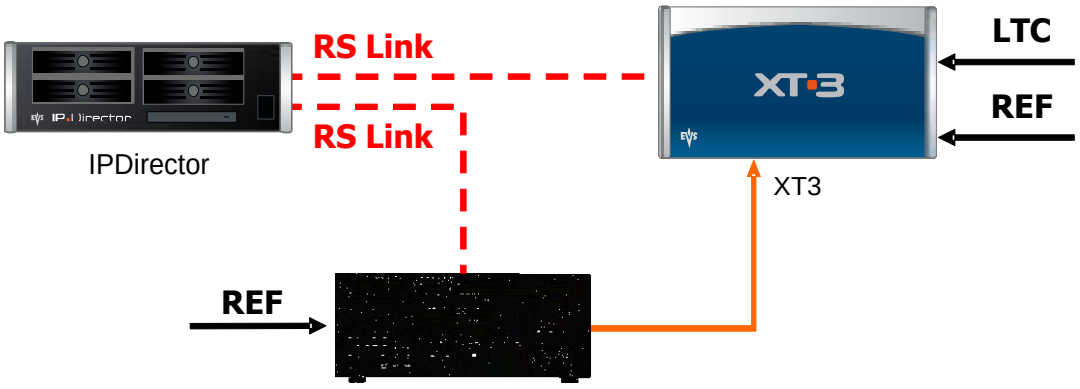
**Note**

You can also stop or restart the IP-Scheduler service by right clicking the Taskbar icon and selecting "Stop Service" or "Restart Service".

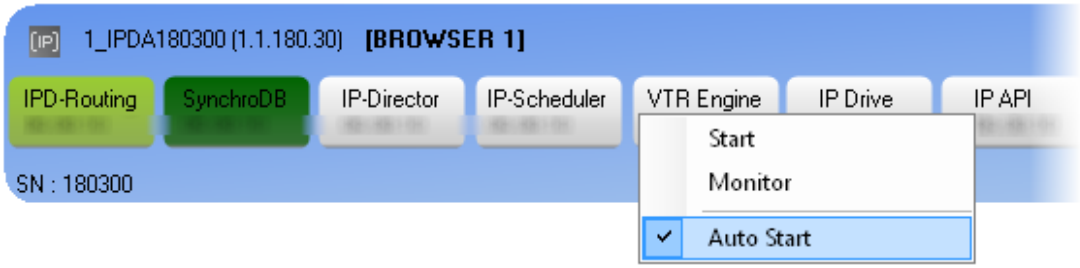


# 3.15 VTR Engine

VTR Engine allows you to manage VTR (maximum 4 by workstation) with the unused RS422 connections of the IP-Director workstation.




After having configured Serial Communication (in the Workstation contextual menu), SynchroDB, IP-Scheduler and before starting IP-Director, right click the VTR Engine button and select Auto Start to automatically start VTR Engine with the IP-Director application.




**Note**

It has no sense to start or auto start a VTR Engine on a workstation which is not connected to a VTR.

## Configure VTR Engine

**Important**

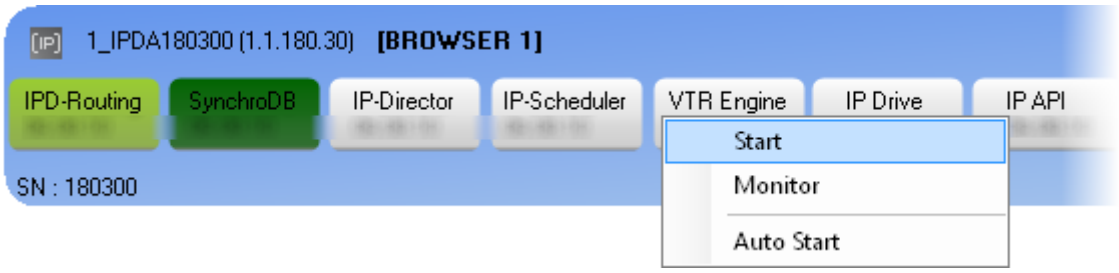
There are no more configurations in the VTR Engine service.

All previous settings have moved to the **Configure Serial Communication** located in the workstation contextual menu.

Please refer to the **Workstation Contextual Menu** chapter for details.

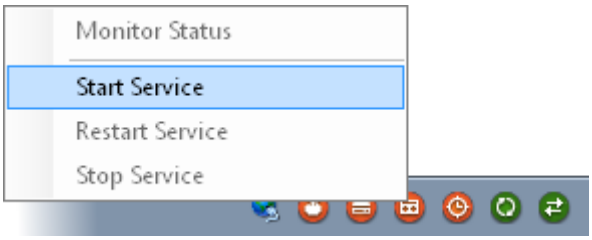
# Start VTR Engine

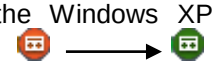
To start the VTR Engine, right click the VTR Engine box and select Start.




The VTR Engine box turns green: the VTR Engine has been successfully started. The IPD-Routing and the SynchroDB start automatically with the VTR Engine.

The VTR Engine can be also started from the icon in the Windows Taskbar. Right click the icon and select Start.




The orange icon becomes green in the Windows XP System Tray of the workstation where the service is started: 

**Note**

In version 5, VTR Engine is a Windows service loaded at the Windows start up. Starting the Remote Installer displays an icon the Taskbar and gives a right-click interface to manage it.

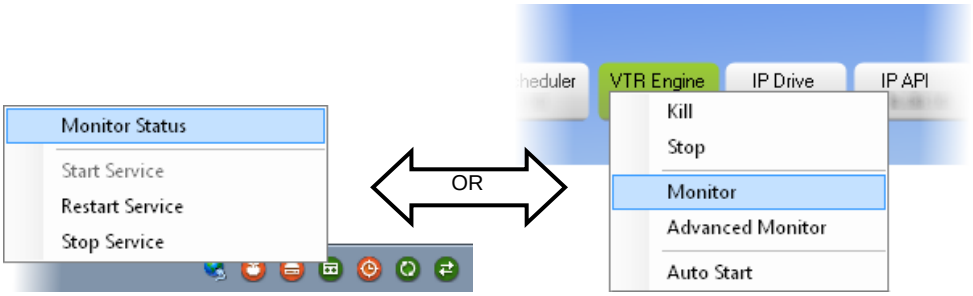

**Note**

If option Auto Start is checked, the VTR Engine starts automatically when IP-Director is started from the Remote installer or by double-clicking on the desktop icon.

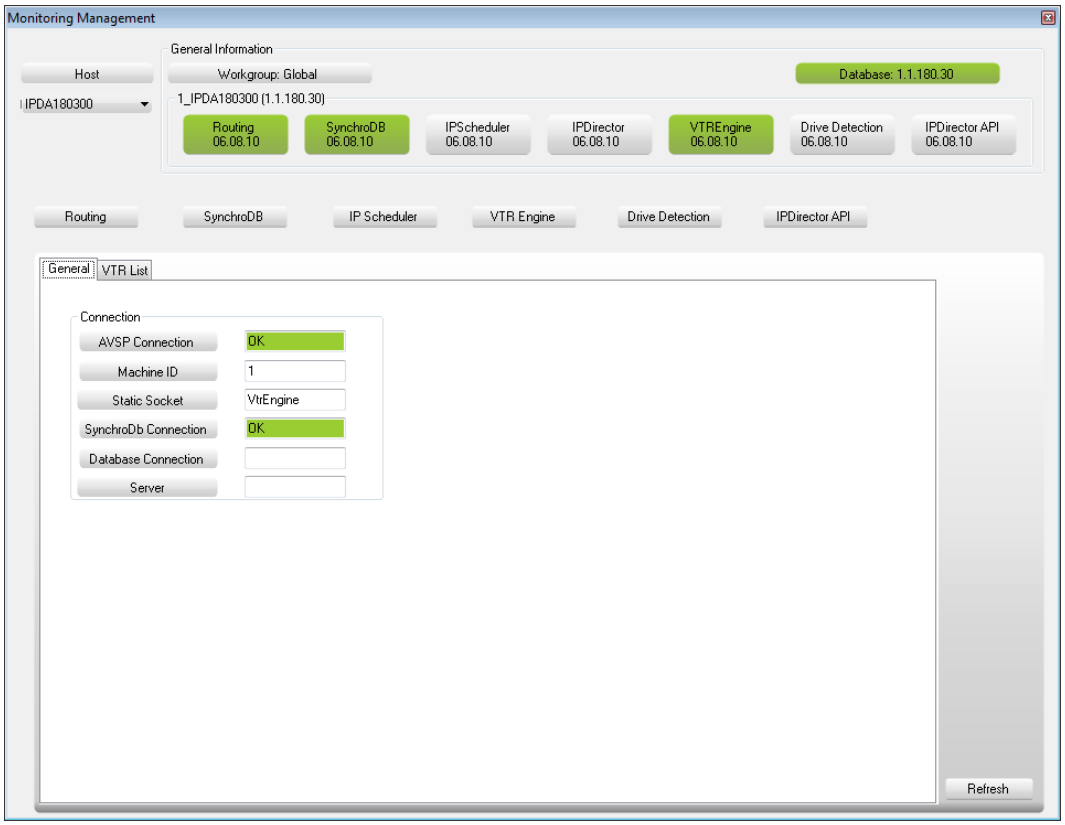
# Monitor VTR Engine

The VTR Engine service monitoring is accessible from its icon in the Taskbar and from the Remote Installer. Two kind of monitoring interface are available:

- The workstation monitoring (from Remote Installer and local icons in the Taskbar)




The window opens:




Select the tab to be monitored.

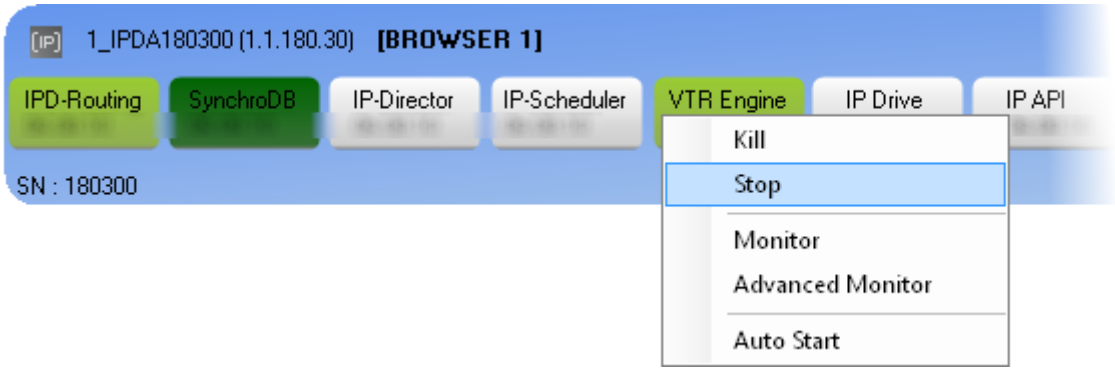
- The advanced monitoring.

By holding the CTRL key, right click the VTR Engine icon (Monitor Status) or just right click the icon within the Remote Installer (Advanced Monitor) when the service is started.

Please refer to the Workstation Monitoring Chapter for details.

# Stop VTR ENGINE

To stop the VTR Engine service, the VTR Engine zone must be green. Then, right click on it and select Stop or Kill.

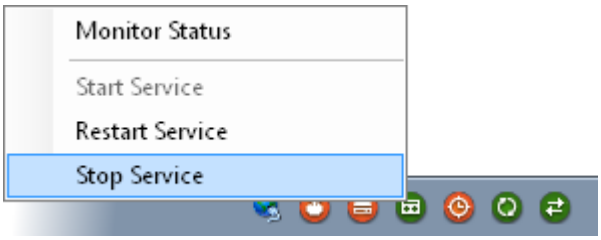



'Stop' will close properly the VTR Engine service and 'Kill' will stop the VTR Engine Process. The 'Kill' must be used as a last resort if the service can be stopped.

View Config previews the VTR Engine Configuration window while service is running. Parameters edition is disabled.

**Note**

You can also stop or restart the VTR Engine service by right clicking the Taskbar icon and selecting "Stop Service" or "Restart Service".



# 3.16 IP Drive

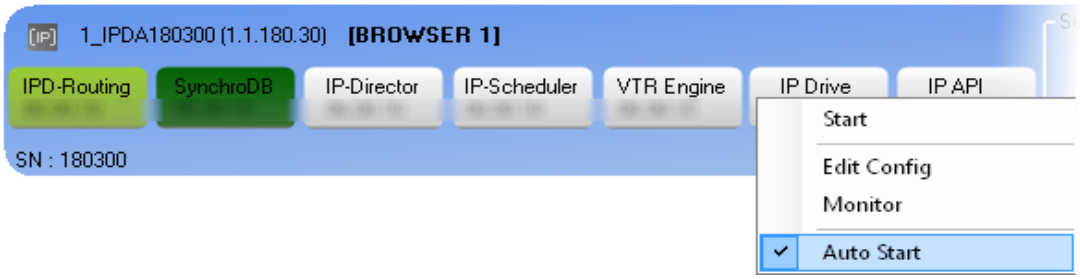
IP Drive allows you to auto detect external drives connected to IP-Director, XFile or XTAccess/XSquare workstations (or other PC with external disks). Those drives can be managed by a SynchroDB and recognized as a Near Line directory inside IP-Director.

Please refer to the SynchroDB/ Directory Sharing Configuration chapter and the Near Line Management chapter for details.

**Note**

At least one SynchroDB service should be in 'Network Mode' when using IP Drive in order to automatically manage the detected drives.

After having configured Serial Communication (in the Workstation contextual menu), SynchroDB, IP-Scheduler and before starting IP-Director, right click the IP Drive button and select Auto Start to automatically start IP Drive with the IP-Director application.




**Note**

It has no sense to start or auto start an IP Drive on a workstation which is not supposed to receive external drives.

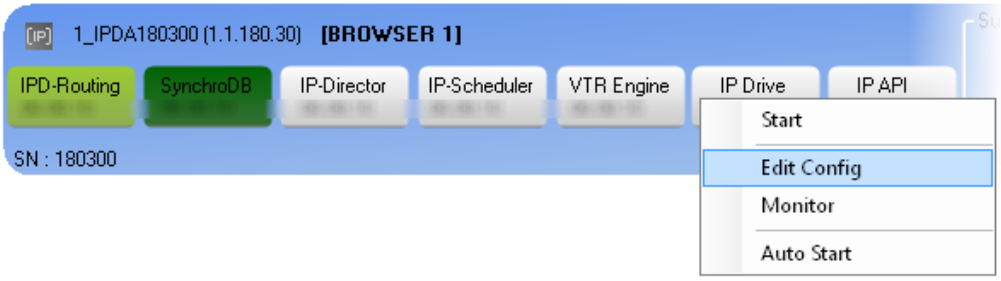
**Note**

IP Drive can be installed on another workstation. XFile, XStore, XTAccess/XSquare and other storage computers are able to run an IP Drive.

Please refer to the IP Drive Installation and Configuration chapter for details.

# Configure IP Drive

Right click the IP Drive button and select Edit Config from the contextual menu.

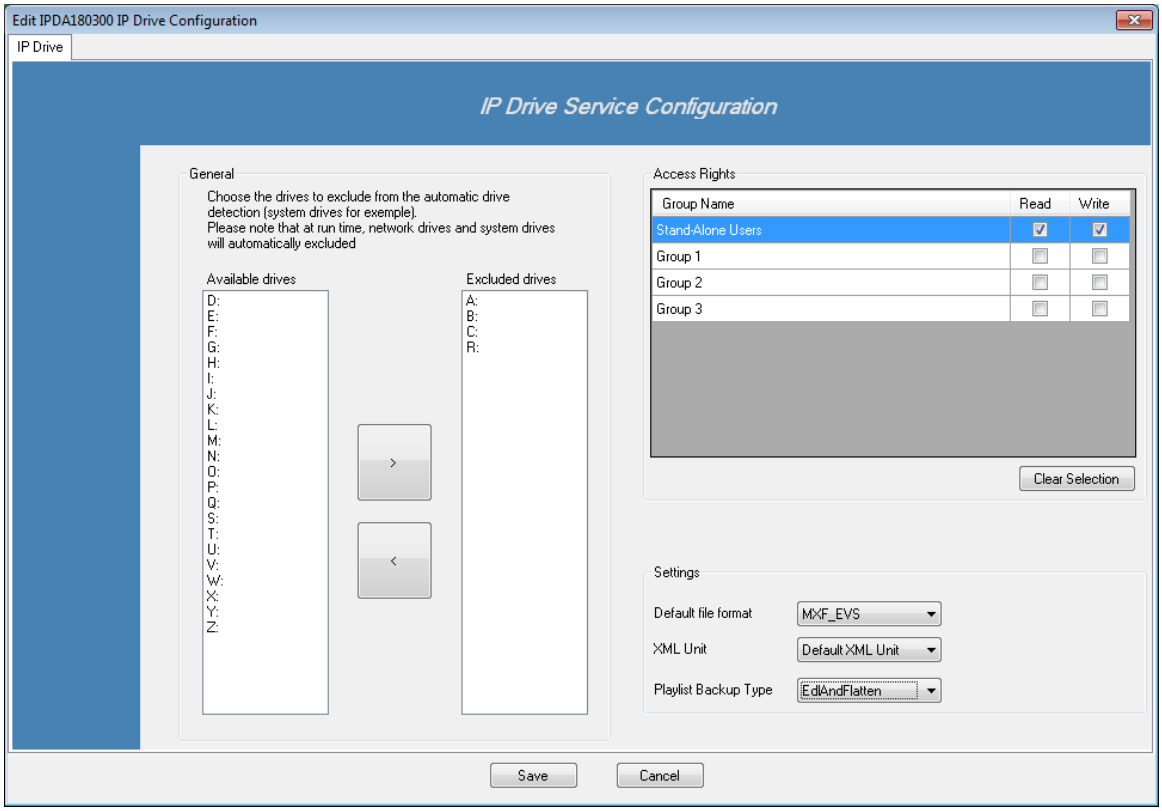



**Note**

The service must be stopped in order to be edited.

Once the IP-Scheduler service is started, the configuration is only viewable.

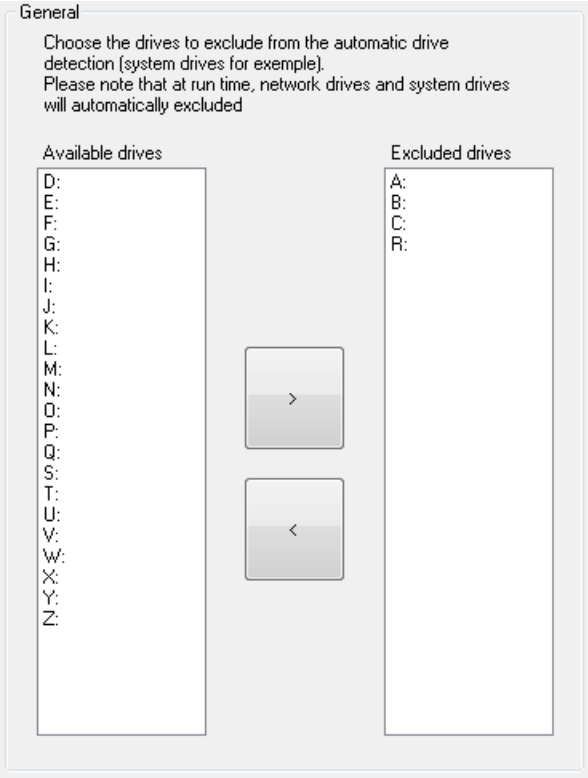
The IP Drive Configuration window opens:



## General

The aim of the General setting is to exclude known drive(s) from the auto detection and especially ones which do not contain relevant media files.

As it is impossible to keep a fixed letter drive in Windows OS, IP Drive has to monitor all letter drives to assume the auto detection. Typically, system drives should be excluded (A, B, C, and R).



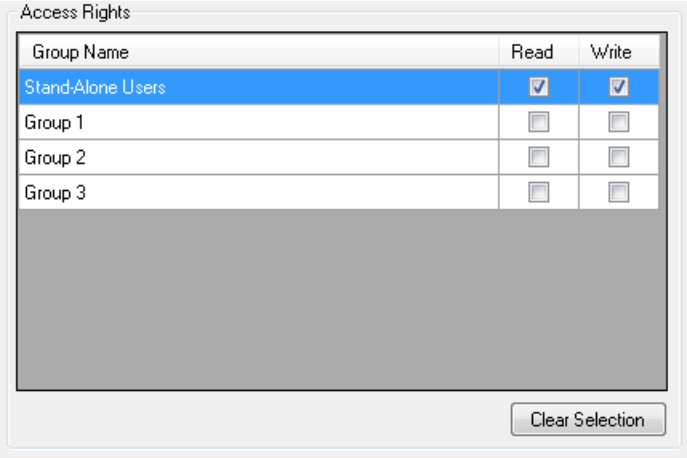

Select the letter in the Available drives list to be excluded from the detection and press “>“ to add it in the Excluded drives list

To remove it from the Excluded drives list, select it and press “<“ to add it in the Available drives list.

## Access Rights

As seen in the Near Line Management Configuration chapter, rights must be defined for drives detected on the workstation where IP Drive is activated.

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




Check all wanted Read or Write boxes for each group.

**Read:**

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

**Write:**

Checking a 'Write' box allows performing a backup of the clips from a server to a drive (Reading is automatically allowed).

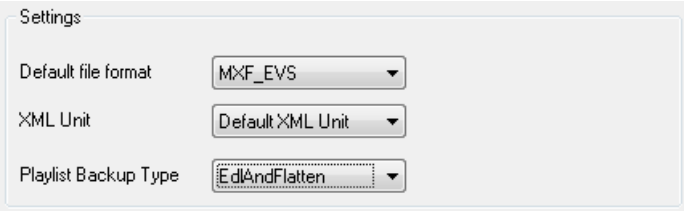
**Note**

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

**Clear Selection:**

Push the button to clear all checked boxes.

## Settings



**Default file format:**

Choose the MXF EVS, the MXF OP1A, QuickTime Movie, QuickTime reference, MXF OPAtom, DV-DIFF MXF OP1A_SMPTE or Wave format. It defines the type of files which will be created by the XFile or XTAccess/XSquare system.

**Note**

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

Default file format is MXF_EVS

**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 Drives detected on the workstation).

**Note**

It is advised to define a XML Unit that is local to the Media Files when configuring an XFile or XTAccess/XSquare PC with removable drives.

**Playlist Backup Type:**

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

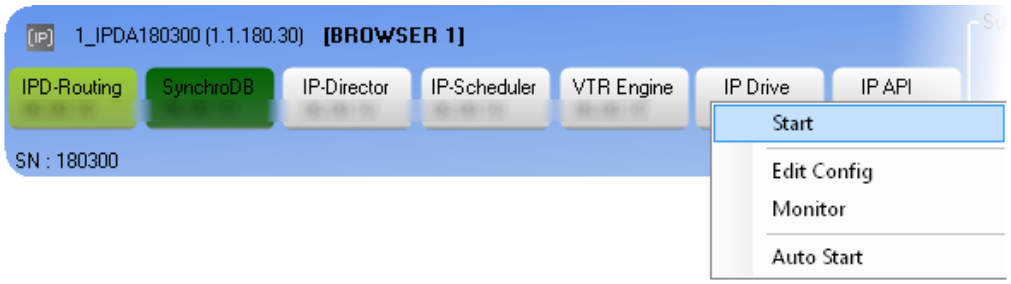
- EDL and Clips: XTAccess/XSquare transfers all the clips and creates an EVS EDL file which references all playlist and timeline elements.
- EDL and flatten files: XTAccess/XSquare creates an EVS EDL file which references all playlist and timeline elements and concatenates them in a single media file 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.

**Note**

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

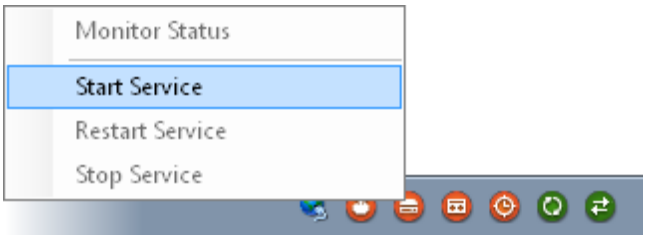
# Start IP Drive

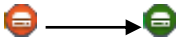
To start the IP Drive, right click the IP Drive box and select Start.




The IP Drive box turns green: the IP Drive has been successfully started.

The IP Drive can be also started from the icon in the Windows Taskbar. Right click the icon and select Start.




The orange icon becomes green in the Windows XP System Tray of the workstation where the service is started: 

**Note**

IP Drive is a Windows service loaded at the Windows start up. Starting the Remote Installer displays an icon the Taskbar and gives a right-click interface to manage it.

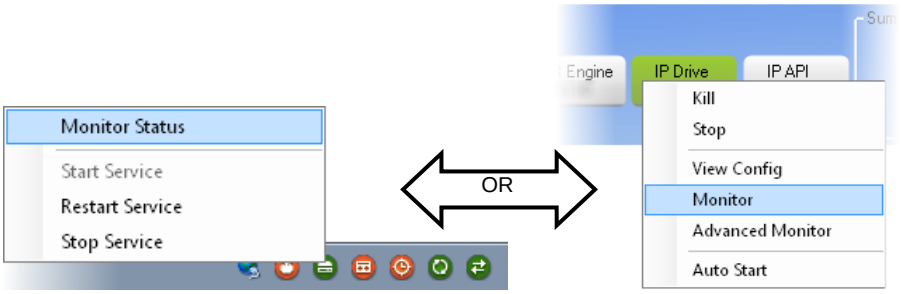

**Note**

If option Auto Start is checked, the IP Drive starts automatically when IP-Director is started from the Remote installer or by double-clicking on the desktop icon.

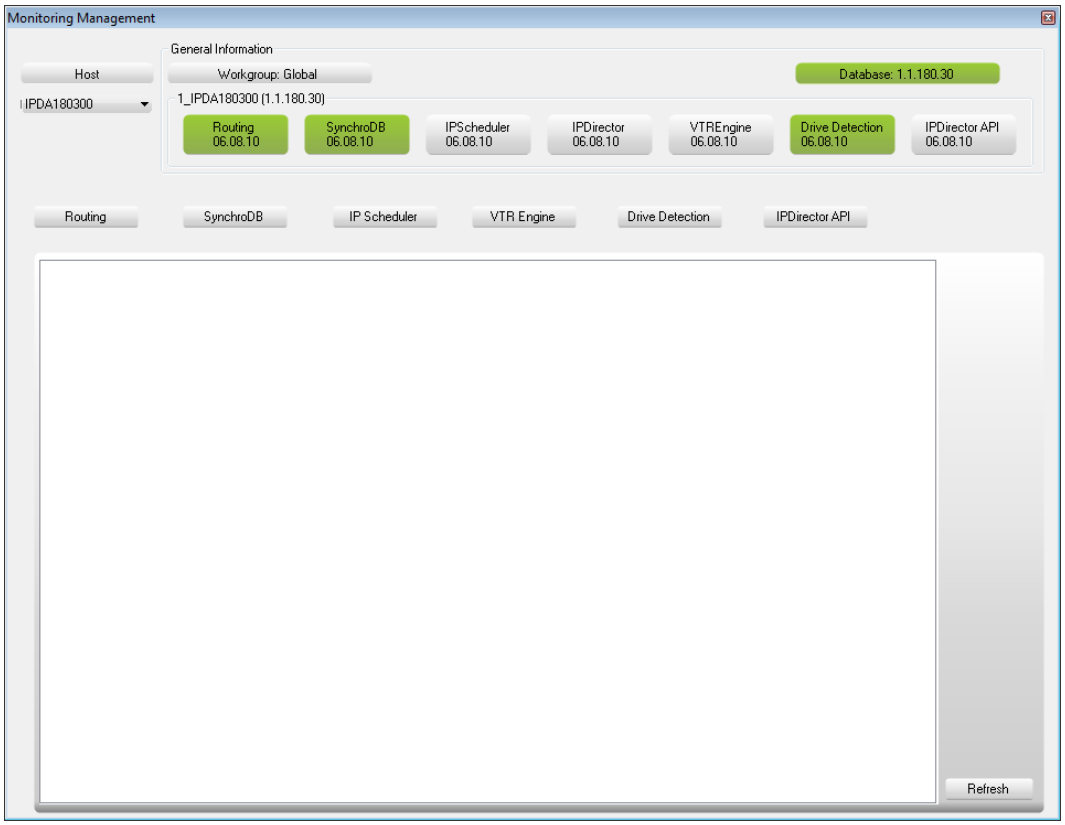
# Monitor IP Drive

The IP Drive service monitoring is accessible from its icon in the Taskbar and from the Remote Installer. Two kind of monitoring interface are available:

- The workstation monitoring (from Remote Installer and local icons in the Taskbar)




The window opens:




Select the tab to be monitored.

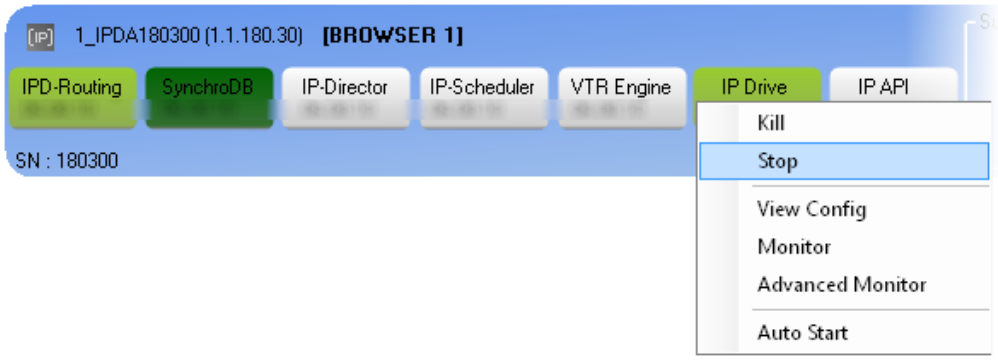
- The advanced monitoring.

By holding the CTRL key, right click the IP Drive icon (Monitor Status) or just right click the icon within the Remote Installer (Advanced Monitor) when the service is started.

Please refer to the Workstation Monitoring Chapter for details.

# Stop IP Drive

To stop the IP Drive service, the IP Drive zone must be green. Then, right click on it and select Stop or Kill.

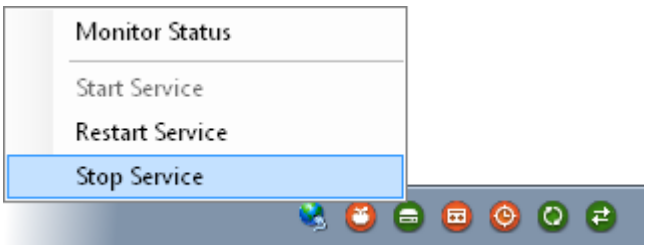



'Stop' will close properly the IP Drive service and 'Kill' will stop the IP Drive Process. The 'Kill' must be used as a last resort if the service can be stopped.

View Config previews the IP Drive Configuration window while service is running. Parameters edition is disabled.

**Note**

You can also stop or restart the IP Drive service by right clicking the Taskbar icon and selecting "Stop Service" or "Restart Service".



# 3.17 IP API & Auto-Complete Indexer

## API

An integrated API is now provided with the IP-Director package. This API is a SOAP Web service hosted by a Windows service. Each IP-Director can host a Web service.

Each workstation is installed with the “Web Service” windows service. If this service is started the IP-Director will act as a Web Service Server and will be able to handle any request from the API clients.

An API client that wants to send a request to the IP-Director API can connect to any IP-Director where the Web Service is started. However, to use only one point of contact and be able to use the processing power of multiple Web Services, a Web Service Proxy can be installed on a gateway server (i.e. the DB Server). This proxy will route the requests to a “Web Service Farm” composed by all web services started in the IP-Director workgroup. This Proxy function adds load balancing and redundancy capabilities to the IP-Director API.

For details, please refer to the document **IP-Director_API_HowTo.pdf** provided with the release notes.

**Note**

IP API can be installed on another workstation. Typically, database computers are able to run an API Proxy.

Please refer to the API Proxy Installation and Configuration chapter for details.

## Auto-Complete Indexer

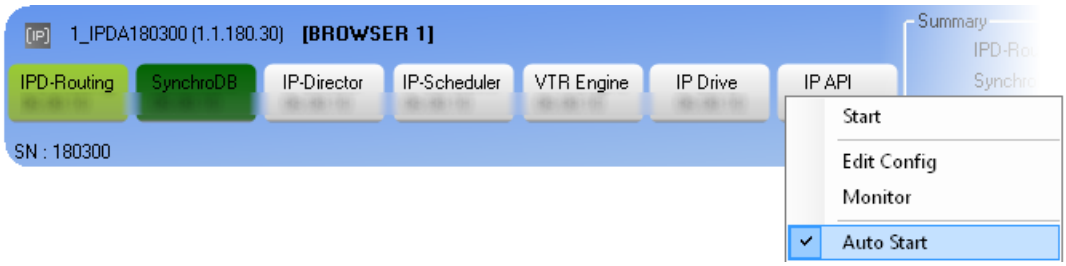
The Auto-Complete search feature available in the IP-Director GUI is based on an engine which is hosted by the IP API service.

The Auto-Complete engine can only be started in an IP API Service in Server mode (not in proxy mode). It responds to the Auto-Complete requests. The Auto-Complete engine usually consumes a lot of memory and receives lots of requests. So it only starts on machines where this configuration is specified.

**Note**

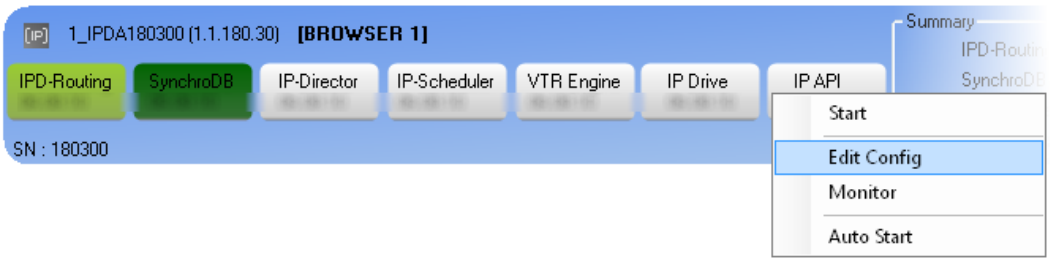
It is therefore possible to find a setup where no machine handles the Auto-Complete feature if no IP API Service is started or configured for it.

After having configured Serial Communication (in the Workstation contextual menu), SynchroDB, IP-Scheduler, IP Drive and before starting IP-Director, right click the IP API button and select Auto Start to automatically start IP API with the IP-Director application.




# Configure IP API

Right click the IP API button and select Edit Config from the contextual menu.




**Note**

The IP-API with the lowest routing number takes the “Master” role.

This IP_API is in charge of the API Notifications and usually consumes a lot of memory.

Other IP-API started in the workgroup has a “Waiting” status (Only as an automatic failover for the IP-API).

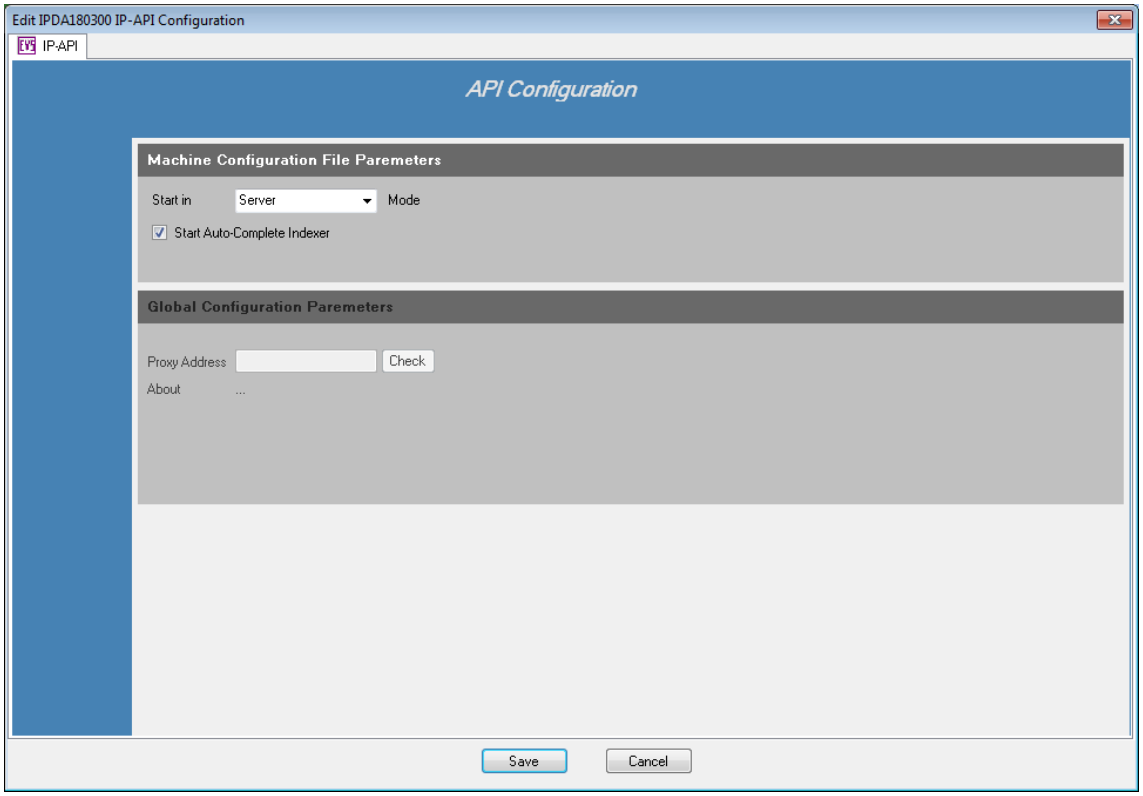
The “Master” role is clearly identified with a dark green status within the Remote Installer.


**Note**

The service must be stopped in order to be edited.

Once the IP-Scheduler service is started, the configuration is only viewable.

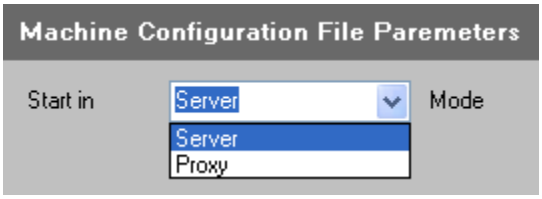
The IP API Configuration window opens:




## Machine Configuration File Parameters

The aim of the Machine Configuration File Parameters section is to define the starting mode of the IP API Service.

Two modes are listed for the starting mode:




- Server (the default mode): Started in server mode, the API service replies to API clients. The Master one provides the notifications.
- Proxy: Started in proxy mode, the API service routes the requests made by the API clients to the API servers and the notifications from the Master IP-API. This configuration is used for a one point of contact using the power of several API severs.

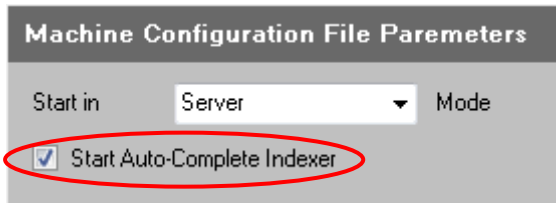
**Note**

This mode is generally use on an API Proxy workstation

Please refer to the API Proxy Installation and Configuration chapter for details.

## Start Auto-Complete Indexer

In order to start the Auto-Complete Indexer, check the following box:




At least one IP-API Service should be started in Auto-Complete Indexer mode to provide the feature in the IP-Director GUI, **even if the API is not used by a third party client.**

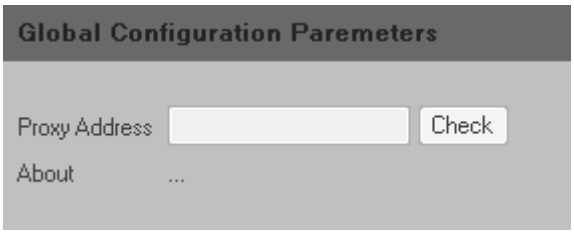
Several Services can be started in this mode to load-balance the requests on multiple stations (It also avoids the single point of failure in a workgroup). But each station will consume the same memory size to load the Auto-Complete catalog.

It is advised on big setups to avoid starting the AutoComplete Indexer on the IP API service which has already the Master role (the API Notifications).

**Note**

It is advised on big setups to avoid starting the AutoComplete Indexer on the IP API service which has already the Master role (the API Notifications).

## Global Configuration Parameters




**This section cannot be edited from the IP API service configuration.**

It is accessible from the IP API tab in the Remote Installer configuration only.

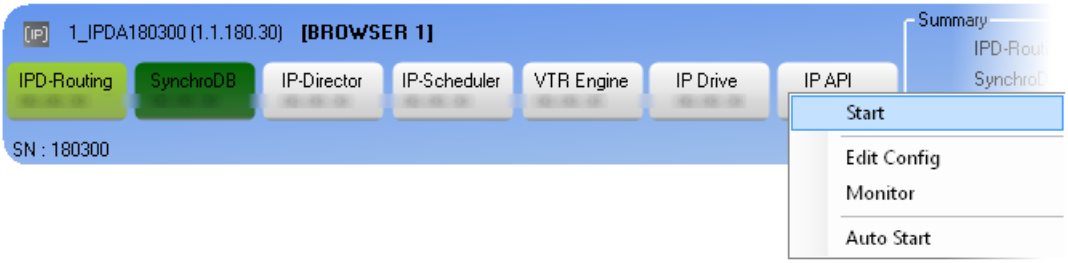
Please refer to the **IP API Configuration chapter** for details.

**Note**

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

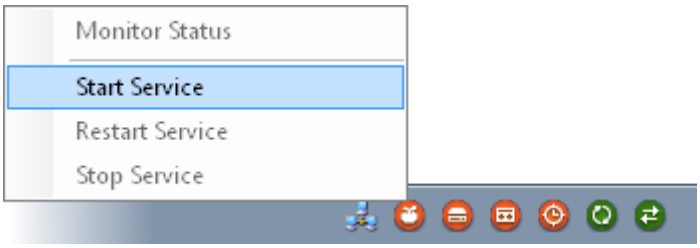
# Start IP API

To start the IP API, right click the IP API button and select Start.




The IP API box turns green: the IP API has been successfully started.

The IP API can be also started from the icon in the Windows Taskbar. Right click the icon and select Start.




**Note**

IP API is a Windows service loaded at the Windows start up. Starting the Remote Installer displays an icon the Taskbar and gives a right-click interface to manage it.

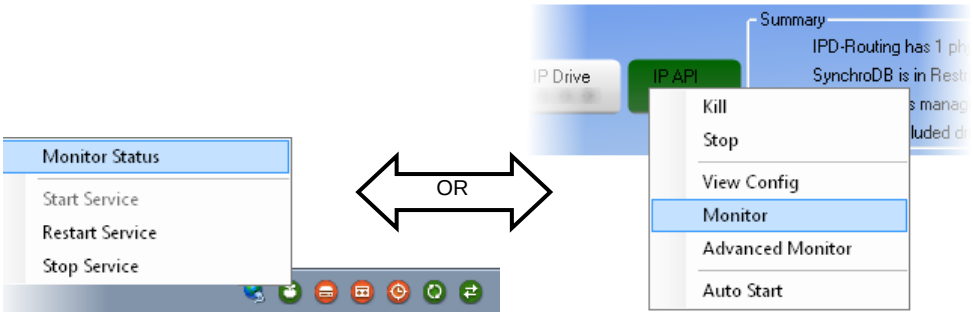

**Note**

If option Auto Start is checked, the IP API starts automatically when IP-Director is started from the Remote installer or by double-clicking on the desktop icon.

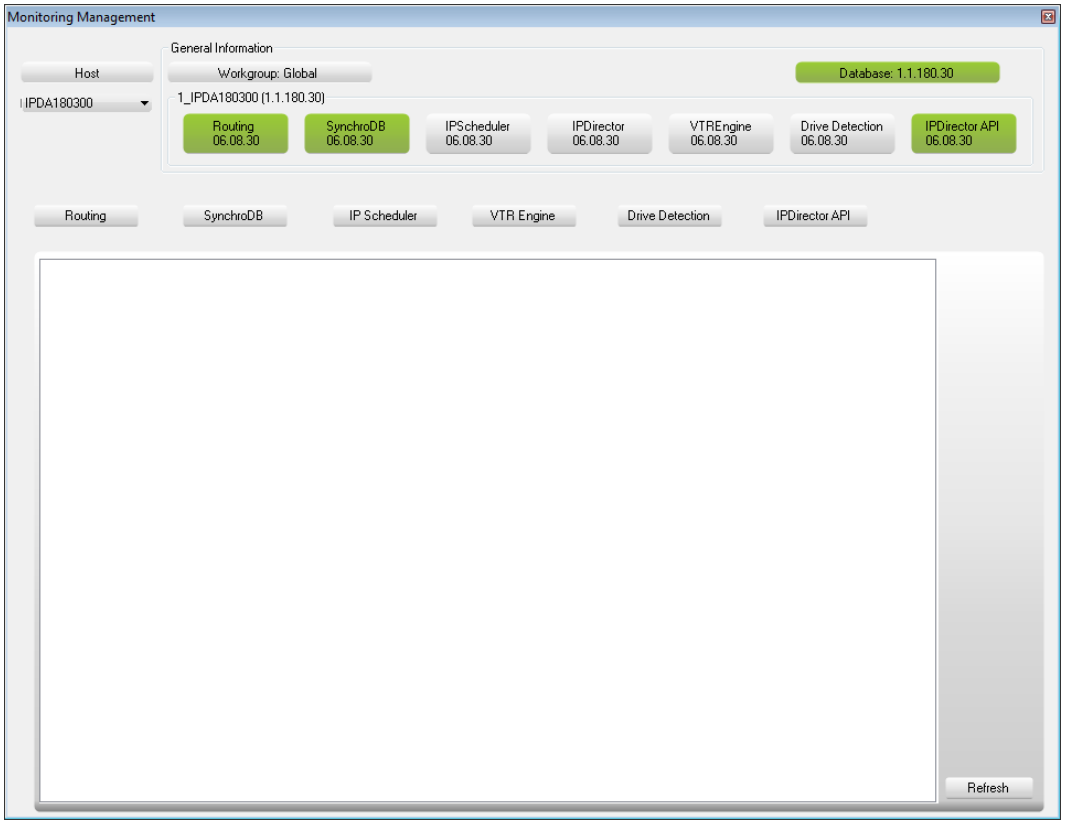
# Monitor IP API

The IP API service monitoring is accessible from its icon in the Taskbar and from the Remote Installer. Two kind of monitoring interface are available:

- The workstation monitoring (from Remote Installer and local icons in the Taskbar)




The window opens:




Select the tab to be monitored.

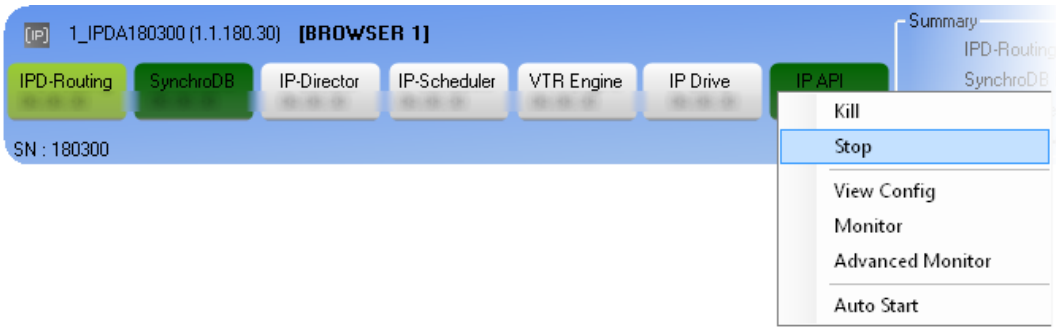
- The advanced monitoring.

By holding the CTRL key, right click the IP API icon (Monitor Status) or just right click the icon within the Remote Installer (Advanced Monitor) when the service is started.

Please refer to the Workstation Monitoring Chapter for details.

# Stop IP API

To stop the IP API service, the IP API zone must be green. Then, right click on it and select Stop or Kill.

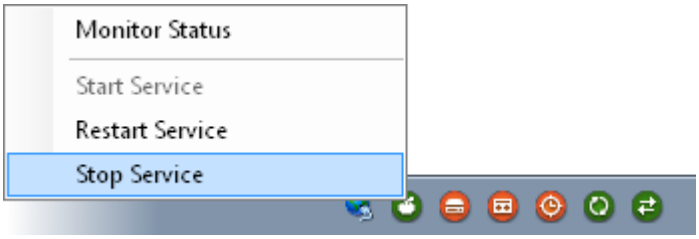



'Stop' will close properly the IP API service and 'Kill' will stop the IP API Process. The 'Kill' must be used as a last resort if the service can be stopped.

View Config previews the IP API Configuration window while service is running. Parameters edition is disabled.

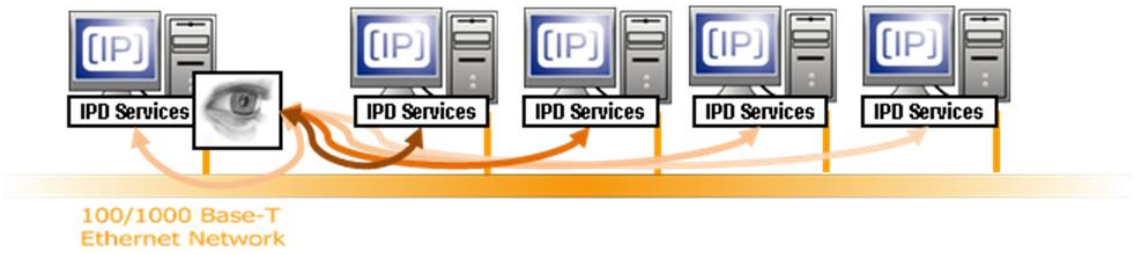
**Note**

You can also stop or restart the IP API service by right clicking the Taskbar icon and selecting "Stop Service" or "Restart Service".



# 3.18 Workstation Monitoring Chapter

It is possible to remotely monitor all services from any workstation on the network **using one common interface**.



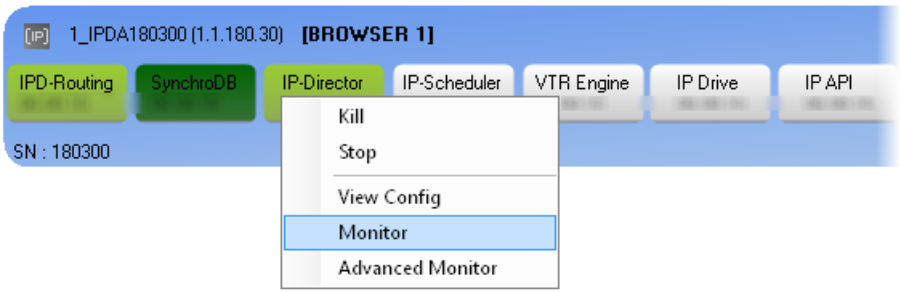

**Note**

The monitoring interfaces are designed for technical assistance. The delivered information is dedicated to skill users in contact with the EVS support staff.

## Starting the Monitoring Management tool

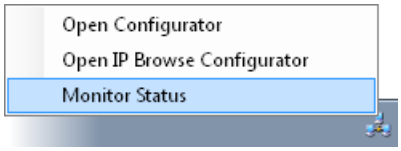
There are two ways to launch the Monitoring Management tool:

- From any service within the Remote Installer:

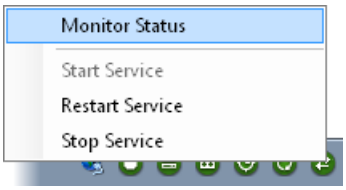



Right click a service on a workstation and select Monitor.

- From the Remote Installer icon (in the Windows taskbar):

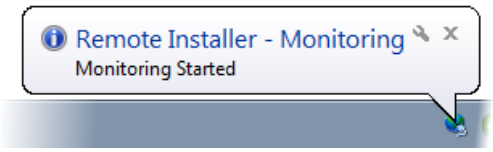



Or

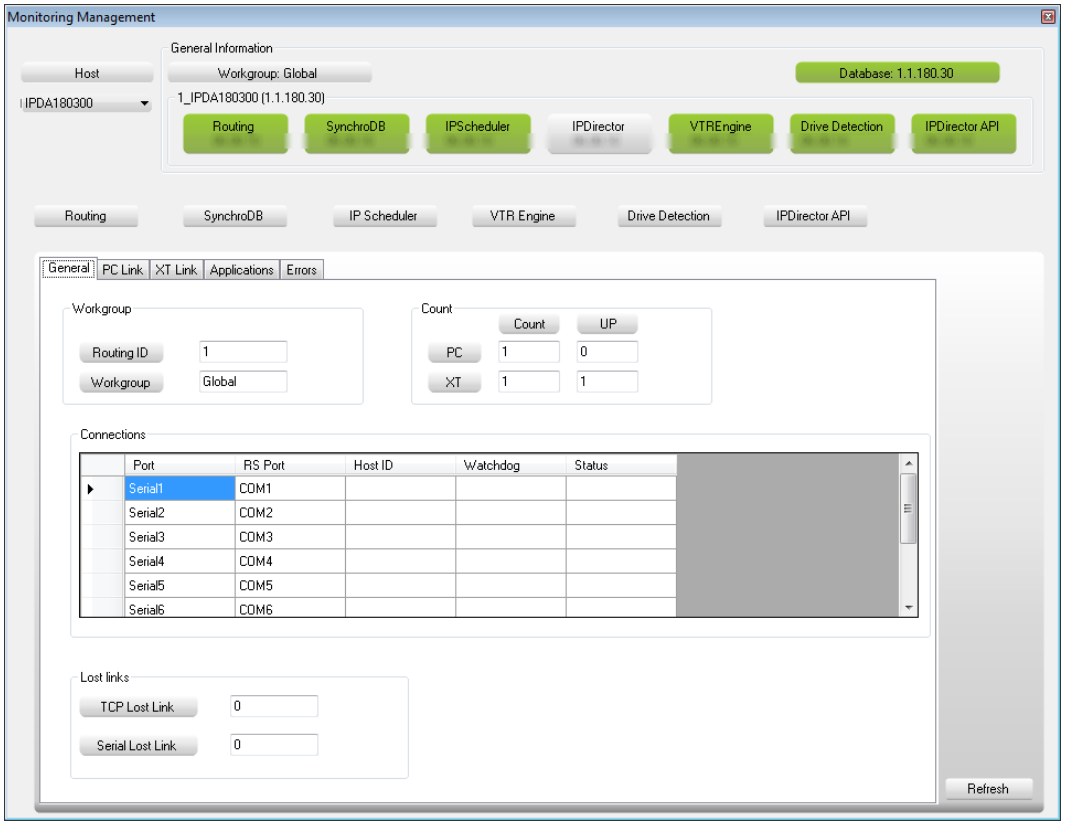



Right-click the Remote Installer icon (or any service icon) and select Monitor Status.

The tool contacts all the workstations on the network and finally displays a started menu in a tooltip.




The Monitoring Management window is displayed:



# Monitoring Management Interface

There are 4 zones:

- The zone where the monitored Host (workstation) is selected.
- The General Information about the selected workstation selected from the previous Host zone.
- The service buttons zone.
- The monitoring zone of the selected service.

## Host

Select the workstation for monitoring. The drop down list shows all the workstation discovered by the Remote Installer.


## General Information

This zone shows information about the workstation:

- The workgroup name
- The database IP address and status
- All service status (started or not) and versions

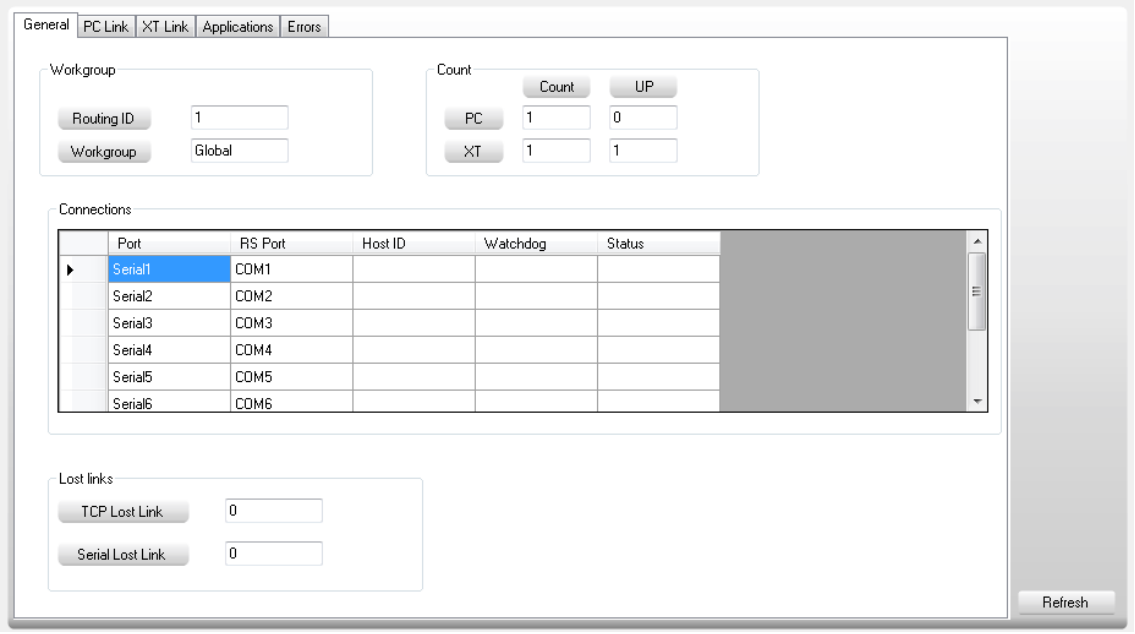

## Service Buttons

The buttons change the monitored service displayed in the dedicated zone.

# Service Monitoring

This zone shows the monitoring of the selected service on the selected workstation. Depending on the monitored service, different tabs are displayed.

This screenshot shows an IP-Routing monitoring example:




**Note**

The values displayed are grabbed when the monitoring is started or when the workstation is selected. The display is not dynamic.

In order to display accurate values, press the Refresh button:


**Note**

The information shown in the service monitoring zone is also available from the advanced monitoring of each service.

# 4. USER MANAGER

## 4.1 Definitions

### User

A user is an individual who will use the system. The user is characterized by a login and a password and can have access to the system by entering a login and password.

### Groups and Membership

A user can belong to a group (or several groups) of users. (If not, he/she is a 'stand alone user'). Defining groups of users will, for example, allow restrictions of visibility to some elements created by other members of the same group. Group membership is mainly used when many different broadcast partners are sharing content on the same IP-Director network.

### Elements

In the IP-Director, the main elements are clips, bins, play-list, log sheets and logs.

Ownership of elements: The owner of an element is the user who has created it. The ownership property will allow to define which element can be deleted and by whom. You can delete the clips created by the members of your groups but not clips created by other groups.

### Resources

The resources of the IP-Director are the recorder channels and the player channels of the servers the IP-Director is connected to.

### Visibility

The visibility of an element or a resource determines what the user can see in the user's interface. In other words, which element or resource a user is allowed to see.

### User Profile

A user profile is a set of characteristics which can be automatically applied when a new user is created. It is a tool to help the administrator to define similar user accounts more quickly with less risk of errors.

A user account is not linked to the profile(s) which was used to define its rights. It means that if a profile is modified, the user characteristics created based on this profile will not be modified.

## 4.2 Start the User Manager application

The User Manager allows you to define all users who will access the IP-Director systems and the group(s) they belong to. Each user can have different rights on the system. For example, some of them will be allowed to delete clips, some others not.

**Note**

It should be launched after the installation of the complete IP-Director set up, and after the database parameters (server location, etc.) have been defined in the console management application and after the Routing and SynchroDB services are started.

**To launch the IP-Director User Manager,**

Double click the icon on your desktop:


Or select START from the windows XP tool bar then Programs → EVS Broadcast Equipment → IP-Director → User Manager.

The login window is opened.


The User Manager is only available to users who have administrator rights on the system.

Enter the administrator login and password. Then click OK.

**Note**

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

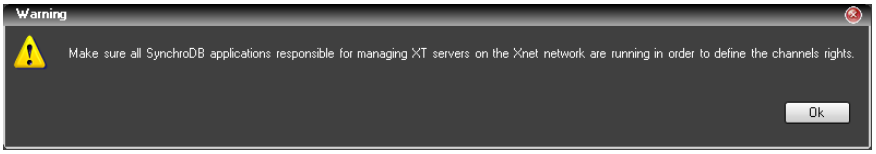
- Login: administrator
- Password: evs

**Note**

If no valid database has been restored, configure the Remote Installer to reach, clean or restore a valid database.

**Note**

This is mandatory to be able to configure the resources rights and visibility of users.



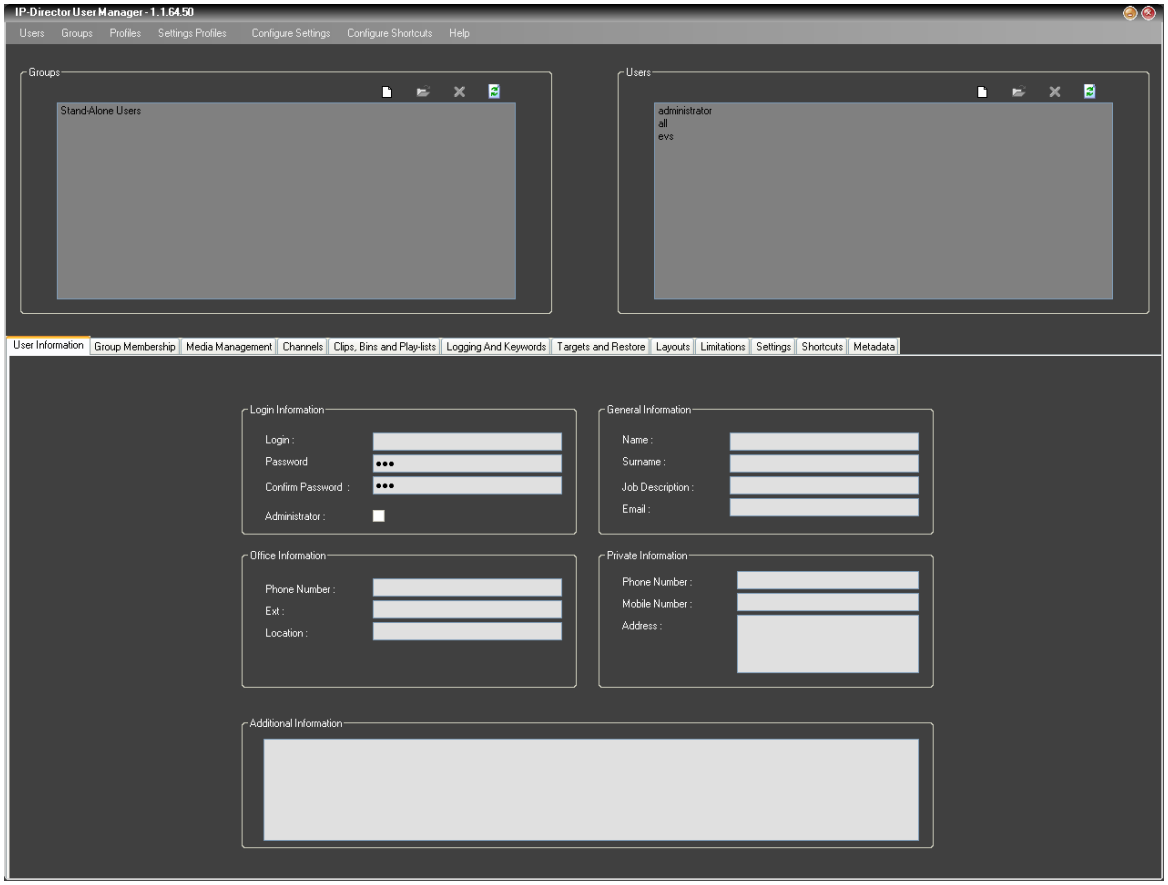

The user manager main window is opened.

# Note to the administrator

A generic administrator user has been created in the database to allow the administrator to log on the system the first time the user uses the system.

The login and password of this administrator user are provided in this manual so EVS strongly recommends that the administrator deletes this generic user as soon as the user has created his/her own administrator user with a different login and password.

# 4.3 Main interface

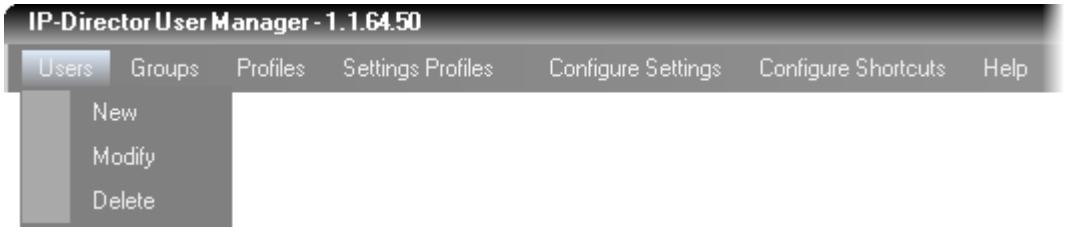



The main interface includes 3 different parts:

- The menus
- The groups and users created on the system
- The characteristics (rights) of the selected user.

# The Menus

## The 'Users' menu

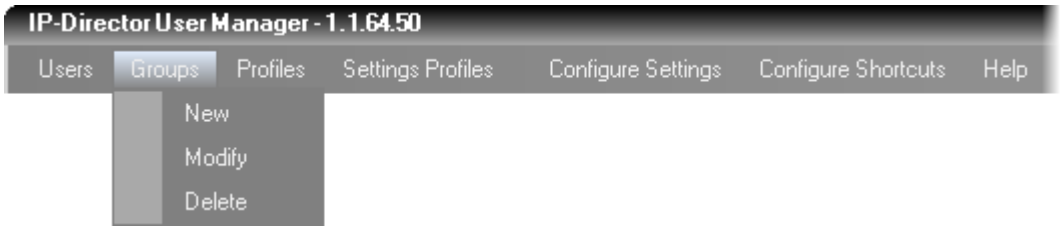



**New:** create a new user

**Modify**: modify user's rights

**Delete:** delete a user

## The 'Groups' menu

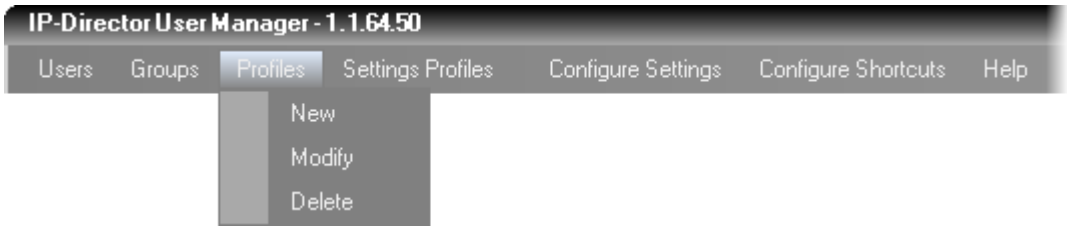



**New:** create a new group

**Modify:** modify (rename) a group

**Delete:** delete a group

## The 'Profiles' Menu




**New:** create a new user profile

**Modify:** modify a user profile

**Delete:** delete a user profile

## The 'Settings Profiles' Menu


**New:** create a new settings profile

**Modify:** modify a settings profile

**Delete:** delete a settings profile

## The 'Configure Settings' option

Open the "Define Settings Types" Windows.

Please refer to the following **Configure Settings/Shortcuts chapter**.

## The 'Configure Shortcuts' option

Open the "Configure Shortcuts" Windows.

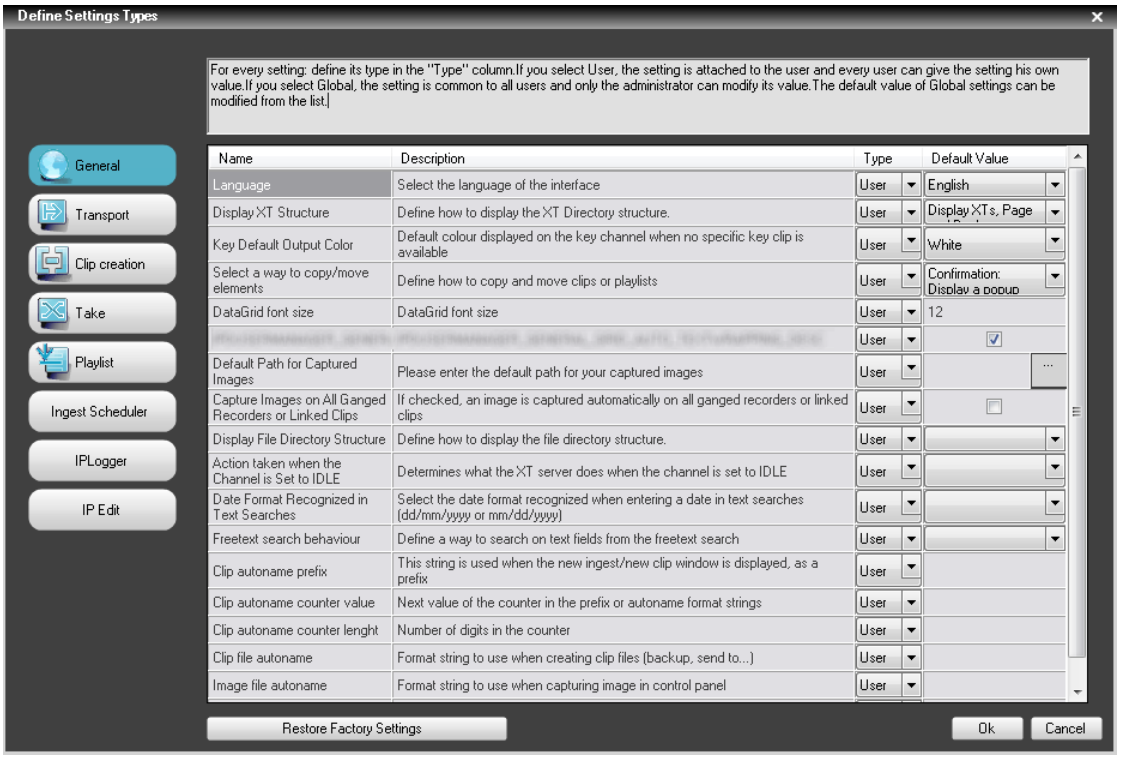
Please refer to the following **Configure Settings/Shortcuts chapter**.

# Configure Global Settings and Shortcuts

## The 'Define Settings Types' window

The administrator can configure default values of all settings. This should be done prior to create users.

Click on Configure Settings in the User Manager main menu to open this window:




Different settings categories are available:

**General:**

Language, Display XT Structure, Key default output color, Copy/Move method, DataGrid font size and AuotText Wrapping, Default path for capture, capture on ganged channels, Display file directory structure, Action taken when channel is set to IDLE, Date format recognized in text search, Freetext search behaviour and Clip/File/Image/Playlist autonaming.

**Transport:**

Settings related to playback transport function: Play VAR speed, Fast Forward speed and Fast Rewind speed, Auto play on load.

**Clip creation:**

Settings related to clip creation: Guard bands, Default clip duration, Open save clip windows, Create clips on all synchronized recorders, My clips only in the "Last clips created list", Default XT for partial clip restore, Premark and Postmark for automatic clip creation, ID Mode and Create/trim sub clips on ganged channels.

**Take:**

Settings related to the 'Take' function: Default video effect type and duration, Default audio effect type and duration.

**Play-list:**

More than 25 settings related to the play-list management, the play-list editor, including colors and audio/video effect properties.

**Ingest Scheduler:**

More than 20 settings related to the Ingest Scheduler module: Display options, Minimum clip duration, Remaining Capacity, Auto-Name for clips/streams/files…

**IP Logger:**

Settings related to the IP Logger module: T/C offset on live, Protect Media prefix and Warnings messages.

**IP Edit:**

More than 45 settings related to the IP Edit module: Display options, Default effect type/duration/position, Preview transitions, Volume automations, GPI type/advance/Pulse/Offset, Replace options, Audio mute/swap.

Two different types of settings exist:

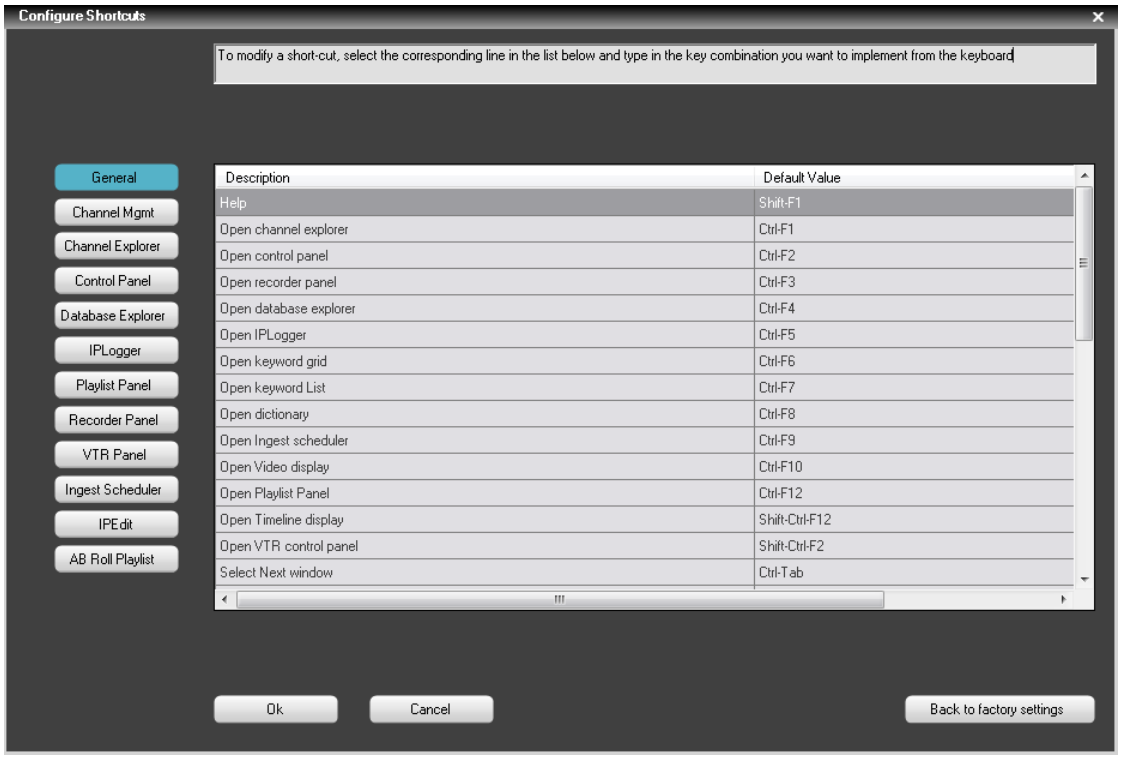
- **User:** the setting value can be changed by any user according to his preference.
- **Global:** the setting value is common to all users and can only be changed by the administrator.

For every setting, the administrator must specify the type of setting (User or Global) and its default value.

# The 'Configure Shortcuts' window

The administrator can configure default values of all settings. This should be done prior to create users.

Click on Configure Shortcuts in the User Manager main menu to open this window:




Each function in the IP-Director interface has its own shortcut.

Consult or edit the default shortcuts between functions and keys.

**Note**

Push the "Back to factory settings" to restore default shortcuts values defined by EVS.

**Note**

To modify a shortcut, select the line in the list and hit the new key combination to change it.

# 4.4 Groups and Users

In the main window, groups are displayed in the group list (on the left) and users belonging to those groups are displayed in the user list (on the right).

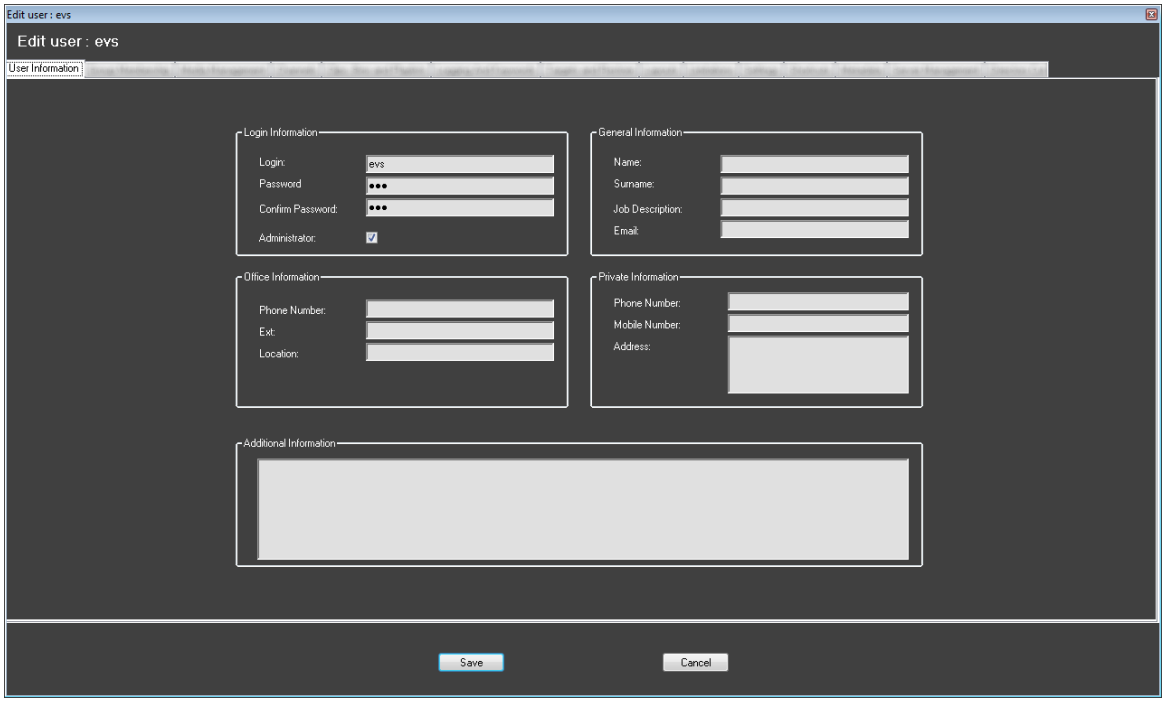
When a group is selected in the group list, the users belonging to this group are displayed in the user list

The functions ‘New’, ‘Modify’, ‘Delete’ are accessible from the main window for users and groups.

## 4.4.1 The Different Characteristics of a User

When a user is selected in the user list, his characteristics are displayed as read-only in the characteristics zone below.

### The User Information tab

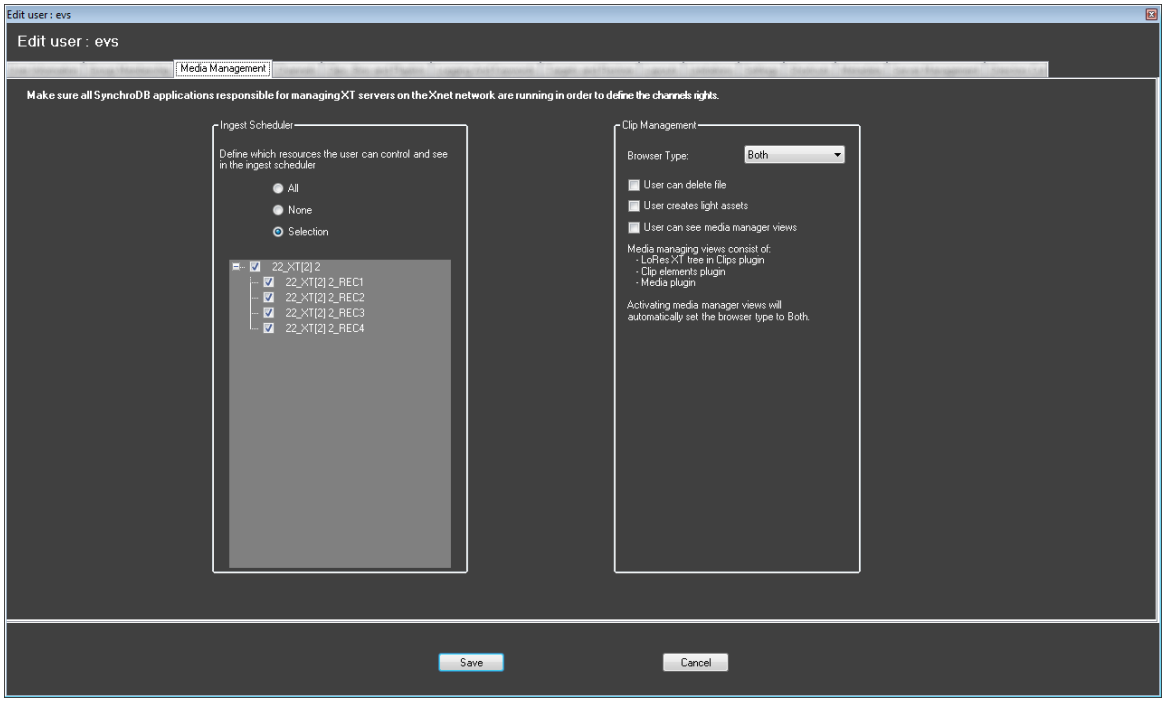



This tab displays all necessary information of the selected user.

# The Group Membership tab


This tab gives information on the group(s) the user belongs to.

# The Media Management tab




This tab gives information on the media management options the user has.

## Ingest Scheduler:

This part of the Media Management tab allows defining which resources can be controlled and seen by the user within the Ingest Scheduler.

**All:**

The user can see and control all channels on the XNet network.

**None:**

The user cannot see and control any channels on the XNet network.

**Selection:**

The user can see and control some channels on the XNet network. The channels seen and controlled have to be checked in the list.

**Note**

If all servers and thus all channels present on the XNet network are not displayed in the list, it simply means that all SynchroDB applications responsible of managing the missing XTs are not up and running or the servers are stopped.

## Clip Management:

This part of the Media Management tab gives extended rights to a media manager for a better clip management.

**Browser Type:**

Select the browser mode between: Both, HiRes Only and LoRes Only. This is the only place to define a user as LoRes or HiRes.

**User can delete file:**

If this box is checked, the user is able to delete physically a file on Near Line storage. Nevertheless, the user receives a warning message before deleting.

**User Creates light assets:**

If this box is checked, the user, who creates a sub-clip on an asset with at least one XT clip, won't create a clip on the server. A reference to the original clip will be created in the IP-Director database and thus avoid filling the clip number on the EVS server.

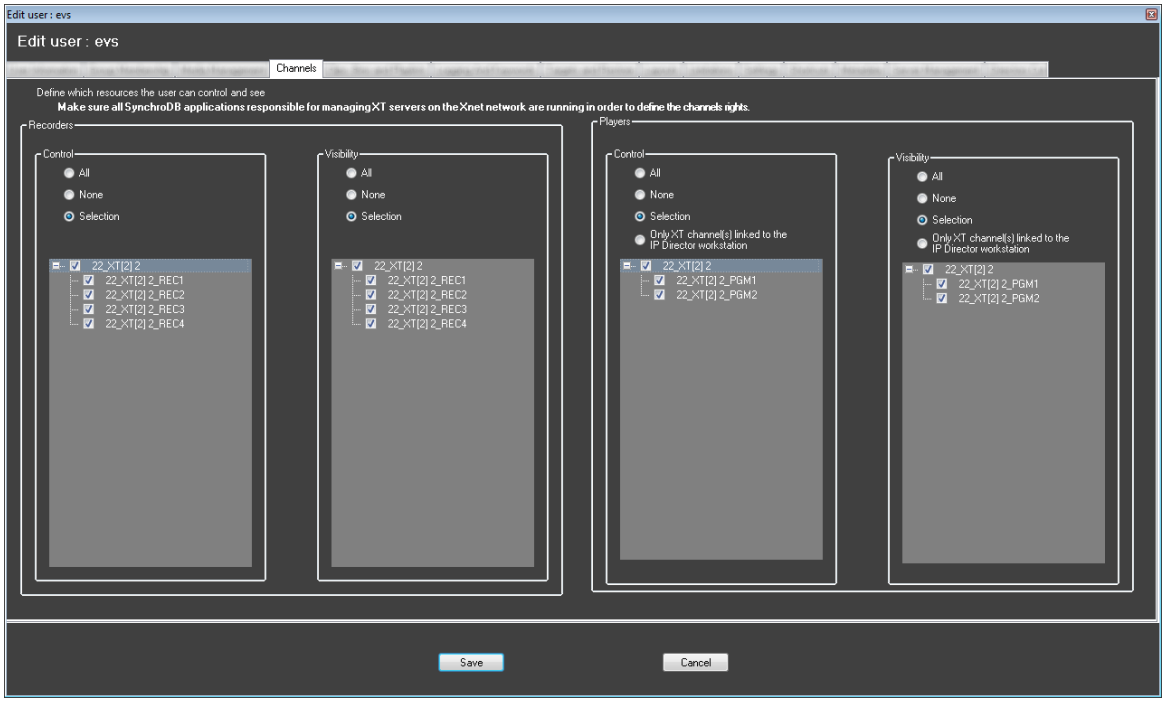
**User can see media manager views:**

If the box is checked, the user reaches advanced media manager views:

- LoRes XT tree in the Clips plugin
- Clip elements plugin
- Media plugin

This option automatically switches the browser mode to "both".

# The Channels tab




This tab gives information on which channel(s) the user can see and control. The control rights will always be lower or equal to the visibility rights.

**All:**

The user can see or control all channels on the XNet network.

**None:**

The user cannot see or control any channels on the XNet network.

**Selection:**

The user can see or control some channels on the XNet network. The channels seen or controlled have to be checked in the list.

**Note**

If all servers and thus all channels present on the XNet network are not displayed in the list, it simply means that all SynchroDB applications responsible of managing the missing servers are not up and running or the servers are stopped.

**Only XT channels linked to the IP-Director Workstation:**

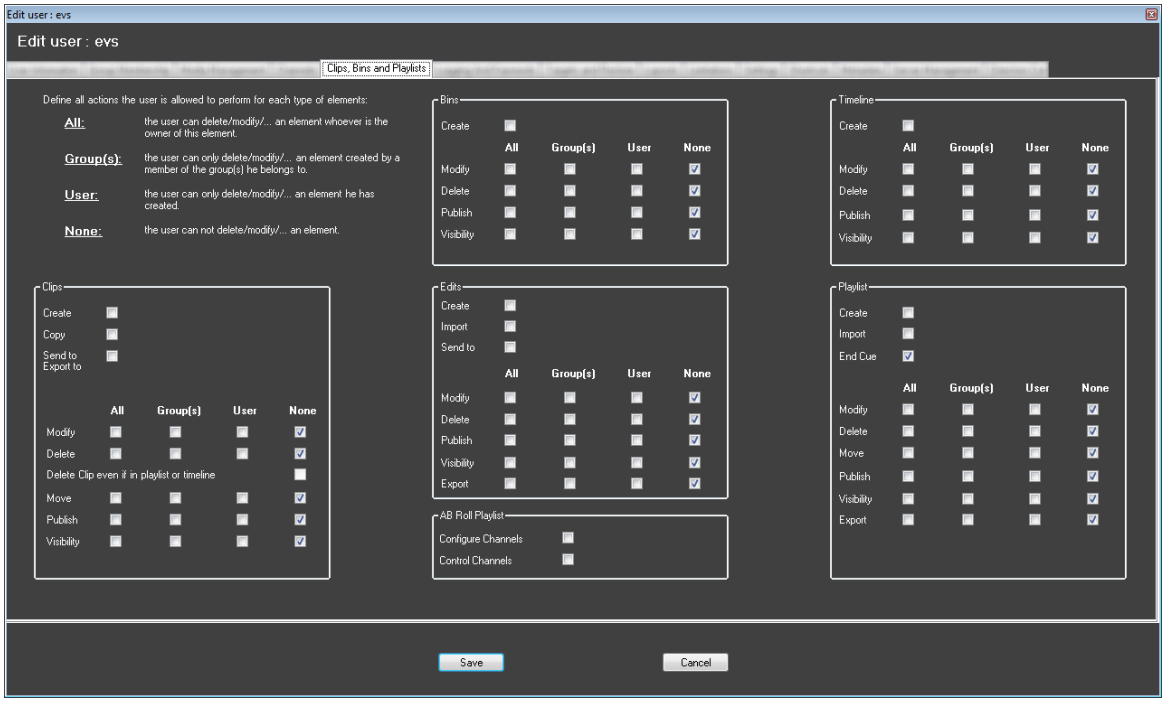
If this option is checked, the user will only see in his GUI, the playback channels which are physically linked to his (her) IP-Director workstation and specified in the IP-Director Configuration in the Remote Installer.

## 4.4.2 Elements

The elements assignments are divided in several single Tabs as follows:

- Clips, Bins and Playlists/Timelines
- Logging and Keywords
- Targets

### Clip, Bins and Playlists (Timeline) Tab




The Clips, Bins and Playlists Tab give information on the rights of the user in terms of visibility and control of some of the elements: clips, bins, edits, AB Roll Playlists, play-lists and timelines.

The **Timelines** created with the IP Edit module have also their separated rights.

**Create, Copy, Send to and Export to boxes:**

If these boxes are checked, the user has the right to Create, Copy, Import, Send or Export the corresponding element on the system and delete clip even if in playlist or timeline.

For example, if the Create box is checked in the 'Clips' zone, it means the user has the right to create clips on the system.

For other functions like Modify, Delete, Move, Publish and Visibility the rights of the user depends on where the box is checked on each line.

**All:**

The user can Modify, Delete, etc… all corresponding elements on the system.

**Group(s):**

The user can Modify, Delete, etc… all corresponding elements created by all users of the group(s) the user belongs to.

**User**:

The user can only Modify, Delete, etc… all corresponding elements the user created.

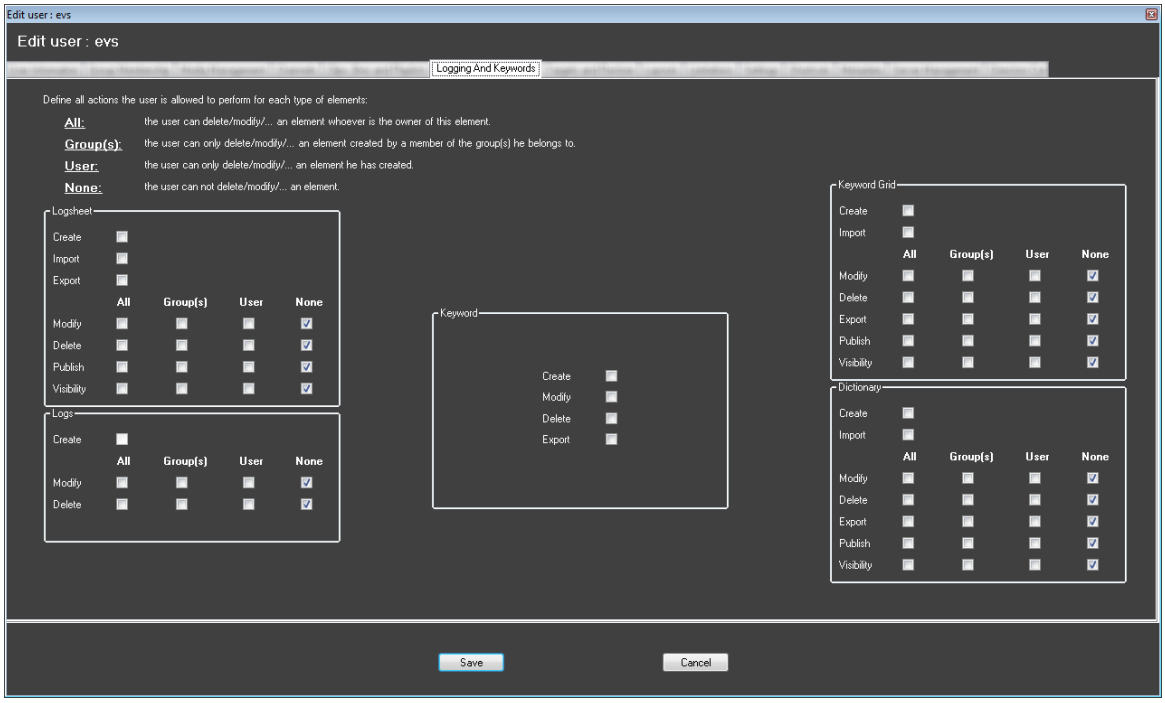
**None:**

The user cannot Modify, Delete, etc… any elements, even the elements the user has created.

In the example below:

- The user can create clips
- The user cannot copy clips
- The user can Send/Export clips that the user can see
- The user can modify clips created by all users member of The group(s) the user belongs to
- The user can delete its own clips.
- The user can move the clips the user has created
- The user can publish to other groups the clips the user has created
- The user can see all clips created by the users, members of the group(s) the user belongs to, but not clips created by other users, members in others groups.

# Logging and Keywords Tab




The Logging and Keywords Tab is used to define which kind of rights the user can perform on logs, logsheets, keywords , keyword grids and dictionaries.

**Log Sheet:**

The authority to manage the complete Log Sheet Create, Modify, Delete, etc…

The logsheet **export** is also protected by a user right.

**Logs:**

The authority to manage individual log entries (Create, Modify or Delete)

**Keyword:**

The authority to manage individual Keywords in the database List (Creation, Delete, Modify, etc…)

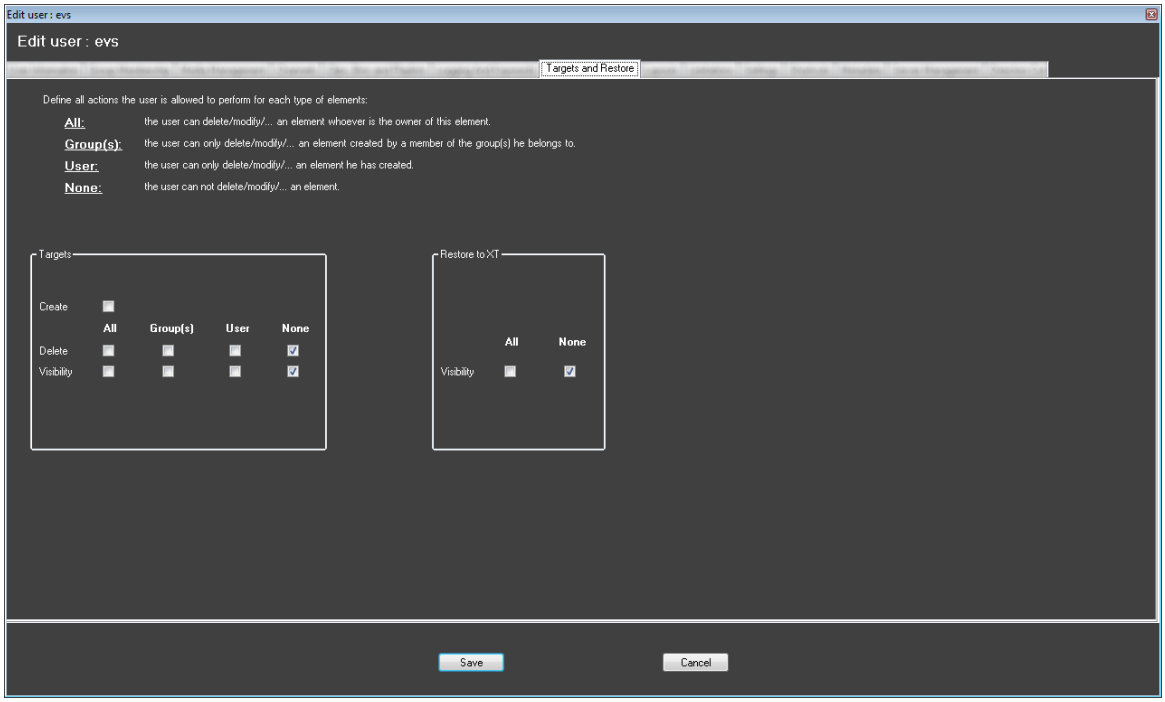
**Keyword Grid:**

The authority to manage complete Keyword Grids in the database (Create, Import, Modify, Delete, Export, etc…)

**Dictionary:**

The authority to manage complete Dictionaries in the database (Create, Import, Modify, Delete, Export, etc…)

# Targets and Restore Tab




The Target Tab is used to define which kind of rights the user can perform on targets and restore to XT.

**Targets:**

The authority to create, delete or see all the targets (Avid, CleanEdit, XT, File On Shared Drive, Final Cut Pro…)

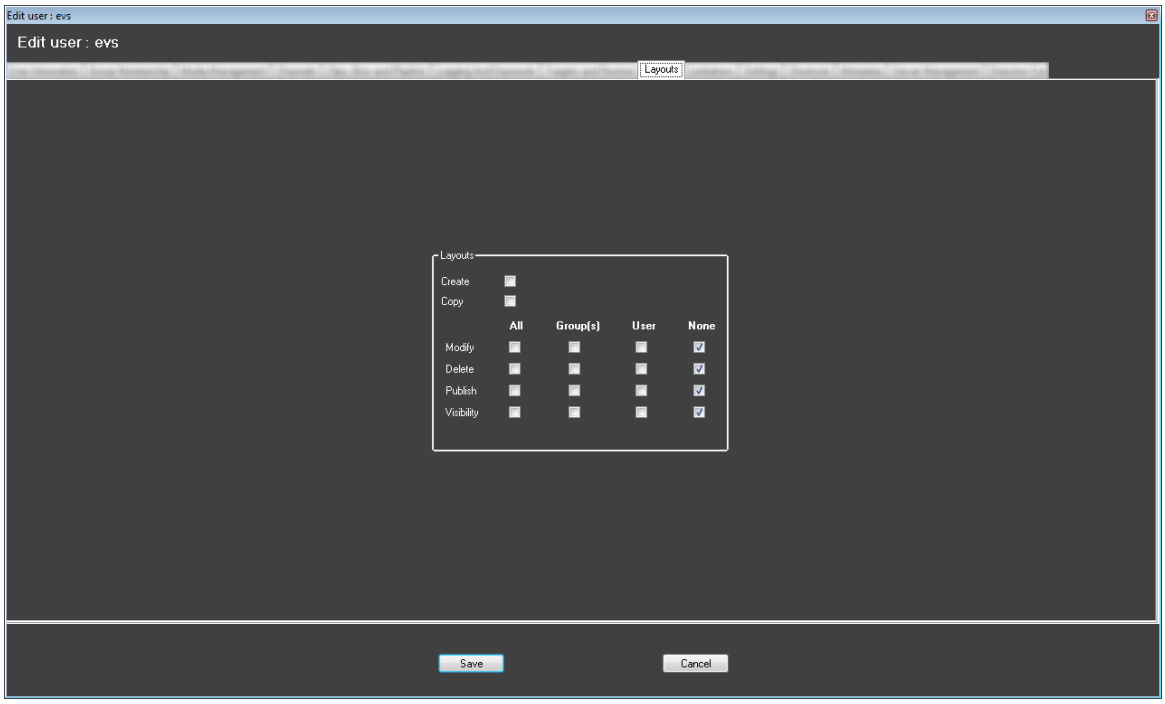
**Restore to XT**

The authority to restore file(s) from the Near Line storage to a server.

**Note**

For the Restore to XT function, the user will have the complete XNet Server list available to them as a restore destination. There is no way to limit the list of XT servers to restore to.

# Layouts Tab




The Layouts Tab is used to define which kind of rights a user has on layouts.

**Create, Copy boxes:**

If these boxes are checked, the user has the right to Create or Copy the corresponding element on the system.

**All:**

The user can Modify, Delete, etc… all corresponding elements on the system.

**Group(s):**

The user can Modify, Delete, etc… all corresponding elements created by all users of the group(s) the user belongs to.

**User**:

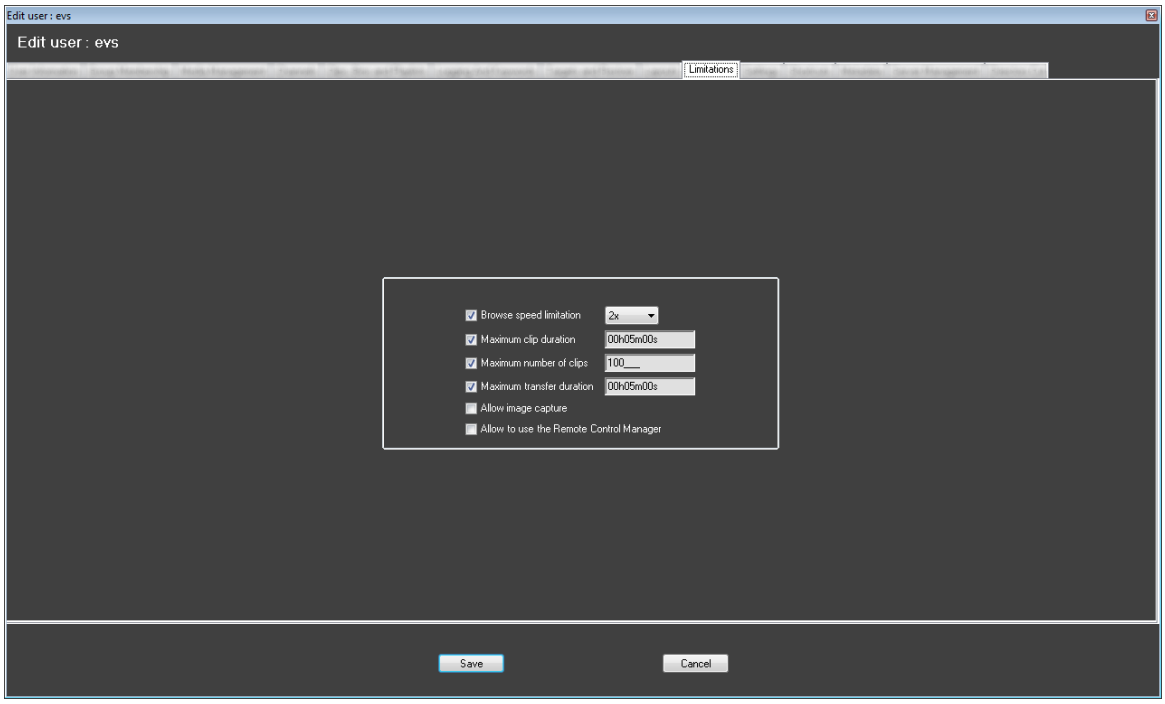
The user can only Modify, Delete, etc… all corresponding elements the user created.

**None:**

The user cannot Modify, Delete, etc… any elements, even the elements the user has created.

# 4.4.3 Preferences:

## Limitations tab




The Limitations Tab is used to impose certain limitations to users of the system, typically to reduce their overall impact on the system performance.

**Note**

These limitations are imposed by default for all users. In smaller setups, it is many times desirable to remove these limitations.

**Browse Speed Limitation:**

This allows the user's Browsing Speed to be limited to the selected Value (2, 3, 5, 10, 20, and 35 x playback speed)

Default: 2X

**Maximum Clip Duration:**

The Maximum duration that user is allowed to make a clip. This is used when it is desirable to limit the user's impact on the overall server's storage space by limiting their individual clip creation duration.

Default: 00h05m00s

**Maximum number of clips:**

The Maximum numbers of clips that user is allowed to make on the system. This is used when it is desirable to limit the user's impact on the overall server's storage space by limiting their individual clip creation.

Default: 100

**Maximum transfer duration:**

The Maximum duration that user is allowed to transfer through an XFile. This is used when it is desirable to limit the user's impact on the overall network traffic and XFile storage by limiting their individual clip transfer duration.

Default: 00h05m00s

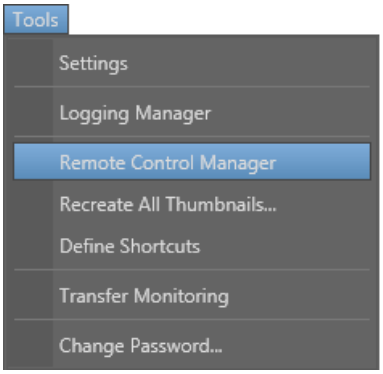
**Allow image capture:**

Authorize to capture images from the Control Panel and the Clip Editor.

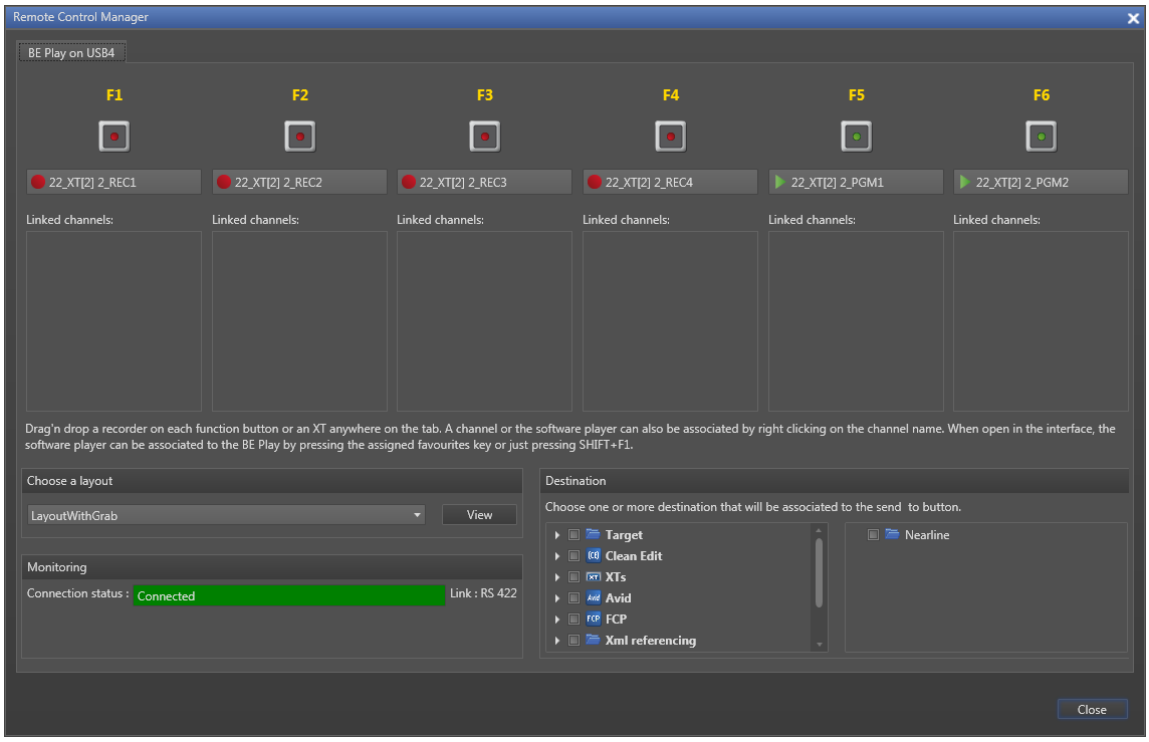
**Allow to use the Remote Control Manager:**

Authorize to open the configuration tool dedicated to the new MPlay and BEPlay remotes.

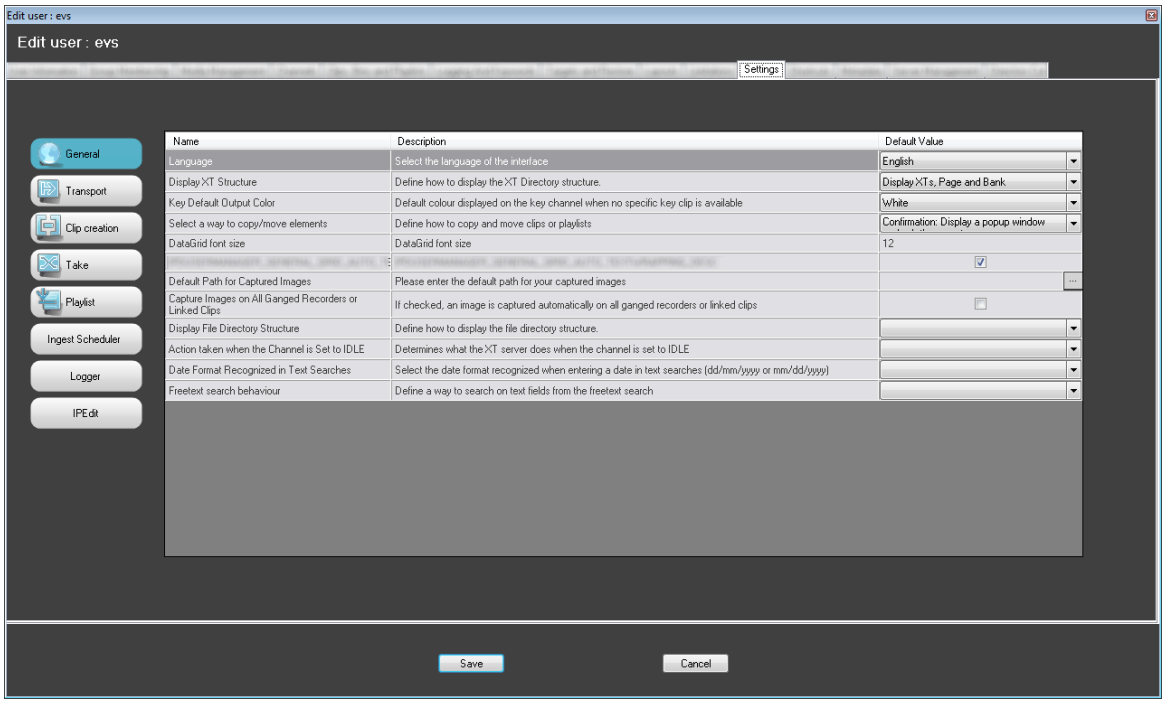
Within the main IP-Director interface, the Tools/Remote Control Manager is displayed if the box is checked.




The tool allows assigning functions to keys:



# Settings tab




The Settings tab defines the values given to all settings for a particular user.

**General:**

Language, Display XT Structure, Key default output color, Copy/Move method, DataGrid Font size & Autotext wrappring, Default path for capture, Capture on ganged channels, Capture Images on ganged recorders or likned clips, Display Directory Structure, Action taken when IDLE, Date format in text searches and Freetext search behaviour.

**Transport:**

Settings related to playback transport function: Play VAR speed, Fast Forward speed and Fast Rewind speed, Auto play on load.

**Clip creation:**

Settings related to clip creation: Guard bands, Default clip duration, Open save clip windows, Create clips on all synchronized recorders, My clips only in the “Last clips created list”, Default XT for partial clip restore, Premark/Postmark for automatic clip creation, ID mode and create sub-clips & trim on all ganged channels.

**Take:**

Settings related to the ‘Take’ function: Default video effect type and duration, Default audio effect type and duration.

**Play-list:**

More than 25 settings related to the play-list management, the play-list editor, including colors and audio/video effect properties.

**Ingest Scheduler:**

More than 20 settings related to the Ingest Scheduler module: Display options, Minimum clip duration, Remaining Capacity, Auto-Name for clips/streams/files…

**Logger:**

Settings related to the IP Logger module: T/C offset on live, Protect Media prefix, Warnings messages and action for shortcuts ENTER or CTRL+ENTER.

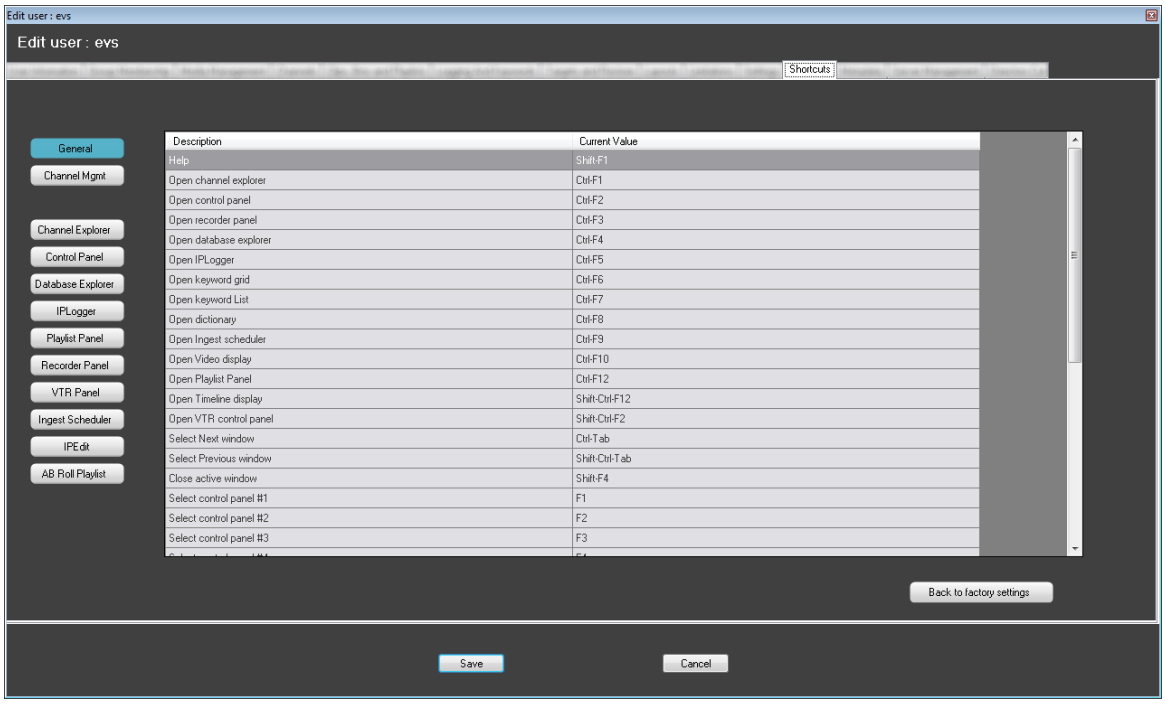
**IP Edit:**

More than 45 settings related to the IP Edit module: Display options, Default effect type/duration/position, Preview transitions, Volume automations, GPI type/advance/Pulse/Offset, Replace options, Audio mute/swap.

**Note**

Users can modify all settings value from the Tools/settings menu in the IP-Director GUI. Only ‘User’ settings can be changed, not ‘Global’ settings.

# Shortcuts tab




The Shortcuts tab defines the keystroke assigned to all shortcuts for a particular user.

A shortcut is associated to a particular function. The same function can be found in different applications.

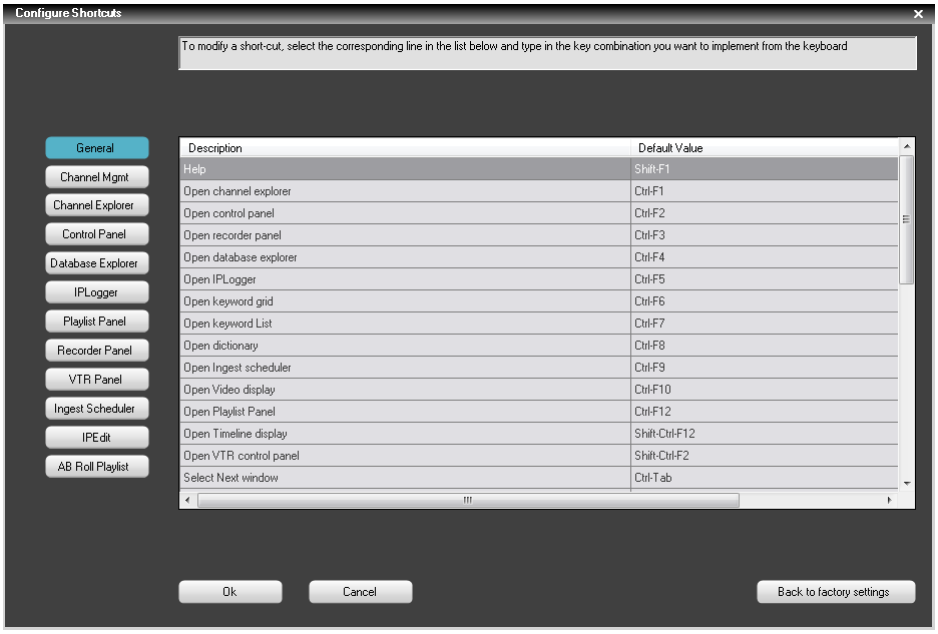
**Note**

Push the “Back to factory settings” to restore default EVS shortcuts.

## Modify a shortcut default value:

To modify a shortcut default value associated to a particular function, the administrator must first select the line corresponding to the function then press the shortcut on the keyboard.

If the shortcut is not already associated to a function in the general category or a function in the category the shortcut is immediately changed.




## Modify a shortcut of any categories:

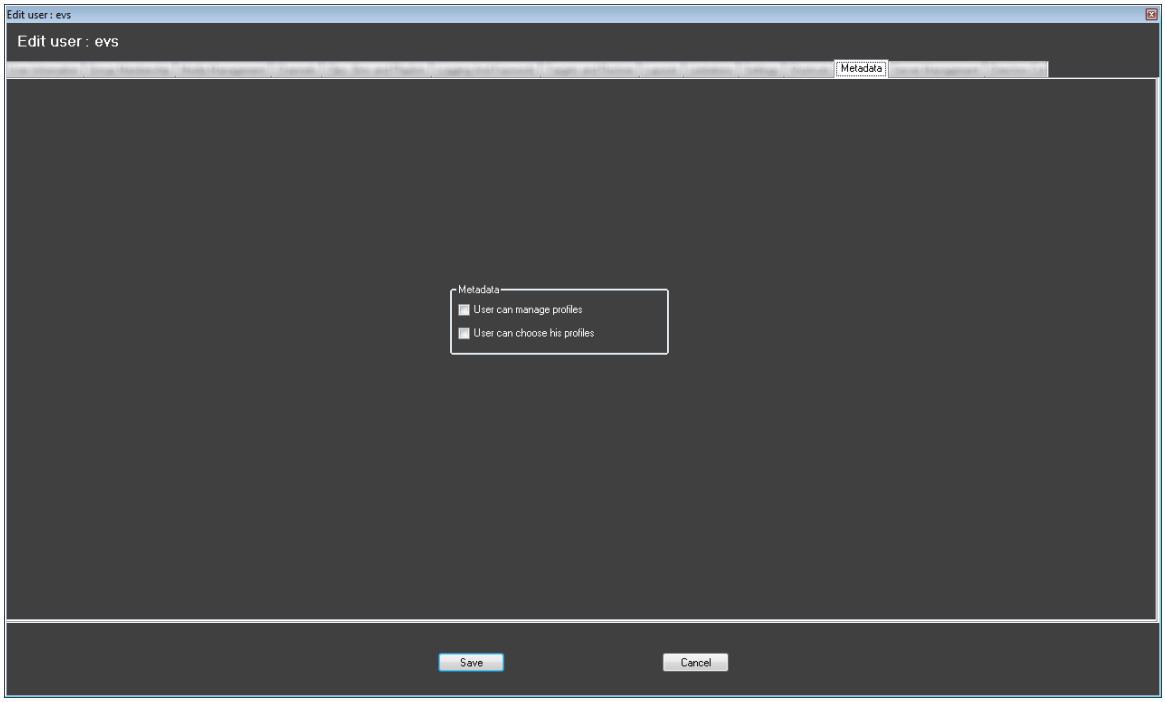
If the shortcut is already associated to a function in the general category, a popup window is displayed:


If the administrator selects '**Swap**', the two shortcuts are swapped between the 2 functions.

If the administrator selects '**Apply and Clear other shortcut**', the shortcut is applied to the selected function and the other function shortcut is cleared.

If the administrator selects '**Cancel**', the operation is cancelled.

# Metadata tab




The Metadata Tab is used to define which kind of rights a user has on metadata profiles.

**User can manage profiles:**

If checked, this user right allows managing the metadata profiles.

Edition, creation and deletion are allowed.

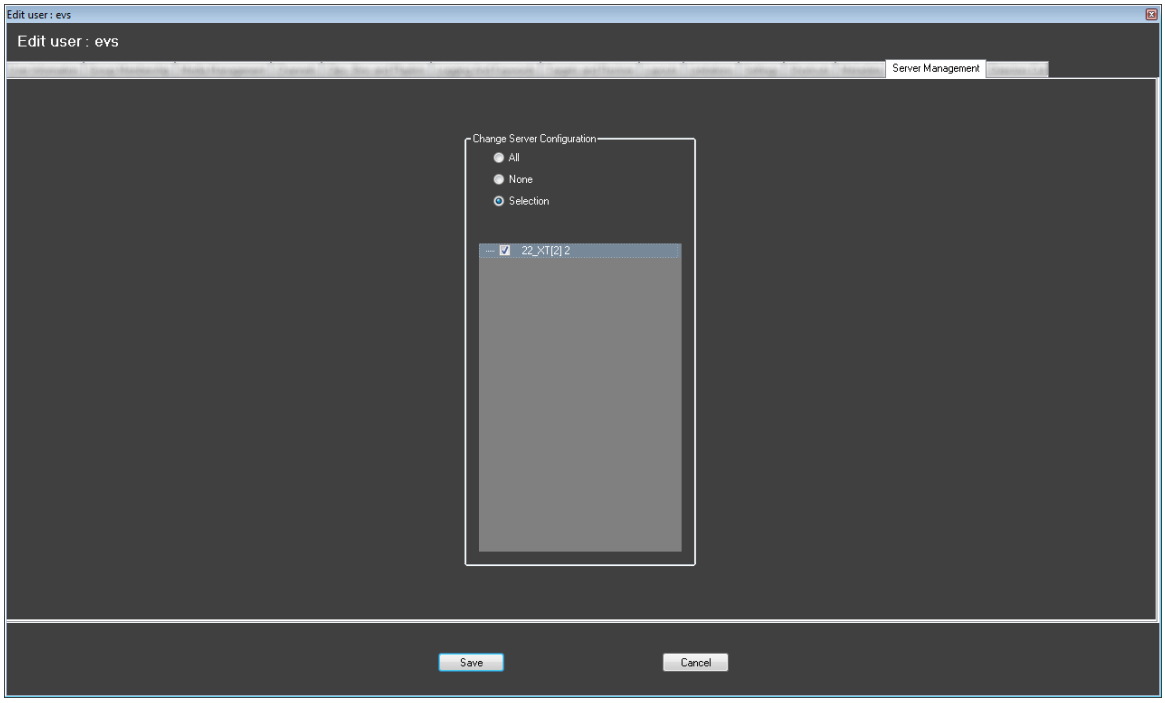
If not, the profiles are created by an administrator/media manager or imported by a third party ingest job.

**User can choose his profiles:**

If checked, this user right allows choosing his profile(s) for clip, playlist or logsheet metadata.

If not, the profiles are assigned by an administrator/media manager or linked by a third party ingest job.

# Server Management tab




The Server Management Tab is used to define which user is allowed to change the server configuration.

**All:**

The user can change the configuration of all servers on the XNet network.

**None:**

The user cannot change the server configurations.

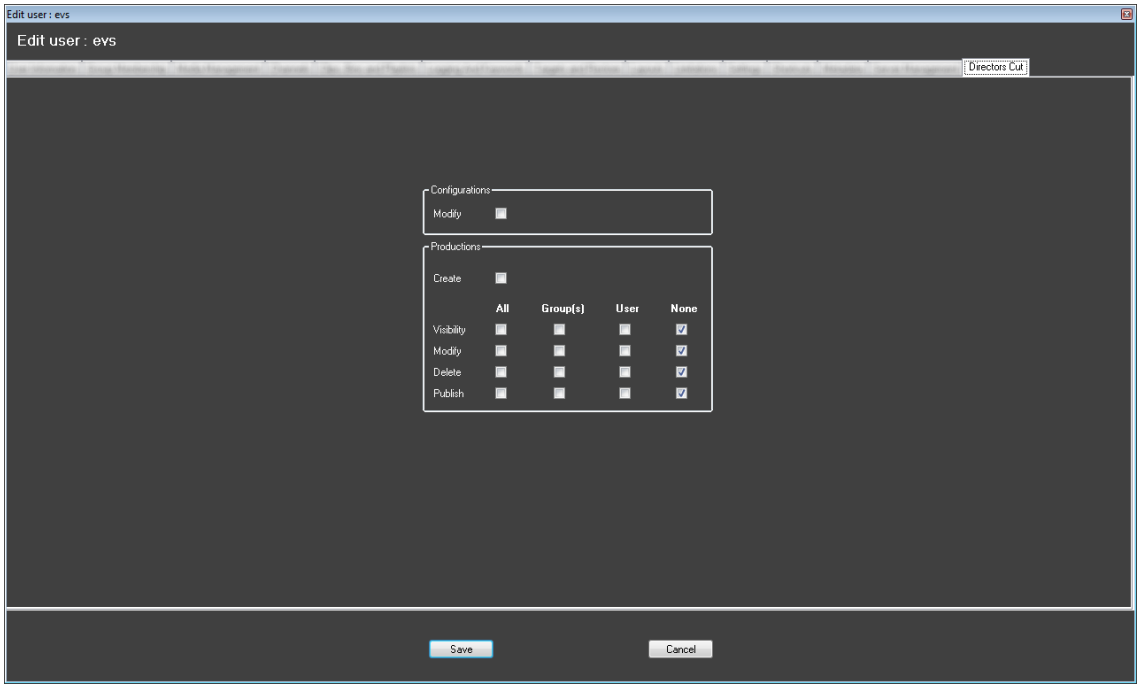
**Selection:**

The user can change some server configurations on the XNet network. The servers have to be checked in the list.

**Note**

If all servers present on the XNet network are not displayed in the list, it simply means that all SynchroDB applications responsible of managing the missing servers are not up and running or the servers are stopped.

# Directors Cut Tab




The Directors Cut Tab is used to define which kind of rights a user has on Directors Cut module.

## Configurations

**Modify:**

The user can modify the Directors Cut configurations.

## Productions:

**Create boxes:**

If these boxes are checked, the user has the right to create the production on the system.

**All:**

The user can Modify, Delete, etc… all productions into the Directors Cut module.

**Group(s):**

The user can Modify, Delete, etc… all productions created by all users of the group(s) the user belongs to.

**User**:

The user can only Modify, Delete, etc… all productions the user created.

**None:**

The user cannot Modify, Delete, etc… any production, even the production the user has created.

# 4.4.4 Groups

## Create a new group.

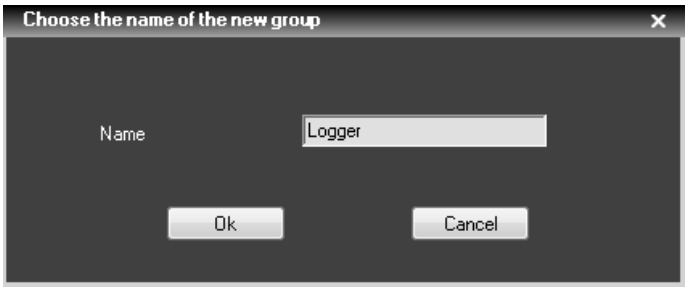
One of the first steps in defining Users for an installation of IP-Director is to define 'Groups' that they will belong to. Groups allow administrators to coordinate access to items based on groupings rather than by ALL or by USER.

**Note**

For simple setups, you should skip this step and proceed to Profile creation.

Select 'New' from the 'Groups' menu or click on the 'New group' button in the main window to create a new group.

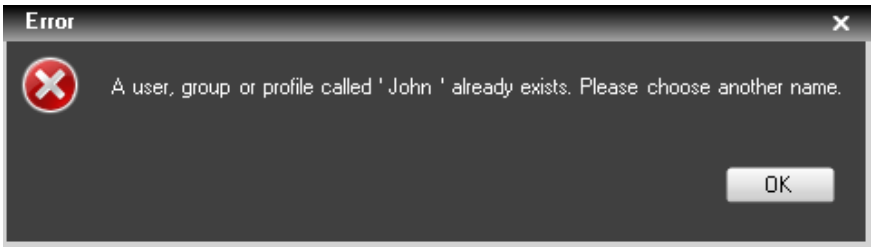
The 'New group' window is opened.




Give a name to the new group and then click OK.

**Note**

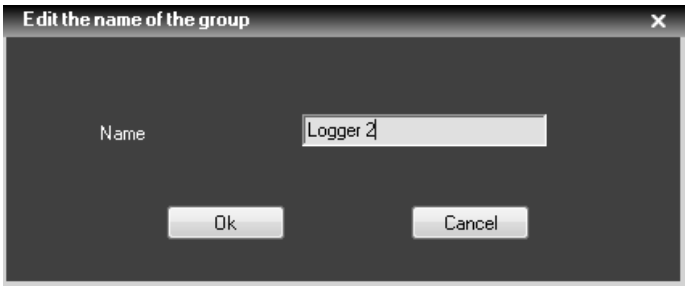
Users, Groups, Profiles must have different names. If "John" needs his own group, enter "G_John" as group name for example. An error window opens if name already exists:



# Modify (rename) a group.

Select 'Modify' from the 'Groups' menu or click on the 'Modify group' button in the main window to create a new group.

The 'Edit the name of the group' window is opened.

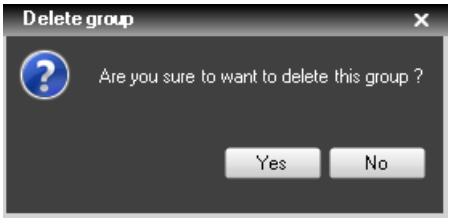



Modify the name of the group, and then click OK.

# Delete a group.

To delete a group, first select the group in the main window interface. Then, Select 'Delete' from the 'Groups' menu or click on the 'Delete group' button in the main window to delete the group.

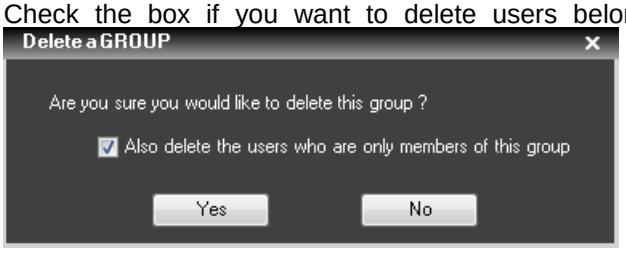
A confirmation window is opened.




Click Yes to confirm, No to cancel.

**Note**

Deleting a non-empty group opens a different confirmation window. Check the box if you want to delete users belonging to the group.



# 4.4.5 Profiles

## Create a new profile

Profile creation can save the administrator time when defining new users into the system.

A profile can be used when several users have the same set of settings values.

It avoids selecting the same boxes for each user who can be considered similar in their access rights.

Example, profiles will make adding 25 new logging users a rapid process because the elements and channel access is usually identical for all the loggers. So, the administrator would define 1 profile, use that profile to start each new logger's user creation.

**Note**

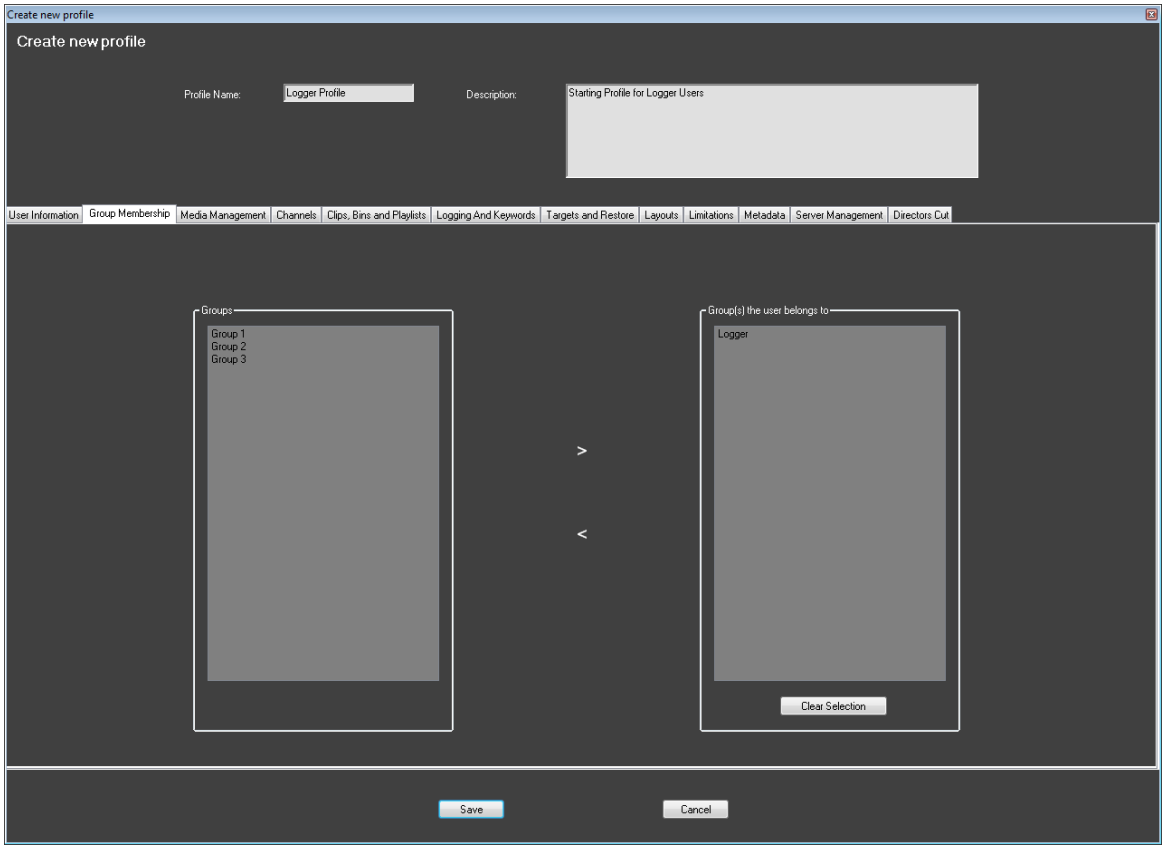
This step is optional, and can be skipped. Proceed to User creation in this case.

**Note**

Profiles are starting points only. It means they cannot be applied to existing users or to update users created from the profiles previously.

Select 'New' from the 'Profiles' menu.

The 'Create New profile' window is opened.



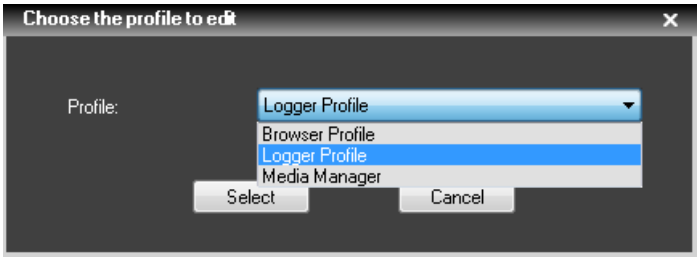
Give a name to the profile (mandatory) and optionally a description. Then fill in the characteristics of the profile you would like to create including group membership, channels, elements, system configuration and preferences.

When complete, click Save.

# Modify an existing profile

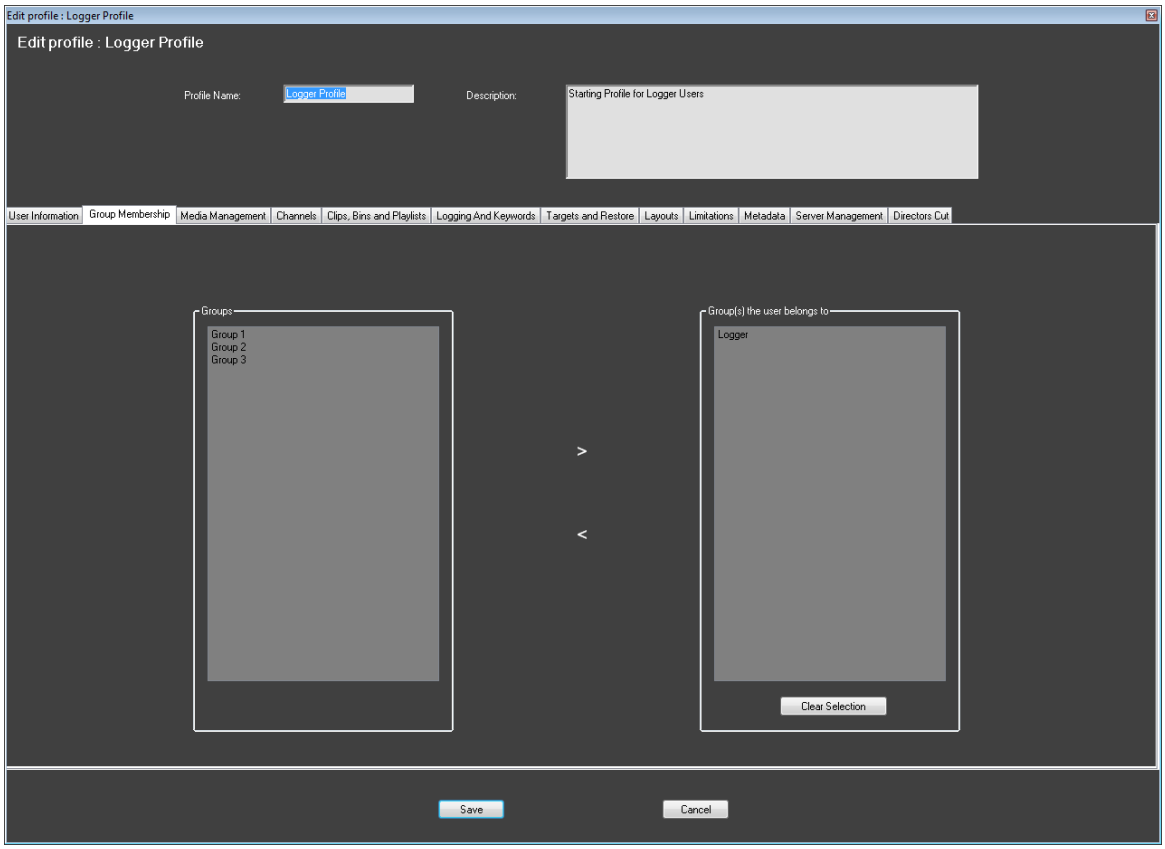
Select 'Modify' from the 'Profiles' menu.

Choose the profile you would like to modify from the following window.




When done, click Select.

The 'Edit profile' window is opened.



All characteristics of the profile can be modified including name, description, group membership, channels, elements, system configuration and preferences.

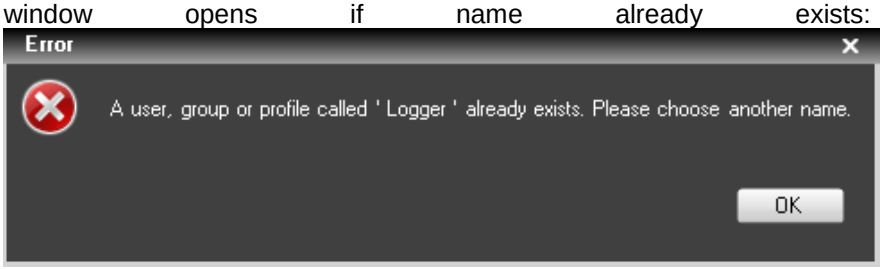
Click Save when the profile characteristics have been modified.

**Note**

Changing a profile will not affect any previously created users from this profile. It will only be changed for new users from this point on.

**Note**

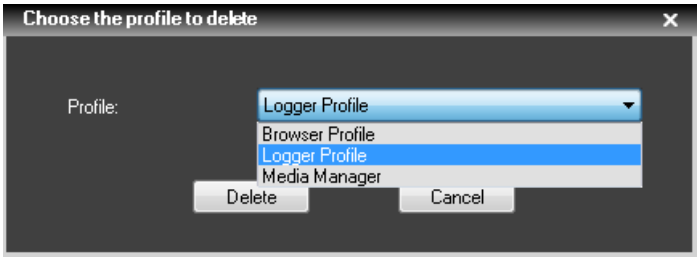
Users, Groups, Profiles must have different names. If loggers need their own profile, enter “LoggerProfile” as group name for example. An error window opens if name already exists:




## Delete a profile

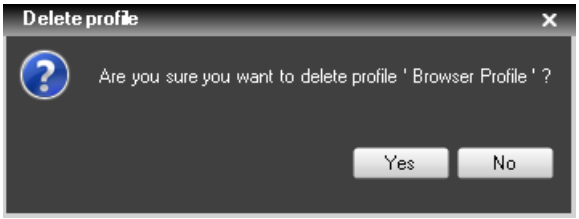
Select ‘Delete’ from the ‘Profiles’ menu.

Choose the profile you would like to delete from the following window.




When done, click Select.

A confirmation window is opened.




Press Yes to confirm or No to cancel.

# 4.4.6 Settings Profiles

## Create a new settings profile

Settings profile creation can save the administrator time when defining new users into the system. A settings profile can be used when several users have the same set of setting values.

**Note**

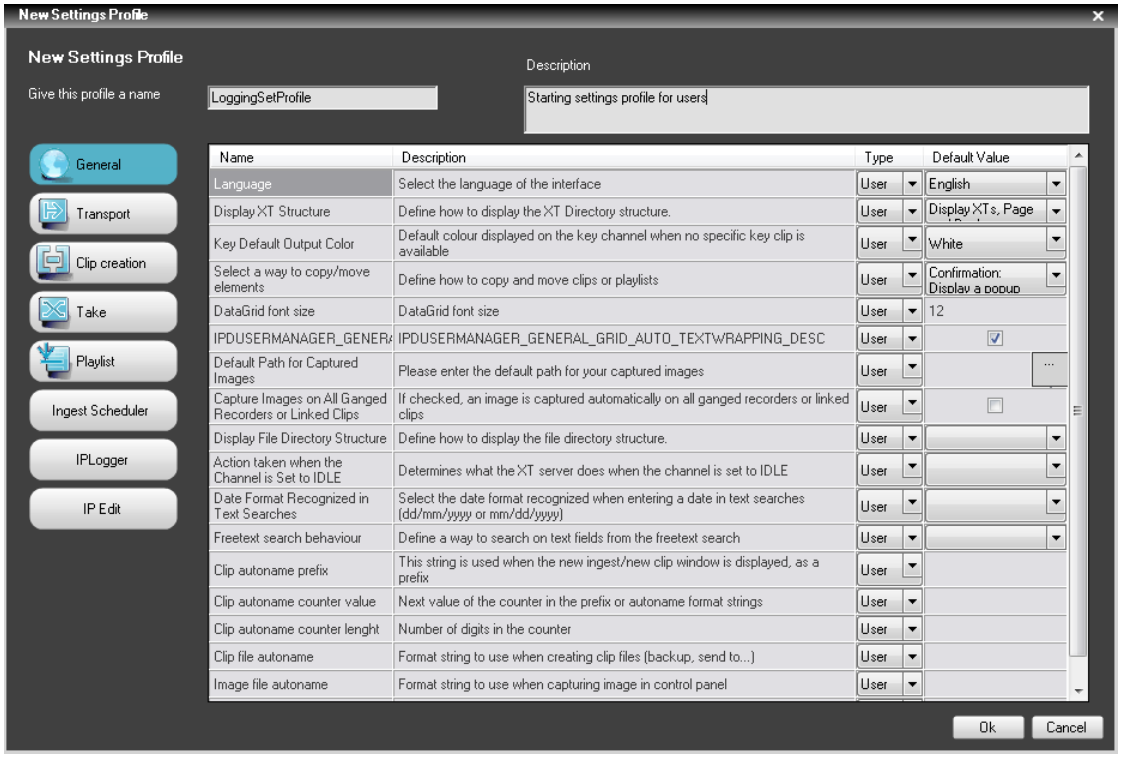
If no setting profile is used, immediately proceed to User creation in this case.

**Note**

Profiles are starting points only. It means they cannot be applied to existing users or to update users created from the profiles previously.

Select 'New' from the 'Settings Profiles' menu.

The 'New settings profile' window is opened.

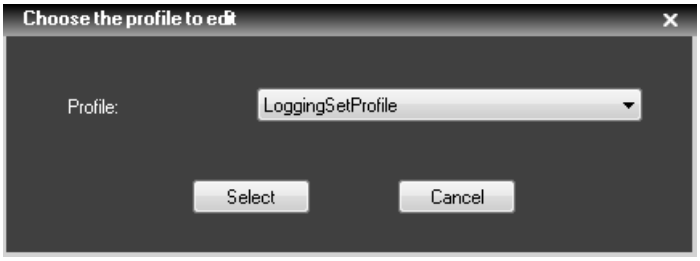



Give a name to the settings profile (mandatory) and optionally a description. Then fill in the characteristics of the profile you would like to create including General, Transport, Clip creation, TAKE, Play-list, Ingest Scheduler, IP Logger and IP Edit preferences.

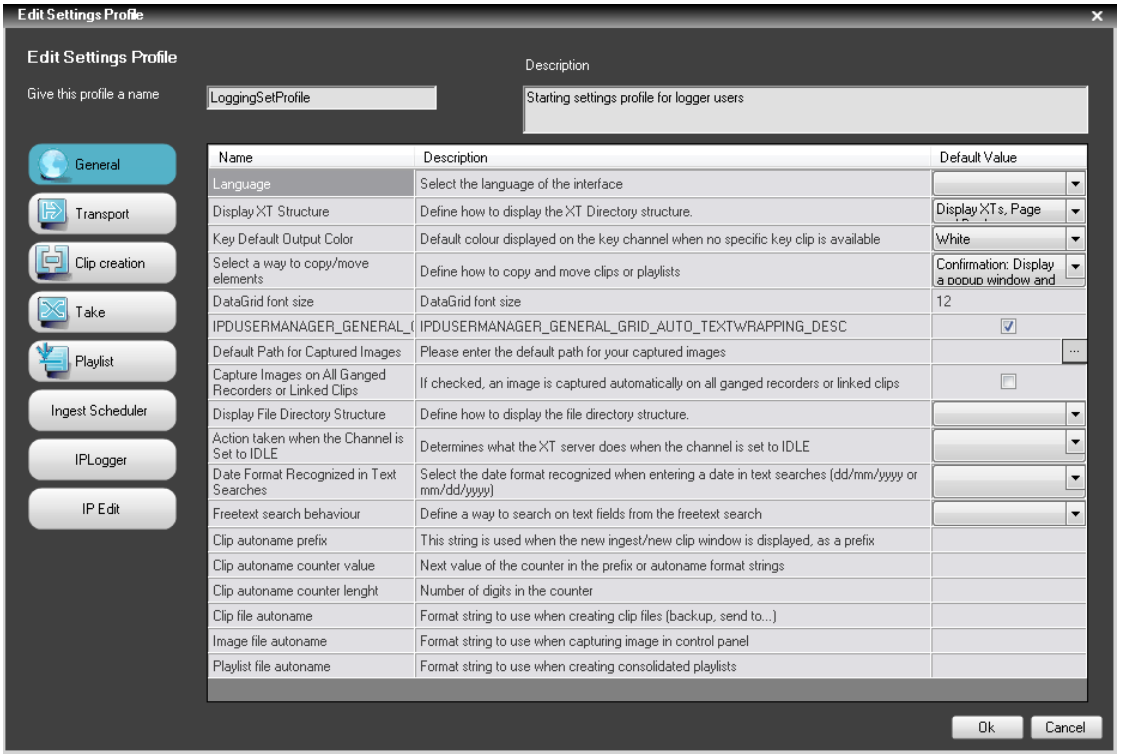
When complete, click OK.

# Modify an existing settings profile

Select 'Modify' from the 'Settings Profiles' menu. Choose the settings profile you would like to modify from the following window.




When done, click Select. The 'Edit settings profile' window is opened.




All characteristics of the settings profile can be modified including Name, Description, General, Transport, Clip creation, TAKE Play-list, Ingest Scheduler, IP Logger and IP Edit.

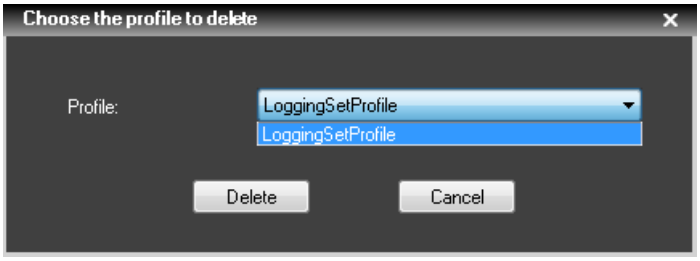
Click Ok when the profile characteristics have been modified.

**Note**

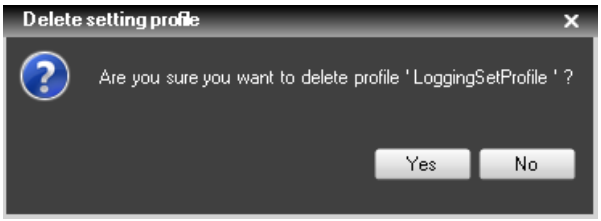
Changing a settings profile will not affect any previously created users from this profile. It will only be changed for new users from this point on.

# Delete a profile

Select ‘Delete’ from the ‘Profiles’ menu. Choose the profile you would like to delete from the following window.




When done, click Select. A confirmation window is opened.

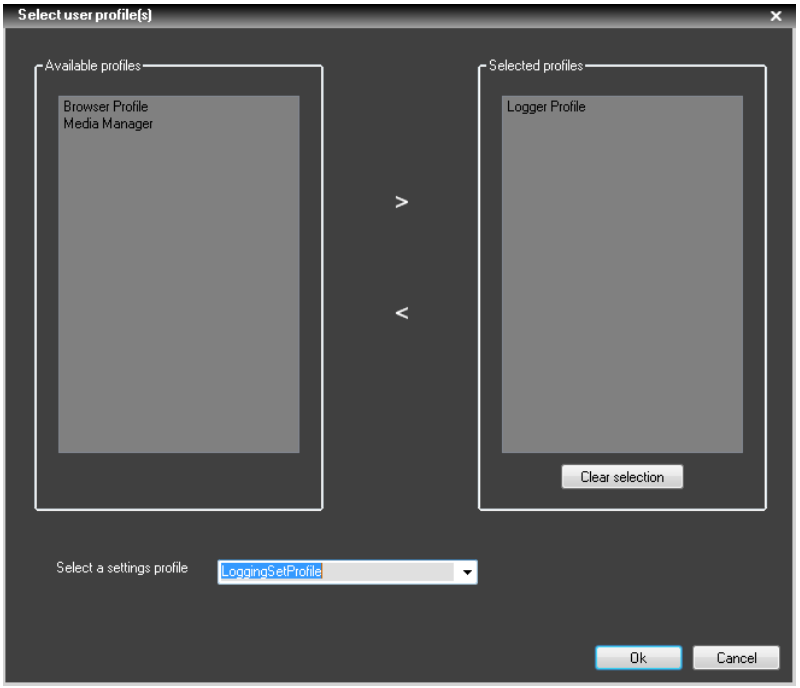


# 4.4.7 Users

## Create a new user.

Select ‘New’ from the ‘Users’ menu or click on the ‘New user’ button in the main window to create a new user.

The ‘Select user profile(s)’ window is opened.




This window is optional. Select the profile(s) characteristics you would like to apply to the new user. Several profiles can be combined to create a new user account.

Simply select the profile in the left list and click on the > button.

The < button can be used to remove a profile from the selected list.

Select the settings profile from the drop down box.

Click OK when your selection is done.

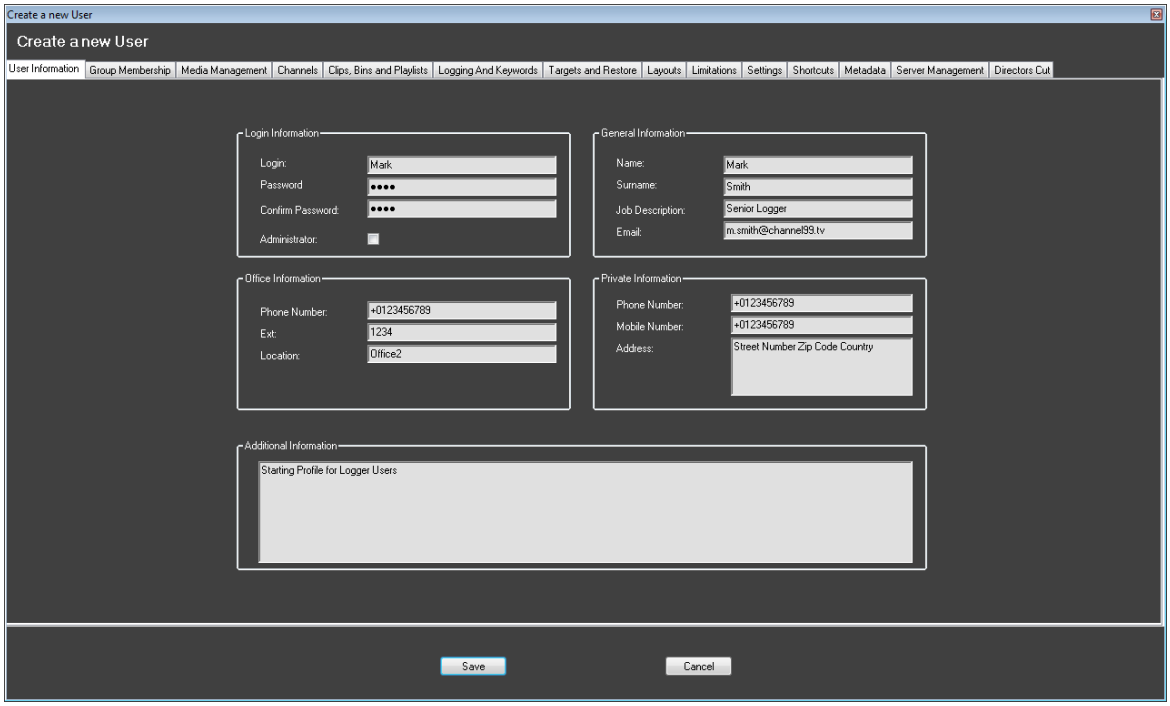
**Note**

Once a user is defined, the profile is no longer linked to the user's settings. Therefore, future updates to the Profile will only apply to future users created from that profile.

**Note**

It is not mandatory to select a user profile and a settings profile to define a new user account. If no profile has been created yet, these lists will be empty.

The 'Create a new user' window is opened.




Enter a login and a password for the new user. Confirm the password. Enter all useful information concerning the user.

Check the Administrator box if the user should have administrator rights on the system.

**Note**

Administrator rights supersede all other tab settings. There is no need to set any other settings for an administrator. For safety, it is advised that manager accounts during operation limit their access to channels in order to protect from accidentally use of another user's playback channel.

For this reason, the admin checkbox should be used sparingly.

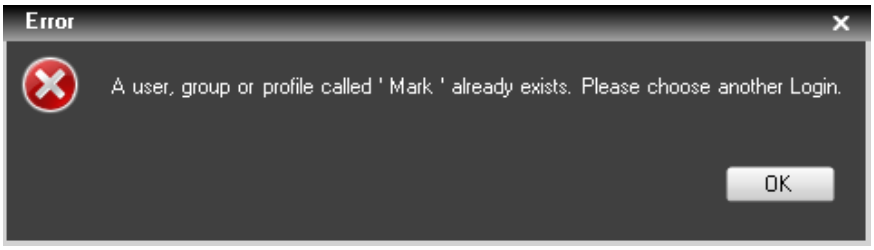
Fine tune the characteristics (rights) in each tab of the user: Group Membership, Channels, etc.

When the user characteristics are complete, click Save.

**Note**

Users, Groups, Profiles must have different names.

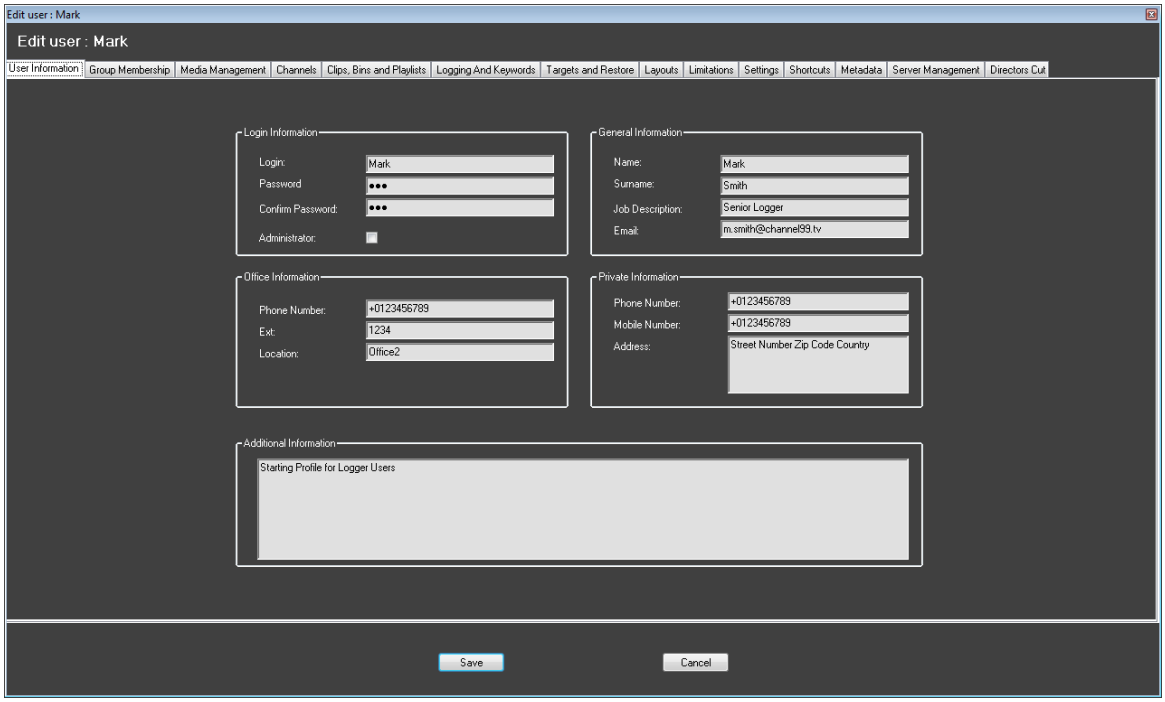
An error window opens if name already exists:




# Modify a user account.

Select ‘Modify’ from the ‘Users’ menu or click on the ‘Modify user’ button in the main window to modify a user account.

The ‘Edit user’ window is opened.



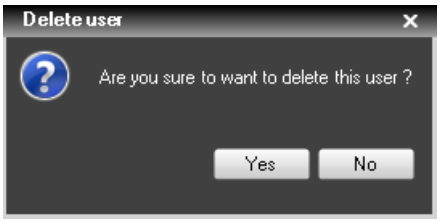

It is now possible to modify all characteristics of the user account.

When done, click Save.

# Delete a user account.

To delete a user account, first select a user in the main window interface. Then, select ‘Delete’ from the ‘Users’ menu or click on the ‘Delete user’ button in the main window to delete a user account.

The ‘Delete user’ window is opened.




Click Yes to confirm, or No to cancel the operation.

# 5. Miscellaneous

## 5.1 IP-Director Upgrade

### 5.1.1 Upgrading The IP-Director Physical Memory

Since IP-Director 5.8/5.9/6.0, all workstations should be upgraded to 2GB of RAM (at least).

It is not mandatory for browsing stations without software player but highly advised for management and software player workstations.

#### Hardware Upgrade

Please contact EVS staff to obtain the proper RAM dedicated for the owned hardware.

**Note**

If the received RAM is not from the same Manufacturer, try to optimize the unity between old and new RAM.

Avoid mixing different RAM manufacturer, speed or bandwidth.

For e.g. if two workstations have both two 512Mo memory modules from manufacturer X and four 512Mo memory modules from manufacturer Y are received, install four modules from manufacturer X in a workstation and four modules from manufacturer Y in the other workstation.

#### Software Upgrade

##### Memory Test

Once the Hardware Upgrade is done, a memory test is highly recommended. Even if all new memory modules are tested, the RAM should be tested on its motherboard.

The memtest+86 can be launched from any EVS USB Key provided with the EVS workstation. Please contact the EVS Support Staff to obtain one if lost or download it from our website www.evs.com (download/technical area, Third Party Software package)

The memory test must run more than one pass in order to properly test the freshly installed memory modules.

# Virtual Memory (Paging File)

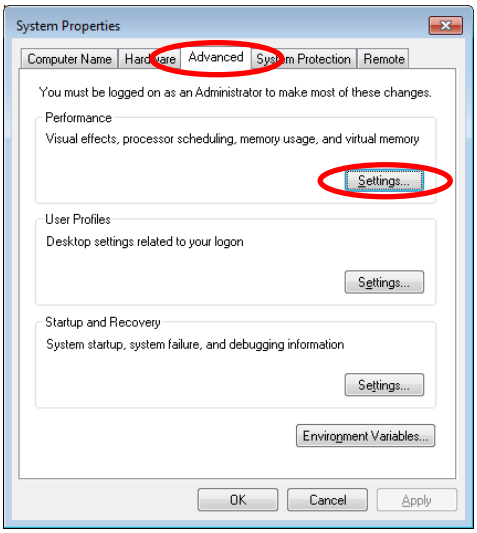
On EVS IP-Director workstations, the size of the virtual memory is at least 1.5 times the amount of physical memory. This value is set manually in the Ghost image and must be extended when memory modules are added. The automatic management of the paging file size is forbidden on IP-Director workstations.

Typically, the previous 1GB memory requested a 1536Mo paging file size. Now, the 2GB memory requests at least 3GB of virtual memory.

On Windows XP: Open the **System Properties** (WIN+Pause).

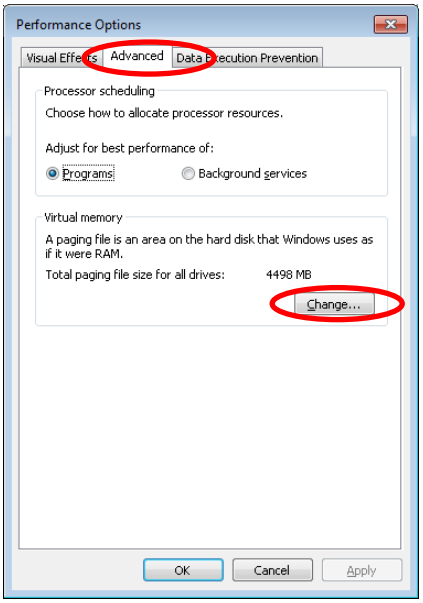
On Windows7: Open the **System Properties** (WIN+Pause), select in the left menu **Advanced system settings**.

Select the **Advanced** tab.



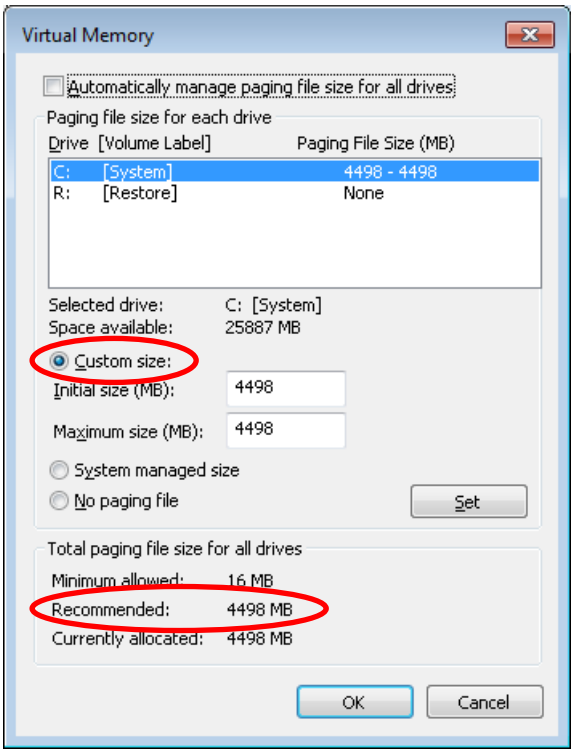

In the Performance zone, click on the **Settings** button.

The Performance Options window pops up. Select the **Advanced** tab.



In the Virtual memory zone, check the size of the paging file and press the **Change** button if it must be changed.

The **Virtual Memory** window is displayed:




Select the **Drive C: [System]** line (if not selected by default)

The recommended size by Windows shows an ideal size of 1.5 time the amount of RAM.

Choose the Custom size option and copy/paste the **Recommended** size into the **Initial size** and **Maximum size** fields.

Press the **Set** button.

Close the **Virtual Memory**, **Performance Options** and the **System Properties** windows by pressing **OK**.

Finally, restart the computer.

**Note**

The paging file has to be configured on the System partition (C:) only. The Restore partition and other storage disks can't host a paging file.

## 5.1.2 Upgrading the IP-Director Environment

EVS started delivering IP-Director workstations since 2005. All the delivered workstations (expect Tyan motherboard based) are always compatible with the most recent software. Nevertheless, if the operating system hasn't changed, lots of additional components must be updated in order to execute software in the best environment as possible.

**Note**

If the workstation was already delivered with a version 5.99/6.08/6.10, the environment is good and **this procedure can be bypassed**.

For all workstations delivered with a previous version of IP-Director (5.96 or lower) the following environment upgrade must be applied once. As IP-Director can be installed on a customer computer, the procedure has also to be applied for this kind of workstation.

The installer will verify lots of parameters and components presence:

- Check that the system has RAM higher or equal to 2GB
- Check date and time settings needed
- Create needed shared folders
- Create needed Windows Users and permissions
- Remove old loopback adapter (no more needed)
- Remove old EVS services, logs and folders
- Check and install new .NET Framework 3.5 & 4.0
- Check and install the Windows Installer 3.1
- Upgrade (or clean and install) MSDE to SQL2005 Express
- Create a new Media database (by restoring a clean DB)
- Add new DB maintenance jobs dedicated to stand alone workstation
- Start the Remote Installer setup

Once done, it is recommended to reboot the workstation.

# [IP]Director_6_Setup.hta

EVS designed a specific installer in order to perform these actions.


This tool can be downloaded from our EVS website support section or from the EVS FTP site. Please contact the EVS support staff for details.

**Important**

The download ZIP file must be extracted on a local disk or on a USB key. It can **not** be launched from a network place.

**Important**

**Always perform a database backup** if your workstation hosts the database of the entire setup (maximum 3 IP-Director workstations) or if it is a stand-alone system.

Three different modes are offered:

- New Install
- Upgrade
- Clean & Upgrade

# New Install

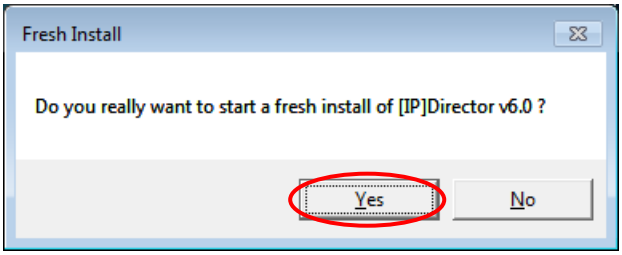
This mode is designed for new **computer not delivered by EVS** where all components are missing or outdated.

Execute the [IP]Director_6_Setup.hta


Select first **Review hardware and software requirements** and read carefully the PDF document.

If the computer fulfills the requirements, select the **Install [IP] Director v6.0 on a new workstation**.

The confirmation window pops up:

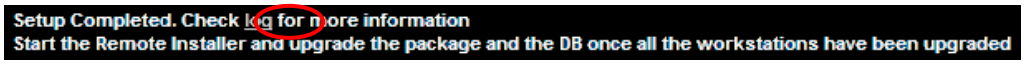



Press **Yes** and follow all the progression of the installation. A progress at the bottom of the window shows a real-time status.


**Note**

Some components (like the .Net Framework 3.5 & 4.0 and the SQL2005 express) require a few minutes to be installed. Don't be afraid of that.

Once finished, the following message is displayed:




A log file is created on the root of the Windows system partition (c:\ on EVS workstations). It can be opened by pressing the **log** hyperlink.

Within the IPD6_Setup_hta.log, you can check all the successful steps executed by the upgrade tool.

Press **Exit** to close the tool and jump to the **Upgrading The Remote Installer chapter** to continue the installation of the IP-Director 6.0

# Install IP Drive or API Proxy

This mode is designed for **non IP-Director stations** which will host an API Proxy (typically a Database Server) or an IP Drive (typically on a XTAccess/XSquare/XFile server).

Please refer to the next chapter **IP Drive & API PROXY installation and configuration.**

# Upgrade

This mode is designed for a **workstation delivered by EVS or a computer already installed with a 5.X** where all components are outdated.

**Note**

This upgrade mode is mainly recommended if all the local parameters and database should be kept.

The local parameters stored on a workstations are:

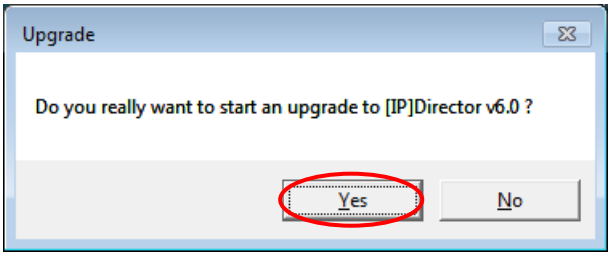
- The local machine number
- The workgroup name
- The information to reach the workgroup database
- The serial port usage (Routing or VTR)
- The SynchroDB configuration and the serial numbers managed

If the database is not hosted in this workstation and if it easy to reconfigure the workstation after cleaning, thus **perform a Clean and Upgrade** (refer to the next chapter).

Execute the [IP]Director_6_Setup.hta


Select the **Upgrade from [IP] Director v5 to v6.0**

The confirmation window pops up:

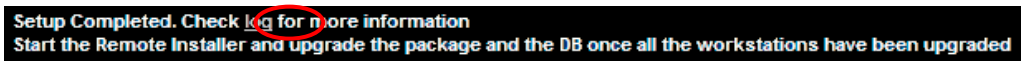



Press **Yes** and follow all the progression of the installation. A progress at the bottom of the window shows a real-time status.


**Note**

Some components (like the .Net Framework 3.5 & 4.0 and the SQL2005 express) require many minutes to be installed. Don't be alarmed when the installer appears to have hung up, as some stages launch separate installers.

Once finished, the following message is displayed:




A log file is created on the root of the Windows system partition (c:\ on EVS workstations). It can be opened by pressing the **log** hyperlink.

Within the IPD6_Setup_hta.log, you can check all the successful steps executed by the upgrade tool.

Press **Exit** to close the tool and jump to the **Upgrading The Remote Installer chapter** to continue the upgrade from old version to a 6.0 one.

# Clean & Upgrade

This mode is designed for a **workstation delivered by EVS or a computer already installed with a 5.X** where all components are outdated.

It is the best mode to get the **cleanest installation**, but all local IP-Director settings will be lost.

**Note**

This upgrade mode is mainly recommended when it's not mandatory to keep the local parameters and database.

The local parameters stored on a workstations are:

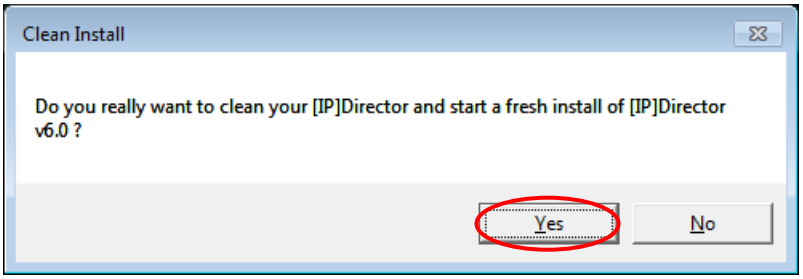
- The local machine number
- The workgroup name
- The information to reach the workgroup database
- The serial port usage (Routing or VTR)
- The SynchroDB configuration and the serial numbers managed

Thus **EVS strongly recommends to perform a Clean and Upgrade** instead of a simple upgrade if the database is not hosted in this workstation and if it easy to reconfigure the workstation after cleaning.

Execute the [IP]Director_6_Setup.hta


Select the **Clean workstation and Install [IP] Director v6.0**

The confirmation window pops up:

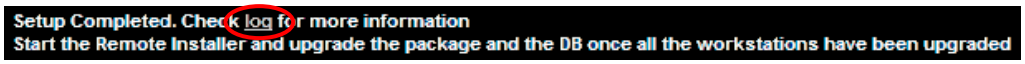



Press **Yes** and follow all the progression of the installation. A progress at the bottom of the window shows a real-time status.


**Note**

Some components (like the .Net Framework 3.5 & 4.0 and the SQL2005 express) require a few minutes to be installed. Don't be afraid of that.

Once finished, the following message is displayed:




A log file is created on the root of the Windows system partition (c:\ on EVS workstations). It can be opened by pressing the **log** hyperlink.

Within the IPD6_Setup_hta.log, you can check all the successful steps executed by the upgrade tool.

Press **Exit** to close the tool and jump to the **Upgrading The Remote Installer chapter** to continue the upgrade from old version to a 6.0 one.

### 5.1.3 Upgrading The Remote Installer

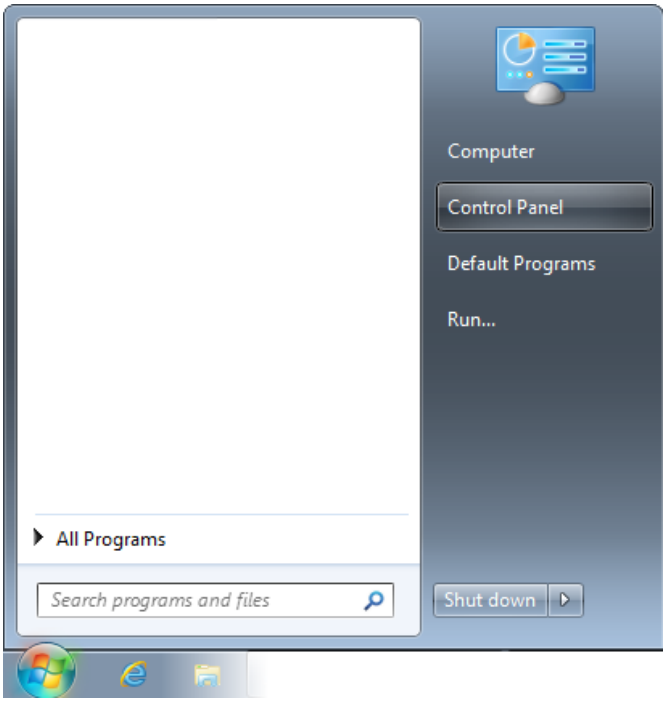
The upgrade procedure of the Remote Installer has not changed:

- As the Remote Installer is a tool which deploys version remotely over the network, it should be first updated in order to have its own new features.
- As it can't overwrite itself nor uninstall itself, the remote installer application should be first uninstalled on one workstation manually by the user.
- The setup.exe is launched on the workstation
- The Remote Installer is opened and deployed automatically from this workstation to the other workstations in the workgroup.

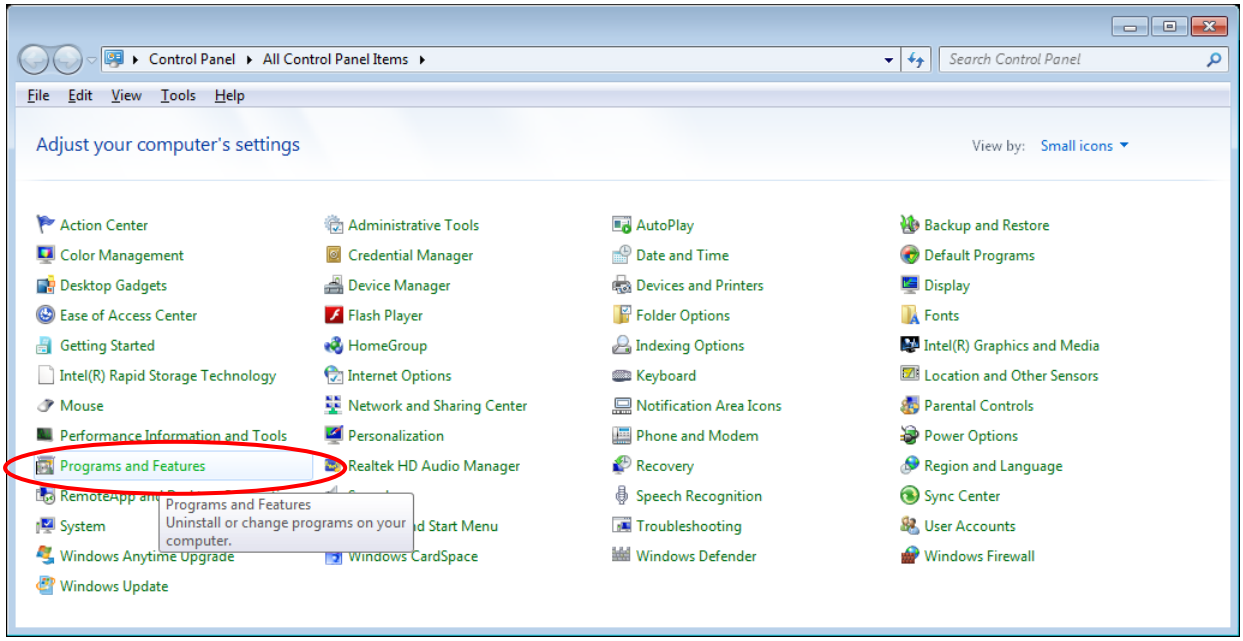
## Uninstall the Remote Installer

Close all running programs.

Open the **Control Panel** of Windows (Start / Settings / Control Panel)

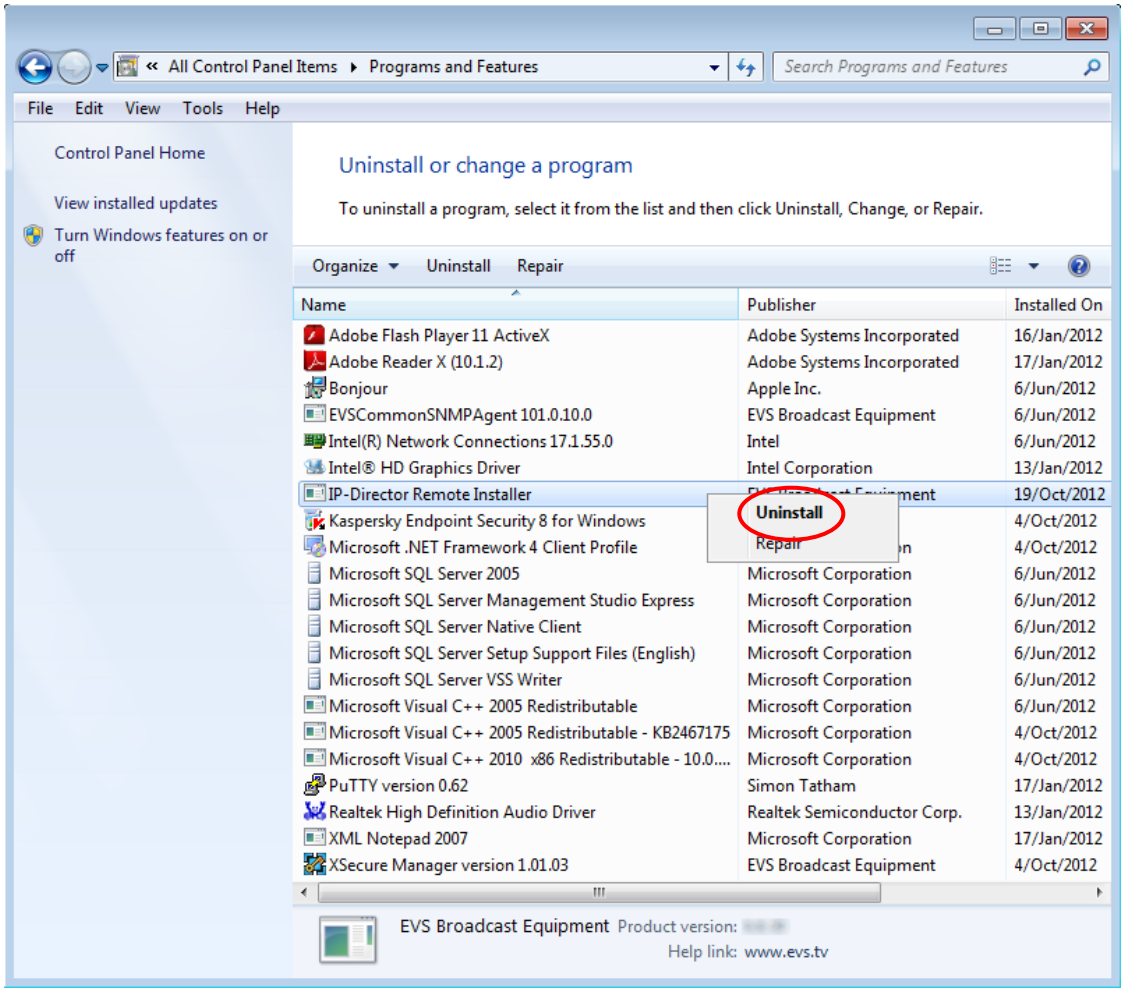


The Control Panel window is displayed:




Select **Program and Features**

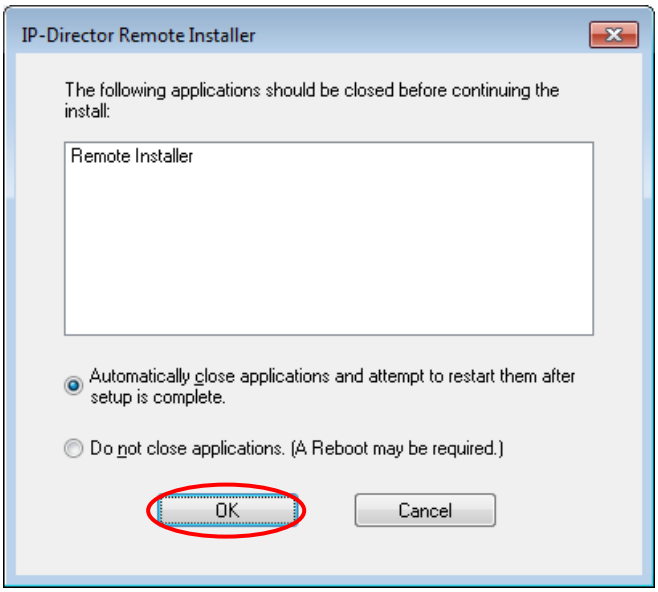
The window is opened:



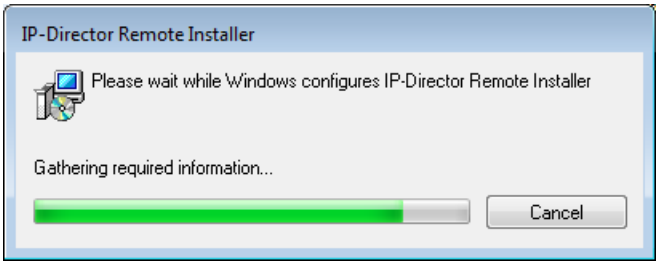
Select **IP-Director Remote Installer** and right click on the selected item.

Choose **Uninstall**.

The following window pops up (if some programs are started and prevent the uninstall process to continue):




Press OK. The progress bar is displayed:



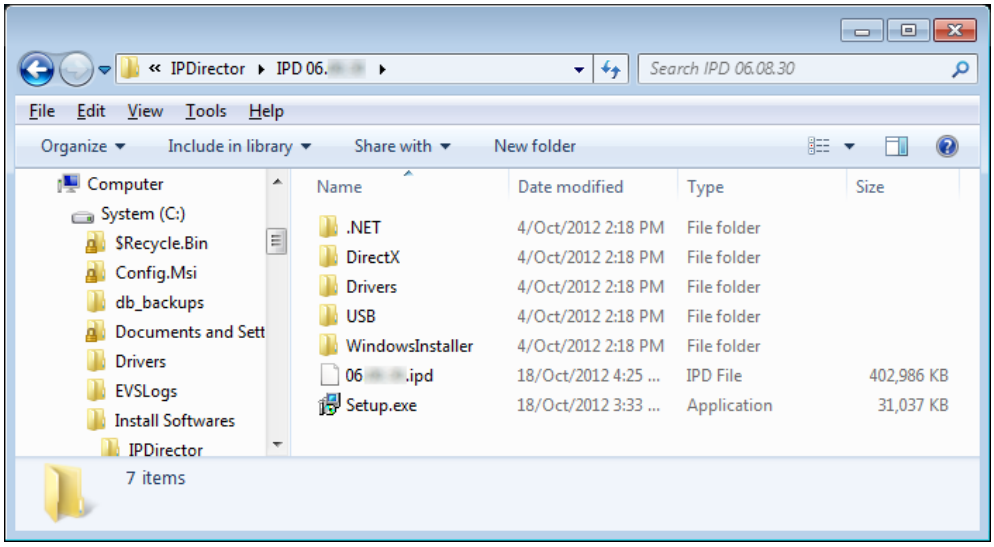

Once finished, close the Programs and Features window.

The Remote Installer is now uninstalled.

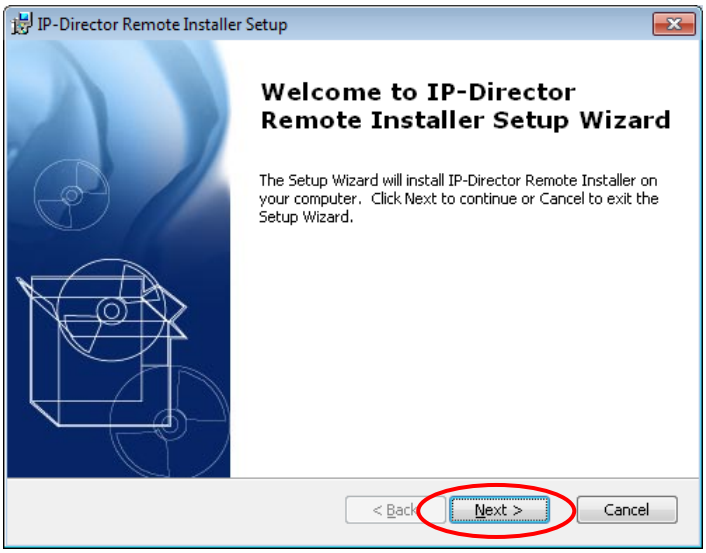
# Install the Remote Installer

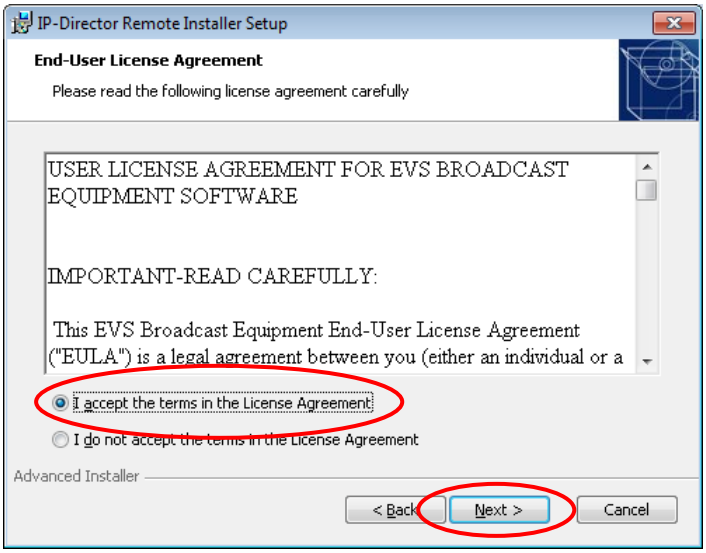
The installer can be downloaded from our EVS website support section or from the EVS FTP site. Please contact the EVS support staff for details.

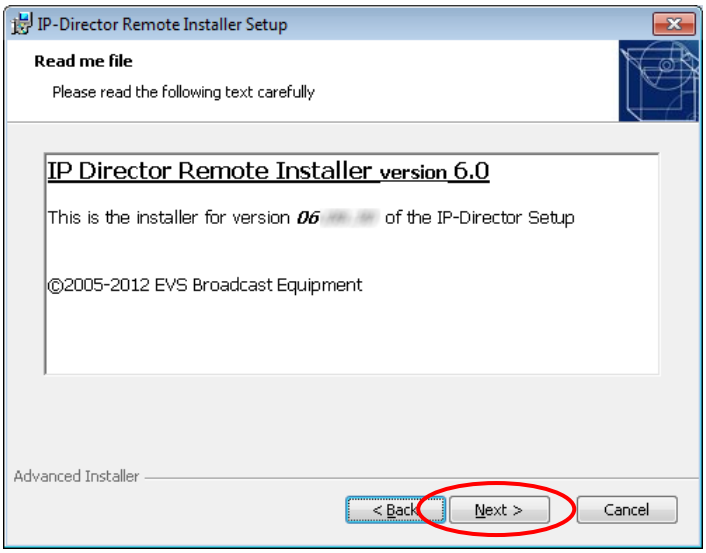
Unzip the provided archive in C:\Install Softwares\IPDirector and start the **setup.exe**

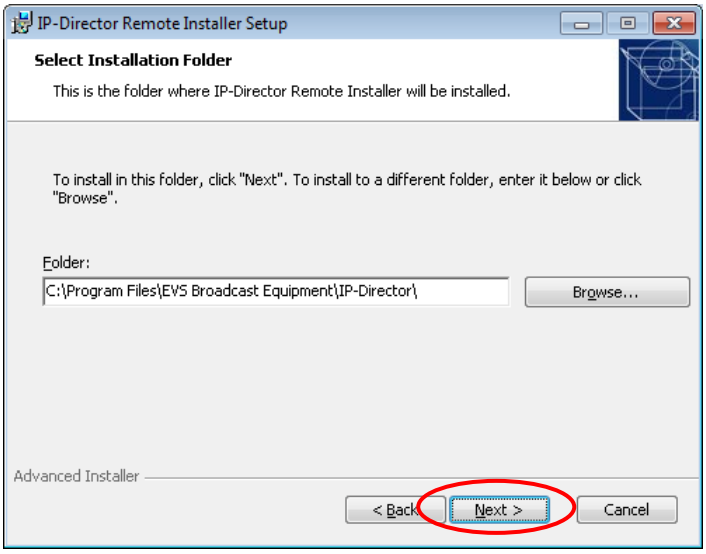


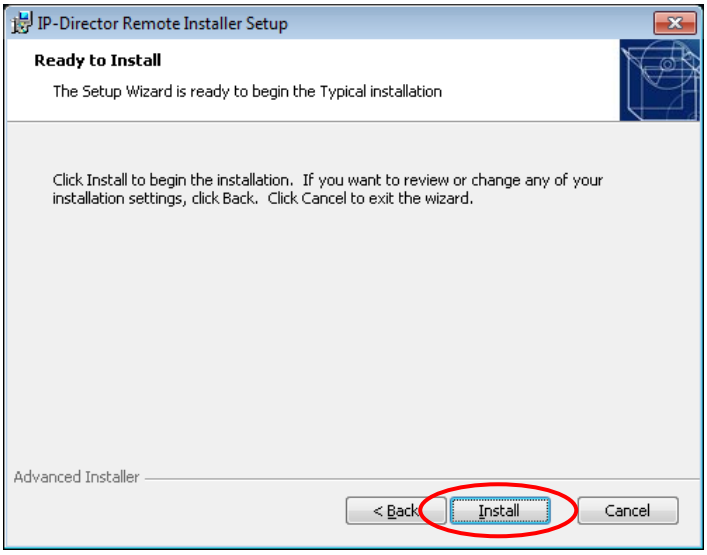

Then follow the different windows displayed, press **Next** at each step:

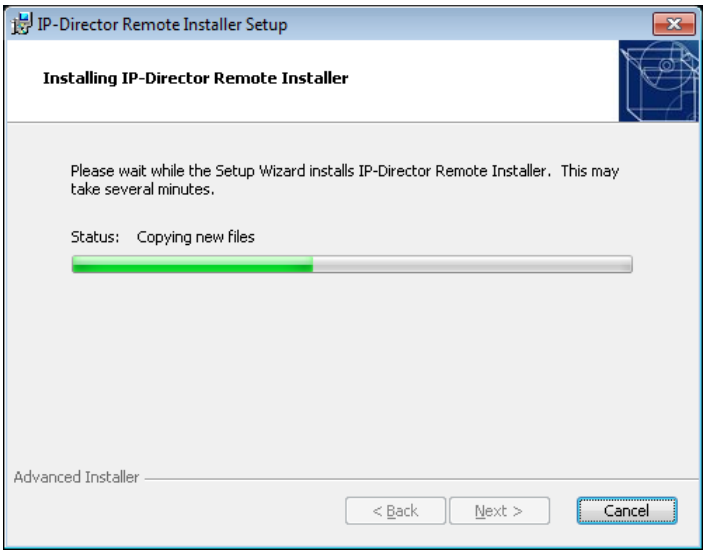



IP-Director Remote Installer Setup
End-User License Agreement
Please read the following license agreement carefully
USER LICENSE AGREEMENT FOR EVS BROADCAST EQUIPMENT SOFTWARE
IMPORTANT-READ CAREFULLY:
This EVS Broadcast Equipment End-User License Agreement ("EULA") is a legal agreement between you (either an individual or a
I accept the terms in the License Agreement
I do not accept the terms in the License Agreement
Advanced Installer
< Back
Next >
Cancel


IP-Director Remote Installer Setup
Read me file
Please read the following text carefully
IP Director Remote Installer version 6.0
This is the installer for version 06 of the IP-Director Setup
©2005-2012 EVS Broadcast Equipment
Advanced Installer
< Back
Next >
Cancel

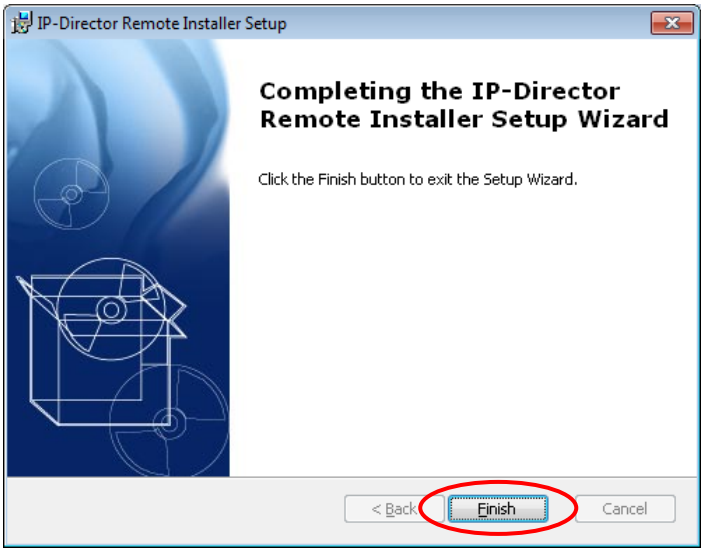

IP-Director Remote Installer Setup
Select Installation Folder
This is the folder where IP-Director Remote Installer will be installed.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Program Files\EVS Broadcast Equipment\IP-Director\
Browse...
Advanced Installer
< Back
Next >
Cancel




Please wait during installation.

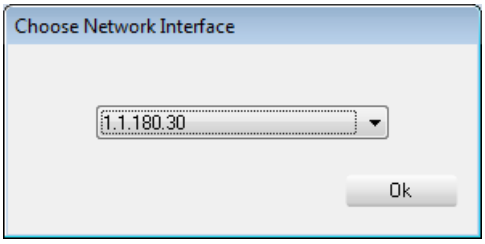
Once finished, this final window is displayed:



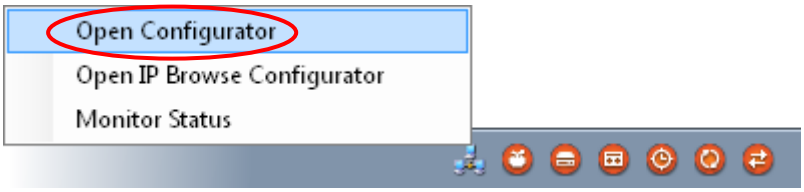
Press **Finish** to close the installer. The Remote Installer is automatically launched. The services icons appear in the Windows Taskbar.

**Note**

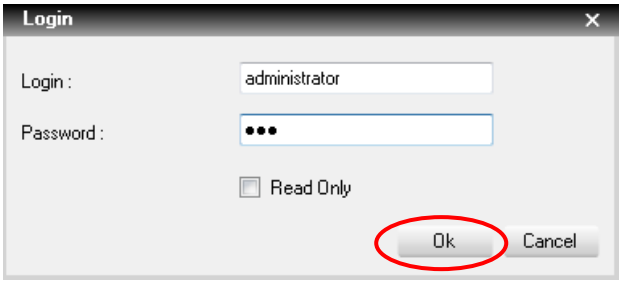
If several network interfaces are connected on the workstation, an IP address must be chosen in order to start the Remote Installer.




Right-click the Remote Installer icon (in the Windows Taskbar) and select **Open Configurator**:

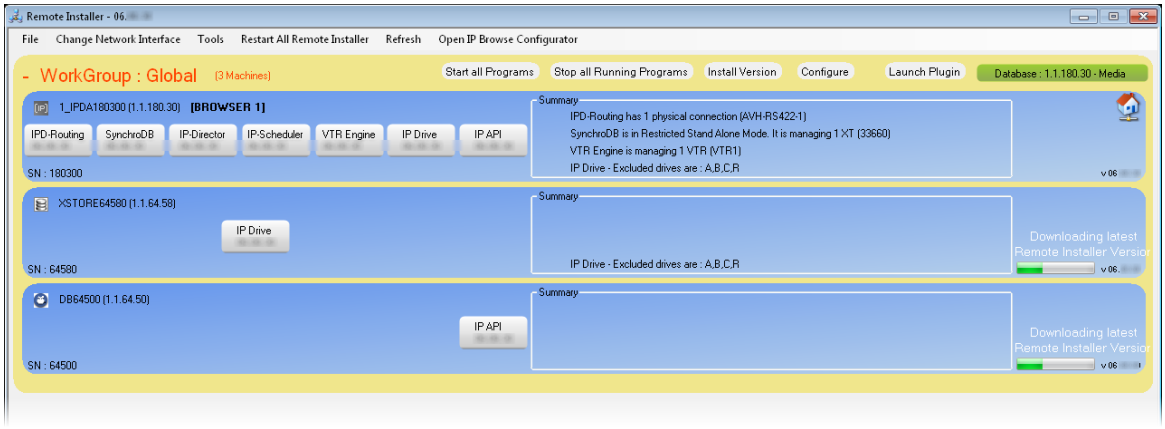



The Login window opens:

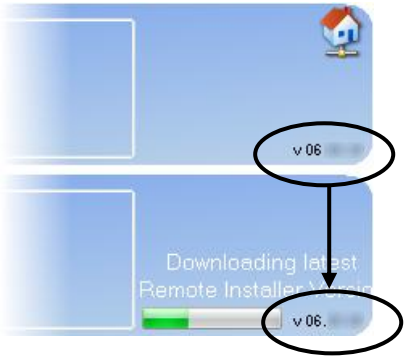



Enter a valid **Login** and **Password** regarding the user rights defined within your database (administrator/evs by default) and press **Ok**. The Remote Installer splash screen appears:

Wait for initializing, the Remote Installer opens:




After a few seconds, all outdated workstation are detected and an automatic upgrade is launched.



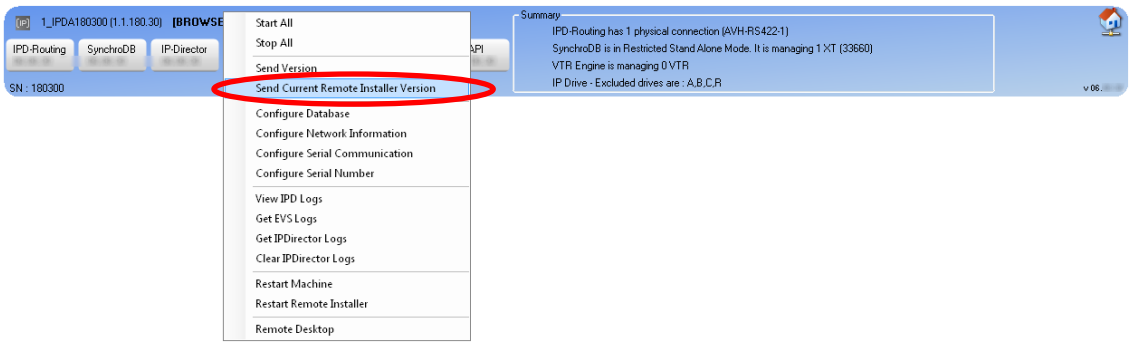

After upgrade, the distant updated workstations restart and disappear a few seconds from the Remote Installer list.

Once all workstations have restarted, are listed again and the serial numbers are defined, the IP-Director package can now be upgraded.

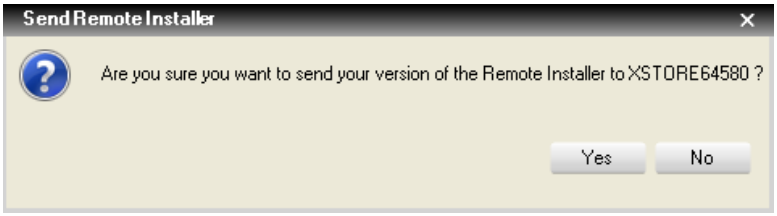
**Note**

There is a possibility to install the current Remote Installer Version on each workstation separately or manually if a station failed to upgrade automatically.

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.

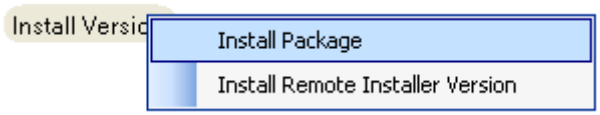
**Note**

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

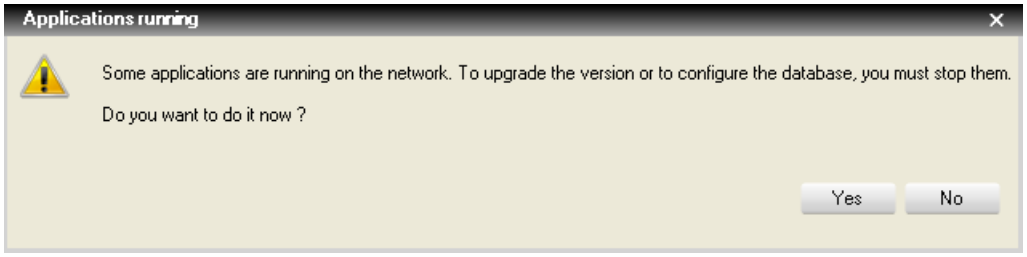
It is recommended to work with standard Ethernet frames (MTU 1500) or Jumbo Ethernet frames (MTU 9000). **Avoid mixing the two sizes.**

## 5.1.4 Upgrading The IP-Director Package

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

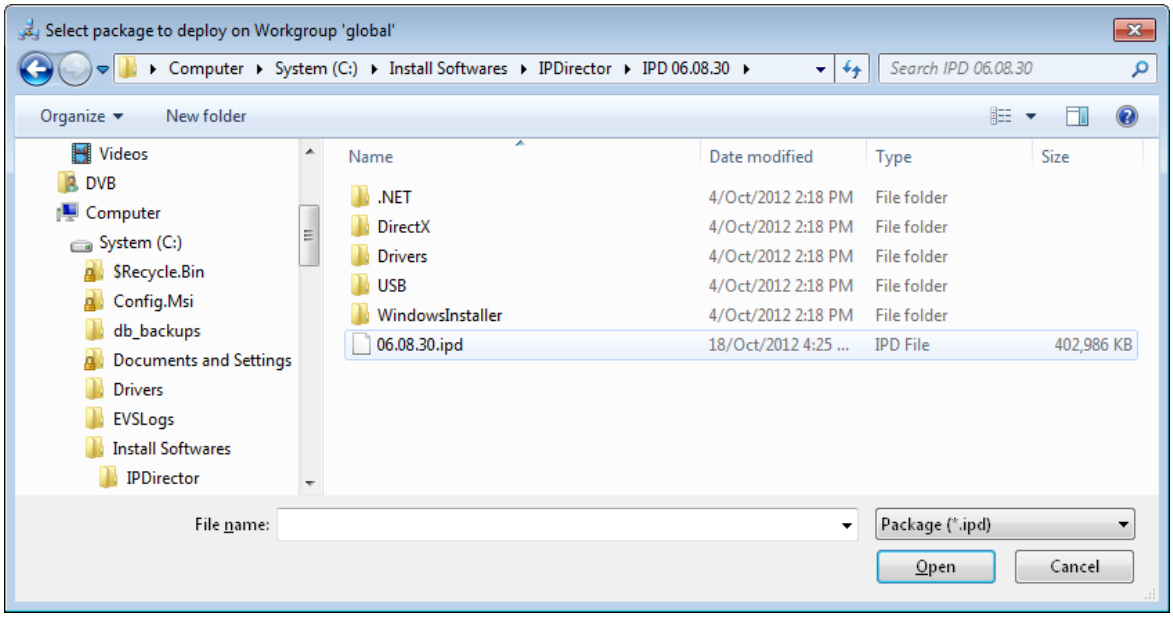



A popup message appears to alert you to stop running services (IPD-Routing, SynchroDB, IP-Director, IP-Scheduler, VTR Engine, IP-Drive and IP-API) on the network before installing version.



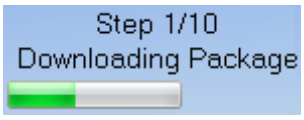

Once the services have been stopped on every workstation, select **Install Package** in the Install Version menu again.

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.

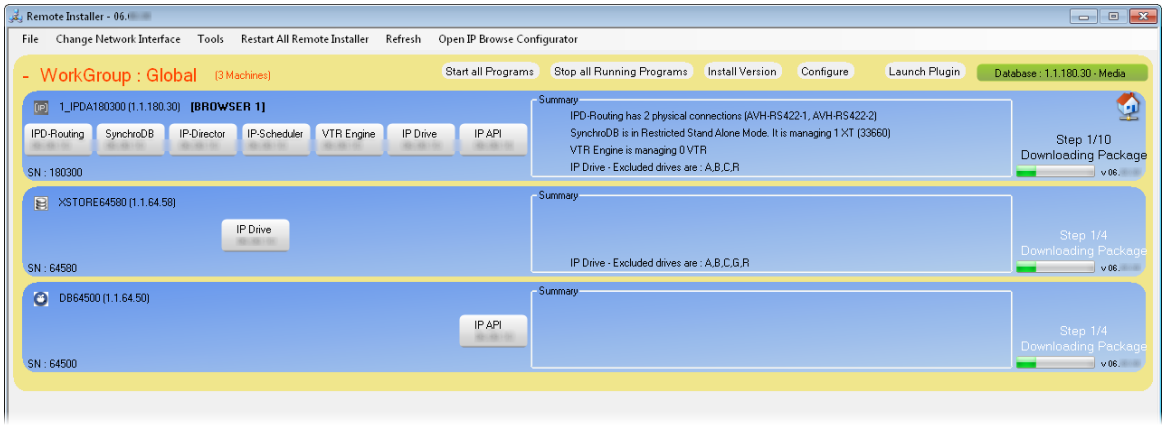



Click Open. The Remote Installer starts to install the package on all workstations.

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



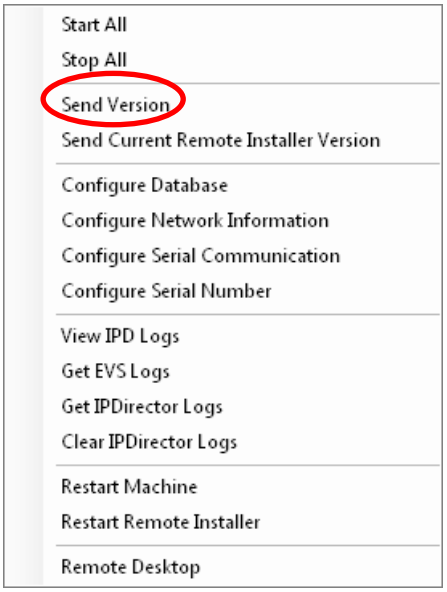

Wait until all progress bars are completed.




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 or the current Remote Installer version on each workstation separately. Right click the corresponding machine and select Send Version or Send Current Remote Installer Version.




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

## 5.1.5 Settings After Fresh Or Clean Install

If the workstations were fresh installed or cleaned, the settings of each workstation have to be entered before upgrading the database.

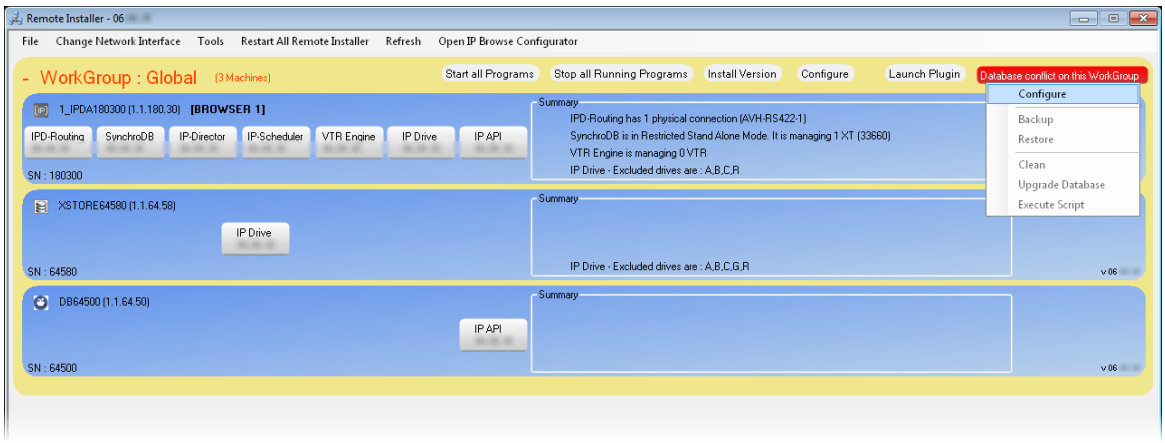
Otherwise, skip this chapter and go to the **Upgrading the Database** chapter.

First, press the Stop all Running Programs buttons in the Workgroup menu:

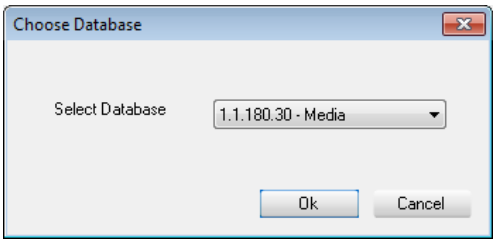

Here are some situations to be solved in the Remote Installer:

### Database Conflict (Red)

At the right bottom of the remote installer application, the database field in red also indicates a database conflict within the workgroup defined.




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



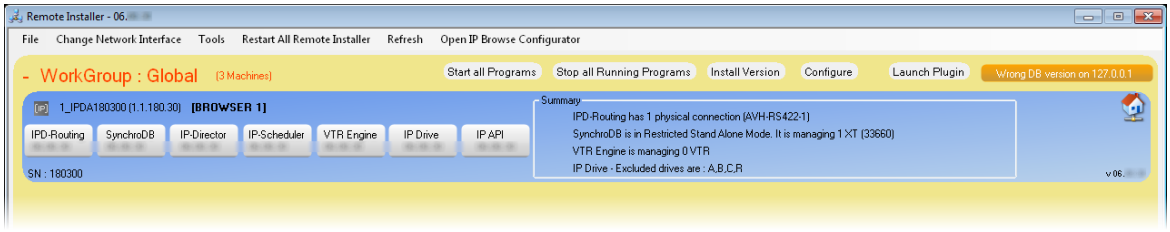

Select the IP address & Instance Name of your database server.

# Database Wrong Version 127.0.0.1

If all workstation were fresh installed, the default value for the Database setting is 127.0.0.1 (local host IP address).

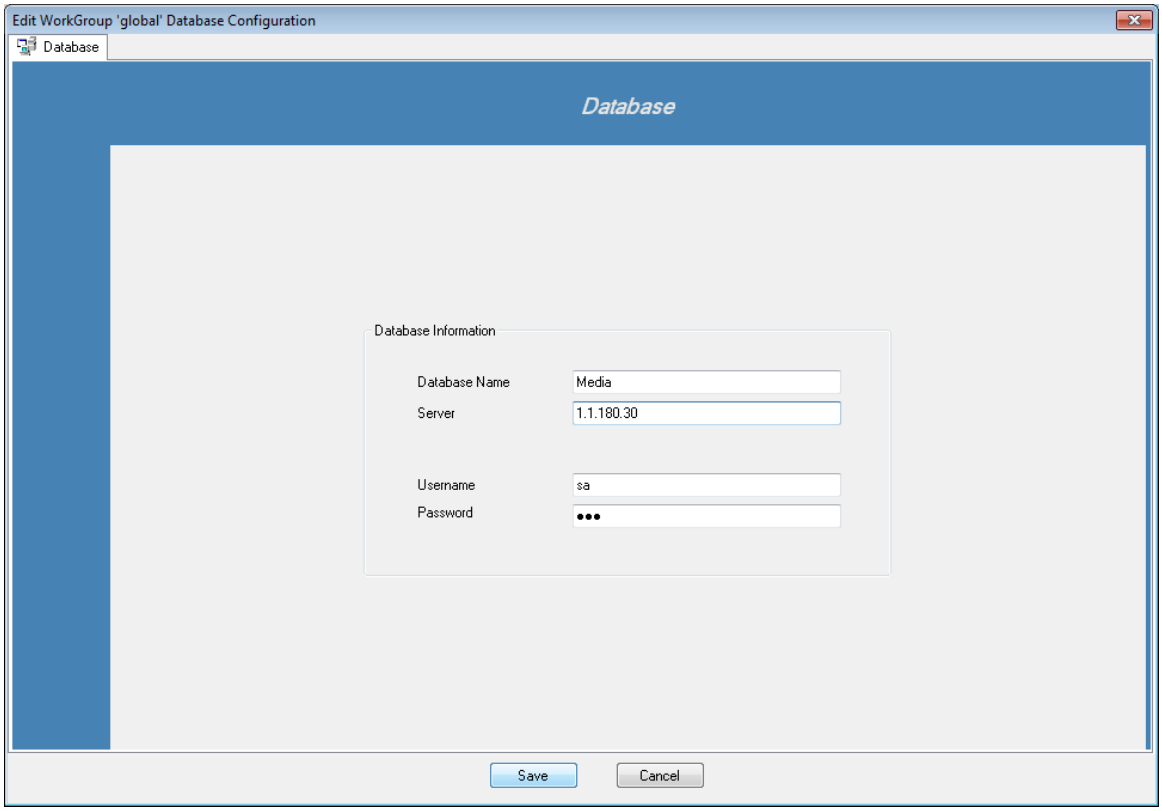
**This address cannot be kept as a valid workgroup database address if the workgroup contains more than one workstation.**

Only one database on one workstation must be chosen for the workgroup.




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

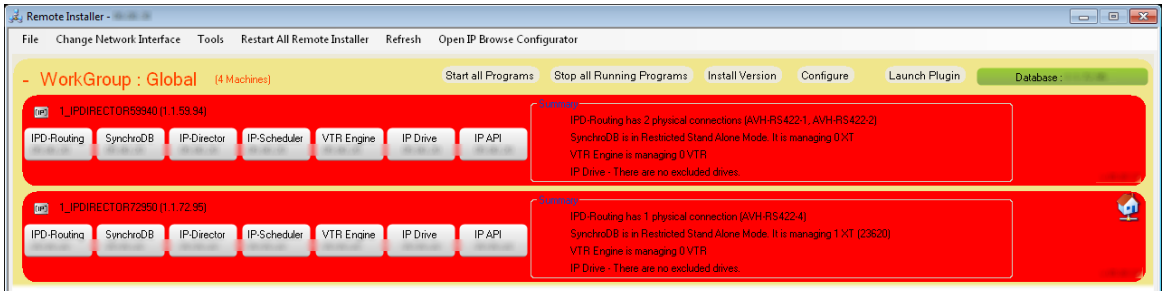
The Database window appears:




Edit the Server IP address and enter the chosen workstation or external database address.

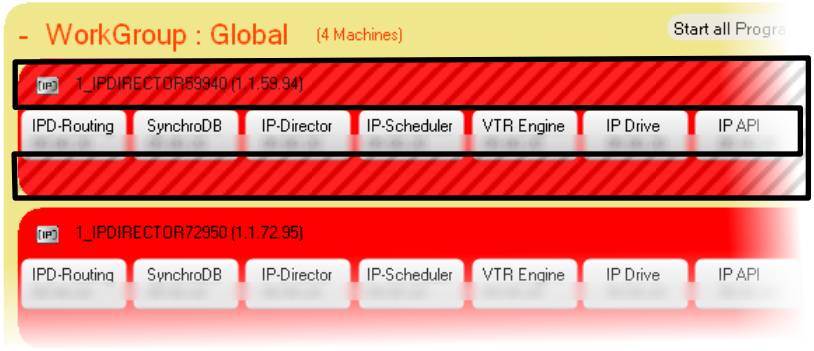
# Local Machine Number conflict

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.

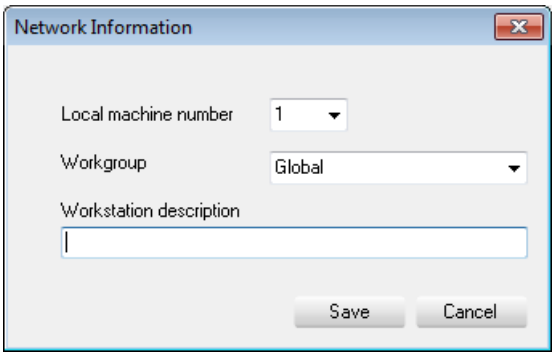




The Local machine number field is used to assign an ID to an IP-Director workstation in the network. All workstations in the network must have a different number and must be from 1 to 255.

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



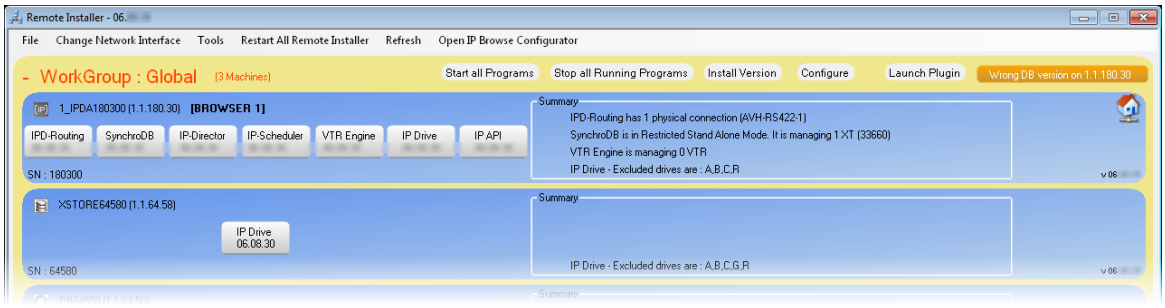

Select **Configure Network Information** to open the following window:



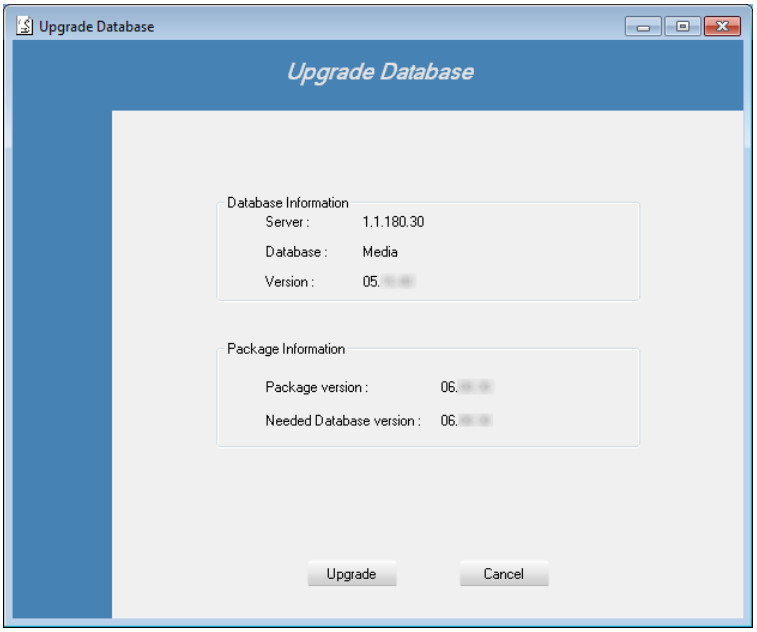

Adjust the Local machine number for each workstation and **Save**.

## 5.1.6 Upgrading The Database Version (from v5 to v6)

At the right bottom 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.




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 DB version.

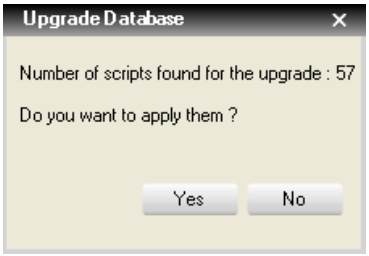
**Note**

If the content of the database does not need to be kept. Skip the upgrade process and restore a clean database.

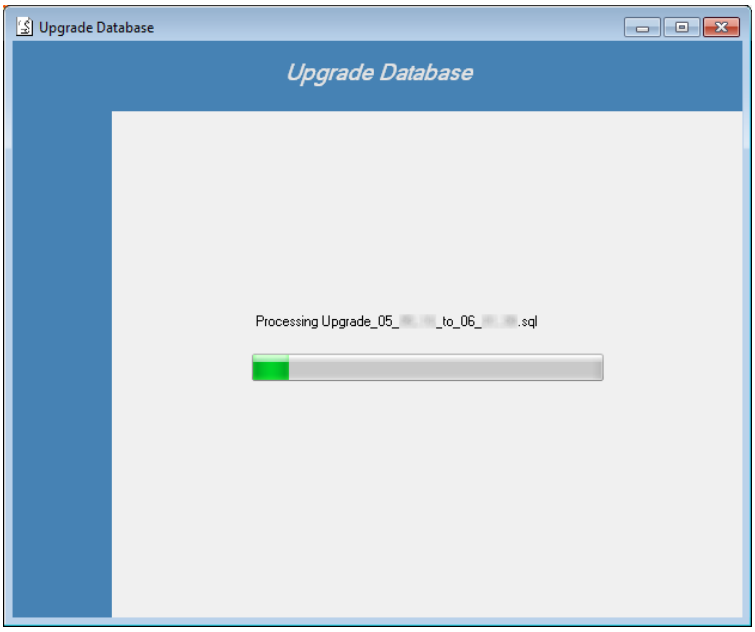
Right-click the database button and select **Restore**.

The clean database version is now clearly identified with an extension: **Media_06_XX_XX_YYMMDD_Clean.BAK**

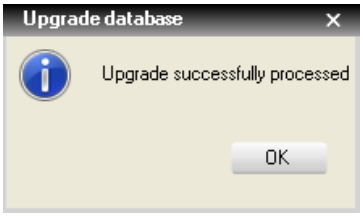
This window pops up:



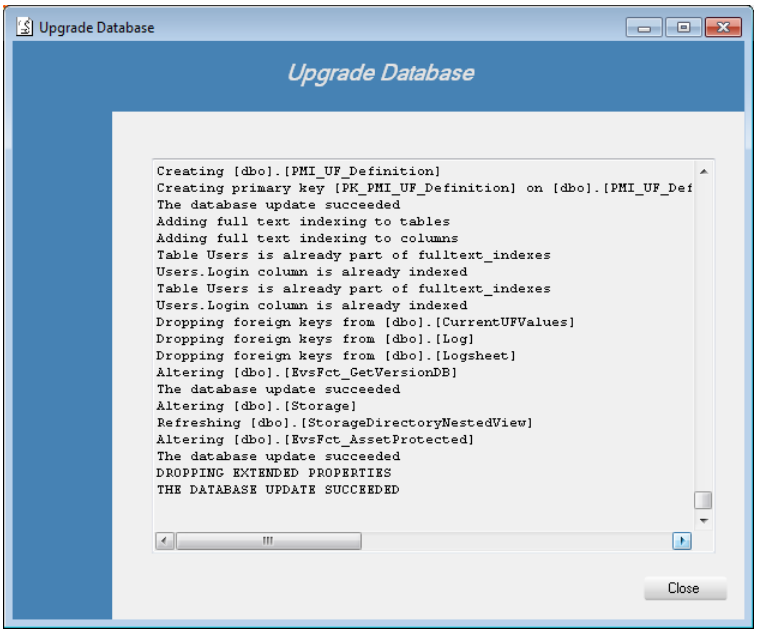

Press **Yes** to apply the needed upgrade scripts, the progress bar is displayed:




Once finished, the following confirmation message can be validated by pressing **OK**.



The Upgrade Database window lists the modifications applied by the script(s), press **Close** after reading it.



# 5.1.7 Additional Checks

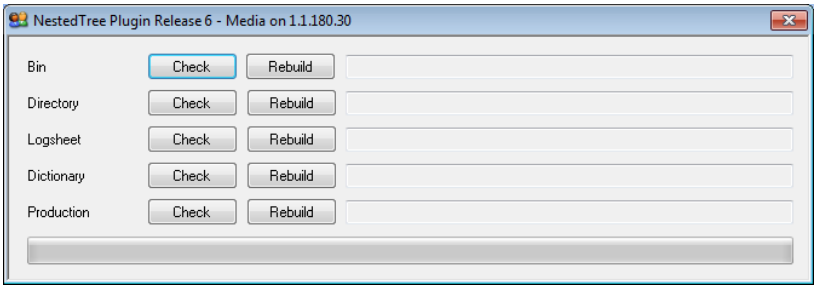
Some additional tests and checks should be done after upgrading Remote Installer, IP-Director package and Database version.

The checks mainly affect the Database.

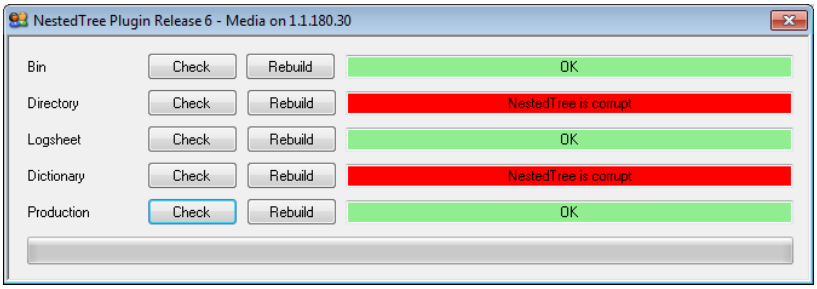
## NestedTreePlugin.Plugin

This plugin is located in the plugin section of the Remote Installer.

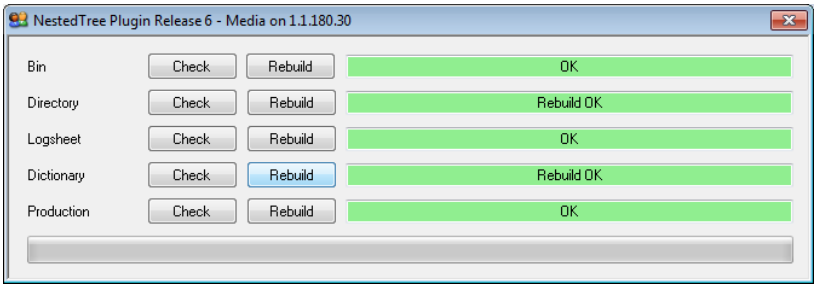
This plugin checks the DB Nested Tree and remove potential DB corruptions.




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




**Rebuild** all the corrupted NestedTrees.




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

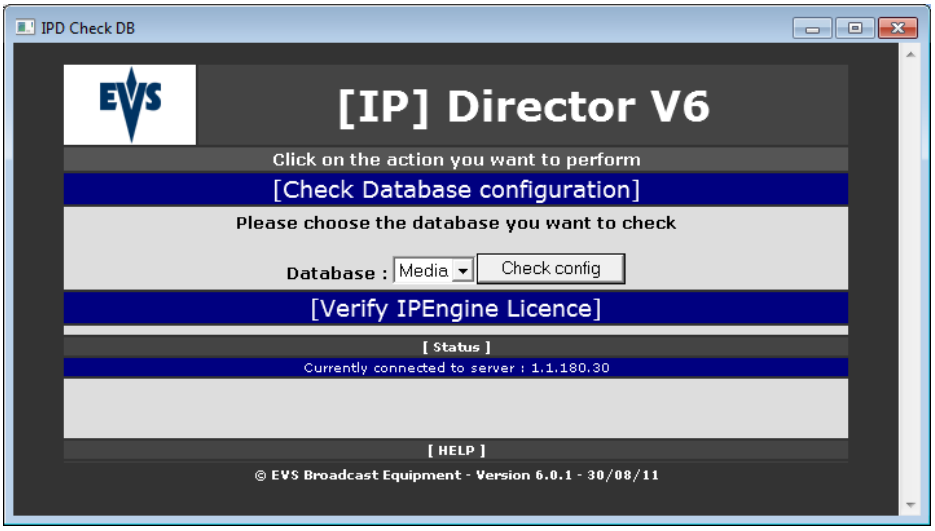
**All SynchroDB services must be restarted if corrupted trees were rebuilt.**

**Note**

This check has no need on a restored clean database.

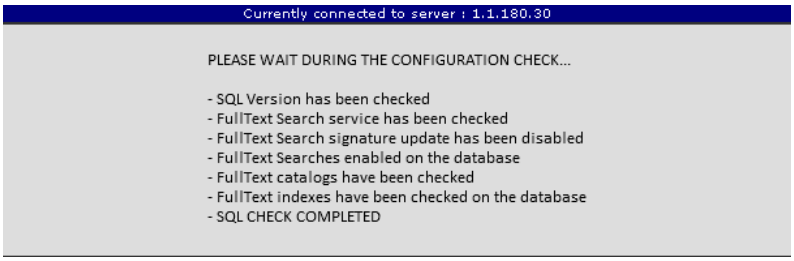
## [IP]Director_6_Check_DB.hta:

This plugin checks the compatibility of the database and the SQL server used by an [IP] director v6 workgroup.




Select the **[Check database configuration]** option.

Choose the database in the drop down list and press **Check config**.




The status zone shows the results:

- 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

**Note**

This check can be done on a restored clean database.

# 5.2 IP Drive & API Proxy Installation and Configuration

The aim of this procedure is to describe step by step how to install:

- An IP Drive service on an XTAccess/XSquare/XFile or a non-IP-Director workstation.

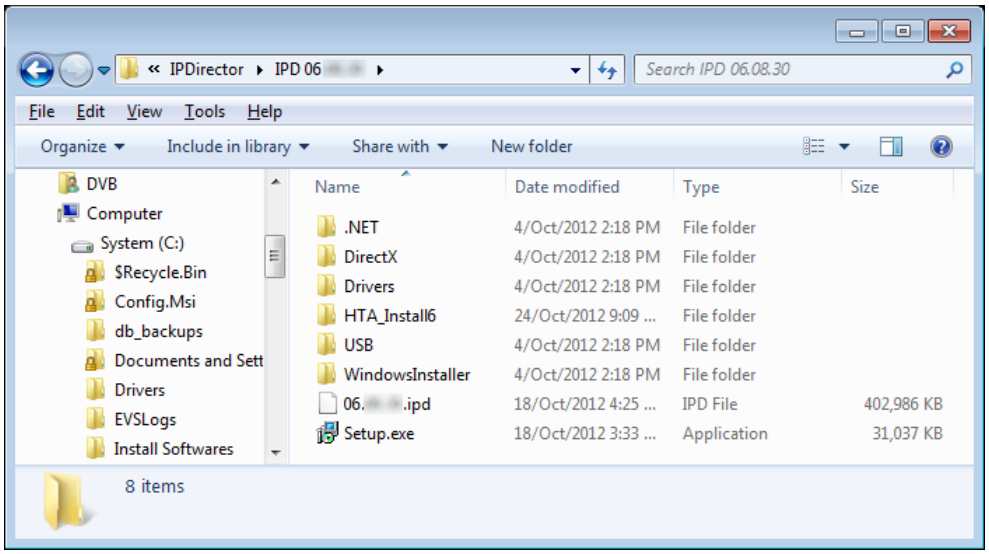
  IP-Director manages the Near Line directories on a network. It can also manage removable hard drives plugged in a workstation. As this workstation might not be an IP-Director, it's mandatory to install the IP-Drive service on all workstations managing drives.

- An API Proxy service on a Database or a non-IP-Director workstation.

  A Web Service Proxy can be installed on a gateway server. This Proxy function adds load balancing and redundancy capabilities to the IP-Director API. Databases are perfectly designed for this role, especially with its virtual IP address on redundant systems.

## Procedure:

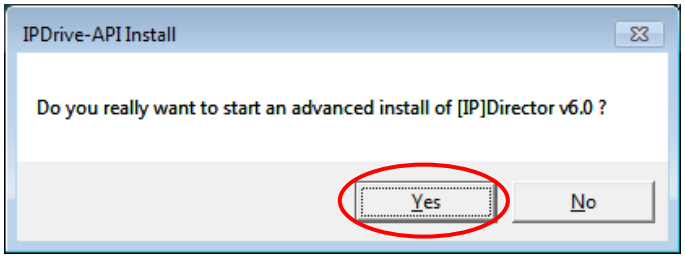
- Download and copy the IP-Director V6.0 setup, package and **HTA Install** on local drive into both C: and R: partitions in the Install Softwares folder.



- Execute the [IP]Director_6_Setup.hta

  Click on '**Install IP Drive or API Proxy**'


- A message is displayed, press **Yes**.




- Follow the progress bar. It ends with the Remote Installer installation.

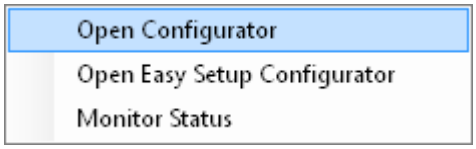

- Once the installation is finished, the following message is displayed.


  Press Exit to quit the application.

- Delete the User Manager and IP-Director icons created on the desktop.


- Open the Remote Installer locally on the Storage Unit.

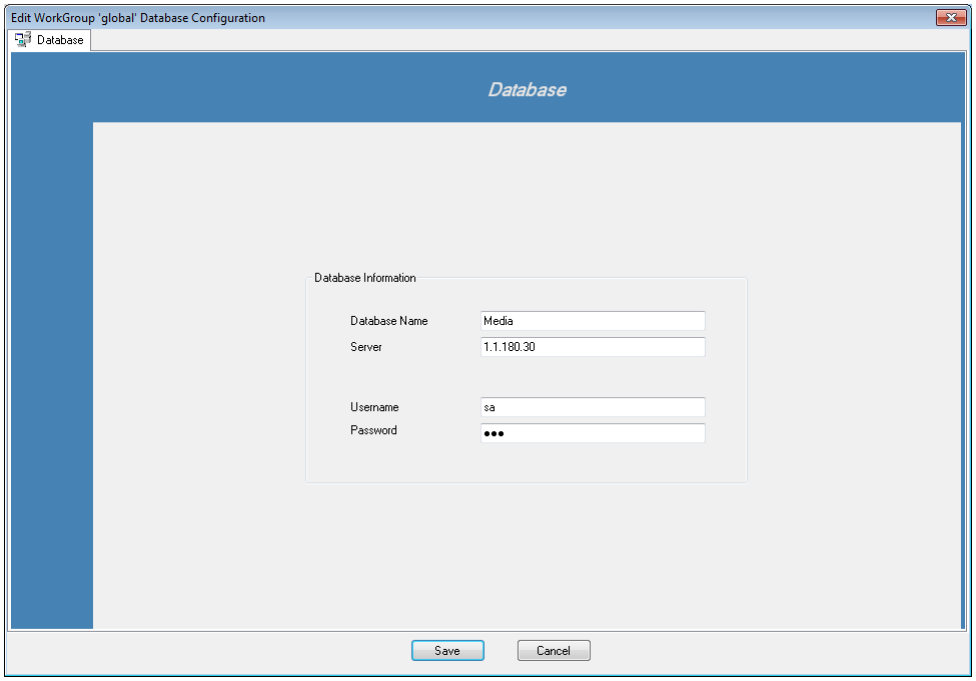
  Right Click the Remote Installer icon in the Windows Taskbar and select **Open Configurator**.




- A message appears asking you to configure the DB settings.

  Press **Yes**

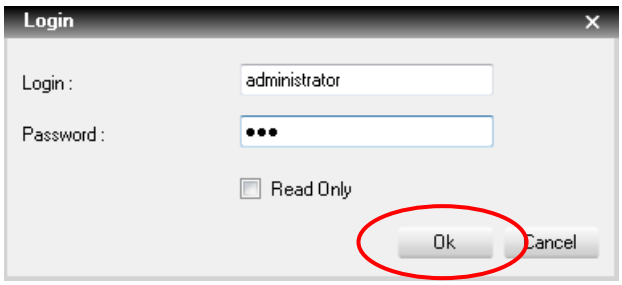
- Enter the IP-Director DB name and IP Address and press **Save**.



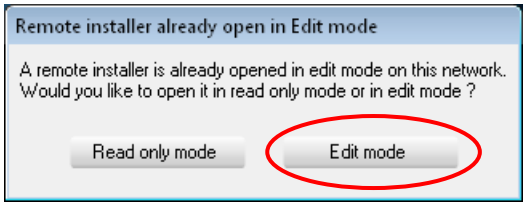
- Enter an administrator login and password to open the Remote Installer.

  Try the login/password: administrator/evs

  Press **Ok**.



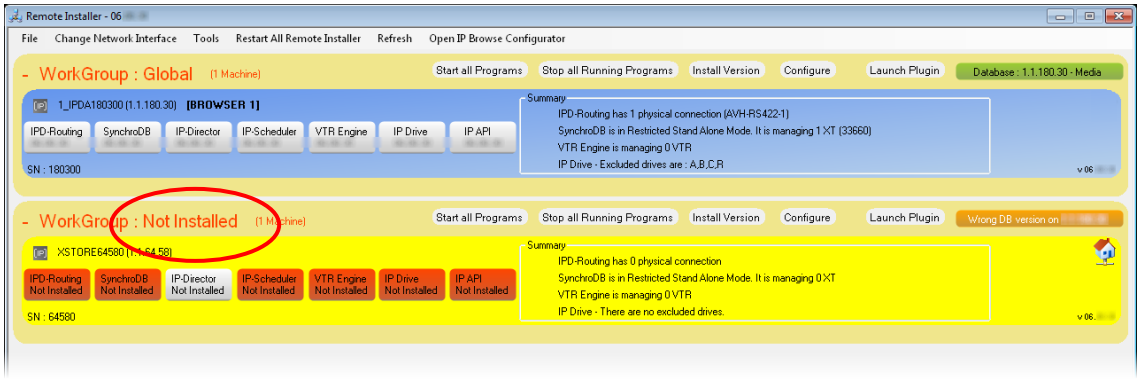

- If another Remote Installer is already open on the network, press **Edit Mode** to continue.




- The remote installer opens and displays all the IP-Director workstations already launched on the network.

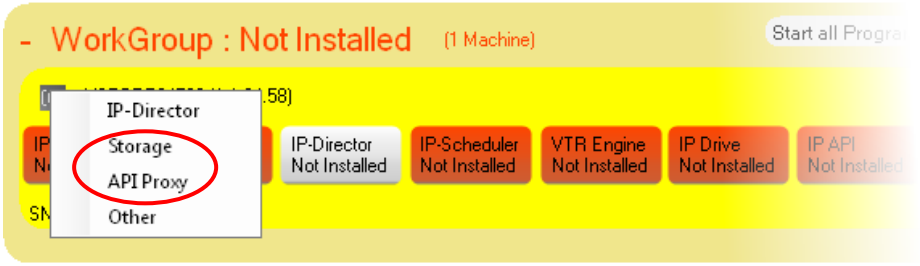
  Your current workstation appears in yellow, without ant workgroup installed. All the IP-Director services appear in red as “Not installed”.

  The current can be clearly identified with its “local” icon 



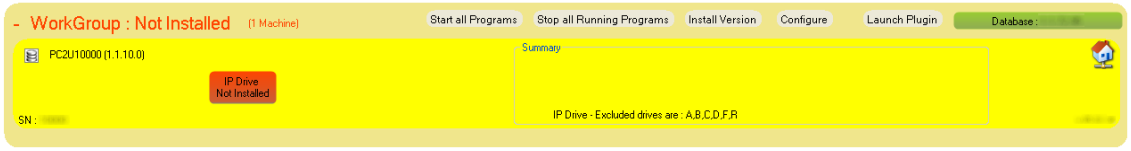

For example here: There is one IP-Director V6 workstation in a “Global” workgroup. You’re installing a standard workstation with an IP Drive or an API Proxy.

- Right click on the small IP-Director icon in the top left corner to open the contextual menu. Select **Storage** or **API Proxy**.




- The Icon changes from  to  (for Storage) or  (for API Proxy).

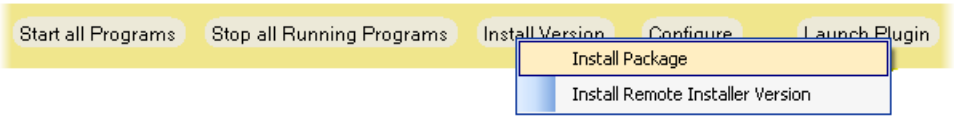
- All IPD modules are hidden except “IP Drive” (for Storage)



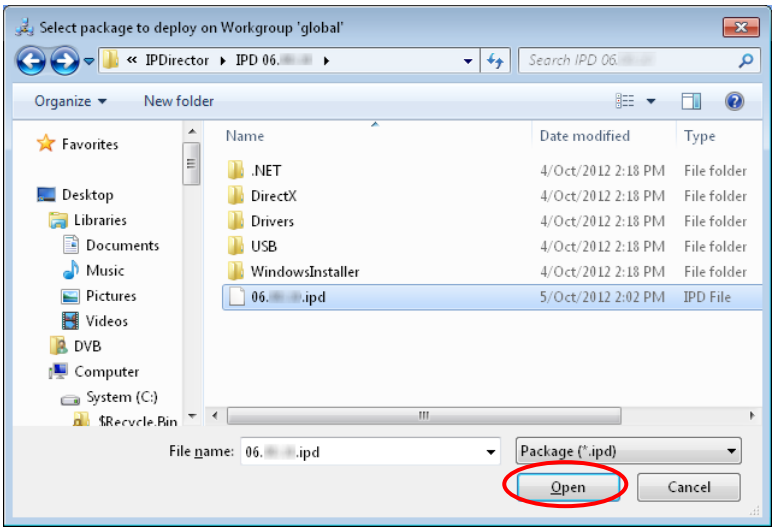

All IPD modules are hidden except “IP API” (for API Proxy)


- Right click the workstation zone to open the contextual menu and send a package of IP-Director.

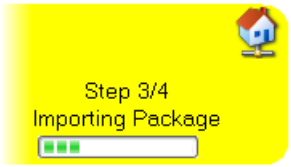
  Or press **Install Version** in the Workgroup (Not Installed) menu and select **Install Package**.



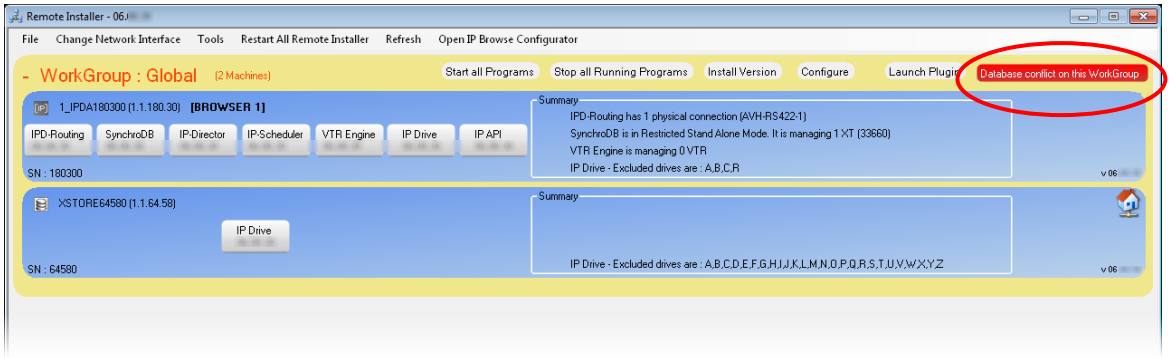

- Browse the Install Software folder and select the .ipd package file. Press **Open**.




- Wait for the complete installation of the package.

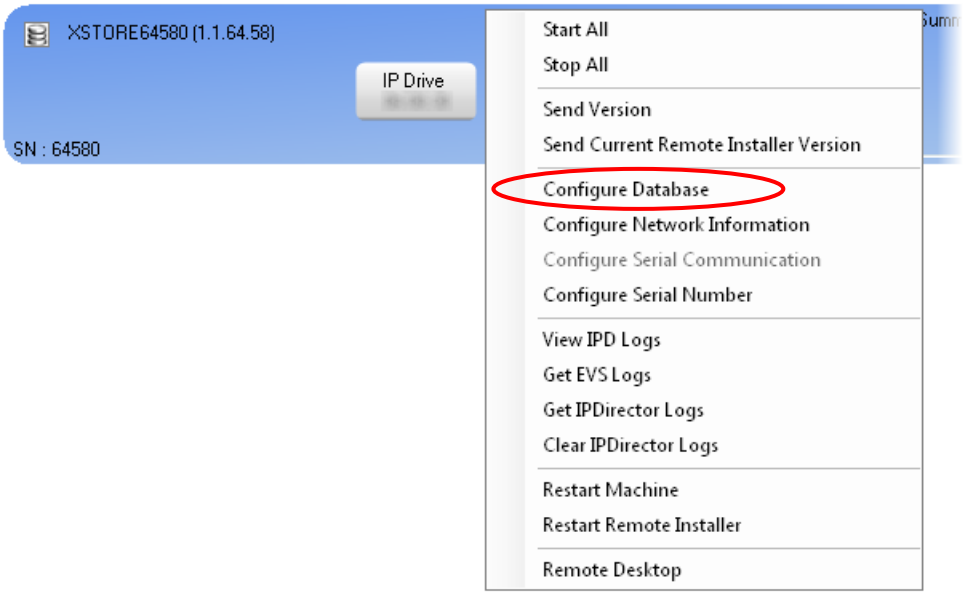



- The workstation joins the “Global” workgroup by default and creates a Database conflict.



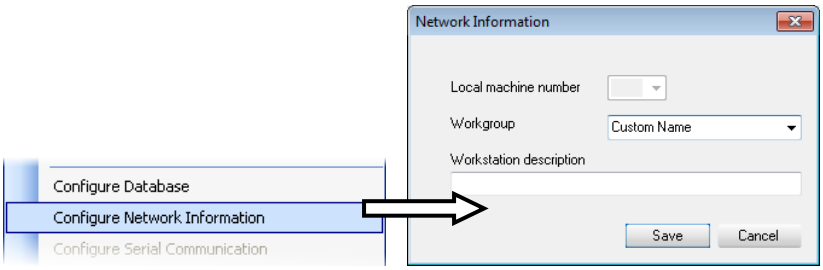

Press **Refresh** in the main menu if the workstation appears yellow after installing the package.

- Right click on the workstation to open its contextual menu and select **Configure Database**.



**Note**

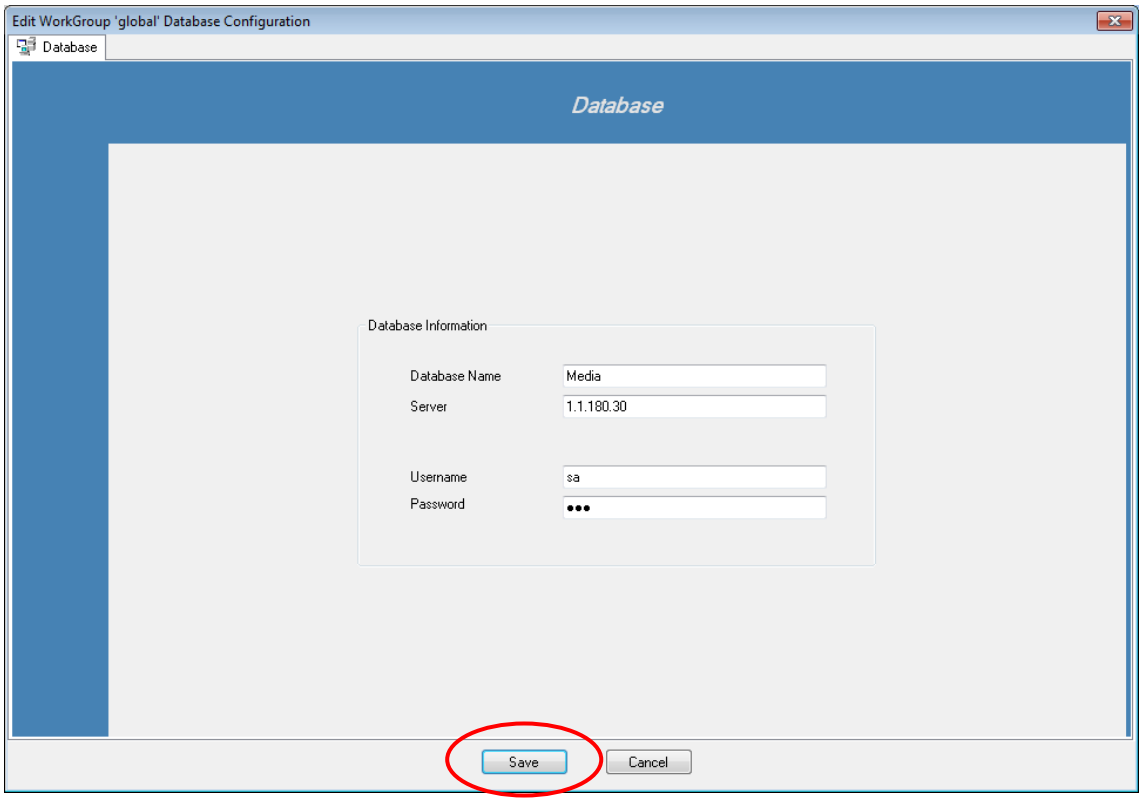
The workstation can join another workgroup. Select **Configure Network Information** in the contextual menu and enter the custom workgroup name.




- Reconfigure once again the database settings to match the workgroup settings.

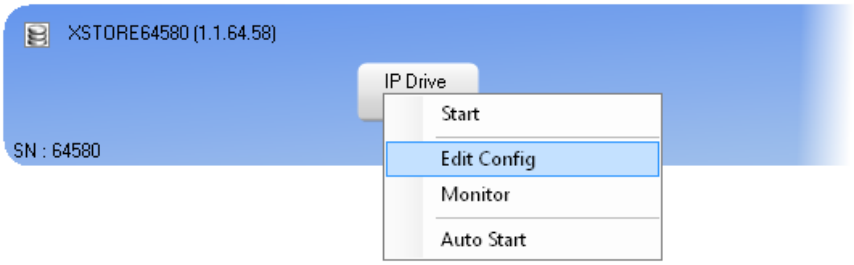
  Enter the name and IP address of the IP-Director Database.

  Press **Save**.



# For IP Drive workstations:

- Right click on the "IP Drive" service and select "Edit config".



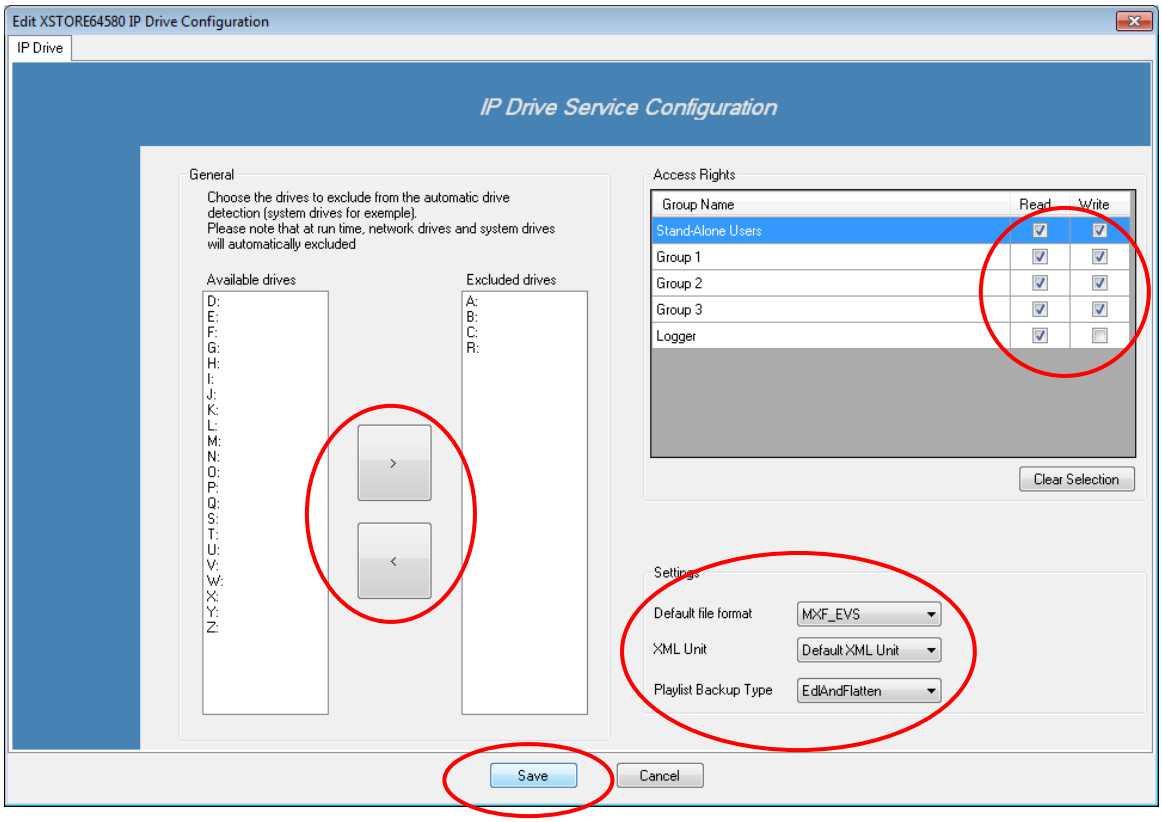

- The "IP Drive Service Configuration" window appears

  Select the drives you **don't want** to be managed in the "Available drives" list then, click the ">" button (most E.V.S hardware will recommend selecting at least C:System, R:Restore and floppy A: / B: drives)

  The selected drives appear in the "Excluded drives" list.

**Note**

Please refer to the IP Drive Service Configuration chapter for details.



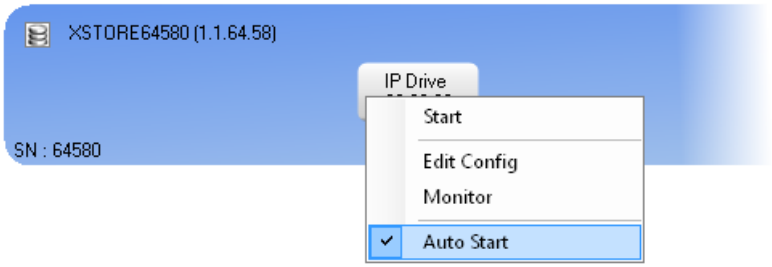

- Define the Groups “Access Rights” for the storage Unit (Read and / or Write access)

- In the Settings area, select the "Default file format", the “XML Unit” and the “Playlist Backup type”.

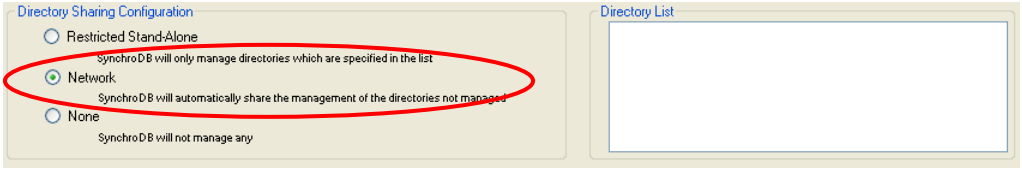
  Drop down lists allow you to pick a choice for each settings.

- Click “Save” then start the IP Drive service.

  Select the auto start mode to start the service with the workstation.



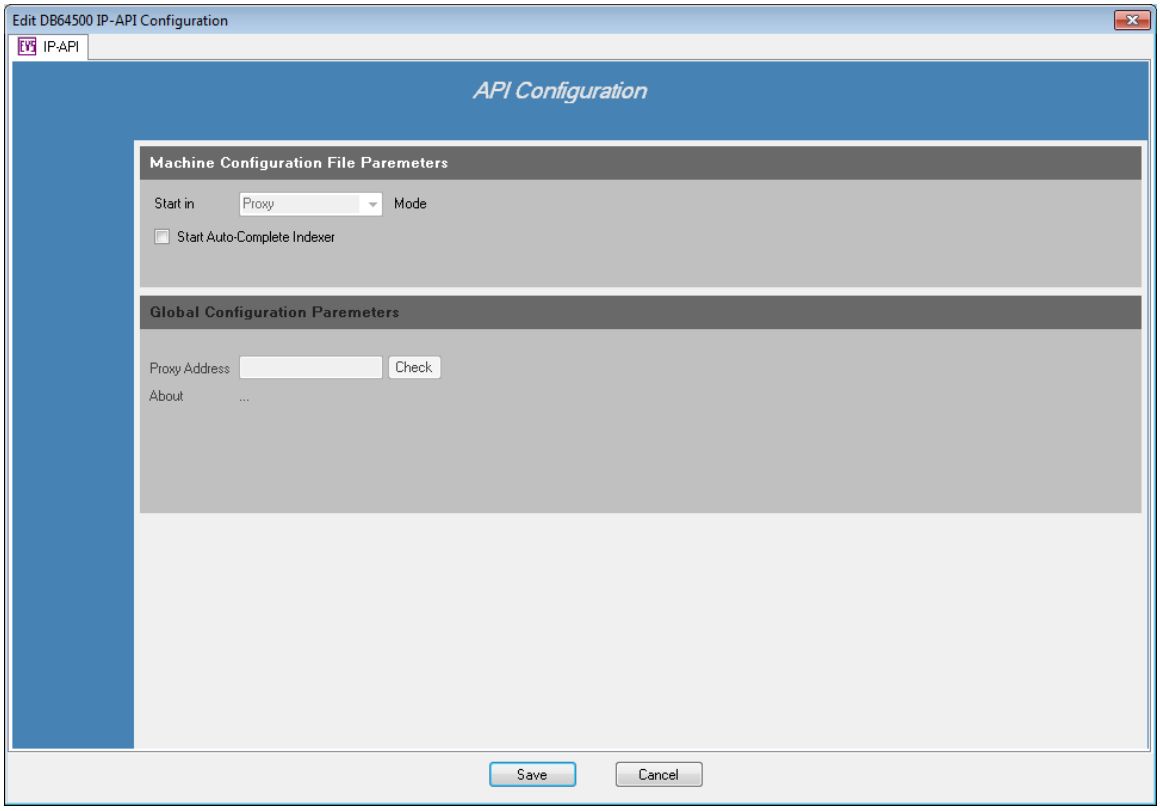

- Make sure that at least one of the workstations in your workgroup has its SynchroDB service “Directory Sharing Configuration” set to Network Mode.



# For API Proxy workstations:

- Right click on the "API Proxy" service and select "Edit config".


- The "IP API Configuration" window appears. No configuration is needed. Starting mode is already defined in 'Proxy'.




- Click "Save" then start the IP API service.

  Select the auto start mode to start the service with the workstation.

# 5.3 IP-Browse Installation

## Introduction

IP Director 6 introduces a new stand alone application based on the IP Director framework : IP-Browse.

This application is self contained and don't require the deployment of the whole IP Director package.

This application is mostly aimed at running on corporate desktop PCs where a traditional Remote Installer installation might not be possible. So on top of the remote installer deployment, an installer is available for each application. This installer can be run in Silent or VerySilent mode for an easy corporate deployment.

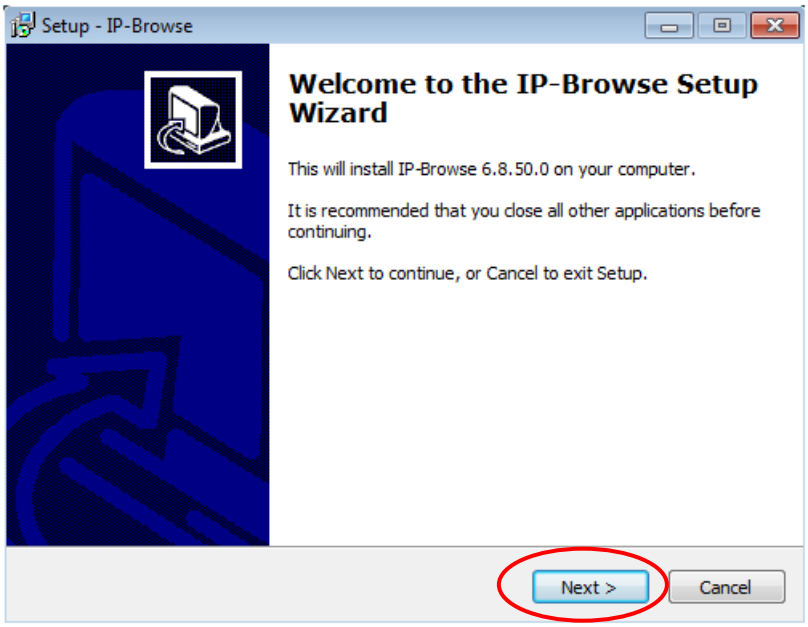
These two methods are described in more detail below.

## 5.3.1 Deployment with a stand-alone installer

### Manual mode

To install IPBrowse on a client station using the installer, just proceed as follows:

- Copy the installer to a temporary directory
- Run the installer and follow the steps in the wizard:

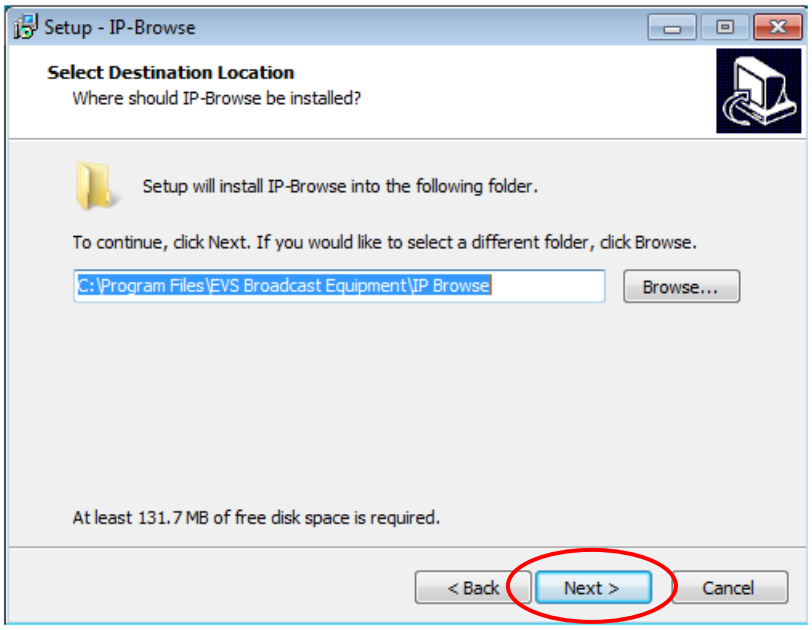



Press Next.

- Accept the license agreement.


Press Next.

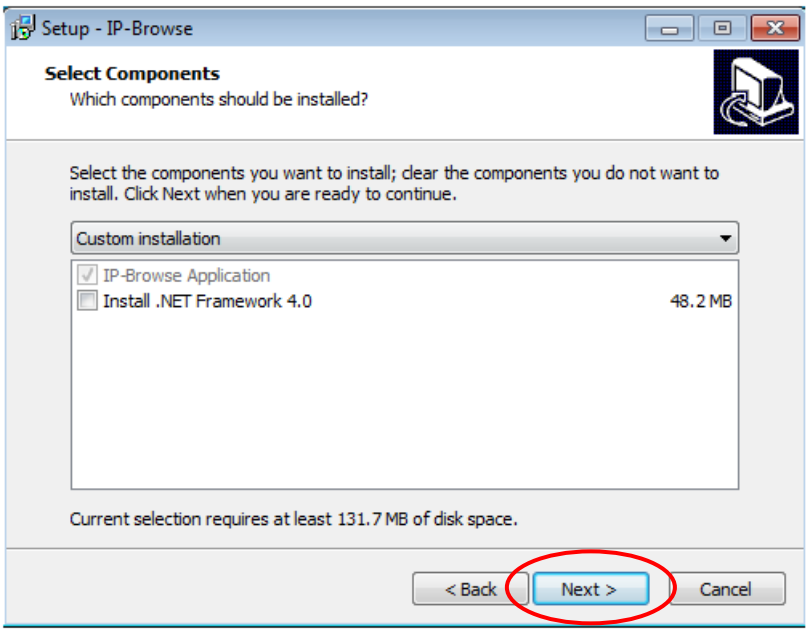
- Choose the folder you wish to install the software in.




Then press Next.

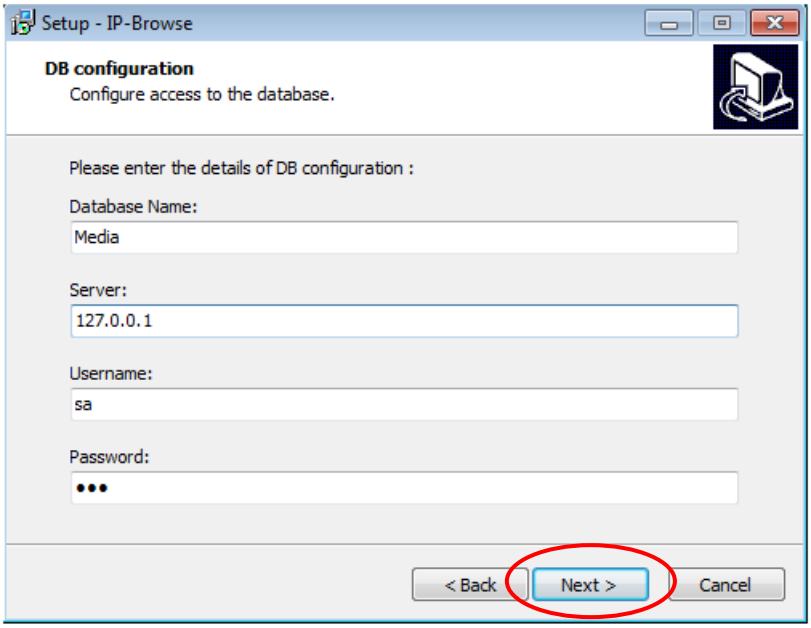
- If some prerequisites need to be installed on the machine, they will automatically be selected here.

  There are two prerequisites: .NET framework 4.0 and VC Redist 2010. If you wish to re-install a prerequisite, select it.



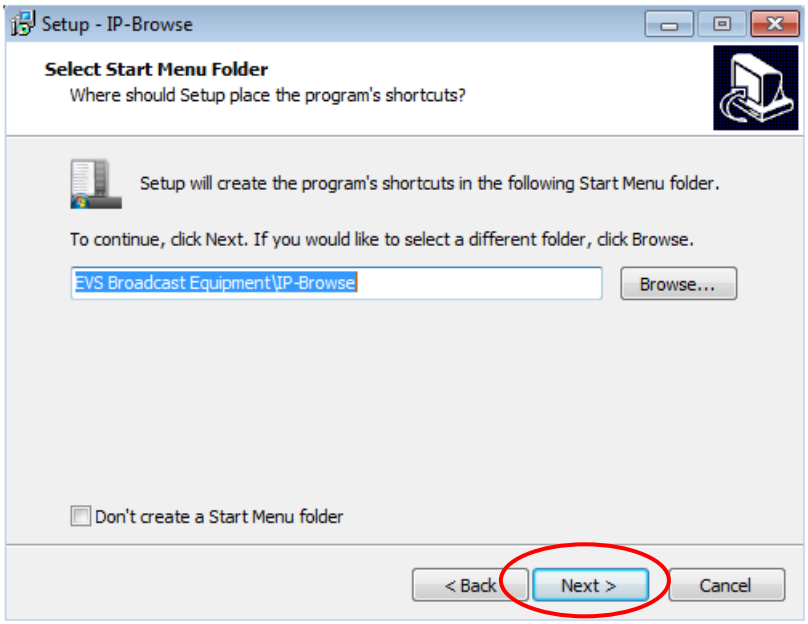

Press Next

- Enter the Name of your IP Director Database and the address of the server it is hosted on.



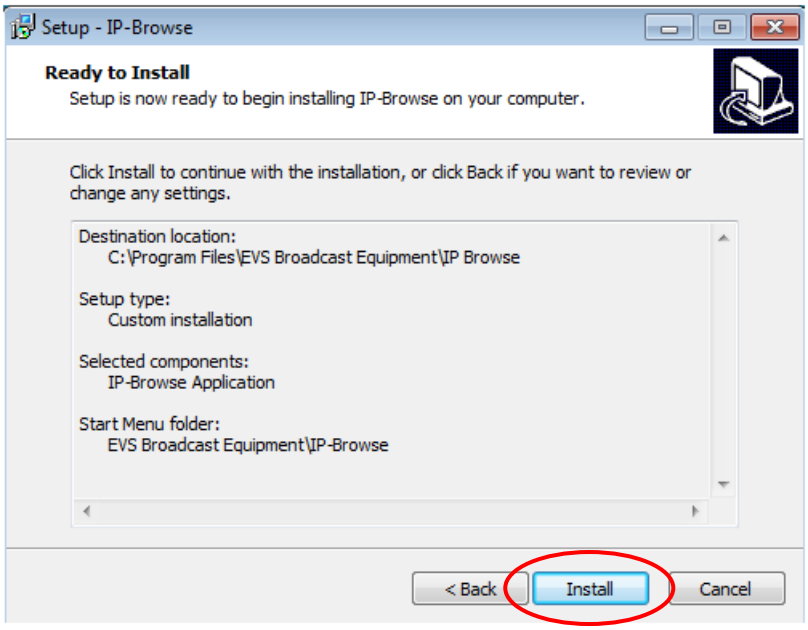

Press Next.

- Choose the path to the start menu folder.




Press Next

- Press Install to proceed with the installation




**Note**

Note that a shortcut of the application will be automatically created on the desktop.

IPBrowse icon

## VerySilent mode

It is possible to run both installers in Silent or VerySilent mode with the following command line arguments:

**/verysilent -DatabaseName "DBName" -PrimaryServer "IPAddress" -UserName "sa" -Password "evs"**

Where **DBName** is the name of the IP Director database and **IPAddress** is the IP Address of the IP Director database

Other command line arguments include:

**/SUPPRESSMSGBOXES**

Instruct Setup to suppress message boxes. Only has an effect when combined with '/SILENT' and '/VERYSILENT'.

The default response in situations where there's a choice is:

- Yes in a 'Keep newer file?' situation.
- No in a 'File exists, confirm overwrite.' situation.
- Abort in Abort/Retry situations.
- Cancel in Retry/Cancel situations.
- Yes (=continue) in a DiskSpaceWarning / DirExists / DirDoesntExist / NoUninstallWarning / ExitSetupMessage / ConfirmUninstall situation.
- Yes (=restart) in a FinishedRestartMessage / UninstalledAndNeedsRestart situation.

5 message boxes are not suppressible:

- The About Setup message box.
- The Exit Setup? message box.
- The FileNotInDir2 message box displayed when Setup requires a new disk to be inserted and the disk was not found.
- Any (error) message box displayed before Setup (or Uninstall) could read the command line parameters.
- Any message box displayed by [Code] support function **MsgBox**.

**/DIR="x:\dirname"**

- Overrides the default directory name displayed on the **Select Destination Location** wizard page. A fully qualified pathname must be specified. May include an "expand:" prefix which instructs Setup to expand any constants in the name. For example: '/DIR=expand:{pf}\My Program'.

**/GROUP="folder name"**

- Overrides the default folder name displayed on the **Select Start Menu Folder** wizard page. May include an "expand:" prefix, see '/DIR='. If the **[Setup]** section directive **DisableProgramGroupPage** was set to **yes**, this command line parameter is ignored.

**/NOICONS**

- Instructs Setup to initially check the **Don't create a Start Menu folder** check box on the **Select Start Menu Folder** wizard page.

The full list of supported arguments can be found at:

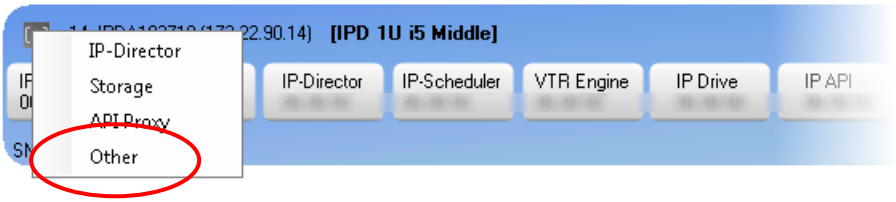
http://www.jrsoftware.org/ishelp/index.php?topic=setupcmdline

## 5.3.2 Deployment with Remote Installer

IP Clip Logger and IPBrowse packages (.ipd) are available to deploy with Remote Installer.

In order to deploy small apps with the remote installer, first install remote installer on all the machines (see tech ref for details).

If only a small app needs to be installed on the workstation (and no IP Director), set the workstation type to “Other” by right clicking on the icon of the workstation:

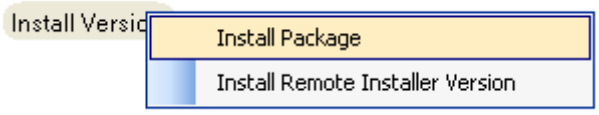



The Remote installer then shows just a summary of the small installed apps:

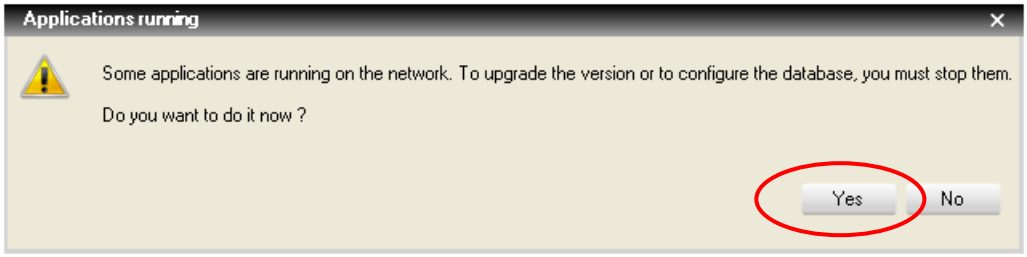

If the workstation type is IP Director, then IP Director and small apps will be deployed on the workstation.

If the small apps are not to be deployed on the IP Director workstations, then all small apps workstations must be in a different workgroup. This workgroup must point to the same Database as the main IP Director workgroup. If some workstations need to have only IP Clip Logger and others only IPBrowse, then they also need to be in different workgroup.

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

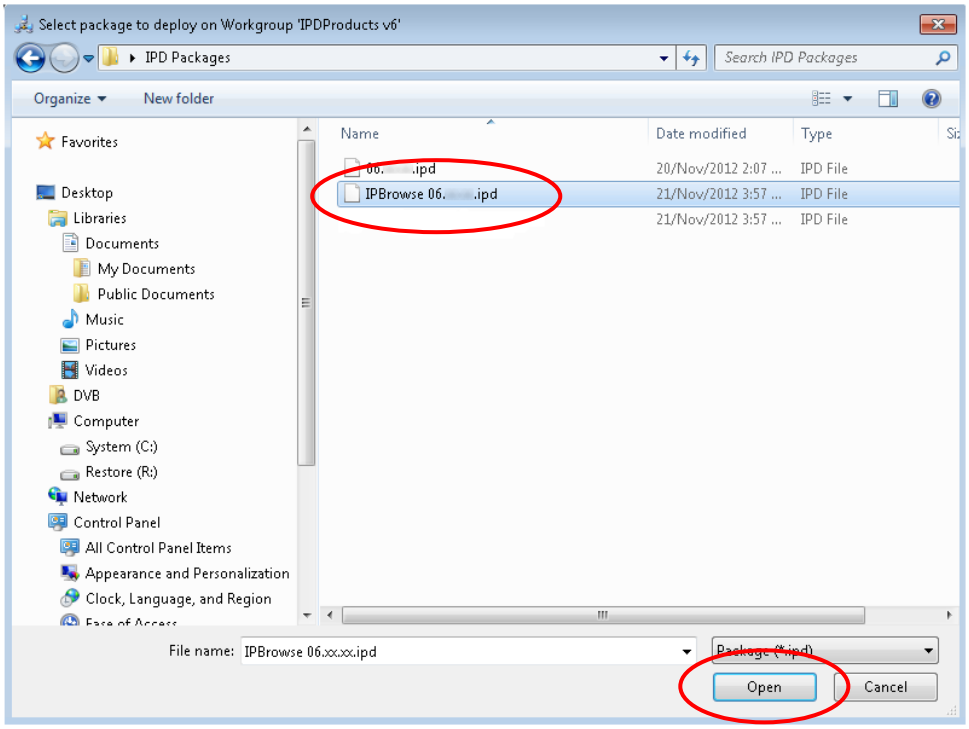



A popup message appears to alert you to stop running services (IPD-Routing, SynchroDB, IP-Director, IP-Scheduler, VTR Engine and IP Drive) on the network before installing version.




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 IPBrowse or IP Clip Logger file is located. The file has an .ipd extension.



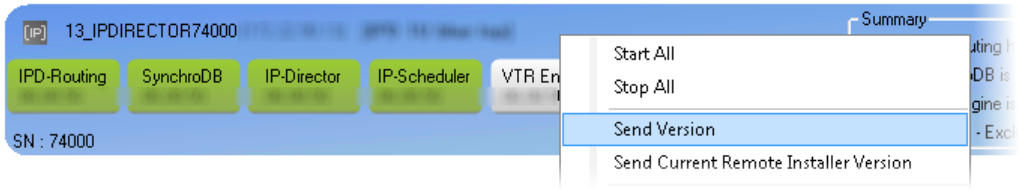

Click Open.

The Remote Installer starts to install the package on all workstations of type:

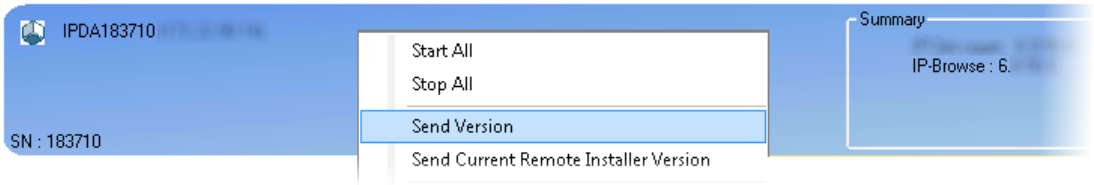
- IP Director
- Other

It is also possible to install a small app on a single workstation in the workgroup by right clicking in the blue area and select Send Version:

- On an IP Director workstation




- On an “Other” workstation




It is not necessary to stop services to install a small app on a single machine.

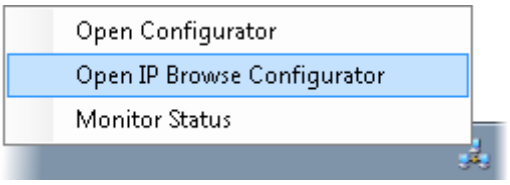
## 5.3.3 IP-Browse Configurator

This tool is designed to configure the IP-Browse interface for client stations.

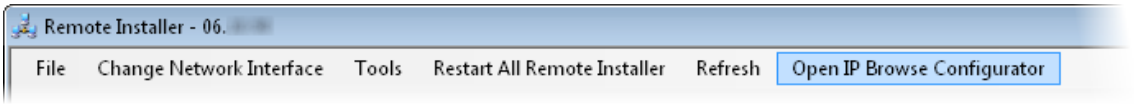
Default view (Clip or Log) opening the small application, default columns or fields for advance search, limit count result... can be defined for the whole IP-browse clients.

There are two ways for opening the configuration tool:

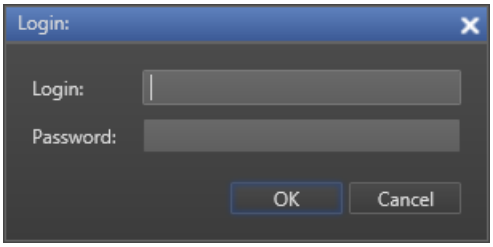
- Open the tool using the contextual menu of the Remote Installer icon.




- Or click on the 'Open IP-Browse Configurator' button in the main menu of the remote installer.



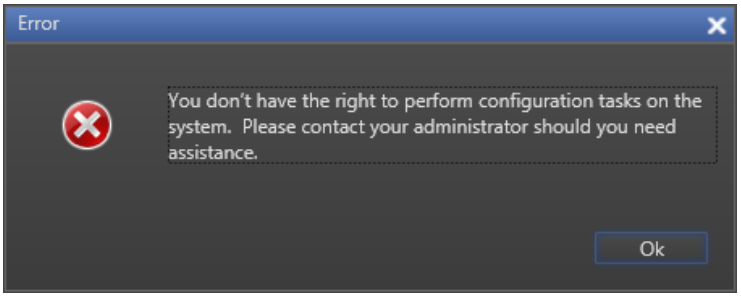

A login window pops up:



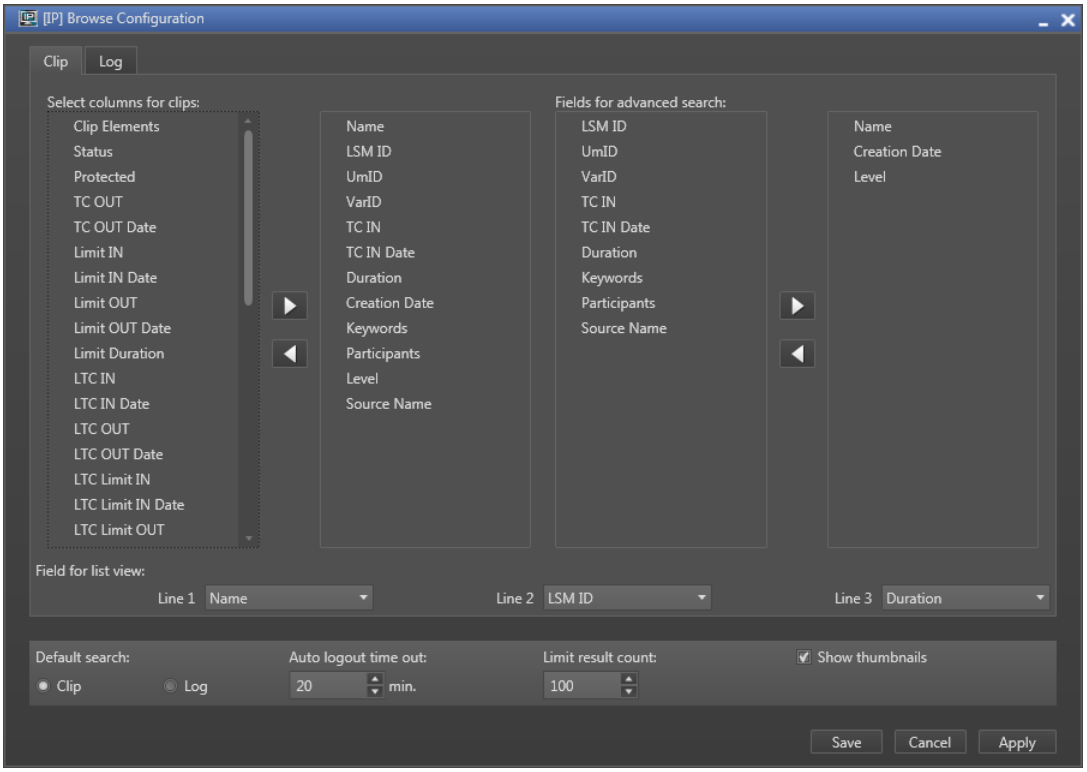

In order to access to the IP-Browse configuration stored in the IPDirector database, credentials must be entered. Only administrator users can enter the tool.

**Note**

If a non-administrator user try to open the tool, this warning message is displayed:



The interface of the tool is now displayed:




The interface is divided into three parts:

- The Clip tab
- The Log tab
- The Settings zone

The IP-Browse application doesn't allow organizing the column order and choice like the Database Explorer does it in IP-Director.

These columns (or fields for advanced search) must be set with the configurator tool for all the IP-Browse clients. The IP-Browse application users cannot modify it.

**Note**

A configuration already exists by default in the database. This default configuration is displayed when the tool is opened for the first time.

# The Clip tab


- In the left zone (Red) of this tab, the columns of the IP-Browse 'Clips' & 'Bins' interfaces can be selected.

  If a column is not added to displayed column list, the IP-Browse user won't be able to display it. But the selected columns can be organized.

  Columns selected by default are: Name, UmID, VarID, TC IN, TC IN Date, Duration, Creation Date, Keywords, Participants, Level and Source Name.

- In the right zone (Orange) of this tab, the default displayed fields for advanced 'Clips' & 'Bins' search can be selected.

  If a field is not added for advanced search, the IP-Browse user will be able to add it anyway.

  Fields selected by default are: Name, Creation Date and Level.

- In the bottom zone (Green) of this tab, the 3 fields for list view can be selected.

  The IP-Browse user can't organize or choose its own 3 lines in the list view.

  Fields assigned by default are: Line1 = Name, Line2 = LSM ID and Line3 = Duration.

**Note**

Select the item and press the arrow buttons to move them from the unselected to the selected lists (and vice versa).

# The Log tab


- In the left zone (Red) of this tab, the columns of the IP-Browse 'Logs' interfaces can be selected.

  If a column is not added to displayed column list, the IP-Browse user won't be able to display it. But the selected columns can be organized.

  Columns selected by default are: TC, Log Date, Description, Level, Color, Keywords and Participants.

- In the right zone (Orange) of this tab, the default displayed fields for advanced 'Logs' search can be selected.

  If a field is not added for advanced search, the IP-Browse user will be able to add it anyway.

  No fields are selected by default

- In the bottom zone (Green) of this tab, the 3 fields for list view can be selected.

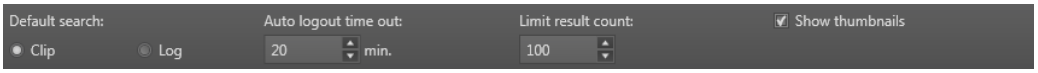
  The IP-Browse user can't organize or choose its own 3 lines in the list view.

  No fields are assigned to line by default.

**Note**

Select the item and press the arrow buttons to move them from the unselected to the selected lists (and vice versa).

## The Settings zone




- Default search: defines the interface (Clip or Log) displayed by default when opening the client IP-Browse software.

  Default value: Clip

- Autologout time out: defines the number of minutes without activity before automatically logging off the user.

  Default value: 20 min

- Limit result count: defines the maximum number of items (Clips or logs) listed in each view. This setting reduces the impact of each search on the database performances.

  Default value: 100 items

- Show thumbnails: allows to display the thumbnails or not.

  Default value: Checked

## Saving the configuration


Once finished:

- Press Save to record the configuration and exit the configurator.
- Press Cancel to exit the configator without saving changes.
- Press Apply to record the configuration and keep the configurator open.

**Important**

The IP-Browse configurator always connects and applies settings to the workgroup database where the remote installer is launched.

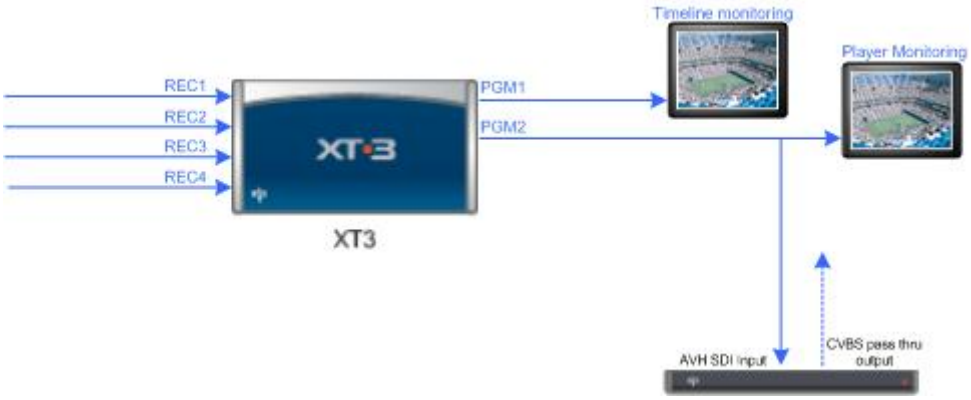
Always launch the configurator tool from an IPDirector station member of the same IPDirector - IP-Browse workgroup.

# 5.4 IP Edit Connectivity

The aim of this chapter is to give the basic outline of an IP Edit setup connected with audio/video external devices.

## Video Connectivity

### IP Edit controlling PGM1/2



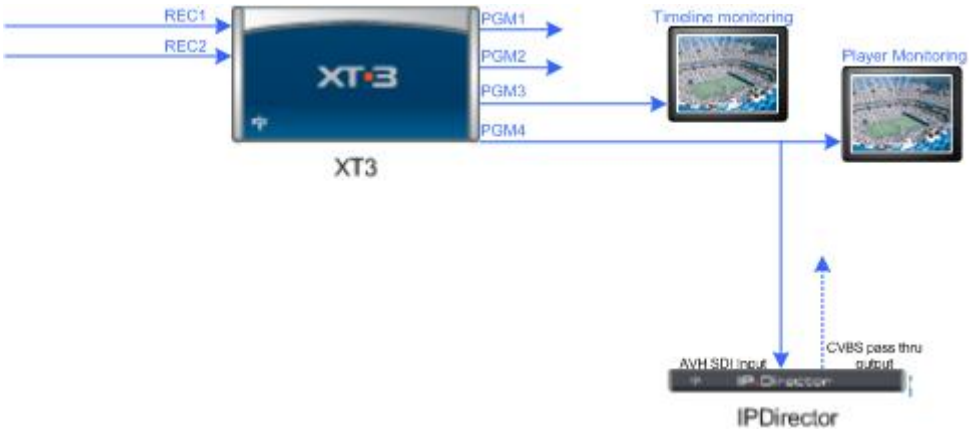

- PGM1 is the timeline output.
- PGM2 is the preview player output.

- Output 1 Clean (PGM1) should be connected to the playout chain.
- Output 1 Character out (PGM1) should be connected to the timeline monitor.
- Output 2 Character out (PGM2) should be connected to the player preview monitor and IP-Director AVH Video Board.

**Note**

The AVH Board has a pass thru output in CVBS allowing you to connect an analog monitor for player monitoring as well as a SDI output.

# IP Edit controlling PGM3/4




- PGM3 is the timeline output.
- PGM4 is the preview player output.

- Output 3 Clean (PGM3) should be connected to the playout chain.
- Output 3 Character out (PGM3) should be connected to the timeline monitor.
- Output 4 Character out (PGM4) should be connected to the player preview monitor and IP-Director AVH Video Board.

**Note**

The AVH Board has a pass thru output in CVBS allowing connecting an analog monitor for player monitoring as well as a SDI output.

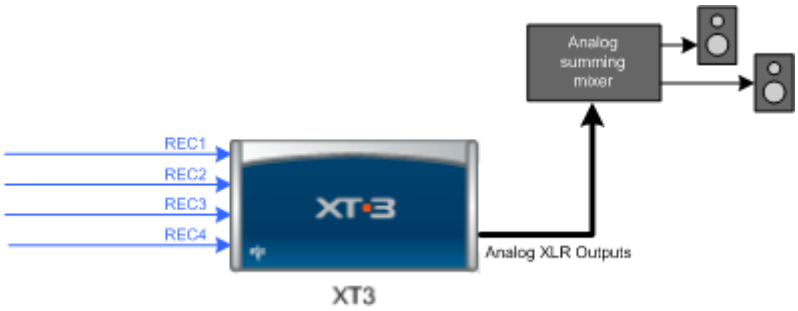
# Audio Connectivity

**Note**

The IP Edit mode has a unique audio management process. This process ensures that ALL audio coming out from the timeline PGM channel and preview player PGM channel are identical so you can choose from which PGM you will connect your audio monitoring system.

There is no need to manage all audio outputs of both the Timeline and Preview channel only one output set of channels is needed, as internal routing will output the relevant audio to these connectors.

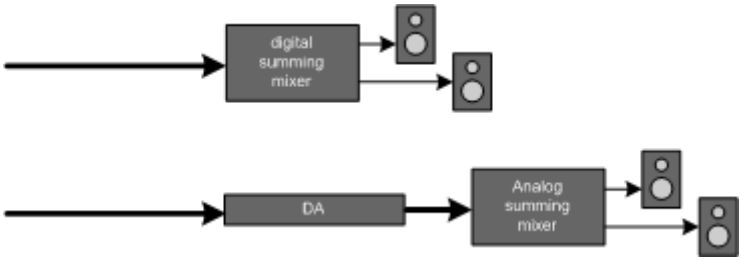
## Analog




Timeline or Player PGM channel must be assigned to XLR Analog Output (A) in the AVCFG Server configuration.

Analog channels must be connected to your analog mixer or local monitoring device.

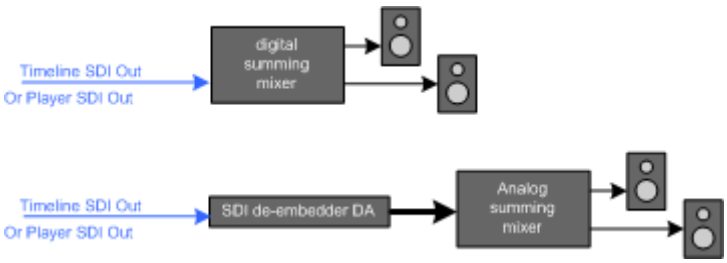
## AES




Timeline or Player PGM channel must be assigned to Digital AES (D) Output in the AVCFG Server configuration.

AES channels must be connected to a digital mixer (or analog mixer using an A/D converter).

## SDI (Embedded Audio)




Timeline or Player PGM channel must be assigned to Embedded Output (E) in the AVCFG Server configuration.

SDI signal must be connected to a digital mixer or audio monitor (or analog mixer using desembedder/AD converter).

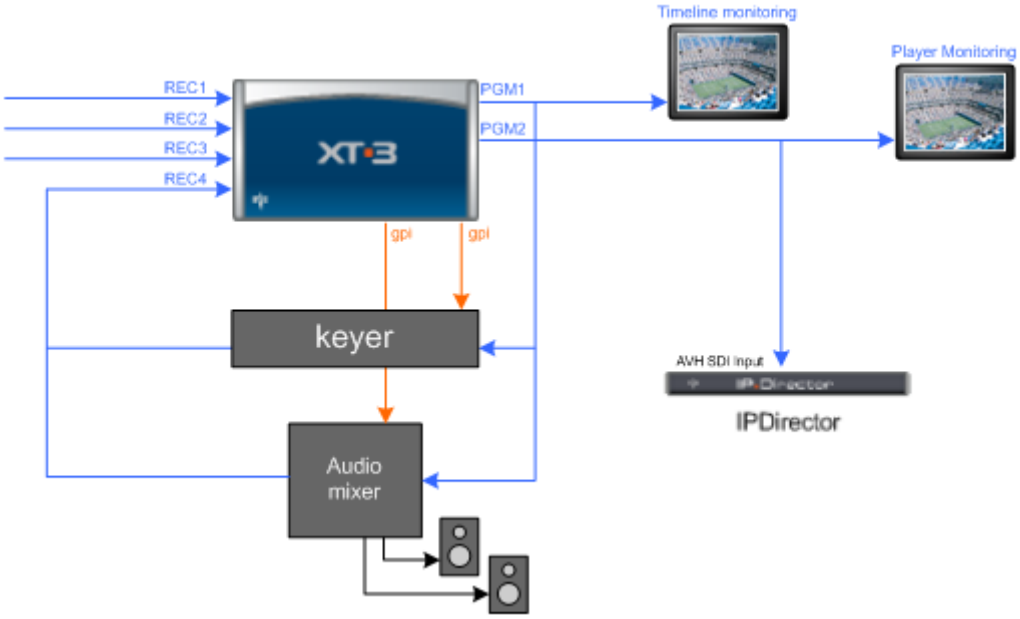
**Note**

When using audio embedded in SDI signal, the AVH Board on the IP-Director workstation integrates a desembedder/AD allowing a 'two tracks' monitoring of the embedded signal on headphones or speakers. It will NOT decode from an HD-SDI signal.

## Advance Setup

When using the IP Edit 'linear replace' feature in order to add graphics coming from a downstream keyer or to add 'voice over' audio effects, a dedicated record channel has to be connected to devices (keyer, mixer etc…). The incoming signal for these devices must be the Timeline channel.

Automatic control of these devices can be done using GPI.



# 5.5 Configuring a VTR control

The aim of this procedure is to describe how to configure a VTR Control.

Inside the IP-Director interface, a VTR Control Panel allows to control external VTRs serially linked to free RS422 ports on IP-Director workstations.

The features are:

- Remote (Shuttle, play, stop, rewind, forward, record, eject)
- Clip creation (Batch list, auto edit)

The procedure shows technical configuration steps. For operational information, please refer to the IP-Director User's Manual.

## Checklist:

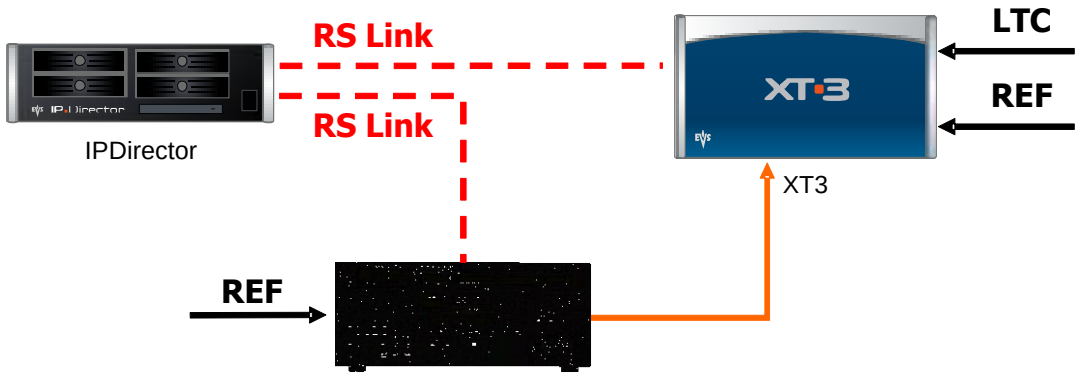
- Connect a serial link between an IP-Director workstation and the VTR.

  Use an identical link as connecting a server with an IP-Director.

  Plug this cable on a free serial port (AVH or MOXA port) on an IP-Director workstation. On the other side, plug it in the serial remote port of the VTR (DB 9pins female connector).

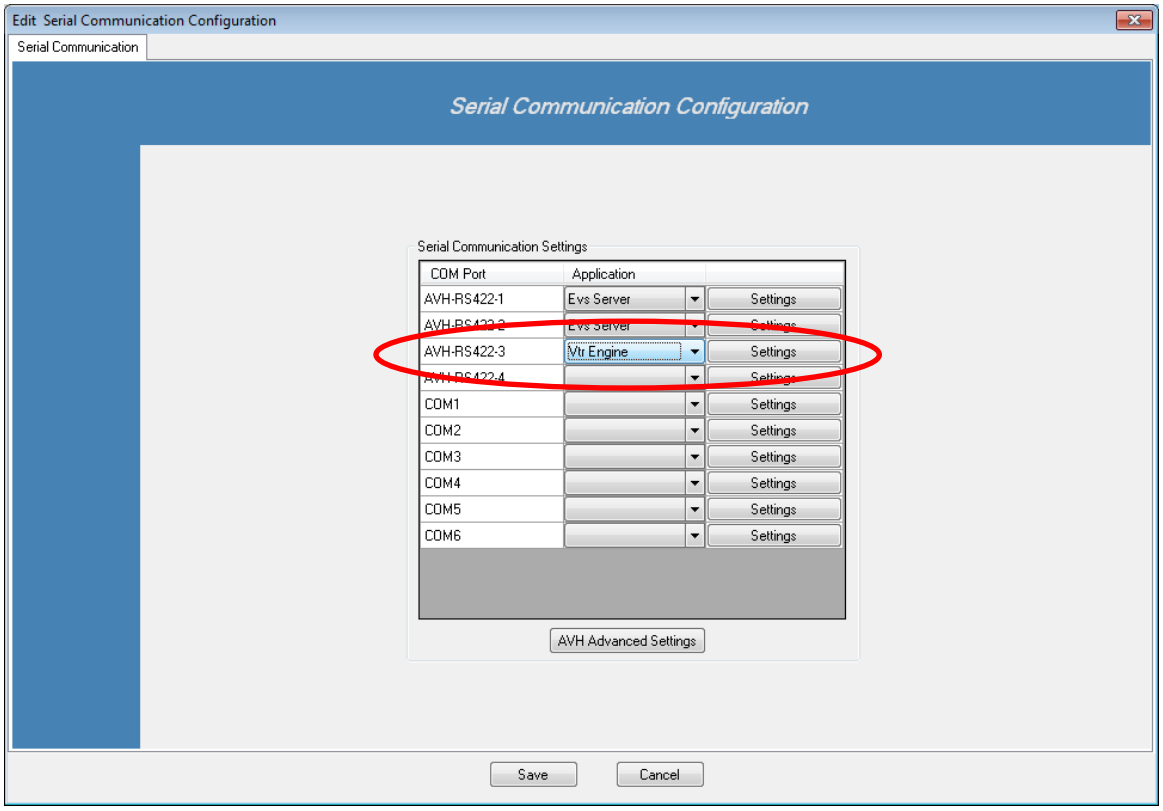
- The ingesting server must receive a LTC Timecode from some source. **Free-run mode (on the EVS server) is not allowed.**

- Connect a video cable between a VTR SDI/HDSDI clean output and the server recorder channel ingesting the VTR feed.



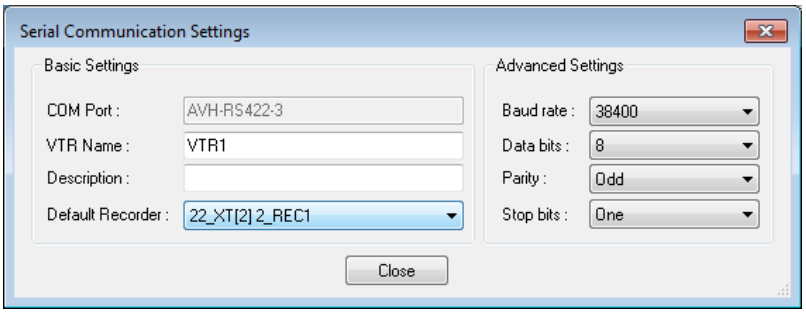
### 5.5.1 IPD parameters (Remote Installer):

- Open the Remote Installer
- Right-click the workstation (Stop the service if it's running) to reach to contextual menu and select Configure Serial Communication.
- In the Configure Serial Communication window, configure the serial link used for the VTR control:




  - Select the COM Port which is linked to the VTR.
  - In the Application drop down list, select Vtr Engine (Only when services are turned off)

- Press the Settings button to edit the Serial link characteristics.

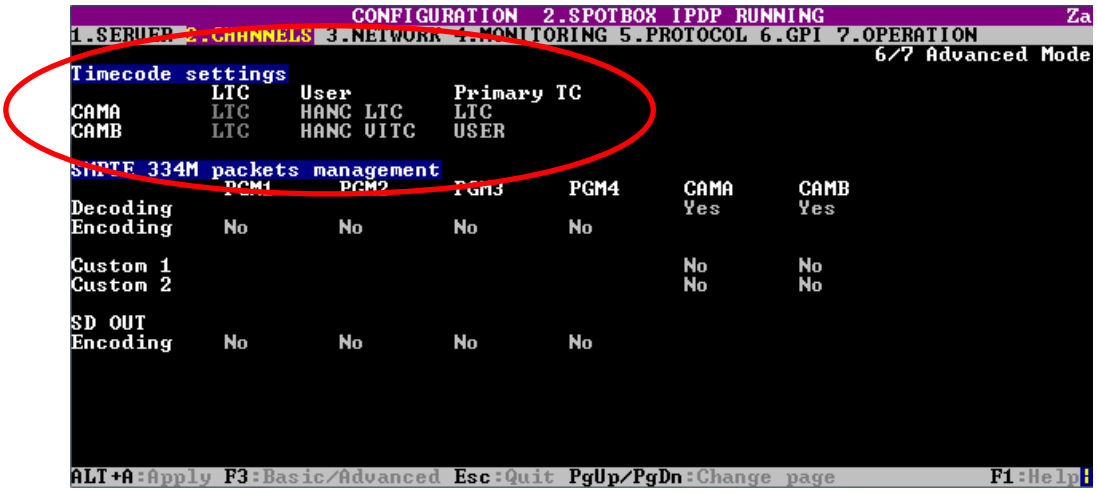



  - Enter a VTR name. This name will appear in the Channel Explorer.
  - Description is not mandatory.
  - Select the server recorder channel ingesting the VTR feed.
  - Adjust the Advanced Settings corresponding with the VTR.

    Try first with the default parameters. Please refer to the Technical VTR manual for more information.
  - Press Close to save the settings.
  - Press Save in the Edit Serial Communication Configuration window.
  - Restart the VTR Engine service.

## 5.5.2 Server parameters:

- In the Multicam application, open the SHIFT+F2 menu on the server VGA screen, press F3 to display Advanced Mode, use PGDN to reach the Timecode Settings:



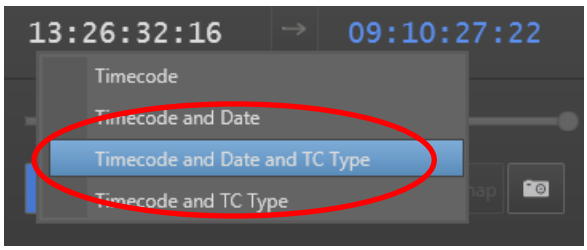

Two TC tables are recorded. You can record VITC (HANC LTC or HANC VITC for HD) and LTC Timecode on the same recording train but in two different tables. The settings impact **only** the OSD display of the server recorder and player channels.

**Important**

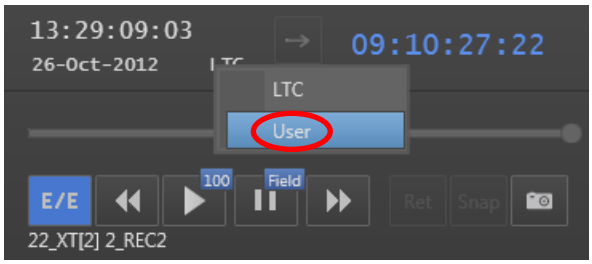
It is **mandatory** to fill the USER TC table with the wanted embedded VITC Timecode (HANC LTC or HANC VITC for HD).

The Time Code Settings can be edited to monitor the incoming VITC on the server OSD. If **Prim.TC** is set on USER and USER table records VITC (HANC LTC or HANC VITC for HD), the Incoming VITC (HANC LTC or HANC VITC for HD) is displayed on the OSD screen.

This choice can also be done from the control panel within the workspace of IP-Director.

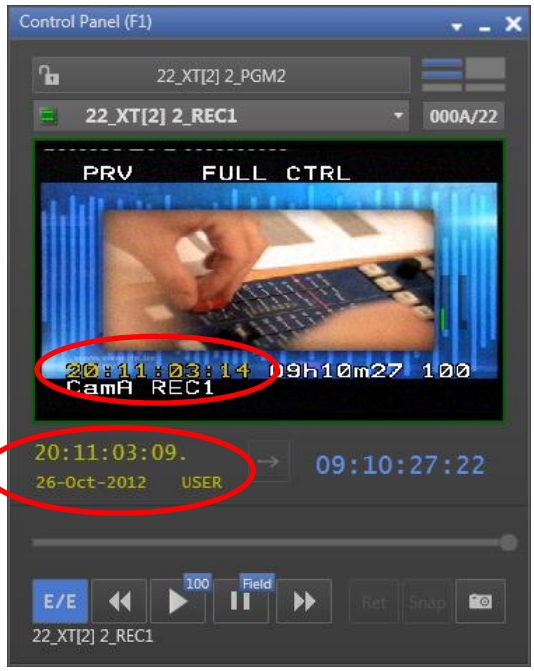



Right-click the Timecode zone and select one of the two last choices in order to display the TC Type.

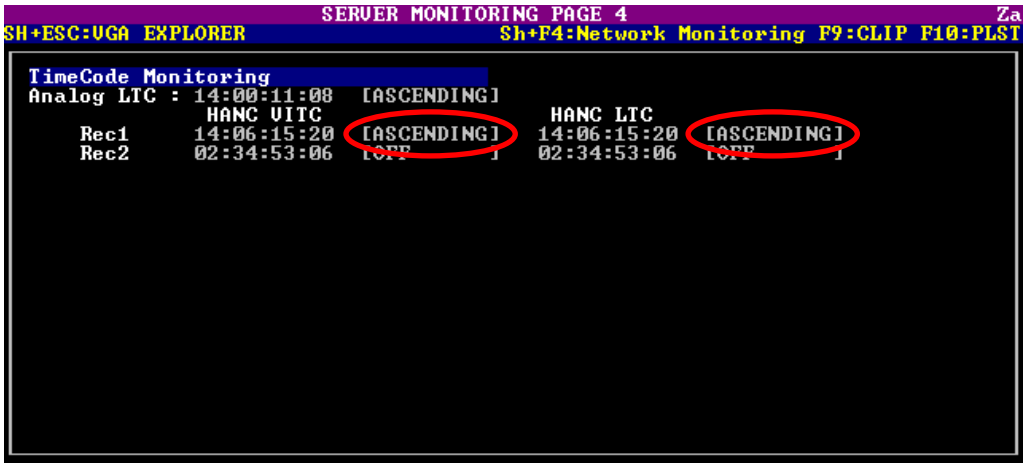



Once the TC Type is display, right-click this one to select the displayed Timecode between LTC and USER.

If you select the USER TC display, the Timecode is now displayed in yellow on the control panel but also within the Multicam OSD:



- Press SHIFT+F5 when the Multicam is running. Then press PGDN once to display the Server Monitoring PAGE 4. This monitoring page displays all running Timecodes for all the recorders of the server.




The recorder channel which receives the video feed must have an ASCENDING status and growing Timecode **on both Analog LTC and the selected VITC (HANC LTC and/or HANC VITC)** lines.

**Note**

The TAPE must be recorded with a continuous VITC (HANC LTC or HANC VITC for HD).

**Note**

Check also the VTR is synchronized on the external video reference which must be the same as the server.

## 5.5.3 BVW protocol settings in the VTR

In the Sony BVW protocol, three timecode values are sent from a VTR serial port to the connected device:

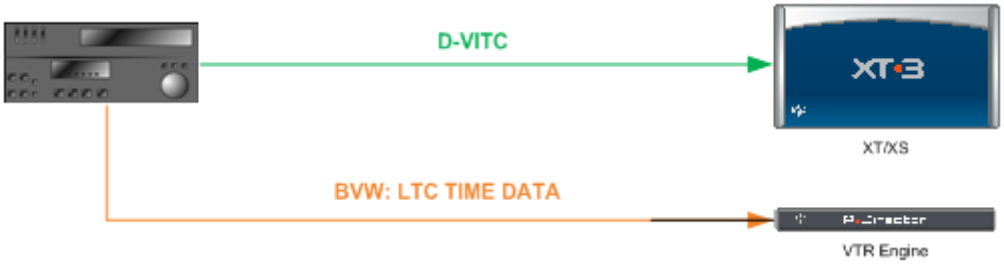
- Timer1
- LTC
- VITC

The IPDirector VTR engine only reads the BVW LTC timecode and considers it as the reference with the corresponding video recorder intra timecode. This ensure frame accurate clipping.

The IPDirector VTR engine doesn't read the BVW Timer1 or VITC from the BVW protocol.

### SD (D-VITC)

The VTR must be set to send the tape D-VITC timecode as LTC on the BVW serial port.

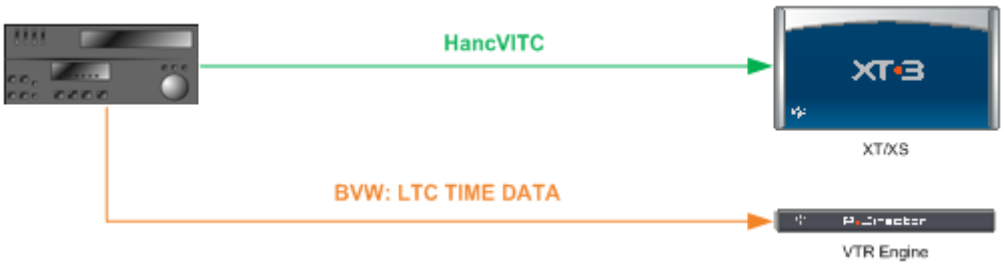



XT/XS Recorder settings:

| RECORDER | |
|---|---|
| USER | PRIMARY |
| D-VITC | LTC |

### HD (HancVITC)

The VTR must be set to send the tape HancVITC timecode as LTC on the BVW serial port.

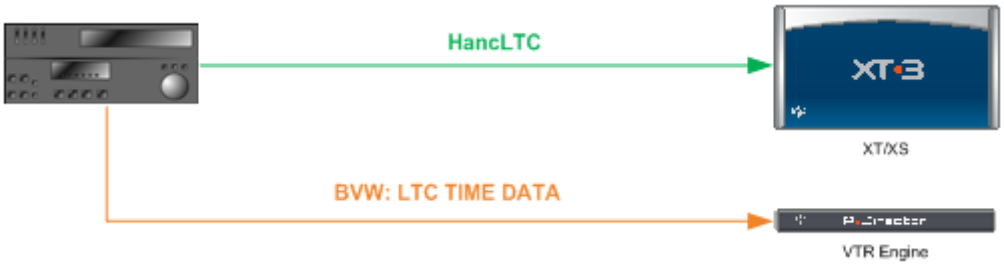



XT/XS Recorder settings:

| RECORDER | |
|---|---|
| USER | PRIMARY |
| HancVITC | LTC |

### HD (HancLTC)

The VTR must be set to send the tape HancLTC timecode as LTC on the BVW serial port.




XT/XS Recorder settings:

| RECORDER | |
|---|---|
| USER | PRIMARY |
| HancLTC | LTC |

# 5.6 Using GPI within IP-Director

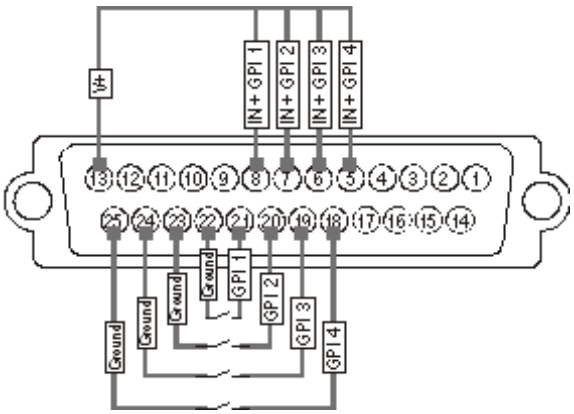
The aim of this procedure is to describe how to configure the GPI settings within IP-Director.

**Note**

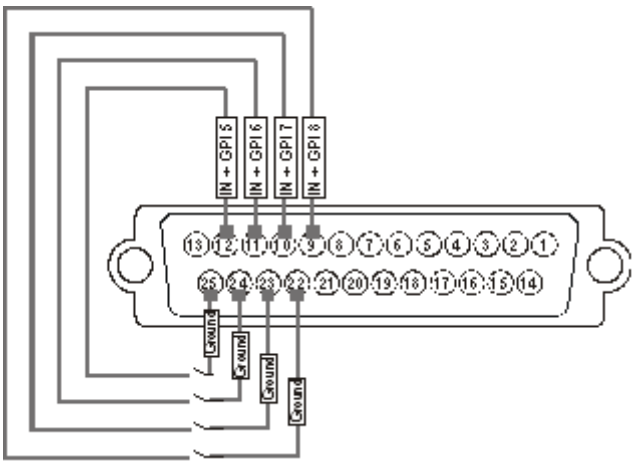
The GPI connection is made directly to the server, and NOT to the IP-Director hardware itself.

## 5.6.1 Reminder – GPI connections on Server

### Relay → Opto inputs on the server (GPI inputs 1, 2, 3, 4)

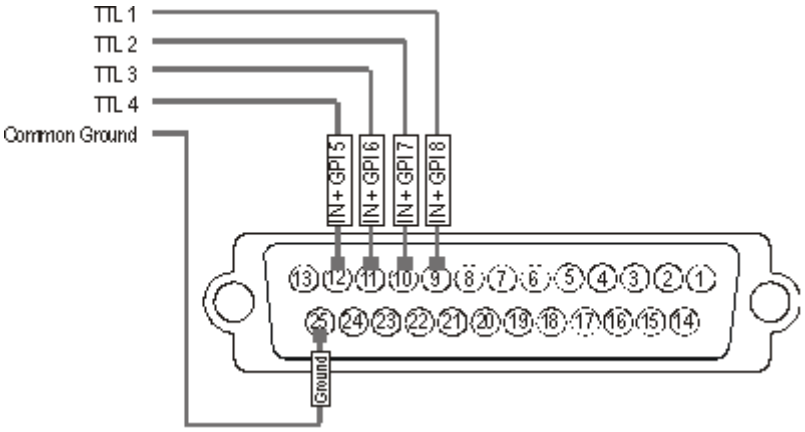



### Relay → TTL inputs on the server (GPI inputs 5, 6, 7, 8)




The relay must be connected between the ground and the corresponding TTL input on the DB25.

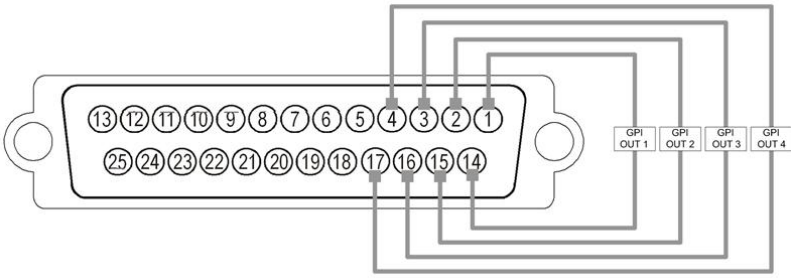
# TTL → TTL inputs on the server (GPI input 5, 6, 7, 8)




Each TTL input on the DB25 is directly connected to the pin of the TTL connector on the device triggering the GPI. The ground must be common between the DB25 connector of the server and the external device.

# GPI Out Settings

The user can define the functions, types and settings associated to the GPI outs in the IP-Director application:



# GPIO Connector: SUB-D 25-pins Male

| | | | |
|---|---|---|---|
| 1 | Relay 3 | 14 | Relay 3 |
| 2 | Relay 2 | 15 | Relay 2 |
| 3 | Relay 1 | 16 | Relay 1 |
| 4 | Relay 0 | 17 | Relay 0 |
| | | | |
| 5 | IN + opto 3 | 18 | IN - opto 3 |
| 6 | IN + opto 2 | 19 | IN - opto 2 |
| 7 | IN + opto 1 | 20 | IN - opto 1 |
| 8 | IN + opto 0 | 21 | IN - opto 0 |
| | | | |
| 9 | I/O TTL 3 | 22 | GND (Return I/O 3) |
| 10 | I/O TTL 2 | 23 | GND (Return I/O 2) |
| 11 | I/O TTL 1 | 24 | GND (Return I/O 1) |
| 12 | I/O TTL 0 | 25 | GND (Return I/O 0) |
| | | | |
| 13 | + 5V 50mA max. | | |

# GPIO hardware specification

## 4 X Relay isolated output:

- Normally open contact (power off -> open)
- Maximum 1A
- Maximum 50 Volts
- Typical life time: 100.000.000 switching

## 4 X Opto isolated input:

- The input consists in an opto diode (VF @ 1.1 Volt) in series with a 470 ohm resistor).
- Typical switching point @ 1.4 mA, for secure operation:
  - i=0 to 0.5 mA -> opto OFF
  - i=2.5 to 30 mA -> opto ON
  - imax= 30 mA
- Direct connection to a TTL/CMOS signal possible (Pin opto - to GND and pin opto + to the TTL/CMOS signal.

  Typical switching point @ 1.6 Volts, for secure operation:
  - Vin< 0.8 Volts -> opto OFF
  - Vin> 2.2 Volts @ 2 mA -> opto ON
  - Vin max (without external resistor) = 15 Volts

## 4 X CMOS input/output:

- each pin can be individually configured as an output or an input
- internal 4K7 pull up to +5V
- low level Vi<1.5 Volt (U12=74HC245)
- high level Vi>3.5 Volt (U12=74HC245)
- optional TTL compatible level (U12=74HCT245)

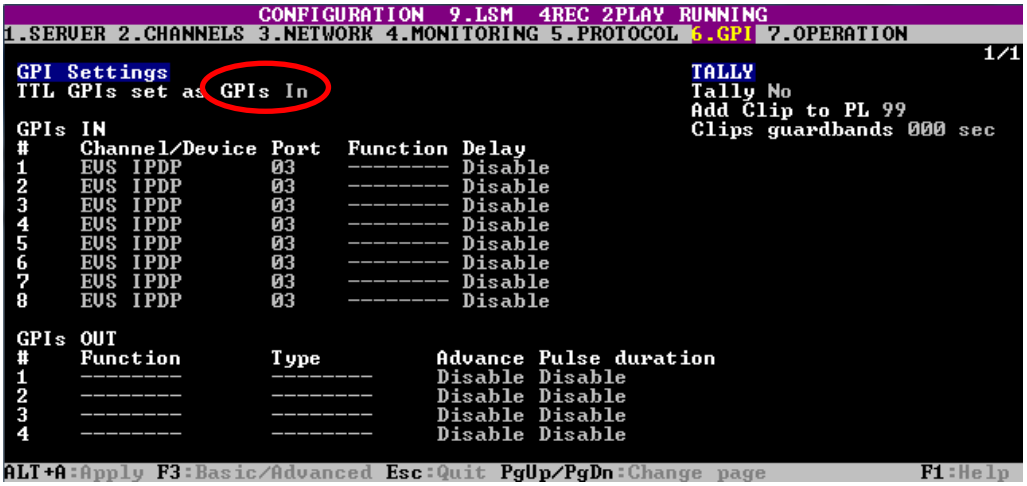
## 5.6.2 Multicam settings

When the Multicam is running on the server, press SHIFT+F2, TAB 6.GPI.

The TTL GPIs can be configured as GPIs IN or OUT.

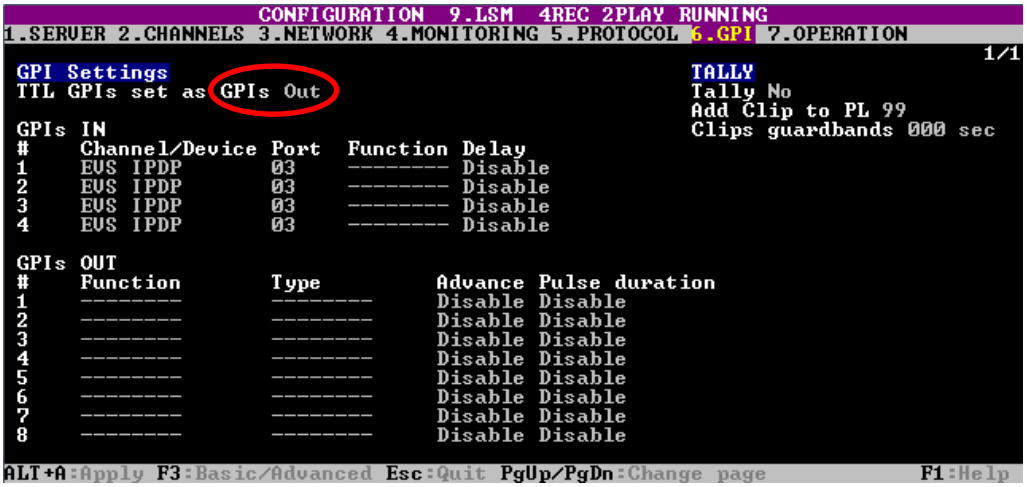
### 8 GPIs In and 4 GPIs Out

Set the TTL GPIs as GPIs IN:




### 4 GPIs In and 8 GPIs Out

Set the TTL GPIs as GPIs OUT:




Use the tab and arrow keys to edit all the GPI Settings.

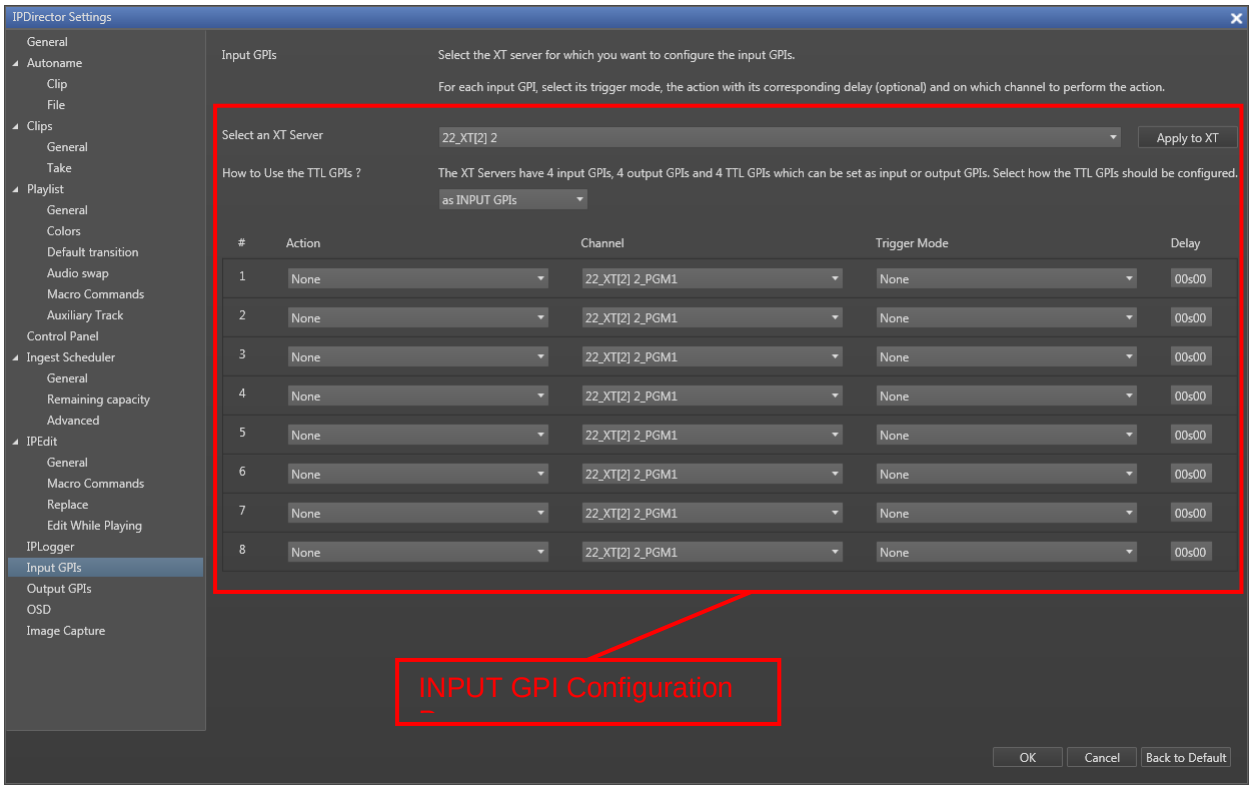
Specify ‘EVS IPDP’ in the Channel/Device column and the IPDP port number on the wished GPI channels (Functions can be defined within the IPD interface)

Edit this page on all the server receiving GPI input signals.

## 5.6.3 IP-Director Settings

These settings are defined in the Input GPIs and Output GPIs tab available from the **Tools > Settings** menu.

### Input GPIs




**Select an XT server:**

Select here the server to be configured.

Press **Apply to XT** to send the GPI settings to the server.

**How to use the TTL GPIs?**

Define here the TTL GPIs usage if it wasn't done from the CONFIGURATION TAB 6.GPI in the Multicam.

If the TTL GPIs are defined as GPIs OUT, the last four GPI IN are grayed out.

**INPUT GPI Configuration Pane:**

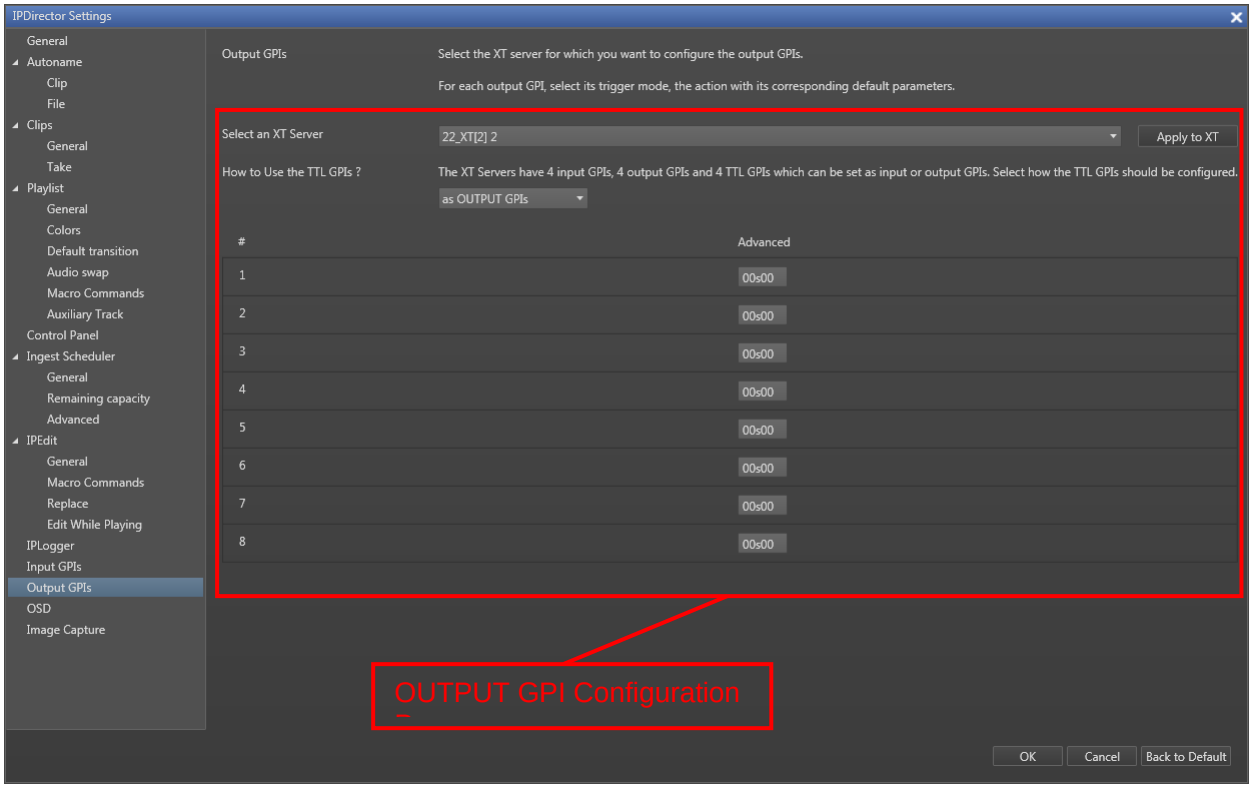
For each INPUT GPI, the following information needs to be defined:

- The action triggered by the GPI key on the server.
- The player channel on which the action needs to be executed.
- The type of trigger signal sent by the GPI to the server.
- The delay of the trigger (now separated for each GPI)

**Important**

Only the GPI keys set up to be managed by IP-Director on the server can be configured in the INPUT GPI Configuration pane. The other ones will be greyed out.

# Output GPIs




**Select an XT server:**

Select here the server to be configured.

Press **Apply to XT** to send the GPI settings to the server.

**How to use the TTL GPIs?**

Define here the TTL GPIs usage if it wasn't done from the CONFIGURATION TAB 6.GPI in the Multicam.

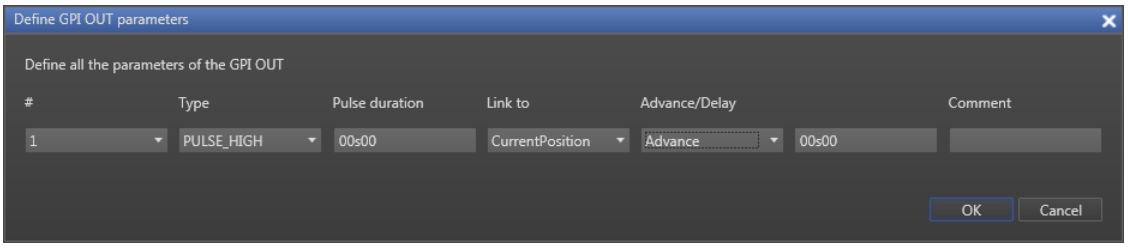
If the TTL GPIs are defined as GPIs OUT, the last four GPIs IN are grayed out.

**OUTPUT GPI Configuration Pane:**

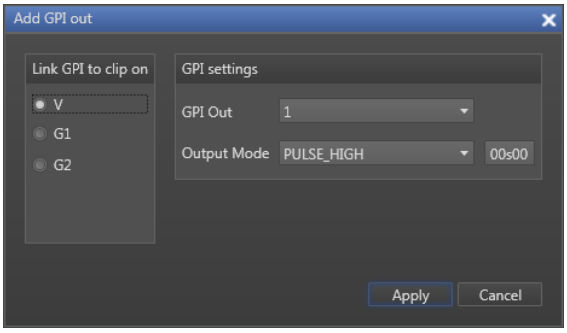
The OUTPUT GPIs are signals that are sent by the GPI from a server under the control of the IP-Director. Eight GPI OUT commands can be sent from a server (if the TTL GPIs are defined as GPIs OUT)

For each OUTPUT GPI, the output mode is now configured within:

- The playlist panel (Insert TAG) or the playlist macro commands (Tools/Settings):




- The IP Edit or the IP Edit Macro commands (Tools/Settings):




**Note**

When you define a pulse signal, you also need to specify the pulse duration.

# 5.7 Creating and reinstalling a ghost of your system

The aim of this procedure is to describe how to create a ghost image of your system and how to restore your system with an existing image.

## How to re-install your system with an existing image

- Reboot the system on Bootable DVD or USB key (with IPD1U) that delivered with the original system. On IPD1U, modify Boot priority in the BIOS settings in order to boot on the USB key.
- For USB key only, select 'EVS Ghost Backup or Restore' in the menu.
- In the ghost startup window, press [ENTER] to open the toolbar.
- In the next window, select Local / Partition / From Image followed by [ENTER].
- In the next window, press the [TAB] key to select the 'Look in area' and open the list by pressing the [down arrow] key. Select the source drive: D fat drive (RESTORE) then [ENTER].
- Select the image file you want to restore then [ENTER].
- In the next window, select the Source partition #1 then [ENTER].
- In the next window, select the Destination drive #1 then [ENTER]. Press the [TAB] key to select the OK button, and then press [ENTER].
- In the next window, select the Destination partition #1 then [ENTER]. Press the [TAB] key to select the OK button, then press [ENTER].
- At the message 'Proceed with partition restore' select yes then [ENTER].
- When the process is complete press [ENTER]. Select Quit then [ENTER], then Yes and [ENTER].
- Remove the USB key or DVD disk and reboot the system.

# How to create a new ghost image of your system

- Reboot the system on Bootable DVD or USB key (with IPD1U) that delivered with the original system. On IPD1U, modify Boot priority in the BIOS settings in order to boot on the USB key.
- For USB key only, select 'EVS Ghost Backup or Restore' in the menu.
- In the ghost startup window, press [ENTER].
- In the next window, select Local / Partition / To Image then [ENTER].
- In the next window, select the Source drive, drive #1 then [ENTER].
- In the next window, select the Source partition #1 then [ENTER]. Press the [TAB] key to select the OK button, then [ENTER].
- In the next window, press the [TAB] key to select the Look in area and open it by pressing the down arrow key. Select the destination drive: D fat drive (RESTORE) then [ENTER].
- Press the [TAB] key to select the File name area then type the file name: IPD05XXXX (where 05XXXX is the current version number). It is also recommended to provide a description of the GHOST you are creating.
- Press the [TAB] key to select Save then [ENTER].
- Select Compress high, then [ENTER].
- At the message 'Proceed with partition image creation' select yes then [ENTER].
- When the process is complete press [ENTER]. Select Quit then [ENTER], then Yes and [ENTER].
- Remove the USB key or DVD and reboot the system.

**Note**

All delivering systems have a R: RESTORE partition located on the system disk. This allows you to have an image file of the C: partition, and easily restore the complete XP operating system and IP-Director Software to the factory default state at any time.

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