



# Xsquare Suite 3.4

## Release Note

July 2015 / 1.2

The screenshot displays the Xsquare Suite 3.4 dashboard with the following sections and icons:

- Monitoring**
  - Jobs
  - EVS Servers
- Job Initiators**
  - Targets SOAP jobs
  - ScanFolders
  - ScanXML instructions XML jobs
- Configuration**
  - Orchestration
  - Job Templates
  - Encoders / Wrappers profiles
  - Icons
  - Labels
- Administration**
  - Users & Access
  - Roles
  - Groups
  - Parameters

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LIST OF DOCUMENTS .....	4
EVS COMPLIANCE MATRIX .....	5
MULTICAM .....	5
IPDIRECTOR .....	5
MISC .....	5
3 <sup>RD</sup> PARTY COMPLIANCE MATRIX .....	6
AVID .....	6
APPLE .....	6
ADOBE .....	6
SOFTWARE INSTALLATION .....	7
XSQUARE SUITE .....	7
OPERATING SYSTEM COMPLIANCE .....	7
HARDWARE: WHERE CAN I INSTALL XSQUARE AND XTACCESS? .....	9
LICENSES .....	11
BUGS FIXED BETWEEN THE VERSION 3.4.7 AND 3.4.8 .....	12
NEW XSQUARE FEATURES .....	12
XSQUARE NICKNAME .....	12
AUTOMATIC PURGE .....	12
USE EVS SERVERS WHICH ARE LOCATED ON A DIFFERENT VLAN THAN XSQUARE .....	13
NEW SETTING TO ACTIVATE/DEACTIVATE CREATION OF EVS XML SIDECAR FILE FOR THE SOURCE FILE WHEN USING XSQUARE SCANFOLDER .....	14
SINGLE PICTURE SUPPORT .....	14
MODIFICATION IN THE XSQUARE API .....	15
CHANGES IN RELEASE 3.4 .....	15
MODIFICATION OVERVIEW .....	15
XSQUARE JOB SERVICE .....	16
XSQUARE CONFIGURATION SERVICE .....	16
CONFIGURATION PROXY SERVICE .....	17
BUGS FIXED .....	18
GENERAL XSQUARE LIMITATIONS .....	19
ASSOCIATION TOOL .....	19
XSQUARE SERVICE MONITORING TOOL .....	19
XSQUARE JOBS AND TEMPLATES .....	19
XSQUARE SCAN XML .....	20
XSQUARE SCANFOLDER .....	20
NEW XTACCESS FEATURES .....	23

SUPPORT UNICODE FILENAME (READ AND WRITE)..... 23

XTACCESS MULTIPROCESS..... 24

BACKUP/RESTORE PRORES 4K QT..... 25

ENCODING SONY XAVC LONG GOP..... 26

DECODE PANASONIC AVC-ULTRA LONG GOP ..... 26

**BUGS FIXED.....27**

**GENERAL XTACCESS LIMITATIONS.....28**

OPERATING SYSTEM..... 28

NLE SETTINGS..... 28

TRANSCODING ..... 29

BACKUP ..... 29

RENDERING ..... 30

MAC PRO OS 10.9 (MAVERICKS)..... 30

MISCELLANEOUS ..... 30

## LIST OF DOCUMENTS

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### Release notes

- **Xsquare\_ReleaseNote\_v3.04.pdf** : Release note of Xsquare Suite
- **XTAccess\_Codecs\_3.04.pdf**: List of codecs & wrappers compatible with XTAccess for wrapping, decoding and encoding

### UserMan

- **Xsquare\_installman\_3\_4.pdf** : document which explains how to install Xsquare
- **Xsquare\_userman\_3\_4.pdf**: user manual for Xsquare, similar to the Xsquare online help available from the web interface

### TechDoc

(These documents are only available on request. Please contact [support@evs.com](mailto:support@evs.com) for more information)

- **How to migrate from XTAccess to Xsquare.pdf**: document which explains how to migrate from XTAccess to Xsquare.
- **Xsquare Automatic redundancy system.pdf**: document which explains how to create a redundancy system with Xsquare.
- **How to create an Adobe Target.pdf**: document which explains how to create an Adobe target with IPD.
- **Avid Setup Guide v1-1.pdf**: Document which explains how configure Avid trarget through the Avid Webservices and the Avid ISIS client

### API

- **Xsquare API documentation**: this document is only available on request. Please contact [Xsquare@evs.com](mailto:Xsquare@evs.com) for more information.

## EVS COMPLIANCE MATRIX

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### MULTICAM

- Multicam 14.00
- Multicam 12.05
- Multicam 12.02 (only for Xfile3/XFlystreamer workflow/CCast agent)
- Multicam 11.02 (only for Xfile3/XFlystreamer workflow/CCast agent)

### IPDIRECTOR

- IPD 6.70
- IPD 6.60
- IPD 6.57

### MISC

- Xsquare 3.X must be used with the SQL Toolkit 6.10.07 or upper (otherwise the re-indexation of the Xsquare DB 3.1 will fail)
- EVS Avid Tools 3.5.9 cannot be installed on XTAccess 3.X. The ingest's workflows through Avid Transfer Engine are no longer supported. EVS recommends using the integrated approach with Avid Webservices API or the AAF generation for all ingest workflows (EVS to Avid).
- **The XedioXTAccessIntegration dll compatible with Xsquare 3.4 is only compatible with the Xedio 4.70 (not the previous versions)**

Please contact [Xsquare@evs.com](mailto:Xsquare@evs.com) for more information.

## 3<sup>RD</sup> PARTY COMPLIANCE MATRIX

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Xsquare 3.4 has been tested with these versions of 3<sup>rd</sup> parties

### AVID

#### Interplay

- Interplay 3.3
- Interplay 3.2
- Interplay 3.1
- Interplay 3.0.5
- Interplay 3.0
- Interplay 2.7.5
- Interplay 2.7

#### Media Composer

- MediaComposer 7; 7.02; 7.03, 7.04
- MediaComposer 8 ;8.2 ; 8.3

### APPLE

- FCP 7
- FCP X 10.1.3 on Mavericks (Mac OS X 10.9)

### ADOBE

- Adobe Premiere Pro CC 7.2.2 (build 27)
- Adobe Premiere Pro CC 2014.2 (8.2)

Please contact [Xsquare@evs.com](mailto:Xsquare@evs.com) for more information.

## SOFTWARE INSTALLATION

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See Installation Manual for details of the installation procedure.

### XSQUARE SUITE

Xsquare is shipped within a package called “Xsquare Suite”, including EVS applications and third-parties software.

<b>EVS software included in the Xsquare Suite</b>	<b>Version</b>
<b>Notification Center</b>	2 .1.22 (new version since the 3.3 release)
<b>Authentication Service</b>	3.4.3 (new version since the 3.3 release)
<b>Xsquare Workflow Gateway</b>	3.4.0 (new version since the 3.3 release)
<b>Xsquare Workflow Host</b>	3.4.1 (new version since the 3.3 release)
<b>Xsquare</b>	3.4.8 (new version since the 3.3 release)
<b>Xsecure Manager</b>	1.2.1 (same version then in 3.3)
<b>Common SNMP Agent</b>	101.0.13 (same version then in 3.3)
<b>XTAccess</b>	3.4.14 (new version since the 3.3 release)
<b>XTGateway</b>	3.4.11 (new version since the 3.3 release)
<b>AssociationTool</b>	3.4.0 (new version since the 3.3 release)

<b>Other software included in the Xsquare suite</b>	<b>Version</b>
<b>Bonjour Service</b>	3.0.0
<b>.NET framework 4.5</b>	4.5.50938
<b>SQL Server Express</b>	9.0.4035
<b>Silverlight (32 and 64 bits)</b>	5.1.30214
<b>VC Redist 2010 (32 and 64 bits)</b>	10.0.40219

## OPERATING SYSTEM COMPLIANCE

Xsquare 3.4 is compatible with:

- **Windows 7 64 bits (default OS)**
- Windows 7 32 bits
- Windows Server 2008 R2 SP1 64 bits

Because Xsquare 3.XX relies on .NET framework 4.5, the following operating systems are NOT supported:

- Windows XP
- Windows 2003 Server 32 bits
- Windows 2003 Server 64 bits

Xsquare and XTAcess are not compatible with Windows 8

## **WINDOWS FIREWALL**

The installer opens these ports on Windows firewall:

On Xsquare device (opened by Xsquare setup):

- 8998 : Internal Xsquare ScanXML service
- 8999 : Internal Xsquare ScanFolder service
- 9001 : NC observer
- 9002 : Xsquare Job Service
- 9003 : Xsquare Config Service
- 9004 : Xsquare Configuration Proxy Service
- 9010 : Authentication service
- 9012: Xsquare Listener Addin
- 9015: Xsquare Workflow Host Service (opened by the Xsquare Workflow setup)
- 9016: Xsquare Workflow Gateway Service (opened by the Xsquare Gateway setup)
- 48888 : NotificationCenter (opened by the NotificationCenter setup)
- 50000 : TCP for the LinX connection management
- 50100 to 50108 : UDP for the LinX exchanges of commands

On XTAcess device:

- 9000 : For XTAcess
- 9005 : XTA config

Note: it is not possible to modify those port numbers.

## **BROADCAST ROUTING**

Your router must support packet broadcast and multicast routing on these ports:

- 5353: for the Apple Bonjour Protocol
- 50000 to 50002: for the LinX Protocol
- 50100 to 50108: for the LinX Protocol



## HARDWARE: WHERE CAN I INSTALL XSQUARE AND XTACCESS?

The **minimum** system requirement for XTAccess and Xsquare is:

- Server hardware (not workstation)
- CPU Intel i5
- 4GB RAM (8GB Ram is recommended)
- GigE board
- VGA 1024x768
- At least 2GB free on the hard disk

For system-critical applications (Real-time XTAccess stream, Xsquare on redundant system, etc): It is recommended to use EVS hardware

EVS Xsquare hardware

- 3U 19" frame, redundant PSU, 2 x GigE
- 2x Intel Xeon Hexa Core CPU, 12GB RAM, Windows Server 2008 R2, SQL 2008 Standard Edition
- 3x300GB SAS (RAID5) for DB, 2x300GB SAS (RAID1) for system, 1x300GB SAS hot spare

EVS XTAccess hardware

- 1U 19" rack with redundant power supply, redundant system disks
- Dual Hexa Core CPU, 8 GB RAM, Windows7 64-bit
- 2x 1 or 10 Gigabit Ethernet ports
- 1x VGA out ; 1x USB2 in front ; 2x USB2 on rear

### XSQUARE SUITE STANDALONE

- XTAccess and Xsquare can run on the same computer, but if XTAccess performs transcoding jobs, Xsquare may be slower than expected. If Xsquare is used to manage more than 4 XTAccess devices (Orchestrator), we strongly recommend using a specific computer to run Xsquare (EVS App Server).
- If you want to use Xsquare with redundancy system for the DB: you will have to use the EVS DB 3U or 2U hardware (the DB can be shared with IPD - see below).

### XSQUARE SUITE ON IPDIRECTOR HARDWARE OR IPDIRECTOR DB

- Xsquare/XTAccess and IPDirector can be installed on the same computer. In this case, we recommend using XTAccess to process maximum 2 jobs without transcoding at the same time, possibly with thumbnails.
- As Xsquare uses the same redundancy mechanism as IPDirector SQL Databases, it is possible to install Xsquare on the same DB as the IPD DB. But please first contact the EVS Support to check if the DB will be powerful enough.

- If Xsquare has to process more than 1 job every 2 seconds: we strongly recommend using the new EVS DB hardware with more than 4 GB of memory (DBS3-2D).

## **INTEL NETWORK BOARD DRIVER**

If you are using a network board with the Intel chipset 82574 on your XTAccess/Xsquare Hardware (this is the default network board chipset on EVS XTAccess hardware): we recommend upgrading the Intel driver to the version 18.1 or above.

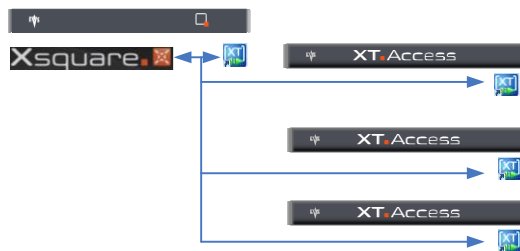
# LICENSES

## XSQUARE

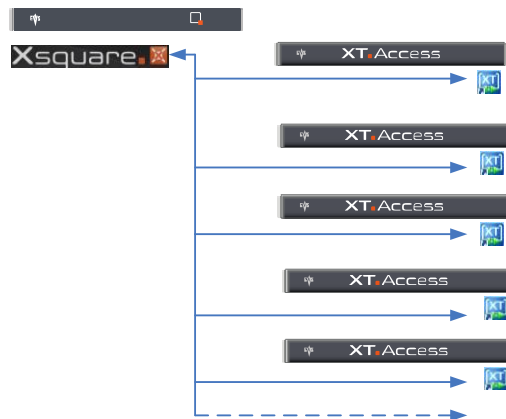
- No XSecure license is required to run Xsquare in standalone mode.



- No XSecure license is required when managing up to 4 XTAccess devices.



- A **basic** XSecure license is required to manage **from 5 to 19 XTAccess** devices: Application: 130 – Xsquare | module: 10-Base Package.



- An **unlimited** XSecure license is required to manage **20 or more XTAccess** devices: Application: 130 – Xsquare | module: 20-Unilimited Engines).

## XTACCESS

An XSecure license is only required to:

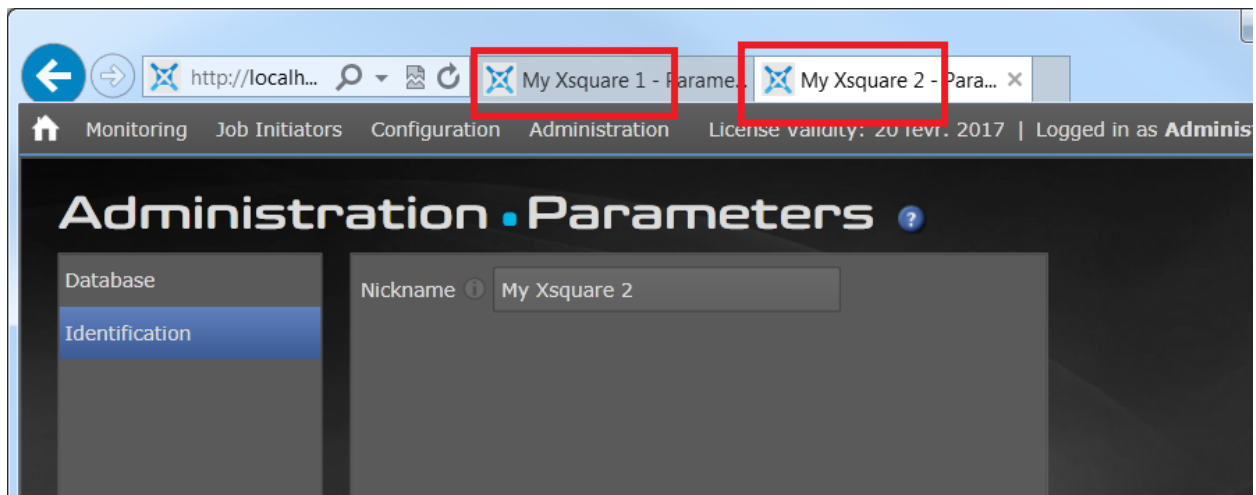
- transcode files or clips
- rendering playlists or timelines (EDLs)

## BUGS FIXED BETWEEN THE VERSION 3.4.7 AND 3.4.8

- XTA-1810 : XTAccess crashes sometime in backup AVC-Intra + H264 LowRes
- Bugs fixed to allow Integration between Xsquare 3.4 and Xedio 4.70
- EEF-1698 : MXF OP1a UK/DPP files are created without audio
- XTA-1811 : XTAccess blocks with edit countaining vizrt tag

## NEW XSQUARE FEATURES

### XSQUARE NICKNAME

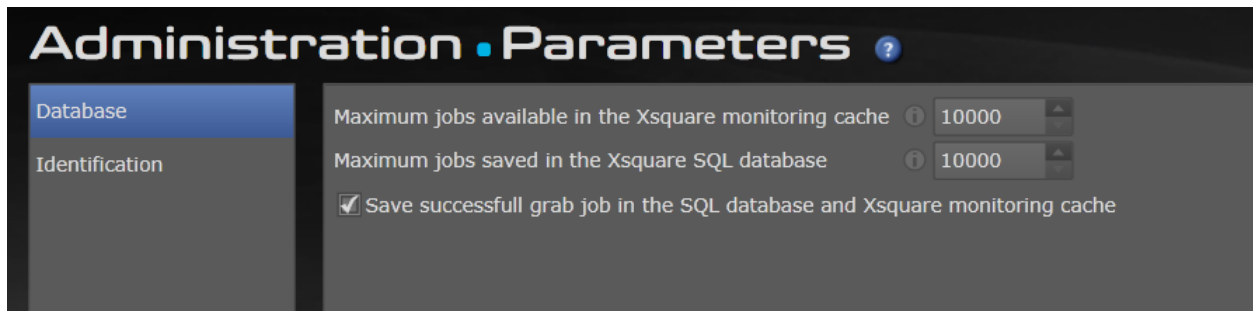


Allows assigning a nickname to the Xsquare application.  
When a nickname is assigned, it appears in the title bar of the Xsquare web interface, which makes it convenient to manage several Xsquare applications at the same time.

### AUTOMATIC PURGE

The automatic purge process will maintain the Xsquare SQL database by removing automatically the old jobs. This purge will avoid to explode the SQL database size

The configuration of the Xsquare automatic purge is available in the Xsquare parameters page in the database section

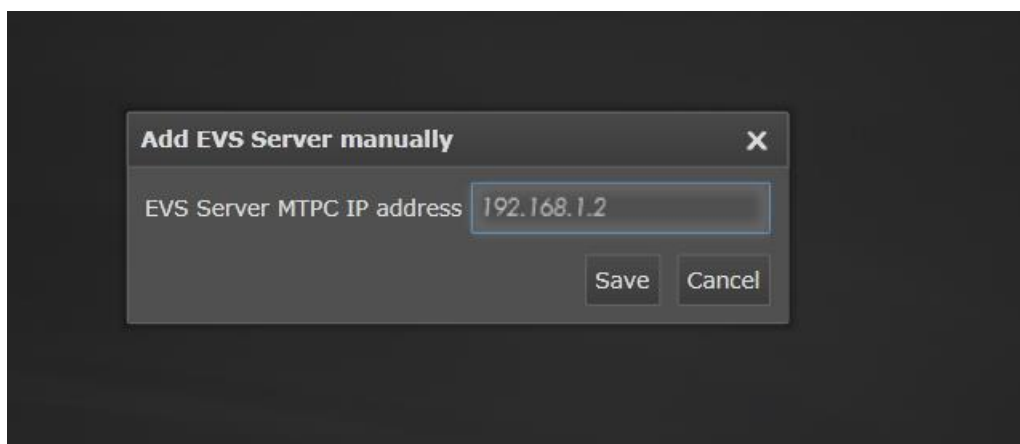


## Parameters

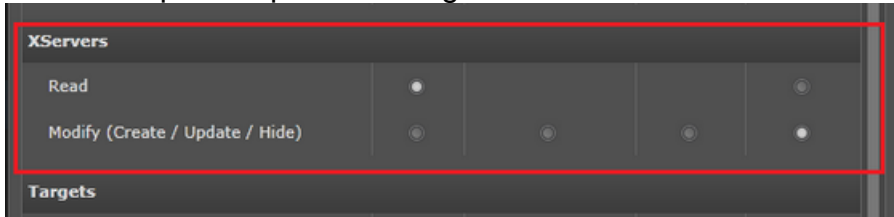
- **Maximum jobs available in the Xsquare monitoring cache:** Specifies the maximum number of jobs that can be displayed in the Job Monitoring window. When this number is exceeded, the oldest jobs are removed from the Job Monitoring window. The default and recommended minimum value is 10,000.
- **Maximum jobs available in the Xsquare SQL database:** Specifies the maximum number of jobs saved in the Xsquare SQL database. An automatic database purge of old jobs is performed every two minutes to prevent any impact on Xsquare performances. The default value is 100,000. The recommended minimum value is 10,000 and always needs to be higher than the max. jobs available in the monitoring cache.
- **Save successful Grab job in the SQL database and Xsquare monitoring cache:** When checked, the successful grab jobs are kept in the database and monitoring cache. The default value is Yes

## USE EVS SERVERS WHICH ARE LOCATED ON A DIFFERENT VLAN THAN XSQUARE

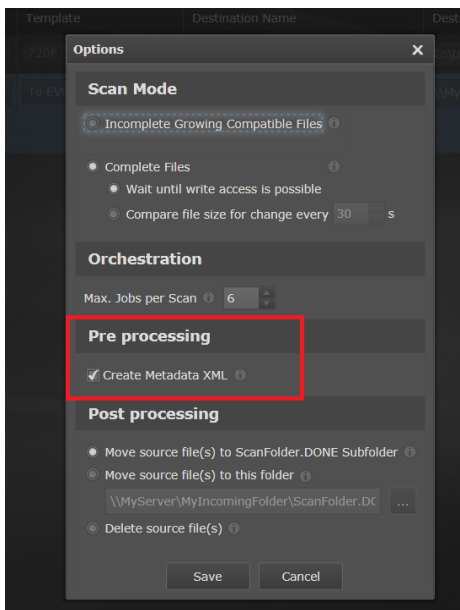
By default Xsquare will automatically discover all the EVS server which are on its VLAN. It is now possible to add manually EVS Server to Xsquare. Xsquare will then try to access it.



This new option is part of the rights than an user can have



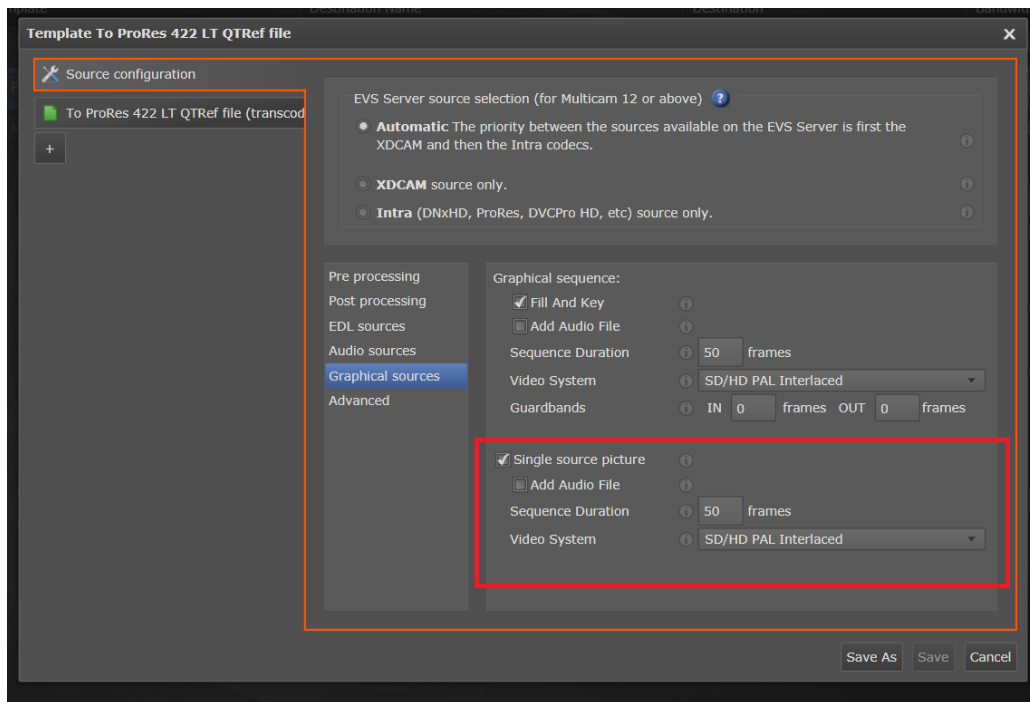
## NEW SETTING TO ACTIVATE/DEACTIVATE CREATION OF EVS XML SIDECAR FILE FOR THE SOURCE FILE WHEN USING XSQUARE SCANFOLDER



There is a new setting in the Xsquare Scanfolder option to activate or not the auto-creation of the EVS.XML file next to the source file during the processing of Xsquare scanfolder job.

## SINGLE PICTURE SUPPORT

It is now possible to add a single picture as source in the “File” scanfolder. Xsquare will manage it with the options which are present in the source graphical



By default only these extension are considered as picture by Xsquare

- BMP
- PNG
- Tiff
- JPEG
- JPG

## MODIFICATION IN THE XSQUARE API

### CHANGES IN RELEASE 3.4

#### Modification Overview

We introduced some new operations to manage Xsquare parameters such as database or identification parameters.

A new type of source has been added. It is called 'SourcePicture' and allows to specify one picture (jpeg, png, tiff,...) as the source of a transfer job or transfer profile.

We added the possibility to add an XServer which could not be detected automatically. The typical use for this is when the XServer is not located on the same VLAN.

Configuration element from type JobProcessorDto is deprecated since version 3.0 because JobProcessorConfigurationDto has also been deprecated. ConfigurationDictionary element should be used instead. Configuration was still populated for backward compatibility matters. From version 3.4 Configuration element will not always be provided. The reason is that we added a new FilenameEncodingMode (Unicode). When a job processor will be configured with a FilenameEncodingMode set to Unicode, element Configuration will not be provided. Of course ConfigurationDictionary element will always be provided with all configuration properties. Note that function GetDefaultProcessorConfiguration has also been deprecate in version 3.0. Use GetDefaultProcessorConfigurationDictionary instead.

## XSQUARE JOB SERVICE

Endpoint: <http://localhost:9002/XsquareJobService>

Operation	Modification type	Detail
TransferJob	A new type called SourcePicture has been added	A new type called 'SourcePicture' has been added. It is an extension of SourceAbstract.

## XSQUARE CONFIGURATION SERVICE

Endpoint: <http://localhost:9002/XsquareConfigurationService>

Operation	Modification type	Detail
GetXServers	Changed the type XServerDto	We added 3 properties to the XServerDto: Specified, ID and RowVersion. Specified is set to true for XServer added using the SaveXServer operation. ID is the internal ID of the XServer. RowVersion is used for avoiding concurrent changes.
SaveXServer	New	Save XServer. Currently, this operation is only used to add a XServer that has not been discovered or to force the update of the properties of a XServer that has been previously added with this operation. When adding an XServer, only MTPC address and the ID are required, the ID must be set to 0. Other properties are not taken into account. Finally, note that when adding an XServer, the property Specified is set to true.
DeleteXserver	New	Delete XServer by XServer identifier. Note that only XServer that has been added using the SaveXServer operation can be deleted, in other word, the property Specified must be set to true.
SetParameters	New	Set paramaters value. Available paramaters:



		CachedJobCount(Maximum jobs available in the Xsquare monitoring cache), ArchivedJobCountThreshold(Maximum jobs saved in the Xsquare SQL database), EnableDeleteSuccessfulGrab, Nickname (Used to identify Xsquare).
GetParameters	New	Get parameters value. Available paramaters: CachedJobCount(Maximum jobs available in the Xsquare monitoring cache), ArchivedJobCountThreshold(Maximum jobs saved in the Xsquare SQL database), EnableDeleteSuccessfulGrab, Nickname (Used to identify Xsquare).
All operations dealing with TransferProfile (GetJobTemplates, GetJobTemplateById, GetTargets, GetTargetById, GetScanFolders, GetScanFolderById, GetXmlScans, GetXmlScanById)	A new element called SourcePicture has been added	A new element called 'SourcePicture' has been added to element 'Sources' which is a member of 'TransferProfile'.
All operations dealing with JobProcessorDto (PublicGetJobProcessors, PublicGetJobProcessorsByTypes, GetJobProcessors, GetClusters, GetDefaultProcessorConfiguration, SaveJobProcessorConfiguration,...)	Deprecated properties in the type JobProcessorDto	Configuration element from type JobProcessorDto is deprecated and might not always be provided, even for XTA processor.

## CONFIGURATION PROXY SERVICE

Endpoint: <http://localhost:9004/XsquareProxyService>

Operation	Modification type	Detail
GetXServers	Changed the type XServerDto	We added 3 properties to the XServerDto: Specified, ID and RowVersion. Specified is set to true for XServer added using the SaveXServer operation. ID is the internal ID of the XServer. RowVersion is used for avoiding concurrent changes.
SaveXServer	New	Save XServer. Currently, this operation is only used to add a XServer that has not been discovered or to force the update of the properties of a XServer that has been previously added with this operation. When adding an XServer, only MTPC address and the ID are required, the ID must be set to 0. Other properties are not taken into account. Finally, note that when adding an XServer, the property Specified is set to true.
DeleteXserver	New	Delete XServer by XServer identifier. Note that only XServer that has been added using the SaveXServer operation can be deleted, in other word, the property Specified must be set to true.
SetParameters	New	Set paramaters value. Available paramaters: CachedJobCount(Maximum jobs available in the Xsquare monitoring cache),

		ArchivedJobCountThreshold(Maximum jobs saved in the Xsquare SQL database), EnableDeleteSuccessfulGrab, Nickname (Used to identify Xsquare).
GetParameters	New	Get parameters value. Available parameters: CachedJobCount(Maximum jobs available in the Xsquare monitoring cache), ArchivedJobCountThreshold(Maximum jobs saved in the Xsquare SQL database), EnableDeleteSuccessfulGrab, Nickname (Used to identify Xsquare).
All operations dealing with TransferProfile (GetJobTemplates, GetJobTemplateById, GetTargets, GetTargetById, GetScanFolders, GetScanFolderById, GetXmlScans, GetXmlScanById)	A new element called SourcePicture has been added	A new element called 'SourcePicture' has been added to element 'Sources' which is a member of 'TransferProfile'.
All operations dealing with JobProcessorDto (PublicGetJobProcessors, PublicGetJobProcessorsByTypes, GetJobProcessors, GetClusters, GetDefaultProcessorConfiguration, SaveJobProcessorConfiguration,...)	Deprecated properties in the type JobProcessorDto	Configuration element from type JobProcessorDto is deprecated and might not always be provided, even for XTA processor.

## BUGS FIXED

- No important bugs corrected in version 3.4

## **GENERAL XSQUARE LIMITATIONS**

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### **ASSOCIATION TOOL**

- To be able to associate XTAccess to Xsquare: they must be on the same VLAN.
- XTAccess and Xsquare hostname must follow the DNS naming convention and contain only the ASCII letters 'a' through 'z' (in a case-insensitive manner), the digits '0' through '9', and the hyphen ('-')
- The Apple Bonjour protocol (used to discover the XTAccess and Xsquare) must be started before Xsquare and XTAccess
- Xsquare could have some difficulty to discover all the XTAccess if there are two network boards activated in two different VLAN on Xsquare computer.

### **XSQUARE SERVICE MONITORING TOOL**

- On Windows 7 64 bits, to be able to use the Xsquare Monitoring tool and restart services: it could be necessary to modify these parameters  
Run -> gpedit.msc -> Computer Configuration -> Windows settings -> Security settings -> Local Policies -> Security Options
  - User Account Control : Behavior of the elevation prompt for administrators in Admin Approval Mode : Prompt for credentials -> Elevate without prompting
  - User Account Control : Run all administrators in Admin Approval Mode : Enable -> Disable
  - User Account Control : Switch to the secure desktop when prompting for elevation: Enable -> Disable

### **XSQUARE JOBS AND TEMPLATES**

- The multi-destinations are available for all the jobs except for the Avid Transfer Engine jobs. It is impossible to create jobs to Avid Transfer Engine with more than one destination ;
- It is impossible to create more than one NLE referencing per destination ;
- It is possible to reference up to two destinations to Xedio ;
- The EVS Server PC LAN network board must be connected to the Network to use the auto codec detection mechanism ;
- To use the auto codec detection : it is necessary to have XTAccess Xsecure licenses ;
- The auto codec detection will be run every 30 seconds on the network ;
- The compulsory and keep partial parameters are not available for the EDL+Clips job. The EDL+Clips job will always use compulsory = true and keep partial = false. So if the EDL+Clip job is canceled or fails : XTAccess will delete all the files created ;

- The retry of the job is done with the information of the original job. If the user changes the template used in the job: the new template will not be used in the retry job except if Xsquare has rebooted between the original job and the retry.

## XSQUARE SCAN XML

- The Scan XML source must be a shared folder on the network (UNC path) and the Scan XML service must have Read/Write access on it ;
- No new features will be added in the XMLJobs v1 protocol.  
The new features will only be available via Jobs v2 and/or templates.
- Previously, XTAccess allowed to use the same XML scan folder setting (XML unit) for the job to XT and to Files. Now, with Xsquare, users will have to create two watch folders with two different templates or define no Xsquare template. So the default XML unit of IPD must be correctly configured in Xsquare
- Xsquare will not support anymore the old IPDirectorClipInfos tag in the EVS Metadata.
- It is impossible to access different UNC path from the same computer with different Windows User. The Xsquare computer can access another computer with only one user.
- Due to the total new implementation of the ScanXML service, there might be slight differences of behaviors between Xsquare and XTAccess ScanXML. For example, if a required element is missing in a Job v1 (or its value is incorrect), XTAccess may use default value, while Xsquare may reject the job. If you plan to switch from XTAccess ScanXML to Xsquare ScanXML, we strongly recommend testing your XML Job files to ensure the differences of behaviors are not blocking.
- The tag <Job\_Src\_Field\_Nb> is not supported anymore.
- The <Job\_Src\_Field\_TC> value must represent a timecode less than 24 hours. If it's not the case, please use timecodes with dates (Job\_Src\_Field\_DTC)
- Job\_Delete\_Src\_File\_After\_Job / Job\_Move\_Src\_File\_After\_Job are not supported.
- XML jobs of grab are rejected if a template is associated to the scanXml. Grab XML job must be used without template in Xsquare.
- It is recommended not to exceed 40 xml units in Xsquare.

We know that since Xsquare is used in conjunction with IPDirector, there is a tendency to define one xml unit per IPDirector target instead of pointing several targets to the same xml unit. While this might seem like good practice, a high number of xml units will put a lot of stress on both Xsquare and IPDirector. If you really need to define more than 40 xml units, please contact [Xsquare@evs.com](mailto:Xsquare@evs.com)

## XSQUARE SCANFOLDER

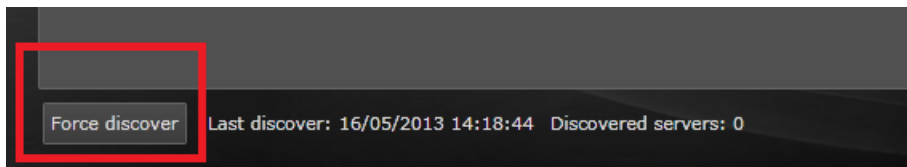
- The scan folder source must be a shared folder on the network (UNC Path) and the Scan Folder service must have Read/Write access on it.
- If you want to be sure that the local XTAccess of the source watch folder will execute the job, you will have to create a Removable cluster
- It is impossible to access different UNC path from the same computer with different Windows User. The Xsquare computer can access another computer with only one user.
- The move job if the scanfolder job is failed will not work if the source file is still growing

## XTACCESS CONFIGURATION THROUGH XSQUARE

- XTGateway will be configured by default to be able to do 4 operations of playlist rendering at the same time. It will be impossible to change this configuration from Xsquare. The modification of the XTGateway configuration must be done manually on each XTGateway in the configuration window.
- The following parameters will not be available in the Xsquare configuration interface. So, if necessary, these parameters will have to be configured manually on each XTAccess (registry keys).
  - Max Log size In MB (Default 2)
  - IP Retry (Default 12)
  - IP Retry timeout (Default 5000)
  - Enable Retry (Default 1)
  - MinFieldsToWriteBeforeRefInCEDB (Default 1000)

## GENERAL LIMITATION AND INSTALLATION

- Xsquare 3.1 or upper is only compatible with the SQL Toolkit 6.10.07 or upper
- Xsquare could take up to 5 minutes to detect a new EVS server on the network. So we recommend forcing manually Xsquare to discover the EVS servers after each modification (example: EVS Server reboot) on the setup.



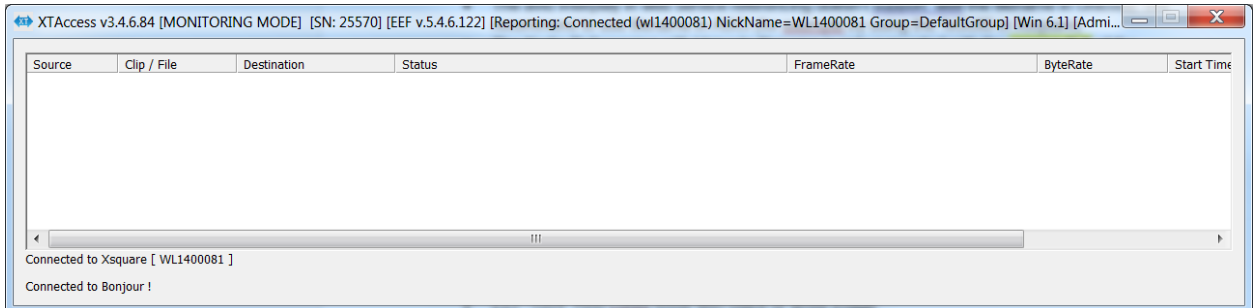
- With SQL Express 2005: The Xsquare DB is limited to 4GB. It is not the case on SQL Server;
- The Xsquare installation could take time (20 minutes) and ask for reboot if SQL express and the .NET frameworks are not already installed on the computer.
- The SQL Express installer could ask to close the Xsquare suite setup. In this case you can ignore the error and continue the installation
- If you create several XTAccess with the same ghost: it is necessary to remove this registry key (HKEY\_CURRENT\_USER\Software\EVS Broadcast Equipment\XTAccess\XTAccessUUID) in the original ghost. This Key is created automatically at the first boot of XTAccess and must be unique.
- The web interface is compatible with all Internet browsers compatibles with Silverlight except Google chrome on Apple OS
- It is not possible to downgrade Xsquare. The upgrade is supported but not the downgrade. If you want to downgrade: you will have to delete completely the Xsquare DB.

## SQL SERVER

When SQL Server is already installed before Xsquare Suite install, it is possible that it is not well configured (especially when it comes from Visual Studio in dev machines). Some steps may or may not be required.

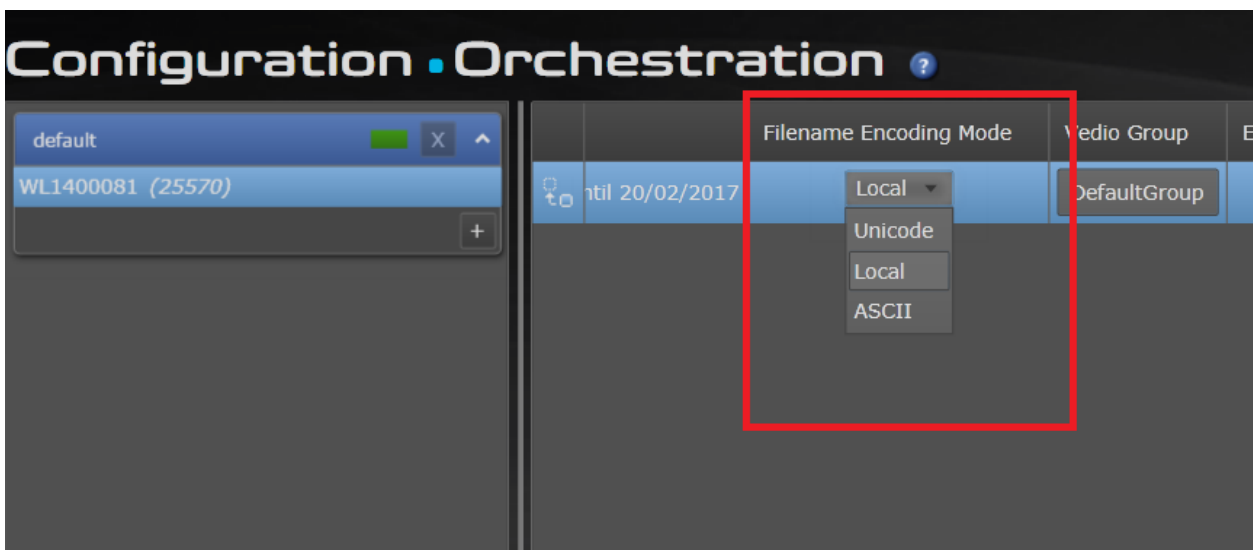
- **Make sure the Windows service is well configured:** In services.msc, the service "SQL Server (SQLEXPRESS)" or "SQL Server (MSSQLSERVER)" or other instance name should have Startup Type "Automatic" and be Started.
- **Sometimes SQL Server Management studio is not installed.** This is not required but it is very useful for debug/management. TODO : add links to SQL Server Management studio installer (32/64 and 2005/2008R2).
- **SQL Server is not listening on network interfaces**
  - Open Start Menu\Programs\Microsoft SQL Server 2008 R2\SQL Server Configuration Manager
  - Open SQL Server Network Configuration -> Protocols for SQLEXPRESS (or other instance name) -> TCP/IP
  - Make sure Enabled has Yes, Listen All has Yes.
  - In IP Addresses, make sure all required IPs have Active = Yes, Enabled = Yes and IP Adress is right (sometimes it is wrong).
  - You have to restart the service "SQL Server (SQLEXPRESS)" or similar.
- **Make sure Mixed mode is activated (Windows + sa/evs authentication) :** If you have SQL Server Management Studio, go to instance properties -> Security -> SQL Server and Windows Authentication mode then restart SQL Server service. From <http://www.mssqltips.com/sqlservertip/1441/correct-the-sql-server-authentication-mode-in-the-windows-registry/> :
- Make sure "sa" account is activated  
 Note : Xsquare, NC, and Authentication installers may do this step for you if they can connect using Windows Authentication.
  - Open SQL Server Management Studio, connect SQL instance using Windows Authentication.
  - Open <instance>->Security ->Logins -> sa -> Properties.
  - Set "evs" in password and confirm password.
  - In Status, make sure Permission is "Grant" and Login is "Enabled".
  - After pressing OK, you have to restart SQL Server service.

## NEW XTACCESS FEATURES



## SUPPORT UNICODE FILENAME (READ AND WRITE)

XTAccess 3.4 can read and write filename in Unicode. It is not necessary anymore to configure windows in the right local page.



The filename encoding mode is configurable per XTAccess in the Xsquare Orchestration page.

- Unicode: XTAccess writes files in unicode
- Local: XTAccess writes files with the same characters than the global local page setting of Windows
- ASCII: XTAccess writes files only with ASCII characters

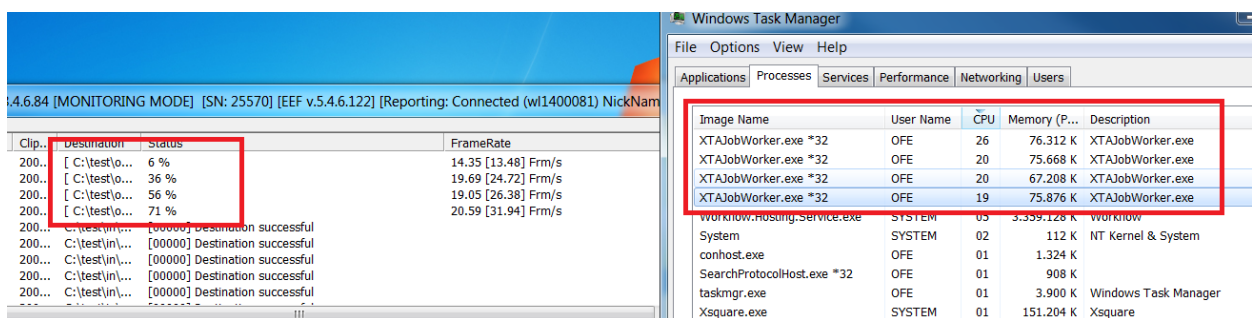
### Limitations

<b>O. Fettweis</b>	3-août-15
<b>File name</b> Xsquare Suite_ReleaseNote_v3.4.docx	Page 23 of 31

- The smooth streaming destination filename must be in ASCII
- The avid Interplay in web service referencing doesn't support well the filename in Unicode. We recommend to use filename in ASCII (for exemple by using the %GUID in Xsquare)
- The Xedio Referencing with Unicode filename is only supported with the version 4.70 of the Xedio

## XTACCESS MULTIPROCESS

XTAccess 3.4 creates one process per job.

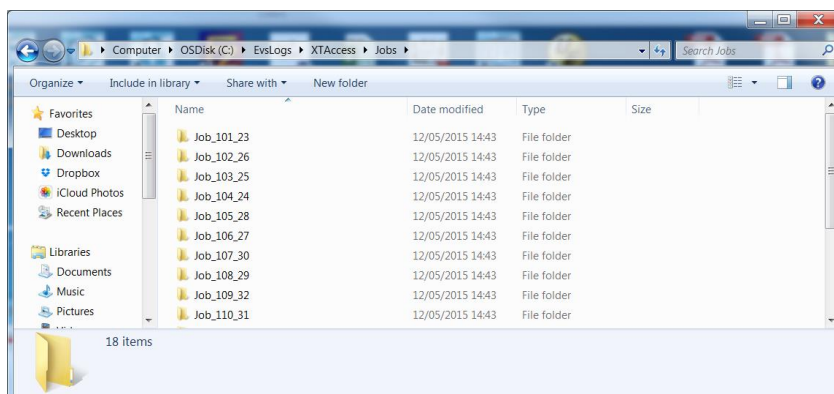


### Advantages:

- The jobs on the same XTAccess are completely independent. If one job fails it will never disturb the others jobs which are running on the same XTAccess
- Each job can reserve its own memory space.
- XTAccess will better use the memory available on the computer

The logs of XTAccess have also been reorganized.

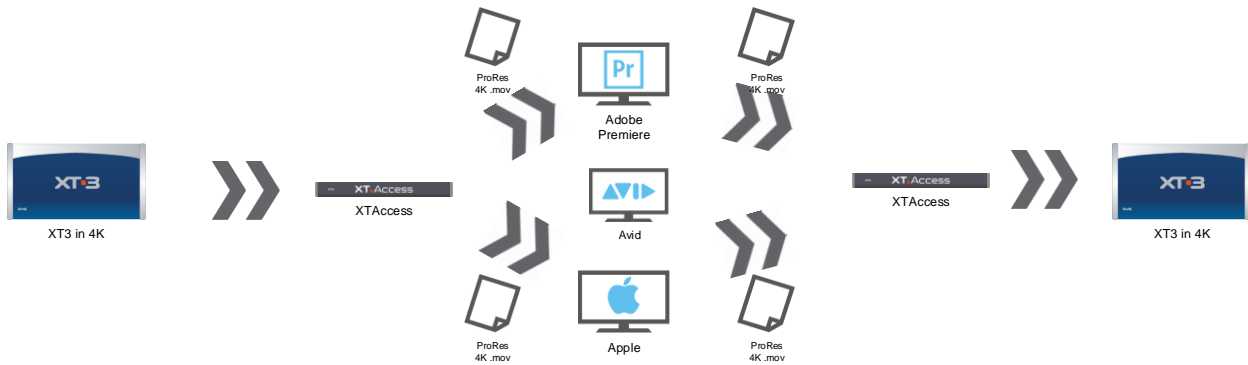
There is now one log folder per job with a history of 100 transfer jobs





## BACKUP/RESTORE PRORES 4K QT

XTAccess 3.4 can backup and restore ProRes 4K from/to an EVS Server



### Resolution

- 3840x2160

### Video Bit rate (50P/60P)

- ProRes LT : 684/821 Mbps

### NLE Compatibles

- Avid MediaComposer 8.4 with the QT ama plugin
- Adobe Premiere
- FCPX

### Performances on EVS XTAccess 1U-2D hardware

- Backup : as fast as real time
- Restore : a little bit slower than real time

### Limitations

- Transcoding to or from 4K only (no resizing support)
- No configuration for stereo/mono, 16/24 bits, little endian/big endian
- No Initial TC support
- No burn of timecode
- No max audio out management
- No audio matrixing
- No read in SWP/XViewer
- No Grab jobs
- No AutoGrab jobs
- No 3D and SLSM mode

## ENCODING SONY XAVC LONG GOP

Encoding of Sony XAVC Long GOP HD 50Mbps MXF OP1a

- Supported resolutions: 720p/1080i/1080p
- Supported video bitrate: 50Mbps only.
- Supported frame rates: 50i, 59.94i, 50p and 59.94p.
- Supported workflows : Transcoding as source or destination, viewable in a player.

Limitations:

- No realtime support when transcoding to Sony XAVC Long GOP HD 50Mbps MXF OP1a

## DECODE PANASONIC AVC-ULTRA LONG GOP

Decode AVC-Ultra LongGOP Class from ENG Camera (OP-1B):

- Supported resolutions: 720p/1080i/1080p
- Supported classes: G50/G25/G12/G6
- Supported frame rates: 50i, 59.94i, 50p and 59.94p.
- Supported workflows: Decoding as source, viewable in a player.

Limitations:

- The AVC-Ultra media must be opened through the XML file and not directly the MXF video file

## **BUGS FIXED**

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- **EEF-1695:** Backup of XDCAM essence in OPATOM => audio and video not synchronized (avid standalone only)

## GENERAL XTACCESS LIMITATIONS

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### OPERATING SYSTEM

- It is necessary to set the UAC to the lower level to use XTAccess on Windows 7 and Windows Server 2008
- We requirement to deactivate the “Areo” mode on windows 7 and Server 2008

### NLE SETTINGS

- General :
  - Export PL/TL: EVS recommends opening the FCP EDL (XML) or Avid EDL (AAF) only when all the child backups are done. Otherwise the NLE (Apple FCP or Avid Media Composer) will not update the growing media in their timelines.
  - The EVS metadata present in the EDL exported from a PL/TL are the metadata of the original clip and not the metadata of the backuped file which could be different (new Varld, new duration, new In point, etc)
- Adobe NLE :
  - To be able to see the EVS metadata in Adobe premiere through the XMP file : It is necessary to copy the EVS schema in this folder
    - Windows C:\Users\nomdutilisateur\AppData\Roaming\Adobe\XMP\Custom File Info Panels\4.0\custom
    - Mac {Home Directory}/Library/Application Support/Adobe/XMP/Custom File Info Panels/4.0/custom/
  - You can contact [support@evs.com](mailto:support@evs.com) to ask the EVS schema for Adobe
  - The XMP metadata file doesn't support complex XML structure. So some EVS metadata are not available in the XMP metadata file
- FCP NLE :
  - The delay between the EVS XT server Live and first picture available in FinalCutPro 7 is +- 15 seconds (tests done in DVCPRO HD NTSC and IMX NTSC)
  - The Matrix of metadata for FCP is only working for the clips metadata, not for the EDL.
- Avid NLE :
  - The EVS Avid tools 3.9.X (in ingest) are not compatible with XTAccess 3.XX
  - It is impossible to update a backup of train in Avid XDCAM OPATOM and Avid H264 proxy in these situations (no problem with the others codecs/wrappers) :
    - If the initial duration was < 2h and the update > 2h
    - If the initial duration was >2h and the update > that the initial duration

- The delay between the EVS XT server Live and first picture available in MediaComposer is +- 20 seconds for the video and +- 30 seconds for the audio (tests done in DVCPRO HD NTSC and IMX NTSC)
- When browsing a growing EWC media, sometimes Media Composer displays "FILE\_OTHER" instead of the video. The file must be refreshed by double clicking on the clip in Media Composer bin.
- Message "PMM\_INSUFFICIENT\_MEDIA" in Media Composer when a media is updated and stretched: the duration is longer than the original one. It is not possible to increase the duration of a media sent to Avid. Note: reducing the duration of the media is OK (see limitation below anyway).
- When updating the duration of the media in Interplay with a shorter duration, the new short out is correctly updated but you need to delete the clip from the Media Composer bin and re-import the media from Interplay in order to place the short out anchor in the right location in the viewer. Limitation of Avid Media Composer
- #35613: It is only possible to use the <General\_Infos> and <Clips\_Infos> XML tags in the Avid Tape.

## TRANSCODING

- XTAccess doesn't support job which starts with a bottom field. In the job the TC In must always be a Top field
- We recommend doing maximum two transcodings in AVC-intra at the same time otherwise memory overflow could appear. Please, contact EVS support to limit the Max Transcoding Job
- #23834: it is necessary to configure the target resolution to 720P to do rendering of playlist in progressive mode.
- #35675: IMX 30, IMX 40 and IMX 50 are considered as different codec for XTAccess. So the smartrendering is not working between these IMX Bitrates.

## BACKUP

- Backup of clips with 32 audios
- Growing clips without out point are not supported by XTAccess.
- If the backup paths are not exactly the same (for example: C:\Video\Toto.mxf is different than \\Xstore60170\Video\Toto.mxf) the XTAccess auto incrementation "(1) (2) (3) etc .." of the filename is not working. We recommend to use %GUID in the file name format string in IPD to be sure that there will never be two times the same file created simultaneously by XTAccess
- #31464: XTAccess doesn't create FCP.XML file in case of backup of 3D clips
- XTAccess doesn't reference OPAtom files in Avid Interplay in case of backup of 3D clips
- # 37057: %TCINDATE and %TCOUTDATE FileNameFormatString option don't work for the rewrap jobs.

## RENDERING

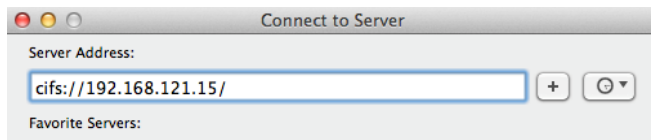
- We recommend doing a maximum of two renderings of playlist in AVC-Intra 100 at the same time otherwise memory overflow could happen.
- #36164: XTAccess can use a lot of memory to decode QT files due to the QT structure
- #38861: XTAccess will not render the audio of one element SLSM “All Frames” in an EDL
- #39025: The EDL rendering in DNxHD with a no video element as first element is not working

## MAC PRO OS 10.9 (MAVERICKS)

- Issues were reported while transferring media to/from Mac OS X Mavericks (typically, “Encoder DLL Error”). This version of Mac OS X supports the SMB2 file transfer protocol that was introduced by Microsoft in Windows Vista in 2006, and later improved on Windows 7. It was reported that Apple SMB2 support was not fully compliant with the Microsoft implementation and we can reasonably expect Apple patches to solve this situation.
- In the meantime, it’s it strongly recommended to disable SMB2 on the client machine, and force using SMB by running the following commands and then restarting Windows:

```
sc.exe config lanmanworkstation depend= bowser/mrxsmb10/lsi
sc.exe config mrxsmb20 start= disabled
```

- You can also use CIFS connection to avoid trouble with SMB2



## MISCELLANEOUS

- Unicode & ASCII extended: Transfer of Unicode metadata to Avid Transfer Manager is not supported.
- In case of backup of trains, <XT\_Creation\_Time> tags are based on XTAccess workstation date and time, not on XT date and time.
- It is not allowed to open, edit or process a file stored in an XTAccess Scan folder. XTAccess will not be able to access the file and could generate errors.
- Backup File Name Format String: XTAccess is not able to handle special characters like the “\ / : \* ? , ; » <> |” in a string.
- Progress current TC in IPD is not available for the Copy XT to XT and with the Avid transfer. The progress bar is available.

- In Hi-Lo mode: you need to use %VCodec or %GUID to do the difference between the two backed clips and XML
- %K1,%K2, etc take the XT keyword with maximum 12 characters and not the IPD Keyword with 64 characters
- If the backup / rewrap fails because the target becomes unreachable (i.e. network failure), the incomplete a/v file CANNOT be deleted.