



IP DIRECTOR : NEARLINE

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NetAPP	Erreur ! Signet non défini.
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INTRODUCTION

This document describes the important points to take into account when configuring an IP-Director Nearline.



[IP] DIRECTOR NEARLINE CONFIGURATION

The nearline management is defined in the Remote Installer -> Configure -> Nearline tab
The following configuration has to be completed :

Name	Destination Path	Default HiRes File Format	XML Unit	Default	Storage system	Authentication Method	Username	Password	Access Rights
AH	\\Burahevsfile\G on XFILE\AH\	EV5 MXF	XTAccess	<input checked="" type="checkbox"/>	MS Windows	Integrated			
Graphics4Edit	\\3.23.148.11\Graphics4Edit\EV5\	EV5 MXF	XTAccess	<input type="checkbox"/>	Others	User/Pwd	editor	access	

- **Name** : Name given to the nearline folder in the IP-Director interface
- **Destination Path** : Path of the nearline storage. It must be a UNC path accessible with CIFS protocol. Subfolders will be managed as well.
- **Default HiRes File Format** : File format used to backup clips on the nearline folder
- **XML Unit** : XML Unit used to process backups and restore to/from the nearline
- **Default** : Default nearline
- **Storage system** : defines the compatibility with file updates events (see next chapter in this document)
- **Authentication Method** : defines the way the managing services will authenticate on the nearline folder (see next chapters in this document)
- **Username** : user used by the managing services if the authentication method is set to "User/Pwd"
- **Password** : password used by the managing services if the authentication method is set to "User/Pwd"
- **Access Rights** : nearline access rights given to the IP-Director user groups.

In addition, a SynchroDB service must be configured to manage the nearline either in RestrictedStandAlone either in Network mode.





STORAGE TYPES AND NEARLINE

The nearline management in IP Director can use FileSystemWatcher events to be aware of a file creation, update or deletion on the storage system. But these FileSystemWatcher events are not supported by all storage Operating Systems.

These events are really useful for the IP Director because the IP Director DB is immediately updated when something is changed on the nearline storage.

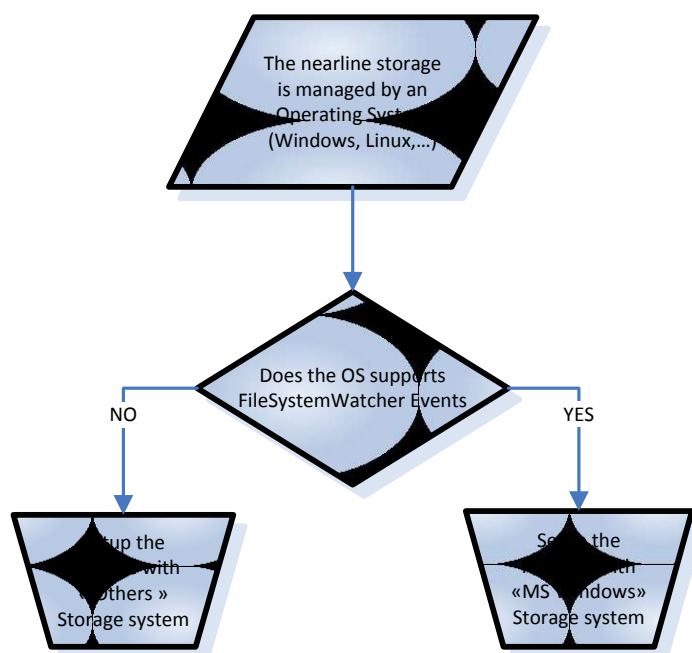
If the storage declared as the nearline is managed by a Windows operating system, it's pretty sure that the FileSystemWatcher events will be supported.

If the storage is managed by a Linux Operating System the FileSystemWatcher compatibility depends on the SAMBA server version and on its configuration.

To be compatible with the FileSystemWatcher events the OS must use a SAMBA server with a version higher than 3.00.25 (actually tested with the version 3.00.28) and the "notify" option must be enabled.

A FileSystemWatcher client is available at EVS to test the events compatibility of the nearline storage. If you are not sure of the storage configuration it is better to proceed to a test with the test client.

If the storage supports the FileSystemWatcher you can configure the nearline Storage Type to "MS Windows" in the Remote Installer otherwise this option must be set to "Others"





NEARLINE AUTHENTICATION

As the nearline storage could not be an EVS hardware the IP-Director should be able to access to the files stored on the nearline in any cases without user prompt.

EVS COMPONENTS

The component that must be able to access the nearline are :

- The Master SynchroDB service or any SynchroDB service that could become Master
- The SynchroDB service that manages the nearline or any SynchroDB that could manage the nearline (in network mode)
- The software players (and potentially every IP-Director)
- The XFile or XTAccess applications

The authentication is based on the Windows authentications processes. We can describe 2 different scenario.

EVS USER (DVB) EXISTS ON THE STORAGE

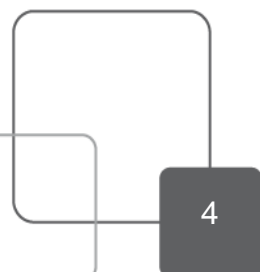
If every application is started with a user and this user exists locally on the nearline storage with the same password, the authentication should be automatic and transparent for the user.

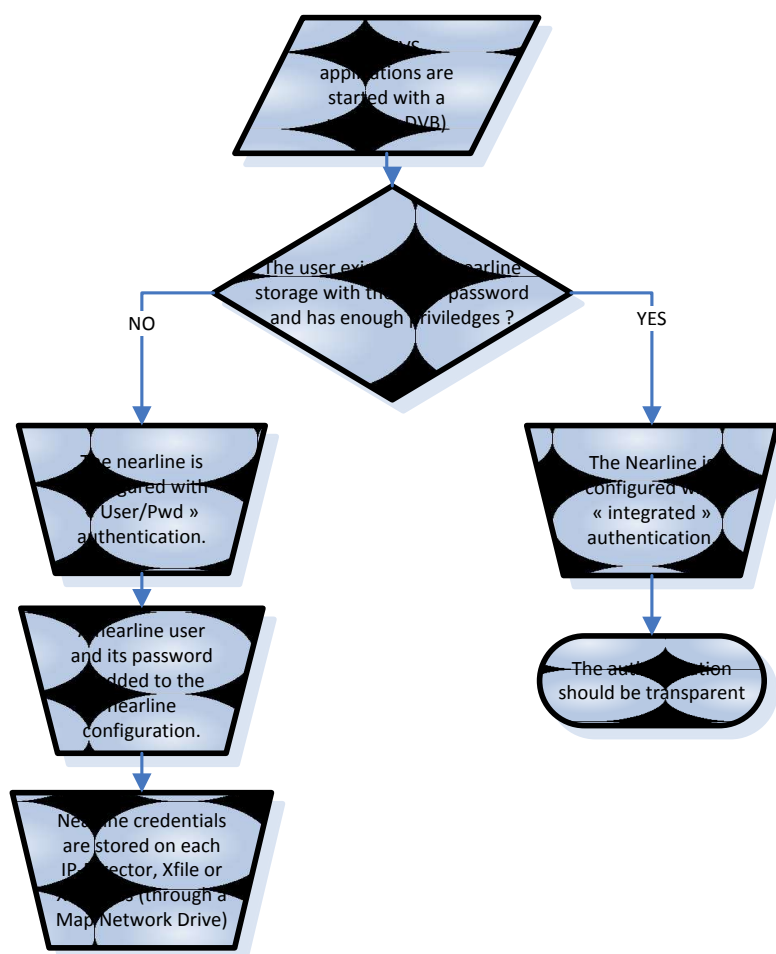
Take into account that, by default, a Windows operating system disables the network access for users without password. It could be blocking for storages hosted on a Windows OS.

EVS USER (DVB) DOESN'T EXIST ON THE STORAGE

If the user used to start the applications doesn't exist on the storage system the synchroDB must be configured to use another user when it tries to connect to the nearline. This is done by changing the authentication mode to "User/Pwd" in the remote installer and by adding the nearline user and password in the same interface. This change is taken into account after a SynchroDB service restart.

This configuration is not used by the IP-Director application (the Software player) neither the Xfile nor XTAccess. The user and password must be stored in the user profile launching these applications by adding a Map Network Drive or by opening the nearline share and store the user and password when windows prompts for authentication.







TESTED SERVERS

EVS XSTORE

As soon as the EVS XStore is managed by a Windows Server, the nearline should be configured with a “Windows” storage system and a “Integrated” authentication. This is the best scenario.

EVS SAN SERVER

The EVS SAN Servers are running a LINUX operating system. Please contact EVS to check if your server version supports the file change notifications (FileSystemWatcher). Check that the SynchroDB services are started with a user that exists on the SAN Servers (it is the case for the DVB user)

OMNEON MEDIAGRID

Following our tests direct access to the Omneon Mediagrid doesn't support the FileSystemWatcher events correctly. However the Omneon Mediagrid client driver enlarge these functionalities a lot. If this driver is installed on every IP-Director (or at least the managing SynchroDB) the nearline can be configured with the “Windows” storage system to manage the file events.

The authentication type depends on the existence of the user launching the EVS applications.

