

SmartBins

DIGITAL NEWS PRODUCTION

Instruction Guide



SOFTWARE VERSION 5.0

071837000
OCTOBER 2004

the most watched worldwide

CERTIFICATE

Number: 510057.001

The Quality System of:

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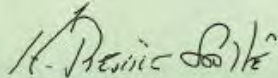
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Including its implementation, meets the requirements of the standard:

ISO 9001:2000

Scope: The design, manufacture and support of video hardware and software products and related systems.

This Certificate is valid until:	June 14, 2006
Revision Date:	September 9, 2003
Renewal Date:	June 14, 2003
Issued for the first time:	June 14, 2000



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Grass Valley Product Support

To get technical assistance, check on the status of problems, or report new problems, contact Grass Valley Product Support via e-mail, the Web, or by phone or fax.

Web Technical Support

To access support information on the Web, visit the product support Web page on the Grass Valley Web site. You can download software or find solutions to problems by searching our Frequently Asked Questions (FAQ) database.

World Wide Web: <http://www.thomsongrassvalley.com/support/>
Technical Support E-mail Address: gvgtechsupport@thomson.net

Phone Support

Use the following information to contact product support by phone during business hours. Afterhours phone support is available for warranty and contract customers.

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Preface

Authorized Support Representative

A local authorized support representative may be available in your country. To locate the support representative for your country, visit the product support Web page on the Grass Valley Web site.

Profile Users Group

You can connect with other Profile XP Media Platform users to ask questions or share advice, tips, and hints. Send e-mail to profile-users@thomson.net to join the community and benefit from the experience of others.

Introducing SmartBins

SmartBins provide a way to automatically keep the contents of a NewsEdit bin synchronized with the contents of a Media Server bin—either a Profile Media Server on an Open SAN system or an M-Series iVDR on a NAS system.

SmartBins work differently depending on the shared storage system you are using—Open SAN or NAS.

SmartBins on an Open SAN System

The computer running the Smart Bin SAN service must have a Fibre Channel-SCSI connection to the Open SAN and a CVFS license.

Open SAN SmartBins provide an automatic way to map specific folders in the NewsEdit tree view of Bins to a specific bin in the Profile view. Media is not moved—instead, automatic mapping of media into two different directory structures occurs that previously required manual mapping file by file using Content Share Explorer or Media Manager. These bin structures are different views into the shared media file database. Some file types like NewsEdit sequences can not be used by Profile directly, and therefore, are not allowed in SmartBins.

SmartBins provide automatic “mirroring” of NewsEdit bins and Profile bins on the Open SAN system. When you create a bin in NewsEdit, you have the option of associating that bin with a Profile bin. Once that association has been made, the SmartBin Service automatically keeps the bins synchronized. New material on the Profile database always finds its way to the NewsEdit database, but the reverse is not true without user interaction in some cases. For example, FeedClip recorded clips are not SmartBin monitored and synchronized to the Profile database because they have a subdirectory under the master bin.

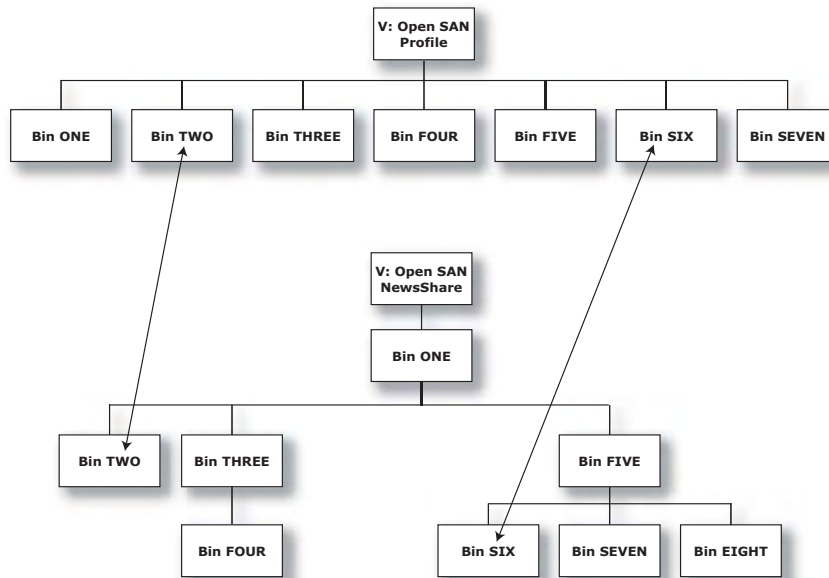
There can be no other bins under a SmartBin, so the SmartBin is the end of the branch in the directory structure. You can have bins next to Smart Bins. Sequences can not live in SmartBins, only flattened simple movie (Profile compatible) files.

You can only map a NewsEdit bin to a Profile bin when you are creating the bin for the first time in NewsEdit. See Chapter 4, “Creating SmartBins in NewsEdit” for instructions on creating SmartBins.



SmartBin Folder Synchronization

When the SmartBin Service starts running, it looks at all of the NewsEdit bins and determines which bins are associated with Profile bins. It then queries the Profile database for the movies in each associated Profile bin. Any movies in the Profile bins that are not in the associated NewsEdit bin are registered to the NewsEdit database. No files are moved—a mapping of the folders between the flat and tree views takes place. On initialization, there is no check made to see if NewsEdit clips are on the Profile database. This means that this initial synchronization is one way—Profile to NewsEdit only.



Updating the Databases

The SmartBin Service constantly monitors both the NewsEdit and Profile databases. Examples of updates to the database are listed below.

Updates to the Profile Database

- **Renaming Clips**—When a movie is renamed on the Profile, the SmartBin Service automatically renames the corresponding clip on the NewsEdit database. If there is a renaming conflict, and the NewsEdit clip is unable to be renamed, the databases will be out of sync.

- **Deleting Clips**—When a movie is deleted on the Profile, the SmartBin Service deletes the corresponding clip on the NewsEdit database. If the clip is being used in NewsEdit at the time the Profile movie is deleted, the NewsEdit clip will not be deleted and the databases will be out of sync.
- **Deleting Bins**—When a bin is deleted on the Profile, all movies in the bin on the Profile database will be deleted, and the bin on the NewsEdit database will also be deleted. The deletions can only occur if clips are not being used in NewsEdit.
- **Adding a Movie**—When a movie is added to the Profile database, the SmartBin Service automatically registers that clip in the NewsEdit database. Complex movies, however, are not registered to the database because SmartBins don't support sequences. In this case, the databases will be out of sync.

Updates to the NewsEdit Database

- **Renaming Clips**—When a clip is renamed in NewsEdit, an attempt is made to rename the corresponding movie in the Profile database. If the Profile movie cannot be successfully renamed, the NewsEdit rename fails.
- **Deleting Clips**—When a clip is deleted in NewsEdit, an attempt is made to delete the corresponding movie in the Profile database. If the Profile movie cannot be successfully deleted, the NewsEdit delete fails.
- **Deleting Bins**—When a bin is deleted in NewsEdit, SmartBin monitoring is automatically turned off on the specified bin before deleting all of the material in the bin. This is done to prevent accidental deletion of material on the Profile database.
- **Creating Master Clips**—While recording to the SmartBin in NewsEdit, a master clip is created in the NewsEdit database. When the master clip is created, the SmartBin Service automatically registers that clip to the Profile database once the record has completed.

Limitations of Open SAN SmartBins

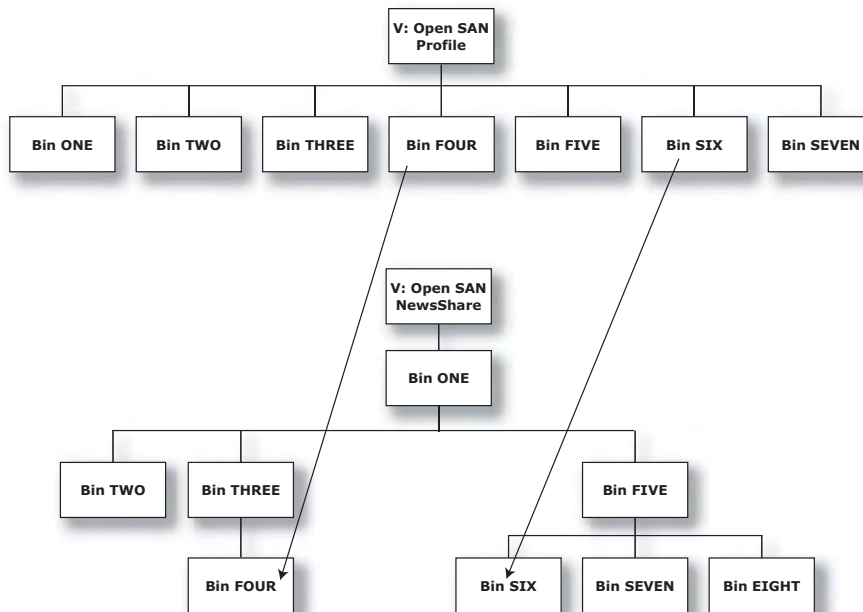
No sub-folders, sequences or sub-clips are allowed in SmartBins. The SmartBin option and Profile mapping association dialog is only available when creating a bin for the first time. No SmartBin dialog is presented for existing bins.



SmartBins on a NAS System

SmartBins for a NewsShare NAS System, known as GXF-SBINs, work in a similar way as the Open SAN System—but actually transfer media via GXF from an M-Series iVDR to the NAS and register with the NewsShare database, automating the import function of NewsEdit. GXF-SBIN needs an external XRE Server or DSM to act as a monitor for media transfer. Publishing back to an M-Series iVDR is via a traditional GXF transfer in NewsEdit.

SmartBins provide an automated process that monitors and transfers files from the flat M-Series iVDR bin structure to the tree-based NewsEdit directory structure on shared NAS storage. SmartBins use a static directory mapping so all files in a particular M-Series iVDR bin are monitored and automatically transferred as they arrive to a selected NewsEdit NAS Bin, and then deleted from M-Series iVDR. This function is uni-directional so that files put into the selected iVDR directory automatically arrive and are available for editing in the targeted NewsEdit directory. Files on the M-Series iVDR can then be manually deleted (locally on the M-Series iVDR) or automatically deleted by the SmartBin Service, with a specified delay after file creation and copy.



Using GXF-SBINs on an M-Series iVDR effectively creates a buffered recording—so that material is protected and redundantly saved (both on M-Series and on NAS) while still making the file available for shared editing or immediate playout on the M-Series. The buffering process takes some time, so there is a 40 second delay between the start of the record to media being available on NewsEdit.

From NewsEdit, files can be sent to an M-Series with the existing Send feature that sends a GXF stream to M-Series (or Profile) for playout. This GXF-SBIN service runs on a dedicated platform or DSM and is available as an option to NewsShare NAS systems.

With the GXF-SBIN service in place, new files are monitored and transferred from the M-Series to selected NewsShare NAS resident folders. Playout channels remain independent from the recording channels. Material availability on the NAS is about 40 seconds from the beginning of ingest on M-Series. While the buffered transfer is taking place, users can see and edit the growing file the same as if the media were recorded on NewsEdit.

Sending clips back to M-Series is done via GXF send dialogs in NewsEdit and M-Series playout is controllable via NewsQ Pro. There is no automatic publishing to an M-Series iVDR from NAS since finished stories need to be linked to playout.

SmartBin Service on a DSM or XRE Server provides the folder monitoring and transfer services to the NAS system. System sizing rules determine how many M-Series iVDR record streams can be supported. A DSM can support up to 4 record streams (2 M-Series chassis). Beyond four streams, dedicated XRE Servers should be used as necessary, budgeting 6 streams per XRE Server.

Currently, an M-Series iVDR user cannot send a file to a NewsEdit directly, only to other M-Series iVDRs or to Profile Media Servers.



Chapter 1 Introducing SmartBins

Installing the Software

In order to use SmartBins, you need to install Profile software, install the SmartBin Service and obtain a license for the software for use in your newsroom. You install the software on the XRE that is part of your system. It can be hosted by itself or share an XRE with a DSM or Windows Domain Controller.

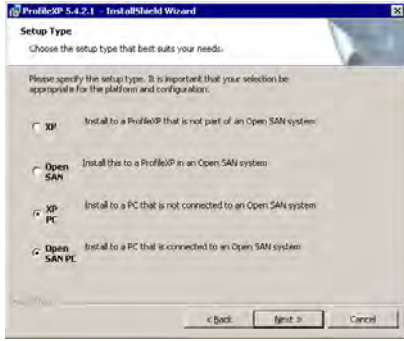


Installing the Profile Software

You need to install the Profile software regardless of which kind of shared storage you are using—Open SAN or NAS.

To install the Profile software:

1. Insert the NewsroomSuite CD into your CD drive.
2. Navigate to **Software Installs | Profile version | XP**.
3. Double-click on **Setup.exe**.
4. Install the software following these instructions:

On this screen...	Do this...
Welcome	Click Next .
License Agreement	Read and accept, then click Next .
Setup Type	For an Open SAN system, select Open SAN PC ; for a NAS system, select XP PC . Click Next . 
Ready to Install	Click Install .
Installation Complete	Click Finish . The computer prompts you to reboot so the new settings take effect.

Installing the SmartBin Service

To install the SmartBin Service:

1. Insert the NewsroomSuite CD into your CD drive and navigate to **SmartBin Service**.
2. Double-click on **SetupSmartBinService.exe**.
3. Install the software following these instructions:

On this screen...	Do this...
Welcome	Click Next .
Select Destination Directory	Leave set at the default location and click Next .
Select Type of Shared Database	<ol style="list-style-type: none">1. Select your media server type: Open SAN or NAS.2. If you want to use security on your shared database, check Enable Security.3. Click Next.
Specify the Servers for the Shared Database	Enter the names of the primary and secondary (if applicable) File System Managers for Open SAN (Database System Managers for NAS) and click Next .
Specify the shared drive(s) in use with this system	Leave set at the default location and click Next .
Ready to Install	Click Next to begin the installation.
Installation Complete	Click OK to close the installation program. The computer prompts you to reboot so the new settings take effect.



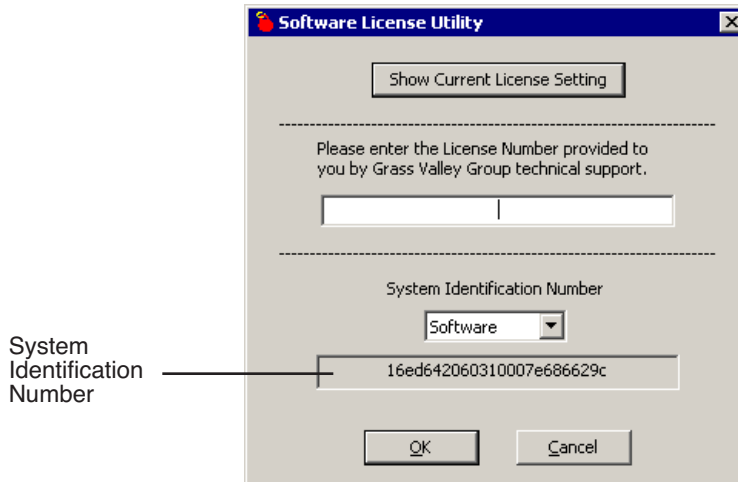
Obtaining a Software License Number

Once you've installed the SmartBin Service software, you need to get a License Number from Grass Valley.

To obtain a License Number:

1. Open Windows Explorer and browse to **C: | Program Files | Vibrint 5.0 | Utilities**.
2. Double-click the file **License.exe** to open it.

The Software License Utility opens:



Your System Identification Number appears in the bottom field of the window.

3. Call Grass Valley Product Support at 1-800-547-8949 and provide the customer service representative with your System Identification Number, as well as the software version and the original order number for the system.
4. Enter the License Number provided to you by Grass Valley Product Support and click **OK**.

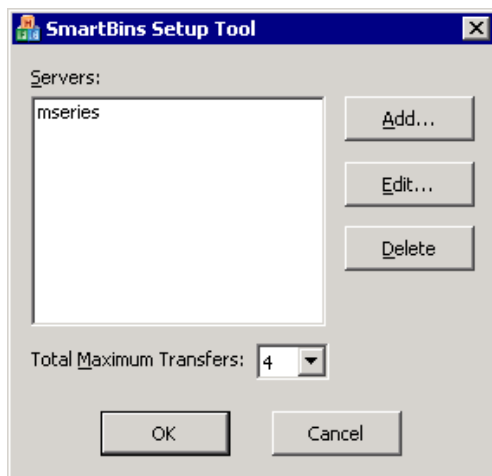
Configuring SmartBin Service on a NAS System

If you are using SmartBins on a NAS system, you need to configure your M-Series iVDR(s) to use SmartBins. If you are using SmartBins on an Open SAN system, you can skip this step.

To configure the SmartBin Service on a NAS system:

1. Go to **Start | Programs | Vibrint 5.0 | SmartBins Setup Tool**.

The SmartBins Setup Tool opens.



2. Select the **Total Maximum Transfers** from the drop-down list.

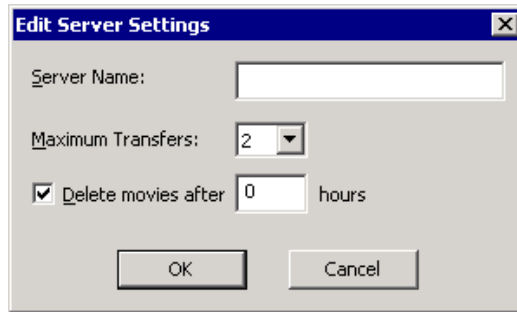
The Total Maximum Transfers is the total amount of streams for this particular instance of the SmartBin Service. Select **4** if the SmartBin Service is installed on the DSM and select **6** if the SmartBin Service is installed on a standalone PC.

NOTE: Increasing the number of Total Maximum Transfers affects the bandwidth on the NAS system.



3. Click **Add**.

The Edit Server Settings window appears:



4. Enter the name of the M-Series iVDR you are using.

5. Select the number of **Maximum Transfers** per M-Series server from the drop-down list.

For a DSM on a NAS network, you usually set **2** for the maximum number of transfers.

6. Check **Delete movies after** __ **hours**, and enter the number of hours after a transfer is complete for media to remain in the database before being automatically removed.

7. Click **OK** to close the setup tool.

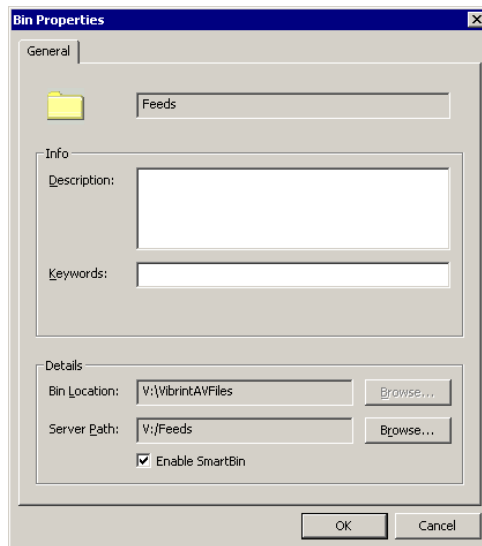
The SmartBin Service restarts.

Creating SmartBins in NewsEdit

Once you've installed the SmartBin Service, you can create SmartBins in NewsEdit which get automatically monitored and updated. A SmartBin monitors the server folder you specify and updates the content of the SmartBin automatically when new clips or updated feeds appear. You don't need to go into the server bin and copy the media into your NewsEdit bin in order to use it in a sequence.

To create a SmartBin:

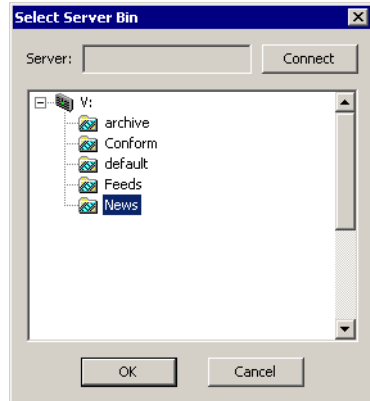
1. Open NewsEdit on any client workstation.
2. Click the **New Bin** button on the Bin toolbar.



3. Click **Browse** to the right of the Server Path field.



The Select Server Bin window appears:



4. If you are using a Network Attached Storage server, enter the name of the server and hit **Connect**; if you are using a Profile server, the Server field is grayed out.

***NOTE:** You only need to enter the name of the server the first time you connect; the server connects automatically once you've set it up.*

5. Select the bin to monitor and click **OK**.

The Server Path fills in with the selected Bin and the Enable SmartBin checkbox gets checked.

6. Click **OK** to create the SmartBin.

NewsEdit now monitors the Media Server folder and adds new media to this bin automatically.