

NewsBrowse

DESKTOP BROWSING SYSTEM

Installation and Configuration Guide

SOFTWARE VERSION 2.7

071-8307-01
DECEMBER 2004

the most watched worldwide

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Preface

This NewsBrowse Installation and Configuration Guide is part of a full set of support documentation for the NewsBrowse system, described as follows:

- **NewsBrowse Installation and Configuration Guide** — Provides explanations and procedures for installing and configuring the NewsBrowse system at a customer site. Includes recovery planning and troubleshooting sections. This document is available in printed form as part of the product bundle when you receive your new system. It is also available in electronic form (PDF file) on the NewsBrowse Application CD-ROM.
- **NewsBrowse Online Help** — Provides instructions for using the NewsBrowse application. This document is available from the NewsBrowse application Help menu.
- **NewsBrowse Release Notes** — Contains the latest information about the NewsBrowse hardware and the software release shipped on your system. The information in this document includes upgrade instructions, feature changes from the previous releases, helpful system administrative information, and any known problems. You receive this document with the latest version of software, on the NewsBrowse Application CD-ROM.

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World Wide Web: <http://www.thomsongrassvalley.com/support/>

Technical Support E-mail Address: gvtechsupport@thomson.net.

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United States	(800) 547-8949 (Toll Free)	France	+33 (1) 34 20 77 77
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Eastern Europe	+49 6155 870 606	Greece	+33 (1) 34 20 77 77
Southern Europe	+33 (1) 34 20 77 77	Hong Kong	+852 2531 3058
Middle East	+33 (1) 34 20 77 77	Italy	+39 06 8720351
Australia	+61 1300 721 495	Netherlands	+31 35 6238421
Belgium	+32 2 3349031	Poland	+49 6155 870 606
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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.

System Overview

NewsBrowse is a media management and editing system. When integrated with a Profile XP Media Server and a NewsEdit system, NewsBrowse supports the complete newsroom workflow — from ingest to editing to distribution to archive.

This chapter includes the following topics:

- “Functional description” on page 9
- “Two tier system diagram” on page 10
- “NetTime system” on page 11
- “Legacy systems” on page 11

Functional description

NewsBrowse processes an incoming feed and simultaneously encodes it into two formats: a low-resolution (MPEG-1) format stored locally on the Network Attached Storage (NAS) unit, and a high-resolution format stored on the Profile Media Server.

NewsBrowse creates video thumbnails, storyboards and RealVideo. You can use a web browser to edit stories using the low-resolution media, which is accessible from the journalist’s desktop. NewsBrowse also provides a rich metadata search engine that allows you to search for clips using various criteria.

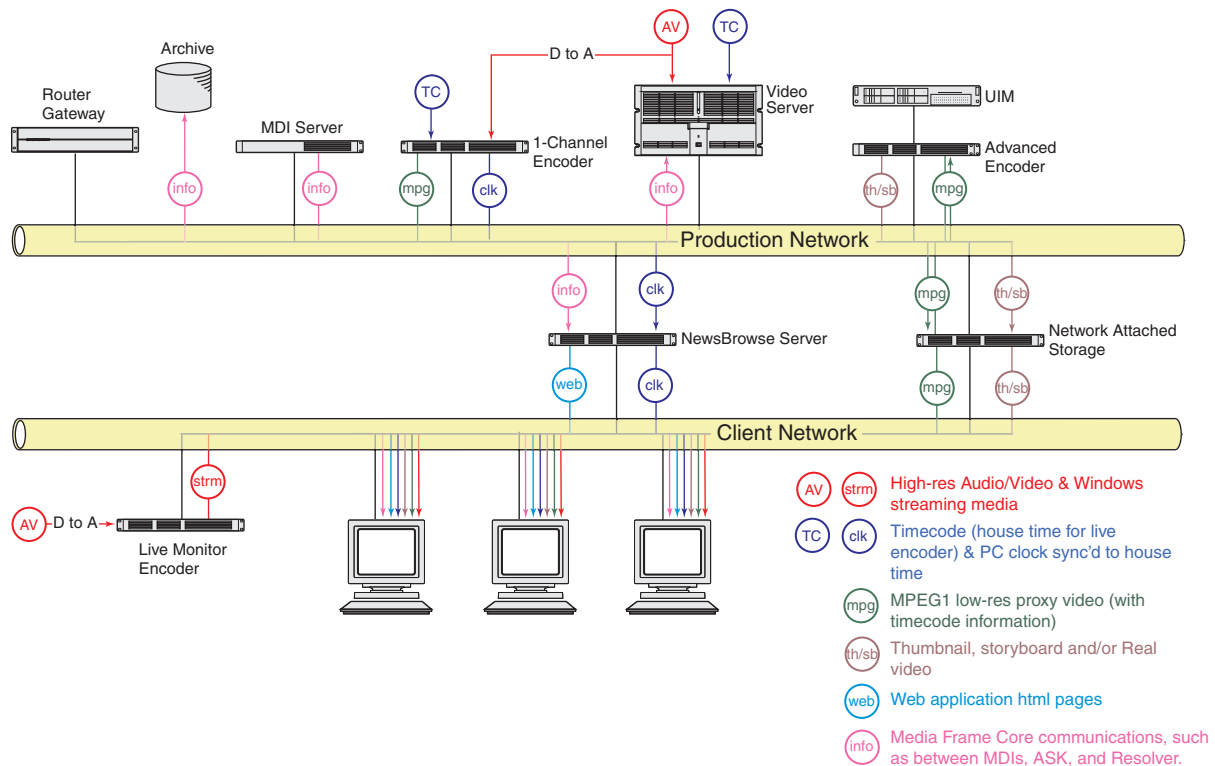
Once you complete a sequence with the NewsBrowse editor, NewsBrowse can use that sequence to pull the corresponding high-resolution video from the Profile Media Server and assemble an on-air quality sequence. NewsEdit can also use the sequence in a similar way. NewsBrowse can also monitor the Profile Media Server to create low-resolution files that do not exist, and stream live feeds.

From the NewsBrowse application you can archive and restore high-resolution media. Archived media is still visible from the NewsBrowse application.

For descriptions of the machines used as platforms for the NewsBrowse system, refer to “Cable hardware components” on page 13.

For descriptions of software components, refer to Appendix A, *Component Interaction Diagrams* on page 133.

Two tier system diagram

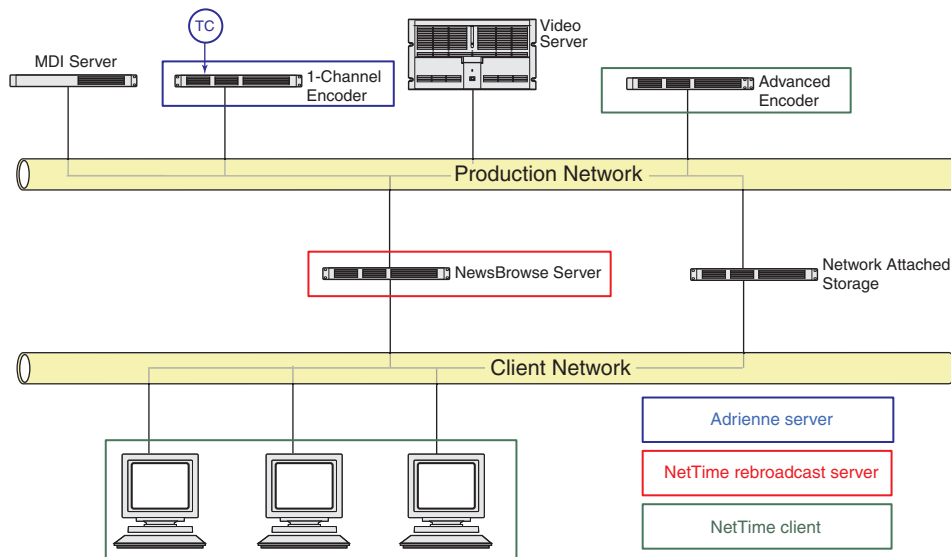


NewsBrowse systems for version 2.0 or higher use the two tier network architecture. This diagram illustrates the recommended architecture for version 2.7.

The system illustrated here includes all hardware platform types. Smaller systems might not include all types of hardware platforms. Consult the system design for your specific system to determine the hardware platforms you must install.

NetTime system

The following diagram illustrates the roles the different NewsBrowse platforms play in the NetTime system. Refer to “Prepare NetTime” on page 38.



Legacy systems

This manual documents systems that are built new for version 2.7 or higher. While existing systems can be upgraded to version 2.7 software, their hardware platforms, network architecture, and other elements might not match the systems documented in this manual.

You can find information about systems built before version 2.7 in Appendix B, *Legacy systems* on page 141. If you need the entire overview and task flow for working on a legacy system, you should refer to the version of this manual that corresponds to the software version around which your system was originally built. Refer to “Revision Status” on page 2 of this manual for information about previous manual versions.

Installing NewsBrowse

This chapter provides instructions for installing the hardware platforms and software components that support the NewsBrowse system. When you are done installing the hardware and software, continue with [Chapter 3, *Configuring the NewsBrowse System*](#) and [Chapter 4, *Recovery Planning*](#) to complete the installation of your NewsBrowse system.

Rack-mount hardware components

Follow the instructions for your specific rack to install each component of the NewsBrowse system. One rack-unit spacing is recommended between components for ventilation.

Cable hardware components

Refer to the system design for your particular NewsBrowse system and the [“Two tier system diagram” on page 10](#) to identify the hardware components and cabling for your NewsBrowse system. Then turn to the appropriate instructions in this section and connect cables as required.

Be aware of the following as you cable your system:

- When connecting the network, use 100Tx cabling and switches (or Gigabit uplink in the case of the NAS). Zoning is not required on the switch if five or less clients are active. If more than five clients are using the system, it is strongly recommended that you use an isolated switch or a shared, zoned switch to isolate the client-side LAN. Network traffic from the NewsBrowse internal LAN is minimized.
- You may want to postpone cabling to external networks until after configuring respective IP addresses.
- The single-channel encoder requires analog video and audio feeds. Digital to Analog conversion of signals may be required.
- Single-channel encoders and live monitor encoders require audio/video connections. Single-channel encoders require timecode feeds.
- For all NewsBrowse machines, connect the keyboard/mouse cable harness as follows:
 - Plug the Y-cable into the keyboard/mouse port on the back of the machine and into one end of the keyboard and mouse ports on the cable harness.
 - Plug the VGA cable on the harness to the back of the machine.
 - Plug the other end of the harness into a PC connection on the KVM Keyboard/Monitor Drawer unit. (If you are not using the KVM component, plug the cables into a PC keyboard, mouse, and VGA port.)

NewsBrowse server instructions: Dell or Axiom platform

The central component of the NewsBrowse system is the NewsBrowse server. Depending on the design of your system, it can host the following software components:

- The web-application for user interaction
- The Ingest Scheduler which drives the encoders
- The Rules Wizard for background processing
- The database and Managed Device Interface services for holding and relating assets in the system.

The server connects to all encoders and the Network Attached storage via the network. Refer to “[Two tier system diagram](#)” on page 10. The client network is available for access to the web application.

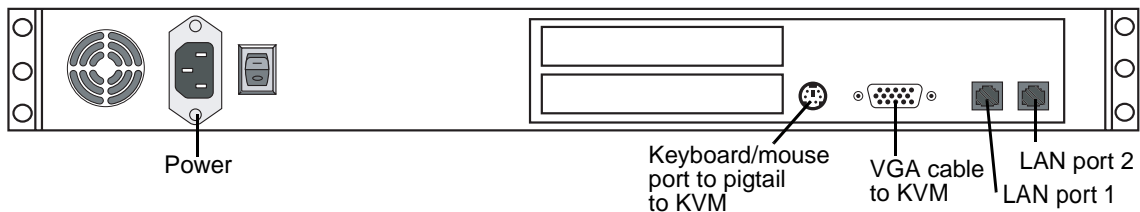
For the NewsBrowse server you have the option of the Axiom platform or the Dell platform, as explained in this section, or the HAFT platform, as explained in “[NewsBrowse server instructions: HAFT platform](#)” on page 15.

Platform Specifications are as follows:

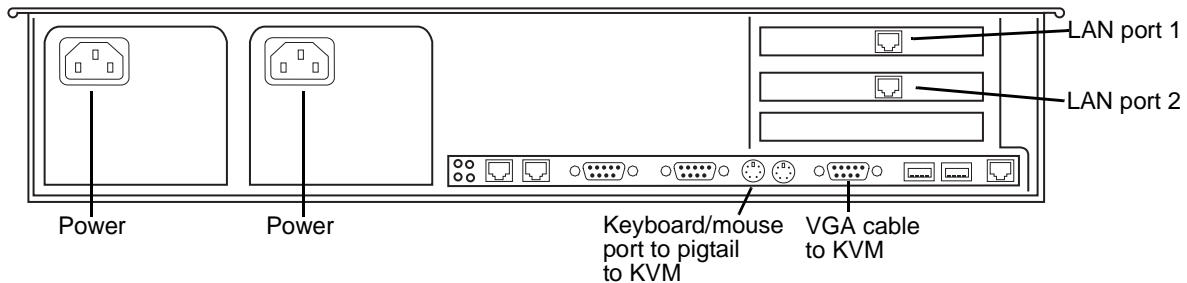
- P 3, 1Ghz or better (1 or 2 CPU)
- 512 MB RAM- CD-ROM Drive
- Minimum 20GB Program Drive
- Windows 2000 Server (SP3)
- .NET Framework 1.1
- Internet Explorer 6 (SP1)
- Windows Media Player 7.1
- Flash Player 6 (6.0.65.0 update)
- Microsoft SQL Server (SP3)
- 100Tx LAN (x2)

Cable as illustrated.

Axiom platform



Dell platform



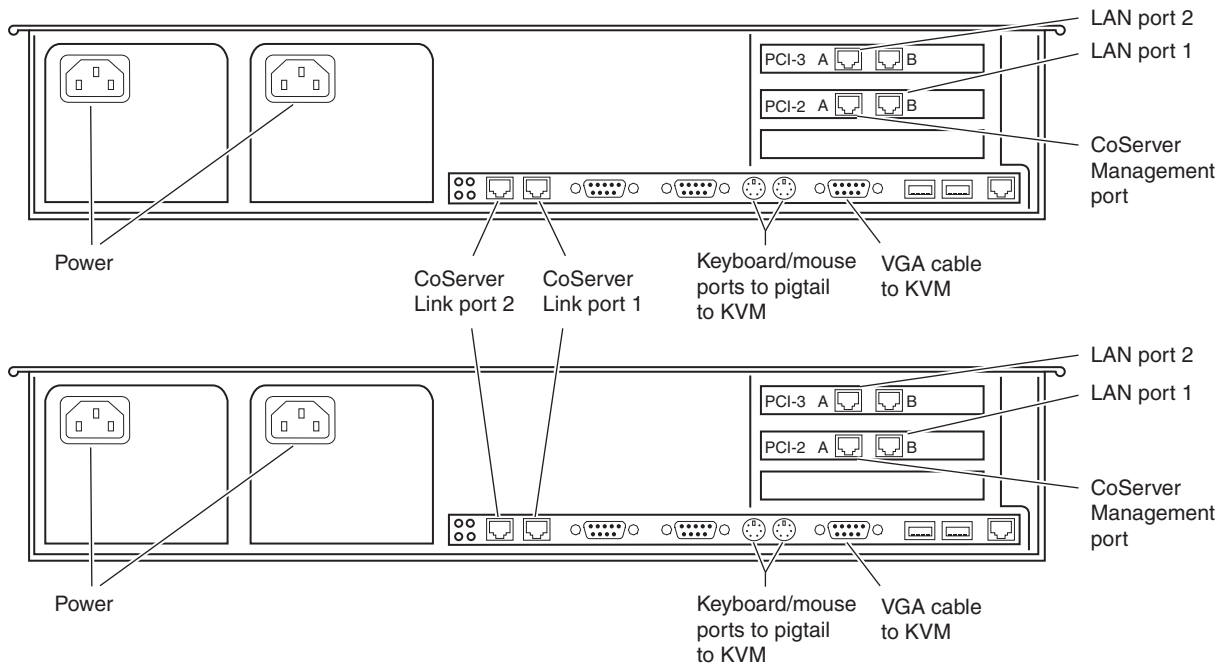
Connect LAN ports to a network router or switch. Connect port 1 to the Production Network (or Private Network for three tier) and port 2 to the Client Network.

NewsBrowse server instructions: HAFT platform

For the NewsBrowse server you have the option of the High Availability, Fault Tolerant (HAFT) platform, also known as the Marathon platform. This platform is made up of two interconnected Dell 2650 servers.

Platform Specifications are as follows:

- P4, 3GHz, 2 CPU
- 512 MB RAM- CD-ROM Drive
- Minimum 18GB Program Drive
- Windows 2000 Server (SP3)
- .NET Framework 1.1
- Internet Explorer 6 (SP1)
- Windows Media Player 9.0
- Flash Player 6 (6.0.65.0 update)
- Microsoft SQL Server (SP3)
- Gb LAN (x4)



Cable as illustrated and as follows:

- Connect LAN ports to a network router or switch. Connect LAN port 1 to the Production Network (or Private Network for three tier) and LAN port 2 to the Client Network.
- Connect the CoServer Management port to the Production Network (or Private Network for three tier).
- Interconnect CoServer Link ports with cross-over cables.
- Connect power cables to a power supply.

Power supply units are hot-swappable.

To power up the HAFT platform, use the normal procedures for the Dell server and log in to the Windows operating system as normal. The virtual server runs in a full screen window. To get to the Dell server desktop, press **Ctrl + Shift+F12**.

To power down the HAFT platform, right-click the system tray icon and select **Manage Endurance Configuration | Shutdown**. This does an orderly shutdown of the virtual server and the Dell server.

Also refer to [“Configure HAFT platform” on page 36](#) for network configuration procedures.

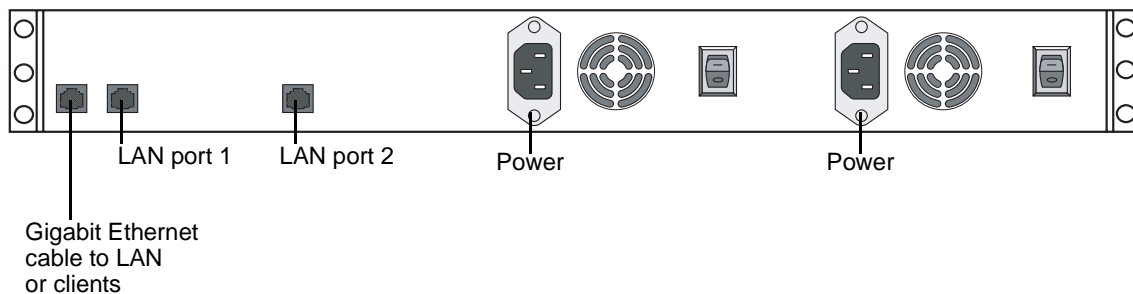
Network Attached Storage (NAS) instructions - Fastora

The NewsBrowse Network Attached Storage (NAS) unit provides storage for MPEG-1 proxy video, storyboards, thumbnails and RealVideo. It may also be configured to store Edit Decision Lists (EDL) that are saved to the NewsBrowse system. Encoders are configured to write to specific locations on the NAS via 100Tx connections over the network. Client access is provided via Gigabit Ethernet uplink to the Client Network.

Platform Specifications are as follows:

- Microsoft Windows Server 2003
- Redundant Power Supplies
- 1000BaseT LAN
- 100Tx LAN (x2)
- RAID protected drives

For instructions on the Linux version of the Fastora NAS, refer to [“Prepare NAS - Linux Fastora” on page 145](#). If necessary, you can mix Linux versions and Windows versions of the NAS on a single NewsBrowse system.



Cable as illustrated and as follows:

- Connect a Gigabit Ethernet cable from the port on the NAS to your LAN or directly to NewsBrowse clients.
- Connect an Ethernet cable from **LAN1** and **LAN2** ports on the NAS to a network router or switch.
- Connect both power cables from the back of the NAS to a power supply.

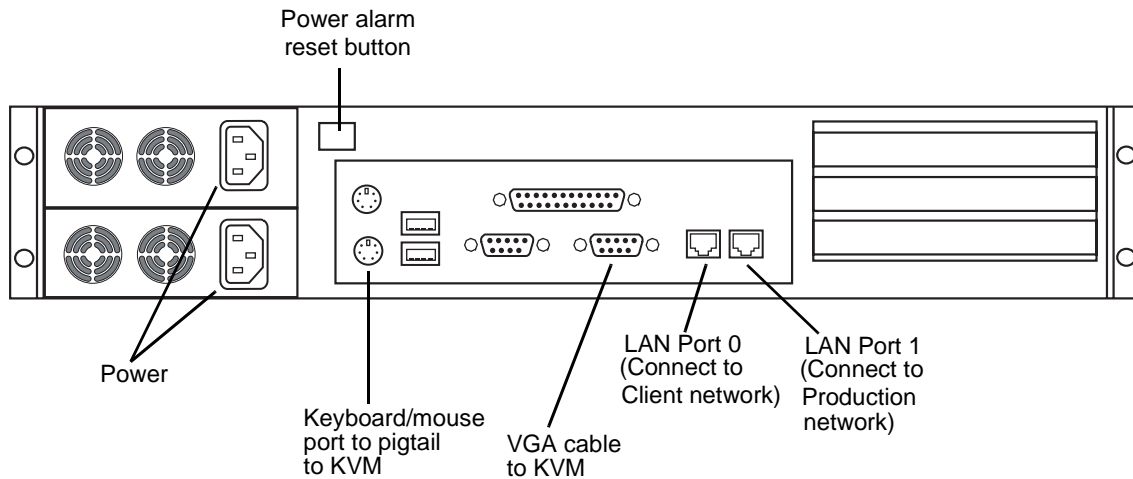
Power supply units are hot-swappable. Once power is applied using switches on the rear panel, use the power switch on the front panel to power down. Failure to use the front switch will cause the disk array to rebuild on the next power up.

NAS instructions: Serial ATA network platform

For the NewsBrowse Network Attached Storage (NAS) unit you have the option of the Serial ATA network (a.k.a. Ciprico 1700 or DiMedia) platform.

Platform Specifications are as follows:

- Redundant Power Supplies.
- 100BT LAN (x2)
- RAID protected drives



Make cable connections as illustrated.

Power supply units are hot-swappable. If the power supply fails or when power is cycled, an alarm will sound. To disable the alarm, press the power alarm reset button to the In position.

Power up the appliance by pressing the small, round On/Standby switch on the front left of the machine. Once the electrical cables are connected, the system has electrical power. Turning the On/Standby switch to standby does not remove power. To remove power, hold down the On/Standby switch for at least five seconds or disconnect the electrical cables.

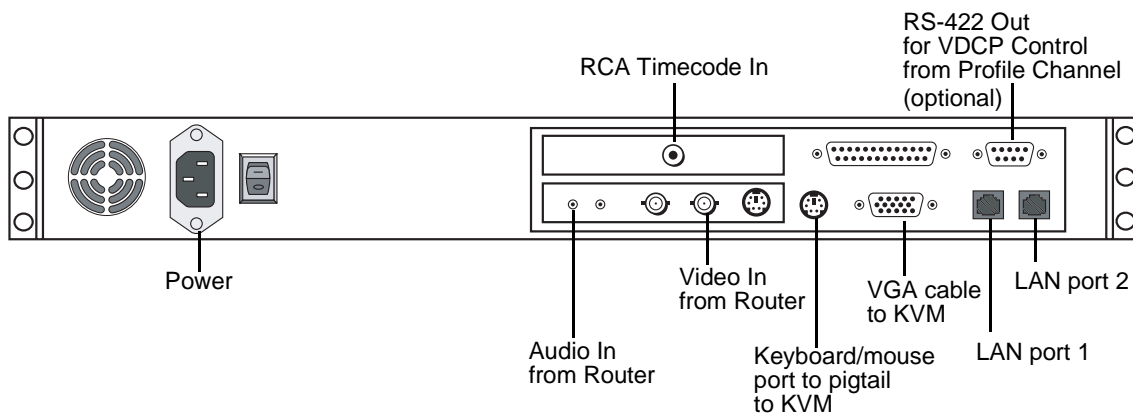
Single-channel encoder instructions

The single-channel encoder creates MPEG-1 proxy versions of high-resolution video. The single-channel encoder records MPEG-1 proxy in parallel with ingest into a video server. A NewsBrowse system may contain multiple single-channel encoders.

If a NewsBrowse system uses Advanced encoders for the creation of MPEG, the single-channel encoder can be an optional component.

Platform Specifications:

- P 3, 1Ghz or better (1 or 2 CPU)
- 512 MB RAM-
- CD-ROM Drive
- Minimum 20GB Program Drive
- Windows 2000 Server (SP3)
- .NET Framework 1.1
- Internet Explorer 6 (SP1)
- 100Tx LAN (x2)



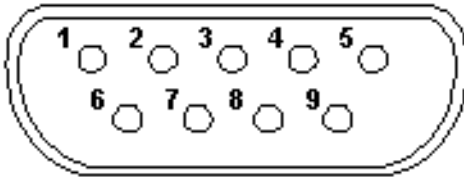
Cable as illustrated and as follows:

- Connect a cable from the Video In port on the Encoder to the analog video feed source.
- Connect a cable from the Audio In port on the Encoder to the analog audio feed source.
- Connect a Timecode cable from the Timecode In port (RCA port) to the house timecode feed.
- Connect two Ethernet cables from the **LAN1** and **LAN2** ports on the Encoder to a network router or switch. Make sure the LAN2 port is connected to the network where the Profile exists. A single-channel encoder can be configured to control up to two Profiles simultaneously using Ethernet API.
- Optionally connect a RS-422 control cable from the COM2 port on the encoder to the RS-422 port on the Profile Media Server (only if API is not used). See below for cable pinouts.
- Optionally connect a RS-422 control cable from the COM2 port on the encoder to a backup VTR. See below for cable pinouts.

RS-422 Cable Pinouts

The RS-422 cable that connects the single-channel encoder and the sequential encoder to a VDCP record channel on the Profile Media Server is a special cable. It needs to use the pinouts described below.

Encoder DB9-F		Profile DB9-M	
1	Tx-	8	Rx-
2	Tx+	3	Rx+
3	Rx+	7	Tx+
4	Rx-	2	Tx-
5	ground	4	ground



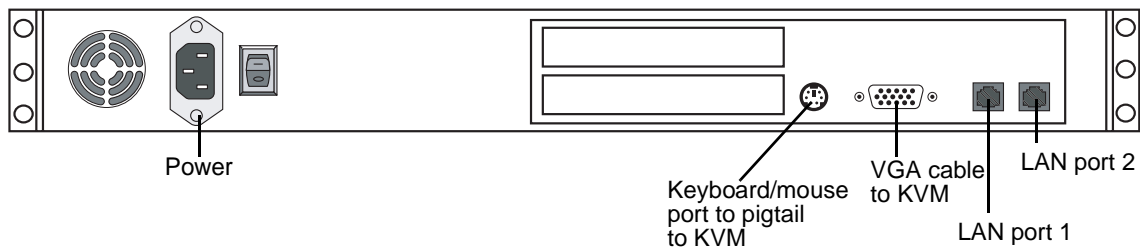
MDI Server instructions

The MDI server is host for the Managed Device Interface (MDI) services, through which the NewsBrowse system gets its visibility of the assets on the various machines in the system.

The MDI server is an optional component. On systems without a MDI server, the MDI services can run on the NewsBrowse server or other NewsBrowse machine.

Platform Specifications are as follows:

- P 3, 1Ghz or better (1 or 2 CPU)
- 512 MB RAM- CD-ROM Drive
- Minimum 20GB Program Drive
- Windows 2000 Server (SP3)
- .NET Framework 1.1
- Internet Explorer 6 (SP1)
- 100Tx LAN (x2)



Cable as illustrated and as follows:

- Connect LAN ports to a network router or switch. Connect port 1 to the Production Network (or Private Network for three tier) and port 2 to the Client Network.

Advanced Encoder instructions

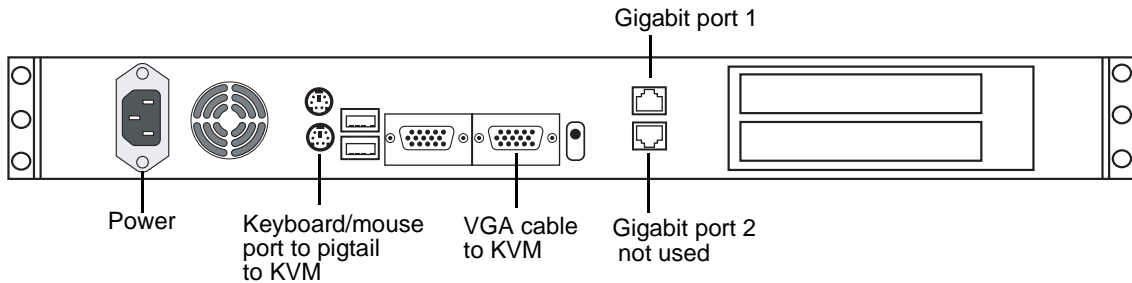
The Advanced Encoder does the following:

- Creates MPEG-1 proxy versions of high-resolution video assets that already exist or are actively being recorded on a video server
- Processes MPEG-1 proxy content and extracts thumbnail images to be used for proxy identification
- Extracts dynamic scene detection images for storyboard creation
- Renders RealVideo for low bitrate proxy content

The Advanced Encoder processes entirely in the digital domain.

Platform Specifications:

- 2.8 GHz Pentium
- 512 MB RAM
- CD-ROM Drive
- Minimum 40GB Program Drive
- Windows 2000 Professional
- .NET Framework 1.1
- Internet Explorer 6 (SP1)
- Real Producer 8.5



Cable as illustrated and as follows:

- Connect an Ethernet cable from the **Gigabit port 1** Advanced Encoder to a network router or switch.

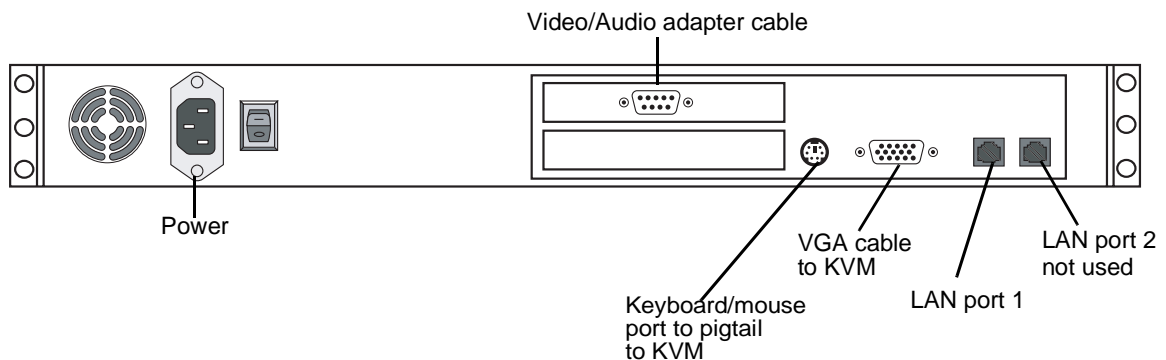
Live monitor encoder instructions

The NewsBrowse live monitor encoder converts an audio/video input into network streaming media. The NewsBrowse web application is configured to create pages that point to this streaming media feed. This device accepts audio/video feeds and connects directly to the Client Network. The steaming video is a real-time conversion of the feed being received by a single-channel encoder.

A live monitor encoder is an optional component; it may be absent if there is no need for real-time monitoring, or multiple live monitor encoders may be present to stream different video feeds.

Platform Specifications:

- Pentium 3 1Ghz or better (1 or 2 CPU)
- 256 MB RAM
- CD-ROM Drive
- Minimum 20GB Program Drive
- Windows 2000 Workstation (SP3)
- 100Tx LAN (x2)
- Osprey 220 Streaming Media Encoder.



Cable as illustrated and as follows:

- Connect an Ethernet cable from the **LAN1** port on the live monitor encoder to a network router or switch.
- Connect Analog Audio and Video harness to the source that corresponds to the desired feed for web-based monitoring.

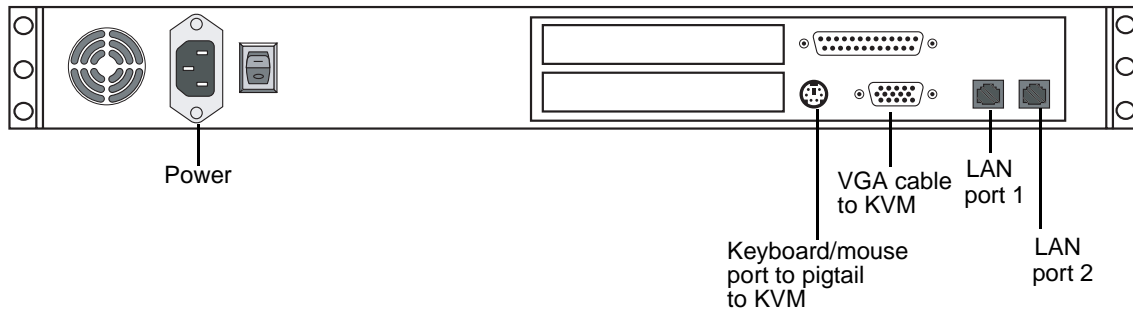
Router Gateway instructions

The NewsBrowse Router Gateway is the host platform for the Router Gateway Service. The NewsBrowse system supports SMS7000 router control and Encore router control via SMS7000 Native Protocol over Ethernet. This device is driven from the Ingest Scheduling process on the NewsBrowse server. The Router Gateway lets NewsBrowse schedule and control ingest services by communicating with your existing router, allowing you to have more ingest feeds than NewsBrowse channels. The Router Gateway provides the bridge between the NewsBrowse Network environment and the Audio/Video Router Control environment.

The Router Gateway is an optional component of the NewsBrowse system. Systems without a stand-alone Router Gateway platform can install the Router Gateway software components on another NewsBrowse system platform, such as the MDI server.

Platform Specifications:

- Pentium 3 1Ghz or better (1 or 2 CPU)
- 256 MB RAM
- CD-ROM Drive
- Minimum 20GB Program Drive
- Windows 2000 Workstation (SP3)
- .NET Framework 1.1
- Internet Explorer 6 (SP1)
- 100Tx LAN (x2)



Cable as illustrated and as follows:

- Connect an Ethernet cable from the LAN1 port on the Router Control Gateway to the NewsBrowse network switch.
- Connect an Ethernet cable from the LAN2 port on the Router Gateway to the network where the Router Control system can be accessed.

Install NewsBrowse software

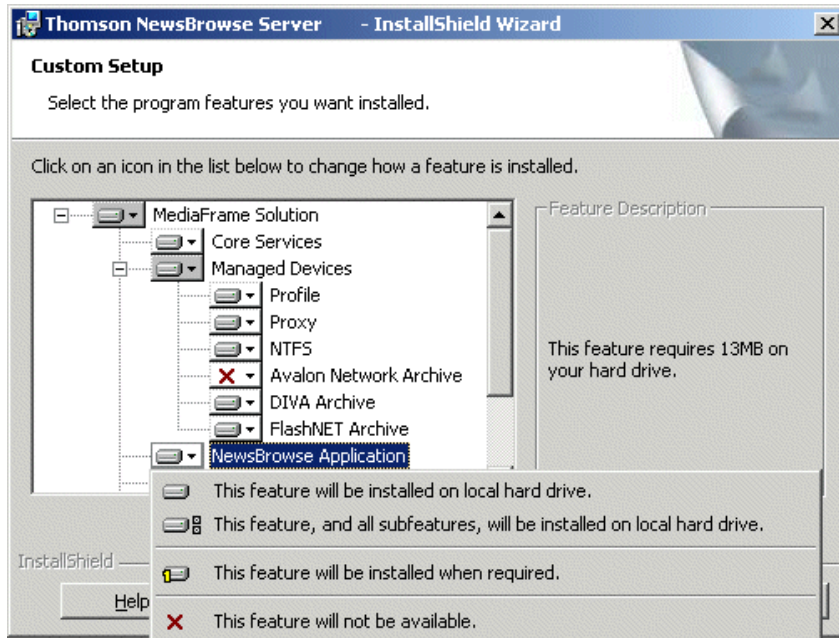
Refer to the installation programs listed below for NewsBrowse software installation. Also check the *NewsBrowse Release Notes* for the version of software you are installing for any version-specific instructions.

The following installation programs are on the NewsBrowse Application CD:

- ...*SingleChannelEncoder*\Setup.exe — Use this setup file to install NewsBrowse software on a single-channel encoder
- ...*AdvancedEncoder*\Setup.exe — Use this setup file to install NewsBrowse software on an Advanced encoder
- ...*Server*\Setup.exe — Use this setup file to install NewsBrowse software on the NewsBrowse server as well as other NewsBrowse machines. The following table indicates the machines on which the software components are typically installed. You might install components differently, depending on the design of your particular NewsBrowse system.

Install Components	NB Server	MDI server	Router Gateway
Core Services	✓		
Managed Devices: Profile		✓	
Proxy		✓	
NTFS	✓		
Avalon Network Archive		✓	
DIVArchive		✓	
FlashNet Archive		✓	
NewsBrowse Application	✓		
Ingest	✓		
Router Gateway			✓
Configure Tool	✓		
Conversion Utility	✓		

To install the software components listed in the preceding table, run the NewsBrowse server install program and when you arrive at the Custom Setup screen, do the following:



If a component that you want to install displays a red X, click the component and select **This feature will be installed on local hard drive.**

If a component that you do not want to install does not display a red X, click the component and select **This feature will not be available.**

Install Profile client software before installing the Profile MDI.

Configuring the NewsBrowse System

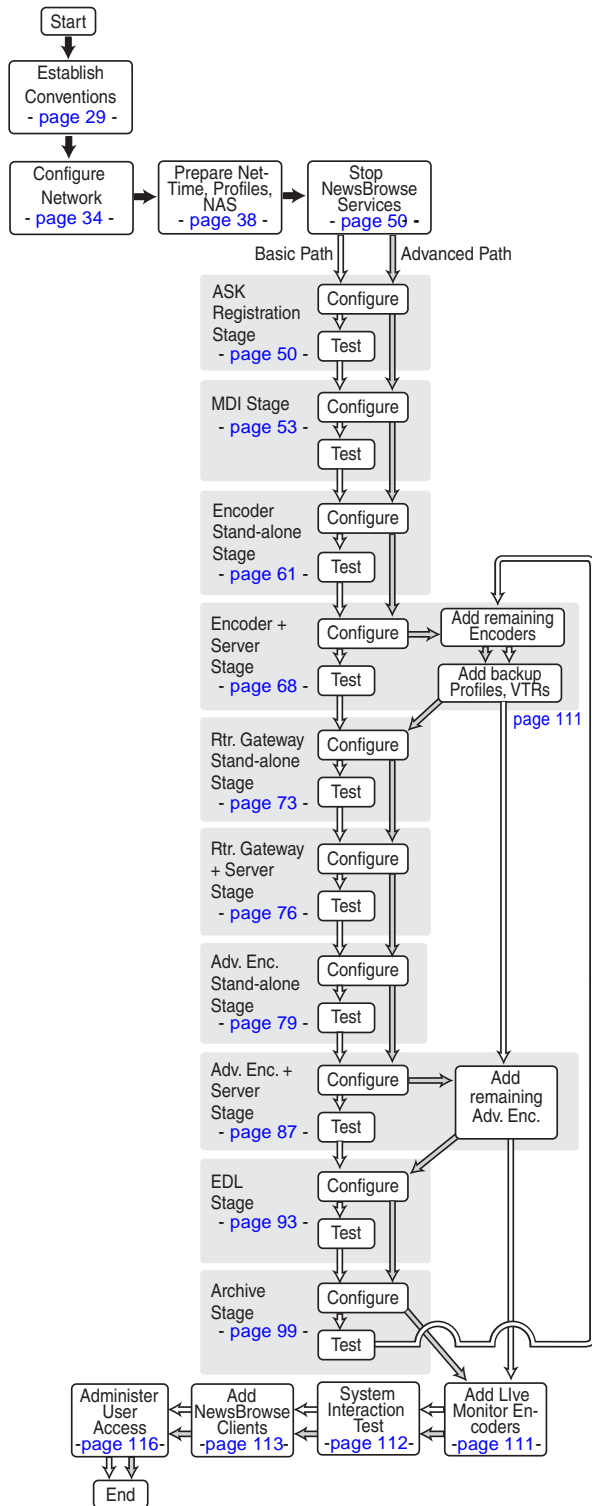
You can use the topics in this chapter in the following ways:

- **Initial configuration** — After your NewsBrowse system components are rack mounted, cabled, and the physical installation process is complete, continue with the configuration instructions in this chapter to create a working system. You can follow the **Basic** path or the **Advanced** path through the core configuration stages, as explained “[Configuration overview](#)” on page 28.
- **Customizing** — After the system is functioning, you can go back to the configuration pages and modify the settings documented in this manual as **Advanced** ✓ to customize the system to fit any special workflow requirements.

The topics in this chapter include the following:

- “[Configuration overview](#)” on page 28
- “[Establish conventions](#)” on page 29
- “[Configure network: Two tier](#)” on page 34
- “[Prepare for core configuration stages](#)” on page 38
- “[Stop NewsBrowse services](#)” on page 49
- “[ASK registration stage](#)” on page 50
- “[Encoder stand-alone stage](#)” on page 61
- “[Managed Device Interface \(MDI\) stage](#)” on page 53
- “[Encoder + Server stage](#)” on page 68
- “[Router Gateway stand-alone stage](#)” on page 73
- “[Router Gateway + Server stage](#)” on page 76
- “[Advanced encoder stand-alone stage](#)” on page 79
- “[Advanced encoder + Server stage](#)” on page 87
- “[EDL Export, Save, Conform stage](#)” on page 93
- “[Archive stage](#)” on page 99
- “[Deploy remaining machines for full system](#)” on page 111
- “[Add live monitor encoders](#)” on page 111
- “[Test system interactions with multiple machines](#)” on page 112
- “[Add NewsBrowse Clients](#)” on page 113
- “[Administering NewsBrowse user access](#)” on page 116
- “[Adding custom fields](#)” on page 119
- “[Testing NewsBrowse client operations](#)” on page 121

Configuration overview



This flowchart illustrates the major tasks required for configuring a NewsBrowse system. Core configuration tasks are broken down into stages. You can work through the configuration stages in different ways, as follows:

If you are new to the NewsBrowse system, follow the **Basic** path. At each configuration page, configure only those settings documented in this manual as **Basic** ✓. This path allows you to learn the system and resolve configuration problems in stages, with a minimal number of configuration variables and machines added to the system at each stage. Then, after you have gained the understanding to make each stage of the system work properly, configure the remainder of the system and add all machines.

If you are experienced with the NewsBrowse system and you want the fastest possible configuration, follow the **Advanced** path and configure the entire system in one pass, adding all machines at each stage. At each configuration page, you can configure settings documented as **Advanced** ✓ as well as those documented as **Basic** ✓.

You can also choose a combination of **Basic** and **Advanced** paths to suit your level of understanding and the design of the particular NewsBrowse system you are configuring.

Refer to the topics in the remainder of this chapter for detailed instructions on each task.

Establish conventions

The following conventions are recommended to make your NewsBrowse system easier to work on and understand. Refer to these sections as necessary as you configure your system.

Machine naming convention

Choose a root name (based on the site, etc.) and use the following convention for naming machines.

Machine type	Name
NewsBrowse server	<i>root-nb-svr</i>
Network Attached Storage (NAS)	<i>root-nb-nas-1...n</i>
Managed Device Interface (MDI) Server	<i>root-nb-mdi</i>
Single-channel encoder	<i>root-nb-enc-1...n</i>
Advanced Encoder	<i>root-nb-adv-1...n</i>
Live monitor encoder	<i>root-nb-live-1...n</i>
Router Gateway	<i>root-nb-rtr</i>
Stand-alone Profile Media Server	<i>pvs-1...n</i>
Open SAN Profile Media Server	<i>mpvs-1...n</i>

Channel naming convention

In general, channel counting begins at one (not zero), with the first channel assigned to the first channel in the first Profile in the system. Keep channel names short, as they need to fit across the Ingest Schedule pages. Here's an example for an Open SAN system using MPVS1104:

NewsBrowse Encoder	Channel Name	Profile Channel
<i>root-nb-enc-1</i>	Ch1	Profile 1, VTR 1
<i>root-nb-enc-2</i>	Ch2	Profile 1, VTR 2
<i>root-nb-enc-3</i>	Ch3	Profile 1, VTR 3
<i>root-nb-enc-4</i>	Ch4	Profile 1, VTR 4
<i>root-nb-enc-5</i>	Ch5	Profile 2, VTR 1
<i>root-nb-enc-6</i>	Ch6	Profile 2, VTR 2
...

With this naming convention, if there is a problem, you can use the channel number to quickly determine which encoder and which Profile are affected.

MDI naming convention

You should use a consistent naming convention for the Managed Device Interfaces (MDIs) in the system. The NewsBrowse system manages a device through an MDI. Each type of device has its own MDI. The MDI software component usually is not hosted on the same machine that it manages. The following table illustrates a suggested convention.

MDI type	MDI name(s)	Comments
Proxy	PROXY1	There is but one Proxy MDI in the system. It manages the storage locations on all the NAS machines.
Profile	SAN1	Manages the one designated Profile on an Open SAN.
	PROFILE1, PROFILE2, PROFILE3,...	Manages a stand-alone Profile system.
NTFS	NTFS1	There is but one NTFS MDI in the system. It manages NTFS storage on one or more machines—typically the server and the NAS machines.
Avalon, FlashNet, DIVA	ARCHIVE1	Manages the archive device.

NOTE: *If you are exporting NewsBrowse EDLs to NewsEdit, the NewsEdit workstation must be able to resolve the Profile MDI name (present in the EDL) to the IP address of the Profile XP system to which the MDI connects. You can do this by either (a) mapping the MDI name to the Profile IP address in the NewsEdit workstation's host table, or (b) by naming the Profile MDI name the same as the Profile host name.*

Services naming convention

Similar to MDIs, you need to have a naming convention for the Ingest Control service and the Proxy Transfer service. These services run on encoders, so the naming convention should help you differentiate between the service itself and the host (table) name of the encoder on which it runs. The following table illustrates a suggested convention.

Service type	Service name(s)	Comments
Ingest Control	INGEST-CH1, INGEST-CH2, INGEST-CH3	The Ingest Control service runs on single-channel encoders. Enumerate in parallel with the host (table) names of the encoders.
Proxy Transfer	ADV1, ADV2, ADV3	For Proxy Transfer service running on Advanced encoders, use this naming convention. Enumerate in parallel with the host (table) names of the encoders.

Ports and services convention

NewsBrowse software components are distributed among the machines that make up the NewsBrowse system. These software components run as Windows services, which communicate over designated ports. As you configure the NewsBrowse system, you must correctly designate port numbers for NewsBrowse software components (services), such that the port numbers and components match between configuration pages.

Do not create your own convention for port usage. Designate ports as specified in the following table:

Services	Port	Comments
Core Services		
Thomson Ask	9010	New service for version 2.0
Thomson Metadata	9014	Not visible on a configuration page
Thomson Resolver	9016	Not visible on a configuration page
Thomson Rules Wizard	9018	Not visible on a configuration page
Thomson Ingest Scheduler	8055	Starting range for first remote control. Not visible on a configuration page.
Ingest Services		
Thomson Ingest Control (single-channel encoder)	9330	Version 1.5 default port number was 8045.
Transfer Services		
Thomson Proxy Transfer (Advanced encoder)	9230	Starting range for first control. Version 1.5 default port number was 8070.
Managed Device Interface (MDI) Services		
Thomson Proxy MDI	9110	—
Thomson Profile MDI ^a	9100	—
Thomson Avalon Archive MDI	9120	
Thomson FlashNet MDI	9124	New service for version 2.7
Thomson DIVA MDI	9122	New service for version 2.7
Thomson NTFS MDI	9115	
Miscellaneous Services		
Thomson Router Gateway	8065	—

^a. The Profile MDI Service manages a number of host processes, one for each Profile that is being managed. These host processes require ports 9130 - 9139. Stopping/starting the Profile MDI Service stops/starts all of the host processes. The version 1.5 default port number for these processes was 8022, with no range.

These services are distributed on different machines in the system. They would not normally run on any one machine, as explained in [“Accessing NewsBrowse services” on page 46](#).

The NewsBrowse system also depends upon Microsoft Internet Information Services (IIS) and SQL services.

Topics later in this manual provide specific instructions for entering port numbers on each configuration page.

Site-specific configuration tables

Create tables similar to the examples given here as required by the site’s specific NewsBrowse system. Use conventions as described earlier in this chapter. The values in **bold** text in these example tables are pre-defined—you should not change them as you might fill in your own site-specific table. Values with *italic* text are an example of the entry you might make in your own table. Cells with a “NA” have no applicable value.

In these examples the system root used for naming is “iron”. Replace “iron” with a root name appropriate to the site.

	Machine types	Machine names The host (table) name you give each machine	MDI types The type of MDI required for each machine	MDI name The name you give each MDI	MDI host The machine that hosts the MDI(s)	Ports The port used by the MDI	Other info
1.	Open SAN Profile Media Server	<i>mpvs-1</i>	Profile MDI	<i>SAN1</i> ^a	\\iron-nb-mdi	9100	Process port 9130 ^b
2.		<i>mpvs-2</i>	NA				
3.		<i>mpvs-3</i>	NA				
4.		<i>mpvs-4</i>	NA				
5.	Stand-alone Profile Media Server	<i>pvs-1</i>	Profile MDI	<i>PROFILE1</i>			Process port 9131
6.		<i>pvs-2</i>	Profile MDI	<i>PROFILE2</i>			Process port 9132
7.	NAS (or other storage device for proxy assets)	<i>iron-nb-nas-1</i>	Proxy MDI ^c	<i>PROXY1</i>	\\iron-nb-mdi	9110	File system folder(s): \\iron-nb-nas-1\Media
8.		<i>iron-nb-nas-2</i>					\\iron-nb-nas-2\Media
9.		<i>iron-nb-nas-3</i>					\\iron-nb-nas-3\Media
10.	Avalon Archive	<hostname>-idm ^d	Avalon Archive MDI		\\iron-nb-mdi	9120	
11.	Machines with NTFS storage	<i>iron-nb-svr</i>	NTFS MDI ^e	<i>NTFS1</i>	<i>iron-nb-svr</i> ^f	9115	File system folder(s): \\iron-nb-svr\TempEDL
12.		<i>iron-nas-1</i>					\\iron-nas-1\EDLs \\iron-nas-1\Audio
13.		<i>iron-nas-2</i>					\\iron-nas-2\Audio

^a. Only one Profile per Open SAN has a MDI

^b. Processes use ports 9130 - 9139. Refer to “Ports and services convention” on page 31.

^c. A single instance of the Proxy MDI manages all the proxy storage machines.

^d. The host table must have an entry with “-idm” appended to the name of the archive device. Refer to “Configure Avalon Archive MDI” on page 105.

^e. A single instance of the NTFS MDI manages storage on multiple machines.

^f. The NTFS MDI must run on the NewsBrowse server.

The following table lists other NewsBrowse machines and services. For Transfer and Ingest services you assign a name associated with “Device Type”. This is similar to assigning MDI names. Refer to [“Configure Media Frame Core ASK: Register components” on page 51](#). These services always reside on the same machine that they manage.

	Machine types	Machine names The host (table) name you give each machine	Device types The “Device Type” service required on each machine	Service name The name you give each service, similar to MDI.	Ports The port used by the service	Other info
14.	NewsBrowse server	<i>iron-nb-svr</i>	NA	NA	NA	
15.	Single-channel encoder	<i>iron-nb-enc-1</i>	Ingest	<i>INGEST-CH1</i>	9330	Display Names: Enc. Chan. 1
16.		<i>iron-nb-enc-2</i>	Ingest	<i>INGEST-CH2</i>		Enc. Chan. 2
17.	MDI server	<i>iron-nb-mdi</i>	NA	NA	NA	
18.	Advanced encoder	<i>iron-nb-adv-1</i>	Transfer	<i>ADV1</i>	9110	
19.		<i>iron-nb-adv-2</i>	Transfer	<i>ADV2</i>		
20.	Live monitor encoder	<i>iron-nb-live-1</i>	NA	NA	NA	
21.		<i>iron-nb-live-1</i>	NA	NA	NA	
22.	Router Gateway	<i>iron-nb-rtr</i>	NA	NA	NA	

Configure network: Two tier

Configure a two tier network, as explained in the following topics. This is the recommended architecture for NewsBrowse version 2.0 and higher. Unless otherwise indicated, all information in this chapter refers to the two tier network. Also refer to [“Two tier system diagram” on page 10](#).

Systems upgrading from version 1.5 may retain the three tier network (which was required for version 1.5) as NewsBrowse 2.0 and higher supports both the three tier architecture and the two tier architecture. Refer to [“Three tier system diagram” on page 141](#). If you are upgrading from version 1.5 to version 2.0 or higher, refer to *NewsBrowse Release Notes* for three tier network configuration instructions.

Distribute host tables

Find host table files at *C:\WINNT\system32\drivers\etc*

All NewsBrowse devices share a common host table, which lists out the Production Network IP settings. For security purposes, the IP addresses should be non-routable (i.e. 192.168.xxx.xxx) and be part of the same subnets used by the Profile/Open SAN systems. The customer may request a particular subnet (routable or not) depending on the needs of the facility. The only client side IP address needed in the host table is for the client switch itself, which is useful for accessing the web management page from the NewsBrowse devices.

The following is an example of host table entries for the NewsBrowse system. Not shown are entries for Profile systems, UIMs, and other machines on the network. Refer to the documentation for these other machines for host table requirements.

```
#-----  
#General Host Table  
#-----  
  
#NewsBrowse server  
  
192.168.30.21      iron-nb-svr  
  
#NewsBrowse NAS  
  
192.168.30.71      iron-nb-nas-1  
192.168.30.72      iron-nb-nas-2  
  
#NewsBrowse Advanced encoders  
  
192.168.30.50      iron-nb-adv-1  
192.168.30.51      iron-nb-adv-2  
  
#NewsBrowse single-channel encoders  
  
192.168.30.26      nb-enc-1          #Open SAN Profile mpvs-1 vtr 01
```

```

192.168.30.27      nb-enc-2          #Open SAN Profile mpvs-1 vtr 02
192.168.30.28      nb-enc-3          #Open SAN Profile mpvs-1 vtr 03
192.168.30.29      nb-enc-4          #Open SAN Profile mpvs-1 vtr 04

#NewsBrowse MDI server

192.168.30.101     iron-nb-mdi

#NB Router Gateway

192.168.30.111     iron-nb-rtr

#The following Client LAN entries are included in this host table for
#reference only. Machines on client network use DNS lookup only.

#NewsBrowse live monitor encoder

10.16.37.91        iron-nb-live-1    #Client LAN
10.16.37.92        iron-nb-live-2    #Client LAN

#NewsBrowse Ethernet Switch

10.16.37.20        iron-nb-2950-client-1 #Client LAN
192.168.30.200     iron-nb-2950-prod-1

```

Host table tips:

- If you are exporting NewsBrowse EDLs to NewsEdit, the NewsEdit workstation must be able to resolve the Profile MDI name (present in the EDL) to the IP address of the Profile XP system to which the MDI connects. You can do this by either (a) mapping the MDI name to the Profile IP address in the NewsEdit workstation's host table, or (b) by naming the Profile MDI name the same as the Profile host name. Refer to [“MDI naming convention” on page 30](#).
- The NAS and NewsBrowse server IP address need to be resolved using the Client side IP address via DNS lookup, not the host table.
- If the server has a canonical name, the host table for any machine that runs MDIs that are subscribed to by the server must match case for the entire canonical name. E.g., if the server's canonical name is “NB-SERVER1.mycorp.net”, then the host table entry in the MDI server(s) must match; if the entry is “NB-SERVER1.MYCORP.NET”, then it will not work. Pinging will not show the problem. The problem doesn't show up until the MDIs attempt to notify the server.

Configure network settings on Production network machines

Use the instructions in this section to configure Production network machines, which are all those of the following types:

- Single-channel encoder
- Advanced Encoder

- Router Gateway

From the factory, the machines are set with static IP and as members of “WORKGROUP”. Change the IP addresses according to the host table. Use standard Windows procedures.

Configure HAFT platform

To configure the HAFT platform for the NewsBrowse networks, do the following:

1. On either CoServer 1 or CoServer 2, configure the virtual server’s network settings as follows:
 - a. Configure PCI-2 A for the Production network. This is the CoServer Management port.
 - b. Configure PCI-2 B for the Production network.
 - c. Configure PCI-1 A for the Client network.
2. Copy the host table onto the virtual server.

Do not modify the IP addresses of the CoServer Link ports. They are used only for communication between the servers.

Configure network settings on Client network machines

Use the instructions in this section to configure Client network machines, which include the following types:

- NewsBrowse server
- Managed Device Interface (MDI) Server
- Live monitor encoder

NAS machines are also on the Client network. You configure NAS machines in [“Prepare NAS - Windows Fastora” on page 40](#).

The DNS will provide the IP lookup for the NewsBrowse devices attached on the client Domain. You must use static IP addresses because DHCP has not been qualified.

You will need the following information from the customer's IT department:

- Verify that the subnet mask for the NewsBrowse machines should be 255.255.255.0.
- The IP address for the NewsBrowse server
- The IP address for each live monitor encoder
- The IP address for each NAS
- Extra IP addresses for future growth
- The IP address for the DNS server and alternate
- The name of the Domain connected on the client side (i.e. *mycorp.com*)
- The IP address for the WINS server if applicable

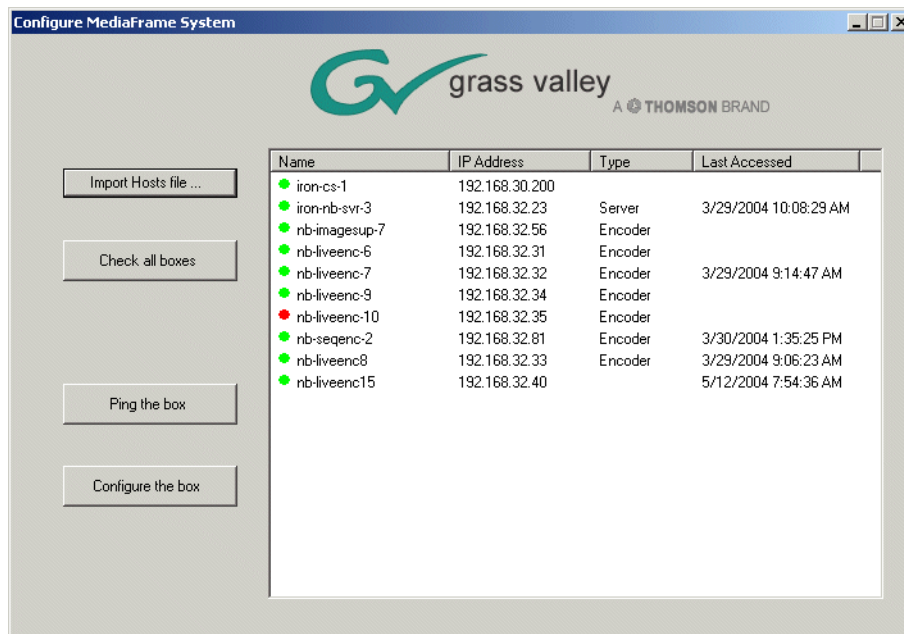
In addition, the customer IT department must add these computers to their Domain.

Proceed with Client network machines as follows. Use standard Windows procedures:

1. Name computer and add computer to Domain
2. Set IP address for each port, DNS servers
3. Set DNS settings

Test: Verify two tier network settings

Verify that you have basic connectivity in both directions along with the correct name resolution. Run a test from the NewsBrowse configuration tool. Open the configuration tool on the NewsBrowse server at **Start | Thomson | NewsBrowse | Utilities | Configuration Tool**.



Prepare for core configuration stages

Do the following tasks in preparation for the configuration of core system functionality.

Prepare NetTime

NetTime keeps the system clocks on NewsBrowse machines in sync. Since the Profile Media Servers and single-channel encoders use the house timecode feeds, the other machines need to be kept in sync as well. On systems that control ingest and have single-channel encoders, the primary purpose of NetTime is to keep the Ingest Scheduler, which runs on the NewsBrowse server, and the NewsBrowse client machines synchronized to house time. On systems that do not control ingest, NetTime is still useful to keep clocks synchronized so that system logs can be correlated.

The following procedure uses a single-channel encoder as the Adrienne Absolute Time Server. If your system does not control ingest and has no single-channel encoders, you can use any machine as the Adrienne Absolute Time Server.

The single-channel encoder runs the Adrienne Absolute Time Server. NetTime clients on the production network reference the Adrienne Absolute Time Server. A NetTime server runs on the NewsBrowse server, which rebroadcasts the time to the client network. NetTime clients on the client network reference the NetTime server.

Refer to “[NetTime system](#)” on page 11 for a diagram of the NetTime system.

Set up NetTime with the following procedures:

- “[Prepare NetTime servers](#)” on page 38
- “[Prepare NetTime clients](#)” on page 39

Prepare NetTime servers

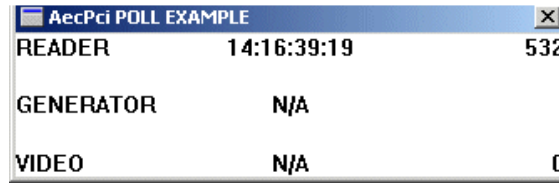
You use one single-channel encoder as the primary Adrienne Absolute Time Server, and another single-channel encoder as the secondary (redundant) Adrienne Absolute Time Server. A LTC connection to house timecode is required for single-channel encoders functioning as Adrienne Absolute Time Servers.

NOTE: Make sure that the Thomson Ingest Control service is off before starting this procedure. If the service is on and you run AecPciPoll.exe, the single-channel encoder locks up.

To prepare a single-channel encoder as a Adrienne Absolute Time Server, do the following:

1. On the single-channel encoder, run the following:

```
C:\AecPciPoll.exe
```



AecPci POLL EXAMPLE		
READER	14:16:39:19	532
GENERATOR	N/A	
VIDEO	N/A	0

This verifies that the Adrienne card is properly installed and the house timecode is valid.

2. Run `C:\Load Service.bat` and in Task Manager, verify that `NtPciClk.exe` is running.
3. Restart the encoder and verify that `NtPciClk.exe` restarted automatically.
4. Open `C:\ATCSI0.exe` and click **Yes** to install.
5. Restart the encoder and verify that the Absolute Time Server icon appears in the system tray.
6. The encoder is now functioning as the primary Adrienne Absolute Time Server. Repeat this procedure on a second single-channel encoder, to make it the secondary Adrienne Absolute Time Server.

Prepare NetTime clients

Before you use a PC to run the NewsBrowse client application, it must be prepared as a NetTime client. If you are following the basic configuration path, you must at a minimum prepare the NewsBrowse server as a NetTime client, as it is temporarily used as a NewsBrowse client in [“Set up NewsBrowse client for configuration stage tests” on page 71](#). Then, at the end of the basic configuration path, you can prepare NetTime on your NewsBrowse client PCs. You can also optionally prepare encoders and other NewsBrowse machines as NetTime clients, in case you want to use them to run the NewsBrowse application for test purposes or to keep the PC clock in sync with the rest of the system for the log files.

Some clients need special configuration to ensure time synchronization throughout the NewsBrowse system. Since your single-channel encoder Adrienne Absolute Time Server is on the Production Network, only NetTime clients on the Production Network have access. You must provide access for the external (Client Network) NetTime clients as well. To do this, you configure a NetTime client machine (in this case, the NewsBrowse server) which has access to both Production and Client Networks to rebroadcast the time sync to external networks. NetTime clients on external networks can then look to the NewsBrowse server as their NetTime server. You can optionally also configure the MDI server to rebroadcast the time sync, so it can back up the NewsBrowse server should there be a problem.

NOTE: Do not install NetTime client on a Profile XP system.

To prepare a NetTime client, do the following:

1. Open the following folder:
`C:\Time Sync Software\Client`
2. Open `NetTime-2b6.exe` and click **Yes** to install. Choose the defaults, including

configure as service.

3. Set Net Time options as follows:
 - a. Enter the host name for the primary and secondary server according to the following table:

NetTime Client	Primary Server	Secondary Server
A Production Network Client	First Encoder	Second Encoder
NewsBrowse server	First Encoder	Second Encoder
External (Client Network) Client	NewsBrowse server	MDI Server (optional)

- b. Select the **RFC868(TCP)** protocol for both servers
 - c. For the NewsBrowse server, select **Allow other computers to sync to this computer.**
 - d. Leave other fields at the defaults and click **Okay.**
4. The PC clock should automatically update to match the server. If not, check network connectivity and review install steps. All machines must be set for the same time zone to function properly.

Prepare Profile Media Servers

On each Profile Media Server that is to interact with the NewsBrowse system, check the following configurations and modify settings as necessary.

1. Set up as a NetTime client. Refer to preceding procedures.
2. Click **Start | Run**, enter *regedit* and press **Enter**. The Registry Editor opens.
3. In the Registry Editor open the following key:
HKEY_LOCAL_MACHINE/SOFTWARE/Tektronix/Profile/ShuttleAtMode
Set the key to **TRUE**.
4. On the Profile XP, start **PortServer**.
5. Add a shortcut to PortServer to the startup folder. This ensures that PortServer always runs on the Profile XP, as it is required for NewsBrowse operation.
6. Verify that the following account has been added to the Profile system:
 - username: nbadmin
 - password: *****

Prepare NAS - Windows Fastora

For the Linux version, refer to [“Prepare NAS - Linux Fastora” on page 145](#).

NOTE: Procure IP addresses from the local network administrator prior to configuring the NAS unit.

When you configure the Windows Fastora NAS for the NewsBrowse networks, you can make network settings in the following ways:

- **Use the remote Windows desktop**, as explained in step 4 of the following procedure, and then use standard Windows procedures to make all settings. If you do this, read the subsequent steps in the procedure to identify the required settings.
- **Use the Fastora configuration pages** (Web based), as documented in the following procedure, and make settings as instructed.

NOTE: If you plan to change the name of the NAS unit and you intend to use the underscore character, such as in `root_nb_nas_n`, you must do so using standard Windows procedures via the remote desktop. The Fastora configuration page does not allow the underscore character.

To configure the Windows Fastora NAS for the NewsBrowse networks, do the following:

1. From any Production network machine, enable the network to recognize the NAS by adding an IP address within the subnet range of 192.168.50.0.
2. For the first NAS machine (`nb-nas-1`), open the NAS configuration software in Internet Explorer by entering the following in the browser address bar:

`https://192.168.50.31:8098`

NOTE: Notice the *s* in the `https`: address. Also, make sure your browser allows cookies and JavaScript (or JIT).

Subsequent NAS machines (`nb-nas-2`, `nb-nas-3`) have IP addresses incremented accordingly (192.168.50.32, 192.168.50.33).

t Fastora IP address is 192.168.1.11.

3. Log on as follows:

Username: administrator

Password: triton

The Fastora Welcome page opens.



4. Do one of the following:

- To use the remote Windows desktop rather than the Fastora configuration pages, click **Maintenance | Remote Desktop**. This feature prompts you to again log on to the NAS unit, and then allows you to access the Windows desktop. Make settings with standard Windows procedures.
 - To use the Fastora configuration pages, continue with this procedure.
5. Click **Set Server Name** and, if necessary, change the name, DNS suffix, and Domain/Workgroup setting. Work with IT at the customer site to add the NAS to a Domain.

If you make a change, click **OK**.

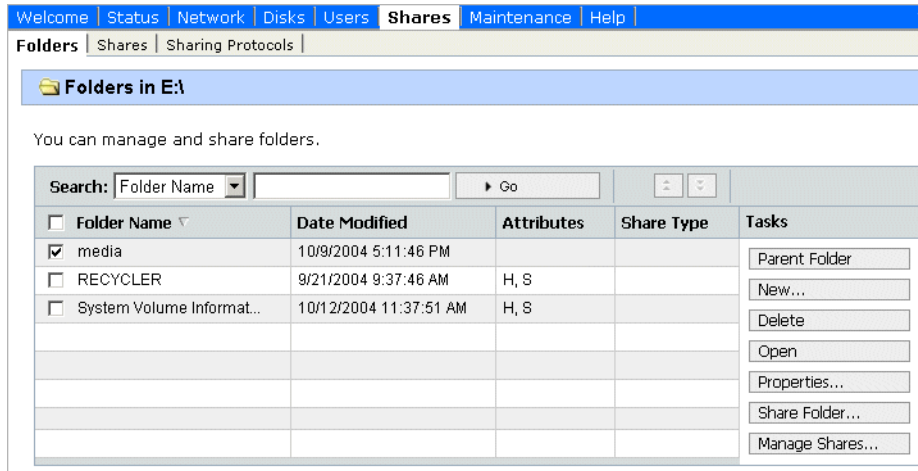
NOTE: After making changes on a configuration page, you must click **OK** or else your changes are lost.

6. Click **Set Administrator Password**.

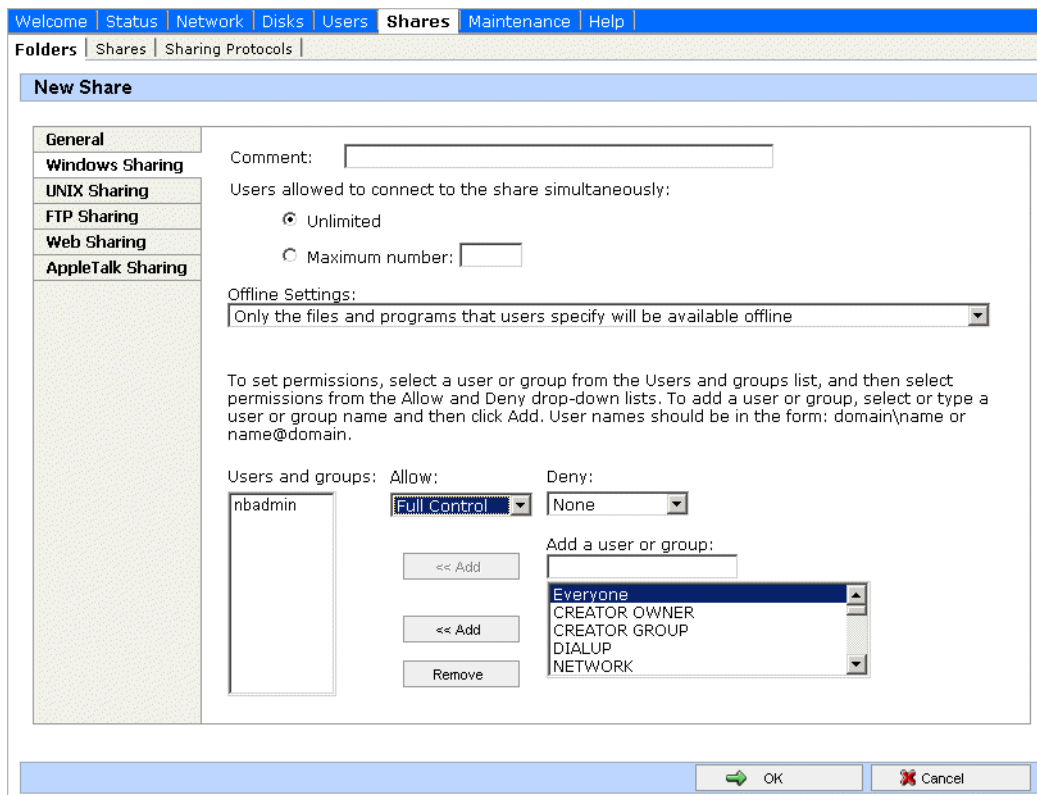
The screenshot shows a configuration window titled "Administrator Account". The window has a title bar with tabs: "Take a Tour", "Set Server Name", "Set Administrator Password", "Set Default Page", and "Microsoft Communities". The "Set Administrator Password" tab is active. Below the title bar, there are four text input fields: "User name:" (containing "administrator"), "Current password:", "New password:", and "Confirm new password:". At the bottom right of the window are "OK" and "Cancel" buttons.

Set a password according to the customer site requirements. Click **OK** to save settings.

7. Click **Network | Interfaces**. If required by the customer site network, change IP, DNS, and WINS settings. A recommended configuration is to use the Gigabit port for the Client network, leave LAN Port 1 at the default static IP for system maintenance access, and use LAN Port 2 for the Production network.
8. Click **Administration Web Site**. If required by the customer site security policies, change the IP addresses and/or ports for encrypted and non-encrypted access used to access the administration Web site. If you make a change, click **OK** and then reconnect via the new port and/or IP address.
9. Click **Shares | Folders**. Share the media directory as follows:
 - a. Select **New Volume (E:)**
 - b. Click **Manage Folders**.
 - c. Select **media**.



- d. Click **Share Folder**.
- e. Enter the following:
Share name: media
- f. Click **Windows Sharing**. After a pause, the Windows Sharing tab opens.



- g. User privileges for the media folder should be as follows:

Everyone — Read only access

nbadmin — Full Control

h. Click **OK**.

10. Close the NAS configuration pages.

Prepare NAS - Serial ATA network platform

To configure the Serial ATA network (a.k.a. Ciprico 1700 or DiMedia) NAS for the NewsBrowse networks, check the following configurations and modify settings as necessary.

NOTE: Procure IP addresses from the local network administrator prior to configuring the NAS unit. Access to configuration pages is dependent upon valid IP addresses.

1. From any Production network machine, enable the network to recognize the NAS by adding an IP address within the subnet range of 192.168.50.0.
2. For the first NAS machine (*nb-nas-1*), open the NAS configuration software in Internet Explorer by entering the following in the browser address bar:

https://192.168.50.31:9890

NOTE: Notice the *s* in the *https*: address. Also, make sure your browser allows cookies and JavaScript (or JIT).

Subsequent NAS machines (*nb-nas-2*, *nb-nas-3*) have IP addresses incremented accordingly (192.168.50.32, 192.168.50.33)

The NAS Administration Tool window opens at the Welcome page.

3. Enter the password. The default password is *triton*. The Status page opens.
4. In the tree view click **Network | Network Ports**. The Configure Network Ports page opens.
5. Configure network ports as follows:
 - a. **Port 0 Client Network** - Set the IP address and subnet mask for the Client network as specified by the local network administrator.

NOTE: The DiMeda NAS requires a static IP address for the client port. Set this up with the local network administrator.

- b. **Port 1 Production Network** - Set the IP address for the production network as specified by the local network administrator, then set the subnet mask to 255.255.255.0.

NOTE: For detailed information about configuration options, click the Help icon (?) in the upper right corner of each window.

- c. Click **Save**, then select the **Restart** option to restart. Reboot takes 2-10 minutes. Do not power-down the enclosure during reboot.

6. After the NAS reboots, access the NAS configuration software as described earlier in step 2 and step 3, except this time, enter the following in the browser address bar:
`https://<Client IP Address>:9890`
The Status page appears.
7. In the Status page tree view, click **Network | Names/IPs**. The Names and IPs page opens.
8. Set the following:
 - **Domain name** - Enter the Client network Domain name.
 - **Gateway** - Enter the IP address for the Client network gateway. Consult the network administrator.
 - **Node Name** - For example: (*root-nb-nas-n*)
9. In the tree view click **System | System Administration | Date/Time**. The Date/Time page opens.
10. Select the correct time zone, date, and time.
11. Click **Save**, then select the **Restart** option to restart.
Reboot takes 2-10 minutes. Do not power-down the enclosure during reboot.
12. After the NAS reboots, access the NAS configuration software again as described in step 6. The Status page appears.
13. In the Status page tree view, click **Storage | Shares | Create** and then click the **Next** button. The CIFS Share page opens.
14. Specify CIFS options as follows:
 - a. Enter *Media* as the share name.
 - b. Set user privileges. Select all of the following options:
 - Writeable
 - Public
 - Browseable
 - Available(Do not select Case Sensitive)
 - c. Click **Save**.
15. Close the NAS Administration Tool.

Verify NAS access

Verify NAS access from production network machines, which are machines of the following types:

- NewsBrowse server
- Single-channel encoder
- Advanced encoder

To verify access, from each production network machine do the following:

1. Open Windows Explorer and navigate to the media directory on the NAS. You can do this with the following path:

\\root-nb-nas-1\Media

2. Verify basic read/write capabilities by creating, modifying, and deleting a simple text file.

To verify access from client network machines, choose a machine on the Client network that can represent a NewsBrowse client PC and that is convenient for testing. From this machine do the following:

1. Open Windows Explorer and navigate to the media directory on the NAS. You can do this with the following path:

\\root-nb-nas-1\Media

2. Verify that NewsBrowse client PCs will have read only rights.

About Windows Domains and the nbadmin account

All NewsBrowse NAS machines require that an *nbadmin* account with a password of ***** has permission to the folder on the NAS that the encoders write to, and that the web service running on the NewsBrowse server reads from.

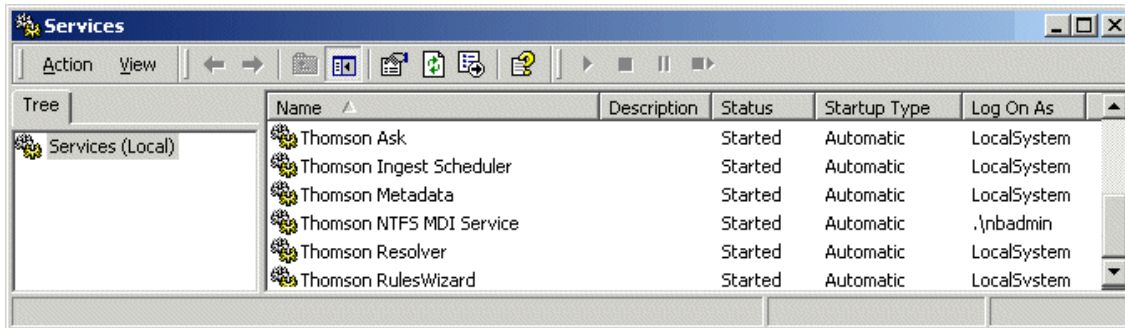
From a Windows networking perspective, when a user account is defined on a local computer rather than a Domain Controller, the account is a “local” account, whose complete name is <computer name>\<username>, rather than <domain>\<username>. For example, with an encoder named *Encoder1*, a NewsBrowse server named *Server1*, and a NAS named *NAS1*, there are three separate local accounts: *Encoder1\nbadmin*, *Server1\nbadmin*, and *NAS1\nbadmin*.

The Windows network automatically maps a local account from one computer onto the local account of another computer—as long as both the account name and the password are identical. To enable this mapping to occur, the Windows Domain Controller “synchronizes” the local accounts on computers *at the time they join the Domain*. Therefore, if the *nbadmin* account is added to the NAS machine *after* the Windows NAS has joined the Windows Domain, this synchronization does not occur. This should not be a problem on factory-prepared NewsBrowse machines, as they come with the *nbadmin* account pre-configured. However, if the proper sequence is not followed and the problem does occur, the workaround is to remove the NAS from the Windows Domain and then re-add it immediately thereafter.

Accessing NewsBrowse services

NewsBrowse software components are distributed among the machines that make up the NewsBrowse system. These software components run as Windows services. A NewsBrowse machine has the services that correspond to the NewsBrowse software components it hosts.

When you change the configuration for a particular software component through the NewsBrowse configuration pages, you must restart that software component’s NewsBrowse service to put the changes into effect. Click **Start | Settings | Control Panel | Administrative Tools | Services** to access the services. All NewsBrowse service names start with “Thomson...”, so they group together in the services list.



Refer to “Ports and services convention” on page 31 for a list of NewsBrowse services.

Accessing NewsBrowse system configuration pages

Use Internet Explorer to browse to port 280 of a NewsBrowse machine to access its configuration pages. You must have administrator permissions on the NewsBrowse machine. For example, to log on to the configuration pages on the NewsBrowse server with administrator permissions, use the following:

Username: `root-nb-svr\nbadmin`

Password: `*****`

The settings you find on a particular computer’s configuration pages depend on the NewsBrowse software installed on the computer. For example, if your MDI component are hosted on a single-channel encoder, you find the Profile Managed Device and Proxy Managed Device configuration settings at port 280 of that single-channel encoder. However, if your MDI component are hosted on a dedicated MDI server, you find the Profile Managed Device and Proxy Managed Device configuration settings at port 280 of the MDI server machine.

You can access a NewsBrowse computer’s configuration pages as follows:

- From the local computer, use the following URL:
`http://localhost:280`
- From the NewsBrowse server, you can also open the NewsBrowse launch page and the click the **Configuration** link. To open the NewsBrowse launch page, use the following URL:

`http://localhost/nbui`

The NewsBrowse launch page resides on the NewsBrowse server only.

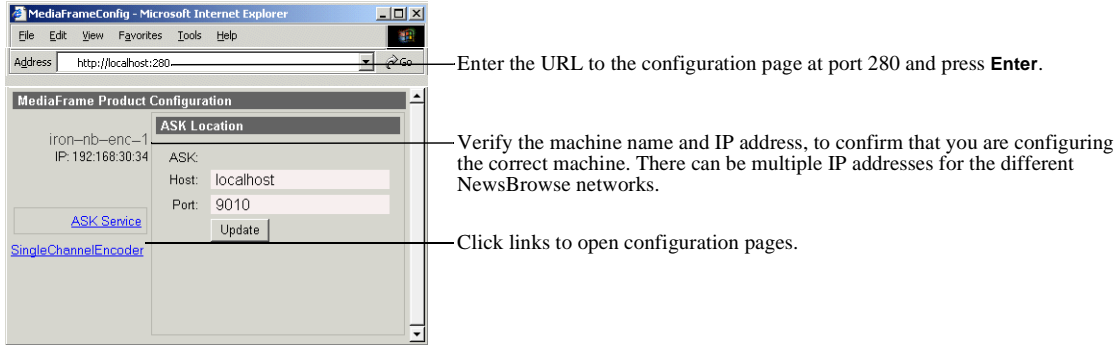
- From a network-connected computer, substitute *localhost* in the URL with the computer’s network name. For example, to access the configuration pages or the NewsBrowse launch page on a NewsBrowse server named *iron-nb-svr*, use the following URLs:

`http://iron-nb-svr:280`

`http://iron-nb-svr/nbui`

You must have network access to open configuration pages. With either a two tier or a three tier network architecture, you can access all NewsBrowse devices from the NewsBrowse server. However, devices on the Client Network, such as a NewsBrowse client PC, do not have access to all NewsBrowse devices. From a NewsBrowse client PC you cannot access devices that are on the Production network only, such as single-channel encoders.

To access NewsBrowse configuration pages, do the following:



Stop NewsBrowse services

Before beginning your initial core configuration stages, you must stop all NewsBrowse services. This prevents the creation of corrupt database records and other errors that result from a partially configured system.

Go to each NewsBrowse machine and turn off all “Thomson...” services, as described in [“Accessing NewsBrowse services” on page 46](#). Then, when you configure each stage, you start the appropriate services to put the settings into effect. This brings the system on-line in an orderly fashion that allows you to verify system interactions and identify configuration problems.

NOTE: It is especially important that the Rules Wizard is not running during configuration stage tests that create assets. When a test asset is created, the Rules Wizard can trigger the creation of various types of proxy media assets. This causes problems because the partially configured system is unable to handle the assets correctly.

ASK registration stage

The ASK software component runs on the NewsBrowse server. It is the central registry for all the software components of the NewsBrowse system. As software components carry out tasks in a functioning system they regularly refer to the ASK component to establish communication and exchange commands and data.

The NewsBrowse system configuration pages also refer to the ASK component to populate fields and lists and to validate the values you enter as you configure the system. For this reason you should configure the ASK component first.

To do the basic configuration and testing of the ASK software component, do the following:

1. [“Configure Media Frame Core ASK: Register components”](#) on page 51
2. [“Test: ASK registration stage”](#) on page 52
3. [“Checklist: ASK registration stage”](#) on page 52

Configure Media Frame Core ASK: Register components

Do not modify
Advanced
Basic

http://localhost:280 → MediaFrameCore → ASK

Open this configuration page locally on the NewsBrowse server machine.

All Domain names in the NewsBrowse system must be identical.

Port 9010 is required. See [“Ports and services convention” on page 31](#).

Saves changes. Changes are lost if you leave the configuration page without updating.

For the following settings, use the table below and refer to [“Site-specific configuration tables” on page 32](#). Add each MDI and “Device Type” service in the NewsBrowse system

Click to add an MDI.

Lists currently added MDIs.

Deletes the currently selected MDI.

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the ASK service on the NewsBrowse server.

When you add an MDI for this type of machine/device...	Select “Device Type”...	Enter “MDI Name”...	Enter “Host Name or IP”...	Enter “Port”...	Comments
Open SAN Profile ^a	Profile	As per convention. Refer to “MDI naming convention” on page 30 .	Host (table) name of the machine hosting the Profile MDIs. Typically the MDI server	9130 - 9139	These are process ports, as explained in “Ports and services convention” on page 31 . Assign numbers in an intentional sequence, so they are easy to match in “Configure Profile MDIs” on page 57 .
Stand-alone Profile	Profile				
NTFS storage on Windows machines	NTFS	NTFS1, as per convention.	NewsBrowse server host (table) name, as the server is the required NTFS MDI host.	Leave field blank. Correct port number is automatically entered on “Add MDI”. Refer to “Ports and services convention” on page 31 to verify.	
Single-channel encoder	Ingest	As per convention. Refer to “Services naming convention” on page 30 .	Single-channel encoder host (table) name		
Advanced encoder	Transfer		Advanced encoder host (table) name		
Proxy	Proxy	PROXY1, as per convention.	Host (table) name of the machine hosting the Proxy MDI. Typically the MDI server.		
Archive device	... Archive	ARCHIVE1, as per convention.	Host (table) name of the machine hosting the archive MDI		

^a Enter only one Profile per Open SAN. As per convention, name the MDI for the Open SAN, rather than for the Profile.

The ASK settings page registers MDIs and services with the ASK software component, which runs on the NewsBrowse server.

Test: ASK registration stage

The following test verifies that configuration pages are correctly loading the configured MDI information.

Test description: Open configuration pages and verify MDI lists.

Run the test as follows:

1. Make sure that the NewsBrowse system is not in use.
2. On the NewsBrowse server, open the **Ask Location** configuration page. Verify that it is configured to **localhost** and port **9010**. These should be the default values. Refer to [“Configure ASK Location: NewsBrowse server” on page 69](#).
3. Open the **Media Frame Core | Rules Automation** page. For the **Profile MDI** field, click the ... button. After a short pause, a list should appear. Verify that the configured Profile MDI names are listed. Close the list without selecting anything.
4. Open the **Ingest Scheduler | Scheduler** page. For the **MDI Name** field, click the ... button. After a short pause, a list should appear. Verify that the configured Ingest MDI names are listed. Close the list without selecting anything.

Checklist: ASK registration stage

Use the following check list to verify that the basic configuration and testing of the ASK registration stage is complete.

- All MDI names and “Device Type” service names are registered with ASK.
- Configuration pages load MDI names.

Managed Device Interface (MDI) stage

In this configuration stage you add a Managed Device Interface (MDI) server to the NewsBrowse system and then set up managed device interfaces so that Profile video servers and Proxy (NAS) devices are on-line as managed devices. Each type of device has a MDI which represents the device's assets in a way that is understandable by the other components of the NewsBrowse system. This allows the NewsBrowse server to coordinate the activity of the NewsBrowse system.

The Encoder + Server configuration stage and other similar configuration stages require managed device interfaces to run their tests.

To bring Profile and Proxy managed devices on-line, do the following:

- [“Prepare MDI server” on page 54](#)
- [“Configure ASK Location: MDI server” on page 55](#)
- [“Configure Proxy MDI” on page 56](#)
- [“Configure Profile MDIs” on page 57](#)
- [“Test: MDI stage” on page 58](#)
- [“Checklist: MDI stage” on page 60](#)

Prepare MDI server

The machine that hosts the MDI services acts as the MDI server. Identify the machine that is the MDI server as follows:

Dedicated MDI server — For medium to large NewsBrowse systems, the MDI services are on a stand-alone MDI server machine, to ensure system performance. If your system has a dedicated MDI server, it comes from the factory with Profile and Proxy MDI services installed, so you do not need to do any further installation. The MDI server requires only network communication in preparation for its use in the NewsBrowse system.

NewsBrowse server as MDI server — For small NewsBrowse systems, the MDI services can reside on the NewsBrowse server. The NewsBrowse server comes from the factory with Profile and Proxy MDI service installed, to support these smaller systems, so you do not need to do any further installation. The NewsBrowse server also has the NTFS MDI service installed, as it is required to run on the server, regardless of the size of the system.

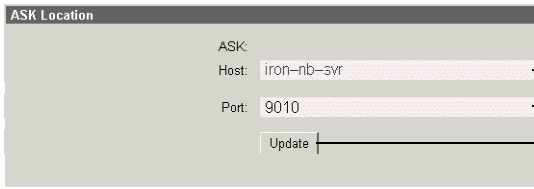
For the remaining configuration steps in this stage, open configuration pages locally (<http://localhost:280>) on the machine running the MDI services.

Configure ASK Location: MDI server

Do not modify
Advanced
Basic ✓
✓

<http://localhost:280> → ASK Location

Access this page locally on the MDI server.



Enter the name of the NewsBrowse server^a

Port 9010 is required. See [“Ports and services convention” on page 31](#).

Saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

It is not necessary to restart a service to put these settings into effect.

^a If the MDI server is the NewsBrowse server, enter “localhost”.

This page tells the MDI server where to look for the ASK service, which runs on the NewsBrowse server. The function of the ASK is to store the location of the software components in the NewsBrowse system, so the components can find one another.

Configure Proxy MDI

Do not modify

Advanced

Basic

http://localhost:280 → Proxy MDI

Access this page locally on the MDI server.

Proxy MDI Settings

Domain: DEFAULTDOMAIN — All Domain names in the NewsBrowse system must be identical.

MDI Name: PROXY1 — Must be set to PROXY1, as per convention.

Port: 9110 — Port 9110 is required. See “Ports and services convention” on page 31.

— Saves changes. Changes are lost if you leave the configuration page without updating.

Add Monitored Storage Location

Monitored Storage Location: — For each NAS machine, enter the UNC path to the “Media” folder. This is the location to which the NewsBrowse system writes the proxy media assets.^a

— Click to add as a location.

Existing Monitored Storage Locations

— Lists the currently added locations. You can add multiple locations. You should have one or more locations listed for each NAS machine.

— Removes the currently selected location.

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the Proxy MDI Service on the MDI server.

^a You can define multiple locations on a single NAS machine, but for each location you must enter and add the complete path.

This page configures the Managed Device Interface (MDI) for the NAS machines that store the low-res proxy media. The NewsBrowse system depends on the Proxy MDI to make proxy media assets visible across the system.

For the Proxy MDI, there is but one managed device, with the logical name PROXY1. This managed device can have multiple locations. The Media directory on each NAS machine is entered as a location. Other directories can be entered as locations as well. In this way the Proxy MDI knows where to look for the low-res assets.

Configure Profile MDIs

Do not modify
 Advanced
 Basic

http://localhost:280 → Profile MIDI

Access this page locally on the MDI server.

- Port 9100 is required. See [“Ports and services convention” on page 31.](#)
- All Domain names in the NewsBrowse system must be identical.
- Saves changes. Changes are lost if you leave the configuration page without updating.
- Select a Profile MDI.
- Enter the host (table) name of the Profile for the MDI selected above.^a
- The time that the Profile MDI waits before it informs the NewsBrowse system that a clip has finished recording. Leave at 2.
- Automatically increments so each Profile MDI has a unique process port.
- Click to add an existing managed device. For stand-alone Profile Media Servers, add a MDI for each one. For Open SAN Profile Media Servers, add only one MDI per Open SAN.
- Verify the MDIs currently on-line. A listing for a single Profile MDI includes the values from all four “Add Profile MDI” fields above.
- Click to remove the selected managed device.
- The following settings specify Profiles to which assets can be transferred via Fibre Channel from other Profiles. This is used by Conform-To-Air EDL and other Fibre Channel transfers. Refer to “Configure Profile MDI: Conform to air settings” on page 94.
- Select the MDI for a Profile to which assets can be transferred.
- Host (table) name of the Profile specified above.
- Click to add as a transfer target. This makes the Profile available for selection from the NewsBrowse application as a transfer destination.
- Profiles capable of receiving a Fibre Channel transfer.
- Click to remove the selected transfer target.

Always click **Update...** buttons after making changes

To put changes into effect, start or restart Profile MDI Service on the MDI server.

^aMake sure the Profile name is entered just as it is in the host table.

This page configures the Managed Device Interfaces (MDI) for the Profile Media Servers that record and store the high-res media. The NewsBrowse system depends on the Profile MDI to make high-res media assets visible across the system.

As you add Profile MDIs, refer to [“Site-specific configuration tables” on page 32](#) and make sure that you associate Profile MDIs and Profile host names correctly.

Multiple Profile MDIs run on a single machine (the MDI server), but they each need their own process port number. For this purpose the “Port” field automatically increments. To use the automatically incremented port numbers, make sure you add Profile MDIs in the correct sequence. You can also manually enter port numbers. The MDIs and their port numbers must match settings as in [“Configure Media Frame Core ASK: Register components” on page 51.](#)

If you are configuring the basic MDI stage, do not yet configure transfer targets.

Test: MDI stage

The following test exercises system functionality exclusive to the Managed Device Interfaces in this stage. A successful test verifies that the basic configurations are correct.

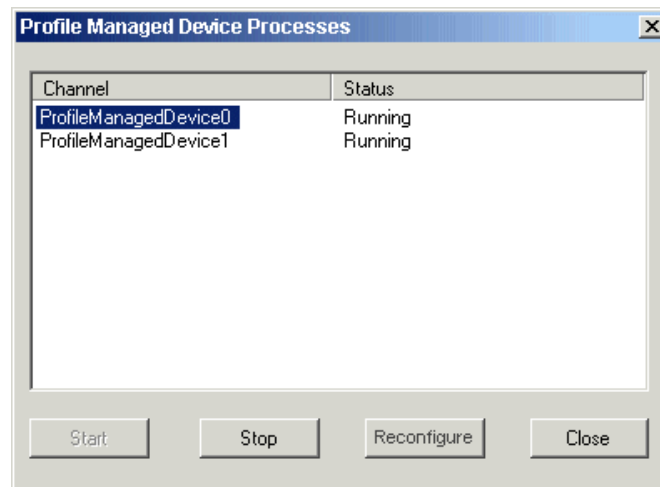
Test description: Using the Managed Device Interfaces, view the assets on each managed device and verify visibility into the machine's file system.

Run the test as follows:

1. Make sure that the NewsBrowse system is not in use.

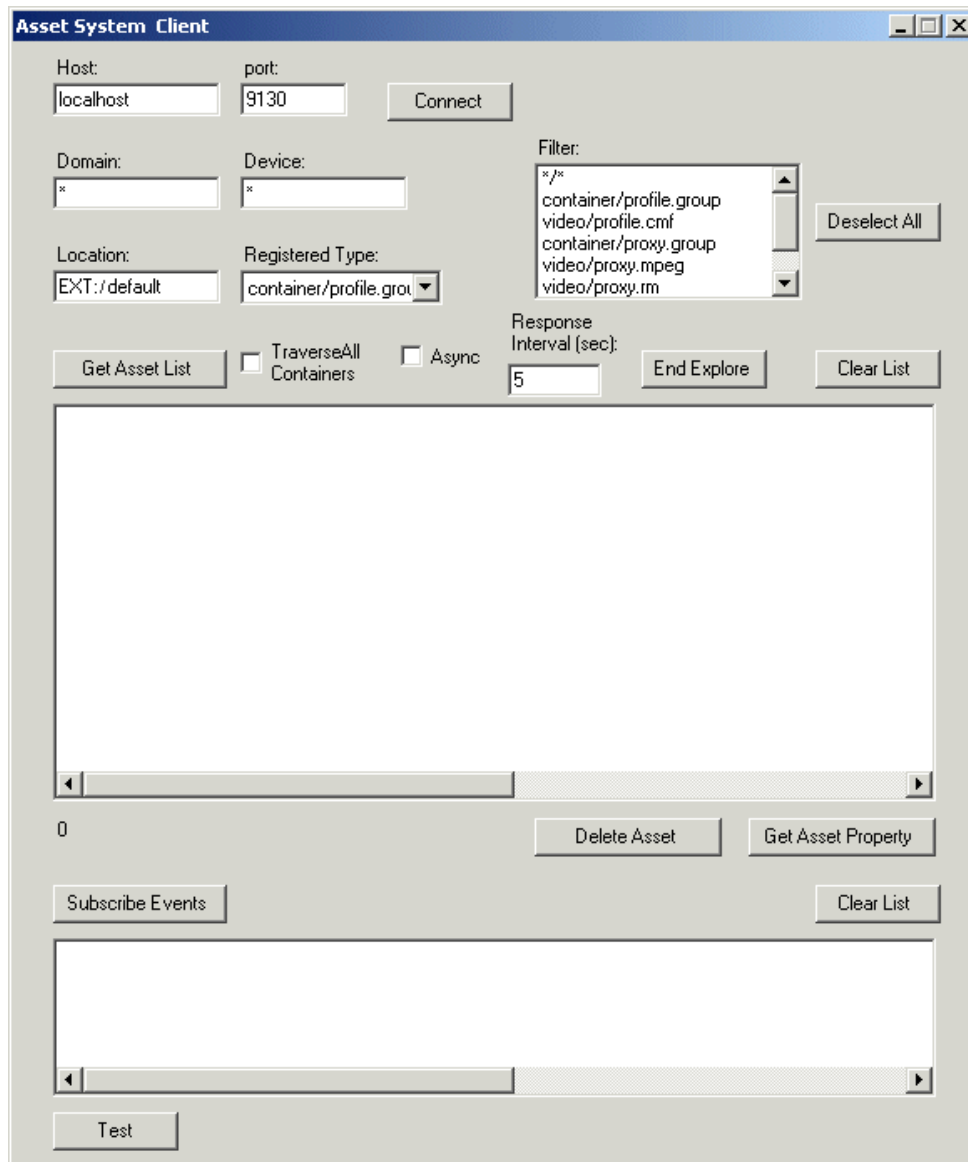
NOTE: Running these tests will tie up a channel and could collide with commands from the Ingest Schedule page. Inform operators that they must not use the channels under test.

2. On the machine that hosts the MDI services, click **Start | Programs | Thomson | NewsBrowse | Utilities | Remoting Host Controller**. The Remoting Host Controller application starts up. Startup is verified by the icon in the Windows system tray as it displays first a red X, then changes to a normally displayed icon.
3. Right-click the icon in the system tray and select **Remoting Host Controller**. The Remoting Host Controller application opens. The Profile MDI Service must be running, as it supports the Remoting Host Controller application.



4. Verify that the number of processes running is the same as the number of Profile Media Servers added as managed devices.
5. Close the Remoting Host Controller application.

6. On the machine that hosts the MDI services, click **Start | Programs | Thomson | NewsBrowse | Diagnostic Tools | Asset System Client**. The Asset System Client application opens.



7. Configure as follows to check the connection to a Profile managed device:

- Host: **localhost**
 - Port: **9130** or another process port number for a Profile MDI. You can find the process port number for each Profile MDI on the Profile MDI Settings configuration page in the Existing Profile MDIs box.
8. Click **Connect**. Verify that the Get Asset List button and other buttons become enabled, which means the connection is successful.

9. Click **Subscribe Events**. This subscribes to notifications from the asset system. With this enabled you should see a message when an asset is created or deleted.
10. Configure as follows to view assets on a Profile managed device:
 - Enable the **Traverse All Containers** check box.
 - Location: Leave this field blank. With Traverse All Container enabled, when the Get Asset List button is clicked it will get all of the assets for the MDI. If you enter a path to a specific clip, you must use forward slashes in the path.
 - Registered Type: **container/***
11. Click **Get Asset List**. Verify that a list of media assets appears.
12. Select an asset and click **Properties**. Verify that properties for the asset appears.
13. Repeat step 9 through step 12 for each Profile managed device, as listed on the Profile MDI Settings configuration page in the Existing Profile MDIs box.
14. Configure as follows to check the Proxy MDI connection:
 - Host: **localhost**
 - Port: **9110**
15. Click **Connect**. Verify that the Get Asset List button and other buttons become enabled, which means the connection is successful.
16. Configure as follows to view assets at a Proxy location:
 - Enable the **Traverse All Containers** check box.
 - Location: Leave this field blank.
 - Registered Type: **container/***
17. Click **Get Asset List**. Verify that a list of media assets appears, for example, the low-res assets created in [“Test: Encoder stand-alone stage” on page 65](#).
18. Select an asset and click **Properties**. Verify that properties for the asset appears.
19. On the NewsBrowse server, start the Asset System Client and click **Subscribe Events** as in step 9 above. When testing the notifications with the Asset System Client, it should run on the server – the same machine on which the Rules Wizard runs. This helps validate the networking configuration between the two machines.

Checklist: MDI stage

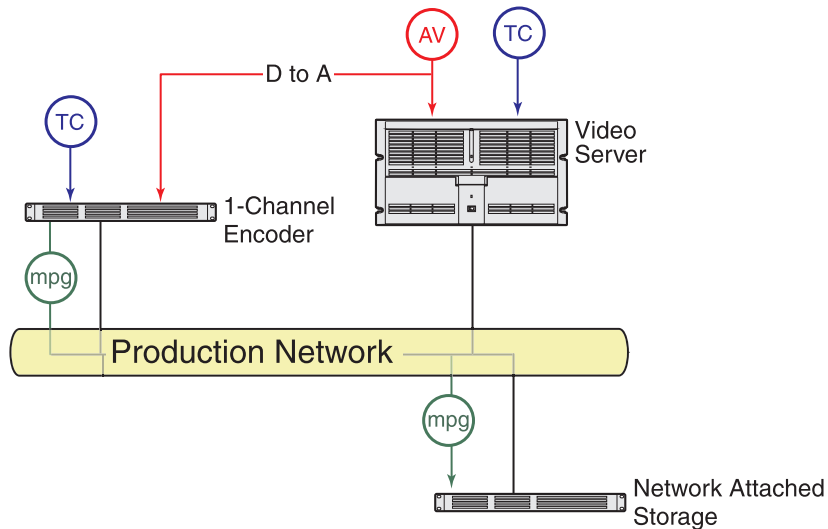
Use the following check list to verify that the basic configuration and testing of the MDI stage is complete.

- The machine designated as the MDI server has the Proxy MDI service and the Profile MDI service installed and running.
- Each Profile Media Server added as a managed device has a Profile Managed Device Process running on the MDI server machine.
- From the Asset System Client application on the MDI server, assets and their properties are visible from each Profile Media Server or Open SAN and from each machine configured as a Proxy location.

Encoder stand-alone stage

For this configuration stage you configure and test one single-channel encoder, one NAS, and one Profile XP server to work together.

The portion of the NewsBrowse system configured and tested in this stage is illustrated by the following diagram.



Refer to [“Two tier system diagram” on page 16](#) for a view of the entire NewsBrowse system.

To do the basic configuration and testing of a single-channel encoder, do the following:

1. [“Configure ASK Location: Single-channel encoder” on page 62](#)
2. [“Configure Ingest Control: Single-channel encoder” on page 62](#)
3. [“Configure Proxy Asset \(NAS\): Single-channel encoder” on page 63](#)
4. [“Configure media server: Single-channel encoder” on page 64](#)
5. [“Configure MPEG encoder: Single-channel encoder” on page 65](#)
6. [“Test: Encoder stand-alone stage” on page 65](#)
7. [“Checklist: Encoder stand-alone stage” on page 67](#)

Configure ASK Location: Single-channel encoder

Do not modify
Advanced
Basic ✓

<http://root-nb-enc-n:280> → ASK Location

ASK Location

ASK
Host: iron-nb-svr — Enter the name of the NewsBrowse server

Port: 9010 — Port 9010 is required. See “Ports and services convention” on page 31.

Update — Saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

It is not necessary to restart a service to put these settings into effect.

This page tells the single-channel encoder where to look for the ASK service, which runs on the NewsBrowse server. The function of the ASK is to store the location of other services in the NewsBrowse system that the encoder might need to access.

Configure Ingest Control: Single-channel encoder

Do not modify
Advanced
Basic ✓

<http://localhost:280> → Single Channel Encoder → Ingest Control Access this page from the local single-channel encoder.

Configure Ingest Control

Remote Control Protocol: Ethernet (.NET) Serial Port (AMP) — Select the protocol that controls the Profile.

IP Port: 9330 — For Ethernet, enter IP Port **9330**. For Serial Port, select a COM Port. See “Ports and services convention” on page 31.

Max Record Minutes: 360 — 360 minutes recommended

Backup VTR: Enable — If using a backup VTR, select **Enable**

COM Port: COM1 — If using a backup VTR, select a COM port.

Record delay (frames): 40 — Adjust as required by the backup VTR^a

Update — Saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the Thomson Ingest Control service on the single-channel encoder.

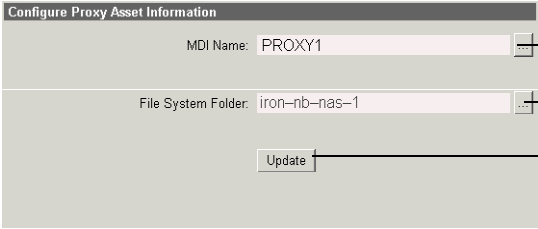
^a. Tune at a later time to make sure the VTR start matches the Profile and encoder start time.

This page provides general information about the single-channel encoder and how it controls the Profile Media Server and (if you use one) a backup VTR.

Configure Proxy Asset (NAS): Single-channel encoder

Do not modify
Advanced
Basic

<http://localhost:280> → Single Channel Encoder → Proxy Asset Information Access this page from the local single-channel encoder.



There is but one logical Proxy Managed Device in the system, named PROXY1.^a

Select the path to the folder (\\Media) on the NAS (or other storage location) that receives the MPEG this encoder creates.

Validates the current configurations with the Proxy MDI settings and saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the Thomson Ingest Control service on the single-channel encoder.

^a. PROXY1 can have multiple folders (on multiple machines) defined as locations for assets.

This page specifies the location (on a NAS machine) in which the single-channel encoder places the proxy MPEG it creates.

When this page opens and when you click a ... button, fields and lists are populated with valid information as currently defined on the ASK settings page and the Proxy MDI settings page.

If you have not yet configured Proxy MDI settings (as in the MDI stage), you must type in the File System Folder path (\\root-nb-nas-n\Media) rather than using the ... button and then selecting from a list. Refer to [“Site-specific configuration tables” on page 32](#). In this case you can ignore error messages about the Proxy MDI information not being available.

Configure media server: Single-channel encoder

Do not modify
Advanced
Basic

http://root-nb-enc-n:280 → Single Channel Encoder → Primary Media Server

Live Record: Enable — Leave this box checked unless the Profile is being taken off line.^a

Profile Control

Record using: API — Select API or VDCP (API is strongly recommended).

Host Name or IP: mpvs-1 — For API, enter the machine name of the Profile, as it is in the host table. For VDCP, select the COM port connected.^b

Channel: Vtr1 — For API, select the Profile channel. For VDCP, enter the signal port connected.^c

Delay: 0 — For API, set to 0. For VDCP, enter delay frames, tuned for the channel so that the Profile and encoder start times are in sync.^d

Profile Asset Information

MDI Name: SAN1 — Select the MDI name for the Profile specified under “Profile Control” above.

Profile Bin: EXT:/Ch1Ingest — Select a bin on the Profile. Upon ingest, the high-res asset is saved here.^e

Update — Validates and saves the current configurations. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the Thomson Ingest Control service on the single-channel encoder.

- ^a. Normally the media server is enabled. Uncheck only when the Profile is off line, but if you still need a second Profile or backup VTR to run.
- ^b. This field is dependent upon the API/VDCP selection above.
- ^c. For API, this list is automatically populated by reading the channel names, as in Configuration Manager, from the Profile specified in the “Host Name...” field above.
- ^d. This field is dependent upon the API/VDCP selection above.
- ^e. This list is automatically populated by reading bins and volumes, as in Media Manager, from the Profile specified in the “Host Name...” field above

This page configures the connection between the single-channel encoder and the Profile channel it controls. Make sure that you correctly associate the MDI with the correct Profile Media Server. Refer to [“Site-specific configuration tables” on page 32](#).

If you have a backup Profile, return to the **Single Channel Encoder → Backup Media Server** link and configure similarly. On the backup server configuration page, you must check **Enable**, as it is unchecked by default.

Configure MPEG encoder: Single-channel encoder

Do not modify
Advanced
Basic

<http://root-nb-enc-n:280> → Single Channel Encoder → MPEG Encoder

Leave at default of 1000000.

Leave at default of 0. Modify only to debug server/encoder timecode problems.

Select **Composite**

Select fields per second: **FPS_5994** for drop-frame NTSC, **FPS_60** for non-drop-frame NTSC, **FPS_50** for PAL.

The MPEG encoder audio output. Adjust to calibrate Advanced Edit audio, or to improve the quality of the desktop audio (i.e. if the source is 'too hot')

Saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the Thomson Ingest Control service on the single-channel encoder.

This page configures the parameters the encoder uses when it creates the MPEG proxy assets.

Test: Encoder stand-alone stage

The following test exercises system functionality exclusive to the basic configurations for the single-channel encoder. A successful test verifies that the basic configurations are correct.

Test description: A short test clip (high-res) is recorded on the Profile Media Server, while at the same time the low-res proxy asset is created on the NAS.

NOTE: Run this test only in the stand-alone stage, with machines that have not yet been added as managed devices (as in the + Server stage). Once the server is connected, this test can result in corrupt database records.

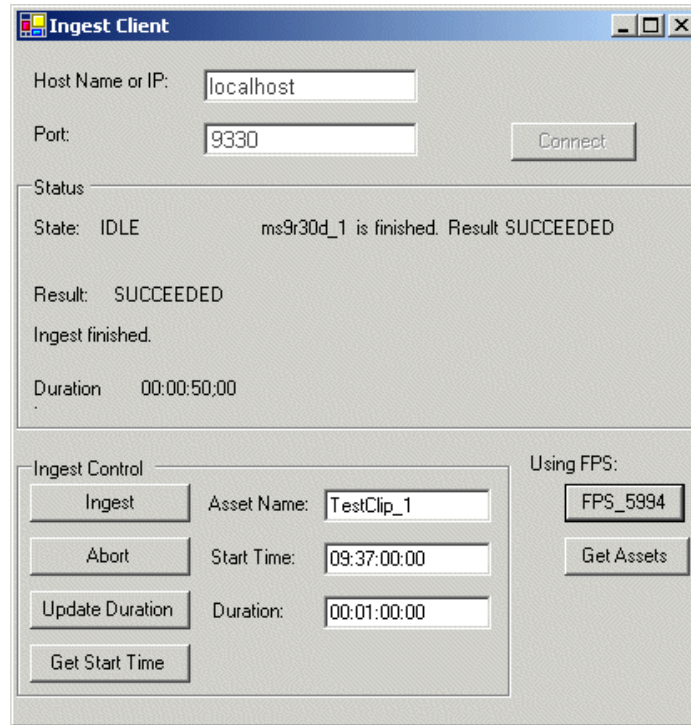
Run the test as follows:

1. Make sure that the NewsBrowse system is not in use.

NOTE: Running these tests will tie up a channel and could collide with commands from the Ingest Schedule page. Inform operators that they must not use the channels under test.

2. Click **Start | Programs | Thomson | Event Viewer**. Event Viewer opens.

3. Click **Start | Programs | Thomson NewsBrowse | Ingest Client**. The Ingest Client application opens.



If you open the Ingest Client application on an operational NewsBrowse system, you'll see the status messages of the last encode job.

4. Configure as follows:
 - Host Name or IP: **localhost**
 - Port: **9330**
5. Click **Connect** to establish a connection with the Ingest Control service that controls the target Profile. Look for the following report in the Status area to verify the connection:
 - State: **IDLE**
6. Configure as follows to create a high-res and a low-res asset:
 - Asset Name: Enter a name for the test asset you are about to create.
 - Start Time: Enter **ASAP**. This starts recording immediately, similar to a crash record. Or you can enter a start time a few minutes ahead of the current time.
 - Duration: Enter **00.00.20.00** (this is 20 seconds, which is adequate for test purposes)
7. Click **Ingest**. The ingest job is submitted and a ProNet session is established with the Profile. Watch the reports in the Status area to verify that the creation of the assets is progressing. Look for the following report to verify completion:

- State: SUCCEEDED
8. In Event Viewer, verify informational messages regarding the creation of the assets.

NOTE: If you've not yet configured the MDIs, you may get some error messages in Event Viewer as the encoder attempts to communicate completion information to MDI services. In this case these messages can be ignored.

9. In the Ingest Client application, click **Get Assets**. For both the high-res and the low-res assets, look for the following report:

- COMPLETE_OK

10. On the Profile system, use Media Manager to verify that a clip with the correct duration was created. Note the location of the clip, as it is used in configuration stage tests later in this chapter.

11. On the NAS, use Windows Explorer to verify that the MPEG clip was created. Open and play the clip. Validate video and audio.

Checklist: Encoder stand-alone stage

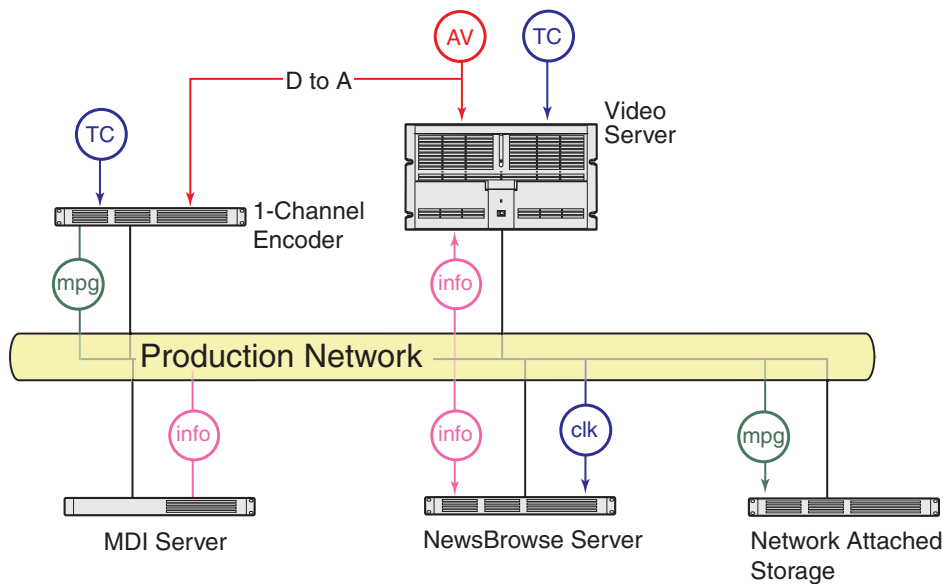
Use the following check list to verify that the basic configuration and testing of the single-channel encoder is complete.

- Audio/Video/Timecode connected properly
- NetTime server running
- Profile(s) record hi-res
- Encoder writes to NAS
- MPEG playback with audio

Encoder + Server stage

For this configuration stage you configure the NewsBrowse server to work together with the single-channel encoder, NAS, and Profile XP server from the Encoder stand-alone stage. MDI services are also required, as configured in the MDI stage.

The portion of the NewsBrowse system configured and tested in this stage is illustrated by the following diagram.



Refer to “Two tier system diagram” on page 16 for a view of the entire NewsBrowse system.

To do the basic configuration and testing for the Encoder + Server stage, do the following:

1. “Configure ASK Location: NewsBrowse server” on page 69
2. “Configure Media Frame Core ASK: Single-channel encoder” on page 69
3. “Configure Ingest Scheduler: NewsBrowse server” on page 70
4. “Set up NewsBrowse client for configuration stage tests” on page 71
5. “Test: Encoder + Server stage” on page 71
6. “Checklist: Encoder + Server stage” on page 72

Configure ASK Location: NewsBrowse server

Do not modify
Advanced
Basic ✓
✓

<http://localhost:280> → ASK Location

Open this page locally on the NewsBrowse server machine.

ASK Location

ASK
Host: localhost
Port: 9010
Update

Enter **localhost**, since you are configuring on the NewsBrowse server itself.

Port 9010 is required. See [“Ports and services convention” on page 31](#).

Saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

It is not necessary to restart a service to put these settings into effect.

This page tells the NewsBrowse server where to look for the ASK service. Since the ASK service runs on the NewsBrowse server, you enter *localhost* for the ASK host location. On all other machines you must enter the name of the NewsBrowse server.

Configure Media Frame Core ASK: Single-channel encoder

Make sure the single-channel encoder’s Ingest Control service is registered with the ASK software component as a “Ingest” device, as explained in [“Configure Media Frame Core ASK: Register components” on page 51](#).

Configure Ingest Scheduler: NewsBrowse server

http://localhost:280 → Ingest Scheduler → Scheduler Open this page locally on the NewsBrowse server.

Do not modify

Advanced

Basic

Scheduler Settings

Purge Event: — Number of previous days of ingest history

Back to Back Delay: — Minimum back-to-back delay in seconds between records on the same channel. Default value is 29.

Video/Audio Router Gateway:

Host Name or IP: — Machine name (from host file) of Router Gateway.

Port: — 8065 required.

— Saves changes. Changes are lost if you leave the configuration page without updating.

Add/Update Ingest Channel

MDI Name: — Select the MDI for the encoder. This specifies the encoder as an ingest channel.

Display Name: — Enter a useful name for the channel. This is displayed in the NewsBrowse application.

Video/Audio Router Destination: — Select the router destination for the channel.

— Adds the above specified encoder as an ingest channel

Existing Channels

— Currently added ingest channels

— Removes the currently selected ingest channel

Update Date/Time Stamp

Date Stamp:

YYYYMMDD — Adds the selected date suffix automatically to high-res clips

YYMMDD

DDMMYY

DDMMYYYY

NONE

Time Stamp:

HHMMSS — Adds the selected time suffix automatically to high-res clips

HHMM

NONE

— Saves date stamp and time stamp changes

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the Thomson Ingest Scheduler service.

The page defines resources available and operating parameters for ingest jobs.

Add the encoder as an ingest channel.

For “Video/Audio Router...” settings, refer to [“Add Router Gateway to Ingest Scheduler” on page 77](#). If you are configuring the basic Encoder + Server stage, do not yet configure these settings.

Set up NewsBrowse client for configuration stage tests

Temporarily set up the NewsBrowse server as a NewsBrowse client. This is explained in [“Prepare NetTime clients” on page 39](#) and in [“Set up client PCs” on page 114](#). Using the NewsBrowse server as a NewsBrowse client is only for the purpose of the staged configuration process. Once the entire NewsBrowse system is operating, you should no longer use the NewsBrowse server as a NewsBrowse client.

Other configurations normally required for NewsBrowse clients, such as NewsBrowse users and licenses, are not necessary when the NewsBrowse client runs on the NewsBrowse server, because you log into the server as NewsBrowse administrator. To use an external PC as a NewsBrowse client, refer to [“Add NewsBrowse Clients” on page 113](#) for the complete instructions.

Test: Encoder + Server stage

The following test exercises system functionality exclusive to the basic configurations for the Encoder + Server stage. A successful test verifies that the basic configurations are correct.

Test description: Using the NewsBrowse user interface, one test clip is manually recorded (crash record) and one test clip is schedule recorded. The NewsBrowse system correctly creates (at the right time) the high-res assets on the Profile Media Server and the low-res proxy assets on the NAS.

Run the test as follows:

1. Make sure that the NewsBrowse system is not in use.

NOTE: Running these tests will tie up a channel and could collide with commands from the Ingest Schedule page. Inform operators that they must not use the channels under test.

2. From the NewsBrowse server, open the NewsBrowse application.
3. Click the **ingest** tab at the top of the NewsBrowse window. The Ingest page opens.
4. On the Ingest page, verify that you can see the single encoder with the correct channel name at the top of the column.
5. Make sure you are on today's schedule, and enable auto-refresh.
6. If not already running, start Event Viewer by clicking **Start | Programs | Thomson | Event Viewer**. You can view activity in Event Viewer as you run tests.
7. Do a crash record as follows:
 - a. On the Ingest page, click the red record button at the top of the channel column. The Add Schedule Event window appears showing the current time as the start time of the record, with a default duration of 30 minutes.
 - b. Enter a meaningful test clip name
 - c. Change the duration to one minute. Duration uses the SMPTE timecode format: hours:minutes:seconds:frames.
 - d. Click **Add Event**. The event gets added to the Ingest Schedule in the current time slot and begins recording.

- e. Change to List View and track progress until the job reports COMPLETED.
8. Do a scheduled record as follows:
 - a. On the Ingest page, double-click in the channel column at a time that is ahead of the current time. The Add Schedule Event window appears.
 - b. Enter a meaningful test clip name.
 - c. Change the start time to a time that is a few minutes ahead of the current time. Start Time uses a 24-hour clock.
 - d. Change the duration to one minute.
 - e. Click **Add Event**. The event is added to the Ingest Schedule in the specified time slot.
 - f. Change to List View, wait until the recording begins, and track progress until the job reports COMPLETED. Verify that the job starts at the correct time.
 9. Check for the crash record and schedule record assets as follows:
 - a. Click the **browse** tab at the top of the NewsBrowse window.
 - b. On the find tab, verify that the crash record and scheduled record clips are listed.
 - c. For each of these clips, select it, then click the **related** tab. Verify that **online media** and **MPEG Video** are listed.

Checklist: Encoder + Server stage

Use the following check list to verify that the basic configuration and testing of the single-channel encoder plus NewsBrowse server is complete.

- Clock synched
- Crash record successful
- Scheduled record on time
- New assets in system

Router Gateway stand-alone stage

For this configuration stage you configure the Router Gateway component for control of your router controller (if used in your system).

Refer to [“Two tier system diagram” on page 10](#) for a view of the entire NewsBrowse system.

To do the basic configuration and testing of the Router Gateway stand-alone stage, do the following:

1. [“Add Router Gateway” on page 73](#)
2. [“Configure ASK Location: Router Gateway” on page 74](#)
3. [“Configure Router Gateway” on page 74](#)
4. [“Test: Router Gateway stand-alone stage” on page 74](#)
5. [“Checklist: Router Gateway stand alone stage” on page 75](#)

Add Router Gateway

The machine that hosts the Router Gateway software component acts as the Router Gateway machine, as follows:

Dedicated Router Gateway — In some NewsBrowse systems, the Router Gateway software component is on a stand-alone Router Gateway machine. If your system has a dedicated Router Gateway machine, it comes from the factory with the Router Gateway software component installed, so you do not need to do any further installation. The Router Gateway machine requires only network connections in preparation for its use in the NewsBrowse system.

MDI server as Router Gateway — The Router Gateway software component can also reside on another NewsBrowse machine, such as the MDI server. If your system uses the MDI server as the Router Gateway host, you must first install the Router Gateway software component from the NewsBrowse server installation program. Run the installation program and install only **Router Gateway**.

Configure ASK Location: Router Gateway

Do not modify
Advanced
Basic

http://localhost:280 → ASK Location

Open this page locally from the machine hosting the Router Gateway Service.

Enter the name of the NewsBrowse server

Port 9010 is required. See “Ports and services convention” on page 31.

Saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

It is not necessary to restart a service to put these settings into effect.

This page tells the Router Gateway where to look for the ASK service, which runs on the NewsBrowse server. The function of the ASK is to store the location of NewsBrowse components.

Configure Router Gateway

Do not modify
Advanced
Basic

http://localhost:280 → Router Gateway

Open this page locally from the machine hosting the Router Gateway Service.

Port 8065 is required. See “Ports and services convention” on page 31.

Name (as it is in host table) of machine hosting Router Gateway service

12345 is the standard port for the SMS7000 native protocol.

If using a backup host, enter machine name.

Use the standard port for router controller. Defaults to 12345.

Saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the Router Gateway service.

This page specifies the machine or (backup) machines that host the Router Gateway Service.

Test: Router Gateway stand-alone stage

The following test triggers the Router Gateway component to send a control signal to the router controller. A successful test verifies that the basic configurations are correct.

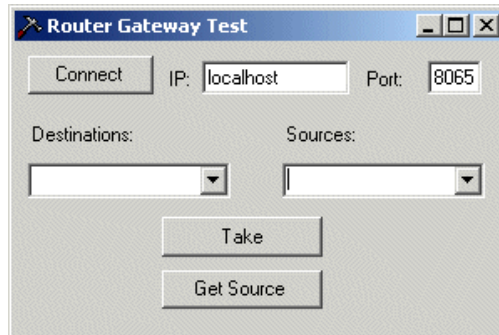
Test description: Using the Router Gateway Client application, change the source and destination of the router.

Run the test as follows:

1. Make sure that the NewsBrowse system is not in use.

NOTE: Running these tests will tie up a channel and could collide with commands from the Ingest Schedule page. Inform operators that they must not use the channels under test.

- From the Router Gateway host, click **Start | Programs | Thomson | NewsBrowse | Diagnostic Tools | Router Gateway Client**. The Router Gateway Client application opens.



- Configure as follows:
 - IP: **localhost**
 - Port: **8065**.
- Click **Connect**. Verify that the Destinations and Sources drop-down lists are populated, which means the connection is successful.
- Configure as follows to trigger the router controller:
 - Destinations: Select a destination from the list that is not the destination currently used by the router.
 - Sources: Select a source from the list that is not the source currently used by the router
- Monitor the video and audio currently routed. Click **Take**. Verify that the video and audio changes.
- Repeat previous steps to validate that takes work for all destinations that are configured to an ingest channel.

Checklist: Router Gateway stand alone stage

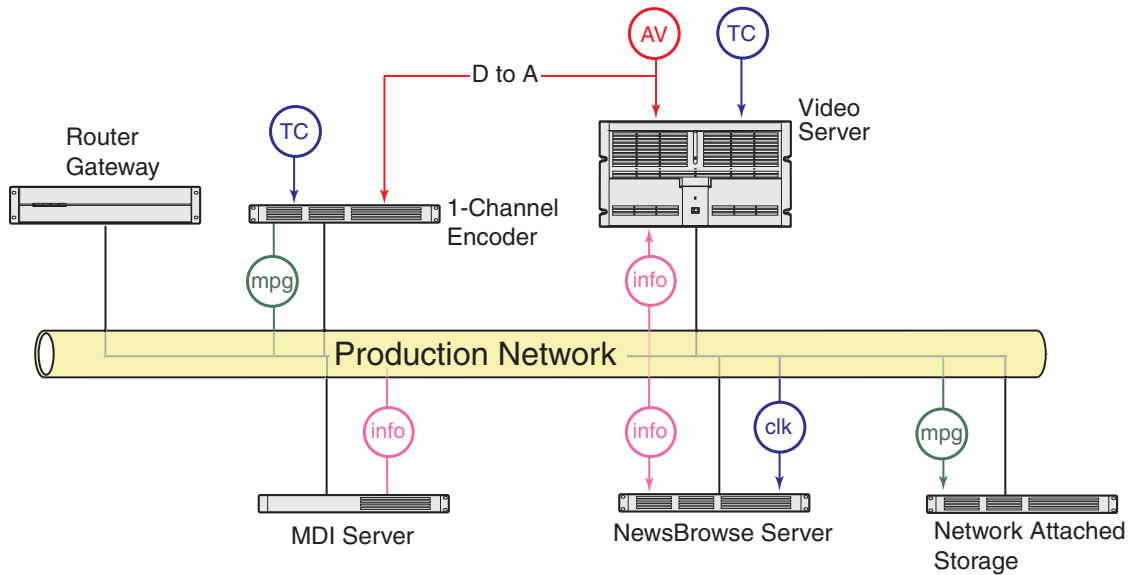
Use the following check list to verify that the basic configuration and testing of the Router Gateway stand alone stage is complete.

- The machine hosting the Router Gateway software component connects to the router controller.
- The Router Gateway software component can change Destinations and Sources on the router controller.

Router Gateway + Server stage

For this configuration stage you configure the Router Gateway component for control of your router controller (if used in your system).

The portion of the NewsBrowse system configured and tested in this stage is illustrated by the following diagram.



Refer to [“Two tier system diagram” on page 10](#) for a view of the entire NewsBrowse system.

To do the basic configuration and testing of the encoder plus server, do the following:

1. [“Add Router Gateway to Ingest Scheduler” on page 77](#)
2. [“Test: Router Gateway + Server stage” on page 78](#)
3. [“Checklist: Router Gateway + Server stage” on page 78](#)

Add Router Gateway to Ingest Scheduler

Do not modify
Advanced
Basic

http://root-nb-svr:280 → Ingest Scheduler → Scheduler

Scheduler Settings

Purge Event: 7 — Number of previous days of ingest history

Back to Back Delay: 29 — Minimum back-to-back delay between records on the same channel

Video/Audio Router Gateway:
Host Name or IP: iron-nb-rtr — Name (as it is in host table) of machine hosting Router Gateway service

Port: 8065 — 8065. Refer to “Ports and services convention” on page 31.

Update — Saves changes. Changes are lost if you leave the configuration page without updating.

Add/Update Ingest Channel

MDI Name: INGEST-CH2 — Select the MDI for the encoder. This specifies the encoder as an ingest channel.

Display Name: Enc. Chan. 2 — Enter a useful name for the channel. This is displayed in the NewsBrowse application.

Video/Audio Router Destination: MXP22 — Select the router destination for the channel.

Add/Update Channel — Adds the above specified encoder as an ingest channel

Existing Channels

INGEST-CH1,(Enc.Chan. 1) MXP21 — Currently added ingest channels

Remove Channel — Removes the currently selected ingest channel

Update Date/Time Stamp

Date Stamp: YYYYMMDD — Adds the selected date suffix automatically to high-res clips
 YYMMDD
 DDMMYY
 DDMMYYYY
 NONE

Time Stamp: HHMMSS — Adds the selected time suffix automatically to high-res clips
 HHMM
 NONE

Update Date/Time Stamp — Saves date stamp and time stamp changes

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the Thomson Ingest Scheduler service on the NewsBrowse server.

This page make the Router Gateway machine available to the Ingest Scheduler service.

In the Router Gateway + Server stage, configure only Video/Audio Router Gateway and Add/Update Ingest Channel settings.

If you have previously added an ingest channel but have not yet configured its router destination, you will have to remove the channel and then add it again but with the router destination configured.

Test: Router Gateway + Server stage

The following test triggers the router controller as part of Profile ingest. A successful test verifies that the basic configurations are correct.

Test description: Using the NewsBrowse application, use the Router option in conjunction with Profile ingest.

Run the test as follows:

1. Make sure that the NewsBrowse system is not in use.

NOTE: Running these tests will tie up a channel and could collide with commands from the Ingest Schedule page. Inform operators that they must not use the channels under test.

2. From the NewsBrowse server, open the NewsBrowse application.
3. Click the **ingest** tab at the top of the NewsBrowse window. The Ingest page opens.
4. Make sure you are on today's schedule, and enable auto-refresh.
5. Verify that the router option is available as follows:
 - a. On the Ingest page, click the red record button at the top of the channel column. The Add Schedule Event window appears showing the current time as the start time of the record, with a default duration of 30 minutes.
 - b. Verify that the **router source** list is present. Change the router source.
 - c. Enter a meaningful test clip name.
 - d. Change the duration to one minute. Duration uses the SMPTE timecode format: hours:minutes:seconds:frames.
 - e. Click **Add Event**. The event gets added to the Ingest Schedule in the current time slot and begins recording.
 - f. Verify that the router changes the video and audio signal correctly.

Checklist: Router Gateway + Server stage

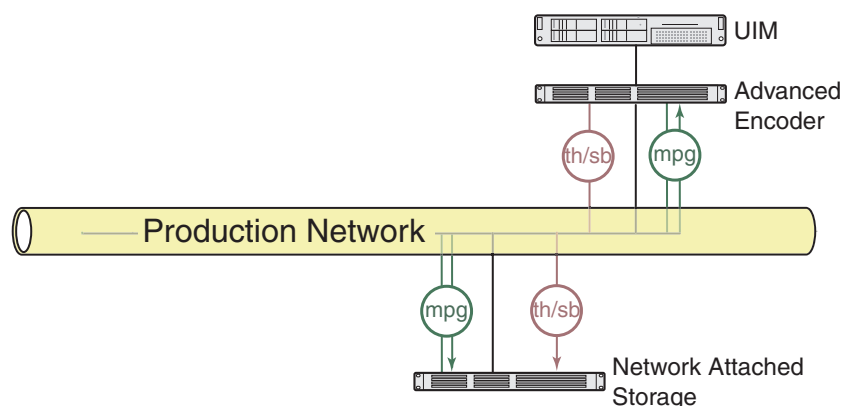
Use the following check list to verify that the basic configuration and testing of the Router Gateway + Server stage is complete.

- Router-control connections successful between NewsBrowse server and Router Gateway
- NewsBrowse application controls router at ingest

Advanced encoder stand-alone stage

For this configuration stage you configure and test one Advanced encoder and one NAS to work together. The Advanced encoder functions as both an Image Support Server to create thumbnail, storyboard, and Real Video assets, and as a Sequential (scavenge) encoder to create MPEG proxy assets.

The portion of the NewsBrowse system configured and tested in this stage is illustrated by the following diagram.



Refer to [“Two tier system diagram”](#) on page 10 for a view of the entire NewsBrowse system.

To do the basic configuration and testing of a Advanced encoder stand-alone, do the following:

1. [“Configure ASK Location: Advanced encoder”](#) on page 80
2. [“Configure Advanced Encoding Control”](#) on page 80
3. [“Configure Proxy Asset \(NAS\): Advanced encoder”](#) on page 81
4. [“Configure MPEG encoder: Advanced encoder”](#) on page 81
5. [“Configure Real Media Encoder: Advanced encoder”](#) on page 82
6. [“Test: Advanced encoder stand-alone stage - high-res source”](#) on page 83
7. [“Test: Advanced encoder stand-alone stage - MPEG proxy source”](#) on page 85
8. [“Checklist: Advanced encoder stand-alone stage”](#) on page 86

Configure ASK Location: Advanced encoder

Do not modify
Advanced
Basic

http://root-nb-adv-n:280 → ASK Location

ASK Location

ASKC

Host: iron-nb-svr — Enter the name of the NewsBrowse server

Port: 9010 — Port 9010 is required. See “Ports and services convention” on page 31.

Update — Saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

It is not necessary to restart a service to put these settings into effect.

This page tells the Advanced encoder where to look for the ASK service, which runs on the NewsBrowse server. The function of the ASK is to store the location of NewsBrowse components.

Configure Advanced Encoding Control

Do not modify
Advanced
Basic

http://root-nb-adv-n:280 → Advanced Encoder → Advanced Encoding Control

Configure Advanced Encoding Control

Configure ProxyTransfer Control

Remote Port: 9230 — Port 9230 is required. See “Ports and services convention” on page 31.

Update — Always click **Update...** buttons after making changes

GXF Servers Info

GXF Server Host Name: UIM1_heo — Enter the host name of the UIM.

Max. Startup Delay: 60 — Enter the maximum time the encoder waits for recording to begin after a clip is created in the database. 60 seconds is the recommended setting.^a

Stream Timeout: 60 — Enter the maximum time the encoder waits for a break in the media stream to be restored. 60 seconds is the recommended setting.^b

Add GXF Server — Click to add as a GXF server for this encoder.

IP= UIM1_heo :Port=0;StartupDelay=60;StreamTimeout=60 — GXF servers currently added for this encoder.

Remove GXF Server — Remove the currently selected GXF server

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the Thomson Proxy Transfer service on the Advanced encoder.

^a. When you create a new clip name in the media database on the Profile XP, the encoder is notified and waits for the media file to appear. Set this value to be the maximum time allowed in your workflow between the creation of a clip name and the commencement of recording the clip.

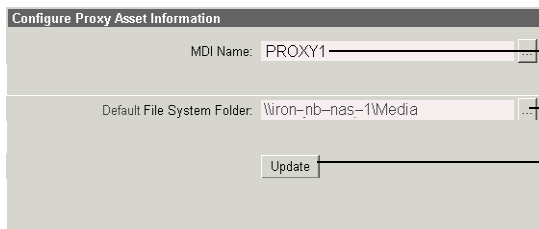
^b. If the high-res stream for which the encoder is creating proxy material is interrupted, the encoder waits this long for the stream to continue.

This page configures the connections between the Advanced encoder and the server from which it gets its media stream, such as a UIM.

Configure Proxy Asset (NAS): Advanced encoder

Do not modify
Advanced
Basic

http://root-nb-adv-n:280 → Advanced Encoder → Proxy Asset Information



There is but one logical Proxy Managed Device in the system, named PROXY1.^a

Select the path to the folder (\Media) on the NAS (or other storage location) that receives the MPEG this encoder creates.^b

Validates the current configurations with the Proxy MDI settings and saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the Proxy Transfer service on the Advanced encoder.

^a. PROXY1 can have multiple folders (on multiple machines) defined as locations for assets. These locations are defined on the Proxy MDI configuration page.

^b. This location is used when in Rules, Proxy Storage Location is blank (*).

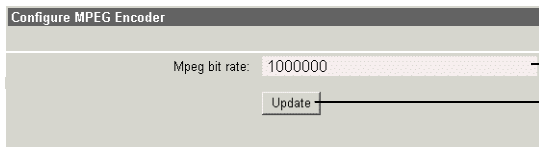
This page specifies the default location (on a NAS machine) in which the Advanced encoder places the MPEG proxy, thumbnail, storyboard, and RealVideo assets it creates.

When this page opens and when you click a ... button, fields and lists are populated with valid information as currently defined on the Proxy MDI settings page.

Configure MPEG encoder: Advanced encoder

Do not modify
Advanced
Basic

http://root-nb-adv-n:280 → Advanced Encoder → MPEG Encoder



Leave at default of 1000000.

Saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

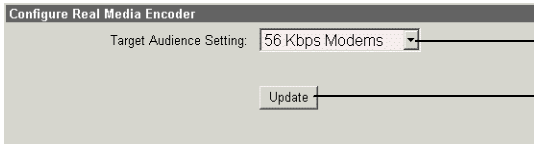
Restart the Thomson Proxy Transfer service on the Advanced encoder.

This page configures the parameters the encoder uses when it creates the MPEG proxy assets.

Configure Real Media Encoder: Advanced encoder

Do not modify
Advanced ✓
Basic ✓

<http://root-nb-adv-n:280> → Advanced Encoder → Real Media Encoder



Select **56K**. Higher settings consume Advanced encoder system resources and cause performance degradation.

Saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the Proxy Transfer service on the Advanced encoder.

This page sets the resolution for the Real Media assets created by the Advanced encoder.

Test: Advanced encoder stand-alone stage - high-res source

The following test exercises Advanced encoder functionality for creating proxy assets using a Profile high-res clip as the source. A successful test verifies that the basic configurations are correct.

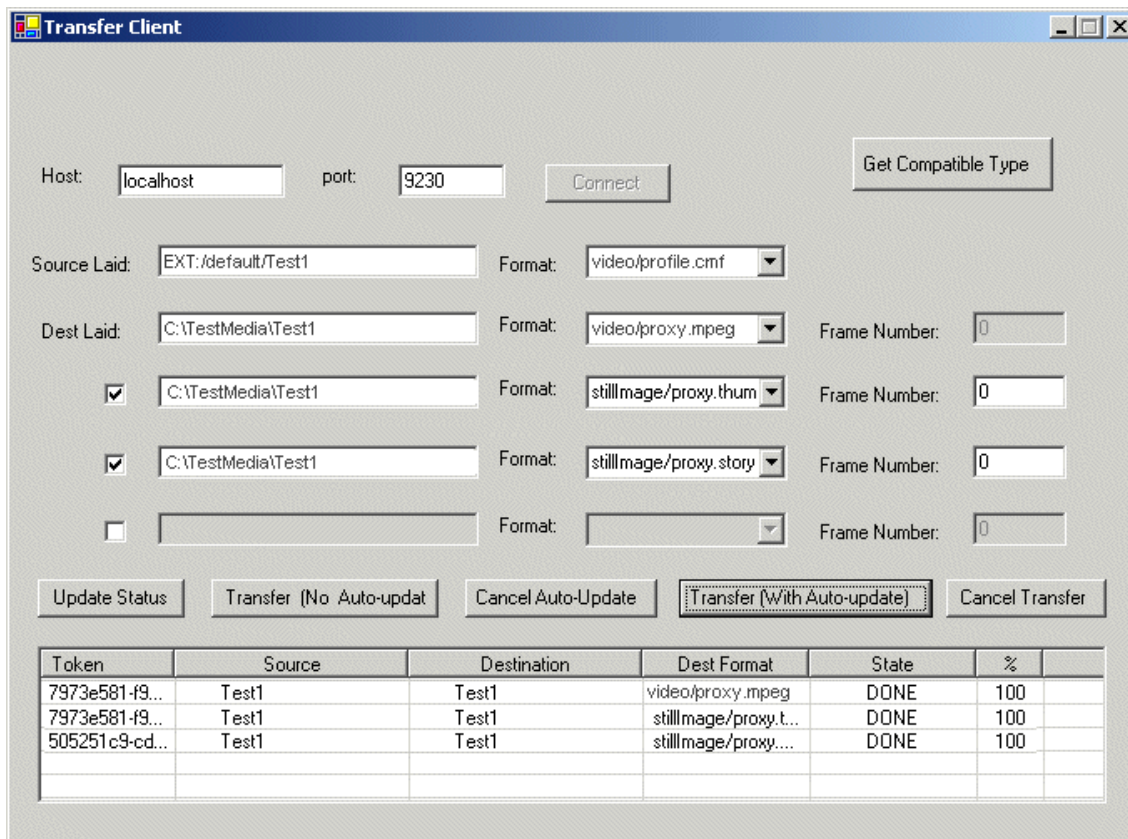
Test description: New asset-types (MPEG proxy, thumbnail, storyboard) are created from a high-res asset and are transferred to a different location.

ASK configuration, as in “ASK registration stage” on page 50, is required for this test.

NOTE: Run this test only in the stand-alone stage, with machines that have not yet been added as managed devices (as in the + Server stage). Once the server is connected, this test can result in corrupt database records.

Run the test as follows:

1. Make sure that the NewsBrowse system is not in use.
2. Make sure the Rules Wizard Service, Thomson Resolver service, and the Thomson Metadata service are off on the NewsBrowse server.
3. On the Advanced encoder, click **Start | Programs | Thomson | NewsBrowse | Diagnostic Tools | Transfer Client**. The Transfer Client application opens.



4. Configure as follows to check the connection:

- Host: **localhost**
 - Port: **9230**
5. Click **Connect**. Verify that the ...Update... and ...Transfer... buttons become enabled, which means the connection is successful.
 6. Configure as follows to define the source clip on the Profile XP:
 - Source Laid: Enter the path to a clip on a Profile. For example, **EXT:/default/clip_name** to on a stand-alone Profile, **V:/default/clip_name** on an Open SAN. Do not enter the *.cmf extension as part of the file name, as the Transfer Client application adds it automatically.

NOTE: The Source path must use forward slashes. Also, the volume name of the Profile is case sensitive.

- (Source) Format: **video/profile.cmf**
7. Configure the first row as follows to transfer/transcode a proxy MPEG asset:
 - Dest Laid: Enter a directory on the local Advanced encoder machine. This is for test purposes only. The test MPEG file will be written to this directory.

NOTE: The Destination path must use back slashes

- (Destination) Format: **video/proxy.mpeg**
8. Select the checkbox to enable the next row, then configure as follows to transfer/transcode a thumbnail asset:
 - Dest Laid: Enter a directory on the local Advanced encoder machine. This is for this test only. The test files are written to the directory.

NOTE: The Destination path must use back slashes

- (Destination) Format: **stillImage/proxy.thumbnail**
9. Select the checkbox to enable the next row, then configure as follows to transfer/transcode a storyboard asset:
 - Dest Laid: Enter a directory on the local Advanced encoder machine. This is for this test only. The test files are written to the directory.

NOTE: The Destination path must use back slashes

- (Destination) Format: **stillImage/proxy.storyboard**
10. Click **Transfer (With Auto update)**. Watch the report in the State column to verify that the asset creation is successful.
 11. Using Windows Explorer, verify the MPEG, storyboard, and thumbnail assets created. Open and play the MPEG clip. Validate video and audio.

Test: Advanced encoder stand-alone stage - MPEG proxy source

The following test exercises system functionality exclusive to configurations for creating thumbnail and storyboard assets from a MPEG proxy asset. A successful test verifies that the basic configurations are correct.

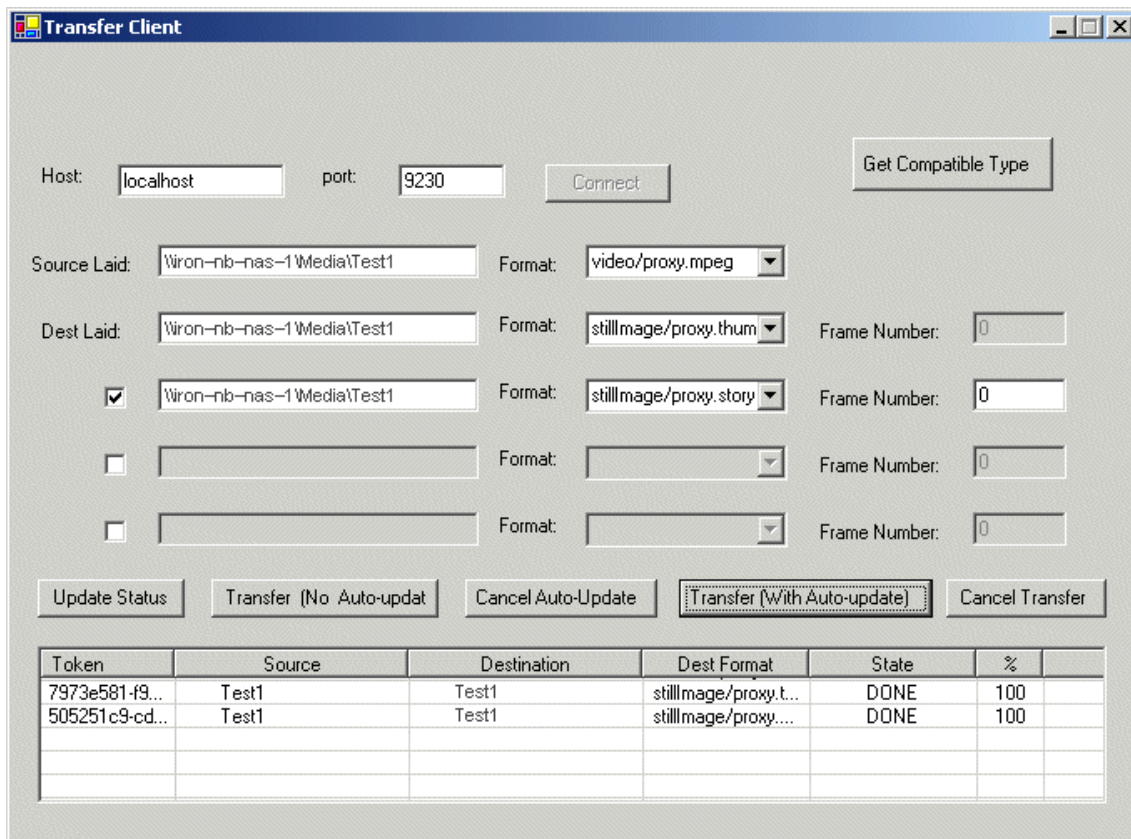
Test description: Thumbnail and storyboard assets are created from an MPEG proxy asset.

ASK configuration, as in “ASK registration stage” on page 50, is required for this test.

NOTE: Run this test only in the stand-alone stage, with machines that have not yet been added as managed devices (as in the + Server stage). Once the server is connected, this test can result in corrupt database records.

Run the test as follows:

1. Make sure that the NewsBrowse system is not in use.
2. Make sure the Rules Wizard Service, Thomson Resolver service, and the Thomson Metadata service are off on the NewsBrowse server.
3. On the Advanced encoder, click **Start | Programs | Thomson | NewsBrowse | Diagnostic Tools | Transfer Client**. The Transfer Client application opens.



4. Configure as follows to check the connection:

- Host: **localhost**
 - Port: **9230**
5. Click **Connect**. Verify that the ...Update... and ...Transfer... buttons become enabled, which means the connection is successful.
 6. Configure as follows to define the MPEG source clip on the NAS:
 - Source Laid: Enter the path to a MPEG asset on a NAS machine. You can use an asset created in an earlier test.
 - (Source) Format: **video/proxy.mpeg**
 7. Configure the first row as follows to transfer/transcode a thumbnail asset from a MPEG asset:
 - Dest Laid: Enter the path to the directory on the NAS machine that contains the source MPEG asset. For the purposes of this test, the thumbnail and storyboard assets must be written to the same location as the source MPEG asset.
 - (Destination) Format: **stillImage/proxy.thumbnail**
 8. Select the checkbox to enable the next row, then configure as follows to transfer/transcode a storyboard asset from a MPEG asset:
 - Dest Laid: Enter the path to the directory on the NAS machine that contains the source MPEG asset. For the purposes of this test, the thumbnail and storyboard assets must be written to the same location as the source MPEG asset.
 - (Destination) Format: **stillImage/proxy.storyboard**
 9. Click **Transfer (With Auto update)**. Track progress in the State column until it reports DONE.
 10. Using Windows Explorer, verify that the thumbnail and storyboard test files were written to the proper directory.

Checklist: Advanced encoder stand-alone stage

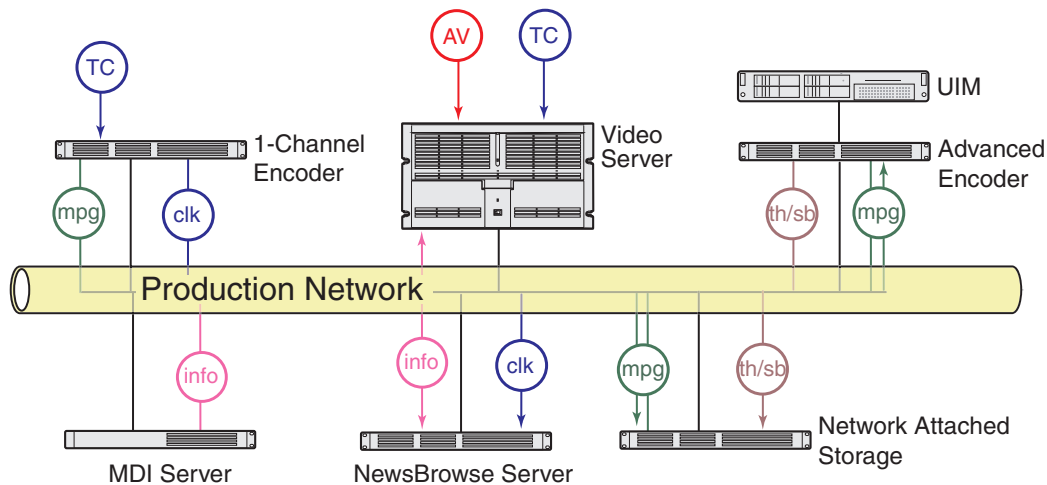
Use the following check list to verify that the basic configuration and testing of the stand-alone Advanced encoder is complete.

- Advanced encoder is connected to NAS
- Encoder writes to NAS
- MPEG created
- MPEG playback with audio
- Thumbnails files are created.
- Storyboard files are created.

Advanced encoder + Server stage

For this configuration stage you configure the NewsBrowse server to work together with the Advanced encoder and NAS from the Advanced encoder stand-alone stage. MDI services are also required, as configured in the MDI stage.

The portion of the NewsBrowse system configured and tested in this stage is illustrated by the following diagram.



Refer to [“Two tier system diagram”](#) on page 10 for a view of the entire NewsBrowse system.

To do the basic configuration and testing of the encoder plus server, do the following:

1. [“Configure Media Frame Core ASK: Advanced encoder”](#) on page 87
2. [“Configure Rules Automation: Advanced encoder”](#) on page 88
3. [“Test: Advanced encoder + Server stage - high-res source”](#) on page 91
4. [“Test: Advanced encoder + Server stage - MPEG proxy source”](#) on page 92
5. [“Checklist: Advanced encoder + Server stage”](#) on page 92

Configure Media Frame Core ASK: Advanced encoder

Make sure the Advanced encoder’s Proxy Transfer service is registered with the ASK software component as a “Transfer” device, as explained in [“Configure Media Frame Core ASK: Register components”](#) on page 51.

Configure Rules Automation: Advanced encoder

http://root-nb-svr:280 → Media Frame Core → Rules Automation

Do not modify
 Advanced
 Basic

Rules Automation Settings

Create Proxy MPEG Rule

Create Proxy MPEG if Profile movie exists when Rules Wizard starts → Select a rule

Profile MDI Name: PROFILE1 → Select the MDI for the Profile monitored by Advanced encoder.

Profile Storage Location: SCAV1 → Enter the path to the bin on the Profile that the NewsBrowse system monitors for movies. *Note: You must use forward slashes for this path.*

Proxy MDI Name: PROXY1 → Must be PROXY1

Rule Priority: Normal → Set all rules to Normal to ensure all are processed

Days to Expire Asset: → Defines the age of the MPEG asset after which it is automatically deleted from the system the next time the purge rule runs. Leave blank to never expire.

Add "Create Proxy MPEG" Rule → Adds settings above as a Create Proxy MPEG encoder rule

Create Proxy Rule

Create Proxy Thumbnail → Select an asset type

if Proxy MPEG exists when Rules Wizard starts → Select a rule

Proxy MDI Name: PROXY1 → Must be PROXY1

Proxy Storage Location: → Leave blank, so the system can use any NAS and keep proxy assets together^a

Rule Priority: Normal → Set all rules to Normal to ensure all are processed

Add "Create Proxy" Rule → Adds settings above as a Create Proxy rule

Existing Rules

Displays all currently added rules.

Remove Rule → Removes the currently selected rule

Rule Retry Policy

Max Number Of Retries: 3 → Specifies how many times the system retries a failed rule. Keep this setting at 3 or below for most rules to prevent degradation of system performance.

Retry Priority: Increase → When a failed rule is retried, its priority can be changed in relation to other rules currently being processed. Set to **Increase** to promote timely processing.

Update Retry Policy → Save Retry setting changes

Purge Policy

Purge Expired Assets Period: 60 → Expired assets are purged from the system after this many days.

Update purge policy. → Saves Purge setting changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

You must start or restart the Thomson Rules Wizard service on the NewsBrowse server to put changes into effect, but if you are doing the initial configuration of the Advanced encoder + Server stage, don't start the service until instructed to do so in the Advanced encoder + Server stage test.

^a When this field is left blank, the Rule specifies "*" as the Proxy Storage Location, so the Default File System Folder is used, as configured in "Configure Proxy Asset (NAS): Advanced encoder" on page 81

This page defines the rules for an Advanced Encoder creating proxy material for an asset. There are two groups of rules to create proxy material, as explained in the following sections.

Create Proxy MPEG Rules

These rules create MPEG material from a Profile or M-Series movie. This is also known as a “scavenge” operation and is the same as Sequential encoder functionality. Depending on the desired behavior of the system you may have to create multiple rules for the MPEG creation. There are four types of rules for MPEG creation, as follows:

- **Exists when Rules Wizard starts up** — This rule will cause the Rules Wizard to traverse a Profile/M-Series MDI to see if there are any Profile/M-Series files that do not have MPEG asset associated with it. The Rules Wizard will only check the system once after startup to see if it needs to create any of these assets.
- **Is recording** — This rule causes MPEG to be created while the system is encoding the Profile/M-Series asset. This MPEG will only be created if you have an Advanced Encoder configured in the system.

NOTE: The “is recording” rule should not be configured with the “is created (closed)” rule referencing the same Profile/M-Series storage location. Also if any other process is associating MPEG and the high-resolution material together this rule should not be configured for that location.

If you want to reserve an Advanced encoder to only create MPEG for assets that are created by the ingest you will need to have the MPEG material be created in a separate folder than the other scavenge MPEG material and configure the advanced encoder's to only use this folder.

- **Is created (closed)** — This rule causes MPEG to be created after the Profile/M-Series asset is done recording. It is most commonly used with Sequential Encoders. Refer to [Appendix B, Legacy systems](#).

NOTE: The “is created (closed)” rule should not be configured with the “is recording” rule referencing the same Profile/M-Series storage location.

- **Has its content modified** — This rule will cause the system to delete the proxy material associated to a Profile/M-Series movie if the movie has its content modified. It will then recreate the MPEG material for the asset. Note: This rule is normal not configured unless the site's workflow frequently modifies content in an asset.

Systems will usually have either “Is recording” or “Is created (closed)” rule set up (not both) for directories that are being monitored for the scavenge process.

The following table maps the “Create Proxy MPEG” rules and provides an example text string for each rule, as appears in the Existing Rules box when the rule is added.

Create Proxy MPEG if Profile movie...	For movies in bin SCAV1, Profile 1	For movies in bin SCAV2, Profile 2
...exists when Rules Wizard Starts up	CreateIfSourceExist Source:DEFAULTDOMAIN/PROFILE1/EXT:/SCAV1/*,video/profile.cmf Destination:DEFAULTDOMAIN/PROXY1/*/*,video/proxy.mpeg Priority:Normal	CreateIfSourceExist Source:DEFAULTDOMAIN/PROFILE2/EXT:/SCAV2/*,video/profile.cmf Destination:DEFAULTDOMAIN/PROXY1/*/*,video/proxy.mpeg Priority:Normal
...is recording	CreateIfSourceIsCreated Source:DEFAULTDOMAIN/PROFILE1/EXT:/SCAV1/*,video/profile.cmf Destination:DEFAULTDOMAIN/PROXY1/*/*, video/proxy.mpeg Priority:Normal	CreateIfSourceIsCreated Source:DEFAULTDOMAIN/PROFILE1/EXT:/SCAV2/*,video/profile.cmf Destination:DEFAULTDOMAIN/PROXY1/*/*, video/proxy.mpeg Priority:Normal
...is created (closed)	CreateIfSourceIsCreatedClosed Source:DEFAULTDOMAIN/PROFILE1/EXT:/SCAV1/*,video/profile.cmf Destination:DEFAULTDOMAIN/PROXY1/*/*,video/proxy.mpeg Priority:Normal	CreateIfSourceIsCreatedClosed Source:DEFAULTDOMAIN/PROFILE2/EXT:/SCAV2/*,video/profile.cmf Destination:DEFAULTDOMAIN/PROXY1/*/*,video/proxy.mpeg Priority:Normal
...has its content modified	CreateIfSourceContentIsModifiedClosed Source:DEFAULTDOMAIN/PROFILE1/EXT:/SCAV1/*,video/profile.cmf Destination:DEFAULTDOMAIN/PROXY1/*/*,video/proxy.mpeg Priority:Normal	CreateIfSourceContentIsModifiedClosed Source:DEFAULTDOMAIN/PROFILE2/EXT:/SCAV2/*,video/profile.cmf Destination:DEFAULTDOMAIN/PROXY1/*/*,video/proxy.mpeg Priority:Normal

Do not configure both to reference the same storage location

Create Proxy Rules

These rules create thumbnails, storyboards, and Real Media video from an MPEG asset. This is the same as Image Support Server (ISS) functionality. Most systems only create thumbnail and storyboard material. There are two types of rules to create the proxy material, as follows:

- **Exists when Rules Wizard starts up** — This rule will cause the Rules Wizard to traverse a Proxy MDI to see if it needs to create proxy material from the MPEG asset.
- **Is created** — This rule will key off of material being created and will create the desired proxy material. If you have a create proxy MPEG rule “Is recording” or “Is created (closed)” you should have this rule configured if you want any other proxy material created.

The following table maps the “Create Proxy” rules and provides an example text string for each rule, as appears in the Existing Rules box when the rule is added.

If Proxy MPEG...	Create Thumbnail assets	Create Storyboard assets	Create Real Video assets
... exists when Rules Wizard Starts up	CreateIfSourceExist Source:DEFAULTDOMAIN/ PROXY1/*/*,video/proxy.mpeg Destination:DEFAULTDOMAIN/ PROXY1/*/*,stillImage/ proxy.thumbnail Priority:Normal	CreateIfSourceExist Source:DEFAULTDOMAIN/ PROXY1/*/*,video/proxy.mpeg Destination:DEFAULTDOMAIN/ PROXY1/*/*,stillImage/ proxy.storyboard Priority:Normal	CreateIfSourceExist Source:DEFAULTDOMAIN/ PROXY1/*/*,video/proxy.mpeg Destination:DEFAULTDOMAIN/ PROXY1/*/*,video/proxy.rm Priority:Normal
...is created	CreateIfSourceIsCreatedClosed Source:DEFAULTDOMAIN/ PROXY1/*/*,video/proxy.mpeg Destination:DEFAULTDOMAIN/ PROXY1/*/*,stillImage/ proxy.thumbnail Priority:Normal	CreateIfSourceIsCreatedClosed Source:DEFAULTDOMAIN/ PROXY1/*/*,video/proxy.mpeg Destination:DEFAULTDOMAIN/ PROXY1/*/*,stillImage/ proxy.storyboard Priority:Normal	CreateIfSourceIsCreatedClosed Source:DEFAULTDOMAIN/ PROXY1/*/*,video/proxy.mpeg Destination:DEFAULTDOMAIN/ PROXY1/*/*,video/proxy.rm Priority:Normal

Test: Advanced encoder + Server stage - high-res source

The following test exercises system functionality exclusive to the rules for creating MPEG proxy, storyboard, and thumbnail assets from a Profile high-res source clip. A successful test verifies that the basic configurations for the rules are correct.

Test description: Trigger rules by creating/modifying a clip on a Profile Media server while the Rules Wizard service is off, then on.

Run the test as follows:

1. Make sure that the NewsBrowse system is not in use.
2. Make sure the Thomson Rules Wizard service is off on the NewsBrowse server.
3. Start the Thomson Resolver service and the Thomson Metadata service on the NewsBrowse server.
4. Click **Start | Programs | Thomson | Event Viewer** to open Event Viewer.
5. On a Profile Media Server, copy a clip into a bin monitored by the Advanced encoder.
6. On the NewsBrowse server, start the Thomson Rules Wizard. Watch Event Viewer and verify that the proxy MPEG, storyboard, and thumbnail assets are created for the clip.
7. On the Profile Media Server, copy another clip into the bin. Watch Event Viewer and verify that the proxy MPEG, storyboard, and thumbnail assets are created for the clip.
8. On the Profile Media Server, modify a clip (rename) in the bin. Watch Event Viewer and verify that the proxy MPEG, storyboard, and thumbnail assets are created for the modified clip.
9. If you have a “is recording” rule configured for high-res clips, on the Profile Media Server, record a clip into a bin monitored by the Advanced Encoder. Watch Event Viewer and verify that the proxy MPEG, storyboard, and thumbnail assets are created (in real-time) as the clip is recorded.

Test: Advanced encoder + Server stage - MPEG proxy source

The following test exercises system functionality exclusive to the rules for creating storyboard and thumbnail assets from a MPEG proxy asset. A successful test verifies that the basic configurations are correct. This test assumes that you are using single-channel encoders for creating the MPEG proxy asset at ingest.

Test description: Trigger rules by creating a clip on a Profile Media server while the Rules Wizard service is off, then on.

Run the test as follows:

1. Make sure that the NewsBrowse system is not in use.

NOTE: Running these tests will tie up a channel and could collide with commands from the Ingest Schedule page. Inform operators that they must not use the channels under test.

2. Stop the Thomson Rules Wizard service on the NewsBrowse server.
3. Start the Thomson Resolver service and the Thomson Metadata service on the NewsBrowse server.
4. From the NewsBrowse server, open the NewsBrowse application.
5. Ingest a short test clip. On the related tab, verify that only the MPEG proxy asset is created.
6. Start the Thomson Rules Wizard service on the NewsBrowse server. In the NewsBrowse application on the related tab, verify that the thumbnail and storyboard assets are created for the MPEG asset, as per your currently configured rules. This could take a few minutes, depending on clip length.
7. Ingest a short test clip. On the related tab, verify that the MPEG proxy asset is created and the other assets are created as well. This could take a few minutes, depending on clip length.
8. Stop the Thomson Rules Wizard service, Thomson Resolver service, and the Thomson Metadata service on the NewsBrowse server.

Checklist: Advanced encoder + Server stage

Use the following check list to verify that the basic configuration and testing of the single-channel encoder plus NewsBrowse server is complete.

- When the Rules Wizard starts up, rules work as configured for the creation of proxy MPEG, thumbnail, and storyboard assets.
- When a clip is ingested, rules work as configured for the creation of proxy MPEG, thumbnail, and storyboard assets.
- When a Profile clip is copied into a monitored bin, rules work as configured for creation of proxy MPEG, thumbnail, and storyboard assets.
- When a Profile clip is modified, rules work as configured for creation of proxy MPEG, thumbnail, and storyboard assets.

EDL Export, Save, Conform stage

For this configuration stage you configure the settings for the following Edit Decision List (EDL) features. These features are available in the NewsBrowse application when EDLs are created:

- **Export** — Exports an EDL to a pre-defined location.
- **Save** — Saves the EDL as a NewsBrowse system asset for future use.
- **Conform** — Creates a high-res asset that matches the EDL on a Profile Media Server.
- **Conform to Air** — Creates a high-res asset that matches the EDL on one Profile Media Server, then transfers the asset to another Profile Media Server.

To do the basic configuration and testing of the EDL stage, do the following:

1. [“Configure Profile MDI: Conform to air settings” on page 94](#)
2. [“Configure NTFS MDI” on page 95](#)
3. [“Configure Media Frame Core ASK: NTFS” on page 95](#)
4. [“Configure Conform Services” on page 96](#)
5. [“Configure Export Services” on page 97](#)
6. [“Configure Save EDL settings” on page 97](#)
7. [“Test: EDL stage” on page 98](#)
8. [“Checklist: EDL stage” on page 98](#)

Configure Profile MDI: Conform to air settings

Do not modify

Advanced

Basic

http://root-mdi-svr:280 → Profile MDI

Profile MDI Settings

Port: 9100

Domain: DEFAULTDOMAIN

Add Profile MDI

MDI Name: PROFILE2

Profile Host Name or IP: pvs-2

Asset System Dwell Time (mins): 2

Port: 9132

Existing Profile MDIs

0 - SAN1 mpvs-1 2 9130
1 - PROFILE1 pvs-1 2 9131

Add Transfer Target The transfer operation requires the fibre channel

Profile MDI Name: PROFILE2

Profile Host Name or IP: pvs-2

Existing Transfer Targets

PROFILE1 pvs-1

This page resides on the machine hosting the Profile MDI service.

Port 9100 is required. See “Ports and services convention” on page 31.

All Domain names in the NewsBrowse system must be identical.

Saves changes. Changes are lost if you leave the configuration page without updating.

Select a Profile MDI.

Enter the host (table) name of the Profile for the MDI selected above.^a

The time that the Profile MDI waits before it informs the NewsBrowse system that a clip has finished recording. Leave at 2.

Automatically increments so each Profile MDI has a unique port.

Click to add an existing managed device. For stand-alone Profile Media Servers, add a MDI for each one. For Open SAN Profile Media Servers, add only one MDI per Open SAN.

Verify the MDIs currently on-line. A listing for a single Profile MDI includes the values from all four “Add Profile MDI” fields above.

Click to remove the selected managed device.

The following settings specify Profiles to which assets can be transferred via Fibre Channel from other Profiles. This is used by Conform-To-Air EDL and other Fibre Channel transfers.

Select the MDI for a Profile to which assets can be transferred.

Host (table) name of the Profile specified above.

Click to add as a transfer target. This makes the Profile available for selection from the NewsBrowse application as a transfer destination.

Profiles capable of receiving a Fibre Channel transfer.

Click to remove the selected transfer target.

Always click **Update...** buttons after making changes

To put changes into effect, start or restart Profile MDI Service on the MDI server.

^aMake sure the Profile name is entered just as it is in the host table.

This page configures the Managed Device Interface (MDI) for the Profile Media Servers that record and store the high-res media. The NewsBrowse system depends on the Profile MDI to make high-res media assets visible across the system.

For the EDL stage, configure the settings related to the EDL Conform to air feature. Specify one of more on-air Profiles as the targets to which conformed high-res clips can be transferred for playback.

For other settings, refer to “Configure Profile MDIs” on page 57.

Configure NTFS MDI

Do not modify
Advanced
Basic

http://root-nb-svr:280 → Managed Devices → NTFS MDI

NTFS MDI Product Configuration Settings

MDI Name: NTFS1	Name of NTFS MDI, as registered with ASK. Refer to “Configure Media Frame Core ASK: Register components” on page 51.
Domain: DEFAULTDOMAIN	All Domain names in the NewsBrowse system must be identical
Port: 9115	Port 9115 required. See “Ports and services convention” on page 31.
Update	Saves changes. Changes are lost if you leave the configuration page without updating.
File System Folder Location: \\iron-nb-svr1\TempEDL Example1: \\HostName Example2: \\HostName\Folder	Machine (and folder) managed by the NTFS MDI. This must be a UNC path. The machine must have NTFS storage. You can optionally specify the folder.
Add Location	Adds the machine/folder) as managed by the NTFS MDI.
Existing File System Folder Locations: \\iron-nb-nas1\EDLs \\iron-nb-nas1\Audio \\iron-nb-nas-2\Audio	Lists currently added machines/folders accessible by the NTFS MDI.
Delete Location	Removes the currently selected machine/folder from the list.
RegisteredType Mappings: xml-edl/xml Example1:txt-text/file Example2:wav-audio/wav	Defines the types of files accessible by the NTFS MDI. Follow the example syntax.
Add RegisteredType	Adds the file-type as accessible the NTFS MDI.
Existing RegisteredTypes: bt-text/file wav-audio/wav	Lists currently added file-types accessible by the NTFS MDI.
Delete RegisteredType	Removes the currently selected file-type from the list.

Always click **Update...** buttons after making changes

Restart the Thomson NTFS MDI Service on the NewsBrowse server.

This page specifies the machines, directories, and file types that the NTFS MDI can access. The NewsBrowse application makes these available as selections for saving and managing assets, including EDLs.

- Enter a location for saving EDLs. Typically this would be on a NAS machine, such as \\root-nas-n\EDLs.
- Enter a location for temporarily saving EDLs as they are being conformed. Typically this would be on the NewsBrowse server, such as \\root-nb-svr\TempEDL.

NOTE: Configure different locations for EDL operations. Do not use the same locations for saving, temporary saving, conforming, and exporting EDLs.

- Enter a location for saving audio files. Typically this would be on a NAS machine, such as \\root-nas-n\Audio.
- Enter *xml-edl/xml* and *wav-audio/wav* as file-types.

Configure Media Frame Core ASK: NTFS

Make sure the NTFS MDI is registered with the ASK software component as a “NTFS” device, as explained in “Configure Media Frame Core ASK: Register components” on page 51.

Configure Conform Services

Do not modify
Advanced
Basic

http://root-nb-svr:280 → NewsBrowse Application → Conform Services

Conform Services Settings

Temporary EDL Location

MDI Name: NTFS1 — Select the name for the NTFS MDI (NTFS1).

MDI Storage Location: \\iron-nb-svr\TempEDL — Enter a full UNC path to the directory (on a machine with NTFS storage) in which the EDLs are temporarily stored.^a

Update — Saves changes. Changes are lost if you leave the configuration page without updating.

Add Conform Service

Display Name: Conform To Air — Enter the label for display in the NewsBrowse application that identifies the service of a Profile conforming an EDL.

Profile MDI Name: SAN1 — Select the MDI for the Profile that does the conformance.

Target MDI Name: PROFILE1 — The Profile managed by this MDI is a play-to-air Profile to which Conform-to-Air high-res assets are transferred.

Target MDI Storage Location: EXT:\Conform — Location (bin) on the play-to-air Profile where the Conform-to-Air high-res asset is stored.^b

NewsQPro Service: Enable — Select to make the EDL available to NewsQPro.

Add Conform Service — Add the service to conform EDLs.

Existing Conform Services

Conform To SAN, svc:SAN1 tgt:SAN1 V:Conform NewsQPro N — Currently added services available to conform EDLs. You can add services using several Profiles, so that they can be selected in the NewsBrowse application when conforming an EDL.

Remove Conform Service — Removes the currently selected EDL service.

Always click **Update...** buttons after making changes
Restart the NewsBrowse application to put changes into effect.

- ^a. This directory must be shared so it can be accessed by the NewsBrowse server.
- ^b. This list is automatically populated by reading the volume and bin names, as in Media Manager, from the Profile indicated by "Target MDI Name" above.

This page tells the NewsBrowse application where to store EDLs that are to be conformed and specifies Profiles that are available to conform EDLs. You can add multiple Profiles as Conform Services, each of which is then available for selection from the NewsBrowse application.

NOTE: Configure different locations for EDL operations. Do not use the same locations for saving, temporary saving, conforming, and exporting EDLs.

For a Conform-To-Air service, one Profile (often an Open SAN Profile) does the work of conforming the EDL, then the resultant high-res asset is transferred to an On-Air Profile (usually a stand-alone Profile) for playout. You must define the NewsBrowse application display name, the Profiles, and the locations to make this type of Conform-to-Air service available in the NewsBrowse application.

Configure Export Services

Do not modify
Advanced
Basic

http://root-nb-svr:280 → NewsBrowse Application → Export Services

Export Services Settings

Add Export Location

Display Name: Export to Sports — Enter the label for display in the NewsBrowse application that identifies the location to which EDLs can be exported.

Export Location: \\iron-nb-nas-1\Sports — Enter a full UNC path to the directory to which the EDLs are exported.^a

Add Export Location — Adds the location as an export location.

Export to News \\iron-nb-nas-1\News — Currently added location available for exporting EDLs. You can add several locations, so that they can be selected in the NewsBrowse application when exporting an EDL.

Remove Export Location — Removes the currently selected location.

Always click **Update...** buttons after making changes
Restart the NewsBrowse application to put changes into effect.

^a. This directory must be shared so it can be accessed by the NewsBrowse server.

This page tells the NewsBrowse application the locations available for exporting EDLs. You can add multiple locations, each of which is then available for selection from the NewsBrowse application. Name locations and add them according to workflow needs.

NOTE: Configure different locations for EDL operations. Do not use the same locations for saving, temporary saving, conforming, and exporting EDLs.

Configure Save EDL settings

Do not modify
Advanced
Basic

http://root-nb-svr:280 → NewsBrowse Application → Save EDL

Save EDL Settings

EDL Storage Location: \\iron-nb-nas-1\EDLs — EDLs are saved to this location, usually a NAS machine.

Default Days to Expire Asset: 30 — After this many days, a saved EDL is deleted. Enter 0 to never delete.

Update — Saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes
Restart the NewsBrowse application to put changes into effect.

This page tells the NewsBrowse application where to save EDLs and how long to keep them in the system.

NOTE: Configure different locations for EDL operations. Do not use the same locations for saving, temporary saving, conforming, and exporting EDLs.

Test: EDL stage

The following test exercises system functionality exclusive to the EDL configurations. A successful test verifies that the basic configurations are correct.

Test description: Using the NewsBrowse application, create an EDL, then export, save, and conform it.

Run the test as follows:

1. Make sure that the NewsBrowse system is not in use.
2. Load a clip in the NewsBrowse application.
3. Mark in/out region of the clip and press the Insert to Timeline button to add to the timeline. Do this a couple of times with this and other assets.
4. Select Save from the timeline control. Enter and take note of the name used for saving. The save should be successful.
5. Refresh the results list by clicking the Go button with no criteria selected. The EDL asset name should appear in the results list.
6. Select the Export button from the timeline control. Select a destination and choose export.
7. Select Conform from the timeline control. Enter and take note of the name used for conforming. Select a target (not a Conform to Air target) and choose Conform.
8. Select Conform again from the timeline control. Enter and take note of the name used for conforming. Select a Conform to Air target and choose Conform.
9. To verify export, the EDL file should be in the export destination.
10. To verify Conform, on the Profile/Open SAN a resulting high-res asset should be created with the exported EDL name. Playback the conformed asset from the Profile/Open SAN.
11. To verify Conform with Transfer to On-Air, a high-res asset should exist on the On-Air server. Playback the conformed asset from the On-Air server.

Checklist: EDL stage

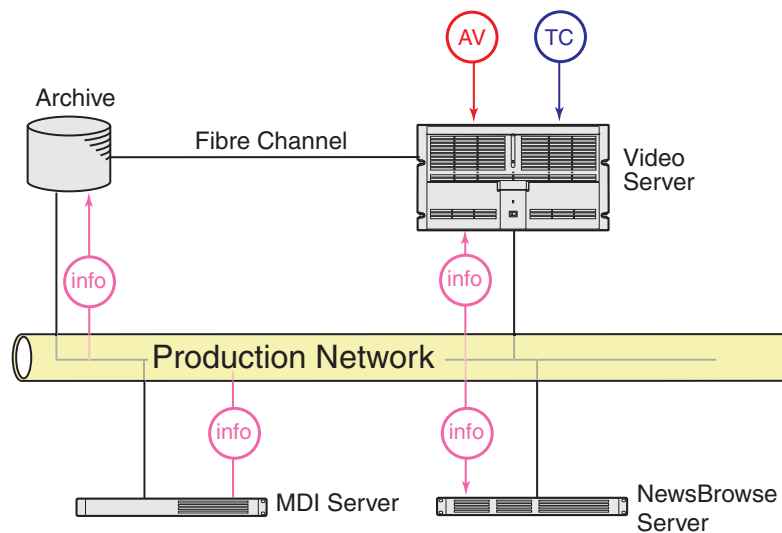
Use the following check list to verify that the basic configuration and testing of the EDL functionality is complete.

- EDL is created and saved.
- Saved EDL available as asset from NewsBrowse application
- EDL exports to specified location
- Profile correctly creates conformed EDL
- Transfer to On-Air EDL plays from On-Air Profile

Archive stage

For this configuration stage you configure your archive MDI, Profile Media Servers, and the NewsBrowse server to work together. This assumes that the archive devices are already installed and connected.

The portion of the NewsBrowse system configured and tested in this stage is illustrated by the following diagram.



To configure and test the Archive stage, do the following:

1. [“Add archive MDI” on page 100](#)
2. [“Verify archive preparations” on page 101](#)
3. [“Configure ASK Location: Archive MDI host” on page 104](#)
4. [“Configure Media Frame Core ASK: Archive” on page 104](#)
5. [“Configure Avalon Archive MDI” on page 105](#)
6. [“Configure FlashNet MDI” on page 107](#)
7. [“Configure DIVA MDI” on page 108](#)
8. [“Configure Archive Services.” on page 109](#)
9. [“Test: Archive stage” on page 109](#)
10. [“Checklist: Archive stage” on page 110](#)

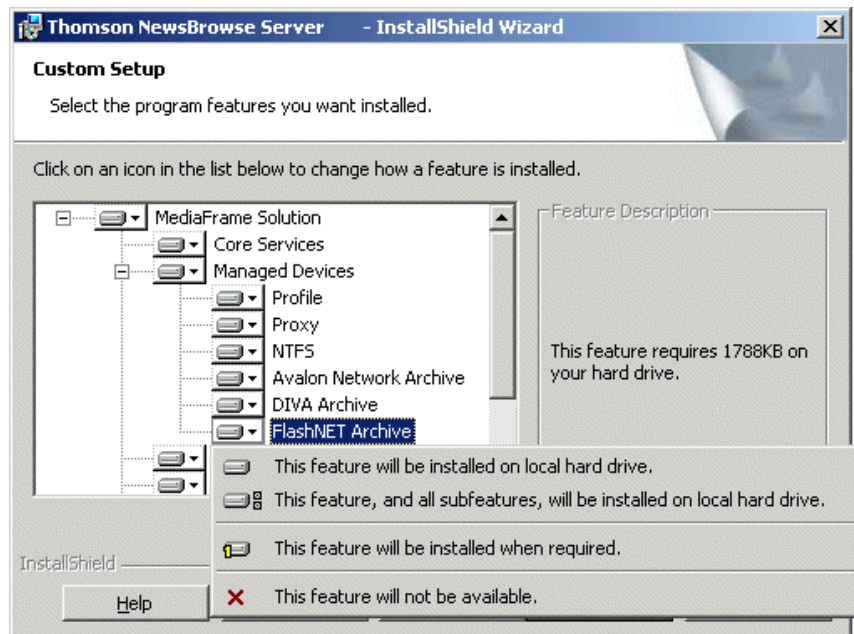
Add archive MDI

The archive MDI software component runs as a service. The archive MDIs that are available for the different types of archive devices are as follows:

- Avalon Archive MDI — runs as the Thomson Avalon Archive MDI service
- FlashNet MDI — runs as the Thomson FlashNet MDI service
- DIVA MDI — runs as the Thomson DIVA MDI service

The archive MDI software component must be installed on a network connected computer. Similar to the other MDIs in the NewsBrowse system, the archive MDI can be installed on a MDI server or on the NewsBrowse server, depending on the size and design of your NewsBrowse system.

You can install the archive MDI software component from the NewsBrowse server installation program. Select the component for your archive from the Custom setup page.



Verify archive preparations

A single Profile XP system provides a maximum of four streams for concurrent transfers. Keep this mind when configuring the archive device for concurrent transfers. If the archive is configured such that it can request more than four streams simultaneously from any single Profile XP system, the additional transfers will error out.

For the type of archive device you use, check the following to verify proper operation with the NewsBrowse system.

Avalon archive preparations

Check the following on the machine which runs Avalon IDM Software (Archive):

1. Login to the machine and go to /avalon/aam/utills
2. Run stataam and verify all services running properly.
3. Make sure host tables are set correctly. Verify for the machine name/IP which IDM will talk to.
4. Make sure the Fiber channel interfaces are configured so that Avalon IDM can talk to the Profiles.

Consider the following when preparing to integrate Avalon archive with NewsBrowse:

- Avalon archive has no fixed limit for concurrent transfers, so it can be configured to consume as few or as many streams provided by the Profile XP systems on the Open SAN.

FlashNet preparations

Check the following on the machine which runs the FlashNet software:

1. Login to the machine.
2. Verify that you can telnet to the Profile Ethernet IP address on port 8192 (telnet keystone2_1e0 8192).
3. Verify that you can FTP from the FlashNet server to the Profile on the Fibre Channel address and login as user *movie*.
4. Make sure the “FlashNet Socket Listener” and “FlashNet Automation” services are up and running.
5. Use the FlashNet “Jukebox” application to test that a drive can be successfully accessed from FlashNet. Refer to “*User Guide for FlashNet running on Windows NT and Windows 2000 platforms*”.

Consider the following when preparing to integrate FlashNet with NewsBrowse:

- The FlashNet MDI does not take any user specified name for the restore. The clips are restored using the original clip name (from archive).
- FlashNet’s setting for concurrent transfers applies globally to all source/destination pairs. There is no setting on a server-by-server (Profile-by-Profile) basis. To make the setting for “maximum number of concurrent transfers”, you use a file named *C:\dtool_env* where you can specify “API_MAX_BACKUPS” and

“API_MAX_RESTORES”. The following is an example for an eight drive system:

```
API_MAX_BACKUPS      2
API_MAX_RESTORES    4
```

This example specifies that two concurrent jobs could be used for automation ingest into the archive, four concurrent jobs could be allowed for automation restore of archives, leaving two drives spare for emergency use or another function.

- The FlashNet MDI uses a file cache to support asset functionality. As the FlashNet device does not have any support for file system updates, the FlashNet MDI assumes that the MDI is the only gateway to the entire FlashNet file system. Any changes made outside the scope of the MDI will not be reflected in MDI immediately.
- Renaming of an asset is not supported in FlashNet.
- A restore operation always defaults to highest “Time Critical” priority and archive operation defaults to “normal” priority.

DIVA preparations

Check the following on the machine which runs DIVA software:

1. Login to the machine.
2. Verify that you can FTP from the DIVA server to the Profile on the Ethernet IP address and login as user *movie*.

Consider the following when preparing to integrate DIVA with NewsBrowse:

- The DIVA MDI does not take any user specified name for the restore. The clips are restored using the original name (from archive).
- DIVA has no fixed limit for concurrent transfers, so it can be configured to consume as few or as many streams provided by the Profile XP systems on the Open SAN.
- DIVA’s setting for concurrent transfers applies to specific source/destination pairs. With the configuration utility/tool you can specify the concurrency limit on a server-by-server (Profile-by-Profile) basis. A single Profile XP system provides a maximum of four streams for concurrent transfers.
- The DIVA MDI makes an the assumption that the MDI is the only gateway to the entire DIVA file system. Any changes made outside the scope of the MDI will not be reflected in MDI immediately.
- Renaming of an asset is not supported in DIVA.
- A restore operation always defaults to highest “Time Critical” priority and an archive operation defaults to “normal” priority.
- The source name specified in the DIVA configuration utility must be the same as the host table name of the Profile XP system.
- If the DIVA server is rebooted, the Thomson DIVA MDI service must be restarted. Refer to [“Accessing NewsBrowse services” on page 46](#).

Network connectivity - all archive types

Using Ethernet IP addresses, from each machine in the following list ping all the other machines in the list:

- NewsBrowse server
- Archive MDI host
- Profile MDI host (MDI server)
- Archive machine
- All Profile systems from/to which media is archived/restored

Using Fibre Channel IP addresses, from each machine in the following list ping all the other machines in the list:

- Archive server
- All Profile systems from/to which media is archived/restored

Configure ASK Location: Archive MDI host

Do not modify
Advanced
Basic ✓
✓

http://localhost:280 → ASK Location

Open this page locally on the machine that hosts the Archive MDI.

Enter the name of the NewsBrowse server

Port 9010 is required. See [“Ports and services convention” on page 31](#).

Saves changes. Changes are lost if you leave the configuration page without updating.

Always click **Update...** buttons after making changes

It is not necessary to restart a service to put these settings into effect.

This page tells the Archive MDI host where to look for the ASK service, which runs on the NewsBrowse server. If the Archive MDI host is a MDI server or other NewsBrowse machine this configuration has likely already been done.

Configure Media Frame Core ASK: Archive

Make sure the Archive MDI is registered with the ASK software component, as explained in [“Configure Media Frame Core ASK: Register components” on page 51](#).

Configure Avalon Archive MDI

Do not modify
 Advanced
 Basic

http://localhost:280 → Managed Devices → Avalon MDI

Open this page locally from the Avalon Archive MDI host.

Name of the Avalon Archive machine. Append *-idm* to the end of the name. This name (with *-idm* appended) must also be in the host table.

Enter **9120**. See [“Ports and services convention”](#) on page 31.

Adds media to the clip to ensure correct long GOP structure. Leave at 2.

The number of archive devices controlled by the MDI.

Select if using partial restore feature.

Saves changes. Changes are lost if you leave the configuration page without updating.

The following settings define archive sources/destinations.

Select **Avalon**. Requires netsem configuration on Avalon. The remainder of this page is disabled.^a

-OR-
Select **Round-robin**. Requires configuration in the following fields^b:

Define Stand-Alone Profile
Select **Stand-alone**.

Define Open SAN
Select **OpenSAN**.

Select the MDI name for the Profile. Select the MDI name for the Open SAN.

Host (table) name of Profile. Enter host (table) name of each Profile on the Open San, with commas separating.^c

Adds a Profile or Open SAN as a source/destination for archive operations.

Currently added Profiles or Open SANs.

Deletes the currently selected device.

Always click **Update...** buttons after making changes

To put changes into effect, start or restart the Thomson Avalon Managed Device service.

^a. With Avalon configuration, you define Profiles and load balance Open SANs when you configure netsem, so it is not necessary to enter any information on this page.

^b. If you do not use Avalon configuration, you must define Profiles and load balance Open SANs on this page.

^c. This defines the Open SAN load balancing. The order of Profiles entered here is the order in which the MDI seeks an open channel for an archive job.

Open this page locally on the machine that hosts the Avalon Archive MDI software component. This page tells the Avalon Archive MDI where to look for the Profile Media Servers for archive and restore of high-res media assets. On this page, or in the

Avalon *netsem*, add all Profiles and Open SANs that are part of the NewsBrowse system. When configuring *netsem*, make sure the *netsem* Open SAN logical name matches the NewsBrowse Open SAN MDI name.

Configure FlashNet MDI

http://localhost:280 → Managed Devices → FlashNet MDI Open this page locally from the FlashNet MDI host.

<p>Do not modify</p> <p>Basic</p> <p>Advanced</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>		<p>The name of the FlashNet MDI.</p> <p>Enter 9124. See “Ports and services convention” on page 31.</p> <p>Name or IP address of the FlashNet machine.</p> <p>Saves changes. Changes are lost if you leave the configuration page without updating.</p> <p>The following settings define archive sources/destinations.</p> <p><u>Define Stand-Alone Profile</u> Select Stand-alone.</p> <p><u>Define Open SAN</u> Select OpenSAN.</p> <p>Select the MDI name for the Profile. Select the MDI name for the Open SAN.</p> <p>Host (table) name of Profile. Enter host (table) name of each Profile on the Open San, with commas separating.^a</p> <p>Adds a Profile or Open SAN as a source/destination for archive operations.</p> <p>Currently added Profiles or Open SANs.</p> <p>Deletes the currently selected device.</p> <p>Always click Update... buttons after making changes</p>
--	--	--

^a. This defines the Open SAN load balancing. The order of Profiles entered here is the order in which the MDI seeks an open channel for an archive job.

Open this page locally on the machine that hosts the FlashNet MDI software component.

This page tells the FlashNet MDI where to look for the Profile Media Servers for archive and restore of high-res media assets. Add all Profiles and Open SANs that are part of the NewsBrowse system.

Configure DIVA MDI

Do not modify

Advanced

Basic

http://localhost:280 → Managed Devices → DIVA MDI Open this page locally from the DIVA MDI host.

DIVA MDI Configuration Settings

MDI Configuration

MDI Name: Archive1 Name of the DIVA MDI.

Port: 9122 Enter **9122**. See “Ports and services convention” on page 31.

MDI Settings

DIVA Host Name or IP: nb-svr-101 Name of IP address of the DIVArchive machine.

DIVA Manager Port: 9000 The port at which DIVA Manager listens for any active connection. By default this port is set to 9000.

Disk Array Names: Online-storage
[Enter comma separated disk array names that is configured with DIVA e.g., Array1,Array2] Specify the name of the disk arrays that are currently configured with the DIVA system.^a

Timeout: 180
(Number of seconds the MDI will try to connect before timing out) The timeout value that controls any communication with the DIVA manager. Default value is set to 180 seconds.

Update Saves changes. Changes are lost if you leave the configuration page without updating.

Add Profile Settings

Profile Type: Stand Alone Define Stand-Alone Profile
 OpenSAN Select **Stand-alone**. Define Open SAN
Select **OpenSAN**.

MDI Name: Select the MDI name for the Profile. Select the MDI name for the Open SAN.

Profile Host Names: Host (table) name^b of Profile. Enter host (table) name^c of each Profile on the Open San, with commas separating.^d

[Enter Profile host names (not IP Addresses). For OpenSAN, separate the host names with a comma e.g., Profile1,Profile2]

Add Adds a Profile or Open SAN as a source/destination for archive operations.

Remove Profile Settings

PROFILE1 (StandAlone, pvs_1) Currently added Profiles or Open SANs.

Remove Deletes the currently selected device.

Always click **Update...** buttons after making changes

- ^a. An array designates a collection of disks designated by their name as they are declared in the DIVArchive configuration.
- ^b. Host table name of Profile must be the same as the source name specified in the DIVA configuration utility.
- ^c. Host table name of Profile must be the same as the source name specified in the DIVA configuration utility.
- ^d. This defines the Open SAN load balancing. The order of Profiles entered here is the order in which the MDI seeks an open channel for an archive job.

Open this page locally on the machine that hosts the DIVA MDI software component.

This page tells the DIVA MDI where to look for the Profile Media Servers for archive and restore of high-res media assets. Add all Profiles and Open SANs that are part of the NewsBrowse system.

Configure Archive Services.

Do not modify

Advanced

Basic

http://root-nb-svr-n:280 → NewsBrowse Application → Archive Services

Enter name for restore location, for display in the NewsBrowse application.

Select a MDI for a Profile or Open SAN that gets the restored clips.

Select a location on the Profile or Open SAN that gets the restored clips.^a

Select if restoring to mirrored Profiles or Open SANs. This opens the following fields for mirrored restore operations.

Select the MDI for the mirrored system that gets the restored clips.

Select a location on the mirrored system that gets the restored clips.

Click to add as a restore location.

Lists currently added restore locations.

Click to remove the currently selected restore location.

Restart the NewsBrowse application to put changes into effect.

^a Profile location lists are automatically populated by reading bins and volumes, as in Media Manager, from the Profile whose MDI is selected from the field above.

This page tells the Archive MDI where to place high-res assets as they are restored from the archive device.

When you select “Enable Mirrored Destination...”, you can then enter the MDI and location for the mirrored Profile or Open SAN system. This allows you to define both Profiles or Open SANs as a single restore location. When this single location is selected in the NewsBrowse application, clips are restored or deleted on both Profiles or Open SANs simultaneously.

Test: Archive stage

The following test exercises archive functionality. A successful test verifies that the archive configurations are correct.

Test description: Using the NewsBrowse application, archive and restore high-res media.

Run the test as follows:

1. Make sure that the NewsBrowse system is not in use.
2. From the NewsBrowse server, open the NewsBrowse application.
3. From the **Find** tab, load a clip. After a short pause, the clip appears in the application interface.
4. On the **related** tab, verify that **online media** is listed as a Related Asset Component.
5. On the **mgmt** tab, verify the presence of the following links:
 - Modify Group Membership
 - Archive Selected Asset

The following links might also be present if the asset has already been archived:

- Restore Selected Asset
- Delete from Archive

Archive and Restore links are not present if the NewsBrowse user currently logged on is not assigned Archive and Restore roles. See [“Configure NewsBrowse Users” on page 117](#).

6. On the **mgmt** tab, click **Archive Selected Asset**. The Archive Selected Asset settings are displayed on the tab.
7. Select an **Archive Group**. This list comes from the archive device. This is the location to which the high-res clip is archived.
8. Select **delete online media following archive**.
9. Click **Submit**, then **Yes** to confirm and **Close**.
10. On the NewsBrowse launch page, click **Archive Status** to track the progress of the transfer. Once the transfer is complete the status reports as DONE and 100%.
11. On the NewsBrowse application **Find** tab, click **Go**. The asset list reloads. Verify that an amber dot is listed with the asset. Select the asset to reload it, then click the **related** tab and verify that **offline media** is now listed.
12. On the **mgmt** tab, click **Restore Selected Asset**. The Restore Selected Asset settings are displayed on the tab.
13. Select from the **Restore to Location** list. This is the Profile system location to which the archived clip is transferred.
14. Click **Submit**, then **Yes** to confirm and **Close**.
15. On the NewsBrowse launch page, click **Archive Status** to track the progress of the transfer. Once the transfer is complete the status reports as DONE and 100%.
16. On the NewsBrowse application **Find** tab, click **Go**. The asset list reloads. Verify that the amber dot is no longer listed with the asset. Select the asset to reload it, then click the **related** tab and verify that both **online media** and **offline media** are now listed.

Checklist: Archive stage

Use the following check list to verify that the configuration and testing of the archive stage is complete.

- High-res asset transfers (archives) from Profile to archive device.
- High-res asset transfers (restores) from archive device to Profile restore location.

Deploy remaining machines for full system

For the basic configuration path, after you have worked through all the configuration stages and verified functionality at each stage, you deploy your remaining NewsBrowse machines.

Do the following tasks to deploy your remaining NewsBrowse machines, as appropriate for the machines included in your particular NewsBrowse system. For instructions, refer to the applicable configuration stages early in this chapter.

- Add backup Profiles. Refer to “Configure media server: Single-channel encoder” on page 64 and “Configure Profile MDIs” on page 57.
- Add backup VTRs. Refer to “Configure Ingest Control: Single-channel encoder” on page 62 and “Configure media server: Single-channel encoder” on page 64.
- Deploy remaining single-channel encoders. Refer to “Encoder stand-alone stage” on page 61 and “Encoder + Server stage” on page 68.
- Deploy remaining Advanced encoders. Refer to “Advanced encoder stand-alone stage” on page 79 and “Advanced encoder + Server stage” on page 87.

Add live monitor encoders

If your system uses live monitor encoders, add them to the system as follows:

1. If you have not already done so, cable and configure for network access similar to the NewsBrowse server.
2. Connect the audio/video feed for an ingest channel.
3. Add live monitor encoders on the Ingest Scheduler Live Feeds configuration page.

http://root-nb-svr:280 → Ingest Scheduler → Live Feeds

Live Feeds Settings

Add Live Feed

Associate to Ingest MDI Name: — Select the MDI (Transfer service) for the single-channel encoder (ingest channel) for which the live monitor encoder provides a video stream.

Host Name or IP: — Machine name (from host file) of the live monitor encoder.

Port: — Port 8080 required.

— Adds the live monitor encoder as a live feed.

Existing Live Feeds

INGEST_CH1	mms://iron-nb-live-1:8080
------------	---------------------------

— Currently added live monitor encoders.

— Removes the selected live monitor encoder.

To put changes into effect, start or restart the Thomson Ingest Scheduler service.

4. On each live monitor encoder, start Windows Media Encoder. There should be a Windows Media Encoder shortcut on the Windows desktop.
5. Open the NewsBrowse application and on the Ingest page verify that the video stream appears.

Test system interactions with multiple machines

Run the following tests to verify that all machines are available and will function correctly, especially during times of heavy system activity.

Multiple channel ingest test

This test verifies ingest and creation of proxy assets for all channels simultaneously.

1. Make sure that the NewsBrowse system is not otherwise in use.
2. Make sure that all the Profile system channels for which NewsBrowse creates proxy media have an appropriate media feed.
3. On the NewsBrowse server, open Thomson Event Viewer.
4. In the NewsBrowse application, schedule ingest events on each channel to occur all at the same time.
5. Once the events start recording, select the find tab on the left side of the application and press the go button with no criteria specified. Assets with the event names should appear in the results list.
6. Select an asset from the results list to load the details on the right side of the application. Video should be visible.
7. After the recording is complete, reload assets and verify that thumbnails and storyboards are created as well. Depending on how your rules are set up, this can take up to two times the duration of the original media.

Multiple scavenge test

This test verifies that scavenge operations can simultaneously control all Advanced encoders and appropriate Profile channels to optimize performance during times of heavy proxy asset creation.

To test multiple scavenge operations, do the following:

1. Prepare a quantity of test clips on a Profile system, such that you have one more test clip than the number of Advanced encoders in your system. For example, if you have four Advanced encoders, prepare five test clips. You must prepare the test clips without triggering the NewsBrowse system to create any proxy assets. You can do this by recording media with a channel that is not associated with the NewsBrowse system for ingest, or by copying existing clips to a different bin. In any case, the bin in which these test clips are initially placed must not be a bin that is currently monitored by the NewsBrowse system for scavenge operations. Make the test clips at least a minute long.
2. On the NewsBrowse server, open Thomson Event Viewer.
3. Prepare a Profile system bin (preferably a bin that is currently empty) for monitoring by the NewsBrowse system for scavenge operations. Define a “Create Proxy MPEG if Profile movie...is created” rule for the bin. It is not necessary to create “Create Proxy” rules for the creation of other proxy assets, as this functionality is tested in the previous [“Multiple channel ingest test”](#).
4. On the Profile system, use Media Manager to simultaneously copy all the test clips into the prepared bin.

5. In Event Viewer, verify that scavenger activities occur for each channel, and that all advanced encoders are encoding MPEG simultaneously.
6. With the NewsBrowse application, validate MPEG assets.

Purge test

1. Select an asset from the results list to load details. Take note of the components associated with this asset. This can be done by looking at the Related tab in the details page. By using the mouse to hover over the entries in the related tab you can derive where the asset components exist in the system.
2. From the general tab on the details page edit the expiration date and select a date in the past.
3. The purge process polls at configured intervals. The default interval is 24 hours. To expedite testing go to the windows services panel and restart the rules wizard process. This will cause the cycle to be reset and assets meeting expiration criteria will be processed immediately
4. Refresh the search results list by pressing the go button with no criteria specified.
5. Verify that asset components noted earlier no longer exist in the system. You will have to look at the NAS for the specific paths to proxy asset components. The asset on the Profile should also be removed.

Add NewsBrowse Clients

Do the following tasks to enable PCs to act as a NewsBrowse clients and run the NewsBrowse application.

- [“Connect server and NAS to customer LAN” on page 113](#)
- [“Set up client PCs” on page 114](#)
- [“Configure NewsBrowse Licenses” on page 114](#)
- [“Testing NewsBrowse client operations” on page 121](#)

If you are upgrading from NewsBrowse system version 1.5 to version 2.0 or higher, refer to *NewsBrowse Release Notes* for upgrade instructions regarding NewsBrowse clients.

Connect server and NAS to customer LAN

The NewsBrowse server and NAS machines must have network access to the external LAN of the NewsBrowse client PCs. Work with the IT personnel at the customer site to configure Domain, DNS suffix, or any other settings required by the site’s LAN. Refer to [“Two tier system diagram” on page 10](#).

Also, make sure that permissions are correct for access to the NewsBrowse server website, which serves the NewsBrowse application. The website uses Integrated Windows Authentication.

Continue with the next procedure [“Set up client PCs”](#).

Set up client PCs

The requirements for a NewsBrowse client PC are as follows:

- Network access to the NewsBrowse server
- Network access to NewsBrowse NAS machines. Refer to [“Prepare NAS - Windows Fastora” on page 40](#) for test procedures.
- DirectX 9.0c or higher
- Flash Player
- Live Filter
- NetTime

To set up a PC to satisfy these requirements, do the following:

1. From a client PC, open Internet Explorer 6 and browse to the following URL to open the NewsBrowse launch page:
<http://root-nb-srv/nbui>.
2. From the NewsBrowse Launch page, click **Client Setup**. Follow the Client Setup on-screen instruction for Flash Player, for Live Filter, and (if you have not already done so) for NetTime. Also refer to [“Prepare NetTime” on page 38](#).

After installation be sure to clear the browser cache on client machines to insure updated components are downloaded. To clear the browser cache in Internet Explorer go to **Tools | Internet Options**, from the **General** tab select the **Delete Files** button, check **Delete all offline content**, and click **OK**.

Continue with the next procedure [“Configure NewsBrowse Licenses”](#).

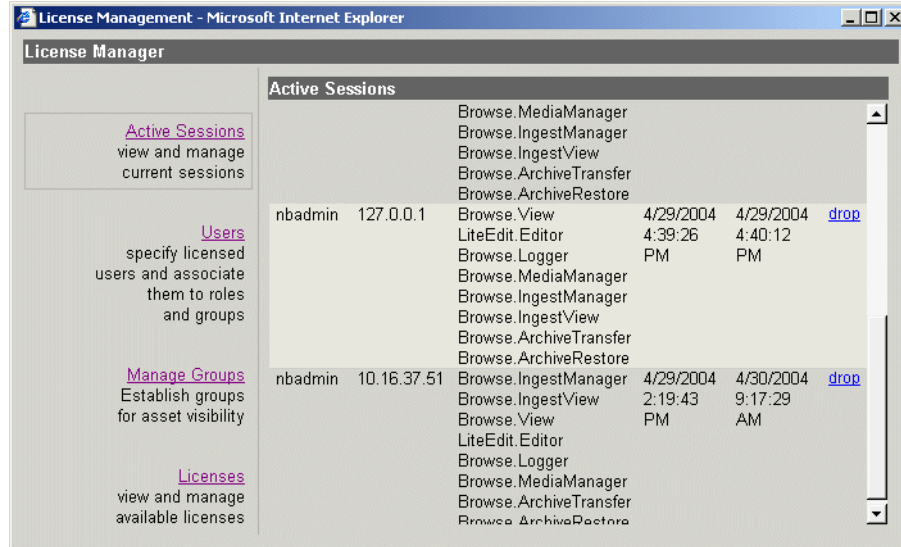
Configure NewsBrowse Licenses

You must configure the NewsBrowse server as per your NewsBrowse license to allow user access to NewsBrowse application features.

To configure for NewsBrowse licenses, do the following:

1. From the NewsBrowse Launch page, click **License & User Management**. This requires that you log in as NewsBrowse administrator.
 - Login: `root-nb-srv\nbadmin`
 - Password: `*****`

The License Manager page opens.



2. Click **Licenses**. The Licenses page is displayed.

The screenshot shows the 'Licenses' page with a table listing licenses, roles, and session counts. Each row has a 'Set Session Count' link.

License	Roles	Session Count	Action
Browse	View MediaManager Logger IngestManager IngestView ArchiveTransfer ArchiveRestore	30	Set Session Count
LiteEdit	Editor	20	Set Session Count
AdvancedEdit	Editor	20	Set Session Count

3. Click **Set Session Count** next to the applicable license. The Set Session Count for ... page is displayed.

The screenshot shows the 'Set Session Count for AdvancedEdit License' dialog box. It displays the license name, roles, current session count, and a field for the new session count. There are 'Update' and 'Cancel' buttons.

License Name: AdvancedEdit
 Roles: Editor
 Current Session Count: 20
 New Session Count:
 Authorization:

4. Enter the appropriate number of licenses purchased (be sure to include any previously purchased license counts). You must provide the proper password to change this value. Click **Update** to save changes.
5. On the NewsBrowse server, restart ISS services. Click **Start | Run** and run `issrestart`.

Users must be set up to allow access to the NewsBrowse application from a NewsBrowse client PC. To do this, you must continue with the next section [“Administering NewsBrowse user access”](#).

Administering NewsBrowse user access

The NewsBrowse administrator sets up NewsBrowse users and can restrict their access to NewsBrowse application features and assets, as explained in the following procedures:

- [“Configure NewsBrowse Groups” on page 116](#)
- [“Configure NewsBrowse Users” on page 117](#)
- [“Managing NewsBrowse User sessions” on page 119](#)

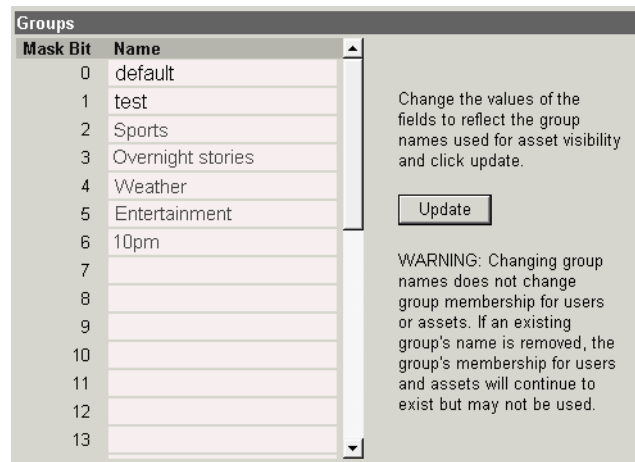
Configure NewsBrowse Groups

The purpose of NewsBrowse groups is to manage a user’s access to assets. The NewsBrowse administrator can create groups and assign the groups individually to users. Using the NewsBrowse application, groups can also be assigned to individual assets. In this way each user’s access is restricted to the assets in their assigned groups.

Configuring NewsBrowse groups is optional. If you do not configure NewsBrowse groups, users and assets are all assigned to the default group, so all users have access to all assets.

To configure NewsBrowse groups, do the following:

1. From the License Manager page, click **Manage Groups**. The Groups page is displayed.



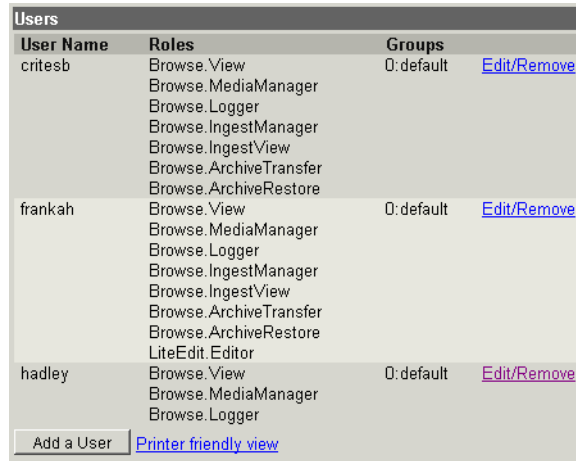
2. Enter names to define groups according to the workflow with which the system is used.
3. Click **Update** to save changes.

Continue with the next procedure [“Configure NewsBrowse Users”](#).

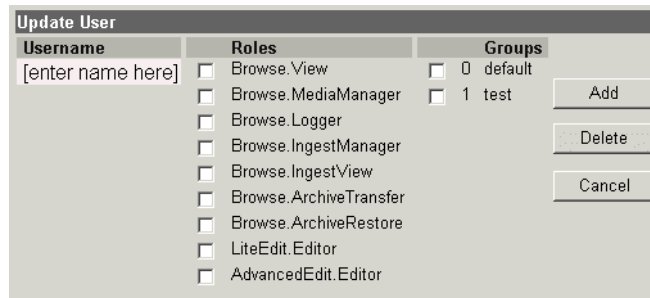
Configure NewsBrowse Users

You must add NewsBrowse users before using the NewsBrowse application from any NewsBrowse client PC. The NewsBrowse application only allows access by users that have been added, as explained in the following procedure.

1. From the License Manager page, click **Users**. The Users page is displayed.



2. To add new NewsBrowse User, click **Add a User**. To modify an existing NewsBrowse user, click the **Edit/Remove** link for the user. The Update User page is displayed.



3. Enter the following:

- Username — This must match the account with which the NewsBrowse client accesses the NewsBrowse application.
- Roles — Select the NewsBrowse application functionality to which the user will have access. The Roles listed are dependent upon current licensing. The following table defines the Roles:

Role	Description
Browse.View	Lets you browse for video clips and view them.

Role	Description
Browse.MediaManger	Also lets you change the metadata including clip expiration; you can schedule and execute purge.
Browse.Logger	Also lets you modify custom fields and keywords.
Browse.IngestManager	Lets you schedule recording events.
Browse.IngestView	Lets you view the Ingest schedule in list view and in graphic view.
Archive.SendToArchive	Lets you transfer high-res assets from a Profile system to an archive device and optionally delete the high-res assets from the Profile system.
Restore.RestoreFrom Archive	Lets you restore high-res assets from an archive device to a Profile system.
LiteEdit.Editor	Lets you do cuts-only editing.
AdvancedEdit.Editor	Lets you use the Advanced Edit program, which lets you use the editing features of NewsEdit.

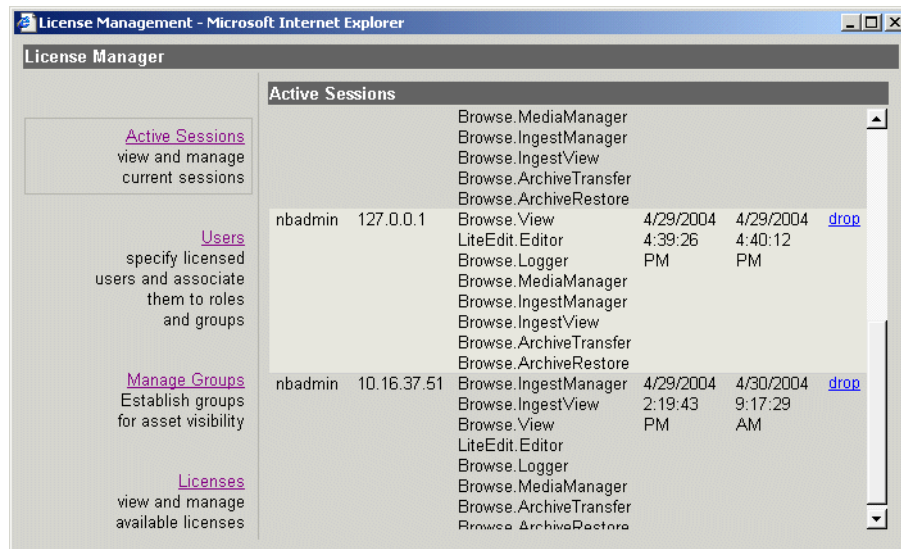
If you assign a Role to more users than the session count for which it is licensed, the Role is not available to all users at times when sessions exceed the count.

- Groups — Select the groups for which the user will be allowed to access media assets.
4. Click **Add** for new users, or **Update** to modify existing users. You can also click **Delete** to remove a user from the NewsBrowse system.
 5. Repeat the previous two steps to add additional users.
 6. Click **Update** to save changes.
 7. On the NewsBrowse server, restart ISS services. Click **Start | Run** and run `issrestart`.

Managing NewsBrowse User sessions

The NewsBrowse administrator can view the current users with active sessions and force a session to be dropped, as follows:

1. From the License Manager page, click **Active Sessions**. The Active Sessions page is displayed.



2. Click the **drop** link to drop a user's current active session.

Adding custom fields

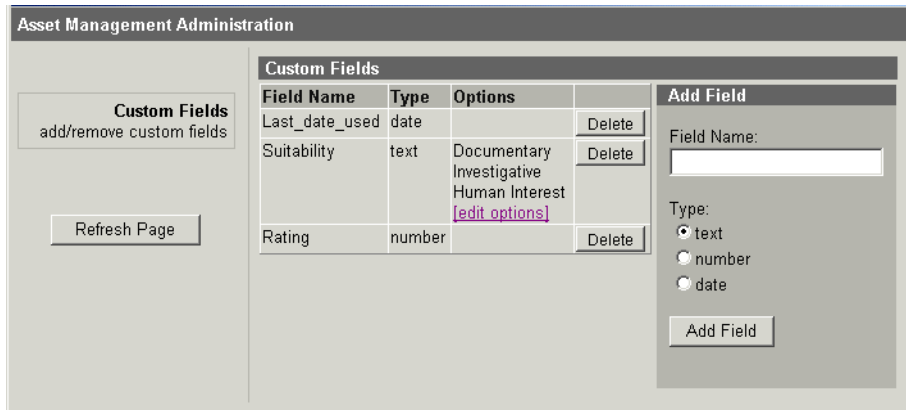
The purpose of custom fields is to enhance site-specific management of assets. The NewsBrowse administrator defines a custom field to create an asset metadata-type that uniquely fits the site's workflow. The user of the NewsBrowse application can then assign metadata to an asset by entering text or making a selection in the custom field.

Adding custom fields is optional.

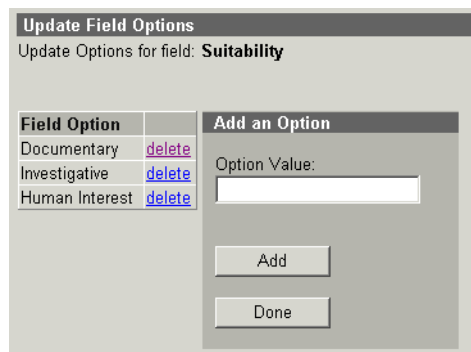
To configure custom fields, do the following:

1. From the NewsBrowse Launch page, click **Asset Management Administration**. This requires that you log in as NewsBrowse administrator.
 - Login: `root-nb-srv\nbadmin`
 - Password: `*****`

The Asset Management Administration page opens.



2. For each custom field you add, do the following:
 - a. Enter a field name.
 - b. Select the type of field as follows:
 - Text — A free-entry text field or a drop down list of selections that you define, as explained in the next step in this procedure.
 - Number — A field in which only numbers can be entered.
 - Date — A field that, when clicked, opens a calendar from which a date can be selected.
 - c. Click **Add Field**.
3. If you are adding a text field, you have the following options:
 - To allow text to be freely entered in the field, no further configurations are necessary. Skip to the next step in this procedure.
 - To provide a pre-defined list of selections for the field, click **Edit Options** for the field. The Update Field Options page opens.



For each selection that is to be on the list, enter its text and click **Add**. You can also click **Delete** to remove a selection from the list. When the list is complete,

click **Done**.

4. Click **Add Field** and **Delete** as necessary to complete your custom fields. To view your latest changes, click **Refresh Page**.
5. Open the NewsBrowse application, select an asset, and click **Custom**. Your custom fields are available to assign metadata to the asset.

Testing NewsBrowse client operations

To perform a quick check that the web and database services are accessible to a client PC, do the following:

1. Log in to a client machine.
2. Open Internet Explorer 6 and browse to the following URL:
http://iron-nb-svr/nbui.

In this example, **iron-nb-svr** is the host name or IP address of the NewsBrowse server.

3. Click **Launch NewsBrowse Application**. You are now logged into the NewsBrowse application website and should have assets available for browsing.

Recovery Planning

Establish a recovery plan for the customer in the event a NewsBrowse machine fails, so that NewsBrowse services can be re-configured rapidly to minimize impact.

Encoder failure considerations

Encoders provide redundancy through numbers. A plan should identify the critical encoders in the system and alternate encoders that can be reconfigured to substitute in the case of failure. There are no automated fail-over capabilities with NewsBrowse components. It is important to identify which machine(s) host Managed Device Interface services (for either Proxy MDI or Profile MDI). These services can be pre-installed on secondary devices, although the server should not be configured to monitor them unless a failure of the primary service occurs. Managed Device Interface services can exist on any encoder and the server need only to be reconfigured to point to the new machine in case of failure.

Encoding jobs can be assigned to any available Advanced Encoder. N+1 redundancy is achieved by adding an extra Advanced Encoder.

Server failure considerations

The SQL database should be backed up on a regular basis and stored in a safe location. In the case of server failure the database can then be restored to minimize data loss. If an off-line backup server is purchased it should be pre-configured to operate in the system so in case of primary server failure, minimal time will be spent bringing up the backup system. The backed up database could be restored to this backup server on a regular basis.

Newer NewsBrowse systems have redundant power supplies and mirrored disks to further protect the integrity of the system.

Database maintenance and administration

NewsBrowse utilizes the SQL full recovery model and a maintenance plan is essential to keeping the database in working order. Not only does the database need to be backed up but the accompanying transaction log needs to be backed up as well. Failure to back up the transaction log can cause the database to become inoperable due to the transaction log file growing too large.

The transaction log is responsible for keeping track of all the edits to data until it reaches what is known as a checkpoint. Once the checkpoint is reached, the data should be permanently committed to the database. Problems arise when this checkpoint is reached, data is not committed to the database, and the transaction log continues to grow. If the transaction log reaches the capacity of growth it can render the database inoperable. In the event that the database has been rendered inoperable, a manual truncation of the transaction log will need to be performed, as explained in [“Repairing a database that is unusable due to transaction log size” on page 124.](#)

Adopt the following practices to keep the database healthy:

- Daily monitor the growth of the transaction log daily, as explained in [“How to determine the size of the transaction log”](#) on page 124.
- When necessary, manually back up the database and the transaction log, then shrink the transaction log file to release disk resources to the operating system, as explained in [“Manually controlling transaction log growth”](#) on page 125.
- Set up a database maintenance plan. This automatically backs up the transaction log and the database. Refer to [“Setting up a database maintenance plan”](#) on page 125.

Repairing a database that is unusable due to transaction log size

If the database is rendered inoperable due to the transaction log becoming too large, it is highly likely that the transaction log has never been backed up, a database maintenance plan has not been enabled on the system, or the SQL Server agent is not running to implement your maintenance plan. The following steps should resolve the problem:

1. Open SQL Query Analyzer
2. Make sure the database in question is selected in the top tool bar. (For this example the *MediaFrame* database will be used.)
3. First try to backup the transaction log without truncating it by running the following command:

```
BACKUP LOG MediaFrame TO Disk = 'filePath\fileName.trn'
```

Where filePath and fileName is user specified, (e.g. D:\Emergency Backups\MediaFrame_tran_12052003.trn) if the file does not already exist, you will need to create it. If the transaction log is full it is likely that this command will fail but it is important to try it to maintain database integrity.

4. Regardless if the previous command passes or fails, execute the following command to clear the transaction log:

```
BACKUP LOG MediaFrame WITH TRUNCATE_ONLY
```

5. To free unused resources to the operating system execute the following command:

```
DBCC SHRINKFILE(MediaFrame_log, 2)
```

How to determine the size of the transaction log

When SQL is installed the space that it is allotted on the operating system is divided into two parts: 50% is given to store transaction logs and 50% is reserved for data. To identify the amount of space the transaction logs is taking up, open SQL Query Analyzer and execute the following command.

```
DBCC sqlperf(logspace)
```

This command will return the amount of space each database's transaction log is taking up and the percentage of space the transaction log is using. The column that lists the percent of space the transaction log is taking up is misleading. NewsBrowse databases set the transaction log growth limit to 500MB. If one of the databases transaction logs is larger than 350MB, then follow the steps in the next procedure [“Manually controlling transaction log growth”](#).

Manually controlling transaction log growth

Use this procedure when the transaction log is approaching its size limit. First back up the database and the transaction log to keep a record of its current state. Then flush and shrink the transaction log file to reduce its size. To do this open SQL Enterprise Manager and manually backup the database and transaction log of the database in question. The steps to do this are as follows:

1. From the Enterprise Manager right mouse click the database in question; select **All Tasks\ Backup Database...**
2. Make sure that the **Database Complete** radio button is selected.
3. In the **Destination** section under **Backup to:**, check the file path and make sure the file has a *.bak* extension. If it does not have a *.bak* extension or the path is not where you would like the backup file to reside, click the **Remove** button to remove the file and the associated path. Click the **Add...** button and browse to the directory to which you would like to store the file. Make sure you give it a file name with the *.bak* file extension. (For example: *D:\DB\MediaFrame.bak*) Click the **OK** button and verify that the path entered is listed in the Backup to: list.
4. In the **Overwrite** section make sure that **overwrite existing media** radio button is selected.
5. Click the **OK** button to backup the database.
6. To backup the transaction log the steps are very similar. Open the Enterprise Manager right mouse click the database in question, select **All Tasks\ Backup Database...**
7. Make sure that the **Transaction log** radio button is selected.
8. In the **Destination** section under **Backup to:**, check the file path and make sure the file has a *.trn* extension. If it does not have a *.trn* extension or the path is not where you would like the backup file to reside, click the **Remove** button to remove the file and the associated path. Click the **Add...** button and browse to the directory to which you would like to store the file. Make sure you give it a file name with the *.trn* file extension. (For example: *D:\DB\MediaFrame.trn*) Click the **OK** button and verify that the path entered is listed in the Backup to: list.
9. In the **Overwrite** section make sure that **overwrite existing media** radio button is selected.
10. Click the **OK** button to backup the Transaction log.
11. Open SQL Query Analyzer.
12. Make sure the database in question is selected in the top tool bar.
13. Execute the following code:

```
BACKUP LOG MediaFrame WITH TRUNCATE_ONLY
DBCC SHRINKFILE(MediaFrame_log, 2)
```

Setting up a database maintenance plan

The best way to control the growth of transaction logs is to simply back them up, once a day at the very least. SQL 2000 makes it very easy to set up a database maintenance schedule. Before you begin implementing a database maintenance plan using the SQL

2000 Database Maintenance Planner wizard make sure that the SQLSERVERAGENT service is started and its properties are set to auto start for a local system account. If the SQLSERVERAGENT is not running, the database maintenance plan will not run. The following steps describe how to launch and configure the SQL 2000 Database Maintenance Planner:

1. Open SQL 2000 Enterprise Manager.
2. Expand Microsoft SQL Servers, expand the SQL Server Group and select the SQL server.
3. On the **Tools** menu, click **Database Maintenance Planner...**
4. After the wizard launches click the **Next>** button.
5. Select **These databases** radio button and select the **MediaFrame** and **NBIgest** databases.
6. Click the **Next>** button to navigate to the **Update Data Optimization Information** page.
7. Select the **Update statistics used by query optimizer. Sample** check box and set it to 10% of the database.
8. Check the schedule to verify that the time scheduled will not conflict with peak usage of the system. If a schedule time change is needed, click the **Change...** button to modify the time. This option can be run daily but once a week is good.
9. Click the **Next>** button to navigate to the **Database Integrity Check** page.
10. Select the **Check database integrity** check box.
11. Select the **Include indexes** radio button.
12. Select the **Attempt to repair any minor problems** check box.
13. Select the **Perform these checks before doing backups** check box.
14. Check the schedule to verify that the time scheduled will not conflict with peak usage of the system. If a schedule time change is needed, click the **Change...** button to modify the time. This option can be run daily but once a week is good.
15. Click the **Next>** button to navigate to the **Specify the Database Backup plan** page.
16. Select **Back up the database as part of the maintenance plan** check box.
17. Select **Verify the integrity of the backup when complete** check box.
18. Select the **Disk** radio button
19. Change the schedule from once a week to daily by clicking the **Change...** button.
20. Select the **Daily** radio button and set the interval to **Every 1 day(s)**.
21. Select the **Occurs once at** radio button. If the default time of 2:00:00 AM is not good, change it to a more suitable time.
22. Make sure that the **Start Date is today's date** and that the **No end date** radio buttons are selected.
23. Click the **OK** button and verify the schedule.
24. Click the **Next>** button to navigate to the **Specify Backup Disk Directory** page.

25. Select the **Use the default backup directory** radio button, except if the site has a specific folder for database backup files. If that is the case, then select the **Use this directory** radio button and enter in the specified path. (Note: SQL can only see local drives and cannot see shared directories or disks that are not native to the machine.)
 26. Select the **Create a subdirectory for each database** check box.
 27. Select the **Remove files older than** check box and set the value to **1 week(s)**.
 28. The backup extension should be set to **BAK**.
 29. Click the **Next>** button to navigate to the **Specify Transaction Log Back up Plan** page.
 30. Select **Back up the transaction log as part of the maintenance plan** check box.
 31. Select **Verify the integrity of the backup when complete** check box.
 32. Select the **Disk** radio button.
 33. Click the **Change...** button to set the transaction log schedule.
 34. Select the **Daily** radio button and set the interval to **Every 1 day(s)**.
 35. Select the **Occurs every** radio button and set the interval to every **6 hours**.
 36. Make sure that the **Start Date** is today's date and that the **No end date** radio button is selected.
 37. Click the **OK** button and verify the schedule.
 38. Click the **Next>** button to navigate to the **Specify Transaction Log Backup Disk Directory** page.
 39. Select the **Use the default backup directory** radio button, except if the site has a specific folder for database backup files. If that is the case, then select the **Use this directory** radio button and enter in the specified path. (Note: SQL can only see local drives and cannot see shared directories or disks that are not native to the machine.)
 40. Select the **Create a subdirectory for each database** check box.
 41. Select the **Remove files older than** check box and set the value to **1 week(s)**.
 42. The backup extension should be set to **TRN**.
 43. Click the **Next>** button to navigate to the **Reports to Generate** page.
 44. Click the **Next>** button to navigate to the **Maintenance Plan History** page.
 45. Click the **Next>** button to navigate to the **Completing the Database Maintenance Plan Wizard** page.
 46. Enter *NewsBrowse* for the name of the schedule.
 47. Click the **Finish** button. (Note: If an error occurs, it is most likely that your SQLSERVERAGENT was not started. Start the service and start over.)
- If the SQLSERVERAGENT is ever stopped, so is your maintenance plan. Make sure that the service is set to auto start in case of a reboot.

Database Restoration

When NewsBrowse is installed, a maintenance plan should be implemented to schedule backups of the *MediaFrame* and *NBIngest* databases and transaction logs. The rule of thumb in restoring the database is to restore the last successful database backup and transaction log backups preceding system failure. Below is a given scenario of a system failure and the steps necessary to recover.

- 2:00:00 AM database back up performed by the maintenance plan
- 8:00:00 AM transaction log is backed up by the maintenance plan
- 2:00:00 PM transaction log is backed up by the maintenance plan
- 2:30:00 PM system failure occurs

The basic steps to recover are as follows:

1. Restore the database backup done at 2:00:00 AM
2. Restore the transaction backup done at 8:00:00 AM
3. Restore the transaction backup done at 2:00:00 PM

With a database maintenance schedule in place, SQL already recognizes the most recent database backup as well as the sequence of transaction log backups. To restore the NewsBrowse databases to the most current state before failure occurred, open SQL Enterprise Manager, expand the SQL Servers, expand the SQL Server Group, expand the server node, expand the databases directory and do the following:

1. Right mouse click the MediaFrame database
2. Select **All Tasks**.
3. Select **Restore Database...**
4. Select the **Database** radio button.

SQL automatically selects most recent database backup file and sequence of transaction logs.

5. Verify the date and time stamp.
6. Click the **OK** button.

SQL will first restore the database, then restore the first transaction log backup, then restore the proceeding transaction logs up until the point of failure. After restore has completed the database will be restored to the point in time of the last backed up transaction log. Repeat the above steps for the *NBIngest* database.

Troubleshooting the NewsBrowse system

Troubleshooting tools

The following troubleshooting utilities can be found on NewsBrowse machines in the Windows menu **Start | Programs | Thomson | NewsBrowse | Diagnostic Tools**.

- LogViewer — This utility is available on all NewsBrowse machines and provides a log of information and errors for services running on that particular device.
- Timecode Check — This is a utility provided on encoders that will display the timecode being fed into the Adrienne timecode board. This is valuable for checking that house time is being read when setting up a single-channel encoder. No NewsBrowse services should be running when using this utility.
- Asset System Client — This utility on the MDI server provides a view of the events generated by Managed Device Interface services configured in the system. Refer to [“Test: MDI stage” on page 58](#).
- Remoting Host Controller — This utility on the MDI server manages Profile Managed Device processes. Refer to [“Test: MDI stage” on page 58](#).
- Ingest Client — This encoder utility exercises a single-channel encoder to test the ability to encode mpeg and initiate record on the high-res video server. Refer to [“Test: Encoder stand-alone stage” on page 65](#).
- Transfer Client — This encoder utility is used to test scavenge and transcode operations. Refer to [“Test: Advanced encoder stand-alone stage - high-res source” on page 83](#).
- Router Gateway Client — This utility allows you to test the connection between the Router Gateway and the router control system. Refer to [“Test: Router Gateway stand-alone stage” on page 74](#).
- Configuration Tool — This tool can check network connectivity (ping) from the NewsBrowse server to all the machines in the NewsBrowse system. Open the configuration tool on the NewsBrowse server at **Start | Thomson | NewsBrowse | Utilities**.

Troubleshooting tips

Use the following table to identify and resolve NewsBrowse system problems.

Symptom	Solution
Problem accessing the NewsBrowse application with Internet Explorer - cannot find server or DNS error.	<p>Check the server name or IP address used in the browse address.</p> <p>Check that the server is running.</p> <p>Check that the server is connected to the client network.</p> <p>Check that connections are secure.</p> <p>Check that IIS is running on the server.</p>
Web application is accessible using IP address but not server name	Host tables or DNS entries must be set to map name to IP address. This should be coordinated with facility IT personnel.
Problem Accessing the NewsBrowse application - permission denied	Check that the account used to log into the client workstation also exists on the server. This is done through the windows administrative tools.
The NewsBrowse client browse comes up with results but thumbnails are missing (broken link indicators where thumbnails should be). Video is also inaccessible.	<p>Check Ethernet connections from NAS to the client network.</p> <p>Check that the client account exists on the NAS. This is the account used to log into the client browse machine.</p>
The NewsBrowse client play back video but scrubbing is poor.	<p>There is too much traffic on the network. Try to isolate NewsBrowse from other network activity.</p> <p>Use a switch rather than a hub for connectivity.</p>
Recording does not start as scheduled for ingest.	<p>Check that encoder, server and client workstation PC clocks are synchronized to house timecode feed (reference NetTime setup instructions).</p> <p>Check that all Thomson services are running on server and encoders (use windows services panel from administrative tools).</p>
Storyboard displays permissions denied error. Timecode does not display with video in clip player.	<p>Check that the server has permissions to access the NAS.</p> <p>Make an initial connection from the server to the NAS by mapping a drive. This establishes the connection for subsequent use - the mapped drive is not used directly.</p>
Video does not load/play in the clip player.	Check that MPEG-1 exists by navigating to the "related" tab in the details display area. If an MPEG link appears, click on it. If video plays then install the "live feed filter" on the client. This can be found from the Client setup link on the NewsBrowse launch page. If video does not display, check that the client has permissions on the NAS.

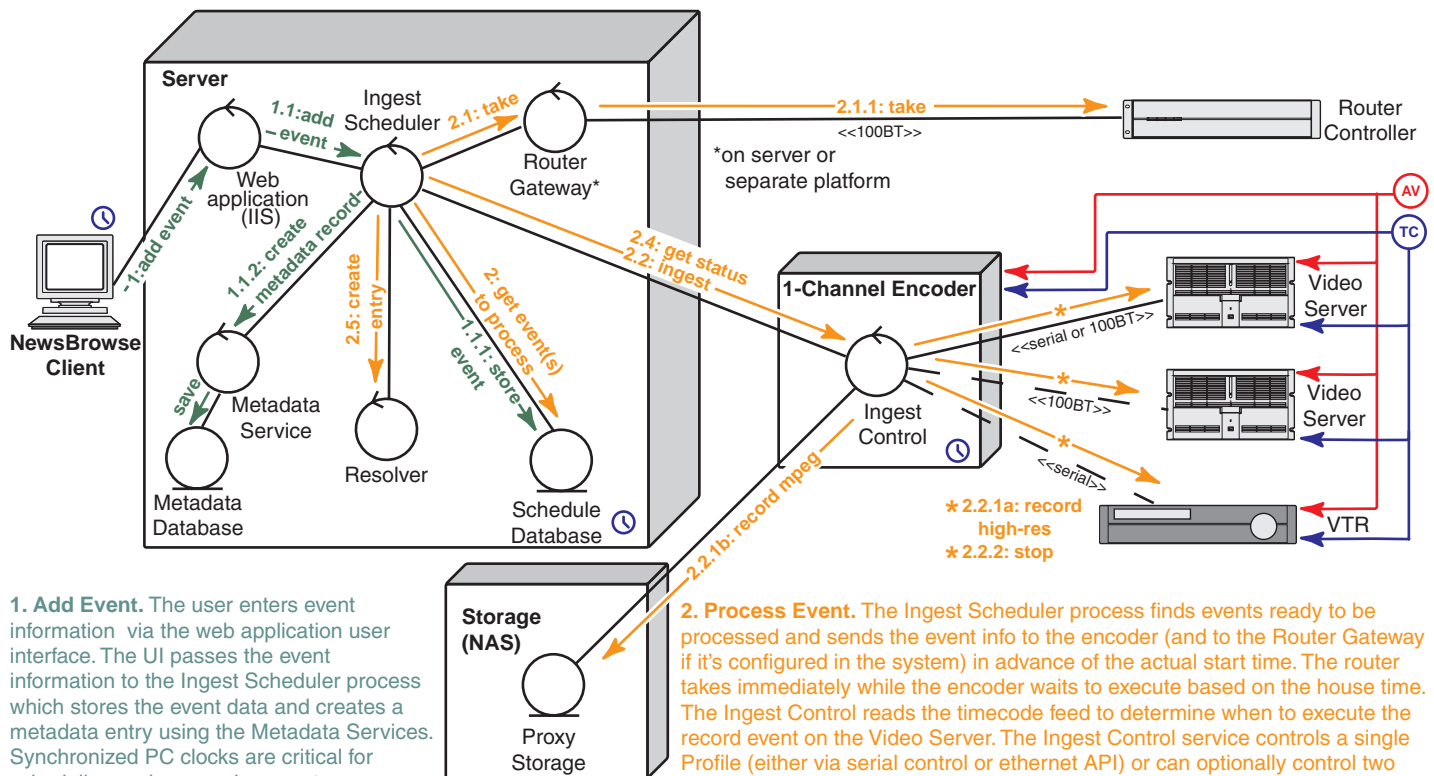
Symptom	Solution
General Browser Issues (esp. after reinstall).	<p>Be sure to clear the browser cache by selecting Tools > Internet Options from the menu. Then from the General tab select the Delete Files button. Check the Delete all offline content checkbox and click OK.</p> <p>Also be sure to update components from the client setup page provided with the NewsBrowse application. The client setup page can be accessed from the NewsBrowse launch page.</p>

Appendix A

Component Interaction Diagrams

This appendix provides diagrams and explanations of how the NewsBrowse system software components interact.

Ingest 1



1. Add Event. The user enters event information via the web application user interface. The UI passes the event information to the Ingest Scheduler process which stores the event data and creates a metadata entry using the Metadata Services. Synchronized PC clocks are critical for scheduling and processing events.

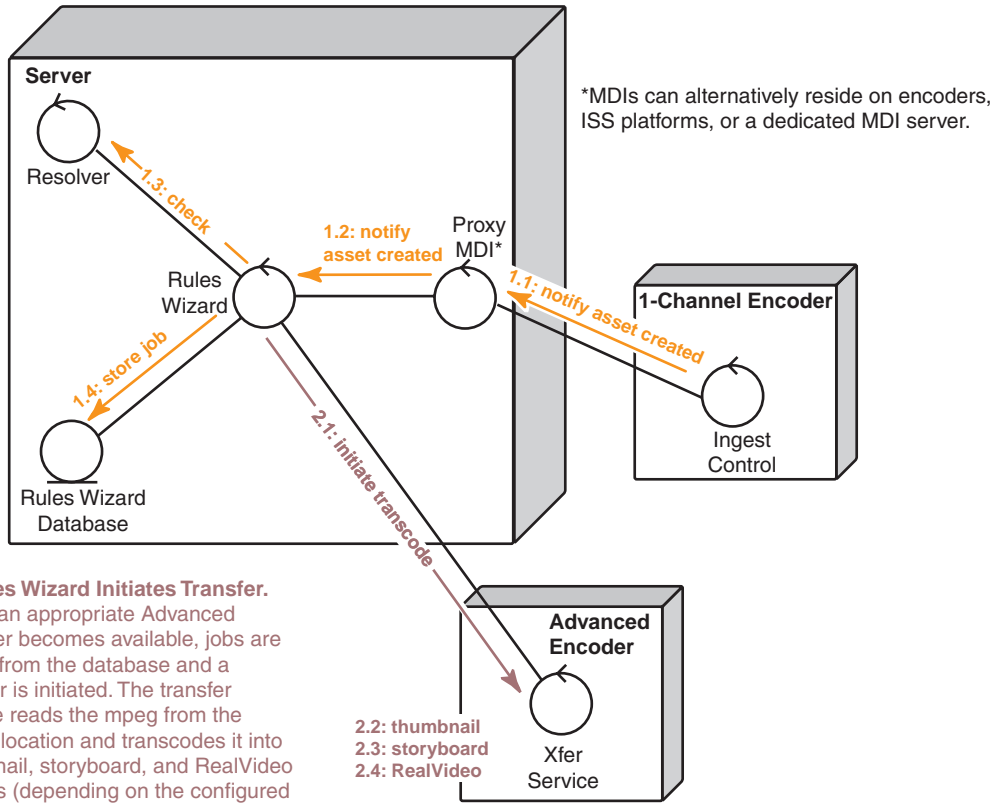
🕒 Synchronized PC clocks (via NetTime)

2. Process Event. The Ingest Scheduler process finds events ready to be processed and sends the event info to the encoder (and to the Router Gateway if it's configured in the system) in advance of the actual start time. The router takes immediately while the encoder waits to execute based on the house time. The Ingest Control reads the timecode feed to determine when to execute the record event on the Video Server. The Ingest Control service controls a single Profile (either via serial control or ethernet API) or can optionally control two Profile servers (both via API only) and a backup VTR (serially). The Ingest Control creates mpeg video and writes it to the configured storage location. The Ingest Scheduler creates associations of the mpeg and high-res assets with the previously entered metadata.

See the next diagram, Ingest 2, for the interaction whereby the Ingest Control notifies the Proxy MDI that the mpeg has been created.

Ingest 2

1. Notification of new mpeg. In the previous diagram, Ingest 1, proxy mpeg is created. Ingest Control then notifies the Proxy MDI of the presence of the new mpeg. The Proxy MDI then notifies the Rules Wizard, which checks to see if the asset already has thumbnail, storyboard, and RealVideo formats associated with it. If not, a job is created and stored in the database.

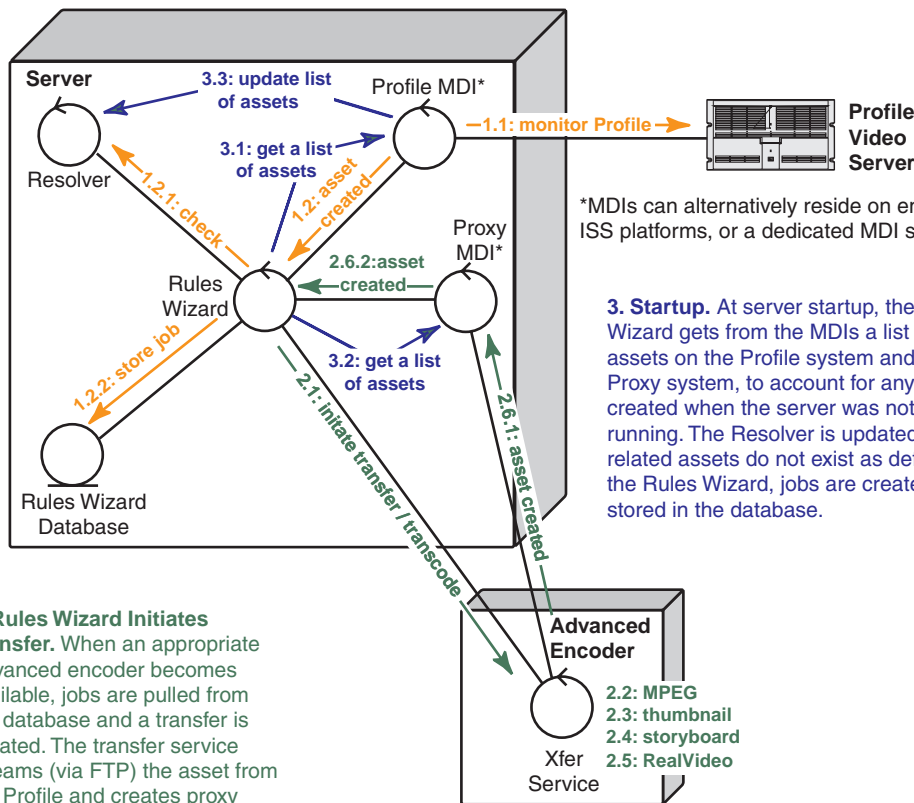


2. Rules Wizard Initiates Transfer. When an appropriate Advanced encoder becomes available, jobs are pulled from the database and a transfer is initiated. The transfer service reads the mpeg from the stored location and transcodes it into thumbnail, storyboard, and RealVideo formats (depending on the configured rules), which are then written back to the same location as the original mpeg file.

2.2: thumbnail
2.3: storyboard
2.4: RealVideo

Scavenge

1. High-Res Asset Created. The Profile MDI monitors the Profile Video Server file system to determine when a new asset is created. When asset creation is detected the Profile MDI notifies the Rules Wizard which checks to see if the asset already has mpeg associated with it. If not, a job is created and stored in the database.

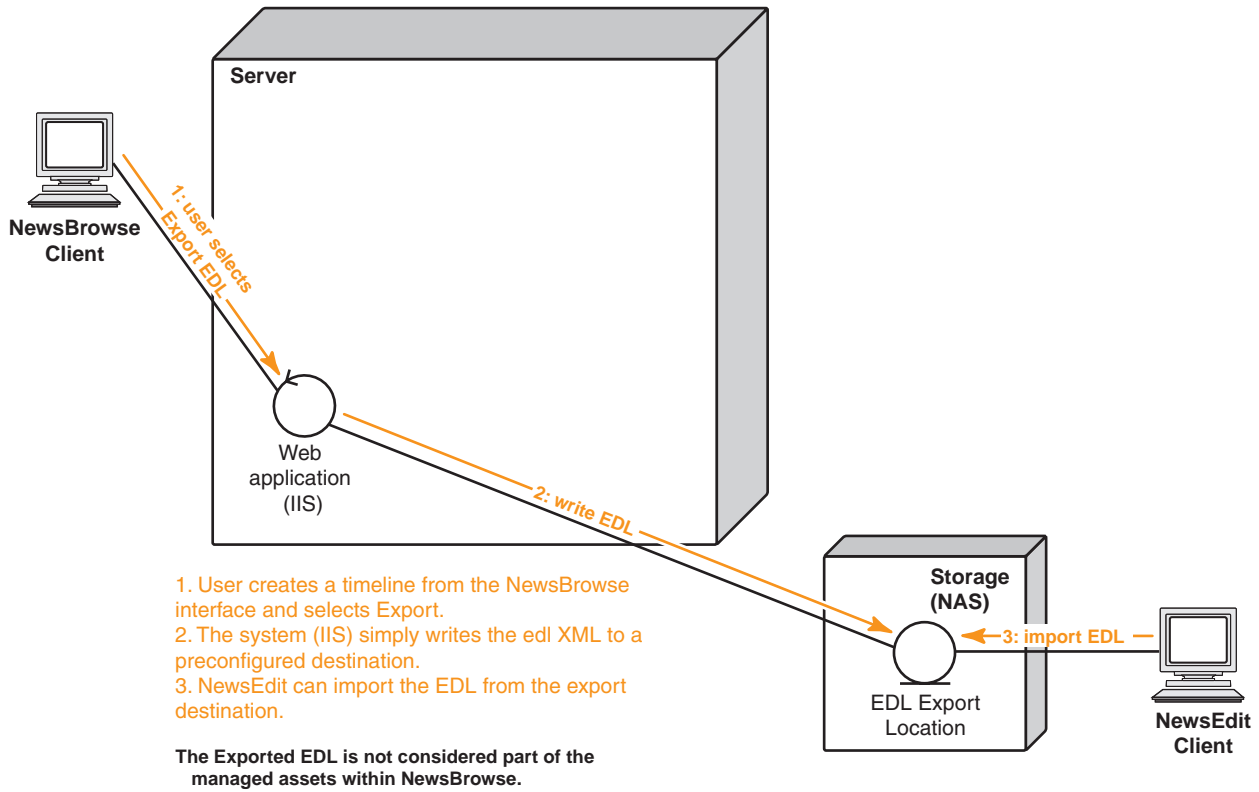


*MDIs can alternatively reside on encoders, ISS platforms, or a dedicated MDI server.

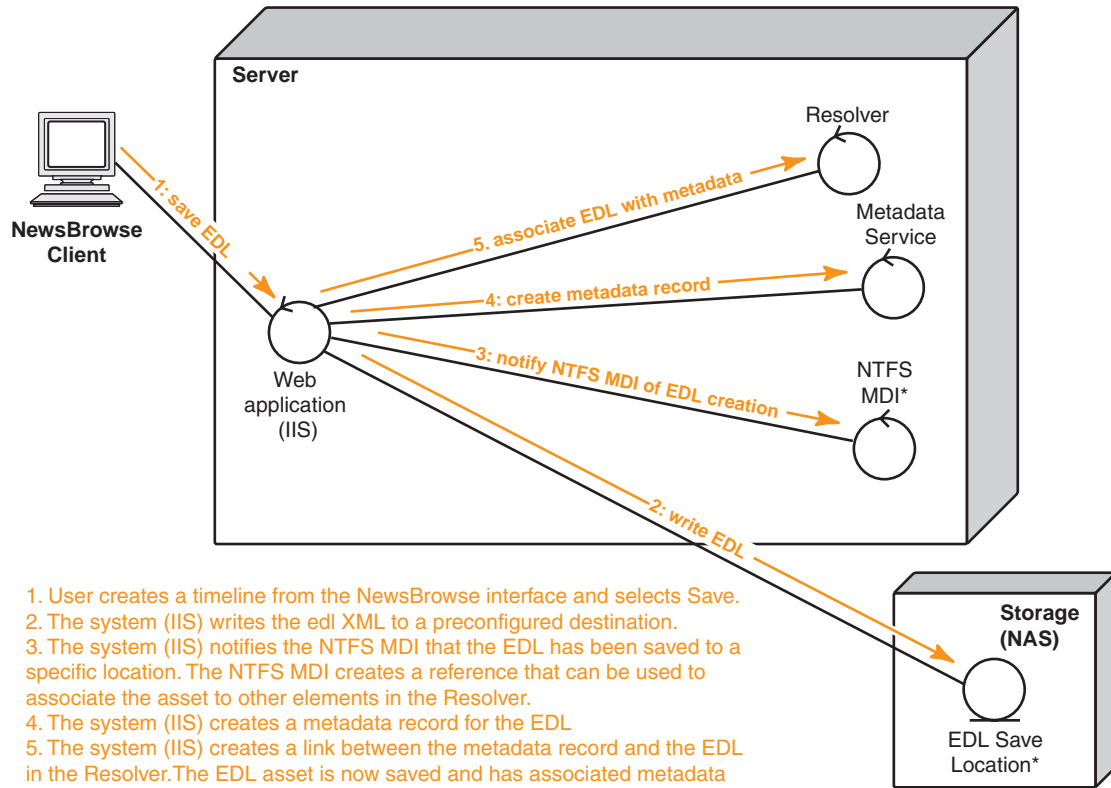
3. Startup. At server startup, the Rules Wizard gets from the MDIs a list of the assets on the Profile system and on the Proxy system, to account for any assets created when the server was not running. The Resolver is updated and if related assets do not exist as defined by the Rules Wizard, jobs are created and stored in the database.

2. Rules Wizard Initiates Transfer. When an appropriate Advanced encoder becomes available, jobs are pulled from the database and a transfer is initiated. The transfer service streams (via FTP) the asset from the Profile and creates proxy assets of all types (depending on the configured rules) to a configured storage location. Then it associates the high-res material with the proxy assets. Once the proxy assets have been created the transfer service notifies the Proxy MDI.

EDL Export

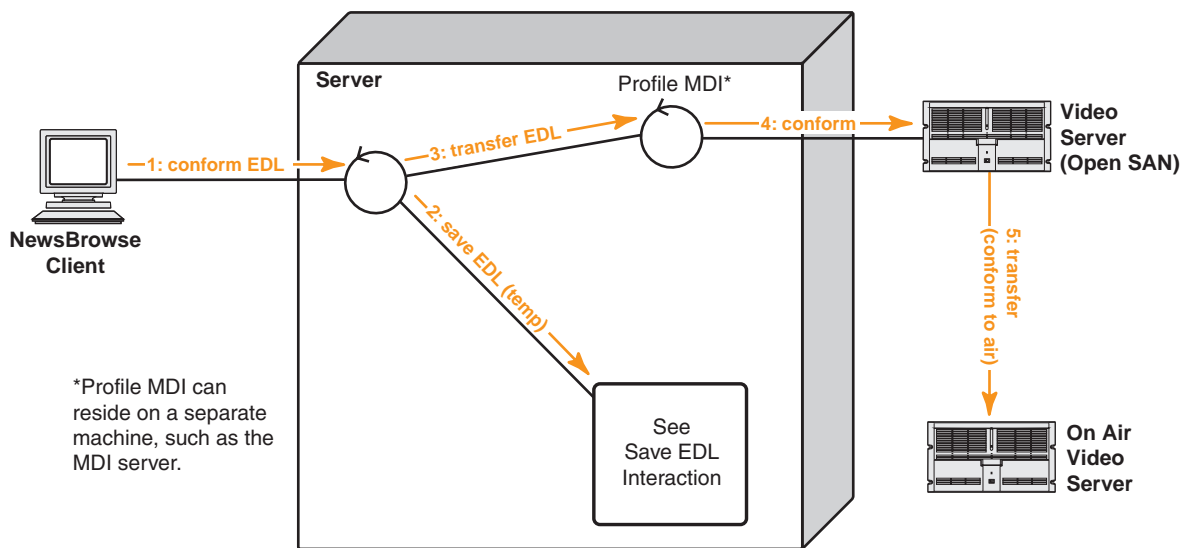


EDL Save



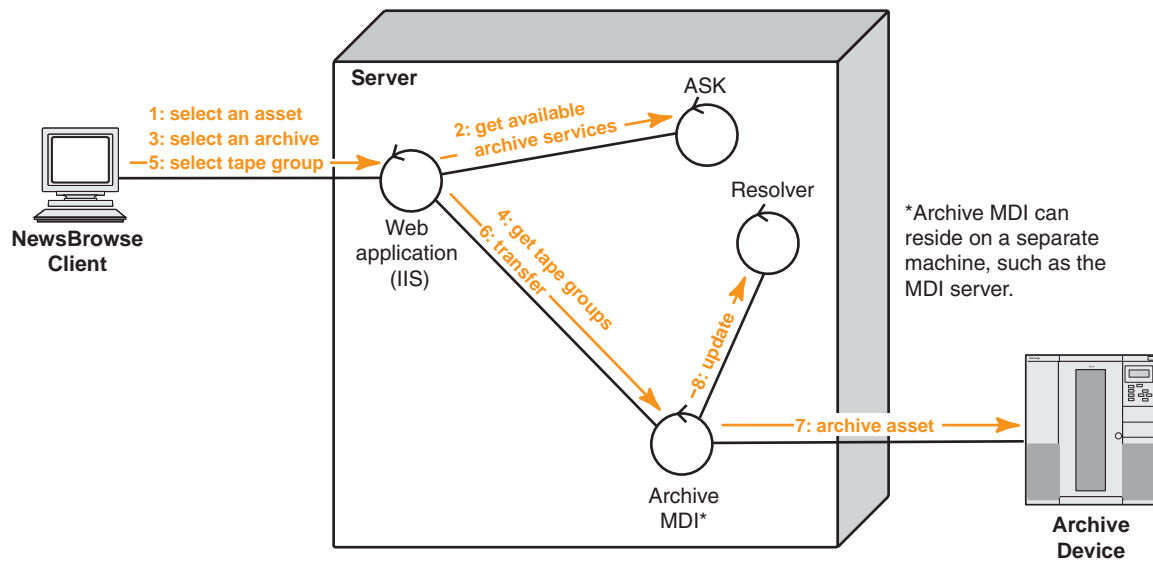
1. User creates a timeline from the NewsBrowse interface and selects Save.
2. The system (IIS) writes the edl XML to a preconfigured destination.
3. The system (IIS) notifies the NTFS MDI that the EDL has been saved to a specific location. The NTFS MDI creates a reference that can be used to associate the asset to other elements in the Resolver.
4. The system (IIS) creates a metadata record for the EDL
5. The system (IIS) creates a link between the metadata record and the EDL in the Resolver. The EDL asset is now saved and has associated metadata which allows the asset to be searched and retrieved.

EDL Conform



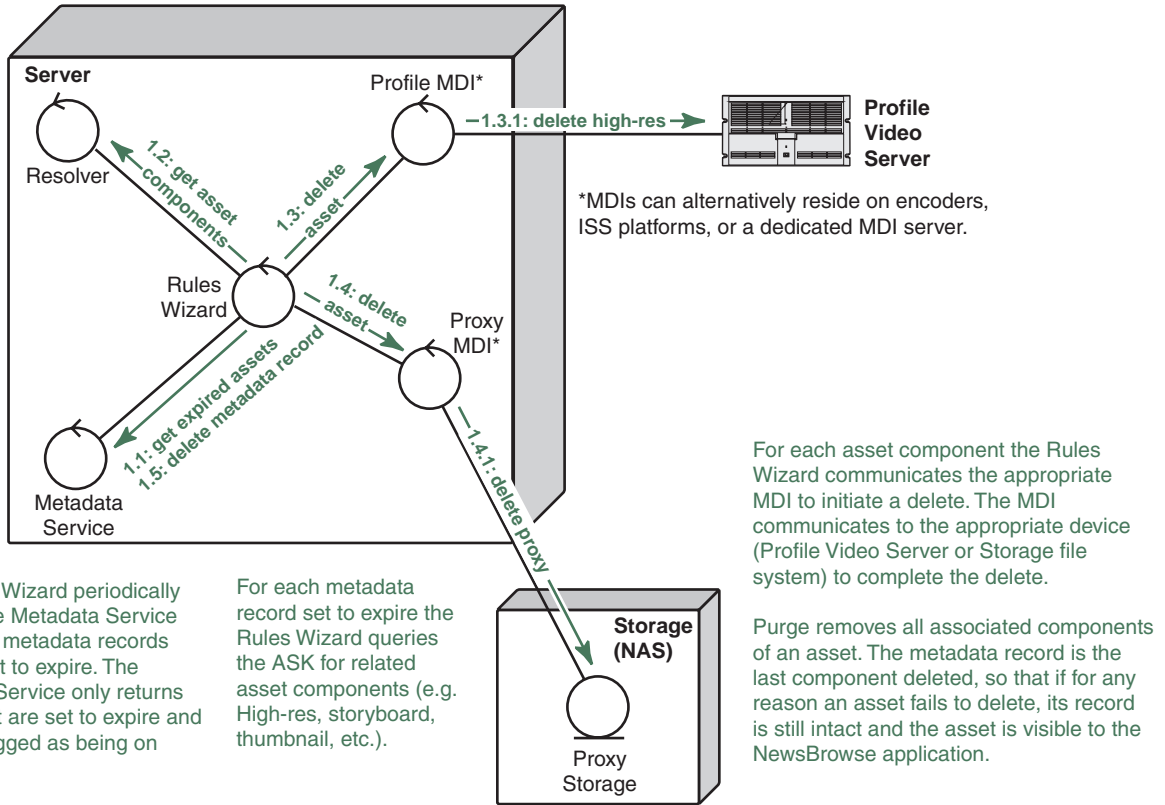
1. User creates a timeline from the NewsBrowse interface and selects Conform.
2. The system (IIS) performs all the actions associated with the Save EDL interaction but to a temporary location.
3. The system (IIS) initiates a transfer of the EDL to a Profile MDI. This causes the conform to take place.
4. The EDL which was previously saved to a temporary location is deleted so that only the conformed high-res asset remains associated with the metadata record which was originally created for the EDL.
5. If a conform to air, the conformed asset is transferred via Fibre Channel to the on air Profile.

Archive



1. User selects an asset, navigates to the management tab, selects the archive option.
2. The system queries the ASK for available archive devices. (Also filters out for assets that already exist in archive by querying the Resolver)
3. The user chooses an available archive.
4. The system queries the archive MDI to obtain a list of available tape groups.
5. The user selects the target tape group and initiates the archive process.
6. IIS accepts the archive request and submits a transfer job to the archive MDI.
7. The archive MDI performs the archive operation by transferring an online asset to the archive device.
8. The archive MDI updates the Resolver to link the newly archived asset to the existing metadata record in the system. The MDI optionally removes the online material from the system if the option to do so was selected initially
9. During the archiving process the system displays the archive status which is retrieved from the archive MDI which was used to perform the transfer.

Purge

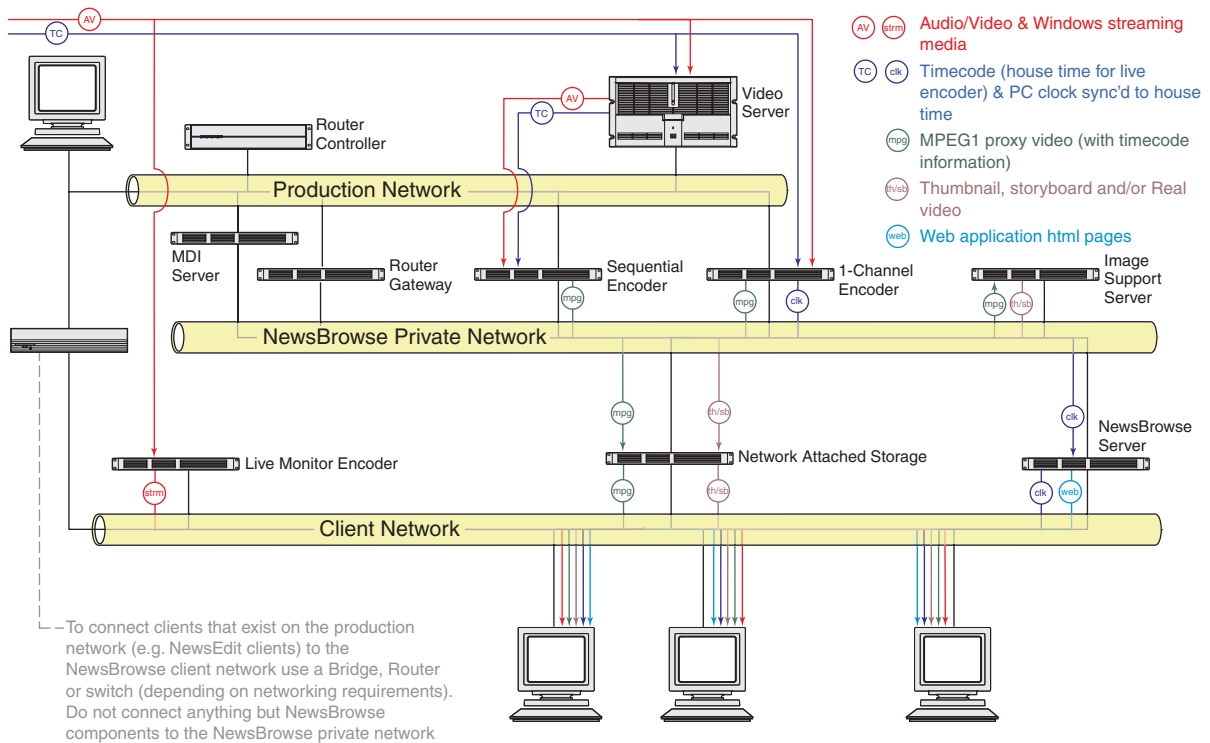


Appendix **B**

Legacy systems

This appendix documents system architectures, hardware platforms, and software components that are no longer recommended for new NewsBrowse systems, but that are retained in existing NewsBrowse systems.

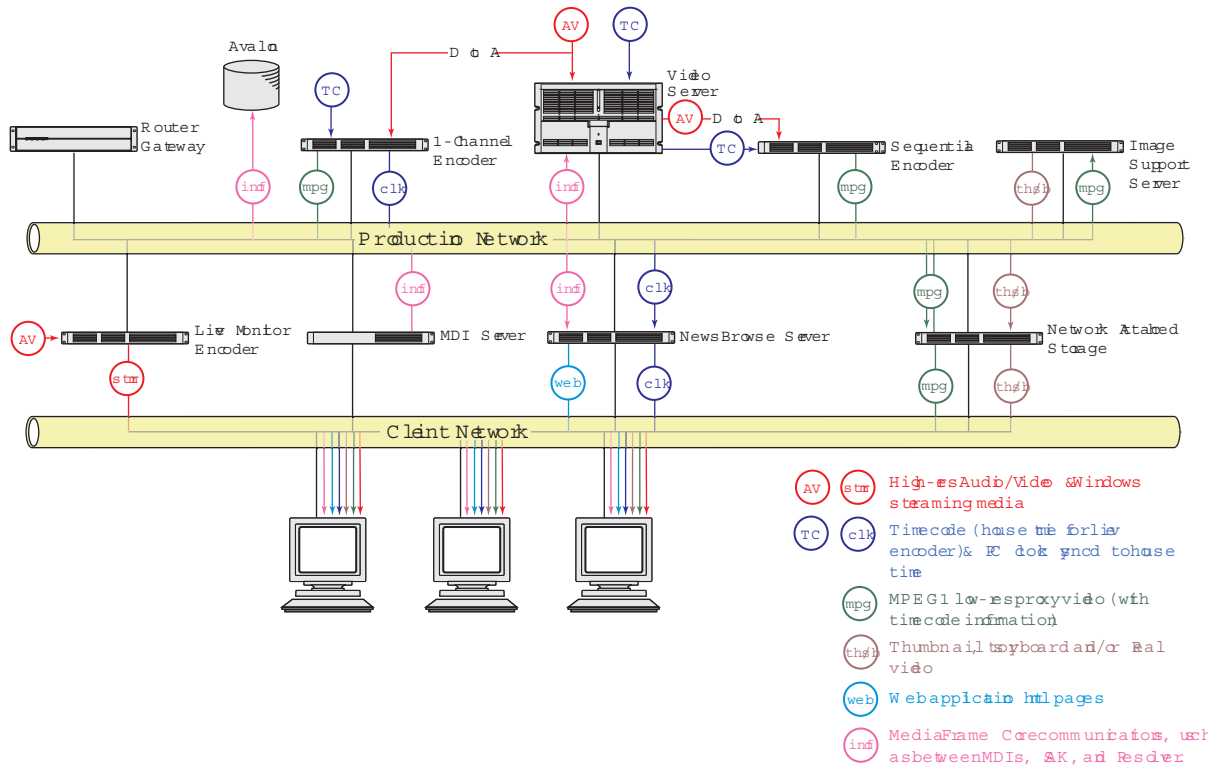
Three tier system diagram



Systems that are upgrading from NewsBrowse version 1.5 to version 2.0 or higher can use the three tier network architecture. NewsBrowse version 1.5 required the three tier network, while NewsBrowse version 2.0 and higher supports either a two tier or a three tier network.

The system illustrated here includes all hardware platform types. Smaller systems might not include all types of hardware platforms. Consult the system design for your specific system to determine the hardware platforms you must install.

Two tier system diagram version 2.0



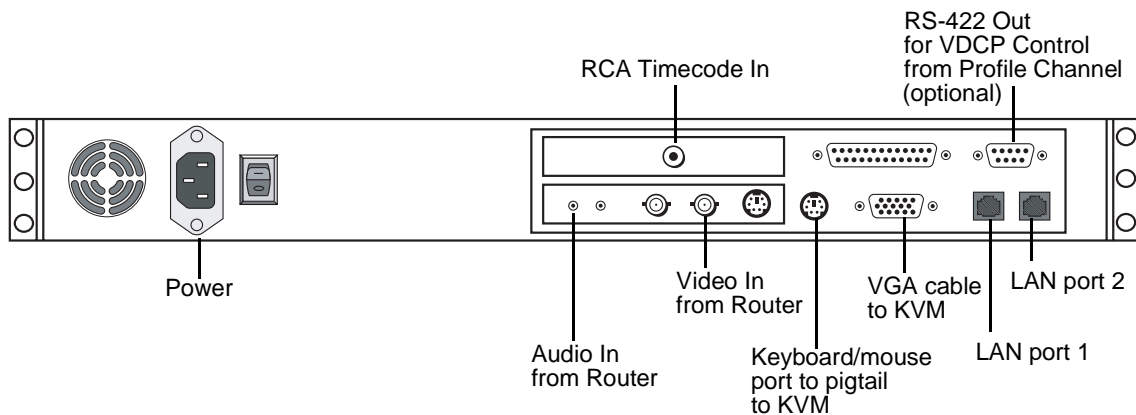
This diagram illustrates the recommended architecture for NewsBrowse version 2.0. It includes devices that are no longer supported in version 2.7 and higher.

Sequential encoder instructions

The sequential encoder creates MPEG-1 proxy versions of high-resolution video assets that already exist on a video server.

Single-channel encoders and sequential encoders both share the same hardware and are wired up identically except for timecode and video/audio sources.

If a NewsBrowse system uses single-channel encoders for the creation of MPEG, the sequential encoder can be an optional component.



Cable as illustrated and as follows:

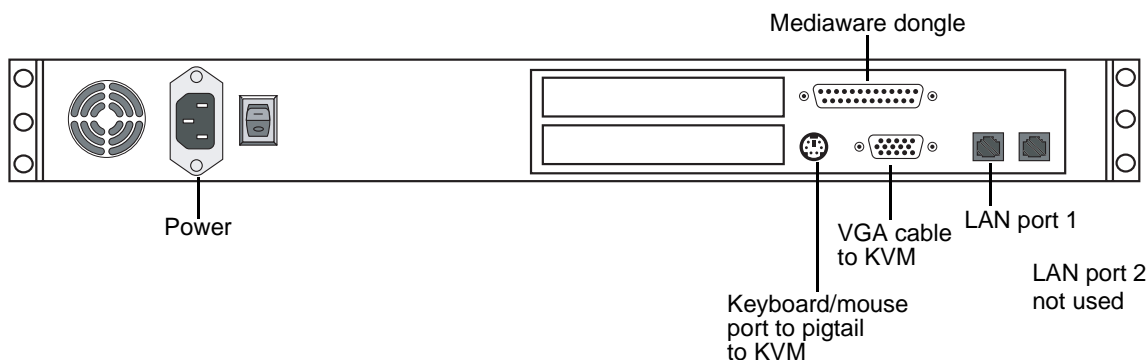
- Connect a cable from the Video In port on the Encoder to the analog video feed source.
- Connect a cable from the Audio In port on the Encoder to the analog audio feed source.
- Connect a Timecode cable from the Timecode In port (RCA port) to the Profile Media Server Timecode Out port; the Profile port must be configured as a Timecode generator and should be free running time of day, closely reflecting the actual time of day.
- Connect two Ethernet cables from **LAN1** and **LAN2** ports on the Encoder to a network router or switch.
- Optionally connect a RS-422 control cable from the COM2 port on the encoder to the RS-422 port on the Profile Media Server (only if API is not used). Refer to [“RS-422 Cable Pinouts”](#) on page 20.

Image Support Server (ISS) instructions

The NewsBrowse Image Support Server is host for the background metadata extraction services used within NewsBrowse. From the Image Support Server, NewsBrowse processes MPEG-1 proxy content and extracts thumbnail images to be used for proxy identification, extracts dynamic scene detection images for storyboard creation, and renders RealVideo for low bitrate proxy content.

Platform Specifications:

- Pentium 3 1Ghz or better (1 or 2 CPU)
- 256 MB RAM
- CD-ROM Drive
- Minimum 20GB Program Drive
- Windows 2000 Workstation (SP3)
- .NET Framework 1.1
- Internet Explorer 6 (SP1)
- Real Producer 8.5
- Mediaware hardware dongle



Cable as illustrated and as follows:

- Attach the Mediaware dongle to the parallel printer port on the back of the Image Support Server to enable generation of thumb-nails and storyboard extraction.
- Connect an Ethernet cable from the **LAN1** port on the ISS to a network router or switch.

Prepare NAS - Linux Fastora

On Linux Fastora NAS devices, check the following configurations and modify settings as necessary.

1. Using Internet Explorer, browse to the NAS machine. For example:
`http://root-nb-nas-n`
2. Login as administrator. The password is *triton*.
3. Navigate in left pane to **Server Configuration | Basic Configuration**.
4. Under the general tab set the following:
 - Server Name
 - Domain name (for client network)
 - DNS server (from customer IT dept.).
5. Under LAN Port 1 tab, do the following:
 - Select manual configuration
 - Set the IP address
 - Subnet mask is 255.255.255.0
6. Leave LAN Port 2 unchanged (disconnected)
7. Under LAN Port 3 tab, select **Get network configuration through DHCP**
8. At **Server Configuration | Date Setup**, set the date and time.
9. Click **Security Setup | Shared Folder Setup**. Select the **Windows/Apple/Novell privileges** tab. User privileges for the media folder should be as follows:
 - everyone - RO
 - nbadmin - RW
10. Click **Network Setup | Windows Network**. Check **Enable Windows Networking**.
11. Enter the following:
 - customer Domain
 - account and password (customer IT dept. will need to provide this)
 - enter the WINS server

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