Operations Guide
Version 6.0

Contents

Preface

This guide is designed to be used by technical staff who will install, configure and support ENPS. It contains confidential and proprietary information. Your site's users should refer to the *ENPS Basic User's Guide* and *ENPS Advanced User's Guide* for information about how to use ENPS in the newsroom.

ENPS was designed to be easy to use. For System Administrators, ENPS provides reliable operation and a "future-proof" design that grows with your enterprise.

To view the latest version of the documentation or to download ENPS software updates visit the ENPS website at `http://www.enps.com`.

Technical Support

Users can press the `F1` key for online help while they are using ENPS.

If you have a technical question about ENPS you can post it on the ENPS support forum at `http://support.enps.com`. You must register to receive a username and password.

If you require additional technical assistance you can reach the AP at the following phone numbers:

ENPS Support

- If you are in the Americas call +1-866-ENPS-911 or +1-202-641-9641
- If you are outside of the Americas call +44 (0) 20 8225 8685.

AP Wires or Radio Network Delivery

- Contact your local AP bureau. If you are not sure which department to contact call +1-800-821-4747 or +1-202-641-9000.
- Call +1-800-232-7241 or +1-202-641-9880.

Typographical Conventions in this Guide

The following table lists the typographic conventions used in this guide:

Typeface	Meaning	Example
`SAMPLE TEXT`	Text to be to be typed, keystrokes, filenames or directories.	Run `C:\Program Files\ENPS\ENPS.EXE` to start ENPS.
Sample →Text	Navigation from one menu to another	To create a new contact select **Personal Folder rover → New→ Contact → Personal**.
Sample text	Button names	Click *Close* to close the current window.

Hardware and Software Requirements

This chapter lists the minimum hardware and software required to run ENPS. Keep in mind the following notes about these requirements:

- You should consult with ENPS Support before you purchase new hardware.

- Server requirements vary based on the number of users at your site and other factors. You may need to add additional servers as your organization grows.

- All hardware must have the appropriate drivers. Refer to "Primary Server" on page 11 to find out when to install drivers during the ENPS installation process.

Minimum Server Requirements	
CPU	Two servers are required: a Primary Server and a backup Buddy Server. Each server must have at least two Intel Xeon 2 GHz processors. Having a dual-core processor does not take the place of multiple processors.
RAM	2 GB minimum; 4 GB or more is recommended.
Operating Systems	Windows Server 2003 or Windows Server 2008. The operating system must be 32-bit; 64-bit operating systems are not supported. The operating system you are using must have the latest Microsoft service packs and security patches installed. Microsoft .NET Framework 4.0 must be installed.
Wire Ingestion	Multi-port serial card such as Comtrol Rocketport or Digi Board with one port for each incoming wire feed. PCI or PCI Express connectors for the multi-port serial cards are recommended. USB connectors are not recommended.
Hard Disk Storage	Hardware RAID yielding a minimum of 146 GB. This can be configured as a RAID 1 or RAID 5 using 10kRPM SCSI or SAS drives. This must be a hardware-based RAID; software-based RAID arrays are not supported. For configuration questions please contact ENPS Support.
Network Interface Card	10/100BASE-T minimum; 10/100/1000BASE-T recommended. The card must support TCP/IP in a Windows networking environment.
Backup System	A locally-attached external media backup for ENPS files is strongly recommended.

Additional Software	Microsoft Internet Explorer 7.0 or later.
	Adobe IFilter 6.0 to index PDF files. This tool is available as a free download from the Adobe website at the following URL:
	`http://www.adobe.com/support/downloads/detail.jsp?ftpID=2611`
	Remote access to server is required such as VNC, PCAnywhere or Remote Desktop.
	Diskeeper Server 6.0 or higher is recommended.
	Real-time antivirus software is not recommended. Refer to "Antivirus Software Recommendations" in this chapter for more information.

The following table lists minimum hardware and software requirements for the client workstation:

Minimum Client Requirements	
CPU	Pentium IV 1GHz minimum; faster workstations are recommended for sites using ActiveX plug-ins.
Supported Operating Systems	Windows XP Professional, Windows Vista Professional or Windows 7 Professional. The operating system must have the latest Service Packs from Microsoft installed. Home editions are not supported.
	Microsoft .NET Framework 4.0 must be installed.
	The workstation must have a Server Client Access License and it must be a member of your site's Windows domain.
RAM	1 GB minimum; 2 GB or more is recommended.
Video Card	Minimum display resolution of 1024x768x16 is required; 1024x768x32 is recommended.
Hard Disk	2 GB
Browser	Microsoft Internet Explorer 7.0 or later.
Printer	Laser printers such as the Hewlett Packard LaserJet series are recommended. Dot matrix printers have limited support under ENPS and are not recommended.
Network Interface Card	10/100BASE-T minimum; 10/100/1000BASE-T recommended. The card must support TCP/IP in a Windows networking environment.
	If you are using multimedia ActiveX plug-ins consult with the vendor for their networking requirements.
Additional Hardware	Audio card and speakers

Refer to your prompter or captioning manual for information about the hardware requirements for your setup. You can use the following requirements as general guidelines:

Prompter/Captioning Workstation Requirements	
CPU	Pentium IV 1 GHz or faster is recommended
Supported Operating Systems	Windows XP Professional, Windows Vista Professional or Windows 7 Professional. Home editions are not supported. The operating system must be installed with the latest Service Pack from Microsoft. The workstation must have a Server Client Access License and it must be a member of your site's Windows domain.
Prompter	It is recommended that you use +WinPlus+ as the primary or backup prompter. The +WinPlus+ prompter is an ISA/PCI hardware board with NTSC/PAL outputs. It comes with a hand controller and can be genlocked.
RAM	1 GB minimum; 2 GB or more is recommended
Video Card Memory	128 MB minimum
Hard Disk	2 GB
Network Interface Card	10/100BASE-T minimum; 10/100/1000BASE-T recommended. The card must support TCP/IP in a Windows networking environment.
Other Hardware	Serial (RS-232) port for optional hand controller. VGA10-to-NTSC converter such as Black Box VGA to Video Portable Pro Videoing Inc. Print-To-Video Standard Mouse and/or Trackball for controlling prompter.

Antivirus Software Recommendations

AP recommends against using realtime anti-virus software on ENPS servers. Doing so may result in the following issues:

- The antivirus software may have kernel-level conflicts with Microsoft's Index Server which ENPS uses for its Search functionality.
- When new material is added to the server it may take significantly longer to add it to the index and therefore will not be available through Search as quickly.
- The index may be corrupted frequently. If it is corrupted, re-indexing will take significantly longer to complete. The Index Server may attempt to repair itself from a conflict by rescanning the indexed drives which can significantly degrade server speed.
- Unscheduled Master Merges may occur several times a day. This can also decrease server performance.

These risks can be severe but they do not always occur. If you accept the potential consequences of running anti-virus software on an ENPS server following these steps to reduce the likelihood of encountering problems:

- Set the antivirus software to perform scheduled scans instead of real-time scans.

- If you must do real-time scans exclude the ENPS data drive(s), which are usually D: on a single-partition system and F:, G: and H: on a multi-partition system. Also exclude the ENPS index folder `Catalog.WCI`.

If you experience frequent Search or indexing problems while running anti-virus software you may need to disable or uninstall the antivirus software while you troubleshoot.

To reduce your servers' vulnerability to viruses and spyware you should take the following precautions:

- Keep servers updated with all of the critical updates from Microsoft.
- Do not allow access to e-mail or the Internet from the servers.
- Make sure there are no open file shares on the servers. The only exception is the ENPS client installation folder which must be shared but should be set to read-only.
- These steps eliminate many server vulnerabilities and reduce the need to run anti-virus software.

Primary Server Installation

This section describes how to install a Primary Server on Windows 2008 Server and Windows 2003 Server. If you already have ENPS installed and you want to update it to the latest version refer to "Upgrading ENPS" on page 24.

Central Server and CTOS

The Central Server is the main repository for your ENPS system maintenance files including staff lists, field definitions, MOS configurations and other global settings. Every site must have a Central Server. There are several options for choosing which server will be the Central Server in your enterprise:

- If you have only one ENPS Primary Server and one Buddy Server then one of these servers, typically the Primary Server, must be the Central Server.
- If your site has multiple pairs of ENPS servers, which may be across multiple physical locations, any of the Primary Servers can be designated as the Central Server.
- A separate, standalone server that does not function as either a Primary or a Buddy server may be designated as a Central Server. This standalone Central Server may only host the master copies of ENPS system files. It would not host any program groups or user data.

The hardware requirements and installation steps for building a standalone Central Server are the same as those for building the Primary Server. To designate a server as your Central Server use set the Global Configuration Option `CentralServer`. Refer to "Global Configuration Options" on page 44 for more information on this setting.

If you use a standalone Central Server you also have the option to configure it as a Central Text Object Server (CTOS). A CTOS is typically used by large organizations to store and index archive data from other ENPS servers. A CTOS allows users to perform a single, integrated search of archives from any client in the enterprise.

The storage requirements for a CTOS depend on how many archives will be stored on the server. You can set a Central Server as a CTOS using the `CTOS` Global Configuration Option. Refer to "Global Configuration Options" on page 44 for more information on this setting.

Installing on Windows 2008 Server

Note the following important points before you start the installation:

- Refer to "Hardware and Software Requirements" on page 7 to make sure your equipment meets all of the prerequisites. Refer to "Part 5: Partition Drives" below for information about the partition sizes you will need for your operating system.
- ENPS servers require static IP addresses, not reserved DHCP IP addresses.
- Server Network Interface Cards (NICs) and the ports to which they connect are both set to identical settings and do not have auto-negotiate or auto-sense functions enabled.

- ENPS servers may <u>not</u> run any other services. The only extra service that is allowed is the SNMP service.
- ENPS servers cannot be Active Directory Domain Controllers.

Part 1: Install the Operating System

1. Install Windows 2008 with Service Pack 2. Make sure you remember the System Administrator password that you provide during the installation. The ENPS installer will prompt you for it later.

2. Install hardware drivers, third party SNMP agents, Diskeeper and backup software.

Part 2: Modify Windows Components

1. Open the Control Panel and select *Windows Firewall*. Make sure the firewall is set to *Off* then click *OK*.

2. Right-click on your computer's desktop icon and select **Manage** to open the Server Manager*.* Under **Security Information** click *Configure IE ESC* in the top right corner and make sure it is set to *Off* for both Administrators and Users.

3. Open the command prompt and run `MSCONFIG` to open the System Configuration utility. On the **Tools** tab select *Disable UAC* then click *Launch*. Click *OK* to close the System Configuration window.
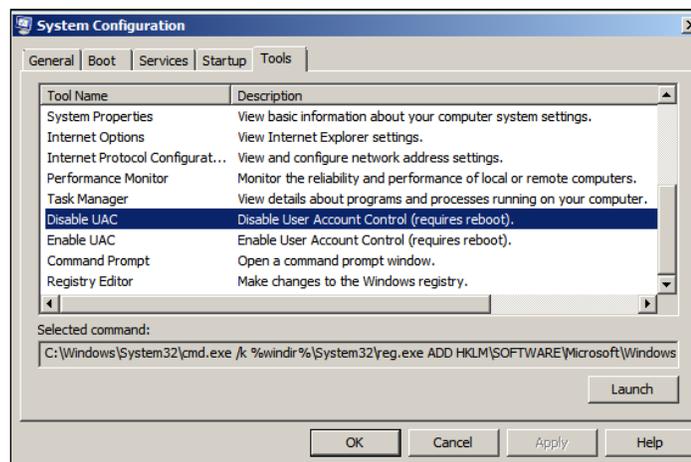
4. Reboot your system.

5. Re-open the Server Manager by right-clicking on your computer's desktop icon and selecting *Manage.* In the Server Manager pane select **Features**.

6. In the **Features Summary** window select *Add Features.* Make sure the following features are selected:

- Telnet Client
- Telnet Server
- .NET Framework 3.0 Features
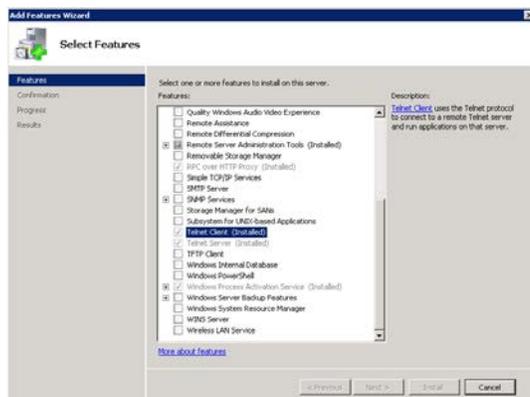
Expand *.NET Framework 3.0 Features*. Make sure the following sub-entries are selected:

- .NET Framework 3.0
- XPS Viewer
- WCF Activation

When you select *.NET Framework 3.0 Features* the **Add Roles Wizard** will prompt you to add roles services.
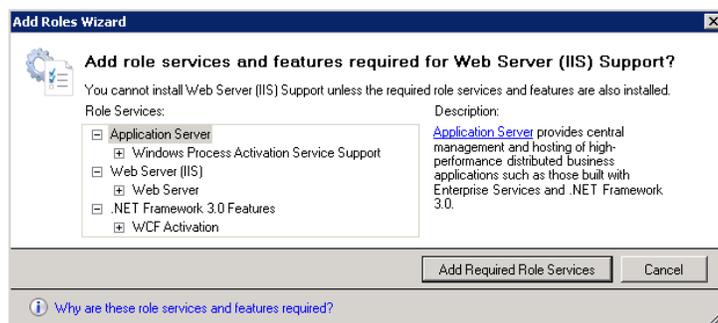
Click the *Add Required Role Services* button.

Click *Next* through the wizard until you can click *Install*. Click *Close* when installation is complete.

7. Click **Roles** on the navigation pane. Under **Roles Summary** click *Add Roles*.
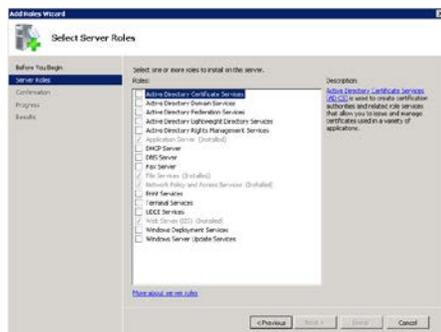
Select the following options if they are not already installed:

- File Services
- Web Server (IIS)
- Application Server

After you select *Application Server* another **Add Roles Wizard** will appear.
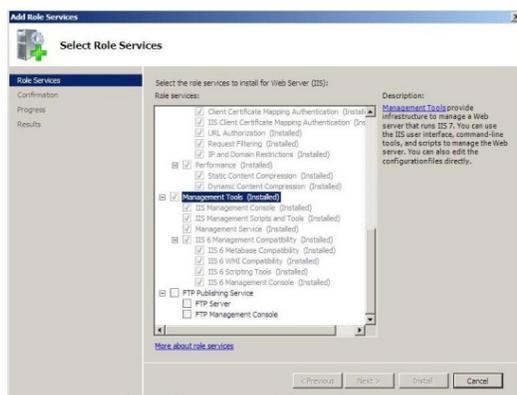
Select the following options if they are not already installed:

- COM+ Network Access
- Web Server IIS Support

When the **Add Roles Wizard** appears click *Add Required Role Services* then click *Next*.

In the Web Server IIS Pane make sure **Management Tools** and its sub-entries are selected. Make sure *IIS 6 Compatibility* is selected then click *Next*.

Expand **Application Development** and select the *ASP* checkbox.

Expand **Windows 2003 Server File Services** and select *Indexing Service* then click *Next*.

Click *Install* to install the selected services. Reboot the server if necessary.

Part 3: Modify Registry Settings

1. Run REGEDT32 from the command prompt. Navigate to the following key:

   HKEY_LOCAL_MACHINE
   \System\CurrentControlSet\Control\FileSystem

2. Select **Edit → New → DWORD Value** and enter
   NtfsMftZoneReservation as the name.

3. Select **Edit → Modify** and in the **Value Data** field enter the number 3.

4. Reboot the server for the registry changes to take effect.

Part 4: Back Up Configuration Data

1. Create the C:\BACKUPS folder.

2. Run REGEDT32 from the command prompt. Navigate to the following key:

   HKEY_LOCAL_MACHINE

```
\SYSTEM\CurrentControlSet\Control\ContentIndex
```

3. Select **File → Export** and save the file as `C:\BACKUPS\Index Server Default Settings.reg`

4. Close the registry editor.

Part 5: Partition Drives

The partition sizes listed below are based on an average ENPS site configuration. If your organization retains wires for more than 100 hours, if your server ingests more than six wires or if you have more than 150 users per server you should consult with ENPS Support for the recommend partition sizes for your site.

Use the following general rules for calculating the total working size for the drives:

*   RAID-1: Two identical drives which yield a space equal to the size of one of the drives. One drive can be lost and the server will continue to run.
*   RAID-5: A minimum of three identical drives which yield space equal to the sum of all drives minus the size of one drive. For example, 3 x 36 GB drives will yield a working size of 72 GB. One drive could fail and the server would continue to run.

For systems with multiple RAID arrays it is recommended that you have two physical disks in a RAID-1 mirror configuration with two NTFS partitions:

*   6 GB C: System volume
*   4 GB D: Swap file/Index Catalog for the remainder of the volume.

The second array should be a minimum of 3 x 9 GB drives in RAID-5 configuration. Do not partition this array.

If you are using a RAID-1 array it is recommended that you use 2 x 72 GB 10k RPM SCSI or larger drives to form the RAID-1 array.

Partition Sizes				
Drive Letter	Volume Name	Minimum Size	Recommended Size	File Allocation Unit Size
C:	System	20 GB	50 GB	4096 (default)
D:	CD-ROM			
E:	Indexes	6 GB*	10 GB	4096 (default)
F:	ENPS Work	10 GB	40 GB	1024
G:	Wires	2 GB	5 GB	1024
H:	Archives	30 GB	50+ GB**	1024

*On configurations with more space it is recommended that indexes are placed on a separate volume. However, if you have limited drive space you may place Indexes on the same volume as your Archives (H:).

**Any extra space in your partitions should be allocated to the Archives volume.

To set the partition letters complete the following steps:

---

1. Open Computer Management by double-clicking on the *Computer Management* shortcut on your desktop. You can also open Computer Management by opening a command prompt and entering the following command:

   ```
   C:\Windows\System32\compmgmt.msc /s
   ```

2. Expand **Storage → Disk Management**. If the drive letter of your CD-ROM drive is F:, G: or H: you must assign it to D: or another available drive letter since these letters will be used by ENPS partitions. To change a drive letter right-click on the drive and select *Change Drive Letter and Paths*.

   Windows permits logical disks to have a maximum of four partitions. To increase this number right-click on the disk name and select *Convert to dynamic disk.* You will not be able to revert to a logical disk once you format the partitions.

3. Right-click on the unformatted partition and select **Format**. When you are prompted for **Volume Type** select *Primary Partition* or select *Simple Volume* if you are using a dynamic disk.

4. Format each drive according to the volume name, partition size and file allocation sizes listed in the *Partition Sizes* table above.

Part 6: Install Server Components

1. Download Microsoft .NET Framework 4.0 from the Microsoft website and install it.

2. Download the ENPS installer from the ENPS download site or insert the ENPS Setup CD-ROM. If you need a link to the download site send an e-mail to `info@enps.com`. Be sure to include your name and the name of your organization along with your request.

3. Run the ENPS installer from the root directory of the ENPS `WORK` drive.

   - When you are prompted to enter the drive letters for Data, Wires, Archives and Indexes refer to the partition table above for the suggested drive letters. Archives and Indexes may have the same drive letter.

   - When you are prompted for the server name enter a name that corresponds to your site name such as station call letters. Do not name your server `ENPS`.

   - Enter the NetBIOS machine name of the Buddy Server. If this server will not have a Buddy Server, or you are configuring it as a CTOS, enter `NONE`.

   - Enter the NetBIOS machine name of the Central Server. If you do not have a separate Central Server the Primary Server will be the Central Server.

   - Enter the system password so that the system can login automatically. This is helpful in the event of a power failure or when the server area is unattended. If you do not enable this feature now you can manually enable it later by completing the instructions in "Enabling Automatic Logon" on page 22.

4. After you fill out the ENPS registration form reboot the server. ENPS server applications will start automatically. Minimize them before you proceed to the next step.

Part 7: Set Configuration Settings

1. Right-click on the **Recycling Bin** and select *Properties*.

2. Select the ENPS volumes F:, G: and H: and select the *Do not move files to the Recycling Bin* option. Click *Apply* to save your settings.

Part 8: Verify IIS Settings

1. Open Computer Management and expand **Services and Applications** then select **Internet Information Services**. Click on the server name in the **Connections** pane to expand it. Select the **ENPS Web** website.

3. Under **ENPS Web Home** double-click **Handler Mappings** to display a list of extensions. Make sure that the following extensions are displayed:

AboMapperCustom-30810	*.htw	Enabled	Unspecified	IsapiModule
AboMapperCustom-30811	*.ida	Enabled	File	IsapiModule
AboMapperCustom-30812	*.idq	Enabled	File	IsapiModule

4. Double-click the first extension so that the **Edit Story Map** box appears. Click *Request Restrictions,* select the **Verbs** tab and verify that the verbs GET, HEAD, and POST appear in each. Repeat this step for each of the other extensions.

Part 9: Install Adobe IFilter

For users to search the contents of PDF files in Newsgathering Grids you need to install Adobe PDF IFilter 6.0 on the ENPS Primary Server. IFilter 6.0 is available for free from the Adobe website at the following URL:

```
http://www.adobe.com/support/downloads/detail.jsp?ftpID=2611
```

Part 10: Enter the License Key

Call ENPS Support to obtain a license key. You will not be able to obtain a license key via e-mail.

- If you are in North America call +1-866-ENPS-911 or +1-202-641-9641.
- If you are outside North America call +44 (0) 20 8225 7272.

To enter your license key open the NOM and select **File → Update license**.

Proceed to "Installing the Client" on page 37 to to install the ENPS client and complete additional server installation steps.

Installing on Windows 2003 Server

Note the following important points before you start the installation:

- Refer to "Hardware and Software Requirements" on page 7 to make sure your equipment meets all of the prerequisites. Refer to "Part 5: Partition Drives" below for information about the partition sizes you will need for your operating system.

- ENPS servers require static IP addresses, not reserved DHCP IP addresses.

- Server Network Interface Cards (NICs) and the ports to which they connect are both set to identical settings and do not have auto-negotiate or auto-sense functions enabled.

- ENPS servers may not run any other services. The only extra service that is allowed is the SNMP service.

- ENPS servers cannot be Active Directory Domain Controllers.

Part 1: Install the Operating System

1. Install Windows 2003 Server with the latest Service Pack from Microsoft.

   IMPORTANT: If you are using a Compaq, HP, Dell or IBM server do not use the manufacturer's startup disk. Use the Windows boot CD instead. If you have to install the vendor's utilities install the operating system then install vendor utilities before you install the latest Microsoft Service Pack.

   During Windows 2003 Server installation you will be prompted to install additional Windows components. Do not select any other options or services. The only service that is allowed is the SNMP service.

   Make sure you remember the System Administrator password that you enter during the installation process. The ENPS installer will prompt you for it later.

2. Install hardware drivers, third-party SNMP agents, Diskeeper and backup software.

Part 2: Modify Windows Components

1. Open the Control Panel and select **Add/Remove Programs** then select **Add/Remove Windows Components**.

   - Enable the Indexing Service.
   - Disable Internet Explorer Enhanced Security Configuration.
   - Make sure Terminal Server is not installed.

2. Select **Application Server** and click *Details.* Enable the following features:

   - Application Server Console
   - ASP.NET
   - Network COM+ Access

3. Select **Internet Information Services** and click *Details.* Enable the following features:

   - Common Files
   - Internet Information Services Manager
   - World Wide Web Service

4. Click *OK* until you return to the main Windows Components screen then click *Next.* When the new components are finished installing close the **Add or Remove Programs** window.

Part 3: Modify Registry Settings

1. Open the command prompt and run `REGEDT32`. Navigate to the following key:

   ```
   HKEY_LOCAL_MACHINE
   \System\CurrentControlSet\Control\FileSystem
   ```

2. Select **Edit → New → DWORD Value**. Enter the name `NtfsMftZoneReservation`

3. Select **Edit → Modify**. In the **Value Data** field enter the number `3`.

4. Reboot the server for the registry changes to take effect.

Part 4: Back Up Configuration Data

1. Create the `C:\BACKUPS` folder.

2. Open the command prompt and run `REGEDT32`. Navigate to the following key:

   ```
   HKEY_LOCAL_MACHINE
   \SYSTEM\CurrentControlSet\Control\ContentIndex
   ```

   Select **File → Export**. Save the file as `C:\BACKUPS\Index Server Default Settings.reg` then close the registry editor.

Part 5: Partition Drives

The recommended partition sizes below are based on an average ENPS configuration. If your organization retains wires for more than 100 hours, if your server ingests more than six wires or if you have more than 150 users per server you should consult with ENPS Support for the recommend partition sizes for your site.

Use the following general rules for calculating the total working size of the drives:

- RAID-1: Two identical drives which yield a space equal to the size of one of the drives. One drive can be lost and the server will continue to run.

- RAID-5: A minimum of three identical drives which yield drive space equal to the sum of all drives minus the size of one drive. For example, 3 x 36 GB drives will yield a working size of 72 GB. If one drive fails the server will continue to run.

For systems with multiple RAID arrays it is recommended that you have two physical disks in a RAID-1 mirror configuration with two NTFS partitions:

- 6 GB C: System volume
- 4 GB D: Swap file/Index Catalog for the remainder of the volume.

The second array should be a minimum of 3 x 9 GB drives in RAID-5 configuration. Do not partition this array.

If you are using a RAID-1 array it is recommended that you use 2 x 72 GB 10k RPM SCSI or larger drives to form the RAID-1 array.

Partition Sizes				
Drive Letter	Volume Name	Minimum Size	Recommended Size	File Allocation Unit Size
C:	System	20 GB	50 GB	4096 (default)
D:	CD-ROM			
E:	Indexes	6 GB*	10 GB	4096 (default)
F:	ENPS Work	10 GB	40 GB	1024
G:	Wires	2 GB	5 GB	1024
H:	Archives	30 GB	50+ GB**	1024

*On configurations with more space it is recommended that indexes are placed on a separate volume. However, if you have limited drive space you may place Indexes on the same volume as your Archives (H:).

**Any extra space in your partitions should be allocated to the Archives volume.

To set the partition letters for your setup complete the following steps:

1. Right-click the My Computer icon and click Manage to open Computer Management. Expand **Storage → Disk Management**. If the drive letter of your CD-ROM drive is `F:`, `G:` or `H:` you must assign it to `D:` or another available drive letter since these letters will be used by ENPS partitions. Right-click on the drive and select **Change Drive Letter and Paths**.

   Windows permits logical disks to have a maximum of four partitions. To increase this number right-click on the disk name and select *Convert to dynamic disk.* You will not be able to revert to a standard logical disk once you format the partitions.

2. Right-click on the unformatted partition area and select **Format**. When you are prompted for **Volume Type** select *Primary Partition* or select *Simple Volume* if you are using a dynamic disk.

3. Format each drive according to the volume name, partition size, and file allocation sizes listed in the *Partition Sizes* table above.

4. Close the Computer Management utility.

Part 6: Install Server Components

1. Download Microsoft .NET Framework 4.0 from the Microsoft website and install it.

2. Download the ENPS installer from the download site or insert the ENPS Setup CD-ROM. If you need a link to the download site send an e-mail to `info@enps.com`.

3. Run the ENPS installer from the root directory of the ENPS `WORK` drive.

   - You will be prompted to enter the drive letters for Data, Wires, Archives and Indexes. Refer to the partition table in the previous step for the suggested drive letters. Archives and Indexes may have the same drive letter.

- When you are prompted for the server name enter a name that corresponds to your site name such as station call letters. Do not name your server `ENPS`.
- Enter the NetBIOS machine name of the Buddy Server. If this server will not have a Buddy Server, or you are configuring it as a CTOS, enter `NONE`.
- Enter the NetBIOS machine name of the Central Server. If you do not have a separate Central Server the Primary Server will be the Central Server.
- Enter the system password so that the system can login automatically. This is helpful in the event of a power failure or when the server area is unattended. If you do not enable this feature now you can manually enable it later by completing the instructions in "Enabling Automatic Logon" on page 22.

After you reboot the ENPS server applications will start automatically. Minimize them before you proceed to the next step.

Part 7: Set Configuration Settings

1. Right-click on the **Recycling Bin** and select *Properties*.

2. Select the ENPS volumes (F:, G:, H:) and select the *Do not move files to the Recycling Bin* option. Click *Apply* to save your settings.

Part 8: Verify IIS Settings

Right-click the **My Computer** icon and click *Manage* to open the Computer Management utility. Expand **Services and Applications** and select **Internet Information Services (IIS) Manager** → **Web Sites**. Right-click on the **ENPS Web** website and select *Properties.* Select the **Home Directory** tab and click the *Configuration* button.

You will see a list of Application Mappings. If the extensions `.ida`, `.htw` and `.idq` are not listed with the mappings shown below you will need to add them to the list.

Extension	Executable Path	Verbs (Limit To)
.ida	`C:\WINDOWS\SYSTEM32\IDQ.DLL`	GET, HEAD, POST
.htw	`C:\WINDOWS\SYSTEM32\WEBHITS.DLL`	GET, HEAD, POST
.idq	`C:\WINDOWS\SYSTEM32\IDQ.DLL`	GET, HEAD, POST

Part 9: Install Adobe IFilter

For users to search the contents of PDF files in Newsgathering Grids you need to install Adobe PDF IFilter 6.0 on the ENPS Primary Server. IFilter 6.0 is available for free from the Adobe website at the following URL:

`http://www.adobe.com/support/downloads/detail.jsp?ftpID=2611`

Part 10: Enter the License Key

Call ENPS Support to obtain a license key. You will not be able to obtain a license key via e-mail.

- If you are in North America call +1-866-ENPS-911 or +1-202-641-9641.

- If you are outside North America call +44 (0) 20 8225 7272 to obtain a license.

Enter your license key by opening the NOM. Select **File → Update license**.

Proceed to "Installing the Client" on page 37 to to install the ENPS client and complete additional server installation steps.

Connecting to Servers with Remote Desktop

Remote Desktop is a convenient way to administer ENPS servers from other workstations. However, when it is opened with its default settings Remote Desktop will create a new session and create additional instances of the ENPS server applications. This will cause problems on the server.

To prevent this from happening you must run Remote Desktop with parameters that have it join the session already running. From the command prompt enter the following command:

```
%WINDIR%\SYSTEM32\MSTSC.EXE -V:<SERVER NAME> /F /ADMIN
```

where `<SERVER NAME>` is the server's NetBIOS name or IP address. Earlier versions of Windows may require the `/console` switch instead of the `/admin` switch.

You can also use remote viewing clients such as RealVNC to connect to your ENPS servers.

Enabling Automatic Logon

If you did not choose to enable automatic server logon during the installation you can perform the following steps to enable it:

1. Open the command prompt and run `REGEDT32`. Navigate to the following key:

   ```
   HKEY_LOCAL_MACHINE
   \SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon
   ```

2. Locate the `DefaultDomainName` key. Right-click on the key and select **Modify**. In the **Value Data** field enter the domain of the Primary Server.

3. Locate the `DefaultUserName` key. Right-click on the key and select **Modify**. In the **Value Data** field enter the username used to log in to the Primary Server.

4. Check to see if the `DefaultPassword` key exists. If the key does not exist select **Edit → New → String Value** to create the key. Enter `DefaultPassword` as the string name. Right-click on the key and select **Modify**. In the **String** field enter the account password.

5. Select **Edit → New → String Value** to create a new key. Enter `AutoAdminLogon` as the string name. Right-click on the key and select **Modify**. In the **String** field enter `1`.

6. Save your changes and exit the registry editor.

When you restart your computer the server will log in automatically.

Upgrading and Migrating Servers

Complete the steps in this chapter to upgrade ENPS to a newer version. This chapter includes instructions for two installers: the upgrade installer and the full installer. You can use the upgrade installer if the newer version has the same major build number as the one you are using. For example, if you are upgrading from 5.0.0053 to 5.0.0087 you can use the upgrade installer. If you are upgrading between major builds such as 4.05 to 5.0 use the full installer.

Keep in mind the following notes before you perform the upgrade:

- Do <u>not</u> perform the upgrade during or immediately prior to a newscast.
- Perform the upgrade when there is the lowest resource load on the system.
- Give users prior notice that the Primary Server will be unavailable.
- If you have multiple Primary Servers upgrade the Central Server first.

Using the Upgrade Installer
Part 1: Download the Installer

1. Download the upgrade installer from the ENPS website or FTP site. If you need a link for the ENPS download site send an e-mail to `info@enps.com`. Be sure to include your name and the name of your organization with your request.

2. Extract the upgrade installer to the root of the ENPS `WORK` drive, then copy those files to the root folder of the Buddy Server.

Part 2: Upgrade the Buddy Server

Perform the following steps on your ENPS Buddy Server:

1. Perform the steps in "Routine Maintenance" on page 151.

2. Close the Watch, NOM Maint, NWP and NOM applications. You should also shut down Extract, WalkCS and Publish if they are running.

3. Run the upgrade installer.

4. Run the **Watch** shortcut on the desktop to launch the ENPS server applications.

Part 3: Upgrade the Primary Server

Perform the following steps on your ENPS Primary Server:

1. Open the NOM and select **NOM Maintenance** → **Buddy Process** to view the Buddy Server queue. Wait until the queue is empty before you proceed to the next step.

2. If your primary language is English (US) you may skip this step. Validate the local language file by completing the steps in "Language Support" on page 153.

3. In the NOM select the **NOM Configuration/Status** window and select the *Block Primary Access* checkbox. Users will see the window below notifying them that the Primary Server is unavailable:

> Your computer is having trouble communicating with the system. (The help desk may be interested in this information: "Socket error [10065] No route to host. [-2146818223]").
>
> ☐ <u>T</u>ry again (if other people seem to be using the system without a problem)
> ☐ <u>W</u>ork off-line and store data on my own computer
> ☐ **Switch to a backup system "Washington (2)"**
> ☐ <u>C</u>ancel this operation
> ☐ E<u>x</u>it ENPS

Users should select the option *Switch to a backup system*.

4. Verify that users are able to connect to the Buddy Server then shut down the ENPS applications on the Primary Server by closing Watch, NOM Maint, NWP and NOM. You should also close Extract, WalkCS and Publish if they are running.

5. Perform the steps in "Routine Maintenance" on page 151.

6. Run the upgrade installer on the Primary Server.

7. Open the command prompt. Go to the ENPS WORK drive and enter \NOM\NOM.EXE /BLOCK to start the NOM in Block mode. Click *OK*. The NOM will launch on the Primary Server.

8. Run the **Watch** shortcut on the desktop to launch the ENPS server applications.

Part 4: Bring the Primary Server Back Online

1. Open the Buddy Server's NOM and select **NOM Maintenance → Buddy Process** to view its queue. Proceed to the next step once the queue is empty.

2. On the Primary Server open the NOM and select the **Configuration/Status** window. Uncheck the **Block Primary Access** checkbox.

   Users will now see a message notifying them that the Primary Server is available.

> Your computer is having trouble communicating with the system. (The help desk may be interested in this information: "Socket error [10065] No route to host. [-2146818223]").
>
> ☐ <u>T</u>ry again (if other people seem to be using the system without a problem)
> ☐ <u>W</u>ork off-line and store data on my own computer
> ☐ **Switch back to my normal system "Washington"**
> ☐ <u>C</u>ancel this operation
> ☐ E<u>x</u>it ENPS
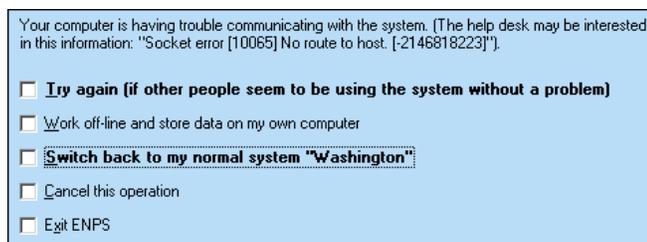
Users should select the option *Switch back to my normal system*. The upgrade is complete.

Using the Full Installer
Part 1: Download the Installer

1. Download the full installer from the ENPS website or FTP site. If you need a link for the ENPS download site send an e-mail to info@enps.com. Be sure to include your name and the name of your organization with your request.

2. Extract the full installer to the root of the ENPS WORK drive, then copy those files to the root folder of the Buddy Server.
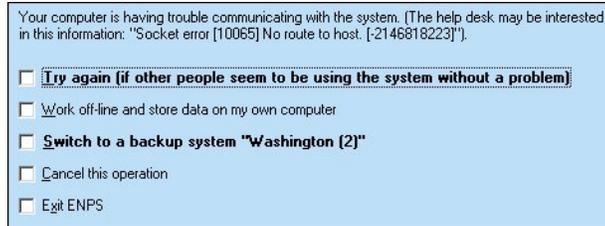

Part 2: Upgrade the Buddy Server

These steps should be performed on the ENPS Buddy Server:

1. Complete the instructions in "Routine Maintenance" on page 151.

2. Shut down ENPS by closing Watch, Extract, Maint, NWP and NOM. If WalkCS and Publish are running they should be closed.

3. Run the full installer. Refer to the "Installing the Buddy Server" section on page 40 for information on using the installer. During installation you should select your language dictionary, even if you already have one installed, to ensure that the spell checker runs correctly. Restart the server when you are prompted to do so.

Part 3: Upgrade the Primary Server

Perform the following steps on your ENPS Primary Server:

1. Open the NOM and select **Maintenance → Buddy Process**. Proceed to the next step once the queue is empty.

2. In the NOM select the **Window → NOM Configuration/Status** . Select the *Block Primary Access* checkbox.

   Users will see the window below notifying them that the Primary Server is unavailable:
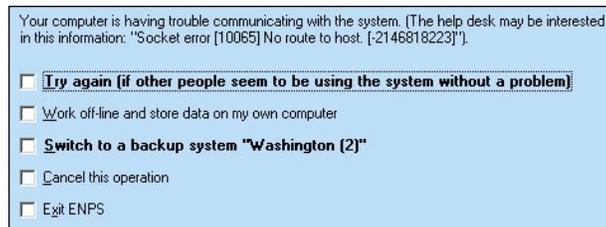
   Users should select the option *Switch to a backup system*.

3. Verify that users are able to work on the Buddy Server then shut down the ENPS applications by closing Watch, NOM Maint, NWP and NOM. You should also close Extract, WalkCS and Publish if they are running.

4. Complete the instructions in "Routine Maintenance" on page 151.

5. Remove the shortcut to Watch from the Windows **Startup** folder. This allows you to restart the server without the server applications opening automatically.

6. Run the full installer and follow the prompts. Refer to "Part 6: Install Server Components" on page 16 for more information. If your site does not use English (US) as its primary language note that the installation process may overwrite your G_LANGEN file during the installation process. You can find the language file with your site's customizations in \COMMON\G_SUPPORT\MASTERS on the ENPS WORK drive.

7. Open the command prompt. Go to the ENPS WORK drive and enter \NOM\NOM.EXE /BLOCK to start the NOM in Block mode.

8. Click *OK*. The NOM will launch on the Primary Server.

9. Add the shortcut to **Watch** back into the **Startup** folder. Run the **Watch** shortcut on the desktop to launch the ENPS server applications.

Part 4: Bring the Primary Server Back Online

1. Open the NOM and select **NOM Maintenance → Buddy Process** to view the Buddy queue. Proceed to the next step once the queue is empty.

2. Open the NOM and select **Window → Configuration/Status**. Uncheck the *Block Primary Access* checkbox. Users will now see the following message:

> Your computer is having trouble communicating with the system. (The help desk may be interested in this information: "Socket error [10065] No route to host. [-2146818223]").
>
> ☐ **Try again (if other people seem to be using the system without a problem)**
>
> ☐ Work off-line and store data on my own computer
>
> ☐ **Switch back to my normal system "Washington"**
>
> ☐ Cancel this operation
>
> ☐ Exit ENPS

Users should select the option *Switch back to my normal system*. The upgrade is complete.

Migrating Servers to New Hardware

The following steps will show you how to migrate your existing ENPS Primary and Buddy Servers to new hardware.

Keep in mind the following before you perform the migration:

*   Do <u>not</u> perform the upgrade during or immediately prior to a newscast.
*   Do <u>not</u> upgrade your ENPS version number when you are migrating servers.
*   Perform the upgrade when there is the lowest resource load on the system.
*   Give users prior notice that the Primary Server will be unavailable.
*   Your current Primary and Buddy Servers should be running when you begin this process.

Part 1: Install ENPS on the New Servers

1. Build a new Primary Server and a new Buddy Server by completing the instructions in "Installing on Windows 2008 Server" on page 11 and "Installing the Buddy Server" on page 40.

    Make sure you are using the ENPS installer that matches the ENPS version number that is currently installed at your site. During the installation assign the new servers temporary names that differ from the names of your site's current servers.

2. On both of the new servers close **NOM Watcher** then close the other ENPS server applications.

3. Copy the following folders from your site's current Primary Server's WORK drive to the same locations on both the new Primary Server and the new Buddy Server:

    *   All of the folders on the ARCHIVES drive.
    *   The following folders on the WORK drive:

        ```
        \<PRIMARY SERVER NAME> except for the S_ARCHIVE sub-folder
        \<PRIMARY SERVER NAME>_H
        \<PRIMARY SERVER NAME>_Inactive
        \<BUDDY SERVER NAME>_H
        ```

```
\NWS
\COMMON\G_SUPPORT
\NOM\NOM.INI
\NWP\NWP.INI
\NWP\TABLES.APN
```

Part 2: Configure the New Buddy Server

1. Note the current Buddy Server's machine name and IP address then disconnect it from the network.

2. Disconnect cables from the old Buddy Server and attach them to the new Buddy Server.

3. Change the new Buddy Server's machine name from the temporary name you assigned earlier to the machine name of the original Buddy Server. Assign it the same IP address as the original Buddy Server.

4. Run the **Watch** shortcut on the desktop to launch the ENPS server applications.

5. On the Primary Server open NOM Maintenance and select **Window →
Buddy Process**. Make sure the **Queue** window is empty before you proceed to the next step.

6. Run `\NOM\INDEXDEL.EXE` on the Buddy Server's `WORK` drive to rebuild the index. This process may take several hours.

7. Open the NOM on your site's current Primary Server. Select **Window →
NOM Configuration/Status**. Select the *Block Primary Access* checkbox.

   Users will see the window below notifying them that the Primary Server is unavailable:
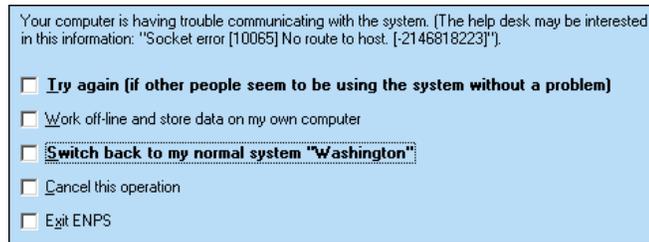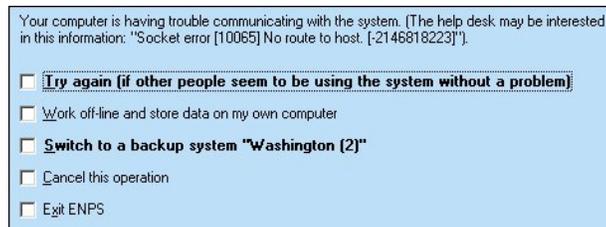

   Make sure that users can open Rundowns and perform Searches on the new Buddy Server. If users encounter problems you should uncheck the *Block Primary Access* checkbox to allow them to return to the Primary Server then contact ENPS Support by calling the number on page 6 for help troubleshooting the new Buddy Server.

Part 3: Configure the New Primary Server

1. Note the current Primary Server's machine name and IP address then disconnect it from the network.

2. Disconnect cables from the old Primary Server and attach them to the new Primary Server.

3. Change the new Primary Server's machine name from the temporary name you assigned earlier to the machine name of the original Primary Server. Assign it the same IP address as the original Primary Server.

4. On the Primary Server open a command prompt. Go to the ENPS `WORK` drive and enter `\NOM\NOM.EXE /BLOCK` to start the NOM in Block mode.

5. Open NOM Maintenance and select **Window → Buddy Process**. Make sure the **Queue** window is empty before you proceed to the next step.

6. Run `\NOM\INDEXDEL.EXE` on the Primary Server's `WORK` drive to rebuild the index. This process may take several hours.

7. Open the NOM and select **Window → Configuration/Status**. Uncheck the *Block Primary Access* checkbox. Users will now see the following message:
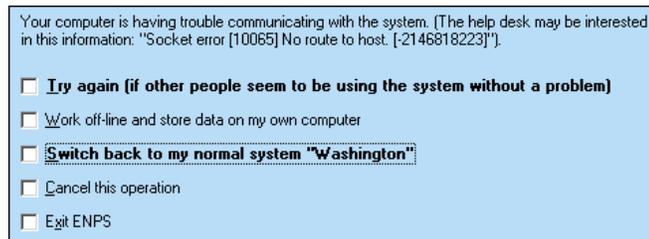
Users should select the option *Switch back to my normal system*. The migration is complete.

Migrating the CTOS

This section will show you how to migrate your CTOS to a newer operating system and hardware while maintaining your site's ENPS data.

Keep in mind the following before you perform the migration:

- Do <u>not</u> perform the upgrade during or immediately prior to a newscast.
- Do <u>not</u> upgrade your ENPS version number when you are migrating servers.
- Perform the upgrade when there is the lowest resource load on the system.
- Your current CTOS should be running when you begin this process.

1. Build a Primary Server by completing the instructions in "Installing on Windows 2008 Server" on page 11.

   Make sure you are using the ENPS installer that matches the version number that your site is using. During the installation assign the new server a temporary machine name that differs from your site's current CTOS.

2. Configure the new server to be a CTOS by enabling the `CTOS` Global Configuration Option. Refer to "Global Configuration Options" on page 44 for more information on this setting.

3. Close **Watch** first then close all ENPS server components on the new server.

4. Copy the following folders from your site's current CTOS `WORK` drive to the new CTOS:

   `\<PRIMARY SERVER NAME>` except for the `S_ARCHIVE` sub-folder
   `\<PRIMARY SERVER NAME>_H`
   `\<PRIMARY SERVER NAME>_Inactive`
   `\<BUDDY SERVER NAME>_H`
   `\NWS`
   `\COMMON\G_SUPPORT`
   `\NOM\NOM.INI`
   `\NWP\NWP.INI`
   `\NWP\TABLES.APN`

5. Note the machine name and IP address of the current CTOS then disconnect it from the network.

6. Disconnect cables from the old CTOS and attach them to the new CTOS.

7. Rename the new CTOS with the original server's name and assign it the IP address of the previous CTOS.

8. Run `\NOM\INDEXDEL.EXE` on the `WORK` drive of the new CTOS to rebuild the index. This process may take several hours.

Server Applications

This section describes the function and usage of the applications on your ENPS servers.

News Object Manager

The News Object Manager (NOM) controls communication between the client and the ENPS server. Capable of processing several hundred simultaneous connections per user, the NOM was designed to minimize network traffic and the server's resource load.

The NOM on the Primary Server communicates with the NOM of its Buddy Server. It ensures that all transactions are duplicated on both servers.
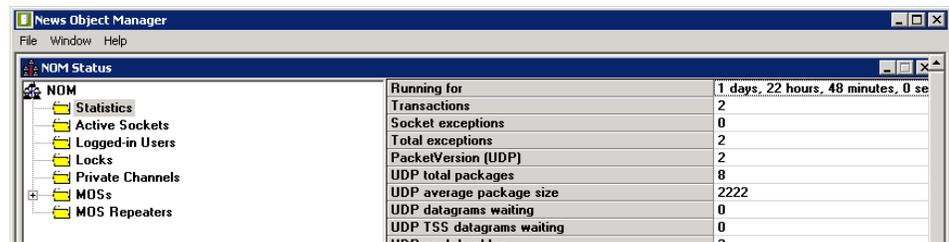
File Menu Options

- **Update license**. Enter a new ENPS license key. Users will see an alert message appear 30 days before it is set to expire. To obtain a new license key call ENPS Support at the phone number on page 6. Be sure to have your site's NID number when you call. Your NID number can be founding in the Global Configuration Options by selecting **Fourth Folder Rover → System Maintenance → Global Configuration Options** in the ENPS client.

- **Set common files' timestamps to current date/time**. If you are troubleshooting and you are trying to determine when a change is made to a file in the common folder. By setting all of the files' timestamps to one time it will be easy to tell when one of the timestamps changed.

- **Reload global tables.** is used when you manually edit one of the global tables using a text editor such as Notepad. ENPS may not detect your change until you select this option.

Window Menu Options

1. **NOM Status** displays status messages about ENPS communications, including statistics for UDP traffic, memory usage, logged in users, private channels and more.

2. **Basys Message Exchange** is used by sites to monitor the exchange of message data with Basys legacy systems. The **Cap** checkbox is used to capture any messages that received error messages.

3. **Basys Story Exchange** is used by sites to monitor the exchange of story data with Basys legacy systems. The **Cap** checkbox is used to capture any messages that received error messages.

4. **Archive Queue** displays data when ENPS is moving data into the archives according to the AutoArchive settings in the Rundowns. A log of archive activity is displayed at the bottom of the screen.

5. **MOS** is divided into two panes: Outbound Items and Inbound Items.

Outbound Items lists messages that are being transmitted to MOS devices.

Inbound Items lists messages that have been received from the MOS devices such as an acknowledgement message that the device received a query from ENPS.

Click *Special* to manually send a `mosReqAll` message to a specific MOS device. The MOS device should respond by sending a message with a list of its MOS objects.

The option *Number roConstruction Messages* is generally only used to set up a MOS repeater for an Avid Newscutter.

While messages are being sent to and from MOS devices you should see them appear in the **Queue** column momentarily. If there are a large number of messages at one time once you may see a short list appear in either or both of the queues. These are messages that have not yet been sent or to which ENPS has not yet responded. The queues should only have messages that appear for a few seconds. If you see a long list of items in the queue there may be a communications problem between your ENPS server and the MOS device. If the problem persists you may see one of the following message in the **Status** column:

- Host Not Found
- Timeout on Connect
- Connection is Forcibly Rejected
- Waiting for Reply
- Disconnected

Refer to the MOS troubleshooting steps on page 163 for more information. If you are troubleshooting a communications problem between ENPS and a MOS device you can select the **Log** checkboxes to store a list of all of the transactions that appear in Inbound and Outbound item queues. The logs are saved in \NOM\LOGS on your ENPS WORK drive. You can select the **Cap** checkbox to capture any MOS messages that return errors.

6. **NOM Configuration/Status** window is where you can set NOM configuration settings. Consult ENPS Support before you change any of these options.
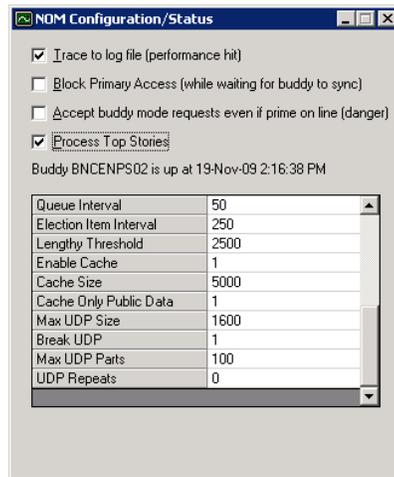
Trace log file creates a log of all of the communications that take place between the NOM and the client workstations. The log is stored in \NOM\LOGS\TRACE.LOG on the ENPS WORK drive. Because the NOM handles a large number of transactions it is recommended that you keep this option selected for troubleshooting purposes only as it will degrade server performance.

Block Primary Access prevents users from connecting to the Primary Server, forcing them switch over to the Buddy Server. This option is used when you are upgrading ENPS or performing routine maintenance.

Accept buddy mode requests is used only in specific troubleshooting circumstances. Consult with ENPS support before you use this setting.

Process Top Stories should be selected if you are using the server as a Top Story Server for the My ENPS feature. Refer to "My ENPS" on page 100 for more information.

7. **Election Processing**. If you are using Stats to process election results this window will display the data generated from wire data. If and you are building races automatically select this window and select *Build races from wire data* to generate races from wire data. Refer to *ENPS Stats Guide* for more information.

8. **AutoCreation Window** gives you an overview of which Rundowns are set to AutoCreate and which Rundowns have already created. To view this window open the NOM on the ENPS Primary Server and select **Window → Rundown AutoCreation**.
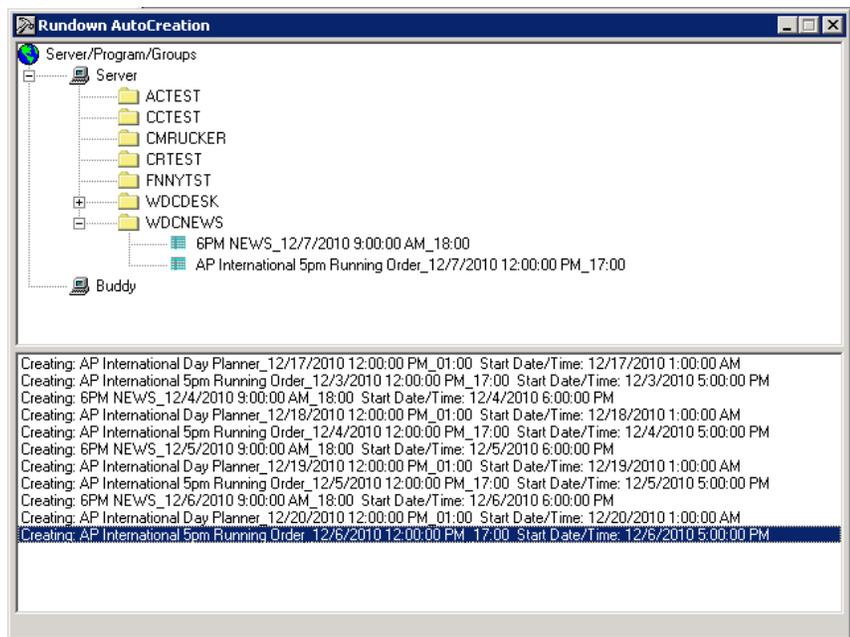
The top pane shows you which Rundowns are configured for AutoCreation. Expand the **Server** entry to display a list of groups. If a group contains a Rundown that is scheduled to be AutoCreated its entry will be displayed in the following format:
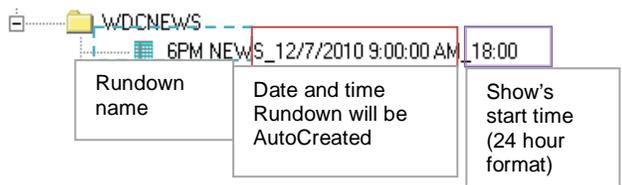
The bottom pane shows displays a list of Rundowns that have already been created. Those entries will be displayed in the following format:
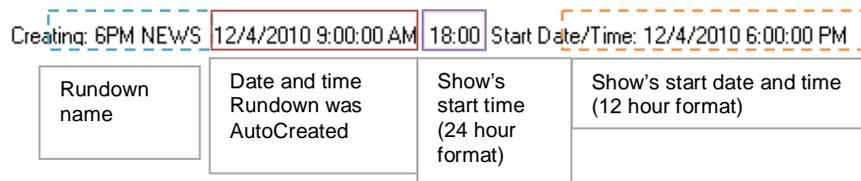
NOM Maintenance

The Maint application purges expired data and synchronizes global tables with the CTOS. It also manages the Buddy process. NOM Maint resides on the same physical server as the NOM.

NOM Watcher

Ensures that required server processes are running and restarts them if they are closed or are terminated in error. NOM Watcher resides on the same physical server as the NOM.

News Wire Profiler

The News Wire Profiler (NWP) ingests news wire feeds and writes incoming stories to the news database. It then forwards news agency data and urgent news wire alerts to users.

The News Wire Profiler (NWP) ingests, categorizes and stores incoming serial data feeds. It can also forward or receive stories from another NWP server via a network socket connection. The NWP supports only eight-bit wires.

The NWP runs in either of two modes: concentrator or non-concentrator. In concentrator mode, it receives news wire copy from multiple serial ports and relays a single stream to other NWP systems via TCP/IP. In non-concentrator mode, it receives news wire copy from multiple serial ports and/or a concentrated socket stream. Usually resides on the same physical server as the NOM.

File Menu Options

- **New wire**, **Delete Wire** options are used to configure the wires you have in ENPS. You can set up the wires from a variety of sources including serial wires, wires via FTP, wires via e-mail and others. Refer to "Sending and Receiving Wires" on page 114 for instructions on how to create wires.

- **View Programming Tables** displays the wires data that your site is coded to receive from the wire provider. If this table displays ntest your site is correctly receiving wires. Refer to "AP Wires or Radio Network Delivery" on page 6 for a list of phone numbers you can call for help receiving wires.

- **Log Messages** stores NWP activity in \NWP\NWP.LOG on the ENPS WORK drive.

Windows

Select the window with the name of the wire or the functionality:

- **Messages** displays the number of datagrams in queue as well as any error messages. The maximum acceptable backlog is 1000 items. Each datagram is given three chances to be sent to each address where the recipient list is composed of the general broadcast address and reflectors. On the third attempt an error is logged with the IP address of the recipient. If multiple errors are logged for the same recipient you should check for network issues.

- **Sockets** displays actively connected sockets and subscribers to various wires.

- **Configuration**

  Statistics: Length of time the NWP has been running.

  Expiration: Set the length of time before news wires are removed from the server. Select a category name and then enter the expiration time in the *Hours* textbox. The values will be updated in the [KillClock] section of NWP.INI. If this field is blank, the default time of eight hours will be used. The maximum value is 168 hours which is one week.

  Delete Schedule: Display when expired times were deleted; schedule when they should be deleted past the top of the hour.

  General: Select the *Process top stories* checkbox to start the Top Stories Server. Refer to the "My ENPS" on page 100 for more information.

For sites ingesting Internet-based wire feeds (i.e. AP WebFeeds, YouTube, Twitter, etc.) and who must connect via a proxy server, the NWP can now piggyback off the proxy settings in Internet Explorer.

To enable, first configure your proxy server in Internet Explorer on your ENPS server, then check the *Use IE Proxy Settings for web based wires* checkbox.
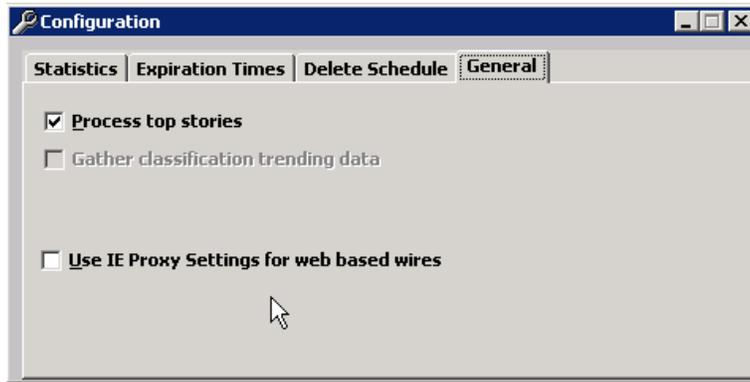
- **Wires Feed by Socket** displays incoming wires, the date and time they were received and the socket they originated from. Upon connection, a receiver registers its IP address to receive data. Any previous sockets from that IP address are closed.
- **Wires via E-mail** allows you to set up an e-mail address that will act as a wire feed. Refer to "Wires via E-Mail" on page 116 for more information.

Chapter 5
Installing the Client

This chapter will show you how to install the ENPS client on your site's workstations. Before you begin make sure the client workstation has all of the pre-requesite hardware and software in "Hardware and Software Requirements" on page 7.

1. The client installer copies files from the `\ENPS` folder on the Primary Server's ENPS `WORK` drive to the client workstation. You can customize the following files in this folder before you begin the installation to transfer your custom settings to your site's client workstations.

   - Use a text editor such as Notepad to open `\ENPS\ENPS.INI` on the Primary Server. The settings in this file will be distributed as the default settings to all of the client workstations at your site so it is recommended that you review these settings before you install the client. You can find a complete list of these settings in "Client Configuration" on page 71.

   - Use a text editor such as Notepad to modify the master custom dictionary in `\ENPS\DICT\SUPP.DICT` on the ENPS `WORK` drive . This file should have only one entry per line.

   - *Optional.* You can replace `\ENPS\BITMAPS\LOGO.JPG` with your site's logo. This image will appear in the top left corner of the ENPS desktop. This file must be in JPEG format and have the same dimensions as the default version.

2. Make sure the ENPS server components are running on the Primary Server. If they are not, double-click the Watch shortcut to launch them. Make sure the shortcut to Watch is in the Windows Startup folder.

3. Log in to a client workstation as `Administrator` on the ENPS domain. ENPS authenticates users by their Windows login. The Windows Administrator account is configured with a special ENPS group called "System." This account lets you configure user settings and set up other groups for your site.

4. Make sure all users have local administrator privileges. Every user account must be able to write to the system registry and have read/write access to the following folders on their workstation:

```
\Program Files\ENPS
\%SYSTEMROOT%\
\%SYSTEMROOT%\SYSTEM
\%SYSTEMROOT%\SYSTEM32
```

   ENPS periodically synchronizes users' system clocks to the clock on the Primary Server so users must also have sufficient access to adjust the system clock on their workstation.

   If you cannot assign these privileges to the user account on the client workstation you must run the `SETADMIN.EXE` application in the `\NOM` folder on the ENPS `WORK` drive.

In this utility you can provide the login for an administrator account that ENPS can use to access the settings and folders that may not be available through user accounts.

5. Use a text editor such as Notepad to open `\ENPS\SETUP.INI` on the Primary Server. This file is used to configure where ENPS shortcuts will appear on the user's workstation. To enable a setting set it equal to 1.

Setting	Description
Desktop	Place a shortcut to ENPS on the client workstation's desktop.
StartMenu	Place a shortcut to ENPS on the client workstation's **Start** menu.
QuickLaunch	Place a shortcut to ENPS on the client workstation's **Quick Launch** toolbar.

Do not change any settings in the `[Files]` section of `SETUP.INI`.

6. If you are performing the installation on a client workstation with an earlier version of the ENPS client make a backup copy of `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI` before you continue with the installation. It may contain workstation-specific CG and prompter settings.

7. If you are installing the ENPS client on Windows Vista or Windows 7 you will need to download and install the DHTML Editing Control for Applications Redistributable Package from the following Microsoft website:

`http://www.microsoft.com/downloads/details.aspx?FamilyID=b769a4 b8-48ed-41a1-8095-5a086d1937cb`

If you are installing the ENPS client on Windows Vista or Windows 7 the User Access Control (UAC) feature may interfere with the macro functionality in ENPS. Some ENPS macros emulate input from the keyboard which the UAC may interpret as a security violation. Refer to the Microsoft website or your Windows documentation for information on how to disable UAC.

8. If you are installing the client on a drive other than the `C:` drive use a text editor such as Notepad to create the file `C:\WINDOWS\SETENPS.INI` with the following text:

```
[Location]
Drive=X:
```

where `X:` is the drive letter where the client will be installed.

9. On the client workstation open a command prompt and enter the command `\\<PRIMARY SERVER NAME>\ENPS\SETUP.EXE` where `<PRIMARY SERVER NAME>` is the NetBIOS machine name of your Primary Server.

ENPS will be installed to the `C:\Program Files\ENPS` folder of the client workstation.

10. Users can start ENPS with a command line switch to control its initial state.

/LOCAL	Start off-line in local mode.
/W	Start in windowed mode.
/F	Start in full-screen mode.

For example, to run the client off-line enter:

```
C:\PROGRAM FILES\ENPS\ENPS.EXE /LOCAL
```

11. In the ENPS client select **Fourth Folder rover** → **System Maintenance** → **Servers**. For each ENPS Primary Server enter `3.0` in the **IS Version** column.

If your site does not use English (US) as its primary language you should refer to "Language Support" on page 153 for more information about customizing ENPS for your local language.

Chapter 6
Installing the Buddy Server

The Buddy Server is a backup of the Primary Server. If the Primary Server goes offline for any reason, such as server hardware failure, the Buddy Server will allow the users at your site to continue using ENPS without disruption.

The transactions handled by the Primary Server are sent via a guaranteed TCP stream to the Buddy Server in the same order in which they appeared on the Primary Server. Keep in mind the following notes about setting up the Buddy Server on your network:

- If possible, the Primary and Buddy Servers should be physically separated but on connected to the same network subnet. Do not connect these servers over a WAN as this can cause communications problems between the servers.

- Wire stories are not copied from the Primary Server to the Buddy Server so the Buddy Server will require its own separate, redundant wire feed in case the Primary Server fails.

- If the Buddy Server and a client workstation are on different subnets the client workstation will not be able to receive updates to Rundowns unless you set up a reflector. Refer to "Reflectors" on page 110 for more information.

The following steps use `AP-ENPS1` as the Primary Server name and `AP-ENPS2` as the Buddy Server name. You will need to modify these instructions with the names of your site's Primary and Buddy Servers.

1. On the Primary Server copy the folders with the server's name and the server's name with the `_H` suffix to the Buddy Server, e.g. `\AP-ENPS1` and `\AP-ENPS1_H`.

2. In the ENPS client select **Fourth Folder rover** → **System Maintenance** → **Servers**.

   a. Click *New.* In the **Buddy Server ID** column enter the Buddy Server's machine name such as `AP-ENPS2` then enter a short description of the server. The **MOS** column should have the same value as the ID column unless a separate MOS server is used. Enter the server's IP address in the **IP** column.

   b. In the row for the Primary Server select the **Buddy Server** field and enter the Buddy Server machine ID such as `AP-ENPS2`.

   c. In the row for the Buddy Server highlight the **Buddy Server** column and enter the name of your Primary Server such as `AP-ENPS1`.

   d. Set the **IS Version** to 3.0.

   e. Click *Save* and restart the client.

3. Use a text editor such as Notepad to open `\NOM\NOM.INI` on the Primary Server's ENPS `WORK` drive. Make sure the setting `Buddy=1` is listed in the `[NOM]` section.

   Repeat this step on the Buddy Server.

4. Open NOM Maintenance on the Buddy Server. Select **Window →
   Synchronization** and click *Sync Now*. Restart both the NOM and NOM
   Maintenance programs. The Buddy Server is now configured to duplicate the
   content of the Primary Server.

5. Open the NOM on the Primary Server and select **File → Reload Global
   Tables**.

6. From the Primary Server's NOM Maintenance program select **Window →
   Buddy Process** to view the transactions between your Primary Server and
   Buddy Server. After the transaction is posted on the Buddy Server will it be
   deleted from the Primary Server's log queue. The NOM provides visual
   status and a log of this process.

If users cannot connect to the Primary Server for any reason the following
window will appear. Users should always select *Switch to a backup system.*

Your computer is having trouble communicating with the system. (The help desk may be interested
in this information: "Socket error [10065] No route to host. [-2146818223]").

☐ Try again (if other people seem to be using the system without a problem)

☐ Work off-line and store data on my own computer

☐ Switch to a backup system "Washington (2)"

☐ Cancel this operation

☐ Exit ENPS
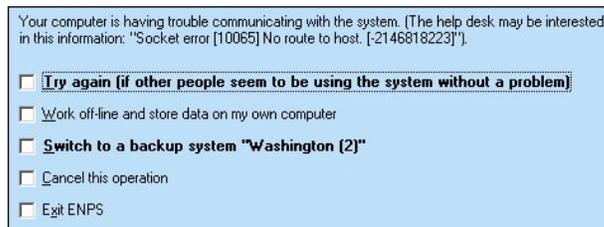
When the Primary Server is back online users will see a message them that the
Primary Server is available.

Your computer is having trouble communicating with the system. (The help desk may be interested
in this information: "Socket error [10065] No route to host. [-2146818223]").

☐ Try again (if other people seem to be using the system without a problem)

☐ Work off-line and store data on my own computer

☐ Switch back to my normal system "Washington"

☐ Cancel this operation

☐ Exit ENPS
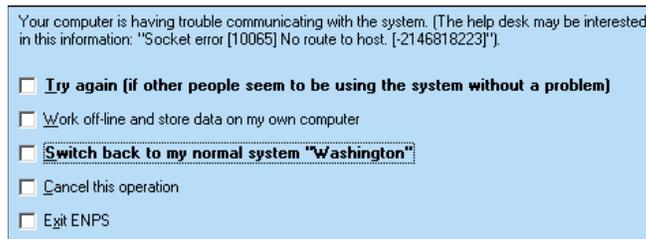
Users should select *Switch back to my normal system*.

Chapter 7
Managing Servers

If your organization is spread over multiple locations or you have more than 150 users at one site it is recommended that you add additional servers to reduce the server resource load.

The Servers table can be used to add or remove servers. It is also used to change server-specific configuration settings. To open the Servers table select **Fourth Folder rover → System Maintenance → Servers**.

After you change one of the options in this table restart both the ENPS client and the NOM on the Primary Server for your changes to take effect.

Field	Description
ID	Server name which can be up to 15 characters long. Spaces are not allowed.
Description	A short description which may include the server's physical location such as a building name, room number or any other information that may be useful to identify the server to support staff.
MOS	Unique name used to identify the server to MOS devices. This may be the same as the ID.
Buddy	ID of the Buddy Server.
IP	IP address of the server.
Broadcast Mask	IP address where the server will send broadcast UDP datagrams. If this field is blank the default address 255.255.255.255 will be used. On Windows 2003 servers the address must be the broadcast address of the network. For example, if the server's IP address is 192.168.100.5 and the subnet mask is 255.255.255.0 the broadcast address for the network would be 192.168.100.255. Use an IP subnet calculator, which is available on the Web, to calculate the broadcast address for a given subnet.
Server Group	Group to which the server belongs. This entry typically includes a physical location or department name.
IS Version	Microsoft Index Server version. This should be set to 3.0 unless you are using an older version of Index Server, which is not recommended.
MOS Repeater	Select this field if the server is a MOS repeater. Refer to "Setting Up a MOS Repeater" on page 136 for more information.
MOS Server	Name of the ENPS server providing MOS messages to a MOS repeater. Refer to "Setting Up a MOS Repeater" on page 136 for more information.

MOS Active Days	Number of days after the Rundown's **End Time** that the Rundown's *MOS Control Active* property will be disabled. Users will not be able to make a Rundown MOS-active for a number of days greater than this value this setting.
	The *MOS Control Active* property will be deactivated when NOM Maintenance runs. By default this occurs at 2:00 AM although this time can be changed by opening NOM Maintenance and selecting **Window → Folder Info**.
	If users configure Rundowns to archive automatically they should make sure that archiving takes place after this setting takes effect.

Configuration Settings

This section shows you how to customize ENPS for your site by setting options in Global Configuration Options, `NOM.INI` and `NWP.INI`. It is recommended that you review all of these options to see which ones apply to your site.

Global Configuration Options

These options control the way ENPS works at your site. Select **Fourth Folder rover** → **System Maintenance** → **Global Configuration Options**. If the desired configuration setting is not listed in the window click *New* and enter the ID from the table below. To change a setting click in the **Value** column and enter the new value.

After you change one of these options restart both the ENPS client and the NOM on the Primary Server for your changes to take effect.

ID and Description	Value
`AddMosObjDuration` Determines whether the duration of MOS objects is used in calculating a story's actual time. By default, `MOSObjectTime` is not included in the calculation of a story's actual time. If this setting is enabled the actual time reflects the sum of the following values: • Text time • Manually entered durations of media objects in the story • The length of a clip which can be found in the **MOS Object Time** column in the Rundown. • **MOS Editorial Time** for a MOS object if the vendor lets users specify it. For voiceovers, the **MOS Editorial Time** should be set to :00 to reflect correct total time.	0=Disabled (default) 1=Enabled
`AllowTwoColumnScript` Give users the option to view stories in two column mode.	0=Disabled (default) 1=Enabled
`AutoArchiveDays` Number of days after a broadcast when Rundowns and Newsgathering Grids are archived according to their AutoArchive settings. By default archiving occurs at 2:00 AM although this time can be changed by opening NOM Maintenance and selecting **Window** → **Folder Info**. Since ENPS automatically deletes Rundowns that are more than 30 days old this setting must be set to a value less than 30.	0=Disabled (default) 1 to 29

`BaseDialect` Four letter dialect code. Local dialects take precedence over the `BaseLanguage` setting. Refer to "ENPS Language Support" on page 153 to find the dialect code for your local language. ► You can configure this setting on an individual workstation by adding it to the `[ENPS]` section of the workstation's `ENPS.INI`. The setting in the `ENPS.INI` overrides the value in the Global Configuration Options.	Four letter dialect code, such as `ENUS` for American English.
`BaseLanguage` Two letter language code for ENPS labels, menus and fields. Refer to "ENPS Language Support" on page 153 to find your local language code. ► You can configure this setting on an individual workstation by adding it to the `[ENPS]` section of the workstation's `ENPS.INI`. The setting in the `ENPS.INI` overrides the value in the Global Configuration Options.	Two letter language code such as `EN` for English.
`BrowseFullRecords` When enabled the List Window displays four lines per item by default. When this setting is disabled it defaults to displaying only one line. If you enable this setting you will also need to modify the Global Configuration Option `ListTextFormat` to format how the information is displayed.	0=Disabled (default) 1=Enabled
`CaseSensitiveMOS` Control whether ENPS uses case-sensitive MOS IDs. You can disable this setting for backward compatibility.	0=Disabled 1=Enabled (default)
`CentralPriv` Enable Security Profiles. Refer to "Groups" on page 91 for more information.	0=Disabled (default) 1=Enabled
`ChineseCILocale` Sites that use Chinese as their primary language should set this to `NEUTRAL` to ensure that Forward Search and highlighting work correctly.	`NEUTRAL` at Chinese language sites.
`CmdDurationColon` Use a colon in the duration length in stories. Durations would be displayed as 1:30 instead of 1'30".	0=Disabled (default) 1=Enabled
`CorpID` An identifier that appears on the fourth folder icon in the ENPS client. It is displayed in various menus and forms.	Site identifier. Default value is `ENPS`
`CTOS` Configure the server to be a Central Text Object Server (CTOS). For a description of the CTOS refer to "Central Server and CTOS" on page 11. If the server is set to be a CTOS it cannot be used for broadcasting.	0=Disabled (default) 1=Enabled

`CVS` Used to generate the license key.	Do not modify this field.
`DefaultMOSVersion` Version of the MOS protocol to use by default.	2.5
`DefaultReadRate` Default number of characters per second to use as a read rate for timing stories.	Default is 18.
`DetachedActiveX` Specify whether the **Media Control** icon has a rover option to open an ActiveX plug-in in a separate window. This feature is useful for viewing plug-in controls on a second monitor. A maximum of three detached plug-ins may be open at any one time. ► You can configure this setting on an individual workstation by adding it to the `[ENPS]` section of the workstation's `ENPS.INI`. The setting in the `ENPS.INI` overrides the value in the Global Configuration Options.	0 – Disabled (default) 1 – Enabled
`DetachedROMax` Maximum number of Rundowns and/or Newsgathering Grids for detached windows. In the main window there is a limit of four open Rundowns and/or Newsgathering Grids at any time. If a user tries to open an additional one they will be prompted to detach it.	Default is 10.
`EnableChat` Determines whether the **Chat** option is enabled from the client's **Messaging** icon. For chat to work port 10509 must be open on the client workstations.	0=Disabled (default) 1=Enabled
`EnableOfficeDocs` Allow users to open documents from network locations. Files with extensions `TXT`, `DOC` and `RTF` can be imported into ENPS as new stories. Files with other extensions, such as `PDF`, `DOCX`, `XLS`, `XLSX`, etc., can be opened but not imported. See also the `Office Document Path` setting on page 93.	0=Disabled (default) 1=Enabled
`EnforceSecurityLevels` Enables use of Approval Extensions. Refer to page 84 for more information.	0=Disabled 1=Enabled (default)
`ExternalDocuments` Allow users to store Word `DOC` or Adobe `PDF` documents in the Newsgathering Grid's **Background** or **Collection** fields. ► You can configure this setting on an individual workstation by adding it to the `[ENPS]` section of the workstation's `ENPS.INI`. The setting in the `ENPS.INI` overrides the value in the Global Configuration Options.	0 – Disabled 1 – Enabled (default)

`FarsiTextBoxFont` Font to use if ENPS is unable to render a Farsi language character with the current font. This value can be set to either Tahoma or Arial, either of which work with all Farsi characters. This setting also takes effect if the font specified in a story is not available on the client workstation. ► You can configure this setting on an individual workstation by adding it to the `[ENPS]` section of the workstation's `ENPS.INI`. The setting in the `ENPS.INI` overrides the value in the Global Configuration Options.	Tahoma or Arial
`FastHighlight` Highlighting matches for search criteria is done on the client rather than the server. Disabling this option may slow performance. This option is not available in all languages.	0=Disabled 1=Enabled (default)
`FileDetect` Determines whether FTP paths are supported in stories, Rundowns and Newsgathering Grids. In a story users will then be able to open paths such as `file://c:\temp` See also `FTPDetect` and `UNCDetect` settings.	0=Disabled (default) 1=Enabled
`FolderSort` Arrange wires and agencies in the Search dialog box and the list of groups in the **Third Folder rover → Locations** in alphabetical order.	0=Disabled (default) 1=Enabled
`FormatSubFieldValues` Controls how fields in a Newsgathering Grid are formatted when they are exported to a MOS device. If this setting is enabled the field's value will be exported using the MOS protocol's date and time format. Note that the field's **Validation** column must be set to `MOSDateTime` to enable exporting the field to a MOS device. Refer to "Creating Custom Fields" on page 55 for more information.	0=Disabled (default) 1=Enabled
`FTPDetect` Determines whether FTP paths are supported in stories, Rundowns and Newsgathering Grids. If this setting is enabled users will be able to open paths with the format: `ftp://ftp.sitename.com` See also `FileDetect` and `UNCDetect` settings.	0=Disabled (default) 1=Enabled

`GridCellHighlightColor` Sets the highlighting color for selected cells in Rundowns and Newsgathering Grids. This option only takes effect if the `GridCellHighlightEnable` setting is enabled in the client's `ENPS.INI`. Users can change this value for individual workstations in their Personal Settings.	Select from color picker.
`HardwareLayout` Semicolon-delimited list of fields to be used with the Broadcast Hardware interface on legacy systems. The special field Default includes the fields `GUID;PageNum;Version;Title` Functionality is identical to prior versions of ENPS unless these settings are specified.	Examples: `Default:Presenter` exports the same fields as prior versions but would includes **Presenter** as a new column to the far right. `GUID;Slug; Segment; Presenter` would export only those four columns.
`InternetOutLogFiles` Number of log files per account for tracking users' Twitter and Facebook activity. Log files are stored in the `\COMMON\INTERNETOUT` folder on the ENPS WORK drive.	1-999 Default is 99.
`InternetOutLogSize` Maximum size for users' Twitter and Facebook activity logs in the `\COMMON\INTERNETOUT` folder on the ENPS WORK drive. When a log file exceeds this size the oldest content in the file automatically rolls over into another, sequentially-numbered file.	1024-65536 Default is 32768.
`ListTextFormat` Controls which fields are displayed in the List Window if the `BrowseFullRecords` global configuration option is enabled. For example `{Title}{CrLf}Tape:{TapeNumber}` displays the title on the first line, adds a carriage return, then displays "Tape:" and the `TapeNumber` field on the next line. To view these changes, users have their client set to display at least two lines per item by selecting **List Window rover → Lines Displayed per Item → 2**.	Any standard or local field may be used in curly braces. The field is case-sensitive. `{CrLf}` may be used for a carriage return-line feed combination.

`ListTextFormatNews`
 	
Set the fields to be displayed for wires when Browse mode is used. This entry should be set to:
`{Title}{CRLF}{Text}`
	Any standard or custom field.

`ListTextFormatMOS`
 	
Configure the content of any XML tag in a MOS object to be viewed using a Browse mode. This configuration for this option uses a similar format to `ListTextFormat`. Here are some examples:
 	
`{/mos/mosObj/mosID}`
 	
`{mosID}`
 	
`{/mos/mosObj/mosExternalMetadata/Owner}`
 	
`{Owner}`
 	
`{/mos/mosObj/mosAbstract}`
 	
`{mosAbstract}`
 	
This Browse format may be set separately for MOS object folders.
	Instead of property fields enclosed in { } enter an XML tag or path in the { } characters. It is assumed that the expression begins with "//" which means the first instance of the element specified will be found regardless of its level in the XML.

`ListTextFormatSMV`
 	
Configure how metadata fields in the Story Media Viewer are displayed. For example:
 	
`{Title}{CRLF}{Text}`
	Any standard or local fields will work.

`LocalStaff` Controls whether the ENPS client retrieves the entire staff list when it starts. If you have a large staff list and want to save server resources you can disable this option.	0=Disabled 1=Enabled (default)
`LowerCaseMacroKeys` By default, ENPS interprets capital letters in a macro to mean that a user is holding down the `Shift` key. This may cause the following letters to be capitalized in some macros. If this setting is enabled it forces the letters following the capitalized letter to lower case.	0=Disabled (default) 1=Enabled
`MaxBriefingTerms` If the number of logical operators in a Search query exceed the value of this setting users will see a warning that results will take longer than normal to process. Logical operators include AND, OR, and NOT.	Default value is 20.
`MaxExternalDocSize` Restrict the size of Word `DOC` and Adobe `PDF` files that can be added to the **Collection** field in Newsgathering Grids.	This value, in bytes, defaults to 500000, approximately half a megabyte. The maximum value is nearly three megabytes or 2999999.
`MaxMOSLinks` MOS Item References have a property called *Recurring* which means that the referenced MOS object appears in multiple locations. This setting determines the maximum number of stories with duplicate MOS Item References to track when the *Recurring* flag is not set.	Default is 500.

`MessageGateway` Specifies whether the Message Gateway is enabled. This option is required by Follow-Me Messaging. Refer to "Follow-Me Messaging" on page 103 for more information.	0=Disabled (default) 1=Enabled
`MIRXMLTree` View MOS Item Reference tooltips in an XML tree view. ► You can configure this setting on an individual workstation by adding it to the `[ENPS]` section of the workstation's `ENPS.INI`. The setting in the `ENPS.INI` overrides the value in the Global Configuration Options.	0=Disabled (default) 1=Enabled
`MOSActiveDays` Number of days after a show's Start Date when the Rundown or Newsgathering Grid's *MOS Control Active* property will be deactivated.	Number of days.
`MOSBrowseMediaExtensions` Comma-delimited list of the media types that can be displayed in the Script Media Viewer. Any extensions that are supported by Windows Media Player or QuickTime are valid for this setting. If an extension is not in this list it will not be possible to preview it in the Story Media Viewer. If `JPG` is the first item in the list then you will only be able to view `JPG` proxies in the Script Media Viewer regardless of what other proxy formats exist in the item reference. If you want to be able to view additional formats when you click the play button you should list those formats before `JPG` in the list.	Example: WMV,MOV,JPG
`MOSChannelLockOverride` Allow users to make changes to MOS channels in the Rundown when a story is locked for editing. If this option is enabled and a channel is assigned to a MOS Item Reference a buffered channel will be assigned as soon as the story is saved.	0=Disabled (default) 1=Enabled
`MOSItemRefColor` MOS Item References appear in a different color in stories. This is designed to make the MOS references easier to see alongside other red production commands.	Select the color from the color palette.
`MOSItemThreshold` Number of item references a user may add to a story before the client displays a warning message. Users will not be prevented from going over this threshold.	Number of item references. The default is 10.
`MOSItemLengthLogThreshold` MOS Item References in a story that are longer than the specified number of characters will be logged to `C:\DOCUMENTS AND SETTINGS\ALL USERS\ APPLICATION DATA\ENPS\MOSITEMREF.LOG` on the client workstation.	Number of characters. The default is 1500.

`MOSItemReplaceChange` Specify this option if MOS Item References in ENPS are corrupted by Unicode characters from certain international character sets when ActiveX plug-ins update MOS Item References. ► You can configure this setting on an individual workstation by adding it to the `[ENPS]` section of the workstation's `ENPS.INI`. The setting in the `ENPS.INI` overrides the value in the Global Configuration Options.	0 – Disabled (default) 1 – Enabled
`MOSJPGProxyPath` See `MOSBrowseMediaExtensions`.	
`MOSLeaseLockMax` Default amount of time after a Rundown's *MOS Control Active* property is selected that ENPS allows external MOS devices to place a temporary "lease" on stories to create new material or update existing material. This option requires MOS version 2.82 or higher.	Number of seconds. The default is 60 and maximum value is 1200.
`MOSROAllow` Allow users to limit which MOS devices can be used from a Rundown. Once this setting is enabled a user with sufficient privileges can select which MOS devices a Rundown can use from the *MOS Allow* list in the Rundown's properties. MOS Item References for devices which are not selected will be grayed out. If no entries are selected in the MOS Allow list all MOS devices will be allowed. If a new MOS device is installed at your site it will have to be manually added to the MOS Allow list in every Rundown. If `MOSROAllow` is disabled all *MOS Allow* settings will be ignored and any Rundown will be able to use any MOS device.	0=Disabled (default) 1=Enabled
`Multicast` Controls whether the NOM will use multicasting to send packets to clients. Refer to "Multicasting" on page 109 for more information.	0 – Disabled (default) 1 – Enabled
`MulticastBaseIP` If the `Multicast` setting is enabled this setting identifies the base IP address to use during the automatic population of the Servers table. Addresses are assigned starting with this value and incremented, skipping previously used values. Refer to "Multicasting" on page 109 for more information.	Default IP address is 239.0.0.1

`MulticastBasePort` If the `Multicast` setting is enabled this setting identifies the base port to use during the automatic population of the Servers table. Ports are assigned starting with this value and incremented, skipping previously used values. Refer to "Multicasting" on page 109 for more information.	Port number. Default port is 10601.
`MulticastTTL` If the `Multicast` setting is enabled this setting identifies the Time To Live value for datagrams. This value sets the number of "hops" a packet can take before it is discarded. Refer to "Multicasting" on page 109 for more information.	Default is 16.
`MulticastAlsoBroadcast` If the `Multicast` setting is enabled you should use this setting during rollout if some systems are using Multicasting and others are not. If this setting is enabled the NOM and NWP will send both broadcast and multicast datagrams. This option should be disabled as soon as the rollout is complete. Refer to "Multicasting" on page 109 for more information.	0 – Disabled (default) 1 – Enabled
`MyENPS` Controls whether the My ENPS feature is enabled. My ENPS gives users an overview of important wire stories, daily Rundowns, and assignments and more. The Top Story Server (TSS) must be started on the NOM for this feature to work. Refer to "My ENPS" on page 100 for more information.	0=Disabled (default) 1=Enabled
`MyENPSRefreshMin` Users can configure My ENPS to automatically refresh content at a set interval. This value sets the minimum number of minutes that users may enter in the auto-refresh field.	Number of minutes. Minimum value is 1.
`NewMsgDays` Determine the number of days that unread group messages will be displayed in users' List Windows at startup. By default, this option is disabled so all new group messages will be displayed regardless of the date they were posted. This value is also used for unread group messages in My ENPS.	0=Disabled (default) To enable, set the number of days to a value between 1 and 999.
`NGCollectionThreshold` Number of items that can be added to a Newsgathering Grid's **Collection** field before a warning appears.	Default is 10.

`NGItemThreshold` Maximum number of items that can be added to a Newsgathering Grid before a warning appears. Although there is no limit for the number of items allowed in Newsgathering Grids, grids that contain extremely large numbers of items can be difficult to open and maintain. The warning message appears after the user inserts a new item or copies lines from another Newsgathering Grid.	Default is 70.
`NGTimeOffset` Time for the server to add to the time in the Newsgathering Grids. This is useful if the server is located in a different time zone than the users. Using a setting of `12:00 PM` users can be +/- 12 hours away from the server hosting the data and still see the grids set to the same date.	Default for existing installations is 01:00 AM. The suggested value and default for new installations is 12:00 PM.
`NID` Number used by ENPS Support to generate your license key.	Do **NOT** modify this field.
`NoMyENPSROScript` Determines whether Rundown stories are allowed in My ENPS. Enable this option to disallow them.	0=Disabled (default) 1=Enabled
`OnAirDragDropProtection` If your site uses an automation system and it is advancing the timing bar in a Rundown you can "protect" a number of seconds at the end of the item. During this time items cannot be dragged immediately below the item with the `PLAYING` status. If `OnAirDragDropProtection` is set to its default value of 10 if a clip is 1:00 long once it has been playing for 50 seconds it will not be possible to drag an item immediately below it. This setting is only applicable if the *Prevent Manual Bar* Rundown property has been set.	Number of seconds. Default value is 10.
`PadROGrid` If Rundown text is clipped in printouts this option enable this option to add extra padding to the print margins.	0=Disabled (default) 1=Enabled
`PersonalCountThreshold` Limit the number of items users can keep in their personal folders. If a user exceeds the number of items set in this option a warning message will be displayed. See also `PersonalSpaceThreshold`.	0=Disabled (default) 1=Enabled
`PersonalSpaceThreshold` Number of kilobytes users can keep in their personal folder. If a user exceeds the specified amount a warning message will be displayed. See also `PersonalCountThreshold`.	0=Disabled (default) or number of kilobytes

`PrompterMOSLines` Add line feeds to prompter output wherever MOS Item References are listed in Rundowns and Newsgathering Grids.	0=Disabled 1=Enabled (default)
`Pronouncer` Controls whether the Pronouncer is enabled. You may wish to disable it if the Pronouncer is not available for your local language.	0=Disabled 1=Enabled (default)
`ReadRateIgnoredChars` Characters that should be ignored during a story's read-time calculation. By default spaces, carriage returns, line feeds and other punctuation characters are excluded. The characters must be listed in hex format with character ranges indicated by hyphens. Ranges must be separated by commas.	The suggested default is: `0A-2F,3A-40,5B-60,7B-7E` This eliminates standard punctuation characters.
`RenumberSummaryMIR` If a MOS Item Reference is created in a Rundown by the Object Autocreate function then moved below the story black line another Object Autocreate message will be issued. Enable this setting to override this behavior. The `itemID` of a summary item, normally 1, will automatically be changed to the next-highest available item ID when the item is moved below the black line.	0 – Disabled (default) 1 – Enabled
`ReportItemNo` Default first column for Rundown layouts: **Page Number** or **Item Number**.	0=PageNumber (default) 1=ItemNumber
`ROItemThreshold` Number of lines in a Rundown for ENPS before a size warning is displayed. This message appears when an applicable Rundown is opened, a user inserts a new line or lines from another Rundown are added.	Default is 125.
`RTLPrint` Use alternate print engine. Enabling this setting may resolve issues with printing on some systems. It also enables print options not available by default such as the ability to add page breaks to long Rundowns or Newsgathering Grids using the **Page Break** column. You must enable this option for right-to-left for languages such as Arabic. ► You can configure this setting on an individual workstation by adding it to the `[ENPS]` section of the workstation's `ENPS.INI`. The setting in the `ENPS.INI` overrides the value in the Global Configuration Options.	0 – Disabled (default) 1 – Enabled

`RundownAlphaPages` Specify whether Rundown pages are numbered sequentially (1,2,3…) or with alphabetic prefixes (A1, A2, A3...). Users can override the Global Configuration setting in a Rundown by selecting the *Rundown Numeric Pages* option in the Rundown properties.	0=Pages numbered sequentially 1=Page numbered with alphabetic prefixes (default)
`RundownPageNumbers` Force the system default layout to contain the fields **Page Number** and **Break**. This setting makes it impossible to remove the **Page** field from the Rundown.	0=Disabled 1=Enabled (default)
`RundownTimeElapsed` Adds the **Elapsed Time** column to Rundowns. As a producer times a program the **Elapsed** column reflects the total time the timing bar stays on each line, allowing producers to see how long a section actually runs as opposed to the Estimated time. If the producer fails to hit the space bar at the beginning of each Rundown item the reflected "elapsed" time will be inaccurate.	0=Disabled (default) 1=Enabled
`RundownTimeEstimated` Configure Rundown timing to use the Estimated time rather than the actual time. If disabled, the Rundown will be timed based on Estimated time until the user saves a story or enters a time in the **Actual** column.	0=Disabled (default) 1=Enabled

`ScriptMediaViewer`
 	
Add a pane to preview MOS Item References in a story. The MOS Item Reference must have a path to the media in the format specified by the MOS Protocol. The story pane can be toggled on or off from the story rover or the icon on the story toolbar.
 	
The following are sample paths:
`http://<server>/proxy/clip328cd20s0e.wmv`
`ftp://<server>/proxy/clip328cd20s0e.wmv`
`\\<server>\media\clip328cd20s0e.mxf`
 	
If MOS Item References do not have a valid path ENPS displays a generic graphic.
 	
■ For more information on the MOS Protocol refer to `http://www.mosprotocol.com`.
 	
► You can configure this setting on an individual workstation by adding it to the `[ENPS]` section of the workstation's `ENPS.INI`. The setting in the `ENPS.INI` overrides the value in the Global Configuration Options.
	0 – Disabled
	1 – Enabled (default)

`SecureArchive` Retain security settings for archived Rundowns. If this setting is disabled all users will have access to everything in archived Rundowns. If this setting is enabled users who lack rights to non-approved stories in an in-progress Rundown will also be denied access to it when the Rundown is archived.	0=Disabled (default) 1=Enabled

`SendChecklistIndexValues`
 	
Controls how ENPS sends checklist fields to MOS devices. If this setting is disabled the text is sent as the value of the relevant MOS tag in a semicolon-delimited list such as:
 	
`<test>red;blue;white</test>`
 	
If this setting is enabled checklist fields will be sent as an attribute of the MOS tag with the checklist positions in the tag's value, such as:
 	
`<test DisplayValue="red;blue;white">`
`1;2;3</test>`
 	
This format was used in earlier version of ENPS and may be required by some MOS devices.
	0=Disabled (default)
	1=Enabled

`SK` Your ENPS license key.	Do not modify
`Speller` Specify whether the Speller is available as a menu option. This may be important if there is no local version of the Speller in your local language.	0=Disabled 1=Enabled (default)
`SpellCheckerPluginID` Use approved third-party ActiveX spell check plug-ins instead of the default spell check tool included with ENPS. This option is used primarily by Portuguese sites who need a specialized spellchecker to support the Portuguese Language Orthographic Agreement. The spell check option will appear from the story rover menu or the spell-check option on the story toolbar. Use of a third-party speller replaces all built-in spelling functionality in ENPS including the standard configuration options. All configuration and dictionary management must be done through the third-party tool, not from the ENPS rover menu. ► You can configure this setting on an individual workstation by adding it to the `[ENPS]` section of the workstation's `ENPS.INI`. The setting in the `ENPS.INI` overrides the value in the Global Configuration Options.	To enable enter the string provided by the ActiveX provider.

`StdActiveXRemove`
 	
Used by ActiveX plug-in developers to specify an alternate sequence for how instances of ActiveX plug-ins are terminated.
 	
Enable this option in situations in which the plug-in does not receive the command to terminate. This may occur with plug-ins that use the Windows Media Player control.
 	
When this setting is disabled:
`Set MyForm.ctrlGuest = Nothing`
`MyForm.Controls.Remove`
 	
When this setting is enabled:
`MyForm.Controls.Remove`
 	
`Set MyForm.ctrlGuest = Nothing`
	0=Disabled (Default)
	1=Enabled

`TerminateOnExit` Shut down third party processes down when the client closes. For example, the Hewlett Packard Universal PostScript driver must be shut down before the client can be restarted. In that case this setting would be set to the HP driver file `HPMUP081.BIN`. ► You can configure this setting on an individual workstation by adding it to the `[ENPS]` section of the workstation's `ENPS.INI`. The setting in the `ENPS.INI` overrides the value in the Global Configuration Options.	Name of the process to shut down.
`Thesaurus` Controls whether the thesaurus is available as a menu option. This may be important if there is no local version of the Thesaurus in your local language.	0=Disabled 1=Enabled (default)
`TimeFormat` Express time in formats for frame-accurate automation systems. Users may also set this value in the Rundown properties.	PAL, NTSCDF, NTSCNDF, or THOUSANDTHS
`TitleSeparator` Set the character used to separate Rundown Slugs and Segments. This can be changed by setting `TitleSeparator` to one or more characters.	Any character(s) except for the following: _ < > : / \ | * ? "
`TrashDays` Number of days to retain items in the Waste Bin. This does not apply to Top Line Messages which may be retained for 24 hours.	Default value is 10

`UNCDetect`
 	
Determines whether UNC paths are supported in stories, Rundowns, and Newsgathering Grids. Once this setting is enabled the client must be restarted for this change to take effect. In a story users will be able to open paths with the format of:
 	
`\\{machinename}` or `\\{IP address}`
 	
See also `FTPDetect` and `FileDetect` global configuration settings.
	0=Disabled (default)
	1=Enabled

`UnescapeAttributes`
 	
Controls how the `>` character is sent in the MOS element tags of outbound MOS messages. By default if there is a greater-than symbol inside of the MOS message's start and end tags ENPS will send it as `>` such as:
 	
`<fieldname attribute="<test>`
`VALUE</test>">UP>DOWN`
`</fieldname>`
 	
If this option is enabled ENPS will send the actual `>` character such as:
 	
`<fieldname attribute="<test>`
`VALUE</test>;">UP>DOWN</fieldname>`
 	
The behavior of other characters in MOS messages will not be affected. This setting may also be enabled in the `\NOM\NOM.INI` on the ENPS `WORK` drive. If the setting does not exist in either location the option will be disabled.
	0=Disabled (default)
	1=Enabled

`UnicodeForwardSearch` Set whether ENPS should use Unicode. This is necessary in languages like Chinese to ensure that Forward Searching and highlighting are enabled in agency wires.	0=Disabled (default) 1=Enabled
`URLDetect` Automatically launch the Web browser control when a user clicks on HTTP hyperlinks appearing in news wire stories or stories.	0=Disabled (default) 1=Enabled
`UseMOSStartTime` Display a table in the Rundown properties that allows users to define when ENPS can start sending messages to specific MOS devices.	0=Disabled (default) 1=Enabled

`UseRoReqAllID` Controls how ENPS responds to `<roReqAll>` messages from MOS devices. By default, ENPS responds to `<roReqAll>` message with an `<roListAll>` message which list all MOS-active Rundowns on the ENPS server. If this option is enabled the `<roListAll>` will only contain MOS-active Rundowns for the device which is requesting it. ■ For more information on MOS Protocol messages refer to `http://www.mosprotocol.com`.	0 – Disabled (default) 1 – Enabled
`UseRTFtext` Enhanced formatting options on story toolbars such as bold, italics, underline, and font colors. To enable this option you must also enable the `XMLstorage` option in the `[NOM]` section of the `NOM.INI`. ► You can configure this setting on an individual workstation by adding it to the `[ENPS]` section of the workstation's `ENPS.INI`. The setting in the `ENPS.INI` overrides the value in the Global Configuration Options.	0 – Disabled (default) 1 – Enabled
`UseSingleFont` Optimize the appearance of stories which Turkish or Russian codepages.	0=Disabled (default) 1=Enabled
`ValidateMOSObjects` Allow users to see when a MOS Item Reference in a story refers to a MOS Object that was deleted from the associated MOS folder. If you enable this setting open the MOS Configuration table and check the **ValidateMOSObject** column for each MOS device to which this setting should be applied. Once this setting is enabled ENPS checks for the MOS Object when an archived story is dragged and dropped into an active Rundown or a Rundown's *MOS Control Active* property is selected. If the object is not found ENPS will "grey out" the MOS Item Reference in the story. This setting should only be enabled for MOS devices that send object messages to ENPS. It should not be used with devices, such as the majority of character generators, that do not send MOS objects to ENPS.	0=Disabled (default) 1=Enabled

NOM Configuration Settings

Use a text editor such as Notepad to open `\NOM\NOM.INI` on the ENPS `WORK` drive. This file lets you customize News Object Manager settings in ENPS. It is recommended that you contact ENPS Support before you changes to these settings.

Once you make a change to this file you must restart the NOM for changes to take effect.

Some of the settings in the `NOM.INI` can be changed directly from the NOM application by selecting **Window → NOM/Configuration Status**. If you change settings from this window you will not have to restart the NOM for your changes to take effect.
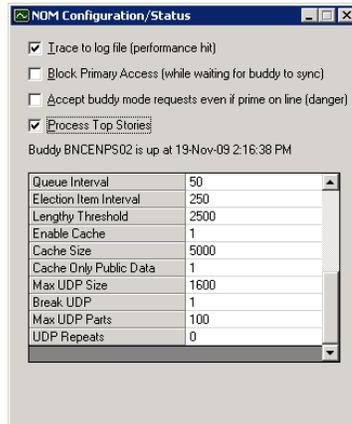
The following table describes the settings in this file:

Setting	Description
[TCPIP]	
`PacketVersion` Incoming wires are in English.	0=English news wires (default) 1=Non-English news wires
`BroadcastMail` Send Top Line Messages as UDP broadcasts instead of point-to-point messages provided that this option is supported by your site's router. This allows users to see their Top Line Messages on each machine if they are logged into multiple client workstations.	0=Disabled (default) 1=Enabled
`BroadcastPrivate` Specify whether changes to a user's personal folder are broadcast to other workstations. This is desirable if a user is working on multiple machines. If this setting is enabled it will be enabled for all of the users on the server.	0=Disabled (default) 1=Enabled
`BreakUDPPackets` Send a larger or smaller number of UDP packets than the NOM's default value of 1024. The `MaxUDPSize` setting is used to set the specific number of packets.	0=Disabled (default) 1=Enabled

`MaxUDPSize` Maximum number of UDP packets for the NOM to send at one time. If you set this value too high your site may lose updates to Rundowns, especially for Rundowns longer than 200 lines. The setting `BreakUDPPackets` must be enabled for this setting to take effect. If the number of UDP packets is increased from the default ENPS may open port 10517 in addition to the regular UDP ports 10512 and 10513.	Number of packets. Default is 2000.
`UDPRepeats` Number of times for the NOM to re-send UDP packages to ensure that they are received by the client. The client will ignore redundant messages. This option will increase network traffic.	Value from 1 to 10. Default is 0. Consult ENPS Support before you enable this option.
[NOM]	
`AutoCreateDelay` Specify the number of minutes for the Buddy Server to delay AutoCreate actions. This allows the Buddy Server queue to clear before it starts to AutoCreate Rundowns.	0=Disabled (default) 1=Enabled
`AutoCreateTimerInterval` Number of seconds to wait between creating Grids and Rundowns for the AutoCreate process.	Maximum is 60, default is 20
`Broadcast` Prevent the NOM from sending UDP broadcast messages into the local subnet. Use this setting if clients are not receiving Rundown and wire updates properly.	0=Disabled (default) 1=Enabled
`Buddy` Specifies whether to use the Buddy Server. The Buddy Server should be disabled when maintenance is being performed on it.	0=Disabled 1=Enabled (default)
`CentralServer` Name of your Central Server. Refer to "Central Server and CTOS" on page 11 for more information.	Example: ENPSTEST01
`FastSortList` Instructs the NOM to sort folder items more quickly when there are large number of items such as MOS object folders. The NOM uses this method automatically if a folder contains more than 32,000 items.	0=Disabled (default) 1=Enabled

`ListenOnBlock` Specify whether the NOM should continues to monitor messages from MOS devices when it is in Block mode.	0=Disabled 1=Enabled (default)
`MaxSocketsClosed` Maximum number of running Winsock controls with closed connections. If this limit is reached a warning is logged and excess controls are unloaded.	Default is 1000
`MessageExpiration` Number of days to preserve Top Line group or personal messages before they are deleted during maintenance.	Default is 7 for short messages, 30 for longer messages
`MOSRepeater` Configure a server to operate as a MOS Repeater. For more information refer to "Setting Up a MOS Repeater" on page 136.	0=Disabled (default) 1=Enabled
`RemotePortTSS` Port to which the NOM and NWP send UDP updates to the Top Story Server.	Default is 11800
`roReqRefreshMOSRefs` Instructs the NOM to ignore `roReq` messages for Rundowns which have the *MOS Control Active* checkbox selected since MOS object updates will be sent automatically. ■ For more information on MOS Protocol messages refer to `http://www.mosprotocol.com`.	0=Disabled 1=Enabled (default)
`SocketTimeout` Number of minutes before the NOM closes unresponsive connections.	Default is 2
`WarnSocketsConnected` Number of simultaneous connections before a warning is logged. If a MOS device creates too many connections it may indicate a problem with the device.	Default is 20
`XMLstorage` Advanced formatting options on story toolbars including bold, italics, underline, and font colors. Clients using these additional formatting features must also enable `UseRTFtext` in the `[ENPS]` section of their `ENPS.INI` file. This setting must be enabled in both the NOM and NWP configuration settings if you want to enable mobile client users to edit scripts and add new lines to Rundowns.	0=Disabled (default) 1=Enabled

[Watch]	
`NOM, NWP, Maint, WalkCS, Publish, TopStories` Controls whether the NOM Watch starts an ENPS server component automatically. Do not modify this field unless instructed to do so by ENPS Support.	0=Disabled 1=Enabled (default for all components)

[TopStories]	
`RefreshMax` Number of stories before the Top Story Server stops refreshing the list of top stories. If you set this value to 25 and there are 26 stories the Top Story Server will not refresh the list.	Set to 1 to disable refreshing. Default is 500.

[Maint]	
`DeleteTimerInterval` Delay between Maint operations.	Default is 200 ms
`SyncExclude` ENPS creates noise words lists for your for local language automatically. These lists cause Searches to exclude terms like "a," "an" or "the." To exclude the noise word list set the value of this setting to `G_NOISE`.	Set this value to G_NOISE to exclude the local noise word list.

[MOS]	
`<MOS Device Name>` Number of seconds before a connection times out for a specific MOS device. If a timeout occurs the Rundown's **MOS Status** column will display `DISCONNECTED`. The Rundown will refresh when the connection is re-established. Refer to the `Timeout` setting to select a default timeout value for MOS devices.	Example: MOSPROMPTER=10

`EdStartLocal` Determines whether ENPS adjusts the `roEdStart` tag in an `roCreate` message based on Daylight Savings Time. By default, ENPS adjusts `roEdStart` to reflect the local time automatically. For example, if a newscast's Editorial Start Time is 17:00 and the local server is in Eastern Standard Time ENPS would send the MOS device an `roEdStart` of 22:00. During Daylight Savings Time the server would send the MOS device an `roEdStart` of 21:00. You can also set ENPS to not adjust the time automatically. This may be necessary for backward compatibility with some MOS systems that are set to receive an unadjusted time in `roEdStart`. ■ For more information on MOS Protocol messages refer to `http://www.mosprotocol.com`.	0=Adjust time automatically (default) 1=Do not adjust time automatically
`DisconnectWait` Interval for the NOM to attempt to contact a non-responsive MOS device.	Default is 30
`StrictXMLValidate` Enforce rigorous XML validity checking on incoming MOS messages. This option is disabled by default for compatibility with devices that use older versions of the MOS protocol.	0=Disabled (default) 1=Enabled
`Timeout` Number of seconds for the connection to a MOS device to time out if no value is specified for a particular MOS device the global timeout will default to this value. Timeouts cannot be less than 1 second and no longer than 60 seconds. `Shift+Del` can be used on the server to delete the currently selected MOS message from the outbound queue on the NOM without confirmation. `Ctrl+Shift+D` deletes all items in the queue.	Default is 6
`Version` Default MOS version for ENPS to use if one is not specified for a particular device.	Default is 2.6
[Reflectors]	
Reflectors' IP addresses for which you want the server to transmit packets directly. For more information refer to "Reflectors" on page 110.	IP addresses for reflectors
[Publish]	
For detailed information on Publishing refer to the *ENPS Publishing Guide*.	

`ConnectRetryInterval` Number of seconds before Publishing attempts to re-establish a lost connection to the server.	Default is 5, maximum is 60
`ConnectTimeout` Number of seconds before a connection to the Publishing database times out.	Default is 5, maximum is 60
`Provider` Set this value to `SQLOLEDB` if Publishing is configured to use a database.	SQLOLEDB if Publishing uses a database.
`PublishEnabled,PublishDBEnabled` Both of these settings must be enabled to use Publishing.	0=Disabled (default) 1=Enabled
`PublishROs` Maximum number of Rundowns or Newsgathering Grids that can used for Publishing.	Default is 50, maximum is 100
[WalkCS]	
`MaxDATFileSize` Maximum size for `WALKCS.DAT`. This file is used by the WalkCS application to track which files have been compounded.	Value in bytes. The minimum is 4000000 or 4 MB. The default and maximum value is 100000000 or 100 MB.
`UseDATFile` Controls whether WalkCS maintains a file tracking previously-compounded content. By default, WalkCS will examine each file in the archive whenever WalkCS runs. This reduces the memory required by WalkCS and the length of time it takes to compare each individual filename to the WalkCS tracking file. It is recommended that larger sites keep this option disabled as it can slow down server performance.	0=Disabled (default) 1=Enabled

NWP Configuration Settings

Section/Description	Value
[TCPIP]	
`DatagramsPerSecond` Number of UDP messages transmitted per second to the NWP.	Default is 20
`PacketVersion` Specifies whether incoming wires are in English.	1=English news wires (default) 2=Non-English news wires

[NWP]	
`Broadcast` Determines whether the NWP sends UDP broadcast messages to the local subnet. This option should be enabled to ensure clients receive Rundown and wire updates properly.	0=Disabled (default) 1=Enabled
`CustomXSLFiles` Determines whether the NWP can ingest custom XML wires. Refer to "For diagnostic purposes, you can configure the NWP to re-ingest previously captured Webfeeds data from a text file. Open a WebFeeds wire, clear the *Active* checkbox, and press `Ctrl+T`. This can also be used for pre-election testing with ENPS Stats. Wires in XML Format" on page 120 for more information.	0=Disabled (default) 1=Enabled
`Discard` Semi-colon delimited list of category codes to discard.	Three digit category codes separated by semi-colons. For example: 021;033;504
`DupeStoryThreshold` Specifies how many of the most-recent incoming wires will be checked for duplicates. Duplicates are defined as stories which have identical slugs and the same text after the wire header. Any duplicates identified within the threshold will be discarded (only the first story received is retained). When ingesting wires via AP WebFeeds without this setting enables a separate version of the story is saved for each included category in a single WebFeeds entry (e.g. sports, business, general news). If this setting is set to a value of 2 or higher then only the version for the first referenced category will be saved.	0=Disabled (default)
`FTPPollInterval` Number of minutes the NWP polls FTP wire files.	Minimum is 1. Maximum is 2000. Default is 5.
`MaxFTPCaptureFiles` Maximum number of files that can be saved in the capture directory when the *Create capture file* option is selected for an FTP wire. Refer to "Wires via FTP" on page 115 for more information.	Default is 9999
`MaxSocketPacket` Maximum packet size in characters for UDP messages when `Unicode` is enabled.	Default is 1024
`NID` ID number for the wire programming tables.	ID number

`NNTP` Specify whether to use the News Ticker feature. For more information refer to "News Tickers" on page 101.	0=Disabled (default) 1=Enabled
`PreventUrgent` Semicolon-delimited list of category codes for which you want wire stories with "urgent" priority to appear as non-urgent stories.	Wires' three digit category codes, separated by semi-colons.
`TwitterFeeds` Ingest a feed from Twitter. Refer to "Wires via Twitter" on page 121 for more information.	0=Disabled (default) 1=Enabled
`Unicode` Unicode formatting. If this option is enabled you also need to change `MaxSocketPacket` to 1024.	0=Disabled (default) 1=Enabled
`UnicodeViewer` Preview wires that contain Unicode characters beyond `&h58F` in the NWP window.	0=Disabled (default) 1=Enabled
`Webfeeds` Ingest WebFeeds wires. Refer to "Wires via AP WebFeeds" on page 117 for more information.	0=Disabled (default) 1=Enabled
`XMLstorage` Advanced formatting options on story toolbars including bold, italics, underline, and font colors. Clients using these additional formatting features must also enable `UseRTFtext` in the `[ENPS]` section of their `ENPS.INI` file. This setting must be enabled in both the NOM and NWP configuration settings if you want to enable mobile client users to edit scripts and add new lines to Rundowns.	0=Disabled (default) 1=Enabled
`YouTubeFeeds` Ingest YouTube feeds. Refer to "Wires via YouTube Feeds" on page 123 for more information.	0=Disabled (default) 1=Enabled
[NNTP]	
`NNTPFaultRestartInterval` Number of minutes before the NWP restarts the NNTP process if it stops. It is recommended that you set this value at 10 then change it as needed.	Number of minutes
[KillClock]	
Number of hours before wires are removed from the server.	Maximum is 168 (1 week)

[Reflectors]	
Reflectors' IP addresses for which you want the server to transmit packets directly. For more information on reflectors refer to "Reflectors" on page 110.	IP addresses to reflectors
[ReflectUrgents]	
IP addresses for workstations that should receive real-time urgent wires only. This is useful for dial-in users or with a slow connection. Forward Search alerts will not be available to those users.	IP addresses for workstations
[Providers]	
Wire provider codes.	Examples: APX=AP Express APD=AP Datafeature APJ=AP-Dow Jones
[TopStories]	
`ExcludedCategories` Category codes to exclude from the Top Stories Server. These categories will be excluded even if the news wire is configured for processing on the Top Stories Server.	NWP category numbers separated by semi-colons
[Wire#] sections for specific wires	
`AllowExtendedWireSave` Number of hours to save wire copy.	Number of hours. Maximum is 8784 or 366 days.
`AllowedExtension` File extensions that may be sent via FTP.	By default all file types are allowed.
`AssumeUTF8XML` In some cases XML wires in may be sent without a byte order mark indicating they are UTF-8. Once this setting is enabled the NWP will be able to ingest those wires properly.	0=Disabled (default) 1=Enabled

Compound Storage

Compound Storage is a method for storing ENPS archive data. It lets you store archived Rundowns and Newsgathering Grids, along with their associated stories, as a single delimited file rather than as separate records. Using Compound Storage reduces the number of files on servers by as much as 97% and significantly reduces the number of files to be indexed. This is especially important for sites that have millions of records in their archives.

If you opt to use the Compound Storage at your site, users will continue be able to access archived material. The only difference they will see is in how Search results are returned for archived data. When a Search finds an uncompressed item it will be displayed as an individual item in the List Window. When a compressed item is found the Rundown or Newsgathering Grid to which it belongs will be displayed. When the user opens the Rundown or Newsgathering Grid the search term will be highlighted in red.

Compound Storage is configured through an application on the ENPS server called `WALKCS.EXE`. This application reviews archive folders and converts Rundowns and Newsgathering Grids older than a certain number of days to the Compound Storage model.

It is recommended that you implement WalkCS when there is the lowest possible resource load on the ENPS server.

To implement Compound Storage complete the following steps:

1. Open the `\NOM` folder on the ENPS `WORK` drive and run `WALKCS.EXE`.
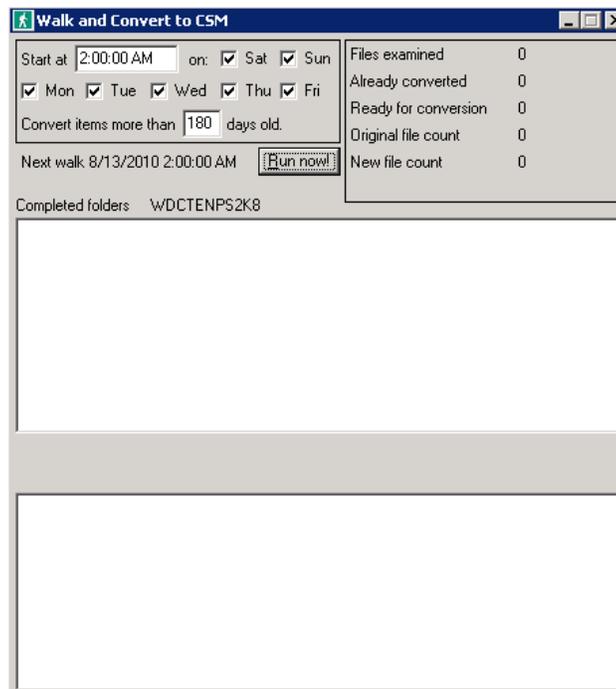
2. In the box *Convert items more than __ days old* enter the number of days before items should be converted to Compound Storage. The recommended

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value is 365; the maximum is 730. Lower volume sites may want to increase the number of days in this setting.

3. You can also select the day of the week, and the time that the Compound Storage utility runs. Once you click *Run now!* the application will review all files in the archive folder and compress those which are older than the configured time frame. The application write a log to the `WALKCS.LOG` file in `\NOM\LOGS` on the ENPS `WORK` drive.

4. Repeat this process on the Buddy Server.

Client Configuration Settings

The configuration settings for a client workstation can be found in `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI`. You can use a text editor such as Notepad to modify this file. To disable a setting add a semi-colon in front of it.

Some of the settings in this file are identical to settings in the Global Configuration Options: the setting in `ENPS.INI` will always override the global option. This allows you to set up configuration settings for the majority of users at your site but set workstation-specific settings on a case-by-case basis.

Once you make a change to the `ENPS.INI` restart the client for your changes to take effect. The following table describes the settings in this file:

Option and Description	Settings/Examples
[ENPS]	
`BaseDialect` Dialect code. Local dialects take precedence over the setting for `BaseLanguage`. A complete list of base dialect codes may be found in "Language Support" on page 153. ► This setting is also available as a Global Configuration Option. The value specified here takes precedence over the global setting.	Four letter dialect code, such as `ENUS` for American English.
`BaseLanguage` Language for ENPS labels, menus and fields. A complete list of language codes may be found in "Language Support" on page 153. ► This setting is also available as a Global Configuration Option. The value specified here takes precedence over the global setting.	Two letter language code such as `EN` for English.
`CG` Determines whether the character generator can be used from the client workstation. Refer to "Character Generators" on page 139 for more information.	0 – Disabled (default) 1 – Enabled
`CGMacro` Determines whether the CG operator can create CG macros to trigger events and transforms. This setting must be enabled in both the `[ENPS]` section and the `[CG]` section. CG macros replace the personal macros controlled by the `F2-F12` keys. The CG operator will see macros available from **Rundown rover** → **CG Device Control**. The CG macro keys on the right of the list window next to the CG text. On the **Group rover** of the client logged into the CG workstation there will be an entry called **CG Macros**. The CG operator can	0 – Disabled (default) 1 – Enabled

enter macros which will be sent when the corresponding function key is pressed. These macros can include {Pause} so that a portion of the macro will execute and the remainder will be executed when the button is pressed again.	
ChatDateTime Format of the date and time prefixed on messages if the **Include date/time** option from the **Chat** rover is selected. The date/time format defaults to "dd-mmm hh:nn".	Example "mmm-dd hh:nn" displays month, day, hours and minutes
ChatHoldTime Seconds of hold time allowed during a chat session.	Default is 240 seconds, or four minutes.
ChatStatusDelay Delay in seconds for flashing status messages.	Default is 3.
CreateRCFiles Sites that are upgrading from ENPS 4.5 should enable this option prior to performing the upgrade. It enables functionality which will allow users to select story text and change it to upper, lower or mixed case.	0 – Disabled (default) 1 – Enabled
CtrlAlt Determines whether modifier key combinations may be used. For example this setting enables Ctrl+Alt key combinations on US keyboard or Alt+Gr in the UK.	0 – Disabled (default) 1 – Enabled
DebugSocket Used by ENPS Support for troubleshooting purposes.	Do not modify.
DefSettings Determine whether a user can select security profiles which specify different user security levels across different servers and/or groups. This setting requires that Global Configuration Option CENTRALPRIV is enabled. Refer to "Default Settings Profiles" on page 96 for more information.	0 – Disabled (default) 1 – Enabled
DetachedActiveX Specify whether the **Media Control** icon has a rover option to open an ActiveX plug-in in a separate window. This feature is useful for viewing controls on a second monitor. A maximum of three detached plug-ins may be open at any one time. ► This setting is also available as a Global Configuration Option. The value specified here takes precedence over the global setting.	0 – Disabled (default) 1 – Enabled

`DraftPrintCharsPerLine,`
`DraftPrintLinesPerPage`
 	
Standard story printing functions were designed for laser printers and are often too rich in detail for most dot matrix printers. User can print in "draft" format was from Editing Window and Rundown rovers. These settings take precedence over the margins in determining when a page or line ends. When printing in draft mode a small progress bar may appear in the upper left corner of the screen.
	Number of characters or number of lines

`ExternalDocuments` Allow users to store Word `DOC` or Adobe `PDF` documents in the Newsgathering Grid's **Background** or **Collection** fields. ► This setting is also available as a Global Configuration Option. The value specified here takes precedence over the global setting.	0– Disabled (default) 1 – Enabled
`ExportPath` Default folder in which items are saved when a user exports a Rundown.	Folder path. The default is the root folder.
`FarsiTextBoxFont` Font to use if ENPS is unable to render a Farsi language character with the current font. This value can be set to either Tahoma or Arial, either of which work with all Farsi characters. This setting also takes effect if the font specified in a story is not available on the client workstation. ► This setting is also available as a Global Configuration Option. The value specified here takes precedence over the global setting.	Tahoma or Arial
`GridCellHighlightEnable` Specify whether ENPS should use the default dark gray color for cell highlighting in Rundowns and Newsgathering Grids. If this setting is enabled cell highlighting color specified by the Global Configuration Option `GridCellHighlightColor` will be used as the cell highlighting color. This setting enables the *Workstation grid cell highlight color* option in a user's Personal Settings.	0 – Disabled (default) 1 – Enabled
`GridRptFontSize` Font size in twips for printing generic grids. Note that 1 twip = 1/20 of point, 1440 twips = 1 inch and 567 twips = 1 centimeter.	Default is 200 twips.
`GridRptHMargin` Width of the margins in twips for printing generic grids. Note that 1 twip = 1/20 of point, 1440 twips = 1 inch and 567 twips = 1 centimeter.	Default for top margin is 360 twips and default for left and right margins is 240 twips.

`LeftZoneWidth, CenterZoneWidth, RightZoneWidth`
 	
When printing in two column mode it is possible to define the percentage of screen space occupied by the left column, the center spacing and the right column using these settings. For example if you set these settings as follows:
 	
`LeftZoneWidth=40`
 	
`CenterZoneWidth=20`
`RightZoneWidth=40`
 	
the left zone will occupy 40 percent, the center zone will occupy 20 percent and the right zone will occupy 40 percent.	

`LoadPrintersOnDemand` By default ENPS validates all available printers when the client starts. If this option is enabled ENPS will only validate the printer list when a user creates a print job. This option should be enabled on remote workstations that connect over low-bandwidth connections.	0 – Disabled (default) 1 – Enabled
`LogMOSActiveXMessages` Create the a log of the ActiveX plug-in MOS activity. The XML log will be created in the `C:\Documents and Settings\All Users\Application Data\ENPS` folder. The filename will be the plug-in's MOS ID.	0 – Disabled (default) 1 – Enabled
`LocalSort` Specify whether to sort Search results on the workstation instead of the server. You should enable this option if your search results are not displayed in the correct chronological order.	0 – Disabled (default) 1 – Enabled
`MIRXMLTree` View MOS Item Reference tooltips in an XML tree view. ► This setting is also available as a Global Configuration Option. The value specified here takes precedence over the global setting.	0 – Disabled (default) 1 – Enabled
`MOSItemReplaceChange` Specify this option if MOS Item References in ENPS are corrupted by Unicode characters from certain international character sets when ActiveX plug-ins update MOS Item References. ► This setting is also available as a Global Configuration Option. The value specified here takes precedence over the global setting.	0 – Disabled (default) 1 – Enabled

`PollClockInterval` Interval at which the client polls the server to synchronize clocks. In Active Directory environments clock synchronization is automatic so ENPS clock is unnecessary. To disable server synchronization disable the `SyncToNOMTime` setting in the `[ENPS]` section.	Number of minutes
`PrintJobDelay` A delay for print jobs. This is necessary for some printing stories from Rundowns in right-to-left languages such as Arabic. If users are using a macro for their print jobs they may also need to add `{WAIT}` commands to their macro code.	Number of seconds
`PublishDBEnabled` Specify whether Publishing features are available in the client. For more information about Publishing refer to the *ENPS Publishing Guide*.	0 – Disabled (default) 1 – Enabled
`PublishEnabled` Display Publishing tables and columns in System Maintenance.	0 – Disabled (default) 1 – Enabled
`QTMediaExtensions` QuickTime player extensions that may be played in the script media viewer.	Example: .mov,.qt,.qti,.m4p,.mp3,.qtif,.qif,.3gp,.mp4
`ROStorySendOnFreeze` Send MOS `roStorySend` messages for all stories in a Rundown whenever the page is frozen or unfrozen. This setting will slow server performance. ■ For more information on the MOS Protocol refer to `http://www.mosprotocol.com`.	0 – Disabled (default) 1 – Enabled
`RTFFarEastFontFix` Controls how a MOS Item Reference's `<itemSlug>` tag is interpreted when an item is dragged from a story or ActiveX plug-in into a story with a Chinese language slug. By default, ENPS will attempt to automatically correct the reference's value. If you want to keep the tag's value unchanged you can disable this setting.	0 – Disabled 1 – Enabled (default)
`RTLPrint` Specify whether to use alternate print engine. Enabling this setting may resolve issues with printing on some systems. It also enables print options not available by default such as the ability to add page breaks to long Rundowns or Newsgathering Grids using the **Page Break** column. You must enable this option for right-to-left for languages such as Arabic. ► This setting is also available as a Global Configuration Option. The value specified here takes precedence over the global setting.	0 – Disabled (default) 1 – Enabled

`ScriptMediaViewer`
 	
Add a pane to preview MOS Item References in a story. The story pane can be toggled on or off from the story rover or from the toolbar in the story window.
 	
The MOS Item Reference must have a path to the media in the format specified by the MOS Protocol. The following are sample paths:
 	
`http://<server>/proxy/clip328cd20s0e.wmv`
 	
`ftp://<server>/proxy/clip328cd20s0e.wmv`
 	
`\\<server>\media\clip328cd20s0e.mxf`
 	
If MOS Item References do not have a valid path ENPS will display a generic graphic.
 	
■ For more information on the MOS Protocol refer to `http://www.mosprotocol.com`.
 	
► This setting is also available as a Global Configuration Option. The value specified here takes precedence over the global setting.
	0 – Disabled (default)
	1 – Enabled

`UseSendInput` On client workstations running Windows Vista or Windows 7 it is recommend that you disable User Access Control (UAC). On machines where UAC is active this option, which is enabled by default, allows macros to continue working as expected. Disabling this setting switches macro execution to an alternate method, but should only be done on an as-needed basis in consultation with ENPS support. Using the default value has no effect on workstations running Windows XP or on Windows Vista or Windows 7 machines where UAC is disabled.	0 – Disabled 1 – Enabled (default)
`SpellCheckerPluginID` Use approved third-party ActiveX spell check plug-ins in place of the default spell check tool included with ENPS. This option is used primarily by Portuguese sites who need a specialized spellchecker to support the Portuguese Language Orthographic Agreement. The spell check option will appear from the story rover menu or the spell-check option on the story toolbar. Use of a third-party speller replaces all built-in spelling functionality in ENPS, including the standard configuration options. All configuration and dictionary management must be done through the third-party tool, not from the ENPS rover menu. ► This setting is also available as a Global Configuration Option. The value specified here takes precedence over the global setting.	To enable enter the string provided by the ActiveX provider.
`SetupRestart` Prompt users to restart workstations after clients are updated from the server.	0 – Disabled 1 – Enabled (default)

`SystemEdit` Allow users with sufficient privileges to edit system fields.	0 – Disabled (default) 1 – Enabled
`SyncToNOMTime` In Windows Active Directory environments scheduled clock synchronization occurs automatically and ENPS synchronization is unnecessary. Use this setting to disable server synchronization.	0 – Disabled 1 – Enabled (default)
`TerminateOnExit` Specify which external processes should automatically stop when the client is shut down. The HP Universal PS driver, for example, must be shut down before the client can be restarted so this setting would be set to the driver filename `HPMUP081.BIN`. ► This setting is also available as a Global Configuration Option. The value specified here takes precedence over the global setting.	Name of the process to shut down.
`UnicodeFontSubst` Enable a substitute Unicode font for the ENPS interface. If this setting is enabled a font must be specified using `UnicodeFontName`.	0 – Disabled (default) 1 – Enabled
`UnicodeFontName` Default Unicode font that will be used for the ENPS interface if `UnicodeFontSubst` is enabled. This font must be installed through Windows and the name specified here must match the font name exactly.	Name of the Unicode font.
`UserIDSpace` ENPS does not allow login names containing spaces and certain reserved characters. To work with legacy systems where spaces are used in names set this setting to a replacement character such as a hyphen or underscore. Spaces in user names will be converted to the specified character for internal ENPS use. A hyphen is recommended.	Windows account name of `John_Doe` would be converted to (and should be created in the ENPS staff database) as `John-Doe` using this setting. If no setting is specified the name would become `JohnDoe`.
`UseRTFtext` Enhanced formatting options on story toolbars such as bold, italics, underline and font colors. This option is enabled by default. This option also requires `XMLstorage` is enabled in the `[NOM]` section of the `NOM.INI`. ► This setting is also available as a Global Configuration Option. The value specified here takes precedence over the global setting.	0 – Disabled 1 – Enabled (default)

`WireRptHMargin`, `WireRptFontSize` Set the width of the left and right margins for wire story printouts or the font size. The default margin is .25 inches and the default font size is 12 pt. The value is given in twips (a twentieth of a point) where 1440 twips = 1 inch.	Default for x is 360 twips and the default value for y is 240 twips.
[TCPIP]	
`ConnectTimeout` Length of time the client will use to attempt to connect to the ENPS server.	Default is 20 seconds.
`LocalServer` Name of the Primary Server.	Example: `APENPS01`
`PacketVersion` Allow support for non-English feeds. Port 10517 may be automatically used in addition to 10512 and 10513 for UDP datagrams. Make sure this setting is the same for both the client's `ENPS.INI` and in the `\NWP\NWP.INI` on the ENPS `WORK` drive.	1 – English wire feeds (default) 2 – Non-English wire feeds
`ReceiveTimeout` Number of seconds before a timeout to receive information back from the ENPS server.	Default is 20 seconds.
`ReceiveTimeoutBriefing` Number of seconds the client will wait for Search results.	Default is 20 seconds.
`ReceiveTimeoutMOSQuery` Number of seconds the client will wait for MOS search results. This setting applies to MOS version 2.8.1 or higher.	Default is 5 seconds.
`ReceiveTimeoutWebHits` Amount of time the client will wait when the *Count* button is pressed from the Search dialog box's *Advanced Options* tab.	Default value is 4 seconds.
`SearchAutoKeyboard` When using ENPS in any RTL language locale such as Arabic an operating system conflict may switch the keyboard language in some textboxes like the Search box. This setting controls whether ENPS should prevent the language switching. By default, this option will be enabled only if the default locale uses a RTL language but you can enable this setting to ensure that switching is prevented regardless of your locale.	0 – Disabled 1 – Enabled (default)
`SelectRows` Number of entries to store in the List Window.	Default is 250.

`UDPInfo` When this setting is enabled, UDP packets received by the workstation will be recorded and the command `Ctrl+Alt+U` will display a table of servers, packets received, and a reliability measure. Only NOM UDP packets (not NWP packets) are tracked and UDPs are only sent only when non-private data is manipulated such as a story is saved or a Rundown is re-ordered. UDPs from servers on different subnets will not be received unless they are explicitly "reflected" and if private channels are active the UDPs will still be tracked even though they are not processed because the packets are duplicated in the private channel. The `CtrlAlt` setting in the `[ENPS]` section must be enabled for this feature to work.	0 – Disabled (default) 1 – Enabled

[Prompter]

`Driver` Name of the prompter driver. Once the driver is specified here you the user can select **Rundown rover → Dump to** the corresponding prompter.	AutoCue WinCue WinPlus Simplicity AP Prompter
`Log` Create a log of prompting activity for troubleshooting purposes. Enabling this option generates `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\PROMPTER.LOG` with overflow into `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\PROMPTER.000`. The following are logged: • `*.DAT` control file updates, text writes, and file removals from the prompter share. • Failed writes of *.DAT files or text files. The word `FAILED!` will be in the log for any write failures.	0 – Disabled (default) 1 – Enabled

`Path`
 	
If you are using WinCue, WinPlus, or AP Prompter and you prompter data to be written to disk, specify a drive letter and directory name or UNC name and path.
	Examples:
	`C:\PROMPTDATA`
	`\\APENPS1\PRMPT`

`Port` Prompter port for AutoCue prompters.	Default is 1.

`Settings`
Serial port settings including baud rate, parity, packet size and stop bits. AutoCue is the only serial prompter supported; it requires the following serial port settings in the `[Prompter]` section:
`; Prompter port (for AutoCue only)`
`; Port=1`
`; Serial port (defaults to 9600,n, 8,1)`
`; Settings=9600,n,8,1`
	9600,N,8,1

[CG]	
`AstonAnimation` Any `AstonCopyPreviewToDisplay` command sent to an Aston will be followed by an `AstonWaitForDynamicEnd` command.	0 – Disabled (default) 1 – Enabled
`AutoPreview` First item to be automatically previewed when grid is first opened, and the next item to be previewed when an item is rendered.	0 – Disabled (default) 1 – Enabled
`BigEndian` When the Unicode setting is enabled, this settings causes the byte order of Unicode data to conform to the Java binary standard instead of the Intel binary standard.	0 – Disabled (default) 1 – Enabled
`CGMacro` Determines whether the user can create CG macros to trigger events and transforms. This setting must be enabled in both the `[ENPS]` section and the `[CG]` section.	0 – Disabled (default) 1 – Enabled
`CharMap` Refer to "Mapping International Characters with the CG" on page 160 more information.	
`Directories` Specifies all available message directories on the Chyron or drives on the Dubner. This setting is not valid for the Codi. Each entry must include the full drive and path name and exactly match the message directories on the Chyron. All messages in these directories must be built using machine fonts, not converted fonts. All tab fields must be set to auto-erase, and all tab stops must match the order of the AP ENPS templates as built by the ENPS operator. Each message directory must have sufficient clear space above the defined starting location to handle large newscasts.	Chyron/ TypeDeko example: DIRECTORIES= C/AM;C/NOON;C/5PM; C/6PM;C/10PM Dubner example: DIRECTORIES= 1;2;3

`GlobalCommand` When disabled, CG commands will utilize the Chyron machine ID code and the proper syntax to address a unique machine on a multi-drop serial cable. When enabled, CG commands will use a global command structure to address all Chyron CGs on a multi-drop serial cable.	0 – Disabled (default) 1 – Enabled
`LeadingTab` When enabled, a Tab command is sent when beginning communication with the character generator, sometimes necessary to position the CGs cursor in the proper starting field.	0 – Disabled (default) 1 – Enabled
`Preload` Preload all CG instructions for show to the character generator. Changes will be transmitted to the CG in real-time and subject to control by the CG keyboard. When disabled, the ENPS PC is in control. This setting is not valid for the Codi.	0 – Disabled (default) 1 – Enabled
`PrimaryUser` In some situations, multiple users can work with the Chyron CG at the same time and it may be desirable to specify which user's commands will be given priority processing. If this option is disabled "X" commands will be used and if enabled "Y" commands will be used.	0 – Disabled (default) 1 – Enabled
`Retries` Number of times to retry transmission to the CG device after a timeout.	Default is 3.
`RTS` When enabled, the Request to Send signal on the CG is respected. This feature may be required for arbitrating flow control between ports on serial port sharing devices. Many such devices have different operational characteristics and may, or may not, be suitable for use with ENPS. Generally, a CG-enabled PC should have exclusive control of the CG to prevent arbitration problems.	0 – Disabled (default) 1 – Enabled
`Test` When enabled, the ENPS character generator driver is in "test mode" and does not respect the settings for `CGTimeout` or `CGRetries`.	0 – Disabled (default) 1 – Enabled
`Timeout` Milliseconds the ENPS character generator driver will wait to hear from the CG device before timing out (500 ms is half a second; 1000 ms is one second).	Default is 3000 (three seconds).
`Trace` CG operations are logged to a temporary file named `CGTRACE.LOG` for review.	0 – Disabled (default) 1 – Enabled

`Unicode` Data to be sent in Unicode rather than ANSI in the default code page.	0 – Disabled (default) 1 – Enabled
`UserAccount` User account name for an Aston model character generator. If specified, a command instructs the Aston to change to that user account.	Example: JOHNSMITH
`UseSBCGOutput` Use this setting if you are not using a double-byte character language and output is sent to the CG incorrectly.	0 – Disabled (default) 1 – Enabled
`UTF-8` Force UTF-8 encoding for the output to the CG device. This setting will output to Unicode UTF-8 regardless of whether the `Unicode` setting is enabled or not.	0 – Disabled (default) 1 – Enabled
[Reflect]	
`Servers, NOM, NWP` Run the standalone reflector `REFLECT.EXE` on a workstation that is dedicated to being a reflector. This option is enabled by adding a list of servers, delimited by semicolons, as a `Servers` setting. This section might also be placed in a file called `REFLECT.INI`. For more information to "Reflectors" on page 110.	For example: APENPS01; APENPS02
[Update]	
`Defer` Number of days to defer minor client updates for dial-up users. Major updates cannot be deferred.	Default value is 10.
[StatsCG]	
Refer to the *ENPS Stats Guide* for information on the settings in this section.	
[TickerCG]	
CG information for News Tickers. Refer to "News Tickers" on page 101 for more information.	
[Automation]	
This section applies to the OmniBus serial interface. Refer to *Using the OmniBus System* on page 125 for more information.	

Custom Fields

In addition to the standard fields that come with ENPS you can add your custom fields which may appear in stories, contacts, Rundowns and Newsgathering Grids.

Open the ENPS client and select **Fourth Folder rover → System Maintenance → [Site name] fields**. If you want to change the parameters of a standard system field create a custom field with the same name and assign the desired parameters. You must restart the NOM on the Primary Server and the ENPS client for your changes to take effect.

The following table describes the parameters used to create a custom field:

Field	Description
ID	System identifier for the custom field. This name is not Use letters and numbers only. Users will not be able to locate the ID using Search if this ID contains any of the following characters: ~ ! @ # $ % ^ & * ( ) - = + _'
Read Only	Specify whether the field allows input.
Default Caption	Field name to display to users. A translation in the Languages table will override this value.
Just	Left, center or right text justification.
Validation	Determines how to verify that information was entered in the correct format. Refer to "Validation Fields" on page 84 for more information.
List	Choices to appear in a pull-down list delimited by pipe "|" characters for example: VO|VOSOT|RDR|PKG|LIVE
Reqd	Specify whether the field is required.
Width	Width in pixels for the default column display.
MaxLen	Maximum number of characters that may be entered in the field.
Upper	Force text to uppercase.
MinVal, MaxVal	Minimum and maximum values for a numeric entry.
Merge	Not used.
Type	Determines which ENPS components will display the field such as Rundowns, Newsgathering Grids, Scripts, etc. Refer to "Type Fields" on page 86 for more information.
Protected	Protect field's value from changes after an initial value is entered.

Sequence	Order number for a fields to appear in the ENPS component such as the story property fields. When you have a group of related fields you can assign sequential numbering so that these fields remain in a consistent order.
Parent	ID of a parent field. Fields with this entry are indented under their parent field.
Briefable	Allow the field to be located through a Search. Selecting this option adds the field to the Search box's **Corporate Content** tab. The first word entered in these fields can be found using the field search box under **<Site name> Content** tab of the Search window. Anything after the first space can be found using "Words in Text." For example, if a user's Search string is "Acme Hotel Fire" you could find this story by doing a field search for "Acme" or a *Words in Text* search for "hotel" or "fire."
Set Lock	Do not use.
Word Wrap	Specify whether text should wrap around to the next line when a word reaches the edge of a column.
Extract Target	Extract information from **Anchor**, **CG** and **Notes** columns. The fields **Take Other** and **Insert Other** can extract data from the **TAKE** and **INSERT** commands, respectively.
Approval Extension	Determines whether multiple approvals will be required before an item is cleared for broadcast. You can create multiple fields set as Rundown columns and set this property for each field. Once those fields are created the **Final Approval** column becomes read-only. It will be automatically selected only when all of the Approval Extension fields have been checked. If any of the fields are not selected, or if story contents change, the **Final Approval** column will be automatically de-selected. The ability to select specific Approval Extension fields can be associated with specific security levels after you enable the Global Configuration Option `EnforceSecurityLevels`. Refer to page 46 for more information.
Autosize Width	Automatically adjust the width if the field is a Rundown column.
MOS Send	Send the field via MOS `roStorySend` messages when the Rundown's *MOS Control Active* property is enabled.
MOS Tag	Specify whether the user can add MOS tags to a summary MOS item or to a MOS item in a story from the Rundown level.

Validation Fields

The following table describes each of the options in the **Validation** field. These options define the type of control that appears in the custom field.

Option	Description
Text	Text input from user.
ComboBox	Drop-down list of choices. The user can either leave this entry blank select one of the choices in the menu. By default, the top line is blank to clear a previously selected choice.
CheckBox	Checkbox that can be selected or unselected.
CheckList	Drop-down checklist that allows users to select multiple options.
CheckListEdit	Drop-down checklist that allows users to enter a field manually.
Duration	Converts a numerical entry to a duration. If the user enters 2 is converted to :02.
Number	Specify whether the field requires a numerical value.
Date	Require a date. If a user types 12-23-10 it is converted to 12/23/10. Entering 122310 would cause an error.
Time	Time entry. 7:00 will be converted to 7:00:00 AM. Entering 700 produces an error.
Collection	Newsgathering Grid column into which users may drag items such as Microsoft Word DOC and Adobe PDF files. **Background** and **Assign Info** are examples of Collection fields.
Form	A form with multiple rows. Each row may have its own unique parameters, labels and validation. To define a row enter: label, validation, length, extract column Each entry must be separated by commas. Values may be left empty but a comma must be still be added as a placeholder for the field parameter. Add the pipe character | to mark the beginning of a new row. For example: `Who,Text,10|What,Text,10|Date,Date,10,Date |Length,Duration,10,EstDuration` If you want to create a form for an Event Sheet refer to the Validation field type **Special** below.
Special	Used the same way as the Form type above but used only for Event Sheets which display grids when double-clicked from Newsgathering Grids. The validation is case-sensitive. When this field is exported via MOS StorySend and/or Publishing, XML-based formatting will be applied. Fields with the validation type of Special appear as repeating elements named after the field. Each will contain child

	elements named after the subfield column headings as in the following example for two rows of "Costs" data: `<Costs><Date>11/11/2002</Date><Amount>44 </Amount><Other>333</Other></Costs><Costs>< Date>11/22/2002</Date><Amount>55</Amount><O ther>667</Other>`
Tree	Provides nested options, with parent and child choices. Once *Tree* is selected in the *Validation* column click in the **List** field then press `Enter` or the `Space bar` to display a new window to configure the tree view. The bottom of the window displays a number of options that will help you configure the options on the tree.
Dual	Allows the user to select two choices from a drop-down list. Choices are specified in the **List** separated by pipe characters "|" such as: `Choice1│Choice2│Choice3`
Table	Display a table when the user clicks on the column. The table is defined by the **List** entries. List entries of "`Tape Name│Tape Number`" will result in a two-column, two-row table with rows "Tape Name" and "Tape Number."
MOS DateTime, Duration, Automation, Automation Duration	Allow user to add custom tags which can be read by MOS devices.
StaffIDList	Prompts the user to type the username of an ENPS user or multiple usernames separated by commas.
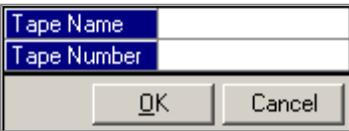
Type Fields

Field	Value
Story	Story property.
RO Column	Rundown column.
RO Property	Rundown properties field. For example the *On Air* checkbox is a Rundown Property.

NG Column	Newsgathering Grid column
NG Property	Newsgathering Grid property
Event Sheet	Newsgathering Grid column that displays information in a grid.
Contacts	Contact field
Story Header	Appears at the top of stories
Story Front	Appears just below the story header

Frequently Used Fields

This section describes custom fields that may be useful for your site. Each field includes a description of how the field is used and its configuration settings in the **Fields** table.

Rundown Column to Display MOS Objects

Rundown and Newsgathering Grid fields can display objects from MOS devices. For example, directors could have a field that displays video items instead of MOS placeholders.

To see a list of MOS Item References that come from the MOS ID `MYVIDEOMOS` create the following field:

Field	Value
ID	MyVideo
Default Caption	My Video
Just	Left
Validation	MOS Automation
List	Item's MOS ID
Type	RO Column
MOS Send	✓
MOS Tag	objSlug

Restart ENPS and add the column to a Rundown. When you add MOS Item References to the story this MOS column will extract IDs for `MYVIDEOMOS` and display them.

Using this feature you could display any tag from the MOS Item Reference by specifying it in the **MOS Tag** field. You could also configure this field to allow the user to enter information in the MOS Item Reference specified by the MOS ID.

To create a column to set the video playout channels for `MYVIDEOMOS` you could add the following entry into the list box in field definitions:

`Channel, MYVIDEOMOS`

This would present the user with a table for channel entry only for the MOS Item References that have `MYVIDEOMOS` as the MOS ID.

You can also create Rundown field that lists MOS Item References in the Source Content Area, the area below the black line, in stories. To create this field, enter

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a MOS-related field name with the letters `BBL` appended to it. For example, you could create a column `MOSSlugsBBL` that would only display MOS Slugs for items in the Source Content Area.

Rundown Column to Send Status Messages Alerts

ENPS can send users a Top Line Message when an item's status changes in a Rundown. Complete the following steps to enable this feature:

1. Select **Fourth Folder rover → System Maintenance → Groups**. Select the **Parent/Child** column for the group that will host the Rundown.

2. The Rundown will send alerts according to the text in the **Status** column in the Rundown. By default this column contains the following options to display status: `OK, ADDED, CHANGED, EP, ANC, HOLD, KILL` and `EMBARGOED`.

   If you want to change one of these status messages you need to re-define the **Status** field in the Fields table. To do this select **Fourth Folder → System Maintenance → [Site] Fields**. Click *New* and create a field with the following options:

Field	Value
ID	DocStatus
Default Caption	Status
Just	Left
List	Options separated by the | character such as: NEW | DELETE | REVIEWED
Width	Column width in picas, e.g. 1000
Validation	ComboBox
Type	RO Column

3. Navigate to the group. Select **Group Folder rover → Group Maintenance → Group Settings**.

   In the textbox *Status codes that trigger top line messages* enter the status value that will send a Top Line Message. This value must match one of the values you entered in the **List** column; this field is case-sensitive.

   In the second textbox enter the full name of the user who will receive a Top Line Message when the **Status** column you specified in the top textbox is selected. You can enter multiple names by separating them with a semi-colon.

Prevent MOS Items from Changing Approvals

When MOS Item References update they can change story approvals in Rundowns. To override this behavior create a custom field for the Rundown.

Select **Fourth Folder rover → System Maintenance** and select the fields for your enterprise. Add a field with the following parameters:

Setting	Value
ID	KeepApproveOnMOSChg
Default Caption	Prevent Approval Reset
Justification	Left
Validation	CheckBox
Type	RO Property

Click *Save* then restart the NOM. Users will see a checkbox called *Prevent Approval Reset*.

User and Group Administration

This chapter will show you how to administer user accounts in ENPS including adding or deactivating user accounts and assigning security privileges. You will also create user groups and assign privileges to Folder Managers to manage those groups.

This section also describes how you can create Performance Monitoring and audit logs to keep track of how the system is being used.

Staff Table

To modify user accounts select **Fourth Folder rover** → **System Maintenance** → **Staff**. To add a new user click *New* and then enter the following information.

Field	Description
ID	User's Windows login name.
Program	User's home group. This is the group that opens when the user clicks on the Third Folder.
Active	✓ This box must be checked for the user to be able to use ENPS. If a user is no longer working at your site uncheck this box.
	Important: Do not delete the user from the system since any templates or stories created by that user will not be attributed to any owner, and this can cause instability in the system.
Supervisor	Make the user a System Administrator.
Surname	User's last name.
Given Name	User's first name.
BasysID	Not used.
Department	Description of the user's department and/or position.
Notes	Notes about this user.
ServerManager	User may add, delete, and edit Read-ins on the server.
SNAPfeed	User may access SNAPfeed functionality.
Physical Location	User's desk location or office number.
Internet Accounts	Authorize the user's account for sending messages via Twitter. Refer to "Enabling Clients to " on page 106 for more information.

Blocked Clients	If you are using ENPS 6.00.0048 or later you can control users' access to specific mobile clients. By default all users can access all ENPS clients. To block a user from using a specific	Desktop ☐ Outlook ☐ Smartphone ☐ WAP ☐ Web ☐ Clear OK Cancel
	client open the ENPS client on the Primary Server and select **Forth Folder Rover** → **System Maintenance** → **Staff**. In the **Blocked Clients** column you can select the client type to block: Desktop, Outlook, Smartphone, WAP or Web.	

Changing a User's ID

If a user's legal name changes you must complete the following steps to transfer the user's personal folder contents and personal settings to a new account ID:

1. Create a new Windows domain account for the user.

2. Open the Staff table described above and create an account for the new Windows user ID. Locate the user's old Windows ID and uncheck the *Active* checkbox.

3. On the Primary Server open the ENPS WORK drive and open the folder with the Primary Server name. Locate the folder with user's old user ID preceded by "U_" such as U_JOHNDOE. Rename the folder to reflect the user's new Windows username.

4. From the folder with the name of your Primary Server open the S_SUPPORT sub-folder and repeat the previous step, renaming the user's old U_ folder to the new Windows user ID.

The user may now use ENPS with the new Windows username.

Groups

Groups are used in parallel to how your enterprise works. At sites with a small number of users this may be as simple as one group for News and another for the Desk; large enterprises may have dozens or even hundreds of groups.

The following types of items can be customized for each group:

*   Group Searches
*   Macros
*   Templates for CGs, Rundowns, and Newsgathering Grids
*   Report layouts for stories and Rundowns

To create a new group, select **Fourth Folder rover** → **System Maintenance** → **Groups**. Click *New* to add groups/programs to the server.

Parameter	Definition
ID	Unique identifier. Spaces are not allowed.
Description	Group name that will appear to users.
Server	Local or remote Primary Server that will host the group.

Type	Configure the folder group as an internal or external publishing folder. For information on how to configure a group for publishing refer to "Groups" on page 91.
Newsgathering	Do not use.
Private	Do not use.
Parent/Child	If selected, Group Managers will be able to set the **Status** column in Rundowns so that when the status has changed, certain users will be notified if a change is made in a Rundown.
Gateway Queue	Used by sites with legacy system gateways.
WarnApproved	Display a warning message if a user attempts to edit an approved story.
ForceEnglish	Force the keyboard layout to English in text entry fields if another language's keyboard layout is in use. This option applies to text entry fields in story titles, Rundown property fields, Rundown cells, and input windows such as the prompt to save changes.

This setting also takes effect during macro playback. The original keyboard layout will be restored when macro playback is done. |
| Allowed Wires | Semicolon-delimited list of wire Provider codes as defined in \NWP\NWP.INI on the ENPS WORK drive. These will be the only wires available to the group. If this column is left blank, all Providers will be allowed. You may enter up to 255 characters in this field. |
| Enable CTOS | By default, Rundowns and Newsgathering Grids are not sent to the Central Text Object Server.

By selecting this box, Rundowns and Newsgathering Grids can be sent to the CTOS but Group Managers will also have to select the *Allow CTOS* checkbox.

It is recommended that only important Rundowns and Newsgathering Grids are sent to the CTOS. Enabling this setting does not change local archive behavior.

For more information on the CTOS refer to "Central Server and CTOS" on page 11. |
Election	Create and view election items. Refer to *ENPS Stats Guide* for more information.
AutoCreate	Enable the Group Manager to set the days of the week on which Rundowns will be automatically created.
WriteEnable Archives	Allow the group to write to archives.
WarnRODelete	Display a warning when a user tries to delete a Rundown or a Newsgathering Grid.

MOS Redirection	Redirect the MOS messages for all of the Rundowns that are dragged into the Group by specifying the device to which MOS messages should be sent. For example: `<family>=<family>.<machine>.<location>. <enterprise>.<mos>` To redirect to multiple devices separate entries with a semicolon. For example: `SNAPFEEDDC=SNAPFEED.WASHINGTON.AP.MOS; SNAPFEEDNY=SNAPFEED.NEWYORK.AP.MOS`
MOS Include	Double-click to display a list of current MOS devices and ActiveX controls. Select the checkboxes of the MOS devices and ActiveX controls that you want to be visible from the group's **Media** icon rover.
MOS Exclude	Double-click to display a list of current MOS devices and ActiveX controls. Select the checkboxes of the MOS devices and ActiveX controls that you do <u>not</u> want to be visible from the group's **Media** icon rover.
Office Document Path	Network folder where users can view non-ENPS documents and import selected files into ENPS as new stories. Files with extensions `TXT`, `DOC` and `RTF` can be imported into ENPS as new stories. Files with other extensions, such as `PDF`, `DOCX`, `XLS`, `XLSX`, etc., can be opened but not imported. To use this setting you must first enable the `EnableOfficeDocs` setting in the Global Configuration Options and restart the ENPS NOM. For a folder where this is enabled a new subfolder called **Office Documents** will appear on the folder's rover menu. Selecting this entry lists the files stored in the network location. Double-clicking a file will open it in the appropriate application such as Microsoft Word, Notepad, etc. For `TXT`, `RTF`, and `DOC` files you can click once to highlight a file then choose **Import as story** from the **List Window** rover menu to import the file contents as a new ENPS story. Generally this feature preserves Word formatting but some information such as graphics may not be imported. If a document is dragged to the ENPS trash can it will also be deleted from the network location.
Default Security	Default privilege level for a group. All users not specifically assigned a privilege level in a folder will assume the folder's default privilege level. If no default level is assigned to a folder then the default level of *Viewer* will be used.
Physical Location	Internal note for the location of the group's users.

After you set the group options click *Save*. Exit the ENPS client and restart it to see the new group.

Security Roles

Security roles define privileges for what users with different responsibilities can view and modify in ENPS. A number of these roles, such as Assistant and Director, come pre-defined in ENPS. You can modify the pre-defined roles and you can create new roles to fit the needs of your organization.

Group Managers can assign these settings to common roles in their groups such as Producer, Director or Production Assistant. Security levels can also vary from one group to another: for example, a user may be an Editor in one group and a Producer in another. Group Managers may perform additional fine-tuning for how these roles will act in their groups. Refer to the *ENPS Advanced User's Guide* for more information.

To view security roles select **Fourth Folder rover** → **System Maintenance** → **Security**. Many of the options offer the following four levels of security:

Security Level	Privileges
0 - None	No access to the item.
1- Read Approved	Read approved items only; cannot change or delete items.
2 - Read Any	Read approved and unapproved items; cannot change or delete items.
3 - Read/Write	Read, create, delete and change items.

To create a new security level click *New*. The table below describes each of options you can set for the security profiles:

Field	Description
ID	Unique identifier. Spaces are not allowed.
Description	Name of the security role that will be seen by Group Managers.
Running Order	Add, delete and move stories in a Rundown. Able to delete items from a Newsgathering Grid.
Script	Create and write stories outside of Rundowns and edit story properties.
RO Stories	Edit Rundown stories and their properties, stories outside of Rundowns and their properties, Rundown fields and story slugs.
Approve	Enter final approval for a story, float stories, freeze page numbers, create and lock Rundowns, use on-air timing functions, choose MOS Story Send devices and set the Rundown's *MOS Control Active* property.
Staff	View and modify staff privileges.
NG Grids	Create and move new Newsgathering Grid items.
NG Items	Create new Newsgathering Grid items, edit existing Newsgathering items and their properties such as grid fields, story slug, forms and Story Log data.

NG Approve	Select MOS Story Send devices and make a Newsgathering Grid MOS Control Active.
Maint	View and modify group templates, macros, report layouts, and saved Searches. Can also create standard Rundown and Newsgathering Grid views for other users.
Election	Create races, edit races and enter election results into ENPS Stats.
Write Archives	Write to archives in Rundowns and Newsgathering Grids.
Approval Extensions	Specifies which Approval Extension fields users with this level of access can select/deselect. Use of this feature requires enabling EnforceSecurityLevels in the Global Configuration Options. Refer to page 84 for more information.

If the Primary Server you are working on is not your organization's Central Server open NOM Maintenance at select **Window → Synchronization**. Click *Sync Now.* Then open the NOM and select **File → Reload Global tables**.

Pre-Set Roles

The following table provides a summary of each of the security profiles and description of each one:

Role	Description
Guest	Create stories outside of Rundowns only.
Viewer	Create stories outside of Rundowns. Read Rundown items but cannot change or delete items in Rundowns or Newsgathering Grids. This is the default setting for all users until another setting is specified.
Superviewer	Read items in Rundowns and Newsgathering Grids but unable to change them.
Intern	Create and modify stories outside of Rundowns but cannot modify items in Rundowns or Newsgathering Grids.
Desk Ideas	Modify stories outside of Rundowns but not stories listed in a Rundown. Create and modify items in Newsgathering Grids.
Writer	Modify stories in Rundowns. Can create and modify items in Newsgathering Grids.
Desk	Create Rundowns and Newsgathering Grids; read and modify any story in either. Approve items in Newsgathering Grids but not in Rundowns.
Assistant	Read any loose stories but can only modify stories in a Rundown; can read Newsgathering Grid items but cannot modify them.
CGMaint	Modify stories in a Rundown but cannot modify Newsgathering Grid items; can read any items in both, provides folder maintenance privileges like creating

	report templates.
Director	Cannot create Rundowns or Newsgathering Grids, can read any item in both but can only modify items in a Newsgathering Grid.
Producer	Create Rundowns and Newsgathering Grids, modify any items in either, and approve items in either one.
Manager	Highest group security level with all of the Producer privileges plus folder maintenance options like modifying report templates, and ability to modify staff privileges within the group. Only a small number of users in the group should have this privilege level. This level is required to complete many of the tasks described in this guide.

Default Settings Profiles

Once you have completed the instructions above to create or modify the security roles at your site you can set the default settings for those security levels. You can use Default Settings Profiles to pre-set the personal, print, macro and Search settings for those profiles. If you want to select certain settings for those users, Default Settings Profiles saves you the work of defining a number of settings on a user-by-user basis. Users can still change their settings to suit their individual needs.

Group Managers can also use this feature at group level by following the instructions in the *ENPS Advanced User's Guide*.

Complete the following settings to create and apply Default Settings Profiles:

1. To enable the site-wide User Profiles enable the settings `DefSettings` in `ENPS.INI` and the Global Configuration option `CENTRALPRIV`, then restart the ENPS client.

2. To modify user profiles select **Fourth Folder rover** → **Default Settings Profiles**.
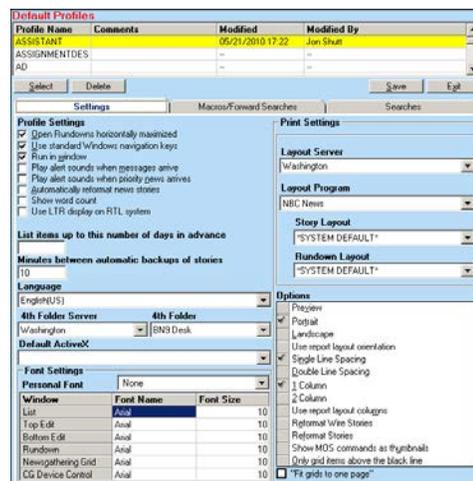
3. To set your preferences highlight a profile such as "Guest" then click *Select*. Make any changes to the preferences, including fonts, fourth folder choice, default ActiveX control, macros, forward searches, or regular searches. Click *Save* when you are finished making your selections.

4. Click *Save* then restart ENPS for your changes to take effect.

Security Profiles

Once you have defined security roles and created groups for your site you may want to define Security Profiles which define different security roles for different groups such as Guest in one group, Viewer in another group and so on.

Complete the following steps to define a Security Profile:

1. Select **Fourth Folder rover → Security Profiles**.

Security Profiles			
NOTE: The first program in each profile is assumed to be the home program			
Profile	Server	Program	Security
Regina Writers	Washington	BNC Test	
	Washington	Election	Super Viewer

2. To start a new profile click in the Profile column and click *New*. The new entry will be displayed at the bottom of the column. Enter a Profile name and Server name. The first Program entry should reflect the user's most often-used, or "home", group. Then in the Security column select the Security role that the user should have in that group.

   To define another group for the profile click in the Server column and click *New*. Once you have defined all of the security roles for the appropriate groups click *Save* to store your changes.

3. To apply a security profile to a user select **Fourth Folder rover → System Maintenance → Staff**. Select a user name then click *Show security*.

Security			
Settings shown are those for Mark Petruzzini. Any changes made will apply to all selected staff members.			
Profile	Server	Program	Security
Test Manager	Washington	Election	Viewer (Default)
Ad-hoc			

The Profile column lists the Security Profiles that were defined in the Security Profiles screen. To add an additional Profile click *New*. When you select a Profile, Program and Security entries will be filled in automatically.

You can also create an *Ad-hoc* entry to manually define the Security role that you want to define for a particular Program group.

Verify Clients with MAC Addresses

You may opt to maintain a list of MAC addresses for workstations and devices which are eligible to connect to ENPS. This provides an extra layer of security apart from the authentication through a Windows username and password.

You can use two methods to build the MAC address table:

- Build your MAC address list automatically by first installing ENPS on all of the workstations and devices at your site. Each time an ENPS client connects to the Primary Server the `G_MACS.NEW` file is updated with the MAC address of that workstation or device. This file is located in `\COMMON\G_SUPPORT` on the ENPS `WORK` drive. To use the MAC addresses stored in this file replace the contents of the file `G_MACS` with `G_MACS.NEW`.

- You can manually create an entry for each entry in the MAC address table described below.

Regardless of which method you choose, remember that any time a network card is added or removed from a workstation you must manually change that entry in the MAC address table. If a workstation or device is not listed in the MAC Address table it will be denied access to ENPS.

To view the MAC address table open the ENPS client. Open **Fourth Folder rover** → **System Maintenance** → **MAC Addresses**.

Property	Definition
ID **This is a required field**.	MAC Address of the network adapter, e.g. `000123A2BCDE`. To obtain a workstation's MAC address click on the ENPS logo in the upper left-hand corner of the ENPS client on that workstation or open the command prompt and enter `IPCONFIG –ALL`
Server **This is a required field**.	Primary or Server name such as `APENPS01`.
AcctCode **This is a required field**.	Internal accounting code. If you are not using this field enter `0001`.
Active	Checkbox to indicate whether this network address has access to ENPS. If this box is not checked the workstation is explicitly prohibited from accessing ENPS.
Free, Property ID, Location, Charge Code, Department, Notes	Fields used to store descriptive information about the device or workstation.
Monitor	Monitor information on client workstation. To enable monitoring for the selected MAC address. Make sure the *Active* box is checked. You will have to enter something in the "AcctCode" box before you will be allowed to save this file. This can be anything. Restart the NOM on the ENPS server. Use a text editor such as Notepad to open `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI`. In the `[ENPS]` section add the setting `CtrlAlt=1` then restart the client on the designated workstation. Press `Ctrl+Alt+M` to open a window displaying statistics with an option to print a summary. date/time, action, details, and elapsed time (in seconds, accurate to .001 seconds) are shown. The following functions are monitored: • Logins • Opening a story • Opening an agency news wire item • Displaying an audio/video object • Opening a folder list

	• Searches • Updating a Rundown • Messaging The log will be cleared each time the ENPS client is restarted.
StartDate	Date when access begins.
Private Channels	Semicolon delimited list of ENPS servers for which the client should open private channels. Refer to "Private Channels" on page 112 for instructions on how to set up private channels.
Expires	Date on which access will be terminated.

Chapter 13
Client Features

This section will show you how to set up important features in ENPS including:

- **My ENPS** provides users with an overview of wires and local content.
- **Web Searches** extends searches to the Web.
- **News Ticker** creates a scrolling ticker from the Rundown.
- **Follow Me Messaging** lets users forward their top-line messages to a cell phone or wireless device while they are away from their desk.

My ENPS

My ENPS gives users an overview of wire stories and local content by adding an icon to the ENPS desktop. Refer to the *ENPS Basic User's Guide* for more information. To enable My ENPS complete the following steps:

1. Select **Fourth Folder rover** → **System Maintenance** → **Global Configuration Options**. Add the setting `MyENPS=1`.

2. Restart the ENPS client.

3. To allow My ENPS to launch automatically on startup you need to enable the Top Story Server. Use a text editor such as Notepad to open `\NOM\NOM.INI` on the ENPS `WORK` drive. In the `[Watch]` section add the line `TopStories=1`.

4. Open the NWP. Select the *Configuration* window and select the **General** tab. Check *Process Top Stories*. The NOM send updates to the Top Story Server through direct UDP packets on port 11800. This port can be changed by adding the `RemotePortTSS` setting to the `[NOM]` section of the `\NOM\NOM.INI` on the ENPS `WORK` drive.

5. Complete this step for each wire you want to appear in user's My ENPS Top Stories list. Select the wire from the **Window** menu. At the bottom of the window uncheck the *Active* checkbox if it is selected, select the *Process top stories* checkbox then check the *Active* checkbox to re-activate the wire.

6. Restart the NOM.

Excluding Categories

It is possible to exclude certain categories of stories from being sent to the Top Stories Server, even if the news wire is configured for Top Stories Server processing. To set the exclusion, add the following entry to `\NWP\NWP.INI` on the ENPS `WORK` drive:

```
[TOPSTORIES]
ExcludedCategories=1;9;10;13;91;92;101;102;104
```

with the numbers representing NWP category numbers. Stories you might consider not sending to Top Story Server would be routine weather stories, lottery results or non-news advisories.

Web Searches

Web Searches enable users to extend the capability of ENPS Search to the Internet. To set up these features, select **Fourth Folder rover → System Maintenance → Web Search Engines**.
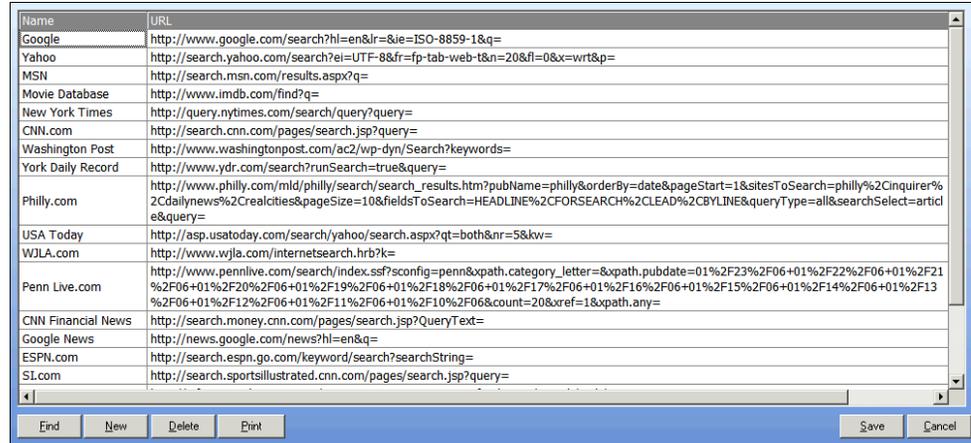
Name	URL
Google	http://www.google.com/search?hl=en&lr=&ie=ISO-8859-1&q=
Yahoo	http://search.yahoo.com/search?ei=UTF-8&fr=fp-tab-web-t&n=20&fl=0&x=wrt&p=
MSN	http://search.msn.com/results.aspx?q=
Movie Database	http://www.imdb.com/find?q=
New York Times	http://query.nytimes.com/search/query?query=
CNN.com	http://search.cnn.com/pages/search.jsp?query=
Washington Post	http://www.washingtonpost.com/ac2/wp-dyn/Search?keywords=
York Daily Record	http://www.ydr.com/search?runSearch=true&query=
Philly.com	http://www.philly.com/mld/philly/search/search_results.htm?pubName=philly&orderBy=date&pageStart=1&sitesToSearch=philly%2Cinquirer%2Cdailynews%2Crealcities&pageSize=10&fieldsToSearch=HEADLINE%2CFORSEARCH%2CLEAD%2CBYLINE&queryType=all&searchSelect=article&query=
USA Today	http://asp.usatoday.com/search/yahoo/search.aspx?qt=both&nr=5&kw=
WJLA.com	http://www.wjla.com/internetsearch.hrb?k=
Penn Live.com	http://www.pennlive.com/search/index.ssf?sconfig=penn&xpath.category_letter=&xpath.pubdate=01%2F23%2F06+01%2F22%2F06+01%2F21%2F06+01%2F20%2F06+01%2F19%2F06+01%2F18%2F06+01%2F17%2F06+01%2F16%2F06+01%2F15%2F06+01%2F14%2F06+01%2F13%2F06+01%2F12%2F06+01%2F11%2F06+01%2F10%2F06&count=20&xref=1&xpath.any=
CNN Financial News	http://search.money.cnn.com/pages/search.jsp?QueryText=
Google News	http://news.google.com/news?hl=en&q=
ESPN.com	http://search.espn.go.com/keyword/search?searchString=
SI.com	http://search.sportsillustrated.cnn.com/pages/search.jsp?query=

| Find | New | Delete | Print | | Save | Cancel |

A URL you use must allow you to enter your query text at the end of the string. For example, to create a Yahoo search string you would enter:

```
http://search.yahoo.com/search?ei=UTF-8&fr=fp-tab-web-
t&n=20&fl=0&x=wrt&p=
```

You can test a URL to see if it will works as a Web Search. Paste the URL into your Web browser then enter search terms at the end of the string. If the Website is able to process your query successfully the query string will work in ENPS.

News Tickers

Users create a scrolling news ticker directly from an ENPS Rundown if your site uses one of the following CGs:

- Pinnacle's Deko family
- Chyron Codi
- Chyron iNFiNiT! family including MAX! and MAXINE! with Chyron serial crawl enabled

To use this functionality your site must subscribe to the AP Network News Transfer Protocol (NNTP) headlines feed. Complete the following steps to enable Rundowns to generate news tickers.

1. On the ENPS WORK drive use a text editor such as Notepad to open \NWP\ NWP.INI. Add the line NNTP=1 to the [NWP] section.

2. Restart the NWP. When it opens you will see the NNTP Ticker Feed window. You may enter a news server name or IP address, a username and password. You can also select whether the target server requires a logon.

```
NNTP Ticker Feed                                                    _ □ X
Iraq Governing Council Disbands; Interim Gov't Will Soon Negotiate Status of U.S.-Led Forces ▲
Judge Rules Partial-Birth Abortion Ban Act Unconstitutional, Says Measure Blocks Right to Choose
Scott Peterson's Murder Trial Begins With Opening Statements About Victim Disappearing in 2002
President Bush Welcomes New Iraq Government, Says Move May Be Accompanied by Rise in Violence
U.S. Says Papers Show Terror Suspect Jose Padilla Shought to Blow Up Hotels, Apartment Buildings
Mel Karmazin Resigns As Viacom President; Tom Freston and Leslie Moonves Replace Him
China Reportedly Approves Britney Spears' Tour, but Officials Worried About Racy Outfits
'Triskaidekaphobia' Among Words Kicking Off First Round of 77th Scripps National Spelling Bee
Stocks Fall on Rising Oil Prices Despite Surge in Construction and Manufacturing
Serena and Venus Williams Beaten at French Open by Jennifer Capriati and Anastasia Myskina
Stocks Fall on Rising Oil Prices
Karmazin Resigns As President of Viacom
Oil Prices Climb After Fatal Saudi Attack
Manufacturing Index Improves in May
Naimi: OPEC Will Try to Ensure Oil Supply
Fiat Names Sergio Marchionne Its New CEO
Former HealthSouth Exec Gets Probation
Accenture Wins $10B Border Security Deal
Pimco to Settle N.J. Market-Timing Charges
Adecco Releases Long-Delayed Results                                 ▼
  More    ☑ Active  Status: 6/4/2004 10:08:18 AM ap.online.headlines.entertainment updated   ⚡
```

3. Select the *Active* checkbox. The application will download a list of available news groups such as `ap.online.headlines.us`. Select the categories you want to add then click the *Add* button to add them to the category list. You may also add a shorter, easier to recognize name for each category.

4. Once the NWP configuration is complete, click *Active*, and the application will begin downloading headline content.

5. Use a text editor such as Notepad to open `\NOM\NOM.INI` on the ENPS `WORK` drive and add the setting `RefreshMax=X` to the `[TopStories]` section where `X` is the number of stories at which the TSS will stop refreshing the Top Stories List (the default is 500). For example, if you set `RefreshMax=25` and the total number of stories is 26, the TSS will not refresh the list. If you do not want to refresh the list at all, set `RefreshMax=1`.

6. Because tickers use crawls which are different than normal ENPS CG templates, you must use a text editor such as Notepad to enter the CG information directly into the `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI` on the ENPS client.

   Add the following section to the `ENPS.INI`:

```
[TickerCG]
;for CG output (if CG=1 in ENPS section above)
;for Chyron serial crawl
;CG=Infinit!;NTSC;COM1:9600,n,8,1;0;
;for Pinnacle Deko Intelligent Interface commands
;CG=Deko;NTSC;COM1:9600,n,8,1;0;5000
;for Chyron Codi commands
;CG=Codi;NTSC;COM3:9600,n,8,1;1000
Timeout=5000
Test=0
Retries=1
Trace=0
DateFormat=h:nn am/pm

;Pinnacle Deko specific
;CG Directories
;CGCurrentDir=C:\DEKO
;CG BasePage
;BasePage=C:\DEKO\CRAWL.DKO
```

```
;Chyron Codi specific
CodiPosition=400
CodiSpeed=2
CodiFont=1
CodiFontColor=1
CodiBackgroundTopColor=200,200,200
CodiBackgroundBottomColor=50,50,50
CodiBackgroundTopPosition=200
CodiBackgroundBottomPosition=256
```

Locate the section of lines for the CG you are using and remove the semi-colon from the beginning of each line that contains an "=" to make that line active. Make sure that all of the settings are correct for your CG, including `BasePage` and `CGCurrentDir` for Pinnacle Deko and communications parameters such as baud rates, stop bits, and parity. Refer to "Character Generators" on page 139 for more information on how these parameters are formatted.

Users should refer to *ENPS Advanced User's Guide* for instructions on how to create news tickers.

Follow-Me Messaging

Follow-Me Messaging gives users the ability to forward their incoming top-line messages to a cell phone or wireless device while they are away from their desk.

Part 1: Set up the Server

The Follow-Me Messaging server must be a different machine than the ENPS server. You must install the Follow-Me server application on a POP mail server machine, running Windows 2003 Server. Install all Windows Updates and security patches before you begin the installation process.

1. Download the latest the latest version of the .NET Framework Redistributable Package from `http://msdn.microsoft.com/netframework/ downloads`. Install the .NET Framework on the server that will host the Messaging Gateway. Reboot the machine when the installation is complete.

2. Check to see if the SMTP service is installed. To do this open the Control Panel and select *Add/Remove Programs*. On the left hand side of the window, click **Add/Remove Windows Components**. Click **Application Server** and then click *Details*. Click **Internet Information Services (IIS)** and then click *Details*. The *SMTP Service* checkbox should be selected. Also make sure ASP.net is installed

3. Open Computer Management and verify that ASP.net State Service is running set to startup automatically. Expand the menu below Services and Applications, click on *Services* and then double-click *ASP.net State Service*. The dropdown box for *Startup type* should be set to "Automatic."

    Expand the menu underneath Services and Applications. Check to make sure that *Default SMTP Virtual Server* is selected under Internet Information Services. If you want to make sure your SMTP server is listening, go to the command line and enter `netstat -an`. At the beginning of list that appears you should see `0.0.0.0:25` with a status of "listening"."

4. Download and install MDAC v2.8. This package can be found at the Microsoft download site http://www.microsoft.com/downloads.

5. Make sure ASP is installed. It is also recommended that you verify ASP is running in Computer Management.

6. Download and install `ENPSMsgGatewayInstaller.msi`. If you need access to the ENPS download page send an e-mail to info@enps.com.

   The installation program will prompt you for the following information:

   - Number of hours the Messaging Gateway should wait for reply from an e-mail. If an email message does not arrive within this number of hours after it was sent then it will be purged.
   - Domain of the e-mail address used for your Messaging Gateway. Enter the domain name of the ENPS Messaging Gateway e-mail address, e.g. `ENPSMsgGateway.com`.
   - ENPS Central Server. If you are only using one Primary Server that is your Central Server.

7. Reboot when you are finished running the installer.

8. From the Control Panel open **Administrative Tools** and click *Services.* Locate the ENPS Messaging Gateway and make sure its status is set to *Started.*

9. From the `\NOM` directory, run `MAINT.EXE` and synchronize with the Central Server, or Primary Server, depending on your network configuration.

Part 2: Configuration Settings

1. Start ENPS. Select **Fourth Folder rover → System Maintenance → Global Configuration Options**. Add the value `MessageGateway=1`.

2. Select **Fourth Folder rover → System Maintenance → MOS Configuration**. Click *New* and create an entry with the ID `ENPSMsgGateway.MOS` and the IP address for the Applications Server where the MsgGateway resides. The ID is case-sensitive.

   Restart the NOM and the ENPS client for changes to take effect.

3. Select **Fourth Folder rover → System Maintenance → Messaging Gateway Devices**. This table lets you configure a list of mobile device names and descriptions that will be supported by your enterprise. Your table may have the following settings:

Device	Description
MOB	Mobile phone
PDA	Personal digital assistant

4. For ENPS top line messages to be properly interpreted by the devices you have configured, ENPS ships with XSL transforms that converts a user message to a format that is readable by the device. Select **Fourth Folder rover → System Maintenance → Messaging Gateway Transforms**. Select the ID of the device you want to configure, the Message Type (Assignment, Contact, Story, or Topline) and then the name of the transform you wish to use:

Mobile Phone Transforms	Description
Assignments	mobAssignments.xsl
Contacts	mobContact.xsl

Stories	mobScript.xsl
Topline	mobTopLine.xsl
PDA Transforms	**Description**
Assignments	pdaAssignments.xsl
Contacts	pdaContact.xsl
Stories	pdaScript.xsl
Topline	pdaTopLine.xsl

All of the ENPS fields called in standard transforms are marked as Rundown **Story Send fields** in the ENPS Fields. To check this, select **Fourth Folder Rover → System Maintenance → {Enterprise} Fields**. If additional fields are required, they must be added in this screen and they must be designated for MOS Story Send output. Note that custom transforms may be required to add these fields to the standard output provided by AP, and writing and support of those transforms is the responsibility of the news organization.

5. Select **Fourth Folder rover → System Maintenance → Staff** and highlight a user name. Click the *Show devices* button. From this screen you can select a device and its unique address for messages to get forwarded. This can be an e-mail address or a mobile phone's unique identifying text messaging address, such as John_Smith@555.1212. ENPS users will be able to configure which devices to send messages, and the time ranges in which to send them to those devices.

Part 3: Send a Test Message to a Mobile Device

Once you have configured a user's Follow-Me messaging settings, make sure that user is not logged in. Then, in the ENPS client, select **Mail rover → Send** and send a Top Line Message to that user. If the message is transmitted to that user's device, you have properly configured Follow-Me messaging.

Launch External Applications

Create a workstation-specific .INI file with your user ID such as JOHNDOE.INI and place it in the Windows directory. To launch other applications, add the following lines to the .INI, replacing the paths listed below with paths to the desired applications. This will determine which external applications may be launched from within the ENPS client.

The text to the left of each equal sign appears to the user from Personal Folder rover, and the executable command follows to the right:

```
[Shell]
Word="C:\PROGRAM FILES\OFFICE\WINWORD\WINWORD.EXE"
Excel="C:\PROGRAM FILES\OFFICE\EXCEL\EXCEL.EXE"
Calculator="C:\WINDOWS\SYSTEM32\CALC.EXE"
```

The macro to launch an application: %2o{Right}~

This will launch the first application in your list, WINWORD.EXE. To launch the second application in the list, add {DOWN 1} before the ~ character, such as: %2o{Right}{DOWN 1}~ To launch the third application, add {DOWN 2}, and so on.

Enabling Clients to Publish to Social Media

ENPS clients can be permissioned to publish updates to social media. This functionality is enabled individually by workstation by completing the steps below. Users should refer to the *ENPS Basic User's Guide* for information on how to use social media features.

1. Download the Social Media installation files from the ENPS download site. If you need a link for the ENPS download site send a request to `info@enps.com` with your name and the name of your organization.

2. Copy the ENPSIO executable to the client workstation where you want to install the functionality. Make sure ENPS is closed on the client workstation then run the `.EXE`.

3. On the Primary Server open the ENPS client and select **Fourth folder rover → System Maintenance → Internet Output Accounts**.
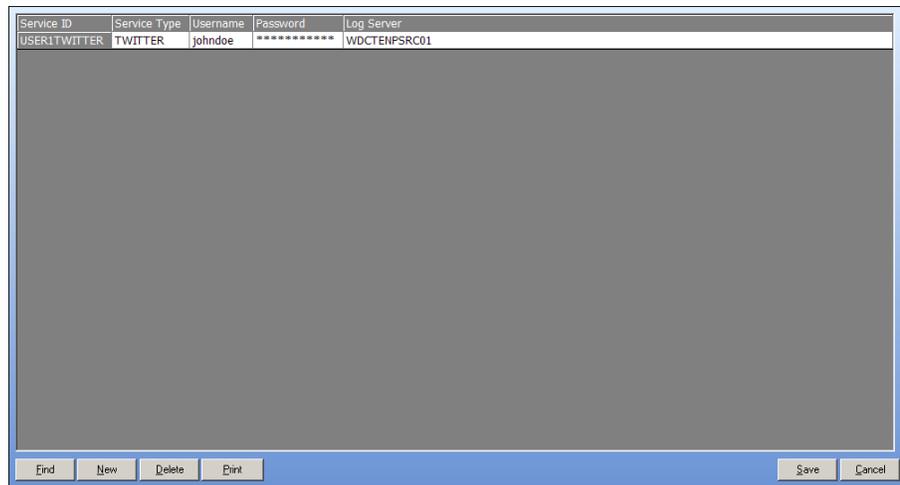
Enter the details for the social media accounts as follows:

Field	Description
Service ID	Login name for the social media account. If there are spaces or punctuation in the account name, omit them here.
Service Type	`TWITTER` or `FACEBOOK` in upper-case.
Username	For Twitter accounts enter the user ID for the account. For Facebook accounts, enter the name of the page including any spaces that might exist in the name, e.g. `News Watch 17`.
Password	Leave this entry blank. You will get a security token to enter in this field once you complete the authentication process.
Log Server	ENPS server to which the account's history logs will be written. This is usually the Primary Server.

Repeat these steps for each account you wish to enable, then click *Save* to apply your changes. Shut down your ENPS client.

4. If the Primary Server you are working on is not your organization's Central Server you must synchronize the servers. Open NOM Maintenance and select **Window → Synchronization**. Click *Sync Now.*

5. To authorize ENPS users to publish to social media, re-launch the ENPS client and select **Fourth folder rover → System Maintenance → Staff**. In the **Internet Accounts** column, grant each user publishing rights to the appropriate accounts. The first time you perform this step you must also enable access for your System Administrator account. Click *Save* to apply your changes.

6. If the Primary Server you are working on is not your organization's Central Server you need to synchronize the servers again. Open NOM Maintenance and select **Window → Synchronization**. Click *Sync Now.*

7. Restart the ENPS client.

Authorizing ENPS to Publish to Twitter

a. Select **Messaging rover → Social Media**. Click on a Twitter account name, enter an update into the message box, and click *Send*. Note that this update will be published to your Twitter feed. An authorization window will appear with a Twitter URL in it.

b. Copy the URL and paste it into your browser. Log in to Twitter and confirm that you want to give ENPS access to your Twitter account. Twitter will then provide a pass code. Paste that code into the field that displays the authentication URL.

c. A second window will appear with a security token. Copy the token.

d. Select **Fourth folder rover → System Maintenance → Internet Output Accounts**. Paste the token in the **Account Password** field for the appropriate **Service ID**. You only need to perform this authorization once for each Twitter account, even if the account's password changes.

Authorizing ENPS to Publish to Facebook

a Restart the ENPS client on the Primary Server and select **Messaging → Social Media**. Click on a Facebook page, enter an update into the Status box, and click *Share*. Note that this update will be published to the Facebook page.

b. A Facebook login page will appear in the lower-half of the control; you may need to display the control full-screen within ENPS to see it. Log in using an account authorized to manage your Facebook page and confirm that you want to give your ENPS system authorization to publish to your page.

c. A pop-up window will appear with an authorization token. Copy the token to the clipboard.

d. Select **Fourth folder rover → System Maintenance → Internet Output Accounts** and paste the token into the **Password** field. You only need to perform this authorization once for each Facebook account, even if the account's password changes. Click *Save* and close the ENPS client.

7. Once authorization is complete once again open NOM Maintenance. Select **Window → Synchronization** and click *Sync Now*. Restart both the NOM and NOM Maintenance programs.

8. If your site does not use English as its primary language, the text labels in the social media window can be localized in the ENPS language file. To modify these settings select **Fourth Folder rover → System Maintenance → Language Resources**. Select the proper language file for your clients and make any changes necessary to the **Internet Output** section.

Social Media Activity and Error Logs

- All social media updates sent via ENPS are stored on the server specified in the **Internet Output Accounts** table for each individual account. These logs can be found in the `\COMMON\INTERNETOUT` folder on the server's ENPS `WORK` drive and can also be viewed by selecting a particular account within the social media control in the ENPS client

- If Facebook returns an error during the user's upload process it will be logged to the file `SOCIALMEDIA.LOG` on the client workstation. In Windows XP this file is located in `C:\DOCUMENTS AND SETTINGS\ALL USERS\ENPS` and in Windows 7 it can be found in `C:\PROGRAMDATA\ENPS`.

- Two Global Configuration Settings, `InternetOutLogFiles` and `InternetOutLogSize`, control the number and size of the log files. Refer to "Global Configuration Options" on page 44 for more information about these settings.

Network Settings

This section will show you how to configure networking options for the ENPS servers to communicate with client workstations.

ENPS requires a TCP/IP network to links all of the clients and servers. Client-server requests are carried via TCP streams using User Datagram Protocol (UDP). The NOM uses a UDP application-layer protocol to update client records. ENPS communicate with the NOM via an application-layer protocol on top of TCP/IP and UDP to communicate with the NOM.

Port Assignments

ENPS uses a range of ports beginning with 10501 for TCP and/or UDP messaging. The following ports are used by ENPS:

Port Number	Purpose
10505/10506	Client TCP requests
10507/10508	NOM UDP datagrams
10509	Chat
10510	Private channel TCP
10511	NWP-to-NWP TCP
10512/10513/10517	NWP UDP datagrams
10540, 10541, 10542	MOS communication
10543-10549	Reserved for future MOS use

The NOM sets the remote port to 10507 and then binds 10508. The client sets local port to 10508 and binds 10507.

The NWP sets remote port to 10512 or 10517 and binds 10513. The client sets local port to 10513 and binds 10512. The ENPS client must do a directory scan on the read-only \ENPS share on all ENPS servers. If the client has permission to read files on the \ENPS share then they have domain authentication. The client makes a request via TCP port 139 to the ENPS servers.

Multicasting

By default, the ENPS server uses UDP broadcasts to communicate updates to client workstations. Multicasting is an alternative method of distributing data updates. Multicasting makes communication between the server and clients more efficient by using the network infrastructure to deliver updates only to those client workstations that need them, not to every workstation in a particular subnet. Multicasting eliminates the need for reflectors to individual subnets.

As an added benefit, dial-up and VPN users can now receive dynamic updates from both the NOM and the NWP provided the dial-up or VPN system supports multicasting.

To enable multicasting complete the following steps:

1. Make sure that all of the hardware on the network between the ENPS server and the client workstations is compatible with multicasting.

2. Open the server's `NOM.INI`. In the `[TCPIP]` section verify the setting `Broadcast=1`.

3. Open the server's `NWP.INI`. In the `[NWP]` section verify the setting `Broadcast=1`.

4. Set the `Multicast` and `MulticastAlsoBroadcast` Global Configuration Options. Refer to "Global Configuration Options" on page 44 for a description of these settings.

5. Open the Servers table by selecting **Fourth Folder rover → System Maintenance → Servers.** Enter the **Multicast IP** and **Multicast Port** values for each server.

6. Restart the NOM of the Central Server. This will assign the new `MulticastIP` and `MulticastPort` values to all of the servers across the enterprise as in the example below:

Server Name	MulticastIP	MulticastPort
Server 1	239.0.0.1	10601
Server 2	239.0.0.2	10602
Server 3	239.0.0.3	10603

Although these values are inserted automatically you can use the Global Configuration Options to set different values for individual servers.

Reflectors

If your site does not use multicasting and your ENPS server is on a different subnet than its client workstations you will need to use reflectors to relay information from the server to the client workstations. Reflectors allow users to view real-time updates to wires, Rundowns, Newsgathering Grids and top-line messages.

Typically ENPS servers support at least 10 reflectors. Setting up too many reflectors will cause a delay in real-time updates reaching client workstations. The maximum number of reflectors that can be configured on a server varies with the server's processing speed and workload.

You have two options for setting up reflectors: configure your site's router for directed broadcasts or set up a standalone workstation to run `REFLECT.EXE`.

Option 1: Configure Your Router for Directed Broadcasts

You can configure your site's router to allow directed broadcasts to another network. This is the preferred method for setting up reflectors.

1. The following instructions show you how to set up directed broadcasting on the Cisco IOS. These instructions use Ethernet interface 0 as the LAN interface; you should adjust these steps to fit your site's configuration.

```
conf t
int e0
ip directed-broadcast
end
save
```

2. By default, ENPS sends a maximum socket packet size of 8192. If your site's router requires a different setting use a text editor such as Notepad to open `\NWP\NWP.INI` on your ENPS Work Drive and change the `MaxSocketPacket` setting to the correct value. This value should be set to 1024 when the `Unicode` setting is enabled in `\NWP\NWP.INI` on the ENPS Work Drive.

3. Use a text editor such as Notepad to open `\NOM\NOM.INI` on the ENPS `WORK` drive. Enter the reflector's broadcast IP address on its own line to the `[Reflectors]` section. If the subnet's IP begins with 192.168.1.1 the broadcast IP is 192.168.1.255.

Option 2: Use a Standalone Workstation as a Reflector

The workstation you designate can only be used as a reflector but it is not necessary to use server class hardware. To configure the workstation to be a reflector complete the following steps:

1. Set up a Windows workstation with a TCP/IP connection. The workstation must have static IP address. Log in with an Administrator account.

2. Download `SETUPREF.EXE` from the ENPS download site. If you need a link for the ENPS download site send a request to `info@enps.com` with your name and the name of your organization. When you run the installer it will add the files `REFLECT.EXE` and `REFLECT.INI` to your `C:\Program Files\ENPS` folder.

   Run `REFLECT.EXE` to start the reflector.

3. By default, all data will be reflected. If you want to specify which servers will have their data reflected by you can use the `Servers` setting in the `[Reflect]` section of `REFLECT.INI` as follows:

   ```
   [Reflect]
   Servers=ENPSDESK01;ENPSNEWS01
   ```

   In this example only traffic received from servers `ENPSDESK01` and `ENPSNEWS01` will be reflected.

4. Use a text editor such as Notepad to open `\NOM\NOM.INI` on the ENPS `WORK` drive. Add the reflector's IP addresses to the `[Reflectors]` section, for example:

   ```
   [Reflectors]
   ; Standalone reflector PC in Building A
   10.141.8.15
   ; ENPS client as a UDP reflector
   132.185.158.136
   ```

5. Repeat the previous step with the `\NWP\NWP.INI` on the ENPS `WORK` drive.

To prevent message duplication only one reflector should be active on a given subnet.

If necessary, you can also use this capability to reflect packets directly to machines on certain IP addresses in another subnet. However, serving too many workstations in this manner may degrade server performance.

Dial-up Workstations

Do not add dial-up workstation addresses to the `[Reflectors]` section of `NWP.INI`. Instead, you can enable real-time urgent news wire updates only for dial-up users by adding the IP address of each dial-in workstation to the `[ReflectUrgents]` sections of `NWP.INI`. With this setting urgent items will be transmitted to those workstations but Forward Search alerts will not be available.

VPN Support

There are two types of VPN systems. One is a site to site VPN in which information is transmitted by VPN routers. This is typically used when a branch office or bureau connects to a central office. In this situation reflectors are supported because there is a broadcast address available for the site.

The other type of VPN is a client to server VPN. This is used on laptops in the field. Users connect to a wireless network, dial in and make a point-to-point connection to the main office. In this situation reflectors are <u>not</u> supported.

Datagram Optimization

The NWP uses a queue system for UDP messages. By default, a maximum of 20 UDP datagrams per second are transmitted. To change this value use a text editor such as Notepad to open `\NWP\NWP.INI` on the ENPS Work Drive and enter a new value for `DatagramsPerSecond`.

To optimize this setting for the number of reflectors you are using use following formula: DatagramsPerSecond = rate of stories received at peak * (Number of active reflectors+1). For example, if you expect to receive five stories per second at peak and you have four reflectors this formula would be 5 * (1 + 4) = 25 so you would set the `DatagramsPerSecond` value to 25. If this value is not set high enough UDPs may be delayed.

Private Channels

A workstation with a private channel receives updates from the NOM via guaranteed TCP instead of UDP packets. You can use private channels if a site has trouble connecting to the Primary Server or if you want to have extra assurance that mission-critical workstations such as CG or prompter machines receive updates.

Complete the following steps to create a private channel:

1. Find the MAC address for the workstation you want to connect via private channel by opening the ENPS client and double-clicking the ENPS icon on the top left corner of the screen.

2. Select **Fourth Folder rover → System Maintenance → MAC Addresses**. Click *New* to create a new entry. Enter the following information:

Field	Description
ID	Workstation's MAC address. Because MAC addresses vary for computers accessing via dial-up PPP this field may also contain a list of pre-authorized dial-up IP addresses or IP ranges separated by semicolons.
Server	NetBIOS machine name for the server to which the workstation will connect.
Private	Re-enter the NetBIOS server name. In rare cases when

Channels	updates from multiple servers are required you can enter multiple server names separated by a semicolon. There should be no more than five Private Channels for each pair of Primary and Buddy Servers.
AcctCode	The field cannot be left blank. You can enter a single character such as a period "." or enter a unique number in this field that will help you identify the channel later.
Active	✓

3. Click *Save* and close the table.

4. If the Primary Server you are working on is not your organization's Central Server open NOM Maintenance at select **Window → Synchronization**. Click *Sync Now.* Then open the NOM and select **File → Reload Global tables**.

5. Restart the ENPS client on the private channel workstation.

Workstations set up to work with private channels ignore standard UDP messages. If workstations have IP addresses in ranges also covered by reflectors the reflected messages will be ignored.

If a private channel connection is lost it will be re-established automatically. A dialog box will appear in the client stating that the connection was lost and suggesting that the open items (e.g., Rundowns, stories) be manually refreshed in case updates arrived during the connection loss.

Dial-up Users

ENPS works through most types of network connections including dial-in connections through a 28.8k modem. Full connection access is attained through any TCP/IP compatible transport including dial-up PPP.

Before users connect to the server via dial-up you should make sure the DNS setting for the TCP/IP dial-up adapter is disabled. Open the Control Panel and open the Networking options. Select TCP/IP Dial-Up Adapter and click *Properties*. Click the **DNS Configuration** tab then click *Disable DNS*. Disabling DNS for the Dial-Up Adapter will disable it for all other TCP/IP adapters on the workstation. If another user requires DNS (e.g. when connected directly to the network while on-site), the DNS setting must be re-enabled.

If the Remote Access Service is in the same subnet as the ENPS server, users will not be able to receive Top Line Messages or Urgent wire alerts through a dial-up connection.

Sending and Receiving Wires

This chapter describes how to set up your ENPS to send and receive wires. Wire configuration is done in the News Wire Profiler (NWP) on the Primary Server.

Categories, Providers, and other wire parameters are set in two places: the NWP application on the Primary Server and in the `\NWP\NWP.INI` on the ENPS WORK drive.

Basic Serial Wire

To create a new serial wire open the NWP and select **File → New Wire**.

Choose the appropriate COM port and click *OK*. A new wire window appears. Click *More* for the wire configuration options.

Complete the following fields to create the serial wire:

Field	Description
Provider	Select the name of the wire provider from the pull-down menu.
Baud, Parity, Data and Stop bits	Enter these specifications according to the port specifications.
Buffer	Use the default value of 3174.

Category Map, Format	Settings provided by the wire provider. Non-standard formats are supported via the **Custom** option.
Use default slug	Assign a standard slug for wire stories. To enable this feature select the checkbox then enter the slug in the textbox. This feature is useful if your site ingests wires in a language for which Windows does not have a system codepage.

Wires via FTP

Before you create the wire via FTP follow the instructions in the previous section to create a category for the new wire in \NWP\NWP.INI on the ENPS Work Drive.

1. Create a new section for the category in the format of [Category_???] with a three letter designation for the wire such as [Category_PRN]. In this section you will create mappings for the wire's category codes to the three digit category codes you created in the [Category] section, for example:

```
[Category_STO]
; Default to PR Other Stories
Default=400
; ST Advisories
r=400
t=401
; PR Domestic/Washington
a=401
b=401
```

2. Restart the NWP then select **File → New Wire** and select FTP. When the new wire window appears click *More* to view additional options.

The following table provides an overview of these fields:

Field	Description
Server	NetBIOS name of the FTP server such as `ftp1.prnewswire.com`
Port	Port number specified by the wire provider, usually 21.
PASV	Select this checkbox if Passive transfers should be enabled.
Username, password	FTP server login credentials. In some cases, you may have to enter this in the format of `username@servername` such as `UserID@ftp1.prnewswire.com`.
Directory	In most cases this setting may be left blank. If you are downloading wires from an FTP site with multiple story directories you can optimize this process by creating multiple wires with different target directories. First create one FTP with all of the wire details and select the first directory that you want to capture. Then restart the NWP, and create a new wire using the first FTP wire as the wire source. The new wire will inherit the server and login settings from the first wire.
Codepage	Set the default codepage for your region.
Category Map	Select the Category Map code you created in the `NWP.INI`.
Use default slug	Assign a standard slug for wire stories. To enable this feature select the checkbox then enter the slug in the textbox. This feature is useful if your site ingests wires in a language for which Windows does not have a system codepage.
Extract slug from keyword field	✓

3. Make sure your NWP settings are only active on the Primary Server. If both the Primary and Buddy Servers are attempting to download wire data, it will only be saved to one of them. Since many wires via FTP also have a backup FTP site, you can set the Buddy Server to download wires from the backup.

4. Select the *Active* checkbox to start using the wire.

Wires via E-Mail

The NWP can ingest POP e-mail as a wire feed. This allows reporters without access to an ENPS client to send story text to an e-mail address designated for wires. Incoming e-mail messages will be formatted as if they are regular news wire stories with the text added to each item's slug for easy identification.

The NWP will not ingest e-mail wires when the recipient is part of a CC or BCC address list or one of multiple addresses on the **To**: line; those messages will be deleted.

To enable wires via e-mail open the News Wire Profiler and select **Window** → **Wires via e-mail**. Click the *More* button then click *New* to create *a* new entry. Complete the following fields:

Field	Description
POP3 Server	NetBIOS name of the POP3 mail server. Do not attempt to access mail servers requiring connections through firewalls, SOCKS servers or dial-up connections.
User ID, Password	POP3 mail server's login credentials.
E-mail address	E-mail address that will receive wires via-email.
Provider	EM
Use default slug	Assign a standard slug for wire stories. To enable this feature select the checkbox then enter the slug in the textbox. This feature is useful if your site ingests wires in a language for which Windows does not have a system codepage.
Category, Priority	Assign a category and priority for the e-mail wire.
TopStories	Select if the e-mail wire should appear as part of the Top Story Server in the My ENPS feature. Refer to "My ENPS" on page 100 for more information.
Msgs, Junk	Tracks the total number of messages received and the number of messages marked as "Junk" by the Junk Filter described below.
Junk Filter	E-mail addresses which should have their messages deleted.
Category-based kill, wire-based kill	Select *Category-based* to purge wires according to the wire's `Kill` setting in the `\NWP\NWP.INI` on the ENPS `WORK` drive.
	Select *Wire-based* to enter a specific number of hours and/or days before the wire data is purged from the server.

Select the *Active* checkbox to use the wire.

Wires via AP WebFeeds

Complete the following steps to configure AP WebFeeds as a wire in ENPS:

1. Use a text editor such as Notepad to open `\NWP\NWP.INI` on the ENPS `WORK` drive. In the `[NWP]` section add the entry `Webfeeds=1`. Save and close the file.

2. Close the News Wire Profiler. It will re-open automatically.

3. In the News Wire Profiler select **File** → **New Wire**. Select **WebFeeds** and click *OK.* Click the *More* button to view the wire's configuration settings.
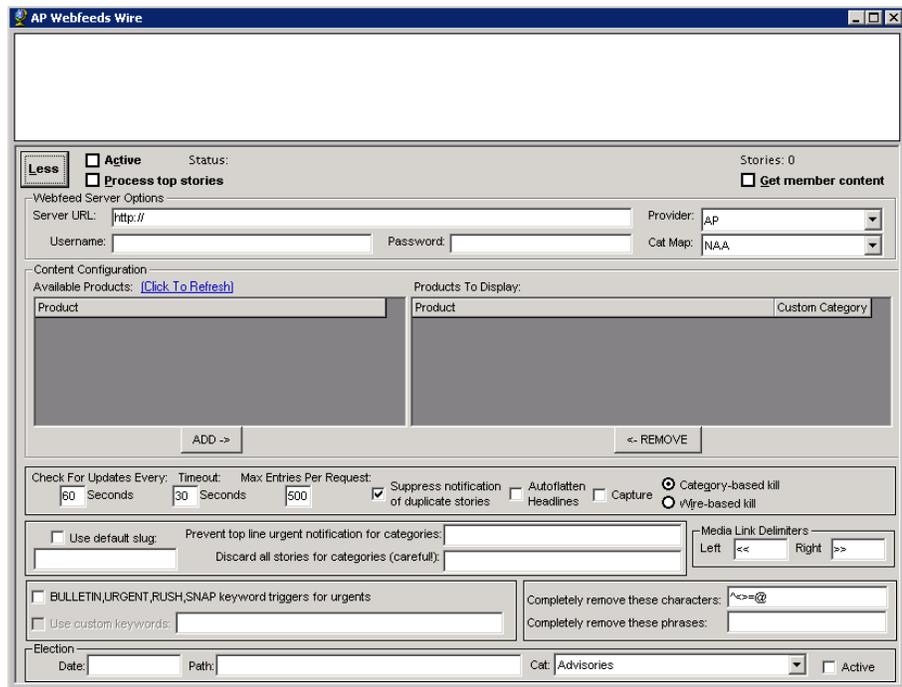
If the *Active* checkbox is selected it must be unchecked before changes can be made to the wire settings.

4. Enter the following information to configure the wire:

Field/Option	Description
Get Member Content	If selected, AP WebFeeds will include content published by your organization.
Username, password	AP WebFeeds login credentials provided by AP.
Provider	Set to `AP` or other custom setting as needed.
Cat Map	Set to `NAA` or other custom setting as needed.

5. Select *Click to Refresh* to update the listing in the **Product** column. To include a product click on it then click *ADD*. The feed will appear in the **Products to Display** column.

    ENPS will display a warning message if too many products are included in a single WebFeeds wire. This is done to avoid URL length restrictions in the query that the NWP sends to the AP WebFeeds server. If you see the warning message, you will either need to remove some products or create a second WebFeeds wire in the NWP. There is no specific limit to the number of products you can add to the WebFeeds wire since the length of the request URL is determined by several variables including the length of the WebFeeds account name and password, certain optional settings in the NWP, and the length of the product codes that were selected.

    Sites that use AP Exchange can save their searches online and they will appear in WebFeeds alongside other WebFeeds content. Note that it may take several minutes between the time the search is configured in AP Exchange and when it is available in the NWP.

6. To create an entry for the product on the **Wires** rover menu in ENPS select the **Custom Category** checkbox next to the product name. AP WebFeeds content will always be displayed in the appropriate standard categories whether this box is selected or not.

Individual stories delivered via AP WebFeeds may include multiple category codes. By default a separate version of the story is saved for each included category (e.g. sports, business, general news) in addition to the WebFeeds **Custom Category** above, if enabled. This behavior can be changed using the `DupeStoryThreshold` setting in the `[NWP]` section of the `NWP.INI`. For more information on this setting refer to "NWP Configuration Settings" on page 65.

7. The settings at the bottom of the window control how the feed is processed by the News Wire Profiler.

Field/Option	Description
Check For Updates Every	Interval at which the ENPS will check for updated data from the AP WebFeeds server.
Timeout	Length of time ENPS will wait for a response from the AP WebFeeds server before it closes the connection.
Max. Entries Per Request	Largest number of stories that may be downloaded at one time. The maximum is 500.
Suppress notification of duplicate stories	By default, ENPS deletes duplicate wires. If this box is checked the News Wire Profiler will not create an entry in `\NWP\NWP.LOG` on the ENPS `WORK` drive when duplicate stories are detected.
Autoflatten Headlines	For AP WebFeeds that contains packages of headlines, such as "Top U.S. Headlines," ENPS can request both the headlines and the individual stories referenced in the package. Enabling this option will increase the amount of network traffic.

If unchecked, ENPS will only request the headline package, not the referenced stories which are contained in other feeds. This is the default behavior. |
| Capture | Save AP WebFeeds XML data to the server. This is useful for troubleshooting problems with the wire. |
| Category-based kill, wire-based kill | Select *Category-based* to purge wires according to the wire's `Kill` setting in the `\NWP\NWP.INI` on the ENPS `WORK` drive.

Select *Wire-based* to enter a specific number of hours and/or days before the wire data is purged from the server. |

Refer to the ENPS Stats Guide section on configuring the election wire for information on how to set the values for the election fields.

8. Click the *Active* checkbox to enable the feed.

Once the feed is enabled users will have the following story property fields available in AP WebFeeds stories:

Property Field	Description
Story Entities	People, places and organizations related to the story, e.g. "Jon Stewart; Helen Mirren; Jennifer Aniston"
Story Subjects	Topics related to the story, e.g. "Award shows; Arts and Entertainment"
Wire Status	Whether the story is usable or unusable.
Wire Release Time	If a story is listed as unusable, the time when a story can be used.

For diagnostic purposes, you can configure the NWP to re-ingest previously captured Webfeeds data from a text file. Open a WebFeeds wire, clear the *Active* checkbox, and press `Ctrl+T`. This can also be used for pre-election testing with ENPS Stats.

Wires in XML Format

To receive wires in XML format you need to create an XSL transform. Complete the following steps:

1. Make a copy of one of the sample XSL transforms in the `\NWP\XSL` folder on the ENPS `WORK` drive. Rename the file with the name of the wire to be ingested.

2. Use a text editor such as Notepad to modify the settings in the XSL according to the formatting of the XML wire.

3. Open `\NWP\NWP.INI` in a text editor. Add the setting `CustomXSLFiles=1` to the `[NWP]` section.

4. Restart the NWP. Select **File → New Wire**. In the **Story Format** menu select the name of the XSL filename that you modified.

   Set the *Story Start* and *Story Stop* codes to match the root tag of the XML file. The root tag is the first tag in the file after the XML header. In the following example the Start Code is `<NewsML` and Story Stop code is `/NewsML>`. Note that the close bracket > and open bracket < are omitted from the Start and Stop codes, respectively.

```
<?xml version="1.0" encoding="utf-8"?>
<NewsML Version="1.2">
  <NewsEnvelope>
    <TransmissionId>1025</TransmissionId>
    <DateAndTime>20090927T103318Z</DateAndTime>
        . . .
  </NewsML>
```

Wires via OPENS

If you are using OPENS you can use the OPENSCG application to output the closings data in XML format to an FTP server. The News Wire Profiler can then import that information into ENPS as a wire. Refer to "For diagnostic purposes,

you can configure the NWP to re-ingest previously captured Webfeeds data from a text file. Open a WebFeeds wire, clear the *Active* checkbox, and press `Ctrl+T`. This can also be used for pre-election testing with ENPS Stats.

Wires in XML Format" above and "Wires via FTP" on page 115 for more information.

Open the NWP and select **File → New Wire**. Select **FTP** and click **OK**. Enter information into the appropriate fields as detailed on page 115. Make sure that you point it to the server that the OPENSCG application is sending information to via FTP. In the **Story Format** select the OPENS XSL transform.

Wires via Twitter

This section will show you how to set up the NWP to ingest Twitter content.

1. Set up a Twitter account for your site. Select the Twitter users you want to follow. You can select additional users later.

2. Use a text editor such as Notepad to open `\NWP\NWP.INI` on the ENPS `WORK` drive.

    a. In the `[NWP]` section add the setting `TwitterFeeds=1`

    b. *Optional.* You may want to create a custom category for your Twitterfeed, especially if your site has multiple Twitter accounts. To create a custom category for the Twitterfeed select a three digit number above 300 equal to the category name in the `[Categories]` section such as:

        `301 = Twitter`

        There is a 30-character limit on the category length.

    c. In the `[Providers]` section add the following entry:

        `TWT=TwitterFeed`

    d. Save and close `NWP.INI`.

3. Close the NWP. It will restart automatically.

4. Select **New → Wire**. For the wire type select `TWITTER`.
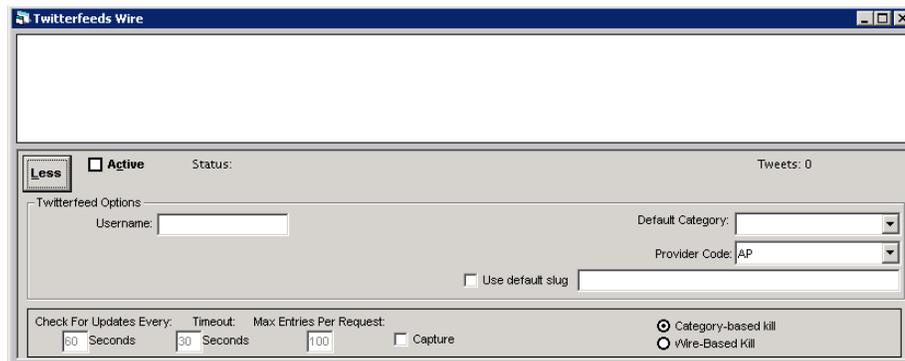
5. Complete the following fields on the Twitterfeeds Wire window:

Field	Description
Username	Twitter login name.

Default Category	If you created a custom category in the `NWP.INI` you can select it here. Otherwise you can select a standard category.
Provider Code	Select `TWITTER`.
Use default slug	Assign a standard slug for wire stories. To enable this feature select the checkbox then enter the slug in the textbox. This feature is useful if your site ingests wires in a language for which Windows does not have a system codepage.
Check for Updates Every	Frequency with which the NWP requests updates from Twitter. Twitter may limit the number of update requests that can be made in an hour from third-party applications like ENPS. This limit is based on the Twitter account used to make the request. Twitter may change the value without warning. You can find more information on Twitter's rate-limiting policies here: `http://dev.twitter.com/pages/rate_limiting_faq` If your ENPS Twitter account is over the limit for the current hour it will be logged in the NWP's **Messages** window. The NWP will not receive new updates from Twitter until the next hour begins.
Timeout	Number of seconds ENPS will wait for a response from the Twitterfeeds server before it closes the connection.
Max. Entries Per Request	Maximum number of wire stories to download when connected.
Capture	Save data to the server. This is useful for troubleshooting problems with the wire. Capture files are saved to the `\NWP` folder on the ENPS `WORK` drive. The filename will be the name of the wire.
Category-based kill, wire-based kill	Select Category-based to purge wires according to the wire's Kill setting in the `\NWP\NWP.INI` on the ENPS `WORK` drive. Select Wire-based to enter a specific number of hours and/or days before the wire data is purged from the server.

6. Select the *Active* checkbox.

7. An authorization window will appear with a Twitter URL in it.

   a. Copy the URL and paste it into your browser.

   b. Log in to Twitter and confirm that you want to give ENPS access to your Twitter account. Copy the authorization code.

   c. Paste the code into the authorization window in the NWP. You only need to perform this authorization once for each Twitter account, even if the account's password changes.

Wires via YouTube Feeds

You can configure the NWP to search YouTube for video on selected topics. A YouTube account is not required to use this feature. Complete the following steps to receive YouTube feeds as a wire:

1. Use a text editor such as Notepad to open `\NWP\NWP.INI` on the ENPS `WORK` drive.

   a. In the `[NWP]` section add the setting `YouTubeFeeds=1`

   b. *Optional.* You may want to create a custom category for your YouTube feed. To create a custom category for the Twitterfeed select a three digit number above 300 equal to the category name in the `[Categories]` section such as:

      `302 = YouTube`

      There is a 30-character limit on the category length.

   c. In the `[Providers]` section add the following entry:

      `YTB=YouTube`

   d. Save and close `NWP.INI`.

2. Close the NWP. It will restart automatically.

3. In the NWP select **New → Wire** and select the YouTube wire.

Complete the following fields:

Field	Description
Search	Search terms for videos. This may be a topic local interest or a story that one of your users is following.
	Audience members can submit videos to your site by adding a unique keyword, e.g. "News7Now" to the metadata for their YouTube videos. To create a wire that displays audience content enter that keyword in this field.
Use default slug	Assign a standard slug for wire stories. To enable this feature select the checkbox then enter the slug in the textbox. This feature is useful if your site ingests wires in a language for which Windows does not have a system codepage.

Safe search options	Level for filtering content that YouTube flagged as explicit.
Default Category	If you created a category mapping for the wire in the `NWP.INI` you can select it here.
Provider Code	Select `YOUTUBE`.
Check for Updates Every	Frequency with which the NWP requests updates from YouTube.
Timeout	Number of seconds ENPS will wait for a response from the YouTube server before it closes the connection.
Max. Entries Per Request	Maximum number of wire stories to download when connected.
Capture	Save data to the server. This is useful for troubleshooting problems with the wire. Capture files are saved to the `\NWP` folder on the ENPS `WORK` drive. The filename will be the name of the wire.
Category-based kill, wire-based kill	Select Category-based to purge wires according to the wire's Kill setting in the `\NWP\NWP.INI` on the ENPS `WORK` drive. Select Wire-based to enter a specific number of hours and/or days before the wire data is purged from the server.

Select the *Active* checkbox to start using the new wire.

YouTube wires include a MOS Item Reference to the video. By default, users will see a JPG preview image in the ENPS media viewer. You can enable an option that will let users double-click the MOS Item Reference to open the YouTube video in a Web browser in the ENPS Editing Window.

To enable this select **Fourth Folder rover → System Maintenance → MOS Configuration** and click *New*. Enter the following settings:

Field	Value
MOS ID	internet.youtube.mos
Description	YouTube
ActiveX	NCWeb.ctrlBrowse
Default Settings	URL=http://www.youtube.com/watch?v=<objID>
MOS Version	2.8.3
LocalDragDrop	Off
Read Only	✓

Click *Save* to apply changes.

Custom Wire Categories

You can create wire categories on a per-server basis that will be displayed from the **Wires** folder rover. Categories are defined in the `\NWP\NWP.INI` on the ENPS `WORK` drive at the bottom of the `[Categories]` section. Here is a breakdown of category numbers from the `NWP.INI`:

```
[Categories]
1=Advisories
2=International Stories;National/International News
4=National Newsminutes/Newswatches;National/International
News
6=Business/Financial News
7=Features/Entertainment
9=Sports Stories;Sports
12=State/Regional Stories;State/Regional News
13=State Newsminutes/Newswatches;State/Regional News
; The following are hard-coded internally and cannot be
changed here.
3=Domestic/Washington Stories;National/International News
5=Politics
10=Farm/Agricultural News
91=Sports Scores;Sports
92=Lottery Results;State/Regional News
102=State/Zone Forecasts;Weather
105=Local/Metro Forecasts;Weather
104=Tropical Weather;Weather
108=Hourly Temperatures;Weather
107=Radar Summaries;Weather
101=Agricultural Weather;Weather
106=Marine/Boating Forecasts;Weather
103=Weather Advisories;Weather
```

You can assign a custom category a code number greater than 400.. The example below creates a category called "Special" with sub-categories for Stocks and Baseball. Note that "S" should appear in the third position and the fifth position is reserved for a semi-colon delimiter.

```
[Categories]
400=Stocks;Special;S;;Stock or Dow
401=Baseball;Special;S;;World Series
```

Move Copy with a Keyword to Wires

If an incoming news wire has a predictable structure you can move stories that contain a specific keyword to its own custom category. To do this complete the following steps:

1. Use a text editor such as Notepad to open `\NWP\NWP.INI` on the ENPS `WORK` drive. Create a custom category mapping for the wire such as:

   ```
   [Category_test]
   <<SPORT>>=9
   ```

   There is a 30-character limit on the category length.

2. Open the NWP and select **File → New**. Complete the following fields:

Field	Value
Story Format	Custom
Category Code Search	✓
Tag, Delimiter, Position	Refer to the example in the following string: `?!?<<SPORT >>?!?` Tag is `?!?` Delimiter is `?!?` Position is 2 because the category name `SPORT` is the second field after the tag.

Dependent Wires

Dependent wires are "virtual" wires created from existing serial wires or FTP feeds. To create a dependent wire open the NWP and select **File → New**. When the wire parameters window appears select *Dependent-Selector Codes* or *Dependent-FTP Directory* from the **Type** dropdown menu. These types are described below.

Dependent-Selector Codes

This option lets you create a virtual wire based on selector codes from another wire. In the **Parent Feed** dropdown menu select the wire from which you want to create a dependent wire. The dependent wire will automatically inherit the connection settings from the parent wire.

Next, enter one or more selector codes separated by commas to specify what will be included in the dependent wire. These can either be entered manually or from a dropdown menu of AP selector codes. A selector code can be added manually even if it is not already in the list. Enter the selector codes in the (Duplicate) field to retain the items in the parent wire. If you enter the selector codes in the (Extract) field the items will be removed from the parent wire.

If the parent wire contains AP selector codes you may also route dependent wire items to specific categories by mapping selector codes to categories. Use a text editor such as Notepad to open `\NWP\NWP.INI` on the ENPS Work Drive. The example below shows a sample mapping:

```
[SIDCategory_SAMPLE]
; Radio Advisories 1
1rad-=1
; Television Advisories 1
1tel-=1
; General Advisories 1
anr--=1
; International 2
1tv--=2
```

This selector code to category mapping can then be selected from the dependent wire from the Selector Category Map dropdown menu.

Dependent-FTP Directory

Use this dependent wire type when you want to create two FTP wires that originate from different folders on the same FTP server and can be accessed

with the same credentials. This will allow the NWP to pull content for both wires without having to disconnect and reconnect to the same server unnecessarily.

Once you have created an NWP wire entry for the first FTP wire create the Dependent-FTP Directory wire. Specify the first FTP wire in the Parent Feed dropdown then enter the directory path for the dependent wire. Complete the other fields as you would for any other type of wire.

Opening a Wire with an ActiveX Plug-In

You can configure a wire to open in an ActiveX plug-in rather than an Editing Window by completing the following steps:

1. Select **Fourth Folder Rover** → **System Maintenance** → **MOS Configuration**.

2. Create an entry in the format of `name.xxx` where `name` is any name you assign and `xxx` matches the wire provider code in the `\NWP\NWP.INI` on the ENPS `WORK` drive. For example, the AP Global MOSID would be `GlobalWire.APG`.

3. In the **ActiveX** column enter the name of the plug-in that you want to associate with this wire.

4. Click *Save* to store your changes and restart the ENPS client.

Publishing Wires

Users can publish stories within your organization as a wire or they may publish stories to an external wire. Internal publishing features can be used to make content like stories available to other users at the site through a category available from the **Wires** folder rover. External publishing makes your site's content available to outside organizations in the same way news agencies like the AP publish news wires.

Note that wire publishing described here is separate from ENPS Publishing which is used to publish stories to cell phones and the Web. Refer to the *ENPS Publishing Guide* for more information.

Complete the following steps to configure a group that can publish wires:

1. Use a text editor such as Notepad to open `\NWP\NWP.INI` on the ENPS `WORK` drive. You first need to create a category for the wire to be published. Add an entry in the `[Categories]` section with the category information with the following format:

   `300=Publish Test;Publishing;I;v`

   - This entry consists of the following parameters separated by semi-colons:
   - A category number between 300 and 400
   - Name of the wire
   - The word `Publishing`
   - `I` to indicate internal publishing and `X` for external publishing. The letter must be upper-case.
   - `v` for the final parameter. In NAA/ANPA format `v` is an advisory.

2. Copy your changes from the `NWP.INI` to the `NWP.INI` on the Buddy Server.

3. In the ENPS client select **Fourth Folder rover** → **System Maintenance** → **Groups**. Complete the instructions in the "Groups" section on page 91 to create a new group. Do not call the new group "Wires." This new group can only be used for publishing.

   To enable the group to publish wires select the group's **Type** column and select *Wire* from the dropdown list.

4. Restart the NWP on the Primary and Buddy Servers.

5. In the NWP on the Primary Server select **Window** → **Publishing Subsystem**.
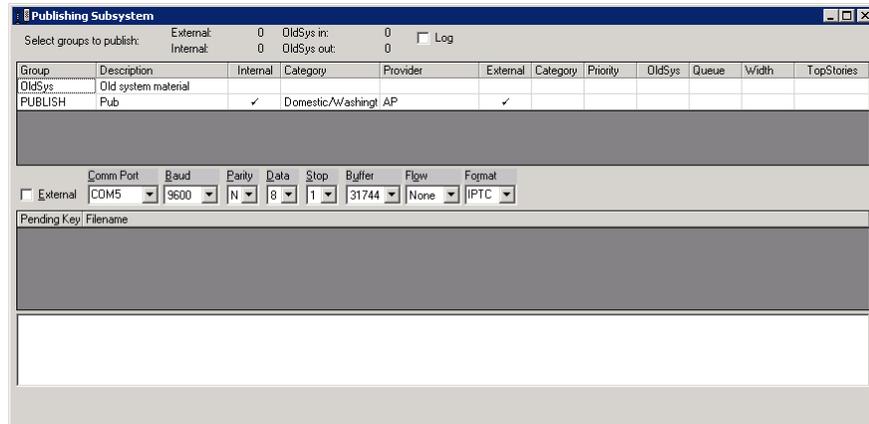
   This window contains a list of groups that are enabled for publishing and a number of properties for each. If your wire is published externally you can select the *External* checkbox and set the wire parameters and *Format* in the lower half of this window.

Users can publish to the new wire-enabled group by dragging stories into the group folder. Once the item is transmitted it will be removed from the folder.

Internal Publishing Features

You can configure internal publishing to publish Rundowns from one group to another. To do this, select **Fourth folder rover** → **System maintenance** → **Groups**. Select the **Parent/Child** column for both the group that will create the Rundown and for the target group that will receive the published Rundown.

Navigate to the group that will publish the Rundown. Select **Group folder rover** → **Group maintenance** → **Group settings**.
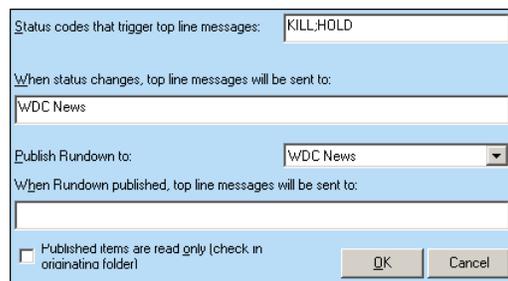
This screen allows you to specify who will be notified if the status of a story changes. You can enter the name of a user or a group. In the **Publish Rundown to:** box you can enter the name of the target group. When you open a Rundown

in that group users will then have the option to publish to the specified target group.

MOS Configuration

The Media Object Server (MOS) protocol is an evolving standard for communication between newsroom computer systems and hardware devices. ENPS supports MOS versions 2.5, 2.6, 2.8, 2.8.1, 2.8.2, 2.8.3 and 3.8.3.

Many sites create a group called `MOS Objects` for storing the site's MOS objects. Refer to "Groups" on page 91 for instructions on how to create a new group.

For the latest information about MOS including an overview of MOS messages refer to `http://www.mosprotocol.com`.

Add a MOS Device or an ActiveX Plug-in

This section shows you how to add MOS-enabled hardware or ActiveX plug-in to ENPS.

MOS-enabled hardware includes video servers, audio servers, still stores, character generators and other types of broadcast hardware.

ActiveX plug-ins are applications that can run from ENPS. They are provided by hardware vendors to allow users view and edit material on that device from ENPS and may include access to routing switchers, ENG antennas, external databases, archives and many other types of newsroom operations. Once installed, the ActiveX plug-in will appear as an option from the **Media Control** rover at the bottom of the ENPS desktop.

To add, modify or remove MOS devices and ActiveX plug-ins select **Fourth folder rover** → **System Maintenance** → **MOS configuration**. The settings in this table are described below:

Setting	Description
ID	A MOS device's unique identifier. If you are configuring MOS-enabled hardware, such as a video server, this ID should match the ID that is configured on the hardware.
	Use the following format when you create a MOS ID:
	`<vendor>.<product>.<site ID>.<enterprise>.<mos>`
	This is called a fully-qualified MOS ID. It is important to use fully-qualified IDs to ensure compatibility between ENPS and MOS devices. An example of a fully-qualified MOS ID is `aveed.server2.camden.wtn.mos`
	If you are configuring an ActiveX plug-in enter the ID provider by the vendor.
	By default, MOS IDs are case-sensitive although this behavior can be changed by disabling the Global Configuration Option `CASESENSITIVEMOS`. Refer to "Global Configuration Options" on page 44 for more information.
Description	Description of the device or ActiveX plug-in. This text will be displayed to users in ENPS menus.

IP	For MOS versions earlier than 3.8.3 this is the IP address of the MOS device.
	For MOS version 3.8.3 or higher this is a URL pointing to the `.ASMX` file on the MOS device.
ActiveX	If you are configuring a hardware device this field may be left blank.
	If you are configuring an ActiveX plug-in this field specifies the name of the plug-in from the Windows Registry such as `NCWeb.ctrlBrowse`.
	Check the vendor's documentation for more information.
Program	Name of the ENPS group in which MOS object messages will be stored. The default group is `System`.
	If you are configuring an ActiveX control that does not connect to a server and which only sends MOS object pointers to ENPS do <u>not</u> select a group.
Default Settings	Parameters that may be required by the ActiveX control. Check the vendor's documentation for more information.
MOS Version	MOS protocol version to use with this device or plug-in: 2.5, 2.6, 2.8, 2.8.1, 2.8.2, 2.8.3, or 3.8.3.
	For users to search MOS devices this field must be set to 2.8.1 or higher and the ENPS server port 10542 must be open.
	If you are using MOS version 3.8.3 or higher you should configure a secure socket connection to the MOS device. Refer to `http://support.microsoft.com/kb/299875` for more information.
	If you leave this field blank ENPS will use the MOS version specified by the `Version` setting in `\NOM\NOM.INI` on the ENPS `WORK` drive.
Local DragDrop	In most configurations this option should be set to *Off* since it can interfere with the mouse control in the plug-in.
Modal UI ActiveX	Run a plug-in in its own window rather than the lower Editing Window. When using plug-ins defined by this field, as opposed to the **Detached ActiveX column**, users are forced to perform an action in the window before they can continue using ENPS. This is required for some plug-ins that require input before other changes are made.
	To enable this feature re-enter the control's name from the **ActiveX** column such as `NCWeb.ctrlBrowse`. Users can open the plug-in by selecting **Editing Window rover → MOS Commands**.
Modal UI Default Settings	If a control name is specified in **Modal UI ActiveX** this field should duplicate the contents of **Default Settings**.
Auto Create	Determines whether Rundowns on this device will able to create MOS objects and/or placeholders for MOS objects automatically.
Username, Password	Credentials sent to the plug-in from ENPS. These settings may be left blank if login authentication is not required.

Read Only	Allow a device to receive messages but not to send them. This is useful for plug-ins like ENPS FAX which should not have any outgoing MOS messages.
Alias	User-friendly name for a MOS device to display instead of the fully-qualified MOS ID. This name will appear in the dropdown boxes for the **Autocreate** and **Object Placeholder Create** columns in Rundowns and Newsgathering Grids.
Story Send	Determines whether a MOS-enabled device can receive MOS StorySend messages. These messages send the entire story including text, production commands and pointers to MOS objects. StorySend messages are often required by prompters and automation systems.
	If this column is not selected only references to objects will be sent to the device.
	Check the vendor's documentation to find out if this setting should be enabled.
RORO Limit	Limit the number of Read-Only Rundowns that can be created in a group. Refer to "Read-Only Rundowns" on page 136 for more information.
Object Type	Select *Audio*, *Still*, or *Video*. This field is for your reference only; it may be left blank.
Object Groups	Name of groups, typically for different shows, into which MOS objects will be sorted. The groups will appear as subfolders of the Program/Group that is selected in the **MOS Configuration** table for a particular device. This allows MOS objects to be routed to different subfolders automatically. Separate each entry with the pipe | character. Users will be able to select the group from the **Object Placeholder Create** column.
Archive Only	Include all of the MOS StorySend messages when a user archives a Rundown or Newsgathering Grid. These messages include the entire body of a story including text, production commands and pointers to MOS objects. This option is useful if organization uses a MOS-enabled Content Management System (CMS).
	If you use this setting make sure the **Story Send** column is also selected. The user can then open the Rundown's properties and select the *MOS Control Active* checkbox then select a MOS device in the **StorySend** column.
Detached ActiveX	To run an ActiveX in its own window copy the name from the **ActiveX** column here. If the ActiveX runs a different plug-in when it is in detached mode enter the control's name from the Windows registry.
Detached Default Settings	Although this is typically the same parameters that are defined for the **Default Settings** column the settings may be different for detached plug-ins. Check the vendor's documentation for more information.

Use Detached	Displays the ActiveX plug-in in a separate window regardless of whether the client has selected to view ActiveX controls separately.
Raw Content	Send all of the content below a Rundown's black line to the MOS device including pointers to MOS objects.
Icons	Select icons to display MOS objects displayed in the List Window. Click ⋯ for a list of choices. You can create your own 16x16 pixel icons in the `\ENPS\BITMAPS\MOS` directory on the server. These images will be copied to client workstations when the client is installed. You can also manually copy 16x16 pixel icons in the `.ICO` or `.BMP` format `to C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\BITMAPS\MOS`. If this folder does not exist you will not be able to change the icons for the MOS device.
Color	Set the color used to display MOS Item References by clicking the ⋯ icon. The numbers displayed represent the color's RGB values.
Export Formatted Text	Determine whether rich text formatting such as bold, underline, and italics will be sent to the device in MOS StorySend messages. This column has a drop-down menu with three choices: • **Off:** Do not include rich text formatting. • **Basic:** Include basic rich text formatting such as bold, italics and underline. Other formatting, such as strikethrough text, will be omitted. • **Extended:** Include all rich text formatting.
Validate MOS Objects	Verify that a MOS object exists when a story is opened or a Rundown's *MOS Control Active* property is selected. If the object is not found the MOS Item Reference will turn grey. Do not enable this setting on devices such as character generators that typically do not send MOS object messages to ENPS.
Block ItemChannel	Ignore channel assignments created by the MOS device. If this option is selected users will need to enter a channel number for every MOS Item Reference in a Rundown.
Status time local	Control how ENPS processes time values in inbound MOS Status messages that do not have a time zone specified. If this option is enabled ENPS will use the same time zone as the ENPS server. If this option is disabled GMT will be used as the time zone.

Configuring ENPS Plug-Ins

This section shows you how to configure the basic plug-in for Internet Explorer and plug-ins for two subscription-based services you can access from with ENPS: AP GraphicsBank and AP PrimeCuts.

Internet Explorer

The following example shows you how to configure the default custom Microsoft Internet Explorer control that ships with ENPS. It can be used as a model for how to implement your own ActiveX controls. These instructions assume that the Microsoft Internet Explorer ActiveX control is installed and registered on the workstation.

To enter the configuration parameters open the ENPS client and select **Fourth folder rover** → **System Maintenance** → **MOS Configuration** and set the following parameters:

Setting	Value
ID	IEXPLORER
Description	Internet Explorer
ActiveX	NCWeb.ctrlBrowse
Default Settings	URL to open as the browser's homepage in the format of `URL=<page address>`, for example: `URL=<http://www.enps.com>` You can hide the browser address bar and/or status bar by adding the following settings to the Default Settings entry, using pipes between settings, for example: `URL=http://www.enps.com|ToolBar=False|StatusBar= False`

All other settings should be left at their default values.

AP PrimeCuts

You must have a subscription to AP PrimeCuts account to use this feature.

ENPS can automatically detect links to AP PrimeCuts audio in incoming AP news wire stories. Such links will be converted to MOS Item References which can be clicked to automatically download the desired file.

Set up the PrimeCuts ActiveX plug-in by selecting **Fourth folder rover** → **System Maintenance** → **MOS Configuration** and enter the following parameters:

Setting	Value
ID	APPC.MOS
Description	AP PrimeCuts
ActiveX	PrimeCuts.PrimeCutsControl
Default Settings	`URL=http://apprimecuts.com/texis/sound/bank /autodownload.bin/+/<objID>?User=<Username> &Pass=<Password>|URLtext=http://apprimecuts .com/texis/sound/bank/results.html?User= <Username>&Pass=<Password>&query=<Cut> &whatfield=F&byrank=0` Do not enter any spaces.
MOS Version	2.8

Local DragDrop	Off
Username, password	Your site's PrimeCuts username and password.
Read Only	✓

All other settings should be left at their default values.

The *ENPS Advanced User's Guide* contains instructions on how to use AP PrimeCuts.

To install the ActiveX, you must run the setup application `SETUPPC.EXE` from the root directory of your Primary Server. Once the installation is complete, clients must be reinstalled to use the ActiveX functionality.

ActiveX Configuration: AP GraphicsBank

You must have an AP GraphicsBank account to use this service. Remember that GraphicsBank accounts are allowed a set number of downloads per month. All downloads after your allocated number of downloads will be charged a fee.

It is recommended that you set up a GraphicsBank account that allows users to only download preview images to prevent unintentional downloads and charges. Contact AP Member Services at 1-800-342-5127 to set up a preview only account.

To install the ActiveX run `SETUPGB.EXE` from the root directory of your Primary Server. You may need to reinstall the ENPS client on workstations that will use this functionality.

To enter the GraphicsBank ActiveX configuration parameters, open the ENPS client and select **Fourth folder rover → System Maintenance → MOS Configuration** and set the following parameters:

Setting	Value
ID	APGB.MOS
Description	AP GraphicsBank
ActiveX	Gbank.GbankControl
Default Settings	`URL=http://gb.ap.org/texis/gb/results.html?` `&User=<Username>&Pass=<Password>&query=` `<GraphicsBankSearch>` Do not enter any spaces.
MOS Version	2.8
Local DragDrop	Off
Username, Password	Your site's GraphicsBank username and password.
Read Only	✓

The *ENPS Advanced User's Guide* contains instructions on how to use the GraphicsBank plug-in.

Read-Only Rundowns

Read-Only Rundowns are used in enterprises where Rundowns are sent via MOS from one ENPS system to another. Making a Rundown Read-Only prevents different groups from making changes to copies of a Rundown and having to reconcile different versions. With a Read-Only Rundown only one master copy of a Rundown can be changed.

Complete the following steps to configure a Read-Only Rundown:

1. On the server that will host the Read-Only Rundown select **Fourth folder rover** → **System Maintenance** → **MOS configuration**. Enter the MOS ID and the IP address of the target server where ENPS will send the Read-Only Rundown. Select the **Story Send** column. Click *Save* to apply your changes.

2. Restart the NOM on the host server.

3. On the target server that will receive the Read-Only Rundown select **Fourth folder rover** → **System Maintenance** → **MOS configuration**. Enter the target server's MOS ID and its IP address. You do not have to select Story Send on the target server. In the **Program** column select the folder where you want the Read-Only Rundowns to be stored. Do not use your site's News or Desk folders. In the RORO Limit specify the maximum number of Read-Only Rundowns that can be stored on the server.

3. Restart the NOM of the target server.

4. On the client for the source NOM create a new Rundown. In the Rundown properties select the target server as a **MOS Story Send** device then select *MOS Control Active*.

The Read-Only Rundown will appear in the folder you configured for the target server.

Setting Up a MOS Repeater

A MOS Repeater is a workstation that re-broadcasts all of the Rundowns on a server that have the *MOS Control Active* property enabled. A typical use for this functionality would be to provide multiple non-linear editing clients with stories from a Rundown that has the *MOS Control Active* property selected so that stories could be still be viewed while users are editing the media.

Complete the following steps to configure a workstation as a MOS Repeater:

1. You cannot use the Primary or Buddy Server as a MOS Repeater. Designate the MOS Repeater workstation with the following minimum specifications:

   - 18 GB free space
   - 512 MB RAM
   - Operating system must be Windows 2000 Server, Windows 2003 Server, Windows 2000 Professional or Windows XP Professional. The operating system must have the latest Service Packs and critical updates from Microsoft installed.

2. Install IIS and create a separate F: called ENPS Work to install the ENPS server applications.

3. Install a copy of the ENPS server applications on the MOS Repeater workstation. Identify the MOS Repeater server as a Primary Server. You also need to enter the machine name of your site's actual Primary Server or

---

Central Server when you are prompted to do so during the installation process.

4. Use a text editor such as Notepad to open `\NOM\NOM.INI` on the ENPS Work Drive. Add or change the following settings to the `[Watch]` section:

```
NOM=1
NWP=0
Maint=1
Extract=0
```

Add or change the following settings to `[Maint]` section:

```
Delete=0
Sync=1
Buddy=0
```

Add or change the following setting to the `[NOM]` section:

```
MOSRepeater=1
```

Restart the Watch application and close the NWP.

5. On a client workstation for your site's ENPS Primary Server select **Fourth Folder rover** → **System Maintenance** → **Servers** and click *Add* to create a new entry with the following parameters:

Setting	Value
ID	MOS Repeater's NetBIOS name.
Description	Description for the MOS Repeater.
MOS	Re-enter the MOS Repeater's NetBIOS name.
IP	MOS Repeater's IP address.
MOS Repeater	✓
MOS Server	Primary Server name from the MOS repeater will receive its MOS StorySend messages

Click *Save* to apply your changes.

6. To set up the targets for a MOS Repeater select **Fourth Folder rover** → **System Maintenance** → **MOS Repeater Targets** and enter the following parameters for each target:

Setting	Value
Target ID	Target machine's NetBIOS name.
Description	Target machine description.
IP	IP address of the repeater target.
Repeater ID	Re-enter target machine name's NetBIOS name.

7. To ensure that the MOS Repeater stays in sync with the NOM, MOS StorySend messages will be numbered coming out of the parent. If the Repeater target receives a message out of the expected order it can request a re-sync for the affected Rundown. To enable this, open the NOM on the Primary Server and select **Windows**→ **MOS**. Check the box *Number roConstruction Messages*. From this screen you can also set the number of

minutes to purge the MOS Repeater's message queue after an editing site logs off.

8. If the Primary Server you are working on is not your organization's Central Server open NOM Maintenance at select **Window → Synchronization**. Click *Sync Now.* Then open the NOM and select **File → Reload Global tables**.

9. Restart the NOM on both the MOS Repeater and the ENPS Primary Server.

Character Generators

This chapter will show you how to setup your character generator in ENPS. The instructions in this chapter apply only to character generators which are connected to ENPS through a serial connection. Character generators that are controlled through a MOS connection are configured through the vendor's ActiveX plug-in.

Supported Character Generators

ENPS CG support includes, but is not limited to, the following CGs:

Manufacturer	Models
Aston	Motif, Ethos, Moto, Red, Blue and Green
Chyron	Duet , Codi, MAX!, MAXINE!, iNFiNiT!,
Pinnacle	Deko, FX Deko (in iNFiNiT! emulation mode)
Pixel Power	Collage in iNFiNiT! emulation mode
Grass Valley	20k, 30k, Graphics Factory and Halo
Inscriber	VMP Studio, CG Supreme, CG Xtreme, Inca CG and Inca Studio. You must have the AutoCGMax option enabled for Inscriber CGs to work with ENPS.

Designate an ENPS client machine as your CG workstation. The CG operator must be able to log into ENPS, select the desired Rundown, and enable CG control from within that Rundown.

When you are connecting the cabling for the CG be sure to follow the manufacturer's instructions. Some vendors have unique cabling configurations as some CGs require pin signals to be reversed at one end to enable hardware flow control.

Refer to "Considerations for Specific Character Generators" on page 141 for more information.

Configuration Settings

To enable a client workstation for CG support use a text editor such as Notepad to open `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI`. In the `[ENPS]` section set `CG=1`.

The `[CG]` section controls the connection parameters for the CG device. The setting `CG` requires the following information separated by semi-colons:

Description	Value
Driver type	Aston, AstonUnicode, Infinit!, Max, Maxine, Dubner, Codi, Duet
Video standard	NTSC, PAL
Serial port settings	<COM PORT>:<Baud>,<Parity>,<Word

	`length>,<Stop bits>`
Machine ID	*Optional.* You can find this value in your character generator's setup program.
Default page	Starting page number in the character generator's that will be used to begin recording. If pages will be preloaded into the Chyron this value will determine the starting page number. The default value is `5000`. If pages are not preloaded leave this value blank
Page number prefix	*Optional.* Character or string to prefix before the page number.

Here are sample connection strings:

```
CG=Aston;PAL;COM1:19200,e,7,1
CG=iNFiNiT!;NTSC;COM1:19200,n,8,1;16;5000
CG=Maxine;NTSC;COM1:19200,n,8,1;16;5000
CG=Max;NTSC;COM1:19200,n,8,1;16;5000
CG=Codi;NTSC;COM1:19200,n,8,1
CG=Dubner;NTSC;COM1:19200,n,8,1;16;;AP
CG=Duet;NTSC;COM1:19200,n,8,1;16;5000
```

To set the CG directory open the ENPS client and select **List Window rover** → **Set CG Directory**.

There are a number of other settings in the `[CG]` section of the `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI` file that control how ENPS works with character generators. Refer to "Client Configuration" on page 71 for more information.

Controlling Multiple Character Generators

There are two methods for controlling multiple CGs:

- Set up multiple ENPS client workstations with each one connected to a different character generator.
- Connect multiple character generators to one machine. The `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI` would require multiple connection strings: one active string and the other connection strings would need to be commented out by adding a semi-colon to beginning of the entry. Every time the CG operator wanted to select a different character generator the `ENPS.INI` would need to be modified.

Copying Templates

If a Folder Manager creates a character generator template that is needed in other groups you can copy the template files on the Primary Server. To copy templates from one group to another one complete the following steps:

1. Open the folder on the Primary Server's ENPS `WORK` drive with the Primary Server name. Select the subdirectory with the name of the group that has the template then open the `\G` sub-folder.

2. Copy the templates to the target group's `\G` sub-folder. If the target group does not have any CG templates you will need to create the `\G` sub-folder.

Considerations for Specific Character Generators

This section lists instructions for specific character generator manufacturers. Check your character generator's documentation or contact the vendor for more information.

Chyron

Keyboard Control

For Chyron character generators that have their own keyboards there are two methods for controlling the device:

- Under PC control the Chyron operator uses the PC keyboard or mouse to control CGs sent to the Chyron's A channel. Once CG control is enabled the operator can move forward or backward through the Rundown. Each CG command encountered within a story will load the appropriate template, fill input fields, and feed the air channel using the defined buffer page.

- Under Chyron keyboard control the Chyron operator pre-loads the entire Rundown using templates within the defined directory on the Chyron. The operator will record the entire newscast as a series of message pages beginning at a single pre-defined starting point. The default value is 5000. This enables the operator to play the CGs in either or both channels or to apply "transform events" to the CGs under manual control. It also allows the operator to use the Next key on the Chyron keyboard to move forward through the newscast. With this option, the operator has full control over fonts, color, kerning and placement.

Tab Fields

All tab field pages must be built using machine fonts, not converted fonts, and tab stops must be set to Auto-Erase. Tab field order is extremely important, and duplicate tab field numbers will create problems. Using the Chyron, it is possible to have two fields incorrectly defined as the same tab stop number, which would disrupt any automated input.

International Characters

To use international characters with the character generator use Notepad to modify `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS`. The settings below show an example of how to use international characters with the Chyron. These settings may not work if they have mapped these accent marks to different keys on the Chyron. Refer to your Chyron documentation for more information.

```
[CG]
CharMap=CG_MAP

[CG_MAP]
; Chyron accents mapping for French.
; The Ï needs to come before other letters in the table
; because of its hex value of 0xCF.
Î=I0x1A;
Ï=I%CF%22;
î=i0x1A;
ï=i%CF%22;
À=A0x92;
Â=A0x1A;
à=a0x92;
```

```
â=a0x1A;
È=E0x92;
Ê=E0x1A;
É=E0x94;
Ë=E%CF%22;
è=e0x92;
ê=e0x1A;
é=e0x94;
ë=e%CF%22;
Ô=O0x1A;
ô=o0x1A;
ó=o0x94;
Ù=U0x92;
Û=U0x1A;
Ü=U%CF%22;
ù=u0x92;
û=u0x1A;
ú=u0x94;
ü=u%CF%22;
Ç=C%CF%3B;
ç=c%CF%3B;
[CG_MAP]

;Chyron accents mapping, Spanish
Í=I0x94;
í=i0x94;
Á=A0x94;
á=a0x94;
É=E0x94;
é=e0x94;
Ó=O0x94;
ó=o0x94;
Ú=U0x94;
Ü=U%CF%22;
ü=u%CF%22;
ú=u0x94;
Ñ=N0x1D;
ñ=n0x1D;
¿=0xBD;
¡=0x4;
[CG_MAP]

;Chyron accents mapping, Portuguese
Í=I0x94;
í=i0x94;
Á=A0x94;
á=a0x94;
ã=a0x1D;
É=E0x94;
é=e0x94;
Ó=O0x94;
ó=o0x94;
õ=o0x1D;
Ú=U0x94;
Ü=U%CF%22;
ü=u%CF%22;
ú=u0x94;
```

```
Ñ=N0x1D;
ñ=n0x1D;
¿=0xBD;
¡=0x4;
```

Pinnacle

If you are using a Pinnacle Deko, it is suggested that you use the iNFiNiT! Driver.
However, if you want to support Unicode output on a Pinnacle Deko use a text
editor such as Notepad to modify `C:\DOCUMENTS AND SETTINGS\ALL`
`USERS\APPLICATION DATA\ENPS\CG.INI` on the CG workstation.

```
[Deko]
Driver=6
```

In the `[CG]` section of the local `C:\DOCUMENTS AND SETTINGS\ALL`
`USERS\APPLICATION DATA\ENPS\ENPS.INI` file, here is an example of how
you would reference the Deko driver:

```
[CG]
CG=Deko;;COM3:19200,N,8,1;1;5000
Preload=0
Timeout=2000
Unicode=1
BigEndian=1
```

Aston

Unicode and ANSI Support

To support a mix of Unicode and ANSI on a number of Aston CGs, including the
Aston Blue use a text editor such as Notepad to add the following lines to
`C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION`
`DATA\ENPS\CG.INI` on the CG workstation:

```
[AstonUnicode]
Driver=7
```

Below is an example of how you would reference the driver in the `[CG]` section:

```
[CG]
CG=AstonUnicode;;COM3:19200,N,8,1;1;5000
Preload=0
Timeout=2000
Unicode=0
```

International Characters

```
[CG_MAP]
; Chyron accents mapping, German
; Character map for inclusion in ENPS.INI for Aston CG
; Windows NT CODE PAGE 850 + Aston Roman/Greek font set
; There is a mapping for every char from 128 to 255 to
; avoid loss of communication following a checksum
; error caused by truncating 8-bit chars to 7-bit.
; Some Unicode currency chars above 255 are included.
; This won't work because ENPS cannot cope with comments
; after the mapping
&H0080=00E1 ;€ Euro. Aston font may not contain character
&H20AC=00E1 ;€ Euro. Aston font may not contain character
&H0081=00AD ;  ☐ dummy map
&H0082=00D3 ;,
```

```
&H0083=00AA ;ƒ
&H0084=00D0 ;„
&H0085=00CC ;…
&H0086=00AC ;†
&H0087=00AD ;‡ - char for many dummy maps
&H0088=005E ;^
&H0089=00AE ;‰
&H008A=013C0053 ;Š
&H008B=00BC ;‹
&H008C=0082 ;Œ
&H008D=00AD ;  □ dummy map
&H008E=013C005A ;Ž
&H008F=00AD ;  □ dummy map
&H0090=00AD ;  □ dummy map
&H0091=00CE ;' - dummy map
&H0092=00CF ;' - dummy map
&H0093=00CE ;"
&H0094=00CF ;"
&H0095=00CA ;•
&H0096=00D4 ;–
&H0097=00D5 ;—
&H0098=007E ;~
&H0099=00B2 ;™
&H009A=013C0073 ;š
&H009B=00BB ;›
&H009C=0083 ;œ
&H009D=00AD ;  □ dummy map
&H009E=013C007A ;ž
&H009F=013B0059 ;Ÿ
&H00A0=00AD ;  - dummy map
&H00A1=00B8 ;¡
&H00A2=00A8 ;¢
&H00A3=00A7 ;£ - Normal kbd £ sign
&H20A4=00A7 ;£ Unicode Pound sign
&H00A4=00AB ;¤
&H00A5=00A9 ;¥
&H00A6=007C ;¦
&H00A7=00CD ;§
&H00A8=00AD ;¨ - dummy map
&H00A0=00B0 ;©
&H00AA=00D8 ;ª
&H00AB=00BA ;«
&H00AC=00DF ;¬
&H00AD=00D1 ;
&H00AE=00B1 ;®
&H00AF=00AD ;¯ - dummy map
&H00B0=00B4 ;°
&H00B1=00D6 ;±
&H00B2=00C7 ;²
&H00B3=00C8 ;³
&H00B4=00OE ;´
&H00B5=018B ;µ
&H00B6=00A7 ;¶
&H00B7=00C9 ;·
&H00B8=00D3 ;¸
&H00B9=00C6 ;¹
&H00BA=00B4 ;º
```

```
&H00BB=00B9 ;»
&H00BC=00BD ;¼
&H00BD=00BE ;½
&H00BE=00BF ;¾
&H00BF=00B7 ;¿
&H00C0=01390041 ;À
&H00C1=01390041 ;Á
&H00C2=013A0041 ;Â
&H00C3=013D0041 ;Ã
&H00C4=013B0041 ;Ä
&H00C5=013D0041 ;Å
&H00C6=0080 ;Æ
&H00C7=01430043 ;Ç
&H00C8=01390045 ;È
&H00C9=01380045 ;É
&H00CA=013A0045 ;Ê
&H00CB=013B0045 ;Ë
&H00CC=01390049 ;Ì
&H00CD=01380049 ;Í
&H00CE=013A0049 ;Î
&H00CF=013B0049 ;Ï
&H00D0=00AD ;Ð - dummy map
&H00D1=013E004E ;Ñ
&H00D2=0139004F ;Ò
&H00D3=0138004F ;Ó
&H00D4=013A004F ;Ô
&H00D5=013E004F ;Õ
&H00D6=013B004F ;Ö
&H00D7=00B5 ;×
&H00D8=0086 ;Ø
&H00D9=01390055 ;Ù
&H00DA=01380055 ;Ú
&H00DB=013A0055 ;Û
&H00DC=013B0055 ;Ü
&H00DD=01380059 ;Ý
&H00DE=008F ;Þ
&H00DF=0181 ;ß
&H00E0=01390061 ;à
&H00E1=01380061 ;á
&H00E2=013A0061 ;â
&H00E3=013E0061 ;ã
&H00E4=013B0061 ;ä
&H00E5=013D0061 ;å
&H00E6=0081 ;æ
&H00E7=01430063 ;ç
&H00E8=01390065 ;è
&H00E9=01380065 ;é
&H00EA=013A0065 ;ê
&H00EB=013B0065 ;ë
&H00EC=01390069 ;ì
&H00ED=01380069 ;í
&H00EE=013A0069 ;î
&H00EF=013B0069 ;ï
&H00F0=008D ;ð
&H00F1=013E006E ;ñ
&H00F2=0139006F ;ò
&H00F3=0138006F ;ó
```

```
&H00F4=013A006F ;ô
&H00F5=013E006F ;õ
&H00F6=013B006F ;ö
&H00F7=00B6 ;÷
&H00F8=0087 ;ø
&H00F9=01390075 ;ù
&H00FA=01380075 ;ú
&H00FB=013A0075 ;û
&H00FC=013B0075 ;ü
&H00FD=01380079 ;ý
&H00FE=008E ;þ
&H00FF=013B0079 ;ÿ
```

Peripherals

This chapter shows you how to interface ENPS with these other peripheral devices:

- Prompters
- Omnibus Automation System
- Hauppauge WinTV card

Prompters

If you are using a prompter connected to an ENPS client workstation through a serial cable the setup is configured in `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI` in the `[Prompter]` section. Refer to "Client Configuration" on page 71 for more information.

+WinPlus+ AP Prompter

To install the +WinPlus+ AP software that comes with ENPS open `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI`.

In the `[Prompter]` section remove the semicolon from the line `Driver=Winplus`. Set the `Path` setting to the UNC path of the published prompter file area.

Save `ENPS.INI` and close the file. Refer to the *+WinPlus+ AP Prompter User's Guide* for more information.

BDL Prompter

ENPS updates the BDL prompter by sending text files to the ENPS Primary Server folder. BDL polls this folder for changes so for this process to work properly, the default remote polling must be enabled and the *Dump to WinPlus* option must be selected at all times in ENPS. In ENPS, a lightning bolt will appear in the bottom left-hand corner of the active Rundown when this feature is activated.

To install the BDL prompter, complete the following steps:

1. On the BDL workstation, create a directory where the show files will be dumped.

2. In the BDL interface, select **Options → Configuration → Constants**. Set the Remote Input Directory to the name of the shared folder. You are can use a UNC name if you prefer to dump show files to a folder on the ENPS server.

3. Under the **PC-Card** tab, set the Line Standard to `NTSC` or `PAL`.

4. Go to **Options → Newsroom** and select ENPS.

5. On an ENPS client workstation use a text editor such as Notepad to open `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI`.

6. In the [Prompter] section remove the semicolon from the line Driver=WinPlus. Remove the semicolon from Path= line and enter the path to the shared folder.

7. In the BDL client, click the ENPS icon to bring up a list of shows dumped to WinPlus. Double-click on the show to prompt.

8. Press F9 to activate prompting.

MOS Prompters

You can control a prompter using a MOS ActiveX plug-in. This workstation should not be shut down and the WinPlus application should always be running so that a MOS message cue does not build up.

To configure a MOS prompter select **System Maintenance → MOS Configuration** add the following settings for each prompter at your site:

Setting	Description
MOS ID	Name of your MOS server. This name is case-sensitive and should follow the following naming convention: `<family>.<location>.<site ID>.<mos>`
Description	Autoscript MOS Prompter
IP	IP address of the MOS prompter
ActiveX	If you are using the Autoscript ActiveX control enter `wpcontrol.wpremote`
Program	A MOS-enabled group that is homed to the local ENPS server. This can be a MOS group for a video or still store device. This allows the MOS prompter to send a list of all messages to ENPS when requesting MOS-active Rundowns from the prompter and acts like a message cue. If you do not want to use an existing group create a new group with your site's call letters in the ID and have it homed to the Primary Server. In the description enter several hyphens so users will know not to open or search the group.
MOS Version	2.8
Local DragDrop	Off
Story Send	Checked ✓

OmniBus Automation System

These instructions apply to the OmniBus serial interface. If your site will be using the MOS ActiveX plug-in to control the OmniBus system you should refer to the vendor's documentation for setup and configuration information.

Configuration Settings

Use a text editor such as Notepad to open `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI.` Add the following serial automation control settings:

```
[Automation]
Driver=OmniBus
; Port settings
Port=COM1:9600,e,7,1
; Store logs to AUTOTRAC.LOG in the TEMP folder.
Trace=1
; Display a message box each time a command
; is sent to the device.
Debug=1
```

Automation Fields

ENPS allows multiple Rundowns to drive the device at the same time. The Rundowns are sent in the order in which automation was activated. Changes to the Rundown are reflected in the OmniBus system in real time. The following fields are required on automation dialogs:

```
Clip        Name Mandatory
Still       Name Mandatory
CG          Template Mandatory, Page Mandatory
Inset       Name Mandatory
Camera      Name Mandatory
Logo        Template Mandatory
Event       Length, Name Mandatory
OS          Name Mandatory
```

The field's entry pattern is expected to be in the format `mm:ss`, to which leading and trailing 00s are added (e.g. 00:mm:ss:00) for relaying to OmniBus. If the field is blank 00:00:00:00 is passed. Event Length is ignored for the purposes of Rundown calculations. You will see *Manual* and *Automatic* buttons along with the fields: "In at:[mm:ss]" and "Event Length: [mm:ss]". The latter is sent as the "duration" field to OmniBus. When set to *Manual* the fields are hidden and the normal CLIPM OmniBus command structure is used. When it is set to *Automatic* the fields are visible and enabled and the CG command is sent to OmniBus using the CLIP+ command structure to define the event.

Syncing Automation Devices

Automation error logging shows when the facility is activated/deactivated. Because OmniBus cannot be queried for status or playlist contents ENPS assumes the OmniBus system state does not change from ENPS session to ENPS session. If the devices get out of sync stop the automation control from all Rundowns, clear all playlists from the automation choice of the Rundown menu, then reactivate automation on the Rundowns.

Hauppauge's WinTV Card

ENPS supports Hauppauge's WinTV PCI products. Users can watch almost any video source in the lower Editing Window of an ENPS client. This can help make the most of limited desk space in studios, control rooms, and crowded newsrooms. Through external audio/video inputs, you can connect to a regular antenna, a cable television feed, in-house video, or a satellite receiver, each with up to 125 channels, or a VTR or video camera.

WinTV PCI boards work with most PCI VGA cards, although there are exceptions. For more information on the Hauppauge WinTV add-in boards go to `http://hauppauge.com`.

The WinTV card and version 2.0 or later of its drivers should be installed. Additionally, the `hcwWinTV.ocx` file must be copied from the `\ENPS\WINSYS` folder on the server to the `\WINDOWS\SYSTEM32` folder on the client. Register the file with the following command: `REGSVR32 hcwWinTV.ocx`

Select **Fourth folder rover** → **System Maintenance** → **MOS Configuration**, and add the following settings:

ID	WinTV
Description	WinTV
ActiveX	`hcwWinTVControl.hcwWinTVocx`

On workstations where the WinTV OCX is installed the **Media rover** → **WinTV** option will appear.

A command strip along the left-hand side of the resizable window allows users to change channels, volume, and video source, or switch to full-screen video playback. Right-clicking will present pop-up menus to change source and channels, adjust the image (contrast, brightness, saturation, hue), freeze a frame, copy the current frame to the clipboard, print the current frame, or even save a frame to disk in `JPEG`, `BMP`, `TIFF` or `GIF` format.

Routine Maintenance

This section lists the routine maintenance procedures that all sites should perform on a daily, monthly, and periodic basis to help ensure trouble-free operation of ENPS.

Daily Checks

- Make sure NOM Watcher and the other ENPS processes are running.

- Verify that the time on the server is correct

- Open **Computer Management** select **Services and Applications** → **Indexing Service**. If the *Docs to Index* value is greater than 1000 or is not reducing, there may be a problem with indexing.

- Open the NOM and select **Window** → **MOS**. Check there are no MOS messages in the outbound queue that are not moving to the MOS device.

- Check the Application and System logs for errors or warnings.

- Check the RAID array management software for errors or warnings.

- Check that the disk is defragmented. If you are using Windows 2008 Server you can figure the operating system to defragment volumes daily. To enable this feature right-click on a drive and select the **Tools** tab. Select the volumes and the time of day when they should be defragmented. This should be at the point of the lowest workload on the server. If your site uses Windows 2000 Server or Windows 2003 Server can use DISKEEPER to defragment volumes daily.

Weekly Checks

- Back up the following folders:

```
\%PRIMARY-MACHINE-NAME%
\%PRIMARY-MACHINE-NAME%_H
\%PRIMARY-MACHINE-NAME%_Inactive
\%BUDDY-MACHINE-NAME%
\%BUDDY-MACHINE-NAME%_H
\ENPS
\NWP
\NOM
\COMMON
```

- Check the ENPS Support Forum for ENPS updates.

- Check the Buddy process is working correctly by checking that the Buddy Process queue in Maint on the ENPS Primary Server is not filling up. Refer to "Buddy Process Sync" on page 141 for more information.

- Open the command prompt and run CHKDSK if there will not be a newscast for at least two hours.

- Install the latest Windows Service Pack. Service packs are available from http://www.microsoft.com but do not install the IIS Lockdown utility.

- Verify that the drives have sufficient free disk space.

- On the Primary Server check the folder with the server name. Use a text editor such as Notepad to open DIRSIZE.TXT and check that the number of files in a folder is not causing a performance problem on the server. This

can happen in folders not automatically maintained by NOM Maint such as Personal areas, and MOS folders. Generally, folders should not contain more than several thousand files.

- Check the number of directories in the NWS folder. There should be one per hour that news wires are retained (e.g. 96). Too many directories indicates that wires are not purging correctly.

- Update copies of your operating system Emergency Repair Disks. This disk can be used to repair an operating system if the files become corrupt. Create the ERD by opening the command prompt and entering `RDISK /S`

Language Support

ENPS works with a large number of languages in countries all over the world. This section will help you set up ENPS to work with the needs of your site.

Keyboard Support

It is up to the user to select the keyboard layout for a story. For new stories, ENPS will use the currently active keyboard layout. Users can have multiple keyboard layouts, even for the same language. ENPS will attempt to find an installed keyboard layout for a language that is compatible with a selected story (rather than requiring the exact sub-language). For example, if a user selects a British English story but no British keyboard layout is installed, ENPS will use any available English keyboard layout.

If characters for your local language such as á, è, or ü are not available on a standard keyboard open the Control Panel and select **Keyboard**. Select the **Input Locales** tab and click **Add** to add your language. Changes to the keyboard layout in the operating system will be reflected in ENPS.

Setting the Local Language

You can customize the text in the ENPS interface to reflect the language spoken at your site by translating the entries in the language file on the Primary Server by completing the following steps:

1. Locate either a two-letter base language code or a four letter dialect code from one of the following tables that best describes the language spoken at your site:

Base Language Codes			
Language	**Code**	**Language**	**Code**
Afrikaans	AF	Latvian	LV
Albanian	SQ	Lithuanian	LT
Arabic	AR	Macedonian	MK
Basque	EU	Malay	MS
Belarusian	BE	Maltese	MT
Bulgarian	BG	Norwegian	NO
Catalan	CA	Polish	PL
Chinese	ZH	Portuguese	PT
Croatian	HR	Raeto-Romance	RM
Czech	CS	Romanian	RO
Danish	DA	Russian	RU
Dutch	NL	Serbian-Cyrillic	SR
English	EN	Setsuana	TN

Estonian	ET	Slovenian	SL
Farsi	FA	Slovak	SK
Finnish	FI	Sorbian	SB
Faeroese	FO	Spanish	ES
French	FR	Sutu	SX
Gaelic	GD	Swedish	SV
German	DE	Thai	TH
Greek	EL	Turkish	TR
Hebrew	HE	Tsonga	TS
Hindi	HI	Ukrainian	UK
Hungarian	HU	Urdu	UR
Icelandic	IS	Vietnamese	VI
Indonesian	IN	Xhosa	XH
Italian	IT	Yiddish	JI
Japanese	JA	Zulu	ZU
Korean	KO		

Base Dialect Codes

Language/ Dialect	Code	Language/ Dialect	Code
Arabic-U.A.E.	ARAE	French-Canada	FRCA
Arabic-Bahrain	ARBH	French-Luxembourg	FRLU
Arabic-Algeria	ARDZ	French-Switzerland	FRCH
Arabic-Egypt	AREQ	German-Austrian	DEAT
Arabic-Iraq	ARIQ	German-Lichtenstein	DELI
Arabic-Jordan	ARJO	German-Luxembourg	DELU
Arabic-Kuwait	ARKW	German-Switzerland	DECH
Arabic-Lebanon	ARLB	Italian-Switzerland	ITCH
Arabic-Libya	ARLY	Portuguese-Brazil	PTBR
Arabic-Morocco	ARMA	Romanian-Moldova	ROMO
Arabic-Oman	AROM	Russian-Moldova	RUMO
Arabic-Qatar	ARQA	Sami-Norway	SAMI
Arabic-Saudi Arabia	ARSA	Spanish-Argentina	ESAR
Arabic-Syria	ARSY	Spanish-Bolivia	ESBO
Arabic-Tunisia	ARTN	Spanish-Chile	ESCL

Arabic-Yemen	ARYE	Spanish-Columbia	ESCO
Chinese-PRC	ZHCN	Spanish-Costa Rica	ESCR
Chinese-Hong Kong	ZHHK	Spanish-Dominican Republic	ESDO
Chinese-Singapore	ZHSG	Spanish-Ecuador	ESEC
Chinese-Taiwan	ZHTW	Spanish-Guatemala	ESGT
Dutch-Belgium	NLBE	Spanish-Honduras	ESHN
English-Australia	ENAU	Spanish-Mexico	ESMX
English-Belize	ENBZ	Spanish-Nicaragua	ESNI
English-Canada	ENCA	Spanish-Panama	ESPA
English-Ireland	ENIE	Spanish-Peru	ESPE
English-Jamaica	ENJM	Spanish-Puerto Rico	ESPR
English-New Zealand	ENNZ	Spanish-Paraguay	ESPY
English-South Africa	ENZA	Spanish-El Salvador	ESSV
English-Trinidad	ENTT	Spanish-Uruguay	ESUY
English-United Kingdom	ENGB	Spanish-Venezuela	ESVE
French-Belgium	FRBE	Swedish-Finland	SVFI

2. Open \COMMON\G_SUPPORT\MASTERS on the ENPS WORK drive. If you see a file with the prefix g_lang followed by the two or four letter code for your local language copy that file to \COMMON\G_SUPPORT on the ENPS WORK drive.

    If you do not see your local language file in the MASTERS folder open \COMMON\G_SUPPORT on the ENPS WORK drive. Copy G_LANGEN to a new file with the prefix g_lang followed by the two or four character code. For example, if you're your site's local language is Chinese call this file g_langzh. If the local language is Spanish and you are Mexico name this file g_langesmx.

3. Select **Fourth Folder rover** → **System Maintenance** → **Language Resources**. Highlight your language's resource file in the list on the left. Click *Edit.*

    You can now make changes to how text is displayed in the ENPS interface by translating the English text strings after the equal sign to text in your local language. If you need to refer to the file's original text the masters are stored in \COMMON\G_SUPPORT\MASTERS on your ENPS WORK drive.

4. Once you are done making changes click *Validate.*

Working in Two Languages

Complete the following steps if your site has ENPS clients that need to display two languages:

1. Open the Windows Control Panel and select **Regional and Language Options**. Click the **Languages** tab and then click *Details.* In earlier versions of Windows, these options can be found under *Keyboards.*

2. In the *Text Services and Input Languages* dialog, click *Add.* Select the language that you want to add to the current Windows language. Click *Ok.*

3. The language bar icon will appear in the Windows taskbar with a blue icon which you can use to switch to the other language. It is possible to switch between languages using left `Alt+Shift` although this key combination is configurable.

Each language will have special its own combinations to produce characters. In Spanish, for example, to create an accented character press the single quote ` key plus a letter; plus and equal symbols generate: ¡ ¿ and the ; key produces ñ.

In ENPS 6.00.0045 a change was made to ensure search results are consistent when searching for phrases with mixed English and non-English characters, e.g. Annika Östberg. The ENPS server must be re-indexed for this correction to take effect. For instructions on re-indexing your ENPS server refer to the instructions on using `INDEXDEL.EXE` on page 167.

Considerations for Specific Languages

- ENPS is compatible with international versions of Windows 2000 and Windows XP.

- Some locale-specific story menu items (Upper/lower case, Fonts, and Dictionary/Thesaurus/Pronouncer) are automatically disabled and not visible for languages not using the ANSI (1252) code page.

- Certain code pages may have a delay when opening stories. If this is the case, enable the `UseSingleFont` option in the Global Configuration Options

- If you are using a double-byte character language and your output to the CG is being sent incorrectly, add the setting `UseSBCGOutput=1` to the `[CG]` section of the `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI` on clients connected to the CG device.

Arabic and other Right-To-Left Languages

- Right-to-left language support is available only on versions of Windows that support it (e.g., Arabic, Hebrew), allowing users to view/edit stories with Arabic and Pan-European text.

- Users in the Arabic locale have the option to view text either left to right (LTR) or right to left (RTL). To override the default of RTL, select Personal Settings and select LTR.

- Titles which include a number (e.g. "500 News") may sometimes display in the List Window in an incorrect sequence. This is due to a limitation of the Windows right-to-left conversion process.

- If your language is Farsi you should specify a font ENPS can use to display Farsi characters if a story's current font cannot be found or cannot properly render the Farsi character. You can either set the `FarsiTextBoxFont` for all clients in the Global Configuration Options or in the `C:\DOCUMENTS AND`

SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI to specify it for a particular workstation.

- An C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI setting SearchAutoKeyboard lets RTL language users override or specifically enable an ENPS feature which prevents an operating system level conflict that can cause the keyboard language being switched in some ENPS text boxes, such as the Search box.

- To fully support printing right-to-left languages such as Arabic you must add the following setting to the [ENPS] section for a workstation's local ENPS.INI file:

```
[ENPS]
RTLPrint = 1
```

If you are having trouble displaying Arabic characters correctly add the following character mappings to the \NWP\NWP.INI on the ENPS WORK drive:

```
[StringTransEBU]
<Restrictions>=&H0052;&H0065;&H0073;&H0074;&H0072;&H0069
;&H0063;&H0074;&H0069;&H006f;&H006e;&H0073;&H000d;&H000a
;&H000d;&H000a
</Restrictions>=
<Dopesheet>=&H0044;&H006f;&H0070;&H0065;&H0073;&H0068;&H
0065;&H0065;&H0074;&H000d;&H000a;&H000d;&H000a
</Dopesheet>=
<Shotlist>=&H0053;&H0068;&H006f;&H0074;&H006c;&H0069;&H0
073;&H0074;&H000d;&H000a;&H000d;&H000a
</Shotlist>=
<ItemID>=&H0049;&H0074;&H0065;&H006d;&H0049;&H0044;&H000
d;&H000a;&H000d;&H000a
</ItemID>=
&H000d;&H000a;&H000d;&H000a;&H000d;&H000a=&H000d;&H000a;
&H000d;&H000a
&H003c=
&H003d=
&H003e=
&H0040=
&H005e=

[StringTransAReA]
&H064d=&H0652
&H064c=&H0651
&H064b=&H0650
&H064a=&H064d
&H0649=&H064c
&H0645=&H0643
&H0644=&H0641
&H0639=&H063a
&H0638=&H0639
&H0637=&H0638
&H0646=&H0644
&H0648=&H0646
&H0647=&H0645
&H203a=&H0644;&H0627
&H00ac=&H060c
&H00bb=&H061b
&H00d7=&H0637
```

```
&H00e0=&H0640
&H00e2=&H0642
&H00e7=&H0647
&H00e8=&H0648
&H00e9=&H0649
&H00ea=&H064a
&H00eb=&H064b
&H00ee=&H064e
&H00ef=&H064f
&H003c=
&H003d=
&H003e=
&H0040=
&H005e=

[StringTransTAra]
&H0041=&H0621
&H0042=&H0622
&H0043=&H0623
&H0044=&H0624
&H0045=&H0625
&H0046=&H0626
&H0047=&H0627
&H0048=&H0628
&H0049=&H0629
&H004a=&H062a
&H004b=&H062b
&H004c=&H062c
&H004d=&H062d
&H004e=&H062e
&H004f=&H062f
&H0050=&H0630
&H0051=&H0631
&H0052=&H0632
&H0053=&H0633
&H0054=&H0634
&H0055=&H0635
&H0056=&H0636
&H0057=&H0637
&H0058=&H0638
&H0059=&H0639
&H005a=&H063a
&H0061=&H0641
&H0062=&H0642
&H0063=&H0643
&H0064=&H0644
&H0065=&H0645
&H0066=&H0646
&H0067=&H0647
&H0068=&H0648
&H0069=&H0649
&H006a=&H064a
&H003c=
&H003d=
&H003e=
&H0040=
&H005e=
```

```
&H000d;&H000a;&H000a=
```

Eastern European Languages

- Some characters from the ANSI 1250 codepage such as the Polish "ñ", Slovak "ò" and Czech "ì", as well as other characters following them on the same line, may be displayed in an incorrect font after a story containing such characters is saved and reopened. This is due to a Microsoft limitation of the presentation of these Unicode characters.

- Windows XP is specifically required for clients using Azeri, Kazak, Uzbek and Kyrgyz language support. Earlier versions of Windows lack proper locale, codepage and character set/font support for these languages.

Swedish

- If you are in a Swedish locale, some instances of the date sort order of Search items may be displayed incorrectly. To correct this issue, add the entry `LocalSort=1` in the `[ENPS]` section of the `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI`.

Chinese

- Far East language support is available only in the Far East versions of Windows, without which Chinese stories cannot be viewed. With it, users can view/edit stories with the respective Far East glyphs and Pan-European text.

- To ensure that forward search on agency copy and highlighting in Chinese works correctly, complete the following steps:

1. In the Global Configuration Settings add `ChineseCILocale=NEUTRAL` and `UnicodeForwardSearch=1`. Restart the ENPS client.

2. In the `NWP.INI`, ensure that the parameter `Unicode=1` is included in the `[NWP]` section.

3. Locate the following key in the registry on the server:

   `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\ContentIndex\Language\Neutral`

   If you are using Simplified Chinese, set the values for this key as follows:

Field	Value
NoiseFile	noise.chs
StemmerClass	{78fe669a-186e-4108-96e9-77b586c1332f}
WBreakerClass	{9717fc70-c1bc-11d0-9692-00a0c908146e}

   These values should be consistent with the values in this key:

   `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\ContentIndex\Language\Chinese_Simplified`

   If you are using Traditional Chinese, set the values for this key as follows:

Field	Value
NoiseFile	noise.cht
StemmerClass	{78fe669a-186e-4108-96e9-77b586c1332f}

WBreakerClass	{954F1760-C1BC-11D0-9692-00A0C908146E}

4. Locate the following key:

```
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\
ContentIndex
```

For the `DLLsToRegister` value, if it contains `Query.DLL`, remove it from the value data.

Mapping International Characters with the CG

Character Generator character mapping supports different languages and character sets and general "string swapping" is available with embedded unprintable character support. In the `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI` file on the workstation controlling the CG device add the following in the `[CG]` section:

```
[CG]
CharMap=CG_Map
```

Create a new `[CG_Map]` section and use the following format for the new character map:

```
[CG_Map]
SourceString=TargetString
```

For example:

```
[CG_Map]
Dog=Cat
```

Swaps the string "Dog" with the string "Cat."

More often, however, the requirement will be to map certain foreign language or unprintable characters. Accordingly, source and target string formats are enhanced to contain the following "escape" options:

Code	Escape Option
`&Hhhhh;`	BASIC-style hex string; convert the `hhhh` value to a Unicode character represented by that hex value. Note that if the `&Hhhhh` is at the end of the Source or Target string, the semicolon is optional (thus providing backward compatibility with prior ENPS versions which used the Aston driver character mapping capability). Otherwise, the semi-colon is required because `hhhh` is a variable-length string consisting of from one to four hex digits.
`0xhhhh;`	C-style hex string; identical to &H above.
`%hh`	HTML-style "byte" escape string; must have two hex digits.
`%uhhhh`	HTML- style "word" escape string; must have four hex digits.
`\nnn`	Lotus-style "byte" escape string; must have three decimal digits.

For example:

- `&H20=\160` maps a space into a Windows non-breakable space.
- `%20=xxx` map spaces to the string "xxx".

- `%20=ho0x21`; maps all spaces to the string "ho!".

Due to the above escapes, the "&", "%", and "\" characters if required must be escaped using one of the methods above. For example:

- % = %25
- & = %26
- \ = %5C

The number of characters in a mapping must agree only with the same number of characters in the incoming data's category field, in effect allowing wildcarding and shorter lists of mappings for similar category groupings.

Operators can jump between items by recalling the first page of each story and easily make changes by opening the story within the Rundown, then editing the CG information. Once the story is saved, the updated information is sent to the CG. This is the safest control method, since any changes made via the CG keyboard are downstream of the control PC, and later changes made to the ENPS Rundown can overwrite the CG operator's previous changes.

CG character mapping supports different languages and character sets. The `MapOneToOne` option handles possible "circular" mappings. For example, a map might include these settings:

```
0xCD=0xd6
0xD6=0x99
```

In this example, the hex value CD is mapped to D6, then D6 is mapped to 99. Essentially, then, CD is mapped to 99, which may not have been intended. This behavior can be changed in the `[CG]` section of the `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI` file.

```
[CG]
MapOneToOne=x
```

When set to 1 mapping is one-to-one and any "circular" references are not processed. If the value is set to 0 (the default), circular mapping is allowed for legacy CG support and also allows mapping single character to a string or a string to a string.

Double Byte Character Sets

To support DBCS languages such as Chinese use a text editor such as Notepad to modify `C:\DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ENPS\ENPS.INI` to include the following:

```
[CG]
CharMap=char_map_name
[char_map_name]
xxx=yyyyyyyy
xxx=yyyyyyyy
xxx=yyyyyyyy
```

In this example, `char_map_name` is a name given to a character map, `xxx` is the Unicode representation of the character in text, and `yyyyyyyy` represents the characters that must be sent to the CG to generate the character. The driver includes a linefeed to close the buffer string and will handle starting another buffer string for the remainder.

Chapter 21

Troubleshooting

This section contains troubleshooting steps for technical issues that you or your site's users may encounter in ENPS. If you need additional help refer to the "Technical Support" section on page 6.

Authentication

User sees an incorrect warning that the license key is about to expire.

In the Windows Control Panel check the **Regional Settings** on both the client workstation and the server to make sure their time and date formats are the same.

User sees the message: "The credentials supplied to ENPS conflict with an existing set of credentials. Please contact your System Administrator."

ENPS only allows connections if the user can be authenticated in the Windows domain and the user does not have any other open sessions. This message may be displayed because the local Windows credentials conflict with the domain credentials supplied. This most commonly occurs when using a VPN connection.

User sees the message "BAD_PASSWORD followed by unsuccessful directory scan when accessing \\SERVERNAME\ENPS."

- On the client workstation open a command line and enter `\\<SERVERNAME>\ENPS` where `<SERVERNAME>` is the NetBIOS name or IP address of your Primary Server. If the shared folder displays a prompt for the user's login credentials it indicates that the user does not have the necessary permissions for the Windows domain.

- Make sure that the user does not have an account on the server with a different password than the one on the local client.

User sees the message "Socket error [10061] / Connection forcefully rejected."

The ENPS client cannot connect to the Primary Server. Refer to the "Network" troubleshooting section on page 163 for more information.

To open ENPS in off-line mode right-click the ENPS shortcut and select *Properties*. Change the shortcut's target to `"C:\Program Files\ENPS\ENPS.EXE /LOCAL"` and click *OK*.

User sees the message "Form_load_splash_error [339] Line = 65 rich TX 32.OCX."

The client workstation has the wrong version of an ENPS file. Re-install the ENPS client by completing the following steps:

1. Back up `C:\Documents and Settings\All Users\Application Data\ENPS\ENPS.INI` to a temporary folder.

2. Delete `C:\Program Files\ENPS`.

3. At the command prompt enter `\\<PRIMARY SERVER>\ENPS\SETUP.EXE` where `<PRIMARY SERVER>` is the NetBIOS machine name or IP address of your Primary Server.

4. Restore `C:\Documents and Settings\All Users\Application Data\ENPS\ENPS.INI` from the temporary folder.

User sees the message "Local Administrator rights are required."

1. Run a virus checker on the client workstation to rule out malware affecting user privileges.

2. Confirm that the ENPS shortcut is pointing to the correct folder by right-clicking on the shortcut and selecting *Properties.*

3. Ensure that the ENPS share on the server is set to Read-only.

4. Make sure that the date/time formats on the server and clients match.

User sees the message "Form_Load frmUDP [10048] Address in use. Flow network connection has been detected."

Check the server for duplicate server processes such as multiple instances of the NOM.

User sees the message "Socket error [10061] Connection forcefully rejected."

Select **Fourth Folder Rover → System Maintenance → Servers**. Make sure that the IP address for each server is correct.

MOS

Before you contact ENPS Support you should check the following items:

- Is the Rundown's *MOS Control Active* property selected?

- Are the proper MOS IDs are selected in the Rundown's *MOS Story Send* property?

- Was the ENPS Primary Server or the MOS server updated since the connection issue began?

- What time did the issue occur?

- Was MOS logging enabled when the issue took place? To enable MOS logging open the News Object Manager and select **Window → MOS**. Check to see if there is there a queue of **Inbound** or **Outbound** items then select the *Log* box for both columns. These logs will be stored in the `\NOM\LOGS` folder on the ENPS `WORK` drive.MOS logs are stored as XML with filenames that match the MOS Server name.

- Which Rundowns are having issues? Is there a specific story in the Rundown that is having MOS connection problems? Is there a specific MOS Item Reference which is causing a problem?

- Has any information changed recently in the **MOS Configuration** table?

- Can the ENPS server successfully ping the MOS server? Can ENPS telnet to the ports 10540 and 10541 on the server?

> There is a confirmed connection between the ENPS Primary Server and the MOS server but certain stories are not updating

If the story has a lock symbol across the top left corner close the story and updates for the story will be incorporated. ENPS buffers all MOS updates while the story is under edit lock.

Network

> Client workstation does not receive updates to Rundowns or wires.

This problem can arise if a large number of UDP packets are lost on the network. This issue may be caused by the firewall on the client or a router that is block blocking TCP/UDP port updates. Check the following possible causes:

- In the Control Panel for the client workstation open the Windows Firewall. Make sure that it is either turned off or that it has the necessary ports open for communicating with the ENPS server. For a list of ports refer to "Port Assignments" on page 109. If the workstation has a third-party firewall running you should also check to see if it has the ENPS network ports enabled.

- If the updates are not reaching multiple workstations check to see if those computers are on a different subnet than the other workstations. If they are, make sure that the appropriate broadcast IP address information for the subnet is listed in the `[Reflectors]` section of both the `\NOM\NOM.INI` and the `\NWP\NWP.INI` on the Primary Server. Refer to "Reflectors" on page 110 for more information.

There are two methods to determine if your site is losing an unusually high number of packets:

Option 1: Enable Packet Table to Determine Packet Loss

1. Use Notepad or another text editor to open `\NWP\NWP.INI` on the ENPS `WORK` drive. In the `[TCPIP]` section set `PacketVersion=2`. If this value was set to 1 you may want to set it back to its original value when you complete these steps.

2. Close the ENPS client if it is open. Use Notepad or another text editor to open `C:\Program Files\ENPS\ENPS.INI` and change the following settings:

   ```
   [ENPS]
   CtrlAlt=1

   [TCPIP]
   UDPInfo=1
   PacketVersion=2
   ```

3. Open the ENPS client. Open a story in a public folder, save it, then press `Ctrl+Alt+U`. Note the value on the counter then close it. Press `Ctrl+Alt+U` again and look at the counter. Each time you change the story and save it you should see the UDP count increase.

Option 2: Use FlushUDP to Determine Packet Loss

1. Use Notepad or another text editor to open `C:\Program Files\ENPS\ENPS.INI`. In the `[TCPIP]` section add the setting

`FlushUDP=1` then add this setting to in the `\NOM\NOM.INI` on the Primary Server's ENPS `WORK` drive.

2. Open `C:\Program Files\ENPS\UDP` on the client workstation and `\NOM\UDP` on the Primary Server's ENPS `WORK` drive. Each of these folders tracks UDP traffic. If the file count in either of this folders is substantially different from the other you should investigate why there is UDP packet loss on your network.

Temporary Workaround for Packet Loss Issues

If one of the methods above shows your site's network is losing a large number of packets between the server and client workstations it is important for you to resolve the network problem as soon as possible.

As a temporary workaround you can configure the News Object Manager to send all UDP packages multiple times to ensure that the client receives them; the client will ignore redundant messages. To enable this option open the News Object Manager on the Primary Server. Select **Window** → **NOM Configuration Status** and set **UDP Repeats** to a number between 1 and 10. Enabling this option will increase network traffic.

Socket closes unexpectedly.

The Primary Server checks sockets on a set time interval to check for non-responsive ports. If a port is non-responsive the socket will be closed. To increase this interval use Notepad or another text editor to open `\NOM\NOM.INI` on the ENPS `WORK` drive. In the `[NOM]` section set `SocketTimeout` to a higher value. The default is 10 seconds.

If the socket closes when there is a heavy workload on the server the error message may be generated because the Primary Server is busy satisfying other client requests. Use Notepad or another text editor to open `C:\Documents and Settings\All Users\Application Data\ENPS\ENPS.INI` on the client workstation. Increase the value for the `ConnectTimeout` setting. The default value is 5 seconds and the maximum is 60.

ENPS launches in Local Storage mode when connected to the network.

Check the following possible causes:

- Make sure the shortcut to `ENPS.EXE` does not include the `/LOCAL` switch.
- On the client workstation open a command line and enter `\\<SERVERNAME>\ENPS` where `<SERVERNAME>` is the NetBIOS name or IP address of your Primary Server. If the shared folder displays a prompt for the user's login credentials it indicates that the user does not have proper permissions for the Windows domain.
- Select **Fourth Folder Rover** → **System Maintenance** → **Servers**. Make sure that the IP address for the server is correct.
- Select **Fourth Folder rover** → **System Maintenance** → **Staff**. Make sure the user's ID matches the user's Windows login name.
- Select **Fourth Folder rover** → **System Maintenance** → **Groups**. Make sure that the user has the correct server listed in the **Server** column.

Performance

Slow performance on the server or on client workstations.

Performance issues can arise from a number of factors. If you experience slowdown on an ENPS server or its client workstations check the following:

- If you are using ENPS 4 upgrade to ENPS 5 or later. ENPS updates often include changes that improve performance.

- Check the server and the client workstations for folders that have 10,000 or more files in a single folder. These folders should be reduced by moving files to other folders or by deleting unnecessary files.

- Make sure the server's archives are being stored on the Archives drive instead of on the ENPS WORK drive.

- Close non-essential applications on the client workstation. If you are running real-time antivirus software on the client temporarily disable it to see if the antivirus application is causing the slowdown. Refer to "Antivirus Software Recommendations" on page 9 for more information.

Prompters

AP +WinPlus+ prompter is not being updated

This can happen if a user dumps a show to the prompter then closes the Rundown. The connection to the prompter has been lost but the files are still stored in the prompter. The user should first re-open the Rundown and select *Dump to WinPlus* to see if the prompter can be updated.

If ENPS cannot locate the \PROMPTER folder because of a network problem it may cause a serious error when the user selects *Dump to WinPlus*. If such a problem occurs it is recommend that you set up a private channel between the workstation and the Primary Server. Refer to "Network Settings" on page 109 on for more information on how to set up private channels.

Rundowns

User sees the message "Resize column [381] Invalid property array index."

A custom field on your Primary Server was not properly saved to your site's Central Server. On the Primary Server open the News Object Manager and select **File → Reload global tables** then restart the client.

Rundown is missing.

Perform a Search to locate the Rundown. Make sure the option to search the local Waste Bin is selected along with the Waste Bin for the group where the Rundown was stored.

The TrashDays setting in the Global Configuration Options controls how long items are retained in the Waste Bin. For more information on this setting refer to "Global Configuration Settings" on page 44.

User sees the warning message "Proceed with edits absent a lock?"

A user attempted to make a change to a **System Maintenance** window that is open by another user. If the user selects *No* the user will be able to view

information in the window but cannot save changes. If the user selects *Yes* whoever clicks *Save* last will commit setting changes to the server; the other user's changes will be discarded.

table.

Error message [9] Subscript out of Range

There are a number of scenarios which can cause this error. Note the title of the blue message box and the context in which it appeared before you contact ENPS Support. Refer to "Technical Support" section on page 6 for the contact number.

Rundown dates in the List Window do not appear in the local format.

You can control how dates are displayed in the local language by selecting **Fourth Folder rover → System Maintenance → Language Resources**. Select the local language file on the left side of the screen then change the date format with the following settings:

```
ENPSShortDateTime=mm/dd/yy hh:nn
ENPSLongDateTime=mm/dd/yyyy hh:nn
```

Search

Search results are missing or incomplete.

If users enters search parameters and see an * character in the List Window it indicates that no results were found. Users should adjust their Search terms or try other searches.

If multiple users are not getting Search results or they receive an error message indicating the server is unavailable you will need to rebuild the index by completing the following steps:

1. Open Computer Management on the Primary Server. Expand **Services and Applications** then select **Indexing Service**. Check the **Status** column for ENPSWork to make sure it says "Started." If it is not running right-click ENPSWork and select **All Tasks → Start**. Check to see if users can receive Search results.

2. Click **Directories** under ENPSWork and verify that the correct folders are being indexed. These folders should include the drive letters that corresponds to the root folders of your Wires and Archives drives and the folder on the ENPS WORK drive with the name of your site's Primary Server.

3. Expand **Services and Applications** and select **Internet Information Services (IIS) Manager → Web Sites**. Right-click on the **ENPS Web** website and select *Properties.* Select the **Home Directory** tab and click the *Configuration* button.
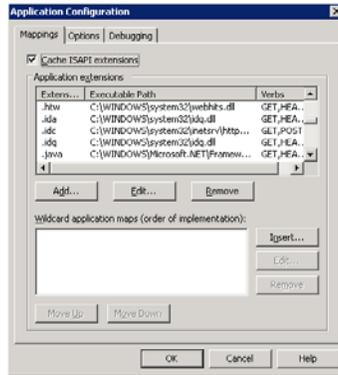
You will see a list of Application Mappings. If the extensions `.ida`, `.htw` and `.idq` are not listed with the mappings shown below you will need to add them to the list.

Extension	Executable Path	Verbs (Limit To)
.ida	`C:\WINDOWS\SYSTEM32\IDQ.DLL`	GET, HEAD, POST
.htw	`C:\WINDOWS\SYSTEM32\WEBHITS.DLL`	GET, HEAD, POST
.idq	`C:\WINDOWS\SYSTEM32\IDQ.DLL`	GET, HEAD, POST

4. Select **Internet Information Services** → **Web Service Extensions**. There should be an entry for **Indexing Service** and it should be set to *Allowed*.

If you cannot find this entry complete the following steps:

a. Right-click **Web Service Extensions** and click *Add a new Web service extension*.

b. In the **Extension name** textbox enter `Indexing Service`.

c. Click *Add* and select the following files:

    ```
    C:\WINDOWS\SYSTEM32\IDQ.DLL
    C:\WINDOWS\SYSTEM32\WEBHITS.DLL
    ```

d. Select the Set extension status to Allowed checkbox.

5. If users still cannot receive search or you receive an error message when you type a query you will need to re-index the server.

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Depending on the amount of data the re-indexing process can take as long as 24 hours. In the NOM select **Window** → **NOM Configuration/Status**. Select the *Block Primary Access* checkbox. Users will see the window below notifying them that the Primary Server is unavailable:
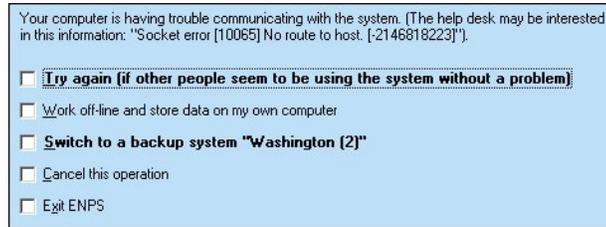
Users should select the option *Switch to a backup system*.

6. Run `\NOM\INDEXDEL.EXE` on the ENPS WORK drive. Once you click *OK* on the confirmation screen the application will start re-indexing the server. To check the status of the re-indexing open Computer Management and select **Indexing Service.**

   If `INDEXDEL.EXE` does not function correctly complete the following steps:

   a. Open a command prompt and run `REGEDIT`.

   b. Navigate to `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\ContentIndex`

   c. Locate the key `ISAPIDefaultCatalogDirectory`. Make sure that **Value Data** is set to `ENPSWork`.

   d. Re-run `INDEXDEL.EXE`.

7. Once the indexes are rebuilt uncheck the *Block Primary Access* checkbox. Users will be prompted to return to the Primary Server.

8. Run `\NOM\INDEXDEL.EXE` on the Buddy Server.

User sees the message "Unpack time [6] Overflow"

1. Back up the files in the client workstation's `\WINDOWS\SYSTEM32` folder.

2. Copy the files from server's `\ENPS\WINSYS` folder on the ENPS WORK drive into the client workstation's `\WINDOWS\SYSTEM32` folder, overwriting the client workstation's copies of the files.

3. If the user still sees the "Unpack time [6] Overflow" message you need to re-install the ENPS client.

   a. Back up `\Documents and Settings\All Users\Application Data\ENPS\ENPS.INI` on the client workstation to save any custom settings.

   b. Delete `C:\Program Files\ENPS`.

   c. Open a command prompt and enter the following command:

      `\\<PRIMARY SERVER NAME>\ENPS\SETUP.EXE`

      where `<PRIMARY SERVER NAME>` is the NetBIOS machine name or IP address of the Primary Server.

d. Overwrite `\Documents and Settings\All Users\Application Data\ENPS\ENPS.INI` with the user's original `ENPS.INI`.

User sees the message "Socket unable to complete."

A user's Search parameters may be so wide that the Index Server is taking too long to process the request and ENPS drops the connection due to a timeout.

The user can change the Search to contain fewer search terms or you can use Notepad or another text editor to modify `\Documents and Settings\All Users\Application Data\ENPS\ENPS.INI` to increase the length of the timeout. Increase the `ReceiveTimeout` setting in the `[TCPIP]` section to a larger value. The default value is 20 seconds.

User sees the message "Socket closed by host."

This error is typically caused by a user entering a noise word such as "so" as one of the Search terms. Noise words usually do not cause a problem but sometimes they can cause the Index Server to ignore the search and close the socket.

Instruct users to omit the noise word from the search or enclose the search terms in square brackets so that ENPS will pass the term as an exact phrase. This can also be done by checking the *Exact Phrase* checkbox in the Search dialog.

User receives the message "Your search returned too many matches. Refine the search term, limit the date/time range, or choose other more specific search parameters."

It is possible that your site has exceeded the default limits for the Indexing Server. Complete the following steps to increase this limit:

1. Open the command prompt on the Primary Server and run `REGEDIT`.

2. Locate the following key:
    `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\ ContentIndex`

3. Click on `CurentControlSet` to see the contents of the folder.

4. Open `MaxRestrictionNodes`. Change the **Base** value to `Decimal`. Set **Value data** to `4294967295`.

5. Reboot the Primary Server. Repeat these steps on the Buddy Server.

Server Synchronization

`ENPS WORK` drives on Primary and Buddy servers are out of sync.

This issue can occur for a number of reasons. For example, one of the ENPS servers may can lose data because of a hardware failure or a network problem may prevent your servers from communicating with each other for an extended period of time.

You can either restore data from the Primary to the Buddy or vice-versa. The instructions below refer to the server with the most complete data as the "Source" and the server you want to update as the "Target."

These instructions can be completed while users are still working on the Source server.

---

1. On the Source server map the drive letter such as `X:` to the root folder of the Target server's `ENPS WORK` drive by opening a command prompt and entering the following command:

   `NET USE X: \\TARGET`

   where `TARGET` is the machine name of your Target server and path to the `ENPS WORK` drive. If you opt to use a drive letter other than `X:` you will need to modify the other steps in this section accordingly.

2. On the Source server move the `\COMMON\BUDDY` folder to the root of its `ENPS Work` drive.

3. The NOMBACK utility duplicates Source server data on the Target server. This process will also delete any files on the Target server that are not present on the Source server.

   Open `\NOM\NOMBACK.EXE` on the ENPS `WORK` drive of the Source server to run NOMBACK.

   a. De-select the **Common** checkbox.

   b. In the **Target Path** enter `X:`

   c. Click *Go* to start the NOMBACK process.

4. When the NOMBACK process is complete copy `\COMMON\G_SUPPORT FOLDER`, usually on the `F:` drive, from the Source server to the same location on the Target server.

5. It is recommended that you re-index the Target server. For instructions on re-indexing your ENPS server refer to the instructions on using `INDEXDEL.EXE` on page 167.

6. You can now delete the `\COMMON\BUDDY` folder that you copied to the root of your Source machine's data drive.

Stories

User sees the message "[32364] Bad Custom Dictionary."

The `SUPP.DIC` dictionary file was created incorrectly. The file should have one word per line with no spaces at the end of each word. There must also be a carriage return after the last word in the file.

User sees the message "EditCtrl_ExtendSelOverFields [5] Invalid procedure call or argument', 'Run time error [28 Out of stack space."

Make sure the story does not contain a square bracket that lacks a matching bracket. This can happen when story text is pasted in from another document. Square brackets in ENPS are restricted to production commands and must always come in pairs.

User sees the message "Draw Tabs can't create auto redraw image."

The resources on the client PC may be low, perhaps because there are other applications running at the same time as ENPS. The user should reboot the PC and close applications they do not need.

Wires

Your site is not receiving wire stories.

1. Verify that the cable for wires is plugged into the Primary Server.

2. Make sure that the News Wire Profiler running on the Primary Server. If it is not running double-click the **Watch** shortcut on your desktop to start the server applications. Make sure there is shortcut to **Watch** in the server's **Startup** folder.

3. Open the News Wire Profiler select **Window** and select the wire. Verify that the *Active* box is checked. If the wire is active select the **Monitor** checkbox. If you do not see incoming data in the wire window contact the wire provider for an update to the wire's programming tables. If it is an AP wire you can find the support number in the "Technical Support" section on page 6.

    When you contact the wire provider make sure you have your site's NID number. This number can be found by opening the ENPS client and selecting **Fourth folder rover** → **System Maintenance** → **Global Configuration Options**.

    If your site is still not receiving wires after you update the programming table your wire provider may need to send a technician to your site to perform additional troubleshooting.

Wire stories appear in the wrong category.

1. Contact the wire provider for an update to the wire's programming tables. If it is an AP wire you can find the support number in the "Technical Support" section on page 6.

    When you contact the wire provider make sure you have your site's NID number. This number can be found by opening the ENPS client and selecting **Fourth folder rover** → **System Maintenance** → **Global Configuration Options**.

2. If you want the wire to appear in a custom category refer to "Custom Wire Categories" on page 125 for instructions on how to set up the custom category. To configure the wire to appear in either a custom category or an existing category complete the following steps:

    a. Open the NWP on the Primary Server. Click **Window** and select the name of the wire.

    b. Uncheck the *Active* checkbox.

    c. In the **Category** dropdown menu select the category name.

    d. Select the *Active* checkbox to reactivate the wire.

Import and Export Data

This section describes how to import data from NewsCenter into ENPS, how to use the Generic Import Facility to import other archives, and how to use the Extract utility to export data from ENPS.

A number of archives from other newsroom computer systems can be converted to work with ENPS. Contact ENPS Support for questions regarding archives from specific systems. You can find the ENPS Support number in the "Technical Support" section on page 6.

Import NewsCenter Archives

Rundown archives and contacts from AP NewsCenter can be converted to ENPS using the `NCIMPORT.EXE` program in the `\NOM` directory on the Buddy Server. Archives should be placed in the corresponding directory with the Buddy Server's computer name (i.e., `BNCENPS02`). Both archives and contacts should be placed in the directory corresponding to the Primary Server's computer name (i.e., `BNCENPS01`) on both the Primary and Buddy servers. The conversion process usually takes several hours.

System performance is not affected during archive conversion to the Buddy Server since users should still be working on the Primary Server. System performance may be affected while importing the contacts on the Primary server. It is advisable to do the contact conversion on the Primary server at a time when there is the least amount of traffic on the network.

1. Run `NCIMPORT.EXE` from the `\NOM` directory on the ENPS Server.

2. Fill in three entry fields:

NewsCenter Folder	Path to the `\NewsCntr` directory on the Dataserver such as `\\dataserv\data$\newscntr`
Target Path	Drive on the Primary that contains the ENPS installation. This should be the Archive drive (typically H:). This cannot be a UNC path.
Target Database	Name of the server you are running the `NCIMPORT.EXE` on (e.g. `BNCENPS02`).

3. Select what you would like to convert from NewsCenter to ENPS: Rundown Archives and/or Contacts.

4. Click *Go.* You will see a dialog box showing the paths for the conversion. If they are correct, click *Yes* to continue. If you notice an error you may select *No* and make the appropriate changes. If you select *Yes* and the paths are incorrect you will receive an error from `NCIMPORT.EXE`. At this time, you will have to check the paths and make the appropriate changes.

5. The conversion process creates a folder `\P_NC20`. Copy this folder to the same location on the Buddy Server.

6. Run `\NOM\INDEXDEL.EXE` on the Primary Server's `WORK` drive to rebuild the index. Repeat this step on the Buddy Server.

Generic Import Facility

The ENPS Generic Import Facility allows data from Access tables to be imported into ENPS database structures. Install GIF by running `SETUPGIF.EXE` on an ENPS server. It will place an icon on the desktop.

Microsoft Access is used because it can bind or import from many types of data such as Microsoft Excel, Lotus 1-2-3, text files, HTML, dBase, FoxPro, Paradox, and ODBC databases. Also, it is possible to access Oracle data via ODBC or a dBase table, or do an elaborate Join.

Any number of tables or updateable queries may be used, so the possibilities are endless for dynamic updates from a variety of sources. Note that by being able to import against queries, the underlying data structure can vary, with the query doing filtering and cleanup, for example.

The following fields must be in the Access table, although the first five and seventh need not be filled:

ID	Description	Format	Sample
GUID	Should be blank and will be automatically updated with the GUID of the resulting record. If this field is not blank, it is assumed that record was already imported. This allows an interrupted import to be restarted without duplicate data being posted.	Text, 50 characters	[blank]
Database	Must match the machine ID of an entry in the server table. GIF must be run on the server.	Text, 255 characters	BNCENPS01
Path	Either `P_groupname` or `U_username` that will be validated against the program/group or staff databases respectively.	Text, 50 characters	P_WCTRIAL or U_MARTIM10
Folder	ID of the subfolder where the data should be stored, excluding the F_ prefix. If not supplied, the main folder is used	Text, 50 characters	TEST
Owner	User ID, excluding the `U_` prefix which must validate against the staff database.	Text, 50 characters	MARTIM10
Title	The item's title/slug, for which there should not be a field in the field definitions tables.	Text, 50 characters	STORYTITLE

Text	The item's associated text (optional), for which there should not be a field in the field definitions tables.	Memo	Sample text

The Database, Path, Folder and Owner settings may be specified for all records in the database by supplying them in the on-screen form. Additional fields must match IDs from the field definitions tables and will be validated, and only "story"-related fields may be used.

The ENPS Generic Import Facility (GIF) allows data from Microsoft Access tables to be imported into ENPS database structures. Microsoft Access is used to bind or import from many types of data (e.g., Excel, Lotus 1-2-3, text files, HTML, dBase, FoxPro, Paradox, and ODBC databases). Also, it is possible to access Oracle data via ODBC or a dBase table, or perform an elaborate Join. GIF will import as many matching fields as are specified and makes two passes, one to check the rows, and one to import. The import will not be executed unless all the rows pass checks.

`GIF` imports as many matching fields as are specified and makes two passes, one to check the rows, and one to import. The import will not be executed unless all the rows pass checks.

Any date fields must be in the format `YYYYMMDDHHNNSS`, and the time portion must be stated in GMT.

Exporting ENPS Data

Extract is a server component that allows you to transfer ENPS data to other applications. It resides on the same physical server as the NOM.

An Extract process runs on the server and handles requests by clients to resolve queries. It allows them to export archived material in a format that can be used by other applications.

To perform the extraction process, complete the following steps:

1. In the Search window, select your organization's content, then a date range, entering "from" and "to" dates.

2. In the server list select the CTOS (or any other server) and select *All content* or *Archives*.

3. Select the **Advanced** tab and the *Extract* button becomes visible. You can save the Search at this point if the task is going to be reused.

4. Click *Extract* and enter a name for the output job to dispatch the request to the server.

When the extraction is complete the user will receive a Top-Line Message. With the message in an Editing Window the first choice on the rover will allow the user to copy the resulting file to a local drive for use in other applications. Extract job files exist on the server for approximately 24 hours.

The file format is as follows, with fields delimited by the Tab character (`x09`):

```
First Row
Start Date
End Date
Additional rows
```

```
Field Name/Description
Program Name
Start Date
Story Slug
Newsgathering Grid Name
Newsgathering Grid Piece Type
Newsgathering Grid First Use flag (0=No, 1=Yes)
Newsgathering Grid Live flag (0=No, 1=Yes)
Actual (duration)
```

Appendix B

File Structure

Each ENPS server hosts multiple tables that can be global, server-based, user-based, and program-based. Table structures are not defined here, as such information cannot be manipulated outside of ENPS.

System Tables

Global tables are stored in the `\COMMON\G_SUPPORT` directory on the Central Server and are replicated to all other ENPS servers as part of the Maintenance process. All changes, no matter what server a user is accessing while making changes, are made on the Central Server. The replication interval is defined as a Maintenance process option and defaults to 30 minutes.

Table	Description
G_AUTOMAC	Automation macros table
G_CONFIG	Global configuration table
G_FIELDDEF	System field definitions table
G_FIELDLOC	Local field definitions table
G_LANGEN	Master English resource table
G_LANG*	Other language resource tables
G_MACS G_MACS.NEW	MAC address table
G_MOS	Media Object Server table
G_NOISE*	Noise word list table
G_PROGRAMS	Program/group table
G_SECURITY	Security level table
G_SERVERS	Server list table
G_STAFF	User table

Each group has its own tables on its home server containing stories, Rundowns, group messages and other group data in a directory with the same name as the server. A directory with a "_H" suffix holds history data (i.e., previous versions of public stories). NWP-related tables are stored in `\COMMON\C_SUPPORT` on the ENPS Primary Server.

Table	Description
C_CATEGORIES	NWP categories table
C_PROVIDERS	NWP providers table

`C_CATEGORIES` and `C_PROVIDERS` are regenerated automatically at start-up, based on the contents of `\NWP\NWP.INI.`

ENPS clients communicate with the appropriate server. The directories displayed below are local to production servers and are not replicated.

Table	Description
S_ARCHIVE	Archived data
S_PRIV	User and program/group privileges tables
S_SUPPORT	User and program/group profiles table
U_*	User data
P_*	Program/group data
D_*	News wire story tables, by category and provider

User Folders

Each ENPS user account has its own set of folders which store items such as current work in progress and incoming messages.

Folder	Description
M	Received top-line messages
W	Private, work in progress data (including stories, Rundowns, and other items)
T	Private deleted items/trash

Program/Group Folders

Each program or group has its own set of folders. Table names are generated from a unique program or group ID such as BNCENPS01.

Folder	Description
C	Contacts
G	Character generator templates
L	Rundown templates and Newsgathering Grid templates
R	Report layouts
T	Public deleted items/trash
V	Stored layouts for Rundowns and Newsgathering Grids
W	Public, work in progress data (including stories, Rundowns, and other items)
X	Story and grid templates

Appendix C

Registry Settings

This section lists the changes that ENPS makes to the system registry on your Primary Server and Buddy Server.

```
HKLM\SYSTEM\CurrentControlSet\Control\contentindex
EventLogFlags=2
FilterDelayInterval=2
FilterFilesWithUnknownExtensions=1
FilterRemainingThreshold=5
FilterRetryInterval=2
GenerateCharacterization=1
IsapiMaxEntriesInQueryCache=0
IsapiMaxRecordsInResultSet=5000
MaxCharacterization=45
MaxFilesizeFiltered=4096
MaxFreshCount=40000
MaxRestrictionNodes=3000
MaxRunningWebHits=200
MaxWebhitsCpuTime=7200
PropertyStoreMappedCache=varies based on available RAM

HKLM\SYSTEM\CurrentControlSet\Control\FileSystem
NtfsDisable8dot3NameCreation=1 NtfsDisableLastAccessUpdate=1

HKLM\SYSTEM\CurrentControlSet\Services\Browser\Parameters
MaintainServerList=Auto

HKLM\SYSTEM\CurrentControlSet\Services\EventLog\Application
MaxSize=1048576
Retention=0

HKLM\SYSTEM\CurrentControlSet\Services\EventLog\Security
MaxSize=1048576
Retention=0

HKLM\SYSTEM\CurrentControlSet\Services\EventLog\System
MaxSize=1048576
Retention=0

HKLM\SYSTEM\CurrentControlSet\Control\contentindex
DelayUsnReadOnLowResource=0
DesiredIndexingPerf=3
DesiredQueryingPerf=3
LowResourceSleep=5
MaxWordlistIo=4294967295
MaxWordlistIoDiskPerf=100
ScanBackoff=0
ServiceUsage=4
StartupDelay=60000
UsnReadMinSize=1
WordListUserIdle=0

HKLM\SYSTEM\CurrentControlSet\Control\Services\cisvc
Start=2
```

Index