ProCAP Transfer
with
Omneon Interface

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Transfer Omneon Overview

The **ProCAP Transfer Application with Omneon Option** ensures accurate and consistent encoding of captions to video clips residing on an Omneon Networks Media Server.

The basic requirements for setting up an Omneon server and ProCAP Transfer system to support network encoding of captions are:

- compatible Omneon server system release - contact Omneon support for the latest information
- ProCAP Transfer system networked to the Omneon server

Network communications must be setup and confirmed through **Configuration Settings** prior to encoding. Multiple Omneon servers can be selected to allow for parallel encoding over multiple identical systems for all operations.

Two encoding work-flows are supported:

- **Single Transfer** consists of selecting a caption file, followed by selecting the video clip to encode to. Encoding proceeds automatically at approximately four times real-time, subject to system setup and load.
- **Batch Transfer** consists of selecting multiple caption files to encode. Video clips must have the same file name to be successfully encoded. Encoding proceeds sequentially, with a status report generated at the end containing the status for individual file encodes.

The Transfer Utility supports the following caption file formats:

- ProCAP Transfer files - opened directly
- WGBH TDS caption files, V1 and V2 - opened with format conversion
- NCI caption files - opened after transfer file render
- Cheetah .CAP version 2 binary caption files - opened after transfer file render

No caption processing is done during transfer.

In order to import NCI and/or Cheetah files, Microsoft Office and ProCAP must also be installed into the Transfer system.

This manual highlights the Omneon specific support of the Transfer application. See the standard Transfer manual for more information regarding the basic operations of the Transfer application.

Single Transfer

Loading Transfer Files

In order to load a transfer file into the transfer utility, you will first have to transfer the ProCAP caption file to a transfer file. If not done previously, the Creating a Transfer File section should be reviewed.

To open a transfer file:

- execute **File** → **Open**
- press the **Open File**  command button

and browse to the file you want to open and click the Open button, or select the file from the More Recently Used list from the bottom of the **File** menu.

The following file formats are supported by the Transfer Open operation:

- ProCAP Transfer files - opened directly
- WGBH TDS caption files, V1 and V2 - opened with format conversion
- NCI caption files - opened after transfer file render
- Cheetah .CAP version 2 binary caption files - opened after transfer file render

An Editor window will open with the selected transfer file and automatically load it, ready for encoding.

If the master dub and the recorded video are not of the same time code, you may have to change the time code in the transfer file. This can be easily accomplished with the Set New Time code command.

The transfer events can be loaded manually by:

- executing **Transfer** → **Load**
- pressing the Load  command button

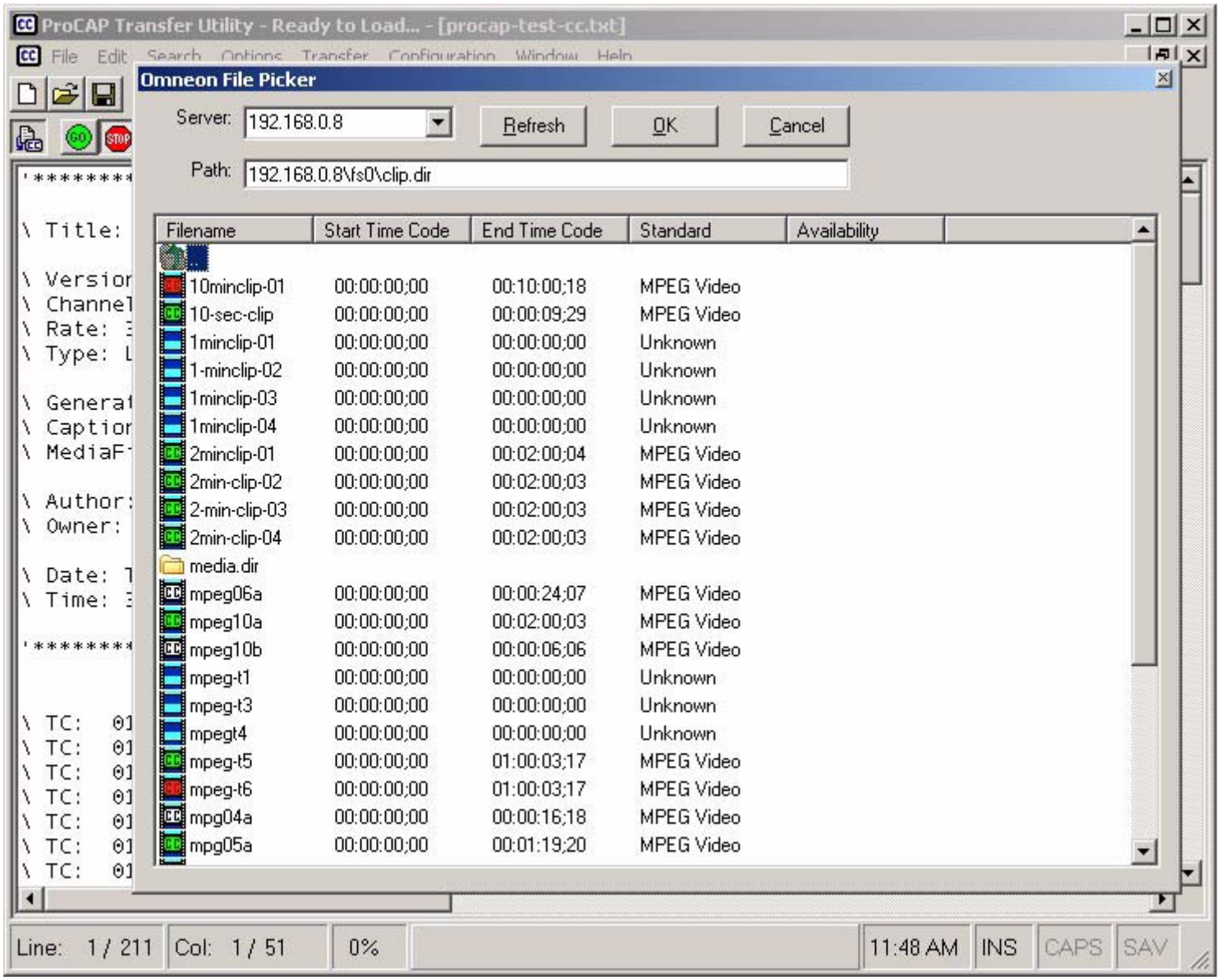
At this point all events are queued into the transfer process and the video clip to encode is requested.

Selecting the Video Clip

The selection of the video clip to encode the contents of the loaded transfer file into is the last step before encoding starts. This step is normally automatic upon successful loading of a transfer file.

To manually select a video clip after opening and loading a transfer file, execute **Configuration → Select Clip**.

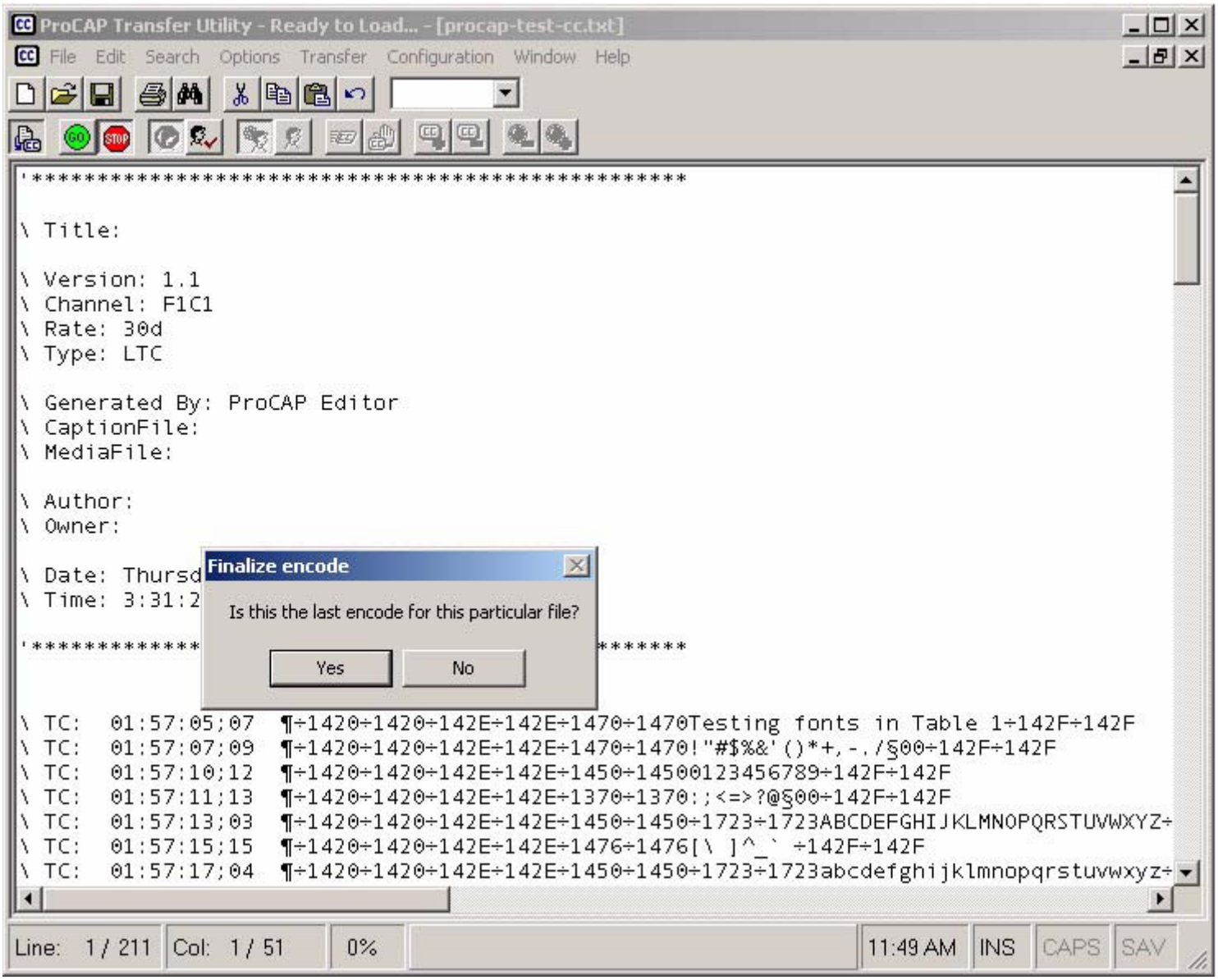
The Omneon File Picker dialog is used to navigate the available video clips and select one to encode:



Available video clips for encoding are shown with an icon to the left of the filename:

blue for uncaptioned/unknown, red for incomplete, and green for captioning complete. The video clip icons are filled in at a slower rate, as the information is retrieved from the Omneon server.

Select **OK** to select the clip and start encoding. Before encoding actually starts, the system needs to know if the current encode is the last encode for the selected video clip.

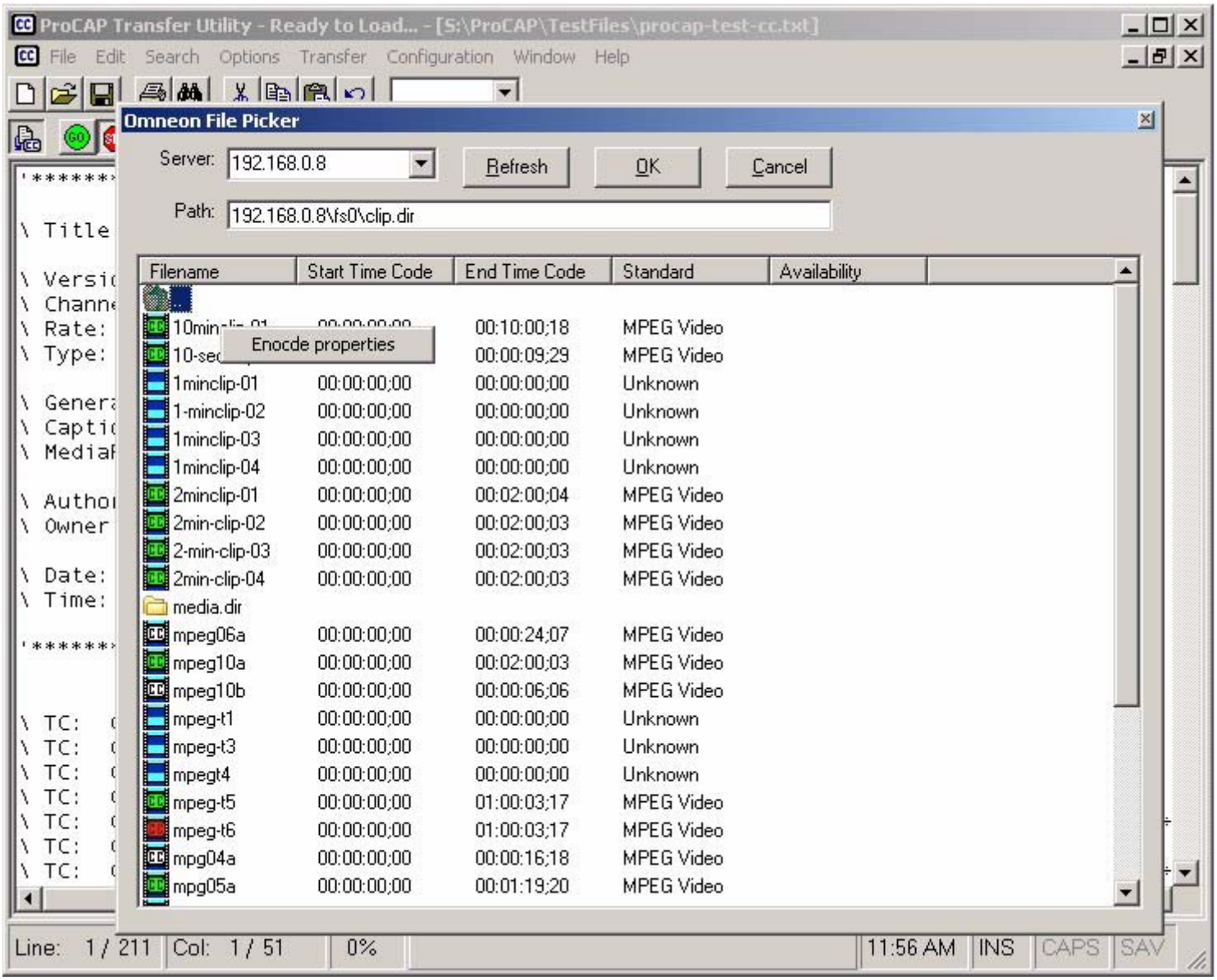


Answer **Yes** to indicate that the current encode is the last one, so that upon successful encoding the Captioning Complete flag is set. The default button is determined by the **Typical Number of Encoder Passes**, located on the **Omneon** tab in the **Configuration Settings** dialog. This allow the Enter key to be used for answering this dialog box for the majority of operations.

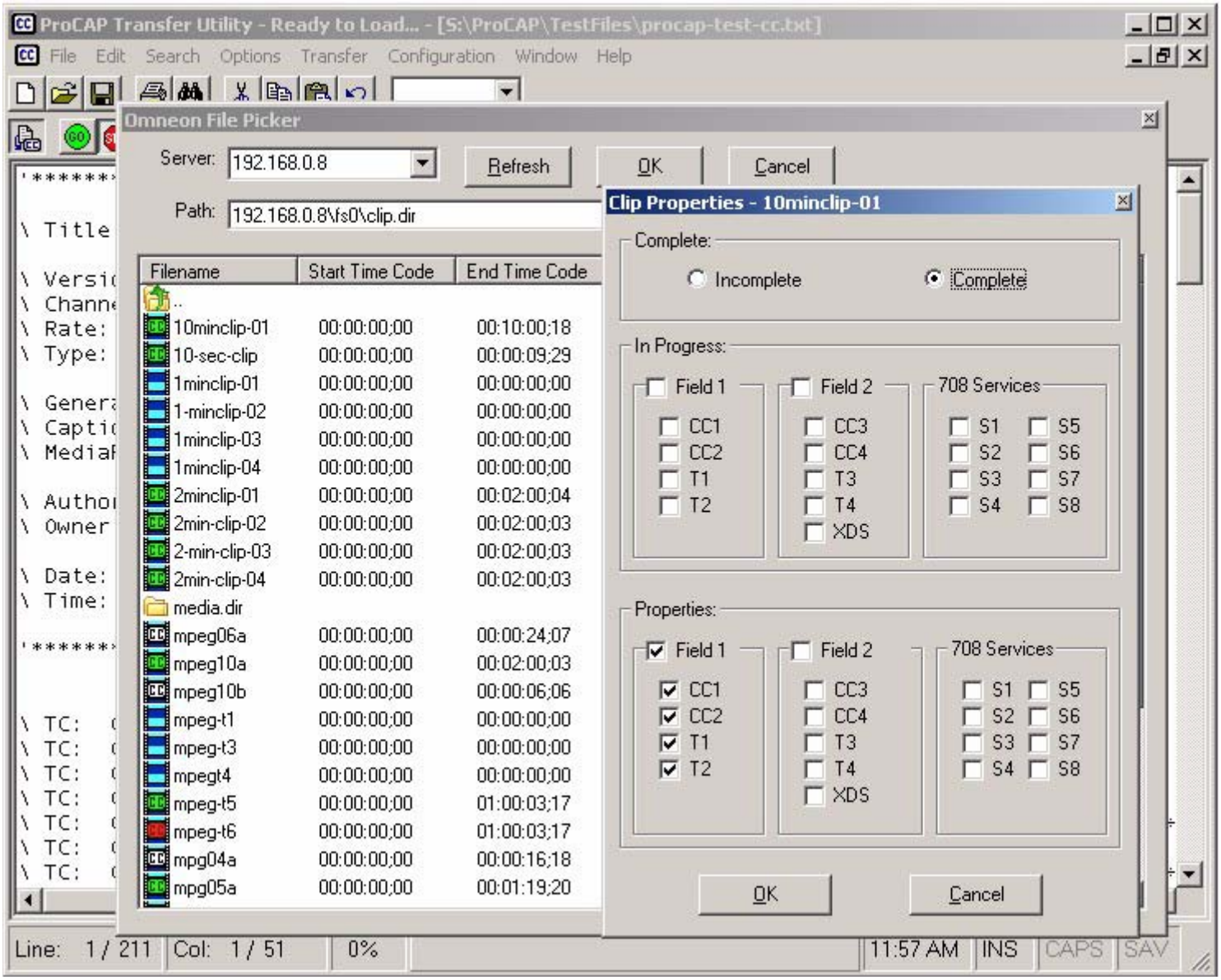
Encoding will normally start automatically after selecting **Yes** or **No**. To start the encoding process manually, see **Start Encoding**.

Encode Properties

Optionally, right click on a video file name to access its encode properties:



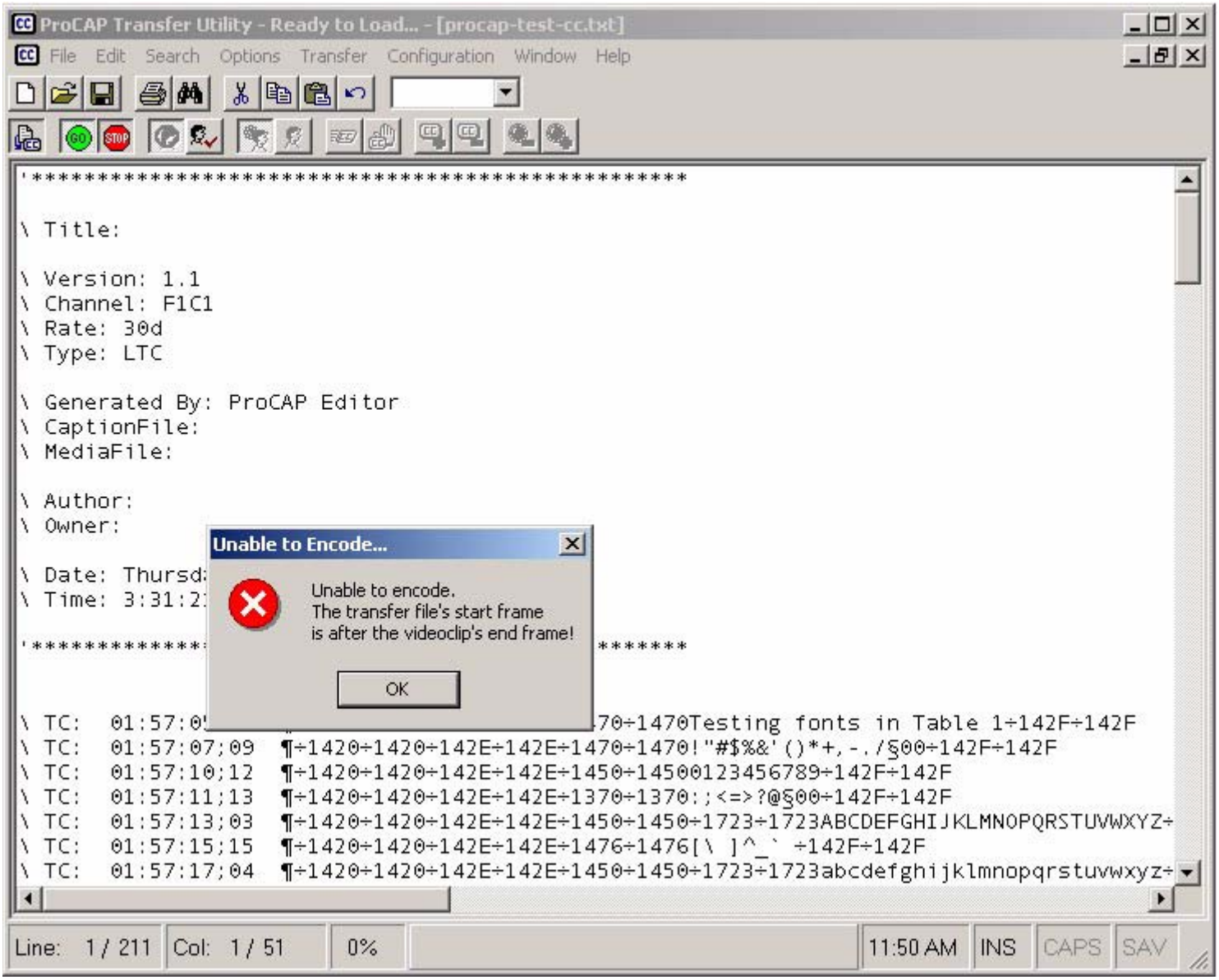
Click on **Encode properties** to open a detailed view of the properties for the given clip:



The Complete flag can only be set after a successful last encode. The remaining flags are set according to the contents of the transfer file encoded, In Progress during the actual encode session, followed by setting the Properties after a successful encode.

Encoding Errors

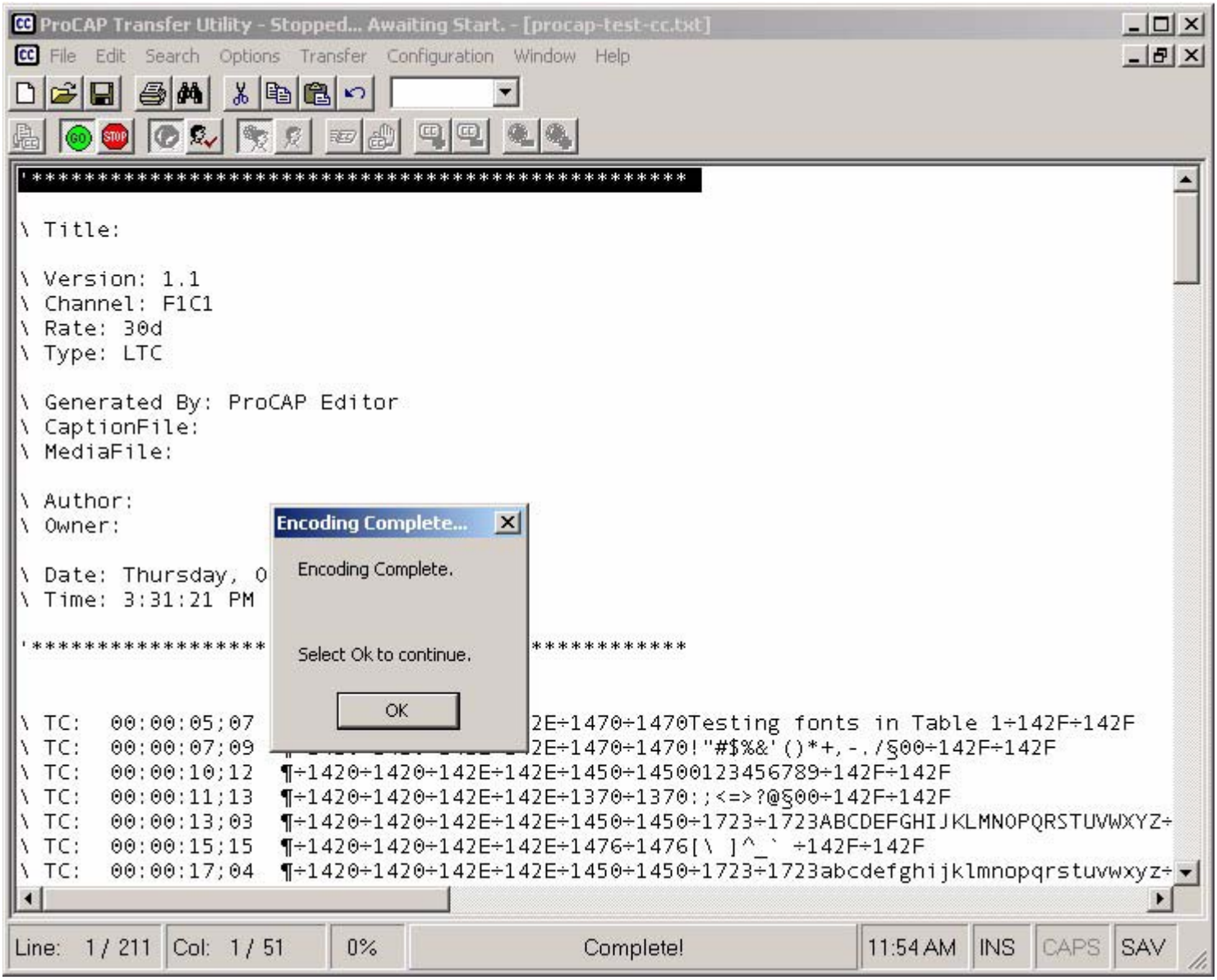
Errors that prevent encoding are flagged as soon as a video clip has been selected. These errors include time code out of range errors, such as the following:



Encoding Done

A status dialog appears when encoding is complete.

For example, the following file encoded correctly:



Select **OK** to continue. The completed transfer file must be unloaded before loading the next, or the Transfer application can be closed.

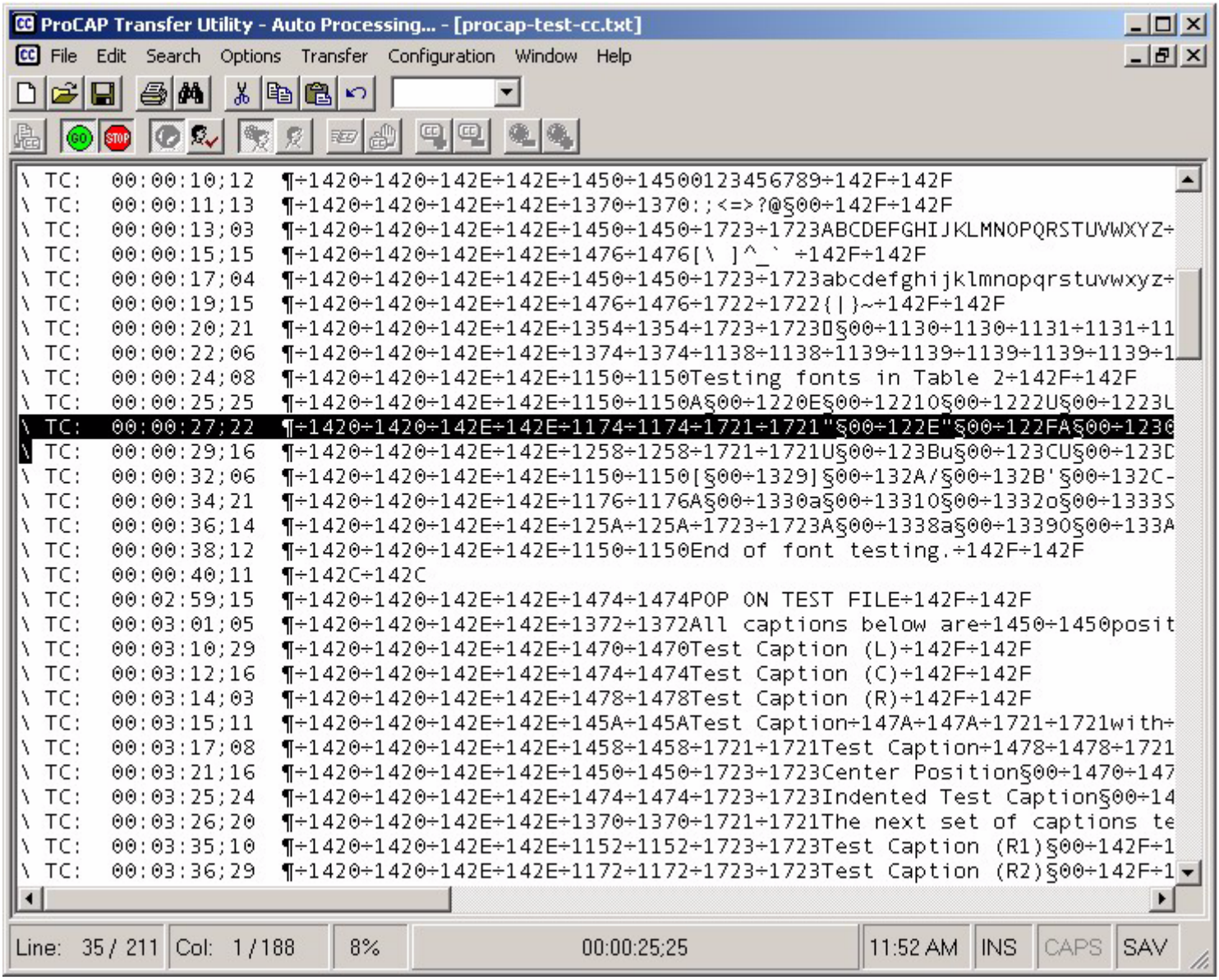
Start Encoding

Once the transfer file has been loaded and the video clip selected, transfer encoding will normally start automatically.

The transfer encoding can be started manually by:

- executing **Transfer** → **Start**
- pressing the **Go** command button

Encoding progress is indicated on the bottom status bar by the current time code being encoded, along with the highlighting of the current event:



Stop Encoding

To stop and abort the transfer at any time:

- execute **Transfer** → **Stop**
- press the **Stop**  command button

The aborted file will be flagged as in progress and incomplete.

Unlike transfer encoding with an encoder, a normal Omneon transfer encoding session will stop automatically when done.

Unloading Caption Files

Once the transfer operation is stopped, the file can be unloaded from the queue by:

- executing **Transfer → Unload**
- pressing the **Unload**  command button

Once the file has been unloaded, the file can be closed, saved and the Transfer Utility is closed.

Closing the Transfer Utility

To close the transfer application, first stop encoding, followed by:

- executing **File** → **Exit**
- pressing the **Close Application** command button on the top right of the window to close the Transfer Utility.

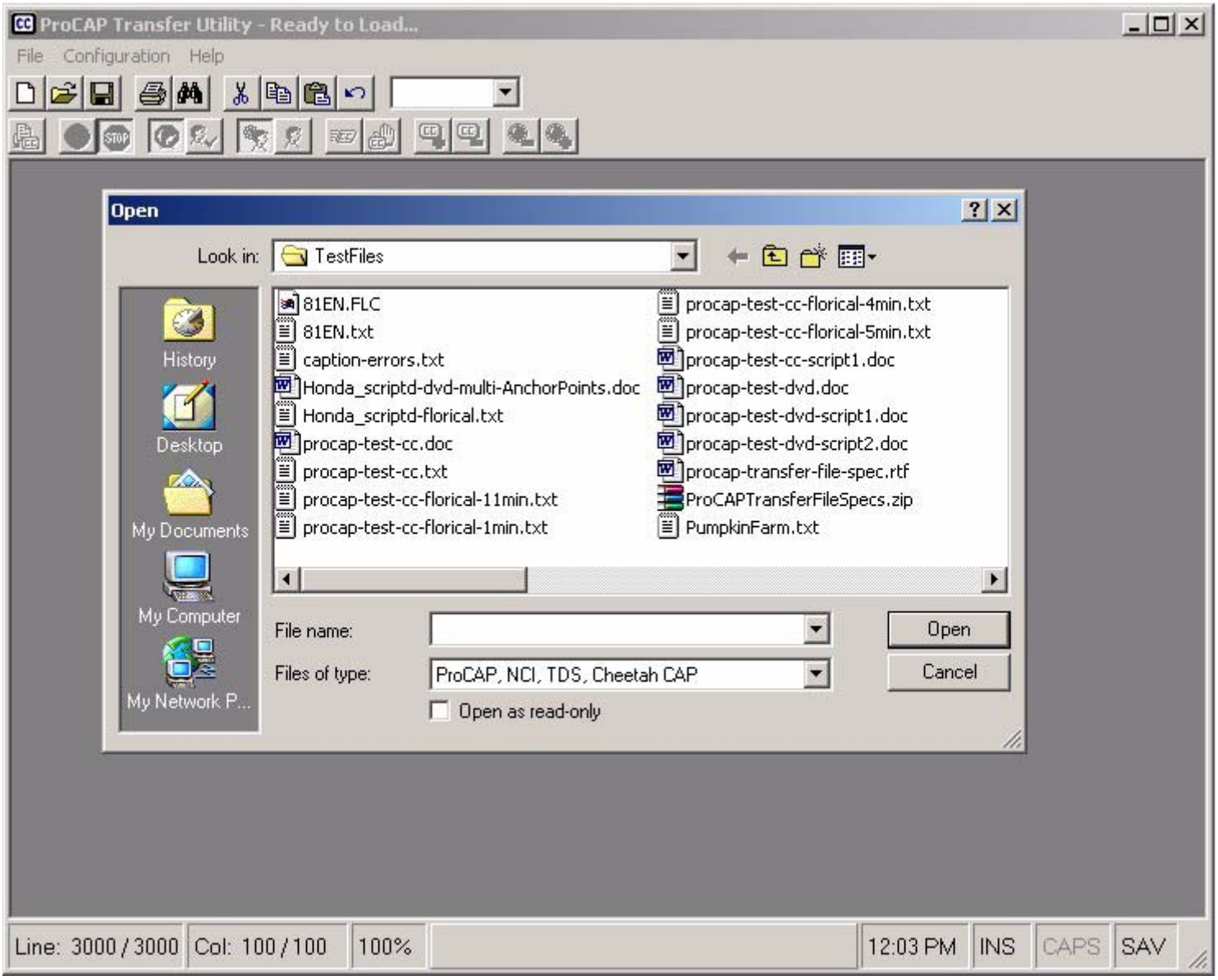
Batch Transfer

Selecting Transfer Files

Batch transfer is used for encoding multiple caption files to video clips at one time. The files are processed in alphabetical order, one after another until all selected caption files have been encoded. A report is generated upon completion containing status for each clip encoded.

Batch transfer operates by matching the caption file names with the video clip names.

Execute **File** → **Batch Transfer,** the following dialog appears for caption file selection:



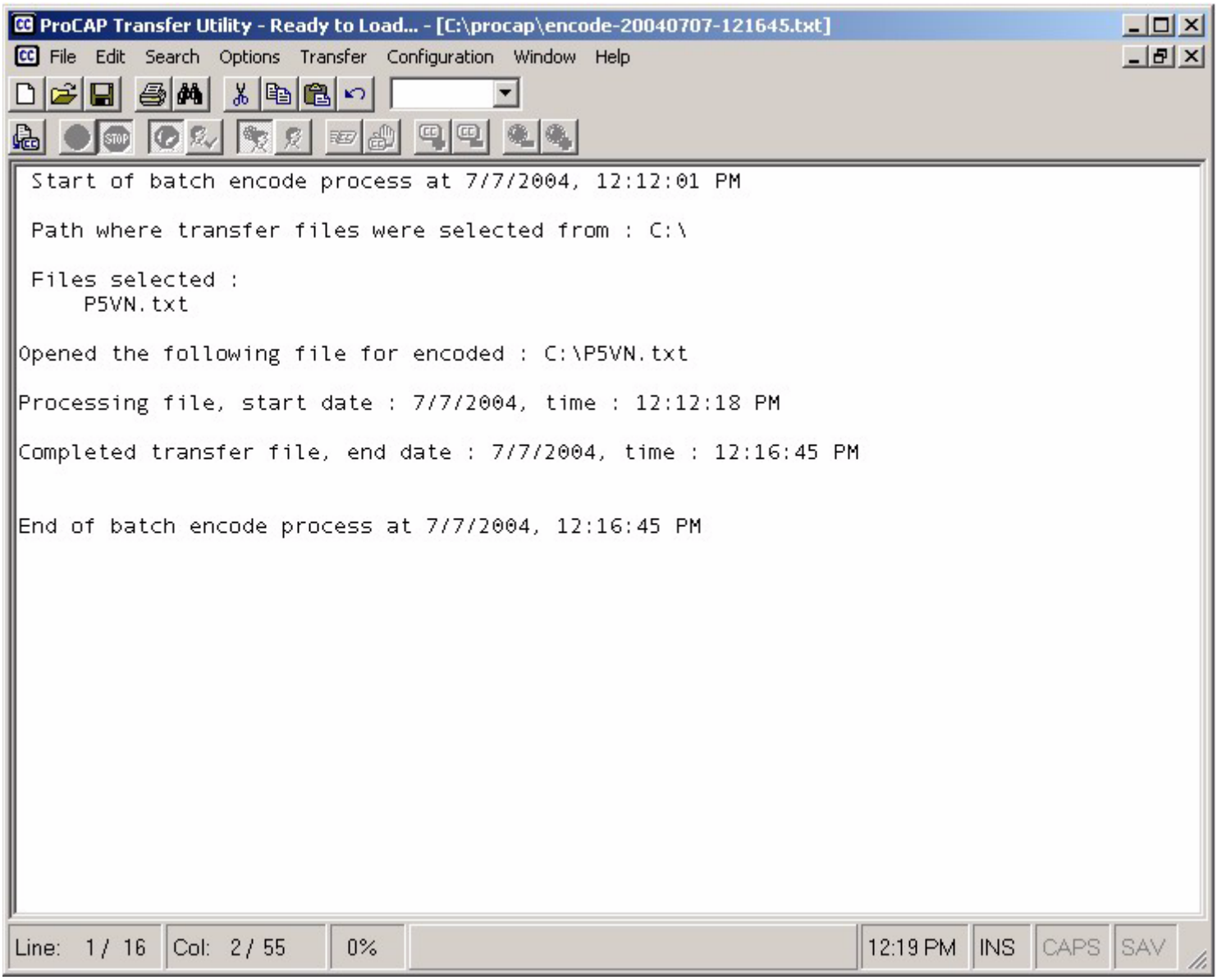
Select **Open** to batch encode the selected caption files. Processing begins immediately of caption files in alphabetical order. All files are processed before the final status report is generated.

The batch transfer operation can be aborted at any time by stopping the transfer process.

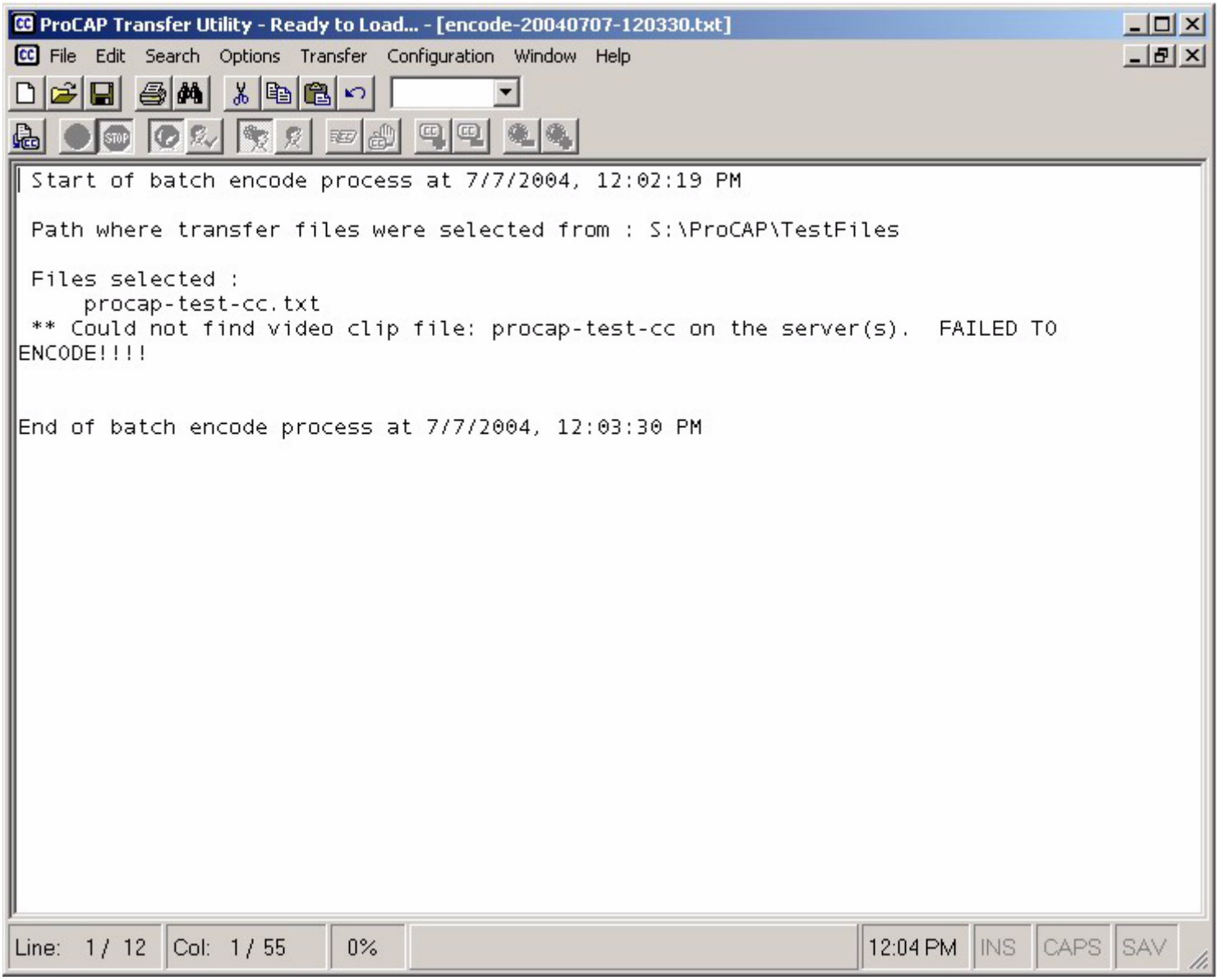
Encoding Done

A status report is generated upon completion of batch encoding. All files encoded are included, with success or failure indicated.

The following sample report shows the file p5vn.txt encoded correctly:



The following sample report shows file procap-test-cc.txt encoded with an error:



The report files are text files that can be saved or discarded as required.

Stop Encoding

To stop and abort the batch transfer at any time:

- execute **Transfer** → **Stop**
- press the **Stop**  command button

The report generated will indicate what files were successfully encoded prior to stopping. The aborted file will be flagged as in progress and incomplete. Any unprocessed files will remain untouched.

Closing the Transfer Utility

To close the transfer application, first stop encoding, followed by:

- executing **File** → **Exit**
- pressing the **Close Application** command button on the top right of the window to close the Transfer Utility.

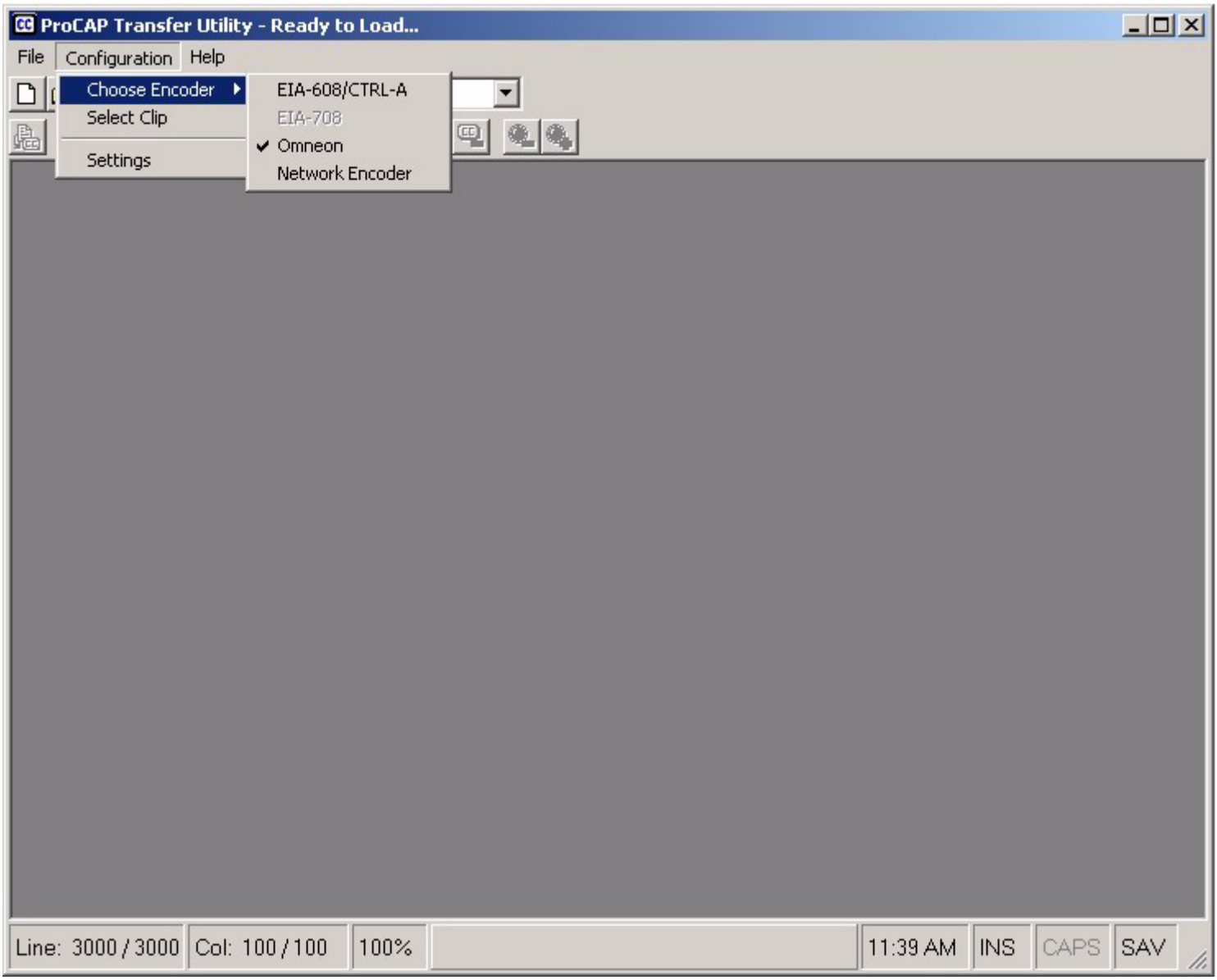
Configuration

The Configuration menu is used to setup the basic operations of the Transfer application.

Choose Encoder

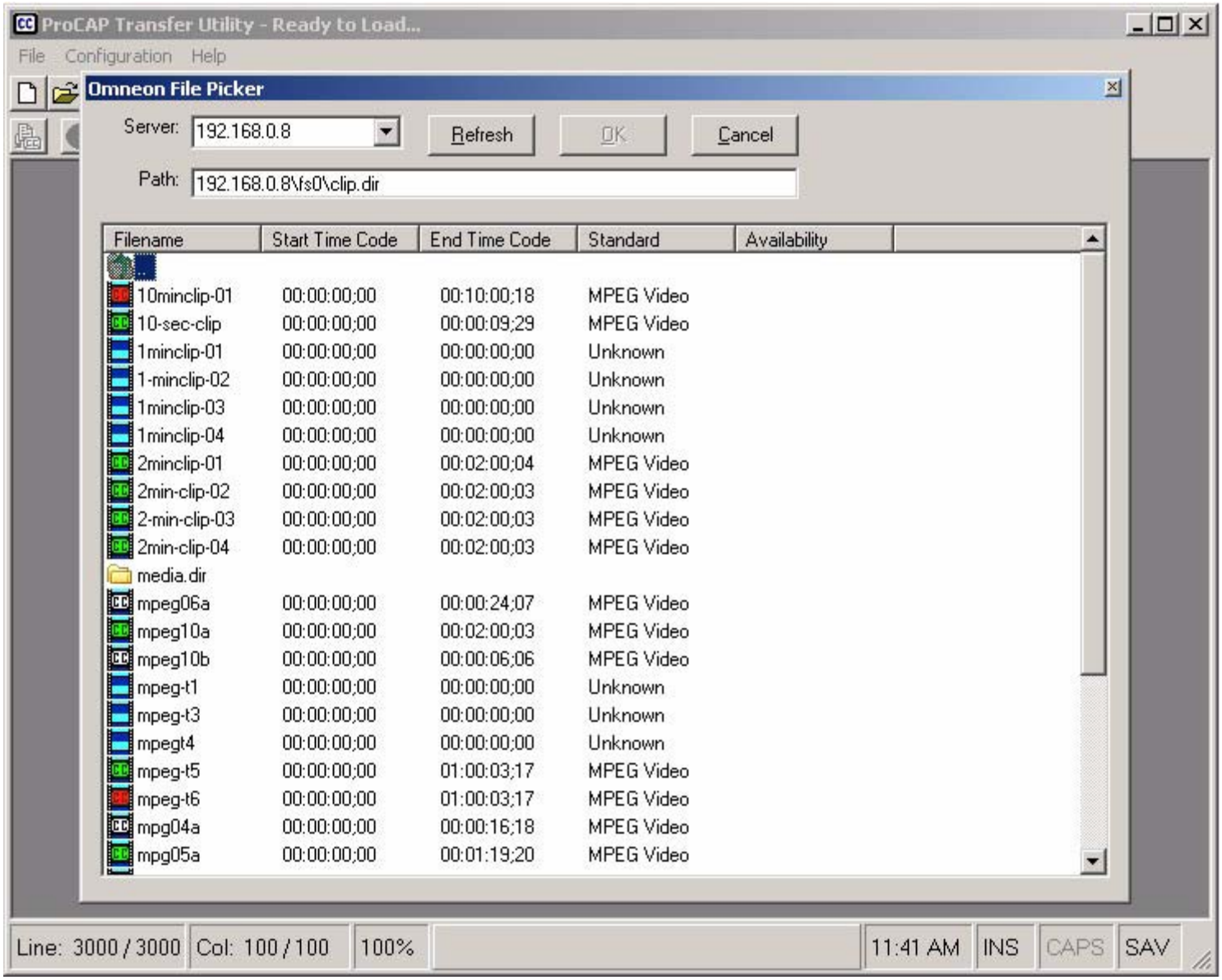
The **Choose Encoder** setting reflects the current target encoder for the Transfer application:

- **EIA-608/CTRL-A** - standard hardware encoder connected through a serial port
- **EIA-708** - currently not available
- **Omneon** - a networked Omneon server available for direct encoding
- **Network Encoder** - standard hardware encoder connected through a network connection



Select Clip

Select Clip is available for browsing Omneon servers for available video clips, and for the manual selection of a video clip to encode:



See Selecting the Video Clip for more detailed information.

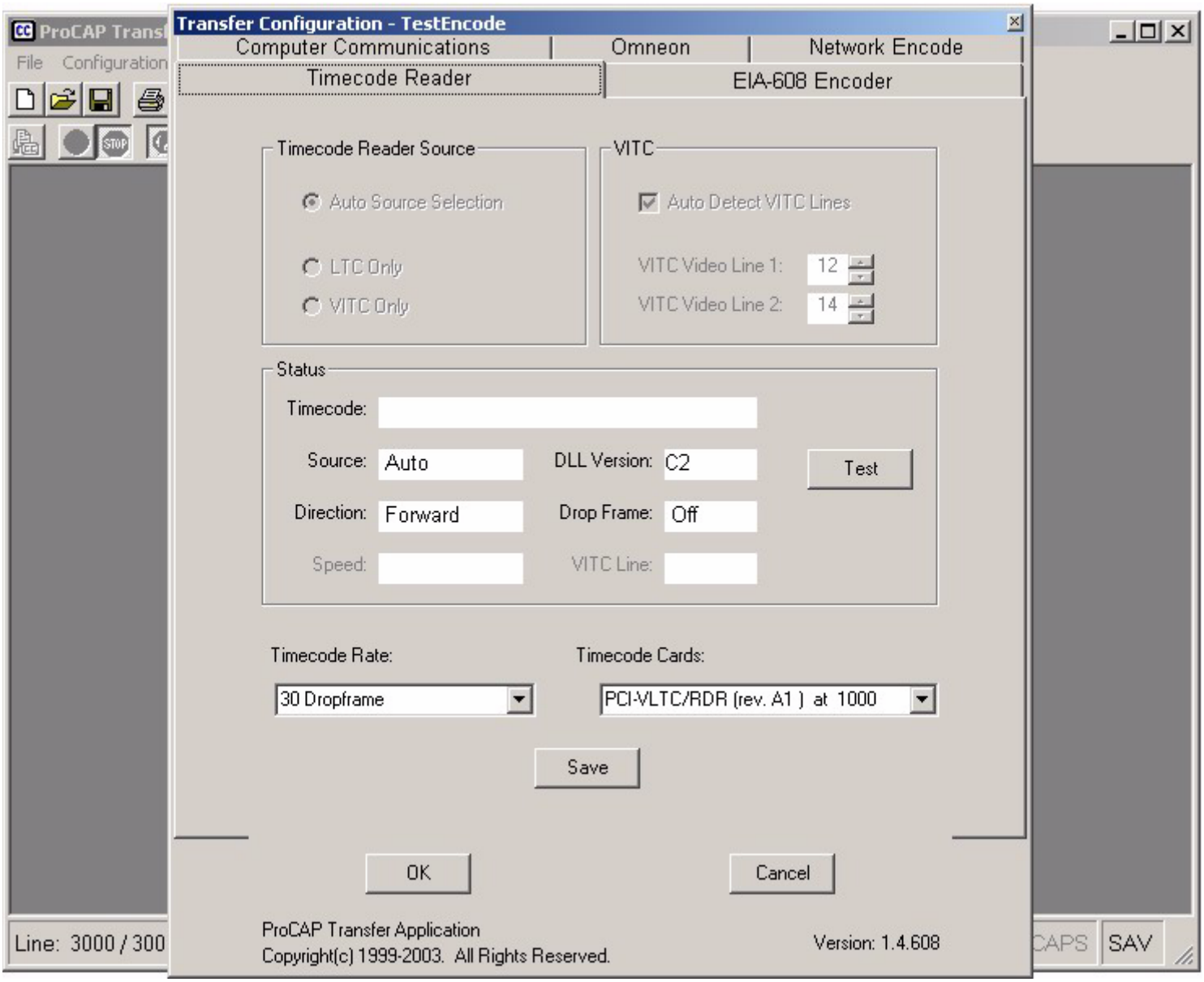
Settings

Configuration **Settings** contain all of the default application settings. The settings are grouped into several different topics:

- Timecode Reader
- EIA-608 Encoder
- Computer Communications
- Omneon
- Network Encode

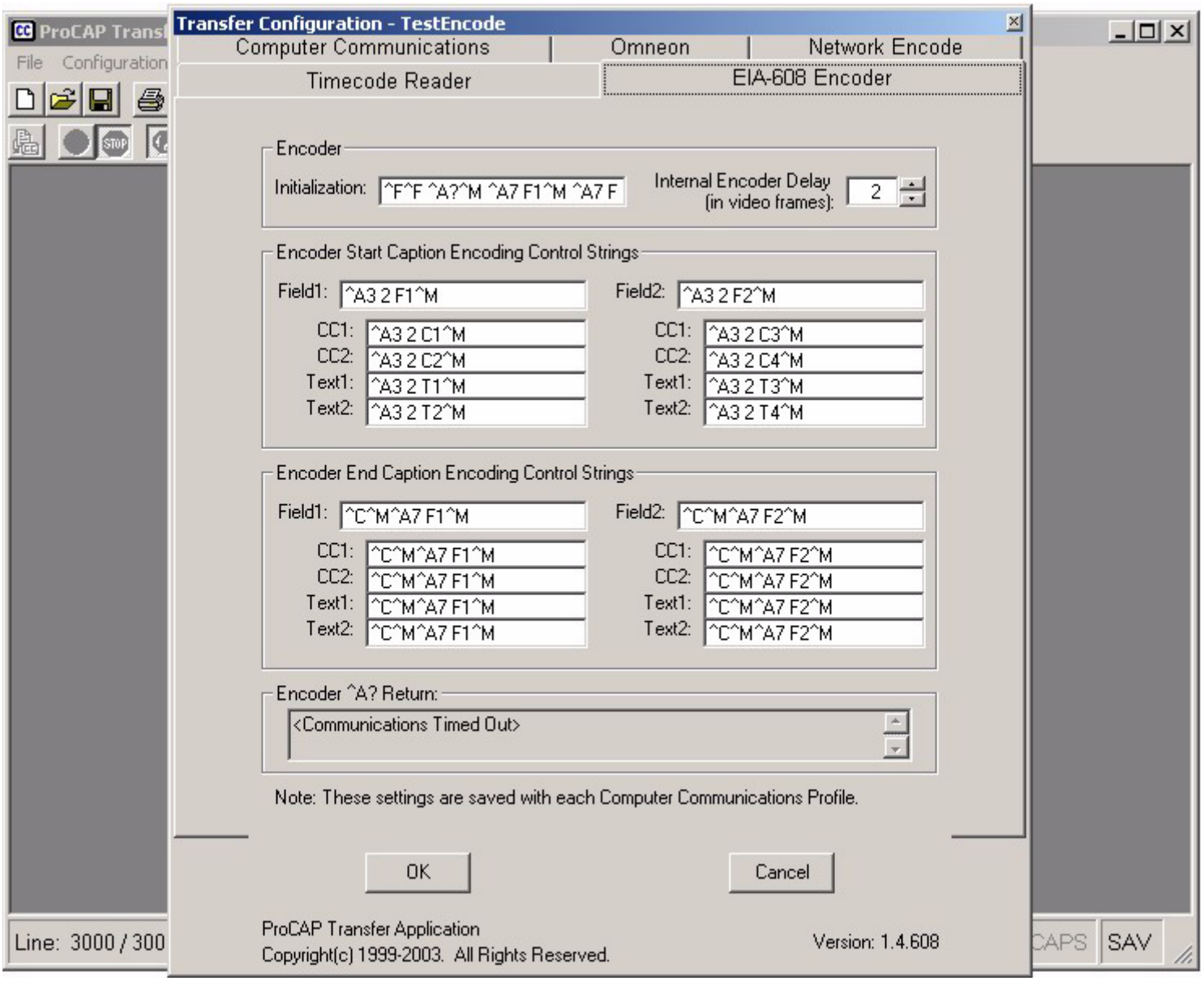
Timecode Reader

The Timecode Reader tab is primarily used for verifying the operation of an installed Adrienne time code reader. The **Timecode Rate** should be set to 30 drop frame for Omneon encoding, and to 30 non-drop frame for conventional EIA-608 encoding.



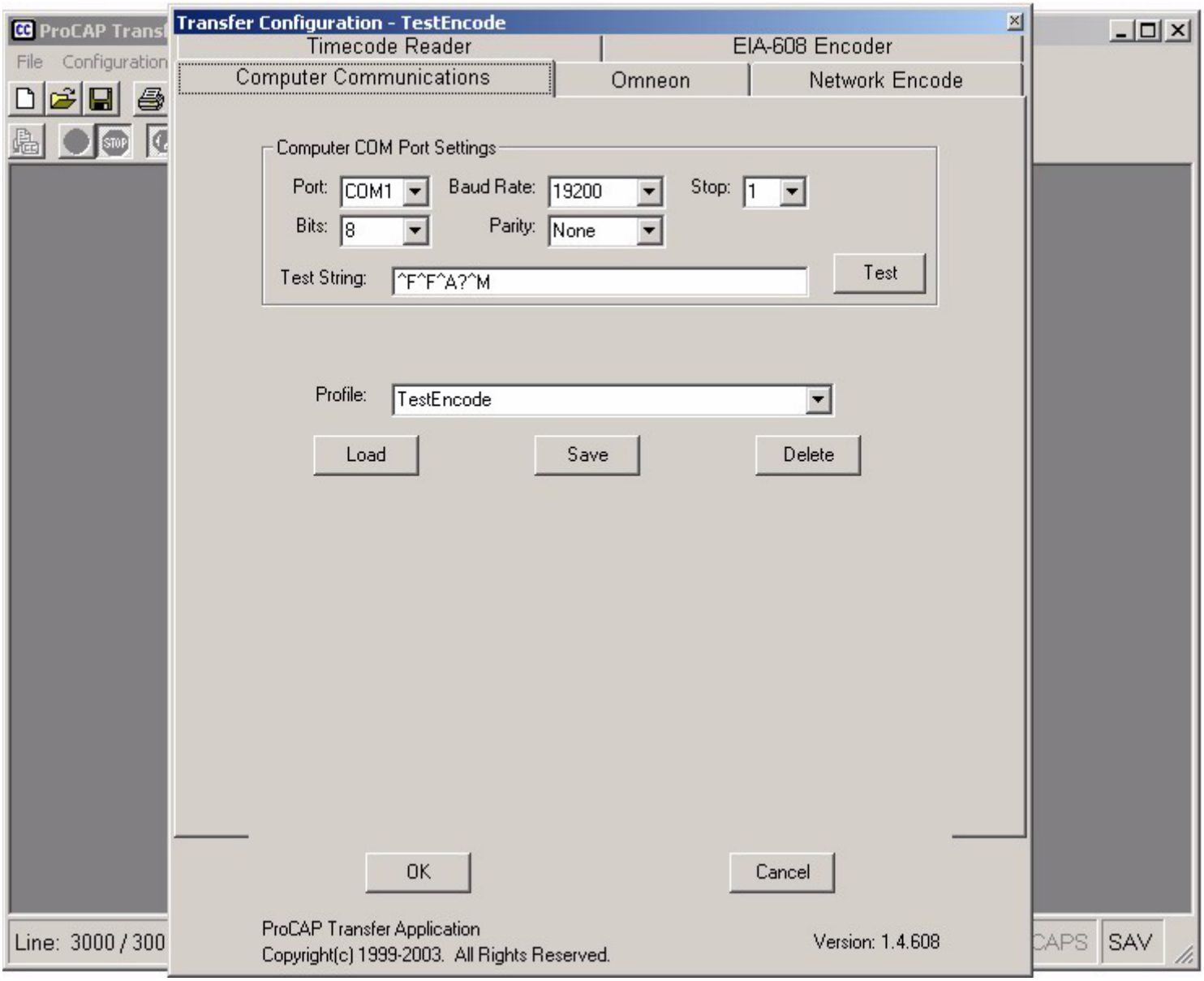
EIA-608 Encoder

The **EIA-608 Encoder** tab contains the encoder initialization settings and control settings and should be kept as the default settings. These are the common configuration strings for a Control-A protocol, or EEG Smart III, compatible encoder.



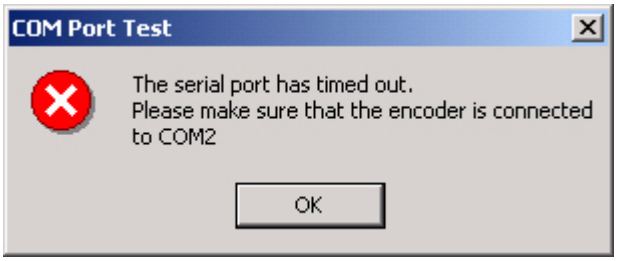
Computer Communications

The **Computer Communications** tab is closely related to the **EIA-608 Encoder** tab. The serial port settings used to communicate with a conventional EIA-608 encoder are set here.



To ensure that the settings are correct, press the Test button. A dialog box should display with an asterisk (*) as the encoder response.

If the encoder is not properly connected, the dialog box will state that the serial port has timed out. This error can also display if the proper bit setting and parity is not set correctly.



You can perform an extended test by copying the initialization string from the Init box and pasting it into the test box. The following is an example result using an Evertz Encoder.

The encoder delay is the delay, in fields, that the encoder introduces to the stream. Consult the user manual or the vendor for the proper setting of this field.

Saving Changes

Once the encoder configuration has been set, you can save the changes into your own profile by typing in a profile name in the profile box and clicking on the

Save button. Changes can be saved to the default profile, but these may be over-written by software updates.

Click on the OK button to close the configuration menu.

Loading A Different Profile

If you have more than one encoder, you can switch between profiles by pulling down the profile combo box by clicking on the down arrow.

This will display the all of the saved profiles. Highlight the profile you wish to load and click the load button.

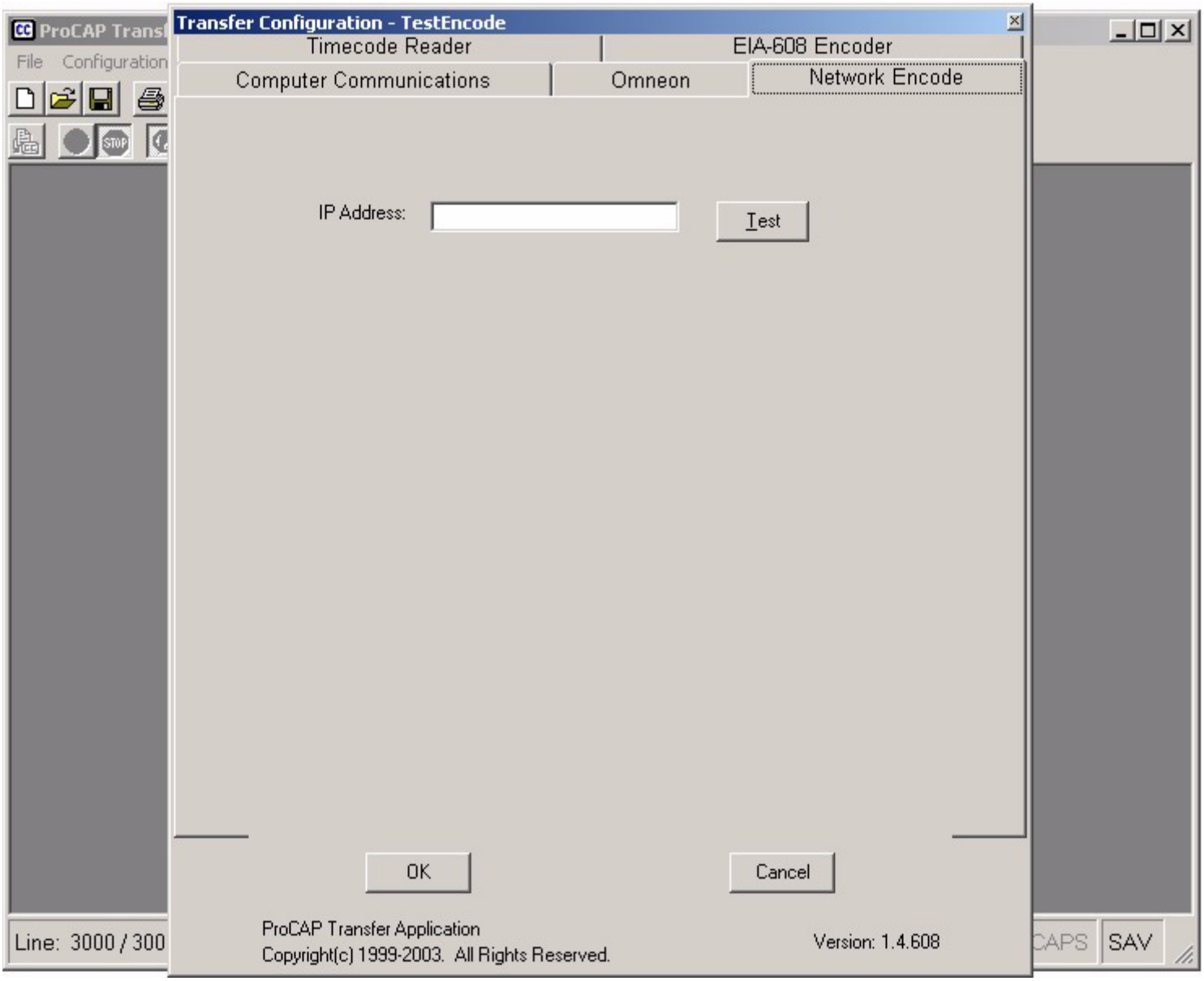
Deleting Profiles

If you have more than one profile and wish to delete the uneeded profiles, pull down the profile combo box by clicking on the down arrow and choose the profile you wish to delete. Click on the delete button to delete this profile.

 If you have deleted all of the profiles, the next time you start ProCAP a new default profile will be created.

Network Encode

The **Network Encode** tab contains the IP address of the selected encoder. The test button sends the same test string to the encoder as with the **Computer Communications** tab.

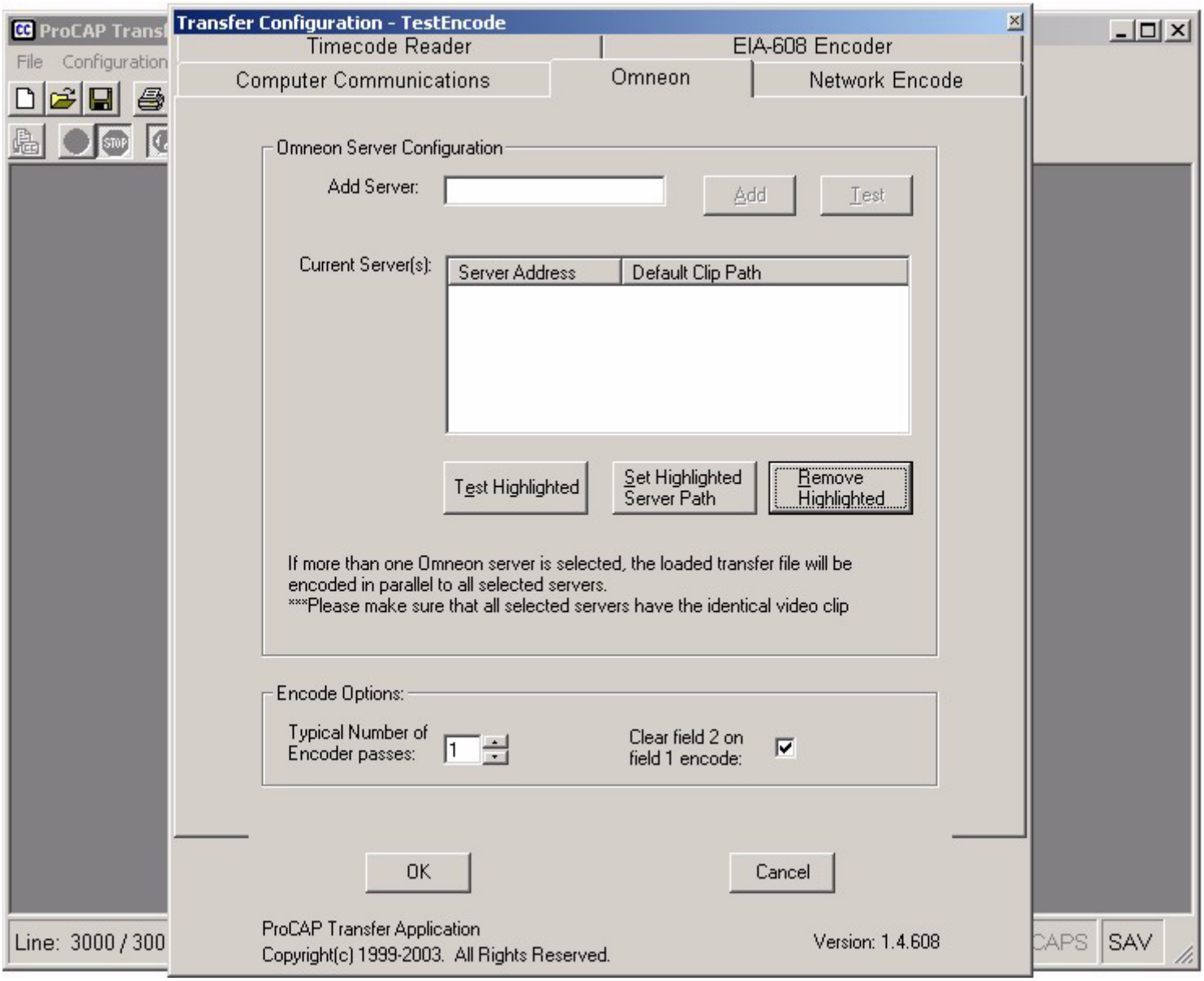


Omneon

The Omneon tab is used to set the Omneon server pool to be used for the Omneon encode operations. See the Omneon Network Setup section for more details.

Network Setup

The **Omneon** tab in the **Configuration Settings** menu is used to setup the Omneon server pool to be used with all Omneon encode operations.



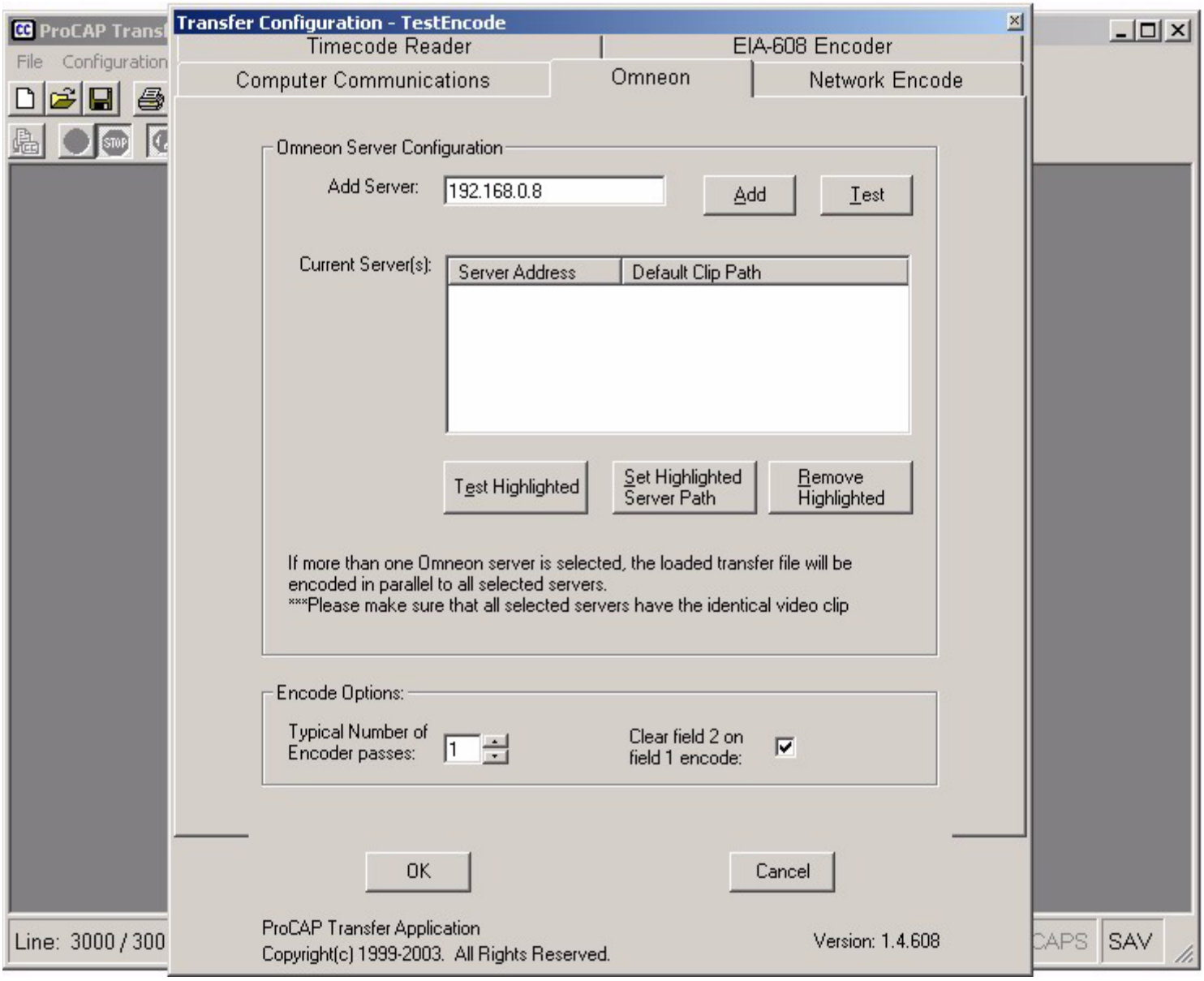
Two **Encode Options** set here affect all Omneon encodes.

The **Typical Number of Encoder Passes** sets the number of encode operations for a given video file before the **Last Encode** dialog defaults to the **Yes** command button when it appears for last encode confirmation. All encode passes before this setting will default to the **No** command button, to allow the Enter key to be used for

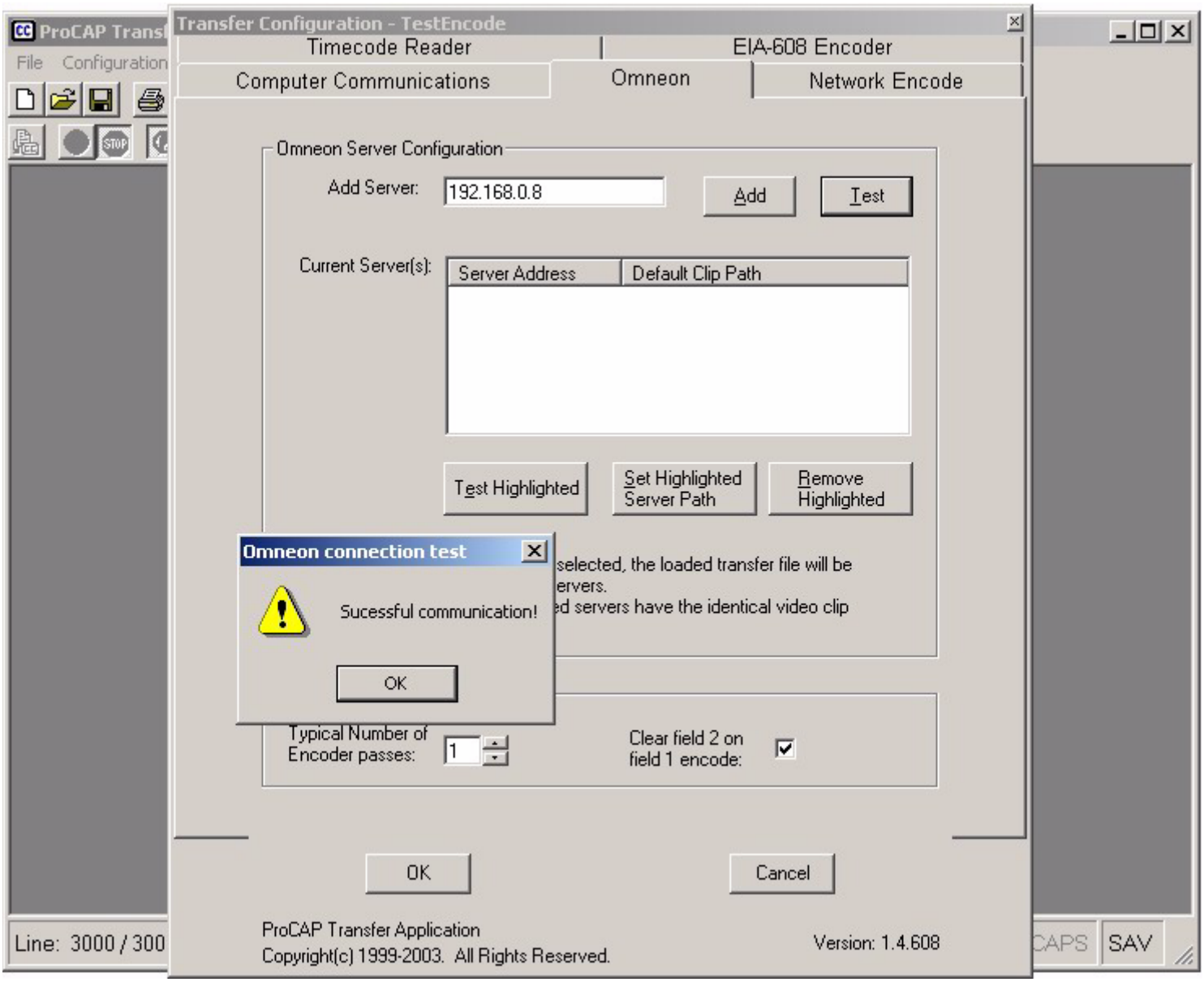
all normal operations. The last encode operation must be identified for the Transfer application to flag the given video file as complete when done. The default is one encoder pass, typically for encoding CC1 in field 1.

The **Clear Field 2 on Field 1 Encode** determines the state of CC3, CC4, T3, T4, and XDS on field 2 for a given video file during the encoding of field 1. The default setting is to clear all field 2 services during the encoding of CC1 in field 1.

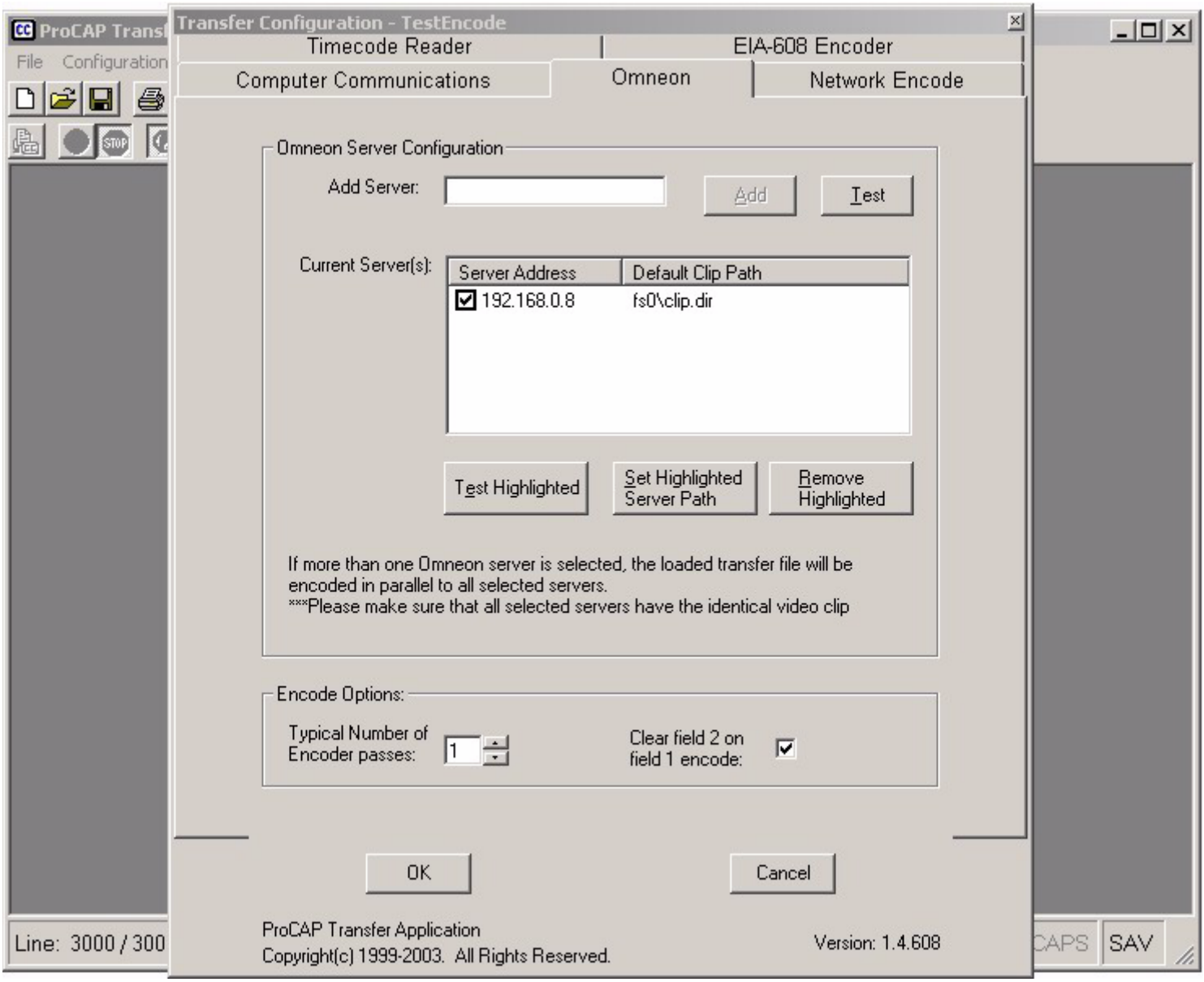
The first operation in setting up a new Omneon server is to add the Omneon server into the available server pool. In the **Add Server** box, enter the IP address, or name, of the new Omneon server.



The **Test** button can be used to confirm that the correct IP address or name has been entered, and that communications are operational.



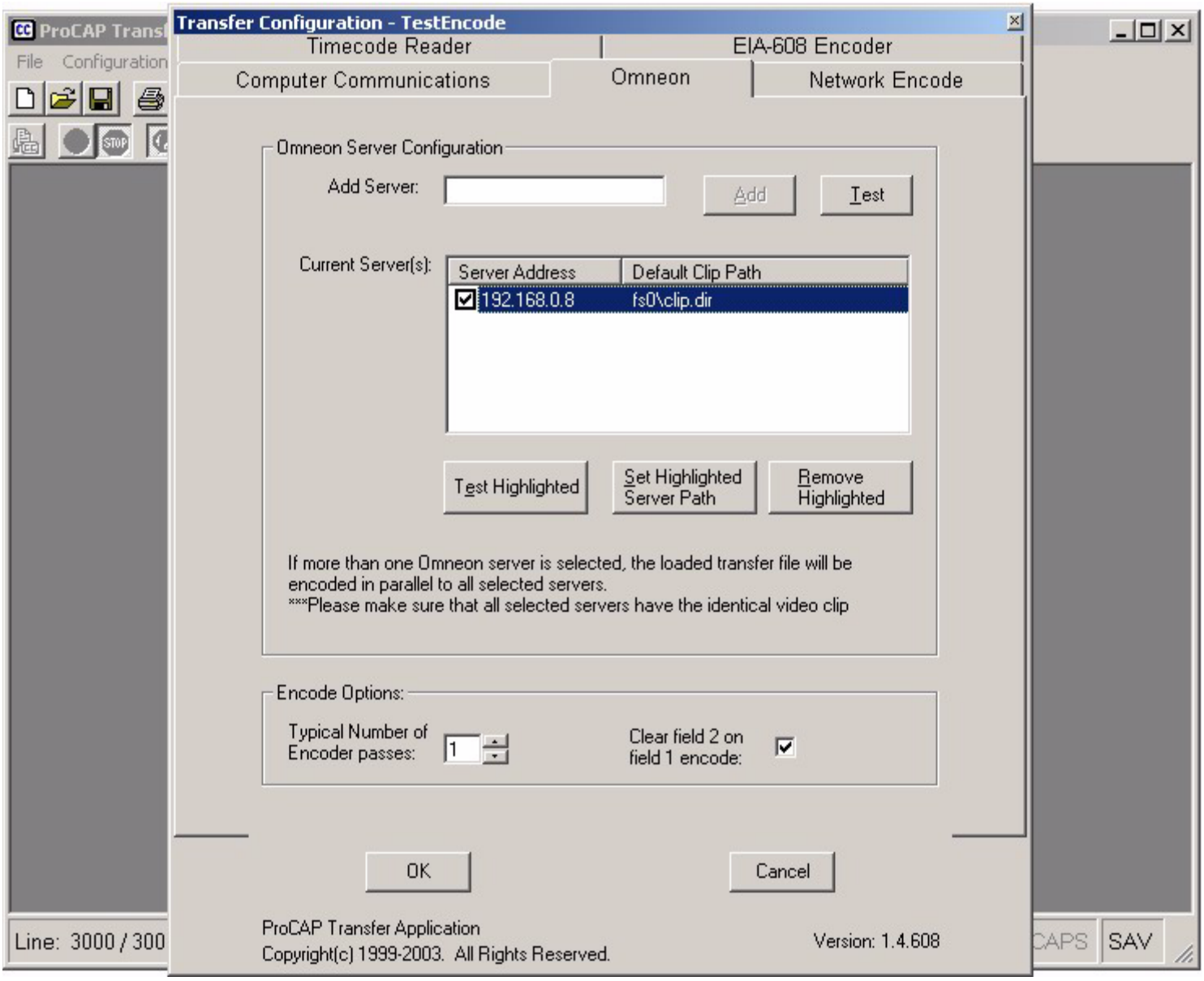
Select the **Add** button to add the new server into the server pool.



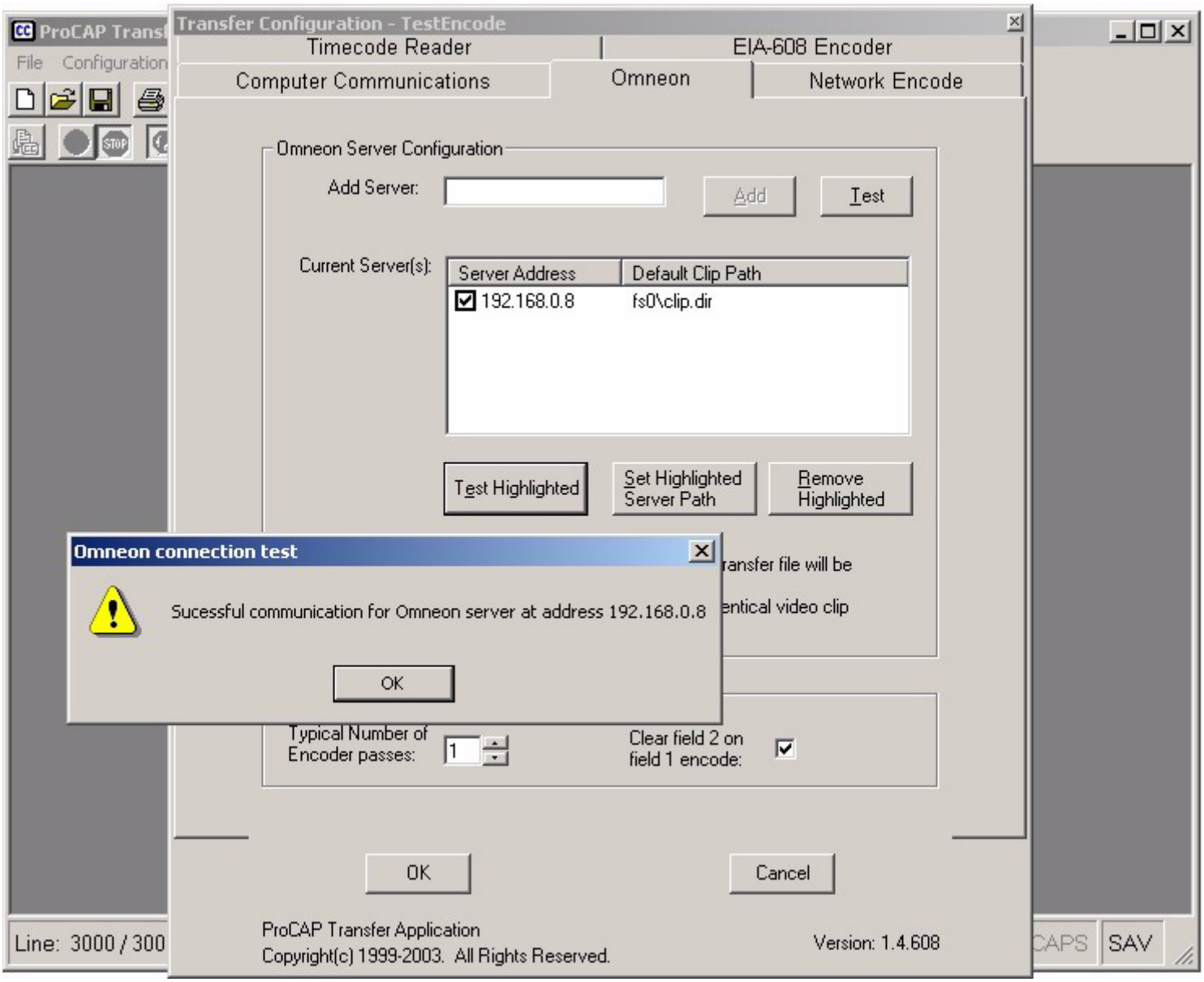
Current Servers are selected from the Omneon server pool by selecting them, indicated by a checkmark in front of the server address. New servers added are selected as current servers by default.

The standard setup is to have a single Omneon server selected, so that all encode operations affect the single selected system. If more than one Omneon server is selected, then all encode operations will be processed in parallel across all Omneon servers. This configuration requires that all selected Omneon servers contain the same files, as any error on any of the selected servers will fail an encode.

Highlight any of the current servers to **Test**, **Remove**, or set the default **Server Path**.

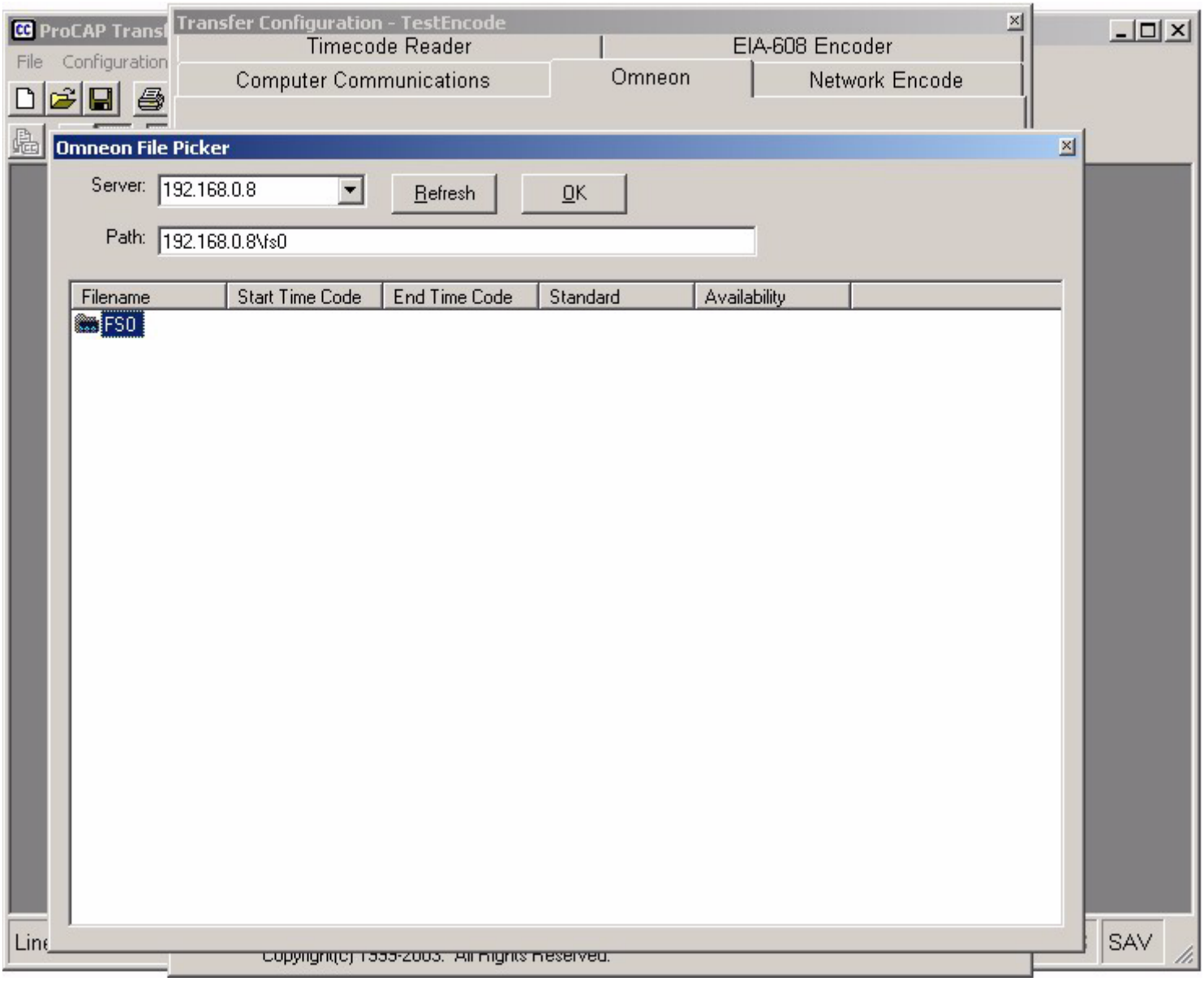


Select **Test** to confirm network communications with the server. The test will fail if network communications timeout. To solve a timeout error, confirm that the Omneon server is on-line and operational, that the correct IP address is being used, and that the Transfer unit has access to the network subnet that the Omneon server resides by using ping.

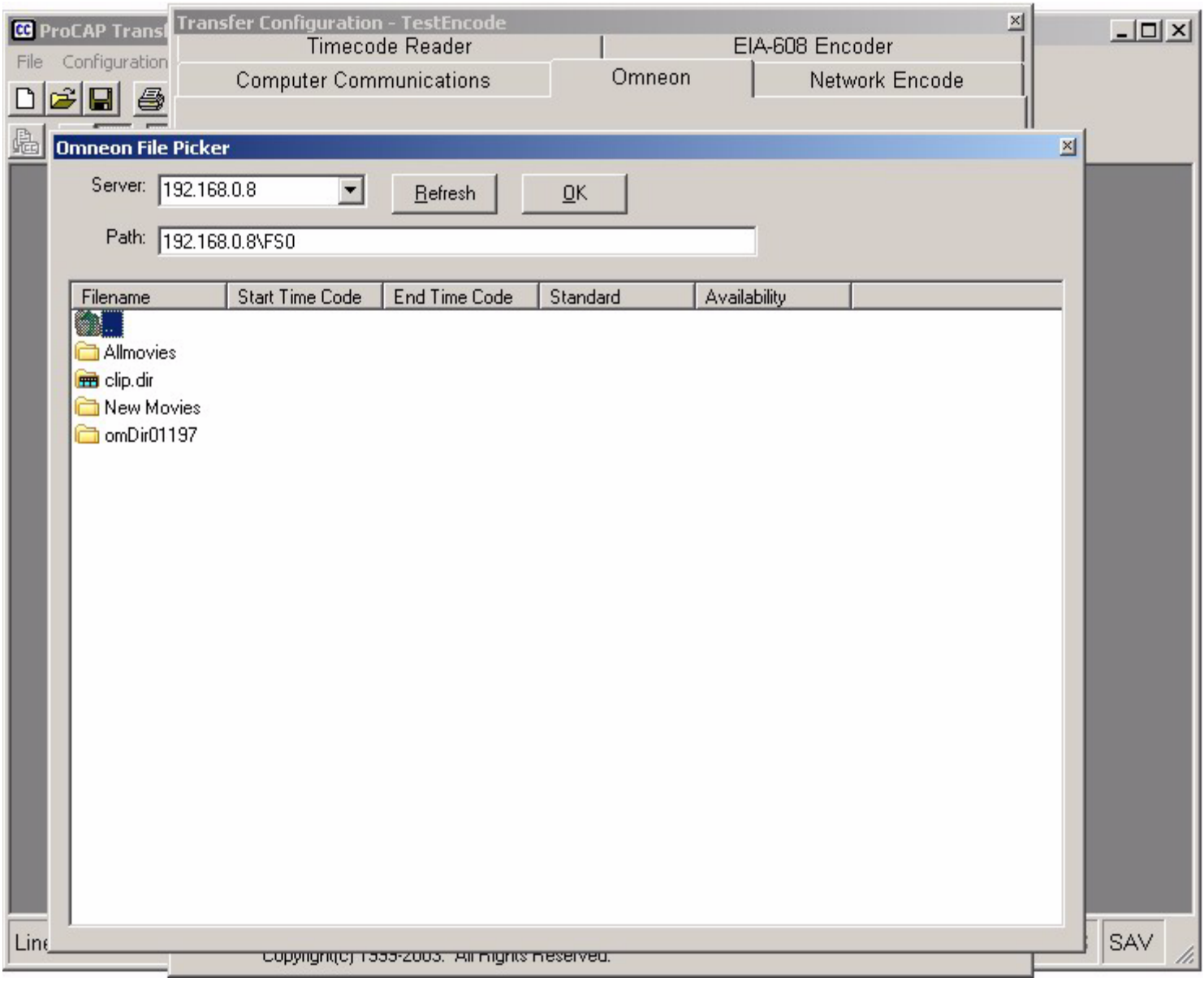


The default server path must be set before encoding to a given Omneon server. The default server path is used extensively by the **Batch Transfer** operation for locating the video clips corresponding to the selected transfer files.

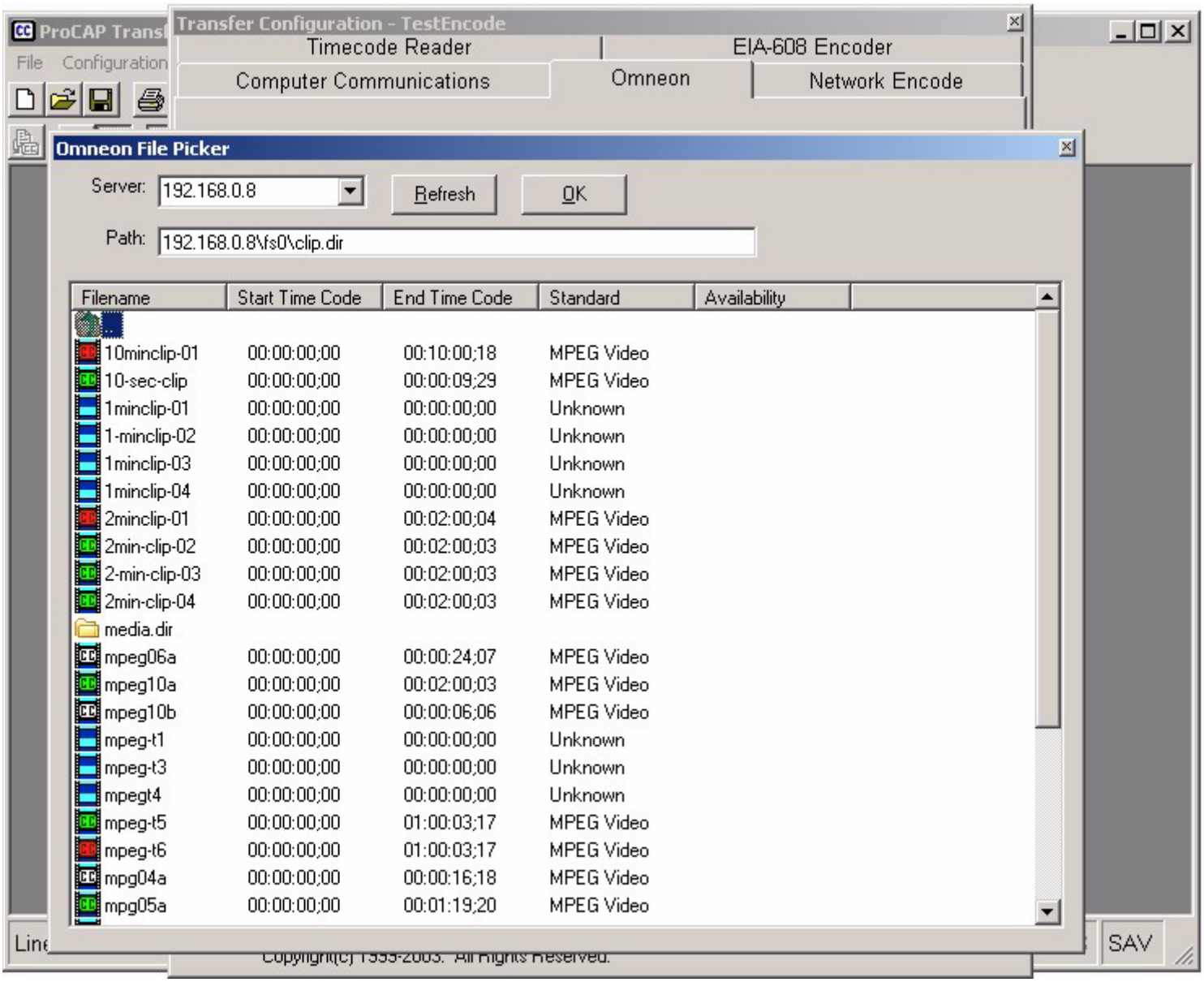
The first step in setting the default server path is to select the drive share on the target Omneon server.



The next step is to navigate to the appropriate directory where the clips are stored. The **Omneon File Picker** lists all available video files, and indicates which directories contain valid video files.



Large directories can take some time to load in the **Omneon File Picker**, as all of the clip information for each clip is retrieved. The Transfer application caches the file names locally, so that the initial listing is filled in a timely manner. Available video clips for encoding are shown with an icon to the left of the filename: blue for uncaptioned/unknown, red for incomplete, and green for captioning complete. The video clip icons are filled in at a slower rate, as the information is retrieved from the Omneon server.



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