GEORGEJAMES
SOFTWARE

RE/parser

RE/parser Installation and Configuration

Notices

Order code 1001.

Product Support

Support is available to all users of George James Software Products who have a current Software Maintenance Agreement. Support and assistance can be obtained from the following sources:

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2	\\Wiz\D\Lib\Manuals\REparser\REparser_Installation_Configuration.2.doc	19 July 2002	Gail Treves Brown	Further small revisions

RE/parser Installation and Configuration

Contents

1 Installation and Configuration

1.1 Installation and Configuration Checklist

The following procedure should be used to install the RE/parser software for the first time.

If you are upgrading a currently installed version of RE/parser, do not use this installation procedure. Each new version of RE/parser is supplied with release notes that describe how to upgrade from an old version of RE/parser to a new version.

If you are installing RE/parser for the first time, you should consult the relevant M implementation-specific section (p. 8-14) before following the instructions below.

Install M

If you have not already done so, install M on the machine where RE/parser is to be installed. If this process is not familiar, please consult George James Software for help.

Check box ☐

Configure M

Set up the namespaces or UCIs which are required for the RE/parser software.

Check box ☐

Copy the RE/parser Software

Copy the files from the CD or zip file to your installation directory.

Check box ☐

Install the RE/parser Routines and Globals

Install the routine and global save files using the appropriate routine and global restore utilities for your M implementation.

More detailed information can be found on p. 4.

Check box ☐

Install the Implementation-Specific Drivers

The first time you start RE/parser, the installation program will run. Select the options for your M implementation and operating system.

More detailed information can be found on p. 5.

Check box ☐

Enter the License Key

Enter the path to your RE/parser license key file.

More detailed information can be found on p. 6.

Check box 

Check the Installation

Start RE/parser to check that the software has been installed correctly.

More detailed information can be found on p. 7.

Check box 

Set Up Device Types

You may need to set up the device characteristics of terminals and printers that you plan to use with RE/parser. The Device Types menu option in RE/parser Set-up enables you to do this.

More detailed information can be found on p. 16.

Check box 

Set Up Terminals

For each terminal which will be used with RE/parser and is not of the DEFAULT type, create an entry in the terminal file (using the Terminals option in the RE/parser Set-up menu).

More detailed information can be found on p.24.

Check box 

Set Up Output Devices

For each printer or other output device which will be used with RE/parser, create an entry in the printer file (using the Printers option in the RE/parser Set-up menu).

More detailed information can be found on p. 21.

Check box 

Set Up Backup Procedures

Make sure your valuable data is backed up regularly.

More detailed information can be found on p.15.

Check box 

The installation of RE/parser is now complete. If you have not already done so, consult the relevant sections for information which is specific to your M implementation.

1.2 Installation

Installing the RE/parser Software

The routines and globals of the RE/parser system are supplied as a set of files in routine save and global save format. The following files are supplied:

REP.RSA	RE/parser routines in routine save format
REP.GSA	RE/parser globals in Caché global save format
REP.GTM	RE/parser globals in GT.M global save format
REP.DSM	RE/parser globals in DSM global save format
REP.MSM	RE/parser globals in MSM global save format
REP.DTM	RE/parser globals in DTM global save format

The global save files contain the same data in different formats. You should use the most appropriate one for your system.

Using the appropriate routine restore and global restore utilities, load the routine save file and one of the global save files into your M system.

Consult the relevant M implementation-specific section (p. 8-14) for further information.

Installing the Implementation-Specific Drivers

In order to run RE/parser on your system, you need to have installed the correct implementation-specific drivers. The installation routine installs the appropriate driver for your operating system and M implementation. It also creates root level entries for all globals used by RE/parser.

The installation routine runs automatically the first time you start RE/parser.

To start RE/parser, type the following command at the M prompt:

```
do ^reparser
```

or

```
DO ^REPARSER
```

Then choose the appropriate options for your system:

```
RE/* Installation
Re-engineering for M Applications
Copyright 1990,2002 George James

For support call +44-1932-252568
or e-mail support@georgejames.com

What type of M system are you running?
     1  Sanchez GT.M
     2  InterSystems MSM
     3  InterSystems DTM
     4  InterSystems ISM
     5  InterSystems DSM
     6  InterSystems Caché
M system (1-6)? 6
What type of Operating System are you running?
      1  Windows
      2  OpenVMS
      3  UNIX, Linux
Operating System? 1
RE/parser - installing Cache drivers .........
RE/parser - installing on-line reference manual ...
Installation complete
```

If you need to re-install the implementation-specific drivers at any time, or if you are running on DTM, enter the following at the M prompt to run the installation routine:

```
do ^reins
```

Entering the License Key

The first time you start RE/parser, you will receive a message saying ‘RE - Please enter a valid license key’.

To start RE/parser, type the following command at the M prompt:

```
do ^reparser
```

or

```
DO ^REPARSER
```

You will be presented with the following screen:

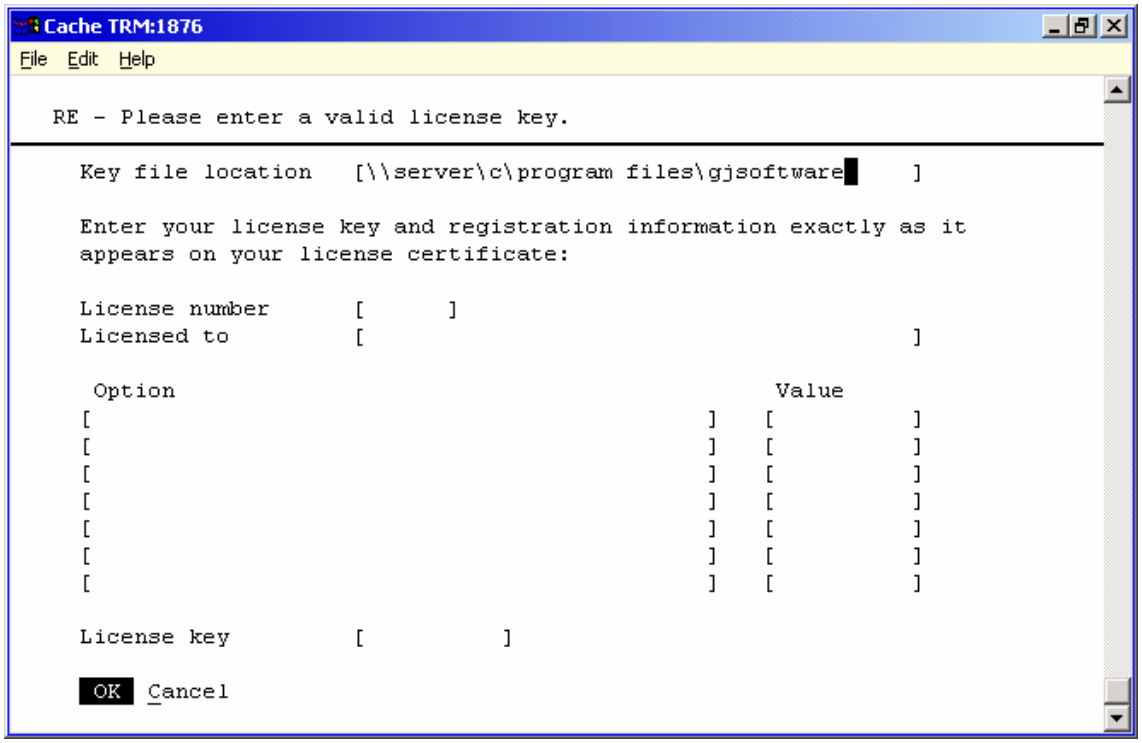

Figure 1.1 License key

Enter the location of your license key. If you are running in a networked environment, it is recommended that you enter the path for the license key location using the whole network path.

The details of your license will be displayed.

When you have entered the location of the license key and selected 'OK' to save the information, use the Exit option and select Yes to exit.

Checking the Installation

Check that the installation procedure has been performed correctly by invoking RE/parser. This is done by typing the following command at the M prompt:

```
do ^reparser
```

or

```
DO ^REPARSER
```

If RE/parser has been correctly installed, you will be presented with the following screen, showing the RE/parser main menu, license number, licensee and copyright notice.

Note: It may be necessary to exit and start RE/parser a second time before the license number is displayed.

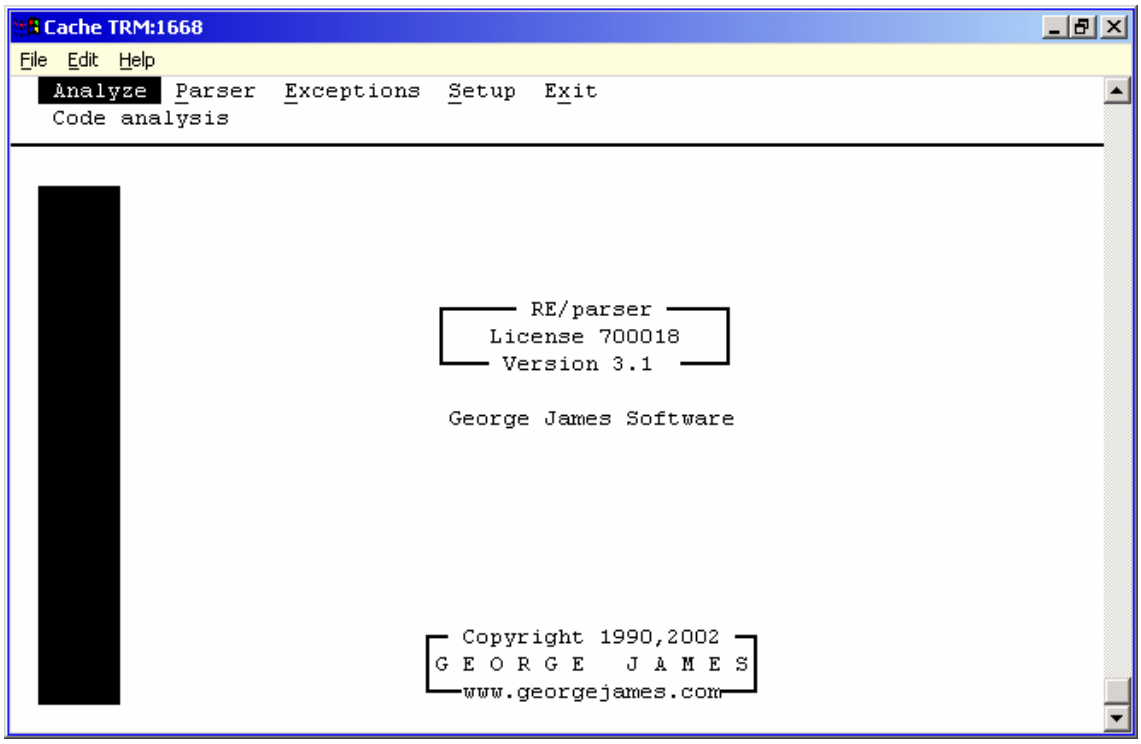

Figure 1.2 RE/parser main menu screen

1.3 M Implementation-Specific Information

Caché Information

Restoring Routines

To restore routines, enter the following at the M prompt:

```
do ^%RI
```

If Caché reports that this file is not a %RO output file, say ‘Yes’ to override and use the file with %RI. Choose Caché mode for the restore.

Syntax errors will be reported, but these can safely be ignored.

Restoring Globals

To restore globals, enter the following at the M prompt:

```
do ^%GI
```

If an end-of-file error is reported, this can safely be ignored.

Other Routine and Global Utilities

The following utilities may be required when upgrading RE/parser:

Routine Save:	%RO
Global Save:	%GO
Routine Delete:	%RDELETE

DSM Information

Restoring Routines

To restore routines, enter the following at the M prompt:

```
do ^%RR
```

Syntax errors will be reported, but these can safely be ignored.

Restoring Globals

To restore globals, enter the following at the M prompt:

```
do ^%GTI
```

If an end-of-file error is reported, this can safely be ignored.

Other Routine and Global Utilities

The following utilities may be required when upgrading RE/parser:

Routine Save:	%RS
Global Save:	%GTO
Routine Delete:	%RPURGE

DTM Information

Restoring Routines

To restore routines, enter the following at the M prompt:

```
do ^%rload
```

Set the format to DSM-11.

Syntax errors will be reported, but these can safely be ignored.

Restoring Globals

To restore the globals, enter the following at the M prompt:

```
do ^%gload
```

If an end-of-file error is reported, this can safely be ignored.

Other Routine and Global Utilities

The following utilities may be required when upgrading RE/parser:

Routine Save:	%rsave
Global Save:	%gsave
Routine Delete:	%rdelete

Installing the Implementation-Specific Drivers

On DTM, the installation program does not run automatically the first time you start RE/parser. Before starting RE/parser, enter the following at the M prompt and then choose the appropriate options for your system:

```
do ^reins
```

Color Configuration

DTM can be configured to run RE/parser in color on the console device. This can be done by mapping the normal ANSI video attributes to various colors using the DTM routine %vconfig (or %config in DTM 4.3 and later). The following video attributes are used by RE/parser and some color mappings are suggested:

Video Attribute	Suggested Color Mapping	
Normal	127 (White on Gray)	63 (White on Cyan)
Bold	113 (Blue on Gray)	49 (Blue on Cyan)
Reverse	79 (White on Red)	79 (White on Red)
Reverse Bold	31 (White on Blue)	31 (White on Blue)
Underline	120 (Gray on Gray!)	59 (Blue on Blue!)

GT.M Information

Restoring Routines

To restore routines, enter the following at the M prompt:

```
do ^%RI
```

Save the routines in the appropriate operating system directory.

Restoring Globals

To restore globals, enter the following at the M prompt:

```
do ^%GI
```

If an end-of-file error is reported, this can safely be ignored.

ISM Information

Restoring Routines

To restore routines, enter the following at the M prompt:

```
do ^%RI
```

Syntax errors will be reported, but these can safely be ignored.

Restoring Globals

To restore globals, enter the following at the M prompt:

```
do ^%GTI
```

If an end-of-file error is reported, this can safely be ignored.

Other Routine and Global Utilities

The following utilities may be required when upgrading RE/parser:

Routine Save:	%RO
Global Save:	%GTO
Routine Delete:	-

MSM Information

Restoring Routines

To restore routines, enter the following at the M prompt:

```
do ^%RR
```

Syntax errors will be reported, but these can safely be ignored.

Restoring Globals

To restore globals, enter the following at the M prompt:

```
do ^%GR
```

If an end-of-file error is reported, this can safely be ignored.

Other Routine and Global Utilities

The following utilities may be required when upgrading RE/parser:

Routine Save:	%RS
Global Save:	%GS
Routine Delete:	%RDEL

1.4 Backing Up your Installation

Once in use, the RE/parser repository contains information that is of significant value. As a minimum, the following volatile globals should be backed up:

```
^re

^re100

^reio

^redev

^reana
```

In practice it is simpler to back up the operating system files which contain the database.

1.5 Set-Up Options

Device Types: Device type maintenance

A number of standard device types are pre-defined, as follows:

DEFAULT	Default device type (pre-set as for ANSI)
SYSTEM	For internal use only
IBMPC	IBM Compatible PC display (DataTree Console)
MSMCON	MSM console
VDU	Basic character terminal
ANSI	ANSI standard terminal
LP	Basic character printer
HPL	HP Laser printer (landscape)
HPP	HP Laser printer (portrait)
LN03	DEC Laser printer
DOSFILE	Sequential DOS file
WINFILE	Sequential Windows file

In order to use devices which are not in the list above, an entry needs to be created in the device type file, specifying the attributes of the device.

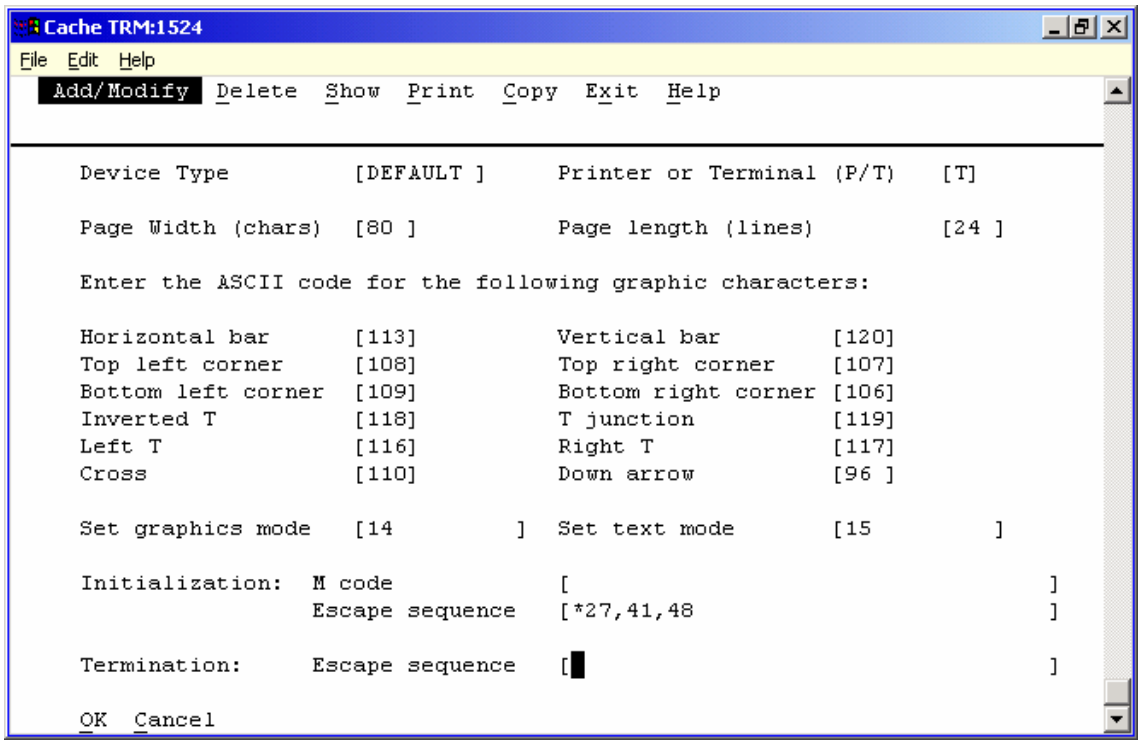

Figure 1.3 Device type maintenance

- Device Type

  Enter a code to identify the device type. Certain device types, e.g. ANSI, which are supplied as a standard part of the package, cannot be modified. You may, however, create as many new ones as you need.

- Printer or Terminal

  Enter P if the device you are defining is a printer or other output device. Enter T if it is a terminal or PC screen.

- Page Width

  Enter the width of the page (or screen) in characters. Where relevant, RE/parser will format the screen or page to fit within this width. Note that most screen displays and reports in RE/parser assume a minimum width of 80 characters.

- Page length

  Enter the length of the page (or screen) in lines. Where relevant, RE/parser will format the screen or page to fit within this length. Note that most screen displays in RE/parser assume a minimum length of 24 lines.

- ASCII code for graphic characters

  The next twelve prompts define the line and box drawing characters to be used for this device.

  You should enter the ASCII code corresponding to the character that should be displayed in each case.

Field	Character
Horizontal bar	─
Top left corner	┌
Bottom left corner	└
Inverted T	┴
Left T	├
Cross	┼

Field	Character
Vertical bar	│
Top right corner	┐
Bottom right corner	┘
T junction	┬
Right T	┤
Down Arrow	v

- Set graphics mode

  If the device uses an alternative character set for graphics characters, enter the ASCII codes required to switch the device to that character set. Enter each character in the control string as an ASCII code, delimited by commas.

- Set text mode

  If the device uses an alternative character set for graphics characters, enter the ASCII codes required to switch the device back from the graphics character set to the normal text character set. Enter each character in the control string as an ASCII code, delimited by commas.

- Initialization: M code

  Enter any string of M code which you wish to be executed on device initialization.

- Initialization: Escape sequence

  If the device requires a special initialization string (for example, to select compressed print), enter the control sequence required. This can be entered in any one of the following formats:

Format	Example
Text string	`!r!font 9;exit;`
ASCII code sequence	`*27,41,48` `*nn,nn,nn,...`
Escape sequence	`@[10l;@10c;@[1m`

Note: @ is used for escape.

Note: The formats cannot be mixed within the same field.

- Termination: Escape sequence

  If the device requires a special termination string (for example, to reset the printer margins), enter the control sequence required.

  It can be entered in any of the formats described for the initialization string.

License: License key maintenance

This option is used to enter a new or amended license key. It controls the options which are enabled. Individual features can also have an expiry date for evaluation purposes.

The license key is stored in an operating system file.

This option can be used to view the details of the key. It can also be used to manually edit the details, although this is unlikely to be necessary.

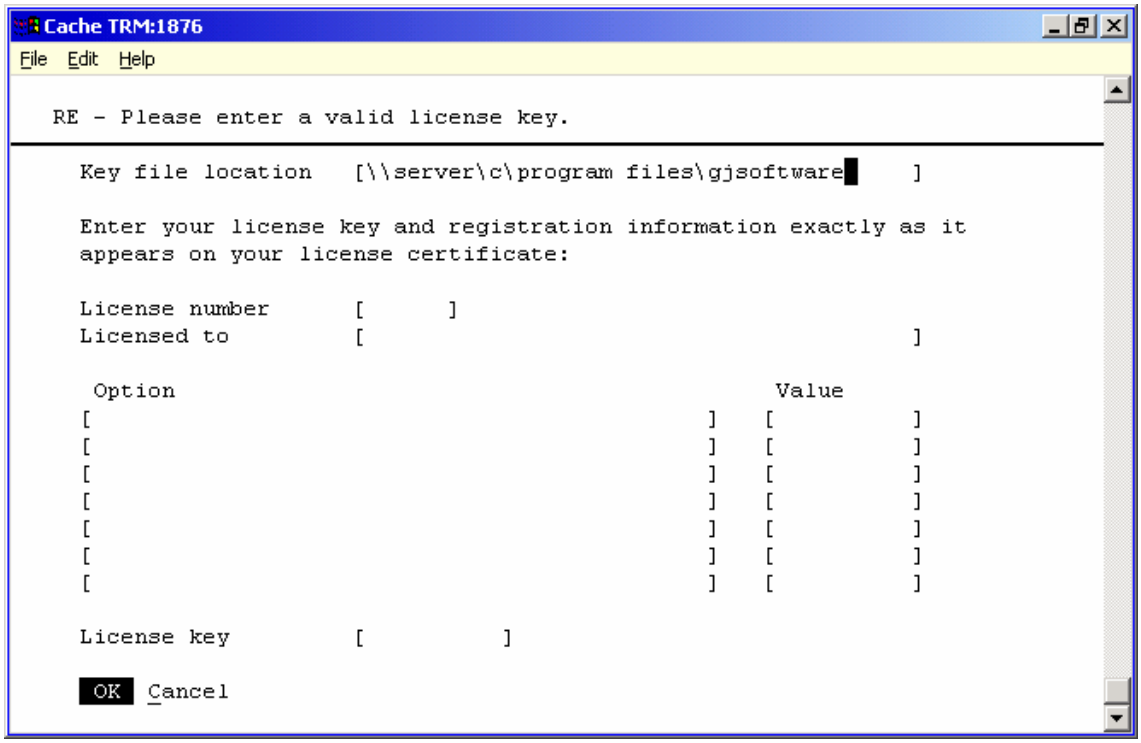

Figure 1.4 License key maintenance

- Key file location

  Enter the location of your license key. If you are running in a networked environment, it is recommended that you enter the path for the license key location using the whole network path.

  When <return> is pressed, the details of your license will be displayed.

Printers: Output device maintenance

Each output device is identified by a logical name, which need not be the same as its $IO value. RE/parser will not be able to use any printer or other output device which does not have an entry in this file.

Figure 1.5 Output device maintenance (printer)

- Printer name

  Enter the name by which the printer or output file is to be known.

- Device ID ($IO)

  Enter the address of the output device. This may be a file name, a device number, or a device mnemonic, depending on the host operating system and M implementation that you are using.

  If you enter '???' in this field, the device ID is entered at print time following the device name. For example, if a device called FILE is set up with a device ID of ???, at any Output Device prompt, the actual device ID to be used is input following the device name.

```
Output Device        [FILE MYFILE.TXT          ]
```

- Device type

  Enter the device type code for the output device, as defined in the device type table.

- Open parameters

  If the device requires special parameters when it is opened, enter them here. If there are multiple parameters, they probably need to be in brackets. For example:

```
Open parameters      [(width=0:escape          ]

Open parameters      [(0::::262208)            ]
```

  If three question marks are entered at any point in the open parameters field then, in a similar way to the Device ID, a value can be supplied at print time which will be substituted for the three question marks. For example, the open parameters contain the following:

```
Open parameters      [(file="???":mode="W")    ]
```

  At print time, the file name can be specified at the Output Device field:

```
Output Device        [FILE MYFILE.TXT          ]
```

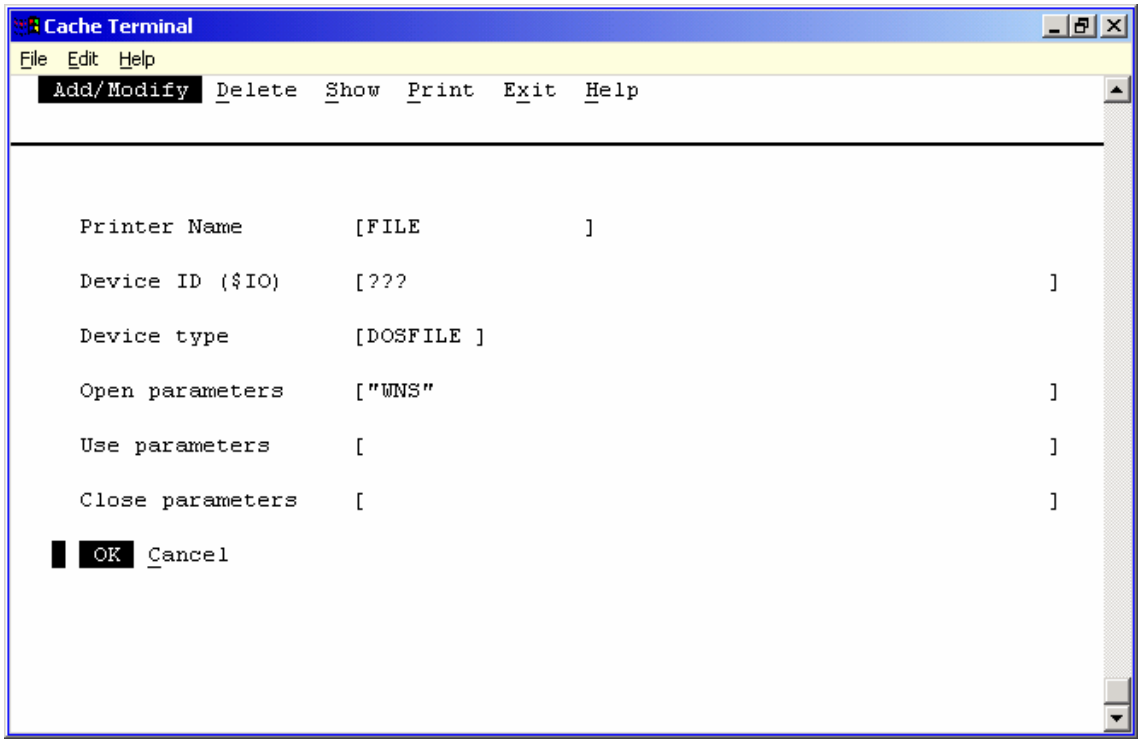

Figure 1.6 Output device maintenance (file)

- Use parameters

  If the device requires special parameters when it is used, enter them here. If there are multiple parameters, they probably need to be in brackets.

- Close parameters

  If the device requires special parameters when it is closed, enter them here. If there are multiple parameters, they probably need to be in brackets.

Terminals: Terminal maintenance

RE/parser will run on any terminal that conforms to ANSI standard 3.64 (e.g. VT220, VT420, and most PC terminal emulators).

Each terminal is identified by its $IO value. If an entry is not defined in the terminal file, RE/parser assumes that the device is of the type DEFAULT, as defined in the device type table. DEFAULT should be configured to support all terminals that will be used with RE/parser over a terminal server or network.

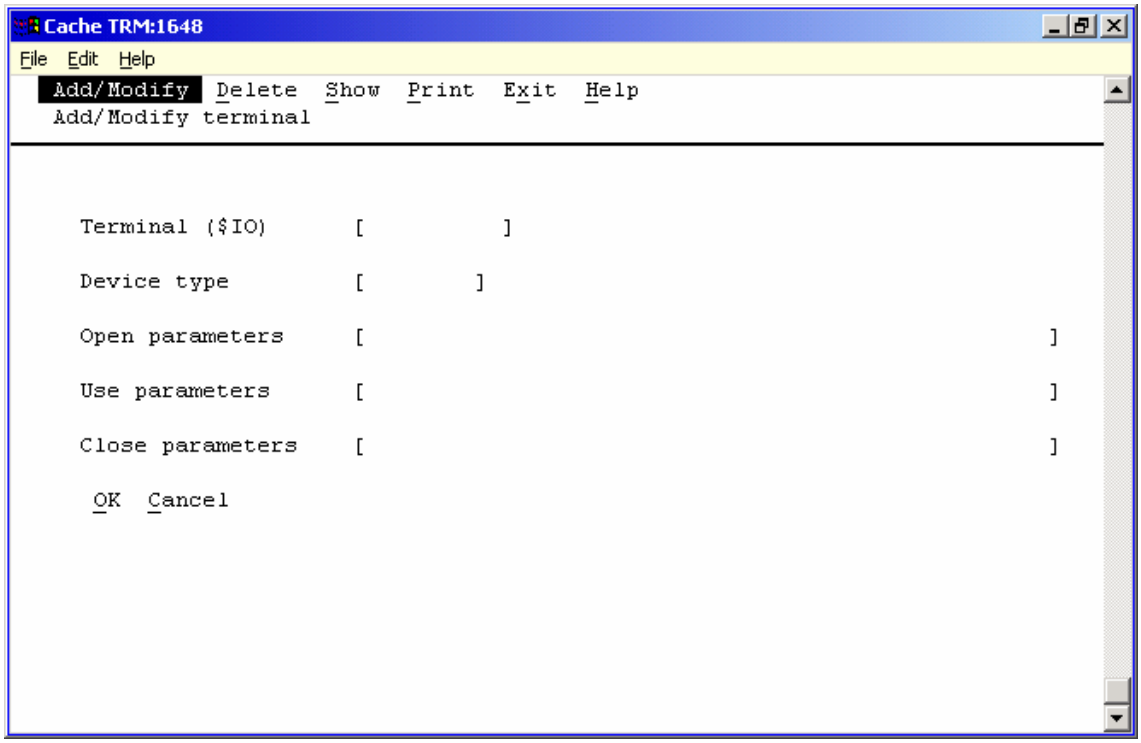

Figure 1.7 Terminal maintenance

- Terminal ($IO)

  Enter the $IO value that identifies the terminal.

- Device type

  Enter the device type code for the terminal, as defined in the device type table.

- Open parameters

  If the device requires special parameters when it opened, enter them here. If there are multiple parameters, they will probably need to be in brackets. For example:

```
Open parameters      [(width=0:escape)          ]
```

```
Open parameters      [(0:::262208)             ]
```

- Use parameters

  If the device requires special parameters when it is used, enter them here. If there are multiple parameters, they probably need to be in brackets.

- Close parameters

  If the device requires special parameters when it is closed, enter them here. If there are multiple parameters, they probably need to be in brackets.