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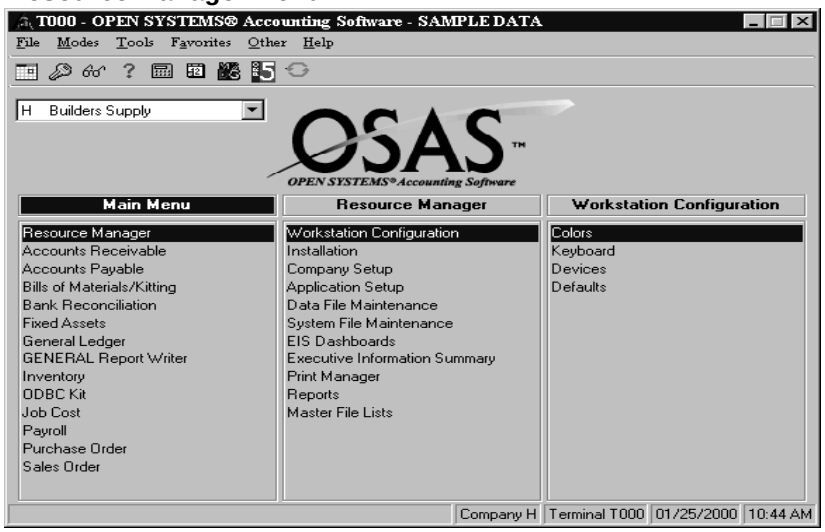
Workstation Configuration 1

Use the Workstation Configuration function to customize and optimize the compatibility of OSAS with your network and the devices that are used in implementing this software on the connected terminals. This function allows you to define the terminal display, specify the definition of function keys, and define devices such as other terminals and printer hardware that can access OSAS.

Note

You can establish the configuration to be used by the system as a whole or by specific terminals.

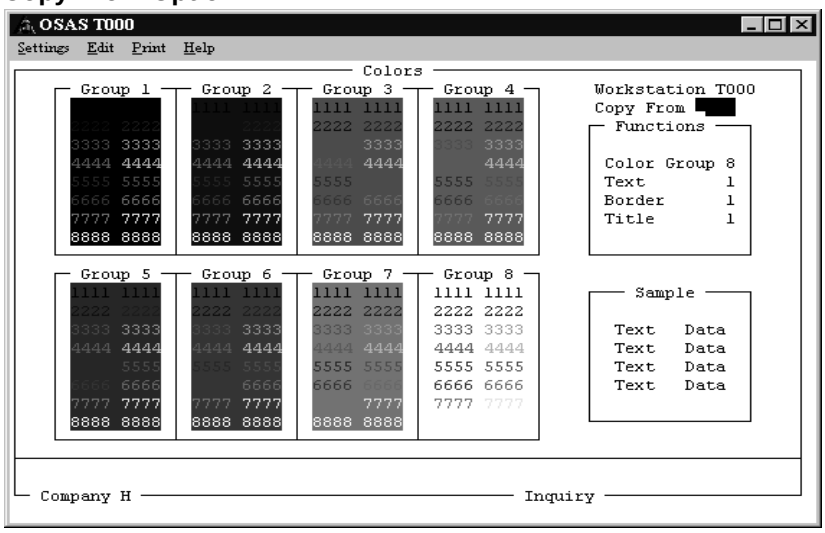
Resource Manager Menu



Note

You **cannot** use the Colors and Keyboard functions in graphical mode. To change the OSAS screen colors in graphical mode, use the Windows Control Panel.

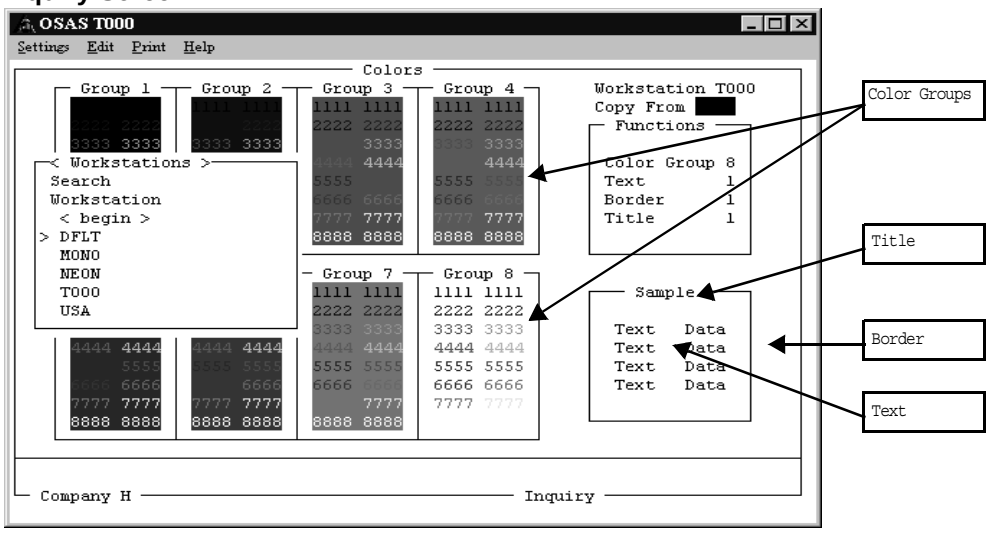
Copy From Option



Use the **Colors** function to customize the screen, menu, and text colors for each *specific* terminal, and each menu item. The **Tab** key allows you to move to each menu and the colors are based on each color group shown. **Proceed** (Pgdn) to save your changes. You can adjust the current colors available by selecting **Settings** from the top panel.

These changes are stored in the **OSCL** file in the **SYSFIL** directory.

Inquiry Screen



If you use the **Inquiry** (F2) key to **Copy From** you will get the following choices. The extra terminal IDs listed in the inset window were previously set up and will not show on your screen, the **DFLT** will return your colors to the original installation colors.

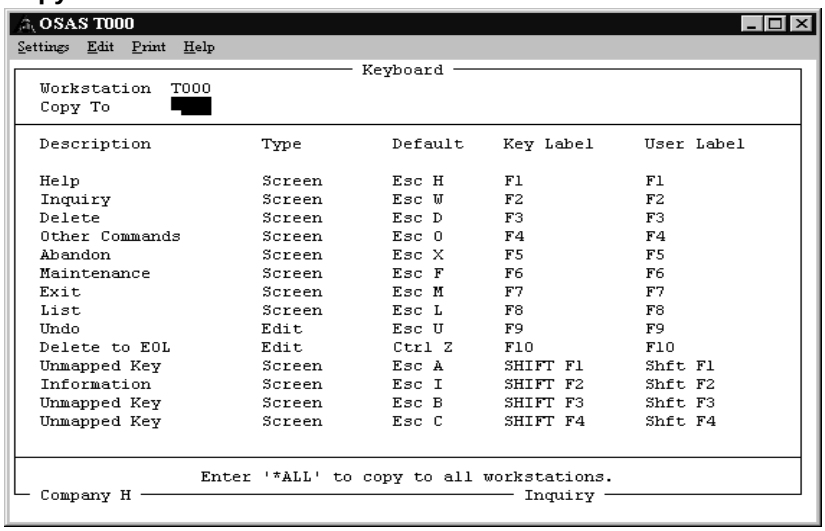
Keyboard

Use the **Keyboard** function to customize the definitions of all or specific terminals, while using OSAS. To have all terminals the same enter ***ALL** in the **Copy To** field. To have one terminal the same as another enter the appropriate Terminal ID. To have one terminal different from the rest then enter the changes on that terminal.

If you are on a Unix system you may need to come in here and make adjustments if you are experiencing issues with your keyboard operation.

The information from this file is stored in the **OSKY** file in the **SYSFIL** directory. You can remove the OSKY file and the system will recreate a new file based off standard defaults.

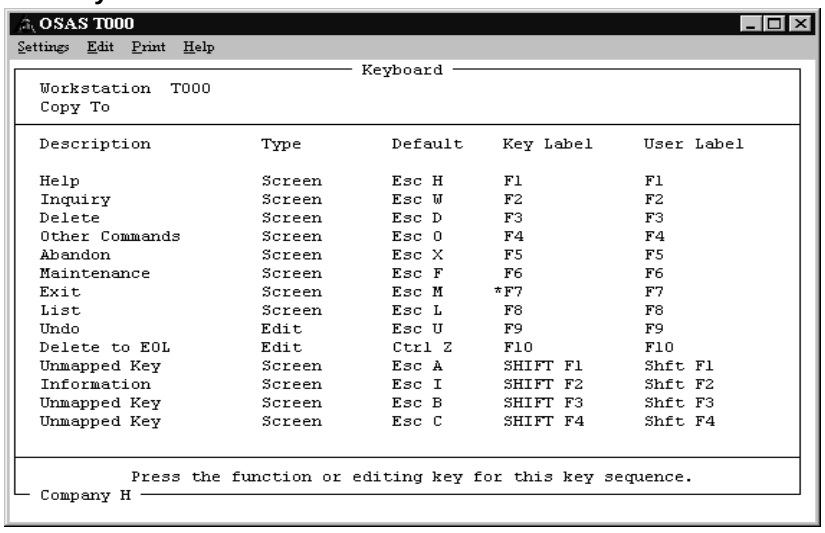
Copy To Selection



To edit the function keys select the function you wish to edit, by moving the arrow key either up or down to the appropriate function. In the example below we have selected the **Exit** function.

Press **Enter** to edit this function key and the following screen will appear, enter in the key sequence you wish to use for this command.

Edit Key Screen



The **Key Label** is the actual key sequence that you want to use to call up the appropriate function. The **User Label** is the description that will label the function.

The User Label for this function will be highlighted and will be the function key used to initiate this function after you exit.

If you experience problems with your keyboard, you can use the **Defaults** to get through the system.

When you complete your changes then **W**rite your changes and select **Y**es if they are correct, then press the **Exit** (F7) command to exit the function.

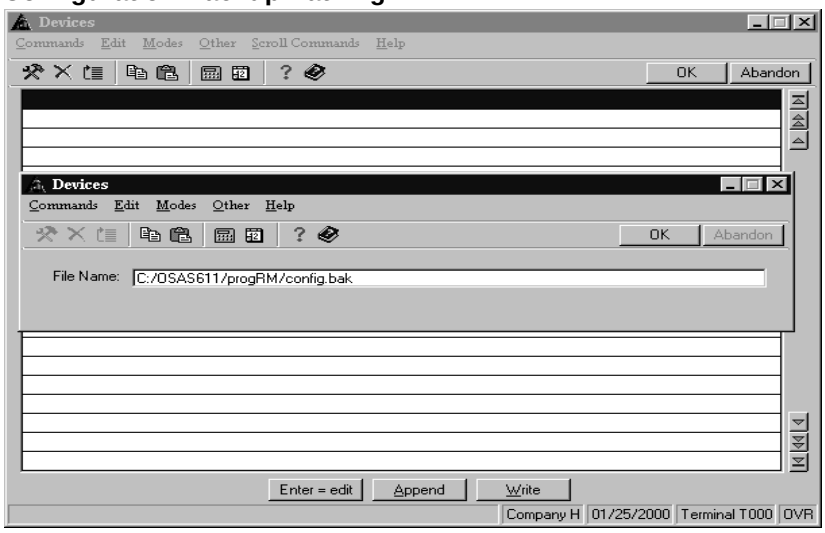
Devices - Editing CONFIG.BBX

Note

Do Not Edit the Config.bbx in DOS or in a note pad. (It is too easy to enter incorrect information, which will cause problems entering OSAS.)

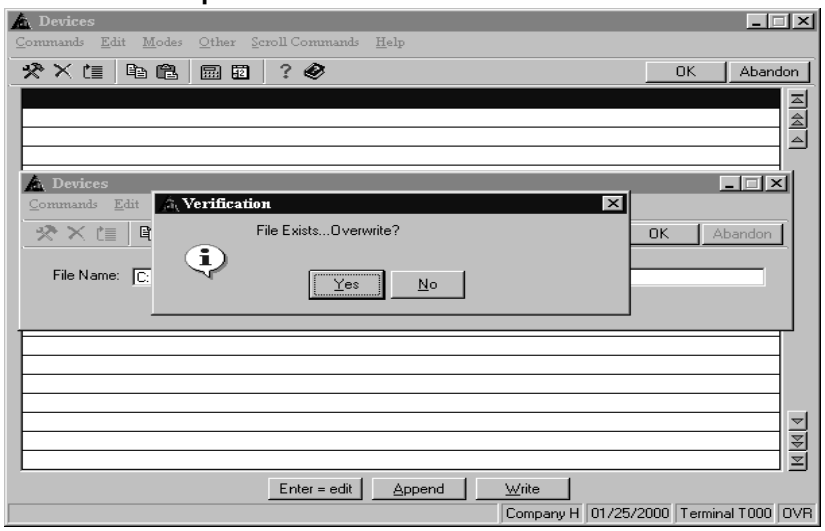
Select **Devices** from the Workstation Configuration menu to view or edit the **CONFIG.BBX** file. The CONFIG.BBX is a text file that contains information about your hardware. All versions of BBx require a configuration file to be present when BBx is loaded. You will receive an error message if it is not present when entering BBx telling you the file could not be located and the invocation will fail.

Configuration Backup Pathing



Because BBx runs on so many operating systems, a configuration file is needed to allow basic programs to use devices in a standard fashion.

Overwrite Prompt



After entering the devices function you are prompted to make a backup copy of the CONFIG.BBX. If a backup copy already exists, you can choose to overwrite it. The system will not let you in without making a backup. It is also recommend to accept the default path, unless the situation requires you to make an adjustment.

CONFIG.BBX File Components Common to All Systems

Command	Definition
STBLEN	Specifies the size, in byte, of an internal list of ALIAS names and disk names. The default for STBLEN is 10240. When you install OSAS this value is calculated and set automatically. ***For networks we recommend the formula of 1024 x (number of terminals) +2048 the maximum is approximately 30000.***
ALIASES	Specifies the number of terminals and printers in your configuration. The default for ALIASES is 22. OSAS uses the default for DOS systems and automatically calculates this value for UNIX systems.
FCBS	The total number of disk files that can be simultaneously accessed by one workstation. The default for FCBS is 10. OSAS sets FCBS to 100.
CIBS	The total number of I/O channels that can be simultaneously accessed by one workstation. The default for CIBS is 16. OSAS sets CIBS to 100.
HANDLES	The maximum number of file handles to be used by each invocation of BBx. If you enter a large number, BBx retains a large number of open files or lets you open a large number of files. OSAS set handles to 100.

Note

Insufficient HANDLES, FCBS, or CIBS can cause error 16's.

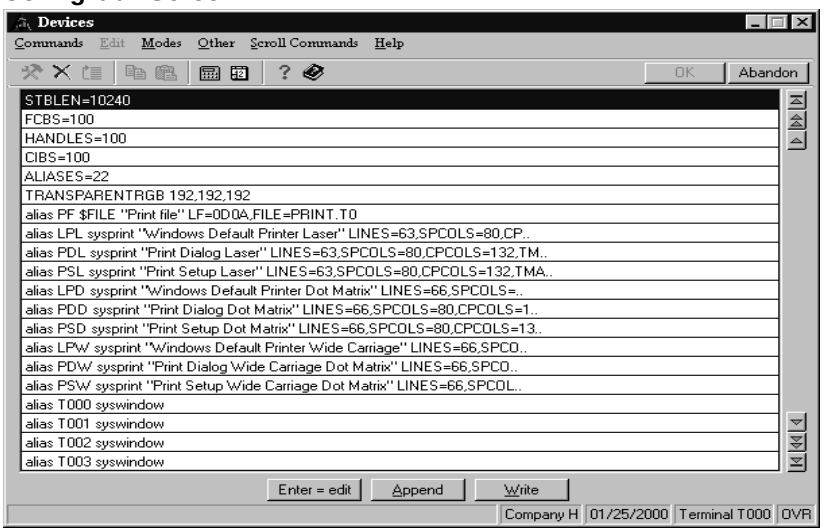
TRANSPARENTRGB 192,192,192 allows the system to bring in your system default colors. You will not want to remove this line from the config.bbx.

Alias PF $FILE "Print File" LF=0D0A is a device created by OSAS which allows for the user to have a (F)ile as a choice to print to in our software.

Note

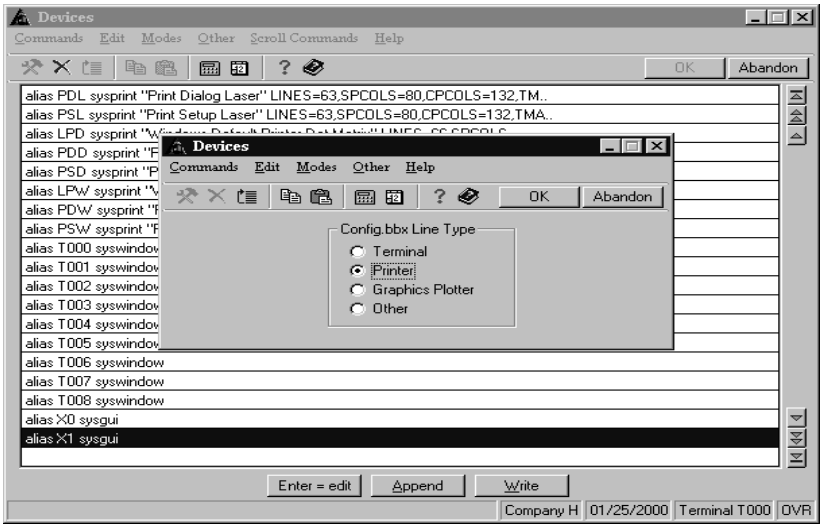
If you misspell something in the **CONFIG.BBX** file, **BBX** will ignore that line. For example if you spell alias for a terminal incorrectly in the config line for a terminal, you may get garbage on the screen when you try to login to OSAS because BBX does not recognize the terminal as being defined.

Config.bbx Screen



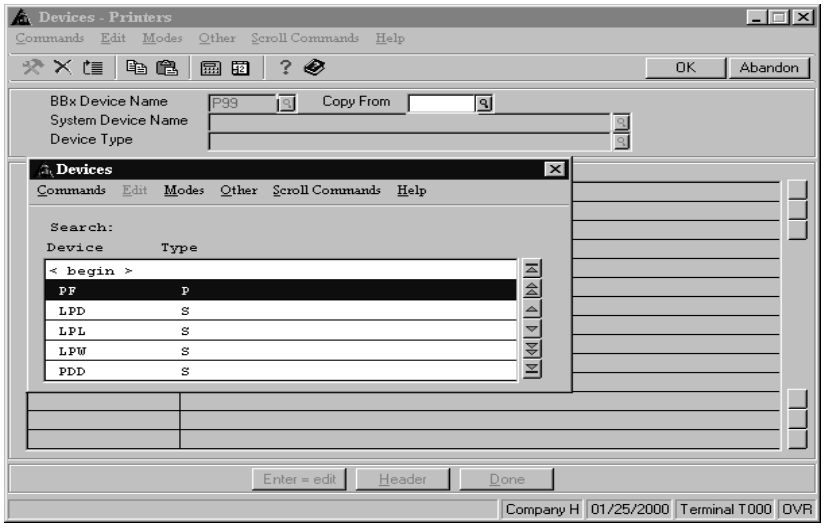
Above is an example of a *Single User Open Windows* CONFIG.BBX. You can add, change and delete devices (terminals, printers, and graphic devices from the above screen by moving the cursor **UP** or **DOWN** and pressing **ENTER** to edit a device, press **A**ppend or **INSERT** to add a device, or press **Delete** (F3) to remove a device. After you are done making changes you must **W**rite, and say **Yes** to save your changes.

Devices



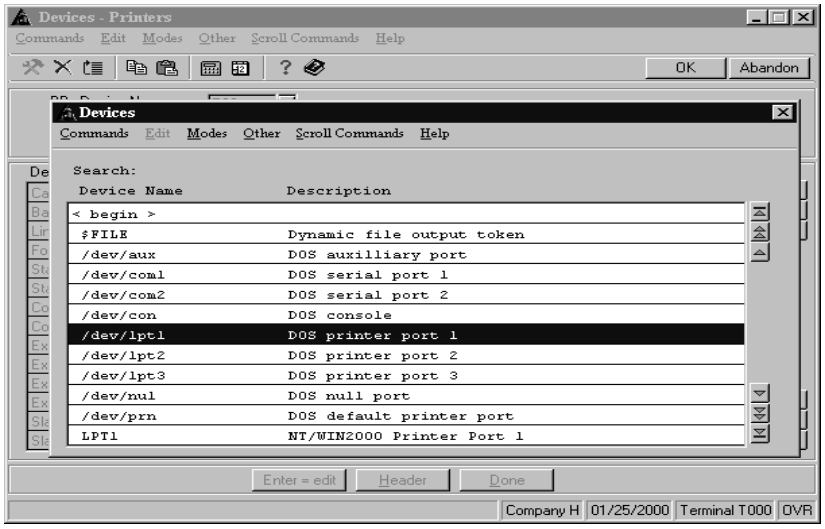
To add a device (printer) press the **INSERT** key to place it where your cursor is, or press **A** to add a device to the end of the configuration. Here we will select **P** to add a printer.

Printer Selection Screen



First assign a **BBX Device Name**. The format is ***Pxxx*** for the device name. Above we have created a printer with **P99** as a device name. All printers need to begin with the Letter **P** or **L**. After entering the device name the system will prompt you to **Copy From** if it is a new definition or provide you with the current setup if it is an existing device. If you choose to you can use the **Inquiry** (F2) command to choose what device to **Copy From**. We will not copy from a pre-defined printer for our example.

Device Names



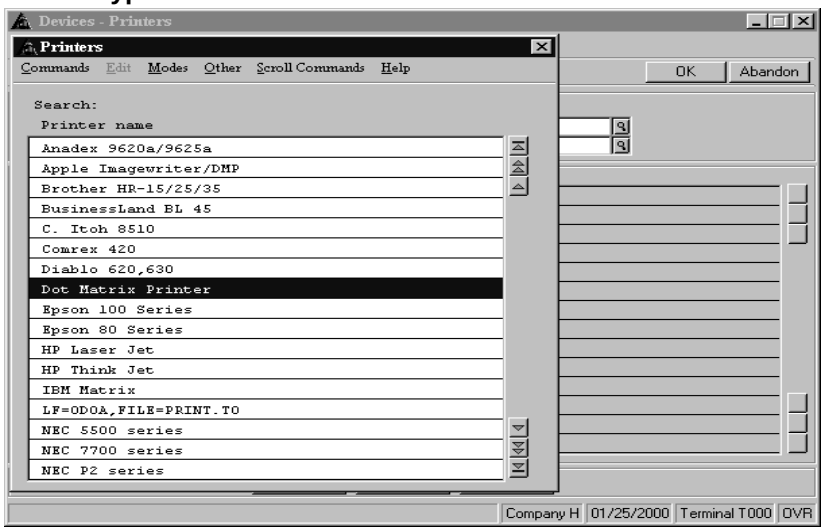
Whereas, P99 is the alias assigned to the BBx Device Name, you must also assign a **System Device Name** so that OSAS knows which system device to use when P99 is selected. Press **Inquiry** (F2) to view the choices available, then move up or down and press **Enter** on the appropriate device.

Above we will select **/dev/lpt1** for our example.

Note

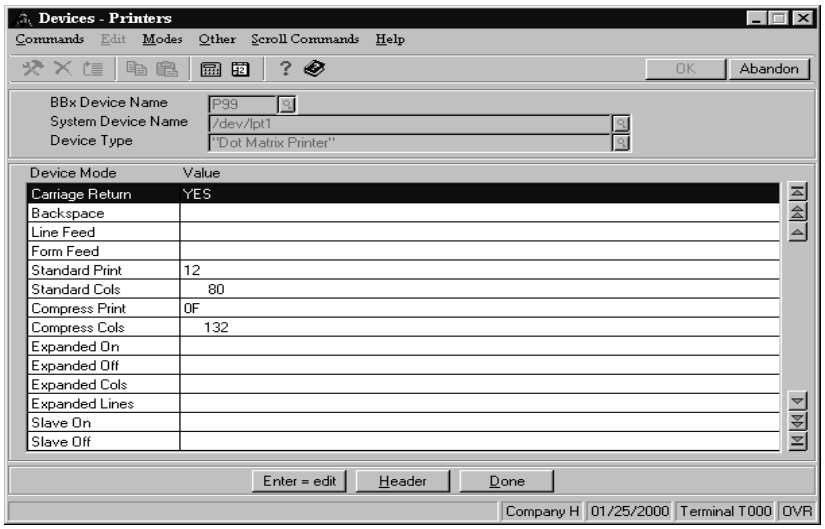
Alias PF $FILE "Print File" LF=0D0A is a device create specific to OSAS that allows the choice of printing to a file for either the **F8** key or for any reports or posting logs and is defaulted in to all CONFIG.BBX files.

Device Type



Next, enter the **Device Type** which will be used to identify the device. You may press **Inquiry** (F2) for one of the descriptions already available or enter your own. In this example chose the **Dot Matrix Printer**. By choosing one from the available list, the system will bring along the preassigned hexidecimal format.

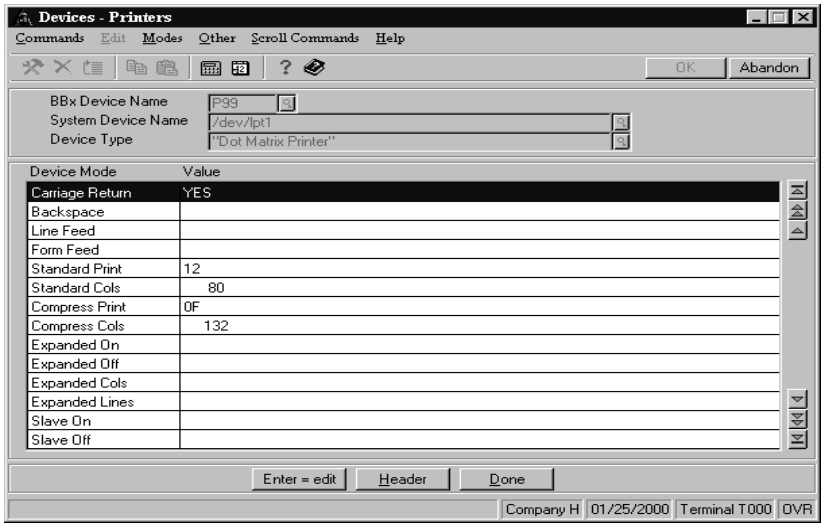
Printer Devices



After entering a **Device Type** the system will default in a number of values for particular characteristics of the printer. Some of these characteristics are described below.

Field	Description
Carriage Return	A value of **YES** is selected by default to put a carriage return after a line feed. If you find reports or print files showing a **Stair Step** effect when displayed this could very well be the problem.
Standard Print	Will show the default value for **CPI** of the font being used, this value is a hexadecimal value. **OSAS uses value of 10 for all of its forms**, however, you can use a different size for reports and logs.
Standard Columns	Is the number of columns that can be printed in **Standard Print**. For a standard **Narrow Carriage** printer this value will default the width of the paper to **80 columns** wide. If you are using a **Wide Carriage** printer this value will default to **132 columns** wide.
Compressed Columns	Is number of columns that can be printed in **Compressed Print.** For a standard **Narrow Carriage** printer this value will default the width of the paper to **132 columns** wide. If you are using a **Wide Carriage** printer this value will default to **240 columns** wide. The **maximum value you may use is 255**, larger values will be interpreted as the default value by the system.
Font	Enter the font you want to print your reports in. For sysprint devices, enter the name of a TrueType font you want to use, for example, "Courier New". You can leave this field blank to accept the default font.
Lock File	Is used to prevent others from using a printer while you are using it. Typically, this is only used for a direct printer. Enter the full path to file and name it with a description that will have meaning to you. (**i.e. "C:/tmp/lock.fle")**.
Timeout	This value is the number seconds that BBX will wait for the operating system to send information before BBX will send back an **Error 0**. The Timeout characteristic is by default disabled, as there is no value in it.

Printer Device



Continue to arrow down on the characteristic screen to edit the rest of characteristics available to you. Reference your *Resource Manager's Users Manual* for information on all the device modes. When you are finished select **D**one and then **W**rite your changes to the **CONFIG.BBX**. These changes will not take effect until you have re-initiated OSAS again, if other are currently working in OSAS, they too, will need to exit OSAS and re-initiated OSAS again in order for these changes to take effect.

Example of a Config.bbx

XY Interpreter Novell - (OPEN WINDOWS)

```
STBLEN=4224
ALIASES=50
FCBS=70
CIBS=70
HANDLES=70
USE_LIM
alias PF $FILE "Print File" LF=0D0A
novell_locks
alias PSP nspool "Dot Matrix Printer"
CR,SP=12,SPCOLS=80,CP=0F,CPCOLS=132,LOCAL=1,QUEUE=Q_NAME_2,SERVER=SERVER_NAME_2
alias PCPT /dev/lpt2 "HP Laser Jet"
CR,SP=1B451B266C3632461B266C304F1B2873313048,SPCOLS=80,CP=1B451B266C3632461B266C
304F1B287331362E3648,CPCOLS=177
alias T00 syswindow
alias T000 syswindow
alias T001 syswindow
```

Note

Continues through each of the 10 sessions available.

```
alias T009 syswindow
if T01
       alias T01 syswindow
       alias PF $FILE "Print File" LF=0D0A,FILE=PRINT.01
       alias P1 sysprint "Okidata 192/193" SPCOLS=80,CPCOLS=132
endif
if T010
       alias T010 syswindow
       alias P1 sysprint "Okidata 192/193" SPCOLS=80,CPCOLS=132,lock=LOCK.T01
endif
if T011
       alias T011 syswindow
       alias P1 /dev/lpt1 "Okidata 192/193" CR,SP=1E,SPCOLS=80,CP=1D,CPCOLS=132
endif
```

Note

"If-Endif" loop continues through each of the 10 sessions available. if T019

```
       alias T019 syswindow
       alias P1 sysprint "Okidata 192/193" SPCOLS=80,CPCOLS=132,lock=LOCK.T01
endif
```

Specifics of XY Port

novell_locks: Tells BBX to perform file and record locking in a special way when running on Novell systems. It is required for Novell systems.

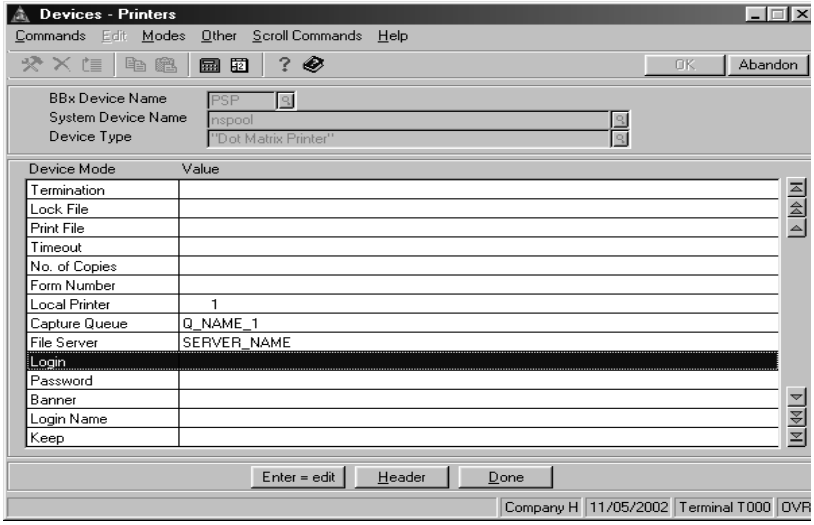
nspool Print Device: The following are parameters that must be set when defining an nspool print device.

Note

Because *nspool* is a logical and not a physical device a message will be displayed that this device is not available. Press **Enter** to select and continue with the definition.

Field	Description
Local Printer	Is the port, to which the output is sent to. Typically this will be **1** referring to **LPT1**, but can also refer to any other local port (i.e. lpt1, lpt2, lpt3). It can be used an unlimited number of times, but must contain a value when using the nspool device.
Capture Queue	Is the print queue that the print job is going to and is a must when using the nspool device. If you are going to capture the output from a port it is not necessary, as you will do the capture through Novell.
File Server	Is the name of the file server where the print queue is stored.
Captured Printer Device	If you choose to capture a printer through the network use a **" /dev/lptx "** device and then use the capture command and the parameters available to you through the network. In the sample **CONFIG.BBX** alias **"PCPT"** will be a printer that is capture by the network.

Printer Device



The above screen shows the device modes mentioned previously.

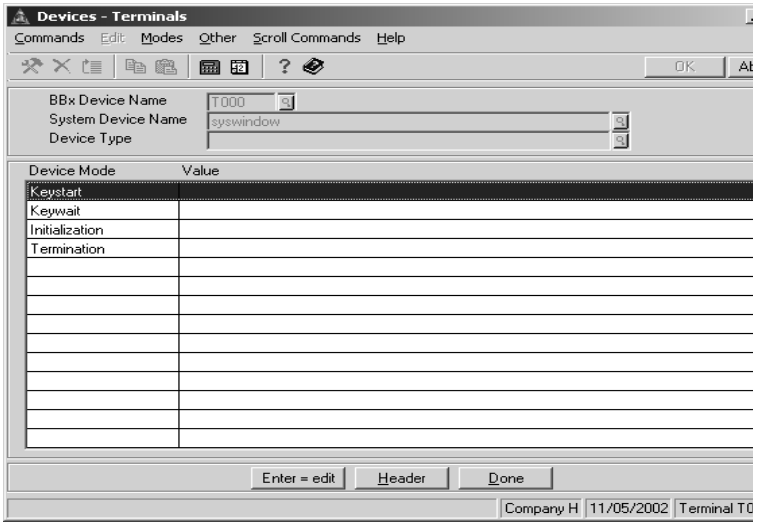
Windows Workstations: With the **XY** interpreter, terminals will be define as **syswindow** workstations. **T00** is an example of how a terminal is defined in the sample CONFIG.BBX with **no local printers**. **Alias T00** is the terminal definition and each session available is defined as alias T00**0** through T00**9**.

Note

Multiple sessions are created as OSAS allows windows workstations to have multiple sessions available to them.

Device Name: Accept the default of **syswindow**. When selecting this device name the system will display a message That **"This device name is unavailable"**, as it is a logical and not a physical. Press **Enter** to select and continue with the terminal definition. The following will be displayed, select **Done** and then **Write** your changes if editing or press **PgDn** to continue with the installation.

Devices Terminals Screen



Device Type: Accept the default and leave this field blank.

Local Printers: When defined in a Windows workstation will appear as **T01** is seen in the sample CONFIG.BBX (page 1-18). Typically, you should use the logical print device sysprint for your printer, this will tell OSAS to use the definition for this printer as it is defined in Windows Software. This shown in P1 for terminal T010. You can still define your printer using the " /dev/lptx " if you prefer (see T011), but may have a conflict with the setup of the same printer in windows.

Note

That a if-endif loop must be created for both the terminal definition (T01) and each of the available sessions for that terminal (T010 through T019). this can be done by editing the config.bbx for individual workstations and sessions or by using the **RMSET** program through the Other Commands menu and choosing to **"Call a Vpro5 Program"**.

novell_tts: Is a parameter that should be included in the CONFIG.BBX if you have Novell with the Transaction Tracking System (TTS), and you want BBX to use it.

Note

This not recommended because some OSAS functions erase data files and Transaction Tracking does not allow a user to erase files. Enter **NO** for this question when you install OSAS.

XW Interpreter Open Windows

```
STBLEN=3072
FCBS=70
HANDLES=70
CIBS=70
ALIASES=41
alias PF $FILE "Print file" LF=0D0A,FILE=PRINT.T0
alias LPL sysprint "Windows Default Printer Laser"
LINES=63,SPCOLS=80,CPCOLS=132,TMARGIN=.5
alias PDL sysprint "Print Dialog Laser"
LINES=63,SPCOLS=80,CPCOLS=132,TMARGIN=.5,dialog
alias PSL sysprint "Print Setup Laser"
LINES=63,SPCOLS=80,CPCOLS=132,TMARGIN=.5,setup
alias LPD sysprint "Windows Default Printer Dot Matrix"
LINES=66,SPCOLS=80,CPCOLS=132
alias PDD sysprint "Print Dialog Dot Matrix"
LINES=66,SPCOLS=80,CPCOLS=132,dialog
alias PSD sysprint "Print Setup Dot Matrix" LINES=66,SPCOLS=80,CPCOLS=132,setup
alias LPW sysprint "Windows Default Printer Wide Carriage"
LINES=66,SPCOLS=136,CPCOLS=240
alias PDW sysprint "Print Dialog Wide Carriage Dot Matrix"
LINES=66,SPCOLS=136,CPCOLS=240,dialog
alias PSW sysprint "Print Setup Wide Carriage Dot Matrix"
LINES=66,SPCOLS=136,CPCOLS=240,setup
alias T000 syswindow
alias T001 syswindow
alias T002 syswindow
alias T003 syswindow
alias T004 syswindow
alias T005 syswindow
alias T006 syswindow
alias T007 syswindow
alias T008 syswindow
alias T009 syswindow
alias T010 syswindow
alias T011 syswindow
```

Note

Continues to loop through each of the sessions available per terminal.

```
alias T019 syswindow
alias T020 syswindow
alias T021 syswindow
alias T022 syswindow
```

Note

Continues to loop through each of the sessions available per terminal.

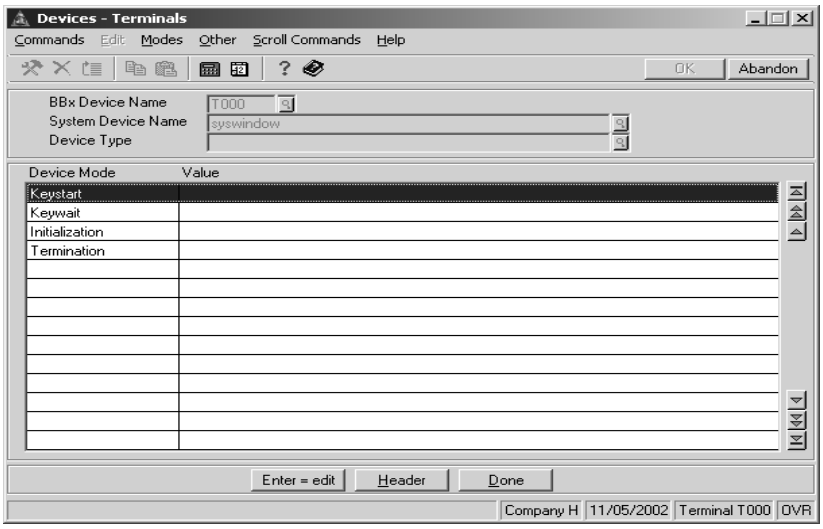
```
alias T029 syswindow
```

Specifics of XW Port

Windows Workstations: With the XW interpreter terminals will be define as WINDOWS workstations. T000 is an example of how a terminal is defined in the sample CONFIG.BBX with no local printers. The terminal definition and each of the sessions available are defined as alias T00**0** through T00**9**. Notice that multiple sessions are created as OSAS allows windows workstations to have multiple sessions available to them.

Device Name: Accept the default of syswindow . When installing the Open Windows version of OSAS this device name is defaulted into the CONFIG.BBX. If you go into edit the terminal through the system, a message is displayed that **"This device type is unavailable"**, as it is a logical and not a physical device. Press **Enter** to select and continue with the terminal definition. The following will be displayed, select **Done** and then **Write** your changes if editing or press **PgDn** to continue with the installation.

Devices Terminals Screen



Device Type: Accept the default and leave this field blank.

Local Printers: May be defined in a Windows workstation. Typically, you should use the logical print device **"sysprint "** for your printer, this will tell OSAS to use the definition for this printer as it is defined in Windows Software. You should notice the number of printers that are available to all the terminals, although they may not be needed the XW interpreter gives you a Windows Default, Dialog, and Setup Printers. Each of these refers to a specific type of printer Laser, Dot Matrix, and Wide Carriage. You can still define your printer using the **" /dev/lptx "** if you prefer, but may create a conflict with the setup of the same printer in windows.

XU Interpreter UNIX Network

```
stblen=2112
aliases=46
fcbs=70
files=70
cibs=70
handles=70
alias LP ">lp -dhp4si -s 2>/dev/null" "spooled printer"
CR,SP=12,SPCOLS=80,CP=0F,CPCOLS=132
alias P1 /dev/lp0 "shared direct printer"
CR,SP=12,SPCOLS=80,CP=0F,CPCOLS=132,LOCK=/tmp/LOCKP1
alias PF $FILE "print file" LF=0D0A,SP=12,SPCOLS=135,CP=12,CPCOLS=135,PTOFF=0C
alias T1 /dev/tty01 ansico
alias T2 /dev/tty02 ansico
alias T3 /dev/tty03 ansico
alias T4 /dev/tty04 ansico
alias T3 /dev/ttyp0 term
alias T4 /dev/ttyp1 term
alias T5 /dev/ttyp2 vt100
if T3
       alias P2 /dev/ttyp0 "local printer ttyp0"
CR,SP=12,SPCOLS=80,CP=0F,CPCOLS=132,SLON=1B5B3569,SLOFF=1B5B3469
endif
if T4
       alias P2 /dev/ttyp1 "local printer ttyp1"
CR,SP=12,SPCOLS=80,CP=0F,CPCOLS=132,SLON=1B5B3569,SLOFF=1B5B3469
endif
if T5
       alias P2 /dev/ttyp2 "local printer ttyp2"
CR,SP=12,SPCOLS=80,CP=0F,CPCOLS=132,SLON=1B5B3569,SLOFF=1B5B3469
endif
```

Note

In order to have workstation specific printers on a UNIX operating system you must be able to assign a BBTERM value for each operating system login. If not, your BBTERM value is decided in the order that you login to the operating system. See your network administrator for information on exporting values.

Specifics of XU

Workstation Setup With the **XU** interpreter there are two ways to configure terminals: tell the system everything you know about each terminal, or supply a token and ask the operating system to supply the terminal specific information.

In the sample **CONFIG.BBX** previously shown **(alias T1 through T4)**, OSAS is told the system devices are defined as **ansico**, so that the software can make the best use of its capabilities (i.e. colors or graphics).

In the sample **CONFIG.BBX** previously shown **(alias T3 and T4)**, OSAS is told the system devices are defined as **term**, so that the software will use the terminal as defined by the operating system, and the capabilities defined for it in the OSAS termcap file.

Note

If the terminal definition is not in the termcap file you must edit it. Follow the instructions in the BBX documentation that are included with the Resource Manager.

Like ansico, **T5 i**s defined by a particular system device name **vt100**, which, again allows the OSAS software to make the best use of the terminal capabilities associated with a vt100 terminal.

Printer Setup The shared direct and the spooled printers are displayed before the terminals, and the slave or local printers are listed after all the terminals are defined.

In the sample **CONFIG.BBX** the previously shown, alias **LP** printer definition is created by using a **-d**estination, followed by the UNIX device name for the printer. The **lpstat -t** command will show all of the UNIX and physical device names available for your printer. Then redirect your BBX output to UNIX (i.e. . **LP ">lp -dhp4si -s 2>/dev/null" "spooled printer"**)

Note

The **-s** suppresses system messages on the terminal, while **2>** suppresses system messages on the console and then redirects those system messages to the device **/dev/null**. To create a shared direct printer, use a BBX device in the form of ***Pxxx*** , then the system device type of **/dev/lpx** and the physical device name, in the sample this is demonstrated with alias **P1**.

Note

The lock parameter prevents print jobs from being printed at the same time. Only one print job is allowed to print to a shared printer through OSAS. In creating a **local** or **slave** printer for a terminal the BBX name must be unique for each printer if it is outside of a **if, endif loop**, otherwise it maybe the same as it is shown in the sample **CONFIG.BBX** as alias **P2**.

Using "RMSET " to create a new CONFIG.BBX

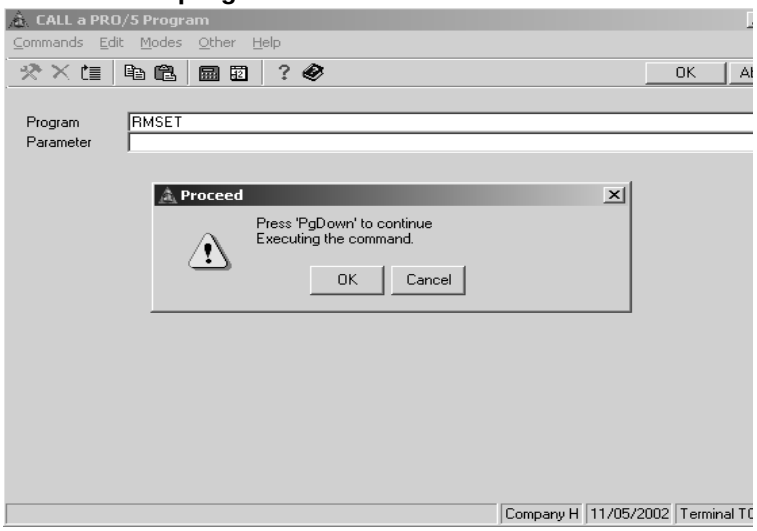
If your network will have multiple workstations each with their own local printers a quick and easy method to define these for your system is to use the "Call a VPRO5 program" function from the Other Commands menu. the program you will wish to run is called "RMSET".

Note

It is recommended that before running this program that both the current config.bbx and the config.bak be saved in an outside directory or diskette in case a device is defined incorrectly. Also print a current copy of the config.bbx if you wish to provide you with a list of your current definitions to keep any changes in definition limited and reduce the need of communicating changes to all users.

With everyone else out of the OSAS software select the Call a VPRO5 program from the Other Commands menu. The following screen appears.

Call a VPRO5 program Screen

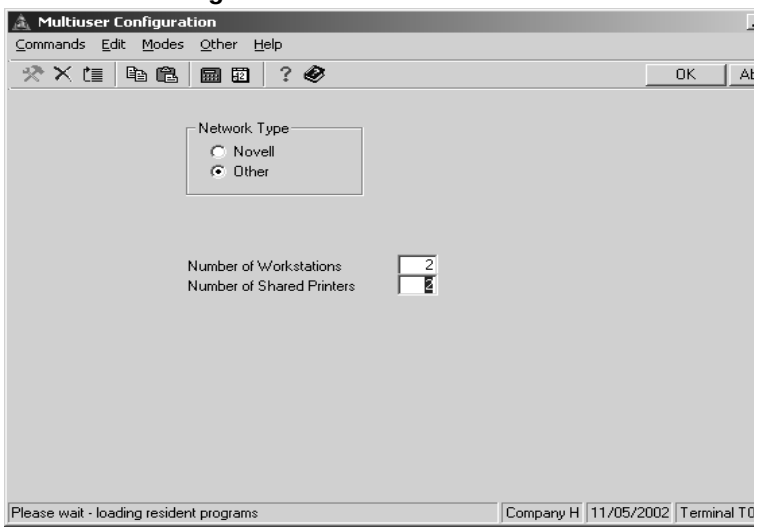


Enter the following information:

Field	Description
Program	Enter the program you wish to execute with the CAP LOCK on to eliminate any case specific errors (UNIX/LINUX). Enter **RMSET**.
Parameters	Enter any parameters associated with the program, these parameter if available should be known in advance. For the RMSET program enter through this field with no selection.

Use the **Verify Command (PGDN)** to begin executing the **RMSET** program and the following screen will appear to begin redefining your network

Multi-User Configuration Screen



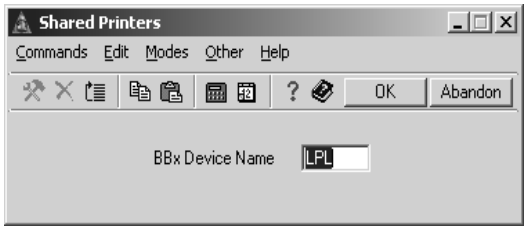
Enter the following information:

Field	Description
Network Type	Select **Novell** if this is a Novell network, for all other networks (Windows, UNIX/LINUX, etc...) select **Other**.
Number of Workstations	Enter the number of workstations you will have accessing the software. **NOTE:** Be sure to account for Terminal 000 as it must also be defined, otherwise you will be defining an extra terminal.
Number of Shared Printers	Enter the number of "Shared printers" thatq will be made available to all users. Refer to the printed copy of your original config.bbx.

Use the **Verify Command (PGDN)** to write the information.

The system will prompt you to enter the first Shared printer.

Shared Printer Screen

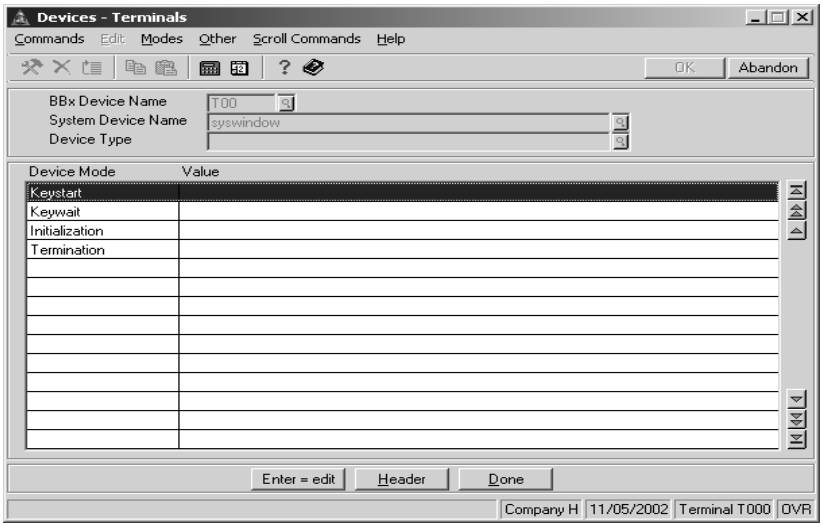


Try to keep the BBX Device names the same as they originally were set, to minimize the effects of users having to remember the new printer definitions upon completion of the new config.bbx.

After defining the BBX Device Name the printer definition screen appears as it would for any new printer creation. Enter the appropriate information and select **D**one to add the definition to the new config.bbx file

Add the remaining shared printers for the network, the system will prompt you for as many shared printers as you originally told the program you wished to create. After the last shared printer is defined the system will now prompt you for each workstation you will define in your network.

Devices - Terminals Screen



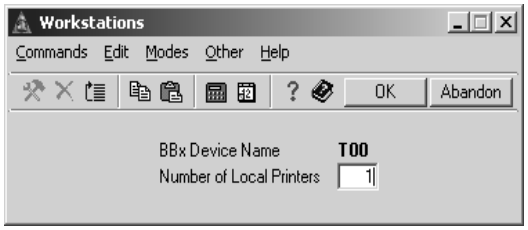
Accept the definition for the terminal (only in rare circumstances might you need to add the additional information.

Note

Be sure that from your original config.bbx that you know specifically what terminal is currently the terminal you are defining in the program so you can define it properly regarding the use of local printers assigned.

Select the done button to add the terminal definition into the new config.bbx. the system will now ask how many local printers this terminal will have.

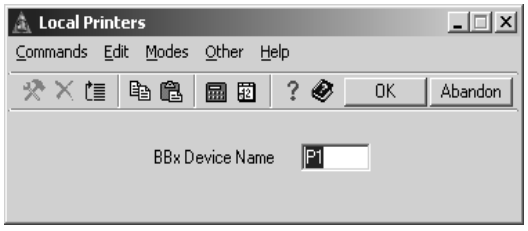
Workstations Screen



Use the **Verify Command (PGDN)** or press **OK** to write the information into the program.

Enter the BBX Device Name for the local printer for this workstation.

Local Printer Screen



The printer definition screen appears again as it did when defining the shared printers. Enter the appropriate information and select the **D**one button when you are satisfied with the definition. The next terminal to be defined will appear.

Follow the same steps with the rest of the workstations to be defined.

When all workstations and printer have been defined the system will provide you with a final confirmation before overwriting the existing config.bbx. **IF YOU WISH TO ABORT USE THE EXIT COMMAND (F7)**, otherwise use the **Verify Command (PGDN)** to write your changes.

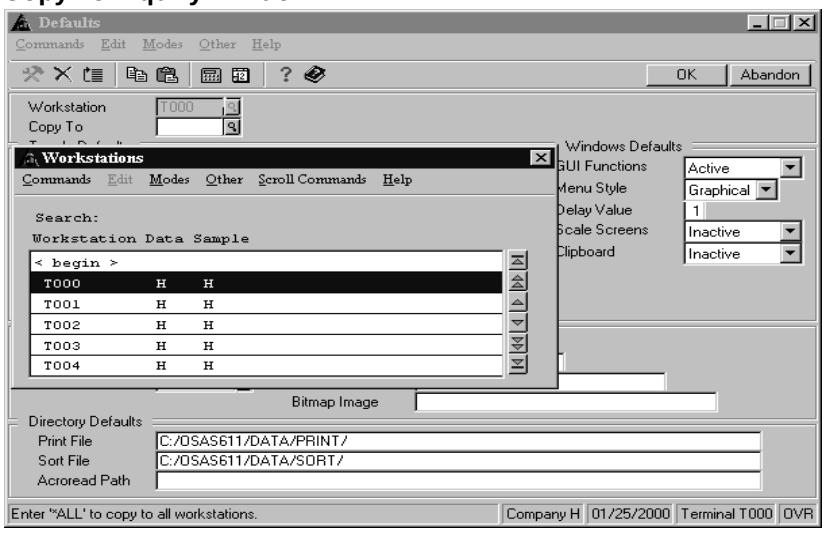
The OSAS software will be shutdown, upon entering the system again all of your changes will now be in affect. Verify the changes are correct, if they are not you can exit the software and copy the original config.bbx and config.bak back into the system and repeat the process.

Defaults

Use the **Defaults** function on the Workstation Configuration menu to set defaults for functions, fields, and directories for a workstation.

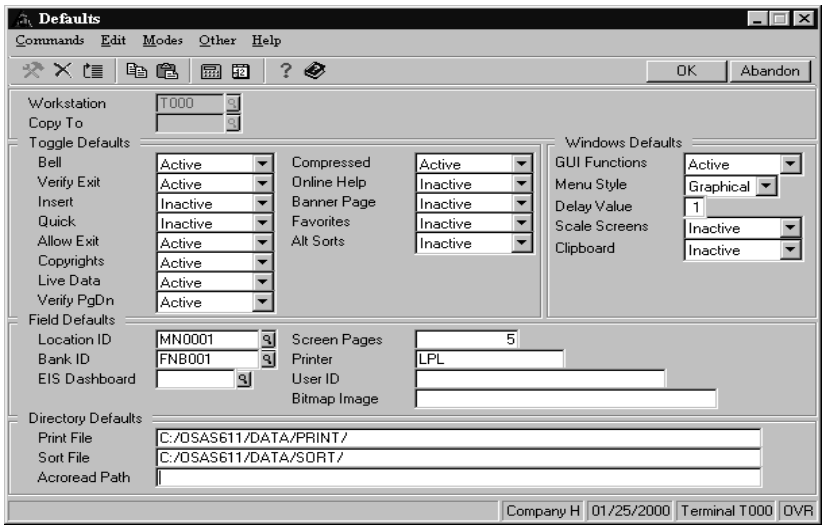
Use the **Copy To** and then press **Inquiry** (F2) to see available terminals to copy defaults from or press **Enter** to edit specific defaults for this terminal. Below is a screen showing the terminals available to copy the current workstation defaults to.

Copy To Inquiry Window



After making a selection the following screen appears.

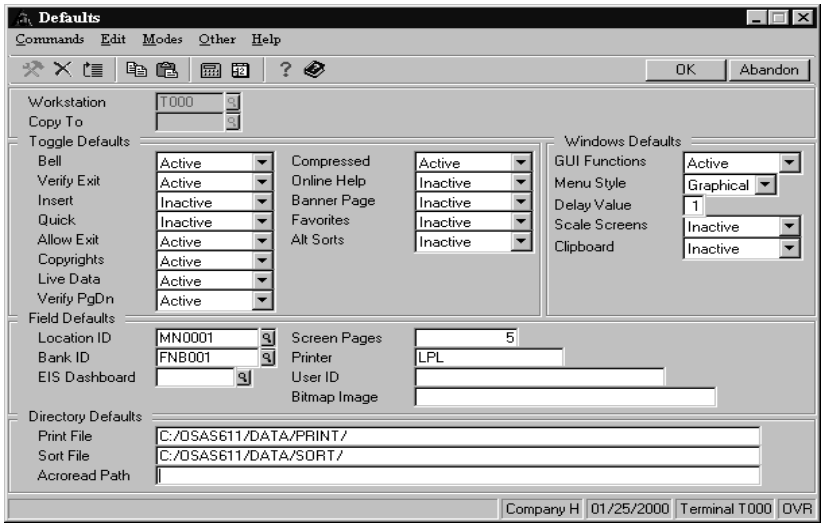
Defaults Selections



Here are descriptions for the items that may be set as defaults for the workstations. Press **A** to select the default as **ACTIVE**, or **I** to select the default as **INACTIVE**.

Field	Description
Bell	If you want the computer to beep during the verification of commands such as **Exit** (F7), **Abandon** (F5), and **Proceed (PgDn**).
Verify Exit	If you want to confirm the **Exit** (F7) and **Abandon** (F5) commands.
Insert	If you want the character you type to appear before (to the left of) the cursor, press **A**. If you want the character to replace the one the cursor is on, press **I**.
Quick	If you would like to use Quick Entry in applications that are applicable, press **A**, if not press **I**. Quick Entry allows you to stop only at fields that require new data. Still allowing you to change skipped fields by using the up-arrow key to move back to the field you need to adjust. You can use **Control-F** to toggle Quick Entry on and off during entry.
Allow Exit	If you want to be able to exit from OSAS and run other operating system programs, press **A**, if you want to prevent this workstation from exiting OSAS press **I**.
Copyrights	If you want the copyrights to appear on your workstation each time you start OSAS, press **A**, if not, press **I**.
Live Data	If you want to recognize only OSAS programs that have live data files, press **A**, you can still **toggle** between live and sample data by using F5. If you want to use OSAS with sample data only enter **I**, for Inactive.
Verify PgDn	If you want to confirm the **Proceed** (PgDn) command by issuing the command a second time.
Compressed	If you want to be able to select compressed screen printing, press **A**, if not, or your workstation does not support it press **I**. Even if you receive a prompt to print in compressed, when you have the setting to Inactive it will not print in compressed.
Online Help	If you want the function keys and the functions they represent to appear at the bottom of the screen, press **A**. Otherwise the system will not list them, although they are still available to use.
Banner Page	If you want a banner page to print that shows the pick screen for each report select **A**. The banner page is useful when printing multiple selections for the same report. To save paper resources, by not printing a banner page, have this set to **I**nactive.
Favorites	Set this to **A**ctive if you want OSAS to start by using the Favorite's menu you can set up using the F2/F10 combination. The F10 function allows you to add/subtract items from the Favorites menu, and the F2 function allows you to toggle between the Main menu and the Favorites menu. To have the system default in the Main menu at start up have this set to **I**nactive.
Alt Sorts	If you want to begin in **Sort** mode, allowing you to search based off different criteria, when using the **Inquiry** (F2) command, enter **A**. If you want to begin in **Search** mode, which uses the characters you type to search, enter **I**.

Defaults Selection Screen

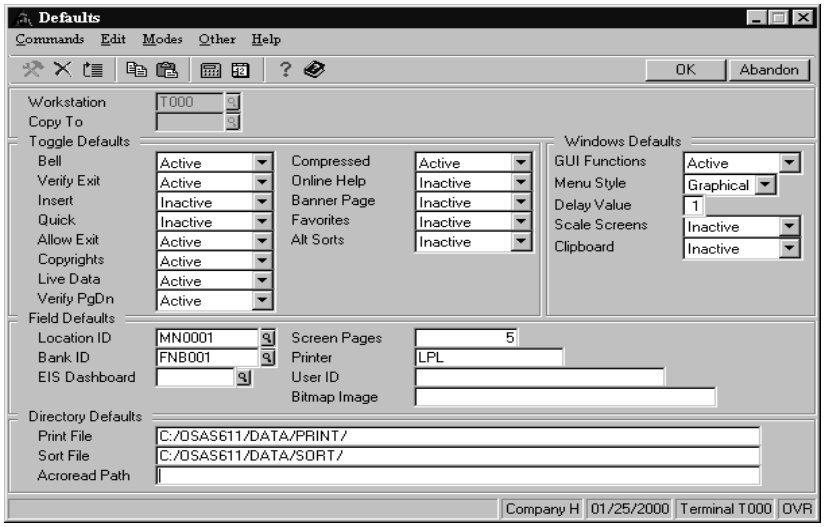


Note

The next five options are available only on Windows workstations.

Field	Description
GUI Functions	If you want to use Windows graphical screens, enter **A**. If you want to use the test screens, enter **I**. You can change modes at the menu level by pressing **Shift-F6**.
Menu Style	Enter one of these options for the type of menu you want to use on this workstation: • **T** = Text menu • **G** = Graphical (panelled) menu • **S** = Start-style graphical menu
Delay Value	If you have chosen the Start-style menu, the delay value is used to regulate how quickly the menu responds to mouse movements. The default delay value is **1**, but you can increase this value (1-9) if your menu behaves erratically.
Scale Screens	If you want to scale the dimensions of the OSAS screens to nearly full-screen size by default, regardless of your monitor's resolution, enter **A**. If you want the screen to resize according to your monitor's resolution, enter **I** (normal setting).
Clipboard	If you want the OSAS copy and paste commands to use the windows clipboard, making the information available for use in other applications, enter **A**. If you want the copied data to remain local to OSAS, enter **I** (normal setting). The setting applies to copying in graphical mode only.

Default Selection Screen



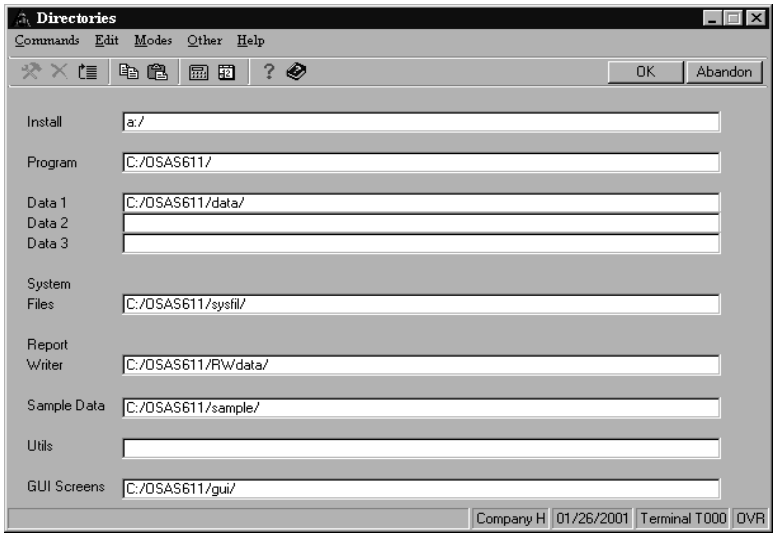
Field	Description
Location ID	Enter the ID of the default location for the workstation. This ID will appear in any Location ID field throughout the system, for this terminal.
Bank ID	Enter the Bank ID you wish to default into this field throughout the system on this workstation.
Eis Dashboard	Enter the default EIS Dashboard for the workstation, if blank the default dashboard is **EISDFLT** (Company Summary).
Screen Pages	Enter the maximum number of pages you want to store in memory from a report that is displayed on the screen in text mode. The system default is 5 screen pages. The larger the number of pages, the more memory required.
Printer	Enter the name of the default printer. You can also enter the BBX device name such as LPL, LP or P0.
User ID	Enter the user ID you wish to be associated with this workstation. The user ID can be used as another identifier when adding form printers or using the pop-up calendar reminders.
Bitmap Image	Enter the name of a bitmapped image to use as a background for your Start-style graphical menu. If you do not specify a bitmap name, the system will use the default file, OSAS.BMP which is installed with Resource Manager.
Print File	Enter the subdirectory where you want your reports to be filed. This directory does not necessarily need to be inside the OSAS directory system.
Sort File	Enter the subdirectory where you want sorted files created by OSAS. This directory does not necessarily need to be inside the OSAS directory system.
Acroread Path	If you want to be able to access the online documentation using the **Shift-F1** function key, enter the full path and file name of the Adobe Acrobat Reader (or a compatible program capable of reading and displaying .PDF documents.

When you are done making changes press Proceed (PgDn) to save your changes and exit the screen.

Installing Applications 2

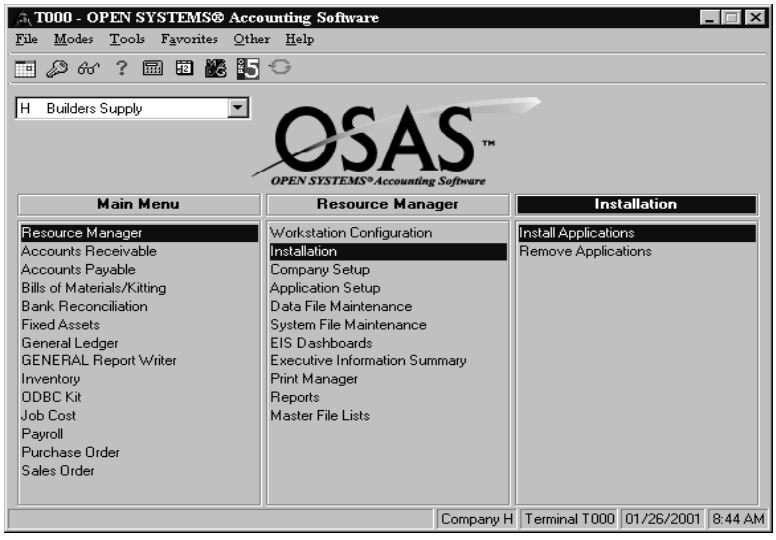
Use the Install Applications function for installing new applications or for updating current applications with a newer version or to install updates. This function installs media from the install path in the **Resource Manager / System File Maintenance / Directories** screen (as seen below).

Directories Screen



The screen displayed above shows that path to be **A:**, if you are installing from a floppy diskette, otherwise enter the path reflecting an appropriate directory **(i.e. C:\install\)**.

Installation Menu



Select Resource Manager, then choose Installation, the above screen will appear.

To remove an application from your menu choose **Remove Application** function then enter the application ID and then page down to remove that application from your menu.

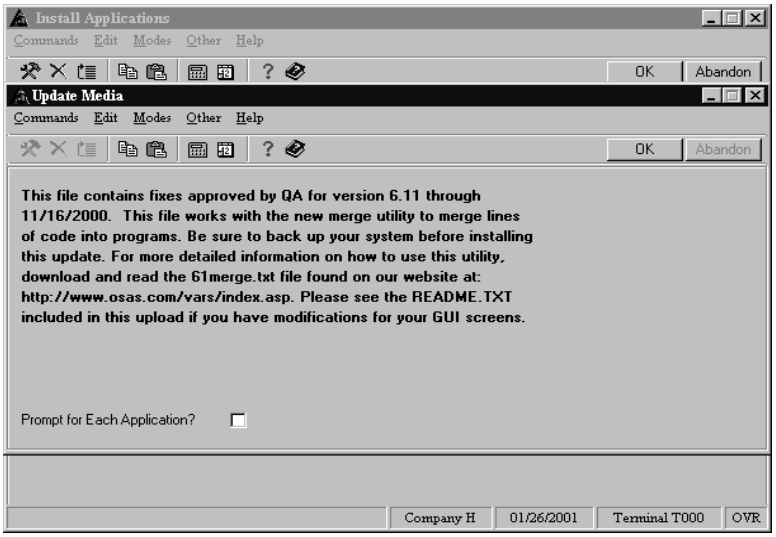
Note

This function will delete all of your data files **and** programs.

Choose **Install Applications** function from the Installation menu and the screen below appears after reading the media to be installed.

When updating your current version of OSAS you will receive this message to either prompt the system to upgrade each application, or let the system simply update all applications. *If you have applications at different versions or version levels, and you wish to control what is, and is not, updated then enter **Y**, if you wish the system to automatically update the applications then enter **N**.*

Application Prompt

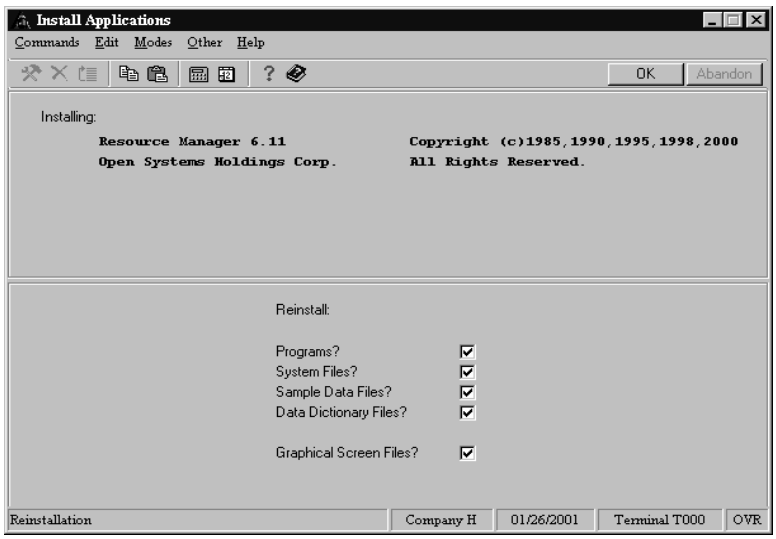


As each application is read on the media being installed the following type of screen will appear, giving you a choice as to what items you choose to install.

Note

You can only do this if you choose **Y** from message **Prompt for each Application**.

Prompt Screen



Command	Description
Application Programs	Refers to all of the programs used to perform the functions used within this application.
System Files	The system file items that are created for each application.
Sample Data	The sample data used in the sample company data directory path.
Data Dictionaries	The data dictionary items that are created for that application.
Graphical Screen Files	The instructions and programs necessary to create reports with Report Writer Application.

IMPORTANT! Install only one zip file at a time.

Operating System

- Make a temporary directory (example: c:/install)
- Copy first zip file into that directory
- At that directory > **pkzip25 -ext 611maintenance.zip**[1] (filename)

OSAS

Resource Manager / System File Maintenance / Directories

- install: **c:\ (temporary directory)** (Once you are finished, you may want to change back to **a:** when done)

Resource Manager / Install Applications

- **N** (for update an application),
- **N** (for prompt for all applications, unless you have modifications)
- **N** (for install another application) **Enter**

Note

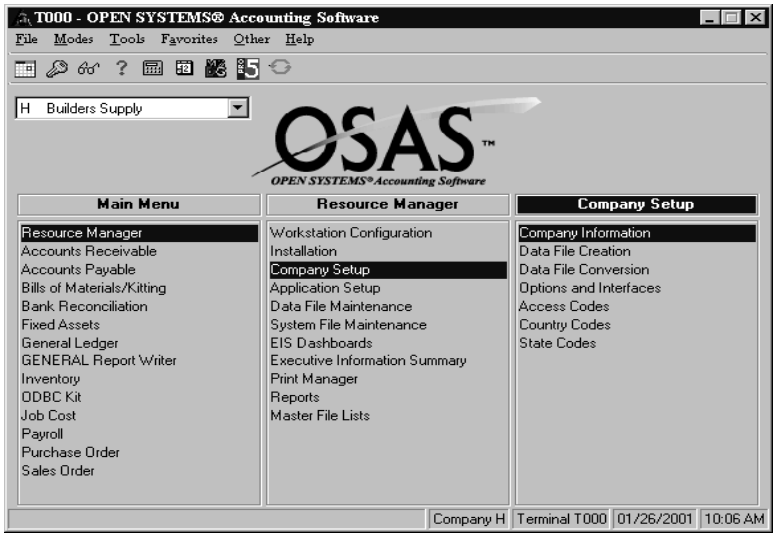
Enter Yes if you have modifications to any of your applications.

The fix for 6.11 is 611maintenance.zip. Since version 5.2x, we have changed how the updates are added to the programs. It only updates the lines of code that have changed instead of updating the entire program. This enables us to keep the update smaller, thus letting us keep the file smaller.

1.The command for UNIX/LINUX is > **pkunzip -N 611maintenance** (filename)

Setting Up Companies 3

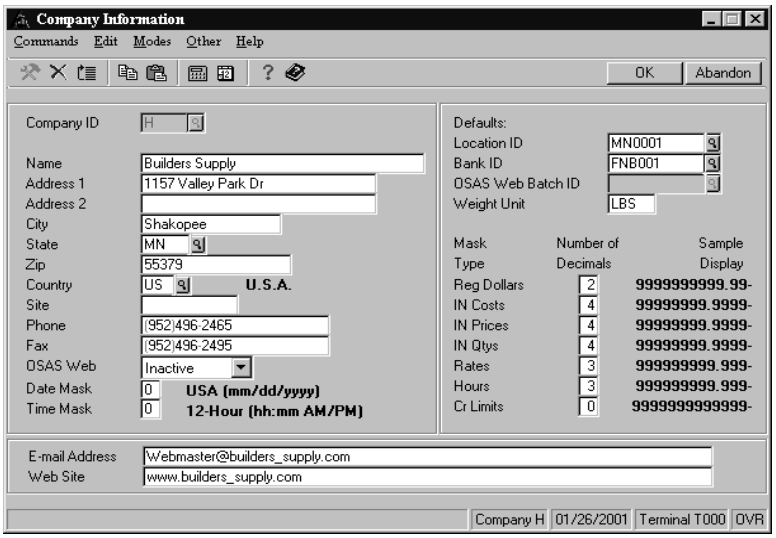
Company Setup Menu



Use the functions on the **Company Setup** menu to enter information for a new company, create or convert data files, set options and interfaces and access codes, or to change a company's Main menu. This is also where you can enter any additional country or state codes.

The information stored in the **Company Information** screen is a record in the **OSCOMP** file.

Company Information Setup



You need to set up a company information screen for every company you want to run in OSAS. The following information is accessed throughout the system.

Field	Definition
Company ID	The ID of the company you selected at the menu is displayed. Accept it, or enter a different company ID, using one to three numbers and/or uppercase letters. You can use the **Delete** (F3) command to delete a company from the system only if there are no data files for it.
Name	Enter the company's name, up to 30 characters in length.
Address 1 & 2	Enter the company's street address on one or both lines, with up to 25 characters per line.
City, State & Zip	Enter the company's city, state and zip code. The **Inquiry** (F2) is available to choose from a list of states available.
Country	Enter the company's country code. The country code you enter also controls the defaults for the country code in other OSAS applications and the default phone number mask.
Site	Enter the company's OSAS site number for reference, or use as a User-defined field.
Phone/Fax	Enter the company's phone/fax number using the mask that appears. The mask is being pulled based off the country code entered.
OSAS Web	If you want to use certain data files for this company with the OSAS Web application, making them available for Internet access, enter **A**. If not, enter **I**.
Date Mask	If you want the dates in the company's reports and on screen to be in American format (mm/dd/yyyy), enter **0**. If you want them to be in European format (dd/mm/yyyy), enter **1**.
Time Mask	If you want times in the company's reports and on screens to be in standard 12-hour format (hh:mm am/pm), enter **0**. If you want them to be in military 24-hour format (hh:mm) enter **1**.
Location ID	Enter the ID of the location you want to use as a default when entering inventory transactions for this company.
Bank ID	Enter the ID of the bank you want to use as a default when you enter cash transactions for this company.

OSAS Web Batch ID Enter the Sales Order batch ID the OSAS Web application will use when posting sales orders received from customers on the Internet.

Weight Unit The weight unit applies to all item weights you enter in the Inventory and Sales Order applications, and is printed on some screens, reports and forms. Enter the standard weight system your company will use. For example, enter LBS or lbs if you use pounds, or KG or kg if you use kilograms.

Numeric Masks **Reg Dollars**: Enter the number of decimals you want assigned to regular dollar amounts.

IN Costs: Enter the number of decimals you want assigned to Inventory costs.

IN Prices: Enter the number of decimals you want assigned to Inventory prices.

IN Qtys: Enter the number of decimals you want assigned to Inventory quantities.

Rates: Enter the number of decimals you want assigned to rates in JO and PA.

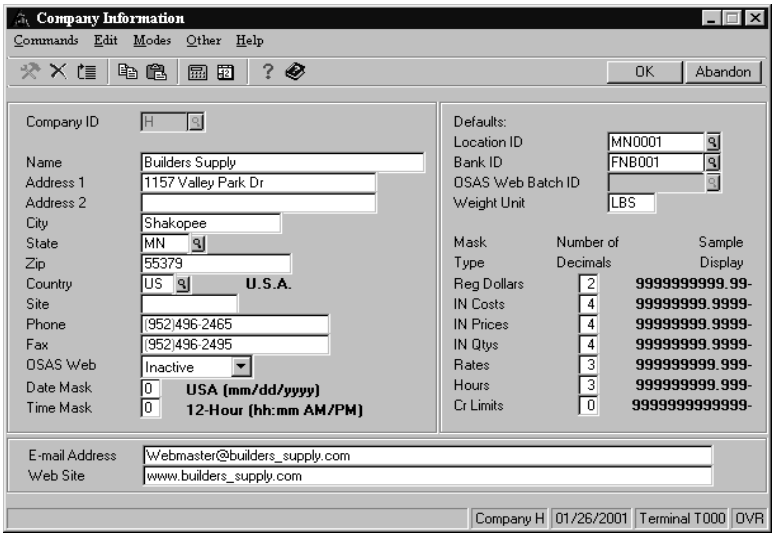
Hours: Enter the number of decimals you want assigned to hours in JO and PA.

Cr Limits: Enter the number of decimals you want assigned to credit limits in AR.

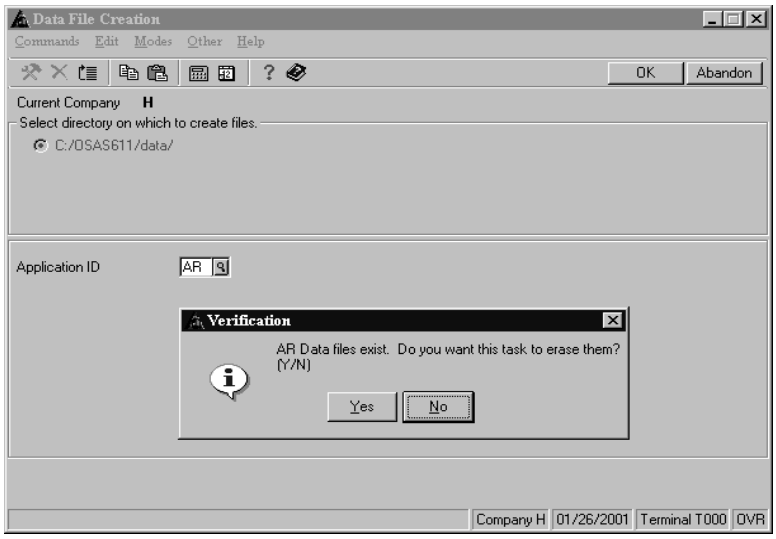
E-mail Address Enter the E-mail address of the company's main contact.

Web Site Enter the Internet address of the company's web site.

Company Information Screen



Selection Screen



Use the Data File Creation function to create files for the current company for one or more applications. The system prompts you to choose a directory if more than one is defined.

If there are data files in the directory specified for the application you entered, you are asked if you want to erase them. If you answer **YES**, the current files are **erased** and new data files are created. If you answer **NO**, only files that don't already exist for the application will be created.

Note

You do not have to use the Data File Creation function if you are upgrading from an earlier version of OSAS and will be using the Data File Conversion function.

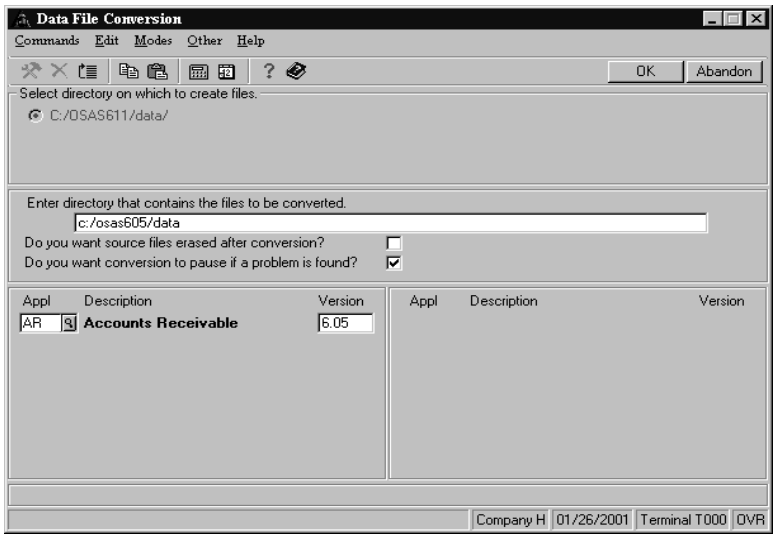
Note

An application will not appear on a company's menu unless you have created or converted data files for that application. Except for ODBC and General Report Writer.

You can also use this function to create one new data file if one has become corrupted and you do not have a backup to restore. See the Error Processing section and the error 13 example for instructions.

Data File Conversion

Selection Screen



Use the **Data File Conversion** function to convert data files for the current company from the last version of OSAS. Refer to each application's ***User's Guide*** for the exact instructions. More than one step may be required, depending on which version you are upgrading from and to.

1. The system prompts you to enter the directory where you want to put converted files if more than one is defined.

2. Enter the name of the directory that contains the files to be converted.

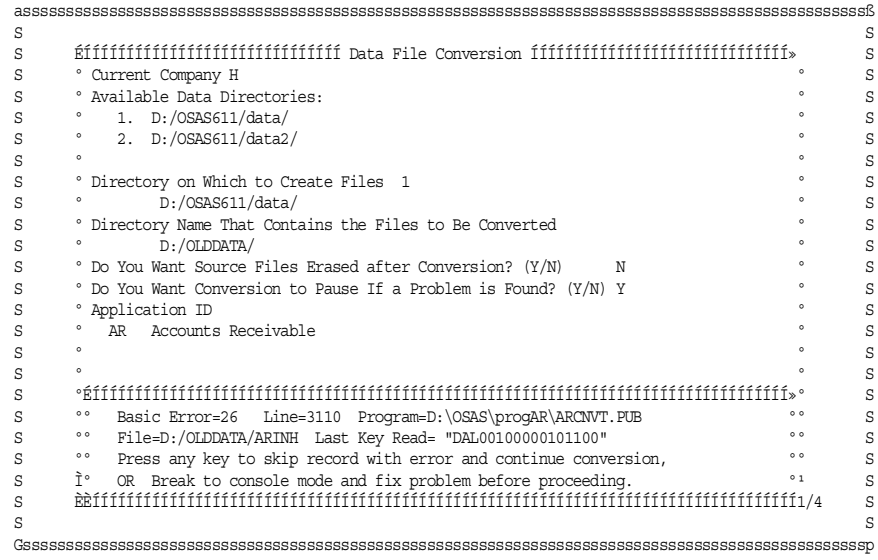
3. You can elect to have the source files erased after conversion. If you have free space on your drive, enter **N**.

4. You can elect to have the conversion pause if a problem is found, or continue without pausing.

5. Enter the IDs for the applications you want to convert. The order that you convert applications is very important depending upon what version is being converted. If there are data files in the directory specified for the application you entered, you are prompted to erase them. If you enter **YES,** the current files are erased and new data files are created. If you enter **NO**, you are brought back to the Application ID field.

   We recommend that for converting that you convert in the following order: **GL, AR/SO, AP/PO, IN, BK**, and other applications.

6. Use the **Proceed** command to begin the conversion.

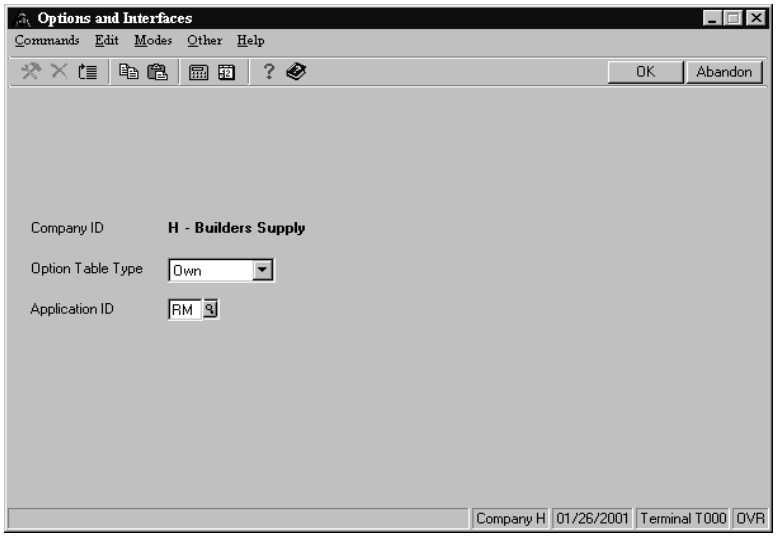


In the example above, **Y** was entered to pause if a problem was found. An error did occur while converting the Open Invoice file. The above message was displayed. The same error information is printed in the error log that is produced at the end of the conversion.

If you elected not to pause if a problem is found, the above message would not be displayed during conversion, but it would be printed in the error log.

Options and Interfaces

Selection Screen

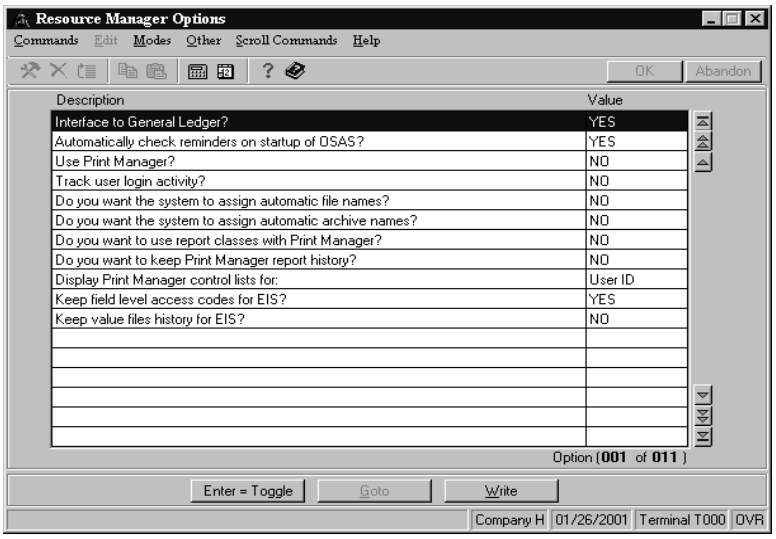


Use the **Options and Interfaces** function to set up or change application interfaces and options. The current company ID is displayed. You are prompted to enter an option table type: **SHARE** or **OWN**. The last type that was set up is the default.

If you have multiple companies on the system and you want them to have the same options and interfaces, enter **SHARE**. If you want each company to have unique options and interfaces, enter **OWN**.

Example: If you want company A but not company B to save Payroll transaction history, enter **OWN** for the option table type. Then set the options accordingly for each company.

Resource Manager Options

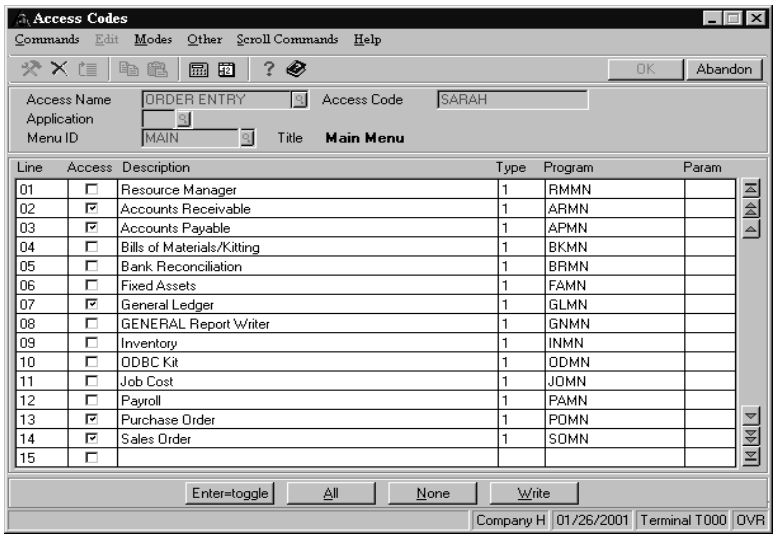


The application interfaces are listed at the top of the screen and the other options are listed at the bottom. Enter **YES** or **NO** for each interface and answer each option question.

Field	Description
Interface to General Ledger?	Selecting **Yes** allows you to select the accounts used for tax liability, refundable, and expense accounts in the Tax Locations function. If you chose **No**, you will need to manually enter in the GL accounts.
Automatically check reminders on startup of OSAS?	To automatically have the system display any reminders you have set in the Pop-up calendar when you enter OSAS, select **Yes**. If you want to manually access your reminders select **No**.
Use Print Manager?	**Yes** will activate Print Mgr, **No** will deactivate it.
Track user login activity?	Enter **Yes** to log the last 2 functions accessed by each user by terminal ID, enter **No** to not track user activity.
Do you want the system to assign automatic file names? archive names?	Enter **Yes** to have the system assign the file and archive file names at time of print to file. Enter **No** to manually assign file and archive file names at time of print job.
Do you want to use report classes with Print Manager?	Selecting **Yes** will require a report class to be assigned for each report printed to file using Print Manager. In addition to sorting purposes, report classes remind you to load the proper forms before you print a report
Do you want to keep Print Manager report history?	To keep history of all reports printed using Print Manager, select **Yes**. Otherwise, select **No** to not keep history.
Display Print Mgr control list for:	**User ID**: to display control list by user ID **Terminal**: to display control list by terminal ID **All**: To display control list by both user ID and terminal ID
Keep field level access codes for EIS?	Entering **Yes** will allow the system to import access codes setup in Resource Manager, to EIS field level. **No**, will not allow you to use the access codes setup in RM.
Keep value files history for EIS?	**Yes** will keep value file history for EIS fields from Global Update function in EIS Periodic Maintenance. Otherwise no history is kept for EIS.

After you have made your selections, **W**rite to save all changes.

Company Setup - Access Codes



Use the **Access Codes** function to set up the rights a user has when he/she logs in to OSAS under that code. Each code is set up to give the user access to different menu choices.

Make sure you create an access code that has unlimited access, especially to Resource Manager.

Note

Once you establish one access code, **all** users must have an access code.

Enter an access name for the individual or group that will use this access code. An example of a group name is **ORDER ENTRY** for the group of users that processes orders.

Enter the access code the individual or group will use. It is **case-sensitive**.

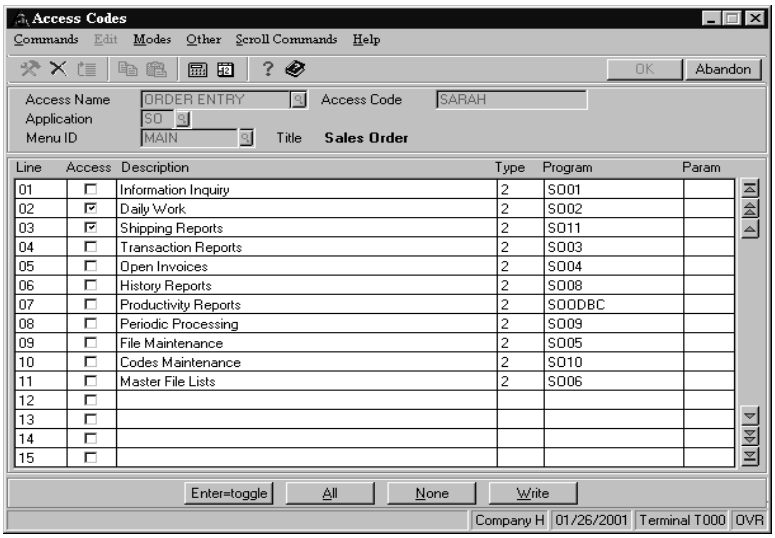
Press **Enter** at the Application field, and enter **MAIN** for the menu ID to work with the company Main menu.

The default is **YES** to allow access to each item on the Main menu. To change the access for one item, use the arrow keys to move the cursor to the item, and press **Enter**. Press **A** to change the access to **YES** for all items. Press **N** to change the access to **NO** for all items.

When you exit or press **W**, the prompt **Write changes?** (Y/N) appears. Press **Y** to save the access codes and write them to the **OSCODE** file. Press **N** to exit the function without saving the changes entered.

In this example, the group **ORDER ENTRY** will have access to the **Sales Order** application on the Main menu.

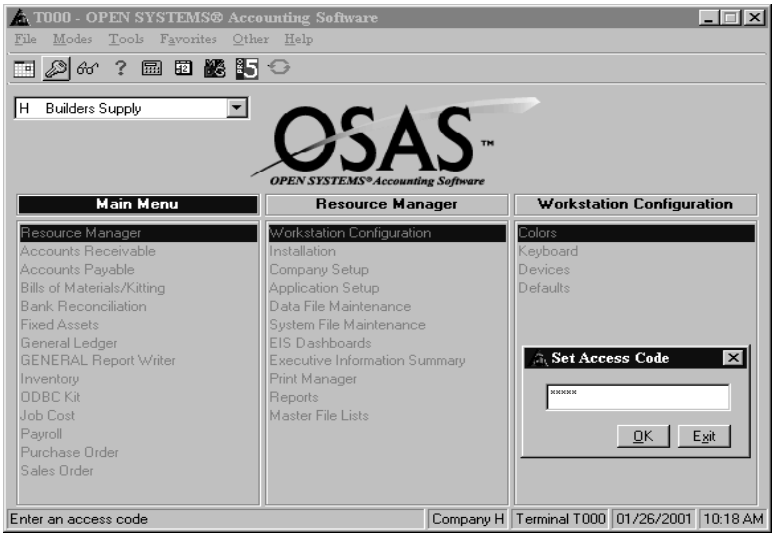
Access Codes



From the Sales Order main menu, the ORDER ENTRY group will have access to the Daily Work and Shipping Reports menus.

You can make additional changes for this access code on any menu or set up other access codes. When you are finished, use the **Exit** (F7) command to go back to the menu.

Access Code Entry

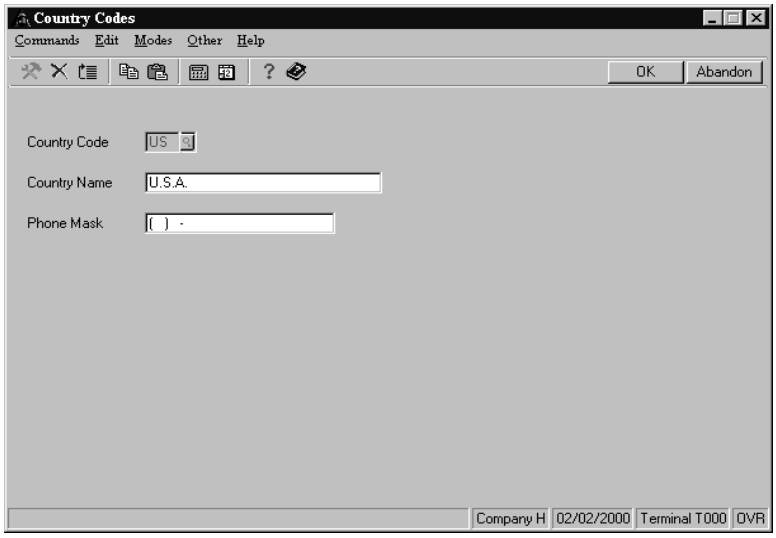


Note

You must use the **Access Code** command **(F4)** to enter an access code before you can select any option from the menu if you are using access codes. **All** Access codes are stored in the **OSCODE** file, if you cannot remember what these codes are you may delete or rename this file and recreate them, but you will be deleting **ALL** access codes used in OSAS. Be sure to allow at least one person to have access to the Resource Manager.

Country Codes

Selection Screen



Use the Country Codes function to assign a two-character code and a telephone number mask to a country. Each Country code does need to have an unique code which you follow with a description of the country you are creating the code for. Many countries have their country codes preassigned, you may want to verify that the phone mask is current.

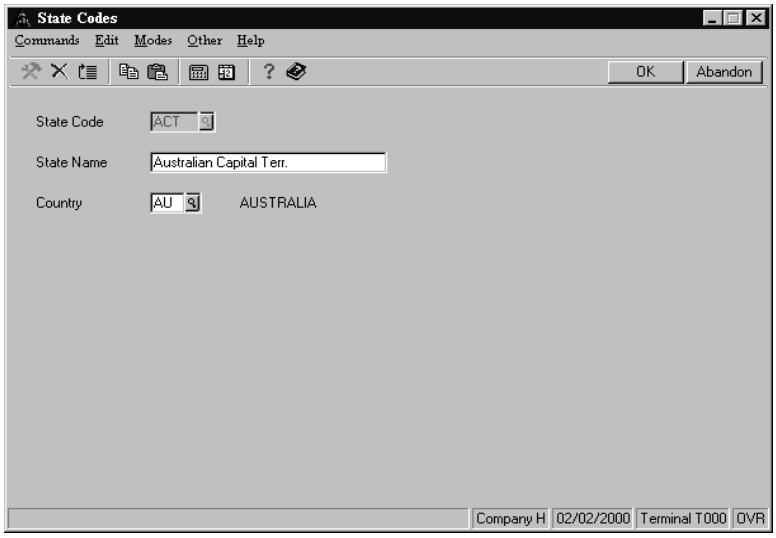
For the phone/fax mask, you will enter in the country's phone numbering system. This is the mask that will be accessed when you enter phone/fax numbers for customers, vendors, or employees located in this country.

You can enter in special characters to mask the country code, area code, phone number, city code, and so on. Enter spaces where phone number digits will be entered. For example, if you want the U.S. phone number to appears as "(555)555-1212" enter "( ) - " for the mask (without the quotation marks); to make it appears as "555-555-1212", enter " - - ". The total number of numbers and separators cannot exceed 20 characters.

Use the **Proceed** (PgDn) command to save any changes, or the new country code.

State Codes

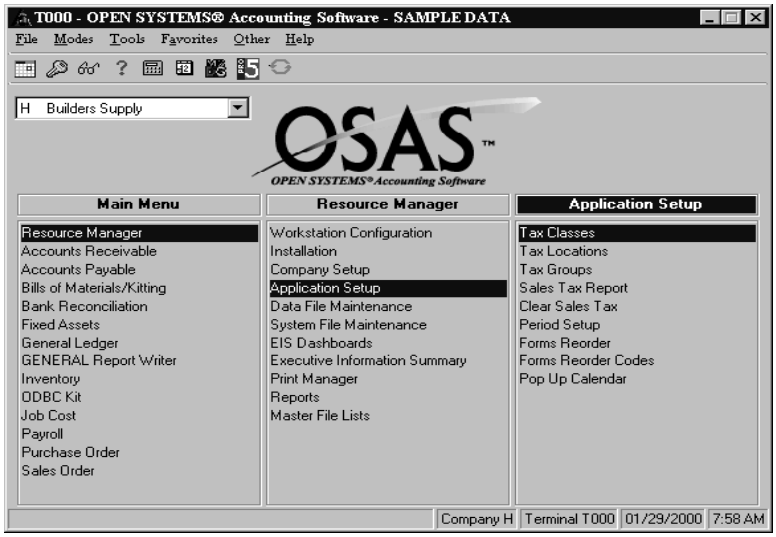
Selection Screen



Use the State Codes function to assign a three-character code, of numbers or letters, to a state, province, or other region within a country. Each State Code has to be unique and it also has to be referenced to an existing County Code.

Setting Up Applications 4

Application Setup Menu



Use the **Application Setup** menu to set up your company's taxes , fiscal periods, and reordering forms that your company regularly uses. This is also where you set up reminders to include on the Pop Up Calendar.

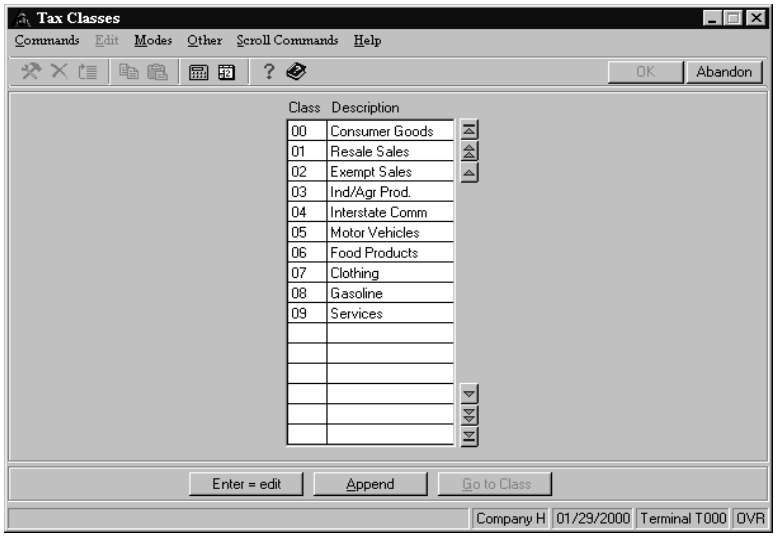
Note

You will need to verify that you have at least one tax class, one tax location and one tax group.

Tax Classes

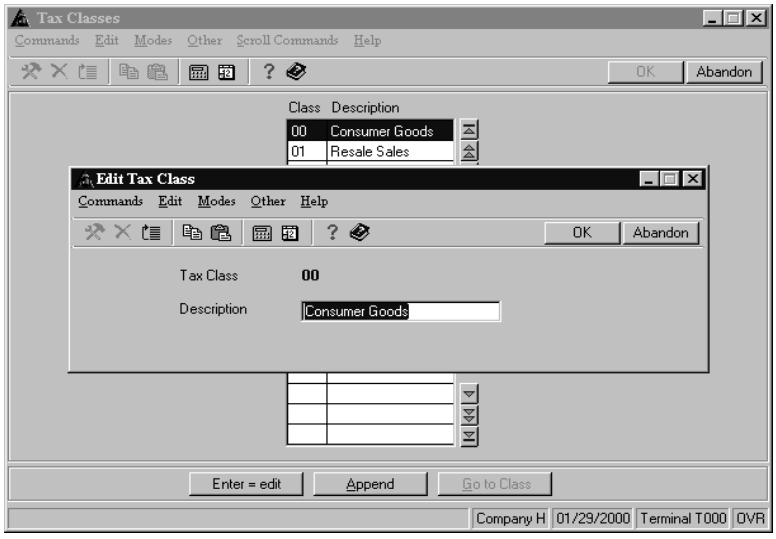
Use the **Tax Classes** function to change the descriptions associated with tax classes. *Tax Classes define the tax category of the items sold*. A tax percentage for each class is stored in the tax location record. If the Inventory module is being used, these tax classes are assigned in the item set up in file maintenance.

Tax Classes



To enter a new tax class press **A** to append. The next entry number will default in to be used, then enter a description that will best define the way the tax class will be used. You can have up to 99 tax classes.

Edit Tax Classes

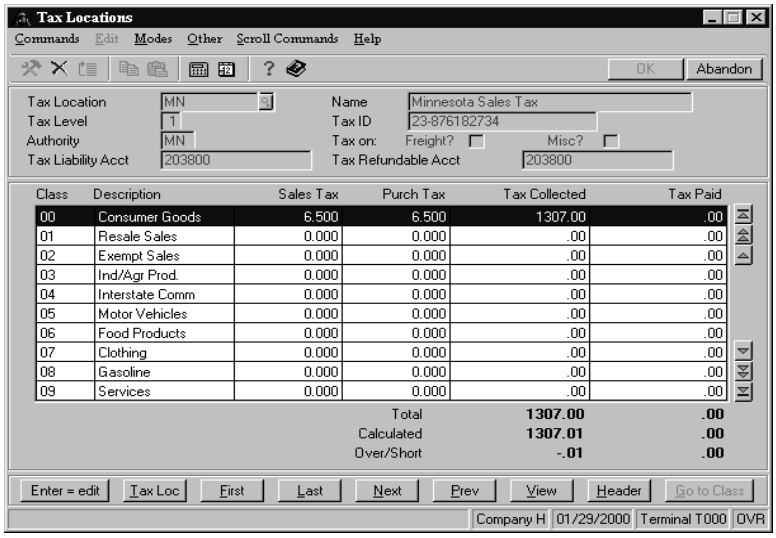


Tax Classes cannot be deleted, however you may change the description. To change the descriptions, move the cursor to the line you want to edit and press **Enter**. As soon as you enter the description, the entry is saved.

Tax Locations

Use the Tax Locations function to set up and maintain the tax authorities and the percentages for which you accumulate sales tax, and purchase tax for each tax class.

MN Tax Location



Enter the ID for the tax location for the record you will work with or set up.

Enter an appropriate tax level for this tax location (see info on Tax Groups). For instance, this location may be subject to a state tax, a county tax, a city tax and so on. **You must know in advance what your tax levels will be before you actually do the tax location setup.**

The tax authority is used to group tax locations into larger groups. You can print the Tax Report and clear tax amounts by tax authorities.

Enter the tax authority the location belongs to. For example, you might use MN for all locations that the state of Minnesota regulates.

Enter the GL liability account, name of the tax location and a tax ID number. Also enter the GL refundable account if you have refundable taxes.

Use the **Tax on Freight?** field if you want the system to calculate tax on freight for any transaction, using that tax location. If the tax location will not tax freight, enter **N**.

Use the **Tax on Miscellaneous?** field if you want the system to calculate tax on miscellaneous charges for any transaction, using that tax location. If the tax location will not tax miscellaneous charges, enter **N**.

Next, move the cursor to the appropriate tax class and enter to change the tax percent for sales or purchases, and any refundable percentage if it is applicable. You should enter the appropriate tax expense account to be credited when using this tax class at this location.

The fields Txbl Sales, Nontxbl Sales and Tax Collected are updated by the system when invoices and credits are posted for each tax class within each tax location.

The fields regarding taxable and nontaxable sales and purchases as well as previous taxes paid or collected may also be edited here, **but is not recommended**.

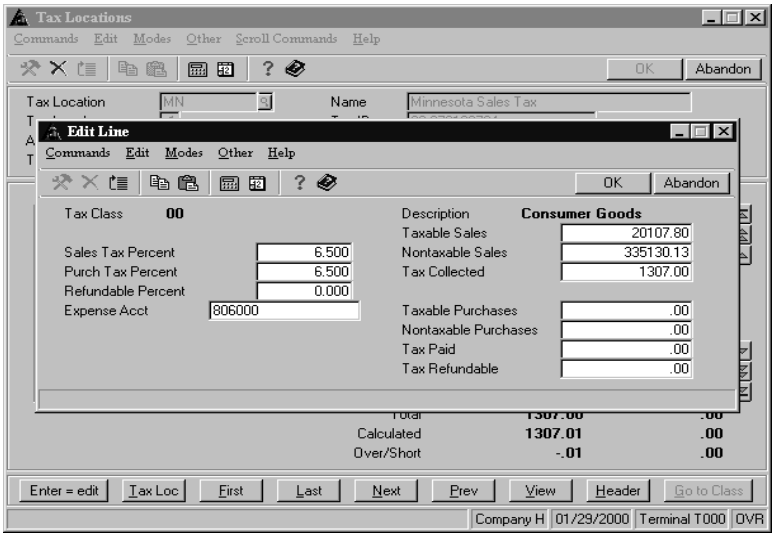
The bottom of the screen shows the total collected tax, calculated tax and a difference between the two. Collected Tax is the total amount of tax that has been collected on each taxable invoice for this tax location.

The Calculated Tax field is multiplying the Taxable Sales field and the appropriate tax percent for each tax class and adding each tax class for the entire tax location.

Note

Any difference between the Collected Tax field and the Calculated Tax field will show in the Over/Short field (usually due to rounding). This Over/Short amount may need a manual entry to the General Ledger in order to be accounted for, depending upon how your accounting department chooses to handle this type of item.

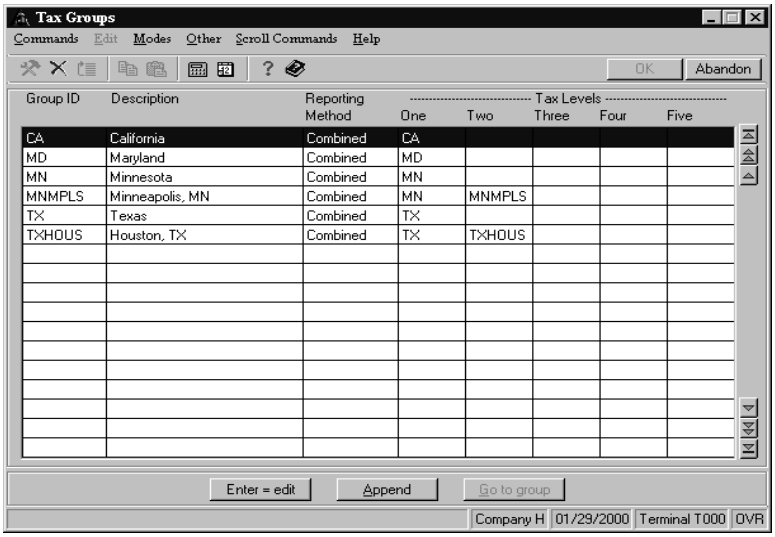
Edit Tax Locations



Tax Groups

Tax Groups are setup in the tax group function on the application setup menu in the Resource Manager. The purpose of the tax group function is to allow you to setup a group with multiple tax locations, and to allow for tax on tax capability. This function is designed to provide a system wide setup, since this function can be used by multiple applications.

Tax Groups

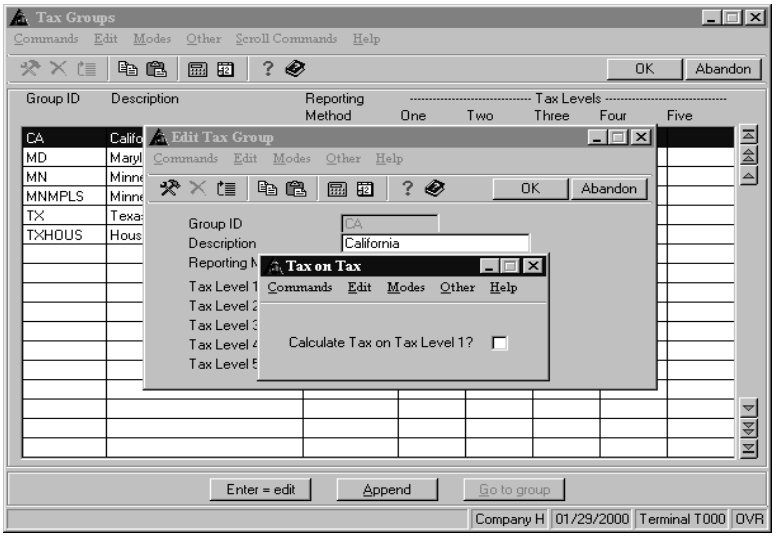


Set up Group ID and description, then decide whether taxes are to be printed combined or separate on invoices. Set up the number of tax levels to be associated with the tax group, levels must be defined in the tax location setup.

Note

Combined will print the total tax on the invoice. **Separate** will print a breakdown of the tax levels.

Tax on Tax



When you have multiple tax levels, you are prompted to choose whether or not to tax the previous tax levels. If yes, then those tax levels chosen are considered in calculating the tax level's tax amount. The above screen shows an example. Tax on tax is not commonly done in the US, but is very typical in Canada.

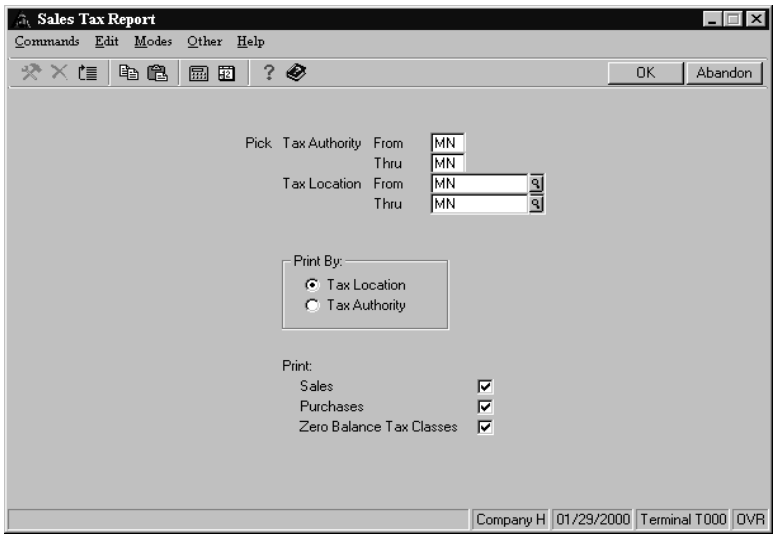
Sales Tax Report

For information as to how taxes are being allocated for the tax group or groups you set up, print the **Sales Tax Report**.

Note

Be sure to print the Sales Tax Report ***before*** you clear the sales tax as part of your periodic processing, whether it be on a period, quarterly, or a yearly basis.

Selection Screen



You can pick any tax authority(s) or tax location(s) to use in your report, then print either sales, purchases, or both, and print it by tax authority or by tax location to print your sales tax reports, which ever way benefits you the most.

There is an example of the Sales Tax Report on the next page.

Sales Tax Report

01/29/2000 Builders Supply Page 1
10:00 AM Sales Tax Report
By Tax Location

Tax Loc	Name	Level	Tax Auth.	Tax ID	General Ledger Accounts: Tax Liability	General Ledger Accounts: Refundable	--- Tax on ---: Frt.	--- Tax on ---: Misc.
MN	Minnesota Sales Tax	1	MN	23-876182734	203800	203800	NO	NO

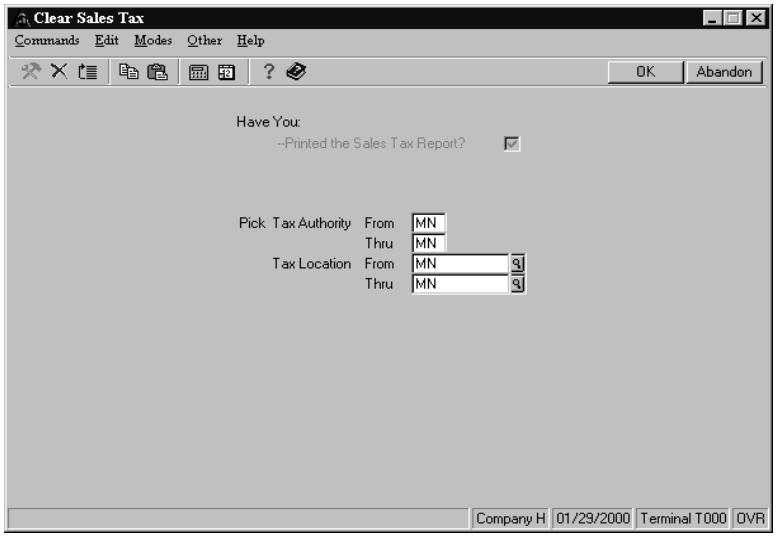
Tax Class	Description / Exp. Acct.	Sales Tax Purch	Tax Ref.	Tax	Taxable	Nontaxable	Tax	Calculated	Over/Short	Refundable
00	Consumer Goods	6.500		Sales	20107.80	335130.13	1307.00	1307.01	.01-	
	806000	6.500	.000	Purch	.00	.00	.00	.00	.00	.00
01	Resale Sales	.000		Sales	.00	.00	.00	.00	.00	
		.000	.000	Purch	.00	.00	.00	.00	.00	.00
02	Exempt Sales	.000		Sales	.00	.00	.00	.00	.00	
		.000	.000	Purch	.00	.00	.00	.00	.00	.00
03	Ind/Agr Prod.	.000		Sales	.00	18704891.90	.00	.00	.00	
		.000	.000	Purch	.00	.00	.00	.00	.00	.00
04	Interstate Comm	.000		Sales	.00	.00	.00	.00	.00	
		.000	.000	Purch	.00	.00	.00	.00	.00	.00
05	Motor Vehicles	.000		Sales	.00	.00	.00	.00	.00	
		.000	.000	Purch	.00	.00	.00	.00	.00	.00
06	Food Products	.000		Sales	.00	.00	.00	.00	.00	
		.000	.000	Purch	.00	.00	.00	.00	.00	.00
07	Clothing	.000		Sales	.00	.00	.00	.00	.00	
		.000	.000	Purch	.00	.00	.00	.00	.00	.00
08	Gasoline	.000		Sales	.00	.00	.00	.00	.00	
		.000	.000	Purch	.00	.00	.00	.00	.00	.00
09	Services	.000		Sales	.00	.00	.00	.00	.00	
		.000	.000	Purch	.00	.00	.00	.00	.00	.00
TOTAL FOR LOCATION MN				Sales	20107.80	19040022.03	1307.00	1307.01	.01-	
				Purch	.00	.00	.00	.00	.00	.00

		Taxable	Nontaxable	Tax	Calculated	Over/Short	Refundable
GRAND TOTAL	Sales	20107.80	19040022.03	1307.00	1307.01	.01-	
	Purch	.00	.00	.00	.00	.00	.00

End of report

Clear Sales Tax

Selection Screen

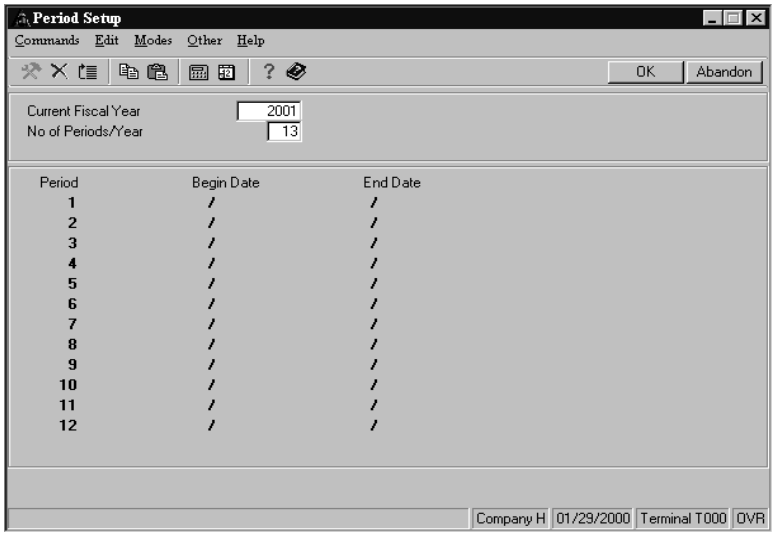


Use the **Clear Sales Tax** function to zero all of your tax totals for each location and authority as part of your periodic processing, or on a regular basis, (weekly, monthly, or yearly). **Print a hard copy of the sales tax report for all of your tax locations and tax authorities before using this function.** Once you clear sales tax, there is no way to retrieve the data without a backup. It is not stored in any files. It also does not allow you to pick a date to clear the tax, it will remove what is currently in the file.

Period Setup

When first starting the system you must use the **Period Setup** function to determine the current year and define the periods you will be using throughout the fiscal year.

Current Fiscal Year



Enter the current year and then the number of periods to be used in the fiscal year. Then page down and the system will define the first 12 periods, (if you are using 13 periods you will have to move the cursor to redefine periods 12 and 13.) Typically, period 13 is used to make the closing entries for the fiscal year, but you will need to decide how that will be handled by your accounting department.

You can leave dates out of the Period table, but you do not want to over lap days.

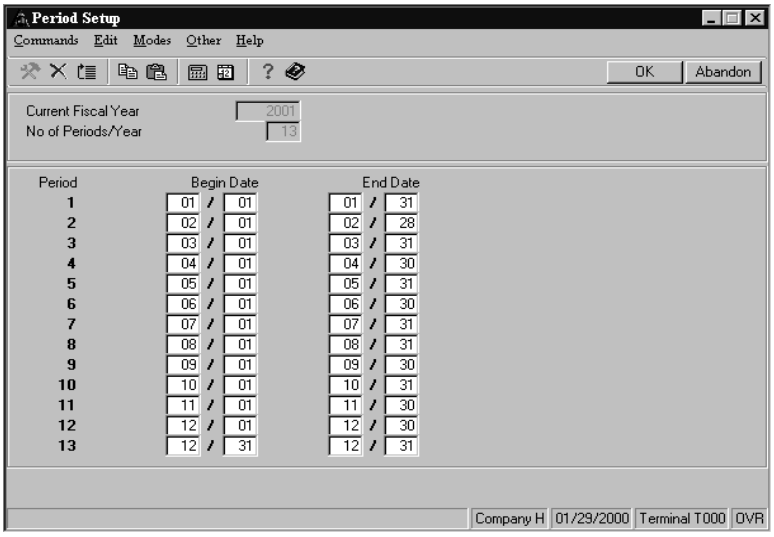
The following example will show you a 13 period setup.

Most people will show period 13 as 12/31 to 12/31 for closing entries.

Note

When choosing 13 periods, the last period is left blank to be defined as you see fit.

Adding Period 13



This table is updated by the system when you do your year end processing in the General Ledger. You can manually change this table during the year, **but is not recommended**.

Forms Reorder

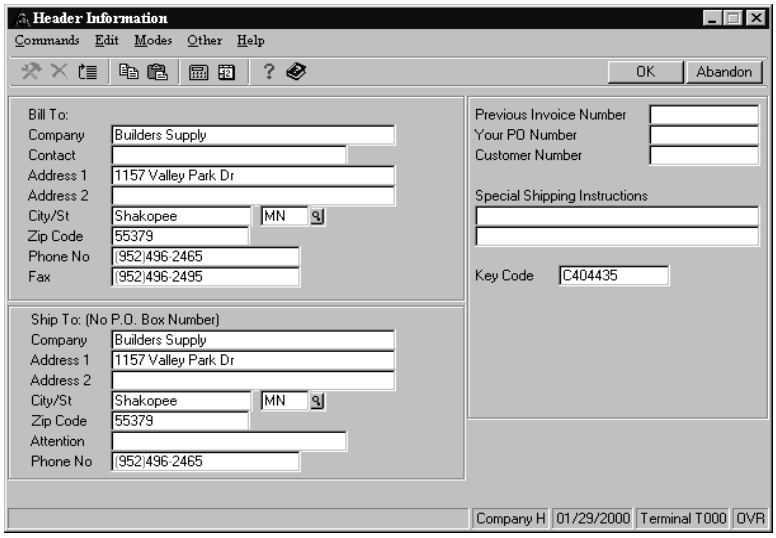
Use the **Forms Reorder** function on the application setup menu to order your *Open Systems* forms. The header information will default in from your company information screen, but may be edited here if you like.

Enter your previous invoice number if you have ordered before otherwise leave this field blank.

Enter your purchase order number and customer number, if you have special shipping instructions enter these next.

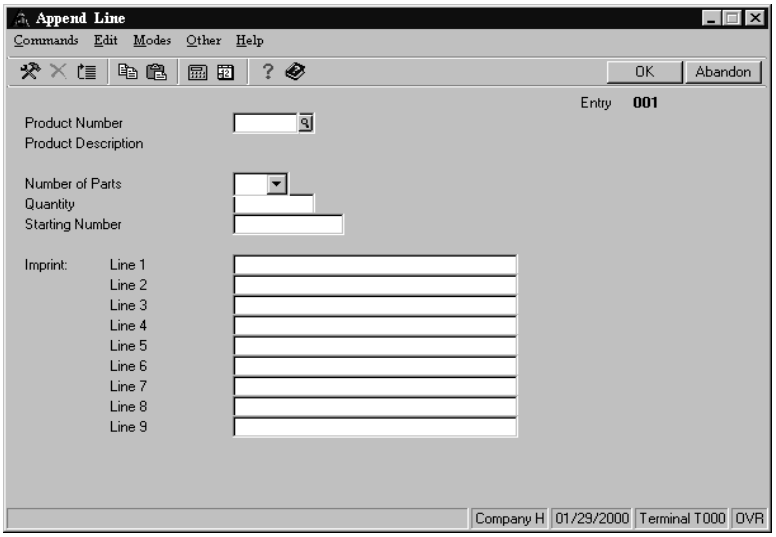
Next enter your **Key Code**. You will find this number on your order catalog given to you from your dealer, or received from the *Rapid Forms* or *Open Systems Forms* Companies.

Header Information



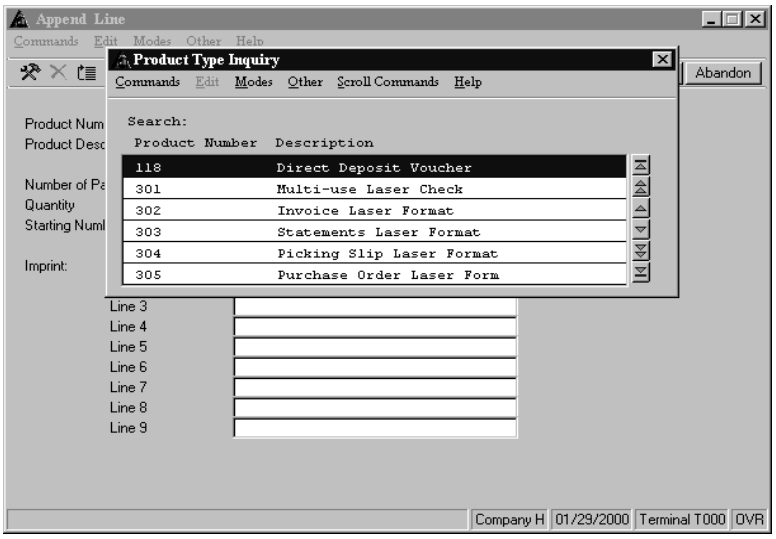
After paging down from the header screen, you enter the actual forms you wish to order on the following screen.

Append Line



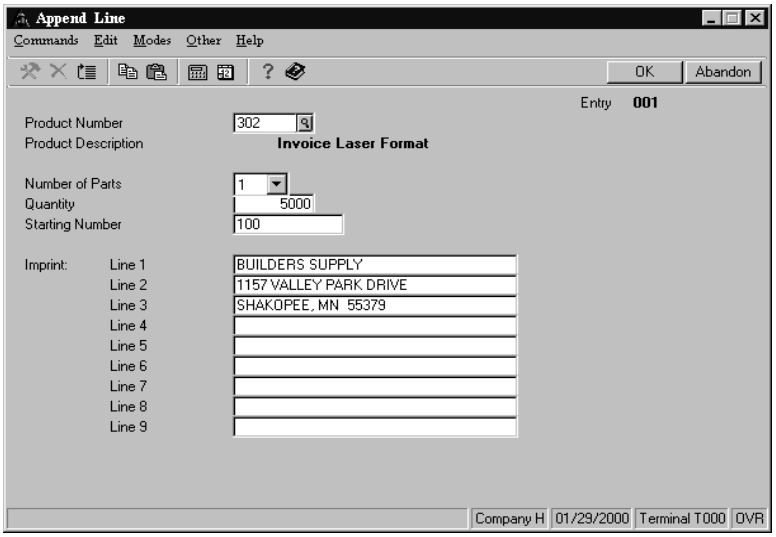
Use the **Inquiry** (F2) command to view the forms that are available to you, as was done in the screen below. You may add additional form codes here by using the **Maintenance** (F6) command or the **Exit** (F7) command and go directly to form codes.

Inquiry Selection Screen



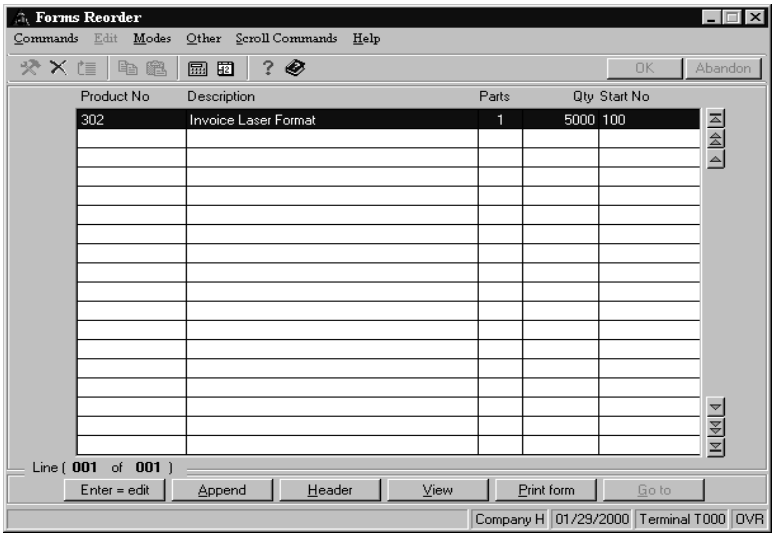
When you select a form you will be shown the number of parts available and can also enter what you would like to have imprinted to those forms.

Append Line



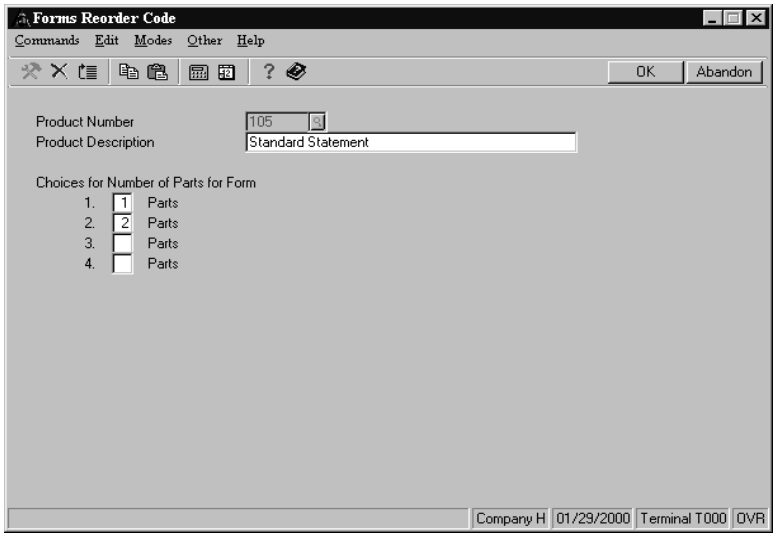
Below is an example of the line items that have been ordered, the quantity of each item and the beginning number to start printing the forms with.

Forms Reorder



Forms Reorder Codes

Selection Screen



Use the **Forms Reorder Codes** function to enter new codes for new forms that you will be using or as they become available to you. This is the same function you are accessing when using the **Maintenance** (F6) command from the reorder forms function.

Enter the form code and description, as well as the selections available regarding the number of parts for that form. Use the **Proceed** (PgDn) command to save the information

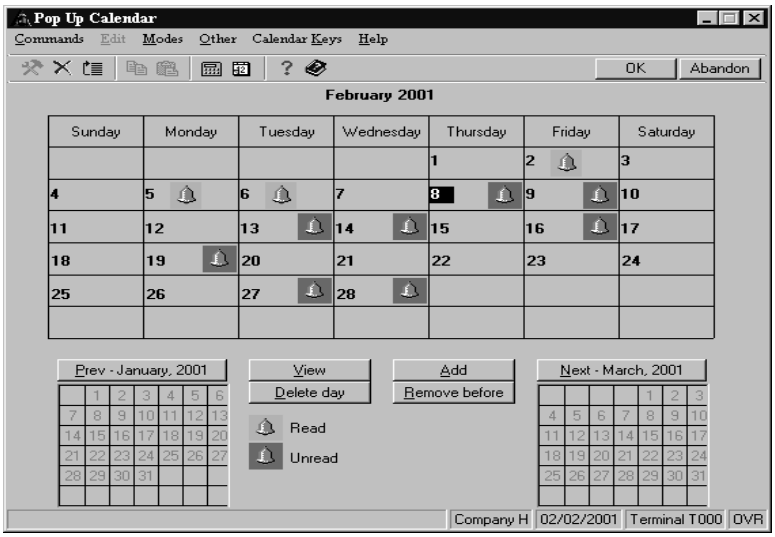
Pop Up Calendar

You can use the Pop Up Calendar function on the Application Setup menu to create and edit calendar-dated reminders. You can create reminders for yourself, for another user, or for everyone on your system.

If you select the option in the *Resource Manager Options and Interfaces function*, the Pop Up Calendar screen will appear automatically when you start OSAS if there are unread reminders on file for the system date.

The Pop Up Calendar is also available from the **Other Commands** (F4) menu on all menu and function screens.

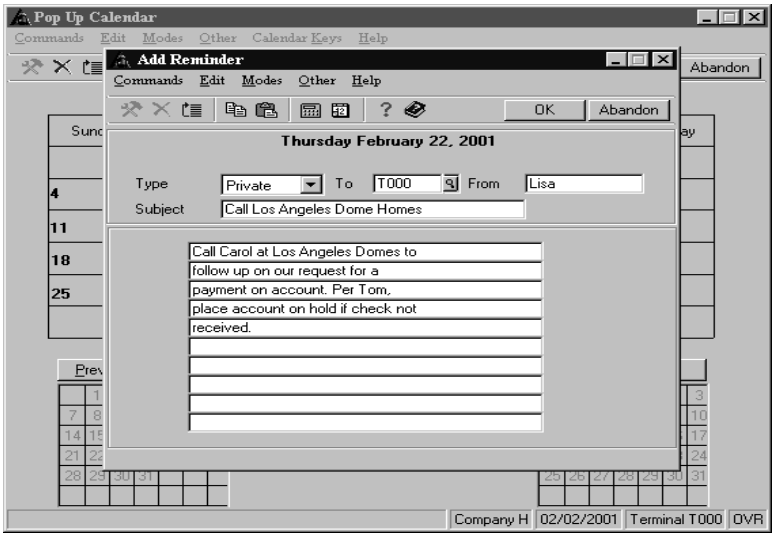
Selection Screen



When you enter in the calendar, the current month is displayed. An icon/symbol will appear on the days for which reminders are on file. Use the arrow keys to scroll through the days on the calendar.

You can choose to look at the previous or the next month's reminders. Use the **View** option to pop up that days reminder, **Add** to add a reminder to the day you are currently on, or **Delete** to remove all reminders for that day.

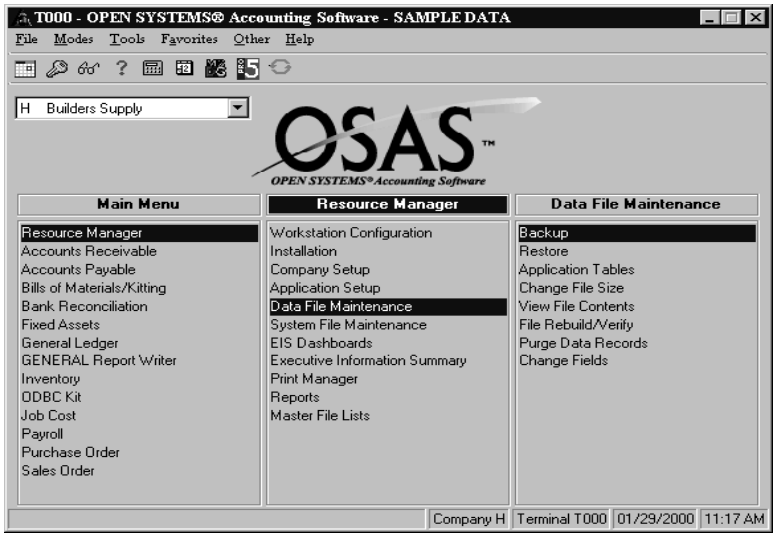
Reminder Screen



The Reminder setup screen allows you to enter whether you want this to be **Private**, for a specific single user, or **Global**, for all users. If it is Private, you would then enter in the Terminal ID for whom this is to go to. Next, enter in who the reminder is from and a short subject.

You can enter up to ten lines of text for the reminder and when you are finished, use the **Proceed** (PgDn) command to send the reminder.

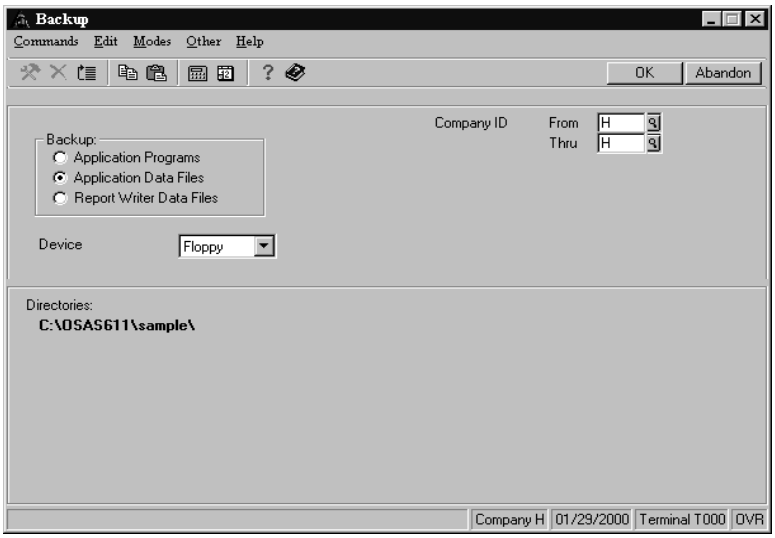
Data File Maintenance Menu



Use the functions on the Data File Maintenance menu to back up or restore files, add or change tables for applications, rebuild data files or view the contents of data files.

Backup and Restore

Backup Screen



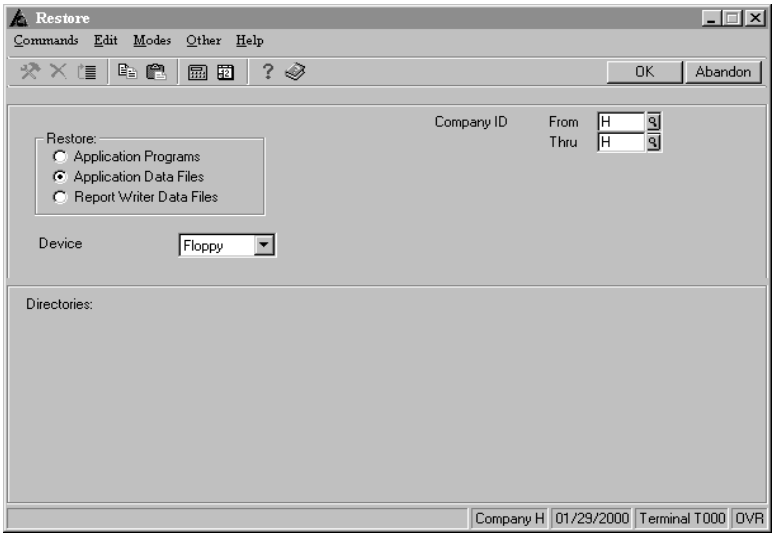
Use the Backup and Restore functions to back up or restore your OSAS programs, data files, or Report Writer data files. If you elect to back up or restore data files, you can enter a range of companies. The directories that will be backed up or restored are displayed. You can use a tape or diskettes.

The backup and restore commands are stored in the following text files, which reside in the OSAS/progRM/:

OSBUF.TXT	Back up to diskette
OSBUT.TXT	Back up to tape
OSREF.TXT	Restore from diskette
OSRET.TXT	Restore from tape

These text files must contain the operating system commands to perform the backup or restore. Open Systems does not provide backup and restore utilities.

Restore Screen



The DOS backup and restore commands are in the OSBUF.TXT and OSREF.TXT files. You must edit the tape text files with the appropriate tape command. Use the same command you would use at the operating system prompt, but replace the directory name with (dir) and the file name(s) with (select). For example, if the tape command to back up the /OSAS/data/ directory is TAPE C:\OSAS\data*.*, the OSBUT.TXT file should contain TAPE (dir)\(select). The (dir) is a variable that will be replaced by the appropriate directory name(s) and (select) will be replaced with the file name(s) that you choose to backup.

When you install Resource Manager on a UNIX/XENIX system, you are prompted to enter the backup and restore commands for diskettes and tapes. If you want to reconfigure your backup devices later, use the Other command to execute the script manually.

From the Resource Manager menu, press the **Other** (F4) command, two times to display the Other Commands menu. Select Execute an Operating System Command. At the command line enter **./ rmcrbr**

You are prompted to enter the install device name, diskette and tape backup commands, and diskette and tape restore commands.

An example of the screen is shown below:

```
assssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssß
S                                                                                          S
S                                                                                          S
S         Computer Type:                  Personal Computer with 3.5 in. drive             S
S  Enter new value or RETURN for default:                                                  S
S                                                                                          S
S         Floppy device for installation:  /dev/fd048ds9                                   S
S  Enter new value or RETURN for default:  /dev/fd096ds15                                  S
S                                                                                          S
S         Command for Floppy Backup:       tar cvf /dev/fd096ds15 (dir)/(select)           S
S  Enter new value or RETURN for default:                                                  S
S         Command for Floppy Restore:                                                      S
S  Enter new value or RETURN for default:                                                  S
S                                                                                          S
S         Command for Tape Backup:         N/A                                             S
S  Enter new value or RETURN for default:                                                  S
S                                                                                          S
S         Command for Tape Restore:        N/A                                             S
S  Enter new value or RETURN for default:                                                  S
S                                                                                          S
S         tar Command:                     /bin/tar                                        S
S  Enter new value or RETURN for default:                                                  S
S                                                                                          S
Gssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssp
```

Use the Backup/Restore Commands function on the Master File Lists menu in Resource Manager to print a list of the commands in the backup and restore text files.

Another example is shown below.

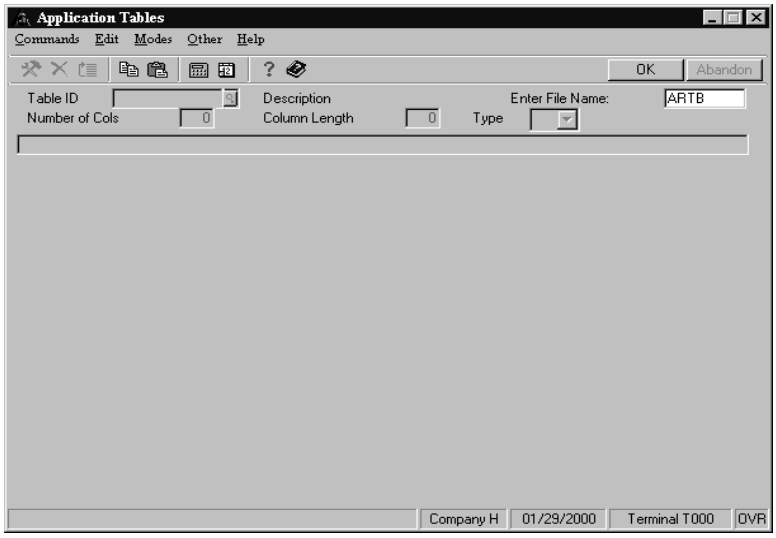
Backup/Restore Commands

```
01/29/2000                     Builders Supply                    Page    1
11:19 AM                 Backup/Restore Commands List
------------------------------------------------------------------------------

Backup to Floppy Command Line (OSBUF.TXT):
     BACKUP (dir)\(select) (flop) /S

Restore from Floppy Command Line (OSREF.TXT):
     RESTORE (flop) (dir)\(select) /S

Backup to Tape Command Line (OSBUT.TXT):
     N/A

Restore from Tape Command Line (OSRET.TXT):
     N/A

End of Report
```

Note

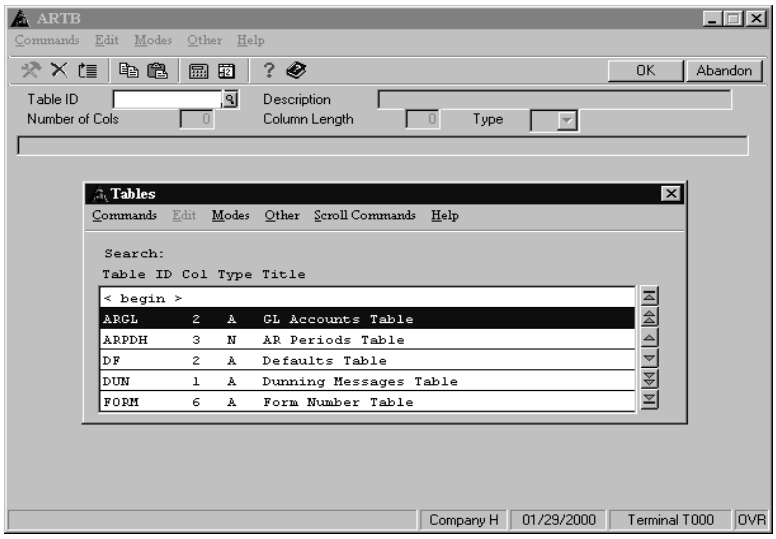
If you are using WINDOWS 95 workstations both the backup and the restore commands will be the following: **C:\progra~1\access~1\backup**

ARTB File



Select the **Application Tables** function from the Data File Maintenance menu to work with an application's tables. Enter the table file name, XXTB, where XX represents the application ID. For example, ARTB is the Accounts Receivable Tables file, GLTB is the General Ledger Tables file, and so on.

Inquiry Function



Then enter the name of the table you want to work with. Use the **Proceed** (PgDn) command to save your changes.

Change File Size

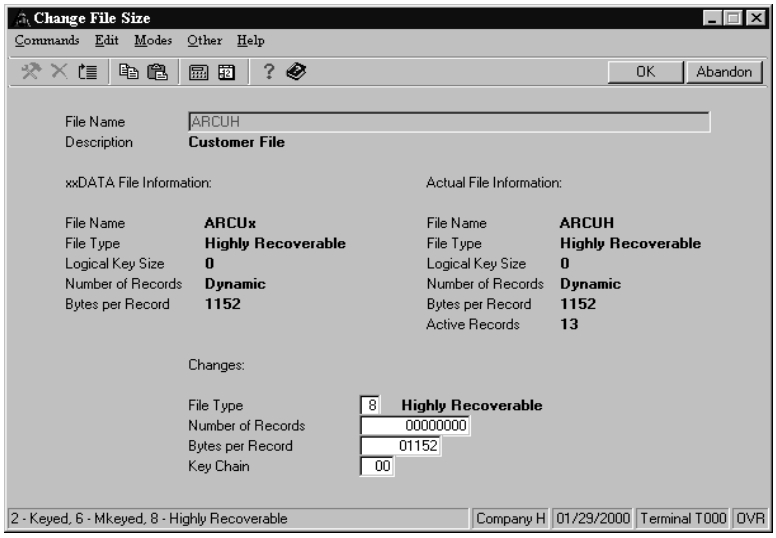
Use the Change File Size function to shrink files from which you have deleted records of old customers, vendors, employees, inventory items, and so on.

Enter the name of the file the function is to be used with.

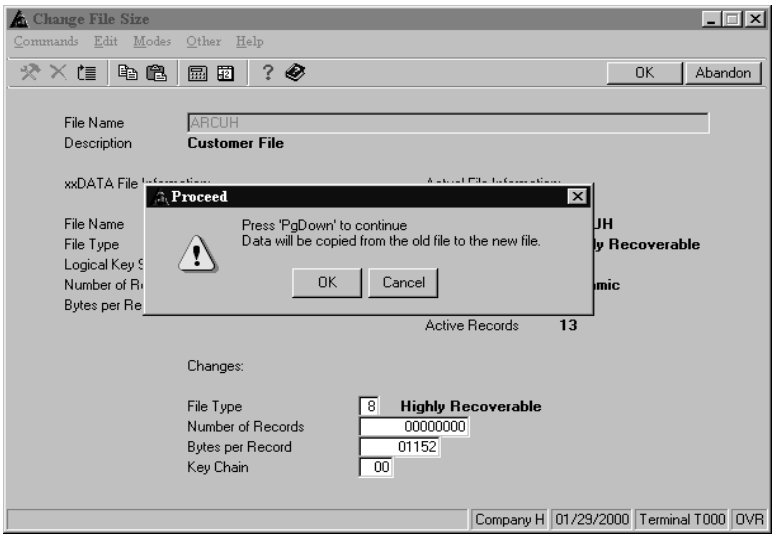
Use the **Proceed** (PgDn) command to begin the function.

The file type should be **Mkeyed or Highly Recoverable** and the number of records should be **Dynamic** under the Actual File Information column, if they are not, consult your dealer for technical support. The system creates a new data file, reads information from the existing file and copies all the records it can read to the new file.

Customer File



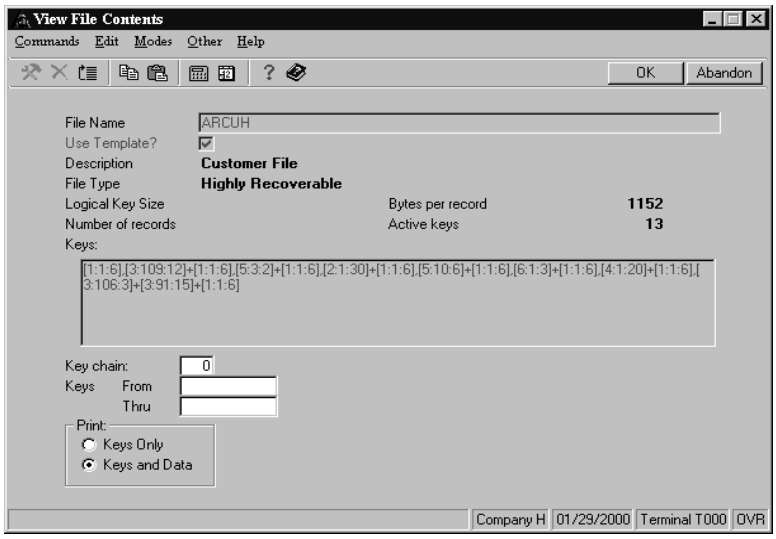
Copied Files



If you use the Change File Size function to rebuild a damaged file, compare the number of records copied to the number of active records displayed in the middle of the screen. If the number of records copied is substantially less than the number of active records, use the **Exit** (F7) command to abort the function. Restore a backup copy of the file, or try the File Rebuild / Verify or Purge Data Records functions. Otherwise, use the **Proceed** (PgDn) command to replace the old file with the new file.

View File Contents

Customer File



Use the **View File Contents** function to display information from a data file for a specified range of records. The data is not labeled but is divided by field number. To find out what is stored in each field, print the Data Dictionary from the Report Writer Master File Lists (if you have the Report Writer application) for the topic file you are working with, or refer to the **File Descriptions** manual, which is part of the Developer's Tool Kit that can be purchased from your authorized reseller.

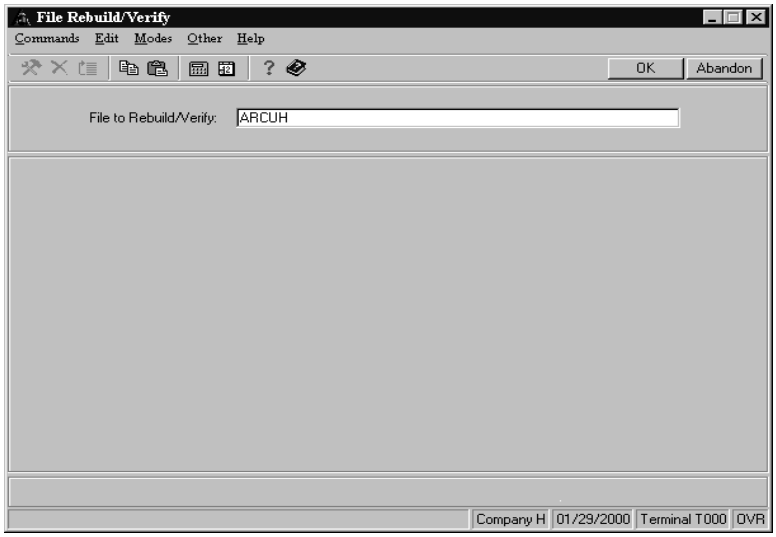
A sample record dump from the Customer file is on the following pages.

View File Contents

```
    01/29/2000                              Builders Supply                                         Page      1
        12:53 PM                                View File Contents

                                C:/OSAS611/sample/ARCUH - Customer File
                                ========================================================

        ---------------------------------------------------------------------------------------------------------------------------
        Key Chain  0:  >ACE001<
        ---------------------------------------------------------------------------------------------------------------------------
CUST$:     1(1,6)      >ACE001<
NAME$:     2(1,30)     >ACE BUILDERS                  <
ADD1$:     3(1,30)     >1588 SE 31ST STREET           <
ADD2$:     3(31,30)    >                              <
ADD3$:     3(61,30)    >                              <
CITY$:     3(91,15)    >PADUCAH        <
ST$:       3(106,3)    >KY <
ZIP$:      3(109,12)   >28655-7865  <
CTRY$:     3(121,2)    >US<
ATTN$:     3(123,25)   >ACCOUNTS PAYABLE         <
CONT$:     3(148,25)   >BRIAN                    <
PHONE$:    4(1,20)     >5055551646          <
FAX$:      4(21,20)    >5025551566          <
GCOD$:     5(1,1)      >0<
SCOD$:     5(2,1)      >3<
DIST$:     5(3,2)      >01<
ACTP$:     5(5,1)      >0<
FCHG$:     5(6,1)      >N<
HLD$:      5(7,1)      >N<
PSHP$:     5(8,1)      >Y<
AUCR$:     5(9,1)      > <
CLS$:      5(10,6)     >WHSL  <
TCOD$:     5(16,6)     >2PCT  <
CUSLV$:    5(22,6)     >ACE001<
FCCODE$:   5(28,2)     >UU<
SREP1$:    6(1,3)      >GPD<
SREP2$:    6(4,3)      >   <
TER$:      6(7,6)      >MIDATL<
NFIN:      7(1,14)     >0<
UPFIN:     8(1,14)     >0<
CDUE:      9(1,14)     >18704891.9<
BAL1:      10(1,14)    >26650.89<
BAL2:      11(1,14)    >0<
BAL3:      12(1,14)    >0<
BAL4:      13(1,14)    >84448.32<
UNAP:      14(1,14)    >-15693.74<
SLSP:      15(1,14)    >18725677.81<
SLSQ:      16(1,14)    >18915788.34<
SLSY:      17(1,14)    >20364358.16<
SLSL:      18(1,14)    >1223579.63<
PFTP:      19(1,14)    >1818150.28<
PFTQ:      20(1,14)    >1864371.01<
PFTY:      21(1,14)    >2308779.89<
PFTL:      22(1,14)    >370863.25<
INVP:      23(1,6)     >5<
INVQ:      24(1,6)     >7<
INVY:      25(1,6)     >17<
INVL:      26(1,6)     >8<
PMTP:      27(1,14)    >35467.99<
PMTQ:      28(1,14)    >682992.53<
PMTY:      29(1,14)    >1662865.83<
PMTL:      30(1,14)    >1110548.58<
DSCP:      31(1,14)    >0<
DSCQ:      32(1,14)    >0<
DSCY:      33(1,14)    >12630.63<
DSCL:      34(1,14)    >1595.38<
DAYP:      35(1,9)     >27<
DAYQ:      36(1,9)     >122<
DAYY:      37(1,9)     >742<
DAYL:      38(1,9)     >211<
NPYP:      39(1,6)     >1<
NPYQ:      40(1,6)     >3<
```

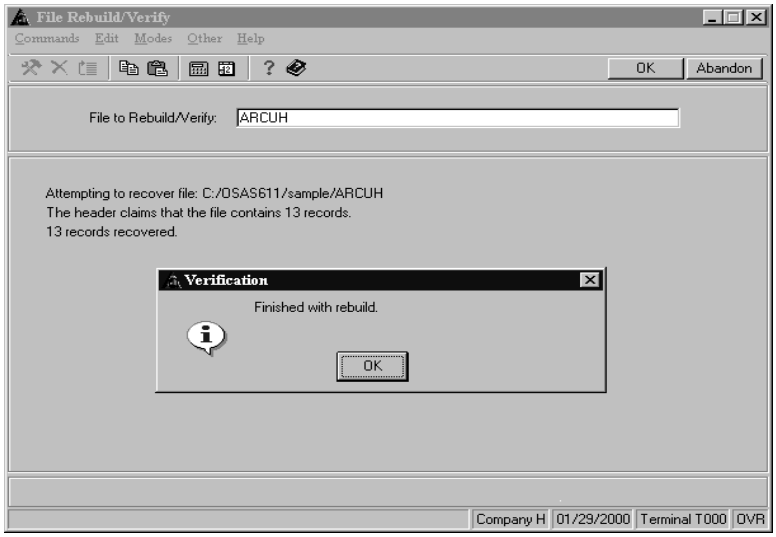
Use the File Rebuild/Verify function to rebuild a damaged data file. The system scans the keys in the file. If the file you try to rebuild is corrupted, messages like the ones in the above example may appear.

Rebuilding Customer File



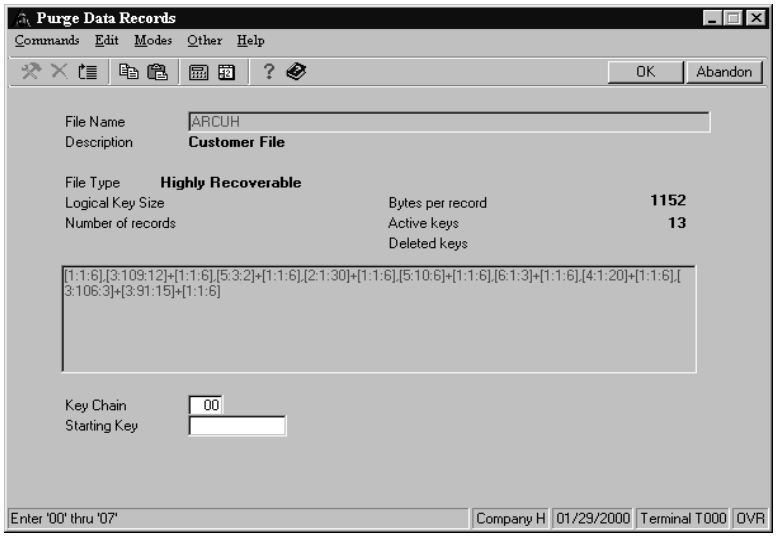
When the program finishes rebuilding the file, enter **Y** to save the rebuilt file or **N** to use the original file.

File Rebuild/Verify



Purge Data Records

Customer File



Use the **Purge Data Records** function to manually rebuild or remove records from a data file.

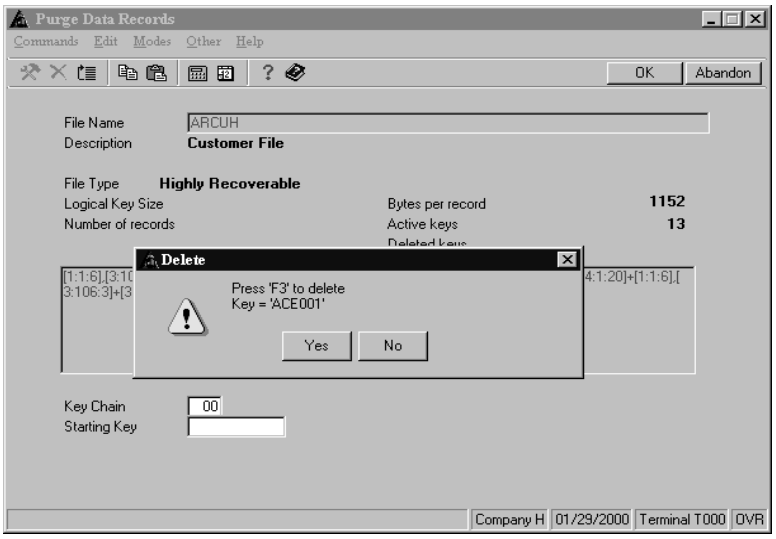
Enter the name of the file you want to purge records from. The bytes per record, active keys and key definitions are displayed. If you know the ID of the key you want to start with, enter its value in the Starting Key field. If you want to start at the beginning of the file, press **Enter** in the Starting Key field.

Note

Use this function with caution. Be sure you know what information you are deleting and how it may affect other files.

Refer to the **File Descriptions** manual or the **Key Definition** section in the Appendix of this manual for key definitions.

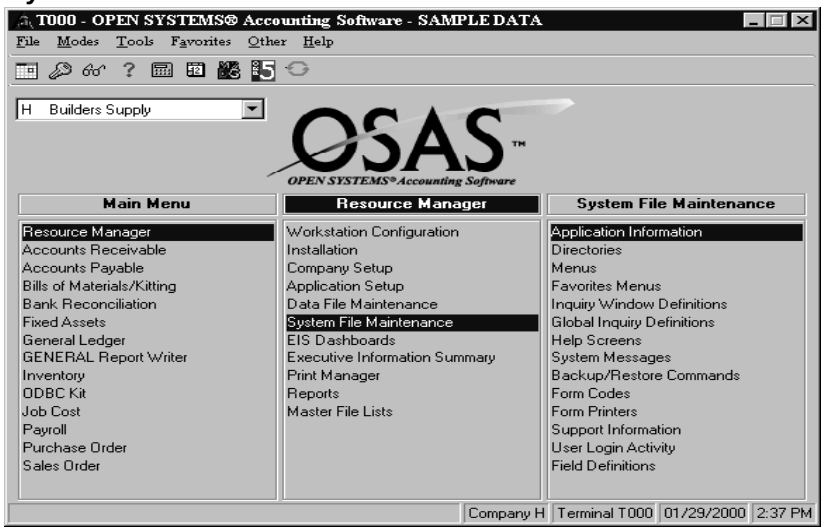
Purge Data Records



Use the **Delete** (F3) command to delete the record for the displayed key, or press **Enter** to move to the next key. To exit from the function at any time, use the **Exit** (F7) command.

Maintaining System Files 6

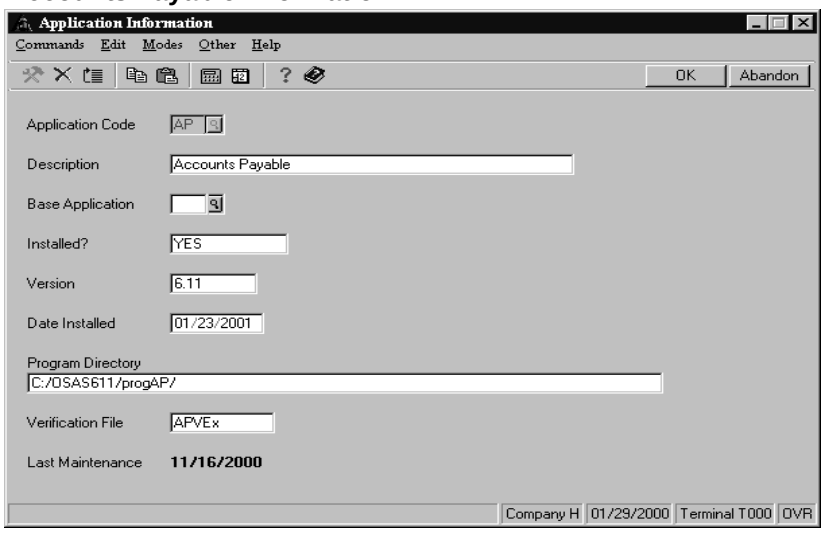
System File Maintenance Menu



Use the options on the System File Maintenance menu to view application information or to change directory information, application menus, inquiry window definitions or help screens.

Application Information

Accounts Payable Information

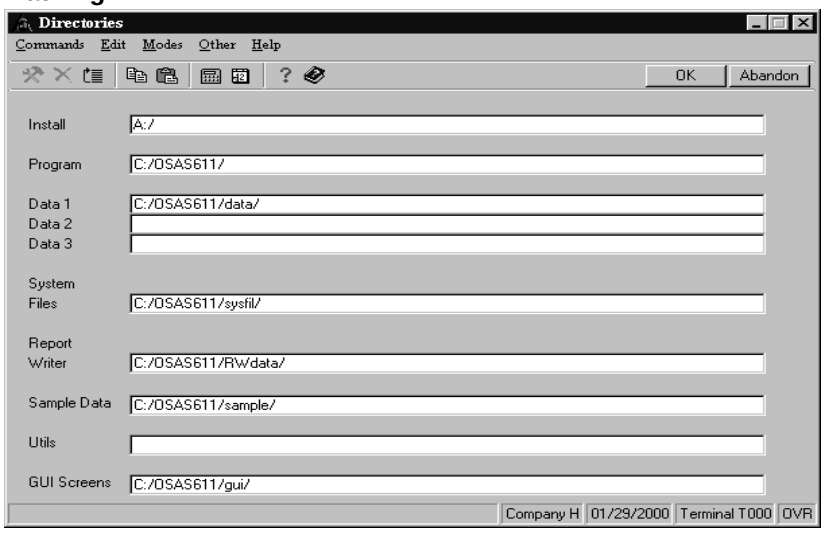


Application information is updated when you install an application. Enter the two-character ID, or use the **Inquiry** (F2) command to look up and select an ID from the list that appears. If you change the Installed field from YES to NO, the application will no longer appear on the menu.

Application information is stored in the **OSAPPL.DOS** or **OSAPPL.UNX** file in the **SYSFIL** directory.

Directories

Pathing



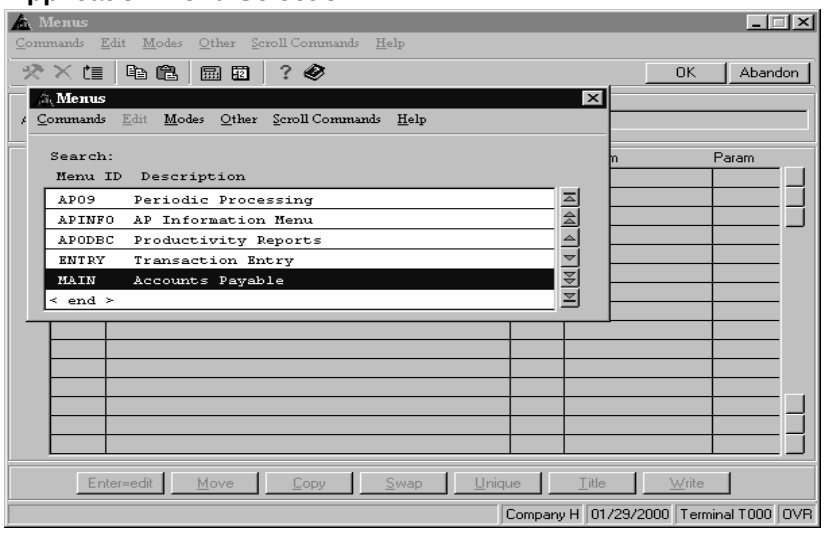
Use the **Directories** function to look at or change the main system directories used by OSAS. You can have three directories for live data. Specify the directory that contains the Software Development utilities.

All of the information on the Directories screen is stored in the **OSINFO.DOS** or **OSINFO.UNX** file in the **SYSFIL** directory and this information may be accessed while working with live or sample data.

Note

Saving a change in the directories function will result in restarting OSAS, be sure that the pathing changes are valid and that the path for the progRM directory in the Application Information function has been changed first.

Application Menu Selection

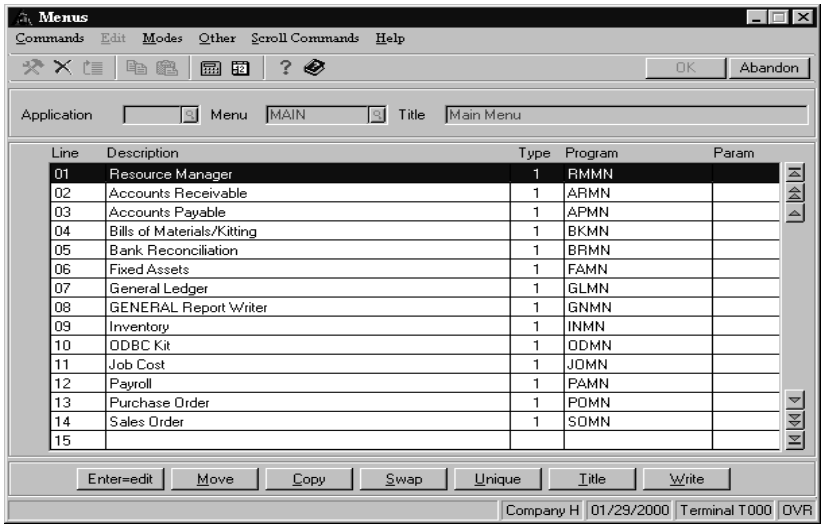


Use the **Application Menus** function to change information on application menus. Enter the application and menu ID you want to work with, or use the Inquiry command to look up and select them from the window. Refer to the following screens in this section for details about the available options.

Note

Use the **List (F8)** command to print a copy of the screen or select Application Menus from the Reports menu to print a list of the menus before making any changes.

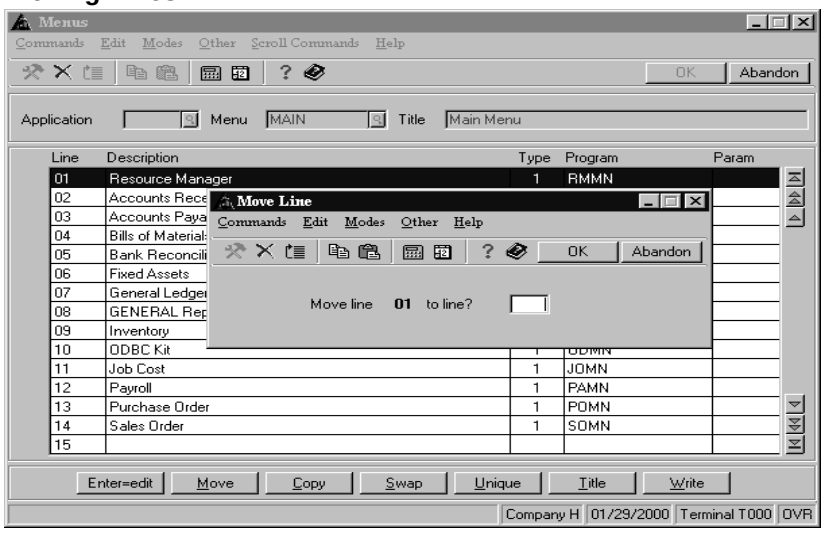
Main Menu



Select **Main Menu** to change to the company's Main menu.

Use the arrow keys to move the cursor to the item you want to work with. Press **Enter** to edit the line.

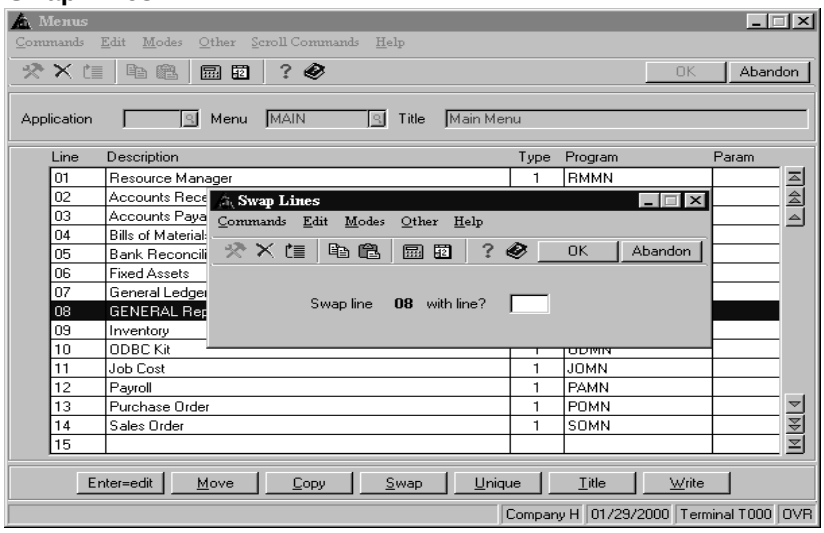
Moving Lines



Press **M** to **move** the current line. A window opens so that you can enter the line number you want to move the item to.

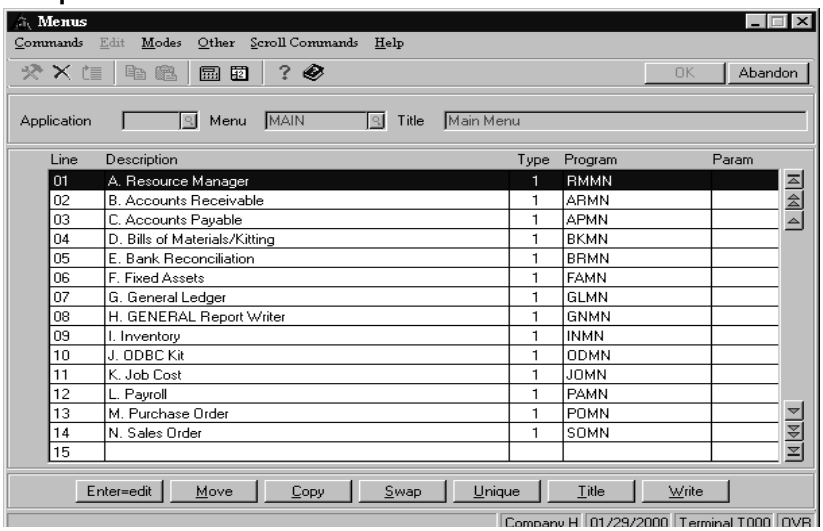
Press **C** to **copy** a line to a new line that is blank. The cursor must be at a blank line. A window opens so that you can enter the line you are copying from.

Swap Lines



Press **S** to **swap** the current line with another. A window opens so that you can enter the line to swap with.

Unique Menu



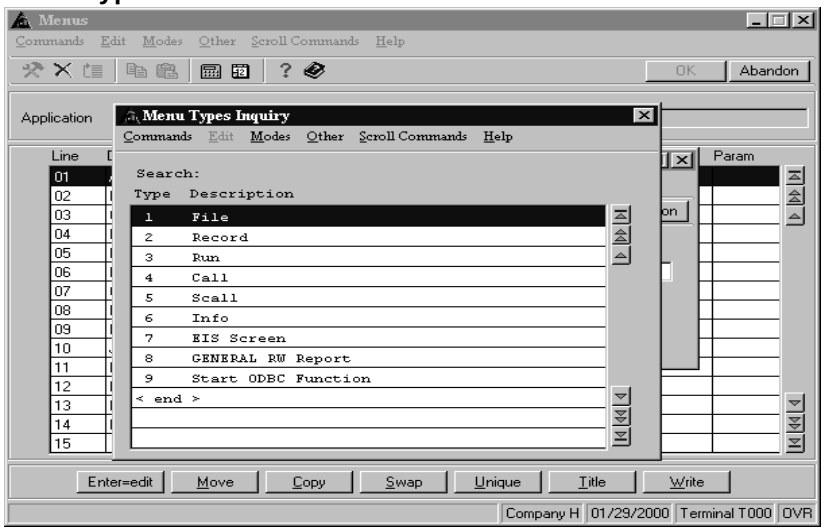
Press **U** to make each item on the menu **unique**. The system automatically inserts the letters of the alphabet before each item. You can move through the menus faster by entering the letter of the item you want to select from the menu.

Press **T** to change the **title** of the main menu.

When you exit or press **W**, the prompted **Write** the Changes (Y/N)? appears. Enter Y to write the changes to the company menu file (OSMNx). Enter N to proceed without saving the changes.

When editing or adding a menu item, fill in the appropriate type of file that will run to bring that menu up. Below is a brief description of the types available.

Menu Types



Type	Description
0	if this is a comment line

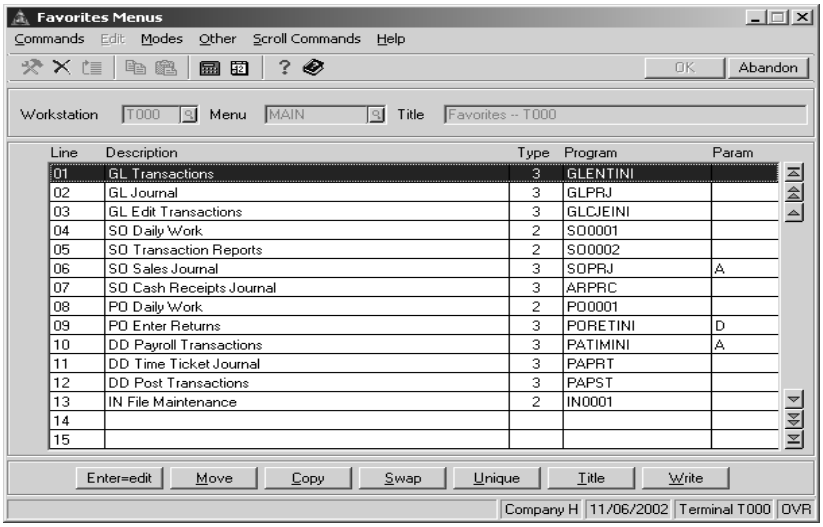
Type	Description
1	if this a menu file (shown above for most menu items)
2	if this is a menu record (i.e. see the More record in the above screen)
3	if this file executes an application program
4	if this file executes a public program
5	if this file executes a system command
6	to execute an information menu program
7	if it is a EIS program
8	if it is a Report Writer Report.

Favorites Menus

All users have the ability to customize the look of their menu based upon the functions that they most readily use. For example if you have order entry personell that are on specific workstations you could highlight a menu item that you wish to add to your favorites and then press F10. When you have added the menu function or functions you like press F2 to change to your favorites menu.

Use the Favorites function from the System File Maintenance Menu to systematically edit menu items, change the display, or delete favorite menu items or the menu itself. When you select the function the following screen appears:

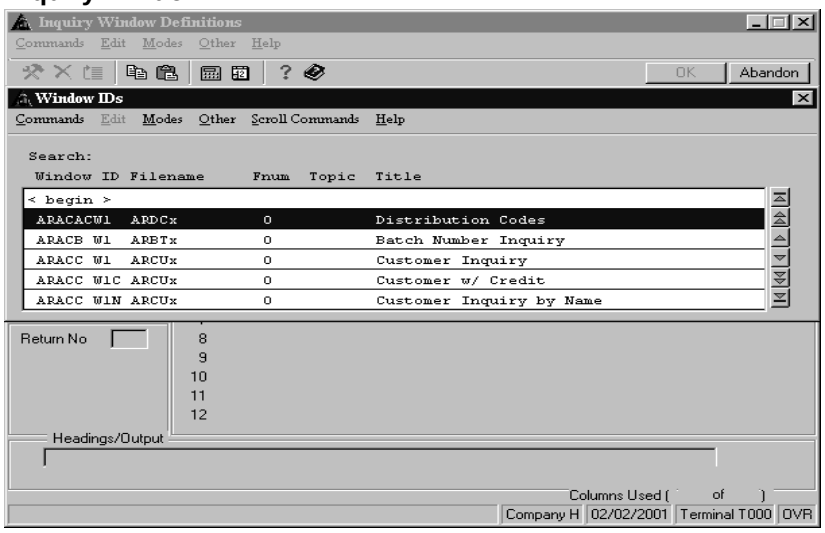
Favorites Menu Screen



All of the commands used by the Menus function (page 6-101) apply in the same manner.

Inquiry Window Definitions

Inquiry Window



Use the **Inquiry Window Definitions** function to add or change items in an existing window or add different sort options for existing windows based on the alternate keys defined by the system. If you want to add inquiry to a field where it is not available, a program modification is required.

Enter the application and window ID for the window you want to work with. **Inquiry** is available at both fields. In this example, we will work with the Customer Inquiry window in the Customers function in Accounts Receivable/Sales Order. Seven variations of the window are available in the Customers function. The first eight characters of the window ID are the same. The ninth character makes each unique.

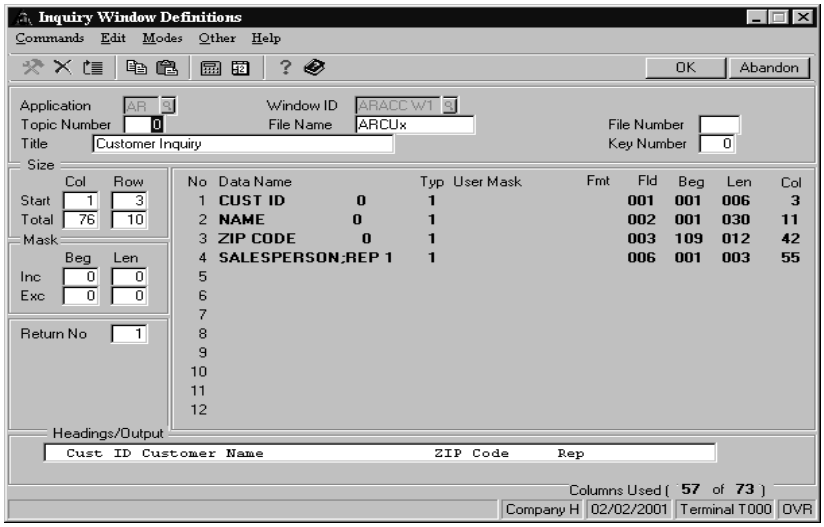
The first three are sorted by the primary key, which is the customer ID, but contain different data items. The last four display the customer information sorted on different items, which are described in the title. To find out which sort options are available for a window, refer to the **File Descriptions** manual or if you have the Report Writer application, use the Alternate Key Descriptions function on the Master File Lists menu to print a list of the alternate keys. You must subtract 1 from the key number in the Report Writer Alternate Key Descriptions List to get the correct key number to use for the window.

Do not change the following items in Inquiry Window Definitions:

Topic Number	Inclusion Mask Length
File Name	Exclusion Mask Begin
File Number	Exclusion Mask Length
Inclusion Mask Begin	

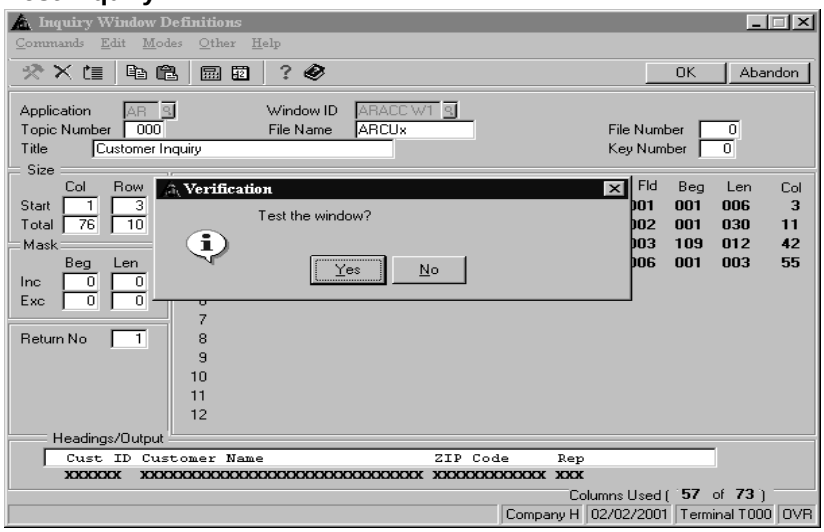
The starting column and row indicate the starting position on the screen where the window will be displayed. The number of columns and rows refers to the columns and rows that will be displayed in the window.

Inquiry Screen



You can change column data or add columns if there is enough space in the window. The message **Width of window data is greater than window size** appears if you try to add more columns to the window than there is room for. You can inquire on available data names that are displayed from the data dictionary file for the window you are working with.

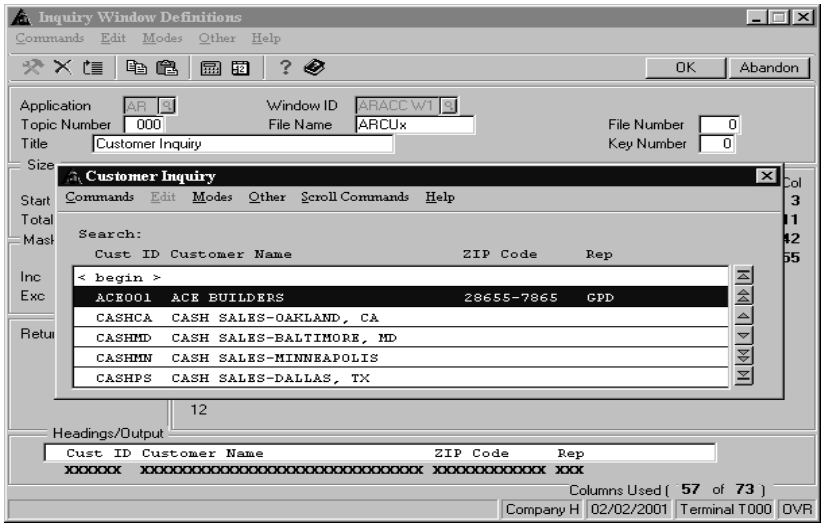
Test Inquiry



You cannot change the Typ Fmt, Fld, Beg, and Len fields. They are defined in the Report Writer Data Dictionary file. The Col field indicates the column in the window where this data name will begin to be displayed. A running total of the columns used is displayed in the lower right corner of the screen.

The output appearance for the window is displayed at the bottom of the screen. You can change the headings. The prompt **Test the window?** appears when you use the **Proceed (PgDn)** command to save your changes. Enter **Y** to display the window with your changes or, enter **N** to proceed without displaying the window.

Customer Inquiry

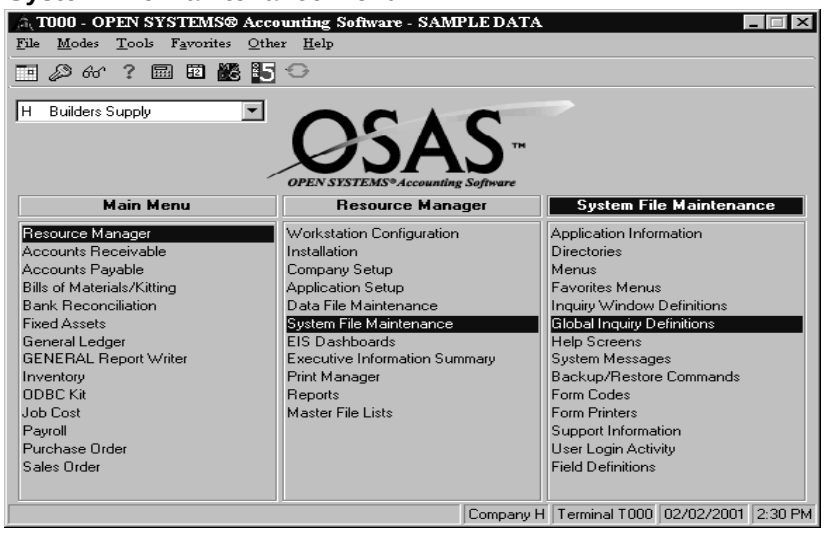


This is an example of the Customer Inquiry window in the Customers function in Accounts Receivable/Sales Order. The information that is displayed is based on the first window definition, ARACC W1.

To use one of the other windows defined for this screen, press **Esc** to list the available options. Use the letters listed on the right side of the screen to change the way the information is displayed in the window. For example, if you want the customer information to be sorted by phone number, press any key to exit from the Window Commands window. Then press **P** to change the information in the Customer Inquiry Window to sort by phone number.

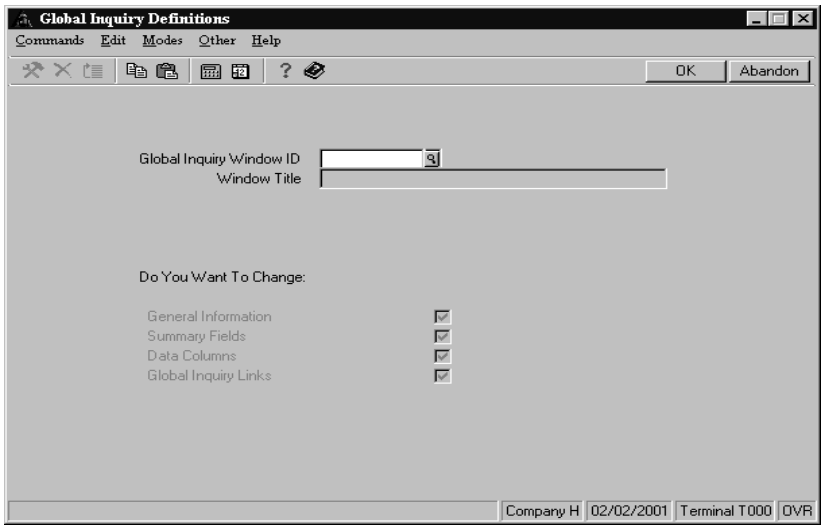
The information is re-displayed in the Customer Inquiry window, sorted by phone number.

System File Maintenance Menu



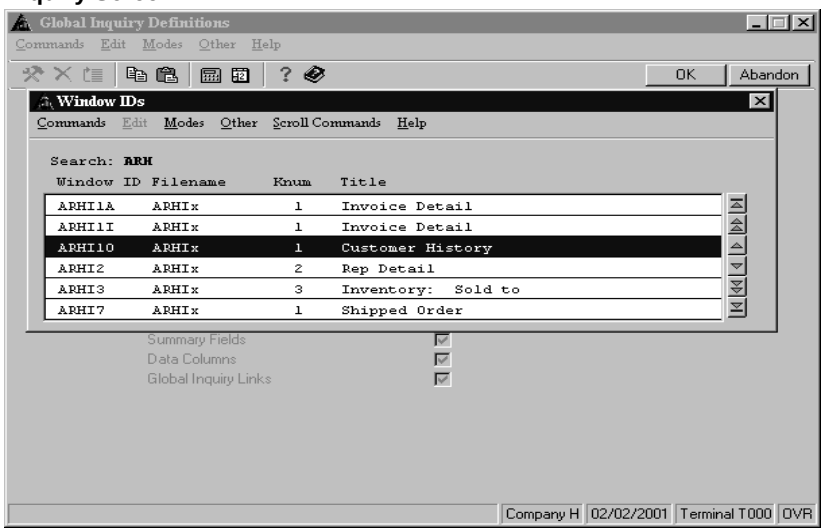
Select the **Global Inquiry Definitions** function to view and create the setup definitions of a particular global inquiry.

Selection Screen



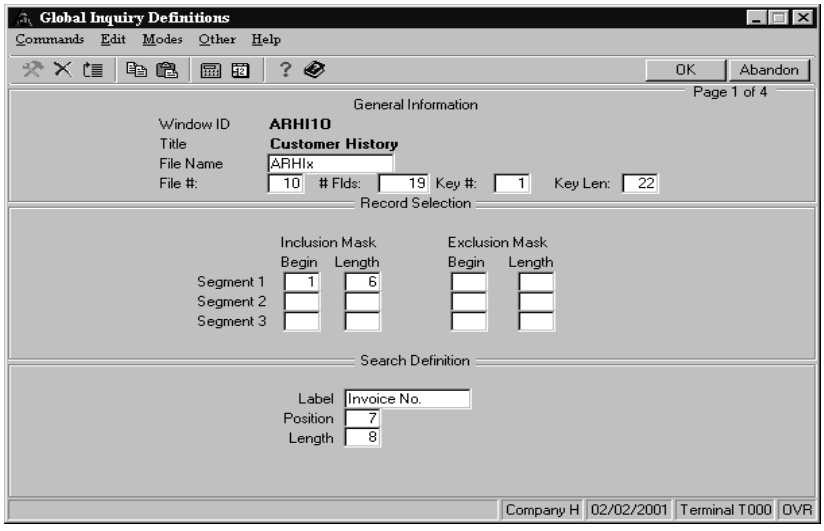
Use the **Inquiry (F2)** command to select an existing global inquiry window or enter your own window ID and title.

Inquiry Screen



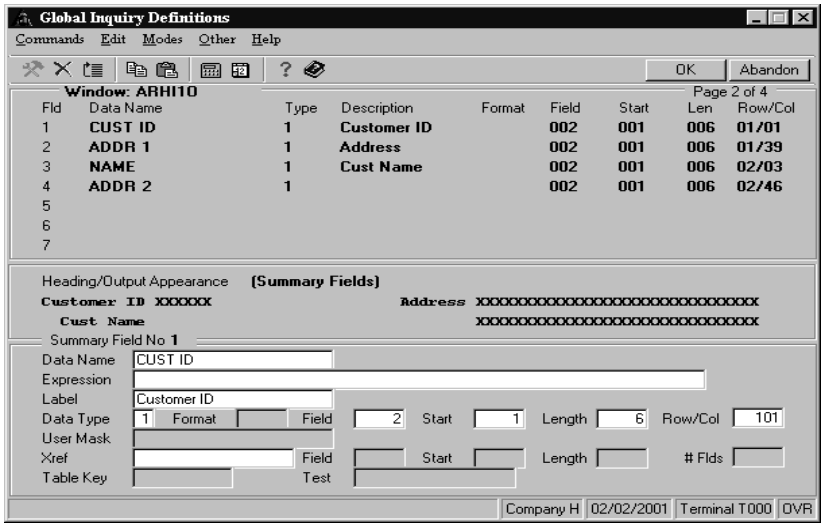
The **General Information** screen will show you the Report Writer Topic number, the channel index, the number of fields per record, the key number being used and its length. Of course, it will show you the Window ID, the title description and the file, the definition is based from too.

General Information Screen



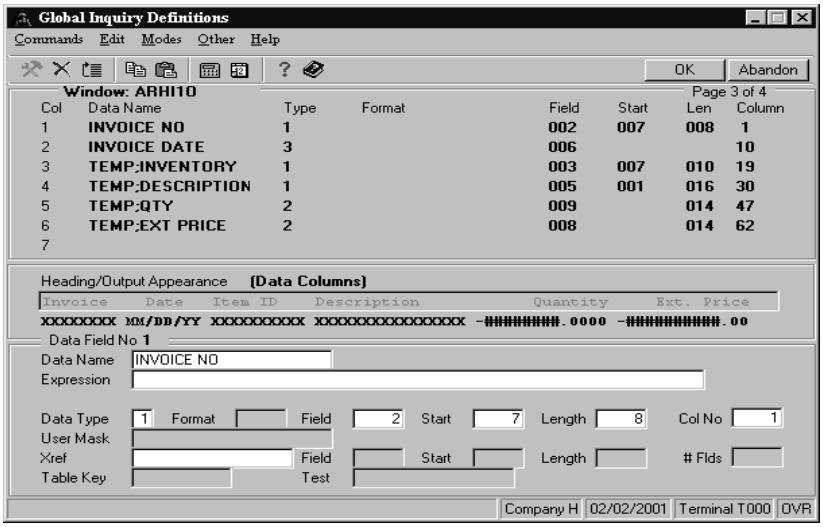
The record selection portion of the screen determines how and what records will be selected in the window. The search definition will define the input you will search for within the record selection. In the example above the record is defined by the customer ID and the search is based on the invoice number and both of these are defined in the file key selected.

Summary Field



The **Summary Fields** page shows 3 types of information; a display of the data fields shown, the heading format that will be seen on the screen, and the actual definition for each particular data field. The summary info determined by the record selection portion of the general information screen.

Data Field

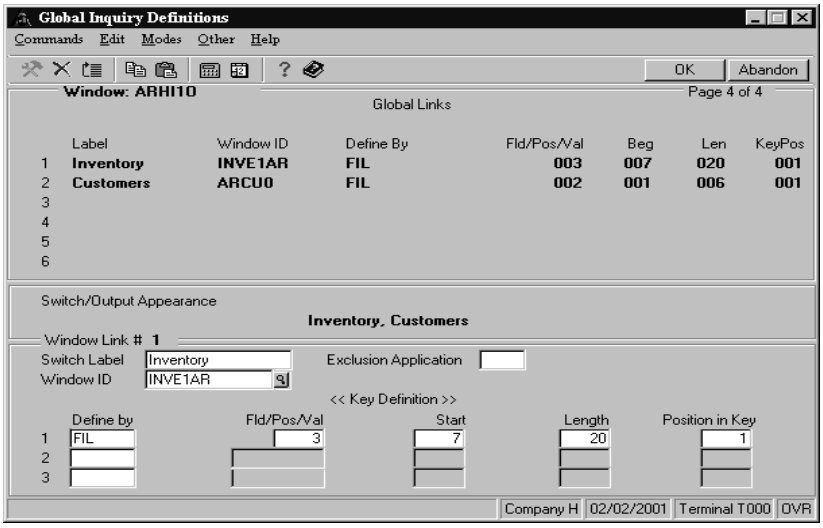


The Data Columns page is setup identical to the summary fields screen; displaying the data fields available from the Report Writer Dictionary, the heading format used on the screen, and the actual definition of the data field.

Note

If no data name is entered in it you may enter a mathematical expression in the next field.

Global Link



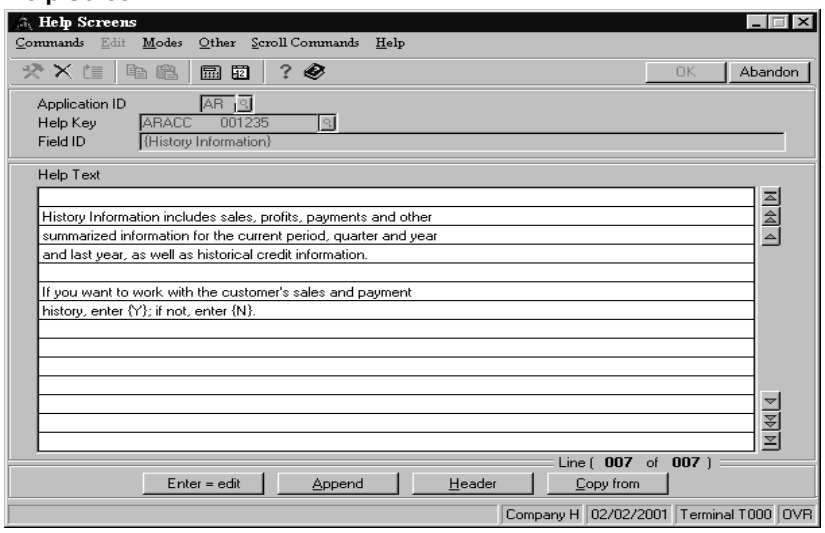
The Global Links page will show you what the currently available links are to other applications, and their window ID. The exclusion application field is if a specific is not present then do not show this as a choice.

Help Screens

Use the **Help Screens** function to add or change text on OSAS help screens. Enter the application ID and help key, or use the **Inquiry (F2)** command to look up and select the items from the window. The contents of the help screen are displayed.

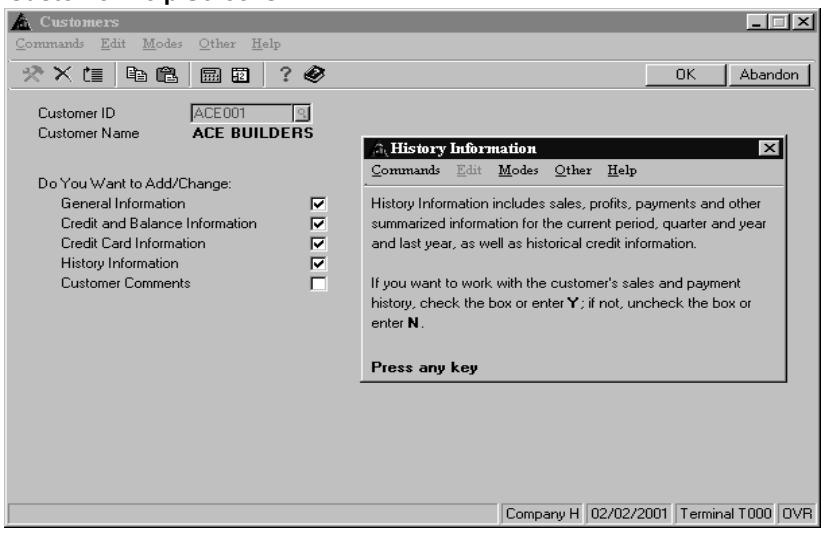
You can add or change the text, but you are restricted to five lines. The help screens are stored in the **XXHELP** file, where XX represents the application you select.

Help Screen



You can also edit help screens within the software. Use the **Help** (F1) command at any field to display the online help. Use the **Maintenance** (F6) command to access the help screen and make changes. Use the **Proceed** (PgDn) command to save the changes, and press any key to exit from the help screen.

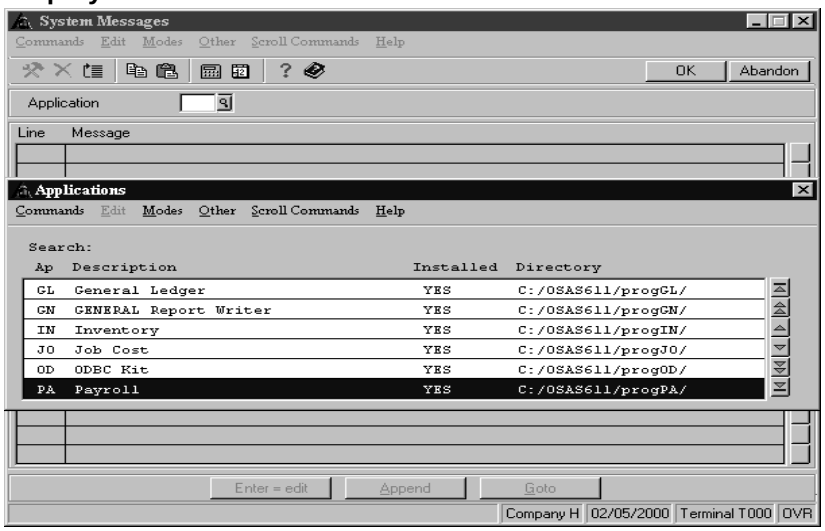
Customer Help Screens



System Messages

Choose the **System Messages** function to change the system messages that are displayed for specific applications. These are messages that will aid you in determining the proper steps to be taken to correctly use that specific application and function. Use the **Inquiry (F2)** command to determine the application you wish to select from those currently available to you.

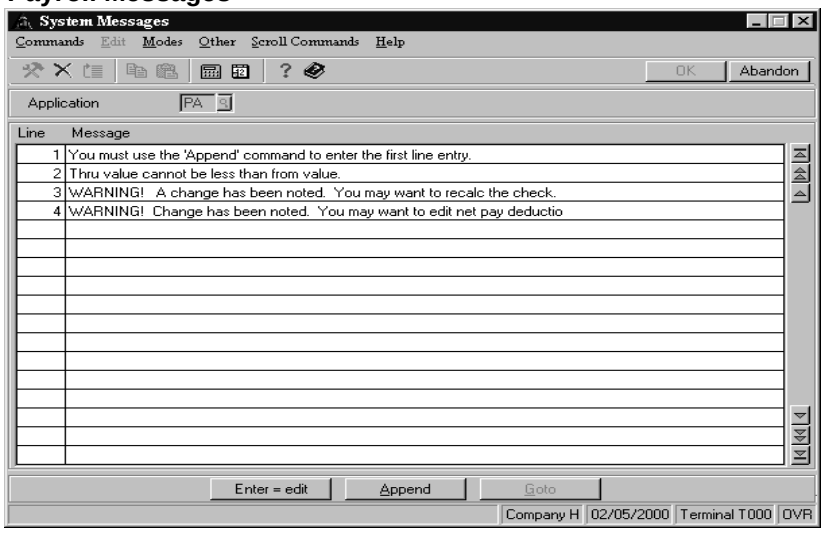
Inquiry Screen



Note

Warning! These messages are positional, do not change their position or content , unless you are sure as to what must be done. If changed, you may not be able to correctly operate that application. Only experience personnel should have access to this function.

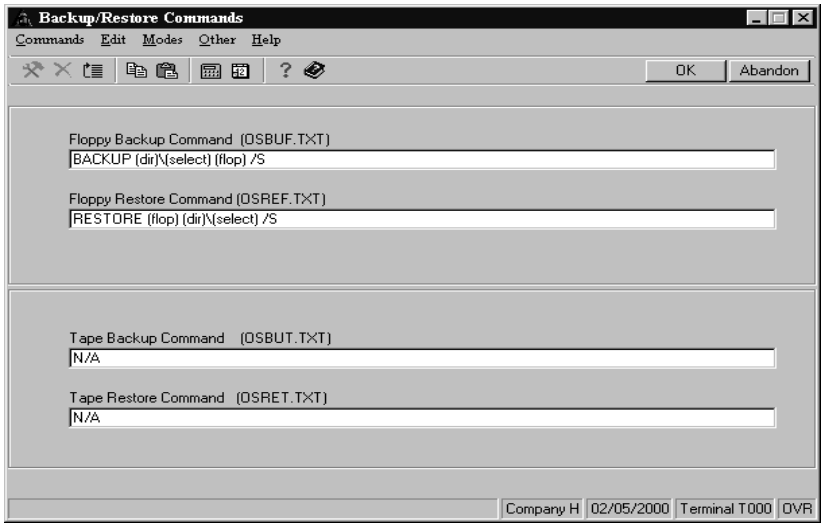
Payroll Messages



Backup & Restore Commands

Choose the **Backup / Restore Commands** function to view or edit those same commands. These are the same commands that are executed in the backup and restore functions of the Data File Maintenance menu. An example of what you may see is shown below.

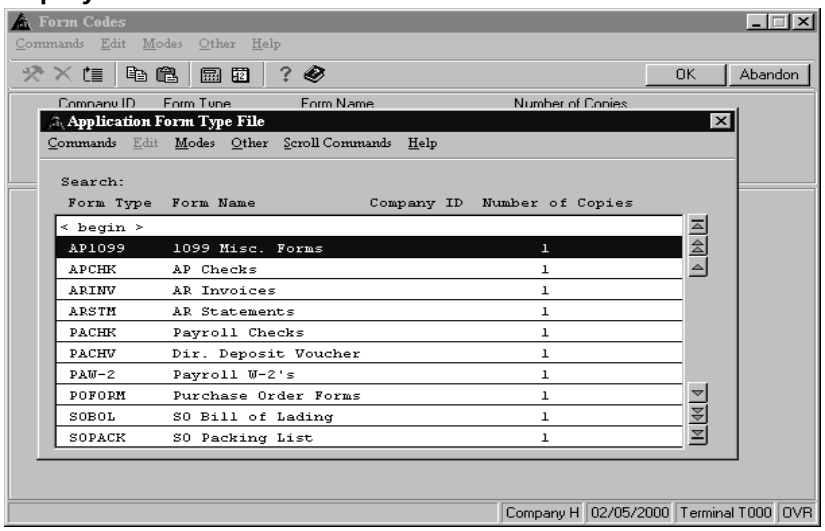
Commands



Form Codes

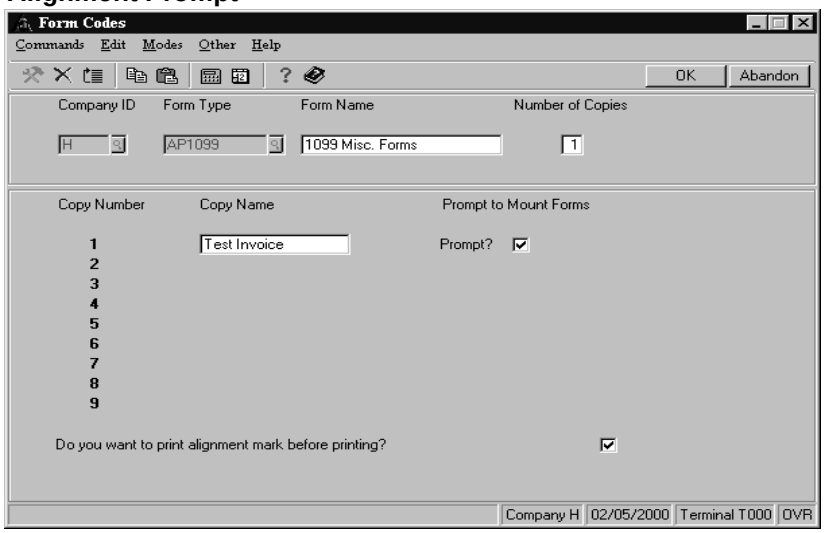
The **Form Codes** function will allow you to set up specifically, the forms and number of copies of them to be printed. You may set these up as company specific or as a general form to be used by all companies. Your company ID must be entered first, then use the **Inquiry** (F2) command to choose a specific form to define. See the screen below.

Inquiry Screen



After the selecting the form, and the number of copies to be printed each time, you will define each copy with a description and if you would like to be prompted to mount the proper forms, or be prompted for an alignment mark.

Alignment Prompt



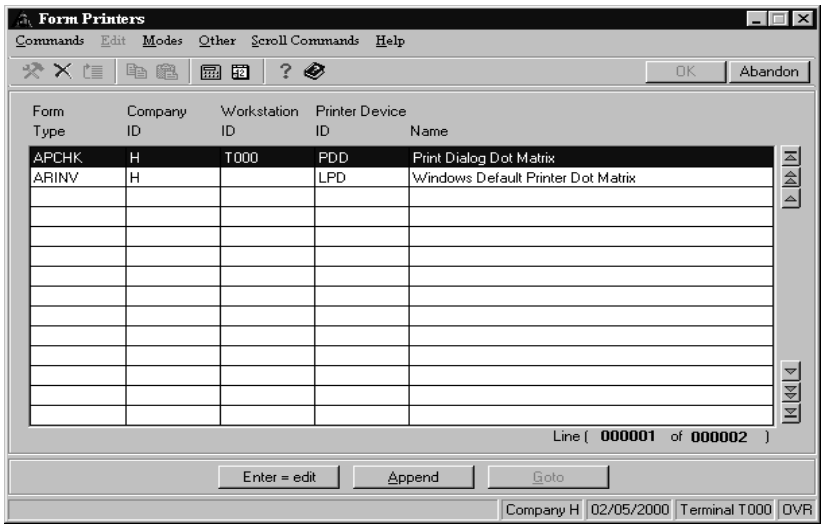
When your definition is completed use the **Proceed** (PgDn) command to write your definition to the **OSFRM** file.

Form Printers

After defining your form codes you must now choose the **Form Printers** function to define the printers and workstations you wish to print these forms from.

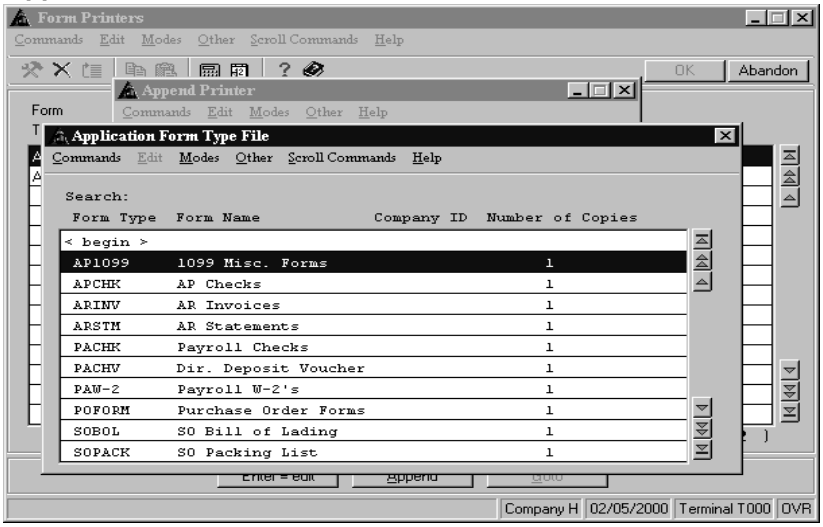
As you see below you may customize this setup for each form type by company, workstation, and printer. The following pages will illustrate these options.

Selection Screen



Enter **A** to append this screen and then use the **Inquiry** (F2) command to display the forms available to be defined, the above screen will appear. Move the cursor to the appropriate form and press **Enter** to select.

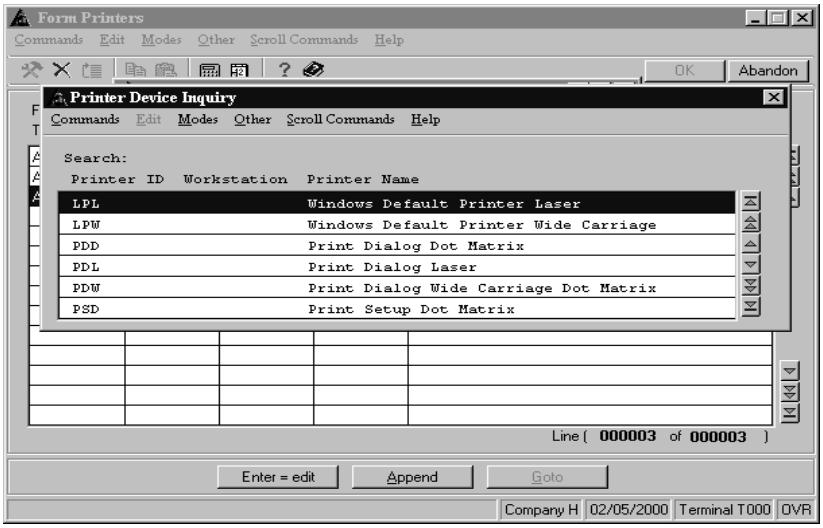
Append Screen



Next, define the terminal(s) you wish to print this form from. You may use one terminal ID or **ALL** or else you may define this form for another printer on a different line. The above screen shows you your options using the **Inquiry** (F2) command.

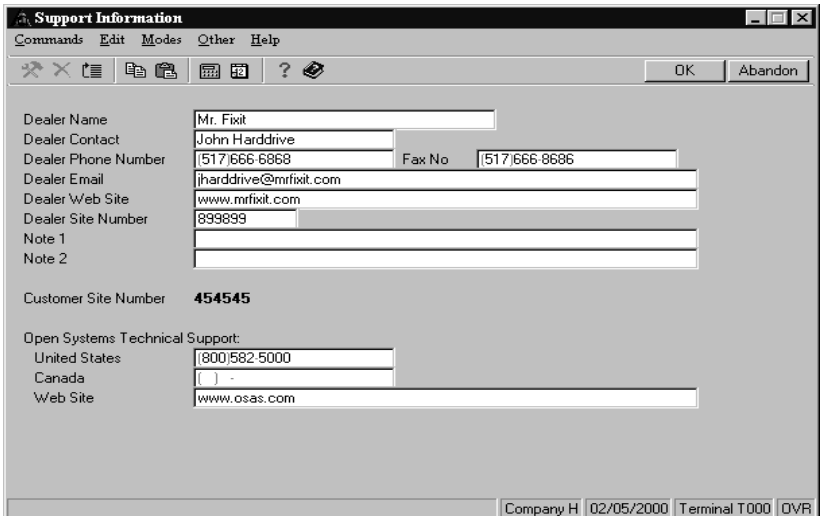
Finally, define the printer or printers that will be printing this form. If you have multiple printers you will need to define each on a separate line. The printer ID will also bring the associated description from the **Config.bbx.** After a line is entered you may cursor back to edit it or again select **A** to append another selection.

Printer Selection



Support Information

Selection Screen



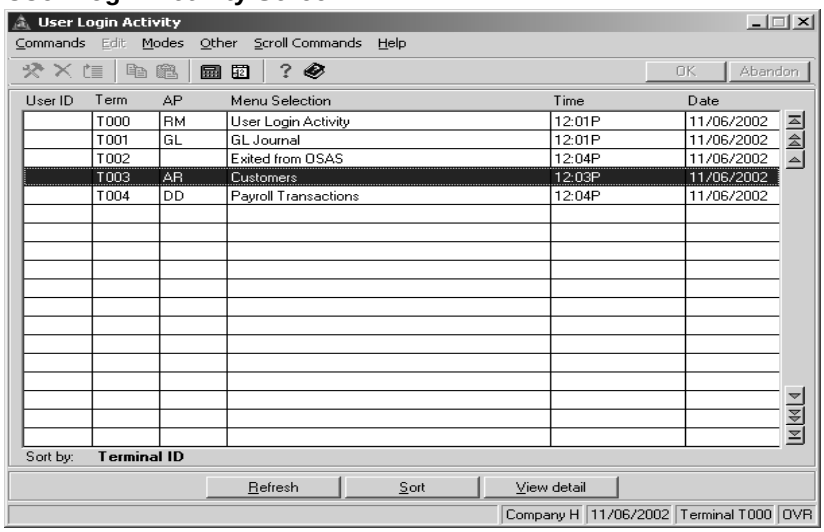
Select the **Support Information** function to enter all your relevant information for technical support on the above screen. You will be prompted to access this screen if you should receive a BBX error at any point in any application. Basic information would include your site number and the telephone numbers for those people needed to service your company.

User Login Activity

If you have set up your options and interfaces for the Resource Manager and selected **YES** to "Track user login activity" you will be able to use the User Login Activity function from the System File Maintenance menu to view all workstations and sessions if they have multiple sessions open and the current function they are in will be displayed. Further more when those sessions have exited the system they will leave a record as such that will show they correctly have exited the system.

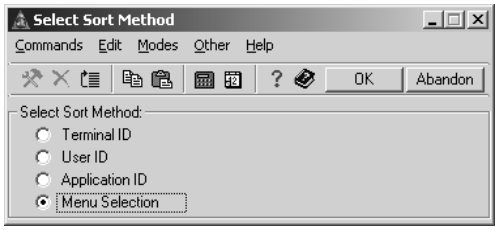
When you select the User Login Activity function the following screen is displayed.

User Login Activity Screen

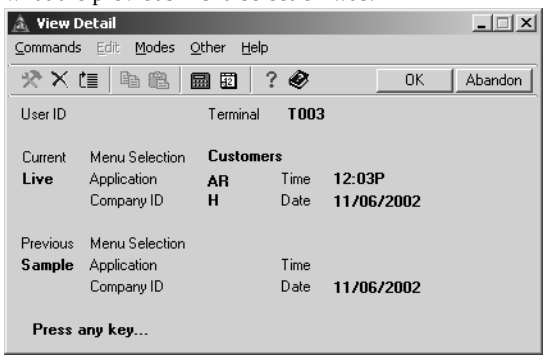


With the current information on the screen showing the activity of all who are or haved used the system several options for viewing the data are available.

Button	Description
Refresh	Press the Refresh button to update you with the most current information from your system. If you have been monitoring the user activity for a while use this selection to update the view.
Sort	Use the sort button to display the information in a more efficient manner showing you specifically the information you are looking for. Valid selections below are Terminal ID, User ID, Application ID, and Menu Selection



Button	Description
View Detail	Further information can be viewed on the entry by selecting the View Detail button for the selected entry, the most important use of this button occurs when reviewing past activity. When selected the view detail shows you not only what the current activity is, but also what the previous menu selection was.

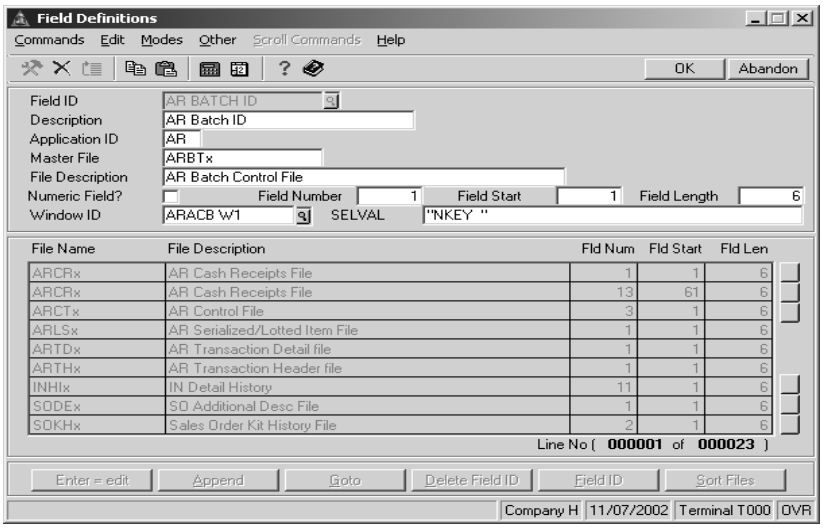


Field Definitions

The Field Definitions function from the System File Maintenance menu has been provided to customers that have vertical applications or have modifications to the system and would like to define those custom files or fields. These field definitions are used almost exclusively with the change fields functions in each of the installed applications.

Select the Field Definitions function from the System File Maintenance menu and the following screen appears.

Filed Definitions Screen



Enter the following information.

Field	Description
Field ID	Enter the **Field ID** you wish to create or use the **Inquiry Command (F2)** to select an existing field to edit or delete.
Description	Enter a description for the above field. If it already exists the information will default into the field.
Application ID	Enter the 2 character application ID this field belongs to.
Master File	Enter the master file this field ID will be defined.
File Description	Enter the description for the master file used to define the Field ID.
Numeric Field?	Check the box if the field being defined is a numeric field. If the field is alpha-numeric or something else leave the box unchecked.
Field Number	Enter the field number in the master file that the field ID is read.
Field Start	If this is not a numeric field, enter the starting position within the field previously entered.
Field Length	If this is not a numeric field, enter the total number of characters used by the Field ID.

Field	Description
Window ID	Enter the ID of the inquiry window you want to use when entering values for this field ID.
Selval	Enter the selection value associated with the inquiry window, if necessary.

The file names and descriptions that contain this field are listed below. The fololowing actions are available to you for processing.

Button	Description
Enter=Edit	Press Enter to edit existing information and to run a record test to verify the entry is correct.
Append	Press **"A"** to append an entry adding another file where the Field ID is referenced.
Goto	Use the "GoTo" button to quickly move to another entry.
Delete Field ID	Press Delete Field ID to remove the field ID from the system.
Field ID	Press Field ID to return the the Field Definition Header to select a new Field ID.
Sort Files	Press the Sort Files button to resort the entries aphabetically.

Using EIS Dashboards 7

Several EIS Dashboards come preloaded with the software you may use them as are defined, copy them to create and modify the display and then add them back into the menu for easy access.

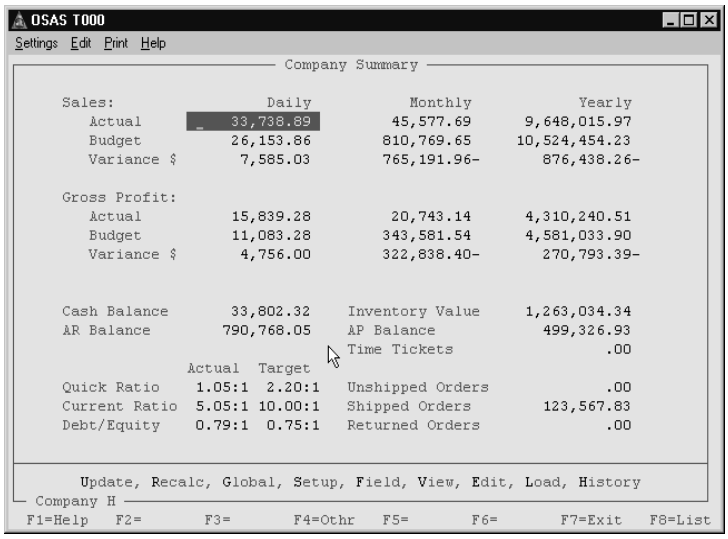
EIS Dashboards Menu screen

The next few pages will list these dashboards and the commands available with them. Company Summary Dashboard will demonstrate the difference between the Text mode display and the Gui mode display. All other dashboards will be demonstrated in the GUI mode.

Company Summary Dashboard

The Company Summary dashboard will provide you with a snapshot of key financial information. With the GUI mode inactive, selecting the Company Summary dasboard the following screen appears

Company Summary Dashboard - Text Mode screen

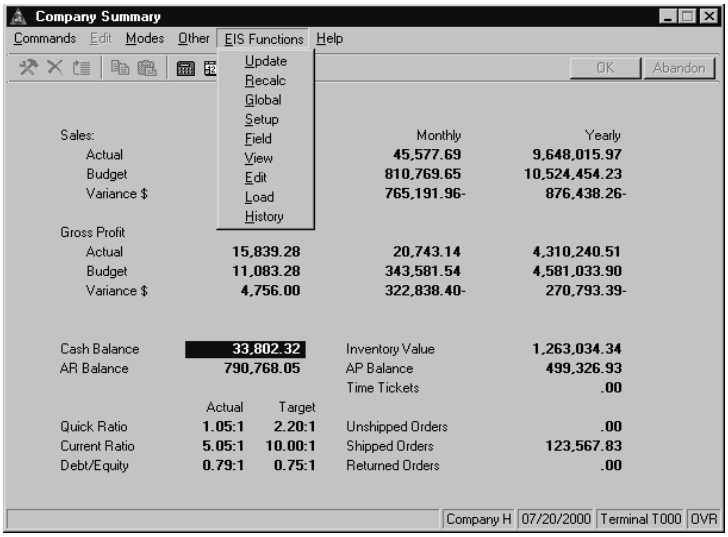


The following commands are available:

Command	Description
Update	Press **U** to update the information in the selected field when used on a network.
Recalc	Press **R** to recalculate a selected field for the latest information.
Global	Press **G** to recalculate all the fields on the screen for the latest information.
Setup	Press **S** to display or edit the ranges of information used in the field selected.
Field	Press **F** to display or edit the definition (calculation) of the selected field.
View	Press **V** to view information on the last calculation to take place on the field selected.
Edit	Press **E** to reconfigure the EIS Dashboard display you are viewing. Use this option to add or remove fields, change dashboard titles and tab stops.
Load	Press **L** to load a different dashboard, make your selection using the Inquiry **(F2)** command.
History	Press **H** to display the EIS Dashboard using saved field history from a different date. You must have the option to **"Save Field Value History"** set to **YES**.

Use the **Proceed (PgDn or Esc P)** command to save your entries and exit to the EIS Dashboard menu.

Company Summary Dashboard - GUI Mode screen



Above is a display of the Company summary dashboard in the GUI mode. Notice that the commands available are enabled by pressing **ALT-E** or clicking on **EIS - Functions** on the command bar. The following commands are available.

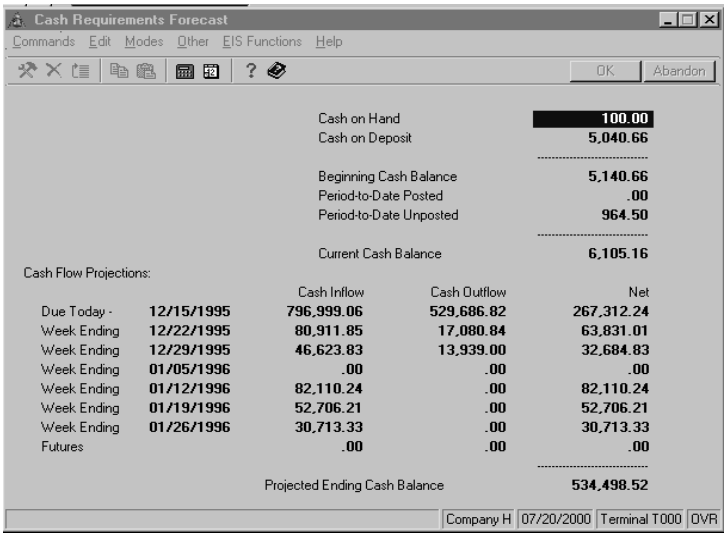
Command	Description
Update	Press **U** to update the information in the selected field when used on a network.
Recalc	Press **R** to recalculate a selected field for the latest information.
Global	Press **G** to recalculate all the fields on the screen for the latest information.
Setup	Press **S** to display or edit the ranges of information used in the field selected.
Field	Press **F** to display or edit the definition (calculation) of the selected field.
View	Press **V** to view information on the last calculation to take place on the field selected.
Edit	Press **E** to reconfigure the EIS Dashboard display you are viewing. Use this option to add or remove fields, change dashboard titles and tab stops.
Load	Press **L** to load a different dashboard, make your selection using the Inquiry **(F2)** command.
History	Press **H** to display the EIS Dashboard using saved field history from a different date. You must have the option to **"Save Field Value History"**set to **YES**.

Use the **Proceed (PgDn or Esc P)** command to save your entries and exit to the EIS Dashboard menu.

Cash Requirements Forecast Dashboard

The Cash Requirements dashboard provides you with cashflow projections.

Cash Requirements Forecast Dashboard - GUI Mode screen



Notice that the commands available are enabled by pressing **ALT-E** or clicking on **EIS - Functions** on the command bar. The following commands are available.

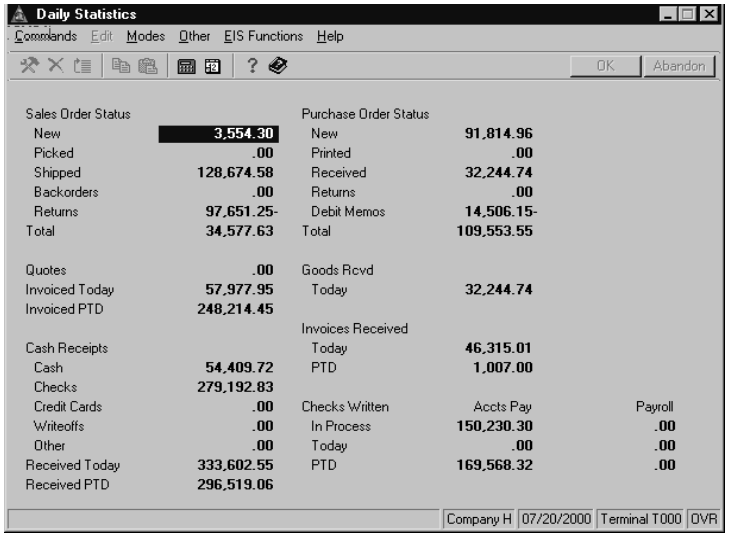
Command	Description
Update	Press **U** to update the information in the selected field when used on a network.
Recalc	Press **R** to recalculate a selected field for the latest information.
Global	Press **G** to recalculate all the fields on the screen for the latest information.
Setup	Press **S** to display or edit the ranges of information used in the field selected.
Field	Press **F** to display or edit the definition (calculation) of the selected field.
View	Press **V** to view information on the last calculation to take place on the field selected.
Edit	Press **E** to reconfigure the EIS Dashboard display you are viewing. Use this option to add or remove fields, change dashboard titles and tab stops.
Load	Press **L** to load a different dashboard, make your selection using the Inquiry **(F2)** command.
History	Press **H** to display the EIS Dashboard using saved field history from a different date. You must have the option to **"Save Field Value History"** set to **YES**.

Use the **Proceed (PgDn or Esc P)** command to save your entries and exit to the EIS Dashboard menu.

Daily Statistics Dashboard

Use the Daily statistics dashboard to provide you with current status information for Sales Order and Purchase Order.

Daily Statistics Dashboard - GUI Mode screen



Notice that the commands available are enabled by pressing **ALT-E** or clicking on **EIS - Functions** on the command bar. The following commands are available.

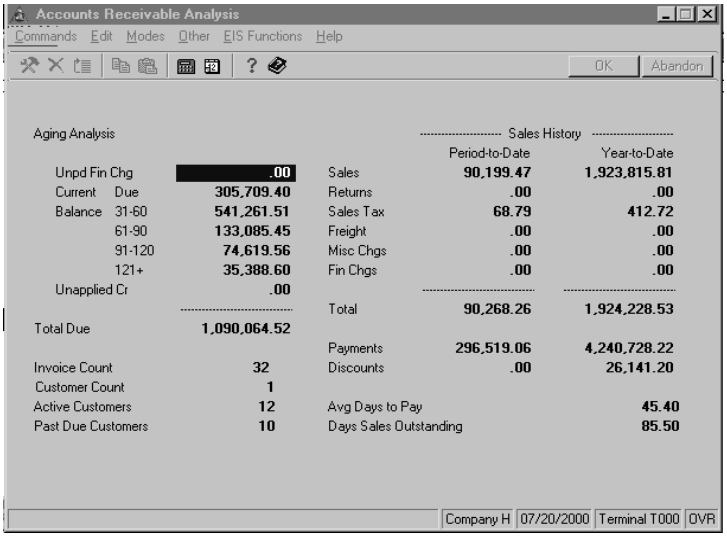
Command	Description
Update	Press **U** to update the information in the selected field when used on a network.
Recalc	Press **R** to recalculate a selected field for the latest information.
Global	Press **G** to recalculate all the fields on the screen for the latest information.
Setup	Press **S** to display or edit the ranges of information used in the field selected.
Field	Press **F** to display or edit the definition (calculation) of the selected field.
View	Press **V** to view information on the last calculation to take place on the field selected.
Edit	Press **E** to reconfigure the EIS Dashboard display you are viewing. Use this option to add or remove fields, change dashboard titles and tab stops.
Load	Press **L** to load a different dashboard, make your selection using the Inquiry **(F2)** command.
History	Press **H** to display the EIS Dashboard using saved field history from a different date. You must have the option to **"Save Field Value History"** set to **YES**.

Use the **Proceed (PgDn or Esc P)** command to save your entries and exit to the EIS Dashboard menu.

Accounts Receivable Analysis Dashboard

The Accounts Receivable Analysis dashboard provides information from key items in Accounts Receivable and Sales Order

Accounts Recivable Analysis Dashboard - GUI Mode screen



Notice that the commands available are enabled by pressing **ALT-E** or clicking on **EIS - Functions** on the command bar. The following commands are available.

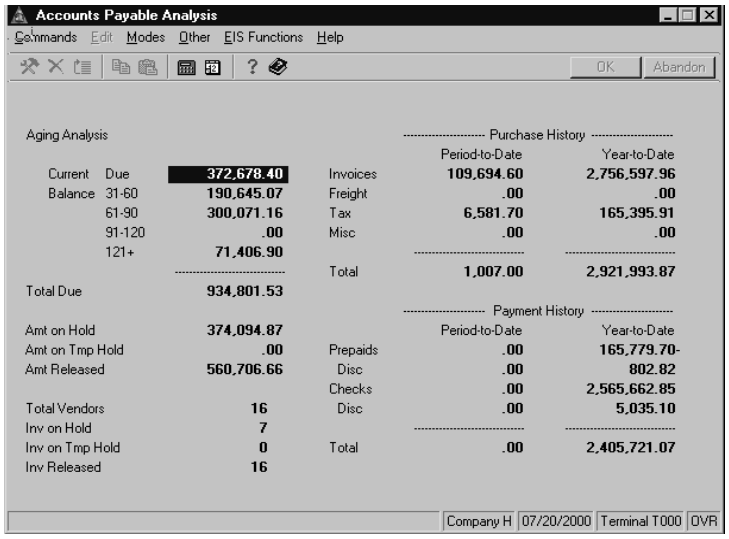
Command	Description
Update	Press **U** to update the information in the selected field when used on a network.
Recalc	Press **R** to recalculate a selected field for the latest information.
Global	Press **G** to recalculate all the fields on the screen for the latest information.
Setup	Press **S** to display or edit the ranges of information used in the field selected.
Field	Press **F** to display or edit the definition (calculation) of the selected field.
View	Press **V** to view information on the last calculation to take place on the field selected.
Edit	Press **E** to reconfigure the EIS Dashboard display you are viewing. Use this option to add or remove fields, change dashboard titles and tab stops.
Load	Press **L** to load a different dashboard, make your selection using the Inquiry **(F2)** command.
History	Press **H** to display the EIS Dashboard using saved field history from a different date. You must have the option to **"Save Field Value History"** set to **YES**.

Use the **Proceed (PgDn or Esc P)** command to save your entries and exit to the EIS Dashboard menu.

Accounts Payable Analysis Dashboard

The Accounts Payable Analysis dashboard provides you with information on key items in Accounts Payable and Purchase Order.

Accounts Payable Analysis Dashboard - GUI Mode screen



Notice that the commands available are enabled by pressing **ALT-E** or clicking on **EIS - Functions** on the command bar. The following commands are available

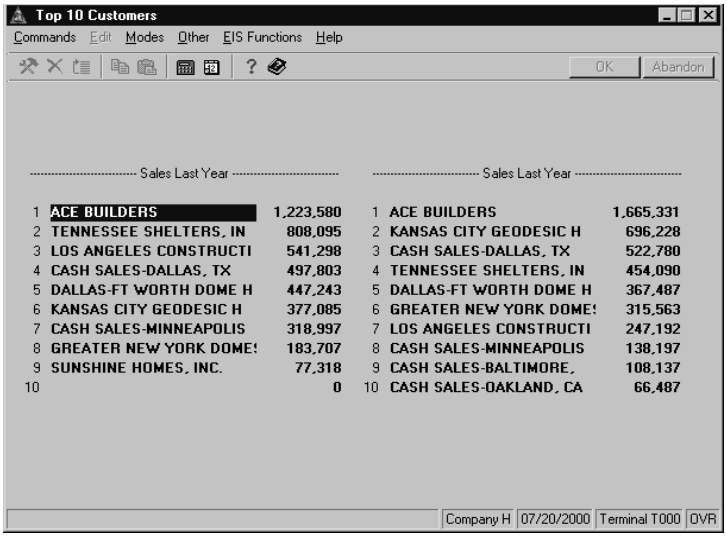
Command	Description
Update	Press **U** to update the information in the selected field when used on a network.
Recalc	Press **R** to recalculate a selected field for the latest information.
Global	Press **G** to recalculate all the fields on the screen for the latest information.
Setup	Press **S** to display or edit the ranges of information used in the field selected.
Field	Press **F** to display or edit the definition (calculation) of the selected field.
View	Press **V** to view information on the last calculation to take place on the field selected.
Edit	Press **E** to reconfigure the EIS Dashboard display you are viewing. Use this option to add or remove fields, change dashboard titles and tab stops.
Load	Press **L** to load a different dashboard, make your selection using the Inquiry **(F2)** command.
History	Press **H** to display the EIS Dashboard using saved field history from a different date. You must have the option to **"Save Field Value History"** set to **YES**.

Use the **Proceed (PgDn or Esc P)** command to save your entries and exit to the EIS Dashboard menu.

Top 10 Customers

The Top 10 Customers dashboard provides you a list of the 10 customers with the highest sales amounts.

Top 10 Customers Dashboard - GUI Mode screen



Notice that the commands available are enabled by pressing **ALT-E** or clicking on **EIS - Functions** on the command bar. The following commands are available

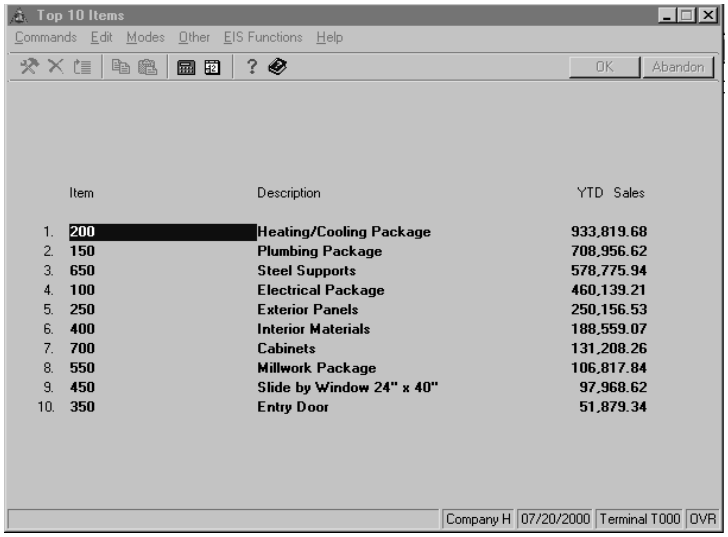
Command	Description
Update	Press **U** to update the information in the selected field when used on a network.
Recalc	Press **R** to recalculate a selected field for the latest information.
Global	Press **G** to recalculate all the fields on the screen for the latest information.
Setup	Press **S** to display or edit the ranges of information used in the field selected.
Field	Press **F** to display or edit the definition (calculation) of the selected field.
View	Press **V** to view information on the last calculation to take place on the field selected.
Edit	Press **E** to reconfigure the EIS Dashboard display you are viewing. Use this option to add or remove fields, change dashboard titles and tab stops.
Load	Press **L** to load a different dashboard, make your selection using the Inquiry **(F2)** command.
History	Press **H** to display the EIS Dashboard using saved field history from a different date. You must have the option to **"Save Field Value History"** set to **YES**.

Use the **Proceed (PgDn or Esc P)** command to save your entries and exit to the EIS Dashboard menu.

Top 10 Items

The Top 10 Items dashboard provides you a list of the top 10 selling inventory items for the year.

Top 10 Items Dashboard - GUI Mode screen



Notice that the commands available are enabled by pressing **ALT-E** or clicking on **EIS - Functions** on the command bar. The following commands are available

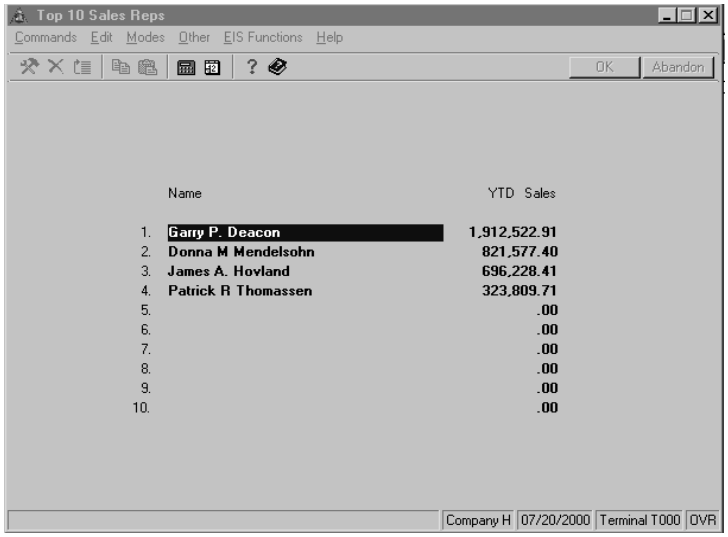
Command	Description
Update	Press **U** to update the information in the selected field when used on a network.
Recalc	Press **R** to recalculate a selected field for the latest information.
Global	Press **G** to recalculate all the fields on the screen for the latest information.
Setup	Press **S** to display or edit the ranges of information used in the field selected.
Field	Press **F** to display or edit the definition (calculation) of the selected field.
View	Press **V** to view information on the last calculation to take place on the field selected.
Edit	Press **E** to reconfigure the EIS Dashboard display you are viewing. Use this option to add or remove fields, change dashboard titles and tab stops.
Load	Press **L** to load a different dashboard, make your selection using the Inquiry **(F2)** command.
History	Press **H** to display the EIS Dashboard using saved field history from a different date. You must have the option to **"Save Field Value History"** set to **YES**.

Use the **Proceed (PgDn or Esc P)** command to save your entries and exit to the EIS Dashboard menu.

Top 10 Sales Reps

The Top 10 Sales Reps dashboard provides a quick list of your top 10 sales representatives

Top 10 Sales Reps Dashboard - GUI Mode screen



Notice that the commands available are enabled by pressing **ALT-E** or clicking on **EIS - Functions** on the command bar. The following commands are available

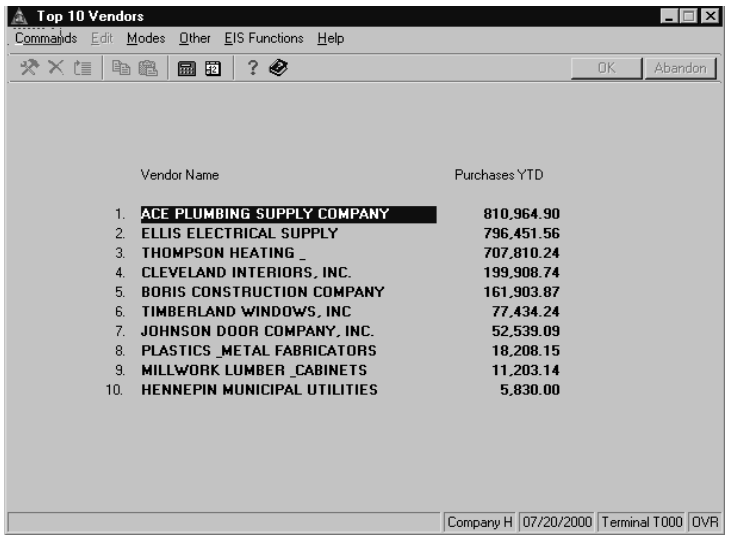
Command	Description
Update	Press **U** to update the information in the selected field when used on a network.
Recalc	Press **R** to recalculate a selected field for the latest information.
Global	Press **G** to recalculate all the fields on the screen for the latest information.
Setup	Press **S** to display or edit the ranges of information used in the field selected.
Field	Press **F** to display or edit the definition (calculation) of the selected field.
View	Press **V** to view information on the last calculation to take place on the field selected.
Edit	Press **E** to reconfigure the EIS Dashboard display you are viewing. Use this option to add or remove fields, change dashboard titles and tab stops.
Load	Press **L** to load a different dashboard, make your selection using the Inquiry **(F2)** command.
History	Press **H** to display the EIS Dashboard using saved field history from a different date. You must have the option to **"Save Field Value History"** set to **YES**.

Use the **Proceed (PgDn or Esc P)** command to save your entries and exit to the EIS Dashboard menu.

Top 10 Vendors

The Top 10 Vendors dashboard provides you with a list of your most used vendors by purchase dollars through the year.

Top 10 Vendors Dashboard - GUI Mode screen



Notice that the commands available are enabled by pressing **ALT-E** or clicking on **EIS - Functions** on the command bar. The following commands are available

Command	Description
Update	Press **U** to update the information in the selected field when used on a network.
Recalc	Press **R** to recalculate a selected field for the latest information.
Global	Press **G** to recalculate all the fields on the screen for the latest information.
Setup	Press **S** to display or edit the ranges of information used in the field selected.
Field	Press **F** to display or edit the definition (calculation) of the selected field.
View	Press **V** to view information on the last calculation to take place on the field selected.
Edit	Press **E** to reconfigure the EIS Dashboard display you are viewing. Use this option to add or remove fields, change dashboard titles and tab stops.
Load	Press **L** to load a different dashboard, make your selection using the Inquiry **(F2)** command.
History	Press **H** to display the EIS Dashboard using saved field history from a different date. You must have the option to **"Save Field Value History"** set to **YES**.

Use the **Proceed (PgDn or Esc P)** command to save your entries and exit to the EIS Dashboard menu.

Executive Information Summary 8

The Executive Information Summary application is a data management application designed for executives to use in consolidating, calculating, and displaying data from other OSAS applications. You can use EIS to display the data from a different application, or you can use the values in a formula to produce new values. It appears in two menu sources for you, EIS Dashboards Menu, which displays the most commonly used dashboards, and Executive Information Summary Menu which provides you with the tools to create and maintain your EIS dashboards.

EIS Dashboards Menu screen

Executive Information Summary Menu screen

EIS dashboards may be created in either the Text mode or the GUI mode in version 6.1x, however they must be created in the Text mode and then converted to see them in both modes. If created in the GUI mode, they will not be available for display in the Text mode.

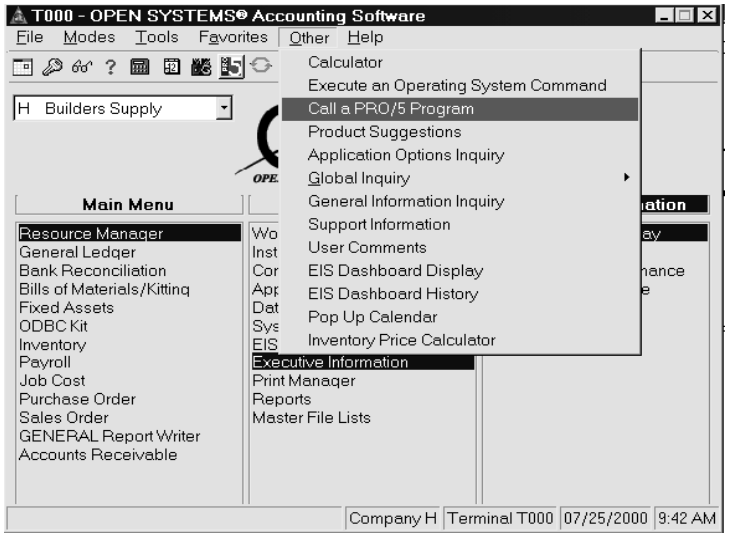
EIS - Dashboard Display

With version 6.1x you will actually have two sets of dashboards to display, those that are viewable in the Text Mode and those that are viewable in the GUI Mode. As you make additional dashboards or edit them you need to keep this in mind, as those made or edited in Text Mode will not be viewable in GUI Mode unless they are converted. You may only convert from a Text EIS dashboard to a GUI EIS dasboard, you cannot convert from GUI to Text.

Converting a Text Dashboard to a GUI Dashboard

In order to convert an EIS dashboard that has been edited or created in the Text Mode, so that both the dashboards will display the same information regardless of the mode you are working in, you will need to Call a PRO/5 program called **EIS2GUI.PUB**. From the main menu **(GUI Mode)** select **Other (ALT-O)** command from the command bar. If you are using the **Text** menu press **(F4 twice)**, the **Other Commands Menu** appears.

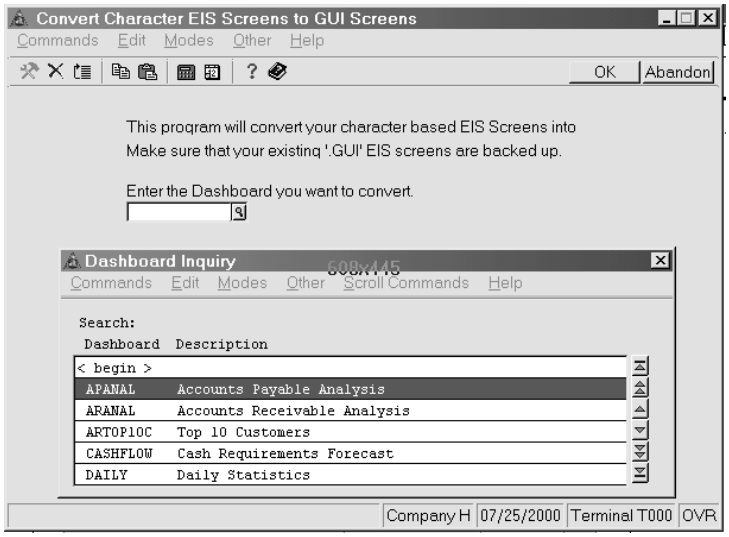
Other Comands Menu screen



Select **"Call a PRO/5 Program"** from the menu, and type **EIS2GUI.PUB** for the program, click the **OK** button, or use the **Proceed (PgDn or Esc P)** command to run the program. You do not need to enter any additional parameters.

The following screen appears.

EIS2GUI.PUB Function with Inquiry screen

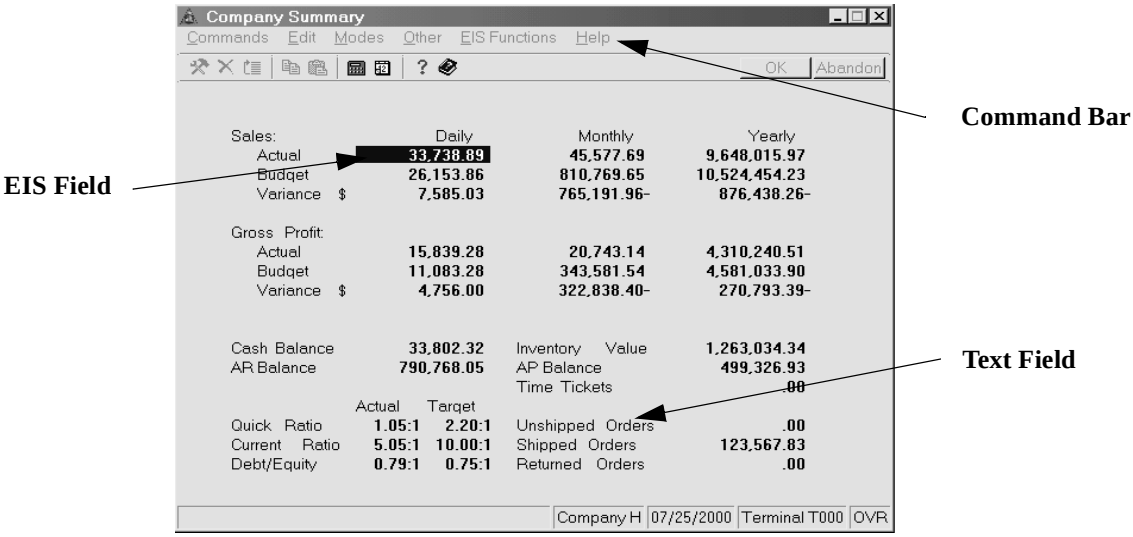


Be sure before running this function that you have made a backup of the GUI dashboards.Select the appropriate dashboard. Use the **Inquiry (F2**) command to choose from the available list of dashboards. When the function is completed it will prompt you to use the **Exit (F7)** command to exit back to the menu system.

Dashboard Display Information

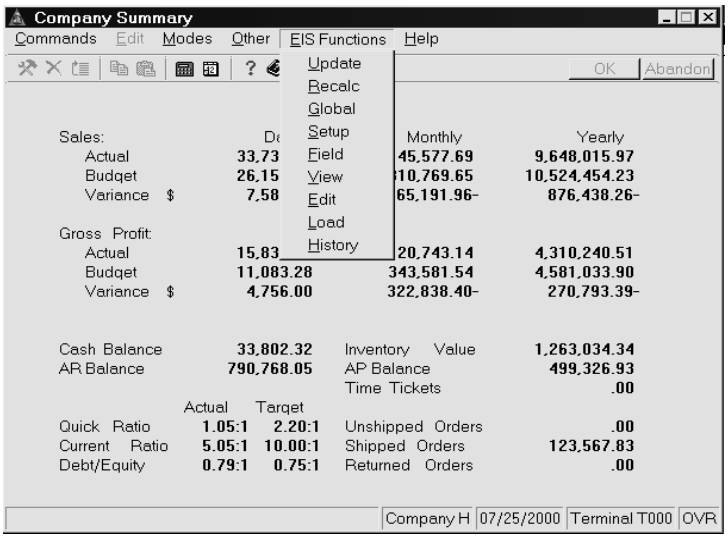
Use the EIS - Dashboard Display to view any of the available dashboards. by default the EISDFLT dashboard (Company Summary) will be displayed as you come into this function, you can however change this to one that may show more pertininent data for you. Select Dashboard Display from the Executive Information Summary menu, the following screen appears.

Company Summary screen



With the dashboard displayed you have the following commands available. Use the **Alt + *underlined letter*** to activate and select from the command bar Although this function is primarily for display you may use the EIS Functions to maintain or manipuplate your dashboard . Upon selection, you have the following choices.

Company Summary / EIS Functions screen



The following commands are available to choose from:

Command	Description
Update	Select **Update** to refresh the field information when more than one person is viewing the same dashboard.
Recalc	Select **Recalc** to update a specific field with current information
Global	Select **Global** to update all fields on the current dashboard.
Setup	Select **Setup** to edit or maintain setups available for a specific field.
Field	Select **Field** to edit or maintain a field definition.
View	Select **View** to display the field information and infromation regarding the last time the field was updated
Edit	Select **Edit** to use the Dashboard Editor to modify the dashboard being displayed.
Load	Select **Load** to load a different dashboard for display.
History	Select **History** to view the dashboard information as a particular point in time. The option to Keep value files history for EIS, must be set to **YES**.

Note

When in the GUI Mode you can also right click anywhere on the dashboard and get the same command choices.

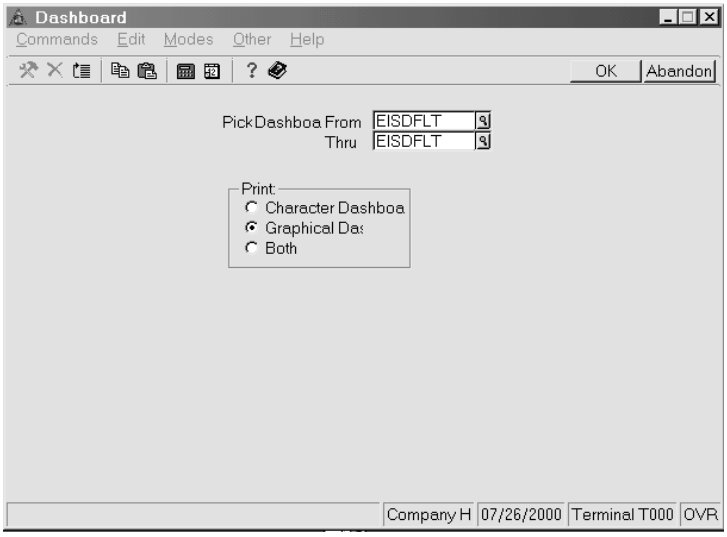
EIS - Reports

Use the Reports function from the Executive Information Summary menu to create reports specific to current dashboard field values. You can also compare both dashboards and individual field values from different points in history if the option to save field history is set to YES.

Dashboards

Print a report of current field values for a range of dashboards, either graphical, character, or both. Select Dashboard from the EIS- Reports menu, the following screen appears.

Dashboard - GUI Mode screen



Use the **Inquiry (F2)** command to select the range of dashboards to be printed. Choose to print for your range just the character dashboards, the gui dashboards, or both the character and gui dashboards.

The report displays all off the field definitions used for that dashboard. The last time and terminal ID to have updated the field value as well as the current value for each field definition. A sample of the report appears on the following page.

Sample Dashboard Report

07/26/2000 Builders Supply Page 1
9:16 AM EIS Dashboard Report

Dashboard EISDFLT Company Summary - Graphical

Field ID	Description Last Updated By	Current Value	Last Updated at Status
DAYACTSL	Daily Actual Sales T000	31,023.33	07/26/2000 09:09:44 No Errors
MTDACTSL	Monthly Actual Sales T000	881,160.26	07/26/2000 09:09:44 No Errors
YTDACTSL	Yearly Actual Sales T000	6,165,571.89	07/26/2000 09:09:44 No Errors
DAYBUDSL	Daily Budgeted Sales T000	22,404.27	07/26/2000 09:09:44 No Errors
MTDBUDSL	Monthly Budgeted Sales T000	694,532.46	07/26/2000 09:09:44 No Errors
YTDBUDSL	Yearly Budgeted Sales T000	6,185,220.12	07/26/2000 09:09:44 No Errors
DAYVARSL	Daily Sales Variance T000	8,619.06	07/26/2000 09:09:44 No Errors
MTDVARSL	Monthly Sales Variance T000	186,627.80	07/26/2000 09:09:44 No Errors
YTDVARSL	Yearly Sales Variance T000	19,648.23-	07/26/2000 09:09:44 No Errors
DAYACTPR	Daily Actual Profit T000	14,430.08	07/26/2000 09:09:44 No Errors
MTDACTPR	Monthly Actual Profit T000	315,757.83	07/26/2000 09:09:44 No Errors
YTDACTPR	Yearly Actual Profit T000	2,830,485.59	07/26/2000 09:09:44 No Errors
DAYBUDPR	Daily Budgeted Profit T000	9,692.28	07/26/2000 09:09:44 No Errors
MTDBUDPR	Monthly Budgeted Profit T000	300,460.55	07/26/2000 09:09:44 No Errors
YTDBUDPR	Yearly Budgeted Profit T000	2,608,992.30	07/26/2000 09:09:44 No Errors
DAYVARPR	Daily Profit Variance T000	4,737.80	07/26/2000 09:09:44 No Errors
MTDVARPR	Monthly Profit Variance T000	15,297.28	07/26/2000 09:09:44 No Errors
YTDVARPR	Yearly Profit Variance T000	221,493.29	07/26/2000 09:09:44 No Errors
CASHBAL	Cash Balance T000	32,776.42	07/26/2000 09:09:44 No Errors
INVVALUE	Inventory Valuation T000	1,261,417.26	07/26/2000 09:09:44 No Errors
ARBAL	Accounts Receivable Balance T000	790,780.38	07/26/2000 09:09:44 No Errors
APBAL	Accounts Payable Balance T000	499,326.93	07/26/2000 09:09:44 No Errors
PATIMETK	Payroll Time Tickets T000	.00	07/26/2000 09:09:44 No Errors
QIKRATIO	Quick Ratio T000	1.07:1	07/26/2000 09:09:44 No Errors
TQKRATIO	Target Quick Ratio T000	2.20:1	07/26/2000 09:09:44 No Errors
SOUNSHIP	Unshipped Orders T000	3,554.30	07/26/2000 09:09:44 No Errors
CURRATIO	Current Ratio T000	5.13:1	07/26/2000 09:09:44 No Errors
TCURATIO	Target Current Ratio T000	10.00:1	07/26/2000 09:09:44 No Errors
SOSHIP	Shipped Orders T000	128,674.58	07/26/2000 09:09:44 No Errors
DTERATIO	Debt-to-Equity Ratio T000	0.82:1	07/26/2000 09:09:44 No Errors
TDERATIO	Target Debt-to-Equity Ratio T000	0.75:1	07/26/2000 09:09:44 No Errors
SORETURN	Returned Orders Total T000	97,651.25-	07/26/2000 09:09:44 No Errors

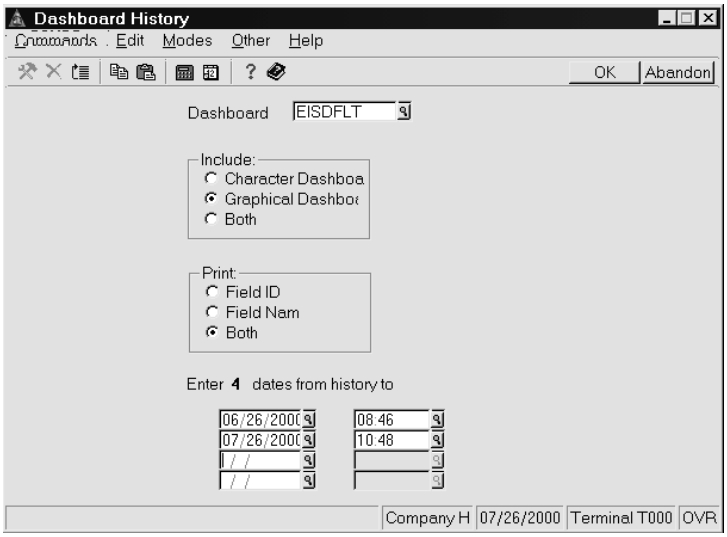
*** End of Report ***

Dashboard History

Select the Dashboard History function from the EIS Reports menu to print a hard copy of how the field definition values have changed. You can select up to 4 different times in history if you have the option to keep field value history set to YES, the history records will only get added when doing a global update from periodic processing.

Doing a global update from the dashboard itself will not add any field value history records to pick from. Select Dashboard History and the Dashboard History pick screen appears.

Dashboard History -GUI Mode screen



To run the report use the following steps:

1. Select the **dashboard** you wish to view history on. Use the **Inquiry (F2)** command to make your selection.

2. Choose either the **character**, **graphical** or **both** versions of the dashboard to be displayed.

3. Choose to include either the **Field ID**, the **Field Name**, or both on the report.

4. Enter the **history dates** from and to. Use the **Inquiry (F2)** command to make your selections for both day and time.

An example of the report is displayed on the next page. In this case only 2 records exist in history for this dashboard.

Sample Dashboard History Report

07/26/2000 Builders Supply Page 1
11:38 AM EIS Dashboard History Report

Dashboard EISDFLT Company Summary - Character

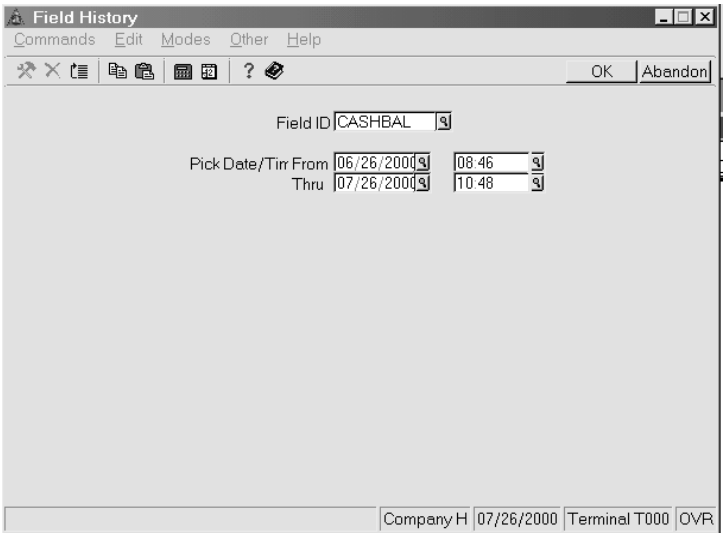
Field ID	Field name	06/26/00 08:46	07/26/00 10:48
DAYACTSL	Daily Actual Sales	31,023.33	3,295.08-
MTDACTSL	Monthly Actual Sales	1,112,263.56	846,841.85
YTDACTSL	Yearly Actual Sales	5,315,434.96	6,131,253.48
DAYBUDSL	Daily Budgeted Sales	31,964.77	22,404.27
MTDBUDSL	Monthly Budgeted Sales	958,943.03	694,532.46
YTDBUDSL	Yearly Budgeted Sales	5,490,687.66	6,185,220.12
DAYVARSL	Daily Sales Variance	941.44-	25,699.35-
MTDVARSL	Monthly Sales Variance	153,320.53	152,309.39
YTDVARSL	Yearly Sales Variance	175,252.70-	53,966.64-
DAYACTPR	Daily Actual Profit	14,430.08	100.77-
MTDACTPR	Monthly Actual Profit	487,076.43	301,226.98
YTDACTPR	Yearly Actual Profit	2,529,157.84	2,815,954.74
DAYBUDPR	Daily Budgeted Profit	14,142.81	9,692.28
MTDBUDPR	Monthly Budgeted Profit	424,284.26	300,460.55
YTDBUDPR	Yearly Budgeted Profit	2,308,531.75	2,608,992.30
DAYVARPR	Daily Profit Variance	287.27	9,793.05-
MTDVARPR	Monthly Profit Variance	62,792.17	766.43
YTDVARPR	Yearly Profit Variance	220,626.09	206,962.44
CASHBAL	Cash Balance	32,790.79	300,826.13-
INVVALUE	Inventory Valuation	1,261,417.26	1,258,382.90
ARBAL	Accounts Receivable Balance	790,780.38	790,780.38
APBAL	Accounts Payable Balance	499,326.93	496,947.14
PATIMETK	Payroll Time Tickets	.00	.00
QIKRATIO	Quick Ratio	1.15:1	1.07:1
TQKRATIO	Target Quick Ratio	2.20:1	2.20:1
SOUNSHIP	Unshipped Orders	3,554.30	3,554.30
CURRATIO	Current Ratio	5.63:1	5.13:1
TCURATIO	Target Current Ratio	10.00:1	10.00:1
SOSHIP	Shipped Orders	128,674.58	54,795.44
DTERATIO	Debt-to-Equity Ratio	0.80:1	0.82:1
TDERATIO	Target Debt-to-Equity Ratio	0.75:1	0.75:1
SORETURN	Returned Orders Total	97,651.25-	58,090.52-
DAYACTSL	Daily Actual Sales	31,023.33	3,295.08-
MTDACTSL	Monthly Actual Sales	1,112,263.56	846,841.85
YTDACTSL	Yearly Actual Sales	5,315,434.96	6,131,253.48
DAYBUDSL	Daily Budgeted Sales	31,964.77	22,404.27
MTDBUDSL	Monthly Budgeted Sales	958,943.03	694,532.46
YTDBUDSL	Yearly Budgeted Sales	5,490,687.66	6,185,220.12
DAYVARSL	Daily Sales Variance	941.44-	25,699.35-
MTDVARSL	Monthly Sales Variance	153,320.53	152,309.39
YTDVARSL	Yearly Sales Variance	175,252.70-	53,966.64-
DAYACTPR	Daily Actual Profit	14,430.08	100.77-
MTDACTPR	Monthly Actual Profit	487,076.43	301,226.98
YTDACTPR	Yearly Actual Profit	2,529,157.84	2,815,954.74
DAYBUDPR	Daily Budgeted Profit	14,142.81	9,692.28
MTDBUDPR	Monthly Budgeted Profit	424,284.26	300,460.55
YTDBUDPR	Yearly Budgeted Profit	2,308,531.75	2,608,992.30
DAYVARPR	Daily Profit Variance	287.27	9,793.05-
MTDVARPR	Monthly Profit Variance	62,792.17	766.43
YTDVARPR	Yearly Profit Variance	220,626.09	206,962.44
CASHBAL	Cash Balance	32,790.79	300,826.13-
INVVALUE	Inventory Valuation	1,261,417.26	1,258,382.90
ARBAL	Accounts Receivable Balance	790,780.38	790,780.38
APBAL	Accounts Payable Balance	499,326.93	496,947.14
PATIMETK	Payroll Time Tickets	.00	.00
QIKRATIO	Quick Ratio	1.15:1	1.07:1
TQKRATIO	Target Quick Ratio	2.20:1	2.20:1
SOUNSHIP	Unshipped Orders	3,554.30	3,554.30
CURRATIO	Current Ratio	5.63:1	5.13:1
TCURATIO	Target Current Ratio	10.00:1	10.00:1
SOSHIP	Shipped Orders	128,674.58	54,795.44
DTERATIO	Debt-to-Equity Ratio	0.80:1	0.82:1
TDERATIO	Target Debt-to-Equity Ratio	0.75:1	0.75:1
SORETURN	Returned Orders Total	97,651.25-	58,090.52-

*** End of Report ***

Field History

Use the Field History function from the EIS Reports menu to get a more selective report of values for a specific field IDs over a period of time. Unlike the dashboard history report which displays all field IDs for a specific dashboard with up to 4 specific dates you will only get one field ID showing a comparison between to different times. The following screen is displayed upon selection.

Field History -GUI Mode screen



To run the report use the following steps:

1. Select the **Field ID** you wish to view history on. Use the **Inquiry (F2)** command to make your selection.

2. Enter the **Date/Time** from and to. Use the **Inquiry (F2)** command to make your selections for both day and time.

An example of the report is displayed below. In this case only 2 records existed in history to pick from.

Sample Field History Report

```
07/26/2000                    Builders Supply                Page    1
12:38 PM                   Field History Report

CASHBAL   Cash Balance


     Date        Time             Value
     06/26/2000  08:46:08       32,790.79
     07/26/2000  10:48:33      300,826.13-

*** End of Report ***
```

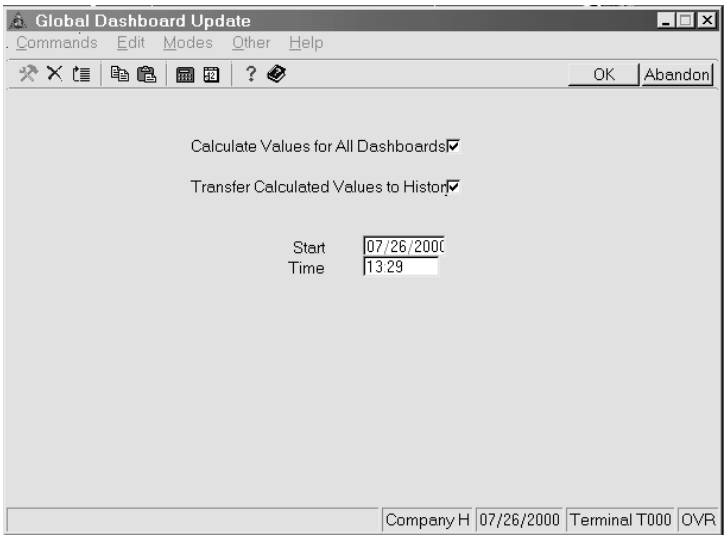
EIS - Periodic Maintenance

Use the EIS Periodic Maintenance function to manage your dasboard information and value history.

Global Dashboard Update

Use the Global Dashboard Update function to update all field values with current information on all existing dashboards, both character and graphical. along with the updating of these values, the function will also, if selected, write these values to field history. Select the function and the the Global dashboard Update screen appears.

Global Dashboard Update - GUI Mode screen



Do the following steps to execute the function.

1. Use the **Spacebar** or click on the check box to **"Calculate Values for All Dashboards"**. If you do not check this box, you will simply update field history with the existing field value.

2. Use the **Spacebar** or click on the check box to **"Transfer Calculated Values to History"**. If you do not check this box, field history is not updated with values to be used with history reports.

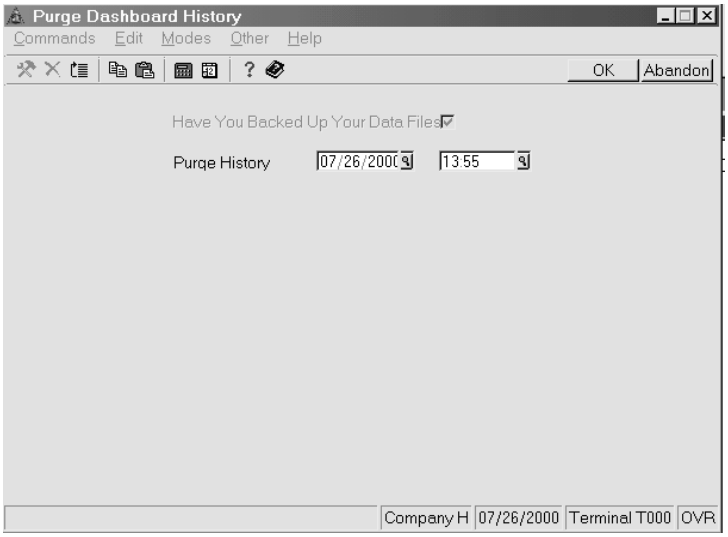
If you do not select either of these check boxes you will be prompted to use the **Exit(F7 or Esc M)** command to exit back to the Periodic Maintenance menu.

The **Date** and **Start Time** default in from the workstation. Press **Enter** to accept this information or correct the information. Use the **Proceed (PgDn or Esc P)** or click the **OK** button to perform the update and return to Periodic Maintenance menu.

Purge Dashboard History

Use the Purge Dashboard History to maintain the size of, and information available in the **EIHIST** file. After selecting this function the following screen appears.

Purge Dashboard History - GUI Mode screen



As in any OSAS function where data is being removed be sure to have a valid backup.

If you do not have one, and check the box **"Have you Backed Up Your Data Files?"** you are creating a risky situation. Be to have some kind of backup available before proceeding.

Use the **Inquiry (F2)** command to select the **Date** and **Time** of which you wish to remove history.

Click on the **OK** button, or use the **Proceed (PgDn or Esc P)** command to run the function, upon completion it will return you to the Peeriodic Processing menu.

EIS - Master File Lists

Use the Master File Lists Menu to select specific function that will display the different components used by Executive Information Summary. You can print out detail lists of screens in detail or in summary, and the same for Field Definitions, Functions, and Setups.

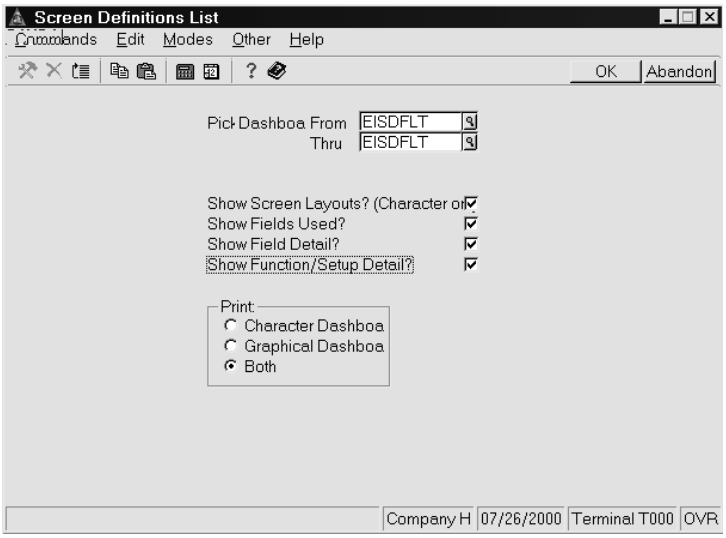
Below are examples of each, they are limited in range to preserve space.

Screen Definitions List

Print this list out to recieve detail information as to the fields being used on the screen, the field detail, the function/setup detail, and if desired the actual layout of the screen for the character mode screens only.

The following example shows only portions fo the report ased upon the selection criteria seen in the following screen.

Screen Definitions Lists - GUI Mode screen



The report prints the following, it has been edited to show portions of each of the criteria selected.

Sample Screen Definitions List (Screen Layout)

07/27/2000 Builders Supply Page 1
10:28 AM Screen Definitions List

Dashboard EISDFLT Company Summary - Character

Screen Layout

```
           1         2         3         4         5         6         7
  12345678901234567890123456789012345678901234567890123456789012345678901234567
 1
 2     Sales:                Daily          Monthly           Yearly
 3        Actual     999,999,999.00-   999,999,999.99-   999,999,999.99-
 4        Budget     999,999,999.99-   999,999,999.99-   999,999,999.99-
 5        Variance $ 999,999,999.99-   999,999,999.99-   999,999,999.99-
 6
 7     Gross Profit:
 8        Actual     999,999,999.99-   999,999,999.99-   999,999,999.99-
 9        Budget     999,999,999.99-   999,999,999.99-   999,999,999.99-
10        Variance $ 999,999,999.99-   999,999,999.99-   999,999,999.99-
11
12
13     Cash Balance  999,999,999.99-   Inventory Value   999,999,999.99-
14     AR Balance    999,999,999.00-   AP Balance        999,999,999.99-
15                                     Time Tickets      999,999,999.99-
16                   Actual  Target
17     Quick Ratio   90.99:1 90.99:1   Unshipped Orders  999,999,999.99-
18     Current Ratio 90.99:1 90.99:1   Shipped Orders    999,999,999.99-
19     Debt/Equity   90.99:1 90.99:1   Returned Orders   999,999,999.00-
20
```

Sample Screen Definitions List (Fields Used)

07/27/2000 Builders Supply Page 2
10:28 AM Screen Definitions List

Dashboard EISDFLT Company Summary - Character

Fields Used

Field ID	Description	Display Mask	Row	Col
DAYACTSL	***Daily Actual Sales***	999,999,999.00-	03	20
MTDACTSL	Monthly Actual Sales	999,999,999.99-	03	38
YTDACTSL	Yearly Actual Sales	999,999,999.99-	03	56
DAYBUDSL	Daily Budgeted Sales	999,999,999.99-	04	20
MTDBUDSL	Monthly Budgeted Sales	999,999,999.99-	04	38
YTDBUDSL	Yearly Budgeted Sales	999,999,999.99-	04	56
DAYVARSL	Daily Sales Variance	999,999,999.99-	05	20
MTDVARSL	Monthly Sales Variance	999,999,999.99-	05	38
YTDVARSL	Yearly Sales Variance	999,999,999.99-	05	56
DAYACTPR	Daily Actual Profit	999,999,999.99-	08	20
MTDACTPR	Monthly Actual Profit	999,999,999.99-	08	38
YTDACTPR	Yearly Actual Profit	999,999,999.99-	08	56
DAYBUDPR	Daily Budgeted Profit	999,999,999.99-	09	20
MTDBUDPR	Monthly Budgeted Profit	999,999,999.99-	09	38
YTDBUDPR	Yearly Budgeted Profit	999,999,999.99-	09	56
DAYVARPR	Daily Profit Variance	999,999,999.99-	10	20
MTDVARPR	Monthly Profit Variance	999,999,999.99-	10	38
YTDVARPR	Yearly Profit Variance	999,999,999.99-	10	56
CASHBAL	Cash Balance	999,999,999.99-	13	20
INVVALUE	Inventory Valuation	999,999,999.99-	13	56
ARBAL	Accounts Receivable Balance	999,999,999.00-	14	20
APBAL	Accounts Payable Balance	999,999,999.99-	14	56
PATIMETK	Payroll Time Tickets	999,999,999.99-	15	56
QIKRATIO	Quick Ratio	90.99:1	17	20
TQKRATIO	Target Quick Ratio	90.99:1	17	28
SOUNSHIP	Unshipped Orders	999,999,999.99-	17	56
CURRATIO	Current Ratio	90.99:1	18	20
TCURATIO	Target Current Ratio	90.99:1	18	28
SOSHIP	Shipped Orders	999,999,999.99-	18	56
DTERATIO	Debt-to-Equity Ratio	90.99:1	19	20
TDERATIO	Target Debt-to-Equity Ratio	90.99:1	19	28
SORETURN	Returned Orders Total	999,999,999.00-	19	56

Sample Screen Definitions List (Field Detail)

07/27/2000 Builders Supply Page 3
10:28 AM Screen Definitions List

Dashboard EISDFLT Company Summary - Character

Field Detail

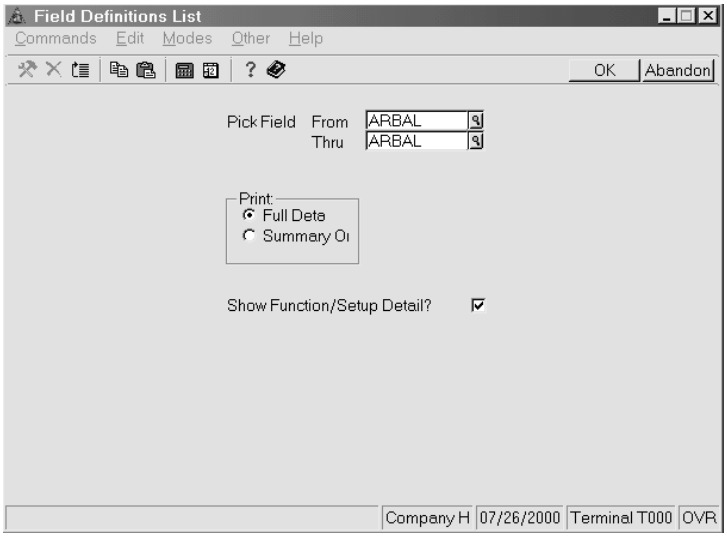
Field ID DAYACTSL Daily Actual Sales
Formula (F1[1]*-1)+F2[1]-F2[2]+F3[5]+F3[7]-F3[13]

#	Function	Description	Setup ID	Description	
1	GLJATDAY	GL Journal File Daily Totals (By Account Type)	GLSALEAT	GL Sales Account Types	
	Sub	Type Description	Type	From	Thru
	1	**N Unposted Journal Entries**	01		
			02	500	510
2	ARTRAN	AR Transactions File Invoice Totals	COMP	Company Ranges	
	Sub	Type Description	Type	From	Thru
	1	**N Invoice Total**	01		
	2	**N Credit Memo Total**			
	3	N Invoice Cost Total			
	4	N Credit Memo Cost Total			
3	SOORDERS	SO Open Orders	COMP	Company Ranges	
	Sub	Type Description	Type	From	Thru
	1	N New Order Total	01		
	2	N New Order Count			
	3	N Picked Order Total			
	4	N Picked Order Count			
	5	**N Verified Order Total**			
	6	N Verified Order Count			
	7	**N Invoiced Order Total**			
	8	N Invoiced Order Count			
	9	N Backordered Total			
	10	N Backordered Count			
	11	N Quoted Order Total			
	12	N Quoted Order Count			
	13	**N Returns Total**			
	14	N Returns Count			
	15	N Open Order Total (no quotes)			
	16	N Open Order Count (no quotes)			
	17	N New/Picked Order Cost			
	18	N Verified/Invoiced Order Cost			
	19	N Backordered Order Cost			
	20	N Quoted Order Cost			
	21	N Returned Order Cost			
	22	N Open Order Cost (no quotes)			

Field Definitions List

Use this function to print a listing of the **Field Definitions** and **formulas** that have been established on your system. You can choose using the **Inquiry (F2)** command to print all, one, or a specific range of definitions. you may also choose to print the function and setup detail for each of these definitions. This detail allows you understand specifically what each piece of the formula is referring to.

Field Definitions List - GUI Mode screen



The following page showsa example of the report output. Notice that the output is really an identical breakdown to what is displayed if showing full detail on the Screen Definiions List.

Sample Field Definitions List

07/27/2000 Builders Supply Page 1
11:37 AM Field Definition List

Field ID ARBAL Accounts Receivable Balance Display Mask 999,999,999.00-
Formula F1[1]-F1[2]-F1[3]+F1[4]+F2[1]-F2[2]-F3[1]-F3[2]

#	Function	Description	Setup ID	Description
1	**AROPEN**	**AR Open Invoice File Totals**	COMP	Company Ranges

Sub	Type	Description	Type	From	Thru
1	**N**	**Invoices Total**		01	
2	**N**	**Credit Memos Total**			
3	**N**	**Payments Total**			
4	**N**	**Finance Charges Total**			
5	N	Open Invoice Grand Total			
6	N	Discounts Total			

#	Function	Description	Setup ID	Description
2	**ARTRAN**	**AR Transactions File Invoice Totals**	COMP	Company Ranges

Sub	Type	Description	Type	From	Thru
1	**N**	**Invoice Total**		01	
2	**N**	**Credit Memo Total**			
3	N	Invoice Cost Total			
4	N	Credit Memo Cost Total			

#	Function	Description	Setup ID	Description
3	**ARCASH**	**AR Cash Receipts File Totals**	COMP	Company Ranges

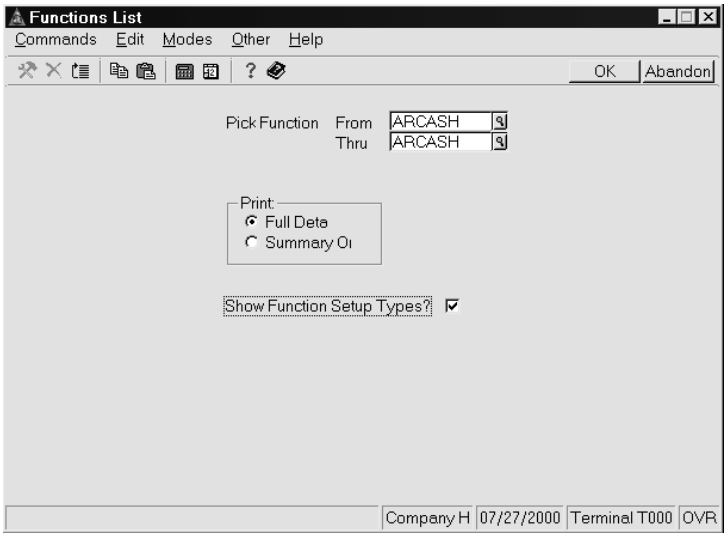
Sub	Type	Description	Type	From	Thru
1	**N**	**Receipt Amount**		01	
2	**N**	**Discount Amount**			
3	N	Cash Amount			
4	N	Cash Count			
5	N	Check Amount			
6	N	Check Count			
7	N	Credit Card Amount			
8	N	Credit Card Count			
9	N	Write Off Amount			
10	N	Write Off Count			
11	N	Other Amount			
12	N	Other Count			

*** End of Report ***

Function Definition List

Use the functions definitions list to view a hard copy of the specific information that will be returned by each function. You may print this information for all established functions, for a range of functions, just an individual function. You may include on the report the setup types that are allowed for the function. select the function from the menu and the following selection screen.

Function Definition List screen



After making the above selections the following output is displayed.

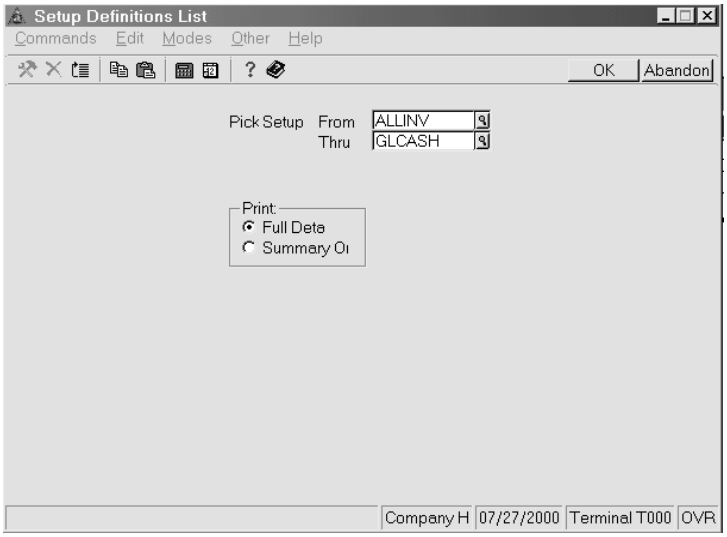
Sample Function Definitions List

```
07/27/2000                                   Builders Supply                          Page    1
12:25 PM                                      Functions List

Function  Description
ARCASH    AR Cash Receipts File Totals
  Setup Types:  #  Description  Length  Type
                1  Company ID        3     3
  Sub  Type          Description
    1  Numeric       Receipt Amount
    2  Numeric       Discount Amount
    3  Numeric       Cash Amount
    4  Numeric       Cash Count
    5  Numeric       Check Amount
    6  Numeric       Check Count
    7  Numeric       Credit Card Amount
    8  Numeric       Credit Card Count
    9  Numeric       Write Off Amount
   10  Numeric       Write Off Count
   11  Numeric       Other Amount
   12  Numeric       Other Count


*** End of Report ***
```

Setup Definitions List

Use the Setup Definitions List function to view the setup type that have been established on the system. the Setup Definitions screen appears.

Setup Definitions List screen



The following output is produced.

Sample Setup Definitions List

```
07/27/2000                                   Builders Supply                                   Page    1
12:36 PM                                   Setup Definitions List

Setup ID  Description
ALLINV    All Inventory Items
  Type    From                                    Thru
  01
  02
  03

BANKACCT  All Bank Accounts
  Type    From                                    Thru
  01
  02

COMP      Company Ranges
  Type    From                                    Thru
  01

GLCASH    Cash Accounts
  Type    From                                    Thru
  01
  02      1000                                    100999


*** End of Report ***
```

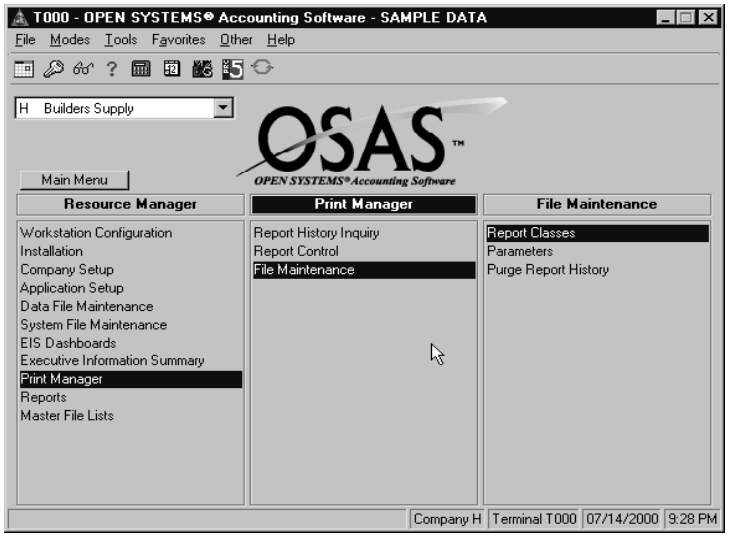
Print Manager 9

Introduction

Use the Print Manager to save, print, and manage reports.

With the Print Manager you can reprint a report and keep transaction history for the dates and times that reports were printed, deleted, or archived. You can also set up form classes for reports to ensure that the proper paper or form is set up for rthe printer you choose, eliminating the need to check before sending a job to a printer. Other features include tracking user activity, searching multiple reports for text, and printing in batches.

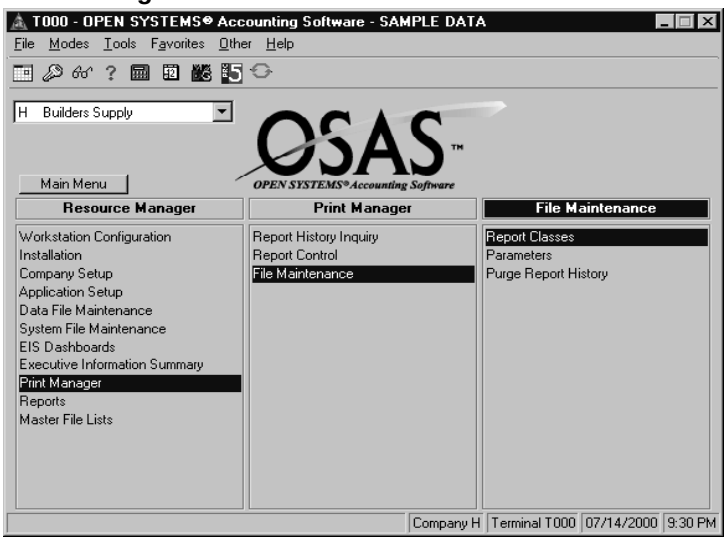
Print Manager Menu screen



File Maintenance

Use the File Maintenance Menu to define report classes, define and create your archive directory and naming structure for system created file names. You can also control the report history you save by purging unwanted or obsolete reports.

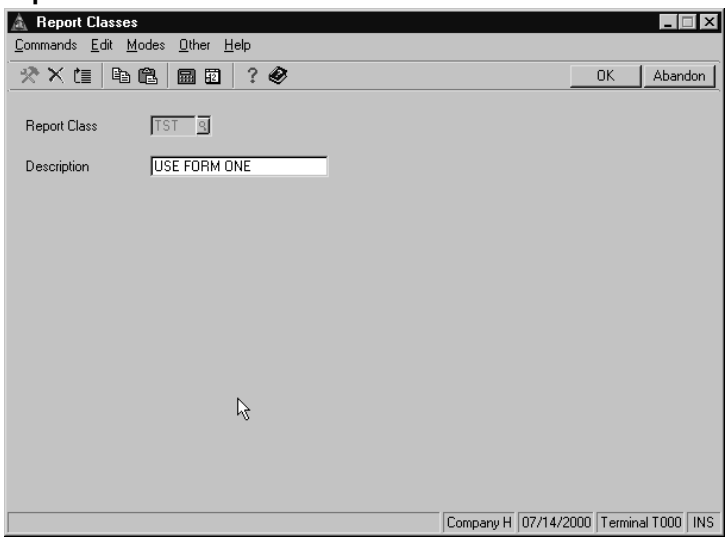
Print Manager File Maintenance Menu screen



Report Class Maintenance

Use the Report Maintenace Function on the File Maintenance Menu to set up and maintain report classes. Report classes will also remind you to load the proper forms before you print a report. Select the Report Classes function, the following screen appears.

Report Classes screen



Enter the following information:

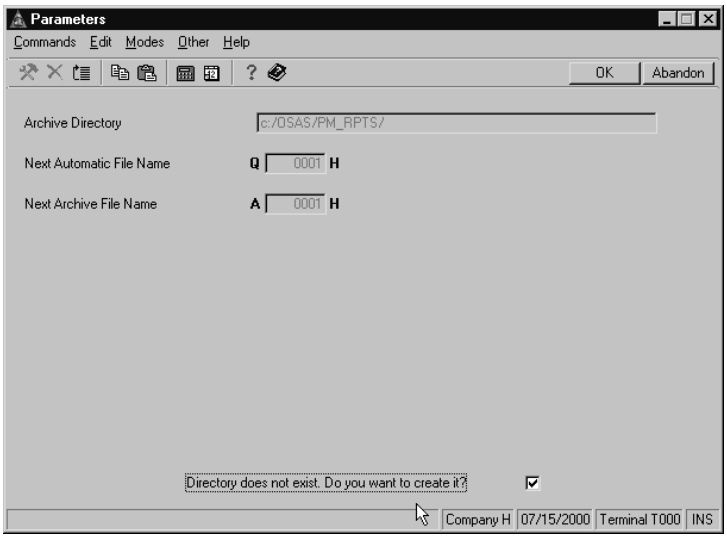
Field Name	Description
Form Class	Enter the Alpha-numeric ID for the report class
Description	Enter the description of the report class. The system uses the report class to remind you to load the proper paper or forms before you print a report using this report class.

Use the **Proceed (PgDn or Esc P**) command, or click on the **OK** button to save your entries.

Parameter Maintenance

Use the Parameter Maintenance function on the file Maintenance Menu to maintain the defaults for the archive directory and system created file names. Select the Parameter Maintenance function and the following screen appears.

Parameter screen



Enter the following information:

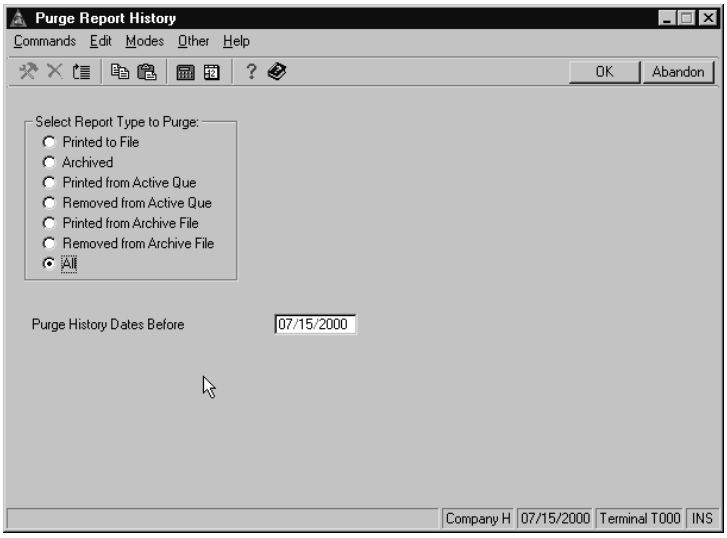
Field Name	Description
Archive Directory	Enter the path for the default directory for archived print jobs. If the directory does not exist the system will create it for you if desired. By default it will be the data 1 path.
Next automatic filename	Accept the displayed numbers, or enter different numbers.
Next archive filename	Accept the displayed numbers, or enter different numbers.

Use the **Proceed (PgDn or Esc P**) command, or click on the **OK** button to save your entries. Use the **Exit (F7 or Esc M)** command, or close the window to exit to the File Maintenance menu.

Purge Report History

Use the Purge Report History function from the File Maintenance Menu to delete report history entries by date and type. Select the Purge Report History function and the following screen appears.

Purge Report History screen



Make the following selections as to the report activity to be purged

Field Name	Description
Purge Transaction Type	From the display list select the appropriate choice for the type of report activity you wish to purge
Purge Transactions Dated Prior To:	Enter the date before which you want transaction history purged. Use ALT+D to use the current workstation date.

Note

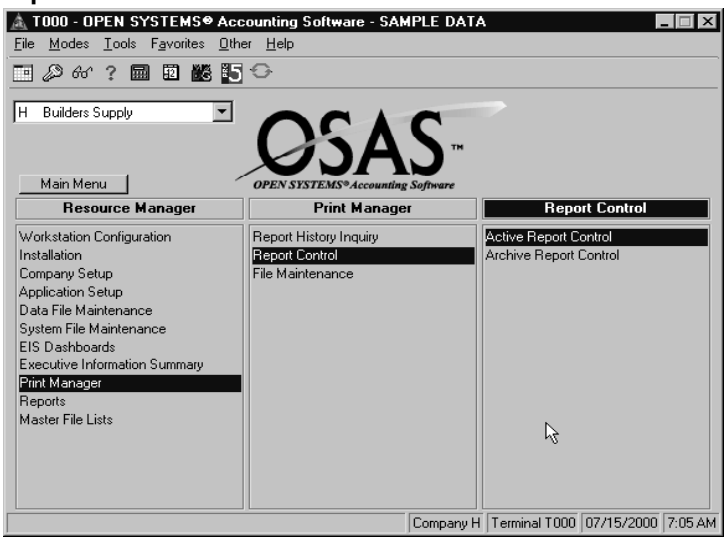
This function is removing the history of a report and not the report itself. You must delete the report itself from either active report control or archive report control.

Use the **Proceed (PgDn or Esc P**) command, or click on the **OK** button to purge your selections, you will then be returned to the File Maintenance menu.

Report Control

Use the report control functions to view and work with reports that you have created through Print Manager. Besides viewing reports you can search multiple reports for matching text, print batch reports, sort, and archive reports in many different ways.

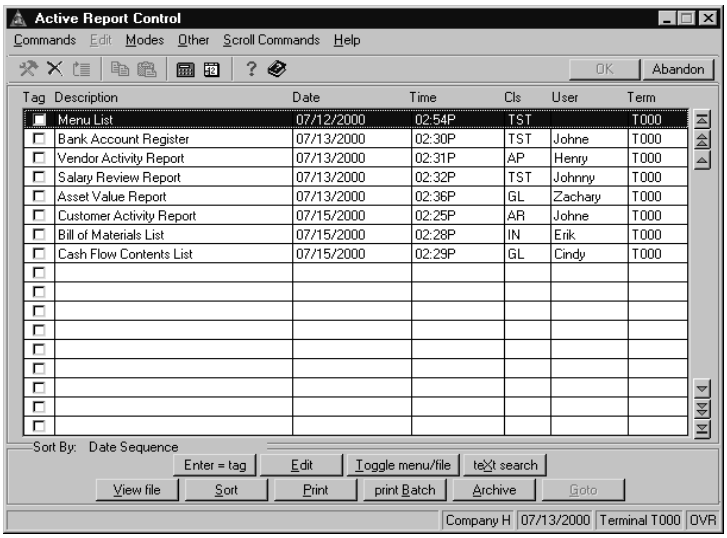
Report Control Menu screen



Using Active Report Control

Use the Active Report Control function from the Report control Menu to view, maintain and work with print jobs that have not yet been archived. Select Active Report Control and the following screen appears.

Active Report Control screen



You may use the following commands to view and maintain your active print jobs.

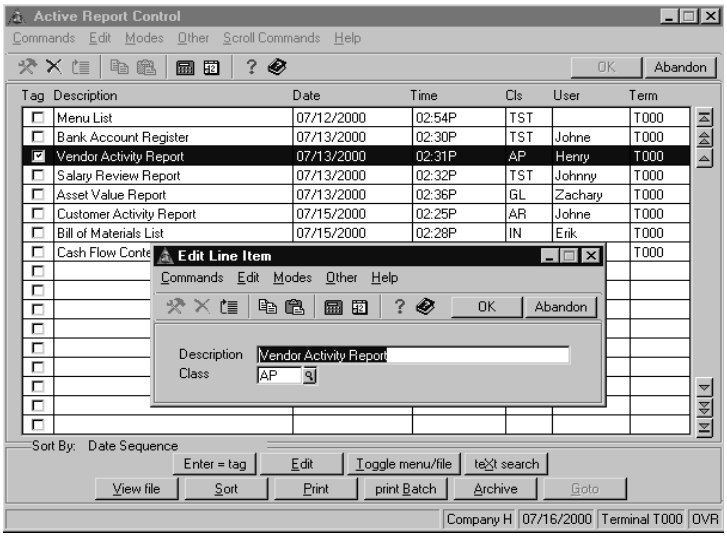
Command	Description
Enter = Tag	Press **Enter** to toggle a selected file as tagged or untagged. Tagged files can be printed using the Print Batch command.
Edit	Press **E** to edit the description and the Cls field.
Toggle Menu / File	Press **T** to toggle the description field to display either the file description or the file path and name.
teXt search	Press **X** to search for text in a report.
View File	Press **V** to display the path information and file name for the selected file.
Sort	Press **S** to select from the following sorts. **1** to sort by report description, **2** sort by the date and time, from most recent to oldest, **3** sort by the ID of the user who produced the file, **4** sort by the report class, **5** sort by the terminal ID where the file was produced.
Print	Press **P** to print the selected file.
print Batch	Press **B** to print the files you selected using the tag command.
Archive	Press **A** to move the selected file from Active Report Control to the Archive Report Control.
Goto	Press **G** to go to a specific line number, you must have at least 19 entries to become active.

To exit to the Active Report Control menu, use the **Exit (F7**) command or close the window.

Editing Line Items with Print Manager

You can choose to edit the report description or report class by clicking on the Edit button. The following screen appears.

Edit Window - Active Report Control screen

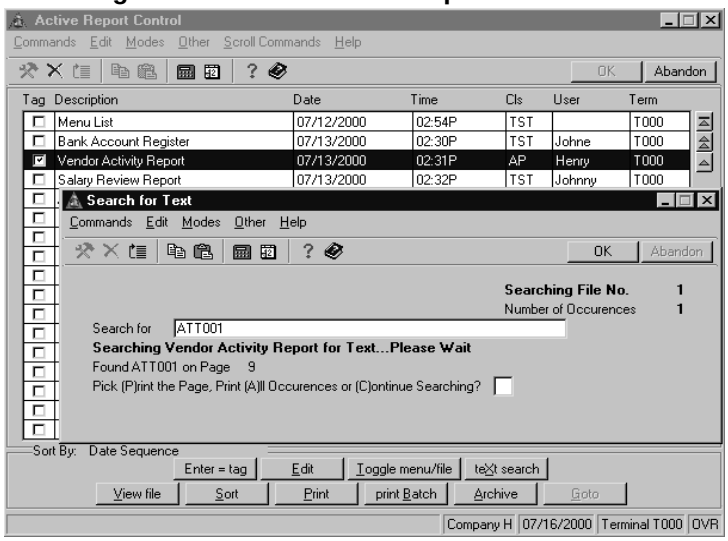


Searching for Text with Print Manager

One of the most useful functions of the Print Manager application is the ability to search individual or multiple reports for specific text. In searching multiple reports in a batch the reports must have the same report class.

Field Name	Description
Search For	Enter the string you want the system to search for, and use the P**roceed (PgDn)** command. You must enter the text exactly as it appears in the print job.
Pick	If the system locates the string you entered, the page number on which the string appears is displayed. Press **P** to display the page of the occurrence, press **A** to print all occurrences, press **C** to continue searching.

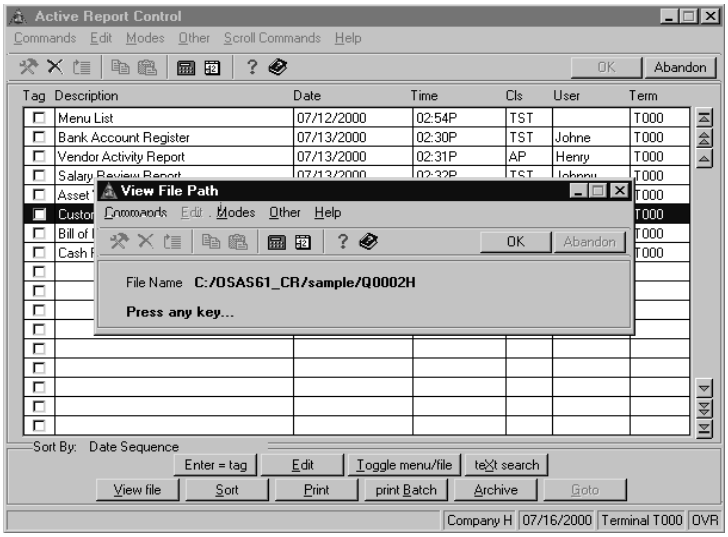
Searching Text Window - Active Report Control screen



Viewing Files with Print Manager

Press the View button to view the name and location of the file created using the Print Manager application.You cannot edit the description or location through this function. The following screen appears.

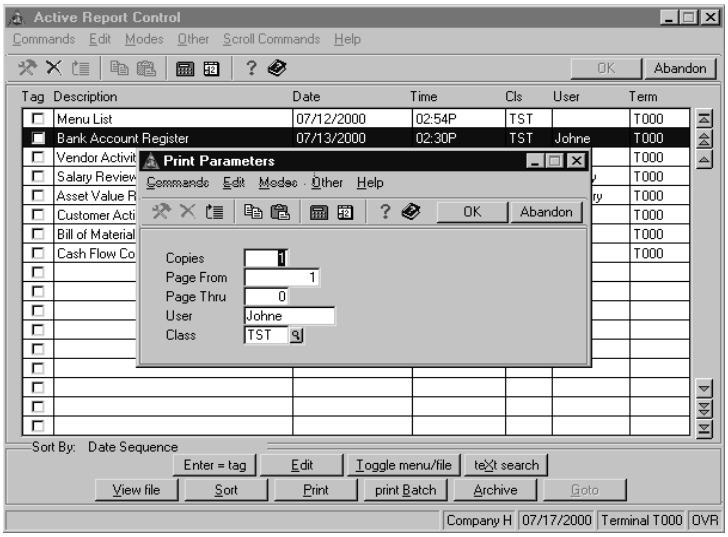
View File Window - Active Report Control screen



Printing Files with Print Manager

Press the Print button to print a selected file, if you wish to print multiple files with the same report class press the print Batch button. the following screen appears.

Print Report Window - Active Report Control screen



Select from the following fields to customize your print job.

Field Name	Description
Copies	Accept the displayed number of copies to print, or enter a different number.
Page From	Accept the displayed beginning page number, or enter a different page number.
Page Thru	Accept the displayed ending page number, or enter a different page number.
User	Accept the displayed user ID, or enter a different ID.
Report Class	Accept the displayed report class, or enter a different report class. When printing batches this field cannot be changed.

Make the following options for file output.

Command	Description
Printer	Select **P,** or the printer radial button to send the print job to a printer.
Preview	Select **R**, or the preview radial button to use a GUI window to view the printed report. The system will also prompt you for the printer you wish to preview the print job with. After viewing the report you can select to send the report to a printer.
End	Select **E** to change your selections or exit to the Report Control menu.

Note

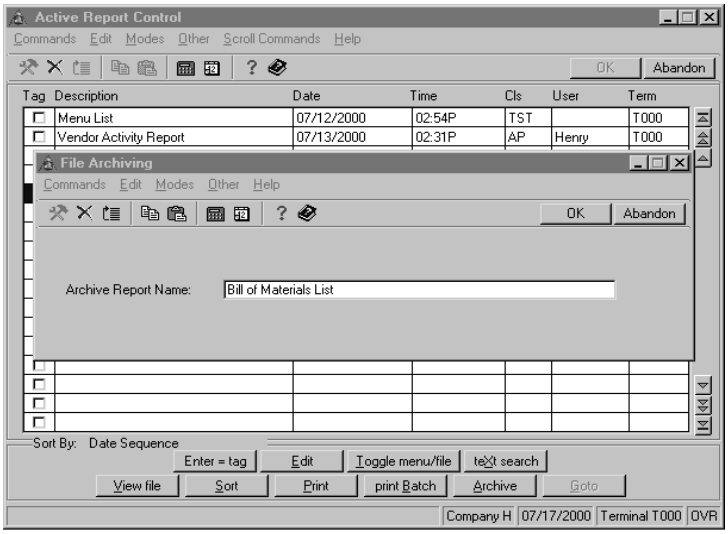
If you print a report class that is different from the last report class used by the printer you selected, a message will appear to warn you.

When the report finishes printing, you can retain the report, remove it from the Active Report Control, or archive it. Enter **R** to retain it, **D** to delete the report, or **A** to send the report to the Archive Control.

Archiving Reports with Print Manager

One of the primary features of Print Manager is the ability to manage print jobs that are currently active and then manage them again when they have been archived. To archive a print job select a individual print job and press the archive button. The following screen appears showing the report description.

Archive Window - Active Report Control screen

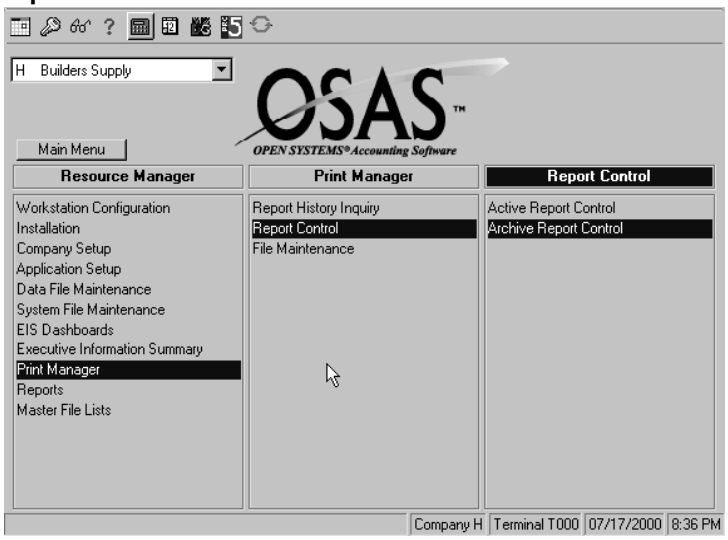


The report description appears by default as the description to be passed on to Archive Report Control, accept it or enter a new report description.

Use the **Exit (F7 or Esc M)** command, or close the window to exit to the Report Control menu.

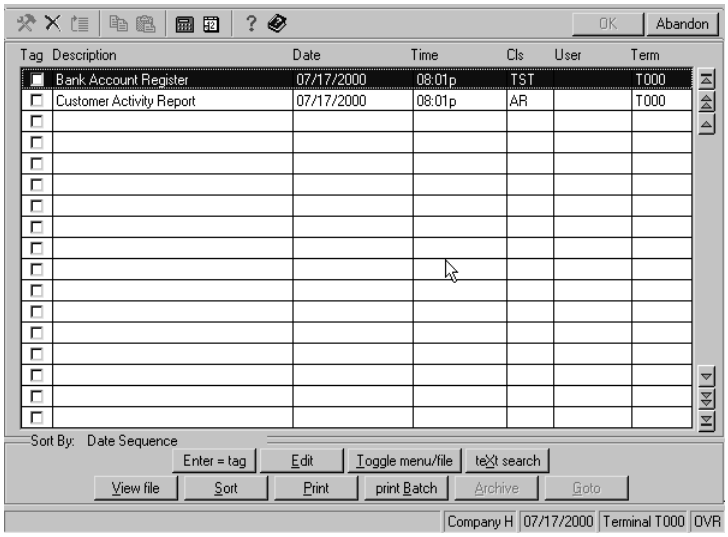
Using Archive Report Control

Report Control Menu screen



Use the Archive Report Control to view and maintain print jobs that have been moved from an active status to archived. All of the functionality available in the Active Report Control function is available here in Archive Report Control, with exception of archiving print jobs. Select Archive Report Control from the menu, the following screen appears.

Archive Report Control screen



After you have finished working with the archived print jobs you can press **F7** to exit the function or simply close the window.

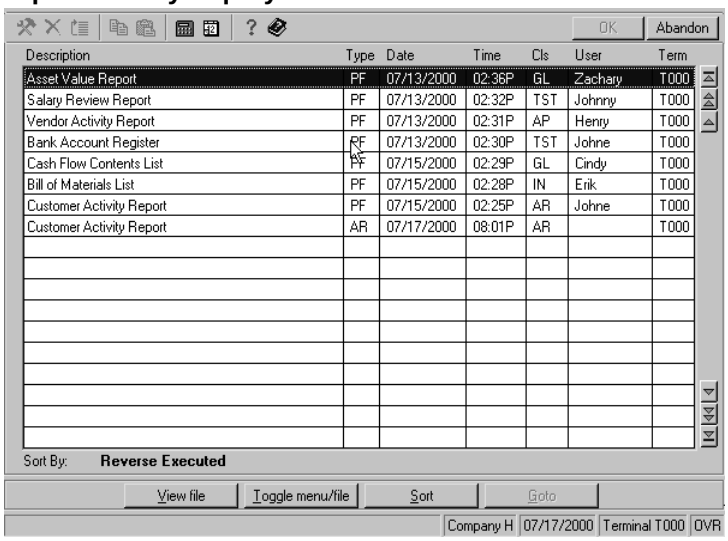
Report History Inquiry

The Report History Inquiry function displays every print job you have printed to file, moved or printed from Active Report Control, and/or moved or printed from Archive Report Control.

Report History Inquiry Menu screen

Select report History Inquiry from the Print Manager menu, the following screen appears.

Report History Inquiry screen



Use the Report History Inquiry screen to display print jobs that have been printed to file, and print jobs moved from Active Report Control to Archive Report Control. the following information is displayed.

Field	Description
Description	The file name, or description is displayed.
Type	The action last performed on the print job is displayed. **PF**, printed to file, **PQ**, printed from Active Report control, **RQ**, removed from Active Report Control, **PA**, printed from Archive Report Control, **RA**, removed from Archive REport Control, **AR**, archived and removed from Active Report Control.
Date	The date the print job was printed is displayed.
Time	The time the print job was printed is displayed.
Cls	The classification, or status, of the print job is displayed.
User	The User ID of the user who printed the print job to file is displayed.
Term	The Terminal ID of the user who printed the print job to file is displayed.

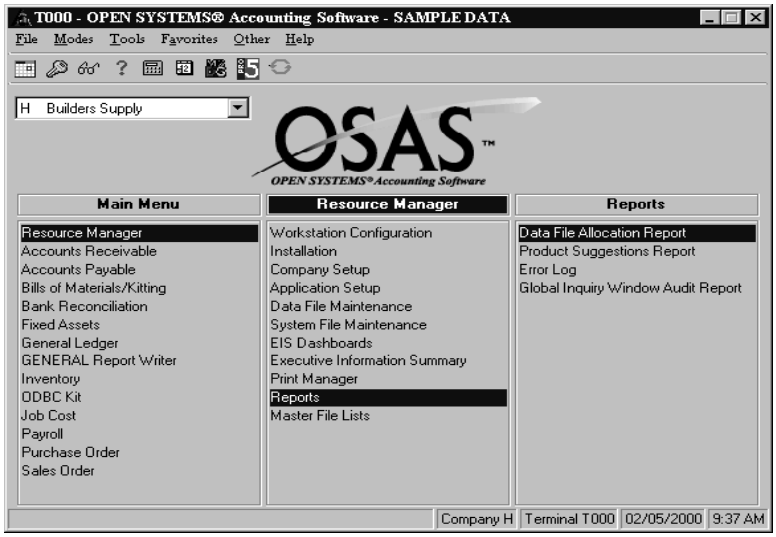
The following commands are available for using Report History Inquiry:

Command	Description
View	Press **V** to display the path information and file name for the selected file.
Toggle menu/file	Press **T** to toggle the description field to display either the file description or the file path and name.
Sort	Press **S** to select from the following sorts. **1** to sort by date of execution,from most recent to oldest, **2** sort alphabetically, **3** sort by date, from most recent to oldest, **4** sort by User ID, **5** sort by the activity type, **6** sort by the terminal ID, **7** to sort by date of execution, from oldest to most recent

Use the **Exit (F7 or Esc M)** commands or close the Report History Inquiry Window to return to the Print Manager menu.

Reports 10

Reports Main Menu

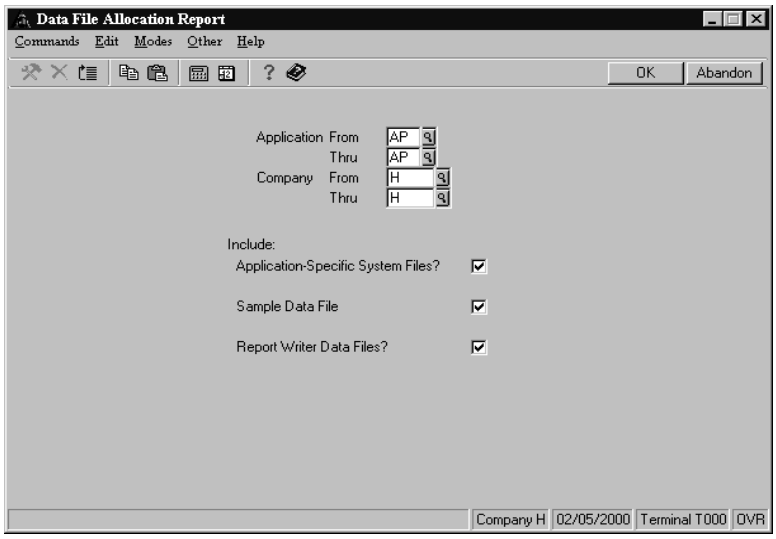


Use the options on the Reports menu to print a list of your company's menus, data file allocations, backup and restore commands, application and company information, help screens, inquiry window definitions, product suggestions or the error log. Print a list of your company's menus, application information, company information, help screens or inquiry window definitions before you change these areas so that you have a hard copy backup of the information.

Data File Allocation Report

Select Data File Allocations to print a list of the files used and their size for a range of applications and companies. You can elect to include application-specific system files, sample data files (if you are in the sample data path), and/or Report Writer data files. If you are in the live data path, you can choose which of the three data paths to include files from.

Selection Screen



02/05/2000 Builders Supply Page 1
9:53 AM Data File Allocation Report

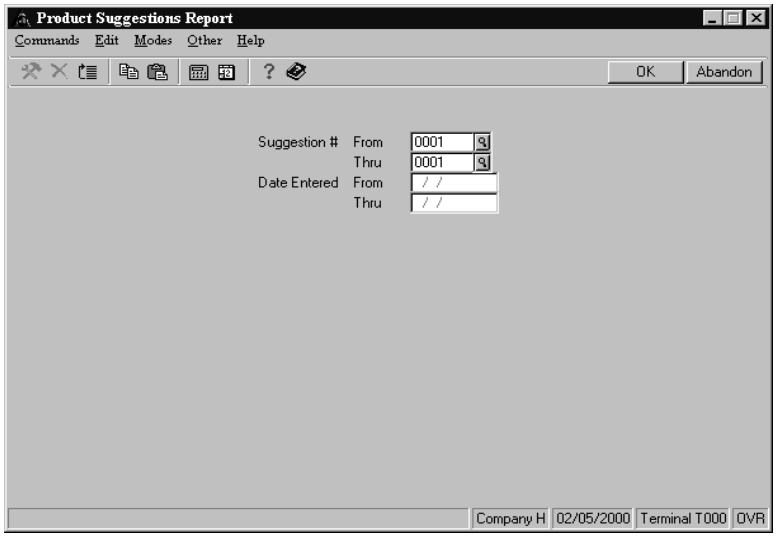
Filename	Description	Filesize Used	Action	Active Keys
Shared Files for AP on /OSAS611/RWdata/				
APTOP	AP Topic File	5,120	(Dynamic)	15
Shared Files for AP on /OSAS611/sample/				
APTB	AP Tables File	16,384	(Dynamic)	18
Company H Files for AP on /OSAS611/sample/				
APBTH	AP Batch Control File	5,120	(Dynamic)	2
APCHH	Checks File	9,216	(Dynamic)	21
APCMH	AP Material Req Control File	8,192	(Dynamic)	1
APCTH	AP Transaction Control File	9,216	(Dynamic)	1
APDCH	Distribution Codes File	5,120	(Dynamic)	1
APDEH	AP Additional Desc File	1,024	(Dynamic)	
APHCH	AP Check History File	10,240	(Dynamic)	8
APHDH	Additional Descriptions Histor	1,024	(Dynamic)	
APHIH	Detail History File	491,520	(Dynamic)	566
APHSH	Summary History File	451,584	(Dynamic)	639
APINH	Open Invoice File	15,360	(Dynamic)	30
APIXH	AP Open Invoice Add'l Info Fil	6,144	(Dynamic)	5
APLSH	AP Lot/Serialized File	1,024	(Dynamic)	
APMDH	Material Requisitions Detail	1,024	(Dynamic)	
APMHH	Material Requisitions Header	1,024	(Dynamic)	
APMSH	AP Mat Req Lot/Serial File	1,024	(Dynamic)	
APRDH	AP Recurring Addl Desc File	1,024	(Dynamic)	
APRHH	Recurring Header File	13,312	(Dynamic)	5
APRLH	Recurring Entries Detail File	12,288	(Dynamic)	5
APTCH	Terms Code File	8,192	(Dynamic)	5
APTDH	Transaction Detail File	14,336	(Dynamic)	
APTHH	Transaction Headers	13,312	(Dynamic)	
APVCH	AP Vendor Comments File	8,192	(Dynamic)	20
APVEH	AP Vendor File	30,720	(Dynamic)	16

End of report

Product suggestions Report

Use the **Product Suggestions** function on the Reports menu to print your suggestions to the printer or file. Enter a range of suggestion numbers and/or dates entered that you want to print suggestions for.

Selection Screen



If you want to reprint a suggestion that has already been printed, select Product Suggestions from the Other Commands menu. Enter the suggestion number and change the Status from **Printed** to **Not Printed**. Print the suggestion again.

The form is ready to fax or mail to Open Systems, Inc. at 952/403-5870.

An example of the form is on the next page.

PRODUCT SUGGESTION

==========

SEND TO:

ATTN: Product Suggestions FAX # 952-403-5870
OPEN SYSTEMS, Inc. 1157 Valley Park Drive Suggestion # 0001
Shakopee MN 55379 Date Submitted: 02/22/2001
800-582-5000

Submitted by: Builders Supply Phone # 952-829-0011 7626
Valley Park Drive Fax # 952-829-1493
Shakopee MN 55379 Site #

Application: AR

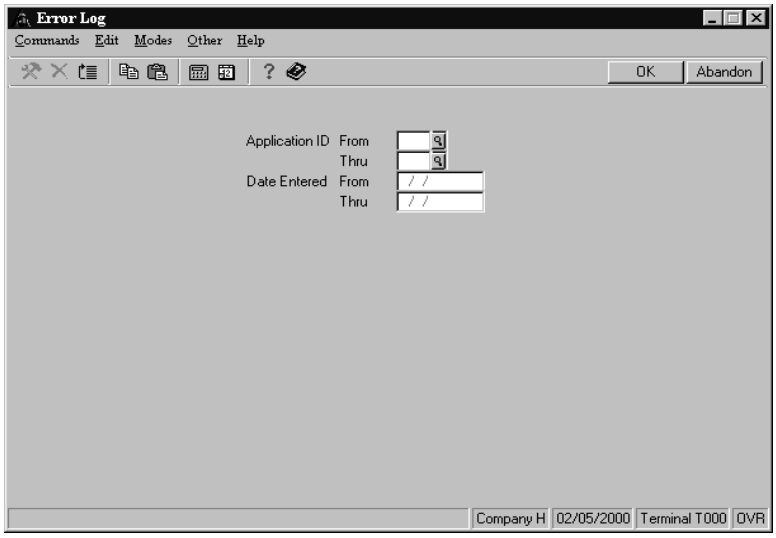
Version #: 6.10

Menu Item: AGED TRIAL BALANCE

Description: Would like the ability to have UNAPPLIED CREDITS applied towards INVOICES on this report... May have to add an OPTION/INTERFACE similar to the one for statements, in order to eliminate this column.

Error Log Report

Selection Screen



When the system encounters an unexpected error, details about the error are written to a log file **(OSERx)** where x represents your company ID. Information for each error includes the application and workstation ID, date, time, error number, line number, name of the program the error occurred in, and listing of the line. Select **Error Log** from the Reports menu to print a list of errors. You can print the error log for a range of application IDs and dates.

This is a sample Error Log List.

01/22/2001 **Builders Supply** **Page 1**

1:30 PM **Error Log**

Application: AP

Workstation: T000 Date: 01/11/2001 Time: 3:37 PM
Error Number: 47 Substring Out of Range
Program Name: APENTHDR
Error Message: BASIC ERROR = 47 LINE = 1320 PROGRAM = APENTHDR
Line Listing: 1320 LET VENDORGL$=VE3$(30,12); REM "TERMS/GL ACCT"

Application: AP

Workstation: T000 Date: 01/11/2001 Time: 3:21 PM
Error Number: 13 Improper File/Device Address
Program Name: APPRJ1
Error Message: BASIC ERROR = 13 LINE = 1010 PROGRAM = APPRJ1
Line Listing: 1010 READ (FILE[19],KNUM=(S2-1),KEY="",DOM=2000)

Application: AP

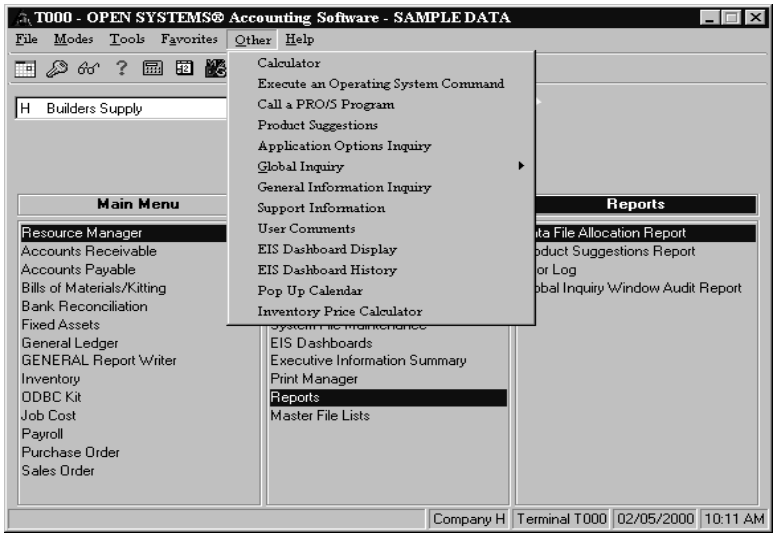
Workstation: T000 Date: 01/11/2001 Time: 3:15 PM
Error Number: 47 Substring Out of Range
Program Name: APPRL1
Error Message: BASIC ERROR = 47 LINE = 2050 PROGRAM = APPRL1
Line Listing: 2050 IF VE3$(1,10)=FILL(10) THEN GOTO 2065; REM "NO PHONE #"

End of Report

Other Commands 11

Use the **Other Commands** menu by pressing **(F4)(F4)** throughout the software to access the calculator, call a BBX program, execute an operating system command, enter or edit product suggestions, or view application options.

Other Commands Menu



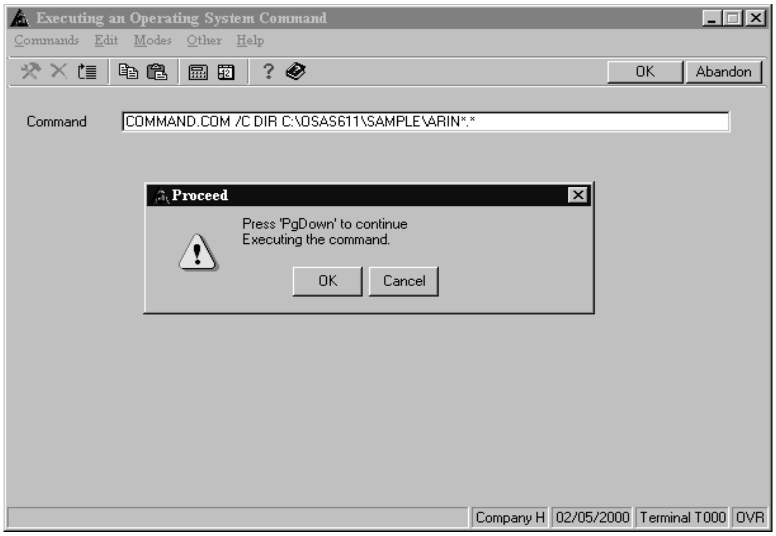
Calculator

Selection Screen

Use the Calculator to do mathematical calculations throughout the software. You can calculate an amount and press **F10** to exit from the calculator and return the total to the field the cursor was at when you accessed the calculator. In version 4.5x and above, it functions like a true calculator. In versions 4.0x and 4.1x, it functioned like a 10-key adding machine.

Execute Operating System Commands

Command Screen



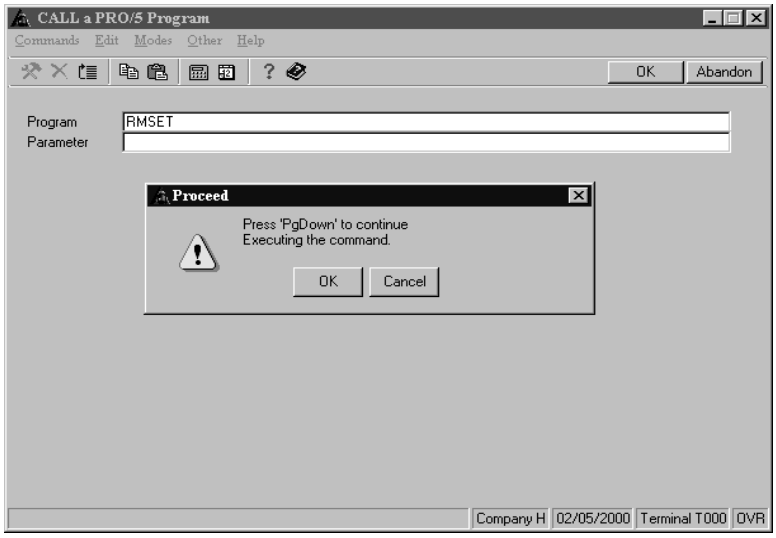
You can execute an operating system command from any place within the software. This function requires a lot of memory, so you may not be able to use it in all places or you may be able to do only simple operating system tasks.

```
 asssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssß
S                                                                                  S
S   ÉÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ Execute Shell Command ÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ»  S
S   º                                                                            º S
S   º   Command  DIR C:\OSAS611\SAMPLE\ARIN*.*                                   º S
S                                                                                  S
S   Volume in drive C has no label                                                 S
S   Directory of  C:\OSAS611\DATA                                                  S
S                                                                                  S
S  ARINH           23552   8-25-92   2:43p                                         S
S                1 File(s)   1542144 bytes free                                    S
S                                                                                  S
S                                                                                  S
S                                                                                  S
S                                                                                  S
S                                                                                  S
S                                                                                  S
S                                                                                  S
S                                                                                  S
S   ÉÍ Verification ÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ»   S
S  º                                Press F7 to Exit                          º    S
S   ÈÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ1/4   S
S                                                                                  S
Gsssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssssp
```

This is an example of the DOS directory utility.

Call a BBX Program

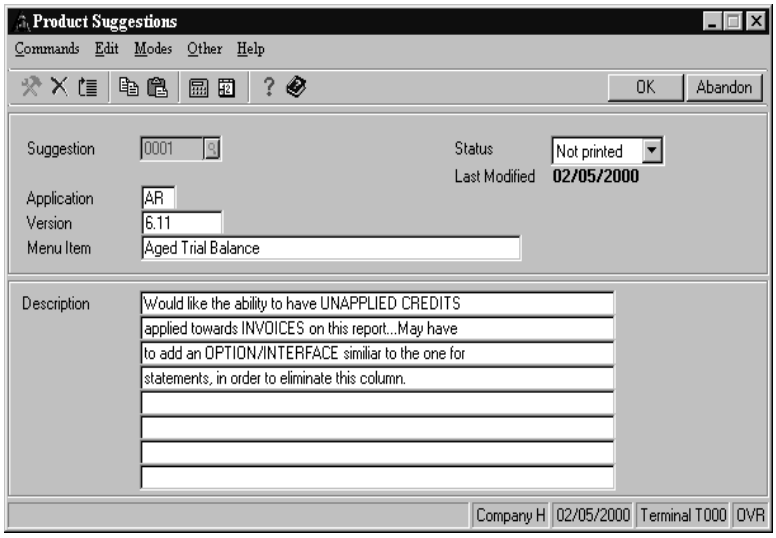
Program Screen



Select **Call a BBX Program** from the Other Commands menu to execute a BASIC program. This function was used in versions 4.0x and 4.1x to execute the rebuild programs RMRCS.PUB and RMIDRM. These rebuilds are on the Resource Manager Data File Maintenance menu in version 4.5x and later.

Product Suggestions

Setup Screen



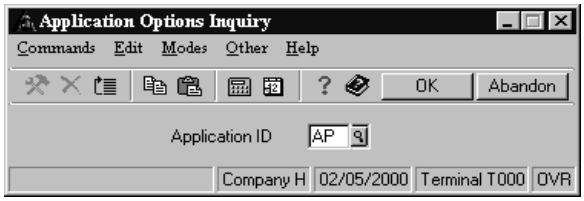
Select **Product Suggestions** to enter your ideas or suggestions for enhancing the OPEN SYSTEMS Accounting Software. If you add a new suggestion, press **Enter** to have the system generate the next suggestion number. If you want to edit a suggestion, enter the suggestion number, or use the Inquiry command to look up and select the number from the list that appears.

Enter the application ID, version number and menu item. Enter a detailed description of your suggestion. You can enter eight lines, 50 characters each.

Select **Suggestions** from the Reports menu to print suggestions. They are ready to fax or mail to Open Systems, Inc.

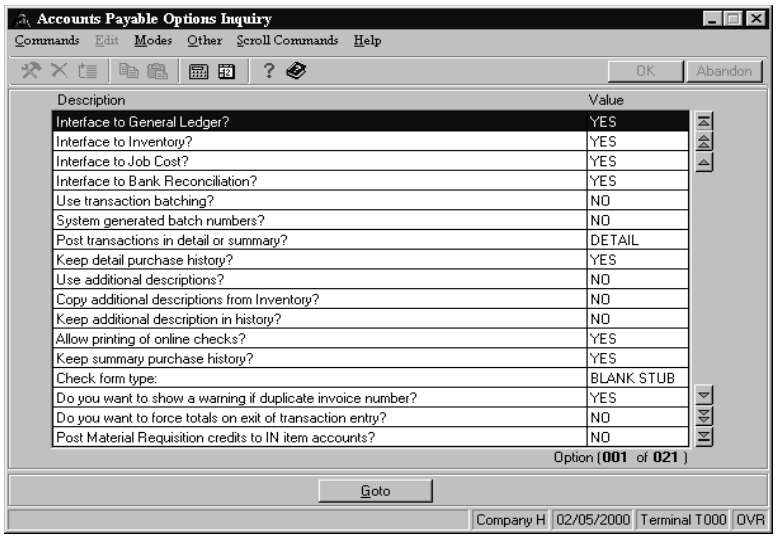
Application Options Inquiry

Inquiry Screen



Select **Application Options Inquiry** to view the options and interfaces for an application throughout the software. You cannot change them here. A window opens where you enter the ID for the application's options and interfaces you want to view.

Accounts Payable Options/Interfaces

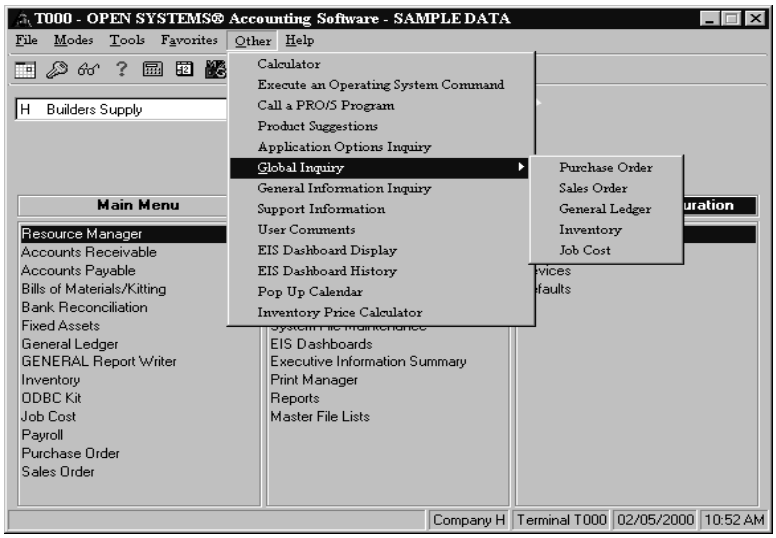


The application's options and interfaces are displayed. Press any key to exit. Select **Options and Interfaces** from the Resource Manager Company Setup menu to changes an application's options and interfaces.

Global Inquiry

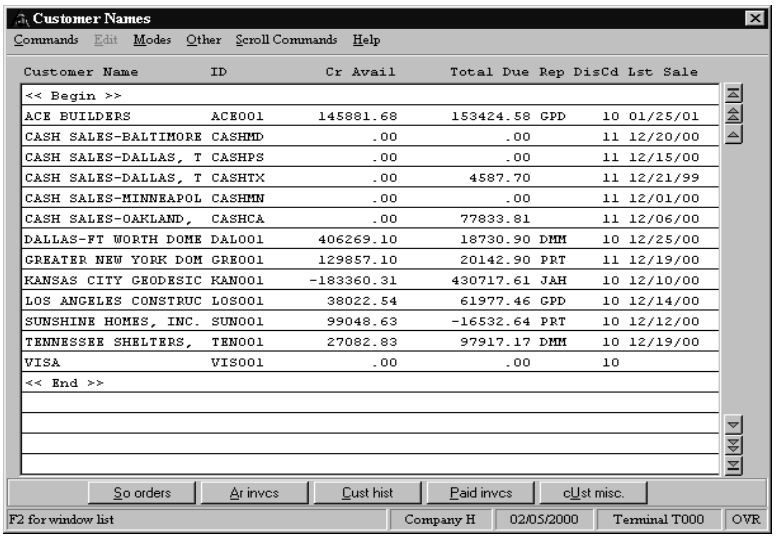
Select the **Global Inquiry** function from the Other Commands menu to quickly inquire for information that is interrelated to each other although it may span several applications. Choose the application to begin with from those that are available to you.

Available Inquiries



Here we have selected Sales Order and below it displays the following information about our current customers.

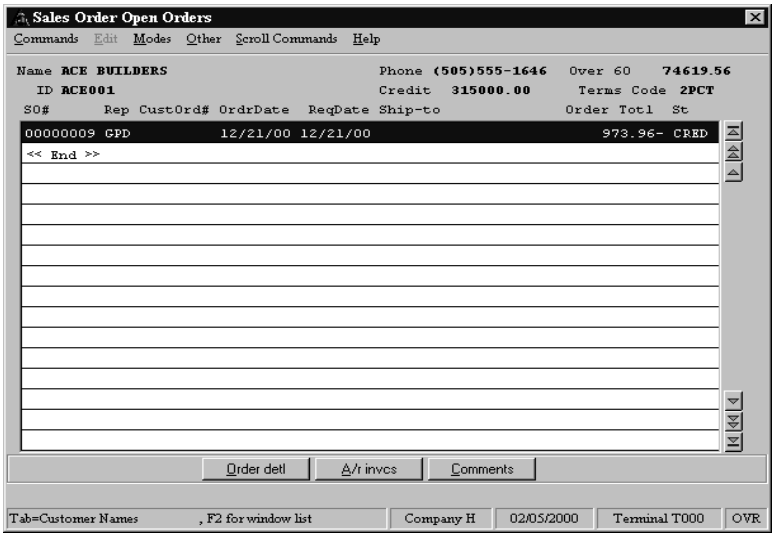
Sales Order Inquiry



It now gives us the choice to inquire about sales orders, invoices, customer history, paid invoices, and miscellaneous customer information.

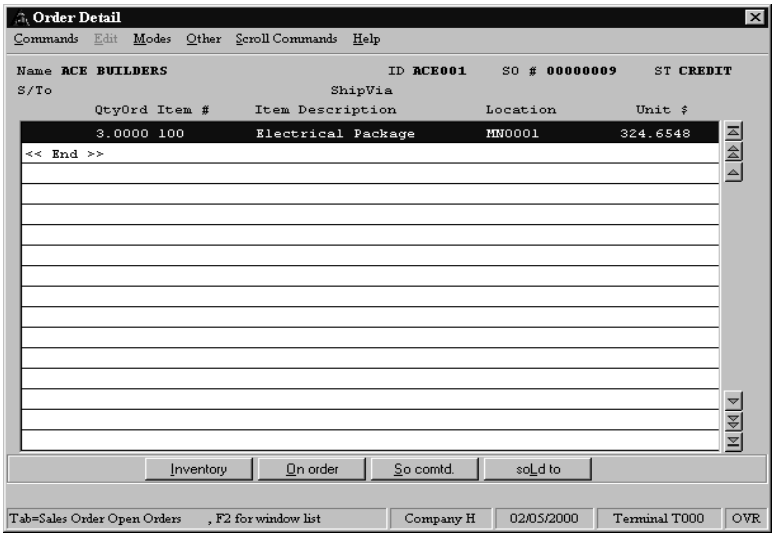
After choosing the Sales Orders all the open orders for that customer are displayed

Sales Orders



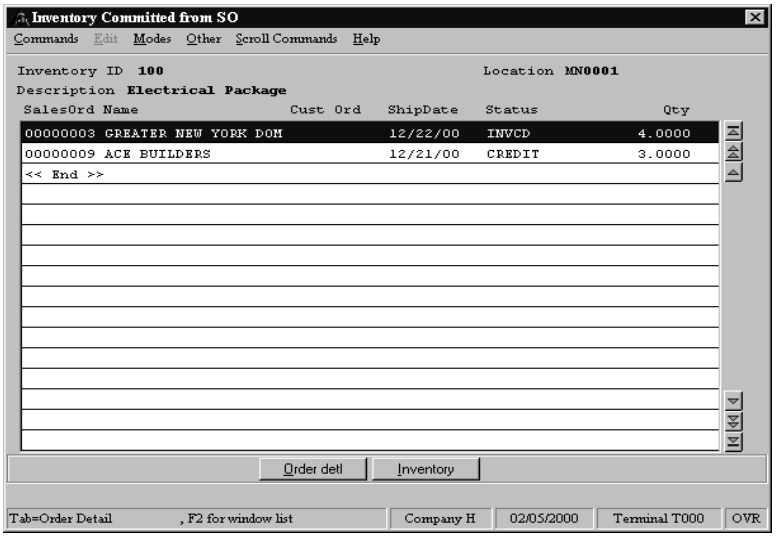
Again we are given options for further inquiry as we choose the actual line detail of each sales order and the results of this are shown on the next page.

Order Detail



As we proceed deeper into the inquiry we selected the Sales Order committed quantity and it will display the records showing the breakdown of the committed quantity and will leave us with the opportunity to see what the on order quantities are for that item in full detail if we choose to select it.

Committed Inventory

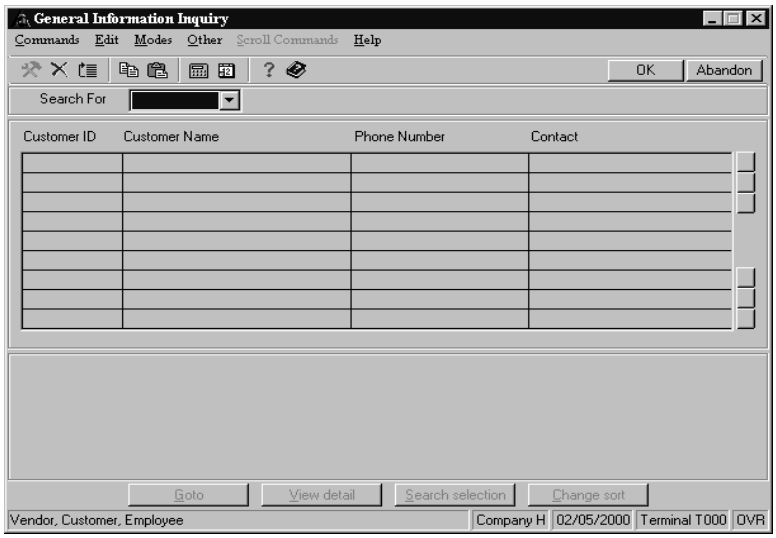


As you have seen there are many things that you may look up using the Global Inquiry function. You may wish to become more efficient at using this function and the benefits it may provide. If you are interested please call technical support or your reseller to inquire on the availability of a global inquiry classes.

General Information Inquiry

Use the General Information Inquiry to quickly look up a specific Vendor, Customer, or Employee. The information that is displayed comes from the General Information screen for Vendors (AP / PO), Customers (AR / SO), and Employees (DD / PA).

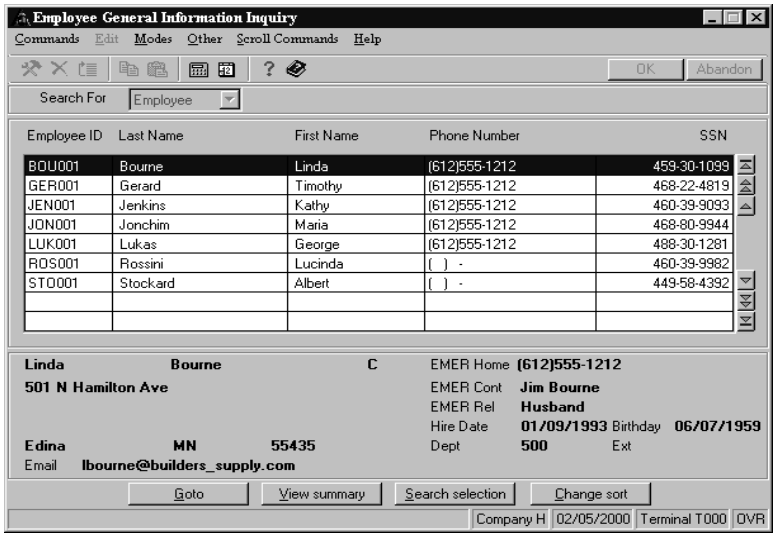
Selection Screen



Note

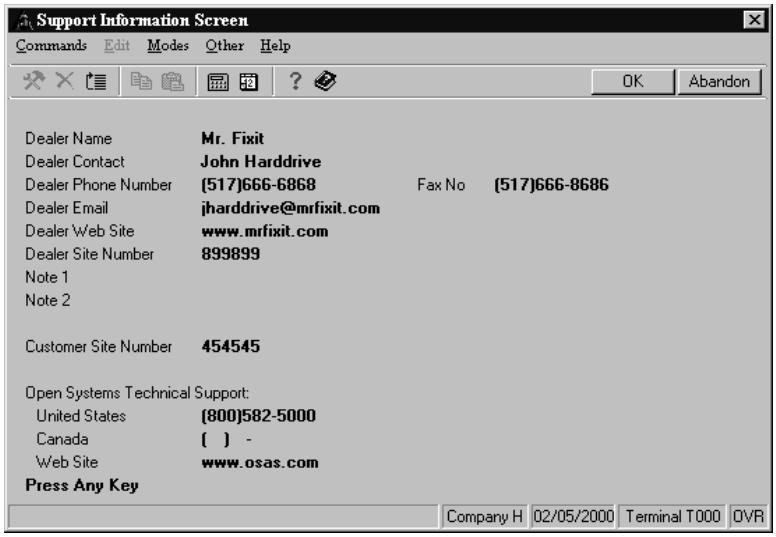
This information cannot be edited or changed here, only displayed.

Employee Inquiry



Support Information

Information Screen

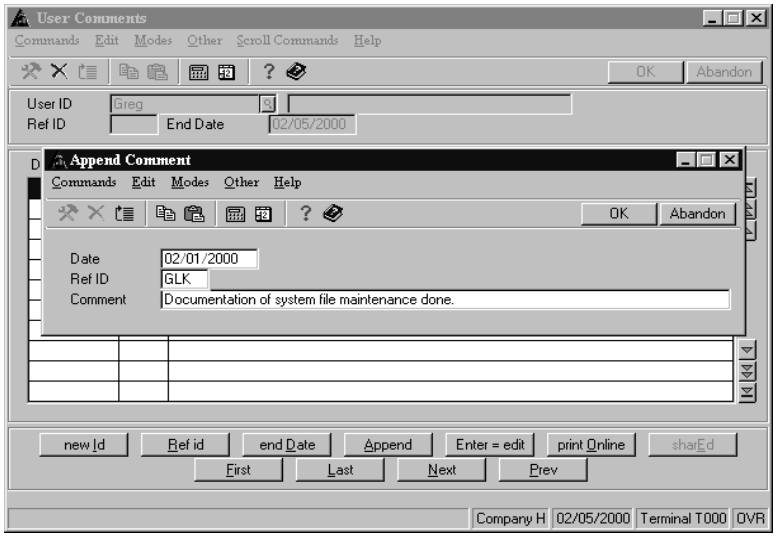


The **Support Information** function from the Other Commands menu will simply display the information that has been entered on the support information screen located in System File Maintenance

User Comments

Select the **User Comments** function from the other commands menu to enter a dialog of user activity for the past or present. Enter the User ID and a Reference ID, the workstation date will default in and then enter a brief comment for whatever documentation you wish to save. An example of the screen is shown below.

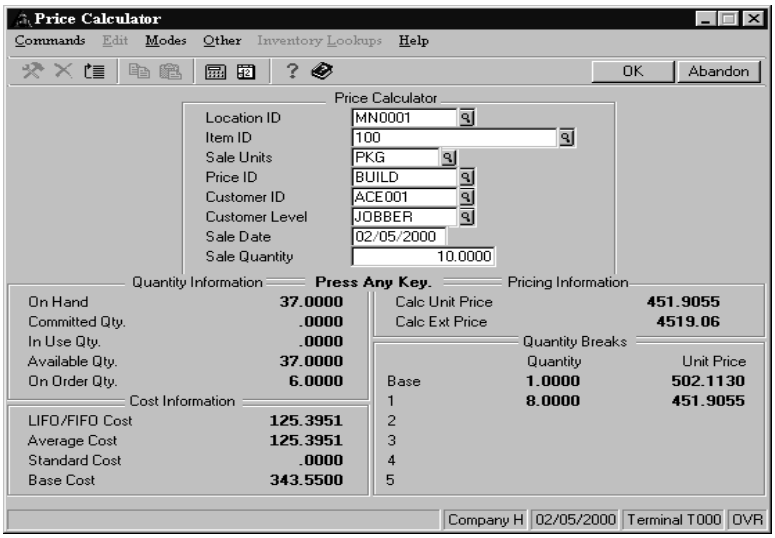
Comment Screen



Inventory Price Calculator

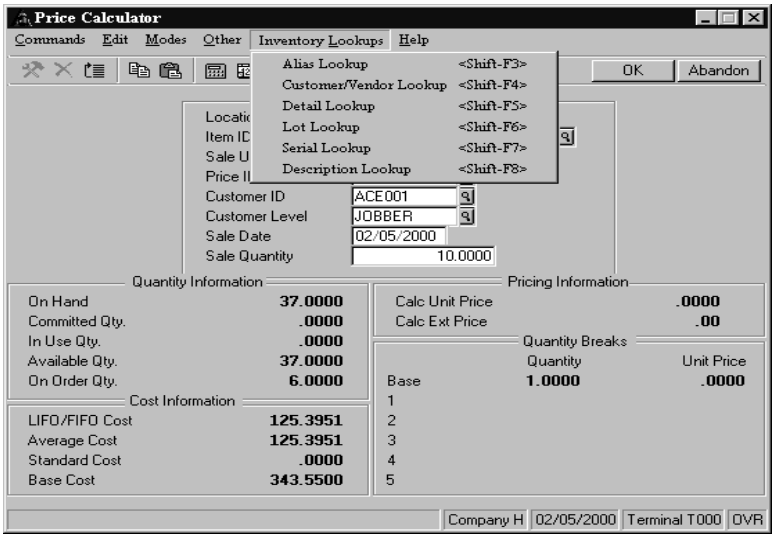
The **Inventory Price Calculator** function will allow you to use your terminal for online Point of Sale inquiry. It will, depending upon interface settings, display pricing for inventory items with price breaks and associated discounts, as well as the most current cost information.

Calculation



Choose the appropriate information such as item location, item ID, the unit of measure being used, the price ID if used, the customer ID, the customer level if used, the date will default from the workstation date, and the quantity you wish to sell. Press PgDn to calculate and quantity, cost, and pricing information is displayed. Press enter to make another calculation.

Inventory Lookup



Errors 12

Reference Materials and Support Tools

It is important to keep good written notes about errors or problems you encounter while using OSAS. If you encounter a problem that's similar to one you've already solved, you have a head start towards resolving the new one.

An example of the kind of problem-solving notes you should keep are shown on the following page.

Most errors that you encounter are file corruption errors that can be caused by power surges, power spikes, or bad sectors on a hard drive. Refer to the Prevention section in the System Administration training guide for more information about protecting your system from file corruption.

A few things to check if you do run into a problem or an error include:

- Has the function worked before? If so, has anything been changed (hardware or software)?
- Does the function work properly in the sample company, Builders Supply? This is always a good test if you suspect file corruption because the sample company uses the same programs as your live company but different data files. If the function works in Builders Supply, but it does not work in your live company, chances are it is a data file problem.
- If the function has worked before and you are having the same problem in Builders Supply, Inc., reload the original programs.
- With the addition of version 6.1x, you will need to verify under what specific circumstances the error happens. This means testing in the **sample** company, and also testing the issue in both **TEXT** and **GUI** modes for differences.

When attempting to resolve errors or problems you encounter in ***OPEN SYSTEMS Accounting Software***, there are tools that can help you do the job better. The *User's Guides* can be used for answering most functional questions regarding any particular application. As a general rule, each user's guide includes:

- Table of contents
- List of functions, page numbers for each menu item
- Chapters for setting up and using the application
- T-accounts for each post and/or month-end process
- Sections covering common questions and system messages
- Section describing data files and functions that update them
- Glossary of terms used in the guide

Note

Be sure to use our website (www.osas.com) for frequently asked questions, updates to errata, compatibility issues etc. If you have access to the eVAR section you often times can search for your specific issues and get potential resolutions.

The **Developer's Tool Kits** are important tools to have if you plan to do programming, to help you with error processing or creating General Report Writer reports. There is a Basic Developer's Tool Kit (can be purchased by users through their resellers or by resellers) and an Advanced Developer's Tool Kit (available only to resellers). The main component that is mentioned throughout the error processing section is the *File Descriptions* manual. It is a part of both developer's kits. It contains a description of each file, a list of the file's keys, and the variables used to store all the data. An example of the file description for the Vendor file is included in the error 47 example.

BASIC Notes for XENIX/UNIX

The examples in the Error Processing section are done in a Windows environment. You can use the same steps to resolve errors on a XENIX system, but there are a few things to keep in mind.

1. The break sequence used to break out of a program and get to a BASIC prompt in DOS is Ctrl-Break, Ctrl-A. It may be different on a XENIX/UNIX system. If Ctrl-Break, Ctrl-A does not work for you, enter the following command at the operating system prompt (# or $) to determine the break sequence for your terminal:

   stty -a <CR>

   It must be entered in lower case. Several lines of information will be displayed. Search the lines for something that reads intr=. The key sequence after the equal sign tells you what the interrupt key is for your terminal. Common interrupts include **Esc**, **Del**, or **Ctrl C**. Replace Ctrl Break with the interrupt sequence for your terminal. For example, if your terminal's interrupt is set to Del, you would press Del, Ctrl-A to get to a BASIC prompt whenever the instructions specify Ctrl-Break, Ctrl-A.

2. XENIX/UNIX systems are case sensitive. As a rule, put the Caps Lock on when you are working in BASIC. All program and data file names must be in capital letters on XENIX/UNIX systems, even when you enter the file name for rebuilding.

File Structures

Two types of files are associated with the ***OPEN SYSTEMS Accounting Software***: **Program files** and **Data files**. Program files, which contain instructions that tell the system what to do with the data you enter, are provided by Open Systems and are copied to your hard drive during installation. The data files store the information or data you enter for your company.

OSAS version 6.xx data files are made up of records. Each record stores the data for one element of the file. For example, the Customer file contains one record for each customer, the General Ledger Master file contains one record for each general ledger account, and the Open Invoice file contains one record for each invoice. One section contains identifiers for each record and another section contains corresponding data.

The identifier for each record is called the key. A key is a group of characters unique to each record, used to identify individual records. For example, a key to the Accounts Receivable Customer file is the six-character customer ID. If you want to look up address or balance information about a specific customer, you need to know the customer ID. The system will look at the key to determine where to find the corresponding data in the file.

The data files are called mkeyed files because each record has multiple identifiers or multiple keys made up of different parts of the actual data. The default or first key is the primary key. You might have 16 keys per record. In addition to being an identifier, keys are presorted pieces of information. Since the keys are already sorted, reports generally print faster because sort files do not have to be created. For example, reports printed from the Customer file can be printed by customer name, zip code, distribution code, phone number, and so forth, because the keys for the Customer file store these data items.

Mkeyed files are dynamic in size, so you do not have to preallocate a specific number of records for a data file. For instance, you do not have to calculate how many customers or open invoices you will have in a year. Once they are created, the files continue to grow as you add information.

A sort file contains only the key information and is used strictly for sorting. The system sorts information when some reports are selected or before you post. In OSAS version 6.xx, sort files are not used because all the data files are Mkeyed files.

This is a diagram of the Customer file. The entire square is the *file*. Each row within the square is a *record*; there is one record for each customer. Each box within a row is a *field*.

Note

The fields and information are abbreviated.

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      PRIMARY KEY
        KEY 0                 KEY 1                KEY 2
       CUSTOMER        ZIP CODE + CUST ID     DISTRIBUTION CODE +
          ID                                       CUST ID

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The keys are subsets of the data. The primary key (Key 0) is the information stored in the first field of the file. In the Customer file, the primary key is the customer ID. Key 1 in the Customer file consists of the zip code and Customer ID. These data items are stored in a separate section and are presorted. Key 2 consists of the customer's distribution code and customer IDs. These keys are used when the system prints reports. If you elect to print a report in Accounts Receivable by zip code, the system reads Key 1. To get the rest of the information for each of those customers as it prints, the system goes back to the original data record. The keys are connected to the original data by *pointers*. Picture them as arrows that go from the key back to the original data record.

Error 0 - Device Busy or Not Ready

Description:

Someone is trying to access a file, record, or device that is unavailable or busy. For example, a printer may be offline or a file or record may be locked by another user. Usually, BBx keeps trying for several seconds before reporting the error.

Comments:

Error 0 is trapped by the OSAS code, which issues the appropriate message:

Record In Use

File In Use

Cannot Open Print Device LP

Suggestions:

- If you are trying to use a print function, make sure that the printer is online and not in use.
- If you receive a **Record In Use** message, another user is accessing the same record of data you are trying to access. Wait a few moments and try the function again.
- If you receive a **File In Use** message, another user is accessing the same data file you are trying to access. Files are usually locked during posts or another critical function. Wait until the other user is finished and try the function again.
- May also get these types of messages under the following circumstance:

    1. If the number of users exceeds the number of licensees.
    2. Missing the line "Files= " in the Config.sys file.
    3. Exiting out of OSAS ungracefully on a network because the network may not realize the session is closed.

Error 2 - End of File

Description:

An attempt has been made to READ or WRITE beyond the end of a file, rather than to the end of a record as is the case with an error 1.

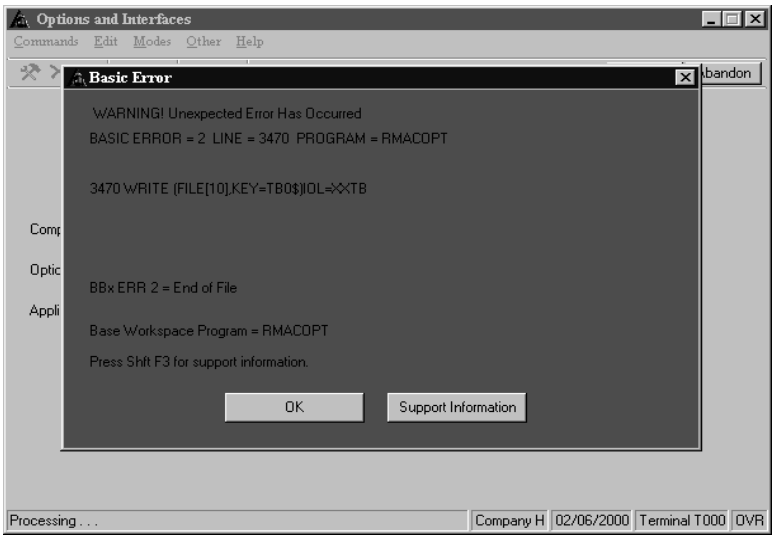
Suggestions:

- If the error occurs on a WRITE statement, verify that you still have available disk space on your hard drive. Since the files are dynamic and expand as records are added, you should reach the end of a file only when there is no more room on your hard drive to expand the file. Use the **SCANDISK** or **DIR** command for a single-user system, **CHKVOL** for a Novell network, and **df** for XENIX/UNIX systems to see how *much space is available on your hard drive.*
- If you still have available space on your hard drive, use the **Change File Size** utility to check the number of records in the file displayed at the bottom of the screen. If a number other than 0 is listed, change it to *00000000*. Then use the **Proceed** (PgDn) command to create a new dynamic file and copy the information to it.
- If the error occurred on a WRITE statement and neither of the previous two scenarios is true or if the error occurs on a READ statement, the file the system is trying to access is corrupted. Use the rebuild utilities-**File Rebuild/Verify**, **Change File Size** or **Purge Data Records**-to try to fix the file.

Error 2 Example

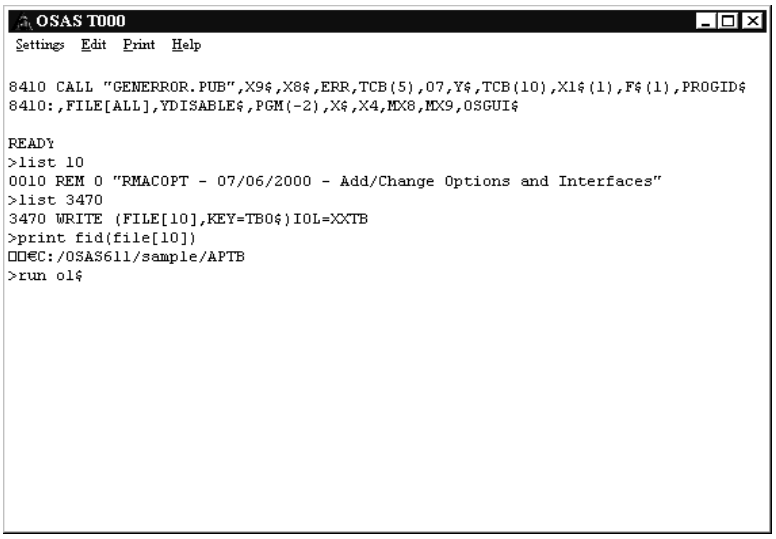
1. Select **Options and Interfaces** from the Resource Manager Company Setup menu. Enter *OWN* for the option table type. Press **PgDn** to proceed. The following error occurs:

Error Box



2. The error occurred on a WRITE statement. Use the **List** (F8) command to print a copy of the screen or write down the information. The error information will also be written to the error log file, which can be printed from the Resource Manager Reports menu. Looking at the IOL= at the end of the line, the system is trying to read from one of the tables files (XXTB). To determine which table file it is, press **Ctrl-F10**, **Ctrl-F10** to get to BASIC. If you are prompted to exit, press **Ctrl-F10**, **Ctrl-F10** again.

Break to Basic



3. Enter **LIST 10** <CR> to list line 10 of the program so that you can verify that the program where the error occurred is still in memory.

4. Enter **LIST 3470** <CR> to list the line where the error occurred.

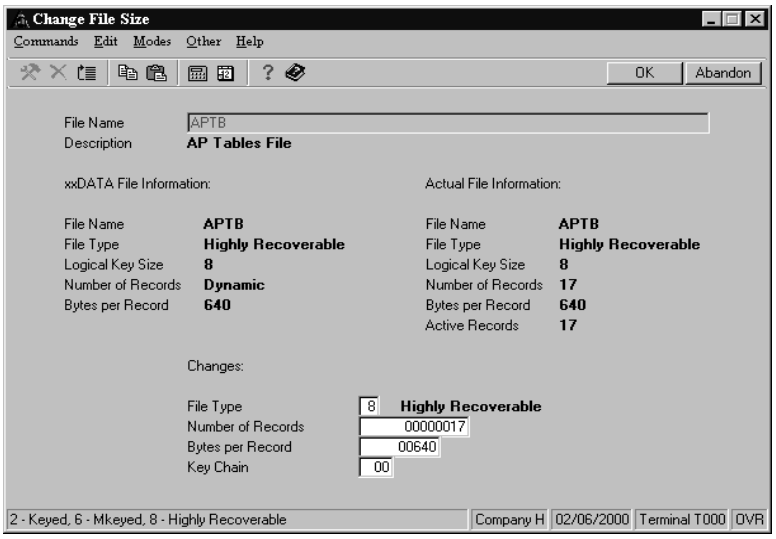
5. Enter **PRINT FID(FILE[10])** <CR>. To find out which table file the system is trying to write to, use the FID command. The full path name and the name of the data file are displayed. In this example it is trying to write to the *APTB* file.

6. Enter **RUN O1$** at the prompt to return to the OSAS menu or enter **BYE** <CR> at the prompt to exit to the operating system to check if there is still available space on the hard drive.

7. Enter **DIR** to get information about the hard drive. In this case there is enough room.

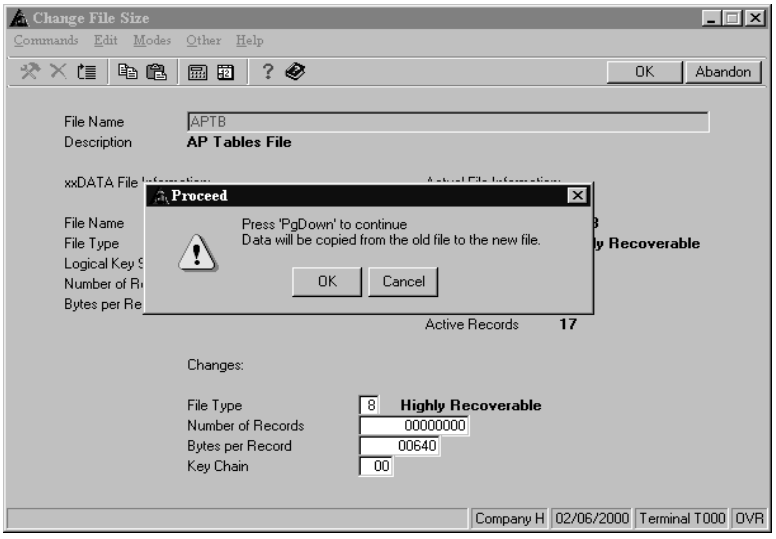
8. Enter OSAS to go back into the software. Select **Change File Size** from the Resource Manager Data File Maintenance menu to check the number of records in the file.

APTB File



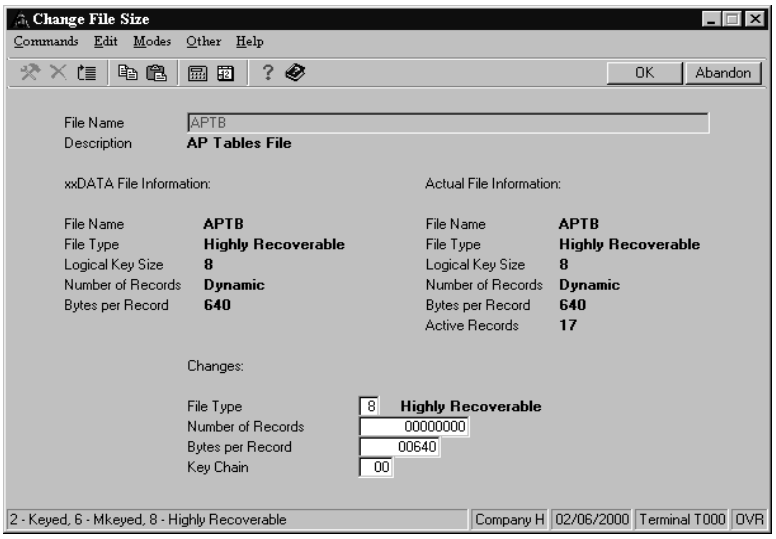
9. Enter **APTB** for the file name. *The number of records should always be zero for a dynamic file.* The number 17 is displayed for the number of records in the file. **The error 2 occurred because there are 17 active records. The file is full**.

Creating new file



10. Enter 0 for the number of records, and use the **Proceed** (PgDn) command to continue and save the new file. A new dynamic file will be created

New APTB.



11. Enter the file name **APTB** again to verify the changes. Highly Recoverable should be displayed for the Number of Records in the Actual File Information. The number of records at the bottom of the screen should be **00000000**.

12. Select **Options and Interfaces** from the Resource Manager Company Setup menu. Enter *OWN* for the option table type. Enter **AP** for the application ID. Press **PgDn** to proceed to change the options and interfaces for Accounts Payable without receiving error message.

Error 3 - Disk Read/Write

Description:

A disk is damaged, or the drive is misaligned.

Suggestions:

- If the error occurs while the hard disk is being accessed on a READ or WRITE statement, run diagnostics on the hard disk and/or have it checked by a professional. You can try to get around the error temporarily by renaming the data file the system is trying to access and using the copy command to move it to a new spot on the drive.
- If the error occurs while a diskette is being accessed, replace the diskette. If the error persists, get the diskette drive checked.
- Usually a host error is included in the error message. If the host error is negative, the operating system is encountering a problem as well as BBx. Refer to the Operating System Errors information later in this section for a list of host errors and descriptions.
- Check for permissions if you are on a network.
- Attempt restoring backup after running a scandisk function.
- Make sure connection from server is intact.

Enter **FLAG *.* <CR>** from a **DOS** prompt in the appropriate directory to see the current rights to the existing files and directories on a **Novell** network. Enter **FLAG *.* +srw** (ver 3.12) and ***.* +shrw**(ver 4.11)**<CR>** to change files to **Shareable Read Write**.

Enter **ls -l <CR>** from a **UNIX** prompt in the appropriate directory to view the current rights for the existing files and directories on a **UNIX** network. Enter **chmod 777 <CR>** to give full rights to those files.

Error 7 -- Sector Pointer Out of Range

Description:

The error 7's are indicating that the file does have some problem and must be rebuilt. This could indicate that someone is rebooting their machine while in OSAS or there is a hardware, power, cabling, etc. problem that is occurring which is causing the corruption.

Follow the directions in the Error 2 section of the manual for instructions on breaking to basic to identify the problem file.

Solution:

- Use the **File/Rebuild and Verify** utility and the **Change File Size** utility to remove the corruption from a specific data file(s) and then test the issue again.

- There are a couple of changes we can do in the software to try and help you possibly pin down the problem. The following method will help if a particular terminal(s) are causing the problem. This method may also help diagnose other corruption errors (i.e. Error 2's, 26's, 47's, etc.) to due terminal specific issues.

1. **Adding a lock file to a terminal alias line**

   Put a lock file on each terminal's alias line. If they enter OSAS and exit gracefully they will be fine and the lock file will be erased, but if they reboot their machine, the lock file will not get erased and they will get an **FS LOAD ERR=15 (3)** the next time they try to enter the software.

   In this way you may be able to pin down which terminal(s) may be causing the corruption, because if you reboot in the middle of OSAS, the corruption that can be caused ranges from no corruption to the file becoming a string file.

   This corruption can also be caused by someone killing a session of OSAS.

   OPEN Windows - To add the lock file to each alias line of OPEN Windows, you will have to use a Text Editor and change each terminal alias line. Make a copy of the config.bbx file in the progRM directory before making any changes. Notice that you put a space, then two quote marks, then a space, then the lock information, make sure you use "/" for the path and always use the same path.

   alias T000 syswindow **"" LOCK=F:/TMP/LOCKT000**

   alias T001 syswindow **"" LOCK=F:/TMP/LOCKT001**

   alias T010 syswindow **"" LOCK=F:/TMP/LOCKT010**

   alias T011 syswindow **"" LOCK=F:/TMP/LOCKT011**

   Notice how the OPEN Windows config.bbx file use the network drive. This will make it easier for the network administrator to check at the end of the day and if everyone is exiting gracefully there should be no lock files in the F:/TMP directory.

UNIX - You can either add the following with vi or go through Resource Manager, Workstation Configuration, Devices and add the lock information to the end of the Device Type field. An example of the Device Type field in devices would be:

ansico LOCK=/tmp/LOCKT1.

Below is what the config.bbx would look like after you made the changes through devices, make sure you use "/" for the path and always use the same path.

alias T1 /dev/tty01 ansico **LOCK=/tmp/LOCKT1**

alias T2 /dev/tty02 ansico **LOCK=/tmp/LOCKT2**

2. Set a SETOPTS bit to force update of file length.

See line 35 of "RMMENU" for where we set some of the setopts information.

35 let a$=opt$,a$(2,1)=$80$; setopts a$; rem reset opts

This line sets the 2nd byte to 80. If you change the 80 to an 81 then this will cause VPro5 to force DOS to update the length of an mkeyed file after any growth in the file. In other words if people are having corruption due to caching you could change this and see if the problem goes away. This will slow down writes to the files, but increases file integrity.

Error 11 - Duplicate or Missing Key

Description:

An attempt has been made to access (READ/EXTRACT/FIND) a record in a file, using the KEY= option when there is not such a key in the file.

BBx will also issue this error if an attempt is made to WRITE a key, using the KEY= option, when the DOM= option is also present, and that key already exists.

Comments:

Most error 11s are trapped and appear as messages which indicate that the data element cannot be found:

Vendor Not on File
Customer Not on File
Tax Location Not on File

Suggestions:

An error 11 (not trapped with a message) will usually occur on a READ, EXTRACT, or FIND statement and does not occur often. The system is looking for a specific record in a file and it is not found. They most often occur with transaction or open order files and are caused by corruption.

In most cases however, the **File Rebuild/Verify** or **Change File Size** utilities will not fix the error.

You can restore a backup or find out which record is missing and remove any additional related records from the file using the **Purge Data Records** utility.

If the **error 11** occurs on a **WRITE** statement without a DOM clause you may try to use the **File Rebuild and Verify** function to try fixing it, otherwise restore a backup of the file or else purge the record being accessed.

Note

Be sure you understand the significance of purging the record out of any ***companion files*** that may also have that record in it. For instance, if a record is purged from the POOHxxx file it may have to be purged from up to 8 other files depending upon method of order entry, the types of inventory ordered, and the item descriptions being used.

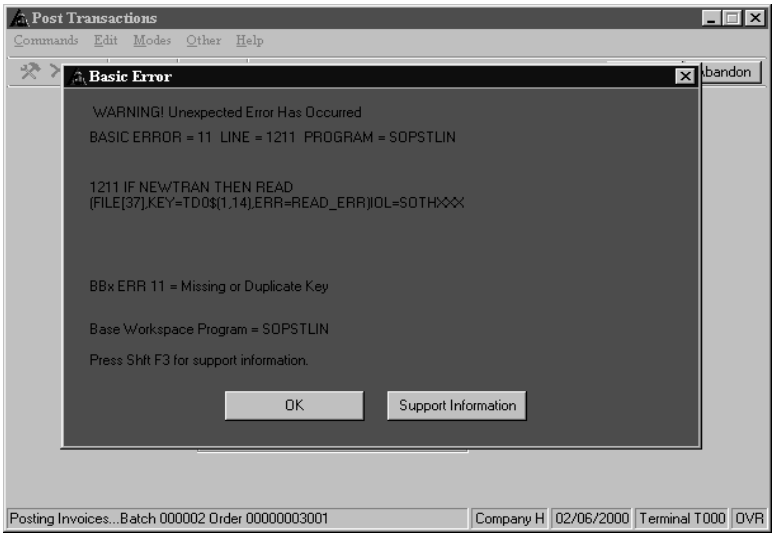
Note

If you are purging a record from an application that updates another application on-line be sure that when re-entering the transaction the interface will need to be turned off to ***prevent*** duplication. The other side of this is that you may need to edit information in the other application before re-entering the original transaction. Or you may need to edit more than one file in the updated application.

Error 11 - Example

The following example happened while posting transactions in Sales Order, the screens being displayed will be similar to what you might see and how you would handle the problem.

Error Message



1. In this example, the system is looking for a specific record in the Sales Order Open Order Header file (SOTHxxx). Press **Ctrl-F10** to get to the BASIC prompt (>). If you are prompted to exit, press **Ctrl-F10** again.

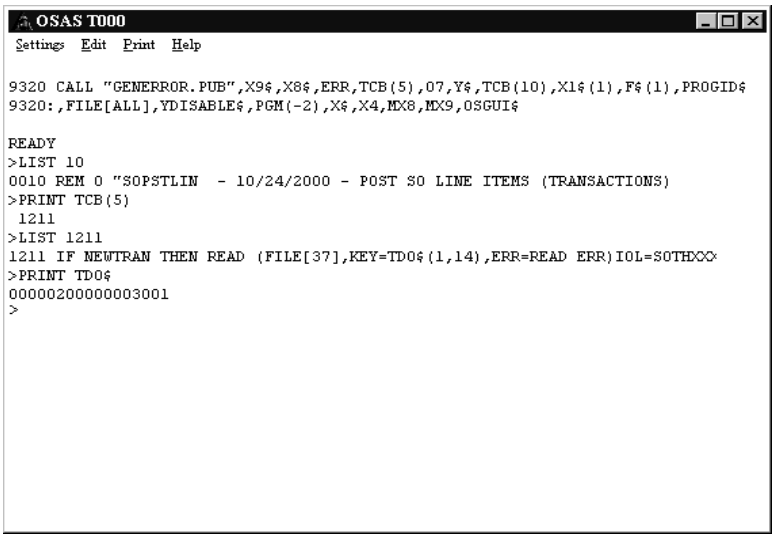
   1211 IF NEWTRAN THEN READ (FILE[37], KEY=TD0$ (1,14), ERR=READ_ERR)IOL=**SOTHXXX**

   Notice that the system is trying to read the header file (**SOTHXXX**) based upon the key from the detail file (**SOTDXXX**).

2. Print the KEY that is being used to determine which record the system is looking for. In this example, you would enter **PRINT TD0$ <CR>** to display the key reference. It is the sales order number.

   1211 IF NEWTRAN THEN READ (FILE[37], KEY=TD0$ (1,14), ERR=READ_ERR)IOL=**SOTHXXX**

Break to Basic



3. The system is looking for the header record, and it is not found. To fix the error, use the Purge Data Records utility to remove all line items for the order number **TD0$(1,14)**, in the (SOTDXXX) file. If in this case we were also using the Additional Descriptions for our transactions, we would need to purge the same record from the SODEXXX file.

4. You may want to reenter the transaction in its entirety. However, you may need to change your options and interfaces to reenter the transaction appropriately, depending upon your original settings.

Error 12 - Duplicate or Missing File

Description*:*

The system is trying to access a file that cannot be found or trying to create a new file in a directory with the same name as an existing file in that directory.

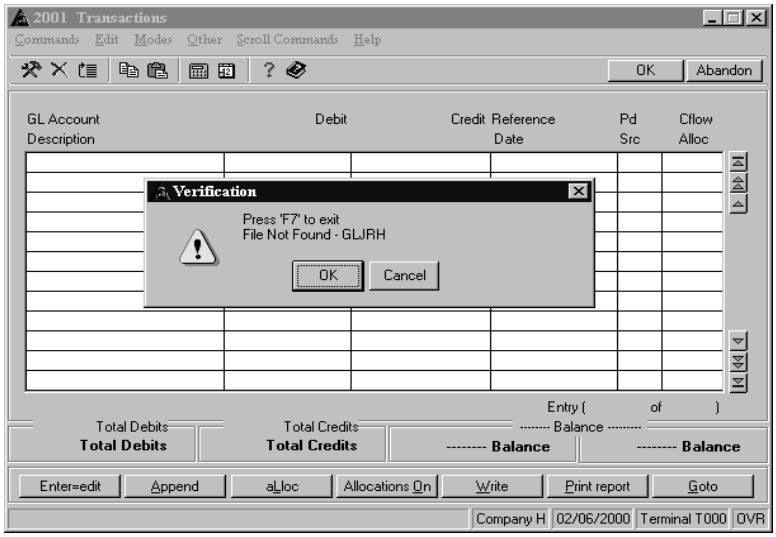
Comments:

Most error 12's are trapped by the programs and appear as the following message:

File XXXXX Not Found

The XXXXX is replaced with the name of the file

Edit Transactions.



Suggestions:

1. Check to see if the file that the system is trying to access is available and located in the proper directory. If it cannot be found, you must find another copy of the file, and load it onto the system. You may have to restore a data backup, create a new data file, or reload a program or data file off the application media to do so.

2. If you are running a multiuser system and the file appears to be available, check the file and directory permissions, and the user rights on some systems. If the function works when you are logged in with supervisor or superuser permissions, the problem is ***permissions-related***.

Error 13 - Improper File/Device Usage

Description:

An attempt has been made to perform an unmeaningful operation on a file or device-for example, reading a printer or a program file.

This error also occurs if a data file is so corrupt that the system does not recognize it as a data file.

Suggestions:

1. If the error occurs when a data file is accessed, use the **Change File Size** utility to check the integrity of the file being accessed. Make sure that the file type listed under Actual File Information is *Mkeyed/Highly Recoverable*. **If it is *String*, the file is too corrupt to rebuild**. You must restore a backup copy, or in some cases you can create a new file. ***Be sure that you check for companion files as they will often times need to be corrected too***.

2. If the file type is Mkeyed/Highly Recoverable and you are on a multiuser system, perhaps you don't have the proper permissions to perform the function. Try the function logged in as supervisor or root. If it works, it is a permissions problem.

3. This error can also occur if a DATA file and a PROGRAM file have the same name. If the system has not been modified, contact Open Systems Technical Support. These circumstances may only occur for a company and application specific scenario, i.e. Company = ND, App = PA causing a conflict with PAWIND.

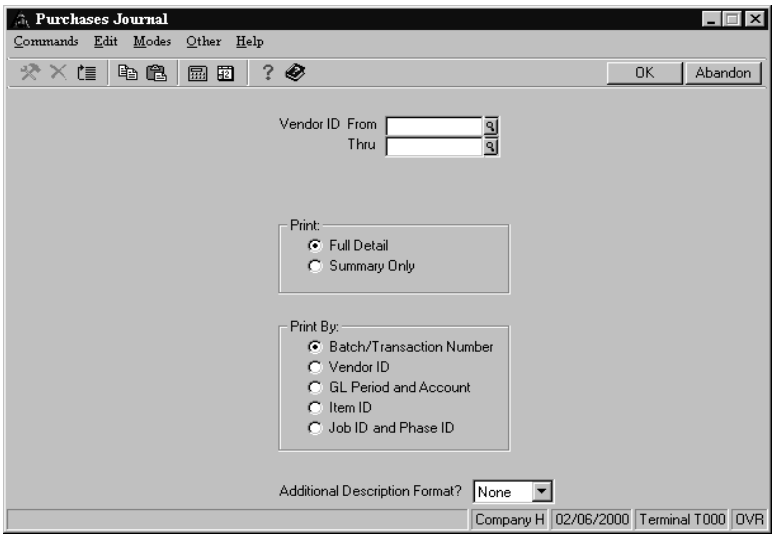
4. Check for permissions if you are on a network.

   Enter **FLAG *.* <CR>** from a **DOS** prompt in the appropriate directory to see the current rights to the existing files and directories on a Novell network. Enter **FLAG *.* +srw** (ver 3.12) and ***.* +shrw**(ver 4.11)<CR> to change files to **Shareable Read Write**.

   Enter **ls -l <CR>** from a **UNIX** prompt in the appropriate directory to view the current rights for the existing files and directories on a **UNIX** network. Enter **chmod 777 <CR>** to give full rights to those files.

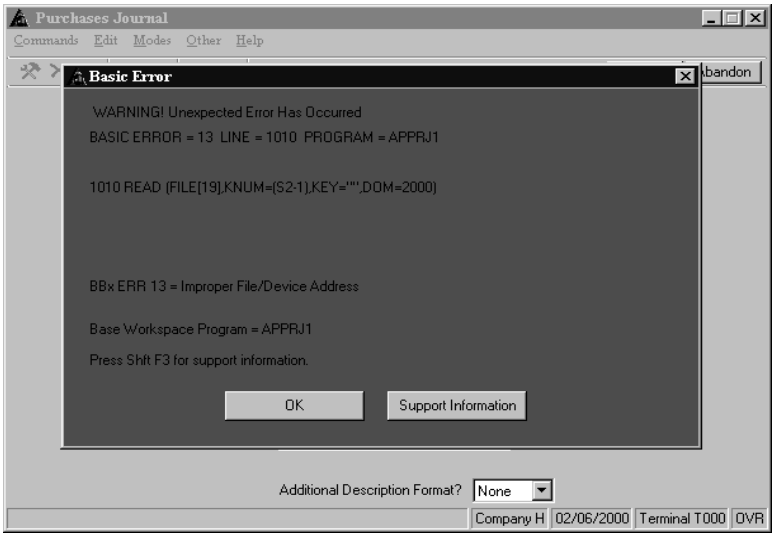
Error 13 - Example

Accounts Payable Purchases Journal



1. Select **Purchases Journal** from the Accounts Payable Daily Work menu. Print the journal for all vendors, in detail, and sorted by transaction number. Output it to the screen.

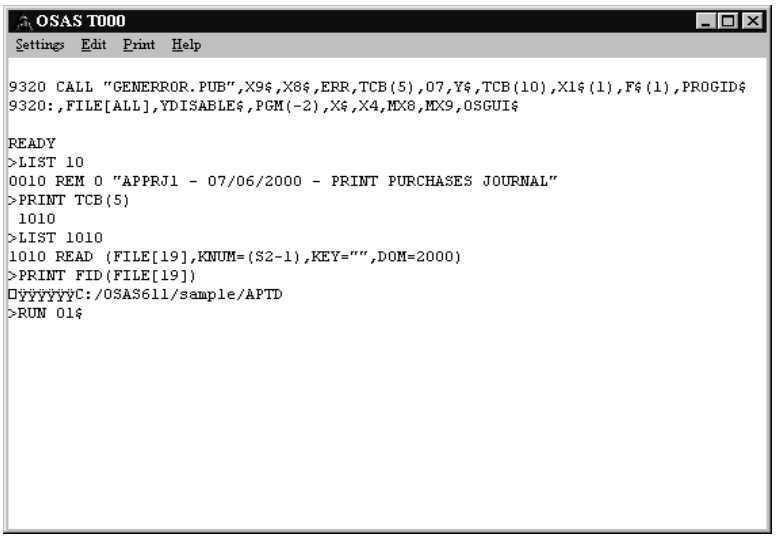
Error Message



2. Use the **List** command to print a copy of the screen, or write down the information. The error information will also be written to the error log file, which can be printed from the Resource Manager Reports menu.

3. Press **Ctrl-F10** to get to the BASIC prompt. If you are prompted to press F7 to exit, press **Ctrl-F10** again.

Break to Basic



4. Enter **LIST 10 <CR>** to verify that the correct program is still in memory.

5. Enter **PRINT TCB(5)<CR>** to verify the last line of code that was executed to determine where the error occurred, then. **LIST 1010 <CR>** to list the last line executed, where the error occurred. This should be the same line as the error you received on your terminal displayed.

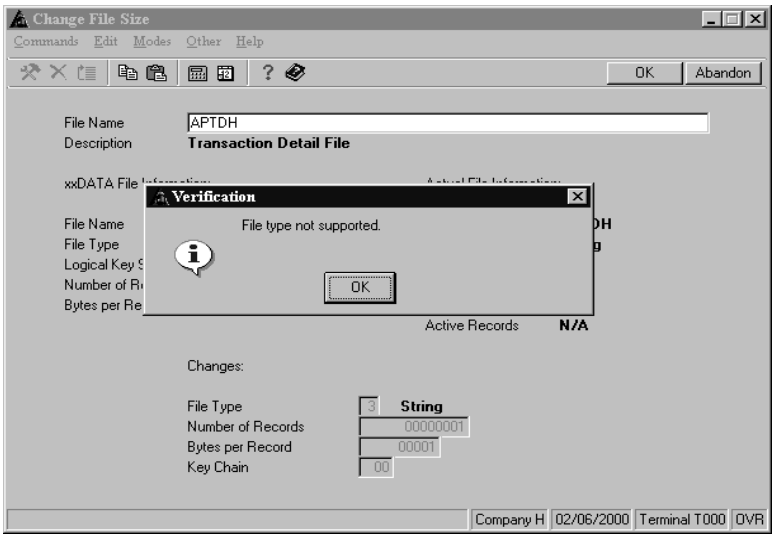
6. With either error, the system is accessing the same file. Enter **PRINT FID(FILE[19]) <CR>** to find out which file the system is reading.

   The system is reading the **APTDH** file.

7. Enter **RUN O1$** to get back to the OSAS menu.

   On a multiuser system, try to run the function when you are logged in as root or supervisor to find out if it is a permissions problem. If the function works when you are logged in as root or supervisor, the integrity of the file is OK. Your user permissions must be changed so that you can use this function. If the same error occurs when you are logged in as root or supervisor, or you are on a single-user system; use the **Change File Size** utility to check the integrity of the data file

Change File Size



8. Select **Change File Size** from the Resource Manager Data File Maintenance menu. Enter **APTDH** for the file name.

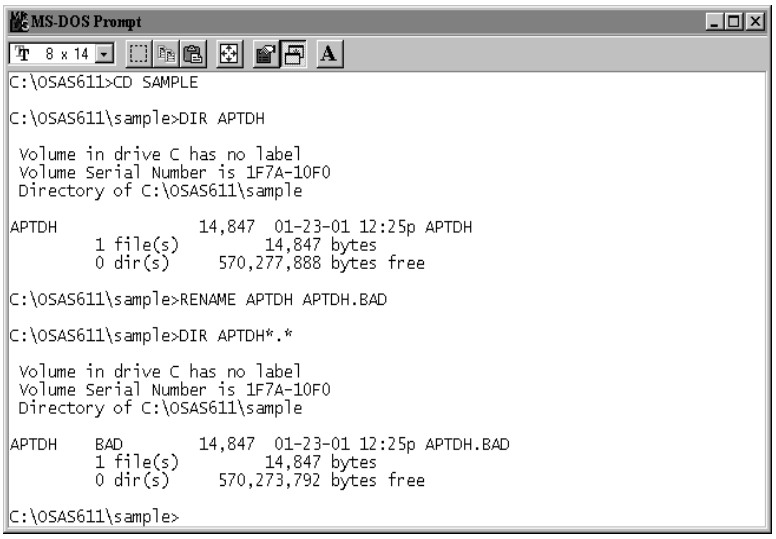
   In this example, the file is no longer mkeyed. The header has been corrupted and the system is interpreting it as a string file. The file is corrupt beyond repair, you can only restore a backup copy or create a new data file.

   To decide whether to restore a backup or create a new file, you have to know a little about the data files: what information they store and when they get updated. In this example we are dealing with the *Transactions file* for Accounts Payable. This temporary file stores transactions that are entered through Daily Work functions and are removed when they are posted. Generally you can elect to create a new file if you are working with a transaction file and not many transactions have been processed since the last post. *Open Order files* (used in Sales Order and Purchase Order) cannot be re-created so easily since all orders are not purged during a post; open orders are still on file.

   Since the *Checks files* in Accounts Payable and Payroll are temporary files, you can erase them if they are string files. Use the **Data File Creation** function to create new files on your system. *Be sure when using this function that you say **NO** to erase existing data files.*

   In this example, we would create a new transactions file (**APTDH**). Also to be consistent and create the companion files that would be related **(APTHH and APDEH).**

Renaming Data Files



9. Exit to the operating system. You must rename or erase the existing file. We recommend that you rename the file and erase it after you know the new file is working correctly. The commands below are for a DOS system. Refer to the appendix for the appropriate XENIX commands.

    - Enter **CD\OSAS611\SAMPLE <CR>** to change directories to the /OSAS611/sample/ directory.
    - Enter **DIR APTDH <CR>** to confirm that the data file is located there.
    - Enter **RENAME APTDH APTDH.BAD <CR>** to rename the file.

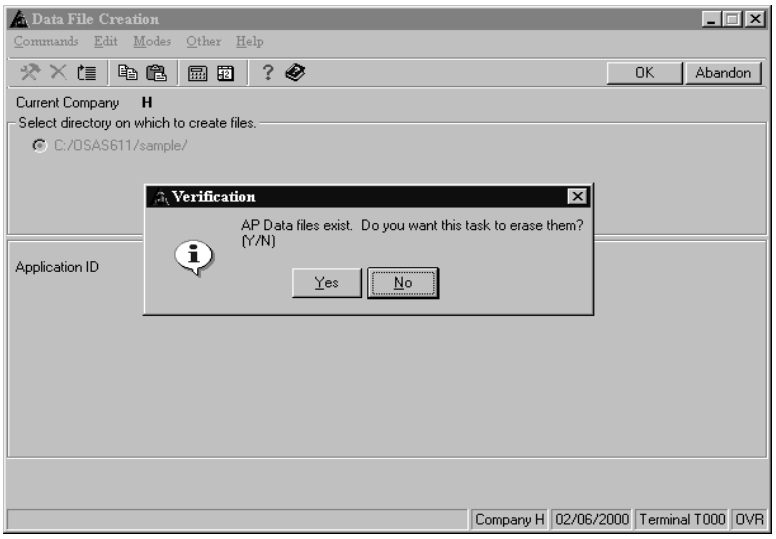
Note

Be sure to rename companion files also to avoid future error 11's.

    - Enter **DIR APTDH*.* <CR>** to confirm that the rename worked.
    - Enter **CD** to change directories back to the root directory.

Enter **OSAS** to go back into the software.

Data File Creation



10. Select **Data File Creation** from the Resource Manager Company Setup menu.

11. Enter the application ID, **AP**.

12. A message should appear indicating that data files already exist for this application. **Enter "No" so that the system will not erase these files**. Use the **Proceed** (PgDn) command to begin the function. Only the file that is missing (because we renamed it) will be created.

13. Reenter the transactions that were lost.

Note

If you do create a new transactions file and Accounts Payable or Accounts Receivable is interfaced with Inventory, turn the interface with Inventory off before reentering the transactions that were lost. Inventory is updated online when you enter transactions and will be updated twice when you reenter the transactions if you do not turn off the interface. Select **Options and Interfaces** from the Resource Manager Company Setup menu to change an application's options and interfaces.

Error 16 - Table Overflow

Description:

Too many channels are opened.

Comments:

When too many channels are opened, the system will appear to be hung and the cursor may be flashing in the lower right corner of the screen.

Suggestions:

- Select **Devices** from the Resource Manager Workstation Configuration menu to verify that the following parameters are set correctly in the CONFIG.BBX file:

  STBLENS=10240

  FCBS=100

  HANDLES=100

  CIBS=100
- If a host error of -4 is displayed with the error 16, verify that the CONFIG.SYS file exists and contains these lines:

  FILES=100

  BUFFERS=32

  FCBS=40,36

  STACKS=9,256
- If the lines are missing, create a new CONFIG.SYS file and reboot the system.
- Disable virus scans and reboot.

Note

FILES=100 should be used with the Windows Resource Manager. On Novell 3.12 be sure that FILE HANDLES=100 in the NET.CFG. The combination between Files (config.bbx) and File Handles (Net.cfg) cannot exceed 255, which is the maximum allowed by DOS.

- If you are on a XENIX system and the CONFIG.BBX file contains the correct parameters, an error 16 commonly indicates that the file and/or lock parameters must to be modified in XENIX. See the SCO XENIX KERNEL RECONFIGURATION notes in the appendix of this manual.

Error 18 - Permission Denied

Description:

You do not have the proper permissions to perform a particular task.

Suggestions:

- On a multiuser system, check user and file permissions. Try to run the function when you are logged in as supervisor or root. If it works when you are logged in as one of these users, it is a permissions problem.
- Use the "ls -l" command on a XENIX system to check the permissions on directories and files. A user should have read and execute permissions on program files; write permissions if you want to allow them to make changes to the programs. A user should have shareable read and write permissions to data files and read, write and execute permissions to all data directories. Users performing post or periodic maintenance functions must be able to erase and create files. Refer to the appendix or your XENIX user manual for more information about permissions and changing them.
- Check for permissions if you are on a network.

  Enter **FLAG *.* <CR>** from a **DOS** prompt in the appropriate directory to see the current rights to the existing files and directories on a Novell network. Enter **FLAG *.* +srw** (ver 3.12) and ***.* +shrw**(ver 4.11)<CR> to change files to **Shareable Read Write**.

  Enter **ls -l <CR>** from a **UNIX** prompt in the appropriate directory to view the current rights for the existing files and directories on a **UNIX** network. Enter **chmod 777 <CR>** to give full rights to those files.

Error 20 - Syntax Error

Description:

The syntax of a particular line of code is invalid, or you made a typographical error while typing in BASIC.

Suggestions:

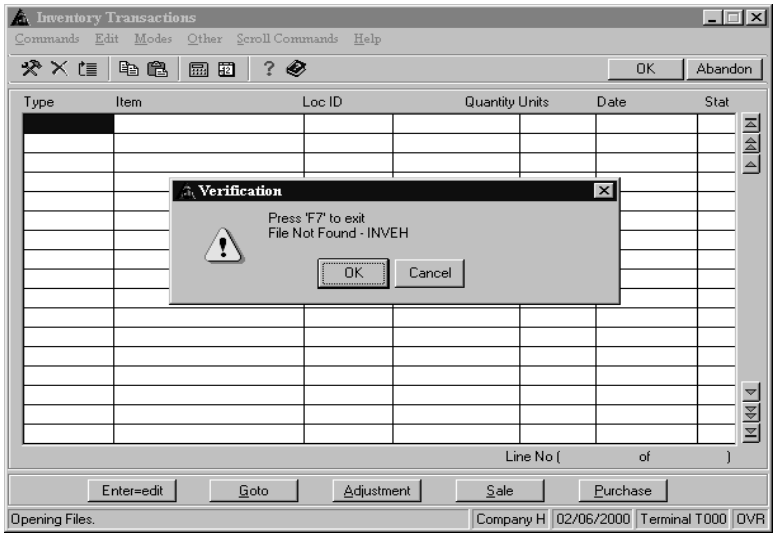
- If the error occurs while you are typing in BASIC, try the command again.
- If the error occurs during a function, find out if the code has been modified or if the user has made any changes on his own, or assisted by a support representative in an attempt to fix a problem. It is common for code, especially read over the phone, to be misinterpreted and entered incorrectly. If it seems that this could be the case and the error occurs on one of the edited lines, double-check and reenter the line of code.

Comments:

Sometimes people mix up quotation marks and apostrophes, the number 0 and the letter O, BASE and space, and F and S.

You may also get this error if the merging of records into **OSTPL** or **OSCNVT** during an install is not completed properly. In versions starting with 5.16x you will receive the following message telling you that a record was not found.

Inventory Transactions



Error 26 - String/Number Mismatch

Description:

A string was used where a number was needed, or a number was used where a string was needed. Since the software does not let you enter characters into numeric fields, this error usually occurs when you have a corrupted data file.

Suggestions*:*

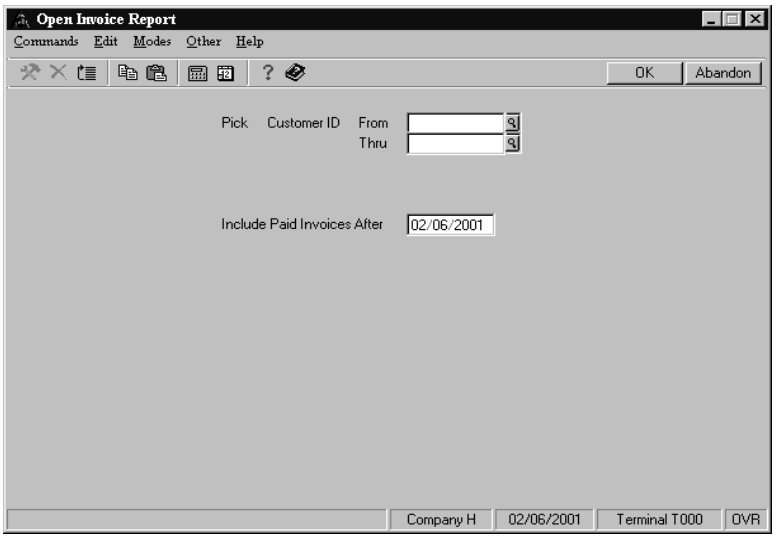
- If the error occurs on a READ or EXTRACT statement, file corruption is indicated if the system is unmodified. The easiest solution would simply be to establish which file was the problem and restore a back-up copy of the file. If backups are not available you might try rebuilding the file.
- If the error occurs after upgrading your software from an earlier version, verify that the correct steps were taken to convert the data.
- Try the **File Rebuild and Verify** function, then the **Change File Size** function and then check for any blank or corrupted records using the **Purge Data Records** function.

Note

Be very sure of what you want to delete, when you press the F3 key in this function you will not get that record back except through a backup.

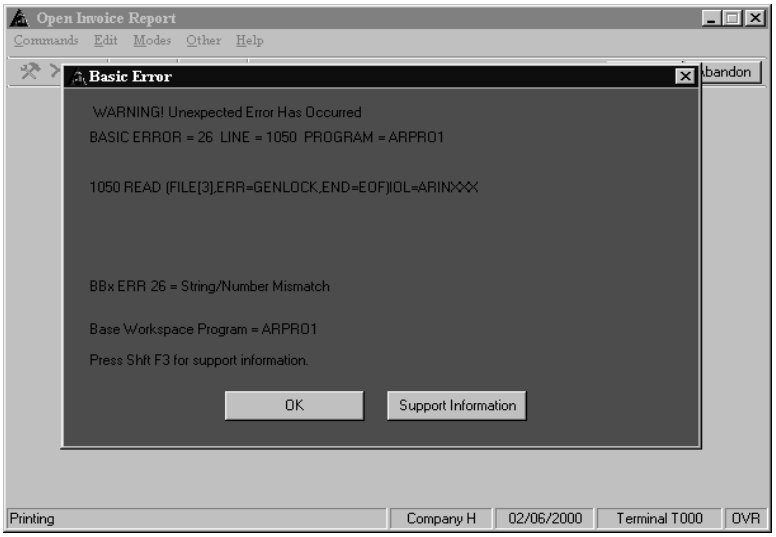
Error 26 Example

Accounts Receivable Open Invoice Report



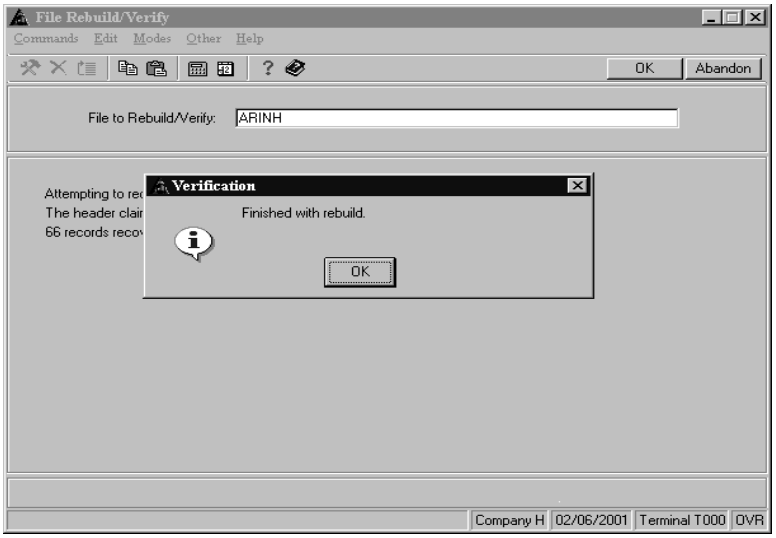
1. Select **Open Invoice Report** from the Accounts Receivable Open Invoices menu. Print the report for all customers and output it to preview. The following error is displayed:

Error Message



2. Use the **List** command (**F8**) to print a copy of the screen, or write down the information. It will also be written to the error log file. The **IOL=ARINX** at the end of the code line indicates that the system is trying to read the Accounts Receivable Open Invoice file (ARINx).

ARINx File Rebuild



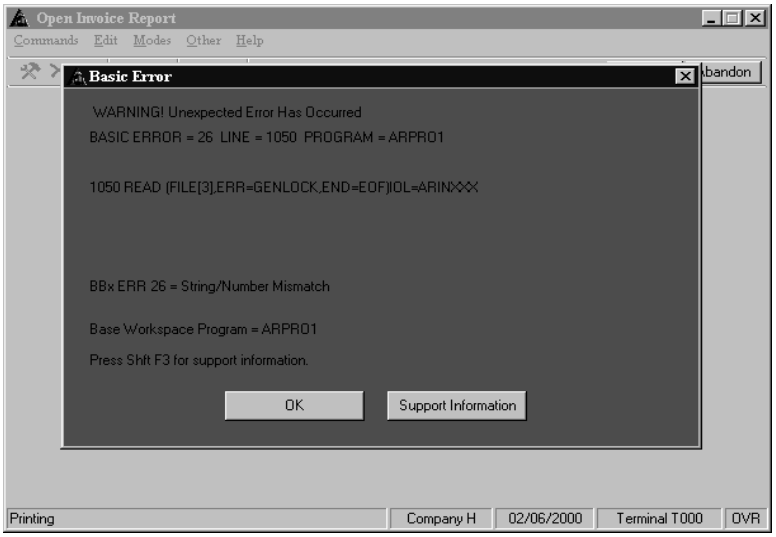
3. Use the **Exit** (F7 or Esc M) command to go back to the menu. Select F**ile Rebuild/Verify** from the Resource Manager Data File Maintenance menu.

4. Enter **ARINH** for the file name. **H** is the company ID.

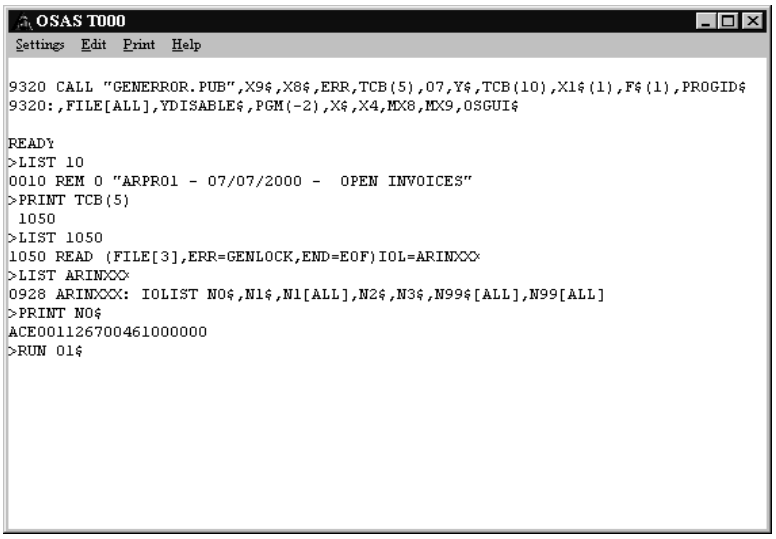
5. All keys were found. Enter **Y** to proceed with the reconstruct anyway. Enter **0** for the key to rebuild. Enter **Y** to replace the original file.

6. Print the Open Invoice Report again. The same error is displayed. Press **Ctrl-F10** to get to the BASIC prompt. If you are prompted to exit, press **Ctrl-F10** again.

Error Message



Break to Basic



7. Enter **LIST 10 <CR>** to verify that the correct program is in memory.

8. Enter **LIST 1050 <CR>** to list the line where the error occurred. If you are not sure what line the error occurred on enter **PRINT TCB(5)** and it will return the last line executed.

   Since the **File Rebuild/Verify** utility did not work, your options are to restore a backup or try to remove the damaged record.

   Before you make this decision, be sure that you know when and how the information gets into this file and if you can reenter it through the system. Since you are working with the Open Invoice file, you can remove the damaged invoice and then reenter it. For a history file, you could not reenter the information without duplicating it in several other files. When you reenter the invoice, however, turn off the interfaces with other applications, and turn off the option switch to save history because this invoice has already been posted to history. Totals in the Customer file should be manually adjusted so the do not include the amount of this invoice.

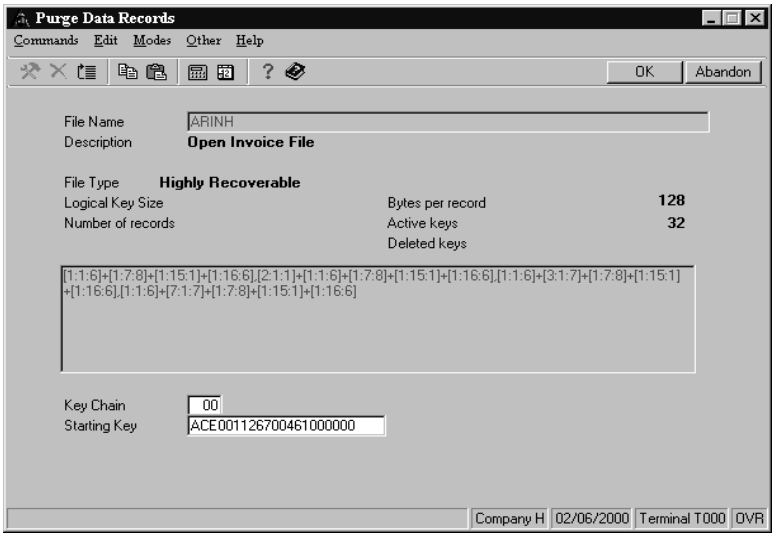
   To find out which invoice or record it is, print the primary key. The primary key is always the data stored in the first field of a record. Enter **LIST ARINX <CR>** to find which variable is storing the key for the Open Invoice file from within the program. The IOList for the Open Invoice file is printed. The first variable listed is the primary key. For the **ARINx** file, it is the variable **N0$**.

9. Enter **PRINT N0$ <CR>** to print the value stored in N0$. The first six characters are the customer ID (ACE001). The next eight characters are the invoice number (6080 followed by four spaces). The next digit (7) represents the type of invoice: an invoice, a credit or a payment. The number 7 indicates that it is a payment. This information is in the *File Descriptions* manual which can be purchased as part of the Developer's Tool Kit. The last two digits (00) are a sequence number assigned by the system to track multiple invoices with the same number for the same customer.

10. Enter **RUN O1$ <CR>** to go back to the OSAS menu.

11. Select **Purge Data Records** from the Resource Manager Data File Maintenance menu.

ARINx Purge Data Records

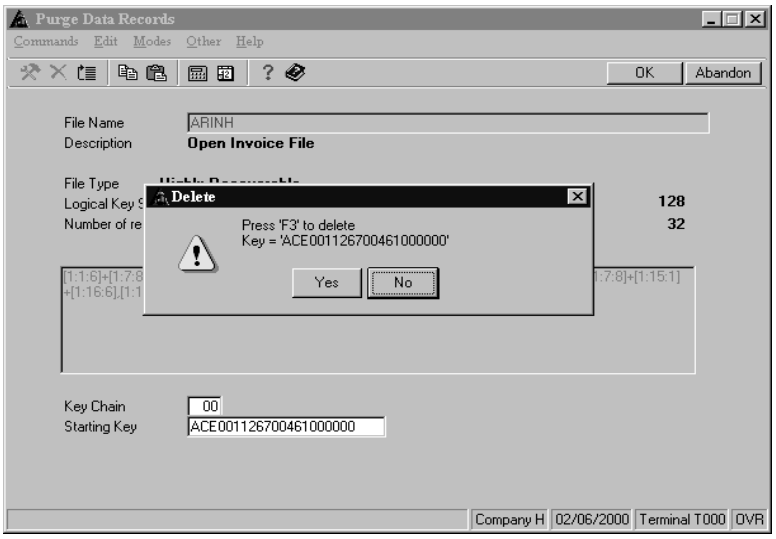


12. Enter **ARINH <CR>** for the file name.

13. Enter **ACE00112670046100** for the starting key. Enter it exactly as it appeared when you printed it on the screen at the point of error.

Press **PgDn** to proceed.

Delete function



14. You are prompted to delete the record with the key you specified as the starting key. Press **F3** to delete it.

Note

If the wrong key is displayed, use the Abandon function to start over, or press **Enter** to go to the next key in the file.

15. Use the **Exit** (F7 or Esc M) command to return the Resource Manager menu.

16. Print the Open Invoice Report again. It should print without an error.

17. Turn off the appropriate option and interface switches and adjust the Customer file before reentering the payment.

18. Print the Open Invoice Report again.

Error 30 - Bad Program

Description:

An attempt has been made to LOAD, RUN, or CALL a bad program file.

Suggestions:

- Find out which program is bad by listing the line of code on which the error occurred. Recopy the program file from the original media into its appropriate directory. If the error persists, check for files with duplicate file names and the integrity of the original file/media. If you think that the program might be located on a bad spot of the hard drive, rename the program and copy it again from the original media.
- Be prepared to thoroughly check out your hardware as anything that may cause electrical noise or interrupt the communication path on a network may cause this error. Examples of items to check could be poor cabling, bad terminators, or incompatible drivers etc....

Note

If you are unsure as to the last line of code that was executed, from a BBX prompt enter **PRINT TCB(5) <CR>** and the last line of code will be listed.

- Error 30 ’s may also occur while attempting to create a file if you are on a Windows 95 terminal using an incompatible 32-bit client. Be sure that you are using the latest available Novell 32-bit client. You can also check our website www.osas.com for other information under support.

Error 31 - Workspace Memory Overflow

Description:

The operation (for example, loading a large program or trying to READ or WRITE a large record) cannot be done with the available memory inside the workspace .

Insufficient Memory (31)

Suggestions*:*

- Below are the standard settings for memory that are allocated for VPro5, if you are receiving error 31's you may need to increase or verify the number of pages of memory allocated for VPro5, change the "-m" parameter in the following places.

  Open Windows Installations

  These parameters are set on the properties line of the icon. Because the Open Windows interpreter is a 16-bit interpreter the parameters listed below are already set to the maximum.

  The **"-t"** and **"-n"** parameters will change with the Terminal ID, the **"-m"** parameter shows your base workspace memory size (displays pages and 4 pages =1k of memory), and the **"-p"** parameter shows the workspace memory size set aside for running programs (displays pages also). Below is an example of the properties line for a windows icon.

Version 6.0x +	**C:\apps\osas60\progrm\osastm.exe -m4096 -tT00 -nT00**
Version 5.2x	**C:\apps\osas52\progrm\osastm.exe -tT00 -nT00 -m255 -p250**

  XENIX/UNIX Installations

  Below is an portion of the rmstart program for a Xenix/Unix Resource Manager, please note that the **"-m"** parameter is found in 3 different places and if needed, should be change in all 3 places.

  ```
  Entering Open Systems (R) Accounting Software\c'
  trap '' 2
  if [ -s ./bbx4run -a -u ./bbx4run ]
  then
  ./bbx4run -q -m512 RMSETUP - -c$OSCOMP -a$OSCODE
  CODE=$?
  if [ $CODE -gt 5 ]
  then
  ./bbx4 -q -m512 RMSETUP - -c$OSCOMP -a$OSCODE
  CODE=$?
  fi
  else
  ./bbx4 -q -m512 RMSETUP - -c$OSCOMP -a$OSCODE
  CODE=$?
  fi
  ```

Note

The file in Xenix/Unix versions will be **"rmstart"** and not **RMSTART.BAT**.

Error 33 - System Memory Overflow

Description:

There is not enough memory outside the user workspace to perform some operation. The error may appear as the following message:

Insufficient Memory (33)

Suggestions:

- Make sure that the system meets the minimum memory requirements.
- For DOS single user and LANs, you must have 640K total base, 512K for OSAS. OSAS does not recognize extended memory.
- For XENIX/UNIX systems, you must have 1 MB for the operating system and 512K for each terminal using OSAS.
- Check for terminate and stay resident (TSR) programs that may be occupying needed memory.
- If you receive this message when you try to print a report to the screen, use the Defaults function on the Workstation Configuration menu to lower the number of Screen Pages for your workstation.
- If changes have been made to the rmstart file (see error 31), check the number of pages being allocated for BBx. If this number is set too high, it can cause error 33s.

Error 43 - Mask Overflow

Description:

The system is trying to print a number that is larger than the mask defined for that number. For example, you cannot print the number 10,749.95 with the mask "#,###.00" because the number requires 5 places to the left of the decimal and the mask allows only 4. This error most commonly occurs when the system tries to print large report totals.

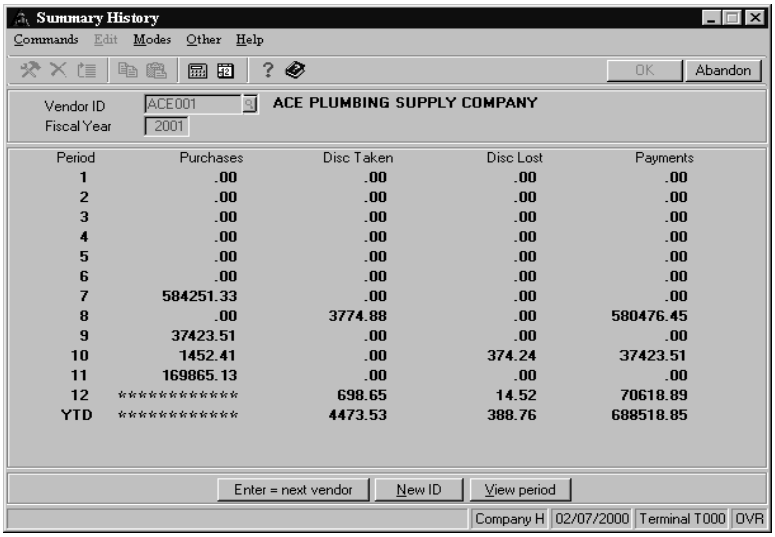
Note

This error is not displayed in **versions 5.x and later**, instead it merely will show as asterisks on your reports.

Suggestions:

The following example shows how an error 43 is treated in versions 5.x and later showing merely that a number is too large. Rarely will this ever occur unless for instance, periodic processing is not being done.

Accounts Payable Inquiry



Error 46 - Invalid Key Size

Description:

The KEY= option has a string longer than the defined key size for the file. The file is corrupted or you may have modifications.

Suggestions:

- Find the name of the file the system is trying to access and use the **File Rebuild/Verify** utility to rebuild it.
- If the rebuild does not work then try purging out the appropriate record, if this does not resolve the problem follow the steps below.
- Try the **Change File Size** utility. If you receive an error 46 running this utility, follow the steps below to try to go around the error.

  1. Press **Ctrl-F10** to get to the BASIC prompt (>). If you are prompted to exit, press **Ctrl-F10** again.

  2. At the BASIC prompt, enter **GOTO 3095 <CR>**. This will send the program to read the next record in the file, skipping the one with the invalid key.

  3. Enter **RUN <CR>**.

  4. Repeat steps 1 through 3 as needed.

Note

Each time you enter **GOTO 3095**, you are skipping past a record in the file and **may be losing data**.

- Restore a backup of the file.

Error 47 - Substring Out of Range

Description:

An attempt has been made to reference an invalid substring. For example, let's say that string variable R$ contains ABCDEFG (the length is seven characters). If you tell the system to PRINT R$(1,3), the system returns ABC, or if you tell it to PRINT R$(4,4), the system returns DEFG. These are substrings of R$. The first number in a substring refers to the beginning character (or byte) of the string variable to be addressed (the starting point). The second number refers to the number of characters to be included in the substring, starting with the beginning character. Now, if you tell the system to PRINT R$(7,2), you will get an error 47 because you are telling the system to print the seventh and eighth characters when the string is only seven characters long.

Suggestions:

There are several ways to resolve an error 47 caused by file corruption:

- Use the File Rebuild/Verify utility to rebuild the data file.
- Use the Purge Data Records utility to remove the problem record from the file.
- Depending on the function you are trying and whether you have a current backup, the best approach may be to bypass the error. Follow the steps below to redimension the suspect variable.

    1. To find out which string variable is causing the error, print each substring as it appears in the program line that was displayed when the error occurred. You will receive an error 47 when you encounter the problem variable. Use the **LEN()** function to print the length of the variable that is causing the problem. (To check the length of R$ in the above sample, you would enter **PRINT LEN(R$)**, which would return a value of 7.)

    2. To find out how long the string variable needs to be, you need to find out what is contained in the variable and where it comes from. Consult the *File Descriptions* manual and/or the program listing (with cross-references). Usually check the file layouts and DIM statements.

Now you have two options.

1. The first option is to use a DIM (dimension) statement to initialize the string variable. For example, if in the above sample R$ should be ten characters long, you could enter DIM R$(10). Using the DIM statement, however, sets R$ equal to ten spaces, and data that was contained in the variable will be lost.

2. The second option, which will preserve the existing data in the variable, is to increase the variable's length by adding spaces to the end of it. We have determined that R$ is only seven characters long and that the system requires it to be ten characters long. Entering the following line will increase the length of R$ without losing the data currently in this string variable:

   >LET R$=R$+FILL(3) <CR>

   The FILL function will add the number of spaces you specify in the parentheses following the word. In this example, 3 spaces will be added to R$. Note that this is only a temporary fix to get by the problem and will not rewrite any variables to the file from which the problem stems.

   You may need to run a loop to set this variable to the proper length without losing existing data if you are dealing with multiple records. It should include a line of code in the format below, where X is the correct length of the variable R$.

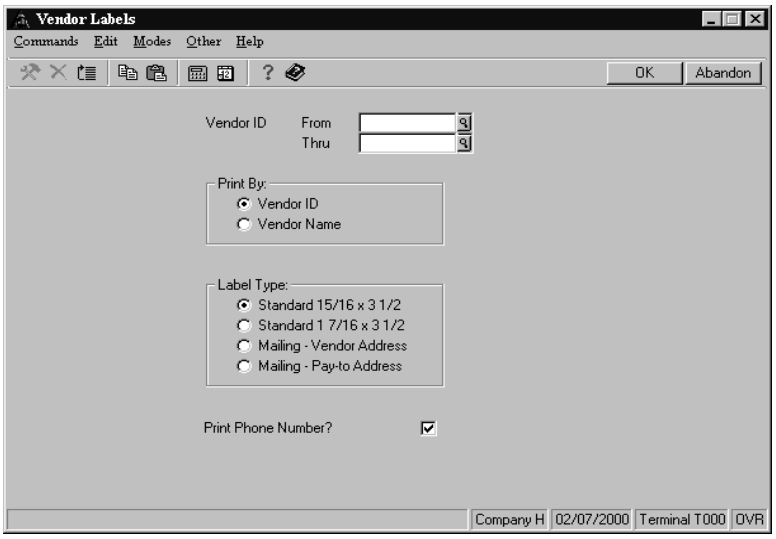
   >LET R$=R$+FILL(X-LEN(R$)) <CR>
   >RUN <CR>

This will allow the variable to be set with the correct length in the file permanently.

3. Restore data file backups. Make a new backup of the current data with the error before restoring old backups, because the error may exist on the old backups also.

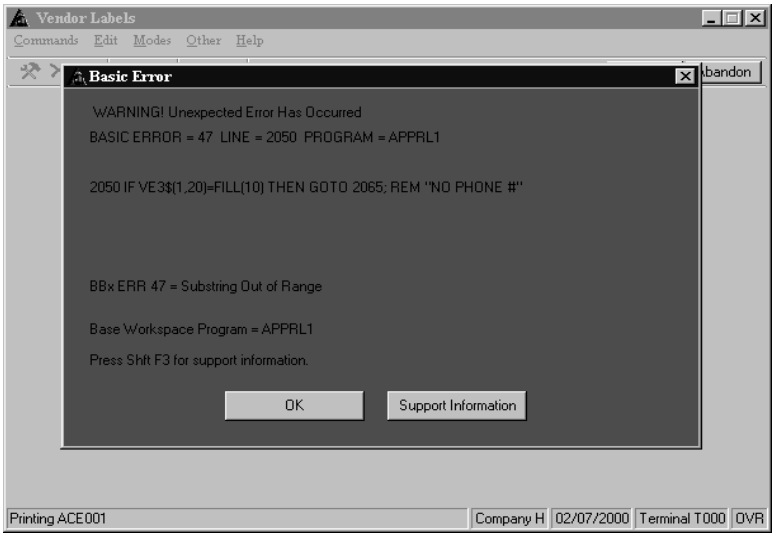
Error 47 Example

Selection Screen



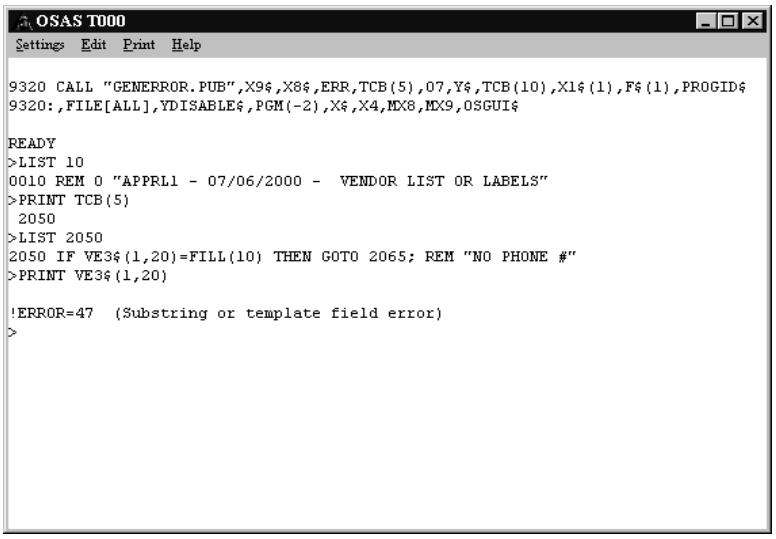
1. Select **Vendor Labels** from the Accounts Payable Master File Lists menu. Print standard labels for all vendors, organized by vendor ID. Enter **YES** to include phone numbers. Output the list to a file, and specify your name for the name of the file. The following error is displayed

Error Message



2. Use the **List** (F8) command to print a copy of the screen, or write down the information displayed. It will also be written to the error log file. Press **Ctrl-F10** to get to a BASIC prompt. If you are prompted to exit, press **Ctrl-F10** again.

Break to Basic



3. Enter **LIST 10 <CR>** to verify that the correct program is still in memory.

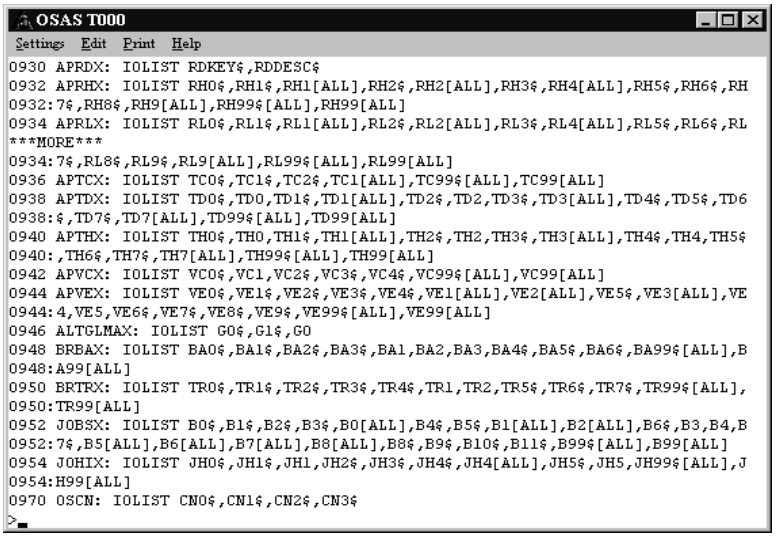
4. Enter **PRINT TCB(5) <CR>** to list the last line executed **LIST 2050 <CR>** to list the line where the error occurred.

   In this example, the error did not occur on a READ or WRITE statement. Finds out which variable is causing the error 47 and which file that information is coming from. The error must be occurring on the variable V3$(1,20) because that is the only variable in the line that uses subscripts (numbers in parentheses).

5. Enter **PRINT VE3$(1,20) <CR>** to confirm the error 47.

6. Enter **LIST 900,1000 <CR>** to list lines 900 through 1000 to determine which file uses this variable.

Data Files



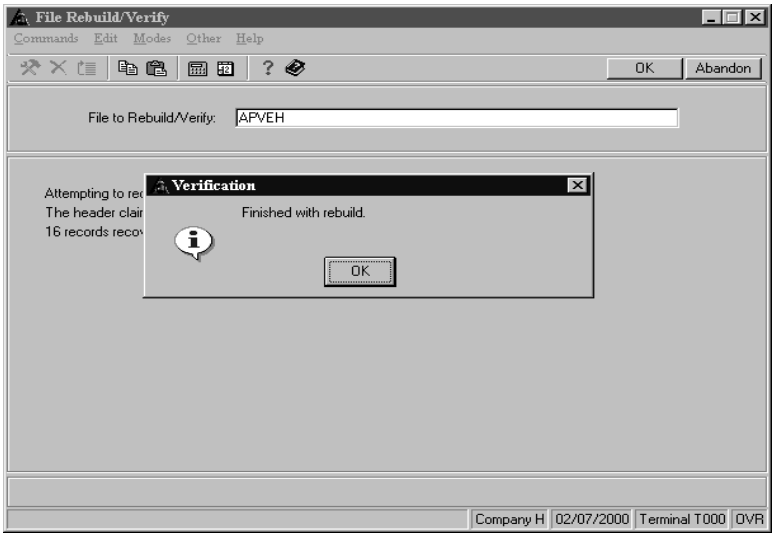
7. VE3$ appears in line 944, which is the input/output list (IOL) for the Vendor file (APVEx). You can try to rebuild the Vendor file.

8. Press **Ctrl-C,** to return to the BASIC prompt.

9. Enter **RUN O1$ <CR>** to return to the OSAS menu.

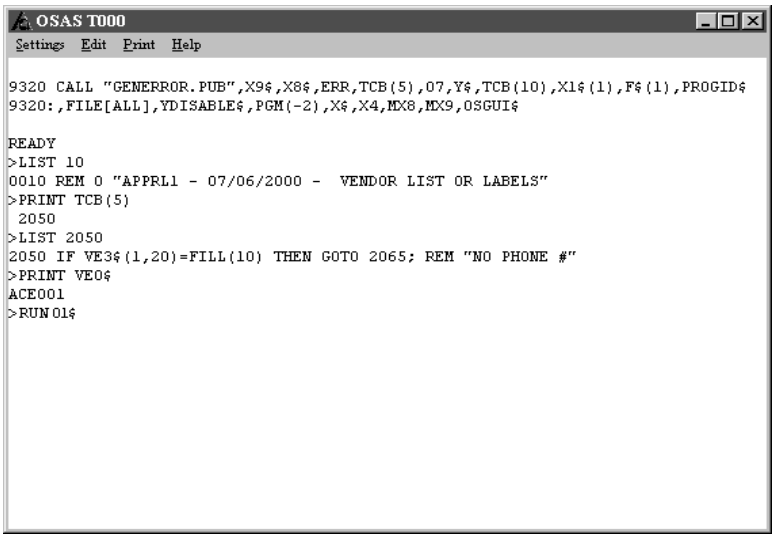
10. Select **File Rebuild/Verify** from the Resource Manager Data File Maintenance menu. Enter **APVEH** for the file name.

File Rebuild/Verify



11. All keys were found. Enter **Y** to proceed with the reconstruct. Enter **0** for the key to use to rebuild the file. Save the rebuilt file. Select Vendor Labels from the Master File Lists menu in Accounts Payable to print the labels again. The error appears again. Press **Ctrl-F10** twice to get to the BASIC prompt.

Break to Basic



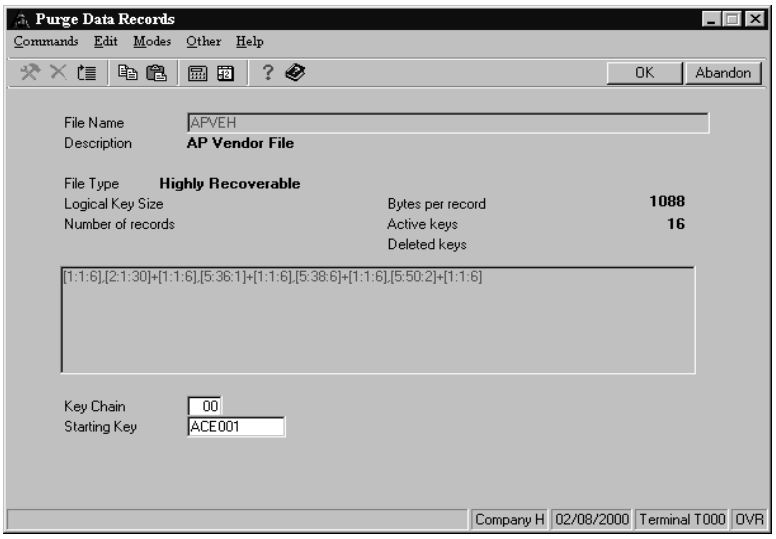
12. Enter **LIST 10 <CR>** to verify that the correct program is in memory.

13. Enter **PRINT TCB(5) <CR>** to list the last line of code executed **LIST 2050 <CR>** to list the line where the error occurred.

14. Enter **PRINT VE0$ <CR>** to print the value of the key for the record being accessed.

15. Since the rebuild did not work, you can remove the corrupted record, redimension the affected variable, and write the information back to the file, or restore a backup. *With the Vendor file, if you have the information for the vendor, you can remove it and reenter the information into the file.* The history and open invoice information will still be there and can be accessed as long as the vendor is reentered with the same vendor ID. Select **Purge Data Records** from the Resource Manager Data File Maintenance menu to remove the record for this vendor. The steps to redimension the variable follow step 20 of this example.

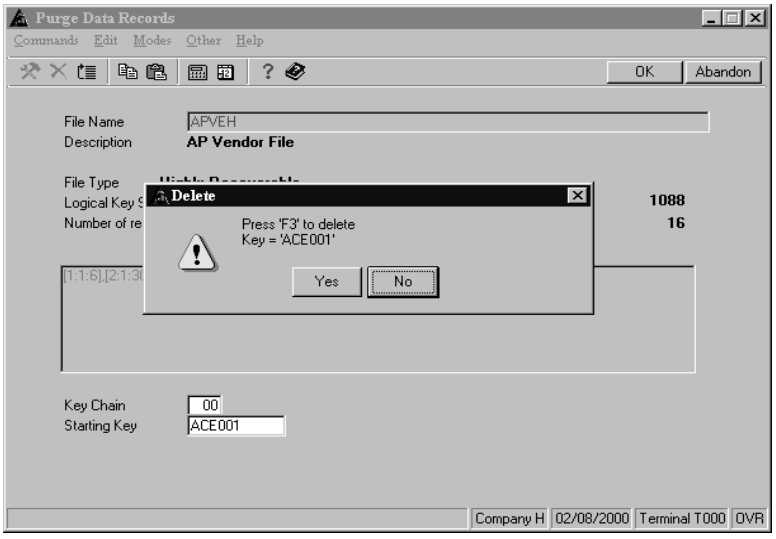
Purge Data Records



16. Enter the file name **APVEH**

17. Enter the value of **VE0$** (ACE001), that was displayed from the error screen. Press **PgDn** to proceed.

Delete ACE001



18. You are prompted to delete the record for key = **ACE001**. Press **F3** to delete the record.

19. Press **F7** to exit. You do not want to delete another record.

20. Print the labels again. You should be able to print them without receiving an error.

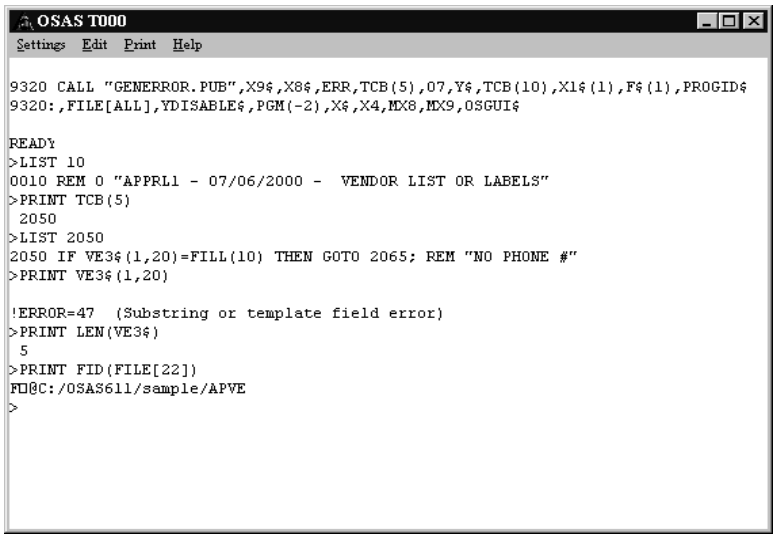
21. Select **Vendors** from the Accounts Payable File Maintenance menu to reenter the vendor's information. Be sure to use the same vendor ID.

Redimensioning the Variable

To redimension the affected variable and write the information back to the file, you need the file layouts, which can be purchased as part of the Developer's Tool Kit. An example of the file layout for the Accounts Payable Vendor file (APVEx) is included on the following pages. It is the version 6.1x Vendor file.

The variable where the error 47 occurred is VE3$. In the file layout, VE3$ is used to represent the data items stored in field 4: the vendor's phone number and 1099 information. The last item, stored in VE3$(52,1), is the 2nd TIN Not flag. It starts at position 52 and has a length of one character. That means that the total length of VE3$ should be 52. You can calculate the length of a string variable by looking at the last item in the file for that variable. Add the numbers in parentheses together and subtract 1-in this example, 52+1=53. 53-1=52. VE3$ should have a length of 52. Go to the point of error and do the following steps.

Error Message

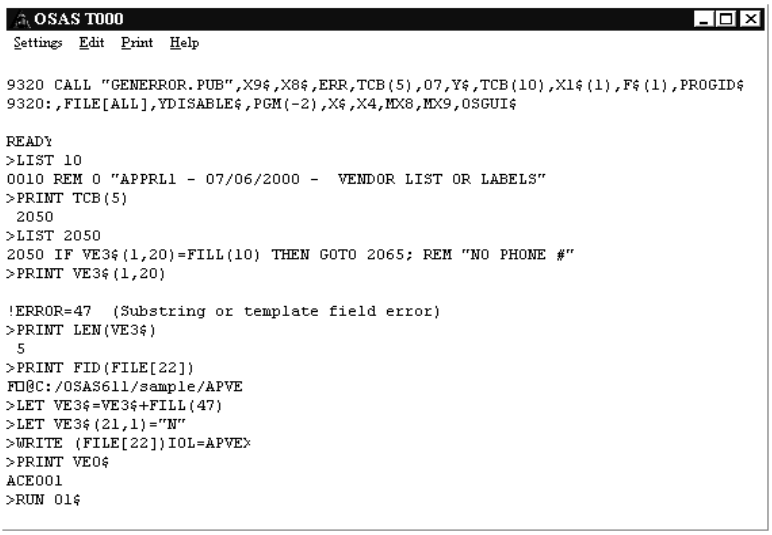


1. Enter **PRINT LEN(VE3$) <CR>** to get the current length of VE3$. It is 5.

   Before you dimension the variable and write the information back to the file, you must know what channel number the affected file is open on. The file layouts give you this information. The channel index is listed on the first page, the element of the array FILE that is *generally* used to store the channel number. There may be exceptions to the rule. In this example, the channel index is **22**.

2. Enter **PRINT FID(FILE[22]) <CR>** to check if the Vendor file is open on the channel **FILE[22**]. It is **APVEH**.

Break to Basic



3. Enter **DIM VE3$(52) <CR>** to dimension the variable VE3$ to the correct length of 42. The dimension statement will also clear any values that were stored in VE3$ (**This method will not save the information**). You may also use the **FILL** function to preserve the existing data stored in the variable VE3$. Instead of using the dimension statement, you can enter:

   LET VE3$=VE3$+FILL(47) <CR>.

   This will leave the first 5 characters and add 47 blanks. You may also accomplish this by entering **LET VE3$=VE3$+FILL(52-LEN(VE3$)) <CR>** which will effectively pad the field with the difference between 52 and the current length of the variable VE3$.

Note

Because VE3$(21,1) is a special flag, you will need to also set this flag to a default value of "N" for the 1099 Form Code. To do this type LET VE3$(21,1)= "N" <CR>.

4. Enter **WRITE (FILE[22])IOL=APVEX <CR>** to write the information back to the file. Use the letter X, ***not*** your company ID, at the end of the write statement. This will only correct a single record, you will need to write a short program loop to correct multiple records. The prompt should be displayed without an error.

5. Enter **PRINT VE0$ <CR>** to find out which vendor the file is accessing so you can reenter their phone number and 1099 information. Refer to the File Information section in the appendix for a list of the keys to the data files.

6. Enter **RUN O1$** to return to the OSAS menu.

7. Select **Vendors** from the Accounts Payable File Maintenance menu to update the information for the vendor.

8. Print the labels again.

APVE file Layouts

The Vendor file contains vendor account information, including the balance due and historical purchase information.

You use the Vendors function to set up the vendors. Thereafter the balances are updated automatically when you post transactions.

There is one record for each vendor.

Channel Index: 22

IOLIST:	0946 APVEX :IOLIST VE0$,VE1$,VE2$,VE3$, VE4$, VE1[ALL],VE2[ALL],VE5$,VE3[ALL],VE4,VE5,VE6$,VE7$,VE8$,VE9$ VE99$[ALL],VE99[ALL]
Array Sizes:	DIM VE1[3],VE2[15],VE3[3],VE99$[0],VE99[1]
String Sizes:	DIM VE0$(6),VE1$(30),VE2$(364),VE3$(52),VE4$(61),VE5$(15), VE6$(20),VE7$(20),VE8$(50),VE9$(50)

Key Number	Field	Description
0	[1:1:6]	Vendor ID
1	[2:1:30] +	Vendor Name +
	[1:1:6]	Vendor ID
2	[5:36:1] +	Vendor Priority Code +
	[1:1:6]	Vendor ID
3	[5:38:6] +	Vendor Class +
	[1:1:6]	Vendor ID
4	[5:50:2] +	Vendor Dist Code +
	[1:1:6]	Vendor ID
	_____	
	9 segments	

Vendor Record

File Name: APVExxx Record Size: 1036 (1088)
File Type: Mkeyed - Dynamic Number of Keys: 5

Field Num	Field Name	Description	A/N	Length	Note
1	VE0$	Vendor ID*	A	6	
2	VE1$	Name	A	30	
3	VE2$(1,30)	Address Line 1	A	30	
	VE2$(31,30)	Address Line 2	A	30	
	VE2$(61,30)	Address Line 3	A	30	
	VE2$(91,15)	City	A	15	
	VE2$(106,3)	State	A	3	
	VE2$(109,2)	Country	A	2	
	VE2$(111,12)	Zip Code	A	12	
	VE2$(123,30)	Pay-to Name	A	30	
	VE2$(153,30)	Pay-to Address Line 1	A	30	
	VE2$(183,30)	Pay-to Address Line 2	A	30	
	VE2$(213,30)	Pay-to Address Line 3	A	30	
	VE2$(243,15)	Pay-to City	A	15	
	VE2$(258,3)	Pay-to State	A	3	
	VE2$(261,2)	Pay-to Country	A	2	
	VE2$(263,12)	Pay-to Zip Code	A	12	
	VE2$(275,20)	Pay-to Phone Number	A	20	
	VE2$(295,25)	Pay-to Attention	A	25	
	VE2$(320,25)	Our Acct Number	A	25	
	VE2$(345,20)	Pay-to Fax Number	A	20	

* The key for a temporary vendor generated by the system is made up of a plus sign (+) followed by a five-digit number. These records are erased during month-end maintenance.

Field Num	Field Name	Description	A/N	Length	Note
4	VE3$(1,20)	Phone Number	A	20	
	VE3$(21,1)	1099 Form Code	A	1	N = No Form I = Individual B = Business
	VE3$(22,16)	1099 Recipient ID	A	16	
	VE3$(38,1)	1099 Field Indicator	A	1	1-9 or A
	VE3$(39,1)	1099 Foreign Address?	A	1	Y or N
	VE3$(40,12)	GL Account Number	A	12	
	VE3$(52,1)	2nd TIN Not	A	1	
5	VE4$(1,20)	Fax Number	A	20	
	VE4$(21,25)	Contact	A	25	
	VE4$(46,1)	Vendor Priority Code	A	1	
	VE4$(47,1)	Vendor Hold?	A	1	Y or N
	VE4$(48,6)	Vendor Class	A	6	
	VE4$(54,6)	Terms Code	A	6	
	VE4$(60,2)	Distribution Code	A	2	
6	VE1[0]	Gross Due	N	14	DOLL
7	VE1[1]	Prepaid	N	14	DOLL
8	VE1[2]	Reserved for OSD	N	4	2.1
9	VE1[3]	Reserved for OSD	N	3	
10	VE2[0]	Purchases Period to Date	N	14	DOLL
11	VE2[1]	Purchases Quarter to Date	N	14	DOLL
12	VE2[2]	Purchases Year to Date	N	14	DOLL
13	VE2[3]	Purchases Last Year	N	14	DOLL
14	VE2[4]	Payments Period to Date	N	14	DOLL
15	VE2[5]	Payments Quarter to Date	N	14	DOLL
16	VE2[6]	Payments Year to Date	N	14	DOLL
17	VE2[7]	Payments Last Year	N	14	DOLL
18	VE2[8]	Discount Taken PTD	N	14	DOLL
19	VE2[9]	Discount Taken QTD	N	14	DOLL

Field Num	Field Name	Description	A/N	Length	Note
20	VE2[10]	Discount Taken YTD	N	14	DOLL
21	VE2[11]	Discount Taken Last Year	N	14	DOLL
22	VE2[12]	Discount Lost PTD	N	14	DOLL
23	VE2[13]	Discount Lost QTD	N	14	DOLL
24	VE2[14]	Discount Lost YTD	N	14	DOLL
25	VE2[15]	Discount Lost Last Year	N	14	DOLL
26	VE5$(1,8)	Last Purchase Number	A	8	
	VE5$(9,7)	Last Payment Number	A	7	
27	VE3[0]	Last Purchase Date	N	7	Julian
28	VE3[1]	Last Purchase Amount	N	14	DOLL
29	VE3[2]	Last Payment Date	N	7	Julian
30	VE3[3]	Last Payment Amount	N	14	DOLL
31	VE4	YTD 1099 Payments	N	14	DOLL
32	VE5	Last-Year 1099 Payments	N	14	DOLL
33	VE6$(1,6)	Tax Group	A	6	
	VE6$(7,14)	Reserved for OSD	A	14	
34	VE7$	Reserved for ISV	A	20	
35	VE8$	Email Address	A	50	
36	VE9$	Web Address	A	50	
37	VE99$[0]	Reserved for ISV	A	0	
38	VE99[0]	Reserved for ISV	N	1	
39	VE99[1]	Reserved for ISV	N	1	

Error 60 - General I/O Error

Description:

An I/O operation failed and a BBx error number is not defined for that type of error. Error 60 is necessary when different host operating systems have unique error conditions not defined by BBx. A host error (operating system error) is usually displayed with the error 60 message.

Suggestions:

- If an error 60 occurs on a XENIX system and the host error is -45, XENIX has encountered a lock table overflow. See the note about SCO Xenix Kernel Reconfiguration in the appendix of this manual.
- If the host error is some other negative value, check this value against the appropriate "Operating System Error Translation" table.

Note

Try executing the line of code with no DOM clauses or error branches to also get the true error. You may use this technique with any potentially trapped error message.

Note

Print TCB(10) <CR> after breaking to Basic to get the true BBX error. If the value returned is negative then this is the true operating error, if it returns a positive value the subtract 1 to get the true BBX error.

- From the error, break to basic and get a ready prompt.
  1. Enter **PRINT TCB(5)<CR>** to get the last line of code executed. Then list that line number.
  2. Now type that line of code in without the DOM clause or the err branch and then **<CR>** to receive the true error.

Page Fault Error Handling

- A page fault error will throw the user out to DOS during a post or a print job. The user should try to press pause to see what the error is.
- A page fault is caused by a corrupt mkeyed file. To find out what file is corrupt the user needs to break to basic between the time they hit enter and when they are thrown out to Windows.
- When they are at the Basic prompt they need to set a trace. To do this they need to type the command **"settrace"** hit enter and then type **"run"**.
- The program will execute until the error occurs and then either stop or throw them out to Windows.
- If they are thrown out to Windows they need to set the trace to a printer or printer as a file. To do this they need to type the command **"open(98)"lp"** where the **"lp"** is the Bbx device name of the printer they want to send the trace to. Then type the command **"settrace(98)"** and then **"run"**. This will send the lines of code to the printer.
- They need to look at the lines of code on the print-out. Typically, the last line that was executed has caused the error. The file that is called for this line is the file that is corrupted. You then need to use the **File Rebuild and Verify** and **Change File Size** functions on this file. If those don't fix it they need to restore a backup of that file.
- If they can't break to basic before the error they need to insert an escape into the program that they are running.

    1. If your error is occurring in a public program you will need to break to basic before the error type **SETOPTS 08<CR>** this will allow you to break out to basic in a public program, you may also load the program initially, insert **SETOPTS 08; ESCAPE;** before that line of code is executed and then proceed with setting a trace.

    2. Go into the app and into a function, break to basic and load the program. List the first few lines of code and find a gap in the numbering sequence. Then type the line number e.g. 109 escape hit enter, type **"SAVE"**. Then go back to the function you got the error in and execute again. When the escape is executed it will break to basic and at that point you can set a trace to find the line that is giving you the error.

- To set a trace:

    Break to basic

    Type **settrace** <CR>

    Type **run** <CR>

- To set a trace to a printer or file:

    Type **open(98)"lp"** <CR> or the Bbx device name of the printer, or the file they want to use (be sure to use " " in defining the printer or file name).

    Type **settrace(98)** <CR>

    Type **run** <CR>

Note

Be sure to remove any escape that were inserted after resolving the problem.

Quick Reference Sheet - Errors

Error	Description	Resolution
1	**end of record**	1. check standard and/or compressed columns for printer 2. check for modifications to data files
2	**end of file**	1. check available space on hard drive 2. corrupt file; try **File Rebuild/Verify**, **Change File Size** or Purge Data Records. If on a read statement, try the rebuild first. If using the change file size be sure the actual file type is Mkeyed and the number of records field is 00000000 in the changes section
3	**hardware problem**	1. check hard drive for bad sectors, if you have bad sectors on the hard drive, find out which file it is reading and move it to a different spot on the hard drive 2. on networks, check connection to server
7	**sector pointer out of range**	try the **File Rebuild/Verify**, if the error comes back periodically setup lock files for the terminals to identify where it is coming from
11	**duplicate or missing records**	manually remove records, or restore backup
12	**duplicate or missing file**	check directories for file
13	**damaged file or permissions**	1. use the Change File Size to check file integrity 2. try function logged in as root or supervisor
16	**table overflow**	1. check FCBS, CIBS, and Handles parameters in Devices 2. check files in CONFIG.SYS file 3. XENIX - increase kernel parameter
18	**Permissions**	try function logged in as supervisor or root; change user permissions accordingly
26	**damaged file**	1. try **File Rebuild/Verify** function 2. remove damaged record using **Purge Data Records**
30	**bad program**	reload the program from original media or backup
31	**insufficient workspace memory**	check ICON for the **-m** and **-p** parameters
33	**insufficient system memory**	1. verify enough RAM available for your system 2. check for memory-resident programs
43	**mask overflow error**	locate value that is too big and increase mask
47	**damaged file**	1. use the **File Rebuild/Verify** utility 2. remove the damaged record, using **Purge Data Records** 3. redimension the variable and write it back to the file
60	**general I/O error**	1. check the host error with the correct table

Operating System Errors

MS-DOS AND NOVELL NETWARE

Internally BBx translates the error code received from the host operating system to its own error codes. If a negative value is returned for the host error, check it with the table below to see what problem the operating system has detected. If a positive value is returned, the error is a BBx error, not an error encountered by the operating system (subtract 1 from a positive value to get the actual BBx error). The error translation tables for MS-DOS and NOVELL are below.

ERROR	CODE	MS-DOS ERROR DESCRIPTION
0	E_INTERN	no error, bad error code (DOS messed up)
1	E_INTERN	invalid function code (bad command)
2	E_NOF	file not found
3	E_NOF	path not found
4	E_TOFLOW	too many open files
5	E_USERCANT	access denied
6	E_INTERN	invalid handle
7	E_MEM	memory control blocks destroyed
8	E_MEM	insufficient memory
9	E_MEM	invalid memory block address
10	E_INTERN	invalid environment
11	E_INTERN	invalid format
12	E_INTERN	invalid access code
13	E_INTERN	invalid data
14	E_INTERN	RESERVED
15	E_BADDISK	invalid drive
16	E_USERCANT	attempt to remove current directory
17	E_BADDISK	not same device
18	E_EOF	no more files

CRITICAL & EXTENDED ERRORS FOR MS-DOS 3.0

ERROR	CODE	MS-DOS ERROR DESCRIPTION
19	E_DFAIL	write protected disk
20	E_BADDISK	bad disk unit
21	E_DFAIL	drive not ready
22	E_INTERN	invalid disk command
23	E_DREAD	CRC error
24	E_DREAD	invalid length (disk operation)
25	E_DREAD	seek error
26	E_DREAD	not an MS-DOS disk
27	E_DREAD	sector not found
28	E_BUSY	out of paper
29	E_DREAD	write fault
30	E_DREAD	read fault
31	E_DREAD	general failure

MS-DOS 3.X & MS-NET ERROR CODES

ERROR	CODE	MS-DOS ERROR DESCRIPTION
32	E_BUSY	sharing violation
33	E_BUSY	lock violation
34	E_BADDISK	wrong disk
35	E_INTERN	FCB unavailable
50	E_INTERN	net request not supported
51	E_INTERN	remote not listening
52	E_INTERN	duplicate name on net
53	E_INTERN	network name not found
54	E_BUSY	network busy
55	E_NOF	network device no longer exists
56	E_TOFLOW	net bios command limit
57	E_DREAD	net adapter hardware error
58	E_INTERN	incorrect response from net
59	E_INTERN	unexpected error from network
60	E_INTERN	incompatible remote adapter
61	E_NOROOM	print queue not full

ERROR	CODE	MS-DOS ERROR DESCRIPTION
62	E_INTERN	queue not full
63	E_NOROOM	not enough room for print file
64	E_INTERN	network name was deleted
65	E_USERCANT	access denied
66	E_NOF	network device type incorrect
67	E_NOF	network name not found
68	E_INTERN	network name limit exceeded
69	E_TOFLOW	net bios session limit exceeded
70	E_BUSY	temporarily paused
71	E_INTERN	network request not accepted
72	E_BUSY	print or disk redirection is paused
80	E_NOF	file exits
81	E_INTERN	
82	E_INTERN	cannot make
83	E_INTERN	interrupt 24 failure
84	E_TOFLOW	out of structures
85	E_INTERN	already assigned
86	E_INTERN	invalid password
87	E_INTERN	invalid parameter
88	E_DREAD	net write fault

NOVELL ERROR CODES

ERROR	CODE	ERROR DESC.	ERROR	CODE	ERROR DESCRIPTION
128	E_BUSY	lockfail	150	E_NOROOM	
129	E_INTERN	RESERVED	151	E_NOROOM	
130	E_USERCANT	no open priv	152	E_NOF	
131	E_INTERN	RESERVED	153	E_NOROOM	
132	E_USERCANT	no create priv	154	E_BADDISK	rename across volume
133	E_USERCANT	no delete priv	155	E_INTERN	bad dir handle
134	E_USERCANT	read only create file	156	E_NOF	invalid path
135	E_NOF	name error	157	E_TOFLOW	no dir handles
136	E_INTERN	RESERVED	158	E_NOF	bad file name
137	E_USERCANT	no search priv	159	E_USERCANT	directory active
138	E_USERCANT	no del priv	160	E_USERCANT	directory not empty
139	E_USERCANT	no rename priv	161	E_DREAD	directory io error
140	E_USERCANT	no set priv	162	E_BUSY	undocumented busy error code
141	E_INTERN	some files in use	250	E_INTERN	temp remap error
142	E_INTERN	all files in use	251	E_INTERN	unknown request
143	E_INTERN	some read only	252	E_INTERN	message queue full
144	E_INTERN	all read only	253	E_INTERN	bad station number
145	E_INTERN	some names exist	254	E_USERCANT	directory locked/spool delete error
146	E_INTERN	all names exist	255	E_NOF	no files found/bad printer/queue full file name error/file exists error close FCB error/io bound error

XENIX/UNIX

Because the XENIX/UNIX error codes are carried around by the system it defines, it is difficult to give a table equating error number to BBx error code. Instead, this list uses the error mnemonic from XENIX in approximate error number sequence.

ERROR	NAME	BBX ERROR CODE	UNIX/XENIX ERROR DESCRIPTION
1	ERPERM	E_CANT	not owner
2	ENOENT	E_NOF	no such file or directory
3	ESRCH	E_INTERN	no such process
4	EINTR	E_BREAK	interrupted system call
5	EIO	E_DREAD	i/o error
6	ENXIO	E_DFAIL	no such device or address
7	E2BIG	E_EOR	too big arg list
8	ENOEXEC	E_INTERN	exec format error
9	EBADF	E_CANT	bad handle
10	ECHILD	E_INTERN	no children
11	EAGAIN	E_INTERN	no more processes
12	ENOMEM	E_MEM	not enough space
13	EACCES	E_USERCANT	permission denied
14	EFAULT	E_INTERN	bad address (hardware fault)
15	ENOTBLK	E_DISK	block device required
16	EBUSY	E_BUSY	mount device busy
17	EEXIST	E_NOF	file exists
18	EXDEV	E_BADDISK	cross-device busy
19	ENODEV	E_CANT	no such device (write to read-only...)
20	ENOTDIR	E_NOF	not a directory
21	EISDIR	E_USERCANT	is a directory
22	EINVAL	E_INTERN	invalid argument
23	ENFILE	E_TOFLOW	can’t open any more
24	EMFILE	E_TOFLOW	too many open files
25	ENOTTY	E_INTERN	not a typewriter
26	ETXTBSY	E_INTERN	text file busy
27	EFBIG	E_EOF	file too busy
28	ENOSPC	E_NOROOM	out of space
29	ESPIPE	E_PNTR	illegal seek
30	EROFS	E_INTERN	read-only file system

ERROR	NAME	BBX ERROR CODE	UNIX/XENIX ERROR DESCRIPTION
31	EMLINK	E_INTERN	too many links
32	EPIPE	E_EOF	broken pipe
33	EDOM	E_INTERN	out of domain
34	ERANGE	E_INTERN	math overflow
35	EUCLEAN	E_INTERN	structure needs cleaning
36	EDEADLOCK	E_BUSY	would deadlock
37	ENOTNAM	E_INTERN	not a semaphore
38	ENAVAIL	E_INTERN	semaphore not available
39	EISNAM	E_INTERN	unexpected name file
43	ENOMSG	E_INTERN	no message of desired type
44	EIDRM	E_INTERN	identifier removed
45	ENOLCK	E_INTERN	no locks available

Fatal System (FS) Load Errors

The internal error codes used by BBx are the BASIC error codes plus 1. Thus when BBx reports an error 0 while executing a program, it has actually encountered an FS Load error 1. BBx does this to comply with the standards of other BASIC languages. The error reported by the message fs load err=xx is the internal error code: so to get the BBx error code, you must subtract 1 from the fs load error number (for example, an fs load error 13 is a BBx error 12). Reference the following table of fs load error codes and their respective BBx error translations.

When BBx reports an fs load error, you will often notice an additional number within parentheses next to the error message. This number may be positive or negative. If the number is the same as the fs load error number, ignore it. If the number is not the same and positive, subtract 1 to get the BBx error. If the number is negative, the operating system has encountered an error. Determine the operating system error by referring to the proper operating system error translation table for TCB(10) values. (Do not subtract 1 if the value in parenthesis is negative.)

fs load error	BBX ERROR	ERROR CODE	ERROR DESCRIPTION
1	0	E_BUSY	busy file/device
2	1	E_EOR	end of record
3	2	E_EOF	end of file
4	3	E_DREAD	read failure
5	4	E_DFAIL	disk failure
6	5	E_XFER	data transfer error
7	6	E_DISK	bad disk/directory
8	7	E_PNTR	bad pointer
9	8	E_VERIF	read verification failure
10	9	E_PWFAIL	powerfail
11	10	E_NLEN	bad name length
12	11	E_KFAIL	key not found
13	12	E_NOF	file not found
14	13	E_CANT	not allowed/cant
15	14	E_BADCIB	invalid cib
16	15	E_ENOROOM	file out of space (during allocation)
17	16	E_BADDIR	directory does not exist
17	16	E_TOFLOW	internal table overflow
18	17	E_BADDISK	disk drive does not exist
18	17	E_BADFID	bad fid passed to fsfidin, fsfidout
19	18	E_USERCANT	priv operation
22	21	E_INVDLEN	invalid data length
27	26	E_BADARG	invalid argument type
30	29	E_MNE	unreconized mnemonic
32	31	E_EOB	end of buffer
34	33	E_MEM	can’t malloc
42	41	E_INVINT	invalid size (record, records...)
47	46	E_INVKLEN	invalid key length
53	52	E_BADHEAD	bad file header (keyed/serial)
61	60	E_INTERN	internal, can’t translate error
128	127	E_BREAK	broken input (interrupted)
152	151	E_NOTIMP	function not yet implemented

FS Load Error Examples

The following fs load errors have been encountered:

FS load Error=5

same as an error 4, drive not ready. It occurs if the system tries to read from a drive that is offline or from a diskette drive that is empty or has the door open.

This error has occurred most commonly on DOS networking systems.

Suggestions:

- Something is wrong with the CONFIG.BBX file. Restore a backup copy or create a new CONFIG.BBX file.
- Remove and then recreate a terminal icon using **SETUP.EXE** from the setup directory under OSAS. Be sure to write changes to the CONFIG.BBX file.

FS load Error=13

same as error 12, file not found.

Suggestions:

- Make sure that a valid CONFIG.BBX file is in the /OSAS/progRM directory, especially if the TCB(10) value returned with the fs load error is -2 or -3.
- This file unavailable error arises when a BBTERM is set at the UNIX level that is not defined in the CONFIG.BBX file.
- At the UNIX prompt type echo $BBTERM to display what BBTERM is set to at the UNIX level. Select Devices from the Workstation Configuration menu in Resource Manager, and set up an alias line with that BBx device name. Do not use the BBTERM method of setting up terminals unless your physical terminal device names are not fixed. This is the case if you are using Multi-view or an emulation package that allows regular PC workstations to act as dumb terminals.
- On XENIX systems, type tty at the operating system prompt to determine what your device name is. Then make sure an entry exists in CONFIG.BBX for this device.

FS load Error=17

same as error 16, internal table overflow.

Suggestions:

- Refer to the error 16 section in BBX ERRORS.
- If you also get the message alias table overflow and you have more than 12 alias lines in the CONFIG.BBX file, make sure that the aliases= parameter also exists in the CONFIG.BBX file and is at least equal to the number of alias lines. You may also get this error if stblens are greater than 31000 or if an alias is defined incorrectly.
- If the error occurs on a XENIX system, and the CONFIG.BBX parameters seem OK, the operating system parameters need to be adjusted. See notes on XENIX Kernel Reconfiguration in the appendix section of this manual.

FS load Error=30

same as an error 29, mnemonic error.

Suggestions:

- This mnemonic error is usually caused by one of three conditions:
- A terminal type in the CONFIG.BBX file does not match closely enough the type of terminal you are using.
- A terminal type in the CONFIG.BBX file does not exist in the termcap file. This condition exists because you tried to invoke OSAS from the progRM directory, using ./rmstart without invoking the TERMCAP command that tells the system to use the termcap file in the progRM subdirectory, and you are using a terminal type such as ansico, which is not defined in the /etc/termcap file.

There is a bad termcap entry, either from corruption of the termcap file or from editing the termcap file and incorrectly making some type of change to an entry.

General Troubleshooting XENIX/UNIX

PROBLEM: Invalid BBterm Value

This terminal device error arises when you use a terminal device that is not defined in the CONFIG.BBX file.

At the UNIX prompt type the **tty** command to find out what physical device port you are on (for example, /**dev**/**tty01**). On a terminal that you can get into OSAS, go into Resource Manager, Workstation Configuration, Devices and add an alias line with that device defined.

PROBLEM: Unable To Load Company/Prefix Information

This message is usually caused by one of the following conditions:

A user does not have read/write permissions to **OSCOMP**, **OSINFO.UNX**, **OSAPPL.UNX**, **OSDF**, **OSKY**, or **OSCL**. The **OSCOMP** file is in the data directory. The OSINFO.UNX, OSAPPL.UNX, and OSDF, OSKY, OSCL files are in the sysfil subdirectory.

"Unable to load company information" will be looking first for the **RMTB** and **OSINFO.UNX** files, while **"Unable to load prefix information"** will be looking for the **OSAPPL.UNX** file first. In version 6.0X the message may be displayed as **"Program not found -RMPREFIX"**

Any one of the above files does not exist.

Any one of the above files is corrupt.

OSAS has been copied to a different directory than the one chosen during installation.

Edit OSINFO and OSAPPL through BBx, and change the paths in these files to the correct paths.

Change the OSAS script in the /**usr**/**bin** directory to reflect the new path.

PROBLEM: Application Information Not Found

This message appears under the following circumstances:

You press **Enter** at installation menu.

The installation process is designed to look at /**tmp**/**OSAS** first to see if the necessary install files exist. You will always get this message once. Press **Enter** again; the installation should continue. If you get the message again, it may be caused by one of the following circumstances.

The first diskette was not inserted first.

Erase the files copied into /**tmp**/**OSAS** and its subdirectories and start the installation over.

Subdirectory /**tmp**/**OSAS**/ is not in the directory name displayed under the installation section in Directories (in Resource Manager, System File Maintenance).

PROBLEM: Unable To Open OSCL, ERR = 0, ERR = 12

This error message will appear for several reasons when entering OSAS. If the path shown in the **INFOSYS.TXT** file is a bogus one, that is, the syntax is incorrect you will get the error 12 message. If the path is incorrect including the drive letter you will get the error 0.

Edit the path of the **INFOSYS.TXT** to correct the error. It is in the **progRM** directory. You should also verify the paths in both the Application Information functions for RM, and the paths shown in the Directories function to be sure they all are in sync. Updating the paths in the directories function will rewrite the INFOSYS.TXT file too.

PROBLEM: Unable To Load Workstation Information

This error message appears when you enter OSAS. One of the files OSDF, OSKY, OSCL in PROGRM does not exist, it is damaged, or the file permissions are incorrect.

If it does not exist, or is damaged, copy OSDF, OSKY, OSCL from the original OSAS Resource Manager media, or restore a backup.

PROBLEM: Unable To Load Company Information / Prefix Information

These error messages are caused by one of these conditions:

A user does not having proper permissions to **OSCOMP**, **OSINFO.DOS**, **OSAPPL.DOS**, **OSDF**, **OSKY**, or **OSCL**. **"Unable to load company information"** will be looking first for the **RMTB** and **OSINFO.DOS** files, while **"Unable to load prefix information"** will be looking for the **OSAPPL.DOS** file first. In version 6.0x and 5.2x the message may be displayed as **"Program not found -RMPREFIX"**, or any one of the above files do not exist or is corrupted/damaged.

Note

If the file does not exist, or is damaged, correct the problem by restoring a backup. The **OSCOMP** file can be copied from the SAMPLE data path.

OSAS was copied to a different drive/directory than the one chosen during installation.

This is particularly common when upgrading from a single-user system where OSAS was installed on drive C: and restoring on drive F: for example, on the network.

Edit the **OSINFO.DOS** and **OSAPPL.DOS** files through BASIC to correct the paths, DO NOT edit them with a word processor. Before trying either of these suggestions, make a backup of these files.

PROBLEM: Application Information Not Found

This message occurs during installation under the following circumstances:

The first diskette was not inserted first, the installation drive under directories is incorrect, the proper file is not being unzipped, possibly from trying to install an update without using the "-d" parameter to unzip the update first.

Updating Fixes

Be sure to do only one file at a time

1. OPERATING SYSTEM

   a Make a temporary directory

   b Copy 601A.zip file into that directory

   c At that directory > pkunzip -d 601a.zip

   pkunzip -N 601a.zip (for UNIX...make sure to use capital N)

2. OSAS

   a Resource Manager

   System File Maintenance

   Directories - install: c:\ (temporary directory) (Done once for all fixes. You may want to change back to your CDrom drive when done)

   b Resource Manager

   Installation

   Install Applications - N (for update an application*), N (for prompt for all applications), N (for install another application), enter

   i If you have any application at a lesser version than the fixes you are installing, you need to say N (no) to update that application if that file includes fixes for that application. This will happen if you have 5.21 RM, PA, IN, and GL and are installing 5.16 fixes.

3. OPERATING SYSTEM

   directory > deltree /y *.*

4. Repeat process for each file.

Note

The fix for version 6.0x is 601A.zip because it uses the merge feature originally started in version 5.2x updates the fix only updates the lines of code that have been changed. Because the fix only stores the lines of code that were changed and not the entire program it enables us to keep the file smaller. You can verify the date of your latest maintenance update by pressing SHFT-F2 at a menu screen. You can compare this date with the date of the 601A.zip file out on the EVAR to determine if yours is the latest.

Note

It is recommended that you delete the xxJUL.TXT files (xx = application ID) from the PROGRM directory before installing the fixes. The system will check the date of the existing program against the date stored in the file. If the date is of the fix is later than that date in the xxJUL.TXT file that code change does not get merged into the existing program. Deleting these files ensures that all fixes will get merged in.

Note

Invoke the interpreter by being in the /OSAS/PROGRM/ directory, then type in **VPRO5** or **PRO5**.

Be sure to use forward slashes "/" and not backslashes "\".

>
>END

READY
>**OPEN(1)"Drive Letter:/OSAS/SYSFIL/OSINFO.DOS"**
READ(1,IND=0)A$,B$,C$,D$,E$,F$,G$,H$,I$,J$
>PRINT A$
a:/ Returns the installation path.
>PRINT B$
G:/APPS/OSAS602/ Returns the Base path.
>PRINT C$
>PRINT D$
>PRINT E$
G:/APPS/OSAS602/DATA/ Returns the Data paths (1-3).
>PRINT F$
G:/APPS/OSAS602/RWDATA/ Returns the Report Writer Data path.
>PRINT G$
G:/APPS/OSAS602/SAMPLE/ Returns the sample data path.
>PRINT H$
C:/VPRO5UTL Returns the Utilities Directory.
>PRINT I$
G:/APPS/OSAS602/SYSFIL/ Returns the system files path.
>PRINT J$
G:/APPS/OSAS61/GUI/ Returns the GUI files path.(Beginning in v6.1x)

To change the drive letter from G: to H: for a data path...
LET C$(1,1)="H"
Do the same for all other variables that are changing the drive letter.
To put in a complete path, if for example it was deleted and there is none.
LET C$=**"G:/APPS/OSAS521/DATA/"**
After changes are made then do the following line:
WRITE(1,IND=0)A$,B$,C$,D$,E$,F$,G$,H$,I$,J$
>BYE

Note

Invoke the interpreter by being in the /OSAS/PROGRM/ directory, then type in VPRO5 or PRO5.

Be sure to use forward slashes "/" and not backslashes "\".

```
>
>END
READY
>OPEN(1)"Drive Letter:/OSAS/SYSFIL/OSAPPL.DOS"
>
>READ(1,KEY="RM")A$,B$,C$,D$,E$,F$,G$,H$,I$
>PRINT A$                    Returns the application ID.
RM
>PRINT B$                    Returns the application Description.
Resource Manager
>PRINT C$                   Returns the verification file.
OSAPPL
>PRINT D$                    Returns the installation status.
YES
>PRINT E$                   Returns the version of the application.
5.21
>PRINT F$                   Returns the Julian Date of the installation.
2450471
>PRINT G$                   Returns the program directory.
C:/OSAS602/PROGRM/
>PRINT H$                   Returns the verification file
RMTB
>PRINT I$                    Returns the Julian Date of the last update.

>LET G$(1,1)="F"            To change drive letter from C: to F:
>LET G$="F:/APPS/OSAS602/PROGRM/"          To change the path of the application.
>WRITE(1,KEY="RM")A$,B$,C$,D$,E$,F$,G$,H$,I$
>BYE
>
```