
Table of Contents

ERRORS

Reference Materials and Support Tools	1 - 1
File Structures	1 - 3

BBX Errors

Error 0 - Device Busy or Not Ready	2 - 3
Error 1 - End of Record	2 - 5
Error 2 - End of File	2 - 9
Error 2 Example	2 - 10
Error 3 - Disk Read/Write	2 - 15
Error 7 -- Sector Pointer Out of Range	2 - 17
Error 11 - Duplicate or Missing Key	2 - 19
Error 11 - Example	2 - 20
Error 12 - Duplicate or Missing File	2 - 25
Error 13 - Improper File/Device Usage	2 - 27
Error 13 - Example	2 - 28
Error 16 - Table Overflow	2 - 33
Error 18 - Permission Denied	2 - 35
Error 20 - Syntax Error	2 - 37
Error 26 - String/Number Mismatch	2 - 39
Error 26 Example	2 - 40
Error 30 - Bad Program	2 - 45
Error 31 - Workspace Memory Overflow	2 - 47
Error 33 - System Memory Overflow	2 - 49
Error 43 - Mask Overflow	2 - 51
Error 46 - Invalid Key Size	2 - 53
Error 47 -- Substring Out of Range	2 - 55
Error 47 Example	2 - 57
Redimensioning the Variable	2 - 61
Key Definitions:	2 - 63
Vendor Record	2 - 64
Error 60 - General I/O Error	2 - 67
Page Fault Error Handling	2 - 69
Quick Reference Sheet - Errors	2 - 71
Operating System Errors	2 - 73
MS-DOS AND NOVELL NETWARE	2 - 73
CRITICAL & EXTENDED ERRORS FOR MS-DOS 3.0	2 - 74
MS-DOS 3.X & MS-NET ERROR CODES	2 - 74
NOVELL ERROR CODES	2 - 76
XENIX/UNIX	2 - 77

Fatal System (FS) Load Errors	2 - 79
FS LOAD ERRORS Examples	2 - 80
General Troubleshooting XENIX/UNIX	2 - 83
General Troubleshooting-Networks	2 - 85
Updating Fixes	2 - 87
EDITING "OSINFO.DOS" or "OSINFO.UNX"	2 - 88
EDITING "OSAPPL.DOS" or "OSAPPL.UNX"	2 - 89

Version 6.1x Additions

Basis License Manager Trouble Shooting	3 - 97
Introduction	3 - 97
FLEXlm Error -1	3 - 97
FLEXlm Error -2	3 - 98
FLEXlm Error -4	3 - 98
FLEXlm Error -5	3 - 99
FLEXlm Error -8	3 - 99
FLEXlm Error -10	3 - 100
FLEXlm Error -14	3 - 101
FLEXlm Error -15	3 - 101
FLEXlm Error -18	3 - 101
FLEXlm Error -96	3 - 102
Common Occurance 6.1x Errors	3 - 103
Introduction	3 - 103
Error = 29 - Mneumonic Error	3 - 103
Error = 47 - Substring Out of Range	3 - 103
Errors / Resolutions for Client Server Product	3 - 105
Introduction	3 - 105
Determining IP Address, hostname, & TCP/IP Domain name.	3 - 105
Hosts, Services, and hosts.equiv files	3 - 106
Data Server Pathing Formats	3 - 107
COMMON ERRORS found with OSAS Client Server	3 - 109
Initial Steps for Client Server Error Resolution	3 - 110

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 Dome Homes, 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.

PRIMARY KEY			
KEY 0 CUSTOMER ID	KEY 1 ZIP CODE + CUST ID	KEY 2 DISTRIBUTION CODE + CUST ID	
Eíííííí»	EííííííííííEíííííí»	Eíííííííííí»	
*ACE001°	*10012-4335*GRE001°	*01*DAL001°	
ííííííí:	íííííííííííííííí:	íííííííííí:	
*DAL001°	*28655-7865*ACE001°	*01*KAN001°	
ííííííí:	íííííííííííííííí:	íííííííííí:	
*GRE001°	*33333-4323*SUN001°	*01*LOS001°	
ííííííí:	íííííííííííííííí:	íííííííííí:	
*KAN001°	*54327-4383*TEN001°	*01*TEN001°	
ííííííí:	íííííííííííííííí:	íííííííííí:	
*LOS001°	*56666 °KAN001°	*02*ACE001°	
ííííííí:	íííííííííííííííí:	íííííííííí:	
*SUN001°	*77777 °DAL001°	*02*GRE001°	
ííííííí:	íííííííííííííííí:	íííííííííí:	
*TEN001°	*9999909584°LOS001°	*03*SUN001°	
Eííííííí:/4	EííííííííííEíííííí:/4	Eíííííííííí:/4	

BBX Errors

2

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 1 - End of Record

DESCRIPTION:

An attempt has been made to *READ* or *WRITE* beyond the width of a record. The maximum amount of data a record can hold is determined by the record size (length in bytes) specified at the time the data file is created.

BBx also issues an error 1 if an attempt is made to write to a printer beyond the number of columns specified for that printer in the CONFIG.BBX file.

COMMENTS:

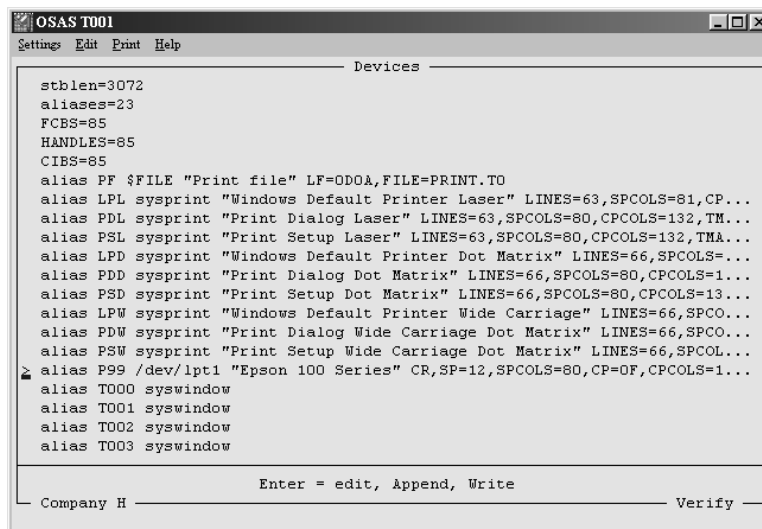
Most OSAS data files are created with a generous record size making error 1 uncommon when accessing a data file. Error 1, however, is somewhat common during print functions.

SUGGESTIONS:

If an error 1 occurs while printing, select Devices from the Resource Manager Workstation Configuration menu to check for sufficient standard and condensed columns.

Enter **Y** to make a backup copy of the CONFIG.BBX file. You are required to make a backup before you are allowed into the Devices file.

Devices Screen



```
OSAS T001
Settings Edit Print Help

Devices

stblen=3072
aliases=23
FCBS=85
HANDLES=85
CIBS=85
alias PF $FILE "Print file" LF=0D0A,FILE=PRINT.TO
alias LPL sysprint "Windows Default Printer Laser" LINES=63,SPCOLS=81,CP...
alias PDL sysprint "Print Dialog Laser" LINES=63,SPCOLS=80,CPCOLS=132,TM...
alias PSL sysprint "Print Setup Laser" LINES=63,SPCOLS=80,CPCOLS=132,TMA...
alias LPD sysprint "Windows Default Printer Dot Matrix" LINES=66,SPCOLS=...
alias PDD sysprint "Print Dialog Dot Matrix" LINES=66,SPCOLS=80,CPCOLS=1...
alias PSD sysprint "Print Setup Dot Matrix" LINES=66,SPCOLS=80,CPCOLS=13...
alias LPW sysprint "Windows Default Printer Wide Carriage" LINES=66,SPCO...
alias PDW sysprint "Print Dialog Wide Carriage Dot Matrix" LINES=66,SPCO...
alias PSW sysprint "Print Setup Wide Carriage Dot Matrix" LINES=66,SPCOL...
> alias P99 /dev/lpt1 "Epson 100 Series" CR,SP=12,SPCOLS=80,CP=0F,CPCOLS=1...
alias T000 syswindow
alias T001 syswindow
alias T002 syswindow
alias T003 syswindow

Enter = edit, Append, Write
Company H Verify
```

Move the cursor to the appropriate alias line to edit and press **Enter**. A second screen appears.

Printer Screen

Device Mode	Value
Carriage Return	YES
Backspace	
Line Feed	
Form Feed	
Standard Print	12
Standard Cols	80
Compress Print	OF
Compress Cols	132
Expanded On	OE
Expanded Off	14
Expanded Cols	2
Expanded Lines	1
Slave On	
Slave Off	

Enter the integer value for this capability.

Company H Verify

Press **Enter** until you get to the Device modes line. The system will skip down to where it displays Carriage Return. Move the cursor to the Standard Columns line and press **Enter**. Enter 80 if you are printing on narrow paper (8 1/2 X 11), or 132 if you are printing on wide paper, move to the Compressed Columns line and press Enter, then enter 132 if you are printing on narrow paper, or 255 if you are printing on wide paper. Use the **Done** command to save your entries and go back to the first Devices screen. Use the **Write** command to write the information to the CONFIG.BBX file. OSAS is restarted with the new CONFIG.BBX file.

- If an error 1 occurs when you send a General Report Writer report to a printer, use the *Devices* function and the steps described above to be sure that the printer is configured correctly.
- Check the width of the report you are trying to print. If you are printing on narrow paper, the report must be less than 132 characters wide. If you are printing on wide paper, the width of the report must be less than the number you entered for **CPCOLS** in the configuration file.
- If an error 1 occurs when you send a Report Writer report to a file, use the Devices function to edit the alias PF line for the terminal you are printing the report from. Enter the number of columns you need for the report-up to 255. You can enter the number in Standard Cols or Compressed Cols.

PF \$FILE Screen

```

OSAS T001
Settings Edit Print Help

Devices

sthlen=3072
aliases=23
FCBS=85
HANDLES=85
CIBS=85
> alias PF $FILE "Print file" LF=ODOA,FILE=PRINT.TO
alias LPL sysprint "Windows Default Printer Laser" LINES=63,SPCOLS=81,CP...
alias PDL sysprint "Print Dialog Laser" LINES=63,SPCOLS=80,CPCOLS=132,TH...
alias PSL sysprint "Print Setup Laser" LINES=63,SPCOLS=80,CPCOLS=132,THA...
alias LPD sysprint "Windows Default Printer Dot Matrix" LINES=66,SPCOLS=...
alias PPD sysprint "Print Dialog Dot Matrix" LINES=66,SPCOLS=80,CPCOLS=1...
alias PSD sysprint "Print Setup Dot Matrix" LINES=66,SPCOLS=80,CPCOLS=13...
alias LPW sysprint "Windows Default Printer Wide Carriage" LINES=66,SPCO...
alias PDW sysprint "Print Dialog Wide Carriage Dot Matrix" LINES=66,SPCO...
alias PSW sysprint "Print Setup Wide Carriage Dot Matrix" LINES=66,SPCOL...
alias P99 /dev/lpt1 "Epson 100 Series" CR,SP=12,SPCOLS=80,CP=0F,CPCOLS=1...
alias T000 syswindow
alias T001 syswindow
alias T002 syswindow
alias T003 syswindow

Enter = edit, Append, Write
Company H Verify

```

Highlight the **alias PF** line for the printer you are using. Press **Enter** to edit the line. The following screen appears.

PF \$FILE Printer Screen

```

OSAS T001
Settings Edit Print Help

Devices - Printers

Bbx Device Name PF

System Device Name $FILE
Device Type "Print file"

Device Mode      Value
Carriage Return
Backspace
Line Feed        ODOA
Form Feed
Standard Print
>Standard Cols    132
Compress Print
Compress Cols     255
Expanded On
Expanded Off
Expanded Cols
Expanded Lines
Slave On
Slave Off

Enter = edit, Header, Done
Company H Verify

```

An error 1 may occur on a READ or WRITE statement if the program has been modified and the record length must be increased to store the additional information.

An error 1 may also occur on a READ or WRITE statement if the system was recently upgraded from a lower version of OSAS and all the necessary conversions have not been run on the file.

Error 2 - End of File

DESCRIPTION:

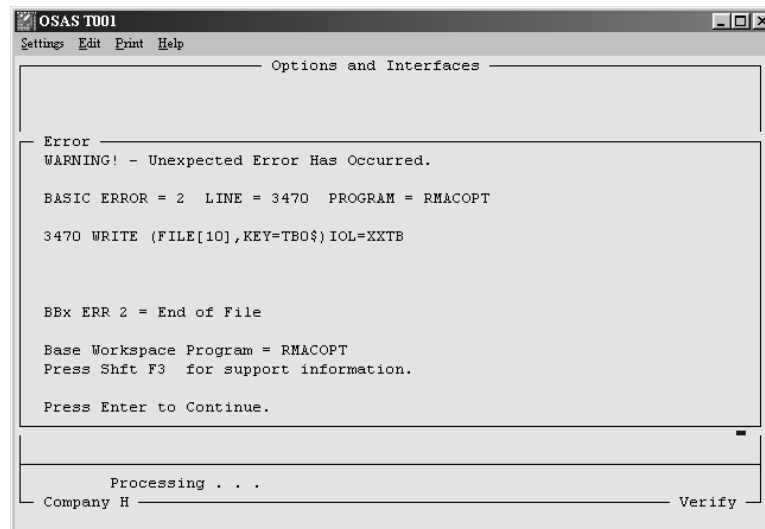
An attempt has been made to READ or WRITE beyond the end of a file, rather than to the end of a record as is the case with an error 1.

SUGGESTIONS:

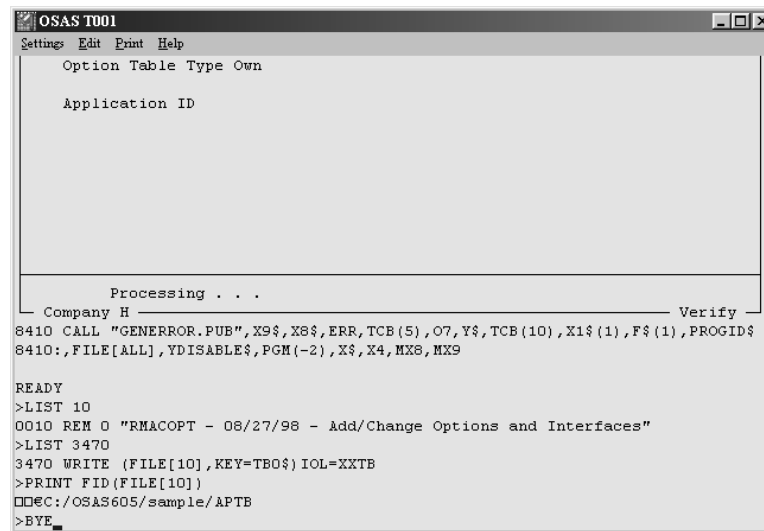
- If the error occurs on a WRITE statement, verify that you still have available disk space on your hard drive. Since the files are dynamic and expand as records are added, you should reach the end of a file only when there is no more room on your hard drive to expand the file. Use the **SCANDISK** or **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 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:



2. The error occurred on a WRITE statement. Use the **List** command (**F8**) 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-C**, **Ctrl-A** to get to BASIC. If you are prompted to exit, press **CTRL-C**, **Ctrl-A** again.



```

OSAS T001
Settings Edit Print Help
Option Table Type Own

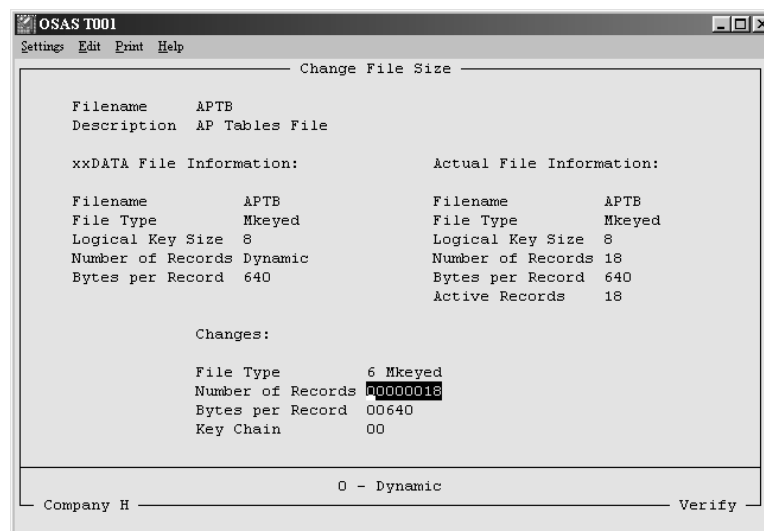
Application ID

Processing . . .
Company H Verify
8410 CALL "GENEROR.PUB",X9$,X8$,ERR,TCB(5),O7,Y$,TCB(10),X1$(1),F$(1),PROGID$
8410:,FILE[ALL],YDISABLE$,PGM(-2),X$,X4,MX8,MX9

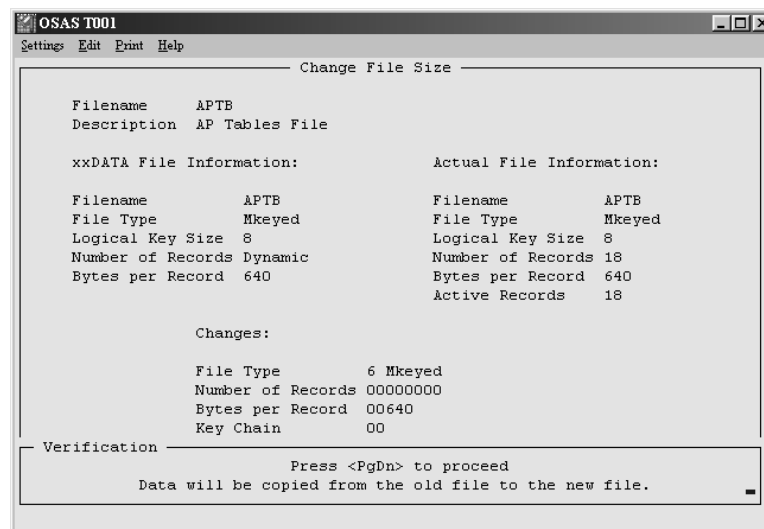
READY
>LIST 10
0010 REM 0 "RMACOPT - 08/27/98 - Add/Change Options and Interfaces"
>LIST 3470
3470 WRITE (FILE[10],KEY=TBO$) IOL=XXTB
>PRINT FID(FILE[10])
□□C:/OSAS605/sample/APTB
>BYE

```

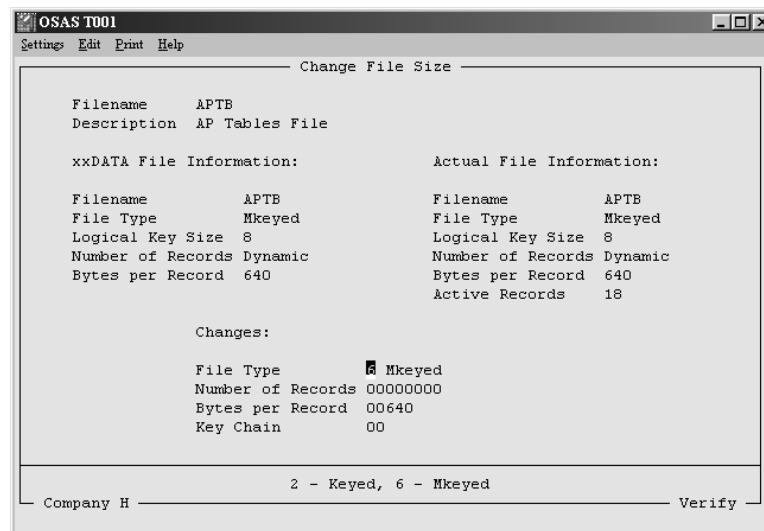
3. Enter **LIST 10** <CR> to list line 10 of the program so that you can verify that the program where the error occurred is still in memory.
4. Enter **LIST 3470** <CR> to list the line where the error occurred.
5. Enter **PRINT FID(FILE[10])** <CR>. To find out which table file the system is trying 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.



9. Enter **APTB** for the file name. The number of records should always be zero for a dynamic file. The number 18 is displayed for the number of records in the file. **The error 2 occurred because there are 18 active records. The file is full.**



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



11. Enter the file name **APTB** again to verify the changes. Dynamic 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.

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.

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 ***.* +shr**(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 them 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 **FSLOAD 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 SETOPTSBIT 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 BBxPROGRESSION/4 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. These errors 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

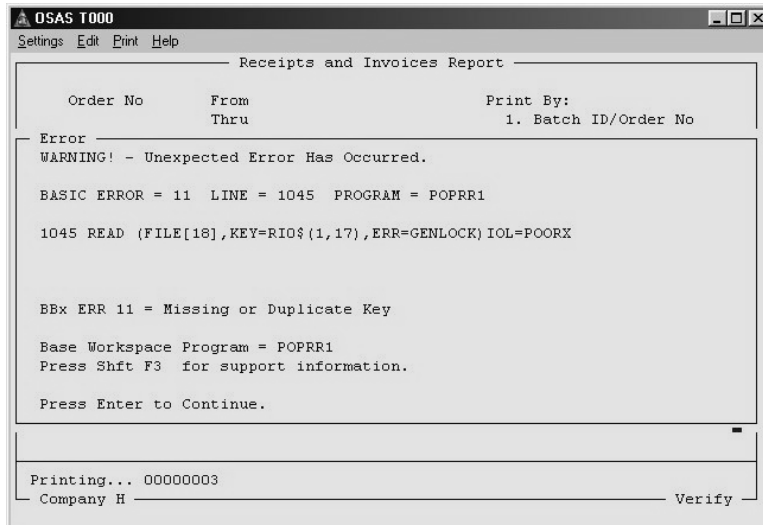
Be sure you understand the significance of purging the record out of any *companion files* that may also have that record in it. For instance, if a record is purged from the POOHxxx file it may have to be purged from up to 8 other files depending upon method of order entry, the types of inventory ordered, 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 executing the Receipts and Invoices Report in Purchase Order, the screens being displayed will be similar to what you might see and how you would handle the problem



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

```
1045 READ (FILE[18],KEY=RI0$(1,17), ERR=GENLOCK) IOL=POORX
```

Notice that the system is trying to read the the open order file (**POORXXX**) based upon the key from the invoices received file (**PORIXXX**).

2. Enter **LIST 10 <CR>** to list the line of code that will identify the program you are currently in, so you may verify that the program where the error occurred is still in memory.
3. Enter **PRINT TCB(5) <CR>** to display the last line of code executed that received an error.
4. Enter **LIST 1045<CR>** in the current example to display the line of code where the error occurred.

```
1045 READ (FILE[18],KEY=RI0$(1,17), ERR=GENLOCK) IOL=POORX
```

- Print the KEY that is being used to determine which record the system is looking for. In this example, you would enter **PRINT RIO\$(1,17) <CR>** to display the key reference.

For this example the value returned will consist of the Batch ID / Order Number / and Entry Number.

00000100000004001

- Enter **PRINT FID(FILE[18])<CR>** to find out which file the system is trying to read from. the full pathh and the name of the data file are displayed. In this example it is trying to read from the POORxxx file.

```

OSAS T000
Settings Edit Print Help

Thru
  Batches to Print:      1
  Print:
    1. Orders
    2. Returns
    3. Both
    1

Printing... 00000003
9320 CALL "GENEROR.PUB", X9$, X8$, ERR, TCB(5), O7, Y$, TCB(10), X1$(1), F$(1), PROGID$-
9320: ,FILE[ALL], YDISABLE$, PGM(-2), X$, X4, MX8, MX9, OSGUI$

READY
>LIST 10
0010 REM 0 "POPRR1 - 07/07/2000 - RECEIPTS AND INVOICES REPORT"
>PRINT TCB(5)
1045
>LIST 1045
1045 READ (FILE[18], KEY=RIO$(1,17), ERR=GENLOCK) IOL=POORX
>PRINT RIO$(1,17)
00000100000004001
>PRINT FID(FILE[18])
FIDC:/OS612/sample/POORH
>

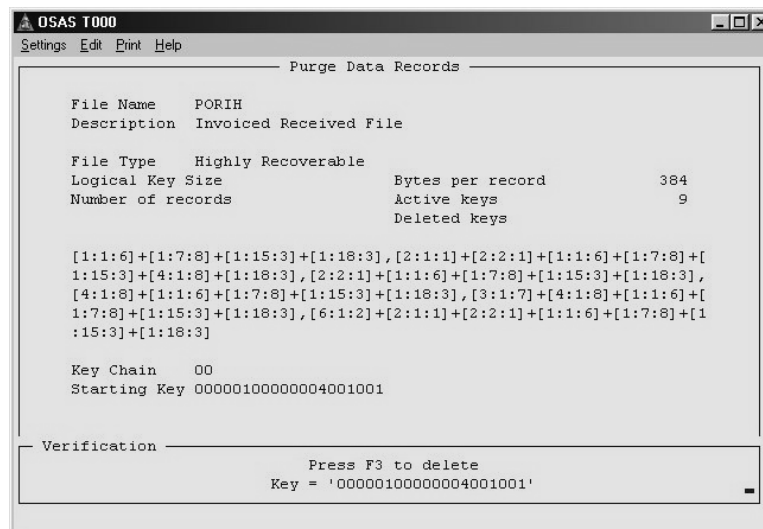
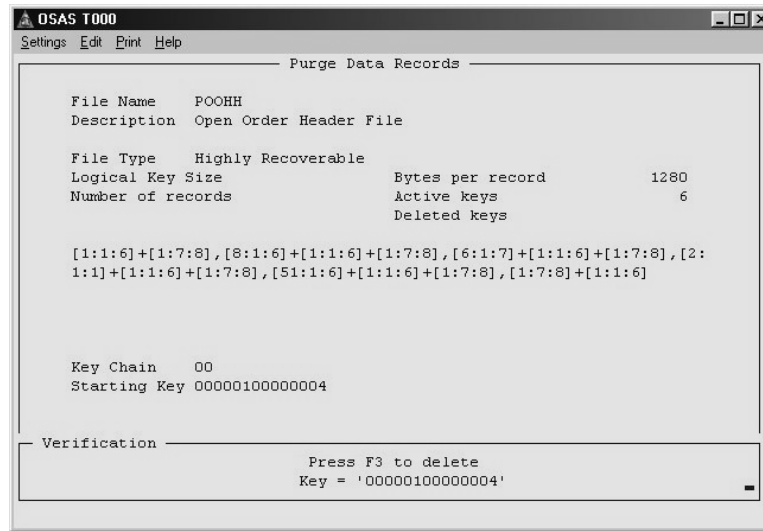
```

- The system is looking for the open order record using the key from the invoiced received file, and it is not found. To fix the error, use the Purge Data Records utility to remove all line items for the order number **RIO\$(1,17)**, in the PORIxxx and all other transaction companion files.

POOHxxx	Open Order Header file
POORxxx	Open Order Detail file
PORGxxx	Goods Received file
PORIxxx	Invoices Received file
PORTxxx	Invoice Totals file
POLIxxx	Lot/Serial Invoiced file
POLRxxx	Lot/Serial Received file
POLSxxx	Lot/Serial Item file
PODExxx	Additional Descriptions file

- Enter **RUN O1\$ <CR>** at the prompt to return to the OSAS menu or enter **BYE<cr>** at the basic prompt to exit to the operating system.
- Make sure you have a **Valid Backup** of your data files (include all interfaced application data files too).
- Select **Purge Data Records** from the Resource Manager Data File Maintenance menu.

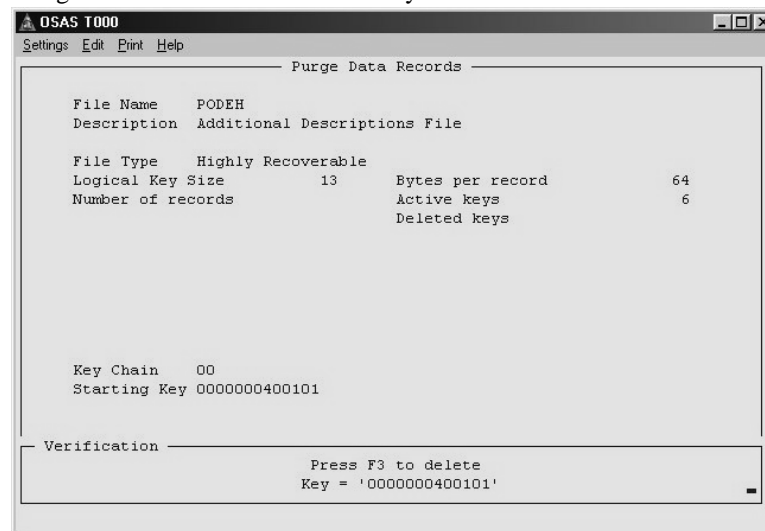
11. Now check each of the Purchase Order Transaction files to see if a record(s) exist for the Batch ID and Order Number that was displayed from **RI0\$(1,17)**, (00000100000004) and remove them. The following are examples of the POOHxxx and the PORIxxx files.



Note

The Batch Number and the Order Number are the beginning part to the keys selected for both files. For these Purchase Order files the key may also contain the Entry Number and Sequence Number. As long as the beginning portion of the key matches the value entered (00000100000004) it should be purged.

12. For the PODExxx file, the key for the file does not contain the Batch Number. The key will begin with Order Number and Entry Number.



13. After removing the Order Number from all of the Purchase Order files, the Receipts and Invoices Report runs successfully.

Note

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 to avoid or reduce duplication.

Error 12 - Duplicate or Missing File

DESCRIPTION:

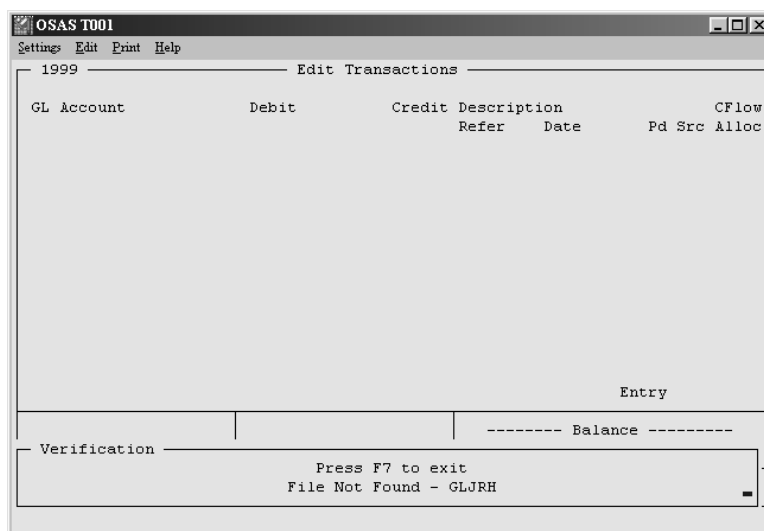
The system is trying to access a file that cannot be found or trying to create a new file in a directory with the same name as an existing file in that directory.

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.



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.

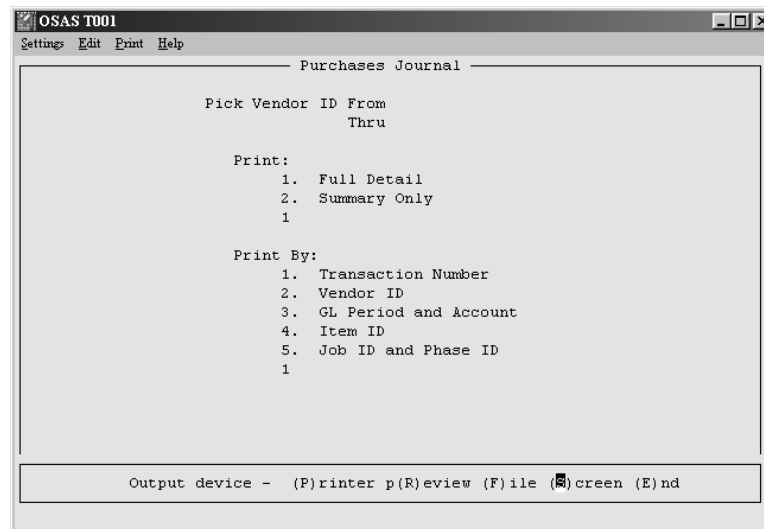
SUGGESTIONS:

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*. **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 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.

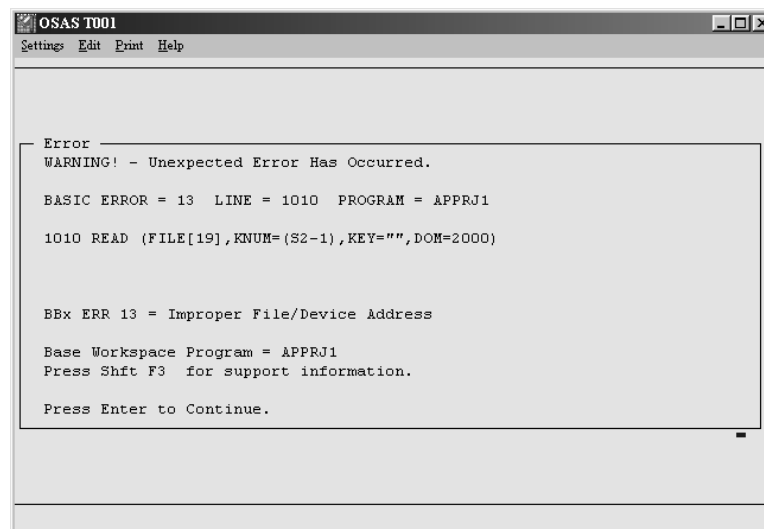
Enter **FLAG *.* <CR>** from a **DOS** prompt in the appropriate directory to see the current rights to the existing files and directories on a Novell network. Enter **FLAG *.* +srw** (ver 3.12) and ***.* +shrw**(ver 4.11)<CR> to change files to **Shareable Read Write**.

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.

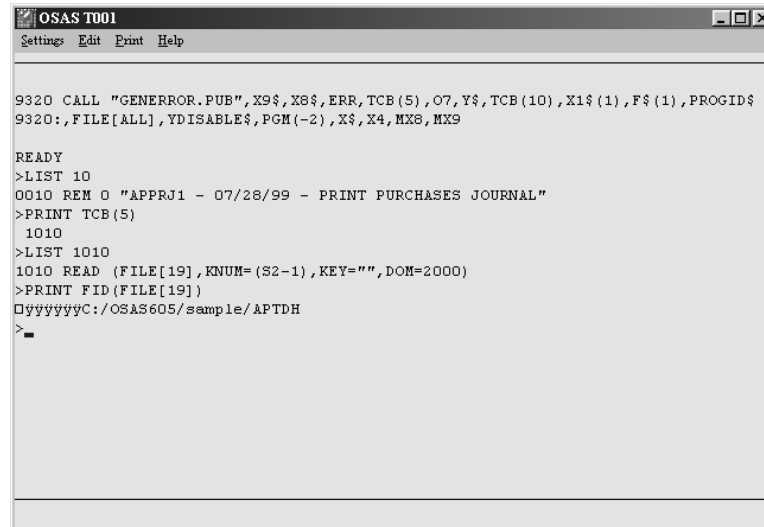
Error 13 - Example



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.



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-C**, **Ctrl-A** to get to the BASIC prompt. If you are prompted to press F7 to exit, press **Ctrl-C**, **Ctrl-A** again.



```

OSAS T001
Settings Edit Print Help

9320 CALL "GENERERR.PUB",X9$,X8$,ERR,TCB(5),O7,Y$,TCB(10),X1$(1),F$(1),PROGID$
9320:,FILE[ALL],YDISABLE$,PGM(-2),X$,X4,MX8,MX9

READY
>LIST 10
0010 REM 0 "APPRJ1 - 07/28/99 - PRINT PURCHASES JOURNAL"
>PRINT TCB(5)
1010
>LIST 1010
1010 READ (FILE[19],KNUM=(S2-1),KEY="",DOM=2000)
>PRINT FID(FILE[19])
□yyyyyyC:/OSAS605/sample/APTDH
>

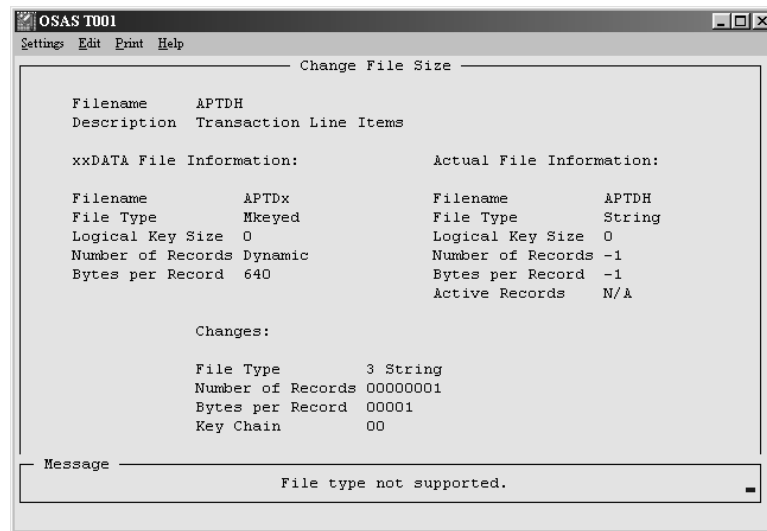
```

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 01\$** 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



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.

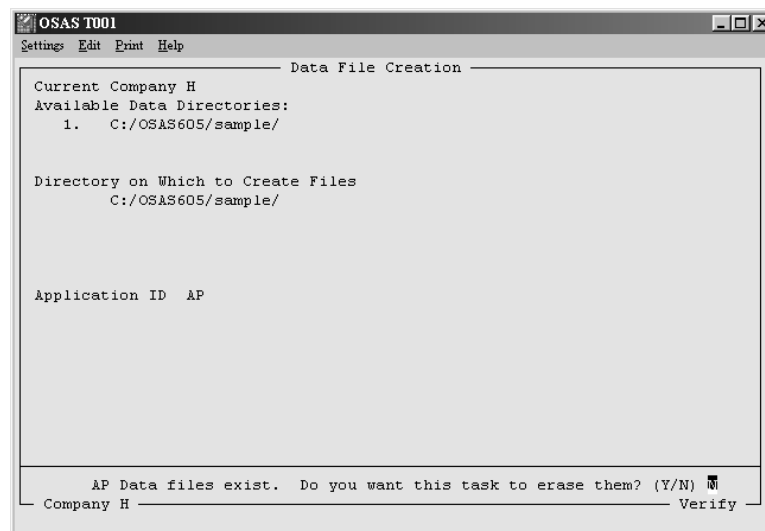
In this example, we would create a new transactions file (**APTDH**). Also to be consistent and create the companion files that would be related (**APTHH and APDEH**).

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\OSAS\SAMPLE <CR>** to change directories to the /OSAS/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.

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

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



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** 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=85

HANDLES=85

CIBS=85

- 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.

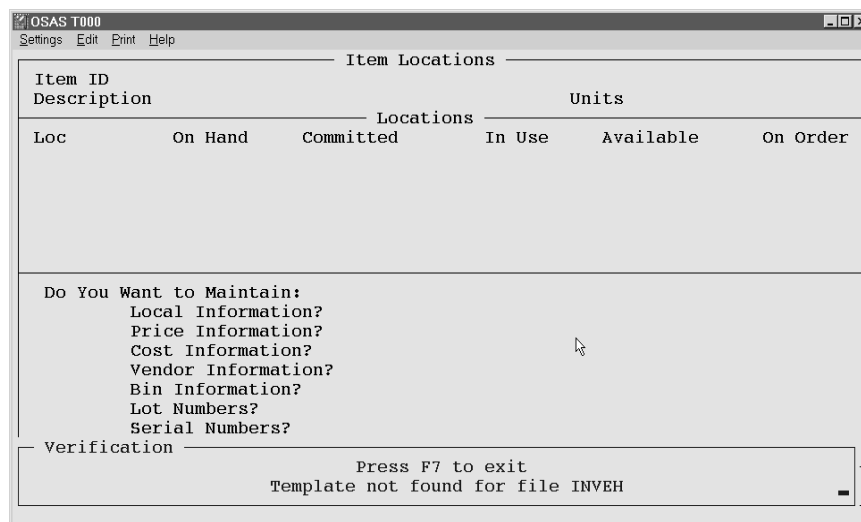
SUGGESTIONS:

- 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.



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.

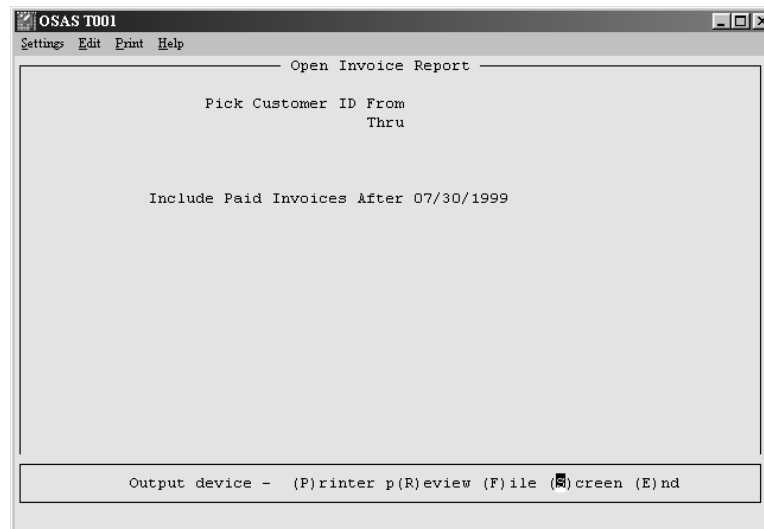
SUGGESTIONS:

- 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.

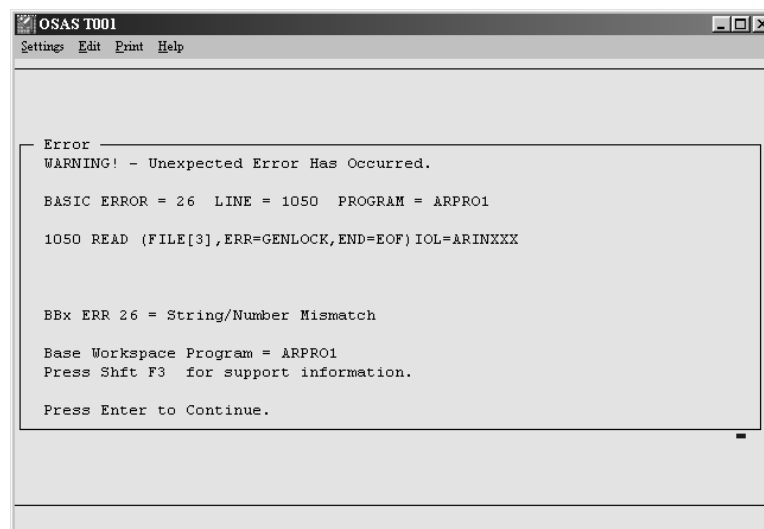
Note

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.

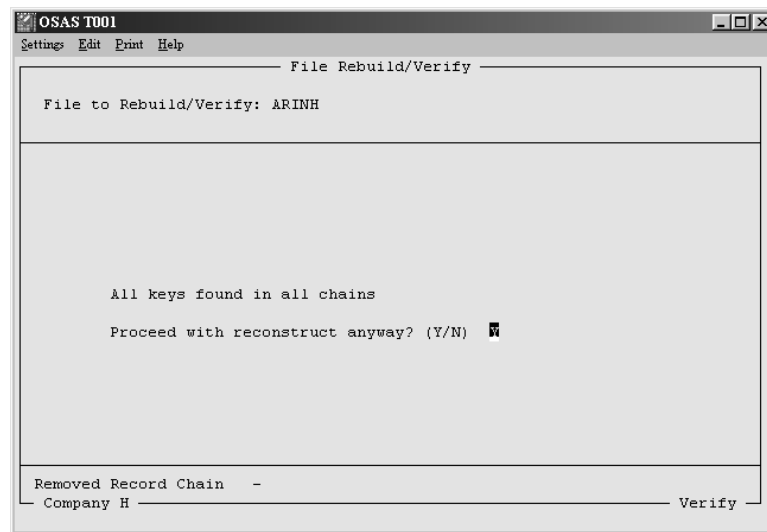
Error 26 Example



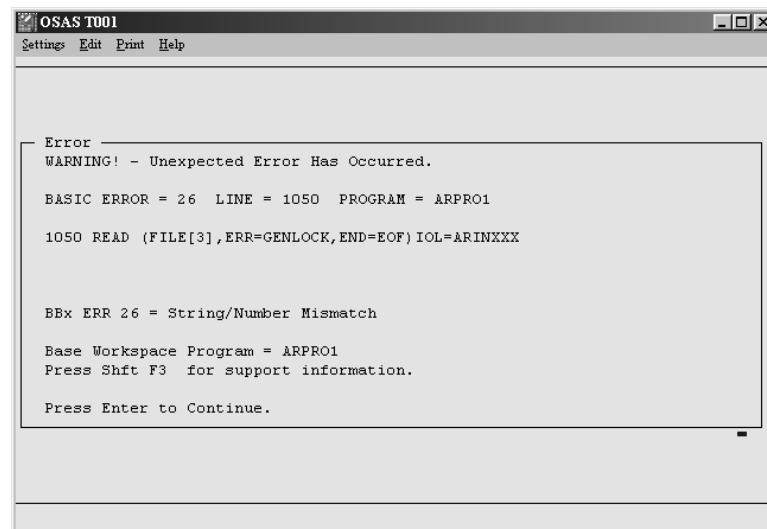
1. Select **Open Invoice Report** from the Accounts Receivable Open Invoices menu. Print the report for all customers and output it to the screen. The following error is displayed:



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).



3. Use the **Exit (F7 or Esc M)** command to go back to the menu. Select **File 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-C, Ctrl-A** to get to the BASIC prompt. If you are prompted to exit, press **Ctrl-C, Ctrl-A** again.



```

OSAS T001
Settings Edit Print Help

9320 CALL "GENERERROR.PUB",X9$,X8$,ERR,TCB(5),07,Y$,TCB(10),X1$(1),F$(1),PROGID$
9320:,FILE[ALL],YDISABLE$,PGM(-2),X$,X4,MX8,MX9

READY
>LIST 10
0010 REM 0 "ARPRO1 - 10/01/96 - OPEN INVOICES"
>PRINT TCB(5)
1050
>LIST 1050
1050 READ (FILE[3],ERR=GENLOCK,END=EOF) IOL=ARINXXX
>LIST ARINXXX
0923 ARINXXX: IOLIST NO$,N1$,N1[ALL],N2$,N3$,N99$[ALL],N99[ALL]
>PRINT NO$
ACE00112670046100
>RUN 01$

```

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.

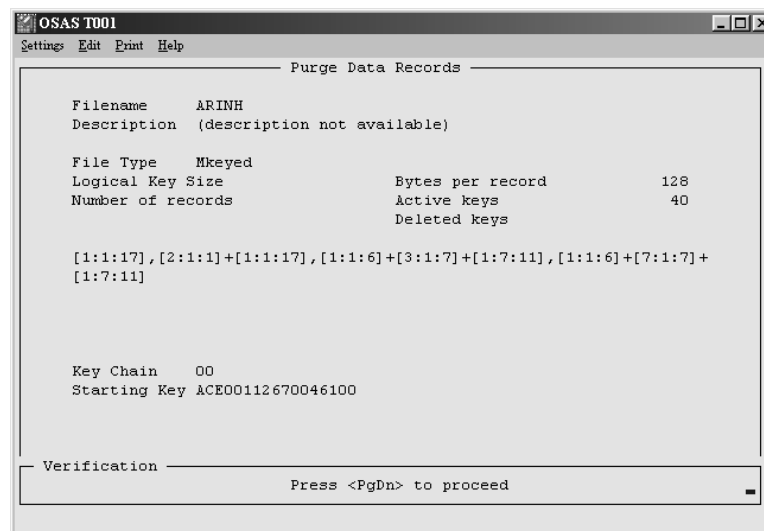
Since the **File Rebuild/Verify** utility did not work, your options are to restore a backup or try to remove the damaged record.

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\$**.

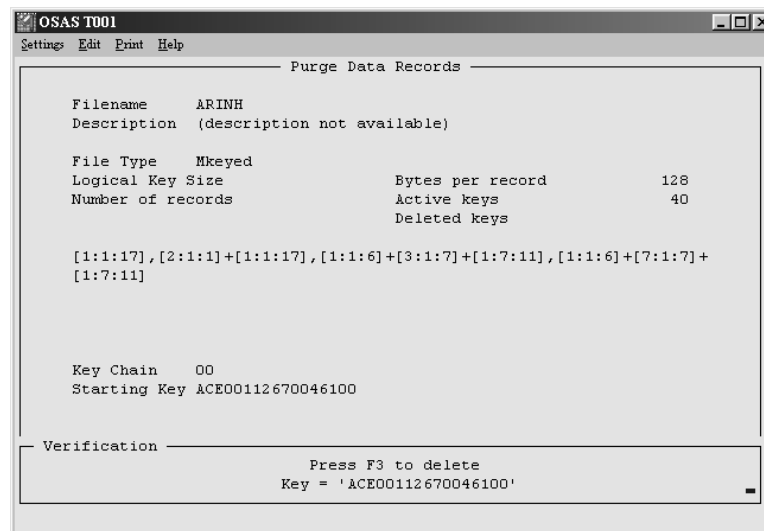
9. Enter **PRINT N0\$ <CR>** to print the value stored in N0\$. The first six characters are the customer ID (ACE001). The next eight characters are the invoice number (6080 followed by four spaces). The next digit (7) represents the type of invoice: an invoice, a credit or a payment. The number 7 indicates 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 01\$ <CR>** to go back to the OSAS menu.

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



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.



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 . The error might be displayed as follows:

Insufficient Memory (31)

SUGGESTIONS:

- Below are the standard settings for memory that are allocated for BBX4, if you are receiving error 31's you may need to increase or verify the number of pages of memory allocated for BBX4, 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.

Summary History				
Vendor ID	ACE001	ACE PLUMBING SUPPLY COMPANY		
Fiscal Year	1994			
Period	Purchases	Disc Taken	Disc Lost	Payments
1*	.00	.00	.00	.00
2*	.00	.00	.00	.00
3*	.00	.00	.00	.00
4*	.00	.00	.00	.00
5*	.00	.00	.00	.00
6*	.00	.00	.00	.00
7	584251.33	.00	.00	.00
8	.00	3774.88	.00	580476.45
9	37423.51	.00	.00	.00
10	1452.41	.00	374.24	37423.51
11	69865.13	.00	.00	.00
12	*****	698.65	14.52	70618.89
YTD	*****	4473.53	388.76	688518.85
* = Summary history not kept.				
Enter = next vendor, New ID, View period				
Company H				Verify

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-C, Ctrl-A** to get to the BASIC prompt (>). If you are prompted to exit, press **Ctrl-C, Ctrl-A** 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 for dimensioning the variables.

- 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.
- 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.

Note

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

OSAS T000

Settings Edit Print Help

Vendor Labels

Vendor ID From
Thru

Print By:
1. Vendor ID
2. Vendor Name
1

Label Type:
1. Standard 15/16 x 3 1/2
2. Standard 1 7/16 x 3 1/2
3. Mailing - Vendor Address
4. Mailing - Pay-to Address
1

Print Phone Number? **YES**

Company H Verify

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

OSAS T000

Settings Edit Print Help

Vendor Labels

Vendor ID From
Thru

Error

WARNING! - Unexpected Error Has Occurred.

BASIC ERROR = 47 LINE = 2050 PROGRAM = APPRL1

2050 IF VE3\$(1,20)=FILL(10) THEN GOTO 2065; REM "NO PHONE #"

BBx ERR 47 = Substring Out of Range

Base Workspace Program = APPRL1

Press Shift F3 for support information.

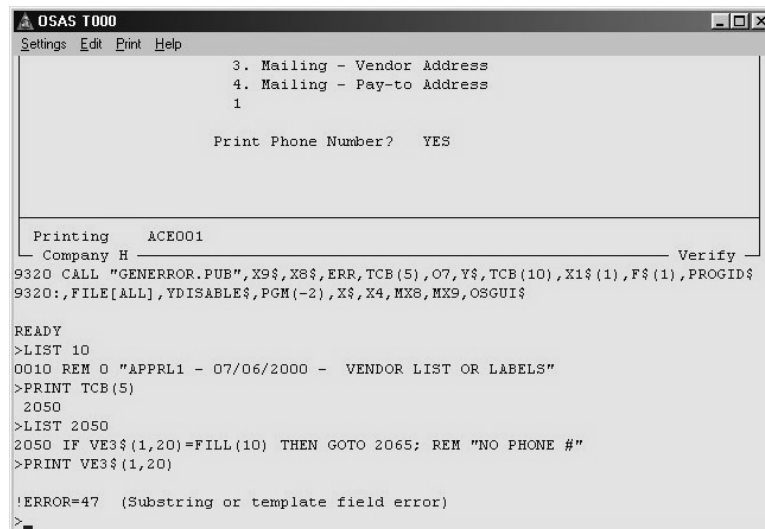
Press Enter to Continue.

Printing ACE001

Company H Verify

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

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



```

OSAS T000
Settings Edit Print Help

      3. Mailing - Vendor Address
      4. Mailing - Pay-to Address
      1

      Print Phone Number?   YES

Printing  ACE001
Company H _____ Verify
9320 CALL "GENERATOR.PUB",X9$,X8$,ERR,TCB(5),O7,Y$,TCB(10),X1$(1),F$(1),PROGID$
9320:,FILE[ALL],YDISABLE$,PGM(-2),X$,X4,MX8,MX9,OSGUI$

READY
>LIST 10
0010 REM O "APPR1 - 07/06/2000 - VENDOR LIST OR LABELS"
>PRINT TCB(5)
2050
>LIST 2050
2050 IF VE3$(1,20)=FILL(10) THEN GOTO 2065: REM "NO PHONE #"
>PRINT VE3$(1,20)

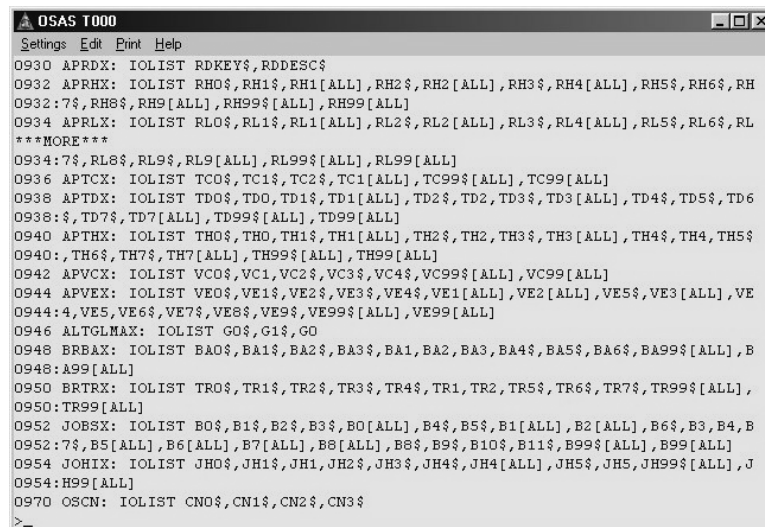
!ERROR=47 (Substring or template field error)
>

```

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. Find 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.



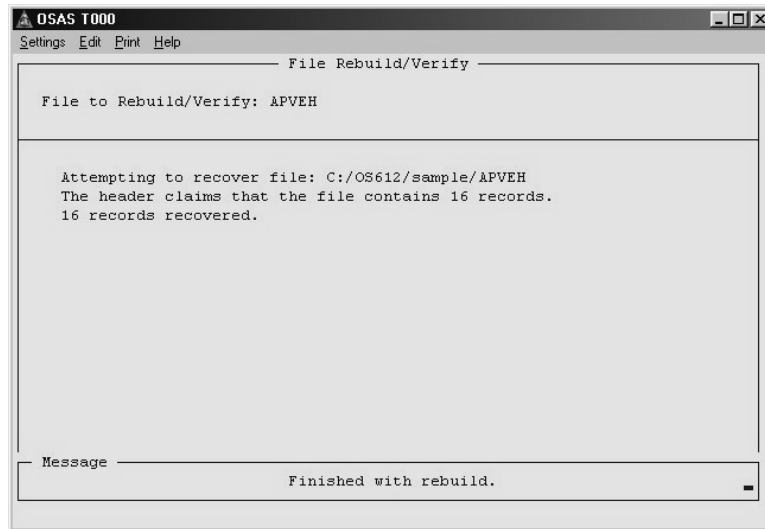
```

OSAS T000
Settings Edit Print Help
0930 APRDX: IOLIST RDKEY$,RDDESC$
0932 APRHX: IOLIST RHO$,RH1$,RH1[ALL],RH2$,RH2[ALL],RH3$,RH4[ALL],RH5$,RH6$,RH
0932:7$,RH8$,RH9[ALL],RH99$[ALL],RH99[ALL]
0934 APRLX: IOLIST RLO$,RL1$,RL1[ALL],RL2$,RL2[ALL],RL3$,RL4[ALL],RL5$,RL6$,RL
***MORE***
0934:7$,RL8$,RL9$,RL9[ALL],RL99$[ALL],RL99[ALL]
0936 APTCX: IOLIST TCO$,TC1$,TC2$,TC1[ALL],TC99$[ALL],TC99[ALL]
0938 APTDX: IOLIST TDO$,TDO,TD1$,TD1[ALL],TD2$,TD2,TD3$,TD3[ALL],TD4$,TD5$,TD6
0938:8$,TD7$,TD7[ALL],TD99$[ALL],TD99[ALL]
0940 APTHX: IOLIST THO$,THO,TH1$,TH1[ALL],TH2$,TH2,TH3$,TH3[ALL],TH4$,TH4,TH5$
0940:1,TH6$,TH7$,TH7[ALL],TH99$[ALL],TH99[ALL]
0942 APVCX: IOLIST VCO$,VC1$,VC2$,VC3$,VC4$,VC99$[ALL],VC99[ALL]
0944 APVEX: IOLIST VEO$,VE1$,VE2$,VE3$,VE4$,VE1[ALL],VE2[ALL],VE5$,VE3[ALL],VE
0944:4,VE5,VE6$,VE7$,VE8$,VE9$,VE99$[ALL],VE99[ALL]
0946 ALTGLMAX: IOLIST GO$,G1$,GO
0948 BRBAX: IOLIST BAO$,BA1$,BA2$,BA3$,BA1,BA2,BA3,BA4$,BA5$,BA6$,BA99$[ALL],B
0948:A99[ALL]
0950 BRTRX: IOLIST TRO$,TR1$,TR2$,TR3$,TR4$,TR1,TR2,TR5$,TR6$,TR7$,TR99$[ALL],
0950:TR99[ALL]
0952 JOBSX: IOLIST BO$,B1$,B2$,B3$,BO[ALL],B4$,B5$,B1[ALL],B2[ALL],B6$,B3,B4,B
0952:7$,B5[ALL],B6[ALL],B7[ALL],B8[ALL],B8$,B9$,B10$,B11$,B99$[ALL],B99[ALL]
0954 JOHIX: IOLIST JHO$,JH1$,JH1,JH2$,JH3$,JH4$,JH4[ALL],JH5$,JH5,JH99$[ALL],J
0954:H99[ALL]
0970 OSCN: IOLIST CNO$,CN1$,CN2$,CN3$
>

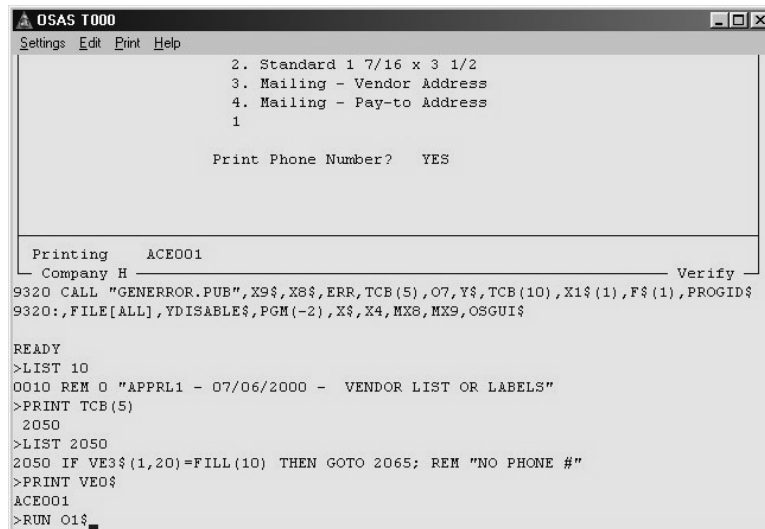
```

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.



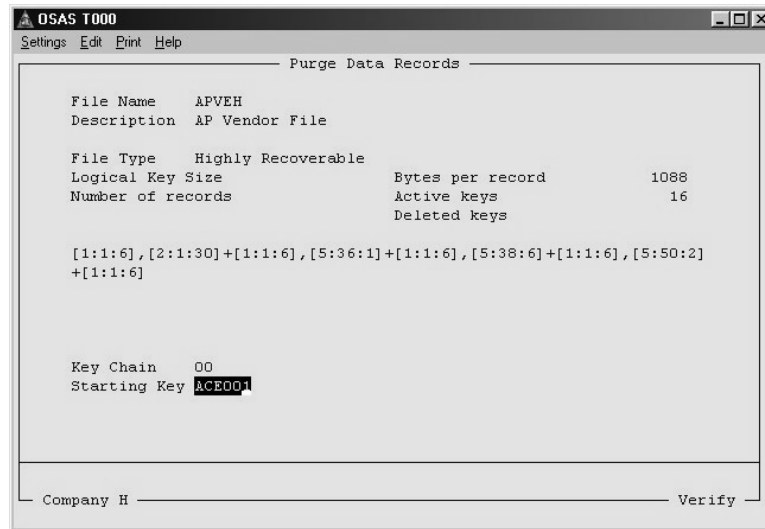
11. All keys were found. Select **Vendor Labels** from the Master File Lists menu in Accounts Payable to print the labels again. The error appears again. Press **Ctrl-C**, **Ctrl-A** twice to get to the BASIC prompt.



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.

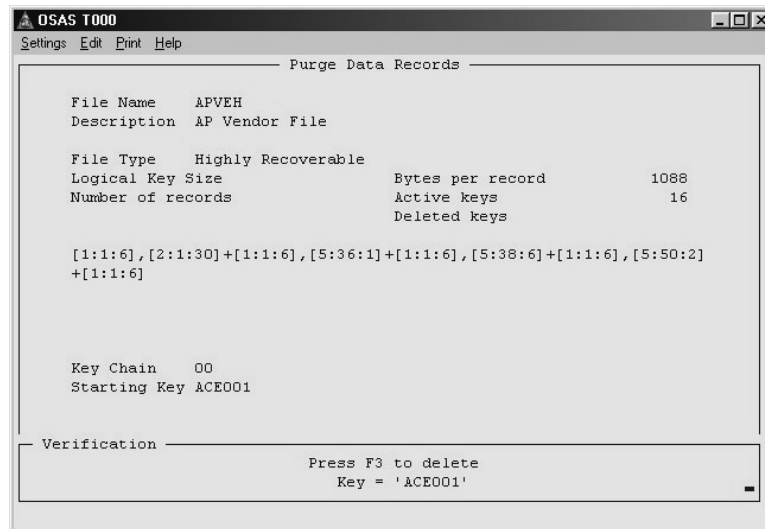
To **REMOVE** the vendor record and reenter the information for this example follow the steps on page 2-60 To **REDIMENSION** the variable for this example follow the steps on page 2-61.

REMOVING the vendor record



16. Enter the file name **APVEH**

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



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.

```

OSAS 1000
Settings Edit Print Help
Print Phone Number? YES

Printing ACE001
Company H Verify
9320 CALL "GENERATOR.PUB", X9$, X8$, ERR, TCB(5), O7, Y$, TCB(10), X1$(1), F$(1), PROGID$
9320: , FILE[ALL], YDISABLE$, PGM(-2), X$, X4, MX8, MX9, OSGUI$

READY
>LIST 10
0010 REM 0 "APPL1 - 07/06/2000 - VENDOR LIST OR LABELS"
>PRINT TCB(5)
2050
>LIST 2050
2050 IF VE3$(1,20)=FILL(10) THEN GOTO 2065; REM "NO PHONE #"
>PRINT VE3$(1,20)

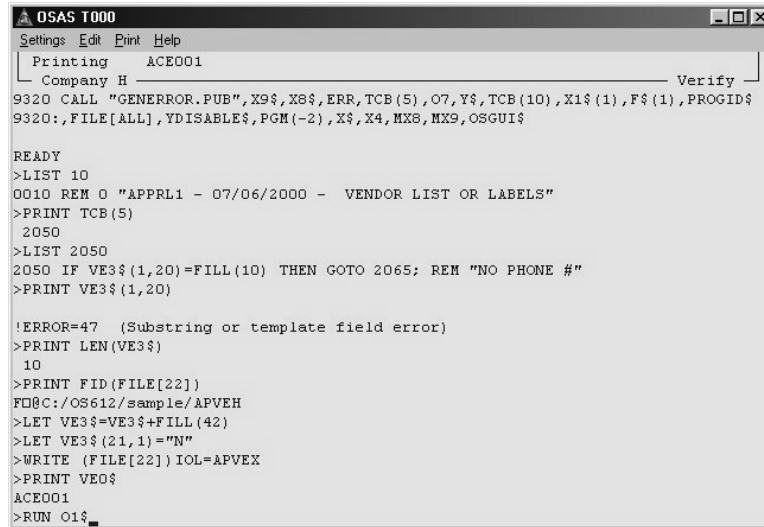
!ERROR=47 (Substring or template field error)
>PRINT LEN(VE3$)
10
>PRINT FID(FILE[22])
FD0C:/OS612/sample/APVEH
>

```

1. Enter **PRINT LEN(VE3\$)** <CR> to get the current length of VE3\$. It is 10.

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.



```

OSAS T000
Settings Edit Print Help
Printing ACE001
Company H Verify
9320 CALL "GENERATOR.PUB",X9$,X8$,ERR,TCB(5),O7,Y$,TCB(10),X1$(1),F$(1),PROGID$
9320:,FILE[ALL],YDISABLE$,PGM(-2),X$,X4,MX8,MX9,OSGUI$

READY
>LIST 10
0010 REM 0 "APPL1 - 07/06/2000 - VENDOR LIST OR LABELS"
>PRINT TCB(5)
2050
>LIST 2050
2050 IF VE3$(1,20)=FILL(10) THEN GOTO 2065; REM "NO PHONE #"
>PRINT VE3$(1,20)

!ERROR=47 (Substring or template field error)
>PRINT LEN(VE3$)
10
>PRINT FID(FILE[22])
FIDC:/OS612/sample/APVEH
>LET VE3$=VE3$+FILL(42)
>LET VE3$(21,1)="N"
>WRITE (FILE[22]) IOL=APVEX
>PRINT VE0$
ACE001
>RUN O1$

```

3. Enter **DIM VE3\$(52) <CR>** to dimension the variable VE3\$ to the correct length of 52. 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(42) <CR>**. This will leave the first 10 characters and add 42 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 Layout

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 Definitions:

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

Field Num	Field Name	Description	A/N	Length	Note
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
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	

*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.

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	<ol style="list-style-type: none">1. check standard and/or compressed columns for printer2. check for modifications to data files
2	end of file	<ol style="list-style-type: none">1. check available space on hard drive2. 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	<ol style="list-style-type: none">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 drive2. 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	<ol style="list-style-type: none">1. use the Change File Size to check file integrity2. try function logged in as root or supervisor
16	table overflow	<ol style="list-style-type: none">1. check FCBS, CIBS, and Handles parameters in Devices2. check files in CONFIG.SYS file3. XENIX - increase kernel parameter
18	Permissions	try function logged in as supervisor or root; change user permissions accordingly
26	damaged file	<ol style="list-style-type: none">1. try File Rebuild/Verify function2. 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	<ol style="list-style-type: none">1. verify enough RAM available for your system2. check for memory-resident programs
43	mask overflow error	locate value that is too big and increase mask
47	damaged file	<ol style="list-style-type: none">1. use the File Rebuild/Verify utility2. remove the damaged record, using Purge Data Records3. redimension the variable and write it back to the file
60	general I/O error	<ol style="list-style-type: none">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_INVDLLEN	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 ERRORS Examples

The following fs load errors have been encountered:

FSload 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.

FSload 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.

FSload 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.

FSload 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).

General Troubleshooting-Networks

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 AND UNABLE TO LOAD 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 PROGRAM 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 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.

EDITING "OSINFO.DOS" or "OSINFO.UNX"

Note

Need to 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

EDITING "OSAPPL.DOS" or "OSAPPL.UNX"

Note

Need to 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**

>

Version 6.1x Additions

3

Basis License Manager Trouble Shooting

Introduction

This guide is intended to help check and resolve the more common errors reported when licensing BASIS products. TCP/IP is the required network protocol for Microsoft Windows and UNIX problems related to platforms. Novell networks can choose between TCP/IP or IPX/SPX, and problems related to Novell installations will be covered in a later document.

The BASIS License Manager (BLM) log file is a critical diagnostic tool when dealing with FLEXlm errors.

In Windows, the log file is named blmgr.txt, and it is located in a directory called BASIS License Manager, under the BASIS product's directory. In Windows NT/2000 and 95/98, the BLM appears as a Control Panel applet called FLEXlm License Manager. Running this applet and clicking on the Status button will give you diagnostic information.

In UNIX, the log file is named basis_lmgrd.log, and it is located in a directory called blmgr/log. this directory is created when files are extracted from the PRO/5 tar file. Samples from the log files are shown in this document.

The BASIS License Manager uses a third party product called FLEXlm. Flexlm issues and numbered error messages are described below.

FLEXlm Error -1

Cannot find the license file.

- Verify that there is a license pointer file. In Windows, the license pointer file is named basis.lic, and it is located in the Visual PRO/5 directory. In UNIX, it is named BASIS.lic, and it is located in the PRO/5 directory.
- Verify that the license pointer file is pointing to the correct host name. This is the server host name for the machine where the BASIS License Manager is running.
- Verify that the BLM is running by checking the BLM process.
 5. In Windows NT/2000, go to Task Manager by right clicking on the Start Bar and selecting Task Manager. Select the Processes tab, click the image name to list the processes in alphabetical order, then verify the process basis_lmgrd and BASIS are running.
 6. In Windows 95/98, press CTRL+ALT+DEL keys. When the tasks dialog box appears verify that the processes basis_lmd grd and BASIS are running.

Note

In windows NT/2000 and in 95/98, the FLEXlm License Manager Control Panel applet reports the following status if a license file cannot be found. Can't get server. Cannot find license file -1 ,359.2 (No such file or directory).

7. In UNIX, use the `ps` command to verify that both these processes are running:

`basis_lmgrd`

`basis -T`

Two suggestions for the `ps` command: `ps -ef | grep basis` or, `br> ps -aux | grep basis`

FLEXlm Error -2

Invalid license file syntax.

- Verify that there is a license pointer file, verify that nothing has been changed in this file and the information that was entered was typed correctly.
- In Windows, this file is named `basis.lic`, and it is located in the `VISUAL PRO/5` directory. In UNIX, it is named `BASIS.lic`, and it is located in the `PRO/5` directory
- Repeat the process of registering for a license and installing it, as the file may have become corrupted.

FLEXlm Error -4

Licensed number of users already reached.

- Verify that you have not reached your user count limit.
- Visual PRO/5 installations have two FLEXlm utilities that provide diagnostic reports. One utility, **lmutil**, runs in DOS in character mode, the other utility, **lmttools**, run in GUI..

1. At a DOS prompt, change directories to the **BASIS License Manager directory** and type the following, substituting the name of the server for "servername".

```
lmutil lmstat -c @servername -a (display all information) or -A (display all active licenses)
```

2. In Windows, run Windows Explorer, click on the **BASIS License Manager directory**, and double click **lmttools.exe**. A new dialog comes up in the Current License File Box. Enter the following, substituting the name of the server for "servername".

@servername

3. In UNIX, change directories to the **blmgr directory** and type the following command, substituting the name of the server for "servername".

```
&nbsp;lmutil lmstat -c @servername -a (displays all information) or -A (displays all active licenses)
```

Note

You can add a SETOPTS Bit to deny use of the software, rather than simply using the Nagware messaging if desired. This may eliminate any potential errors caused by excessive users in the system. You must contact Basis for more specifics on how this is done.

FLEXlm Error -5

No such feature exists.

- Verify that the license for the feature (product) is installed. Each installed BASIS product must have its own separate license file. The name of the license file is made up of the number of users, the product and the serial number. In **Windows**, license files are located in the **BASIS License Manager** directory. In **UNIX**, license files are located in the **blmgr** directory. The example license file name 5PRO5DSPRO512345.lic is made up of the following components:

5 = number of users

PRO5DS = P[RO/5 Data Server feature

PRO512345 = serial number

- If the license is missing, repeat the process of registering for a license and installing it.
- If the license is installed, check the BASIS License Manager log file for more details about the error.

FLEXlm Error -8

Invalid (inconsistent) license key.

The license key and data for the feature do not match. This usually happens when a license file has been altered.

- Verify that the license file(s) has not been edited in any way and has not been corrupted. Verify that the information in the license file matches what you originally entered. the license file is a text file and may be viewed with any text editor, remember that incorrectly modifying this file will cause it to fail. In **Windows**, license files are located in the **BASIS License Manager** directory. In **UNIX**, license files are located in the **blmgr** directory. You may contact BASIS Technical Support by email at support@basis.com to verify the information, install the license information again, or register for a license.

Sample BLM log file:

```
9:44:38 (lmgrd) License file(s): /usr/basis/blmgr/PRO5DSPRO514420.lic
9:44:38 (lmgrd) lmgrd tcp port 27000
9:44:38 (lmgrd) starting vendor daemons ....
9:44:38 (lmgrd) Started basis (internet tcp port 1468 pid 23578)
9:44:38 (basis) FLEXlm version 6.1b
9:44:39 (basis) Invalid license key (inconsistent encryption code for "PRO5DS")
```

FLEXlm Error -9

Invalid host. the hostid of this system does not match the hostid specified in the license file.

- Verify that you have register3ed the license from the BASIS License Manager and the HOSTID for the machine running the BLM is in the license file. To verify the HOSTID on the machine where the BLM is running:

Visual PRO/5 installations have two FLEXlm utilities that provide diagnostic reports. One utility, **lmutil**, runs in DOS in character mode, the other utility, **lmttools**, run in GUI.

1. At a DOS prompt, change directories to the **BASIS License Manager directory** and type the following:

```
lmutil lmhostid
```

2. In Windows, run Windows Explorer, click on the **BASIS License Manager directory**, and double click **lmtools.exe**. Click on the **HOSTID** button.
3. In UNIX, change directories to the **blmgr directory** and type the following command:

```
lmutil lmhostid
```

It may be necessary to register again in this situation if the license file does not have the correct HOSTID. Please contact BASIS Technical Support at 505-345-5021 with the product serial number. It may be necessary to reset the license information at BASIS to allow you to request another license with the correct HOSTID.

FLEXlm Error -10

Feature has expired.

Some licenses have time limits, and this message indicates that the time limit has passed. Verify that you are not running a seven day temporary license or a demonstration license and that the date has not expired. You can check the date by looking at the appropriate license file you are running.

- Each installed BASIS product must have its own separate license file. The name of the license file is made up of the number of users, the product and the serial number. In **Windows**, license files are located in the **BASIS License Manager** directory. In **UNIX**, license files are located in the **blmgr** directory.

The example license file name 5PRO5DSPRO512345.lic is made up of the following components:

5 = number of users

PRO5DS = P[RO/5 Data Server feature

PRO512345 = serial number

The license file is a text file and may be viewed with any text editor, remember that incorrectly modifying this file will cause it to fail.

A seven day temporary license is issued when a second request is made for a license and the HOSTID submitted does not agree with the original request. Please contact BASIS Technical Support at 505-345-5021 if this the case. Contact a BASIS Sales representative to convert a demonstration license to a permanent license.

Sample BLM log file:

```
15:01:26 (lmgrd) License file(s): C:\BASIS\BASISL~1\5PRO5_DEVPRO555574.lic
15:01:26 (lmgrd) lmgrd tcp port 27000
15:01:26 (lmgrd) starting vendor daemons ....
15:01:26 (lmgrd) Started basis (internet tcp port 0 pid 112)
15:01:26 (basis) EXPIRED: PRO5_DEV
15:01:26 (basis) EXPIRED: PRO5_DEV
15:01:26 (basis) Server started on basistest for: PRO5_Dev
15:03:01 (basis) DENIED: "PRO5_DEV" basis@basistest (Feature has expired (-10,32))
15:12:44 (basis) DENIED: "PRO5_DEV" basis@basistest (Feature has expired (-10,32))I
```

FLEXlm Error -14

Cannot find Server hostname in network database.

The lookup for the hostname on the SERVER line in the license file failed. this often happens when NIS or DNS or the hosts file is incorrect. **Workaround: Use IP Address instead of hostname.**

- Verify that the host name in the license pointer file is the correct name for the server that is running the BASIS License Manager. In **Windows**, this license file is named **basis.lic**, and it is located in the **VISUAL PRO/5** directory. In **UNIX**, it is named **BASIS.lic**, and it is located in the **PRO/5** directory.
- Verify that the server's host name can be resolved by pinging it by name. You can also change the host name to the IP address, but this may cause a FLEXlm error -15.

FLEXlm Error -15

Cannot connect to license server.

The server has not been started yet, or the wrong port@host or license file is being used, or the port or hostname in the license file has been changed.

- Verify that the BASIS License Manager machine and the local workstation have a hosts file. It is recommended that both the server and the workstation IP addresses be included in both hosts files.

Sample hosts file entries:

```
192.134.1.123      servername
192.134.1.124      workstation name
```

- If you are using DNS, verify that your BASIS License Manager machine is in your DNS Server with the correct host name and IP address.

In Windows, you can check the host name by right clicking on Network Neighborhood and selecting Properties, then selecting the Identification tab and viewing the computer name.

In UNIX, check the host name by typing in the following command:

```
>host name
```

FLEXlm Error -18

License server does not support this feature.

- Verify that the license for the feature (product) is installed. Each installed BASIS product must have its own separate license file. The name of the license file is made up of the number of users, the product and the serial number. In **Windows**, license files are located in the **BASIS License Manager** directory. In **UNIX**, license files are located in the **blmgr** directory.

The example license file name 5PRO5DSPRO512345.lic is made up of the following components:

5 = number of users

PRO5DS = P[RO/5 Data Server feature

PRO512345 = serial number

Sample log file entries generated after attempting to run PRO/5 and getting an error -18.

```
8:10:15 (basis) UNSUPPORTED: "PRO5_DEV" (PORT_AT_HOST_PLUS )basis@basistest.com
(License server does not support this feature (-18,327))
```

8:10:15 (basis) UNSUPPORTED: "PRO5" (PORT_AT_HOST_PLUS)basis@basistest.com
(License server does not support this feature (-18,327))

FLEXIm Error -96

Server node is down or not responding

- See the system administrator about starting the server, or make sure that you're referring to the right host (see LM_LICENSE_FILE).
- Verify that the subnet mask is set properly:
 1. In Windows NT/2000, right click on the Network Neighborhood and select Properties. In the Configuration tab, highlight TCP/IP->ethernet and click on Properties. The Microsoft TCP/IP Properties dialog box will appear. Verify with your system administrator the correct subnet mask for your network. A typical subnet mask might be 255.255.255.0
 2. In Windows 95/98, right click on the Network Neighborhood and select Properties. In the Configuration tab, highlight TCP/IP->ethernet and click on Properties. The Microsoft TCP/IP Properties dialog box will appear. Verify with your system administrator the correct subnet mask for your network. A typical subnet mask might be 255.255.255.0g
 3. In UNIX, the procedure for verifying subnet masks varies greatly. check with your system administrator.

Common Occurance 6.1x Errors

Introduction

With development of the OSAS version 6.1 and its GUI capabilities several different error messages may become more common in occurrence than they did in previous versions. With these occurrences the procedures that will be used to resolve these issues may differ from methods used in earlier versions. The descriptions below will not be complete, but will allow you to make a more informed response to technical support. It is our hope that a more informed response will allow for a more cost effective support call and reducing you technical support charges.

Error = 29 - Mneumonic Error

Reasons:

Most of these errors will occur when attempting to use a specific mneumonic with a device that does not support that mneumonic. As it relate to OSAS, this could be a a GUI device trying to be accessed while in Text Mode, or an issue with a specific sequence of events in GUI Mode creating a situation that fails to access a specific GUI component (multi-load form/screen functions are more likely to create this situation).

Resolution Methods:

Should an error like this occur you should call in to technical support with the following information:

- Specific steps of duplication. This will include the exact sequence of events and windows in the order they appeared. Be sure to include any inquiry or maintenance commands that were used and at what point.
- At the point of error, break to basic and print the following pieces of information

<u>Variable</u>	<u>Description</u>
OSGUL.SCRNID\$	Returns the name of the *.BRC that is opened.
OSGUL.CONTEXT_POINTER	Returns a number (1-50) in the array of window IDs available.
OSGUL.WIND_ID[X]	Replace X with the number returned from the osgui.context_pointer to get the name of the window the error is occurring with.

The above information will be needed to expedite the issue for resolution. With all issues in version 6.1x they should be tested in the sample company, and they should also be tested in both GUI and Text modes for specificity. Often times this error will only occur in one mode and not the other.

Error = 47 - Substring Out of Range

Reasons:

In version 6.1x this error may still occur from data corruption, or a field length that is not dimensioned properly, but may also occur if a field is not defined in the template (possibly a text program trying to reference a GUI template).

Resolution Methods:

With all issues in version 6.1x they should be tested in the sample company, and they should also be tested in both GUI and Text modes for specificity. Often times this error will only occur in one mode and not the other. Contact technical support with specific directions for duplication after the above tests are completed.

Errors / Resolutions for Client Server Product

Introduction

Using the OSAS Client Server product in both a mixed environment network, and with Windows NT network alone, requires at least a basic knowledge of the TCP/IP protocol and the components that are used in communicating with that protocol. In recent history, a large majority of the support calls being addressed on these networks are resolved by addressing either incomplete, or incorrect setup of these TCP/IP components. By understanding the information being addressed with these components, you may be able to more efficiently install the OSAS Client Server product, or resolve issues after installation in a more cost effective manner.

The basic components that are addressed in this document are the hosts, the services, and the host.equiv files.

Determining IP Address, hostname, & TCP/IP Domain name.

Below are some methods for determining the IP Address, the hostname, or the TCP/IP domain name.

1. To determine what the IP Address, host name, and domain name go to each Win95/98 workstation, right click on **Network Neighborhood** and select **Properties** from the menu. Then highlight the **TCP/IP** protocol., press the **Properties** button and select the **IP Address** tab. This will give you the workstations IP Address if you are using static IP addresses. To get the **host name** and the **domain name**, select the **DNS** tab.
2. To determine what the IP Address, host name, and domain name go to each NT 4.0 workstation/server, right click on **Network Neighborhood** and select **Properties** from the menu.. Select the **Protocols** tab, select the **TCP/IP** protocol. This will give you the workstations IP Address if you are using static IP addresses. To get the **host name** and the **domain name**, select the **DNS** tab.
3. If they are using DHCP, then the "Obtain an IP Address Automatically" has been selected. Use one of the following commands to find out TCP/IP information at this point for any workstation/server.
 - **WINIPCFG** from a DOS prompt then select the "More Info" button.
 - **IPCONFIG** (some systems will have to use the DOS version.)

Note

You must be able to ping both the server and the workstation by IP address, host name, and host name+domain name from the server and the workstation respectively.

Note

You will not need to edit any of the host files, if you are using NT Server enabling -DHCP Server to allocate IP Addresses. Data Server itself doesn't care as long as the communication is taking place correctly.

Hosts, Services, and hosts.equiv files

Hosts File

The hosts file must be edited to include both the IP address and the machine name for machine each will be communicating with. On the server, the host file would include entries for all machine names and IP addresses that will be communicating with the server. On the workstation, the hosts file would include entries for the server IP address and machine name on which the Data Server component of OSAS has been installed.

For example, if the server where I have installed the Data Server component of the OSAS Client Server product has a IP address of **100.100.10.1** and the server's machine name is **server_box**, then I would have the following entry in the hosts file of each workstation trying to use the Data server:

```
100.100.10.1    server_box    # remarks or descriptions
```

Also, if we have two workstations with IP addresses of **100.100.10.8** and **100.100.10.9** and their machine names are **pc_bob** and **pc_bill**, then the following entries would be found in the hosts file for **server_box** shown above.

```
100.100.10.8    pc_bob        # remarks or descriptions
100.100.10.9    pc_bill       # remarks or descriptions
```

Note

If this the initial set up for a machine you may only have a **hosts.sam** file. This file is a sample file and should not be used. Make a copy of the file with no extension on the operating system and edit the new file.

Services File

The services file will need to be edited to allow both the server and the workstation to allow for a port to be used for the Data Server service to communicate with each other. We recommend that **port 1100** be used for the OSAS Data Server. The entry added to this file will be the same for both the server and the workstation. I would also recommend that you be consistent in the placement of this entry in the services file, as you view the file the center column will list all of the ports being used. Although you can add this entry on any line, I am recommending that you insert the line where port 1100 would numerically be in order. This will allow you in the future a faster method of identification for error resolution if needed. Below is a sample entry in the services file for the Data Server.

```
pro5srv        1100/tcp      # PRO5 Data Server (inc. server name for easy ID)
```

Note

To avoid additional Client Server issues be sure not to move either the hosts or the services files from their default locations. For **Windows 95/98** this is the **C:\Windows** directory. For **Windows NT/2000** this the **C:\Winnt\system32\drivers\etc**.

Hosts.equiv File

The hosts.equiv file is used in a mixed environment network specifically regarding the UNIX/ LINUX side of the network. This file is used to help identify all those people or machines that will be accessing files through the UNIX data server. If each machine name is the same as the user name then you would have one entry per terminal, if the user name is different then the machine name, then you will have multiple entries per machine.

For example: if we have two workstations named **stevem** and **greggl** and the user logins are the same, then the following entries would appear:

stevem

greggl

If however, you have two workstations named pc_stevem and pc_greggl and the user logins are different from the workstation names, i.e. stevem and greggl. The entries in the hosts.equiv file would be entered as:

pc_stevem	machine name
pc_greggl	machine name
stevem	login name
greggl	login name

Data Server Pathing Formats

One of the reasons for the speed of the OSAS Client Server product versus the standard OSAS product is the benefits gained in sending a higher level call for data using data server pathing. The key understanding when looking at these data server paths is that the path is with respect to how the data server will access the data. This should not be confused by the path that the workstation would use via mapped drives to access the data.

Below is the format for data server pathing in Open Systems.

/<server_box,pro5srv>path from data server to data

In the above example, you would replace **server_box** with the machine name that the Data Server component was installed on. The path from data server to data is just that, because we are using TCP/IP and have specified the machine name already, your call for data has been made first to the data server which in turn, interprets the path that it now needs to use to retrieve the data (*path from data server to data*) and does so.

Sample Data Server Pathing by Data Server Type**UNIX/LINUX Data Server:**

data 1	/<server_box,pro5srv>/u/usr/app/osas605/data/
sysfil	/<server_box,pro5srv>/u/usr/app/osas605/sysfil/
sample	/<server_box,pro5srv>/u/usr/app/osas605/sample/
RWdata	/<server_box,pro5srv>/u/usr/app/osas605/RWdata/
GUI	/<server_box,pro5srv>/u/usr/app/osas605/GUI/

NT Data Server:

data 1	/<server_box,pro5srv>C:/app/osas605/data/
sysfil	/<server_box,pro5srv>C:/app/osas605/sysfil/
sample	/<server_box,pro5srv>C:/app/osas605/sample/
RWdata	/<server_box,pro5srv>C:/app/osas605/RWdata/
GUI	/<server_box,pro5srv>C:/app/osas605/GUI/

Novell Data Server:

data 1	/<server_box,pro5srv>SYS1:/app/osas605/data/
sysfil	/<server_box,pro5srv>SYS1:/app/osas605/sysfil/
sample	/<server_box,pro5srv>SYS1:/app/osas605/sample/
RWdata	/<server_box,pro5srv>SYS1:/app/osas605/RWdata/
GUI	/<server_box,pro5srv>SYS1:/app/osas605/GUI/

COMMON ERRORS found with OSAS Client Server

Below is a table of errors and potential reasons for them that may occur if the software is installed incorrectly, incompletely or network issues exist.

<u>Error</u>	<u>Host Error</u>	<u>Reason</u>	<u>Platform</u>
0	-10061	If the wrong port is entered on the open statement. If the data server has been shut down	UNIX/NT UNIX/NT
12		If the correct information is not set up in the hosts file on either the workstation and/or server. If the correct information is not set up in the .rhosts and/or hosts.equiv files on the server. If the data server's config.bbx file does not have the correct dksyn's set. If you spelled the the server name that the data server is installed on incorrectly.	UNIX/NT UNIX NT UNIX
FSload Error 13	FSerr 13	If trying to access through a Novell Data Server, ODBC driver only works with TCP/IP, not NCP.	NOVELL
17		If the data server's config.bbx file does not have the correct dksyn's set.	NT
18		Permissions	UNIX/NT
60	-161	No setopts bit 00000020 set in the server config.bbx. No setopts bit 00000020 set in the workstation config.bbx.	UNIX/NT
FSload Error 61	FSerr -161	If you do not put a User ID in the advanced settings for ODBC.	UNIX/NT
70	(Network user Error)	If the correct information is not set up in the hosts file on either the workstation and/or server. If the correct information is not set up in the .rhosts and/or hosts.equiv files on the server.	UNIX/NT UNIX
72	(Network Cnct'n Lost) -10054	If executing pro5 on the workstation without the -u parameter. If you have files open on the workstation when the data server is shutdown, then try to access those files. If the hosts file on the server does not have your workstation's information, you get this on the open of any file.	UNIX UNIX/NT UNIX/NT

ODBC Error

Basis ODBC program unable to open Dictionary Default dictionary element does not exist. Can not Open database dictionary file. /<sco5,port=1100>/apps/osas/RWdata/file.1

File system error fserr = 70 fserrs = 70

Maximum user count exceeded on server.

This error occurred because two workstations were using the same ODBC activation key, which is a license infringement, if you are using the 1.1 ODBC driver or single user licenses with the 2.3 ODBC driver. **Each workstation that is accessing the data through ODBC at the same time must have a unique activation key.**

Initial Steps for Client Server Error Resolution

Unable to Open OSCL, ERR = 0 or 12

1. Error occurs when trying to enter OPEN SYSTEMS, the Data Server may not be running.
2. If the data server looks like it is running, get everyone out of OSAS and down the server, then restart the data server and test for results.
3. If the previous steps do not work do the following:
 1. **Break to a basic prompt at the point of error, and at the prompt type in END.**
 2. **Try to manually opening the directory by doing entering the following:**

>OPEN(99)"/<SERVER_BOX,pro5srv>C:/APPS/OSAS605/DATA"

Upon entering the above line, replace server_box with the machine name where the data server is installed and the appropriate path. if you do not get an error review your pathing files for incorrect paths. Otherwise, below are some common errors that will occur on the open statement.

Error	Description
4	Check for improper or incorrect dksyn drives in the config.bbx where the NT data server resides.
12	Check both the server and the workstation services/hosts files for incorrect or incomplete entries.
60	Check for incorrect spelling of data server pathing.

Unable to Load Prefix Information -

(Record/File/Device) Errors on the second workstation for NT or UNIX Client Server Installation of OSAS.

- If two workstations are using the same activation key.
- If the client does not set all of his data access type paths set to the data server path when he installs his first application. Because they have a one license activation, the sysfil path is not set. when the second machine goes in it cannot share the OSINFO.DOS and the OSAPPL.DOS when using mapped drives. Correct by changing the appropriate path to a data server path.

Note

This is not the case with version 6.1x as you will be using the Basis License Manager with a multiple user count and not individual interpreters on each of the workstations.

Error 70 (Network User Error)

On a UNIX network this error could be caused by the hosts.equiv, and/or .rhosts files that are incorrectly set up for the **userid** and/or **machine host name**.

>PRINT INFO(3,2)

returns the user id

>PRINT INFO(3,4)

returns the machine name

If it seems inconsistent in that sometimes the machine name includes the IP address and sometimes it does not, be sure that your machine name and IP name each have its own line in the hosts.equiv file. You will usually enter two lines in the hosts.equiv file. **One for your machine host name, and then one for your machine's host name + IP domain name.** For example, do the following:

jamese

jamese.abc.com

Do not do the following in the hosts.equiv file

jamese jamese.abc.com

Error 72 (Network Connection Lost)

When using a UNIX data server this error could occur because the workstation name in the hosts, hosts.equiv and/or .rhosts files are set up incorrectly.

>PRINT INFO(3,4)

returns the machine name

The **machine name** comes from the TCP/IP protocol setting under DNS configuration for the HOST Name and/or Domain Name.

The **User ID** is passed through the command line for the OSAS icon: i.e. **-ujamese**

