



Ross Systems International

FINFO

User Manual

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Rupert Stanley

Abstract.

This manual describes how to install and use FINFO. Which is a utility developed by Ross Systems International to be used on HP NonStop™ Systems to display Guardian file information. The file information can be selected by a number of criteria, it is then sorted on a specified key and displayed in one of a number of formats. User Totals showing file usage are also displayed at the end of each subvolume, volume and system displays.

Product Version

FINFO Version 3.2

Supported Releases

This manual supports the Version 3.2 product release of FINFO and all subsequent releases until otherwise indicated in a new edition.

Restrictions

The product must be licensed

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New and Changed Information

This is the sixth edition of the FINFO User Manual (document number FINFOU032).

This revision includes the information about the Volume and SubVolume Display Modes, which have been added to allow for Volume and Subvolume Summary Displays as well as file status testing.

This previous revision includes the `-sq` parameter for selecting sql files, `-si` parameter for selecting by index level, `-s%` parameter for selecting by % usage and `-e` parameter for outputting file extent detail information (which includes the maximum number of partitions, index level and percent usage information).

The Excel spreadsheet format was changed in the previous revision to include and extra columns for max extents, index level and percent usage information, and the select progid's parameter has been changed from `-si` to `-sr` to allow for the select on index level parameter.

The license file access remains as it was in the previous revision so that it can also reside on the same subvolume as FINFO which will automatically be accessed on startup and the licence testing has been extended to include blade systems.

This revision includes information on how to use the license manager product: VIEWLICE,

Please, please, please tell me of any other problems so I can fix them.

This revision requires the product to be fully licensed.

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About This Manual

This is reference manual for the configuration, management and use of the FINFO product. This section contains a detailed description of the manual and its intended audience, organisation, content a prerequisite requirements.

The Reading Audience

This manual is meant to be used by system managers and users who are responsible for the installation, operation and use of the FINFO product. The manual assumes that the reader is knowledgeable about the HP NonStop™ Guardian operating and programming environments.

Organization on This Manual

- Section 1. Introduces FINFO and its components.
- Section 2. Describes the installation and configuration of the FINFO product.
- Section 3. Is a summary sheet of FINFO Commands.
- Section 4. Describes the characteristics of the report file
- Section 5. Describes the file selection parameter and its effects.
- Section 6. Describes the help command
- Section 7. Describes the display commands.
- Section 8. Describes the sort commands.
- Section 9. Describes the selection by file attribute commands.
- Section 10 Describes the VIEWLICE license manager
- Section 11 Contains User Notes, License and Contact Information

Related Manuals

There are no related manuals.

Your Comments Invited

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1. INTRODUCTION

FINFO is a utility for HP NonStop computers, developed by Ross Systems International, to display Guardian disk and file information. OSS Users are spoilt for choice and have their own utilities.

It has the capabilities of selection on a wide range of criteria, displaying the output in a variety of sorted forms and generating user usage reports by sub volume, volume or system.

Selection

Disk Data can be selected by: Volume Mask, or
 SubVolume Mask, or
 File Name mask, and/or
 Date (Modification) Range (hours, days, weeks, months, years), and/or
 Date (Creation and/or Modification and/or Last Open and/or Expiration)
 by (Maximum and/or Minimum), and/or
 Size Maximum, and/or
 Size Minimum, and/or
 User (Name or Number), and/or
 File Code, and/or
 File Type, and/or
 Index Depth, and/or
 Percent Full, and/or
 SQL (Table, Index, Protection View, Shorthand View, All) and/or
 Audited and/or Licensed and/or Progid'd and/or Open and/or Partitioned
 Content (either Binary or Text(Case Sensitive or Insensitive))

Display

The display is performed as **Volume Display** containing volume summary details and totals.

Or, as a **SubVolume Display** on a volume by volume basis and consists of two components:

1. SubVolume Summary details containing details of file, user count and amount of space used.
2. A File Exception report contains the names of all files requiring maintenance

Or, as a **File Information Display** on a sub volume by sub volume basis and consists of two components:

1. The File Display, which can be sorted, see below.
 This display can be in:
 - a) Full form, one file details per line, or
 - b) Date details, one file details per line, or
 - c) Extent details, one file details per line, or
 - d) Compressed form, several file names per line, or
 - e) Suppressed

Note. The file size details can be displayed on a per partition or total file size basis.

2. The User Summary Display:

An individual user summary display is produced after displaying each sub volume, volume and system information, depending on the range of files selected.

The users, by number and name, are displayed, followed by the number of files, bytes used and pages allocated.

Or, as a **Spreadsheet Export Display** in the form of a flat file for export into an EXCEL or other similar spreadsheet. This display contains three components:

1. The session header giving date, time and FINFO program details
2. The File header display containing the semi-colon separated column headings
3. The file display containing the file details in rows with the columns separated by semi-colons.

Sorting

The File Display can be sorted by: Name, or
Date (Modification), or
Size, or
User, or
File Code

The user display is always sorted by user number.

EMS Log Reporting

If the user does not have a valid license the following report is sent to the EMS Log:

FINFO License Expired to renew contact: info@rsi-ns.com or +44(0)-1206-392923

2. IMPLEMENTATION

In order to install FINFO on your system:

1. Assign a subvolume on which FINFO is to be installed.
2. Copy the following files from your release disk:
 - a. FINFO.V32 to FINFO (binary Copy)
Note. In the name FINFO.V32, V32 refers to the version number
 - b. VIEWLICE.100 to VIEWLICE (binary Copy)
 - c. LICENSES.101 to LICENSES (ascii Copy)
3. Use FUP to alter the file codes as follows:
 - a. FUP ALTER FINFO, CODE 700
 - b. FUP ALTER VIEWLICE, CODE 100

FINFO is now installed and ready to run.

Note. FINFO Version 3.2 is only executable on TNS/R systems,
other versions are available for Itanium or classic CISC Systems

3. REFERENCE SUMMARY

The run command for FINFO is as follows:

RUN FINFO/OUT <report>/ [<file select> <commands>]

1. <report> : Output file (stdout)
2. <file select> : Files selector [[<vol>.<subvol>.<file>]
 Volume selector \$<vol> or
 SubVolume selector \$<vol>.<subvol>
 where <vol> = Volume Name, default current volume
 <subvol> = Sub volume Name, default current
 <file> = file descriptor, default wild
 vol/subvol/file can contain wild cards "*"
3. <commands> : The following commands are available, they do not have to match case -
 - a) -H or -? - Print out command help menu
 - b) -W - Print out in wide format
 - c) -D - Print out File Date Details
 - d) -E - Print out file extent details
 - e) -A - Print actual file sizes, not partition size
 - f) -X - Print out in eXcel compatible format
 - g) -Tx - Print user totals, total type x, where x is:
 - None - Print all user totals
 - V - Volume – Print Volume and System Totals
 - S – System – Print System Totals Only
 - h) -Ox - Order File Display by x, where x is:
 - (i) C - File Code
 - (ii) D - Date
 - (iii) N - Name (default)
 - (iv) S - Size
 - (v) U - User Number
 - (vi) UN - User Name
 - i) -Sx - Select by x, where x is:
 - (i) A - Audited Files Only
 - (ii) B - Match on text ("text"), text sought, this is a caseless match on the file text.
 - (iii) C - File Code (yyyy), where yyy is file code
 - (iv) D - Date Range (dyyyr)
 - yyy - Number of units, default 1 day
 - r - H(ours), D(ays), W(eeks), M(onths), Y(ears) , or
 - Calendar Date Range (dtm<date time>)
 - t – type: C(reation), L(ast Open)
 - E(xpiration) M(odification)
 - m – Modifier <, = or > - Less, Equal, Greater than
 - <date time> - dd[/mm[/yy[yy]]] [,hh:mm[:ss]] or ,hh:mm[:ss]
 - (v) I - Index Level (ix), where x is the index level
 - (vi) L - Licensed Files Only
 - (vii) O - Open Files Only
 - (viii) P - Partitioned Files Only
 - (ix) Q - SQL Files (qt)
 - t - Type: L(sql), T(able), I(ndex), P(rotection), S(horthand)
 - (x) R - Progid Set Files Only

- (xi) S - Size (smyyy)
yyy - File size in Kilobytes
m - modifier, <, = or >- less, equal, greater than
- (xii) T - File Type (tx), where x is the file type
U - Unstructured R - Relative
E - Entry Sequences K - Key Sequenced
- (xiii) U - User (u<name>>), where <name> is:
<group>.<user> tandem group.user names
<group no>,<user no> group & user nos.
- (xiv) X - Match on text ("text"), text sought, this must match the case of the text.
- (xv) % - Percent Full (%p), where p is percent full
- (xiv) (PIRA non text fields, any text must match case.

Note. The selector parameter has no effect in the case of the Volume and SubVolume Displays, except that “-si” and “-s%” are used with the SubVolume Display to set limits for the files which need maintenance in that files with an index depth greater than the one specified **or** which are greater than that percentage full are flagged as needing maintenance.

5.2 SUB-VOLUME SUMMARY DISPLAY

The Volume Summary Display has the command format: `finfo $<vol>.<subvol>`

Example 52-1. SubVolume Display using wildcards.

```
$WORK NATIVE 16> finfo $system.z*
FINFO V3.2 Native 02/07/2010 18:18
-----
Copyright Ross Systems International Ltd. 2008,2009,2010

Full Version (Release Date 2nd July 2010)
-----
SUBVOLUMES on \SIRIUS.$SYSTEM
SubVolume      Files  At Limit  Users    Used Space (Mb)  % of Disk      Pages
ZINSAIDS        24     0         1         2.84             0.14           1432
ZLINKMON         2     0         1         0.00             0.47           4608
ZLOG03           5     2         1        29.26            1.49          14561
. . .
ZTMFCONF        16     0         1         0.22             0.03            382
ZX000000         3     0         1         0.26             0.02            240
ZXOSSMON         6     0         1         0.06             0.01            162
Disk Totals     826    6         2        93.03            5.67          55386

Files needing maintenance
Name ($SYSTEM.) Last Modified Code  PExt  SExt  MExt  PC%  Comments
ZLOG03.ZZEV0004 02-Jul-2010 843  800  800  16  91.6  Reload (too full)
Recommendations: Reload (too full);

System      Files  At Limit  Users    Used Space (Mb)  % of System      Pages
Totals      826    6         2        93.03            5.67          55386
```

Note. The Disk and system totals of the subvolumes selected are displayed as well as a detailed display of the files needing maintenance.
 The reporting level for the index depth and the percent full is graduated depending on how recently the file has been used.

Example 52-1. SubVolume Display using wildcards and trigger levels.

```
$WORK NATIVE 20> finfo32 $system.sys* -si3 -s%80
FINFO V3.2 Native 02/07/2010 18:29
-----
Copyright Ross Systems International Ltd. 2008,2009,2010

Full Version (Release Date 2nd July 2010)
-----
SUBVOLUMES on \SIRIUS.$SYSTEM
SubVolume      Files  At Limit  Users    Used Space (Mb)  % of Disk      Pages
SYS02           416    0         1        289.35           15.14          147854
SYS03           461    0         2        364.95           18.94          185046
SYSGEN           1     0         1         1.04             0.05            512
SYSTEM           932    0         7        270.97           14.17          138457
Disk Totals     1810   0         7        926.33           48.31          471869

Files needing maintenance
Name ($SYSTEM.) Last Modified Code  PExt  SExt  MExt  PC%  Comments
SYS02.TMFMSG     26-Feb-1998  0    51   50   16  44.0  Reload (index 3)
SYS03.TMFMSG     26-Feb-1998  0    51   50   16  44.0  Reload (index 3)
SYS03.ZZSA0087   02-Jul-2010  130  28   16   53  87.0  Reload (too full)
SYS03.ZZSA4208   01-Jun-2004  130  26   16   53  85.4  Reload (too full)
SYSTEM.TALERROR  16-Jan-1998  0     1    1   16  84.4  Reload (too full)
Recommendations: Reload (too full); Reload (index depth);

System      Files  At Limit  Users    Used Space (Mb)  % of System      Pages
Totals      1810   0         7        926.33           48.31          471869
```

5.3 FILE DISPLAY

The File Display has the command format: `finfo [[[<vol>.<subvol>.<file>]`

Note: The volume and subvolume can only be specified if a file is specified, otherwise the default is the current volume and subvolume.

Each of the specified fields can be wild carded with the default specifier for file being * i.e. all the files in the current subvolume.

Example 53-1. Using only defaults. Displays Local Directory.

```
$WORK OLIVER 3> finfo
FINFO V2.9 Native 14/11/2008 12:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)

Files on \SIRIUS.$WORK.OLIVER
Name      Last Modified      Code TP RWEP      Size      User No  PExt  SExt  Pages
CC151UTH  12-Dec-2006 15:35:18    101 U  NNNN      3,326     127,004    4    28    4
OBJECT    30-Nov-2006 23:30:52    100 U  NNNN      9,430     127,004    4     2    6
SDE4C     12-Dec-2006 15:58:31    101 U  NNNN     10,234     127,004    4    28   32
SDE4O     12-Dec-2006 15:58:44    100 U  NNNN     17,670     127,004    6     2   10
TACLCSTM  28-Apr-2004 18:54:07    101 U  NNNN      2,150     127,004    8    32    8
XMPL6C    30-Nov-2006 23:25:57    101 U  NNNN      1,058     127,001    2    16    2
XMPL6O    30-Nov-2006 23:31:36    100 U  NNNN      9,430     127,004    4     2    6

Selected User Totals for SubVolume \SIRIUS.$WORK.OLIVER
User No  User Name      Files      Bytes Used      Pages Used
127,001  RSI.RUPERT      1           1,058            2
127,004  RSI.OLIVER      6          52,240           66
Totals:                7          53,298           68
```

Note: The files are displayed by subvolume in subvolume name order.

Within the subvolume the files are displayed in the requested order, and if no ordering command is given the files will be automatically be fully displayed in their name order.

At the end of each subvolume and subvolume display there is a summary display showing the subvolume or volume name, fully expanded, with a list of user details for the selected files and totals. Note, these are not the complete totals for the subvolume or volume but only the summary details for the selected files.

At the end of the finfo display is multiple volumes have been selected a summary report is generated for the selected volumes, showing the number of subvolumes and volumes selected. Note, finfo is not intended to be used for searching multiple systems. So it is assumed that the display will be for a maximum of one system.

If more than one subvolume is selected the display will look like this:

Example 53-2. Use wildcards to display all files starting with v on Local Volume

```
$WORK OLIVER 10> finfo *.v*
FINFO V2.9 Native 14/11/2008 12:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$WORK.RSIPROG

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
VIEWLICC	19-Feb-2007 18:51:51	101	U	NNNN	58,644	127,001	6	6	30
VIEWLICH	19-Feb-2007 18:51:52	101	U	NNNN	9,368	127,001	2	2	6

Selected User Totals for SubVolume \SIRIUS.\$WORK.RSIPROG

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	2	68,012	36
Totals:		2	68,012	36

Files on \SIRIUS.\$WORK.RSITEST

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
VIEWLICE	13-Feb-2007 08:32:26	100	U	NNNN	55,296	127,001	28	16	28

Selected User Totals for SubVolume \SIRIUS.\$WORK.RSITEST

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	1	55,296	28
Totals:		1	55,296	28

Files on \SIRIUS.\$WORK.RUPERT

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
VIEWLICC	12-Feb-2007 18:48:30	101	U	NNNN	58,644	127,001	6	6	30
VIEWLICE	12-Feb-2007 20:05:38	100	U	NNNN	250,906	127,001	28	16	124
VIEWLICH	12-Feb-2007 18:47:41	101	U	NNNN	9,368	127,001	2	2	6
VIWLICE	10-Feb-2007 17:20:10	100	U	NNNN	242,616	127,001	28	16	124

Selected User Totals for SubVolume \SIRIUS.\$WORK.RUPERT

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	4	561,534	284
Totals:		4	561,534	284

Files on \SIRIUS.\$WORK.SQL

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
VERSIONS	09-Sep-2004 21:35:20	584	K	NG--	1,536	255,255	1	1	1
VIEWS	09-Sep-2004 21:35:17	585	K	NG--	0	255,255	16	128	0

Selected User Totals for SubVolume \SIRIUS.\$WORK.SQL

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	2	1,536	1
Totals:		2	1,536	1

Selected User Totals for Volume \SIRIUS.\$WORK, Subvolumes: 6

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	12	992,086	519
255,255	SUPER.SUPER	2	1,536	1
Totals:		14	993,622	520

Note. The Volume Total.

Comment. This display has been cut down for reasons of space, so there will be a mismatch in the volume totals.

6. HELP COMMAND (-h and -? Commands)

The Help Command is invoked either on input of a -h or -? Command or on a command error.

Example 60-1. The Help Command

```
$WORK NATIVE 21> finfo -h
FINFO V3.2 Native 02/07/2010 18:33
-----
Copyright Ross Systems International Ltd. 2008,2009,2010

Full Version (Release Date 2nd July 2010)
-----
FINFO Commands are:
FINFO/OUT <report>/ [<file names>] [<commands>]
<report>      : Output file (stdout)
<file names>  : Files selector  [[<vol>.<subvol.><file>] or
                  Volume selector  <vol> or
                  SubVolume selector <vol>.<subvol>
                  where <vol> = Volume Name, default current volume
                        <subvol> = Subvolume Name, default current
                        <file> = file descriptor, default wild
                  vol/subvol/file can contain wild cards *
<commands>   : -H or -? - Print out command help menu
                  -W - Print out in wide format
                  -X - Generate EXCEL semi-colon separated spreadsheet
                  -D - Print out file date details
                  -E - Print out file extent details
                  -A - Print actual file sizes, not partition size
                  -Tx - Print out user totals, total type x
                        - None - Print all user totals
                        V - Volume - Prints Volume and System Totals
                        S - System - Prints System Totals only
                  -Ox - Order by x, where x is:
                        C - File Code
                        D - Date
                        N - Name (default)
                        S - Size
                        U - User
                  -Sx - Select by x, where x is:
                        A - Audited Files Only
                        B - Both ("<text>") where <text> is text
                           Files are searched for the case free text
                        C - File Code (yyyy), where yyy is file code
                        D - Date Range (dyyyr)
                           yyy - Number of units, default 1 day
                           r - H(ours),D(ays),W(eeks),M(onths),Y(ears)
                           or
                           Calendar Date Range (dtm<date time>)
                        t - Type: C(reation), L(ast open)
                           E(xpiration), M(odification)
                        m - modifier < / >
                           <date time> - dd[/mm[/yy]][,hh:mm[:ss]]
                           or
                           <date time> - ,hh:mm[:ss]
                        I - Index Level (ix), where x is the index level
                        L - Licensed Files Only
                        O - Open Files Only
                        P - Partitioned Files Only
                        Q - SQL Files (qt)
                           t - Type: L(sql), T(able), I(ndex)
                           P(rotection), S(horthand)
                        R - Restricted Progid Set Files
                        S - Size (smyyy)
                           yyy - File size in Kilobytes
                           m - modifier, < / >- less / greater than
```

T - File Type (tx), where x is the file type
U - Unstructured, R - Relative,
E - Entry Sequenced, K - Key Sequenced,
U - User (u<name>>) where <name> is:
 <group>.<user> tandem group,user names
 <group no>,<user no> group & user nos.
X - Text ("<text>") where <text> is text
 Files are searched this takes time
% - Percent Full (%pp) pp = percent
(- PIRA Rec ("<pira rec>")
 see PIRA syntax in finfo.pdf
default select all files by file selector

7. DISPLAY TYPES

7.1 VOLUME SUMMARY DISPLAY

The Volume Summary Display has the command format: `finfo $<vol>`

The aim of this display is to show disk information for each volume and also the system as a whole.

Example 71-1. Volume Summary Display.

```
$WORK NATIVE 5> finfo $*
FINFO V3.2 Native 02/07/2010 17:39
-----
Copyright Ross Systems International Ltd. 2008,2009,2010

Full Version (Release Date 2nd July 2010)
-----
VOLUMES on \SIRIUS
      (Mb)          (Mb)          %          Fragments
Volume  Capacity  Free Space  Free      Count      Biggest (Mb)
$SYSTEM      2000        264.58     13        143         263.56
$AUDIT       4238       1589.11    37         7          625.50
$WORK        4238       3585.76    84         24         2826.38
Totals      10476       5439.45    51        174         2826.38
```

- 1) There is a preamble which identifies the version of FINFO being used the date of the report, copyright and licensing information.
- 2) There is a system header line which gives the full name of the system being reported on.
- 3) There is a title line identifying the volume data being reported on.
- 4) The Volume column contains the 8 character volume name
- 5) The Capacity Column gives the disk capacity in megabytes
- 6) The Free space column gives the amount of unused space on the disk.
- 7) The fragments count shows the number of unused fragment of disk space..
- 8) The biggest fragment shows the largest fragment on the disk.
- 9) The row which has "Totals" in the volume column contains the System Totals for the volumes analysed and contains the total capacity, free space, the average percentage free space, the total number of fragments and the largest fragment on al the disks analysed.

7.2 SUB-VOLUME SUMMARY DISPLAY

The Volume Summary Display has the command format: `finfo $<vol>.<subvol> <selectors>`

The aim of this display is to give sub-volume summary information for each subvolume analysed, together with volume totals with list of files needing maintenance with recommendations.

The set of subvolume totals list of file needing maintenance is included for each volume analysed and finally a cumulative total is produced for the entire volume.subvolume set analysed.

The selectors can be `-six` or `-s%p` where `x` is the index level and `p` is the percentage full trigger level if either of these trigger levels are reached then the file is reported as needing maintenance.

The default trigger levels depend on when the file was last modified as given by the table below:

Last Modified	Approximately within	% Full	Index Depth
<4,000 seconds	Last Hour	70%	2
<90,000 seconds	Last Day	80%	2
<600,000 seconds	Last Week	90%	3
>600,000 seconds	After 1 week	Not flagged	3

This means that the reporting sensitivity depends on the degree to which a file is used.

Example 72-1. SubVolume Display using wildcards and trigger levels.

```
$WORK NATIVE 20> finfo32 $system.sys* -si3 -s%80
FINFO V3.2 Native 02/07/2010 18:29
-----
Copyright Ross Systems International Ltd. 2008,2009,2010

Full Version (Release Date 2nd July 2010)
-----
SUBVOLUMES on \SIRIUS.$SYSTEM
SubVolume      Files  At Limit  Users    Used Space (Mb)  % of Disk      Pages
SYS02           416    0         1        289.35           15.14          147854
SYS03           461    0         2        364.95           18.94          185046
SYSGEN           1      0         1         1.04             0.05           512
SYSTEM          932    0         7        270.97           14.17          138457
Disk Totals    1810   0         7        926.33           48.31          471869

Files needing maintenance
Name ($SYSTEM.) Last Modified Code  PExt  SExt  MExt  PC%  Comments
SYS02.TMFMSG     26-Feb-1998  0    51   50   16  44.0  Reload (index 3)
SYS03.TMFMSG     26-Feb-1998  0    51   50   16  44.0  Reload (index 3)
SYS03.ZZSA0087   02-Jul-2010  130  28   16   53  87.0  Reload (too full)
SYS03.ZZSA4208   01-Jun-2004  130  26   16   53  85.4  Reload (too full)
SYSTEM.TALERROR  16-Jan-1998  0     1    1   16  84.4  Reload (too full)
Recommendations: Reload (too full); Reload (index depth);

System      Files  At Limit  Users    Used Space (Mb)  % of System      Pages
Totals     1810   0         7        926.33           48.31          471869
```

Notes:

- 1) There is a preamble which identifies the version of FINFO, and date and licensing information.
- 2) Then there is a subvolume header giving the system and subvolume name
- 3) The Subvolume column gives the subvolume name
- 4) Files, Users, Used Space and Pages correspond to these totals for the subvolume
- 5) At limit is the number of files at or exceeding the trigger level of index depth or % used
- 6) % of Disk is the % of the available disk used by the subvolume files
- 7) The files needing maintenance table gives the file name including subvolume, modification time, file code, extent information (Primary, Secondary, Maximum no of extents), percent full and recommendations, if the index level is too deep this given also.
- 8) Parts 2) to 7) are repeated for each volume analysed followed by system totals.

7.3 FULL FILE DISPLAY

The default file display mode is a full file display, it has the format:

Example 73-1. Full File Display.

```
$WORK OLIVER 3> finfo
FINFO V2.9 Native 14/11/2008 12:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$WORK.OLIVER

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
CC151UTH	12-Dec-2006 15:35:18	101	U	NNNN	3,326	127,004	4	28	4
OBJECT	30-Nov-2006 23:30:52	100	U	NNNN	9,430	127,004	4	2	6
SDE4C	12-Dec-2006 15:58:31	101	U	NNNN	10,234	127,004	4	28	32
. . .									
TEST4	14-Nov-2008 11:57:05	3000	EP	NNNN	2,270	127,004	8	32	8
TACL CSTM	28-Apr-2004 18:54:07	101	U	NNNN	2,150	127,004	8	32	8
XMPL6C	30-Nov-2006 23:25:57	101	U	NNNN	1,058	127,001	2	16	2
XMPL6O	30-Nov-2006 23:31:36	100	U	NNNN	9,430	127,004	4	2	6

Selected User Totals for SubVolume \SIRIUS.\$WORK.OLIVER

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	1	1,058	2
127,004	RSI.OLIVER	6	52,240	66
Totals:		7	53,298	68

Notes.

- 1) There is a preamble which identifies the version of FINFO being used the date of the report, copyright and licensing information.
- 2) There is a subvolume header line which gives the full name of the subvolume being reported on.
- 3) There is a title line identifying the file data being reported on.
- 4) The Name column gives the 8 character file name
- 5) The Last Modified Column gives the Date and time when the file was last modified, unless the file is open when is simply indicates that the file is open.
- 6) Code. This Column gives the file code together with the following indicators:
L – Licensed, P – Progid'd, A – Audited
- 7) The TP Column is the file type: (R)elative, (E)ntry Sequences, (K)ey Sequenced, (U)nstructured. and Partitioning Information: 2-9 File Partitions, P > 9 Partitions, X – Extended Partition, B – Bad Partition, Blank – File Not Partitioned
- 8) Size. This give the file size (eof) to an accuracy of 4 to 6 digits with the following modifiers : blank – none, Kb – Kilobytes, Mb – Megabytes, Gb – Gigabytes, Tb – Terabytes, Pb – Petabytes.
- 9) The User Number Column gives the user number, group,user.
- 10) The Pext Column gives the number of Pages in the primary extent
- 11) The Sext Column gives the number of Pages in the secondary extents
- 12) The Pages Column gives the total number of Pages allocated in the extents. Plus a 1 character modifier similar to size K, M, G, T and P
- 13) The User Totals Preamble identifies the subvolume and provides a heading line
- 14) The User Number Column and User Name Column give the Guardian User Number and Names
- 15) The Files, Bytes Used and Pages Used columns display the corresponding totals per user.
- 16) The user totals row contains the sum of the corresponding figures.
- 17) Volume & System User Totals follow the same format and show the subvolume & volume count.

7.4 FILE EXTENT DISPLAY (-e Command)

The extents file display mode is a full file display, with an emphasis on usage it has the format:

Example 74-2. File Extents Display.

```
$WORK OLIVER 3> finfo -e
FINFO V3.1 Native 29/09/2009 12:59
-----
Copyright Ross Systems International Ltd. 2008,2009

Full Version (Release Date 22nd September 2009)
-----
Files on \SIRIUS.$WORK.OLIVER

Name      Last Modified      Code TP RWEP User No  PExt  SExt  MExt  IxL  PC%
CC151UTH  12-Dec-2006 15:35:18    101 U  NNNN 127,004    4    28   978   0   0.0
OBJECT    30-Nov-2006 23:30:52    100 U  NNNN 127,004    4     2    16   0  13.5
SDE4C     12-Dec-2006 15:58:31    101 U  NNNN 127,004    4    28   978   0   0.0
SDE4O     12-Dec-2006 15:58:44    100 U  NNNN 127,004    6     2    16   0  24.0
TACLCSTM  28-Apr-2004 18:54:07    101 U  NNNN 127,004    8    32   500   0   0.0
XMPL6C    30-Nov-2006 23:25:57    101 U  NNNN 127,001    2    16    16   0   0.2
XMPL6O    30-Nov-2006 23:31:36    100 U  NNNN 127,004    4     2    16   0  13.5

Selected User Totals for SubVolume \SIRIUS.$WORK.OLIVER
User No  User Name      Files      Bytes Used      Pages Used
127,001  RSI.RUPERT      1           1,058            2
127,004  RSI.OLIVER      6          52,240           66
Totals:                7          53,298           68

Selected User Totals for Volume \SIRIUS.$WORK, Subvolumes: 1
User No  User Name      Files      Bytes Used      Pages Used
127,001  RSI.RUPERT      1           1,058            2
127,004  RSI.OLIVER      6          52,240           66
Totals:                7          53,298           68
```

Notes.

- 1) The general form of the file display is the same as the full file display, except
- 2) The Size and Pages columns are removed, and the following columns are added
- 3) The Mext Column gives the maximum number of extents allowed for the file.
- 4) The IxL Column gives the maximum index level used for Key Sequenced files.
- 5) The PC% Column give the percentage of the file space used

7.5 WIDE FORMAT FILE DISPLAY (-w Command)

This is a summary form of file display it has the format:

Example 75-1. Wide Display.

```
$WORK OLIVER 5> finfo -w
FINFO V2.9 Native 14/11/2008 12:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$WORK.OLIVER

```
CC151UTH OBJECT SDE4C SDE40 TACLCSTM XMPL6C XMPL6O
```

Selected User Totals for SubVolume \SIRIUS.\$WORK.OLIVER

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	1	1,058	2
127,004	RSI.OLIVER	6	52,240	66
Totals:		7	53,298	68

Notes.

- 1) The general form of the file display is the same as the full file display, except
- 2) The file details header and columns and are replaced by a list of the file names.

7.6 DATE DETAILS FILE DISPLAY (-d Command)

This form of display provides the user with comprehensive file date information together with file size information to a maximum of 4 significant digits, it has the format:

Example 76-1. Date Details Display.

```
$WORK OLIVER 6> finfo -d
FINFO V2.9 Native 14/11/2008 12:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$WORK.OLIVER

Name	Created	Last Modified	Last Opened	Expiration	Size
CC151UTH	12Dec2006-15:30	12Dec2006-15:35	12Dec2006-15:58	*NO EXPIRATION*	3326
OBJECT	30Nov2006-23:30	30Nov2006-23:30	30Nov2006-23:30	*NO EXPIRATION*	9430
SDE4C	12Dec2006-15:27	12Dec2006-15:58	12Dec2006-15:58	*NO EXPIRATION*	10Kb
SDE4O	12Dec2006-15:58	12Dec2006-15:58	12Dec2006-15:58	*NO EXPIRATION*	17Kb
TACLCSTM	28Apr2004-18:53	28Apr2004-18:54	12Dec2006-15:23	*NO EXPIRATION*	2150
XMPL6C	30Nov2006-23:25	30Nov2006-23:25	30Nov2006-23:31	*NO EXPIRATION*	1058
XMPL6O	30Nov2006-23:31	30Nov2006-23:31	30Nov2006-23:31	*NO EXPIRATION*	9430

Selected User Totals for SubVolume \SIRIUS.\$WORK.OLIVER

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	1	1,058	2
127,004	RSI.OLIVER	6	52,240	66
Totals:		7	53,298	68

Notes.

- 1) The date field columns are full form with out seconds or an open indicator
- 2) The size column has a width of 5 characters including the size modifier (Kb, Mb...).

7.7 PRINT ACTUAL FILE SIZES DISPLAY MODIFIER (-a Command)

The print actual file sizes command causes all the file sizes displayed to be the total or actual file size over all the partitions defined, not the default partition file size.

Example 77-1 Actual File Size Print

```
$WORK RUPERT 36> finfo -a test
FINFO V2.9 Native 14/11/2008 12:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)

Files on \SIRIUS.$WORK.RUPERT

Name      Last Modified          Code TP RWE P   Size   User No  PExt  SExt  Pages
TEST      20-Apr-2007 12:46:45   2000 E  NNNN   1,613Kb 127,001  2     2     32

Selected User Totals for SubVolume \SIRIUS.$WORK.RUPERT
User No   User Name              Files      Bytes Used      Pages Used
127,001   RSI.RUPERT             1          1,613,824       32
Totals:                   1          1,613,824       32
```

Example 77-2 Partition File Size Print

```
$WORK RUPERT 39> finfo *.rupert.test
FINFO V2.9 Native 14/11/2008 12:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)

Files on \SIRIUS.$AUDIT.RUPERT

Name      Last Modified          Code TP RWE P   Size   User No  PExt  SExt  Pages
TEST      20-Apr-2007 12:56:59   2000 EX NNNN   1,548Kb 127,001 100   100   800

Selected User Totals for SubVolume \SIRIUS.$AUDIT.RUPERT
User No   User Name              Files      Bytes Used      Pages Used
127,001   RSI.RUPERT             1          1,548,288       800
Totals:                   1          1,548,288       800
...
Files on \SIRIUS.$WORK.RUPERT

Name      Last Modified          Code TP RWE P   Size   User No  PExt  SExt  Pages
TEST      20-Apr-2007 12:46:45   2000 E2 NNNN   65,536  127,001  2     2     32
Selected User Totals for SubVolume \SIRIUS.$WORK.RUPERT

User No   User Name              Files      Bytes Used      Pages Used
127,001   RSI.RUPERT             1          65,536          32
Totals:                   1          65,536          32
...
Selected User Totals for System \SIRIUS, Subvolumes: 2 Volumes: 2
User No   User Name              Files      Bytes Used      Pages Used
127,001   RSI.RUPERT             2          1,613,824       832
Totals:                   2          1,613,824       832
```

Note: The difference in the file sizes in the two examples. The file “test” has been set up in two partitions, the first display shows the total file size and the second display shows the components on the various subvolumes. The system total for the file matches the first display

7.8 PRINT ONLY TOTALS COMMAND (-t Command)

.The totals only print command suppresses the subvolume user details and prints out only the subvolume, volume and system user totals.

7.8.1 FULL TOTALS PRINT (-t Command)**Example 78-1. Full Totals Print (-t)**

```

$WORK OLIVER 11> finfo *.v* -t
FINFO V2.9 Native 14/11/2008 12:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)

Selected User Totals for SubVolume \SIRIUS.$WORK.LS00CAT
User No  User Name          Files          Bytes Used     Pages Used
127,001  RSI.RUPERT             2              1,536          1
Totals:  :                      2              1,536          1

Selected User Totals for SubVolume \SIRIUS.$WORK.PCPROGS
User No  User Name          Files          Bytes Used     Pages Used
127,001  RSI.RUPERT             3             305,708        170
Totals:  :                      3             305,708        170

Selected User Totals for SubVolume \SIRIUS.$WORK.RSIPROG
User No  User Name          Files          Bytes Used     Pages Used
127,001  RSI.RUPERT             2             68,012         36
Totals:  :                      2             68,012         36

Selected User Totals for SubVolume \SIRIUS.$WORK.RSITEST
User No  User Name          Files          Bytes Used     Pages Used
127,001  RSI.RUPERT             1             55,296         28
Totals:  :                      1             55,296         28

Selected User Totals for SubVolume \SIRIUS.$WORK.RUPERT
User No  User Name          Files          Bytes Used     Pages Used
127,001  RSI.RUPERT             4             561,534        284
Totals:  :                      4             561,534        284

Selected User Totals for SubVolume \SIRIUS.$WORK.SQL
User No  User Name          Files          Bytes Used     Pages Used
255,255  SUPER.SUPER           2              1,536          1
Totals:  :                      2              1,536          1

Selected User Totals for Volume \SIRIUS.$WORK, Subvolumes: 6
User No  User Name          Files          Bytes Used     Pages Used
127,001  RSI.RUPERT          12             992,086        519
255,255  SUPER.SUPER           2              1,536          1
Totals:  :                  14             993,622        520

```

Notes.

- 1) All the files details lines have been suppressed
- 2) The subvolume totals remain unchanged.
- 3) The volume totals remain unchanged, note the subvolume count

7.8.2 PRINT ONLY VOLUME TOTALS AND ABOVE (-tv Command)**Example 78-2. Totals Print Only Volume and Above (-tv)**

```
$WORK OLIVER 14> finfo *.*.* -tv
FINFO V2.9 Native 14/11/2008 12:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

```
Selected User Totals for Volume \SIRIUS.$SYSTEM, Subvolumes: 40
User No  User Name           Files      Bytes Used    Pages Used
127,001  RSI.RUPERT            20         61,677,490   30,188
200,010  <alien>.(200,10)      8          177,108      95
200,014  <alien>.(200,14)      3          66,440       33
200,040  <alien>.(200,40)      2          243,624     132
255,002  <alien>.(255,2)       26         1,832,648   1,450
255,200  SUPER.RUPERT          4          558,440     292
255,255  SUPER.SUPER           2847       980,805,565  776,121
Totals:  2910                 1,045,361,315  808,311
```

```
Selected User Totals for Volume \SIRIUS.$AUDIT, Subvolumes: 925
User No  User Name           Files      Bytes Used    Pages Used
127,001  RSI.RUPERT           122        10,942,457    5,834
255,255  SUPER.SUPER           6393       1,430,269,673  1,152,611
Totals:  6515                 1,441,212,130  1,158,445
```

```
Selected User Totals for Volume \SIRIUS.$WORK, Subvolumes: 91
User No  User Name           Files      Bytes Used    Pages Used
014,021  <alien>.(14,21)       1          12,288        8
127,001  RSI.RUPERT           3001       283,275,408   168,734
127,004  RSI.OLIVER            6          52,240        66
127,255  RSI.MGR                1          2,048         8
255,127  <alien>.(255,127)     1           360           2
255,255  SUPER.SUPER           1620       158,987,572   54,990
Totals:  4630                 442,329,916   223,808
```

```
Selected User Totals for System \SIRIUS, Subvolumes: 1056 Volumes: 3
User No  User Name           Files      Bytes Used    Pages Used
014,021  <alien>.(14,21)       1          12,288        8
127,001  RSI.RUPERT           3143       355,895,355   204,756
127,004  RSI.OLIVER            6          52,240        66
127,255  RSI.MGR                1          2,048         8
200,010  <alien>.(200,10)      8          177,108        95
200,014  <alien>.(200,14)      3          66,440        33
200,040  <alien>.(200,40)      2          243,624     132
255,002  <alien>.(255,2)       26         1,832,648   1,450
255,127  <alien>.(255,127)     1           360           2
255,200  SUPER.RUPERT          4          558,440     292
255,255  SUPER.SUPER           10860      2,570,062,810  1,983,722
Totals:  14055                 2,928,903,361  2,190,564
```

Notes:

- 1) All the files details lines have been suppressed
- 2) The subvolume totals have been suppressed.
- 3) The volume totals remain unchanged, note the subvolume count
- 4) The system details are now present because of the file select command note the subvolumes and volumes counts.
- 5) Users which have not been recognised by the system are flagged under group <alien> with their user number as their user name in brackets
- 6) Users which only have an alias are flagged under user group <alias> with their alias names.

7.8.3 PRINT ONLY SYSTEM TOTALS (-ts Command)**Example 78-3. Totals Print Only System Totals (-ts)**

```
$WORK OLIVER 13> finfo *.*.* -ts
FINFO V2.9 Native 14/11/2008 12:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

```
Selected User Totals for System \SIRIUS, Subvolumes: 1056 Volumes: 3
User No User Name Files Bytes Used Pages Used
014,021 <alien>.(14,21) 1 12,288 8
127,001 RSI.RUPERT 3143 355,895,355 204,756
127,004 RSI.OLIVER 6 52,240 66
127,255 RSI.MGR 1 2,048 8
200,010 <alien>.(200,10) 8 177,108 95
200,014 <alien>.(200,14) 3 66,440 33
200,040 <alien>.(200,40) 2 243,624 132
255,002 <alien>.(255,2) 26 1,832,648 1,450
255,127 <alien>.(255,127) 1 360 2
255,200 SUPER.RUPERT 4 558,440 292
255,255 SUPER.SUPER 10860 2,570,062,810 1,983,722
Totals: 14055 2,928,903,361 2,190,564
```

Notes:

- 1) All the files details lines have been suppressed
- 2) The subvolume totals have been suppressed.
- 3) The volume totals have been suppressed
- 4) The system details are the same as for the other totals output.
- 5) The same treatment of user names. Note this is useful for cleaning up your system.
- 6) This is as far as it gets there is not high reporting level for multiple systems.

7.9 PRINT EXCEL COMPATIBLE FORMAT DISPLAY MODIFIER (-x Command)

The Excel compatible command causes the details to be displayed in an Excel compatible format with summary headers, semi-colon separated column headers and file detail rows with the columns separated by semi-colons.

Example 79-1 Excel Compatible Print

```

$WORK NATIVE 4> finfo rupert.p* -x
FINFO V3.1 Native 29/09/2009 13:12
-----
Copyright Ross Systems International Ltd. 2008,2009

Full Version (Release Date 22nd September 2009)
-----
Volume;SubVolume;FileName;Open;Licensed;ProgId;Audited;Modified;LastOpen;Created
;Expiration;GroupNo;UserNo;GroupName;UserName;FileCode;FileType;Partitions;PExt;
SExt;MaxPages;AllocPages;Permit;Eof;Index Levels;%Full
$WORK ;RUPERT ;PAKSUBS ;N;N;N;N;03/12/2004 10:23:12;09/05/2009 18:43:50;03/12
/2004 10:23:11;NONE;127;001;RSI;RUPERT;0;U;;4;28;27360;228;NNNN;425606;0; 0.8
$WORK ;RUPERT ;PASS1 ;N;N;N;N;13/05/2006 11:38:14;09/05/2009 18:43:51;13/05
/2006 11:37:47;NONE;127;001;RSI;RUPERT;101;U;;2;2;32;2;NNNN;34;0; 0.1
$WORK ;RUPERT ;PASS2 ;N;N;N;N;13/05/2006 11:41:14;09/05/2009 18:43:51;13/05
/2006 11:40:32;NONE;127;001;RSI;RUPERT;101;U;;2;2;32;2;NNNN;2082;0; 3.2
$WORK ;RUPERT ;PASS3 ;N;N;N;N;13/05/2006 11:42:37;09/05/2009 18:43:51;13/05
/2006 11:41:14;NONE;127;001;RSI;RUPERT;101;U;;2;2;32;2;NNNN;34;0; 0.1
$WORK ;RUPERT ;PASS4 ;N;N;N;N;13/05/2006 11:43:32;09/05/2009 18:43:51;13/05
/2006 11:42:31;NONE;127;001;RSI;RUPERT;101;U;;2;2;32;2;NNNN;2080;0; 3.2
$WORK ;RUPERT ;PASSN ;N;N;N;N;19/02/2007 18:38:19;09/05/2009 18:43:51;13/05
/2006 11:44:07;NONE;127;001;RSI;RUPERT;101;U;;2;2;32;2;OOOO;2282;0; 3.5
$WORK ;RUPERT ;PFILE ;N;N;N;N;07/07/2006 07:22:14;09/05/2009 18:43:51;12/10
/2005 16:08:15;NONE;127;001;RSI;RUPERT;0;E;;2;100;1502;2;NNNN;4096;0; 0.1
$WORK ;RUPERT ;PIRACOMP;N;N;N;N;29/01/2007 15:40:46;09/05/2009 18:43:51;02/11
/2006 08:42:16;NONE;127;001;RSI;RUPERT;101;U;;2;2;32;2;NNNN;2136;0; 3.3
$WORK ;RUPERT ;PIRADT01;N;N;N;N;25/01/2007 13:10:41;09/05/2009 18:43:52;25/01
/2007 10:47:21;NONE;127;001;RSI;RUPERT;101;U;;2;2;32;2;NNNN;2226;0; 3.4
$WORK ;RUPERT ;PIRALIB ;N;N;N;N;13/02/2007 07:36:46;09/05/2009 18:43:52;13/02
/2007 07:36:44;NONE;127;001;RSI;RUPERT;100;U;;40;16;280;136;NNNN;275848;0; 48.1
$WORK ;RUPERT ;PIRALIBC;N;N;N;N;13/02/2007 07:35:45;13/07/2009 11:34:40;01/12
/2006 10:23:27;NONE;127;001;RSI;RUPERT;101;U;;18;18;288;90;NNNN;158908;0; 26.9
$WORK ;RUPERT ;PIRALIBH;N;N;N;N;01/02/2007 18:56:09;09/05/2009 18:43:55;24/11
/2006 12:35:51;NONE;127;001;RSI;RUPERT;101;U;;4;4;64;12;NNNN;20082;0; 15.3
$WORK ;RUPERT ;PIRASI03;N;N;N;N;01/06/2006 10:24:46;09/05/2009 18:43:55;01/06
/2006 10:24:46;NONE;127;001;RSI;RUPERT;101;U;;4;16;15636;4;NNNN;102;0; 0.0
$WORK ;RUPERT ;PIRATEST;N;N;N;N;13/02/2007 07:37:07;09/05/2009 18:43:55;13/02
/2007 07:37:02;NONE;127;001;RSI;RUPERT;100;U;;42;16;282;138;NNNN;282144;0; 48.9
.
$WORK ;RUPERT ;PROJSET ;N;N;N;N;05/10/2007 12:42:29;09/05/2009 18:43:57;05/10
/2007 12:41:33;NONE;127;001;RSI;RUPERT;101;U;;2;2;32;2;NNNN;3022;0; 4.6

```

Note: The semi-colon lines are not designed to fit into a display and so overflow on the screen
In reality on would type "FINFO /OUT <export file>/ -x"
plus of course other selection parameters

8. FILE INFORMATION SORT COMMANDS (-o)

The file details subvolume display can be sorted on one of the following keys:

- a. File Code. -oc Command.
- b. Modification date. -od Command.
- c. Name. -on Command (default)
- d. Size. -os Command.
- e. User Number -ou Command

Note The file data can only be sorted by one method at a time.
The file sort information command has no effect on volume and subvolume displays.

8.1 SORT BY FILE CODE. (-oc Command)

Example 81-1. Sort by File Code. (-oc)

```
$WORK OLIVER 15> finfo -oc
FINFO V2.9 Native 14/11/2008 12:29
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$WORK.OLIVER

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
OBJECT	30-Nov-2006 23:30:52	100	U	NNNN	9,430	127,004	4	2	6
SDE4O	12-Dec-2006 15:58:44	100	U	NNNN	17,670	127,004	6	2	10
XMPL6O	30-Nov-2006 23:31:36	100	U	NNNN	9,430	127,004	4	2	6
CC151UTH	12-Dec-2006 15:35:18	101	U	NNNN	3,326	127,004	4	28	4
SDE4C	12-Dec-2006 15:58:31	101	U	NNNN	10,234	127,004	4	28	32
TACLCSTM	28-Apr-2004 18:54:07	101	U	NNNN	2,150	127,004	8	32	8
XMPL6C	30-Nov-2006 23:25:57	101	U	NNNN	1,058	127,001	2	16	2

Selected User Totals for SubVolume \SIRIUS.\$WORK.OLIVER

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	1	1,058	2
127,004	RSI.OLIVER	6	52,240	66
Totals:		7	53,298	68

Note. Although the files are sorted by file code, within the file codes the name order is maintained.

8.2 SORT BY DATE. (-od Command)**Example 82-1. Sort by Date. (-od)**

```
$WORK OLIVER 16> finfo -od
FINFO V2.9 Native 14/11/2008 12:29
-----
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Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$WORK.OLIVER

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
TACL6STM	28-Apr-2004 18:54:07	101	U	NNNN	2,150	127,004	8	32	8
XMPL6C	30-Nov-2006 23:25:57	101	U	NNNN	1,058	127,001	2	16	2
OBJECT	30-Nov-2006 23:30:52	100	U	NNNN	9,430	127,004	4	2	6
XMPL6O	30-Nov-2006 23:31:36	100	U	NNNN	9,430	127,004	4	2	6
CC151UTH	12-Dec-2006 15:35:18	101	U	NNNN	3,326	127,004	4	28	4
SDE4C	12-Dec-2006 15:58:31	101	U	NNNN	10,234	127,004	4	28	32
SDE4O	12-Dec-2006 15:58:44	100	U	NNNN	17,670	127,004	6	2	10

Selected User Totals for SubVolume \SIRIUS.\$WORK.OLIVER

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	1	1,058	2
127,004	RSI.OLIVER	6	52,240	66
Totals:		7	53,298	68

Note. Strict date/time order is preserved.

8.3 SORT BY NAME. (-on Command)**Example 83-1. Sort by Name. (-on)**

```
$WORK OLIVER 17> finfo -on
FINFO V2.9 Native 14/11/2008 12:29
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$WORK.OLIVER

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
CC151UTH	12-Dec-2006 15:35:18	101	U	NNNN	3,326	127,004	4	28	4
OBJECT	30-Nov-2006 23:30:52	100	U	NNNN	9,430	127,004	4	2	6
SDE4C	12-Dec-2006 15:58:31	101	U	NNNN	10,234	127,004	4	28	32
SDE4O	12-Dec-2006 15:58:44	100	U	NNNN	17,670	127,004	6	2	10
TACL6STM	28-Apr-2004 18:54:07	101	U	NNNN	2,150	127,004	8	32	8
XMPL6C	30-Nov-2006 23:25:57	101	U	NNNN	1,058	127,001	2	16	2
XMPL6O	30-Nov-2006 23:31:36	100	U	NNNN	9,430	127,004	4	2	6

Selected User Totals for SubVolume \SIRIUS.\$WORK.OLIVER

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	1	1,058	2
127,004	RSI.OLIVER	6	52,240	66
Totals:		7	53,298	68

Note. There is no difference between this and an unadorned fileinfo, see Example 71-1.

8.4 SORT BY SIZE. (-os Command)

Example 84-1. Sort by Size. (-os)

```
$WORK OLIVER 18> finfo -os
FINFO V2.9 Native 14/11/2008 12:29
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$WORK.OLIVER

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
XMPL6C	30-Nov-2006 23:25:57	101	U	NNNN	1,058	127,001	2	16	2
TACLCSTM	28-Apr-2004 18:54:07	101	U	NNNN	2,150	127,004	8	32	8
CC151UTH	12-Dec-2006 15:35:18	101	U	NNNN	3,326	127,004	4	28	4
OBJECT	30-Nov-2006 23:30:52	100	U	NNNN	9,430	127,004	4	2	6
XMPL6O	30-Nov-2006 23:31:36	100	U	NNNN	9,430	127,004	4	2	6
SDE4C	12-Dec-2006 15:58:31	101	U	NNNN	10,234	127,004	4	28	32
SDE4O	12-Dec-2006 15:58:44	100	U	NNNN	17,670	127,004	6	2	10

Selected User Totals for SubVolume \SIRIUS.\$WORK.OLIVER

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	1	1,058	2
127,004	RSI.OLIVER	6	52,240	66
Totals:		7	53,298	68

8.5 SORT BY USER. (-ou Command)

Example 85-1. Sort by User. (-ou)

```
$WORK OLIVER 19> finfo -ou
FINFO V2.9 Native 14/11/2008 12:29
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$WORK.OLIVER

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
XMPL6C	30-Nov-2006 23:25:57	101	U	NNNN	1,058	127,001	2	16	2
CC151UTH	12-Dec-2006 15:35:18	101	U	NNNN	3,326	127,004	4	28	4
OBJECT	30-Nov-2006 23:30:52	100	U	NNNN	9,430	127,004	4	2	6
SDE4C	12-Dec-2006 15:58:31	101	U	NNNN	10,234	127,004	4	28	32
SDE4O	12-Dec-2006 15:58:44	100	U	NNNN	17,670	127,004	6	2	10
TACLCSTM	28-Apr-2004 18:54:07	101	U	NNNN	2,150	127,004	8	32	8
XMPL6O	30-Nov-2006 23:31:36	100	U	NNNN	9,430	127,004	4	2	6

Selected User Totals for SubVolume \SIRIUS.\$WORK.OLIVER

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	1	1,058	2
127,004	RSI.OLIVER	6	52,240	66
Totals:		7	53,298	68

9. FILE SELECTION COMMANDS (-s)

As well as defining the file name patter to be matched the FINFO user can specify a number of other file attributes a file must match in order to be selected.

These attributes are defined by the `-s` command.

When the volume or sub-volume display mode is used the file selection command has no effect on the files selected. However, the select on index depth and percent full selection commands are used to define the files reported on a needing maintenance, see Section 7.2.

Note. If there is more than one selection parameter the files selected must have all of the attributes, i.e. it is an and function. The only exception to this is where a parameter can be included more than once, for instance file or user code, in which case the selection is based on an OR function, i.e. user 1 or user 2 or user... but they are ANDed between groups so we have say all those users and type 100 or 500 or 700 for example

The attributes available for selection are:

- a. Audited (-sa). File must be audited, one of these is allowed.
- b. Caseless Text (-sb"text") the contents of the file are scanned for the case free text.
- c. File Code (-scxxx). File Code xxx must match, up to 50 of these are allowed.
- d. Date Range (-sdxxxr). File Modification date/time must be xxx r's before the present, where r can be H(ours), D(ays), W(eeks), M(onths) or Y(ears)
- e. Calendar Date Range (-sdtm<date time>).
The file is selected depending on the:
Date Type (t): (C)reation, (M)odification, (L)ast Open or (E)xpiration Date, and
Qualitative match indicator (m): Less Than (<), Equal (=) or Greater Than (>), and
The given <date time> dd/mm/yyyy, hh:mm:ss the following combinations are allowed:
(C)reation Date, = allowed or > and <, and
(M)odification Date, = allowed or > and <, and
(L)ast Open Date, = allowed or > and <, and
(E)xpiration Date, = allowed or > and <
In the date time parameter either the date or the time must be present
In the date component the day is required, the month and year are optional.
The time parameter is indicated by a comma and must contain the hour and minute, the seconds is optional, hence the date time syntax is:
<date time> ::= dd[/mm[/yy[yy]]][,hh:mm[:ss]] | ,hh:mm[:ss]
To summarise you can have up to 8 date type parameters that is one < and one > for each of the four date types, and = counts as a < and an > for the given date type.
- f. Index depth (-six). Where x defines the index depth.
If a file has this index depth or greater it is included in the output.
This selection parameter can only be defined once
- g. Licensed (-sl). File must be licensed.
- h. Open (-so). File must be open.
- i. ProgId'd (-si). File must be progid'd.
- j. Partitioned (-sp). File must be partitioned.
- k. SQL (-sqx). x is either l(all), T(able), I(ndex), P(rotection view), S(horthand view)

- l. Size (-ssmxxx). m is either < or > or =, you can have a < and a > but only one =
The file must be <=> the size xxx in kilobytes.
To summarise you can have up to two of these parameters
- m. File Type (-st). t must be (U)nstructured, (R)elative, (E)ntry Sequenced or (K)ey Sequenced.
You can have only one of these parameters
- n. User Name(-su<group>.<name>)) where group and name are the text user names, they can be wild cards , but may not contain wild cards, so super.* is ok but su*.* is not.
This selection parameter can only be defined once.
- o. User Number (-su<group no>, <user no>) where group and user and number in the range of 0 to 255, they can be wildcards so 255,* is ok but 255,10* is not
- p. Percent full (-s%p). Where p is the percentage full. Where files are this or more percent full they are included in the output.
This selection parameter can only be defined once.
- q. Text (-sx"text") the contents of the file are scanned for the text.
- r. PIRA Data (-s("pira rec")) the contents of the file are scanned for the matching data
See following page for PIRA data format.
Note only one of Text or Data can be selected at a time and
TAKE GREAT CARE WITH SELECT ON TEXT OR PIRA DATA, THEY CONSUME
COMPUTING POWER **LOTS OF IT.**

9.1 PIRA Data Syntax

The PIRA fields use a modified set of the PIRA syntax, in that the PIRA Data Field is a PIRA Record, without user hooks.

The Syntax is: (“ <fields> “)

Where: <fields> ::= <field> <sep> <fields> | <>

<field> ::= <string> | <hex no> | <octno> | <bin no> | <dno> | <no> | <hex byte> | <dec byte>

<string> ::= ‘ <chars> ‘

<chars> ::= ASCII_Character <chars> | <>

<hex no> ::= # Hex_Digits

<dno> ::= \$ <number>

<number> ::= Decimal_Digits

<oct no> ::= % <octal number>

<octal number> ::= <octal digits>

<bin no> ::= %B <binary number>

<binary number> ::= binary digits

<hex byte> ::= ~ <hex no>

<dec byte> ::= ^ <number>

<sep> ::= <spaces> <sep> | <comment> <sep> | , <sep>

<spaces> ::= Space <sep> | Space

<comment> ::= ! <chars> !

Note: <string> generates a variable number of bytes

<<hex No> generates and int16

<dno> generates and int32

<number> generates and int16

<oct no> generates and int16

<bin no> generates and int16

<hex byte> generates an unsigned byte

<dex byte> generates and unsigned byte

all other fields generate nothing including syntax errors which are simply regarded as comment

There are no user fields <user field>

To allow for parameterisation it is important to include the field in quotes

9.2 SELECTING AUDITED FILES (-sa)

Example 92-1. Select Audited.(-sa)

```
$WORK LSE00DB 26> finfo -sa
FINFO V2.9 Native 14/11/2008 12:29
-----
```

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 Trial Version(Release Date 13th November 2008, Expires 31st December 2008)

Files on \SIRIUS.\$WORK.LSE00DB

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
ARCHKEY	18-Oct-2004 19:06:51	0A	R	NCNC	0	255,255	824	824	0
ARCHKEY0	18-Oct-2004 19:06:53	0A	K	NCNC	0	255,255	26	26	0
ARCHRSA	18-Oct-2004 19:07:00	0A	R	NCNC	0	255,255	36	36	0
. . .									
ENCRKEY1	29-Oct-2004 01:37:54	0A	K	NCNC	28,672	255,255	28	28	28
GROUP	19-Oct-2004 13:30:05	0A	K	NCNC	12,288	255,255	2	2	6
RSAPRIV	18-Oct-2004 19:06:59	0A	K	NCNC	0	255,255	34	34	0
RSAPUB	18-Oct-2004 19:06:57	0A	K	NCNC	0	255,255	34	34	0
USERKEK	19-Oct-2004 10:41:26	0A	K	NCNC	12,288	255,255	2	2	6

Selected User Totals for SubVolume \SIRIUS.\$WORK.LSE00DB

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	12	143,360	134
Totals:		12	143,360	134

Note: The A added to the Code column

9.3 SELECTION BY BOTH CASES TEXT CONTENTS (-sb"....")

The user must have read access rights to the files being searched, otherwise they will not be selected.

Example 93-1. Selecting by Case Free Text Contents (-sb"....")

```

$SYSTEM SYSTEM 59> finfo -sb"SIRIUS"
FINFO V2.9 Native 14/11/2008 12:29
-----
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Trial Version(Release Date 13th November 2008, Expires 31st December 2008)

Files on \SIRIUS.$SYSTEM.SYSTEM

Name      Last Modified          Code TP RWE P    Size   User No  PExt  SExt  Pages
STARTUP   19-Jun-2006 09:46:07   101 U  NCNC    8,070   255,255  2     2     6

Selected User Totals for SubVolume \SIRIUS.$SYSTEM.SYSTEM
User No  User Name          Files      Bytes Used      Pages Used
255,255  SUPER.SUPER        1           8,070           6
Totals:                1           8,070           6

$SYSTEM SYSTEM 61> EDIT STARTUP R
TEXT EDITOR - T9601D20 - (01JUN93)
CURRENT FILE IS $SYSTEM.SYSTEM.STARTUP
*L /SIRIUS/
  19      comment ** 25/04/04 Created for \SIRIUS Reinhard **
*E
    
```

Note. The file has been correctly found.

9.4 SELECTING ON FILE CODE (-sc)

Example 94-1. Selecting single file code(-sc)

```

$SYSTEM.SYSTEM 29> finfo -sc700
FINFO V2.9 Native 14/11/2008 12:29
-----
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Trial Version(Release Date 13th November 2008, Expires 31st December 2008)

Files on \SIRIUS.$SYSTEM.SYSTEM

Name      Last Modified          Code TP RWE P    Size   User No  PExt  SExt  Pages
AR        20-Feb-1997 20:36:03   700 U  NCNC   151,264  255,255  8     16     88
AS1       08-Oct-1997 05:42:41   700 U  NCNC   1,670Kb  255,255  32    32    832
CFE       12-Nov-1997 06:36:32   700L U  NCNC   9,367Kb  255,255  4     28   4596
CRTLGSTD  18-Jun-1996 02:59:02   700L U  NCNC    7,752   255,255  6     16     6
.
.
.
SQLESPMG  13-Oct-1998 19:09:11   700L U  NCNC   517,760  255,255  32    32    256
STATSRV   09-Jul-1997 09:29:47   700L U  NCNC   731,840  255,255  32    32    384
TDP       16-Oct-1998 19:54:39   700L U  NCNC    2,193Kb  255,255  32    32   1088
UGEN      08-Oct-1997 04:36:08   700 U  NCNC    1,082Kb  255,255  32    32    544
UOPT      08-Oct-1997 03:48:52   700L U  NCNC    2,075Kb  255,255  32    32   1024

Selected User Totals for SubVolume \SIRIUS.$SYSTEM.SYSTEM
User No  User Name          Files      Bytes Used      Pages Used
255,255  SUPER.SUPER        22         25,465,712     12,706
Totals:                22         25,465,712     12,706
    
```

Note. The L added to the Code Column for certain entries

Example 94-2. Selecting multiple file codes(-sc)

```
$SYSTEM.SYSTEM 30> finfo -sc700 -sc100
FINFO V2.9 Native 14/11/2008 12:29
```

```
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$SYSTEM.SYSTEM

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
ADDHELP	20-Nov-1992 16:28:57	100L	U	CCNC	26,374	255,255	8	2	14
AHEXOBJ	17-Jun-1997 15:33:58	100L	U	CCCC	47,104	255,255	24	16	24
AID	17-Sep-1988 00:00:51	100L	U	NONO	120,832	255,255	60	34	60
AMIXF	16-Sep-1988 17:50:01	100L	U	NCNC	77,824	255,255	38	6	38
AMON	28-Feb-1989 15:07:10	100L	U	NONO	1,265Kb	255,255	618	200	618
APCCDC	19-Nov-1998 15:40:20	100L	U	NCNC	90,112	255,255	18	28	46
APCCOM	12-May-1992 09:42:51	100L	U	CCCC	79,872	255,255	40	16	40
APCHEX	19-Nov-1998 15:40:22	100L	U	CCCC	14,336	255,255	8	2	8
APCOBJ	19-Nov-1998 15:40:24	100L	U	CCCC	1,710Kb	255,255	216	64	856
APCSEC	19-Nov-1998 15:40:26	100	U	NCNC	20,480	255,255	4	16	20
APCTAP	19-Nov-1998 15:40:28	100L	U	CCCC	274,432	255,255	48	44	136
APE	11-Oct-1994 22:06:19	100L	U	NCNC	633,710	255,255	68	32	324
AR	20-Feb-1997 20:36:03	700	U	NCNC	151,264	255,255	8	16	88
ARMTRACE	23-Apr-1992 15:16:18	100L	U	NONO	8,192	255,255	4	2	4
AS1	08-Oct-1997 05:42:41	700	U	NCNC	1,670Kb	255,255	32	32	832
AUDSERV	24-Jul-1997 00:19:11	100L	U	NCNC	202,752	255,255	100	16	100
.
ZOSFSCF	18-Jun-1997 17:33:44	100L	U	NCNC	75,776	255,255	38	14	38
ZOSISCF	01-Nov-1994 19:55:01	100L	U	NCNC	204,800	255,255	100	16	100
ZPTRLIB	10-Sep-1997 17:08:11	100L	U	NCNC	351,522	255,255	82	16	178
ZQIOPTR	04-Jun-1996 16:35:07	100L	U	NCNC	126,976	255,255	62	16	62
ZSCPTR	11-Jul-1995 23:33:42	100L	U	NCNC	139,264	255,255	68	16	68
ZSCSPTR	12-Jul-1995 02:50:11	100L	U	NCNC	120,832	255,255	60	16	60
ZSCSSCF	16-Sep-1996 16:26:52	100L	U	NCNC	55,296	255,255	28	6	28
ZSMPPTR	17-Jan-1998 21:50:53	100	U	NCNC	120,832	255,255	60	16	60
ZSX1PTR	21-Oct-1997 15:54:38	100L	U	NCNC	684,032	255,255	334	16	334
ZSX1SCF	03-Oct-1997 00:13:52	100L	U	NCNC	276,480	255,255	136	16	136
ZTBLSCF	29-Jul-1996 15:25:49	100L	U	NCNC	108,544	255,255	54	16	54
ZTCIPTR	09-Sep-1997 17:58:57	100L	U	NCNC	161,792	255,255	80	16	80
ZTCISCF	19-Jun-1998 14:34:32	100L	U	NCNC	110,592	255,255	54	16	54
ZTLKPTR	11-Jul-1995 23:33:45	100L	U	NCNC	126,976	255,255	62	16	62
ZTLKSCF	19-Jan-1996 00:55:52	100L	U	NCNC	155,648	255,255	76	16	76
ZTNTPTR	11-Jul-1995 23:10:05	100L	U	NCNC	126,976	255,255	62	16	62
ZTR3SCF	03-Jun-1997 20:30:11	100L	U	NCNC	79,872	255,255	40	16	40
ZX25PTR	11-Jul-1995 23:33:05	100L	U	NCNC	157,696	255,255	78	16	78
ZX25SCF	26-Jan-1994 18:32:15	100L	U	NCNC	102,400	255,255	50	16	50
ZZSRVMON	17-Jan-1995 16:07:12	100	U	NCNC	9,608Kb	255,255	1858	32	4706

```
Selected User Totals for SubVolume \SIRIUS.$SYSTEM.SYSTEM
```

User No	User Name	Files	Bytes Used	Pages Used
200,010	<alien>.(200,10)	7	177,006	93
200,014	<alien>.(200,14)	3	66,440	33
200,040	<alien>.(200,40)	1	32,064	16
255,002	<alien>.(255,2)	1	247,808	122
255,200	SUPER.RUPERT	3	550,912	288
255,255	SUPER.SUPER	432	229,844,540	114,733
Totals:		447	230,918,770	115,285

Note: The mix of file codes selected.

9.5 SELECTING BY DATE AND TIME

9.5.1 SELECTING ON A DATE RANGE (-sdxxxr)

Where: **xxxx** describes the range by number of date/time units from the current date/time
r describes the date/time range, H(ours), D(ays), W(eeks), M(onths) or Y(ears)

Example 95-1. Selecting within a 1 month range(-sd1m)

```
$WORK RUPERT 2> finfo -sd1m -od
FINFO V2.9 Native 14/11/2008 12:29
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$WORK.RUPERT

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
HEADING	02-Mar-2007 15:50:25	101	U	NNNN	2,316	127,001	4	16	4
PROJDIRH	09-Mar-2007 11:33:41	101	U	NNNN	2,166	127,001	2	2	2
FINFO1	12-Mar-2007 19:27:46	100	U	NNNN	183,426	127,001	18	14	102
ZZBI0028	15-Mar-2007 00:20:36	100	U	NNNN	215,508	127,001	20	16	116
FINFO2	22-Mar-2007 16:16:18	100	U	NNNN	216,394	127,001	20	16	116
. . .									
LICENSES	28-Mar-2007 13:12:32	101	U	NNNN	716	127,001	4	16	4
ZZZZ	29-Mar-2007 10:00:15	101	U	NNNN	26	127,001	2	2	2
FINFOH	29-Mar-2007 11:29:58	101	U	NNNN	18,464	127,001	4	4	12
FINFOC	29-Mar-2007 12:19:04	101	U	NNNN	106,444	127,001	16	16	64
FINFO	***** OPEN NOW *****	100	U	NNNN	228,392	127,001	22	16	118

```
Selected User Totals for SubVolume \SIRIUS.$WORK.RUPERT
User No User Name Files Bytes Used Pages Used
127,001 RSI.RUPERT 21 1,986,276 1,092
Totals: 21 1,986,276 1,092
```

Note. The file details have been ordered by date and the open file.

9.5.2 SELECTING ON A CALENDAR DATE RANGE (-sdm<date time>)

Where: **t** is the type, (Creation, Last open, Modification, Expiration), and
m is the modifier (< > =) Less than, Greater than, Equal
<date time> is the date and time dd/mm/yyyy, hh:mm:ss, See Page 21 for further detail.

Example 95-2. Selecting using the date modified – default (-sd>...)

```
$SYSTEM.SYSTEM 32> finfo -sd>1/1/2000 -sd<31/12/2000
FINFO V2.9 Native 14/11/2008 12:29
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$SYSTEM.SYSTEM

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
COILBIN1	14-Apr-2000 14:55:15	100	U	NNNN	22,576	200,010	8	2	12
EXWEEK	21-Jan-2000 14:23:15	100	U	NCNC	26,976	255,255	10	2	14
IPMS	25-Apr-2000 09:24:23	101	U	NCNC	2,182	255,255	2	2	2
QTIM	27-Jun-2000 09:06:19	100	U	NCNC	31,376	255,255	12	4	16
.
X1	15-Apr-2000 16:03:41	101	U	NCNC	4,182	255,255	2	2	4
X2	15-Apr-2000 16:04:50	101	U	NCNC	6,852	255,255	2	2	4
X3	15-Apr-2000 16:06:02	101	U	NCNC	6,852	255,255	2	2	4
X4	15-Apr-2000 16:06:45	101	U	NCNC	6,858	255,255	2	2	4

Selected User Totals for SubVolume \SIRIUS.\$SYSTEM.SYSTEM

User No	User Name	Files	Bytes Used	Pages Used
200,010	<alien>.(200,10)	1	22,576	12
200,014	<alien>.(200,14)	1	40,518	20
255,255	SUPER.SUPER	8	92,698	52
Totals:		10	155,792	84

Example 95-3. Selecting and sorting using the date modified – default (-sd>...)

```
$SYSTEM.SYSTEM 33> finfo -sd>1/1/2000 -sd<31/12/2000 -od
FINFO V2.9 Native 14/11/2008 12:29
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$SYSTEM.SYSTEM

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
X	03-Jan-2000 08:21:17	101	U	NCNC	7,420	255,255	2	2	4
EXWEEK	21-Jan-2000 14:23:15	100	U	NCNC	26,976	255,255	10	2	14
COILBIN1	14-Apr-2000 14:55:15	100	U	NNNN	22,576	200,010	8	2	12
X1	15-Apr-2000 16:03:41	101	U	NCNC	4,182	255,255	2	2	4
X2	15-Apr-2000 16:04:50	101	U	NCNC	6,852	255,255	2	2	4
X3	15-Apr-2000 16:06:02	101	U	NCNC	6,852	255,255	2	2	4
X4	15-Apr-2000 16:06:45	101	U	NCNC	6,858	255,255	2	2	4
IPMS	25-Apr-2000 09:24:23	101	U	NCNC	2,182	255,255	2	2	2
QTIM	27-Jun-2000 09:06:19	100	U	NCNC	31,376	255,255	12	4	16
TOPCOM	24-Jul-2000 11:00:32	100	U	NNNN	40,518	200,014	16	4	20

Selected User Totals for SubVolume \SIRIUS.\$SYSTEM.SYSTEM

User No	User Name	Files	Bytes Used	Pages Used
200,010	<alien>.(200,10)	1	22,576	12
200,014	<alien>.(200,14)	1	40,518	20
255,255	SUPER.SUPER	8	92,698	52
Totals:		10	155,792	84

Example 95-4. Selecting and sorting using the date modified – (-sdm>...)

```
$SYSTEM.SYSTEM 35> finfo -sdm>1/1/2000 -sdm<31/12/2000 -od
FINFO V2.9 Native 14/11/2008 12:29
```

```
-----
```

```
Copyright Ross Systems International Ltd. 2008
```

```
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

```
Files on \SIRIUS.$SYSTEM.SYSTEM
```

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
X	03-Jan-2000 08:21:17	101	U	NCNC	7,420	255,255	2	2	4
EXWEEK	21-Jan-2000 14:23:15	100	U	NCNC	26,976	255,255	10	2	14
COILBIN1	14-Apr-2000 14:55:15	100	U	NNNN	22,576	200,010	8	2	12
X1	15-Apr-2000 16:03:41	101	U	NCNC	4,182	255,255	2	2	4
X2	15-Apr-2000 16:04:50	101	U	NCNC	6,852	255,255	2	2	4
X3	15-Apr-2000 16:06:02	101	U	NCNC	6,852	255,255	2	2	4
X4	15-Apr-2000 16:06:45	101	U	NCNC	6,858	255,255	2	2	4
IPMS	25-Apr-2000 09:24:23	101	U	NCNC	2,182	255,255	2	2	2
QTIM	27-Jun-2000 09:06:19	100	U	NCNC	31,376	255,255	12	4	16
TOPCOM	24-Jul-2000 11:00:32	100	U	NNNN	40,518	200,014	16	4	20

```
Selected User Totals for SubVolume \SIRIUS.$SYSTEM.SYSTEM
```

User No	User Name	Files	Bytes Used	Pages Used
200,010	<alien>.(200,10)	1	22,576	12
200,014	<alien>.(200,14)	1	40,518	20
255,255	SUPER.SUPER	8	92,698	52
Totals:		10	155,792	84

Example 95-5. Selecting using the date created, sorted by date modified (-sdc>...)

```
$SYSTEM.SYSTEM 34> finfo -sdc>1/1/2000 -sdc<31/12/2000 -od
FINFO V2.9 Native 14/11/2008 12:29
```

```
-----
```

```
Copyright Ross Systems International Ltd. 2008
```

```
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

```
Files on \SIRIUS.$SYSTEM.SYSTEM
```

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
EXWEEK	21-Jan-2000 14:23:15	100	U	NCNC	26,976	255,255	10	2	14
COILBIN1	14-Apr-2000 14:55:15	100	U	NNNN	22,576	200,010	8	2	12
QTIM	27-Jun-2000 09:06:19	100	U	NCNC	31,376	255,255	12	4	16
TOPCOM	24-Jul-2000 11:00:32	100	U	NNNN	40,518	200,014	16	4	20
SHUTDOWN	16-Apr-2004 09:11:33	101	U	CCCC	4,924	255,255	2	2	4

```
Selected User Totals for SubVolume \SIRIUS.$SYSTEM.SYSTEM
```

User No	User Name	Files	Bytes Used	Pages Used
200,010	<alien>.(200,10)	1	22,576	12
200,014	<alien>.(200,14)	1	40,518	20
255,255	SUPER.SUPER	3	63,276	34
Totals:		5	126,370	66

Note. The date modified in the Last Modified column.

Example 95-6. Selecting using the last open date, sorted by date modified (-sdc>...)

```

$SYSTEM SYSTEM 37> finfo -sdl>1/1/2006 -sdl<31/12/2006 -od
FINFO V2.9 Native 14/11/2008 12:29
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)

Files on \SIRIUS.$SYSTEM.SYSTEM

Name      Last Modified      Code TP RWEP      Size  User No  PExt  SExt  Pages
CALC      05-Aug-1987 10:23:42  100L U  NCNC  25,270  255,255  13    13    13
SCFCSTM   04-Sep-1989 09:05:26   101 U  NCNC    144  255,255  2     2     2
PWR       19-Jun-1995 21:08:10  100L U  NONO  43,008  255,255  22    16    22
. . .
VIEWLOG   23-Jan-2004 16:06:16   100 U  NCNC 102,566  255,255  40     4    52
FASTCNFG  26-Mar-2004 14:59:28   101 U  NCNC    134  255,255  2     2     2
USERXLS   21-Nov-2006 11:50:52     0 U  OOOO  17,920  255,255  4     28    32

Selected User Totals for SubVolume \SIRIUS.$SYSTEM.SYSTEM
User No  User Name      Files      Bytes Used      Pages Used
255,255  SUPER.SUPER    11         5,359,042      2,687
Totals:                11         5,359,042      2,687

```

Example 95-7. Selecting using the expiration date (-sdc>...)

```

$SYSTEM SYSTEM 38> finfo -sde>1/1/2008
FINFO V2.9 Native 14/11/2008 12:29
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)

No Files Found

```

Note. No expiration dates were set, so no files were found

9.6 SELECTING ON INDEX LEVEL (-sixx)

Where: xx is the minimum index lever.

Example 96-1. Selecting Index Level (-sixx)

```
$WORK ZSPIDEF 61> finfo31 -sil -e
FINFO V3.1 Native 20/10/2009 17:42
-----
Copyright Ross Systems International Ltd. 2008,2009
```

Full Version (Release Date 15th October 2009)

Files on \SIRIUS.\$WORK.ZSPIDEF

Name	Last Modified	Code	TP	RWEP	User No	PExt	SExt	MExt	IxL	PC%
ZMP00010	04-Feb-2005 12:27:13	961	K	NCNC	255,255	2	2	900	2	1.1
ZMP00011	04-Feb-2005 12:27:14	961	K	NCNC	255,255	2	2	900	2	1.0
ZPHIFI	04-Feb-2005 12:27:16	961	K	NCNC	255,255	2	2	900	2	1.1

Selected User Totals for SubVolume \SIRIUS.\$WORK.ZSPIDEF

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	3	116,736	60

Totals: 3 116,736 60

9.7 SELECTING ON LICENSED FILES (-sl)

Example 97-1. Selecting Licensed Files (-sl)

```
$SYSTEM SYSTEM 40> finfo -sl
FINFO V2.9 Native 14/11/2008 12:29
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$SYSTEM.SYSTEM

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
ADDHELP	20-Nov-1992 16:28:57	100L	U	CCNC	26,374	255,255	8	2	14
AHEXOBJ	17-Jun-1997 15:33:58	100L	U	CCCC	47,104	255,255	24	16	24
AID	17-Sep-1988 00:00:51	100L	U	NONO	120,832	255,255	60	34	60
AMIXF	16-Sep-1988 17:50:01	100L	U	NCNC	77,824	255,255	38	6	38
AMON	28-Feb-1989 15:07:10	100L	U	NONO	1,265Kb	255,255	618	200	618
APCCDC	19-Nov-1998 15:40:20	100L	U	NCNC	90,112	255,255	18	28	46
APCCOM	12-May-1992 09:42:51	100L	U	CCCC	79,872	255,255	40	16	40
APCHEX	19-Nov-1998 15:40:22	100L	U	CCCC	14,336	255,255	8	2	8
APCOBJ	19-Nov-1998 15:40:24	100L	U	CCCC	1,710Kb	255,255	216	64	856
. . .									
ZTCISCF	19-Jun-1998 14:34:32	100L	U	NCNC	110,592	255,255	54	16	54
ZTLKPTR	11-Jul-1995 23:33:45	100L	U	NCNC	126,976	255,255	62	16	62
ZTLKSCF	19-Jan-1996 00:55:52	100L	U	NCNC	155,648	255,255	76	16	76
ZTNTPTR	11-Jul-1995 23:10:05	100L	U	NCNC	126,976	255,255	62	16	62
ZTR3SCF	03-Jun-1997 20:30:11	100L	U	NCNC	79,872	255,255	40	16	40
ZX25PTR	11-Jul-1995 23:33:05	100L	U	NCNC	157,696	255,255	78	16	78
ZX25SCF	26-Jan-1994 18:32:15	100L	U	NCNC	102,400	255,255	50	16	50

Selected User Totals for SubVolume \SIRIUS.\$SYSTEM.SYSTEM

User No	User Name	Files	Bytes Used	Pages Used
200,010	<alien>. (200,10)	2	27,298	15
200,014	<alien>. (200,14)	1	12,098	6
200,040	<alien>. (200,40)	1	32,064	16
255,255	SUPER.SUPER	346	181,088,252	90,333
Totals:		350	181,159,712	90,370

Note. The L appended to the executable file code

9.8 SELECTING ON OPEN FILES (-so)

Example 98-1. Selecting Open Files (-so)

```
$SYSTEM SYSTEM 42> finfo -so
FINFO V2.9 Native 14/11/2008 12:29
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$SYSTEM.SYSTEM

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
CSPOOL	***** OPEN NOW *****	100L	U	NONO	520,192	255,255	66	54	282
FINFO	***** OPEN NOW *****	100	U	NCNC	227,874	255,255	22	16	118
MDSHIST	***** OPEN NOW *****	180	U	AAAA	0	255,255	2	16	34
SPOOL	***** OPEN NOW *****	100L	U	NCNC	1,680Kb	255,255	134	64	838
USERID	***** OPEN NOW *****	0	K	U-N-	45,056	255,255	33	32	33
USERIDAK	***** OPEN NOW *****	0	K	U-N-	18,432	255,255	34	32	34

Selected User Totals for SubVolume \SIRIUS.\$SYSTEM.SYSTEM

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	6	2,492,258	1,339
Totals:		6	2,492,258	1,339

Note. The OPEN NOW displayed in the Last Modified Column.

9.9 SELECTING ON PARTITIONED FILES (-sp)

Example 99-1. Selecting Partitioned Files (-sp)

```
$SYSTEM SYSTEM 41> finfo *.*.* -sp
FINFO V2.9 Native 14/11/2008 14:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$AUDIT.RUPERT

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
TESS	27-Oct-2008 17:49:22	2000	EX	NNNN	0	127,001	100	100	0

Selected User Totals for SubVolume \SIRIUS.\$AUDIT.RUPERT

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	1	0	0
Totals:		1	0	0

. . .

Files on \SIRIUS.\$WORK.RUPERT

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
TESS	27-Oct-2008 17:50:01	2000	E2	NNNN	4,096	127,001	2	2	2
TEST	20-Apr-2007 12:46:45	2000	EB	NNNN	65,536	127,001	2	2	32

Selected User Totals for SubVolume \SIRIUS.\$WORK.RUPERT

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	2	69,632	34
Totals:		2	69,632	34

. . .

Selected User Totals for System \SIRIUS, Subvolumes: 2 Volumes: 2

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	3	69,632	34
Totals:		3	69,632	34

9.10 SELECTING ON SQL FILES (-sql)

Example 910-1. Selecting SQL Files (-sql)

```
$WORK NATIVE 11> finfo31 sql.* -sql
FINFO V3.1 Native 29/09/2009 14:43
-----
Copyright Ross Systems International Ltd. 2008,2009

Full Version (Release Date 22nd September 2009)
-----
Files on \SIRIUS.$WORK.SQL
```

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
BASETABS	18-Oct-2004 19:07:01	572A	K	NG--	12,288	255,255	16	128	16
CATALOGS	04-Oct-2004 14:45:01	571A	K	NA--	12,288	255,255	16	128	16
COLUMNS	18-Oct-2004 19:07:01	573A	K	NG--	86,016	255,255	16	128	144
COMMENTS	09-Sep-2004 21:35:14	574A	K	NG--	0	255,255	16	128	0
CONSTRNT	09-Sep-2004 21:35:18	575A	K	NG--	0	255,255	16	128	0
CPRLSRCE	09-Sep-2004 21:35:19	587A	K	NG--	0	255,255	16	128	0
CPRULES	09-Sep-2004 21:35:19	586A	K	NG--	0	255,255	16	128	0
FILES	18-Oct-2004 19:07:01	576A	K	NG--	12,288	255,255	16	128	16
INDEXES	18-Oct-2004 19:07:01	577A	K	NG--	16,384	255,255	16	128	16
IXINDE01	18-Oct-2004 19:07:01	577A	K	NG--	12,288	255,255	16	64	16
IXPART01	09-Sep-2004 21:35:29	579A	K	NG--	0	255,255	16	64	0
IXPROG01	18-Oct-2004 19:10:03	580A	K	NG--	12,288	255,255	16	64	16
IXTABL01	18-Oct-2004 19:07:01	581A	K	NG--	12,288	255,255	16	64	16
IXUSAG01	18-Oct-2004 19:10:04	583A	K	NG--	16,384	255,255	16	64	16
KEYS	18-Oct-2004 19:07:01	578A	K	NG--	20,480	255,255	16	128	16
PARTNS	09-Sep-2004 21:35:16	579A	K	NG--	0	255,255	16	128	0
PROGRAMS	18-Oct-2004 19:10:11	580A	K	NG--	12,288	255,255	16	128	16
TABLES	18-Oct-2004 19:07:01	581A	K	NG--	12,288	255,255	16	128	16
TRANSIDS	18-Oct-2004 19:10:04	582A	K	NG--	0	255,255	1	1	1
USAGES	18-Oct-2004 19:10:04	583A	K	NG--	20,480	255,255	16	128	16
VERSIONS	09-Sep-2004 21:35:20	584A	K	NG--	1,536	255,255	1	1	1
VIEWS	09-Sep-2004 21:35:17	585A	K	NG--	0	255,255	16	128	0

```
Selected User Totals for SubVolume \SIRIUS.$WORK.SQL
User No  User Name      Files      Bytes Used      Pages Used
255,255  SUPER.SUPER    22         259,584         338
Totals:  22             259,584         338
```

```
Selected User Totals for Volume \SIRIUS.$WORK, Subvolumes: 1
User No  User Name      Files      Bytes Used      Pages Used
255,255  SUPER.SUPER    22         259,584         338
Totals:  22             259,584         338
```

Example 910-2. Selecting SQL Files by Table (-sqt)

\$WORK NATIVE 13> finfo31 sql.* -sqt
 FINFO V3.1 Native 29/09/2009 14:45

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Full Version (Release Date 22nd September 2009)

 Files on \SIRIUS.\$WORK.SQL

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
BASETABS	18-Oct-2004 19:07:01	572A	K	NG--	12,288	255,255	16	128	16
CATALOGS	04-Oct-2004 14:45:01	571A	K	NA--	12,288	255,255	16	128	16
COLUMNS	18-Oct-2004 19:07:01	573A	K	NG--	86,016	255,255	16	128	144
COMMENTS	09-Sep-2004 21:35:14	574A	K	NG--	0	255,255	16	128	0
CONSTRNT	09-Sep-2004 21:35:18	575A	K	NG--	0	255,255	16	128	0
CPRLSRCE	09-Sep-2004 21:35:19	587A	K	NG--	0	255,255	16	128	0
CPRULES	09-Sep-2004 21:35:19	586A	K	NG--	0	255,255	16	128	0
FILES	18-Oct-2004 19:07:01	576A	K	NG--	12,288	255,255	16	128	16
INDEXES	18-Oct-2004 19:07:01	577A	K	NG--	16,384	255,255	16	128	16
KEYS	18-Oct-2004 19:07:01	578A	K	NG--	20,480	255,255	16	128	16
PARTNS	09-Sep-2004 21:35:16	579A	K	NG--	0	255,255	16	128	0
PROGRAMS	18-Oct-2004 19:10:11	580A	K	NG--	12,288	255,255	16	128	16
TABLES	18-Oct-2004 19:07:01	581A	K	NG--	12,288	255,255	16	128	16
TRANSIDS	18-Oct-2004 19:10:04	582A	K	NG--	0	255,255	1	1	1
USAGES	18-Oct-2004 19:10:04	583A	K	NG--	20,480	255,255	16	128	16
VERSIONS	09-Sep-2004 21:35:20	584A	K	NG--	1,536	255,255	1	1	1
VIEWS	09-Sep-2004 21:35:17	585A	K	NG--	0	255,255	16	128	0

Selected User Totals for SubVolume \SIRIUS.\$WORK.SQL

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	17	206,336	274
Totals:		17	206,336	274

Selected User Totals for Volume \SIRIUS.\$WORK, Subvolumes: 1

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	17	206,336	274
Totals:		17	206,336	274

Example 910-2. Selecting SQL Files by Index (-sqi)

\$WORK NATIVE 14> finfo31 sql.* -sqi
 FINFO V3.1 Native 29/09/2009 14:48

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Full Version (Release Date 22nd September 2009)

 Files on \SIRIUS.\$WORK.SQL

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
IXINDE01	18-Oct-2004 19:07:01	577A	K	NG--	12,288	255,255	16	64	16
IXPART01	09-Sep-2004 21:35:29	579A	K	NG--	0	255,255	16	64	0
IXPROG01	18-Oct-2004 19:10:03	580A	K	NG--	12,288	255,255	16	64	16
IXTABL01	18-Oct-2004 19:07:01	581A	K	NG--	12,288	255,255	16	64	16
IXUSAG01	18-Oct-2004 19:10:04	583A	K	NG--	16,384	255,255	16	64	16

Selected User Totals for SubVolume \SIRIUS.\$WORK.SQL

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	5	53,248	64
Totals:		5	53,248	64

Selected User Totals for Volume \SIRIUS.\$WORK, Subvolumes: 1

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	5	53,248	64
Totals:		5	53,248	64

9.11 SELECTING ON PROGID'D FILES (-sr)**Example 911-1. Selecting ProgId's Files (-sr)**

```

$SYSTEM SYSTEM 41> finfo -sr
FINFO V2.9 Native 14/11/2008 12:29
-----
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Trial Version(Release Date 13th November 2008, Expires 31st December 2008)

```

Files on \SIRIUS.\$SYSTEM.SYSTEM

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
CCFUP	27-Feb-1994 17:28:22	100LP	U	NCNC	1,019Kb	255,255	196	16	500
FUP2	09-Jul-1996 17:20:17	100LP	U	NCNC	2,556Kb	255,255	228	64	1252
LISTTMF	11-Aug-1998 14:17:34	100LP	U	NCNC	451,418	255,255	78	16	222
PRINTCOM	14-Nov-2003 14:16:06	100P	U	NCNC	141,678	255,255	42	8	74
VIEWTMF	27-Mar-2001 13:22:36	100LP	U	NCNC	493,762	255,255	86	16	246

Selected User Totals for SubVolume \SIRIUS.\$SYSTEM.SYSTEM

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	5	4,661,974	2,294
Totals:		5	4,661,974	2,294

Note. The P appended to the File Code and well as the L in some cases.

9.12 SELECTING ON FILE SIZE (-ss...)**Example 912-1. Selecting on File Size Less Than (-ss<)**

```

$WORK RUPERT 3>finfo -ss<1 -os
FINFO V2.9 Native 14/11/2008 14:27
-----
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Trial Version(Release Date 13th November 2008, Expires 31st December 2008)

```

Files on \SIRIUS.\$WORK.RUPERT

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
BINGBANG	31-Jan-2007 18:16:46	0	E	NNNN	0	127,001	2	2	0
TEMP1	07-Aug-2006 19:36:22	101	U	NNNN	0	127,001	2	2	0
ZZZZ	29-Mar-2007 10:00:15	101	U	NNNN	26	127,001	2	2	2
PASS1	13-May-2006 11:38:14	101	U	NNNN	34	127,001	2	2	2
PASS3	13-May-2006 11:42:37	101	U	NNNN	34	127,001	2	2	2
FUPCSTM	26-Apr-2004 10:33:02	101	U	NNNN	62	127,001	4	8	4
IPTEXT	06-Oct-2004 17:10:39	101	U	NNNN	88	127,001	2	2	2
LICECOMP	12-Feb-2007 08:38:25	101	U	NNNN	90	127,001	2	2	2
HEME9901	31-May-2006 14:09:02	101	U	NNNN	102	127,001	4	16	4
HEMESI01	29-Nov-2005 19:28:37	101	U	NNNN	102	127,001	4	16	4
HSSPSI02	31-May-2006 14:07:57	101	U	NNNN	102	127,001	4	16	4
LICESI00	31-May-2006 13:17:33	101	U	NNNN	102	127,001	4	16	4
PIRASI03	01-Jun-2006 10:24:46	101	U	NNNN	102	127,001	4	16	4
TLOSSI04	01-Jun-2006 14:44:42	101	U	NNNN	102	127,001	4	16	4
WILD9999	31-May-2006 13:19:18	101	U	NNNN	102	127,001	4	16	4
SCFCSTM	19-Apr-2004 16:27:24	101	U	NNNN	144	127,001	4	16	4
LICEOLS	10-Jul-2006 19:10:35	101	U	NNNN	184	127,001	4	16	4
BIGHEAD	14-May-2004 11:44:58	101	U	NNNN	186	127,001	4	16	4
LICE0001	12-Feb-2007 16:15:01	101	U	NNNN	186	127,001	4	16	4
PROFILE	01-Aug-2006 09:25:33	180	U	NNNN	270	127,001	2	100	2
BANKOENG	02-Feb-2007 18:36:29	101	U	NNNN	274	127,001	4	16	4
LICEBEW2	12-Feb-2007 09:48:40	101	U	NNNN	274	127,001	4	16	4
LICEFAIL	05-Jun-2006 19:12:40	101	U	NNNN	274	127,001	4	16	4
LICENCES	02-Feb-2007 18:15:53	101	U	NNNN	276	127,001	4	16	4
LICENEW	28-Mar-2007 13:11:47	101	U	NNNN	276	127,001	4	16	4
LICENEW3	06-Jun-2006 11:26:20	101	U	NNNN	456	127,001	4	16	4
LIC24	02-Feb-2007 16:18:04	101	U	NNNN	458	127,001	4	16	4
LICENEW1	10-Feb-2007 18:37:51	101	U	NNNN	458	127,001	4	16	4

LICENRSI	02-Feb-2007	18:12:28	101	U	NNNN	548	127,001	4	16	4
LICENTST	12-Feb-2007	18:42:43	101	U	NNNN	548	127,001	2	2	2
LICENSES	28-Mar-2007	13:12:32	101	U	NNNN	716	127,001	4	16	4

Selected User Totals for SubVolume \SIRIUS.\$WORK.RUPERT

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	31	6,576	102
Totals:		31	6,576	102

Note: The selection in the specified range and the output sorted by size.
 The 1 in -ss<1 refers to 1 Kb, i.e. select size less than 1000 bytes

Example 912.2. Selecting on File Greater Than (-ss>)

```
$SYSTEM SYSTEM 45> finfo -ss>1000 -os
FINFO V2.9 Native 14/11/2008 14:27
```

```
-----
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Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$SYSTEM.SYSTEM

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
CCFUP	27-Feb-1994 17:28:22	100LP	U	NCNC	1,019Kb	255,255	196	16	500
NLD	23-Jan-1998 22:29:31	700	U	NCNC	1,019Kb	255,255	32	32	512
NOFT	16-Jul-1996 19:35:36	100L	U	NCNC	1,054Kb	255,255	168	64	552
OFFSRV	12-Feb-1999 12:23:35	100L	U	NCNC	1,066Kb	255,255	104	50	554
RDFCOM	02-Oct-1996 19:00:10	100L	U	CCNC	1,076Kb	255,255	100	16	532
UGEN	08-Oct-1997 04:36:08	700	U	NCNC	1,082Kb	255,255	32	32	544
TOOLSALA	17-Sep-1997 16:52:04	100L	U	NCNC	1,097Kb	255,255	140	16	540
CRD30R	12-Feb-1999 13:12:07	100L	U	NCNC	1,109Kb	255,255	212	16	548
TOOLSWA	17-Sep-1997 16:52:25	100L	U	NCNC	1,115Kb	255,255	146	16	546
FASTPNOV	01-Oct-1997 17:55:16	100L	U	NCNC	1,132Kb	255,255	120	32	568
SMFIXUP	02-Dec-1998 21:35:38	100L	U	NCNC	1,149Kb	255,255	152	16	568
. . .									
TTALK	20-Jun-1997 05:29:07	100L	U	NCNC	1,615Kb	255,255	338	32	818
FASTPLW	22-Jun-1997 18:47:04	100L	U	NCNC	1,642Kb	255,255	192	64	832
AS1	08-Oct-1997 05:42:41	700	U	NCNC	1,670Kb	255,255	32	32	832
SPOOL	***** OPEN NOW *****	100L	U	NCNC	1,680Kb	255,255	134	64	838
APCOBJ	19-Nov-1998 15:40:24	100L	U	CCCC	1,710Kb	255,255	216	64	856
MTSQLCFE	30-Sep-1997 01:14:30	100L	U	NCNC	1,724Kb	255,255	844	18	844
RELOCSRV	20-Oct-1998 17:35:03	100L	U	NCNC	1,811Kb	255,255	120	16	888
PATHTCPX	09-Sep-1996 09:03:52	700	U	NONO	2,011Kb	255,255	32	32	992
PATHTCP2	17-Mar-1998 14:54:42	700	U	NCNC	2,019Kb	255,255	32	32	992
UOPT	08-Oct-1997 03:48:52	700L	U	NCNC	2,075Kb	255,255	32	32	1024
TDP	16-Oct-1998 19:54:39	700L	U	NCNC	2,193Kb	255,255	32	32	1088
SCASVR	11-Feb-1999 18:26:05	100	U	NCNC	2,207Kb	255,255	296	64	1128
. . .									
TMDSREP	14-Jul-1993 09:37:55	100L	U	NONO	4,027Kb	255,255	284	284	1988
COBOL85	23-Nov-1998 19:01:23	100	U	NONO	4,476Kb	255,255	534	64	2198
SQLCATA	20-Nov-1996 20:25:46	100L	U	NCNC	4,536Kb	255,255	556	64	2220
COBOLFE	05-Aug-1997 18:17:52	100	U	NCNC	4,575Kb	255,255	590	64	2254
SNMPAGT	12-Feb-1999 14:31:57	100L	U	NCNC	4,615Kb	255,255	284	32	2268
SQLCAT	16-Jul-1997 15:28:51	100L	U	NCNC	4,845Kb	255,255	594	64	2386
SQLCOMP	26-Oct-1998 19:25:12	100L	U	NCNC	4,896Kb	255,255	608	64	2400
SQLCI	28-May-1997 15:37:23	100L	U	NCNC	5,316Kb	255,255	654	64	2638
TMDSREP2	14-Jul-1993 09:40:33	100L	U	NONO	5,356Kb	255,255	442	442	2652
SQLCFE	25-Nov-1997 19:14:05	100L	U	NCNC	8,034Kb	255,255	1172	64	3924
CFE	12-Nov-1997 06:36:32	700L	U	NCNC	9,367Kb	255,255	4	28	4596
ZZSRVMON	17-Jan-1995 16:07:12	100	U	NCNC	9,608Kb	255,255	1858	32	4706
SQLMSG	14-May-1998 21:01:58	0	K	NCNC	9,752Kb	255,255	64	64	4800

Selected User Totals for SubVolume \SIRIUS.\$SYSTEM.SYSTEM

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	62	171,460,736	84,752
Totals:		62	171,460,736	84,752

Note. The use of the size modifier (Kb) in the output

Example 912-3. Selecting on File Size Range (-ss> -ss<)

```
$WORK RUPERT 5> finfo -ss>1 -ss<3 -os
FINFO V2.9 Native 14/11/2008 14:27
```

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Files on \SIRIUS.\$WORK.RUPERT

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
HEADERS	27-Oct-2006 16:05:58	101	U	NNNN	1,100	127,001	4	16	4
THALES	23-May-2006 18:06:08	101	U	NNNN	1,182	127,001	4	16	4
FGENF	26-Apr-2004 14:27:50	101	U	NNNN	1,284	127,001	4	16	4
SHHISTOR	02-Aug-2006 21:01:23	180	U	NNNN	1,742	127,001	2	100	2
RTSPOOLF	19-Apr-2004 15:23:32	101	U	NNNN	1,966	127,001	4	16	4
PASS4	13-May-2006 11:43:32	101	U	NNNN	2,080	127,001	2	2	2
PASS2	13-May-2006 11:41:14	101	U	NNNN	2,082	127,001	2	2	2
PIRACOMP	29-Jan-2007 15:40:46	101	U	NNNN	2,136	127,001	2	2	2
PROJDIRH	09-Mar-2007 11:33:41	101	U	NNNN	2,166	127,001	2	2	2
CAPTEST	07-Mar-2006 19:34:56	101	U	NNNN	2,194	127,001	2	2	2
TRIN	17-Jul-2006 07:56:59	101	U	NNNN	2,196	127,001	2	2	2
PIRADT01	25-Jan-2007 13:10:41	101	U	NNNN	2,226	127,001	2	2	2
PIRATSTB	29-Jan-2007 17:20:22	101	U	NNNN	2,244	127,001	2	2	2
PASSN	19-Feb-2007 18:38:19	101	U	OOOO	2,282	127,001	2	2	2
HEADING	02-Mar-2007 15:50:25	101	U	NNNN	2,316	127,001	4	16	4
THALES1	23-May-2006 17:10:16	101	U	NNNN	2,408	127,001	4	16	4
IPSCCL	07-Oct-2004 12:18:58	101	U	NNNN	2,538	127,001	2	2	2
IPSCRIPT	07-Oct-2004 11:55:50	101	U	NNNN	2,556	127,001	2	2	2
HSTEST	24-Oct-2005 16:46:19	101	U	NNNN	2,584	127,001	2	2	2
RTSPOUTF	19-Apr-2004 15:23:38	101	U	NNNN	2,622	127,001	4	16	4
FECOMSTR	19-Apr-2004 15:27:58	101	U	NNNN	2,736	127,001	4	16	4
IPTESTD3	29-Jun-2004 10:02:15	101	U	NNNN	2,788	127,001	2	2	2
IPTESTD2	13-Feb-2007 08:10:22	101	U	NNNN	2,962	127,001	2	2	2

Selected User Totals for SubVolume \SIRIUS.\$WORK.RUPERT

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	23	50,390	62
Totals:		23	50,390	62

Note. The neat chopping at both ends of the range.

9.13 SELECTION ON FILE TYPE (-st)

Example 913-1. Selecting on Unstructured Type (-stu)

```

$SYSTEM SYSTEM 47> finfo -stu d*
FINFO V2.9 Native 14/11/2008 14:27
-----
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Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
    
```

Files on \SIRIUS.\$SYSTEM.SYSTEM

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
D20C8LIB	22-Nov-1995 23:17:21	100	U	N---	902,508	255,255	74	32	458
DALSVR	03-Feb-1994 16:33:28	100L	U	NCNC	2,417Kb	255,255	276	16	1188
DAY	30-Sep-2003 10:25:39	100	U	NCNC	41,390	255,255	14	4	22
DAYPURGE	30-Jun-1998 10:31:47	100	U	NCNC	39,468	255,255	14	4	22
DBSVRMAP	08-Nov-1996 16:35:59	0	U	NCNC	4,224	255,255	4	4	4
DBSVROBJ	11-Nov-1996 17:15:27	100L	U	NCNC	20,480	255,255	4	4	12
DDL	07-Feb-1997 16:28:12	100	U	NCNC	573,440	255,255	280	16	280
DDLTRANS	27-Oct-1992 10:37:26	100L	U	NCNC	67,584	255,255	34	16	34
DDQUERYS	21-May-1996 04:59:38	101	U	NONO	30,740	255,255	14	2	16
DDSCHEMA	31-May-1996 09:48:55	101	U	NONO	81,854	255,255	8	32	40
DEQUE	01-Dec-1997 20:00:52	101	U	NCNC	23,046	255,255	14	28	14
DEQUECC	01-Dec-1997 20:00:52	101	U	NCNC	15,708	255,255	10	28	10
DIAGBOOT	16-Sep-1988 21:48:12	100L	U	NONO	61,440	255,255	30	24	30
DIRENTH	13-Sep-1995 08:59:45	101	U	NCNC	2,470	255,255	4	16	4
DISKLIST	12-Feb-1999 12:53:33	100L	U	NONO	356,352	255,255	174	16	174
DISKLOG	12-Feb-1999 12:54:00	100L	U	NONO	462,848	255,255	226	16	226
DISKPRBE	14-Aug-1991 11:16:19	100L	U	NONO	393,216	255,255	192	16	192
DISKSTAT	12-Feb-1999 12:54:26	100L	U	NONO	407,552	255,255	200	16	200
DISKTEST	12-Feb-1999 12:54:55	100L	U	NONO	501,760	255,255	246	16	246
DISKUTIL	12-Feb-1999 12:55:21	100L	U	NONO	425,984	255,255	208	16	208
DLARAB	18-Apr-1986 10:15:40	101	U	NCNC	10,454	255,255	2	2	6
DLAUNCH	02-May-1997 17:57:06	101	U	NCNC	4,646	255,255	4	16	4
DLAUNCHH	13-Jul-1995 21:24:36	101	U	NCNC	5,250	255,255	4	16	4
DLTERM	31-Oct-1985 13:00:41	101	U	NCNC	8,024	255,255	2	2	4
DMPTRACE	23-Apr-1992 15:16:19	100L	U	NONO	12,288	255,255	6	2	6
DNSCOM	18-Mar-1993 01:26:02	100L	U	CCCC	751,616	255,255	94	32	382
DNSEXP	28-Sep-1994 23:17:25	100L	U	CCCC	278,528	255,255	34	32	162
DNSMGR	28-Sep-1994 23:19:38	100L	U	CCCC	718,848	255,255	84	32	372
DRAMDIAG	27-Sep-1990 09:42:08	510	U	NONO	65,932	255,255	20	100	120
DSAPDDL	11-Jun-1997 07:53:17	101	U	NONO	7,002	255,255	4	16	4
DUP	16-Sep-1988 22:23:37	100L	U	NONO	40,960	255,255	20	14	20
DUPREN	16-Sep-1988 22:23:38	100L	U	NONO	51,200	255,255	26	2	26
DUPREN2	16-Sep-1988 22:23:39	100L	U	NONO	38,912	255,255	20	8	20

```

Selected User Totals for SubVolume \SIRIUS.$SYSTEM.SYSTEM
User No  User Name      Files      Bytes Used      Pages Used
255,255  SUPER.SUPER      33          8,823,660       4,510
Totals:                33          8,823,660       4,510
    
```

Note. The U in the Type Column and the fact that the selection has only been done on files beginning with d (d*).

Example 913-2. Selecting on Relative Type (-str)

```

$SYSTEM SYSTEM 49> finfo *.* -str
FINFO V2.9 Native 14/11/2008 14:27
-----
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Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
    
```

Files on \SIRIUS.\$SYSTEM.SYS03

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
QIOGQDIR	***** OPEN NOW *****	5140	R	AAAA	0	255,255	16	16	0

Selected User Totals for SubVolume \SIRIUS.\$SYSTEM.SYS03

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	1	0	0
Totals:		1	0	0

Note. The R in the T column.

Example 913-3. Selecting on Entry Sequenced Type (-ste)

```

$SYSTEM SYSTEM 50> finfo -ste
FINFO V2.9 Native 14/11/2008 14:27
-----
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Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
    
```

Files on \SIRIUS.\$SYSTEM.SYSTEM

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
CRASHPOL	15-Jan-2004 09:05:44	0	E	CCCC	512	255,255	4	20	4
MYTERM	15-Nov-2001 10:42:26	0	E	NCNC	0	255,255	20	20	0
OUTPUTT	12-Aug-1999 08:11:24	0	E	NCNC	0	255,255	4	20	0
ZZEVCONF	31-Dec-1974 00:00:19	843	E	NOOO	2,048	255,255	1	1	1

Selected User Totals for SubVolume \SIRIUS.\$SYSTEM.SYSTEM

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	4	2,560	5
Totals:		4	2,560	5

Note. The E in the T column.

Example 913-4. Selecting on Key Sequenced Type (-stk)

```
$SYSTEM SYSTEM 52> finfo -stk h*
FINFO V2.9 Native 14/11/2008 14:27
```

```
-----
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Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$SYSTEM.SYSTEM

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
HELMCDG	06-Nov-1996 11:50:25	0	K	NCNC	208,896	255,255	16	16	112
HELMCLX	12-Nov-1992 16:08:24	0	K	NCNC	151,552	255,255	16	16	80
HELMCOMM	08-Nov-1995 17:50:34	0	K	NCNC	208,896	255,255	16	16	112
HELMCPU	15-Sep-1995 03:15:29	0	K	NCNC	163,840	255,255	16	16	80
HELMCPU4	03-Mar-1997 11:59:54	0	K	NCNC	724,992	255,255	16	16	368
HELMCSS	20-Nov-1996 17:59:20	0	K	NCNC	102,400	255,255	16	16	64
HELMDISK	03-Mar-1998 14:31:37	0	K	NCNC	512,000	255,255	16	16	256
HELMFIRM	14-Oct-1997 10:44:40	0	K	NCNC	24,576	255,255	16	16	16
HELMGIO	10-Feb-1997 19:39:42	0	K	NCNC	139,264	255,255	16	16	80
HELMIPB	12-Oct-1995 14:17:38	0	K	NCNC	151,552	255,255	16	16	80
HEMLLAN	10-Dec-1997 00:13:43	0	K	NCNC	16,384	255,255	16	16	16
HELMMDS	01-Feb-1998 13:17:08	0	K	NCNC	405,504	255,255	16	16	208
HELMMDS4	12-Jul-1996 07:29:52	0	K	NCNC	454,656	255,255	16	16	224
HELMMFC	03-Jun-1996 14:50:49	0	K	NCNC	32,768	255,255	16	16	16
HELMODSK	14-Dec-1994 19:48:13	0	K	NCNC	217,088	255,255	16	16	112
HELMSCSI	29-Mar-1996 06:41:57	0	K	NCNC	106,496	255,255	16	16	64
HELMSUI	22-Dec-1994 02:50:13	0	K	NCNC	16,384	255,255	16	16	16
HELMSXLK	15-Jun-1993 09:56:04	0	K	NCNC	53,248	255,255	16	16	32
HELMSYH	06-Jan-1998 11:41:37	0	K	NCNC	110,592	255,255	16	16	64
HELMTAPE	25-Sep-1997 03:56:22	0	K	NCNC	290,816	255,255	16	16	144
HELMTMDS	14-Oct-1997 10:44:28	0	K	NCNC	258,048	255,255	16	16	128
HELMTPI	01-Nov-1994 23:28:12	0	K	NCNC	20,480	255,255	16	16	16
HLSPDIR	12-Jun-1997 15:03:28	300	K	NCNC	1,536	255,255	16	32	16

Selected User Totals for SubVolume \SIRIUS.\$SYSTEM.SYSTEM

User No	User Name	Files	Bytes Used	Pages Used
255,255	SUPER.SUPER	23	4,371,968	2,304
Totals:		23	4,371,968	2,304

Note. The K in the T column and the h* file selector in the command

9.14 SELECTION ON USER (-su)

Example 914-1. Selecting on User Number (-suggg.uuu)

```
$SYSTEM SYSTEM 55> finfo -su200,10
FINFO V2.9 Native 14/11/2008 14:27
-----
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Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$SYSTEM.SYSTEM

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
BARCODES	07-Jul-2003 09:32:09	100	U	NNNN	22,490	200,010	8	2	12
COILBIN1	14-Apr-2000 14:55:15	100	U	NNNN	22,576	200,010	8	2	12
COMPARE	14-Oct-1988 08:43:25	100L	U	NNNN	9,216	200,010	5	5	5
FIXFILE	11-Oct-1999 08:47:15	100	U	NNNN	56,312	200,010	20	4	28
KILLOPEN	24-Jan-2002 11:54:45	100	U	NNNN	24,916	200,010	8	2	14
LABELBIN	15-Dec-1999 13:23:56	100	U	NNNN	23,414	200,010	8	2	12
MQSLOG	02-Aug-2001 13:41:43	101	U	NNNN	102	200,010	2	2	2
QSUBMIT	12-Jun-1992 12:46:28	100L	U	NNNN	18,082	200,010	8	2	10

Selected User Totals for SubVolume \SIRIUS.\$SYSTEM.SYSTEM

User No	User Name	Files	Bytes Used	Pages Used
200,010	<alien>.(200,10)	8	177,108	95
Totals:		8	177,108	95

Note. The comma in the select command defining the user number

Example 914-2. Selecting on User Name (-suggg.uuu)

```
$SYSTEM SYSTEM 58> finfo -susuper.rupert
FINFO V2.9 Native 14/11/2008 14:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)
```

Files on \SIRIUS.\$SYSTEM.SYSTEM

Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
PAK	19-Mar-1998 17:17:00	100	U	AAAA	190,464	255,200	32	32	96
PAKSX	19-Mar-1998 17:17:05	100	U	AAAA	180,224	255,200	32	32	96
README	19-Mar-1998 17:17:36	101	U	AAAA	7,528	255,200	4	28	4
UNPAK	19-Mar-1998 17:17:08	100	U	AAAA	180,224	255,200	32	32	96

Selected User Totals for SubVolume \SIRIUS.\$SYSTEM.SYSTEM

User No	User Name	Files	Bytes Used	Pages Used
255,200	SUPER.RUPERT	4	558,440	292
Totals:		4	558,440	292

Note. The full stop in the select command defining the user name

9.15 SELECTION BY TEXT CONTENTS (-sx"...")

The user must have read access rights to the files being searched, otherwise they will not be selected.

Example 915-1. Selecting by Text Contents (-sx"...")

```

$SYSTEM SYSTEM 59> finfo -sx"SIRIUS"
FINFO V2.9 Native 14/11/2008 14:27
-----
Copyright Ross Systems International Ltd. 2008
Trial Version(Release Date 13th November 2008, Expires 31st December 2008)

Files on \SIRIUS.$SYSTEM.SYSTEM

Name      Last Modified          Code TP RWEP      Size  User No  PExt  SExt  Pages
STARTUP   19-Jun-2006 09:46:07   101 U  NCNC      8,070  255,255  2     2     6

Selected User Totals for SubVolume \SIRIUS.$SYSTEM.SYSTEM
User No  User Name      Files      Bytes Used      Pages Used
255,255 SUPER.SUPER    1           8,070           6
Totals:                1           8,070           6

$SYSTEM SYSTEM 61> EDIT STARTUP R
TEXT EDITOR - T9601D20 - (01JUN93)
CURRENT FILE IS $SYSTEM.SYSTEM.STARTUP
*L /SIRIUS/
 19      comment ** 25/04/04 Created for \SIRIUS Reinhard **
*E
    
```

Note. The file has been correctly found.

9.16 SELECTION BY PERCENT USAGE (-s%xx)

Where: xx is the minimum percent usage of the file space.

Example 916-1. Selecting by Percent Usage (-s%xx)

```

$WORK NATIVE 63> finfo -s%30 -e
FINFO V3.1 Native 20/10/2009 17:51
-----
Copyright Ross Systems International Ltd. 2008,2009

Full Version (Release Date 15th October 2009)
-----
Files on \SIRIUS.$WORK.NATIVE

Name      Last Modified          Code TP RWEP User No  PExt  SExt  MExt  IxL  PC%
FINFO16   16-Aug-2009 11:59:41   100 U  NNNN  127,001  36    16    23    0   43.0
FINFO17   17-Aug-2009 16:52:48   100 U  NNNN  127,001  36    16    23    0   43.1
FINFOCN4   27-Sep-2009 14:24:11   101 U  NNNN  127,001  16    16    16    0   31.5
FINFONC    20-Oct-2009 17:19:03   101 U  NNNN  127,001  16    16    16    0   33.1
FINFONC3   22-Sep-2009 12:26:39   101 U  NNNN  127,001  16    16    16    0   31.2
PROBE     14-Oct-2009 17:18:39   100 U  NNNN  127,001  10     6    16    0   44.6

Selected User Totals for SubVolume \SIRIUS.$WORK.NATIVE
User No  User Name      Files      Bytes Used      Pages Used
127,001 RSI.RUPERT    6           1,277,914      678
Totals:
    
```

9.17 SELECTION BY DATA CONTENTS (-s("..."))

The user must have read access rights to the files being searched, otherwise they will not be selected.

Example 917-1. Selecting by Data Contents – PIRA Rec (-s("..."))

```
finfo -s("#A7D3 #7982 #7D1E")
FINFO V2.9 Native 14/11/2008 14:27
-----
```

Copyright Ross Systems International Ltd. 2008
Trial Version (Release Date 13th November 2008, Expires 31st December 2008)

Files on \SIRIUS.\$WORK.RUPERT

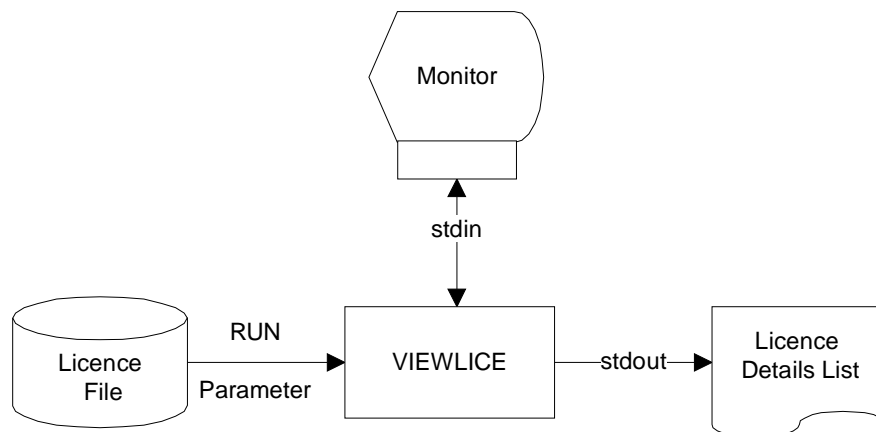
Name	Last Modified	Code	TP	RWEP	Size	User No	PExt	SExt	Pages
PAKSUBS	03-Dec-2004 10:23:12	0	U	NNNN	425,606	127,001	4	28	228

Selected User Totals for SubVolume \SIRIUS.\$WORK.RUPERT

User No	User Name	Files	Bytes Used	Pages Used
127,001	RSI.RUPERT	1	425,606	228
Totals:		1	425,606	228

Note This data combination was chosen because it had been found in the 100th block of PAKSUBS using FUP. It was therefore comforting to know that it had been found

10. VIEWLICE Licence Viewer



VIEWLICE is a management tool which allows system administrators to view the contents of a licence file and delete expired licences.

10.1 Running VIEWLICE

VIEWLICE is run using the following TACL commands:

CLEAR ALL

RUN VIEWLICE /IN <term in>, OUT <term out>/<licence file>

Where:

- <term in> Name of the terminal input device, can be a file, optional default home terminal
- <term out> Name of the terminal output device, can be a file, optional default home terminal,
- <licence file> Licence File Name, optional, default LICENCES

The licence file is read and displayed on the output device, the user is then prompted for a command.

The display has the format:

```
$WORK PCPROGS 43> VIEWLICE NEW13
```

```
VIEWLICE      10/07/2007 09:58
```

```
-----  
Copyright Ross Systems International Ltd. 2007
```

```
-----  
Licenses Contained in License File: NEW13
```

```
MONEY3 Licenses, Universal Bank Inc.           - Copyright RSI: 10 Aug 2007 10:44  
System Name: MONEY3, System No.: C12347
```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
001	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000

```
MONEY4 Licenses, Universal Bank Inc.           - Copyright RSI: 10 Aug 2007 10:44  
System Name: MONEY4, System No.: C12348
```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
003	02 HSSPOOL	31 Dec 2009	<none>	<none>	4	NS10000
004	06 R-IPPS	31 Dec 2009	<none>	<none>	4	NS10000

```
:>>
```

Note: No passwords are output.

10.2 VIEWLICE Command Summary

VIEWLICE uses the following commands to maintain RSI License Files.

1. **ADD <file>** The file is appended to the license file.
2. **CHAL <no>** Alters the challenge response for a given element number <no>:
The following procedure is performed
 - (i) The user is challenged with the corresponding challenge number
 - (ii) The user enters the response
 - (iii) The user is requested twice for the challenge
 - (iv) The user is requested twice for the response
 - (v) If there is a failure at any stage the command is discontinued, otherwise the record is updated with the new challenge response details.
3. **DEL <no>** The given licence number is deleted
4. **EXIT** Causes the VIEWLICE process to stop execution and write any changes to the licence file. Ctrl Y (EOF) has the same action
5. **FC** Retrieves Edits and re-executes lines in the history buffer
This command uses the editing template as described in the TACL Manual Chapter 8.
6. **HELP** This displays a help menu
7. **INFO** Displays the License File
8. **PASS** Alters the password for the file, only available if there is a licensing licence on the file:
The following procedure is performed
 - (i) The user is prompted for the password. If incorrect the command is discontinued
 - (ii) The user is prompted twice for the new password, which if it matches it is used as the new password
9. **UNDO** Drops all changes to the Licence File

When VIEWLICE is started the referenced license file is displayed. The No column refers to the number of the licence record

There are two types of licence records.

1. Institution header records. i.e.

```
SIRIUS Licences - 2 Jun 2006 13:07
```

```
System Name: SIRIUS, System No.: 14441
```

The number of these records is not displayed. However the first record in the file has sequence number 0 and all other institution header records have numbers in sequence with the institution licence records. These records cannot be deleted until all corresponding Institution Licence Records on the file have been deleted.

2. Institution Licence records. i.e.

```
04 RSI TEST 30 Sep 2006 <none> 2 to S7800
```

The record sequence number of these records is displayed in the first column under the heading "No.".

10.3 VIEWLICE Commands

10.3.1 ADD

This command has the syntax: `ADD <file>`

The ADD command causes the referenced file to be appended to the license file.

It is used when a new licence is issued to merge old and new licence files.

Example.

```
:>> ADD NEW10
```

Licenses Contained in License File: NEW13

MONEY3 Licenses, Universal Bank Inc. - Copyright RSI: 10 Aug 2007 10:44
 System Name: MONEY3, System No.: C12347

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
001	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000

MONEY4 Licenses, Universal Bank Inc. - Copyright RSI: 10 Aug 2007 10:44
 System Name: MONEY4, System No.: C12348

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
003	02 HSSPOOL	31 Dec 2009	<none>	<none>	4	NS10000
004	06 R-IPPS	31 Dec 2009	<none>	<none>	4	NS10000

MONEY1 Licenses, Universal Bank Inc. - Copyright RSI: 9 Aug 2007 15:26
 System Name: MONEY1, System No.: C12345

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
006	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000
007	02 HSSPOOL	31 Dec 2009	<none>	<none>	2	S88000
008	06 R-IPPS	31 Dec 2009	<none>	<none>	2	S88000

MONEY2 Licenses, Universal Bank Inc. - Copyright RSI: 9 Aug 2007 15:27
 System Name: MONEY2, System No.: C12345

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
010	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000
011	02 HSSPOOL	31 Dec 2009	<none>	<none>	2	S88000
012	03 RSI TEST	31 Dec 2009	<none>	<none>	2	S88000
013	04 TELOS	31 Dec 2009	<none>	<none>	2	S88000
014	05 FINFO	31 Dec 2009	<none>	<none>	2	S88000
015	06 R-IPPS	31 Dec 2009	<none>	<none>	2	S88000

10.3.2 CHAL

This command has the syntax: CHAL <no>

The CHAL command alters the challenge response for a given element number <no>:

The following procedure is performed

- (i) The user is challenged with the corresponding challenge number
- (ii) The user enters the response
- (iii) The user is requested twice for the challenge
- (iv) The user is requested twice for the response
- (v) If there is a failure at any stage the command is discontinued, otherwise the record is updated with the new challenge response details.

Example.

```
:>> CHAL 15
```

Challenge is , enter response:

Enter new challenge:naughty

Re-enter new challenge:naughty

Enter new response: <new response is hidden>

Re-enter new response: <new response is hidden>

Licenses Contained in License File: NEW13

MONEY3 Licenses, Universal Bank Inc. - Copyright RSI: 10 Aug 2007 10:44
System Name: MONEY3, System No.: C12347

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
001	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000

MONEY4 Licenses, Universal Bank Inc. - Copyright RSI: 10 Aug 2007 10:44
System Name: MONEY4, System No.: C12348

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
003	02 HSSPOOL	31 Dec 2009	<none>	<none>	4	NS10000
004	06 R-IPPS	31 Dec 2009	<none>	<none>	4	NS10000

MONEY1 Licenses, Universal Bank Inc. - Copyright RSI: 9 Aug 2007 15:26
System Name: MONEY1, System No.: C12345

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
006	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000
007	02 HSSPOOL	31 Dec 2009	<none>	<none>	2	S88000
008	06 R-IPPS	31 Dec 2009	<none>	<none>	2	S88000

MONEY2 Licenses, Universal Bank Inc. - Copyright RSI: 9 Aug 2007 15:27
System Name: MONEY2, System No.: C12345

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
010	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000
011	02 HSSPOOL	31 Dec 2009	<none>	<none>	2	S88000
012	03 RSI TEST	31 Dec 2009	<none>	<none>	2	S88000
013	04 TELOS	31 Dec 2009	<none>	<none>	2	S88000
014	05 FINFO	31 Dec 2009	<none>	<none>	2	S88000
015	06 R-IPPS	31 Dec 2009	naughty	*****	2	S88000

10.3.3 DEL

This command has the syntax: DEL <no>

The DEL command deletes the given licence number.

Example.

```
:>> DEL 14
```

```
License number 14 deleted, altered array is:
Licenses Contained in License File: NEW13
```

```
MONEY3 Licenses, Universal Bank Inc. - Copyright RSI: 10 Aug 2007 10:44
System Name: MONEY3, System No.: C12347
```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
001	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000

```
MONEY4 Licenses, Universal Bank Inc. - Copyright RSI: 10 Aug 2007 10:44
System Name: MONEY4, System No.: C12348
```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
003	02 HSSPOOL	31 Dec 2009	<none>	<none>	4	NS10000
004	06 R-IPPS	31 Dec 2009	<none>	<none>	4	NS10000

```
MONEY1 Licenses, Universal Bank Inc. - Copyright RSI: 9 Aug 2007 15:26
System Name: MONEY1, System No.: C12345
```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
006	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000
007	02 HSSPOOL	31 Dec 2009	<none>	<none>	2	S88000
008	06 R-IPPS	31 Dec 2009	<none>	<none>	2	S88000

```
MONEY2 Licenses, Universal Bank Inc. - Copyright RSI: 9 Aug 2007 15:27
System Name: MONEY2, System No.: C12345
```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
010	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000
011	02 HSSPOOL	31 Dec 2009	<none>	<none>	2	S88000
012	03 RSI TEST	31 Dec 2009	<none>	<none>	2	S88000
013	04 TELOS	31 Dec 2009	<none>	<none>	2	S88000
014	06 R-IPPS	31 Dec 2009	naughty	*****	2	S88000

```
:>>
```

10.3.4 **EXIT**

This command has the syntax: **EXIT**
 Ctrl Y (EOF) has the same action

The **EXIT** command causes the **VIEWLICE** process to stop execution and the user to be prompted to confirm the writing of any changes to the licence file, if the license records have been updated.

Examples.

1. The license file has been edited

```
:>>EXIT
```

```
Do you want to overwrite license file NEW13 YES/NO: YES
```

```
VIEWLICE Processing Complete  
$WORK PCPROGS 44>
```

2. The license file is unaltered

```
:>>EXIT
```

```
VIEWLICE Processing Complete  
$WORK PCPROGS 46>
```

10.3.4 FC

This command has the syntax: FC

The FC command Retrieves Edits and re-executes lines in the history buffer

This command uses the editing template as described in the TACL Manual Chapter 8.

Example.

```
:>> FC
```

```
FC..DEL 14
..... 3
```

```
FC..DEL 13
.....
```

```
License number 13 deleted, altered array is:
Licenses Contained in License File: NEW13
```

```
MONEY3 Licenses, Universal Bank Inc.                   - Copyright RSI: 10 Aug 2007 10:44
System Name: MONEY3, System No.: C12347
```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
001	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000

```
MONEY4 Licenses, Universal Bank Inc.                   - Copyright RSI: 10 Aug 2007 10:44
System Name: MONEY4, System No.: C12348
```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
003	02 HSSPOOL	31 Dec 2009	<none>	<none>	4	NS10000
004	06 R-IPPS	31 Dec 2009	<none>	<none>	4	NS10000

```
MONEY1 Licenses, Universal Bank Inc.                   - Copyright RSI: 9 Aug 2007 15:26
System Name: MONEY1, System No.: C12345
```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
006	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000
007	02 HSSPOOL	31 Dec 2009	<none>	<none>	2	S88000
008	06 R-IPPS	31 Dec 2009	<none>	<none>	2	S88000

```
MONEY2 Licenses, Universal Bank Inc.                   - Copyright RSI: 9 Aug 2007 15:27
System Name: MONEY2, System No.: C12345
```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
010	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000
011	02 HSSPOOL	31 Dec 2009	<none>	<none>	2	S88000
012	03 RSI TEST	31 Dec 2009	<none>	<none>	2	S88000
013	06 R-IPPS	31 Dec 2009	naughty	*****	2	S88000

```
:>>
```

10.3.5 HELP

This command has the syntax: **HELP**

The HELP command displays a help menu

Example.

```
:>>HELP
```

VIEWLICE Commands are:

```

ADD <file>      The file is appended to the license file.
CHAL <no>       Alters the challenge response for a given element number <no>
DEL(ETE)<no>    The given license number is deleted
EXIT           Stop execution and write any changes to the license file
              Ctrl Y (EOF) has the same action
FC            Retrieves, Edits and re-executes lines
HELP         Displays the help menu
INFO        Displays the License File on the terminal
PASS(WORD)   Alters the password for the file, only available if
              there is a licensing license on the file:
PRINT <file> Prints the license file on the device <file>
UNDO        Drops all changes to the Licence File
:>>

```

10.3.6 INFO

This command has the syntax: **INFO**

INFO command displays the edited License File

Example.

```
:>> INFO
```

Licenses Contained in License File: NEW13

```

MONEY3 Licenses, Universal Bank Inc.           - Copyright RSI: 10 Aug 2007 10:44
System Name: MONEY3, System No.: C12347

```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
001	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000

```

MONEY4 Licenses, Universal Bank Inc.           - Copyright RSI: 10 Aug 2007 10:44
System Name: MONEY4, System No.: C12348

```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
003	02 HSSPOOL	31 Dec 2009	<none>	<none>	4	NS10000
004	06 R-IPPS	31 Dec 2009	<none>	<none>	4	NS10000

```

MONEY2 Licenses, Universal Bank Inc.           - Copyright RSI: 9 Aug 2007 15:27
System Name: MONEY2, System No.: C12345

```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
010	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000
011	02 HSSPOOL	31 Dec 2009	<none>	<none>	2	S88000
012	03 RSI TEST	31 Dec 2009	<none>	<none>	2	S88000
013	06 R-IPPS	31 Dec 2009	naughty	*****	2	S88000

10.3.8 PASS

This command has the syntax: `PASS`

The `PASS` command alters the password for the file.
It is only available if there is a licensing licence on the file.

The following procedure is performed

- (i) The user is prompted for the password. If incorrect the command is discontinued
- (ii) The user is prompted twice for the new password, which if it matches it is used as the new password

Example.

1. No licensing license in file.

```
:>> PASS
```

```
Your are not authorised to change passwords, access denied
```

```
:>>
```

2. Licensing license in file, valid password entered

```
:>>pass
```

```
Enter Password: <entered password is hidden>
```

```
Enter new Password: <new password is hidden>
```

```
Re-enter new Password: <new password is hidden>
```

3. Licensing license in file, invalid password entered

```
:>>pass
```

```
Enter Password: <entered password is hidden>
```

```
Invalid password entered, access denied
```

```
:>>
```

10.3.9 UNDO

This command has the syntax: `UNDO`

`UNDO` drops all changes to the Licence File and reloads the editable licence file from the disk.

Example.

```
:>> UNDO
```

```
Licenses file reset, changes undone  
Licenses Contained in License File: NEW13
```

```
MONEY3 Licenses, Universal Bank Inc. - Copyright RSI: 10 Aug 2007 10:44  
System Name: MONEY3, System No.: C12347
```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
001	01 HSM EMM	31 Dec 2009	<none>	<none>	2	S88000

```
MONEY4 Licenses, Universal Bank Inc. - Copyright RSI: 10 Aug 2007 10:44  
System Name: MONEY4, System No.: C12348
```

No.	Product	Expiry Date	Challenge	Response	Max CPUs	CPU Type
003	02 HSSPOOL	31 Dec 2009	<none>	<none>	4	NS10000
004	06 R-IPPS	31 Dec 2009	<none>	<none>	4	NS10000

```
:>>
```


11. USER NOTES

Note: The product is still undergoing improvement any comments please contact us:

e-Mail: info@rsi-ns.com Web: www-rsi-ns.com Tel. +44(0)-1206-392923

You will also need to buy a license for the licensed version of this product (FINFO V3.2 / FINFO V1.9) to continue to use FINFO after December 2008

A fully functional trial version of the product is available on request.

This release of the product has no known faults, even when used under the most extreme conditions, owing to our patient, tolerant and intrepid testers, to whom we owe a huge vote of thanks, especially LM and CB.

Rupert Stanley. Ross Systems International. rupert@rsi-ns.com