



| z/TPF V1.1

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Loaders Changes for Loading Files

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Overview

- **Ability to load files alone or along with programs**
 - Files can be loaded without programs
- **Supported by Image loader (TLDR) & E-type loader (OLDR)**
 - All E-type loader commands support files
- **Supports z/TPF collection support file system (TFS)**
 - GFS must be active to load files

Offline Loader Changes

- **New @FILE control statement**
 - Source location
 - Target location
 - Permission for the target file

Offline Loader Changes (continued)

- **New @FILE control statement (continued)**
 - Owner ID of the target file
 - Unknown owner ID name defaults to TFPDFLTU_UID
 - Group ID of the target file
 - Unknown group ID name defaults to TFPDFLTG_GID
 - Translation option
 - None or ASCII to EBCDIC

ZIMAG DISPLAY Example

```
ZIMAG DISPLAY PROGRAM
IMAG0015I 15.47.54 PROGRAM AREA DISPLAY
PROG AREA      IMAGE NAME  FILES
PROG1          TPF01       N
PROG2          TPF02       Y
PROG3          TPF03       N
PROG4          TPF04       N
PROG5          TPF05       N
PROG6          TPF06       N
PROG7          TPF07       N
PROG8          TPF08       N
END OF ZIMAG DISPLAY
```

ZIMAG COPY

- **PROGRAM** parameter copies base versions of files in addition to programs
 - GFS must be active if source image or target image have files loaded
 - Files loaded to the target image are removed prior to the copy

ZOLDR Details

- **ZOLDR LOAD**
 - Files created in TFS filesystem
 - Loadset generation number appended to pathname internally
 - Application uses original pathname (versioning is transparent)
- **ZOLDR DELETE**
 - Files removed from TFS filesystem
 - Stay pending deletion if GFS not active (loadset renamed)

ZOLDR Details

- **ZOLDR ACTIVATE**
 - Allows use by new ECBs
 - Selective activation supported
 - Symbolic links created in special purpose file system
 - Version control file index (VCFX) file system
 - Updates made to a file are only made to the version associated with that ECB
 - Multiple versions of a file are NOT synched

ZOLDR Details

- **ZOLDR DEACTIVATE**
 - Provides fallback, no longer used by new ECBs
 - Updates made while activated remain

Activate/Deactivate Example

- **ZOLDR ACTIVATE loadset containing file**
- **Application makes change x to file**
- **ZOLDR DEACTIVATE loadset containing file**
- **ZOLDR ACTIVATE same loadset again**
- **Change x is still there**

ZOLDR Details

- **ZOLDR ACCEPT**
 - Becomes the base version of the file
 - No fallback
 - Stay pending accept if GFS not active

ZOLDR DISPLAY LOADSET Example

ZOLDR DISP LOADSET NEWAFILE

OLDR1200I 15.27.32 CLE2 - BEGIN LOADSET INFORMATION

LOADSET STATUS

NEWAFILE CREATED ON 10/10/08 14.26.34
INACTIVE

CONTAINS THESE PROGRAMS

NEWAKW

CONTAINS THESE FILES

SHORTNAME 0001

file1.dat

SHORTNAME 0002

file2.dat

CLE2 - END OF DISPLAY

ZOLDR DISPLAY LOADSET FULLPATH Example

```
ZOLDR DISP LOADSET NEWAFILE
OLDR1200I 15.27.32 CLE2 - BEGIN LOADSET INFORMATION
LOADSET    STATUS
NEWAFILE   CREATED ON 10/10/08 14.26.34
           INACTIVE

           CONTAINS THESE PROGRAMS
           NEWAKW
           CONTAINS THESE FILES
           SHORTNAME 0001
           /sys/tpf_pbfiles/mydir/file1.dat
           SHORTNAME 0002
           /sys/tpf_pbfiles/mydir/file2.dat
CLE2 - END OF DISPLAY
```

ZOLDR EXCLUDE & REINCLUDE

- **Use shortname instead of pathname in exclude & reinclude commands**
 - Shortname assigned automatically during ZOLDR LOAD
 - Display shortname with ZOLDR DISPLAY LOADSET
- **ZOLDR EXCLUDE LSNAM 0001.0003**
- **ZOLDR REINCLUDE LSNAM 0003**

New ZFILE FVER Command

- **Finds the location of a file**
- **zfile fver -I base /mydir/file1.dat**
 - Finds the location of the base version of the file
- **zfile fver -I lsnname /mydir/file1.dat**
 - Finds the location of the file in that loadset
- **zfile fver /mydir/file1.dat**
 - Finds the location of the file to be used by this ECB
- **Output can be piped to the ZFILE xargs command**

ZFILE FVER Examples

```
zfile fver /sys/tpf_pfiles/mydir/file1.dat
FILE0001I 15.58.38 START OF DISPLAY FROM fver
  /sys/tpf_pfiles/mydir/file1.dat
/sys/tpf_pfiles/mydir/.file1.dat/.2
END OF DISPLAY
```

```
zfile fver /sys/tpf_pfiles/mydir/file2.dat | xargs
  head -n2
FILE0001I 14.18.26 START OF DISPLAY FROM fver
  /sys/tpf_pfiles/mydir/file2.d...
THIS IS LINE ONE
THIS IS LINE TWO
END OF DISPLAY
```


Program Base Considerations

- **Define image with a program base number**
- **Naming convention for program base unique files**
 - /sys/tpf_pbfiles
- **Supported by Image loader (TLDR) & E-type loader (OLDR)**

Program Base Restrictions

- **Non-program base unique files**
 - Don't begin with /sys/tpf_pbfiles
 - Supported by E-type loader (OLDR), can be accepted when:
 - Base version of file does not already exist
 - -or-
 - All processors are running on the same program base
 - Supported by Image loader (TLDR) when:
 - Base version of file does not already exist
 - -or-
 - User exit UELK indicates it is OK

Initialization Commands

- **Create subdirectories for program base unique files**
 - `zfile mkdir /tpf_pbfiles/n` (where *n* is 1-8)
 - Automatically done on file system initialization (`zfint`)
- **Verify SYSFS is mounted**
 - `zfile mount`
- **Create the mount point for VCFX**
 - `zfile mkdir /vcfx`
- **Mount the VCFX on the /vcfx directory**
 - `zfile mount -t vcfx /vcfx`
- **Automatically remounted on each IPL**

Additional Information

- **Concepts & Structures**
 - Description of special purpose file system managed by E-type loader (OLDR)
- **Database User's Guide**
 - Initialization commands
- **Program Management**
 - Programming considerations
- **PJ32902 APEDIT**

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