Loaders Enhancements

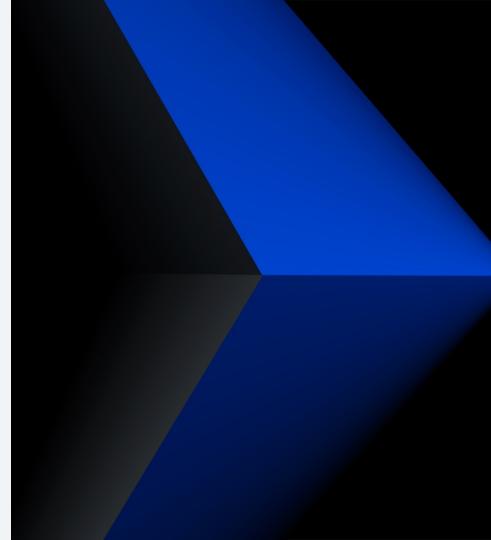
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Any reference to future plans are for planning purposes only. IBM reserves the right to change those plans at its discretion. Any reliance on such a disclosure is solely at your own risk. IBM makes no commitment to provide additional information in the future.



E-type loader recycle interface - refresher

- The E-type loader recycle interface is used to determine whether any program in a set of programs has changed versions.
- As such, a long-running process can determine if it needs to be recycled.
- If it does not need to be recycled, its activation number is bumped up, allowing other E-type loader activity (accepts) to complete.

E-type loader recycle interface - refresher

For example:

- INETD managed server depends on <u>programs ABCD and</u> WXYZ.
- ZOLDR ACTIVATE of loadset with program <u>ABCD</u> occurs.
- Server calls the E-type loader recycle interface to determine if it should be recycled.
- YES, it should be recycled. The server exits.
- INETD restarts the server using the new version of **ABCD**.

APAR PJ46750 (Nov 2022) E-type loader recycle interface enhancements

 The E-type loader recycle interface is enhanced to provide the ability to specify files in the input parameter list.

APAR PJ46750 (Nov 2022) E-type loader recycle interface enhancements

For example:

- INETD managed server depends on programs ABCD and WXYZ and files myfile1 and myfile2.
- ZOLDR ACTIVATE of loadset with file <u>myfile2</u> occurs.
- Server calls the E-type loader recycle interface to determine if it should be recycled.
- YES, it should be recycled. The server exits.
- INETD restarts the server using the new version of <u>myfile2</u>.

APAR PJ46750 (Nov 2022) E-type loader recycle interface enhancements

• If a long-running ECB must be recycled because of the activation of a loadset, the long-running ECB is no longer required to recycle a second time when the loadset is accepted. This applies to the IBM MQ server and any other long-running server that leverages the E-type loader recycle interface.

ZDFLV - Display file versions (Target 3Q2023)

Use this command to see information about versions of a file loaded to the zTPF system.

- Location of each version on z/TPF.
- Location on Linux on Z.
- Activation number and status.
- Load time.
- File size.

As-is user story

- A developer is making changes to an application that relies on an input file to determine the desired behavior.
- The developer loads a new version of the file.
- However, the behavior is not as expected.
- It is very difficult to determine if the wrong file was loaded!

- A developer is making changes to an application that relies on an input file to determine the desired behavior.
- The developer loads a new version of the file.
- However, the behavior is not as expected.
- The developer uses the ZDFLV command to determine where the file was loaded from.

```
zdflv addGuest84.srvc.json info-all
DFLV0002I 16.41.54 EXTENDED FILE VERSION INFORMATION
  FILE - /sys/tpf pbfiles/tpf-fdes/addGuest84.srvc.json
  LOADSET-
             BASE STAT- ACT ACT NUM- 0 HI ACT-
                                                         N/A
  sourcepath=/ztpf/linuxbin/blddrv/adbi
/jam/addGuest84.srvc.json
  loadtime=02-06-23 14.53.23
  LOCATION-/sys/tpf_pbfiles/tpf-fdes/addGuest84.srvc.json
  SIZE-91 bytes
FND OF DTSPLAY+
```

```
zdflv addGuest84.srvc.json LOADSET-ALL INFO-all
DELVOQUET 09.09.29 EXTENDED ETLE VERSION INFORMATION
FILE - /sys/tpf pbfiles/tpf-fdes/addGuest84.srvc.json
        STAT- ACT ACT NUM- 0 HI ACT- N/A
LOADSET-
 sourcepath=/ztpf/linuxbin/blddrv/adbi/jam/addGuest84.srvc.json
 loadtime=02-06-23 14.53.23
 LOCATION-/sys/tpf pbfiles/tpf-fdes/.addGuest84.srvc.json/.0
 SIZE-91 bytes
LOADSET- NEWFILE STAT- ACT ACT NUM- 26 HI ACT- N/A
 sourcepath=/ztpf/curdrv/adbi/jam/addGuest84.srvc.json
 loadtime=02-27-23 13.49.52
 LOCATION-/sys/tpf pbfiles/tpf-fdes/.addGuest84.srvc.json/.2
 SIZE-91 bytes
END OF DISPLAY+
```

- The developer can quickly see which version of the file is active on the system. In this case, it came from the system build directory instead of their build directory.
- The developer correctly loads the file.

ZDFLV - Display file versions (3Q2023)

You can also do a search by file name with a wild card:

```
ZDFLV tpf-fdes/add*.srvc.json
DFLV0003I 08:14:31 THE LIST OF FILES THAT MATCH
   /sys/tpf_pbfiles/tpf-fdes/addCards.srvc.json
   /sys/tpf_pbfiles/tpf-fdes/addCard84.srvc.json
   /sys/tpf_pbfiles/tpf-fdes/addCard84wrapper.srvc.json _
   /sys/tpf_pbfiles/tpf-fdes/addPNR84.srvc.json
END OF DISPLAY
```

We want sponsor users!

Our development cycle is driven by your feedback.

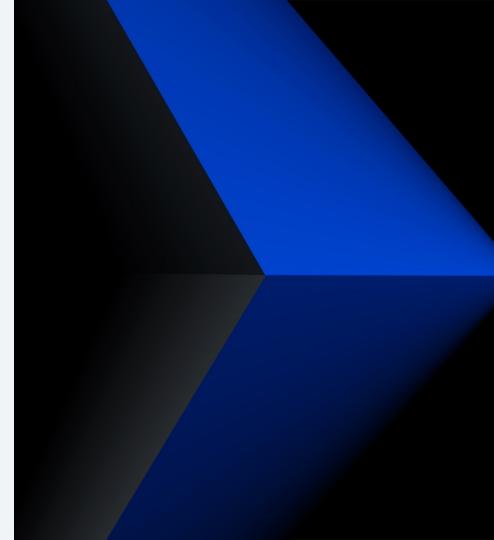
We are looking for sponsor users to assist in design and implementation, targeting the following personas:

Operations

We expect to begin engaging with the sponsor users in 1Q2023.

If you are interested in participating as a sponsor user, please contact:

Josh Wisniewski (jwisniew@us.ibm.com)



Thank you

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