



IBM Software Group

TPF Users Group Fall 2005

z/TPF Maintenance

Packaging, Content, and Web Resources

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Venue: Hot Topic

AIM Enterprise Platform Software

IBM z/Transaction Processing Facility Enterprise Edition 1.1.0

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Topics

- Products and Software
- PUT Cycles
- Web Resources
- Maintenance Packages
- Sample APAR Installation Procedures
- Comments and Suggestions

Products and Software

- z/TPF Products
- z/TPF Restricted Access Software
- Opensource Software

z/TPF Products

- Product GA and PUT maintenance levels
 - Distributed through the IBM Software Delivery & Fulfillment Center (SDF)
 - Available on CD and/or e-delivery* format for download

- Individual APAR packages
 - Distributed through the IBM TPF Family Maintenance web pages
 - Available in e-delivery* format for download, at time APAR is closed
 - Included on PUT distributions CDs

- Products
 - z/TPF Base
 - z/TPF Database Facility
 - z/TPF HPO
 - IBM TPF Product Information Center

*e-delivery requires a subscription for an e-distribution maintenance id

z/TPF Restricted Access Software

- Available only to z/TPF customers
- GA, PUT maintenance levels, and individual APAR packages
 - Distributed through the IBM TPF Family Maintenance web pages
 - Available in e-delivery* format only
- Current list of restricted access software
 - z/TPF Software Profiler

*e-delivery requires a subscription for an e-distribution maintenance id

Opensource Software

- Software GA, PUT maintenance levels, and individual APAR packages
 - Distributed through the TPF Repository managed by the University of Illinois: <http://tpf.ncsa.uiuc.edu/>
 - Available in e-delivery* format only
- Software
 - glibc & libstdc++ runtime libraries tailored for z/TPF

*e-delivery requires a subscription for an e-distribution maintenance id

PUT Cycles

PUT Cycles

- One PUT every six months
- GA dates for the PUTs will be:
 - Last Friday of May
 - Last Friday of November
- All Products and Software mentioned on the previous pages will adhere to this PUT cycle
- For the z/APARs, our direction will be to maintain PUT information on the web for a total of six PUTs.
 - When PUT 07 ships, PUT 01 entries will be dropped
 - When PUT 08 ships, PUT 02 entries will be dropped
 - This includes dropping the PUT (n-6) APARs from the prerequisite history column of the prerequisite history list
 - All APEDITs will continue to be available through DCF/Deep Blue for older PUT levels, however APAR tar files will be pruned

Web Resources

- zTPF Families Maintenance Web Sites
- TPF Families Downloads Web Sites
- zTPF Information, Drivers, and Tools
- TPF Repository, managed by the University of Illinois

TPF Families Maintenance Web Sites

- Provides access to:
 - z/TPF APEDITs and z/TPF APAR packages
 - z/TPF APAR closure sequence file
 - z/TPF Prerequisite list
 - z/TPF Critical and Correcting APAR list
 - z/TPF APAR Data File
 - TPF APAR Tool

- Each of the above includes entries for ALL of the z/APARs
 - All closing codes: code, doc, canceled, etc.
 - All of the supported products and software:
 - z/TPF
 - z/TPFDF
 - z/TPF HPO
 - Restricted Access Software
 - Opensource Software
 - IBM TPF Families Product Information Center

TPF Families Maintenance Web Sites

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Home | Products | Services & solutions | Support & downloads | My account

← Host Transaction Processing

TPF

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Related links

- ALCS
- IBM TPF Toolkit for WebSphere Studio

z/TPF Maintenance

The maintenance for z/TPF is available to current licenseholders. You use your z/TPF electronic distribution user ID to access z/TPF maintenance. z/TPF licenseholders can set up an electronic distribution user ID and password by issuing a [Request for user ID](#).

Overview
z/TPF
TPF 4.1
TPPDF
Operations Server

[View All z/TPF APARs by Number](#)

[View All TPF APARs by Functional Area](#). z/TPF and TPF share common functional area information.

TPF APAR Tool currently does not support z/TPF

Access the TPF Family Tools to download [the Software Profiler tool](#).

PUT Levels	Refer by	Closure Sequence (flat file)
PUT 1	APAR Number	close1.txt

Supporting z/TPF APAR Information

- [z/TPF Pre-requisite File](#)
- [z/TPF Critical and Correcting APARs](#)

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APEDITs and APARs

- z/TPF APEDITs
 - presented in views by:
 - All z/TPF APARs
 - By PUT
 - By Functional Area
 - APEDITs are viewable
 - APEDITs contain either a link to the z/TPF APAR package or a URL for the Restricted Access or Opensource download sites

- Detailed content of the APEDITs and the APAR packages will be described later in the presentation

APEDITs and APARs By PUT view

z/TPF APARs

APAR Number	PUT	Abstract
PJ30286	1	VALBC macro may return incorrect results when called in 31-bit addressing mode.
PJ30287	1	Correct various disassembler output displays.
PJ30288	1	Correct 31-bit pointers for GSYSC, RSYSC, FSYSC system macros.
PJ30289	1	ZDMAP needs to support the \$ character.
PJ30290	1	Program Attribute Table (PAT) stub code in idspat.mac may cause incorrect offsets and object code in the listing file for macros that call idspat
PJ30291	1	z/TPF MQSeries does not retry transient errors from gethostbyname().
PJ30292	1	Automatic retry of OSA-Express connection activation.

Closure Sequence File

- z/TPF APAR closure sequence file
 - One file per PUT level
 - Text file containing the PUT Level and the APAR number
 - Contains ALL APARs
 - TPF 4.1 version of the file contains code APARs only

- Sample

```
PUT1    PJ30311
PUT1    PJ30306
PUT1    PJ30291
PUT1    PJ30297
PUT1    PJ30316
PUT1    PJ30305
PUT1    PJ30349
PUT1    PJ30330
PUT1    PJ30341
PUT1    PJ30336
PUT1    PJ30351
PUT1    PJ30360
PUT1    PJ30319
```


Prerequisite File

- z/TPF Prerequisite File
 - For each entry, provides:
 - Prerequisite APAR list (PJxxxxx(n), where n is PUT level)
 - Status (Base, HPO, Changed, New, Obsolete)
 - File Format
 - Path and file name
 - Number of files in the list expanded to include the following:
 - Source files
 - Objects, shared objects, and archives (OCO, configuration dependent and independent)
 - Utility and offline executables
 - z/TPF list shows prerequisite history for all source, compiled, assembled, and linked files
 - Note: Only the linked shared objects for the opensource glibc & libstdc++ runtime libraries for TPF are included in the prerequisite list.

Prerequisite File

- File Formats
 - Source files (and extensions):
 - C(.c), CPP(.cpp,.cc,.c), Assembler(.asm),
 - Copy(.cpy), Macro(.mac), General-Macro(.mac), System-Macro(.mac),SIP-Macro(.mac), Struct-Pgm-Macro(.mac)
 - CHeader(.h), CPPHeader(.hpp), Include(.incl)
 - Export(.exp)
 - PLI(.pli), YACC(.y,.ypp), LEX(.l)
 - Makefile(.mak), Control(.cntl)
 - Tool()
 - JCL(.jcl), REXX(.rex), XML-pkg(mixed), JAVA(.java), Document(.readme)
 - Compiled, assembled, and linked files:
 - Object(.o), Shared-Object(.so), archive(.a),
 - Keypoint(.kpt), MVS-Object(.ipl)
 - Linux-Offline(), zOS-Offline(.pds)

Prerequisite File

- Path and file name
 - System configuration dependent entries
 - `<sys>/` appears as the first directory in the pathname
 - These entries are never shipped, only appear as to be compiled or linked in APEDITs
 - Utility and offline program entries
 - `os390/` and `linux/` appears as the first directory in the pathname
 - These entries are never shipped, only appear as to be compiled or linked in APEDITs
 - OCO shared objects and archives
 - `base/oco/` appears as the first directories in the pathname
- Entries for the z/TPF Software Profiler source files are included in the prerequisite file, even though APARs for this software are distributed via the z/TPF Downloads page.
- Entries for the glibc & libstc++ runtime library source and object files are not included in the prerequisite file -- only the shared object files are included.

Prerequisite File

	BASE	Shared-Object	base/filesys/load/CFVY.so
PJ30335(1) PJ30389(1) PJ30581(2)	Changed	Shared-Object	base/filesys/load/CFVZ.so
PJ30335(1) PJ30408(1)	Changed	Shared-Object	base/filesys/load/CFZF.so
PJ30335(1) PJ30408(1)	Changed	Shared-Object	base/filesys/load/CFZI.so
	BASE	Shared-Object	base/filesys/load/CHSM.so
PJ30335(1)	Changed	Shared-Object	base/filesys/load/JCI3.so
	BASE	Shared-Object	base/filesys/load/UDDS.so
	BASE	C	base/filesys/mfs/mfs_alloc.c
	BASE	C	base/filesys/mfs/mfs_balloc.c
	BASE	C	base/filesys/mfs/mfs_create.c

	BASE	Macro	<sys>/macro/skgtsz.mac
	BASE	Object	<sys>/obj/acpf.o
PJ30521(1)	Changed	Object	<sys>/obj/acpl.o
	BASE	Object	<sys>/obj/ard3.o
	BASE	Object	<sys>/obj/ard7.o
	BASE	Object	<sys>/obj/ard9.o
	BASE	Object	<sys>/obj/arp1.o
	BASE	Object	<sys>/obj/arp2.o

Critical and Correcting APAR list

- z/TPF Critical and Correcting APAR list
 - Views include
 - Closed, By PUT level
 - Open
 - Lists contain
 - Critical/Correcting APAR number
 - Hiper Indicator
 - Status (open/closed)
 - 'Corrected APAR' number (for correcting APARs only)
 - PUT level the 'corrected APAR' was shipped in (for correcting APARs only)
 - Date
 - If APAR is open, date APAR was opened
 - If APAR is closed, date APAR was packaged
 - Functional area the APAR belongs to
 - APAR abstract

Critical and Correcting APAR List

z/TPF Critical and Correcting APARs

PUT Level	Description
PUT1	None
PUT2	PUT 2 List
OPEN	OPEN List

APAR	H	Status	Corrected APAR	PUT	Date Added/Modified	Functional Area	Abstract
PK10215	H	O			8/10/2005	TPFDF CENTRAL DATABASE ROUTINES	DBCRCRE does not return an error if a specified algorithm already exists. Instead, a new file address is allocated

z/TPF APAR Data File (currently under construction for z/TPF)

- Provides access to the APAR Data behind the Web Pages
 - Available for download in text and CSV format
 - CSV can be imported into spreadsheets

- Contains the following columns
 - APAR number
 - Critical Flag
 - Hiper Indicator
 - Release
 - Status
 - PUT
 - part
 - severity
 - func area code
 - func area desc
 - corrected
 - correcting
 - open date
 - avail date
 - close code
 - abstract

z/TPF APAR Data File (currently under construction for z/TPF)

- Sample CSV entry

```
PJ30662;C;;41;C;20;1;3;02B;POOLS;PJ28097;;09/13/2005;10/04/2005;PRI;RLCHA  
program CLC8 may cause a CTL-3 by writing past the end of a 4-K common  
block.
```


TPF APAR Tool (currently under construction for z/TPF APARs)

- The TPF APAR tool can display APARs meeting a set of criteria, including:
 - PUT level
 - Severity
 - Date range
 - Closing code
 - HIPER indicator
 - Critical indicator
 - APAR number range
 - Functional area

- For each APAR meeting the criteria, the resulting display provides
 - A link to the APEDIT
 - A view of the prerequisite APARs
 - Severity, closing code, release, PUT, and Functional Area
 - Dates opened and available
 - Corrected and Correcting APARs
 - The ability to download the APAR
 - The ability to save the displayed information as text, html, or csv formats.

TPF APAR Tool

PUT levels
[Set All](#) [Clear All](#)
 13 14 15 16 17
 18 19 20

Severity Levels:
[Set All](#) [Clear All](#)
 1 2 3 4

Closing Codes: ?
[Set All](#) [Clear All](#)
 PER PRS PRI SPE
 Critical APARs only
 HIPER APARs only

Enter a range of APAR numbers:

From

To

Enter a range of APAR dates:

From To

Select the APAR dates to be used:
 Open Date Available Date

Choose Functional Area(s) to be displayed:

FAs selected

Display APAR(s)

as Text HTML CSV

Save the APAR tool current settings

For APARs selected for download:

Select types of files for download Source Binary Listings

TPF APAR Tool

6 APARs found.

Select	APAR	Rel	PUT	FA	SEV	Open (yyyymmdd)	Available (yyyymmdd)	Closing Code
<input type="checkbox"/>	PJ30494 P	41	20	26B ?	2	20050704	20050823	PRI
	Corrected With APAR PJ21791 applied, a CTL-571 catastrophic system error occurs when an accept() response from one socket is received on one I-stream while another I-stream is processing a select() request for the same socket.							
<input type="checkbox"/>	PJ30489 P	41	20	05U ?	2	20050630	20050727	PRI
	Corrected When processing dynamic LU bind requests, the TPF local application RVT may be cleared causing all subsequent bind requests to fail with sense code 087D0001.							
<input type="checkbox"/>	PJ30377 P	41	20	02L ?	2	20050524	20050705	PRI
	Corrected Modules in a state change pending condition may be scanned by the Missing Attention Handler.							
<input type="checkbox"/>	PJ30331 P	41	20	08C ?	2	20050303	20050802	PRI
	Corrected With APAR PJ27477 applied, tape automount may not be completed successfully, and attention process failed messages COSK0196E and COSK0199E can be received when there are multiple paths defined to a tape drive.							
<input type="checkbox"/>	PJ30262 P	41	20	26N ?	2	20050304	20050504	PRI
	Corrected With APAR PJ29447 applied, the IP socket does not send data when SYN is lost.							
<input type="checkbox"/>	PJ30074 P	41	20	05C ?	2	20041014	20050516	PRI
	Corrected A FOUND GDS should be sent when sending a negative LOCATE response if the logical unit (LU) is valid on TPF.							

TPF Families Downloads Web Sites

- Provides access to:
 - z/TPF Restricted Access Software
 - z/TPF Software Profiler GA, PUT levels, and APARs
 - z/TPF and TPF 41 Open Software, Tools, and Sample Applications (drivers)
 - TPF Merge Tool
 - TPF Build Tools

TPF Families Downloads Web Sites

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[Home](#) | [Products](#) | [Services & solutions](#) | [Support & downloads](#) | [My account](#)

← [Host Transaction Processing](#)

Downloads for TPF Family Products

These programs are available for you to download, evaluate, and use in your TPF environment.

Check marks (X) in the z/TPF and TPF columns represent the environments where the tools can operate. Some tools are available to licensed Only customers only. These are indicated by "yes" in the Licensed column. The other tools are available to anyone on an As-Is basis.

Follow the links for more detailed descriptions of the tools and their prerequisites.

[Download Tips](#)
[License Description](#)

Tool	z/TPF	TPF	Last Update	Licensed Only
64-bit Assembler Conversion Tool (z/TPF) The 64-Bit Assembler Conversion Aid is a Linux-based executable file that will make changes to a program or application, allowing for its use in a 64-bit environment.	X		New 16 Sept 2005	
Apache with TPF modifications The TPF modifications for the Apache HTTP Web Server and Secure Web Server	X	X	Updated 15 December 2004	yes
Build tools The TPF build tools give you access to several OS/390 and TPF tools that were previously only available from batch JCL.	X	X	Updated 18 March 2004	yes
Continuous data collection The continuous data collection tool does continuous monitoring and gathering of TPF performance data.		X		yes

- Related links**
- [ALCS](#)
 - [IBM TPF Toolkit for WebSphere Studio](#)

zTPF Information, Drivers, and Tools

- Provides a single source for links to z/TPF specific items
 - Opensource glibc & libstdc++ runtime library source files
 - z/TPF Software Profiler download page
 - Migration Tools
 - Sample applications (drivers)

z/TPF Information, Drivers, and Tools

← Host Transaction Processing

z/TPF Information, Drivers, and Tools

TPF	
More information	
Family of products	
Support	
Services	
Education	
Library	
Business relationships	
Contacts	
Site map	
Related links	
<ul style="list-style-type: none"> • ALCS • IBM TPF Toolkit for WebSphere Studio 	

Migrating to z/TPF	A variety of information is available to guide your migration to z/TPF. More...
z/TPF and z/TPFDF Information Centers	The z/TPF and z/TPFDF Information Centers (TPF IC) are available online.
z/TPF Software Profiler	The z/TPF Software Profiler file contains materials needed to install z/TPF.
C/C++ Language	<ul style="list-style-type: none"> • These z/TPF Single-Source Build Migration Tools will help you prepare for your migration from TPF 4.1 to z/TPF 1.1. • glibc and libstdc++ libraries open source c language libraries, with patches needed for TPF, are available at the following web site: http://tpf.ncsa.uiuc.edu.
Tools	<ul style="list-style-type: none"> • API5 Driver - these z/TPF driver programs are available to download, evaluate, and use in your z/TPF environment. These drivers can also serve as sample programs on how to exploit and utilize the new and enhanced macros and functions provided by z/TPF. • SOAP Module for Apache (mod_tpf_soap) on z/TPF Enterprise Edition V1.1

TPF Repository, managed by the University of Illinois

- Provides access to:
 - Opensource glibc & libstdc++ runtime library source files modified for z/TPF
 - GA, PUT levels, and APARs

- <http://tpf.ncsa.uiuc.edu/>

TPF Repository, managed by the University of Illinois

Home :: Download
sign in

tpf.ncsa.uiuc.edu

[Downloads](#)

[Documentation](#)

[Getting Support](#)

Transaction Processing Facility Downloads

Releases

Release	Description	Package	README	<i>current</i>
Initial Release	Initial Release of the TPF GLIBC 2.3.2 and libstdc++ 3.4	zpf.PUT00.tar.gz	README.zpf_PUT00	
PUT 1 APAR		PJ30495.tar.gz	README.PJ30495	*

Maintenance Packages

- APAR Packages
- PUT Package Content

APAR Packages - Delivery Formats, Files

- z/TPF Products and z/TPF Restricted Access Software
 - Electronic: compressed tar files
 - Named: PJxxxxx.tar.gz, PKxxxxx.tar.gz
 - Can be unpacked using:
 - WinZip on windows
 - tar command on linux (pax conversion to ebcdic eliminated)
 - Requires an e-distribution user id/subscription for e-delivery

- Opensource Software
 - Electronic: compressed tar files
 - Named: PJxxxxx.tar.gz
 - Can be unpacked using:
 - WinZip on windows
 - tar command on linux (pax conversion eliminated)
 - README.PJxxxxx
 - contains the download instructions

APAR Packages - Content

- Tar file contents
 - APEDIT
 - Source files
 - OCO binaries (shared objects, libraries, and archives)
 - Object shippable binaries and listings

- Directory Structure
 - APAR number (PJxxxxx/) is used as the top level directory name
 - Will be unpacked relative to the current directory
 - All other subdirectories match the z/TPF directory structure

Sample APAR Package: PJ30292.tar.gz

```
PJ30292/  
PJ30292/PJ30292.txt  
PJ30292/base/  
PJ30292/base/rt/  
PJ30292/base/rt/ctsr.asm  
PJ30292/base/rt/coea.asm  
PJ30292/base/cntl/  
PJ30292/base/cntl/tpf_app_base.cntl  
PJ30292/base/load/  
PJ30292/base/load/CTSR.so  
PJ30292/base/load/COEA.so  
PJ30292/base/lst/  
PJ30292/base/lst/coea.lst  
PJ30292/base/lst/ctsr.lst  
PJ30292/base/lst/CTSR.map  
PJ30292/base/lst/COEA.map  
PJ30292/base/obj/  
PJ30292/base/obj/coea.o  
PJ30292/base/obj/ctsr.o
```

APEDIT Content: APAR Identification (PJ30292.txt)

- APAR Number
 - Product ID
 - Functional Area
 - PUT Level
 - Abstract
- ```
APAR NUMBER: PJ30292
PRODUCT: z/TPF
FUNCTIONAL AREA: OSA-EXPRESS SUPPORT FOR TPF
SHIPPED IN PUT: 1

ABSTRACT:
Automatic retry of OSA-Express connection activation.
```



## APEDIT Content: Package Contents

- Required
  - Source segments
  - Object Only Binaries (OCO)
- Optional
  - Configuration Independent Binaries - can be used as shipped or built by customer.
- Support files (maps and listings for the Configuration Independent Binaries)
- All source and binaries identified as:
  - (N) - New
  - (C) - Changed
  - (O) - Obsolete

### PACKAGE CONTENTS:

#### Source Segments:

```
(C) base/cntl/tpf_app_base.cntl
(N) base/rt/coea.asm
(C) base/rt/ctsr.asm
```

#### Object Only Binaries:

None.

#### Configuration Independent Binaries:

```
(N) base/load/COEA.so
(C) base/load/CTSR.so
(N) base/obj/coea.o
(C) base/obj/ctsr.o
```

#### Support Files:

```
base/lst/coea.lst
base/lst/ctsr.lst
base/lst/COEA.map
base/lst/CTSR.map
```

## APEDIT Content: Other Binaries to Build

- Identifies configuration dependent files that must be built by the customer
- Also labeled as (N), (C), (O)

### OTHER BINARIES TO BUILD:

(C) <sys>/load/IPAT.so

(C) <sys>/obj/ipat.o

# APEDIT Content: Prerequisite List (PJ30523.txt)

## PREREQUISITE APARS IN APPLICATION ORDER:

<sys>/obj/ccstor.o

PJ30357(1) PJ30286(1) PJ30457(1) PJ30428(1)

<sys>/load/CPS0.so

PJ30299(1) PJ30306(1) PJ30297(1) PJ30316(1) PJ30341(1) PJ30360(1)

PJ30288(1) PJ30318(1) PJ30357(1) PJ30312(1) PJ30365(1) PJ30374(1)

PJ30364(1) PJ30342(1) PJ30332(1) PJ30339(1) PJ30398(1) PJ30286(1)

PJ30422(1) PJ30391(1) PJ30409(1) PJ30389(1) PJ30457(1) PJ30429(1)

PJ30458(1) PJ30481(1) PJ30442(1) PJ30416(1) PJ30428(1) PJ30487(1)

PJ30313(1) PJ30528(1) PJ30402(1) PJ30479(1) PJ30327(1) PJ30423(1)

# APEDIT Content: Comments, Solution, etc. (PJ30292.txt)

## COMMENTS:

This enhancement will check the Open Systems Adapter (OSA) connections and try to activate the OSA connections on a time-initiated basis every 60 seconds if the DESIRED STATUS is ACTIVE.

If an operator changes the DESIRED STATUS to INACT, z/TPF will not activate the OSA connections.

## SOLUTION:

In ctsr, a new segment (coea) is activated after OSA restart to check the OSA cards every 60 seconds when the system reaches 1052 state. z/TPF will try to activate OSA cards that are not active but are marked in z/TPF as SHOULD BE active.

## COREQS:

None.

## MIGRATION CONSIDERATIONS:

None.

## APEDIT Content: Build Commands

- Maketpf commands needed to build both the configuration dependent and configuration independent binaries listed in the APAR
- Commands can be cut/pasted onto command line, or into a script
- Commands for Linux and z/OS are separated by the headings:
  - #maketpf commands for linux
  - #maketpf commands for z/OS

### BUILD COMMANDS AND INSTRUCTIONS:

```
#maketpf commands for linux
maketpf -f COEA coea.o
maketpf -f CTSR ctrs.o
maketpf -f IPAT ipat.o
maketpf IPAT link
maketpf CTSR link
maketpf COEA link
```

# APEDIT Content: Updated Information Units and Links

## UPDATED INFORMATION UNITS:

z/TPF Messages (Online, SQLCODEs, and errno Values)

z/TPF TCP/IP

See your IBM representative if you need additional information.

## DOWNLOAD INSTRUCTIONS:

<http://www.ibm.com/software/http/tpf/ztpfmaint/put1/PJ30292.htm>



## PUT Packages - Delivery Formats

- z/TPF Products
  - Physical Media: CDs
  - Electronic: compressed tar files
    - Requires e-distribution user id/subscription for e-delivery
    - Can be unpacked using:
      - WinZip on windows
      - tar command on linux (pax conversion eliminated)
  
- z/TPF Restricted Access Software
  - Electronic: compressed tar files
    - Requires e-distribution user id/subscription for e-delivery
    - Can be unpacked using:
      - WinZip on windows
      - tar command on linux (pax conversion eliminated)
  
- Opensource Software
  - Electronic: compressed tar files
    - Can be unpacked using:
      - WinZip on windows
      - tar command on linux (pax conversion eliminated)

## z/TPF Base - CD and e-delivery Files

1. readme.txt
  - Describes CD content and unpacking instructions
2. NOTICES.TXT
3. LICENSE.TXT
4. PDF's of the Licensed Program Specification(LPS)
5. zTPF.PUTxx.source.tar.gz
  - The final version of all z/TPF Base source changed on PUT xx
  - All z/TPF Base OCO required binaries
6. zTPF.allPUTxx.source.tar.gz
  - The final version of all z/TPF Base source changed since GA
  - First shipment on PUT 02
7. zTPF.PUTxx.binary.tar.gz
  - Objects and shared objects for all z/TPF Base configuration independent programs at the PUT xx level
8. zTPF.PUTxx.listings.tar.gz
  - Listings for all z/TPF Base configuration independent objects at the PUT xx level

For download convenience with e-delivery:

- Files 2-6 are packaged in the following tar file: zTPF.V1.1.MMYYYY.source.tar.Z
- Files 7-8 are packaged in the following tar file:zTPF.V1.1.MMYYYY.optional.tar.Z

## z/TPF Base - APAR CD

- readme.txt
  - Describes CD content and unpacking instructions
  
- zTPF.PUTxx.apars.tar.gz
  - Contains all PUT xx APAR packages (PUT xx only, not cumulative since GA)
  - Includes z/TPF, z/TPFDF and z/TPF HPO
  - Each package is delivered already unpacked
    - A single tar unpack of this file produces a directory of all PUT xx APAR packages
  
- This composite APAR tar file is delivered on CD only

## z/TPF HPO - CD and e-delivery Files

1. readme.txt
  - Describes CD content and unpacking instructions
2. zTPF-HPO.PUTxx.source.tar.gz
  - The final version of all z/TPF HPO source changed on PUT xx
3. zTPF-HPO.allPUTxx.source.tar.gz
  - The final version of all z/TPF HPO source changed since GA
  - First shipment on PUT 02
4. zTPF-HPO.PUTxx.binary.tar.gz
  - Objects and shared objects for all z/TPF HPO configuration independent programs at the PUT xx level
5. zTPF-HPO.PUTxx.listings.tar.gz
  - Listings for all z/TPF HPO configuration independent objects at the PUT xx level

For download convenience with e-delivery:

- Files 2-3 are packaged in the following tar file: zTPF-HPO.V1.1.MMYYYY.source.tar.Z
- Files 4-5 are packaged in the following tar file:zTPF-HPO.V1.1.MMYYYY.optional.tar.Z

## z/TPFDF - CD and e-delivery Files

1. readme.txt
  - Describes CD content and unpacking instructions
2. PDF's of the Licensed Program Specification(LPS)
3. zTPFDF.PUTxx.source.tar.gz
  - The final version of all z/TPFDF source changed on PUT xx
4. zTPFDF.allPUTxx.source.tar.gz
  - The final version of all z/TPFDF source changed since GA
  - First shipment on PUT 02
5. zTPFDF.PUTxx.binary.tar.gz
  - Objects and shared objects for all z/TPFDF configuration independent programs at the PUT xx level
6. zTPFDF.PUTxx.listings.tar.gz
  - Listings for all z/TPFDF configuration independent objects at the PUT xx level

For download convenience with e-delivery:

- Files 2-4 are packaged in the following tar file: zTPFDF.V1.1.MMYYYY.source.tar.Z
- Files 5-6 are packaged in the following tar file:zTPFDF.V1.1.MMYYYY.optional.tar.Z

## z/TPF Restricted Access Software e-delivery Files

- **readme.txt**
  - Describes the tar file content and unpacking instructions
  
- **zTPF.SoftwareProfiler.PUTxx.source.tar.gz**
  - The final version of all Software Profiler source changed on PUT xx
  
- **zTPF.SoftwareProfiler.allPUTxx.source.tar.gz**
  - The final version of all Software Profiler source changed since GA
  - First shipment on PUT 02



# Opensource Software

- `readme.ztpf_PUTxx`
  - Describes the tar file content and unpacking instructions
- `zTPF.Opensource.PUTxx.tar.gz`
  - The final version of all opensource files changed on PUT xx
- `zTPF.Opensource.allPUTxx.tar.gz`
  - The final version of all opensource files changed since GA
  - First shipment on PUT 02

## Sample APAR Build Procedures

# Sample APAR Installation Procedures

## 1. Download PJ30292.tar.gz to a Linux mounted drive

- z:\apar\_tarfiles\PUT01\PJ30292.tar.gz
- z: is a mount to /ztpf on the Linux system

## 2. On Linux, unpack the tar file:

- cd /ztpf/PUT01/apar\_packages
- tar -xvzf /ztpf/apar\_tarfiles/PUT01/PJ30292.tar.gz
- This will result in:
  - /ztpf/PUT01/apar\_packages/PJ30292/....

## 3. Setup the build space:

- mkdir /ztpf/PUT01/PJ30292/build
- cd /ztpf/PUT01/PJ30292/build
- vi maketpf.cfg
  - TPF\_ROOT := /ztpf/PUT01/PJ30292
  - TPF\_ROOT += /ztpf/PUT01/apar\_packages/PJ30292
  - TPF\_ROOT += /ztpf/prod
  - TPF\_BSS\_NAME := BSS

## Sample APAR Installation Procedures

4. Merge any local modifications into the delivered source files and place the updated files under /ztpf/PUT01/PJ30292/local\_mod/...
5. Cut/paste the APEDIT maketpf commands to a script:
  - vi PJ30292.sh

```
#maketpf commands for linux
maketpf -f COEA coea.o
maketpf -f CTSR ctrs.o
maketpf -f IPAT ipat.o
maketpf IPAT link
maketpf CTSR link
maketpf COEA link
```
  - chmod 755 PJ30292.sh
6. Run the build commands
  - ./PJ30292.sh
7. Load/verify the shared objects
8. Promote the APAR source and binary files, as needed

## Sample APAR Installation Procedures

- This set of procedures will:
  - "Build" the APARs, placing all generated files under /ztpf/PUT01/PJ30292
  - Leave the files delivered with the APAR package untouched under /ztpf/PUT01/apar\_packages/PJ30292
- If there are no local modifications to the programs affected by the APAR, the shared objects delivered in the APAR package can be loaded without rebuilding (given all prerequisite APARs are also loaded)
- Configuration dependent binaries must always be built by the customer. These are listed in the OTHER BINARIES TO BUILD section of the APEDIT

## Comments and Suggestions



## You Input Requested

- Please send us your comments and suggestions!
- We will continue to make improvements wherever possible, but we need your input
- Many of the enhancements included with z/TPF were the result of customer feedback against the TPF 4.1 APAR packages
- You can submit feedback through your CSRs or by opening TPFUG or FITS requirements

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