



TPF Toolkit V3.4

TPF Users Group - Spring 2009 TPF Toolkit Updates

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Development Tools Subcommittee

AIM Enterprise Platform Software
IBM z/Transaction Processing Facility Enterprise Edition 1.1.0

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Updates

- **TPF Toolkit V3.4**
- **Interim Fixes**
 - Interim Fix V3.4.1
 - Interim Fix V3.4.2
- **TPF Toolkit V3.2.8**

TPF Toolkit V3.4

- **Based on Eclipse 3.4.2**
- **TPFUG requirements**
 - V07007F - Allow user chance to save file before running action
 - V06012F - Provide project rename user exit
 - V06009F - Override for User Unique Macro Definitions
 - V07004F - SSH Timeout value
 - V08003S - Show Canonical Path in TPF Toolkit file properties view
 - V07003F - 3-Way Merge Tool
 - V07005F - Additional HFS File Data

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- **Consumer Web Services**
 - New wizard to create Consumer Web Service Deployment Descriptor



New Consumer Web Service Deployment Descriptor Wizard

Deployment Descriptor
Specify consumer web service details

URI: /myService

Stub: ABCD

Description: My Consumer Web Service

Provider Code Page: UTF-8

Consumer Code Page: IBM-500

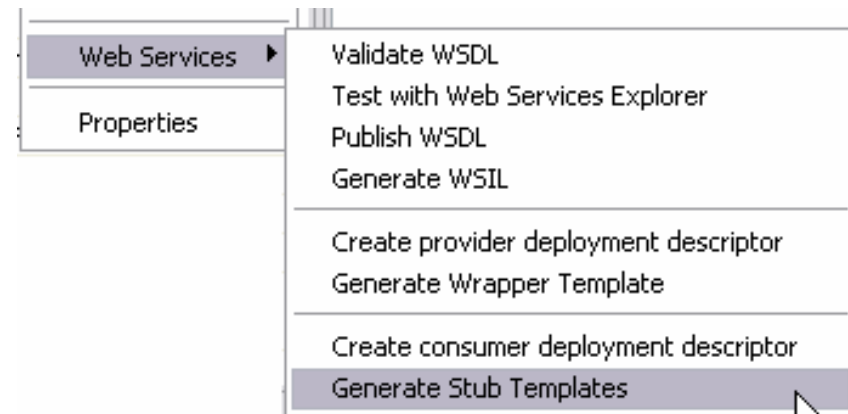
SOAP Message Handlers
Specify the SOAP message handlers to invoke when a SOAP request is received:

Name	Required
logging	true

Add...
Edit...

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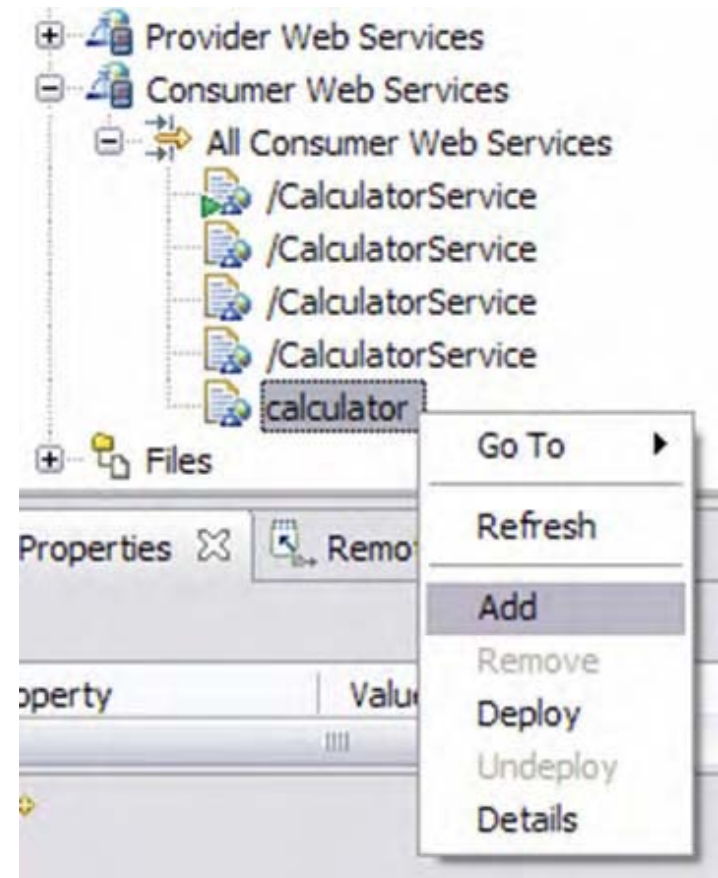
- **Consumer Web Services (continued)**
 - New action to create Consumer Web Service stubs
 - Configurable stub code templates in TPFSHARE
 - tpf_ws_stub_template.c
 - tpf_ws_stub_template.h
 - tpf_ws_stub_makefile_template.mak
 - tpf_ws_stub_fault_template.c
 - tpf_ws_stub_req_template.c
 - tpf_ws_stub_resp_template.c



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- **Consumer Web Services (continued)**

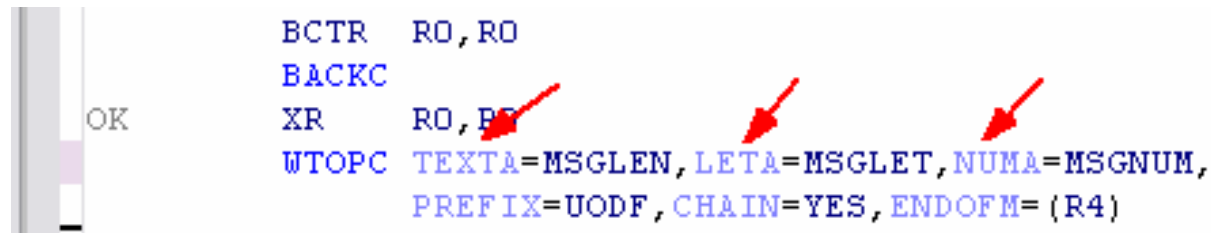
- New RSE subsystem to list and manage Consumer Web Service resources
 - Add
 - Remove
 - Deploy
 - Undeploy
 - Details (opens DD file in editor)



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- **Editor updates**

- New C/C++ editing functionality in LPEX editor
 - Migrated functionality previously only available in Remote C/C++ editor
 - Open Definition, Open Declaration, Open Header File actions
 - Auto-save (configurable save interval)
 - Enhanced syntax highlighting for keyed parameters

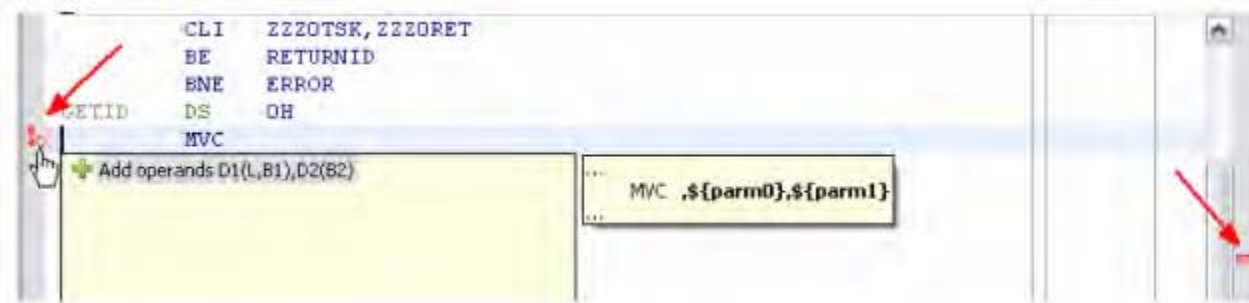


```
BCTR  RO,RO
BACKC
XR    RO,RO
WTOPC TEXTA=MSGLEN, LETA=MSGLET, NUMA=MSGNUM,
      PREFIX=UODF, CHAIN=YES, ENDOFM={R4}
```

The screenshot shows a terminal window with a vertical scrollbar on the left and an 'OK' button. The code is displayed in blue text. Red arrows point to the parameters 'LETA=MSGLET', 'NUMA=MSGNUM', and 'PREFIX=UODF' in the 'WTOPC' line, highlighting the enhanced syntax highlighting for keyed parameters.

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- **Editor updates (continued)**
 - Enhanced syntax support for ASM programs
 - Hover on macro shows syntax
 - Error marker annotation for incorrect syntax
 - Quick fix for syntax error
 - Easy navigation of errors via vertical ruler



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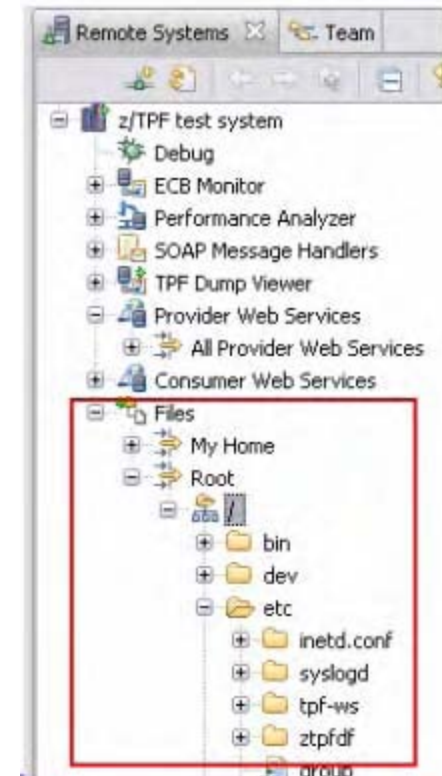
- **Editor updates (continued)**
 - Template support
 - Predefine templates in preference page
 - Create templates using selected text in editor
 - Content assist to insert templates

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- **Maketspf updates**
 - ASM error feedback in Remote Error List
 - New stub generation actions for project stubs, TPF stubs, USR stubs

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- **RSE update**
 - Files subsystem for TPF connections



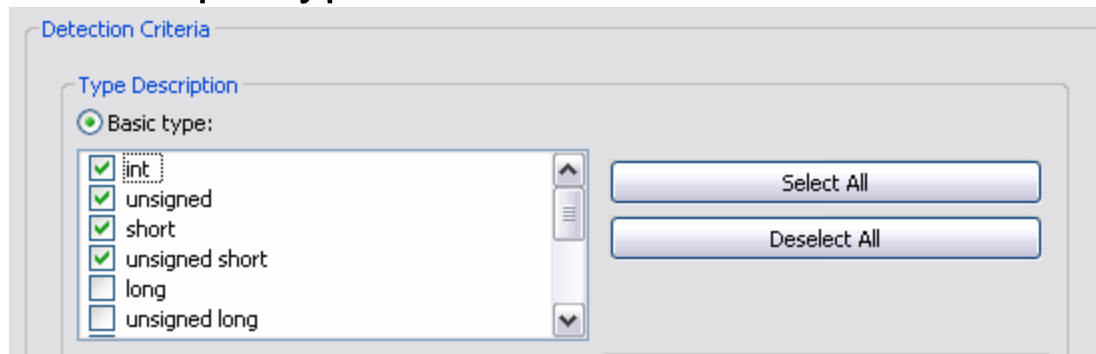
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- **Menu Manager updates**
 - New prompt variables
 - &PROMPT_LIST
 - &PROMPT_BOOL_LIST
 - Content assist for variables in New Action wizard

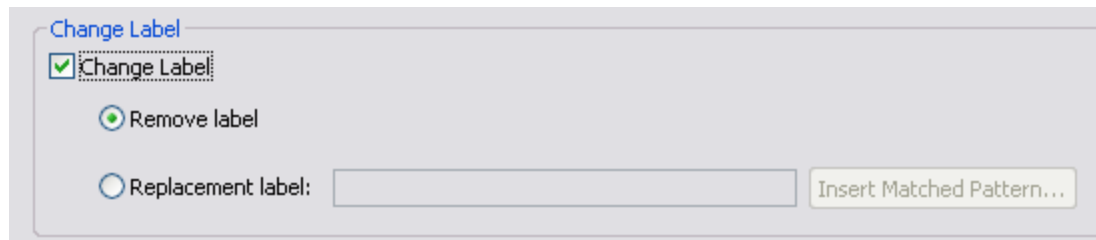


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- **Single Source Updates**
 - CPP Type Usage Rule Template
 - Select multiple types



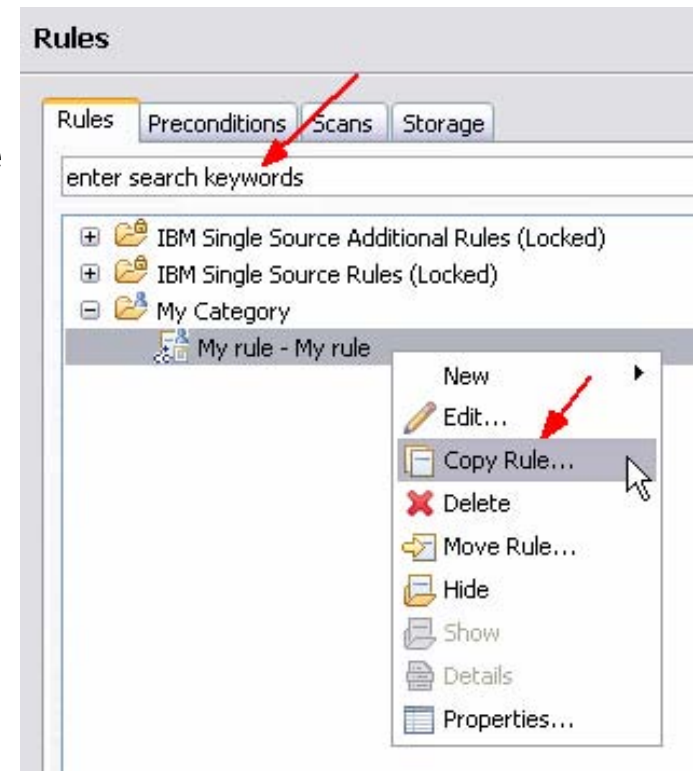
- HLAsm template
 - Change label in fix



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- **Single Source Updates**

- Remove ignore annotations for edited lines
- Find rules
- Create a rule from an existing one



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- **Debug Registration updates**

- New registration types

- Function
- System Error

New Filter

New Debug Registration Session

i Invalid LNIATA. Specify 3 pairs of hexadecimal values or use *.

Workstation Information

Workstation TCP/IP address: workstation

TPF Terminal

Terminal name: _____

LNIATA IP Address LU Name

Registration Information

Select a registration type: Program
Program
Function
System Error

Add

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- **Debug view configuration files**
 - Predefine list of XML mapping files for debug views
 - Select configuration for each debug session

Select a TPF memory view option set to configure:

Default Memory View Configuration Options for z/TPF

This definition is loaded from %TPFSHARE%. It cannot be edited.

Default configuration: Default Memory View Configuration Options for z/TPF

ECB view

ECB memory map file

DECB view

DECB memory map file

DECB display file

Data Level view

Data Level memory map file

Data Level display file

SWOOSR view

Interim Fix V3.4.1 and Interim Fix V3.4.2

- **New Single Source Rules**

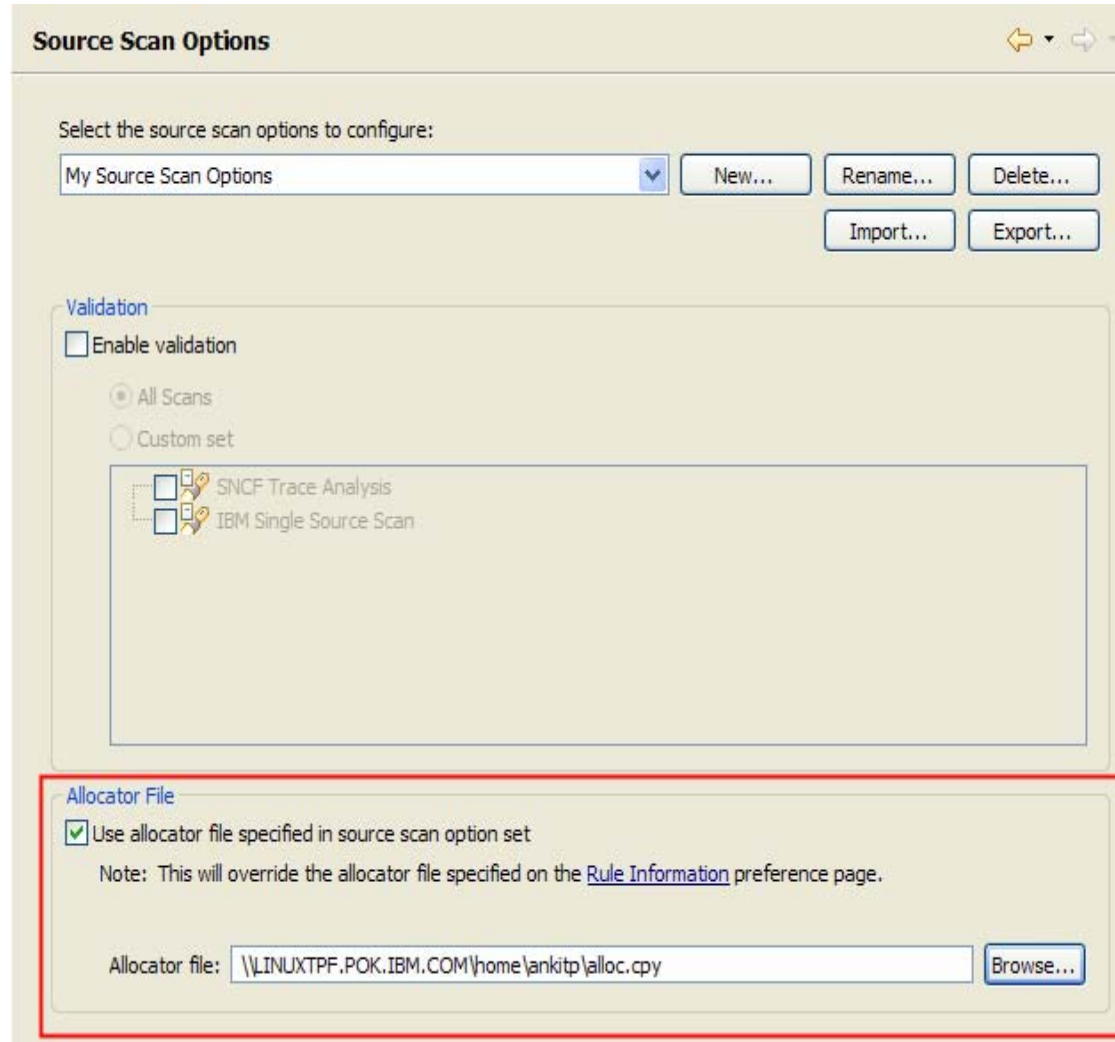
- **OTRGETFa**
 - Flag occurrences of TPF 3.1 GETLC, GETSC, GCFLC and GCFSC file storage address macros and replace with the GETFC macro
- **OTRTMSTa**
 - Flag occurrences of the 'tm' time structure in C/C++ header files
- **OTRCASTa**
 - Flag strings, pointers and constants that are cast to signed and unsigned int data type where regs.rx is an l-value.
- **OTRREGSa and OTRREGSb**
 - Flag definition and usage of F0-F15 and C0-C15 in assembly, copy and macro files

Interim Fix V3.4.1 and Interim Fix V3.4.2

- **Updated rules**
 - PJ31214b
 - PJ29640k
 - PJ29575a
 - PJ29630a
 - PJ29640a
 - PJ29640d
 - OTRLONGb
 - OTRPRAGb

Interim Fix V3.4.1 and Interim Fix V3.4.2

- **Source Scan Updates**
 - Allocator file can be specified within target environments



Source Scan Options

Select the source scan options to configure:

My Source Scan Options

Validation

Enable validation

All Scans
 Custom set

- SNCF Trace Analysis
- IBM Single Source Scan

Allocator File

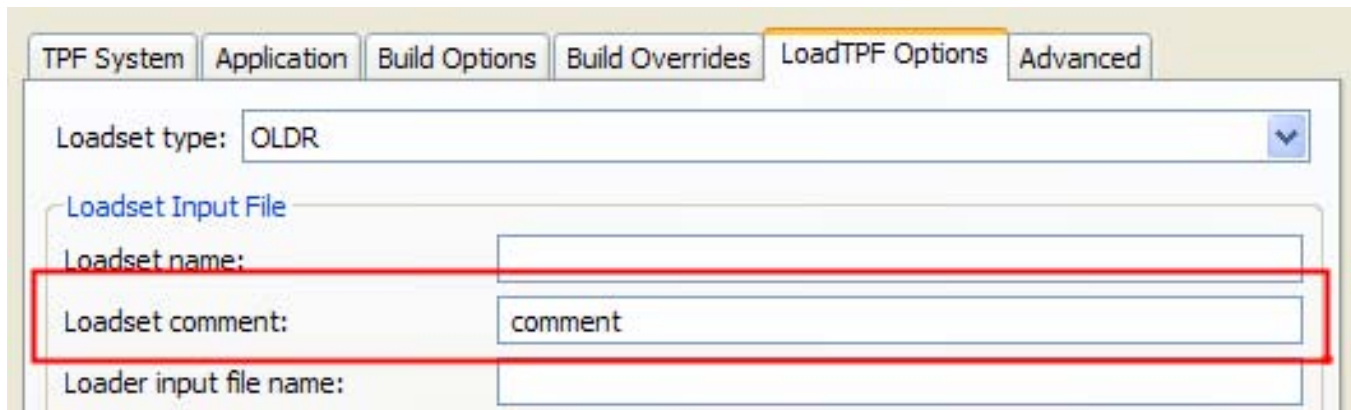
Use allocator file specified in source scan option set

Note: This will override the allocator file specified on the [Rule Information](#) preference page.

Allocator file:

Interim Fix V3.4.1 and Interim Fix V3.4.2

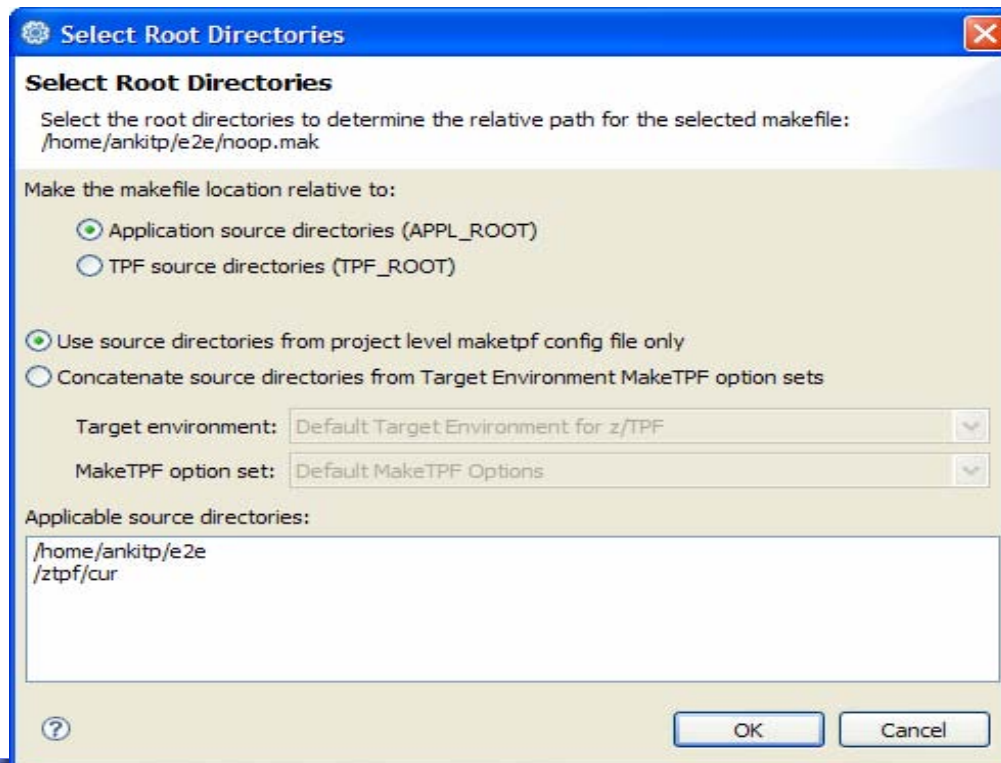
- **MakeTPF updates**
 - Support for loadset comments (APAR PJ34903)



The screenshot shows a software interface with several tabs: TPF System, Application, Build Options, Build Overrides, LoadTPF Options (selected), and Advanced. Under the LoadTPF Options tab, there is a dropdown menu for 'Loadset type' set to 'OLDR'. Below this is a section titled 'Loadset Input File' containing three input fields: 'Loadset name:', 'Loadset comment:', and 'Loader input file name:'. The 'Loadset comment:' field contains the text 'comment' and is highlighted with a red rectangular box.

Interim Fix V3.4.1 and Interim Fix V3.4.2

- **MakeTPF updates**
 - Makefile paths can now be relative to TPF_ROOT or APPL_ROOT



Interim Fix V3.4.1 and Interim Fix V3.4.2

- **Debugger updates**
 - ECB Summary view

ECB Summary											
Registers											
R0	0000000000000010	R1	0000000409D93FC4	R2	0000000000000000	R3	0000000000000000	R4	00000000D8C4C2F0	R5	000000040A7A4176
R6	0000000409EC51E8	R7	00000000118F0000	R8	00000000118F00C5	R9	0000000000000000	R10	0000000000000000	R11	000000001180F460
R12	0000000409EC4000	R13	0000000409D9E6D8	R14	000000000013B75E						
Work Area											
W00	C4C2E4C7	004	C3E5E9E9	008	80B00000	012	00000000				
016	00000000	020	00000000	024	040E9640	028	00000130				
032	00000000	036	00000000	040	01000000	044	00000000				
048	00000000	052	E2D4D7C2	056	010000C2	060	80B00000				
064	00000000	068	00000000	072	00008400	076	04000000				
080	E3C5E2E3	084	00000000	088	00000000	092	036DD8C8				
Extended Work Area											
X00	01008400	004	8000E3C5	008	E2E3C3E5	012	E9E9041C				
016	00000000	020	0000000E	024	0EF06E80	028	13B87000				
032	00000014	036	036DD8C8	040	00000000	044	846F83BC				
048	02408414	052	00000000	056	00000000	060	00000000				
064	02408414	068	036DD8C8	072	00000000	076	C3E5C1F3				
080	00000000	084	00000000	088	847062EE	092	00000014				
Data Level											
Name	CE1FAx	CE1FMx	CE1CRx	CE1CTx	CE1CCx	SUD	DCT				
D0	00000000	00000000	0EF06E80	0021	017D	00	00				
D1	00000000	00000000	0EF08000	0001	0FFF	00	00				
D2	00000000	00000000	00000000	0001	0000	00	00				
D3	00000000	00000000	00000000	0001	0000	00	00				
D4	00000000	00000000	00000000	0001	0000	00	00				
D5	00000000	00000000	00000000	0001	0000	00	00				
D6	00000000	00000000	00000000	0001	0000	00	00				

Interim Fix V3.4.1 and Interim Fix V3.4.2

- **Debugger updates**
 - Custom Debug Registration

```
<?xml version="1.0" encoding="utf-8"?>
<customRegistrations xmlns="http://www.ibm.com/xmlns/debug"
<!-- Uncomment the following and update to specify appro
<customRegistration>
  <id>101</id>
  <name>My Company Registration Type</name>
  <parameter>Transaction ID</parameter>
  <parameter>Transaction Type</parameter>
</customRegistration>
</customRegistrations>
```

Debug Registration Session

Workstation Information

Workstation name: peiriche2 Workstation TCP/IP address: *

TFE Terminal

Terminal name: 110000
= S/NAT10 IP address UI Name

Registration Information

Select a registration type: My Company Registration Type

Transaction ID: 30000
Transaction Type:

Trace created entries
 Trace global variable initialization functions

User token:

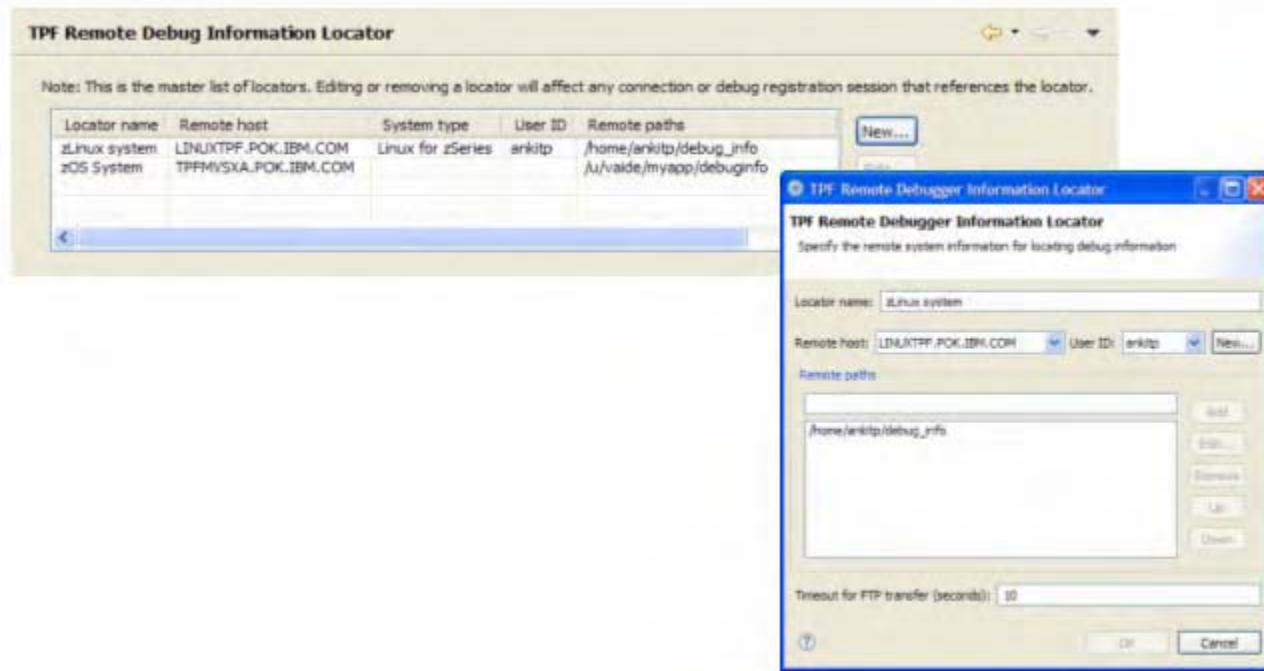
Condition

ECB field or register to compare	Condition	Value to compare
	Equal to	

Little-endian bytes (e.g. X'149F' for Hex, or C'test' for Char, etc.)

Interim Fix V3.4.1 and Interim Fix V3.4.2

- **Debugger updates**
 - Remote Debug Information Locators





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