



| z/TPF V1.1

TPF Users Group Fall 2008 TPF Toolkit Updates

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

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Updates

- **Interim Fixes**
 - Interim Fix V3.2.7
 - Available July 2008
 - Interim Fix V3.2.8
 - Planned for end of October 2008
- **TPF Toolkit V3.4**
 - Planned for end of 2008

Interim Fix V3.2.7

- **New Single Source Rules**

- PJ33107a
 - Flag C function name parameter register 15 on CALLC macro statements
- PJ32379a
 - Flag &DXCNAME global symbol
- PJ33562a
 - Change the CORE parameter on GETPC macro statements to the ADDR parameter
- PJ33562b
 - Flag the FILE parameter on GETPC macro statements
- OTRPRAGc
 - Make #pragma NORENT statements conditional
- OTRSABRa and OTRSABRb
 - Flag keywords in SabreTalk as potential single source issues

Interim Fix V3.2.7

- **Updated rules**
 - PJ32183a
 - Use of native decimal data type is replaced by decimal template class
 - PJ32183b
 - Source files that use the decimal template class must include header file tpf/decimal.hpp
 - PJ32183d
 - GCC Compiler does not recognize suffix "d" as part of the ANSI C/C++ grammar
 - OTRPACKc
 - `_Packed` option should be surrounded with `#ifdef __370__`
 - OTRPRAGb
 - `#z/OS` specific `#pragma map` directive not supported on z/TPF

Interim Fix V3.2.7

- **Maketspf updates**
 - New Precompile action
 - Build SQA source segments
 - Build SabreTalk programs (APAR PJ33788)

Interim Fix V3.2.8

- **Planned for end of October 2008**
- **Single Source updates**
 - New and updated rules
 - New rule to replace TPF 3.1 GETLC, GETSC, GCFLC and GCFSC file storage address macros with GETFC macro
 - New rule to scan for tm time structure in C/C++ header files.
 - Updated OTRLONGb, OTRPRAGa, PJ29575a
- **Maketpf updates**
- **RSE updates**

TPF Toolkit V3.4 (Sneak peeks and highlights)

- **Planned for end of 2008**
- **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
 - Remove IBM macro using <REMOVE> tag
 - Override (instead of just adding definitions to) IBM macros using [OVERRIDE] tag
 - Override IBM registers
 - V07004F - SSH Timeout value
 - V08003S - Show Canonical Path in TPF Toolkit file properties view
 - V07003F - 3-Way Merge Tool
 - V07005F - Additional HFS File Data

TPF Toolkit V3.4 (Sneak peeks and highlights)

- **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:

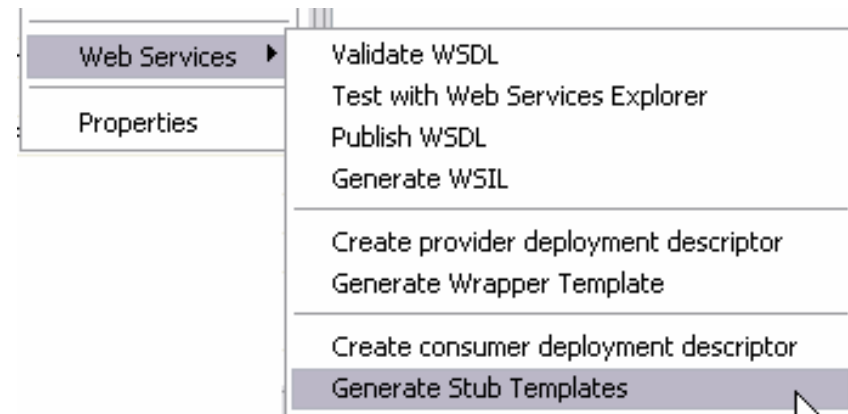
Name	Required
logging	true

Add...
Edit...

TPF Toolkit V3.4 (Sneak peeks and highlights)

- **Consumer Web Services (continued)**

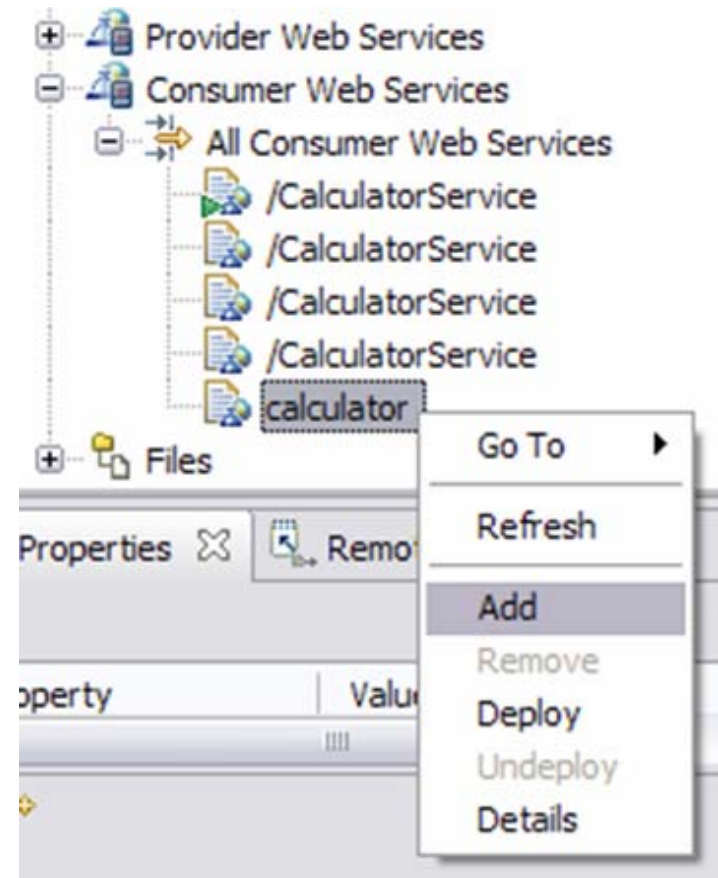
- New action to create Consumer Web Service stubs
- Configurable stub code templates in TPFSHARE
 - tpf_ws_stub_template.c
 - tpf_ws_stub_template.h
 - tpf_ws_stub_makefile_template.mak
 - tpf_ws_stub_fault_template.c
 - tpf_ws_stub_req_template.c
 - tpf_ws_stub_resp_template.c



TPF Toolkit V3.4 (Sneak peeks and highlights)

- **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)



TPF Toolkit V3.4 (Sneak peeks and highlights)

- **Editor updates**

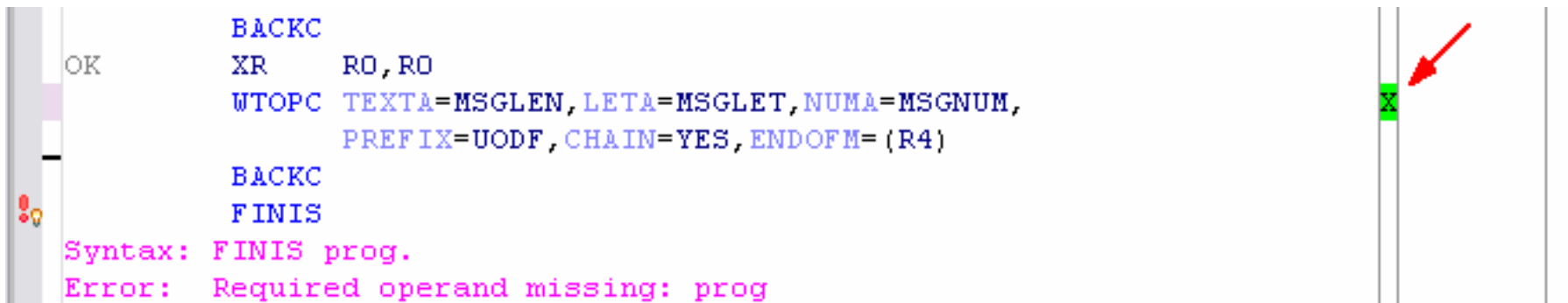
- New C/C++ editing functionality in LPEX editor
 - Migrated functionality previously only available in Remote C/C++ editor
- Open Definition, Open Declaration, Open Header File actions
- Auto-save (configurable save interval)
- Enhanced syntax highlighting for keyed parameters



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

TPF Toolkit V3.4 (Sneak peeks and highlights)

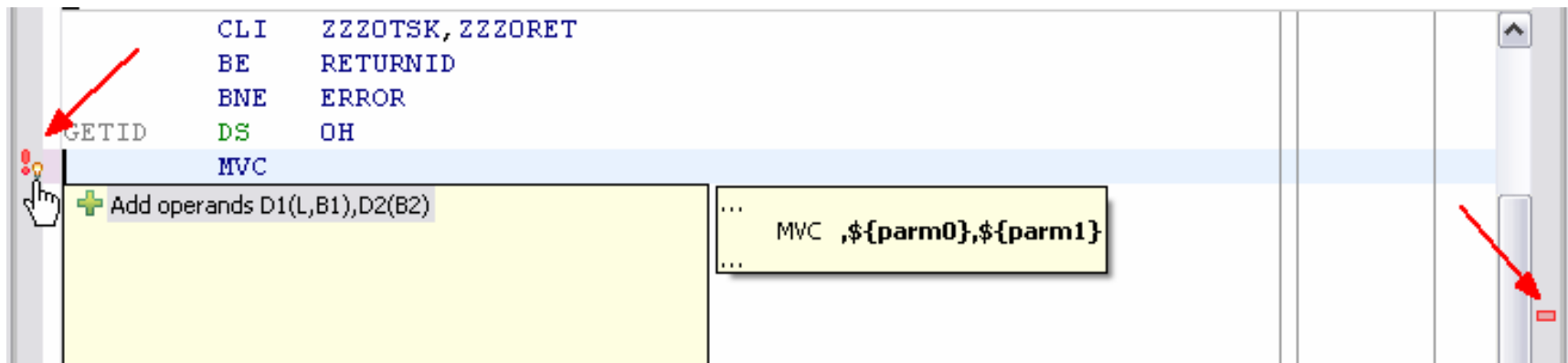
- **Editor updates (continued)**
 - Margin support for ASM programs
 - Vertical lines to visually indicate margins
 - Margin-aware editing (enter key can insert continuation character)



```
OK      BACKC
        XR      R0, R0
        WTOPC  TEXTA=MSGLEN, LETA=MSGLET, NUMA=MSGNUM,
             PREFIX=UODF, CHAIN=YES, ENDOFM= (R4)
        BACKC
        FINIS
Syntax: FINIS prog.
Error: Required operand missing: prog
```

TPF Toolkit V3.4 (Sneak peeks and highlights)

- **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



TPF Toolkit V3.4 (Sneak peeks and highlights)

- **Editor updates (continued)**
 - Task tags
 - Preference page to define tags
 - Tags marked in comments in source code
 - Easy navigation via vertical ruler

The screenshot displays the TPF Toolkit editor interface. At the top, it shows 'Line 5', 'Column 51', and 'Replace 10 changes'. Below this is a vertical ruler with markers 1 through 7. The source code is as follows:

```
BBBB      TITLE 'test'  
          BEGIN NAME=VVVV,VERSION=99  
*TODO: put some code in here  
  
FINIS VVVV  remarks can also have TODOs  
END
```

Two red boxes highlight specific features: one on the left margin next to the first two lines of code, and another on the right margin next to the first line of the comment. A tooltip box is visible over the comment text, containing the text '*TODO: put some code in here'.

TPF Toolkit V3.4 (Sneak peeks and highlights)

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

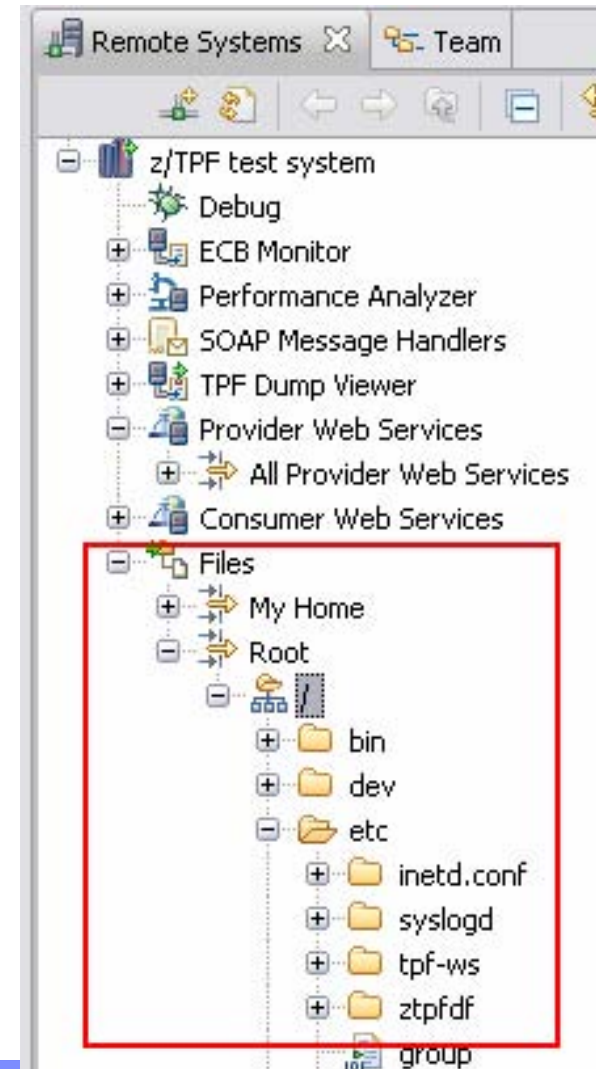
TPF Toolkit V3.4 (Sneak peeks and highlights)

- **Maketspf updates**

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

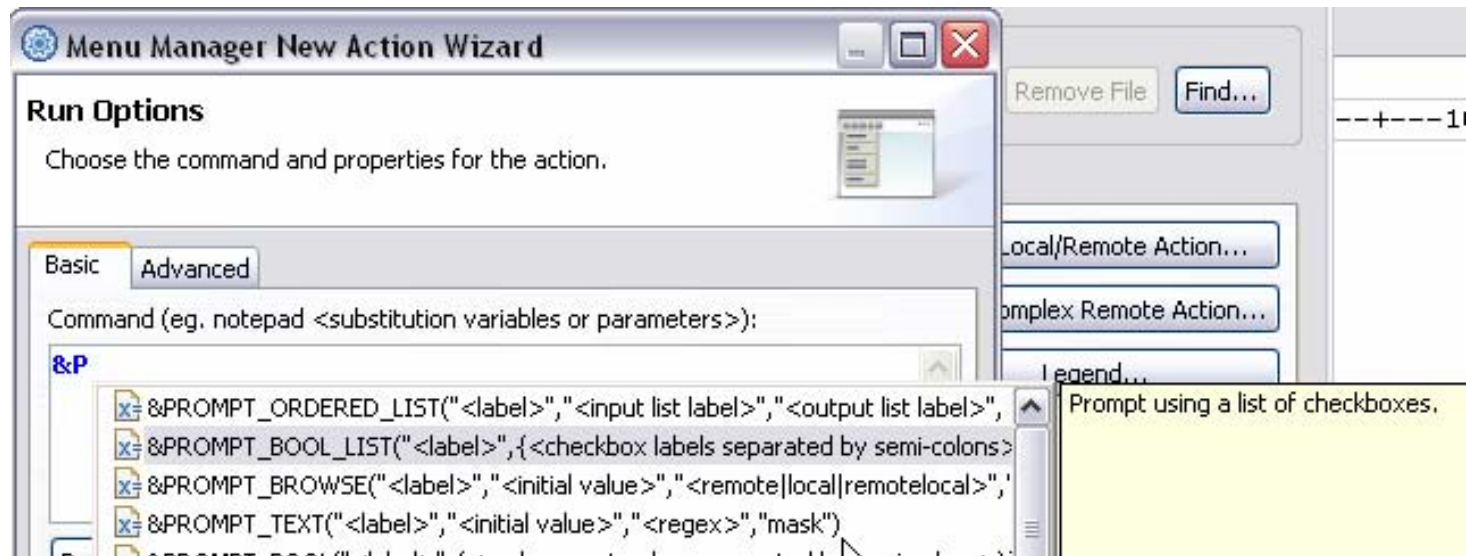
TPF Toolkit V3.4 (Sneak peeks and highlights)

- **RSE updates**
 - SSH remote shell for z/OS and Linux for System z connections
 - Files subsystem for TPF connections



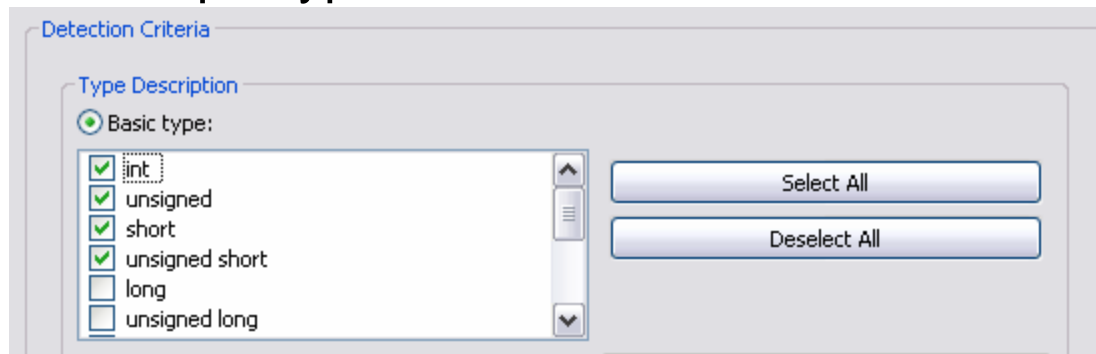
TPF Toolkit V3.4 (Sneak peeks and highlights)

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



TPF Toolkit V3.4 (Sneak peeks and highlights)

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

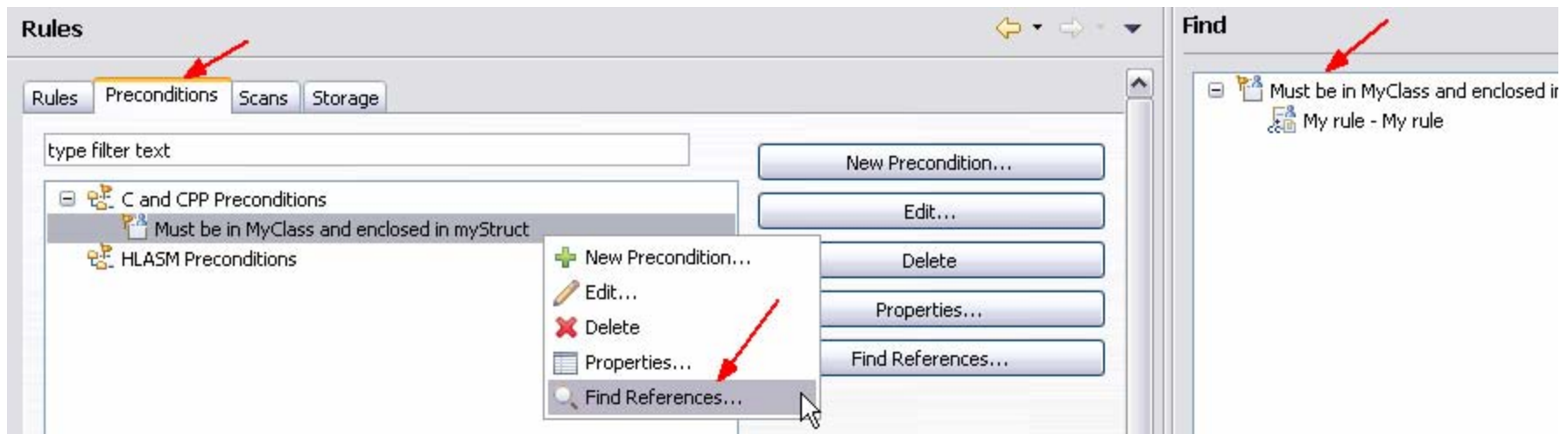


- HLAsm template
 - Change label in fix



TPF Toolkit V3.4 (Sneak peeks and highlights)

- **Single Source Updates (continued)**
 - New Preconditions tab



TPF Toolkit V3.4 (Sneak peeks and highlights)

- **Single Source Updates**
 - Scopes for preconditions

Create Precondition

Define the precondition location and match criteria

Choose a language: C/C++

Name: Must be in MyClass and enclosed in myStruct

Location: Anywhere in same file

Precondition is satisfied when:

- Matched (e.g. File contains #include "file.h")
- Not matched (e.g. File does not contain #include "file.h")

Detection Criteria

- Rule
- Scope**

Specify the detection scope by adding scope clauses.

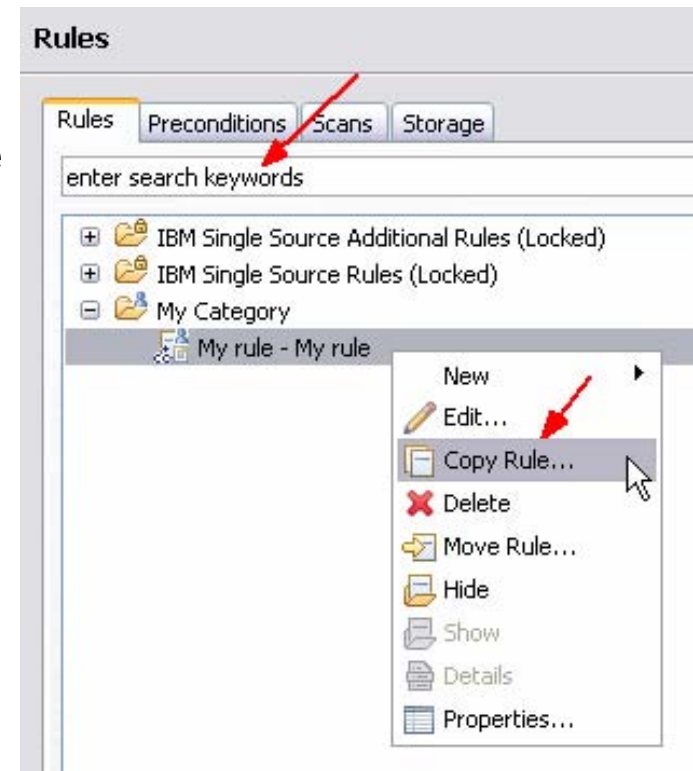
Operator	Scope Name	Details
	Class Scope	Matches: MyClass
AND	Structure Scope	Matches: myStruct

Buttons: Existing rule..., New Rule..., Add..., Edit...

TPF Toolkit V3.4 (Sneak peeks and highlights)

- **Single Source Updates**

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



TPF Toolkit V3.4 (Sneak peeks and highlights)

- **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

TPF Toolkit V3.4 (Sneak peeks and highlights)

- **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

TPF Toolkit V3.4

That's all folks!

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