



IBM TPF Toolkit V3.2

TPF Users Group Fall 2007 TPF Toolkit Updates

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AIM Enterprise Platform Software
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Updates

- **TPF Toolkit v3.2**
- **Interim Fixes**
 - v3.2.1
 - v3.2.2
 - v3.2.3

TPF Toolkit V3.2

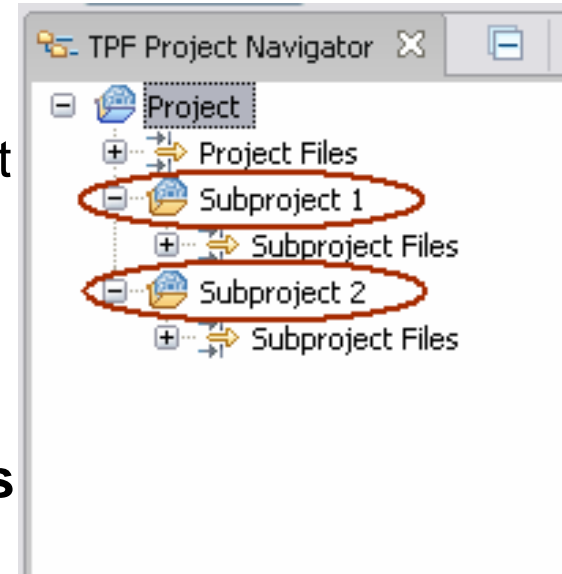
- **Based on Eclipse V3.2.2**
- **New features**
 - Subprojects
 - TPF debugger views
 - Source Scan Tool
 - Web Services Tools

Requirements

- **V05002**
 - Create Project from RSE display
 - From RSE, add files/folders to project or subproject
 - Create new project, subproject or filter during add
- **V06002F**
 - Allow comments in concatenation files
- **V06002S**
 - TPF Menu Options should not be hidden under OTHER
 - Easier access to wizards to create new TPF Toolkit files
- **V06005S**
 - RSE accessibility to memory maps
- **V06007S**
 - Integrated PA merge trace file solution
 - New action to merge trace files
 - Control order in which the trace files are merged
 - Option to analyze the merged trace file after the merge

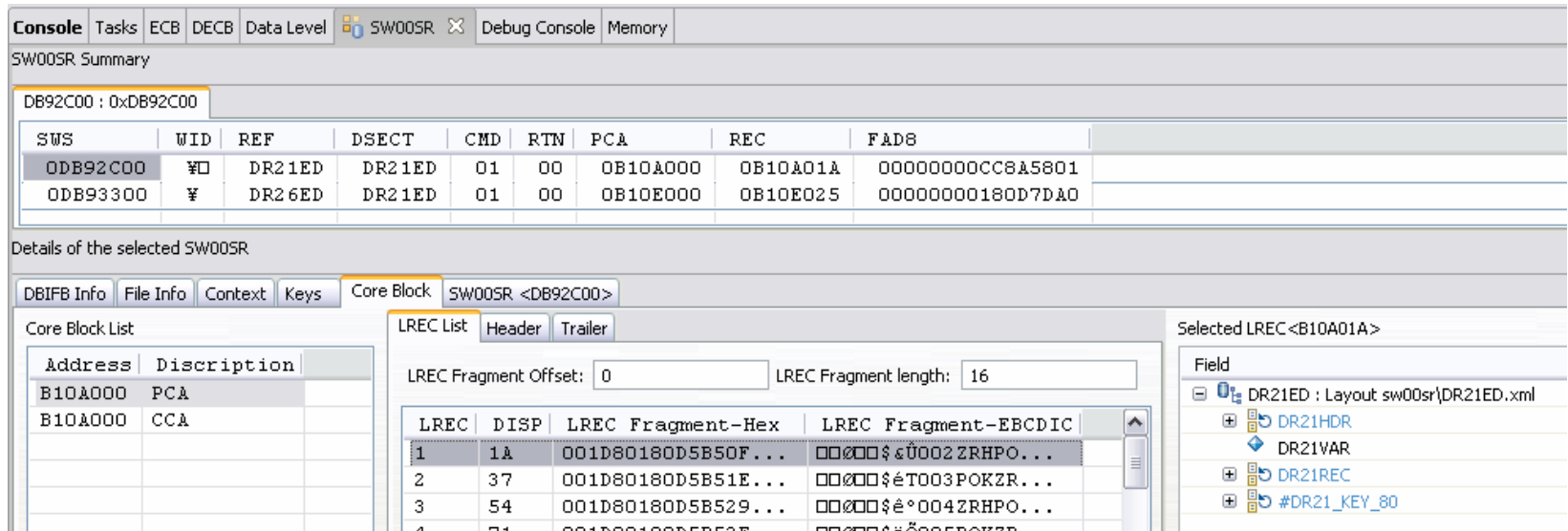
Subprojects

- **Use subprojects to help organize applications**
 - subprojects can represent subcomponents
 - subproject for each module or shared object
- **Similar to projects**
 - custom project actions
- **Build subprojects individually or build project to propagate build to all subprojects**
- **Build order is set at the project level**
- **Parent project dictates the list of applicable Target Environments**



TPF Debugger Views

- V06007F
- New views:
 - ECB
 - Data Level
 - DECB
 - SW00SR (New in Interim Fix 3.2.3)
- XML files for mapping memory and customizing view display



Console | Tasks | ECB | DECB | Data Level | SW00SR | Debug Console | Memory

SW00SR Summary

DB92C00 : 0xDB92C00

SWS	WID	REF	DSECT	CMD	RTN	PCA	REC	FAD8
ODB92C00	¥□	DR21ED	DR21ED	01	00	OB10A000	OB10A01A	00000000CC8A5801
ODB93300	¥	DR26ED	DR21ED	01	00	OB10E000	OB10E025	00000000180D7DA0

Details of the selected SW00SR

DBIFB Info | File Info | Context | Keys | Core Block | SW00SR <DB92C00>

Core Block List

Address	Description
B10A000	PCA
B10A000	CCA

LREC List

LREC Fragment Offset: 0 LREC Fragment length: 16

LREC	DISP	LREC Fragment-Hex	LREC Fragment-EBCDIC
1	1A	001D80180D5B50F...	□□□□\$εÚ002 ZRHPO...
2	37	001D80180D5B51E...	□□□□\$éT003 POKZR...
3	54	001D80180D5B529...	□□□□\$é°004 ZRHPO...
4	71	001D80180D5B53F...	□□□□\$é°005 POKZR...

Selected LREC <B10A01A>

Field

DR21ED : Layout sw00sr\DR21ED.xml

- DR21HDR
- DR21VAR
- DR21REC
- #DR21_KEY_80

Source Scan Tools

- **Based on existing Single Source Tools**
- **Scan projects/subprojects/filters/folders/files**
 - Group rules for custom scans
 - Scan action on pop-up menu
- **Validation**
 - Tied to Target Environment settings
 - Re-scans files after changes saved in editor
- **Create your own rules**
 - Also provide fixes for errors flagged by rules
 - Scan with custom rules
 - Validate using custom rules
- **Errors shown in Error List**

Source Scan Updates

- **New Single Source rules**
 - PK33367a
 - PJ31874a
 - PJ31214a
 - PJ31254
 - PJ32183
 - PJ32174
 - OTRPDSCa
 - OTSWSRa
- **HLAsm rules recognize register equates**
- **C++ rules that recognize structs also enhanced to recognize unions**

Source Scan Updates – Ignore errors

Special tag to indicate which rules to ignore

```

Line 17      Column 7      Replace
+-----+-----+-----+-----+-----+-----+
*TKIGNORE::PJ29640b,PJ29640c::
      LM      R6,R4,(R7)

*NOT IGNORED
      LM      R6,R4,(R7)
      LM      R6,R4,(R2)
      R(R12,R9)
  
```

Ignore

✓ Show Quick Diff Ctrl+Shift+Q

Ignored Error List

Filter matched 12 of 12 messages

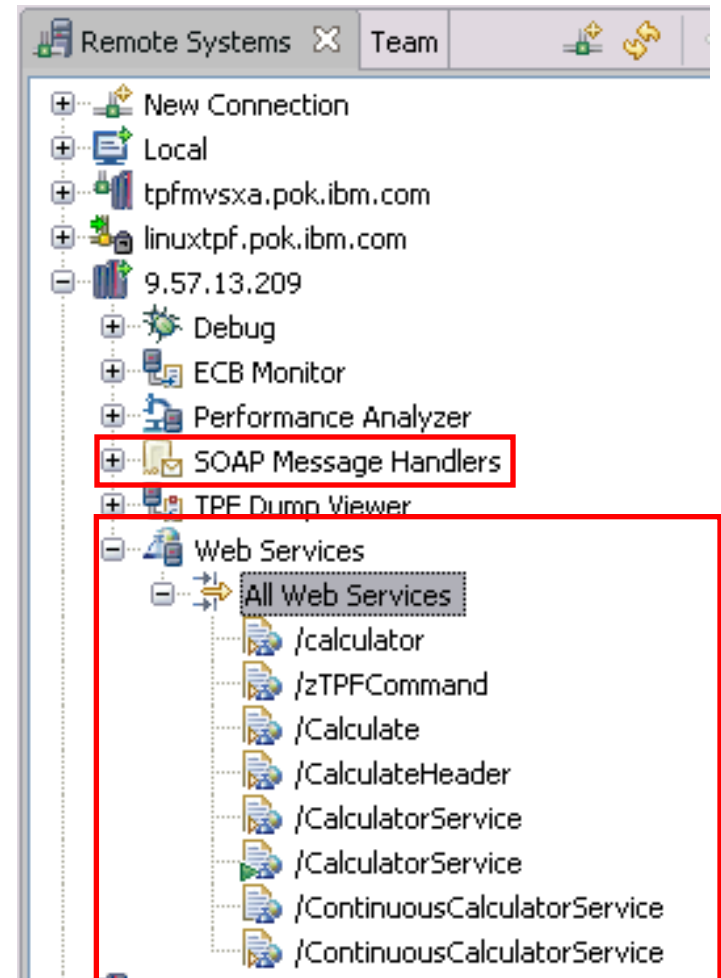
ID	Message	Seve...	Line	Location	Host Narr
PJ29640c	Use R13 to reference the stack pointer	7	3	/home/mh...	LINUXTPF
PJ29640b	Use R1 to reference the parameter list	7	3	/home/mh...	LINUXTPF
PJ29640b	Use R1 to reference the parameter list	7	13	/home/mh...	LINUXTPF
PJ29640b	Use R1 to reference the parameter list	7	17	/home/mh...	LINUXTPF
PJ29640b	Use R1 to reference the parameter list	7	21	/home/mh...	LINUXTPF
PK33367a	Flags first occurrence of bam_struct structure in C/CPP code segments.	7	1	/home/mh...	LINUXTPF

Web Services

- **Wizards to help you create TPF Web Service resources**
 - SOAP Message Handler Deployment Descriptors
 - Provider Web Services Deployment Descriptors
 - WSDL files
 - WSIL files
- **Actions**
 - Transfer deployment descriptors to TPF
 - Generate wrapper program template and makefile
- **Test/debug TPF Web Services**

Web Services

- **Two new subsystems in RSE**
 - SOAP Message Handlers
 - Web Services
- **Actions**
 - Add
 - Remove
 - Deploy
 - Undeploy
- **TPF Web Services Education session tomorrow**



Other Updates

- **MakeTPF**
 - PJ31515 – New TIMESLICE column in control files
 - UI enhancements
 - Control file table now sortable by columns
 - Expand included control files
 - Control file contains version tag to determine number of columns
- **C/C++ Editor**
 - Create template directly from editor
 - Content Assist displays templates
 - Action to remove auto comment from a line
- **LPEX Editor**
 - Outline view for ASM files lists Sections, Macros Using domains, Symbols
 - Action to remove auto comment from a line

Other updates

- **Debug global variable initialization functions**
- **New Performance Analysis UI**
 - Eclipse based client
 - XML based trace file format
 - New actions to download, convert and analyze trace files from TPF
- **Details view**
 - Column based view of projects/filter/folders/files

Other updates

- **Menu Manager**
 - UI simplification
- **Index based remote search**
 - Create token based index to speed up search
 - Action to remove auto comment from a line
- **Copy local/remote actions**
 - New actions to help with SCM integration
 - Available as optional feature

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