

z/TPF EE V1.1

z/TPFDF V1.1

TPF Toolkit for WebSphere® Studio V3

TPF Operations Server V1.2



IBM Software Group

## *TPF Users Group Fall 2005*

TPF Toolkit

Version 3.0 overview

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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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# Key enhancements in V3

- z/TPF application development support
- Single Source tools
- Target Environments
- SSH support
- Enhanced C/C++ editor support
- Enhanced memory views in debugger
- TPF Dump Viewer
- ECB Monitor
- Migration support from v2.0.x to v3.0
- Administrative features

# z/TPF application development

- Connectivity to Linux for z/Series
  - Access files
  - Submit builds
- Editor support for z/TPF assembler macros
- MakeTPF based builds for z/TPF
- Load to z/TPF (using LoadTPF)
- z/TPF Debugger support

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# TPF 4.1 to z/TPF Migration

- Single source tools to identify and convert TPF 4.1 Assembly and C/C++ application source files
- Wizard to convert TPF 4.1 build scripts to MakeTPF makefiles

# Single Source Tools

- Convert TPF 4.1 Assembly and C/C++ application source files
- Review errors reported by scan in Error List.
- Use "Quick Fix" to insert a fix for problem on the spot
- Compare original file with a converted version of the file
- Preserve original source lines as comments when tools automatically correct single source errors
- Mark lines with changes made by the tool
- Enable/disable subset of required changes to detect
- Maintain single source compatibility of converted files
- All required single source changes listed in TPF Toolkit help.
- [Demo](#)



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# Target Environments

- Pre-defined configurations to customize the edit/compile/load/debug settings for application development
- Ability to create multiple sets of named configurations
- Made up of Building Blocks
  - Build and Link Options
  - Build Mechanism
  - Editor Options
  - Load Options
  - Menu Options
  - MakeTPF Options
  - Target Environment Variables



# Target Environments

- Examples of Target Environments usage:
  - each deployment (target) system
  - different PUT levels
  - each release/version of system
  - each subsystem (BSS, BAS, etc)
  - and more...

# Target Environment

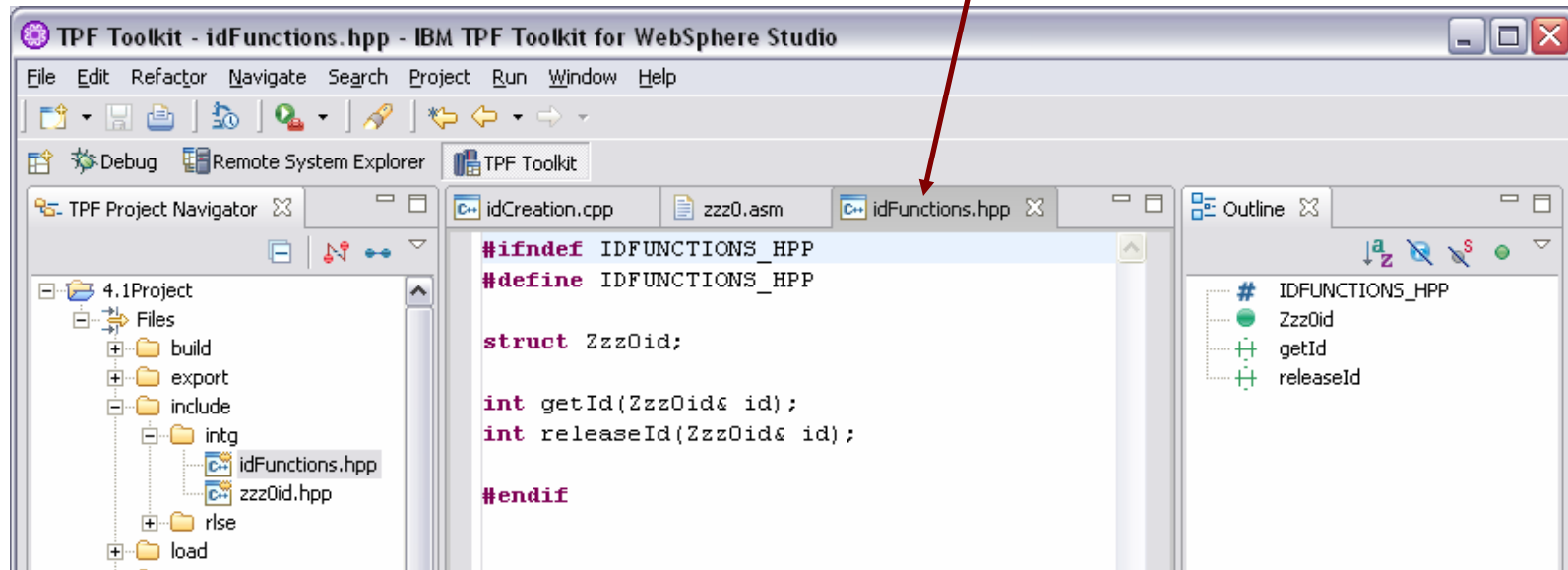
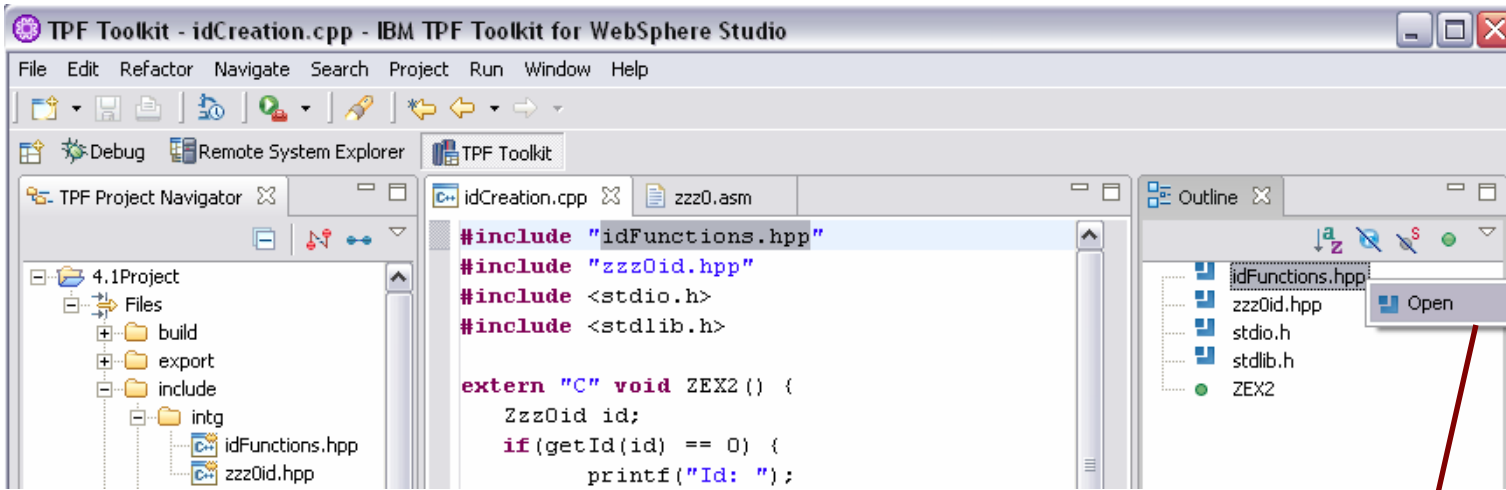
- Demo
  - Two TPF 4.1 environments
    - RELEASE environment
      - version that is already released to production/customer
      - PUT 18
      - Build and link options to pick up appropriate versions of dependent files (C/C++ includes, macros, etc).
      - Editor options to provide PUT level specific content assist, F1 help and auto-comments
      - Load options
    - INTEGRATION environment
      - version that is under current development
      - PUT 19
      - Build and link options to pick up appropriate versions of dependent files (C/C++ includes, macros, etc).
      - Editor options to provide PUT level specific content assist, F1 help and auto-comments
      - Load options
  - [Demo](#)

# Key enhancements in V3

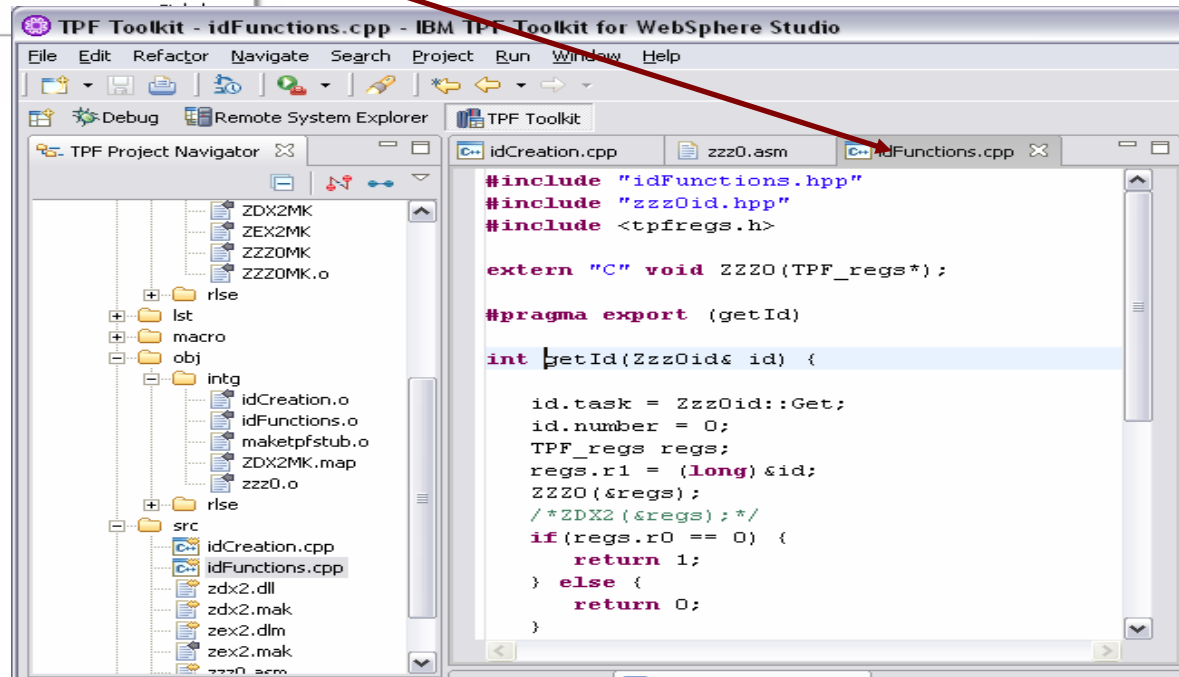
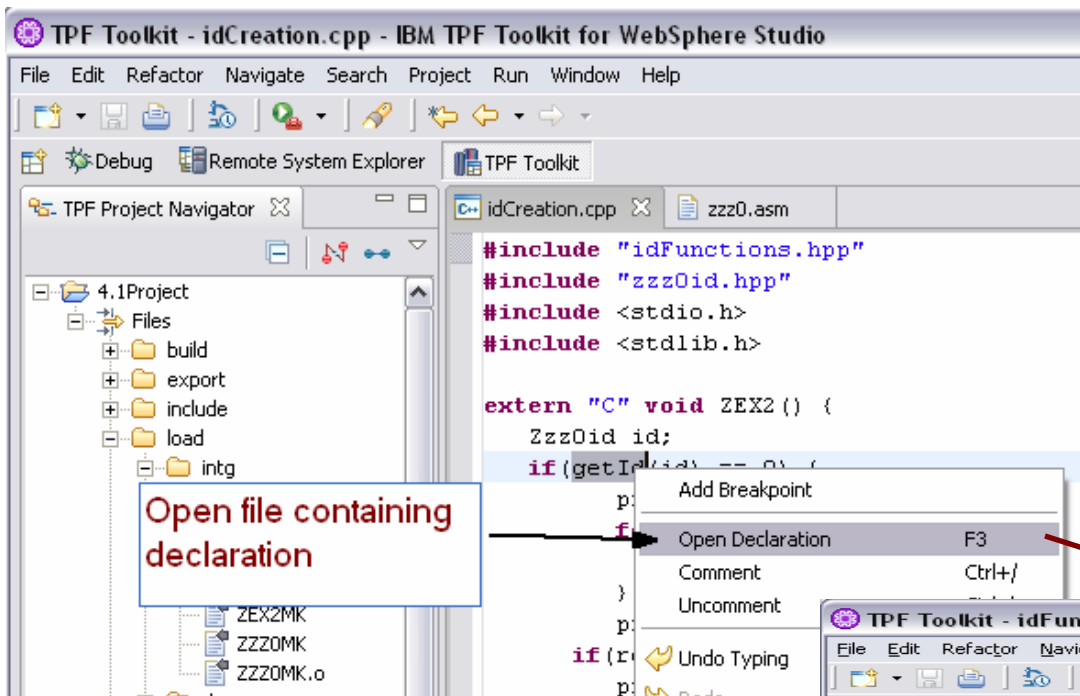
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Remote System Explorer - B.000002 - IBM TPF Toolkit for WebSphere Studio

File Edit Refactor Navigate Search Project Run Window Help

Debug Remote System Explorer TPF Toolkit

idCreation.cpp zzz0.asm idFunctions.hpp B.000002

Remote Systems Team

- New Connection
- Local
- My zOS system
- My zLinux system
- My TPF 4.1 test system
- My zTPF test system
  - TPF Dump Viewer
    - All Dumps
      - B.000002 (Selected)
      - B.000003
- ECB Monitor
- Debug
- Performance Ana...

Go To

- Refresh
- Expand +
- Collapse -
- Rename...
- Delete...
- Debug
- Delete
- Details

```

===== Details for dump B.000002 =====
DUMP FILE ID-B.000002 DUMP FILE NAME - /tpfdbgdumpB/000501.CO0901 .
SE-000501 OPR-IOADB01 PROGRAM-CUD0 OBJECT-cud0          OFFSET-000
COMPLEX-CO0901 CPU-B ISTREAM-01 SS-BSS SSU-HPN  TERMINAL-C00039
PSW -      0705200180000000 0000000391190862
R0 - R3   00000000CDOE404 00000000CDOE3F0 0000000000A0B01 000000
R4 - R7   00000000CDOE74C 0000000000000000 00000000000000C9 000000
R8 - R11  00000000CDOEB70 00000003911913D4 000000000D1C6FC8 000000
R12 - R15 00000003911E6000 0000000391191348 0000000000128A22 000000
END OF DISPLAY
    
```

Property	Value
Dump Date	17OCT
Dump type	IOADB01
Object Name	cud0
Offset in Object	0000024A
Processor ID	B
Program Name	CUD0
Subsystem Name	BSS
System Error	000501
Time	10.46.28

Remote System Details Tasks TPF Toolkit Console

Debugs the selected dump

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===== Details for dump B.000002 =====
DUMP FILE ID-B.000002 DUMP FILE NAME - /tpfdbgdumpB/000501.C00901 .
SE-000501 OPR-IOADB01 PROGRAM-CUDO OBJECT-cud0          OFFSET-000
COMPLEX-C00901 CPU-B ISTREAM-01 SS-BSS SSU-HPN  TERMINAL-C00039
PSW -      0705200180000000 0000000391190862
R0 - R3   00000000CDOE404 00000000CDOE3F0 00000000000ADB01 000000
R4 - R7   00000000CDOE74C 0000000000000000 00000000000000C9 000000
R8 - R11  00000000CDOEB70 00000003911913D4 0000000000D1C6FC8 000000
R12 - R15 00000003911E6000 0000000391191348 0000000000128A22 000000
END OF DISPLAY
    
```

My TPF 4.1 test system

- My zTPF test system
  - TPF Dump Viewer
  - ECB Monitor
    - ECBs
      - 0AB15000
      - 0AB3C000
      - 0AB4E000
      - 0AB5A000
      - 0AB84000
      - 0AB8A000
      - 0ABAE000
      - 0ABB7000
      - 0ABC9000
      - 0ABDB000
      - 0ABEA000
      - 0AC14000
  - Debug
  - Performance Analyzer

Properties Remote Scratchpad

Property	Value
IS	1
Minutes	854
Offset	0
Origin	CXFR
Program	COMX
Seconds	37
SSU	HPN
SVC	SAWNC
Trace Name	COMX

Remote System Details Tasks TPF Toolkit Console

ECB Filter ECBs

Name	SSU	IS	Program	Trace Name	Minutes	Seconds	Origin	Offset	SVC
0AB15000	HPN	1	COMX	COMX	854	37	CXFR	0	SAWNC
0AB3C000	HPN	1	COMX	COMX	854	37	CXFR	0	SAWNC
0AB4E000	HPN	1	COMX	COMX	849	33	L/S	0	SAWNC
0AB5A000	HPN	1	COMX	COMX	999	18	0	SAWNC	
0AB84000	HPN	1	QT00	QT00	849	33	1052	0	ENTNC
0AB8A000	HPN	1	COMX	COMX	854	37	CXFR	0	SAWNC

Debugs the selected ECB



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