

z/TPF V1.1

2013 TPF Users Group

Title: z/TPF Debugger &

TPF Toolkit Future Plan

Joshua Wisniewski & Mohammed Ajmal Development Tools Subcommittee

AIM Enterprise Platform Software IBM z/Transaction Processing Facility Enterprise Edition 1.1

Any reference to future plans are for planning purposes only. IBM reserves the right to change those plans at its discretion. Any reliance on such a disclosure is solely at your own risk. IBM makes no commitment to provide additional information in the future.

© 2013 IBM Corporation



Agenda

- Thinking about the future of the Debugger
- New debugger features currently in plan
- What's Next:
 - New tools and code coverage enhancements
- Long term
 - Continued focus on requirements
 - Usability features
- TPF Toolkit The future



Thinking about the future of the Debugger

- Continued focus on customer requirements prioritized by TPFUG voting results.
- Work planning evaluation questions:
 - What features can be provided that can not be accomplished by any means today?
 - What new tools can be provided that fills a gap in functionality in our overall tool set?
 - What TPF Toolkit requirements require debugger changes?
 - What TPF features require debugger changes?
- Long term focus on usability features for existing functions.



New debugger features currently in plan

V09113F – Mixed Source View

- Source code lines will be intermixed as comments into the disassembly code in a new editor view
- Assembler support showing DSECT expansions
- C/C++ support at any optimization level

V08024F/ V08033F / V08040F – TPF File View

- ZDFIL/ZAFIL equivalent in a view like the memory view
- Ability to render the data in variety of ways (ASCII, EBCDIC, HEX, XML, etc)

Customer Requirement – Detach from a running ECB

- Set the application running and exit the debugger
- This application ECB will no longer be a candidate for debugging



What's Next: New tools and code coverage enhancements

New diagnostic tool – Execution Flow Tool

- This tool will provide the ability to see the program flow through your application in a GUI platform
- Combines features of the trace log tool (program flow), code coverage tool (source code executed) and debugger (execution flow and application state).
- This tool is still being dreamed up so please send us any suggestions

Code Coverage Tool Enhancements

- V12133 Code coverage and debugger integration
- V12134 Code coverage against the .listing



Long Term: Continued focus on requirements

- V12129 Highlight registered debug sessions
- V08026F System Heap View
- V12130 Enhanced Support for Loosely Coupled Debugging
- V08019S Reference Breakpoints
- ZDBUG display and clear for dump viewer sessions
- A button to turn on 'trace created entry'
- Ignore system "fork" events
- Many many more...



Long Term: Usability features

- Trace log subsystem for collecting trace log reports
- Revisit SW00SR view to add file support
- Reduce debugger memory requirements
- Compressed EPDC
- More efficient EPDC flows
- Reduce size of dump viewer dumps
- V09113F provide collapsible sections in the mixed source view.
- Many many more...



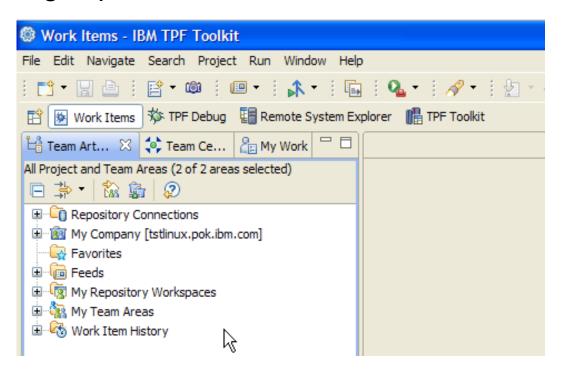
TPF Toolkit – The future

- Adopt newer versions of Eclipse platform
- Continue our tight integration with the debugger team to provide new functionality
 - V09113F Mixed Source View
 - V08024F/ V08033F / V08040F TPF File View
 - V12133 Code coverage and debugger integration
 - V12134 Code coverage against the .listing
 - V12131 Set default source look up value
 - V12132 Execution flow tool
 - And many other enhancements...



TPF Toolkit – The future

- Rational Team Concert (RTC) integration with TPF Toolkit
 - Provide source control, defect management and project planning capabilities in one environment





Trademarks

- IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.
- (Include any special attribution statements as required see Trademark guidelines on https://w3-03.ibm.com/chq/legal/lis.nsf/lawdoc/5A84050DEC58FE31852576850074BB32?OpenDocument#Developing%20the%20Special%20Non-IBM%20Tr)

Notes

- Performance is in Internal Throughput Rate (ITR) ratio based on measurements and projections using standard IBM benchmarks in a
 controlled environment. The actual throughput that any user will experience will vary depending upon considerations such as the
 amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed.
 Therefore, no assurance can be given that an individual user will achieve throughput improvements equivalent to the performance
 ratios stated here.
- All customer examples cited or described in this presentation are presented as illustrations of the manner in which some customers
 have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics will
 vary depending on individual customer configurations and conditions.
- This publication was produced in the United States. IBM may not offer the products, services or features discussed in this document in other countries, and the information may be subject to change without notice. Consult your local IBM business contact for information on the product or services available in your area.
- All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.
- Information about non-IBM products is obtained from the manufacturers of those products or their published announcements. IBM
 has not tested those products and cannot confirm the performance, compatibility, or any other claims related to non-IBM products.
 Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.
- Prices subject to change without notice. Contact your IBM representative or Business Partner for the most current pricing in your geography.
- This presentation and the claims outlined in it were reviewed for compliance with US law. Adaptations of these claims for use in other geographies must be reviewed by the local country counsel for compliance with local laws.