

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 Spring 2007

TPF Operations Server Update

Name: Don Kallberg

Venue: Operations and Coverage Subcommittee

AIM Enterprise Platform Software

IBM z/Transaction Processing Facility Enterprise Edition 1.1.0

© IBM Corporation 2007

Any references 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.

TPF Operations Server

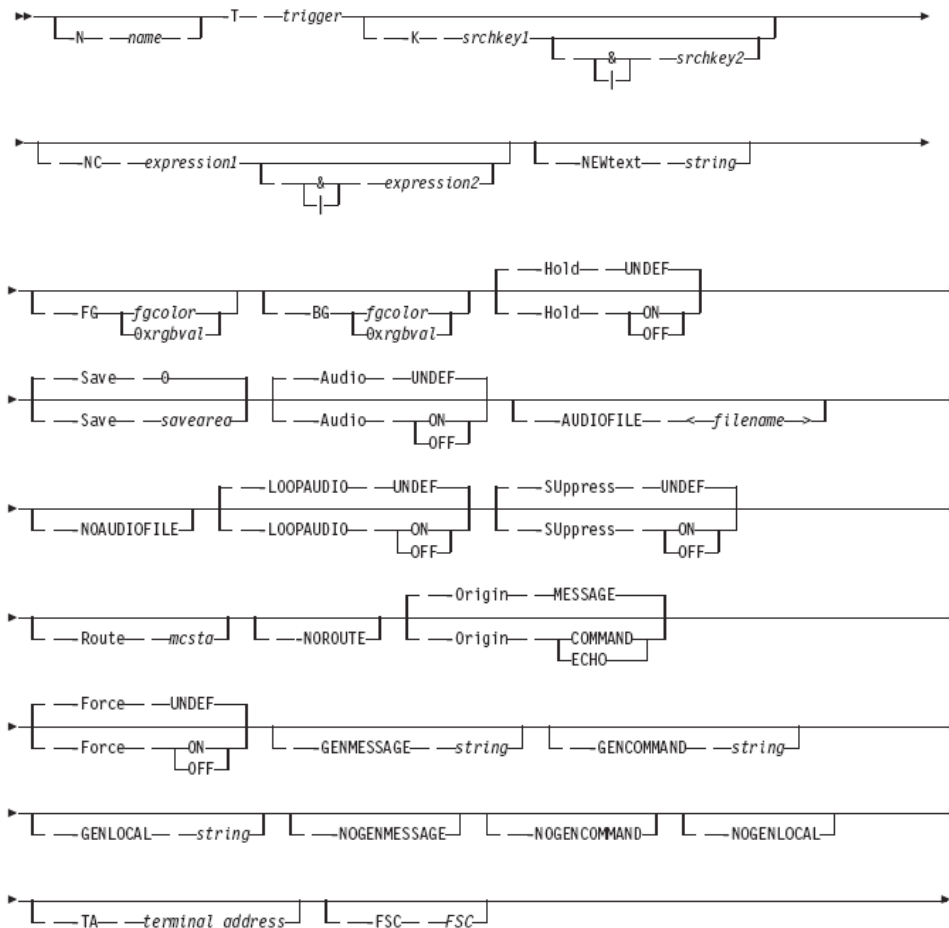
- Version 1.2.05 planned GA on June 29, 2007
 - Released on CD
 - Electronic delivery available
- APARs
 - Patch File
- Software levels.

Enhancements available

- GUI for Filter Rule Management
- Filter Rules for C++ and REXX APIs
- Console Right Click Actions
- z/TPF Message and Command Help

Filter Rule Syntax

-same as console filter rules



GUI for Filter Rule Management (FRM.BAT)

TPF Operations Server Filter Rule Management - c:\Program Files\IBM TOS\console\filterruleslab.tosrules

File Edit Rules Help

Line #	Name	Trigger	Key#1	Op	Key#2	Num Comp	New Text	FG Color	BG Color	Hold
2		AAEC0045E	"Server error"				"&0 &1 TOS unr...			
4		AAES0009I	"FROM TA 05"				"&6 &7 &8 &9 &...			
6		AAES00099999I	"FROM TA 00 : I...							
8		AUTO	"AUTO SEND"				"* 05AUTO SEN...			
9		AUTO*					"* 05AUTO &1 &...			
10		AAESROUTE						YELLOW	GREEN	
11		AAESROUTE	AAER					PINK	GREEN	
12		AAE*						CYAN		ON
14		AAES0009I	_BEEP_				"&0 &1 &2 &3 &...			
16		MYAUTO*					"* 1BAUTO &1 &...			
19		*A						GREENISH	BLACK	ON
20		*E						BLACK	SOMEWHATRED	ON
21		MQSC*						WHITE		
25		CLKS0010I						YELLOW	BLACK	ON
26		CLKS0005W	CONFIRMATION					YELLOW	BLACK	ON
27		CLKS0011A	"BSS WILL CHA...					YELLOW	BLACK	ON
28		CLKS0012A	"SUBSYSTEM W...					YELLOW	BLACK	ON
32		*						YELLOW	BLUE	
36		IPLB0002I	"SYSTEM ID IS"		MODEL					
37		IPLB0044I	COUPLING		MODEL					
38		IPLB00D2I	AVAILABLE		STREAMS					
39		IPLB0151I	IMAGE							
43		DSYS0002I	RESTART					BLACK	RED	
44		DSYS0001I	1052					BLACK	YELLOW	
45		DSYS0009I	1052					BLACK	YELLOW	
46		DSYS0001I	NORM					BLACK	GREEN	
47		DSYS0009I	NORM					BLACK	GREEN	
48		CVRN0004I	"RESTART COM...					BLACK	YELLOW	
49		CVCX0002I	"SYSTEM IN 1052"		HER			BLACK	YELLOW	
50		CVCX0001I	"NOW IN"							
51		CYCL0004T	BSS		"MUST BE HIGH...					
52		CYCL0004T	CHECK							
53		CYCL0010T	"NO SS CYCLED"		SS(S)					
57		COT*								
58		*								
74		CPSE0151T						BLACK	RED	
75		CPSE0152E								
76		CPSE0150E								

4 Errors 89 Rules

GUI for Filter Rule Management

Filter Rule Properties

Condition | Color and Sound | Save Message | Commands and Messages | Remainder

Name (-N)

Trigger (-T)

Error: Invalid -T argument(invalid length)

Search Key (-K)

Numeric Compare (-NC)

Terminal Address (-TA) Origin (-O)

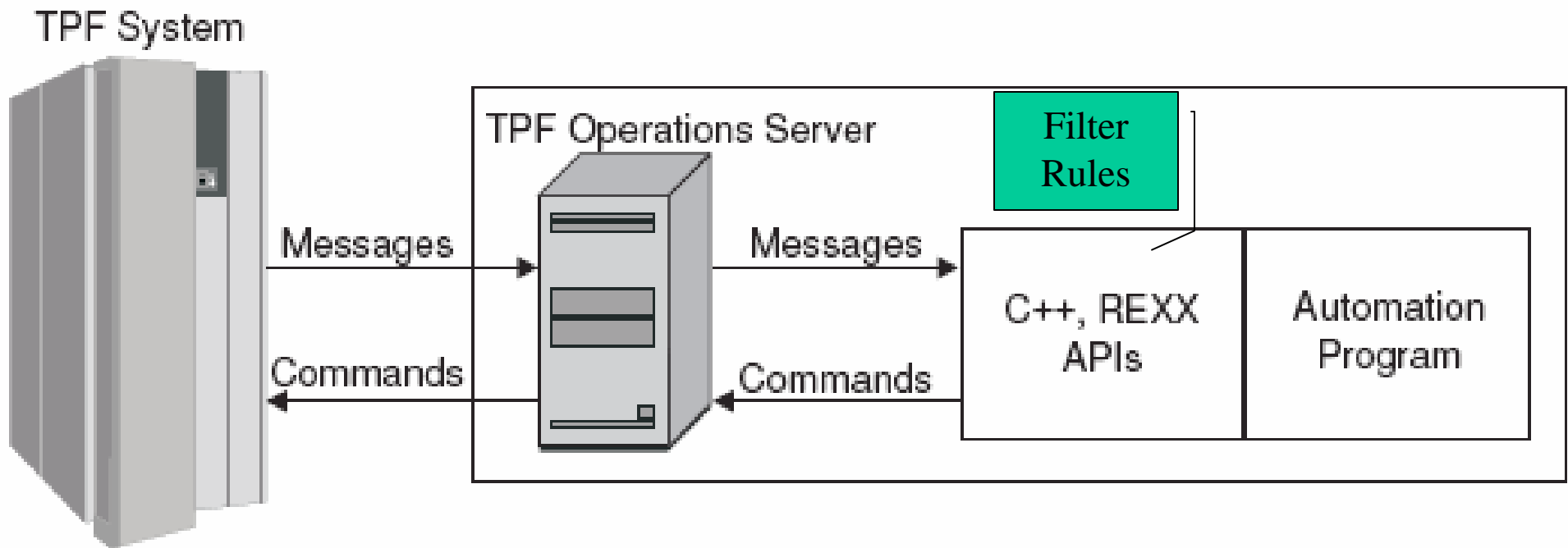
Functional Support Console (-FSC) Force (-FORCE)

Ok Cancel

GUI for Filter Rule Management

- FRM <filter rule filename>
- Recommended filetype:
 - *.TOSRULES
- Define Windows Association with filetype *.TOSRULES (<http://support.microsoft.com/kb/307859>)
 - Right click a file with filetype *.TOSRULES
 - “Select the program from a list”
 - Browse for \IBM TOS\console\FRM.BAT
 - Check box next to “Always use the selected program for this type of file:”

Filter Rules for C++ and Rexx API Programs



Filter Rules for C++ and REXX APIs

- Rule Based (Default) Filter Engine
 - Same rules as Console Filter Engine including...
 - Suppression, Audio Alert
 - Program must check values set in the structure.
 - Change Message Text
 - Generate Message
 - Generate Command
 - Route
 - Route message to another TA

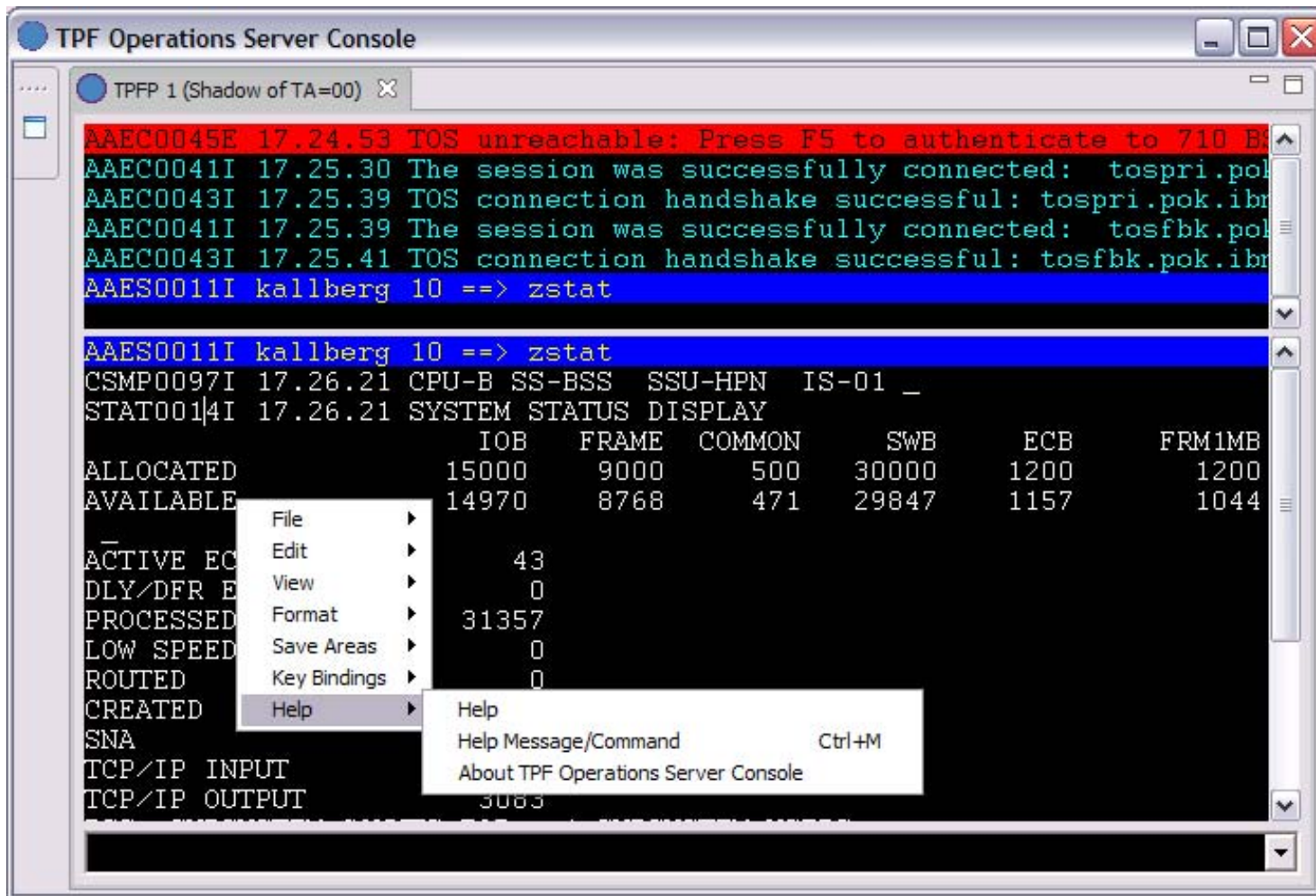
Filter Rules for C++ and REXX APIs

- One or more rule based filter engines per client
- Allows same client to have different attributes
- Filter Rules can now be used with
 - TOSLOG – DB2 Logging Service/Application
 - LOG2FILE
 - RAVEN Automation
 - TOS2TEC – Interface to Tivoli
 - Your Applications

Filter Rules for C++ and REXX APIs

- Add filter rule information to the session configuration file *.CONF as follows:
 - FILTER=F1,F2,...F9
 - FILTER.F<x>.enginename =
com.ibm.tpf.etos.TPFFilter.FilterEngine
 - FILTER.F<x>.classname also supported.
 - FILTER.F<x>.parm1=<directory>\<rulefile>.tosrules

Console Right Click Actions



Console Right Click Actions

- Menu/Action Bar options available when right click in main message or held message areas.
 - No setting required for this.
- Hiding Menu/Action Bar from console window requires a console startup (JCON) option
 - **-HIDEMENUBAR**
- Some other options to save screen space
 - **-HIDEHORIZBAR** (no horizontal scroll bars)
 - **-HIDEFASTVIEWBAR** (left side of main window)

z/TPF Message and Command Help

- Cursor on message or command echo line
 - Right click and select 'Help Message/Command'
 - Command/action menu help option
 - Quick key - <Ctrl> M
- From the command line
 - !help <message id> - help on the message
 - !help <command> - help on the command
 - !help <system error id> - help on the system error id
 - !help <other> - search for other information
- ➔ Goes directly to TPF Product Information Center

z/TPF Message and Command Help

- Access TPF Product Information Center through default browser
 - Profile.help.viewer=browser
 - Profile.help.infocenterURL=<url for TPF Product Information Center>
 - Profile.help.pluginIDs=<list of plugins to search>
- Example:
 - profile.help.viewer=browser
 - profile.help.infocenterURL=http://publib.boulder.ibm.com/infocenter/tpfhelp/current/index.jsp
 - profile.help.pluginIDs=com.ibm.ztpf-ztpfdf.doc_put.03
com.ibm.tpfops.doc_1106

z/TPF Message and Command Help

The image shows two overlapping windows. On the left is the 'TPF Operations Server Console' displaying a log of system messages and a table of resource usage. On the right is a Microsoft Internet Explorer browser window showing the 'z/TPF PUT 03' help page for the 'ZSTAT-Display system status' command.

TPF Operations Server Console

```

AAEC0041I 15.53.51 The session was successful
AAEC0043I 15.53.51 TOS connection handshake s
AAEC0041I 15.53.51 The session was successful
AAEC0043I 15.53.52 TOS connection handshake s
AAES0011I kallberg 11 ==> zstat
CSMP0097I 14.54.28 CPU-B S
STAT0014I 14.54.28 SYSTEM S
IOB
ALLOCATED 15000
AVAILABLE 15000
COMMON 500
ACTIVE ECBS 18
DLY/DFR ECBS 0
PROCESSED 12364
    
```

IBM TPF Product Information Center - Microsoft Internet Explorer

Address: https://tpfid.pok.ibm.com/help/index.jsp?topic=/com.ibm.ztpf-ztpdf.doc_put.cur/gtpo1/cmd_zstat.html

Software information center

Search: GO Search scope: All topics

z/TPF PUT 03 (as of 03/24/2007)

ZSTAT-Display system status

Use this command to do the following:

- Display status information about the z/TPF system, such as the number of allocated and available main storage blocks and the number of active entry control blocks (ECBs).
- Generate time-initiated displays of the status information.
- Display information about I-stream utilization, I-stream unique work list counts, and I-stream shared work list counts.
- Display information about the use of physical blocks based on owner name.
- Display information about dumps.
- Display information about the use of 31- and 64-bit system heap storage.

Last updated

- Changed for PUT02.
- Changed for PUT00.

Requirements and restrictions

None.

Format

```

>>-ZSTAT----->
>+-----+<
+  --Dinterval-----+
+  --STOP-----+
+  --U-----+
+  --DUMP-----+
    
```

z/TPF Message and Command Help

IBM TPF Product Information Center - Mozilla Firefox: IBM Edition

File Edit View Go Bookmarks Tools Help

https://tpfid.pok.ibm.com/help/index.jsp?topic=/com.ibm.ztpf-ztpfdf.doc_put_cur/gtpm4/msg_00000c.html

TPF I/T ISSI IT Help Central ITSAS eAMT IBM Latest Headlines

IBM TPF Product Information Center

Software information center

Search GO Search scope: All topics

Contents

- TPF Product Information Center Home
 - z/TPF PUT 03 (as of 04/13/2007)
 - Introduction
 - Concepts
 - Tasks
 - Reference
 - Commands
 - Examples
 - Messages
 - Error return (errno) values
 - Offline messages
 - Online messages
 - Program status words
 - SQLCODEs
 - System errors
 - 000001-00004F
 - 000001
 - 000002
 - 000003
 - 000004
 - 000005
 - 000006
 - 000007
 - 000008
 - 00000B
 - 00000C**
 - 00000D
 - 00000E
 - 00000F
 - 000010
 - 000011
 - 000012
 - 000013
 - 000014
 - 000016
 - 000018
 - 00001A
 - 00001C

z/TPF PUT 03 (as of 04/13/2007)

00000C

Last updated

Changed for PUT00.

Program

CCNUCL(CICR)

Error message

LOGIC ERROR-CICR-INVALID IDSPBT POINTER IN R3

Explanation

The z/TPF system ran out of working storage and attempted to call the CPMNOCOR routine in program CICR. The routine requires a valid physical block table entry address in R3. In this case, R3 did not contain a valid physical block table address.

System action

The z/TPF system starts irrecoverable error processing, which leads to an automatic z/TPF system IPL. All working storage should be available again following the IPL.

User response

Do one of the following:

1. Use the dump to determine the reason storage was depleted. Message CPSE0151T describes the current physical block usage for all physical block types.
2. Enter the following commands for additional online problem determination:
 - [ZSTAT](#) to display the current main storage levels
 - [ZDCLV](#) to display the z/TPF system shutdown levels
 - [ZACLV](#) to alter the z/TPF system shutdown levels.
3. Provide the dump to your IBM service representative to determine the source of the incorrect physical block table address.

Related information

See *z/TPF Operations* for more information about the [ZSTAT](#), [ZDCLV](#), and [ZACLV](#) commands.

Parent topic: [000001-00004F](#)

Previous topic: [00000B](#)

Done

tpfid.pok.ibm.com

!help 00000C

Ready. INS Server: tospri.pok.ibm.com HP: 1 TA: 10 SH: 00 FSC: 4000 PRC Active

z/TPF Message and Command Help

- Access local TPF Product Information Center plugins in an Eclipse window
 - Copy plugins to \Console\Plugins directory
 - Profile.help.viewer=eclipse
- See TPF Operations Server User Guide
 - “Accessing the TPF Product Information Center”

z/TPF Message and Command Help

The screenshot displays the IBM z/TPF Operations Server Console interface. On the left, a terminal window shows a list of messages for TPF 1 (Shadow of TA=0). The messages include:

```

AAEC0045E 17.24
AAEC0041I 17.25
AAEC0043I 17.25
AAEC0041I 17.25
AAEC0043I 17.25
AAES0011I kallbe
AAES0011I kallbe
CSMP0097I 17.26
STAT0014I 17.26

```

Below the messages, the console displays the following status information:

```

ALLOCATED
AVAILABLE
-
ACTIVE ECBS
DLY/DFR ECBS
PROCESSED
LOW SPEED
ROUTED
CREATED
SNA
TCP/IP INPUT
TCP/IP OUTPUT

```

On the right, a help window titled "Help - TPF Operations Server Console" is open, showing the details for the **STAT0014I** command. The window includes a search bar, a contents list, and the following information:

z/TPF PUT 03

STAT0014I

SYSTEM STATUS DISPLAY

Last updated

Added for PUT00.

Explanation

This is the normal response to the [ZSTAT](#) command with no parameters specified.

System action

None.

User response

None.

Related information

See *z/TPF Operations* for more information about the [ZSTAT](#) command and for an example of the informational display.

Parent topic: [STAT-SYSL](#)
 Previous topic: [STAT0012I](#)
 Next topic: [STAT0016I](#)

APARs of Interest

- IC51114 – AAEC0118E may cause additional commands to fail to reach the host from a console or Java API program.
- IC51209 – Null commands by C++ API programs may cause application exception. This was seen with TOS2TEC interface.
- IC51214 – Messages routed to TOS2TEC may be truncated.
- IC51656 – TOSLOG DB2 logging service fails to automatically start on boot.
- IC51851 – KILLTOS with TA specified but missing hostport shutdown the server.
- IC52125 – DST update needed in the JRE
- IC52402 – Allow routed messages to be sent to RAVEN variations.

Software Levels

- Windows XP Professional – SP 2
- Windows Server 2003 – SP1
- Planned Windows Vista support for clients
 - Requires TOS V 1.2.05
- Luminex 3215 TPF Console Interface
 - Version 1.08 (Sept. 2006)
- IBM Personal Communications V 5.8
 - Part of Host Access Client Package
- DB2 V 9.1 tested with logging client
- Open Object REXX V 3.1
 - <http://www.oorexx.org/>

TPF Operations Server Service Deliveries

- TPF Operations Server V 1.2.05
 - planned availability - June 29, 2007
 - Registration required to receive electronic delivery.
 - http://www.ibm.com/software/http/tpf/pages/req_full.htm
- Individual APARs available on the Web
 - TPF -> SUPPORT -> MAINTENANCE
(<http://www.ibm.com/tpf/pages/maint.htm>)
 - APARs listed in the order closed
 - Unzip package and run TOSAPAR.BAT to apply.
- Patch file containing all the latest closed APARs
 - TOS_PATCHyyyymmdd.ZIP
 - Extract and run TOS_Patch.BAT
 - Use with code delivery applications.

Questions



Trademarks

IBM, and DB2 are trademarks of International Business Machines Corporation in the United States, other countries, or both.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft, Windows, Vista, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, product, or service names may be trademarks or service marks of others.

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.