IBM

IBM Software Group

TPF Users Group Spring 2006

TPF Base Updates

Name : Michael Shershin

Venue : Main Tent

AIM Enterprise Platform Software

IBM z/Transaction Processing Facility Enterprise Edition 1.1.0

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Agenda

- SubCapacity reporting tool
- I/O Measurements
- Norm state pool reallocation
- User modifications now in z/TPF

Subcapacity Reporting

- Support for Workload License Charging (WLC)
- z/TPF APARs PJ30885 and PJ30953
- SCRT V12.1
  - ► Runs on z/OS
  - ► Expect general availability on 6/12/2006
  - ► Available as a web download at the following web site
    - − http://www-03.ibm.com/servers/eserver/zseries/swprice/scrt/
- Definitions
  - ► MSU - Millions of Service Units
    - − measure of the amount of work that a processor can do in one hour
    - − used for software pricing
      - • not necessarily a direct indication of relative processor capacity
    - − 2084-301 max MSUs = 70   z/990 with 1 CP
    - − 2084-302 max MSUs = 132   z/990 with 2 CPs
  - ► IBM software pricing information by machine type

http://www-03.ibm.com/servers/eserver/zseries/library/swpriceinfo/pdf/swp_ibm.pdf

Subcapacity Reporting

- Definitions (continued)
  - ► SCRT89 - records collected by z/TPF which contain 4 hour rolling average of MSUs consumed
  - ► SCRT - SubCapacity Reporting Tool which runs on z/OS
- SCRT89 records used as input to SCRT tool on z/OS
  - ► Must transport SCRT89 records from z/TPF to z/OS
- SCRT on z/OS produces a subcapacity report
  - ► Monthly subcapacity reports must be sent to IBM if you are using WLC
  - ► SCRT89 records must be kept for 6 months.
    - ‒ On either z/TPF or z/OS
- z/TPF implementation details to be provided in SCP subcommittee by Rick Matela

I/O Measurements

- z/TPF APAR PJ30979
- Includes
  - ► Channel measurements for all channels except FICON channels
    - – Data Reduction report
    - – CDC pannel
    - – Expect follow on project to handle FICON channel measurements
  - ► Device measurements being collected
    - – Collected for all channel attached devices
      - DASD, Tape, CTC, etc
    - – Support format-0 and format-1 sub-channel measurement blocks
    - – Written to Data Collection tape on all data collection runs
      - At start of run and at end of run
    - – Data is not being formatted
      - Expect to address formatting of data in future
      - Reduce customer modifications when migrating to z/TPF

Norm State Pool Reallocation

- z/TPF APAR PJ30910
- Complex outage not needed to do a pool reallocation
  - ► If fallback is needed, complex outage is still required
- Function
  - ► Add new pool segments anywhere in configuration
  - ► Expand existing pool segments
  - ► Combine existing pool segments as long as first pool segment has a even multiple of 8000 addresses in it
  - ► Add new pool sections
  - ► Deactivate pool segments
  - ► Delete pool segments as long as they were previously deactivated
- Additional new function
  - ► Force reorder in core pool directory
  - ► Empty a pool directory
  - ► IPL no longer required for a change in pool set size to take effect
  - ► Validate DASD Format

Norm State Pool Reallocation

- How does it work?
  - ► New record types are used for
    - – Pool segment table
    - – Directory records
    - – Short term control records
  - ► New records are created with the new configuration
  - ► Changes to current directory records are shadow copied to new directory records
  - ► At time to use new configuration, use new records
  - ► If fallback needed, go back to old records
- Details will be provided in SCP subcommittee

More User Modifications now in z/TPF

- Dumps
  - ► Display of last 8 dump and SNAPCs
    - − z/TPF APAR PJ30686
  - ► Duplicate dump and SNAPC enhancments
    - − Display of duplicate dump table
    - − Remove selected dumps from table
    - − z/TPF APAR PJ30740
- Pools
  - ► Released pools record (CA records) can be 4K in size
    - − z/TPF APAR PJ30810
  - ► Additional information on short term pool recycle message
    - − z/TPF APAR PJ30926

More User Modifications now in z/TPF (continued)

- Record hold table
  - ► Overflow table full dump (CTL-21) has been eliminated
  - ► z/TPF APAR PJ30682
- ZDECB filtering
  - ► New user exits
  - ► z/TPF APAR PJ30691

Additional Presentations

- Performance Task Force
  - ► Performance tool updates by Michael Shershin
  - ► Omegamon for TPF by Don Kallberg and Bill Davis
- SCP subcommittee
  - ► Workload License Charging (WLC) through Subcapacity Reports by Rick Matela
  - ► Various TPF Base Updates by Michael Shershin
- Hot topic
  - ► z/TPF Memory Allocation by Dr. Robert Blackburn

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