z/TPF V1.1

TPF Users Group - Fall 2012

Title: CP Updates

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AIM Enterprise Platform Software
IBM z/Transaction Processing Facility Enterprise Edition 1.1.0

PJ39499 – Dump processing enhancements

- **ZDSER DUPL and ZDSER SNAP DUPL display counts of duplicate dumps.**
- **Include 4 K around breaking event register.**
- **Ability to dump all allocated blocks and at post process time select to include only in use blocks.**

PJ40269 – Sort and filter ZDSER DUPL displays

- **On ZDSER DUPL and ZDSER SNAP DUPL provide ability to sort and filter the display.**
  - Count of dumps
  - Dump number
  - Program (trace) name
  - Subsystem

```
==> ZDSER DUPL PROG-PGM0
CSMP0097I 22.22.42 CPU-B SS-BSS  SSU-HPN  IS-01
DSER0030I 22.22.42 DUPL DISPLAY
DUMP NUMBER SS   PGM      ADDRESS           COUNT
U00E1C613   BSS  PGM0 0000000409EDA96E        280
U008C84D4   BSS  PGM0 0000000409EDA96E        146
U00726FDC   BSS  PGM0 0000000409EDA96E         87 _
U00B06256   BSS  PGM0 0000000409EDA96E         45
END OF DISPLAY+
```

ZDSER Example

```
==> ZDSER DUPL SORT-COUNT
CSMP0097I 22.18.35 CPU-B SS-BSS  SSU-HPN  IS-01
DSER0030I 22.18.35 DUPL DISPLAY
DUMP NUMBER SS   PGM      ADDRESS           COUNT
U00DB945C   BSS  PGMT 0000000409EDA96E        332
U00E1C613   BSS  PGM0 0000000409EDA96E        280
U00A65752   BSS  PGMD 0000000409EDA96E        221 _
U00B45DD3   BSS  PGM3 0000000409EDA96E        209
U00482652   BSS  PGM5 0000000409EDA96E         18
U001CA9DE   BSS  PGM4 0000000409EDA96E         12 _
U004DBA54   BSS  PGMZ 0000000409EDA96E         11
U00609911   BSS  PGMZ 0000000409EDA96E          8
U00EDDADE   BSS  PGM2 0000000409EDA96E          6
U004E1DD0   BSS  PGMA 0000000409EDA96E          2
I00000346   BSS  CVIQ 0000000005A0B448          0
END OF DISPLAY+
```

PJ39648 – Provide ability to display CTSD

- **ZDMCT - display the module configuration table (CTSD)**

```
==> ZDMCT DEVICE-A
CSMP0097I 13.24.51 CPU-B SS-BSS  SSU-HPN  IS-01
DMCT0003I 13.24.51 DISPLAY OF ACTIVE MODULE CONFIGURATION TABLE
TRACK SIZE RANGES FOR DEVA
                  FROM              TO        TOTAL
 INDEX    CYLINDER TRK    CYLINDER TRK       TRACKS     SIZE    DUPE _
     1           0  02           0  09            8    LARGE    YES
     2           0  10           1  00            6    LARGE    NO
     3           1  01           2  02           17    LARGE    YES
...
    44        2118  09        2120  00           22       4K    YES
              2120  01        2121  03           18    UNDEFINED _
    45        2121  04        2122  10           22       4K    YES
              2122  11        2123  13           18    UNDEFINED
    46        2123  14        3123  13        15000       4K    YES
    47        3123  14        3338  13         3225       4K    YES
END OF DISPLAY+
```

PJ39814 – Expand ZSTIM time initiated table

- **Current time initiated table is in a 1055 byte record.**
- **When the 1055 byte record is full, the time initiated table will be moved to a 4 K record.**

PJ40221 – Enhance RHT queue threshold user exit

- **APAR PJ39312 provided CP user exit WQTX**
  - Request to exit the ECB or allow the ECB to continue to wait on the record hold table (RHT) queue
- **APAR PJ40221 provides ability to not queue the ECB and to return an error to the application.**

PJ39803 – Improvements to tape lost interrupt

- **Two new tape user exits have been added**
  - TLIH
    - CP user exit
    - Called any time that a tape operation has been active for longer than 1 second.
  - TMQM
    - CP user exit
    - Called when the queue depth for any tape exceeds the value specified by the equate CPMMQLHIGH (default is 1000).

PJ40471 – Performance improvement

- **Change to routine that determines which activated program to use.**
  - Routine CCEHOLD in CCENBK
- **Performance is helped when:**
  - Activated loadsets exists and
  - Activated loadset has C or C++ program with multiple entry points and that program is entered frequently.

PJ40517 – ZDTAP display enhancement

- **Include queue size in ZDTAP display**

```
==> ZDTAP
CSMP0097I 13.01.39 CPU-B SS-BSS  SSU-HPN  IS-01
COTD0002I 13.01.39 DTAP      - TAPE STATUS

ADDRESS   NAME   SSU    STATUS   TPIND    VOLSER  FORMAT    #BLOCKS LDR  QUEUE

 0421     RTA    BSS      AO    20 81 20  A00109  38K          1092 YES     16 _
 0422    AVAIL
 0420    AVAIL
 0423     RCP    HPN      AO    01 81 A0  Z01846  38K             0 YES      0

END OF DISPLAY+
```

PJ40527 – ZSTAT ENVIRONMENT

- **Displays various settings for your z/TPF system.**

```
==> ZSTAT ENVIRONMENT
CSMP0097I 17.13.16 CPU-B SS-BSS  SSU-HPN  IS-01
STAT0027I 17.13.16 SYSTEM ENVIRONMENT DISPLAY

   TPF PUT LEVEL                 08
   MACHINE TYPE                  2094-728
   TPF IN TEST MODE              YES
   TAPES IN TEST MODE            YES

   ENVIRONMENT                   VM       _
   VM ID NAME                    SHERSHN1
   VM ID SIZE                    1999 MB
   UNALLOCATED MEMORY            139 MB
END OF DISPLAY+
```

PJ40527 – ZSTAT ENVIRONMENT example

```
==> ZSTAT ENVIRONMENT
CSMP0097I 14.46.00 CPU-D SS-BSS  SSU-HPN  IS-01
STAT0027I 14.46.00 SYSTEM ENVIRONMENT DISPLAY

   TPF PUT LEVEL                 08
   MACHINE TYPE                  2094-728
   TPF IN TEST MODE              YES
   TAPES IN TEST MODE            NO

   ENVIRONMENT                   PR/SM-SH _
   LPAR NAME                     TPFP12
   LPAR SIZE                     8 GB
   LPAR CAP                      NO
   LPAR WAIT COMPLETION          NO
   UNALLOCATED MEMORY            469 MB
   TPFMODE CHANNEL REDRIVE       NO
END OF DISPLAY.
```

PJ40387 – Local IPTE

- **Reduce performance impact of copy-on-write.**
- **Hardware capability exists on zEnterprise EC12 machines.**
- **Prior machines such as z196 and z10 do not have this capability.**
  - TPF use of local IPTE is enabled or disabled based on whether your machine has this capability.

The End

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