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11093: What's New with System z Monitoring?
- Lunch & Learn

Mike Goodman, OMEGAMON Product Manager

IBM Corporation

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Redesigned <u>OMEGAMON V5</u> provides System z faster, simpler problem management

First two products with being released are OMEGAMON for z/OS and CICS

- Enhanced 3270 User Interface and Install/Config Enhancements

- **Simplify monitoring** with ability to view enterprise summary of multiple sysplexes and subsystems
  - Can save 50 to 75% of time needed to find problems
- **Decrease resource usage** by taking advantage of zIIP specialty processor
  - Up to 73% of CICS SLA processing off-loaded
- **Improve availability** with new 'Find' command to easily locate hung users and connections over entire cicsplex
  - Can reduce fix times from 90 minutes to 2 minutes

Reduce system outages and increase productivity

Based on System, Performance and Beta Testing

Enhanced 3270 user interface creates Enterprise of information for improved availability

- Understand transactions across multiple sysplexs
- Color coding to provide ability to find and resolve problems quickly
- Eliminates need to move between multiple screens and monitors

"GUI on a green screen"

Customer prioritized Problem Solving scenarios built into enhanced 3270 user interface

Easy to see and find critical system and sub-system information for improved performance and availability across System z

- **Customized screens focused on customer defined problems**
- Screen content based on high priority problems
- Includes Healthcheck and Bottleneck analysis

Top consumers view of details

Gain graphical view of data
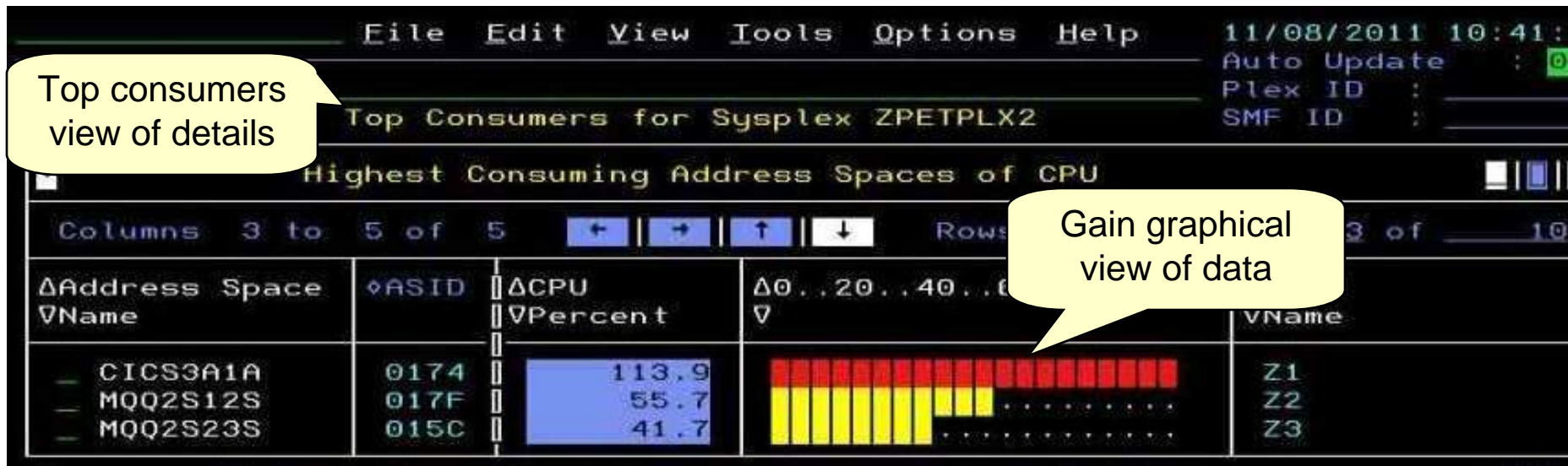
Example of quickly finding and fixing z/OS Problem

New E3270UI highlights problems and simplifies resolving them quickly

Screen 1

Exceptions				
Columns _3_ to _5_ of _6_ ← → ↑ ↓ Rows ___1__ to ___8__ of ___8_				
◊Sysplex Name	◊LPAR Name	‖ΔException ‖∇	Value	Waiting Tasks
_ LPAR400J	CANSYSG	‖ Performance_Index	7.50	-
_ LPAR400J	CANSYSG	‖ Enqueue	SYSDSN	1
_ LPAR400J	CANSYSG	‖ GTF_Active	TRUE	-
_ LPAR400J	CANSYSG	‖ CPU_Loop_Index	100.0	-
_ LPAR400J	CANSP22	‖ Performance_Index	1.76	-
_ LPAR400J	CANSYSL	‖ Performance_Index	4.28	-
_ LPAR400J	CANSP12	‖ Performance_Index	1.42	
_ LPAR400J				

Possible Looping Job

Screen 2

Exceptions				
Columns _3_ to _5_ of _6_ ← → ↑ ↓ Rows ___1__ to ___7__ of ___7_				
◊Sysplex Name	◊LPAR	‖ΔException	Value	Waiting Tasks
_ LPAR4			6.66	-
_ LPAR400J		Active_Storage_Alert	WARNING	-
_ LPAR400J	SYSL	Performance_Index	2.50	-
_ LPAR40	CANSP11	Performance_Index	1.42	-
_ LPAR400J	CANSP22	Performance_Index	1.30	-
c LPAR400J	CANSP22	CPU_Loop_Index	99.6	-
_ LPAR400J	CANSYSG	Performance_Index	4.28	-

Enter 'c' to cancel job

Screen 3

```
Command ==>
KM5PLXO       KM5ACTC2      Cancel Address Space
          Press ENTER to continue                          _|□|×
Columns       Address Space Name . :  MGRABZ                    1
◊Sysplex      ASID . . . . . . . . :  0044
Name          Address Space Type . :  BATCH
              SMF ID . . . . . . . :  SP22
_ LPAR400
```

Job Cancelled

Exceptions				
Columns 3 to 5 of 6 ← → ↑ ↓ Rows 1 to 4 of 4				
◊Sysplex Name	◊LPAR Name	‖ΔException ‖∇	Value	Waiting Tasks
_ LPAR400J	CANSP13	‖ Performance_Index	2.85	-
_ LPAR400J	CANSP13	‖ Active_Storage_Alert	WARNING	-
_ LPAR400J	CANSP22	‖ CPU_Loop_Index	99.6	-
_ LPAR400J	CANSYSG	‖ Performance_Index	4.10	-

In prior releases this would have taken from 5 to 15 screen interactions

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New Problem Determination and Management allows Operations and SMEs to see events faster

Increase availability by monitoring over time to identify and fix potential problems before they become outages

- Set exceptions to quickly alert operators across entire sysplex
- Warned about a problem 98% faster then before

```
KM5MSUO              4-Hour Rolling Average MSU Statistics        SMF  ID    :  SP22

                                    LPAR
 4 Hour MSUs................             6     LPAR Defined              Yes
 % LPAR MSU Capacity.......              6.0   Average %                 0.0
 LPAR Capacity Limit.......            100     Average % T             100.0
 LPAR Capacity Limit Basis. Entitled

                                 LPAR Group                                 ▉|▉|▨

 LPAR Group          Average Unused      LPAR Group          Group LPAR
 Name                Group MSUs          Capacity Limit      MSU Limit

 CANDLE                      93                    100                 100

                               5 Minute Intervals                           ▉|▉|▨

 Columns  2  to  6  of  8     ← | → | ↑ | ↓                                    48

 ◇Time              ▮ % Time            Uncapped            % LPAR              pped
 Period             ▮ Uncapped          MSUs/Hour           Uncapped           Us/Hour

  _ 08:59-09:02     ▮    100.00             8.83                8.83               0.00
  _ 08:54-08:59     ▮    100.00             6.59                6.59               0.00
  _ 08:49-08:54     ▮    100.00             6.52                6.52               0.00
  _ 08:44-08:49     ▮    100.00             7.25                7.25               0.00
```
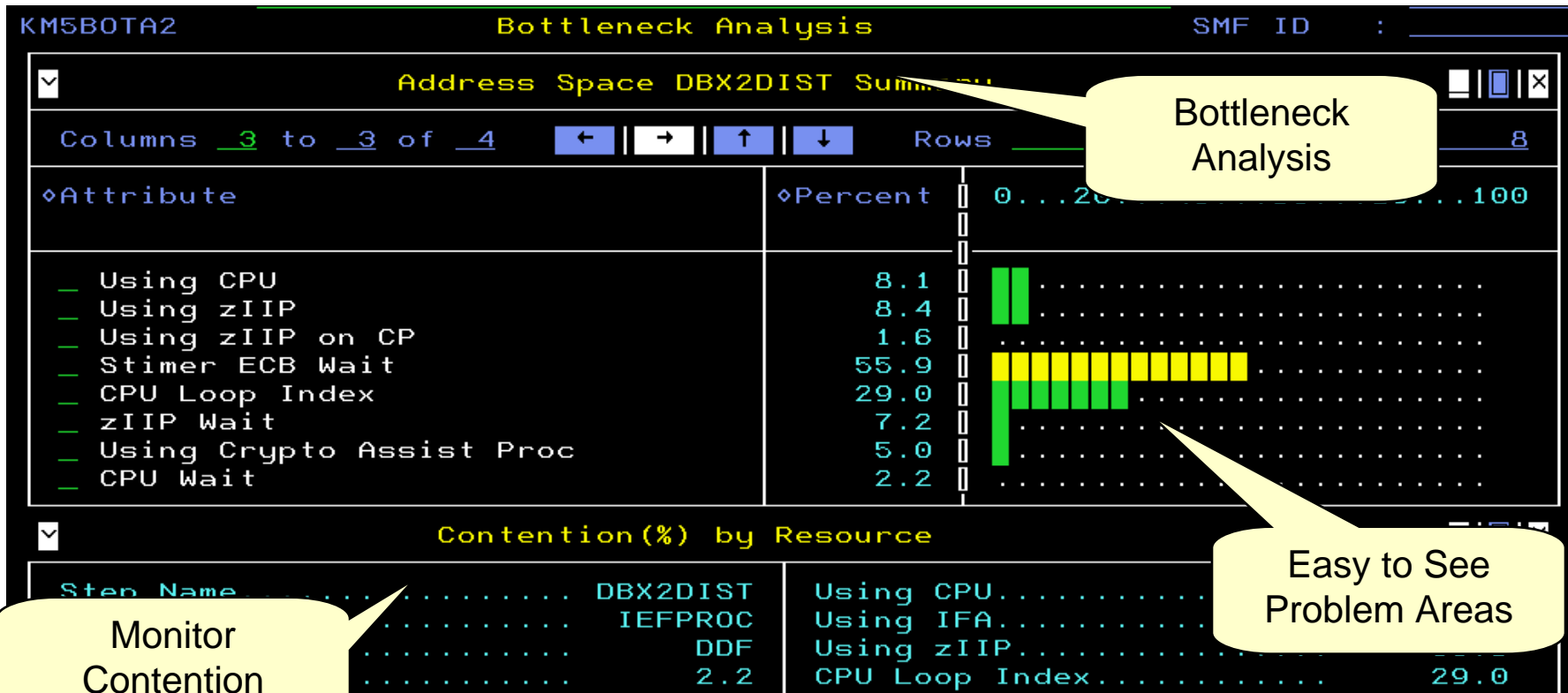
4 Hour Rolling Average

5 minute intervals

Bottleneck Analysis provides visibility to potential problems before they become outages

Quickly find out where resource contentions and shortage exist

Integrated into e3270ui to allow for easier problem monitoring

Healthcheck analysis assists in finding and fixing problems quickly incorporated in e3270ui

Regularly monitor key IT resources and usage

Select and see best practices recommendations on how to fix

```
KM5HCSTS                      Health Checker                    SMF ID    : 73
 ⌄                      Health Check Status                          ▐■▌×

    Proc Name.................  HZSPROC     Task Identifier...........  HZSPROC
    Status....................   Active     Exceptions SevMed.........        6
    Checks Deleted............        0     Exceptions SevLow.........        6
    Checks Eligible...........      146     Exceptions SevHigh........        2
    Checks NotDeleted.........      177     Exceptions SevNone........        0
    Checks Ineligible.........       31     Exceptions Outstanding....       14
    Checks DeletePending......        0


    Columns  1 to  2 of  2    ←  ║ →  ║ ↑ ║ ↓      Rows _____1 to _____1 of _____1

    Version                   +Parmlib
    Identifier                 Members

    z/OS             01.13.00  LC,IA,CY
 ⌄                      Health Checks                                ▐■▌×

    Columns _1 to _3 of 26                        _1 to _____11 of ____177

    ΔCheck                              ΔCheck
    ∇Name                               ∇Status

    _  XCF_CDS_SPOF                    IBMXCF        EXCEPTION-HIGH
    _  USS_PARMLIB_MOUNTS             IBMUSS        EXCEPTION-HIGH
    _  VSM_SQA_THRESHOLD              IBMVSM        EXCEPTION-MEDIUM
    _  XCF_CDS_MAXSYSTEM              IBMXCF        EXCEPTION-MEDIUM
    _  XCF_CF_STR_POLICYSIZE          IBMXCF        EXCEPTION-MEDIUM
    _  XCF_CF_ALLOCATION_PERMITTED    IBMXCF        EXCEPTION-MEDIUM
    _  XCF_CF_STR_AVAILABILITY        IBMXCF        EXCEPTION-MEDIUM
    _  VSAMRLS_CFCACHE_MINIMUM_SIZE   IBMVSAMRLS    EXCEPTION-MEDIUM
    _  USS_PARMLIB                    IBMUSS        EXCEPTION-LOW
    _  GRS_AUTHQLVL_SETTING           IBMGRS        EXCEPTION-LOW
    _  CSV_APF_EXISTS                 IBMCSV        EXCEPTION-LOW
```

Health Check

Sorted, Color Coded Resource Status

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Unix workloads growing on z/OS as applications are ported to mainframe

- USS comes included in OMEGAMON XE on z/OS
- Complete view of Unix overhead and activities available and customizable with enhanced 3270 user interface

Come talk to OMEGAMON Experts and see detail capabilities and value

Additional OMEGAMON V5.1 sessions

10383 New Problem Solving capability with OMEGAMON v.5.1 on z/OS
- Tuesday, March 13, 2012: 4:30 PM-5:30 PM
- Walnut (Omni Hotel CNN Center)

10385 Solving CICSplex Performance Problems using OMEGAMON v5.1 for CICS on z/OS
- Wednesday, March 14, 2012: 4:30 PM-5:30 PM
- Walnut (Omni Hotel CNN Center)

Come by the OMEGAMON ped in the Technology Exchange to see live demo