At a glance: z/OS V1.13 includes several enhancements designed to:

- Help you get early warning of certain system issues before they become obvious to help you act quickly and decisively with integration between z/OS Predictive Failure Analysis and Runtime Diagnostics functions.
- Simplify application programming with a new z/OS base component, z/OS Batch Runtime environment, designed to enable COBOL and JavaTM to interoperate with DB2® applications while maintaining transactional integrity, thus allowing enhancements to existing COBOL DB2 application suites with Java-based DB2 access.
- Help you shorten batch windows using JES2 JCL improvements and a new option to free tape volumes more quickly.
- Improve spool volume management by using new JES2 spool migration function and JES3 dynamic spool add capability.
- Improve I/O performance between 50% (1.5X) and 150% (2.5X) for many z/OS UNIX workload using shared zSeries® File System (zFS) in a Parallel Sysplex®.
  - Applications that use zFS, such as z/OS UNIX System Services and WebSphere® Application Server for z/OS, are expected to benefit.
- Improve performance for traditional workloads with IEBCOPY improvements.
- Provide more options you can use to secure your data with newer, faster, and more scalable encryption and security capabilities incorporated in IBM Tivoli® Directory Server for z/OS (LDAP), RACF®, z/OS System SSL, ICSF, and z/OS PKI Services.

☞ See: # 08 zNibbler (Pred. Failure Analy.:

☞ See: # 53 zTidbits (z/OSMF – New Face)

z/OS Management Facility (zOSMF) V1.13 offers several enhancements designed to:

- Clone z/OS images and deploy software more easily and consistently, using a new software deployment task
- Define new storage volumes to SMS quickly and easily, using a new DASD management task
- More easily maintain highly secure network connections with an updated z/ OSMF-based Configuration Assistant for z/OS Communications Server
- Create a more unified z/OS experience for system programmers by enabling a new web-enabled ISPF interface from z/OSMF
- Support easier monitoring of z/OS Capacity Provisioning Manager status, using a new capacity provisioning task
- Consolidate monitoring for z/OS and LinuxTM workload server resources with new, integrated Linux system data gatherers in the updated Resource Monitoring task
- Improve monitoring and management of incidents, and sending of diagnostic data using the updated Incident Log task
- Integrate the z/OS experience with the ability to link and launch between z/OSMF applications and between z/OSMF and other browser-accessible applications
- Deliver a new REST interface designed to enable z/OS and non z/OS systems to submit z/OS jobs, obtain job status, retrieve job output, and more

Ease of use z/OS V1.13 introduces many new simplification capabilities. It is designed **to address the need for skills** by making existing personnel more productive and by reducing the time needed for someone new to gain proficiency on the platform.

- New function is designed to address overall operational efficiency by reducing the steps for tasks and introducing new streamlined processes. Ultimately, these new capabilities are intended to make your organization more responsive in meeting business needs.
- z/OS Management Facility is the IBM System z strategic direction for z/OS simplification. Although z/OSMF V1.13 and z/OS V1.13 are separate products, their development and technological integration are tightly linked.
  - Current and future planned enhancements are not only intended to simplify individual z/OS system management tasks, but to link tasks together for an integrated and modern system programmer experience

Enhancements for z/OSMF V1.13 include capabilities to:

- Clone z/OS images and deploy software more easily and consistently, using a new software deployment task
- Define new storage volumes to SMS quickly and easily, using a new DASD management task
- Support easier monitoring of z/OS Capacity Provisioning Manager status, using a new capacity provisioning task
- Create a more unified **z/OS experience for system programmers** by enabling a new web-enabled ISPF interface from z/OSMF
- Make it easier to maintain highly secure network connections with an updated Configuration Assistant for z/OS Communications Server
- Consolidate monitoring for z/OS and Linux workload server resources using integrated performance data gatherers for Linux on System z, Linux on System x®, and AIX® systems in the updated Resource Monitoring task
- Improve monitoring and management of incidents, and sending of diagnostic data using the updated Incident Log task
- Integrate the z/OS experience with the ability to link and launch between z/OSMF applications and between z/OSMF and other browser-accessible applications.

***New* DASD Management task** is the foundation for simplified disk storage management. The new task is intended to allow you to perform storage group management tasks from within the application. It is designed to streamline the process of adding volumes to SMS pool storage groups, reducing several manually intensive steps involving multiple applications to a reduced number of steps using a single interface. The DASD Management task is planned to be made available in first quarter 2012 with the PTF for APAR PM40869.

The DASD Management task allows you to:

- View collections of predefined available volumes with the introduction of the reserve storage pool resource.
  - Once defined, the task can discover these volumes.
- View new pool storage group attributes to be used as policy within the task.
- View pool storage group and volume information associated with the active SMS configuration. An alert is displayed if a storage group has exceeded its storage utilization threshold. In addition, the storage group information will display new storage group attributes to be used as policy within the task.
- Add storage to an SMS pool storage group via a new wizard.
  - The Add Storage wizard can enable you to add storage to an SMS pool storage group more easily than before.

***New* Capacity Provisioning task:** IBM System z On/Off Capacity on Demand (OOCoD) can give you the ability to add or remove System z hardware capacity as needed.

- Provisioning Manager (in the base of z/OS) can automate the OOCoD process.
  - The Capacity Provisioning Control Center (CPCC) is the user front end to administer capacity provisioning policies.
- Provisioning task.- the Capacity Provisioning task is designed to support easier monitoring of z/OS Capacity Provisioning Manager status, which can simplify the work of an administrator by reducing the amount of time it takes to get information about capacity provisioning status. The Windows-based CPCC is still required for managing the z/OS Capacity Provisioning Manager.

Lucky 13

z/OS V1.13 delivers new availability, batch programming, and usability functions.

z/OS V1.13 runs on these z servers:

- z196
- z114
- z10TM EC
- z10 BC
- z9® EC
- z9 BC
- z990
- z890
- z900
- z800

🟥 Withdrawn from marketing

z/OSMF V1.13 also delivers a new API for z/OS itself. A new RESTful API in z/OSMF can enable any distributed, non-z/OS system to submit batch jobs and access batch job information anytime. This API is enabled on z/OS V1.13, and later.

This release debuts cross-Sysplex z/OSMF instance running in each sysplex and one of those z/OSMF Instances will be the system that you connect a browser to for all software deployment activities a.k.a. the Primary z/OSMF.

By using HTTPS secure communications between the **primary** & **secondary** instances, you can deploy software from one sysplex to another throughout your enterprise

z/OS V1R13 marks the removal of the Distributed Computing Environment (DCE). NOTE – There are replacement strategies: see SG24-6935

Continued on page 2.

***New* web-enabled "Classic" ISPF Interface** under the Classic Interfaces category enables you to open and launch classic z/OS ISPF sessions directly from z/OSMF. You can open multiple sessions in multiple panes and navigate to ISPF applications via z/OSMF

- This interface will make the ISPF applications URL addressable and thus allow the ability to directly launch to ISPF- based functions from z/OSMF tasks or from external applications. For example, you can launch from the Incident Log directly to browse a log snapshot data set in ISPF.
  NOTE: You can view up to four ISPF screen sessions at the same time. The panels appear similar to classic 3270 layout and can be navigated using both mouse and keyboard. Additional tabs allow you to navigate to other ISPF panels, and TSO/E messages are displayed in a popup window.

The Health Checker framework is enhanced to allow you to specify when health checks should be run for the first time, and when they should be repeated using a new SYNCVAL keyword in the HZSPRMxx parmlib member or on the Health Checker MODIFY command. This can help you schedule checks to run at more predictable times. Also, extensions to the Health Checker framework allow better control over messages and check intervals, and allow checks to increase the severity of their exceptions as system conditions change.

NOTE: These changes are intended to allow programmers to write advanced health checks with improved usability.

The SMF dump program used for processing SMF log streams (IFASMFDL) is enhanced to reduce the time it takes to extract the data. This new function is designed to allow you to specify a new SMARTENDPOINT keyword when running the utility, to limit the amount of data read from the log stream being processed.

Eliminate the need for WebSphere MQ for SDSF Sysplex environments. In z/OS V1.13, SDSF simplifies support for sysplex-scope displays in a JES2 environment. Once all systems in a MAS are running z/OS V1.13 JES2, all displays are sysplex scope without the use of IBM WebSphere MQ for z/OS (5655-L82) . This new function is designed to help simplify SDSF setup and operation.

z/OS CIM Server is designed to add support for CIM Indications to the Storage HBA and SB Multipath Management profiles. These extensions are intended to help form a basis for multiplatform storage management tools.

A number of small enhancements are made to HCD:

- A new "View unused resources" action you can choose for the channel path list to show how many unit addresses and control units are used, and available for the selected channel path
- Additional IODF checking when building a production IODF or a validated work IODF
- Support for exporting & importing unconnected control units and devices in build I/O configuration statements and migrate function

Performance with workloads: Performance improvements are based on internal IBM laboratory tests. Your results will vary.

- Improve I/O performance between 50% (1.5X) and 150% (2.5X) for many z/OS UNIX workloads using shared zFS in a Parallel Sysplex. Applications that use zFS, such as z/OS UNIX System Services and WebSphere Application Server for z/OS, are expected to benefit.
- Improved performance is expected for traditional workloads with IEBCOPY improvements. Any workload using PDS to PDS copies is expected to benefit.
- z/OS is designed to support some programs running in 64-bit storage, provided that they meet certain restrictions. This is intended to provide virtual storage constraint relief to applications, particularly those that imbed code in data areas for performance reasons
- The VSAM RLS buffer management algorithm for least recently used buffers has been improved. This is expected to reduce the CPU time used for buffer management processing in the SMSVSAM address space for large VSAM RLS data sets with large buffer pools. PLUS - VSAM record-level sharing (RLS) supports a new storage class (STORCLAS) attribute you can use to specify whether VSAM RLS buffers and the associated resources are released quickly, or retained for a period of time as they are on prior releases, once all applications have closed a VSAM RLS data set on a given system.

R M F: A new Postprocessor Serialization Delay report is available in XML output format to help users to detect serialization-related performance issues by providing system suspend lock, enqueue, and latch contention information.

NOTE: RMF also stores this information in a new subtype 5 of SMF record 72.

The **Postprocessor Workload Activity** report is extended by the following features:

Response time distribution for velocity goals: In addition to service and report class periods with a specified response time goal, new tabular response time distributions are displayed for those periods that have defined execution velocity goals. This helps customers to obtain better analysis data for transactional workload which can be used to change existing execution velocity goals to meaningful response time goals.

Supervisor promotion: The report shows the CPU time consumed for work units while they have been promoted by the z/OS supervisor to a higher dispatching priority than assigned by WLM. In addition, RMF provides new overview conditions for the Postprocessor based on SMF record 72-3.

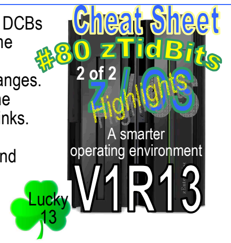
NOTE: The Postprocessor "**Paging Activity**" report is redesigned to provide a more current picture of storage distribution.

Scalability:

- Remove bottlenecks: The maximum size of a VSAM volume data set (VVDS) is increased to provide support for more data sets per volume, increasing the maximum from hundreds of thousands to millions. Also Catalog processing increases the number of aliases from approximately 3,500 to approximately 250,000 or more.
- Simplified storage management: In z/OS V1.13, IBM introduces FTP support for more data set types in the extended addressing space (EAS) of extended address volumes (EAVs), enabling FTP to access this additional DASD capacity when allocating, storing, and retrieving data sets that are eligible to reside there.

Foundation for extreme data handling and simplified storage management:

- Potentially improved I/O performance without the need for application changes for QSAM-, BPAM-, and BSAM-based workloads by leveraging High Performance FICON. Also, existing EAV functionality is enhanced with support for larger, 1 TB Extended Address Volumes (EAVs).
- Extended Address Volumes (EAVs) allow more data to be stored on direct access storage devices. z/OS V1.13 Communications Server FTP, which already supports SMS-managed extended format sequential data sets, supports these additional data set types when they reside in the EAS of an EAV: both SMS-managed and non-SMS-managed physical sequential basic and large format data sets, PDS and PDSE data sets, and GDG data sets. Also, SDSF is designed to support extended format sequential (DSNTYPE=LARGE) print files, and print files that are placed in the EAS of an EAV.
- A **Problem Documentation Upload utility** is added to z/OS and is intended to be used to transmit dumps to IBM. This utility is designed to break dumps into segments that can be transmitted in multiple data streams to help reduce data transfer time and to support encryption. This utility is similar to the Problem Documentation Upload utility currently available for download, and has an alias entry point named MTFTPS for compatibility. This utility can be called from the z/ OSMF V1.13 Incident Log application.
  NOTE: This utility can be called from the z/OSMF V1.13 Incident Log application.
  The Problem Documentation Upload utility can currently be downloaded from http://www14.software.ibm.com/webapp/set2/sas/f/zaids/pduf.html
- Enhancements for the **IEBCOPY utility** are intended to improve performance when copying a partitioned data set (PDS) to another PDS. In addition, IEBCOPY exploits 31-bit storage for track buffers, and the current requirement for APF authorization is removed in z/OS V1.13.



DFSMSdfp is planned to add support to Open/Close/End of Volume to allow programs to use BSAM and QSAM DCBs and ACBs to access subsystem data sets with extended TIOTs (XTIOT). DFSMSdfp Open/Close/End of Volume processing is changed to reduce tape movement for tapes having ISO/ANSI Version 4 labels. This is intended to improve tape processing performance without requiring any application changes.

- z/OS supports up to **32 subchannels per coupling channel path.** This function is expected to help improve the utilization of long-distance coupling links and provide more coupling link bandwidth for long-distance coupling links.

Application integration z/OS V1.13 introduces many new batch programming capabilities:

- The z/OS Batch Runtime environment is intended to form the foundation for resilient, highly available, secure, and scalable services for batch applications.

-The z/OS Batch Runtime is intended to provide the framework for **Java to COBOL interoperability**, for transactional updates to DB2, and for sharing database connections between Java and COBOL.

- New **Java-COBOL interoperability** capabilities are designed to enable you to reuse valuable COBOL assets by developing new or enhancing existing batch applications with Java. With this capability, for example, you can share adatabase connection between COBOL and Java -- allowing you to use Java subroutines directly **in lieu of Java stored procedures**. The Java portions of your batch applications can be eligible for the IBM System z Application Assist Processor, or the IBM System z Integrated Information Processor, using the zAAP on zIIP capability introduced with z/OS V1.11.

- Initially, Java, DB2, and COBOL support is provided with IBM 31-bit SDK for z/OS, Java Technology Edition, Version 6.0.1 (5655-R31), DB2 V9.1 for z/OS (5635-DB2), or later, with PTFs, and IBM Enterprise COBOL for z/OS V4.2 (5655-S71), or later.

- Several **batch enhancements are provided for JES2 environments** that are intended to help simplify the development of batch applications.

  > Support is provided for in-stream data sets to be used within JCL procedures and for include statements.
  >>This is designed to improve usability of JCL procedures; for example, by making it possible for you to put utility control statements in the same member as the rest of the procedure.

  > Support is provided to allow jobs for which journaling is used to be stopped after a currently running step has finished and held for restart in the following step; (intended to allow less-disruptive system shutdowns).

  > Job-level return code support is provided. A *new* JOBRC keyword on the JOB statement is designed to allow you to specify whether a job's return code should be set to the highest return code of any step that was run, the return code of the last step, or the return code of a specific step. This new support can make it simpler to determine whether a job succeeded or failed by looking in a single place for the result.

  > Support for specifying a time, interval, or number of output lines on the UNALLOC parameter of the SPIN keyword on the DD statement. This is intended to improve availability for long-running address spaces.

- A new API you can use to submit batch jobs and retrieve batch job information from z/OS using distributed systems as well as z/OS systems. This new API, which is HTTPS protocol-based and uses Representational State Transfer (REST), is introduced with z/OS V1.13 with z/OSMF V1.13. This is intended to make z/OS batch processing much more accessible to distributed systems and web-based processes.

- Batch concurrency can be improved. A new FREEVOL=EOV keyword on the JCL DD statement allows you to specify that volumes of a multivolume tape data set be made available for other processing once the processing for each volume is finished. This is intended to allow overlapped processing for multivolume data sets, which can speed batch process.

XL C/C++ includes these performance and usability enhancements:

– For Metal C, new support is provided for:

  > IPA and HOT options, which provide inter procedural analysis and high-order loop analysis and transformations during optimization
  > Function property blocks to help you identify the C functions and their associated properties when code scanning or dump reading
  >> A DSAUSER option you can use to request that a field the size of a pointer be reserved on the stack
  >> An ARGPARSE option for automatic parsing of entry point options
  >> The qsort() function, which allows an array to be sorted using a function you supply, and is intended to relieve Metal C programmers from having to write sort routines with similar capabilities.

  NOTE: New ARCH(9) functions for programs running on zEnterprise System servers.

– Informational messages, specified with FLAG(I), are now issued by default in z/OS UNIX System Services for consistency with batch compilations

– Debugging enhancements: In prior releases, the z/OS dbx debugger for C/C++ programs requires that the compiler insert Execute (EX) instructions (called hooks) so that the debugger can gain control during program execution to display information about the program and the data it processes. In z/OS V1.13, dbx provides support for debugging programs compiled without hooks, in addition to those compiled with hooks. This support is intended to allow you to debug programs whose sizes and performance characteristics are more closely aligned with production programs.

  > New debugging APIs provide easier access to debug information in .mdbg and .dbg files.
  > Debug information for inline procedures, gives the ability to set entry breakpoints at all inline instances.

- Language Environment supports recovery from additional abends during output and close operations for C/C++ programs, and can return to C/C++ programs, indicating that an I/O error has occurred rather than issuing an abend. This is intended to provide a more predictable recovery environment for C/C++ programs when I/O errors are encountered.

- The Base Control Program internal interface (BCPii) allows authorized programs to perform functions related to CPC Image User groups on IBM zEnterprise and IBM System z10® servers with a minimum microcode level (MCL). New function in z/OS V1.13 is designed to allow available CPC Image User groups on a particular CPC and their member images to be listed in, connected to, and disconnected from groups; to support queries for group attributes; and to support issuing most HWICMD BCPii commands to all the members of a specified group.

z/OS UNIX System Services for user-level file system mounts is designed to provide support for limiting overall user mounts, the ability to allow these functions for specific users and groups of users, the ability to restrict which mount points a user may use, and the ability to allow user mounts only at empty mount points. Also, improved warning and failure messages are provided for some mount and unmount operations. The ability to move these mounts from system programmers or administrators directly to users can improve usability and flexibility, and make it easier to use z/OS UNIX.

z/OS UNIX System Services is enhanced with:

- A script command you can use to record the output of a shell session. For example, a script command could be used to create a session log file for auditing or another output file intended to be processed later.

RMF enhances its CPU reporting capabilities for z/OS systems running as z/VM guests. SMF record type 70 subtype 1 (CPU activity) provides simplified PR/SM partition and logical processor data sections for the guest system. This enables the ***Partition Data Report*** section of the **CPU Activity** report to provide dispatch times and processor utilizations for this guest system. The additional CPU data for z/VM guests is measured as soon as the new gatherer option VMGUEST for Monitor **I** is active.

Before, R13 the HIPERDISPATCH Defult setting was NO; however with more than 64 CPs on a z196, the System always uses HIPERDISPATCH (DEFAULT=YES).

R13 zFS will no longer write In 1 K blocks and will convert to 8k blocks, therefore zFS might need more DASD space.

IBM.Function.HealthChecker: Run the command against your z/OS V1R11 or V1R12 zones to see if you have any missing z/OS Health Checks.

Use SMP/E FIXCATs for PTF verification where this task now should be business-as-usual to ease maintenance.

A large portion of the z/OSMF application is written in Java and is, therefore, eligible for zAAP.

z/OS UNIX System Services is enhanced with: continued

- Updates to the vi and ex editors that allow you to edit untagged text files and have them treated as if they contained text data using a codeset you specify.
- New support also allows you to override the built-in auto conversion function, making it easier to edit ASCII-encoded files under z/OS UNIX.
- A capability that allows you to specify that IPv4 UDP datagram reply packets must flow on the same interface where the request arrived when a server system has multiple home addresses with multiple routes back to the client or is using a DVIPA. This support, designed to be similar to the existing support for IPv6, is intended to allow applications to require that the response to a request be restricted to the same IPv4 address from which the request was received.

•The Program Management Binder supports new operations for unnamed ($PRIVATE) sections in load modules and program objects. This new design allows you to specify that all unnamed sections be deleted or that specific unnamed sections be named (using CHANGE statements) or replaced. These new functions are intended to make it easier to maintain load modules and program objects in place while avoiding unnecessary growth and virtual storage use due to an accumulation of unnamed sections.

- Support is provided to allow tasks in a WLM enclave that have subtasks to leave that enclave and for subtasks of a task joining a WLM enclave to be joined automatically to that enclave. In prior releases, enclave tasks with subtasks are not allowed to leave an enclave. Any subtasks created by a task that has joined an enclave are automatically added to the same enclave. This new suppor is designed to allow a task to leave an enclave along with its subtasks. This new support also allows a task joining an enclave to have its non-enclave subtasks joined to that enclave.

- XCF provides a simplified set of interfaces for passing messages within a Parallel Sysplex. New services are designed to allow a server to be established to process messages and for messages to be sent across the sysplex without first joining an XCF group. This is intended to make it easier to exploit XCF services for applications that do not require the member management and monitoring provided by the XCF group services interfaces.

Language Environment adds support for initializing multiple CEEPIPI main environments under one task control block (TCB) and tc provide access to a user word for each environment both within and outside it. This is intended to help you migrate Preinitialization Compatibility Interface (PICI) environments to CEEPIPI.

•IBM Tivoli Directory Server for z/OS (LDAP) has several enhancements and new functions.

•z/OS CIM Server provides sequence identifiers in the indications profile. This is designed to allow unsuccessful deliveries to be retried by the CIM Server, lost and duplicate deliveries to be detected by a WBEM listener, and a listener to reorder any indications that arrive out of order.

•SDSF REXX support is provided for reading the sysplex-wide operations log (OPERLOG), in addition to the single system log (SYSLOG). The support for OPERLOG is designed to be very similar to that for SYSLOG, allowing records to be selected by start time and date and providing the ability to specify a maximum number of records to be returned. Additionally, the OPERLOG displa is designed to show messages in the same colors in which they would be displayed on a console. An SDSF Java interface also supports access to OPERLOG. These enhancements are intended to make it easier for you to perform complex repetitive functions programmatically using SDSF.

•z/OS XML System Services supports a binary XML format, Extensible Dynamic Binary XML (XDBX). XDBX supports a subset of XML constructs in a new binary form, and appropriate use of XDBX is expected to provide performance improvements for validating parsing operations compared to conventional XML text documents.

Availability: zSeries File System (zFS) is updated with self-healing capability for internal errors, improving the availability of any application using zFS, such as WebSphere Application Server for z/OS.

- Predictive Failure Analysis (PFA), adds additional monitors for JES2 spool utilization and enqueue activity. In addition, PFA adds the ability to automatically invoke Runtime Diagnostics to help you pinpoint the source of the anomaly even faster.

Runtime Diagnostics adds additional processing for GRS latch and z/OS UNIX System Services file system latch contention.

- JES2 is designed to allow you to discontinue the use of a spool volume dynamically in a relatively short period. A new $M SPOOL command will allow you to specify that either a new spool data set of equal or greater size on a different volume be used to replac an existing spool data set.
- I/O Supervisor (IOS) improvements to I/O error recovery are provided.
- The Direct Access Device Storage Manager (DADSM) component provides Dynamic Exit support for both the preprocessing exit (IGGPRE00) and the postprocessing exit (IGGPOST0).

•The DISPLAY OMVS,WAITERS display is enhanced to show a table for file latch activity. Similar to the table for file system latche it also shows information about the holders, waiters, latches, file device numbers, file inode numbers, latch set identifiers, file names, and owning file systems.

- DFSMShsm control data set (CDS) backup processing is enhanced.
- To detect unresponsive name servers and issue operator messages when one is detected. In Version 1.13, this support is taken a step further so that the system resolver will automatically stop using name servers that become unresponsive, and automaticall start using them again when they recover.

•The IBM Tivoli Directory Server for z/OS (LDAP) is extended to allow you to specify flexible search and time limits for LDAP group This new support is designed to enable LDAP administrators to balance LDAP server-enforced limits and the time needed by specific applications.

- RMF provides additional system suspend lock, Global Resource Serialization (GRS) enqueue, and GRS latch contention information in a new Postprocessor Serialization Report (available in XML output format) and also in new SMF Type 72 subtype 5 records. This is expected to help make it easier to respond to serialization-related performance issues.
- RMF also takes advantage of new WLM services to provide response time distribution information about all service classes for which velocity goals are set, in addition to those for which response time goals are set, in the Workload Activity Report. This is intended to give you a better view of response time distribution across all WLM service classes.
- PDSE support is enhanced with two new commands to simplify the identification of and recovery from some PDSE problems by allowing you to display all users of a specified PDSE, and to discard stale pages from PDSE directory cache.

Ease of use z/OSMF

- Clone z/OS images and deploy software more easily and consistently, using a new software deployment task
- Define new storage volumes to SMS quickly and easily, using a new DASD management task
- Support easier monitoring of z/OS Capacity Provisioning Manager status, using a new capacity provisioning task
- Create a more unified z/OS experience for system programmers by enabling a new web-enabled ISPF interface from z/OSMF
- Make it easier to maintain highly secure network connections with an updated Configuration Assistant for z/OS Com Server
- Consolidate monitoring for z/OS and Linux workload server resources using integrated performance data gatherers for Linux on System z, Linux on System x®, and AIX® systems in the updated Resource Monitoring task • Improve monitoring and management of incidents, and sending of diagnostic data using the updated Incident Log task
- Integrate the z/OS experience with the ability to link and launch between z/OSMF applications and between z/OSMF and other browser-accessible applications