



New and Improved

**IBM Consolidated Service Test and Revised
Recommended Service Upgrades for z/OS
and OS/390**



IBM Consolidated Service Test (CST) and Revised Recommended Service Upgrade (RSU) for z/OS and OS/390

IBM has established a Consolidated Service Test (CST) team to enhance the way IBM tests and recommends maintenance for z/OS and OS/390 software. The CST team consists of product test representatives from the operating system and the major subsystems, including z/OS, OS/390, CICS, DB2, IMS and MQSeries. The goal is to improve the overall quality of service and provide a common maintenance recommendation for all products on the platform.

Products and Levels Tested

CST testing is in addition to existing testing programs and does not replace any current testing performed by the products. CST is currently focused on the Parallel Sysplex environment. It is a customer-like production sysplex environment in an IBM test lab with batch and data-sharing applications that exploit and stress the latest functions with up to two levels of subsystems on three levels of z/OS or OS/390 systems. The key products specifically tested in CST include:

- Z/OS
- OS/390
- CICS Transaction Server for OS/390
- DB2 UDB for OS/390
- IMS
- MQSeries for OS/390.

The Websphere environment will be considered in the future.

RSU

Recommended Service Upgrade (RSU) has been available monthly with preventive maintenance deliverables, such as, ESO and CBPDO¹, on the OS/390 platform since 1996. It is the subset of the maintenance that is recommended for installation for all customers. RSU is provided as a file on the service deliverables in the form of SMP/E ++ASSIGN statements for *RSUyymm*. RSU maintenance has been tested monthly and recommended as the preventive service strategy for OS/390 and z/OS elements for the past five years.

Although the original RSU is available for all products on the platform, not all products make the same preventive service recommendation. The recommendation has varied by product. For example, OS/390 recommended RSU, CICS recommended all maintenance be installed, and DB2 created RMLs².

The criteria for inclusion in the original RSU was:

- Severity 1 and 2 APARs
- HIPER APARs

¹ Enhanced Service Offering (ESO) and Customer Built Product Delivery Offering (CBPDO) are preventive maintenance deliverables available in the US. May differ in other countries.

² Recommended Maintenance List (RML) is a specific recommendation tested by DB2.

- Special Attention APARs
- PE Fixes
- Security/Integrity APARs

Revised RSU

Beginning in November, 2001 the contents of the RSU was changed based on the maintenance that has been installed and run through the new CST cycle for at least one month. In CST the product recommended maintenance is installed and tested. After testing is complete the maintenance is recommended, as before, in the form of SMP/E ++ASSIGN statements for *RSUyyymm*, included with the standard preventive maintenance deliverables. (*yyymm* now refers to the year and month that the service *completed the test cycle*.) The revised RSU can also be ordered in SUF³.

The benefits of the revised RSU are:

- Better testing of maintenance by each of the participating products in a parallel sysplex environment.
- Recommendation for RSU was identified by the participating product experts.
- Testing is completed prior to the RSU being made available. The original RSU was based on the selection criteria and the testing was done after the RSU was generally available.
- Allows for consistent maintenance recommendation across participating products.

The maintenance included in each RSU differs depending on whether it is a monthly or quarterly RSU.

Quarterly and Monthly Consolidated Service Test Cycles

CST has a quarterly testing cycle. Each quarter begins by installing **all** service from the prior quarter and defining test scenarios to exploit new product functions while existing workloads are being executed. During the second month of the quarter, CST runs the new test scenarios, identifies any problems and applies fixes, as necessary. In the final month of the quarter, recovery tests are performed and workloads are run in a high stress environment. At the end of the quarter, results are published in the Consolidated Service Test report.

At the end of each month, between quarterly recommendations, CST will provide a delta recommendation for customers whose preventive strategy requires more frequent maintenance updates. The monthly recommendation supports the most recently published CST quarterly recommendation. It includes HIPER, PE fixes, and Security/Integrity fixes that have been installed at the beginning of the month and tested for the duration of the month.

Quarterly RSUs (RSUyy03,RSUyy06,RSUyy09,RSUyy12) contain:

- All service, Severity 1, 2, 3, 4 APARs, as of the end of the prior quarter.
- HIPER, PE fixes, Security/Integrity APARs that have completed a 30 day CST cycle in that month.
- CST corrective fixes.

³ Service Update Facility (SUF) is a web based service deliverable.



Monthly RSUs (RSUyy01,RSUyy02,RSUyy04,...)contain:

- HIPER, PE fixes, Security/Integrity APARs that have completed a 30 day CST cycle in that month.
- CST corrective fixes.

NOTE: The first revised RSU was RSU0109. It contained all service through 0106 plus HIPER, PE, and Security/Integrity fixes through 0108.

General Maintenance Recommendations using revised RSU

IBM now has the same recommendations for key OS/390 and z/OS products. Upgrade RSU preventive maintenance every 3 months (or maximum of 6 months). Start with the latest RSU available. Monitor HIPER and PE fixes by reviewing weekly and installing as needed.