

IBM Sub-Capacity Reporting Tool (SCRT)

Current Levels

IBM's policy requires SCRT reports to be created using the most current Version of SCRT. However, IBM does not require a specific Release or Modification level. Therefore, you may select the appropriate release and modification

Last Updated: April 5, 2022

Minimum Version Required: Version 28

V.R.M
28.2.4

SCRT Environment
[Download for z/OS](#)

[Download for Linux](#)

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[z/OS APAR OA62735](#)

Supported Report Types

- Sub-Capacity Reports for z/OS, z/TPF, and z/VSE
- Multiplex Reports for z/OS and z/TPF
- Enterprise Tailored Fit Reports for z/OS
- Sub-Capacity Reports and Multiplex reports for independent software vendor (ISV) products

Features and updates listed by Version, Release, and Modification level are described on the following pages.

Features and updates listed by Version, Release, and Modification level (V.R.M):

Version/Date	Description
<p>16 March 2022 (Version 28.2.4)</p>	<p>Support has been added for:</p> <ul style="list-style-type: none"> • Additional NO89 products. Updates to the NO89 DD are required to self-report usage or non-usage of these products: <ul style="list-style-type: none"> ○ IBM Z JCL Expert – 5698-020 ○ IBM Z Workload Scheduler 10 – 5698-T09 • z16 processor type 3931
<p>17 December 2021 (Version 28.2.3)</p>	<p>This release changes the following behavior:</p> <ul style="list-style-type: none"> • When the NO89 DD is missing specifications for multiple products, SCRT will issue one SCRTOOL212 message for each missing product before terminating. Previously, SCRT would terminate after issuing a single SCRTOOL212 message for the first missing product. • The command line interface for SCRT on Linux and Windows now supports the "--report-time" parameter, equivalent to the REPORT_TIME control statement for the z/OS batch interface. Accepted values for "--report-time" are UTC_TIME and SPECIAL_LOCAL_TIME. • The name for product 5655-PYT has been updated from "IBM Open Enterprise Python for z/OS" to "IBM Open Enterprise SDK for Python" • The product family name "IBM SDK for Node.js - z/OS" has been updated to "IBM Open Enterprise SDK for Node.js" <p>Support has been added for:</p> <ul style="list-style-type: none"> • New product: <ul style="list-style-type: none"> ○ IBM Open Enterprise SDK for Node.js 16 – 5655-NOE • New z/OS priced feature: <ul style="list-style-type: none"> ○ z/OS V2 Advanced Data Gatherer
<p>17 September 2021 (Version 28.2.2)</p>	<p>This release fixes the following problems:</p> <ul style="list-style-type: none"> • OA61898 – Section V6 does not properly indicate hours that occurred near an IPL for zNALC systems. <p>This release changes the following behavior:</p> <ul style="list-style-type: none"> • The product family name "IBM Z Common Data Provider" has been changed to "IBM Z Operational Log and Data Analytics" <p>Support has been added for:</p> <ul style="list-style-type: none"> • New products: <ul style="list-style-type: none"> ○ IBM Z Operational Log and Data Analytics 5 – 5698-LDA ○ IBM Z Anomaly Analytics with Watson 5 – 5698-ANA ○ IBM Observability by Instana Application Performance Monitoring on z/OS - 5698-5A1
<p>15 June 2021 (Version 28.2.1)</p>	<p>This release fixes the following problems:</p> <ul style="list-style-type: none"> • Section B5 in a Country Multiplex report or an Enterprise Tailored Fit report may report an incorrect value in the "Number of processors in Multiplex" field that does not correspond to the actual number of processors in the report. The actual CPCs reported in section B5 is correct. This can occur when data provided for a CPC lies entirely outside of the report period bounds.

Version/Date	Description
	<p>This release changes the following behavior:</p> <ul style="list-style-type: none"> • The name for product 5697-VTP has been updated from “IBM Wazi Virtual Test Platform” to “IBM Z Virtual Test Platform V1” <p>Support has been added for:</p> <ul style="list-style-type: none"> • New products: <ul style="list-style-type: none"> ○ IBM Z Virtual Test Platform V2 – 5696-VTP
<p>10 May 2021 (Version 28.2.0)</p>	<ul style="list-style-type: none"> ○ This release fixes the following problems: <ul style="list-style-type: none"> ○ An error in calculating hourly MSU values for z/VSE when one or more of the SCRT89 reporting intervals reports a fractional MSU value of less than 1 MSU is resolved. ○ Support has been added for: <ul style="list-style-type: none"> ○ Using a Tailored Fit Pricing (TFP) Solution ID provided in SMF89 records to associate a z/OS system with a Tailored Fit Pricing solution as an alternative to using the CONTAINER control statement. z/OS support for this capability will be provided by APAR OA60198. ○ A new non-MSU based metric for products that are based on the number of CPCs on which the product is enabled and/or active. ○ Interval rate data and detailed interval rate data options have been added to the Processing Options panel of the SCRT GUI. ○ New products: <ul style="list-style-type: none"> ○ IBM Z Distribution for Zowe V1 – 5698-ZWE
<p>4 January 2021 (Version 28.1.2)</p>	<ul style="list-style-type: none"> ○ This release fixes the following problems: <ul style="list-style-type: none"> ○ OA60511: Corrupt report not accepted by LMS due to embedded null character in feature name in section F5. ○ OA60376: Incorrect MSUs reported for a Tailored Fit Pricing solution when an LPAR contributing to the container also has Tenant Resource Groups (TRGs) contributing to a different container AND the LPAR is part of capacity group that has exceeded the group capacity. ○ OA60678: UnsupportedOperationException when using the INTERVAL_RATE_DATA and/or DETAIL_INTERVAL_RATE_DATA control statements and SMF intervals span the last hour of a year and the first hour of the next year.
<p>3 November 2020 (Version 28.1.1)</p>	<ul style="list-style-type: none"> ○ This release fixes the following problems: <ul style="list-style-type: none"> ○ Dynamic allocation failure creating a PDS member with an @ symbol when running SCRT under code page IBM-1141. ○ Support has been added for: <ul style="list-style-type: none"> ○ Additional NO89 products. Updates to the NO89 DD are required to self-report usage or non-usage of these products: <ul style="list-style-type: none"> ○ IBM Workload Scheduler distributed Agent for z/OS V9 – 5698-AAR ○ IBM Tivoli Workload Scheduler distributed Agent for z/OS V8 – 5698-AA3 ○ IBM Migration Utility for z/OS V5 – 5698-MG5 ○ New products: <ul style="list-style-type: none"> ○ IBM Debug for z/OS V15 – 5755-Q50 ○ IBM Developer for z/OS Enterprise Edition V15 – 5755-AC5
<p>10 October 2020 (Version 28.1.0)</p>	<ul style="list-style-type: none"> ○ This release fixes the following problems: <ul style="list-style-type: none"> ○ OA60126: SCRT may incorrectly determine a product to be active when the product ID (PID) appears in SMF89 records but the product owner is not IBM. ○ In ISV reports, SCRT incorrectly applies a Mobile Workload Pricing (MWP) reduction to the z/OS product when the MWP input is from WLM. ○ H4 may fail to report missing data in cases where an INCLUDE control statement was used AND when there were multiple systems active within an LPAR during the report period.

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	<ul style="list-style-type: none"> ○ The GMT offset may be incorrectly determined for some report sections. ○ This release changes the following behavior: <ul style="list-style-type: none"> ○ Section B5 and the individual machine header sections (MxCx) now report the CPC MSU Peak 4HRA and CPC MSU Consumption. The reported values correspond to the CPC values in the N5 and N7 sections. ○ For ISV SCRT reports, product headers are changed from “MLC Product Name” and “MLC Product ID” to “Product Name” and “Product ID” respectively in sections B5, E5, and E7, as ISV products are not necessarily licensed to MLC terms. ○ For ISV SCRT reports, the section V5 title is changed from “MOBILE/ZCAP PRICING DETAILED DATA” to “DETAILED DATA” Mobile and zCAP offerings do not apply to ISV products. ○ SCRT v28 is the last version of SCRT that will run under a Java 7 JVM. When SCRT v28 is run under a Java 7 JVM, new message SCRTTOOL038 is issued to indicate that the Java level is deprecated. The message is a warning only and does not affect report generation. ○ Support has been added for: <ul style="list-style-type: none"> ○ System Recovery Boost reporting. New section G8 indicates the number of report hours in which a System Recovery Boost event occurred. New section V8, enabled via the GENERATE_DETAILED_DATA control statement (or GUI or CLI equivalent) indicates System Recovery Boost events on a per hour, per image basis. ○ New products: <ul style="list-style-type: none"> ○ IBM Wazi Virtual Test Platform – 5697-VTP ○ New z/OS priced features: <ul style="list-style-type: none"> ○ IBM z/OS Workload Interaction Correlator ○ IBM z/OS Authorized Code Scanner
26 June 2020 (Version 27.2.2)	<ul style="list-style-type: none"> ○ This release fixes the following problems: <ul style="list-style-type: none"> ○ OA59655: Some entitled features of z/OS may appear active in section F5 of the SCRT report even if they are explicitly disabled in the IFAPRDxx PARMLIB member. SCRT processing now checks the SMF89T2FLAGS field of the SMF89 subtype 2 records to determine if the feature is enabled and will not report the feature as active, even if the feature was successfully registered. ○ OA59798: The SCRT hour corresponding to the value in the SMF70_IPL_TIME field is determined incorrectly in some scenarios. This results in incorrect “missing minutes” in sections H7 and V6. SCRT now computes the correct hour for IPLs. ○ This release changes the following behavior: <ul style="list-style-type: none"> ○ The “MWP_Input_From_WLM” special condition is no longer indicated in section D5 for Enterprise Tailored Fit Pricing reports as this condition does not apply to Tailored Fit Pricing solutions. No MSU adjustments for Mobile Workload Pricing are or were made for these solutions. ○ Support has been added for: <ul style="list-style-type: none"> ○ New products: <ul style="list-style-type: none"> ○ IBM Z Common Data Provider V2 - 5698-ABN ○ IBM Z Operations Analytics V4 – 5698-AAV ○ IBM Open Enterprise Python for z/OS - 5655-PYT
10 May 2020 (Version 27.2.1)	<ul style="list-style-type: none"> ○ This release fixes the following problems: <ul style="list-style-type: none"> ○ When running SCRT on Windows or Linux, processing SMF records that were improperly transferred or otherwise corrupted could result in a stack trace and termination of SCRT. Processing is updated to issue new message SCRTTOOL056 to indicate there was an

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	<ul style="list-style-type: none"> ○ error reading the SMF or SCRT89 records <ul style="list-style-type: none"> ○ Integer division in the calculation of MSUs consumed in Tenant Resource Group (TRGs) resulted in loss of precision and possibly inaccurate MSU consumption values for Tailored Fit Pricing solutions. Processing is updated to correctly calculate MSU consumed in TRGs. ○ The "Missing LPAR Data" and "Missing CPC Data" indicators in section B5 of a Country Multiplex Report or an Enterprise Tailored Fit report incorrectly indicated "N" when all missing data incidents (as reported in sections H4 or H6) lasted exactly one hour. Section B5 is updated to indicate there is missing data when there are any missing data incidents regardless of duration. ○ This release changes the following behavior: <ul style="list-style-type: none"> ○ Interval Rate Data algorithms have been updated to not consider periods that do not include any data from SMF70 records. This can impact the system chosen as the representative system for the given (and subsequent) periods and, therefore, the reported MSU rate information reported in sections V9 and I5. ○ The calculation of MSUs to exclude based on the CPU time specified on an EXCLUDE MSU_CONSUMPTION control statement is updated to be consistent with other calculations involving the conversion of CPU time to MSU. This can result in up to a 1 MSU difference in the calculated value. ○ Support has been added for: <ul style="list-style-type: none"> ○ New products: <ul style="list-style-type: none"> ○ IBM Z Open Automation Utilities – 5698-PA1 ○ IBM Connect:Direct for z/OS V6 – 5655-X12 ○ This document has been updated to indicate that support for the z15 T02 processor (8562) was added in SCRT version 27.2.0
10 March 2020 (Version 27.2.0)	<ul style="list-style-type: none"> ○ This release fixes the following problems: <ul style="list-style-type: none"> ○ When SMF records are generated from multiple measurement facilities (for example, by both RMF and third party products) for the same system image, SCRT may over accumulate dispatch time, affecting calculations derived from those values, including MSU consumption metrics. SCRT processing has been updated to accept records from only a single measurement facility on an hour-by-hour basis and to issue message SCRRTTTOOL070 when multiple monitoring products were detected. ○ In some scenarios, SCRRTTTOOL158 was not issued in instances where it should have been. The issue is corrected and SCRT will issue SCRRTTTOOL158 and terminate processing when appropriate as described in the SCRT User's Guide. ○ This release changes the following behavior: <ul style="list-style-type: none"> ○ Sections H4 and H6 now include a summary line indicating the total number of missing hours. ○ Section H7 no longer requires individual justification for each LPAR's missing minutes. A single justification is required for each H7 section that indicates missing time. Per LPAR justifications can be optionally provided. ○ Product 5655-Y31 was renamed from "WebSphere Business Rules for z/OS V8" to "IBM Operational Decision Manager for z/OS V8" in October 2018. The SCRT product catalog has been updated to report the new name. ○ Support has been added for: <ul style="list-style-type: none"> ○ Feature reporting for z/OS. Priced and unpriced features of z/OS are reported in new section F5. ○ Optional interval rate data reporting. New section I5 indicates hours in which the CPC MSU rate exceeded the permanent machine capacity for any 15 minute period within the hour. This section is disabled by default and should only be enabled at the direction of

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	<p>IBM.</p> <ul style="list-style-type: none"> ○ Optional detailed interval rate data reporting. New section V9 indicates the MSU rate (and related metrics) of the CPC at a sub-hour granularity. This section is disabled by default and should only be enabled at the direction of IBM. ○ SCRT now issues message SCRTTOOL069 to indicate the number and type of SMF records that were dropped because they were duplicates. ○ z15 T02 processor type 8562 ○ New Products: <ul style="list-style-type: none"> ○ IBM SDK for Node.js on z/OS, V8 - 5655-DKN ○ IBM SDK for Node.js on z/OS, V12 – 5655-NJS ○ IBM Z Table Accelerator – 5698-TA1
<p>16 December 2019 (Version 27.1.4)</p>	<ul style="list-style-type: none"> ○ This release fixes the following problems: <ul style="list-style-type: none"> ○ OA58635: A corrupted SMF or SCRT89 record can result in a null pointer exception and inability to generate a report. Processing is updated to drop some instances and forms of record corruption, allowing a report to be generated. ○ This release changes the following behavior: <ul style="list-style-type: none"> ○ When warning message SCRTTOOL155 is issued, SCRT will now end with RC 4 instead of RC 0. ○ Support has been added for: <ul style="list-style-type: none"> ○ Reference product lines that indicate simultaneous peak four hour rolling average across related product families, such as between MLC and VUE product variants. These new lines appear in the IPLA product groups in sections E5 and B5 and in supporting sections. The new reference product lines are: <ul style="list-style-type: none"> ○ IPLA CICS-Based ○ IPLA COBOL-Based ○ IPLA DB2-Based ○ IPLA IMS-Based ○ IPLA MQ-Based ○ IPLA PL/I-Based ○ This document has been updated to indicated that support for the z15 processor was added in SCRT version 27.1.2
<p>28 October 2019 (Version 27.1.3)</p>	<ul style="list-style-type: none"> ○ This release fixes t following problems: <ul style="list-style-type: none"> ○ OA58245: Product peak reported outside of report period When input SMF data contains information about systems that have data only for time periods outside the report period, SCRT may incorrectly compute the report period boundaries. Processing is updated to ignore these systems when determining the report period bounds. ○ When multiple z/OS systems with the same SYSID run on multiple LPARs simultaneously, SCRT may associate effective dispatch time with the incorrect system, resulting in incorrect estimated MSU values in section H4. Processing is updated to assign dispatch time to the correct systems. ○ When an EXCLUDE statement specifies a CPC that does not exist in the data, processing terminates without producing a report. Processing is updated to continue processing, produce a report, and end with RC=4. ○ Support has been added for: <ul style="list-style-type: none"> ○ The INCLUDE command now supports *ALL for the IMAGE_ID keyword. Specifying *ALL will include all systems on the specified CPC.
<p>2 September 2019 (Version 27.1.2)</p>	<ul style="list-style-type: none"> ○ This release fixes the following problems:

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	<ul style="list-style-type: none"> ○ OA57891 – The section D5 special condition "Global Performance Data Control Authority was not enabled during one or more intervals" is incorrectly detected under some conditions. ○ OA58143 – An external spreadsheet program can change the SCRT report formatting, causing LMS to reject the report as corrupted. ○ OA577781 – Section H4 estimated peak total may not match the sum of individual systems. ○ Support has been added for: <ul style="list-style-type: none"> ○ z15 processor type 8561 ○ New products: <ul style="list-style-type: none"> ○ IBM Z Service Automation Suite V1, 5698-SA1. NOTE: This is a NO89 product. Updates to the NO89 DD are required to self-report usage or non-usage of the product.
30 June 2019 (Version 27.1.1)	<ul style="list-style-type: none"> ○ This release fixes the following problems: <ul style="list-style-type: none"> ○ OA57741 – The z/OS web download (scrttool.tar.gz) did not have the intended unix permissions. ○ OA57744 – The SCRT GUI does not apply the NO89 product assignments stored in the user profile. ○ OA57754 – Serviceability code added in SCRT V27.1.0 causes extended processing time when compared to earlier SCRT versions. ○ z/OS 1.13 and earlier systems with dedicated processors may show incorrect MSU consumption values in section N7.
10 June 2019 (Version 27.1.0)	<ul style="list-style-type: none"> ○ Support has been added for: <ul style="list-style-type: none"> ○ Enterprise Tailored Fit Reporting. See the SCRT User's Guide for a full description of the changes related to Enterprise Tailored Fit Reporting. ○ The INCLUDE control statement. ○ Specifying NO89 products per container via the UPDATE CONTAINER control statement ○ A new IPLA product entry, "IPLA IMS-based", representing the simultaneous peak 4HRA value of IMS MLC and IMS VUE products. ○ Section H4 no longer reports hours as missing if they were excluded via an EXCLUDE statement. ○ New section G5 reports capacity changes on an hourly basis. ○ New section G6 reports the number of hours in which SCRT enforced either the defined capacity or the group capacity and the extent to which the actual value exceeded the soft capacity value. The "z/OS Uncapped" product reports what the z/OS peak 4HRA would have been if SCRT had not enforced soft capacity values. ○ New products: <ul style="list-style-type: none"> ○ IBM Z Batch Resiliency, 5698-BR1 ○ This release changes the following behavior: <ul style="list-style-type: none"> ○ In multiplex reports, products with non-MSU based metrics are now reported under the heading "IPLA Product Name – non-MSU based". Previously, they were reported with other IPLA products. ○ SCRTTOOL135 is updated to show the original formatting of the control statement in error, when possible. ○ Under Linux, error logs are written to the \$XDG_DATA_HOME/SCRT directory if it exists, or \$HOME/.local/SCRT if it does not. Previously, error logs were written to the configuration directory. ○ New headers are introduced in Section E7 to separate MLC and IPLA products. ○ This release fixes the following problems:

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	<ul style="list-style-type: none"> ○ An error in which some data from SMF 89 records could be attributed to the incorrect hour has been corrected. ○ An error in applying the GMT offset from SMF records originating from z/OS 1.4 or earlier systems without APAR OA11036 applied has been corrected.
1 April 2019 (Version 26.1.3)	<ul style="list-style-type: none"> ○ This release changes the following behavior: <ul style="list-style-type: none"> ○ LPAR groups that fall entirely outside the report period are not reported. ○ Section H7 is updated to not require justification for a system that is designated to be part of a different container via the CONTAINER control statement. ○ Processing is updated to pre-fill justification in section H7 when an image is repeated in multiple H7 sections. The first instance of missing data for a system will require justification; subsequent sections will indicate that justification was required in a previous section.
1 March 2019 (Version 26.1.2)	<ul style="list-style-type: none"> ○ Support has been added for: <ul style="list-style-type: none"> ○ New products ○ This release fixes the following problems: <ul style="list-style-type: none"> ○ OA56741 – Z/OS LINE INCORRECTLY APPEARS IN REPORT ALONG WITH Z/OS (ZNALC) WHEN Z/SE OR Z/TPF EXIST ON THE CPC. ○ OA56989 - SECTION D5 CONTAINS MESSAGE SAMPLE SOLUTION ID FOUND IN SMF DATA FOR A CONTAINER THAT WAS IGNORED. ○ OA56875 - NULLPOINTEREXCEPTION WHEN GENERATING AN SCRT REPORT WITH DETAILED DATA ENABLED AND ONE OR MORE IMAGES IS MISSING LPAR NAME ○ OA56951 - SCRTTOOL053 ISSUED FOR A ZNALC MACHINE WHEN SMF89 RECORDS ARE MISSING ○ OA56882 has been added to the list of fixes included in SCRT 26.1.1 (below)
10 February 2019 (Version 26.1.1)	<ul style="list-style-type: none"> ○ Support has been added for: <ul style="list-style-type: none"> ○ Enhanced product catalog (ISVLIB) support for Independent Software Vendor (ISV) SCRT reports. Usage of this feature requires support from participating ISVs. ○ The LPAR_COMMENT control statement is enhanced to accept a list of LPAR names to which the comment should apply. When a list of LPAR names is supplied, they must be surrounded by parenthesis. The control statement will also accept *ALL to match all LPARs. ○ The GUI no longer requires SMF data to have a .smf extension. ○ This release changes the following behavior: <ul style="list-style-type: none"> ○ Section H6 will now report and require justification for missing data incidents lasting one hour. Previously, H6 would only report missing data incidents lasting more than one hour. ○ When a CONTAINER control statement specifies a CPC that is not included in the SMF data, SCRT will issue message SCRTTOOL324, continue processing, and set return code 4. Previously, SCRT would terminate processing and set return code 16. ○ This release fixes the following problems: <ul style="list-style-type: none"> ○ OA56882 BSAM read error on CSVINPUT datasets. SCRTTOOL250 was issued, but the job ended with RC=0 instead of RC=4 ○ OA56613 SCRTTOOL603 RC=16 WHEN SCRTTOOL IS RUN WITH COUNTRY MULTIPLEX AND CONTAINERS AND THERE IS MISSING SMF RECORDS. ○ OA56744 SCRT 26.1.0 DISCARDS SMF70 RECORDS FROM Z/OS 1.7 AND EARLIER SYSTEMS WHEN SMF70 RECORDS PROCESSED BEFORE SMF89 RECORDS ○ NullPointerException when a CEC has no systems such as due to excluded data or data that is exclusively outside of the report period. ○ Section H4 incorrectly reports missing data when an LPAR had multiple sysids IPLd during the month and the LPAR was excluded. ○ Section M5 does not show the correct end date/time for TPF “nodata” LPARs

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	<ul style="list-style-type: none"> ○ SCRTTOOL135 message does not reflect the command as originally entered ○ When an exclude is specified in local time, but the data requires that times be reported in UTC, Section D5 may not report the start and resume times correctly. ○ In a Country Multiplex Report, machines that have all LPARs excluded may show container related data from other machines. ○ Sections V5 and W3 may report contributions to the “z/OS V2 (Traditional)” product from LPARs that are assigned to a container.
10 October 2018 (Version 26.1.0)	<ul style="list-style-type: none"> • Support has been added for: <ul style="list-style-type: none"> • Section E5, and section B5 in a multiplex report, and various supporting sections now include a product line for "z/OS Unreduced." This product line reflects the z/OS MSU value prior to any reductions from IBM Container Pricing for Z solutions, IBM Z Collocated Application Pricing (zCAP), or other IBM MSU reduction programs. <i>Note, this product will appear in reports generated after December 1, 2018.</i> • When the use of an EXCLUDE statement results in all data for a machine being excluded, SCRT will now produce a report for the machine reflecting no usage. • Section N7 will now report z/VSE and z/TPF LPARs. The operating system of the LPAR is indicated in a new column to the right of the existing columns. • Section V5 now includes NO89 products • New Section H7 reports the completeness of data collection for solutions billed based on an MSU consumption metric at sub-hour granularity. • New Section V6 shows the number of unreported minutes of SMF70 data on an hour by hour basis. This section is only when the GENERATE_DETAILED_DATA control statement is used. • The IWPTRACE DD can be specified to generate a supplemental report showing, per hour and per LPAR, the reasons why the IWP defining program was not eligible for the IWP algorithm • This release fixes the following problems: <ul style="list-style-type: none"> • OA56162 – SCRT INCORRECT MVM ROOT CALCULATION WHEN CONTRIBUTING PRODUCT IS ZCAP DEFINING PROGRAM • NO89 products did not appear in section V5 • Various GUI fixes
24 August 2018 (Version 25.3.4)	<ul style="list-style-type: none"> • Support has been added for: <ul style="list-style-type: none"> • New products • CPSTRACE 2 – A second section has been added to the optional CPSTRACE output. This section shows per container, per hour MSU consumption values. CPSTRACE 1 continues to show the per container, per hour four hour rolling average. • This release fixes the following problems: <ul style="list-style-type: none"> • OA55769 – Section H4 requires a comment for times when the LPAR was excluded. • OA55865 – Section H6 requires a comment for times when the LPAR was excluded. • OA55867 – Under Country Multiplex processing, SCRT incorrectly reports in UTC time instead of local time under some circumstances. • OA55869 – SCRT fails with an NPE if an unknown machine type is found in the data. • NullPointerException when selecting a non-existent ISV library file in the GUI. • Incorrect NO89 product selection list when switching ISV library files in the GUI. • Incorrect MSU consumption calculations in CPS header sections and section N7 when input data comes from multiple OS releases and in which one of the OS releases does not include machine capacity factors in the SMF or SCRT89 data.
25 June 2018 (Version 25.3.3)	<ul style="list-style-type: none"> • Support has been added for: <ul style="list-style-type: none"> • New customer number formats • This release fixes the following problems: <ul style="list-style-type: none"> • OA55661 – SCRT fails to generate a report due to null pointer exception when using dedicated processors or processors with wait completion enabled • OA55613 – SCRT may incorrectly attribute calculated MSU values to multiple z/TPF systems when multiple z/TPF systems are active on the same LPAR during the

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	<ul style="list-style-type: none"> reporting period • OA55628 – SCRT fails to generate a report due to ClassCastException • OA55665 – SCRT report is not accepted by LMS when the z/TPF Transformation Engines offering is used due to incorrect hash calculation in section D5 • OA55866 - SCRT CALCULATION OF THE GROUP CAPACITY ENFORCEMENT LIMIT MAY BE OVERSTATED • Section H4 estimated peak hour can fall outside of the report period • Section H4 estimates can be inaccurate in some circumstances. The estimate calculation algorithm has been updated.
25 May 2018 (Version 25.3.2)	<ul style="list-style-type: none"> • Support has been added for: <ul style="list-style-type: none"> • Peak hour of consumption has been added to section N7 • Support for Java 9 and Java 10 has been added to the Windows/Linux GUI • This release fixes the following problems: <ul style="list-style-type: none"> • OA55541 – Exclude statement not applied for some container related report sections • OA55425 – ConcurrentModificationException processing an LPAR that runs both zNALC and traditional z/OS during the report period • OA55471 – Null pointer exception when clicking the Details or Remove button on the GUI exclude panel • MSU consumption calculations do not correctly account for CPU wait time in certain machine configurations • An excluded LPAR is still considered when calculating group limit enforcement • zNALC LPARs in section H4 can appear without zNALC identifier • Empty groups appear in U5 • LPARs with no consumption appear in N7 • WLA capping does not get shown in CPSTRACE • The Generate Report button in the GUI is not enabled until the Browse button is clicked • Null pointer exception when changing the ISV library file in the GUI • Can not proceed past the customer information panel in the GUI for ISV reporting
30 April 2018 (Version 25.3.1)	<ul style="list-style-type: none"> • Support has been added for: <ul style="list-style-type: none"> • Future function • This release fixes the following problems: <ul style="list-style-type: none"> • The GUI does not allow navigation past the customer information panel in some circumstances • Container summary can appear in section B5 when no containers are active during the reporting period
10 April 2018 (Version 25.3.0)	<ul style="list-style-type: none"> • Support has been added for: <ul style="list-style-type: none"> • z14 3907 machine type • Enhanced missing data details in section H4. Section H4 will now show estimated MSU values for each data collection incident based on information provided by other LPARs on the system. Section H4 will also show an estimated peak MSU value for the operating system had all the missing data been collected and attributed to the indicated operating system. • GSSP products running in a container will be included in section J7 as an alternate metric. • Whole LPARs that are part of a Container Pricing solution are now subject to group capping and are capped independently from traditional LPARs. • Country multiplex pricing is available for ISV reports. • Section D5 reports the ignored periods for containers. • Section D5 reports when a sample solution id has been found in the data and is not ignored. • Section D5 reports when containers are found to be running on ineligible machine types. • New section T6 reports container MSU consumption contributors. • The GUI has been enhanced to use the entirety of the window area. • SCRT will no longer exit without generating a report when the image specified on a CONTAINER control statement is not found on the CPC. Instead, message SCRTTOOL329 will be issued as a warning and processing will continue.

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	<ul style="list-style-type: none"> • This release fixes the following problems: <ul style="list-style-type: none"> • OA54843 SCRT CONTROL STATEMENTS MLC_ALL AND IPLA_ALL DO NOT PRODUCE THE E5 SECTIONS (ALL) LINE FOR ALL PRODUCTS • OA55052 SCRT ISSUES SCRTTOOL117 AND FAILS TO GENERATE A REPORT WHEN SMF DATA CONTAINS LARGE UTC OFFSETS • OA55203 Incorrect hash calculation in section D5 results in LMS rejecting the report • Sections E7 and Q7 report an incorrect product id in some circumstances. • TPF "no data" LPARs do not show a percentage in section Q5. • LPAR not active during peak container hour appears in section T4 without an asterisk in the TRG column. • CPC/LPAR ordering can be inconsistent in the GUI. • Section D5 exclude results do not match the report time format (UTC or local). • Section E7 might show an incorrect operating system name or product ID for z/OS. • MVM family product calculations may be incorrect in some circumstances. • Products active on a CPC in multiplex reports do not appear in section P5 if the machine was inactive during the peak hour.
15 February 2018 (Version 25.2.1)	<ul style="list-style-type: none"> • This release fixes the following problems: <ul style="list-style-type: none"> • OA54648 SCRT REPORT H4 SECTION MAY HAVE DUPLICATE ENTRIES FOR LPARS THAT HAD MULTIPLE SYSTEMS IPLED DURING THE MONTH • OA54785 MOBILE REDUCTION NOT CORRECTLY REPORTED FOR ZNALC LPARS WHEN USING BOTH CSV FILE AND WLM INPUTS • Duplicated broken SMF records can result in incorrect MSU values for tenant resource groups • SCRTTOOL003 should not be issued by the command line interface when the only option specified is --help or --version • Multiple problems related to processing LPARs that run both traditional z/OS and zNALC during the reporting period. • Instance counts in section J7 are not scoped to the container • Section Q7 and T4 do not appear in ISV reports when containers are present • Multiple fixes related to container reporting
12 December 2017 (Version 25.2.0)	<ul style="list-style-type: none"> • Support has been added for: <ul style="list-style-type: none"> • Container Pricing for IBM Z, including updates to the z/OS JCL for SCRT and updates the graphical user interface (GUI) and command line interface (CLI) for Windows and Linux. • Processing of SMF records transferred to Windows and Linux platforms without record descriptor words. • The Detail LPAR Usage Data section (N7). • Generating ISV reports from the command line interface for Windows and Linux. • Hashing of ISV reports is updated. • The CLI now issues data collection messages SCRTTOOL015 and SCRTTOOL068. • The GUI "Review Report" function is enabled under Linux when supported by the desktop environment. • This release fixes the following problems: <ul style="list-style-type: none"> • OA53220: IBM Z/OS CONNECT EE V2 MAY SHOW DOUBLED CONNECTION COUNTS IN AN HOUR WHEN THE PRODUCT WAS RECYCLED • OA53979: Use of a VM LPAR as the target of a NO89 assignment does not apply the assignment to all guests • OA54055: D5 section shows MWP_Input_From_WLM even if ignore is specified • OA54159: SCRT VERSION 25.1.0 FAILS WITH SCRTTOOL603 MESSAGE CAUSED BY: JAVA.LANG.NULLPOINTEREXCEPTION • OA54249: H4 section shows missing records for an LPAR/SYSTEM for a time when another system is IPLed on the LPAR • OA54296: Enable processing of records transmitted with no RDW • OA54322: SCRT throws NPE processing machine outside of report period in CMP • OA54325: NPE in H4 caused by missing HODs from insufficient data • OA54328: Some LPAR names may show up as "Not Found" in the NO89 GUI panel preventing selection of NO89 products on said LPARs • OA54329: Incorrect record size calculation for VSE blocked data • OA54285: zCAP ONLYZCAPALL product entry overwrites all LPARs for that product

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	<p>from previous entries</p> <ul style="list-style-type: none"> • GUI - SCRT no longer attempts to use optional price offering input from a previous execution of the tool if the current input data is not eligible for the price offering. • GUI – An error related to removing Exclude specifications is corrected. <p>Please see the SCRT Users Guide "Summary of Changes" section for information about these changes.</p>
<p>10 October 2017 (Version 25.1.0)</p>	<ul style="list-style-type: none"> • Support has been added for: <ul style="list-style-type: none"> • Additional options in the command line interface on Windows and Linux platforms. • Sections H4 and H6 in Standard Sub-Capacity Reports. These sections replace Section H5. Sections H4 and H6 were already present in Multiplex reports. For more information about what has changed with the introduction of sections H4 and H6, see the white paper available at http://www.ibm.com/common/ssi/cgi-bin/ssialias?htmlfid=ZSL03473USEN • Reporting of 1 hour data gaps in Section H4. Previously, data gaps lasting 1 hour or less were suppressed from the report. All data gaps are now reported. • Two new Execution-based sub-capacity IPLA products to the SCRT product list: <ul style="list-style-type: none"> • IMS DB VUE V15 (5655-DS5) • IMS TM VUE V15 (5655-TM4) • This release fixes the following problems: <ul style="list-style-type: none"> • OA53667 EXCLUDED TPF LPARS AND NON STANDARD LPARS SUCH AS ICF, IFL, IIP MAY APPEAR IN SECTION H4/H6 - An excluded TPF NODATA LPAR required a customer supplied justification in Section H4. The justification now indicates that the LPAR was excluded. • OA52881: SCRTTOOL B5 SECTION SHOWS A COD MODEL CHANGE FOR A PERIOD OF TIME THAT WAS EXCLUDED - Machine model changes that are observed during hours that are exclude are no longer reflected in Section B5 or the machine specific section of a multiplex report. • OA53245: SCRTTOOL155 MESSAGE CAUSES THE JAVA SCRTTOOL TO TERMINATE ON UNMATCHED LPAR_COMMENT - Processing is updated to not issue SCRTTOOL155 for an LPAR specified on an LPAR_COMMENT control statement but that was not active during the report period. • OA52745: SCRTTOOL REPORT SECTION D5 START AND RESUME TIME MAY NOT MATCH THE ACTUAL EXCLUDE STATEMENT USED. - The start and end times of the exclusion results in Section D5 now always reflect the values supplied on the EXCLUDE statement. Additionally, in some circumstances, the number of hours excluded was incorrect; this is now corrected. • OA53876: [SCRT GUI] CUSTOMER GET NULLPOINTEREXCEPTION BECAUSE AOBJECT IS NULL - A code error leading to a NullPointerException in the GUI has been corrected. • OA53787: SCRTTOOL053 MAY BE ISSUED INCORRECTLY WHEN SMF RECORDS ARE INCLUDED FROM OLD Z/OS RELEASES SUCH AS Z/OS 1.3 - Processing is updated to correctly handle data from older systems. • OA52499: SCRTTOOL047 ISSUED FOR AN LPAR IN A NO89 STATEMENT THAT WAS DEACTIVATED FOR THE ENTIRE MONTH. - Processing is updated to not issue SCRTTOOL047 for an LPAR that was specified in a NO89 statement but was inactive for the entire report period. • OA53751: SCRTTOOL258 MESSAGE MAY INCORRECTLY BE ISSUED WHEN ZCAP INPUT CSV TIMES ARE THE FULL ZOS CONSUMPTION. - Internal enhancements to zCAP processing to avoid SCRTTOOL258 • OA53891: SCRTTOOL REPORT N5 AND P5 SECTION FOOTNOTE (V) - Processing is updated to report footnote (v) in sections N5 and P5 when appropriate. • NO89 products report 0 MSU when OS product MSU > 0 and < 1 - Under certain circumstances, NO89 products would report 0 MSU when the OS product MSU value was between 0 and 1 as indicated by footnote (v). Processing is updated to use the footnote for the NO89 products. • Deselecting an LPAR on the NO89 assignment panel in the GUI doesn't work. - Under certain circumstances, returning to the NO89 assignment panel in the GUI and changing assignments was not reflected in the report. Processing is updated to correct this. • NO89 product selections in the GUI lost for VM guests. - NO89 product selections in

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	<p>the GUI for VM guests were lost when leaving and returning to the panel. Processing is updated to correct this.</p> <p>Please see the SCRT Users Guide "Summary of Changes" section for information about these changes.</p>
13 September 2017 (Classic Version 24.2.3)	<ul style="list-style-type: none"> Added support for the IBM z14 (z14) family of servers.
10 August 2017 (Java Version 24.12.0)	<ul style="list-style-type: none"> Added support for the IBM z14 (z14) family of servers. Support has been added for a command line interface on Windows and Linux platforms. The command line interface supports a subset of the SCRT processing options supported by the z/OS deliverable and the Windows and Linux GUI interfaces. Specifically, the command line interface supports the following: <ul style="list-style-type: none"> Specification of customer information, equivalent to the PARMS DD on z/OS Specification of NO89 product information Specification of Exclude control statements and LPAR comments Specification of input SMF and SCRT89 datasets Support has been added for 32 bit JVMs on Windows and Linux systems. At installation time, the user can select to install 32 bit or 64 bit support. 32 bit support should be selected only when a 64 bit environment is not available. Use of a 32 bit environment may impact the ability to generate SCRT reports in very large environments. Support has been added for the GSTRACE DD statement. Previously, the GSTRACE DD was supported only by SCRT Classic. When specified, SCRT will generate a file list of reasons why SCRT did not assign the Getting Started Sub-Capacity Pricing value to an eligible Getting Started Sub-Capacity Pricing product. Additionally, GSTRACE support is enabled in the SCRT GUI on Windows and Linux systems. This release fixes the following problems: <ul style="list-style-type: none"> APAR OA52725 - LPARS THAT WERE EXCLUDED FROM THE SCRT REPORT MAY SHOW AS MISSING LPAR DATA IN THE H4 OR H5 REPORT SECTION. - LPARs that were excluded from processing may require a comment in H4 or H5 APAR OA52916 - SCRTTOOL H4 SECTION REQUIRES CUSTOMER COMMENTS FOR TIMES THAT ARE MISSING DUE TO AN EXCLUDE - SCRTTOOL H4 section requires customer comments for times that are missing due to an EXCLUDE. When an EXCLUDE control statement is used in the input JCL those SMF70/89/SCRT89 records are excluded from the report. Report section D5 has a note that the EXCLUDE was processed and requires a comment. In addition the H4 section will also reflect the missing records that were excluded but H4 also required a redundant comment to explain the missing SMF records. APAR OA53330 - SCRTTOOL NO89 STATEMENT MAY NOT PROCESS AS EXPECTED - When using CPC:*ALL as a NO89 product selector, the product was not selected. APAR OA53333 - LMS UPLOAD OF SCRT REPORT FAILS WITH STATUS "CORRUPTED SCRT SUBCAP MULTIPLEX DATA(D5)" - Upload of an SCRT report may fail when REPORT_TIME=UTC_TIME is used in conjunction with an EXCLUDE statement APAR OA53338 - SCRTTOOL REPORT E5 SECTION IPLA Z/OS-BASED (ALL) LINE INCORRECT - The z/OS IPLA (All) line was being given the middleware reduction instead of the z/OS reduction. APAR OA53339 - SCRTTOOL REPORT IS INCORRECTLY SHOWING MOBILE REDUCTIONS FOR A ZCAP NETNEW PRODUCT - SCRT report is incorrectly showing Mobile reductions for a zCAP net new product in sections P5 and W3. Net new products are not eligible for reductions. The product calculations in section E5 are correct. APAR OA53432 - ISVPREFIX TAG IN ISV PRODUCT LIBRARY DOES NOT INFLUENCE THE PDS MEMBER NAME AS IT SHOULD - The <isvprefix> tag in an ISV product library is not being used to generate the PDS member names for reports. APAR OA53453 - SECTION P5 AND W3 MAY NOT SHOW A ZCAP REDUCTION WHEN THE PRODUCT IS ALSO ADJUSTED FOR INTEGRATED WORKLOAD PRICING - Section P5 and W3 may not show a zCAP reduction when the product is also adjusted for Integrated Workload Pricing. The reductions were properly calculated for the E5 section, but not reported in the P5/W3 sections as expected. APAR OA53518 - SCRTTOOL JAVA VERSION SECTION U5 ADDS FOOTNOTE iii MORE OFTEN THAN THE CLASSIC VERSION DID - SCRT Java issues U5 footnote (iii)

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	<p>under more conditions than SCRT Classic. Java is updated to match the Classic behavior.</p> <p>Please see the SCRT Users Guide "Summary of Changes" section for information about these changes.</p>
28 June 2017 (Java Version 24.11.3)	<ul style="list-style-type: none"> • The SCRT modification level has been removed from the prolog of the sample JCL. The current version, release, and modification level can now be found in the "version.txt" file located in the SCRT installation directory of the z/OS, Windows, and Linux deliverables. • Added two new Execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> • IBM Enterprise PL/I VUE for z/OS V5 (5655-EPL) • IBM Tivoli System Automation for z/OS V4 (5698-SA4) • This mod-level release fixes the following problems: <ul style="list-style-type: none"> • Corrects a NullPointerException that may occur during processor capping if an LPAR was not active during the peak hour. • Corrects an error where selecting the "Last Month" report period option in the GUI would not allow the report to be generated. • Corrects an error assigning NO89 products to VM guest LPARs in the GUI • APAR OA52671: SCRTTOOL603 message issued when an invalid PID is used for an input CSV file • APAR OA52911: SCRTTOOL P5 section reporting an actual MSU that exceeds the hardcap LPAR image capacity • APAR OA52787: SCRTTOOL overwrites an output PDS file if the machine had an MES upgrade with the same serial number • APAR OA52987: Syntax error in ISVLIB DD document results in error loading XML parser message • APAR OA52602: zCAP reduction may not be applied for zNALC LPARs • APAR OA52724: SCRTTOOL H4 section incorrectly reporting missing LPAR data for TPF LPARS • APAR OA53132: SCRTTOOL Windows GUI panel gets extra serial numbers that vary by the first digit
28 June 2017 (z/OS Classic Version 24.2.2)	<ul style="list-style-type: none"> • Added two new Execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> • IBM Enterprise PL/I VUE for z/OS V5 (5655-EPL) • IBM Tivoli System Automation for z/OS V4 (5698-SA4) • This mod-level release fixes the following problem: <ul style="list-style-type: none"> • EXCLUDE processing fixed to take into account that guests of z/VM may have a different (virtual) machine serial number from the actual machine serial number
23 May 2017 (Java Version 24.11.2)	<ul style="list-style-type: none"> • This mod-level release fixes the following problems: <ul style="list-style-type: none"> • Corrected the Product ID for IBM Application Delivery Foundation for z Systems V3 to 5655-AC6 (was specified incorrectly as 5697-AC6) <ul style="list-style-type: none"> ○ APAR OA52602: zCAP reduction may not be applied for zNALC LPARs ○ APAR OA52565: SCRTTOOL255 message issued for an hour that is outside of the reporting period ○ APAR OA52586: SCRT report may have incorrect results when different System IDs are IPLed on an LPAR at different times ○ APAR OA52575: SCRT fails with out of memory condition but the JOB gets RC=0 ○ APAR OA52700: SCRT for Multiplex may terminate with SCRTTOOL603 when reporting ZCAP summary with GSSP products if a GSSP product was not active in the peak hour ○ APAR OA52718: SCRT M5 section may have end dates earlier than start dates when an Exclude statement Resume time is after the reporting period ○ APAR OA52877: Unable to submit SCRT report due to incomplete Serial Number in B5 section
23 May 2017 (z/OS Classic Version 24.2.1)	<ul style="list-style-type: none"> • This mod-level release fixes the following problem: <ul style="list-style-type: none"> • Corrected the Product ID for IBM Application Delivery Foundation for z Systems V3 to 5655-AC6 (was specified incorrectly as 5697-AC6)
17 April 2017 (Java Version 24.11.1)	<ul style="list-style-type: none"> • This mod-level release fixes the following problems: <ul style="list-style-type: none"> ○ APAR OA52463: SCRTTOOL603 message for zCAP reports when the input CSV file entry has no matching SMF records. ○ APAR OA52430: SCRT JAVA version may have a different peak hour than MRT when Group Capping is changed in the peak hour. ○ APAR OA52464: The report C5 section may have incorrect reporting period start month for German customers.

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10 April 2017 (Java Version 24.11.0)	<ul style="list-style-type: none"> Version 24.11.0 supports: (1) z/OS and z/TPF and z/VSE in Sub-Capacity Reports; (2) Country Multiplex Pricing (CMP) for z/OS and z/TPF; (3) z/VSE sub-capacity reporting within a Multiplex Report; (4) MWP, zCAP, and zWPC in all reports; (5) ISV product Sub-Capacity Reports Support has been added for Multi-Version Measurement (MVM). SCRT will now report a combined concurrent peak MSU value, indicated with (All) as the Product ID, any time two or more products in the same Program Family are running during the same reporting period. Support has been added for creation of Sub-Capacity Reports for independent software vendor (ISV) products. Added one new MLC product to SCRT product list: <ul style="list-style-type: none"> IMS 15 QPP (5635-A06) Note: During the period of time that IMS V15 is available only through the Quality Partnership Program, the suffix "QPP" will be displayed in the SCRT Report after the name of the product. Added two new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> IBM MQ Advanced z/OS V9 (5655-AV9) IBM MQ Advanced z/OS VUE V9 (5655-AV1) <p>Please see the SCRT Users Guide (PDF, 5.9MB) "Summary of Changes" section for information about these changes.</p>
10 April 2017 (Classic Version 24.2.0)	<ul style="list-style-type: none"> Version 24.2.0 supports z/OS and z/TPF and z/VSE in Sub-Capacity Reports Version 24.2.0 does not support CMP, MWP, zCAP, zWPC, nor ISV products Support has been added for Multi-Version Measurement (MVM). SCRT will now report a combined concurrent peak MSU value, indicated with (All) as the Product ID, any time two or more products in the same Program Family are running during the same reporting period. Added one new MLC product to SCRT product list: <ul style="list-style-type: none"> IMS 15 QPP (5635-A06) Note: During the period of time that IMS V15 is available only through the Quality Partnership Program, the suffix "QPP" will be displayed in the SCRT Report after the name of the product. Added two new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> IBM MQ Advanced z/OS V9 (5655-AV9) IBM MQ Advanced z/OS VUE V9 (5655-AV1) <p>Please see the SCRT Users Guide (PDF, 5.9MB) "Summary of Changes" section for information about these changes.</p>
28 February 2017 (Java Version 24.10.7)	<ul style="list-style-type: none"> This mod-level release fixes the following problems: <ul style="list-style-type: none"> APAR OA52150: SCRTTOOL EXCLUDE STATEMENT MAY NOT PROCESS CORRECTLY FOR TPF LPARS - Fix exclude processing to allow exclude of LPARs that conform to the TPF naming convention, but for which no data is provided. APAR OA52151: SCRTTOOL MAY SHOW A 0 MSU REDUCTION FOR MOBILE WORKLOAD WITH ZNALC LPARS - Properly apply mobile workload reductions to zNALC LPARs. APAR OA52155: SCRTTOOL FAILS WITH SCRTTOOL053 MESSAGE. EXCLUDE DOES NOT RESOLVE THE MESSAGE - Process excludes before checking for missing SMF89 or SMF70 data.
9 February 2017 (Java Version 24.10.6)	<ul style="list-style-type: none"> This mod-level release fixes the following problems: <ul style="list-style-type: none"> APAR OA52035 – SCRTTOOL603 NullPointerException caused by missing data in SMF record P5 section. APAR OA52036 – SCRTTOOL603 NullPointerException caused by an error in an LPAR list (such as a non-existent LPAR) in a zCAP input CSV file. APAR OA52038 – SCRTTOOL603 NullPointerException in the GSSP product algorithm when no OS product record was found for the hour. APAR OA52042 – EXCLUDE control statements with multiple LPARs not processed correctly.
17 January 2017 (Java Version 24.10.5)	<ul style="list-style-type: none"> This mod-level release fixes the following problems: <ul style="list-style-type: none"> When the license definition of an LPAR changes between Traditional (non-zNALC) and zNALC status during a reporting period, SCRT may in some cases incorrectly associate the zNALC data from that LPAR with the Traditional time period. APAR OA51872 – SCRTTOOL603 NullPointerException caused by redundant file closing.
10 January 2017 (Java Version 24.10.4)	<ul style="list-style-type: none"> This mod-level release contains the following enhancements and fixes: <ol style="list-style-type: none"> Memory use enhancement: <ul style="list-style-type: none"> SCRT V24.10.4 has been restructured to significantly reduce the memory size required for program execution. This will particularly benefit customers who have a medium to large environment. If the current memory in use by SCRT in your

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	<p>environment is a cause for concern, we recommend that you try decreasing the heap size to an acceptable level. This action should be performed incrementally.</p> <ol style="list-style-type: none"> 2. Sub-Capacity Report fixes included: <ul style="list-style-type: none"> ▪ Corrected section H5 and M5 tracking of input data start and end times. This includes improved accuracy compared to SCRT Classic and previous SCRT Java releases. This fix affects the start and end times in sub-hour intervals. The percent data reported in section H5 should now be similar to that reported by the SCRT Classic release. 3. Multiplex Report fixes included: <ul style="list-style-type: none"> ▪ Corrected minor issues with the counting of missing and unmatched data hours for section H4, and missing hours for section H6. ▪ Corrected detection of zNALC LPARs for section H4. <ul style="list-style-type: none"> • Reminder about PMR submission for problems using SCRT: <ol style="list-style-type: none"> 1. Severity 1 service requests must only be used for system down conditions which require 7x24 coverage and should not be used for a problem involving SCRT unless running of SCRT brings your system down. Please run SCRT as soon as possible after the 2nd of the month because waiting until the 9th of the month before trying to run SCRT does not qualify a problem to be reported as Severity 1.
1 December 2016	<ul style="list-style-type: none"> • Technical support for the Sub-Capacity Reporting Tool (SCRT) is now provided through the standard PMR service request process. See the SCRT Ask Me page for details about submitting a PMR.
2 November 2016 (Java Version 24.10.3)	<ul style="list-style-type: none"> • This mod-level release fixes the following problems: <ul style="list-style-type: none"> ○ When the license definition of an LPAR changes between Traditional (non-zNALC) and zNALC status during a reporting period, SCRT may in some cases incorrectly associate the zNALC data from that LPAR with the Traditional time period.
26 October 2016 (Java Version 24.10.2)	<ul style="list-style-type: none"> • This mod-level release fixes the following problems: <ol style="list-style-type: none"> 1. When reading VSE blocked format data on Windows, Linux, or Linux on z, SCRT may skip records due to an error processing the record format. This may lead to incorrect results in the SCRT report. 2. When DIAGMSG=WLM MOB is specified, SCRTTOOL611 may incorrectly report that WLM mobile data was not found. The SCRT report does correctly reflect the mobile data. 3. Under rare circumstances, an error processing SMF 70 group capping logic may lead to negative product values in the detailed data section of the SCRT report. 4. Customers participating in the z/OS Connect EE V2 Open Beta may encounter a NullPointerException due to a difference in the SMF instrumentation between the Open Beta and generally available versions of z/OS Connect EE V2. This problem does not occur for customers running the generally available z/OS Connect EE V2 program.
11 October 2016 (Java Version 24.10.0)	<ul style="list-style-type: none"> • Version 24.10.0 supports: (1) z/OS and z/TPF and z/VSE in Sub-Capacity Reports; (2) Country Multiplex Pricing (CMP) for z/OS and z/TPF; (3) z/VSE sub-capacity reporting within a Multiplex Report; and (4) MWP, zCAP, and zWPC in all reports • Added support for reporting of z Systems Workload Pricing for Cloud (zWPC) • Added support for reporting one new IPLA product using Simultaneous Instances: <ul style="list-style-type: none"> ○ IBM z/OS Connect Enterprise Edition V2 (5655-CEE) Note: 5655-CEE is not eligible for MSU-based sub-capacity. SCRT will report the number of Simultaneous Instances by which the product is licensed. • Added seven new Execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> ○ IBM Developer for z Systems Enterprise Edition (5655-AC5) ○ IBM Application Delivery Foundation for z Systems V3 (5655-AC6) ○ IBM Application Performance Analyzer for z/OS V14 (5655-Q49) ○ IBM Debug for z Systems V14 (5655-Q50) ○ IBM Operations Analytics for z Systems V3 (5698-ABH) ○ IBM Common Data Provider for z Systems V1 (5698-ABJ) ○ DB2 12 for z/OS VUE (5770-AF3) 2. Updated the product name of one existing sub-capacity MLC product: <ul style="list-style-type: none"> ○ DB2 12 for z/OS (5650-DB2) Note: Since the DB2 12 Quality Partnership Program has ended, SCRT will no longer append "(QPP)" to the product name in the SCRT report. <ul style="list-style-type: none"> ○ Changed zCAP footnote to refer to the ONLYZCAP parameter instead of ONLYICAP ○ Changed SCRTTOOL255 message to include diagnostic information <p>Please see the SCRT Users Guide (PDF, 5.7 MB) "Summary of Changes" section for information about these changes.</p>

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11 October 2016	<ul style="list-style-type: none"> Today IBM announced that the Classic Version deliverables of SCRT will no longer be supported after October 2017. Customers currently using an SCRT Classic Version deliverable should begin planning their migration to one of the Java Version deliverables prior to October 2017. z/VSE customers without z/OS will have the choice of the Windows or Linux deliverables.
11 October 2016 (Classic Version 24.1.0)	<ul style="list-style-type: none"> Version 24.1.0 supports z/OS and z/TPF and z/VSE in Sub-Capacity Reports Version 24.1.0 does not support CMP, MWP, zCAP, nor zWPC Added seven new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> IBM Developer for z Systems Enterprise Edition (5655-AC5) IBM Application Delivery Foundation for z Systems V3 (5655-AC6) IBM Application Performance Analyzer for z/OS V14 (5655-Q49) IBM Debug for z Systems V14 (5655-Q50) IBM Operations Analytics for z Systems V3 (5698-ABH) IBM Common Data Provider for z Systems V1 (5698-ABJ) DB2 12 for z/OS VUE (5770-AF3) Updated the product name of one existing sub-capacity MLC product: <ol style="list-style-type: none"> DB2 12 for z/OS (5650-DB2) Note: Since the DB2 12 Quality Partnership Program has ended, SCRT will no longer append "(QPP)" to the product name in the SCRT report. <p>Please see the SCRT Users Guide (PDF, 5.7MB) "Summary of Changes" section for information about these changes.</p>
11 July 2016 (Java Version 23.14.0)	<ul style="list-style-type: none"> Release 23.14.0 now supports z/VSE sub-capacity reporting within a Multiplex Report. Release 23.14.0 continues to support Country Multiplex Pricing (CMP) for z/OS and z/TPF. Release 23.14.0 continues to support z/OS and z/TPF and z/VSE in Sub-Capacity Reports. SCRT now also offers a Windows deliverable and a Linux deliverable (running on workstations and on z Systems). In Multiplex Reports, added a Missing Hour Count to the information in the H4 and H6 sections. Fixed an issue with zCAP processing that could lead to 1 MSU being assigned in hours where the MWP or zCAP defining program did not generate eligible CPU time. <p>Please see the SCRT Users Guide (PDF, 5.7MB) "Summary of Changes" section for information about these changes and especially see "Appendix D" for specific installation and use information for V23.14.0.</p>
10 June 2016 (Java Version 23.13.4)	<ul style="list-style-type: none"> This mod-level release supports z/OS and z/TPF, including CMP, zCAP, and MWP. z/VSE reporting is supported the same as in V23.13.0. Added two new sub-capacity MLC products to SCRT product list: <ul style="list-style-type: none"> IBM MQ for z/OS V9 (5655-MQ9) IBM Enterprise PL/I for z/OS V5 (5655-PL5) Added four new Execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> IBM MQ Advanced Message Security for z/OS V9 (5655-AM9) IBM MQ Managed File Transfer for z/OS V9 (5655-MF9) IBM MQ for z/OS VUE V9 (5655-VU9) IBM WebSphere Application Server for z/OS V9 (5655-WAS)
10 June 2016 (Classic Version 23.7.4)	<ul style="list-style-type: none"> This mod-level release supports z/OS, z/TPF, and z/VSE, but it does not support CMP, zCAP, nor MWP. Added two new sub-capacity MLC products to SCRT product list: <ul style="list-style-type: none"> IBM MQ for z/OS V9 (5655-MQ9) IBM Enterprise PL/I for z/OS V5 (5655-PL5) Added four new Execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> IBM MQ Advanced Message Security for z/OS V9 (5655-AM9) IBM MQ Managed File Transfer for z/OS V9 (5655-MF9) IBM MQ for z/OS VUE V9 (5655-VU9) IBM WebSphere Application Server for z/OS V9 (5655-WAS)
12 April 2016 (Java Version 23.13.2)	<ul style="list-style-type: none"> This mod-level release supports z/OS and z/TPF, including CMP, zCAP, and MWP. z/VSE reporting is supported the same as in V23.13.0. This mod-level release adds support for the Migration Pricing Option (MPO) for customers migrating to CICS TS for z/VSE V2 (5655-VSE) and IBM TCP/IP for z/VSE V2 (5686-CS1). This mod-level release fixes an ABEND S02 when using multiple SMF datasets having different LRECLs. This mod-level release fixes an OutOfBounds exception when an Exclude control statement has both the Start and Resume dates outside of the current Reporting Period.
12 April 2016	<ul style="list-style-type: none"> This mod-level release supports z/OS, z/TPF, and z/VSE, but it does not support CMP, zCAP,

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(Classic Version 23.7.2)	<ul style="list-style-type: none"> nor MWP. This mod-level release adds support for the Migration Pricing Option (MPO) for customers migrating to CICS TS for z/VSE V2 (5655-VSE) and IBM TCP/IP for z/VSE V2 (5686-CS1).
11 March 2016 (Java Version 23.13.1)	<ul style="list-style-type: none"> This mod-level release supports z/OS and z/TPF, including CMP, zCAP, and MWP. z/VSE reporting is supported the same as in V23.13.0. This mod-level release fixes a NullPointerException which occurs when a PDS is specified on the SCRT OUTPUT DD but a member name is not provided.
10 March 2016 (Java Version 23.13.0)	<ul style="list-style-type: none"> This release supports z/OS and z/TPF, including CMP, zCAP, and MWP. This release supports z/VSE in Sub-Capacity Reports, but z/VSE is not supported in Multiplex Reports. Added support for the IBM z13s (z13s) family of servers. Added one new sub-capacity MLC product to SCRT product list: <ul style="list-style-type: none"> Enterprise COBOL for z/OS V6 (5655-EC6) Added three new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> IBM Transformation Extender for z/OS V9 (5655-R99) IBM Transformation Extender Advanced for z/OS V9 (5655-Q35) IBM Enterprise COBOL VUE for z/OS V6 (5697-V61) Updated the product name of one existing sub-capacity IPLA product: <ul style="list-style-type: none"> 5697-CDT has been renamed to "IBM Application Delivery Foundation for z Systems" Added support for Mobile Workload Pricing (MWP) data collection by Workload Manager (WLM), replacing the need to supply mobile transaction data with a separate CSV input file. Added support for the LPAR_Comment control statement for Multiplex Reports. The SPECIAL DD control statements are no longer commented out using JCL style comments (/*); an asterisk in the first column now is used to comment out SPECIAL DD control statements. Fixed a problem preventing Multiplex Reports from being accepted by LMS due to text corruption. <p>Please see the SCRT Users Guide (PDF, 5.7MB) "Summary of Changes" section for information about these changes and especially see "Appendix D" for specific installation and use information for V23.13.0.</p>
10 March 2016 (Classic Version 23.7.0)	<ul style="list-style-type: none"> This release supports z/OS, z/TPF, and z/VSE, but it does not support CMP, zCAP, nor MWP. Added support for the IBM z13s (z13s) family of servers. Added one new sub-capacity MLC product to SCRT product list: <ul style="list-style-type: none"> Enterprise COBOL for z/OS V6 (5655-EC6) Added three new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> IBM Transformation Extender for z/OS V9 (5655-R99) IBM Transformation Extender Advanced for z/OS V9 (5655-Q35) IBM Enterprise COBOL VUE for z/OS V6 (5697-V61) Updated the product name of one existing sub-capacity IPLA product: <ul style="list-style-type: none"> 5697-CDT has been renamed to "IBM Application Delivery Foundation for z Systems" <p>Please see the SCRT Users Guide (PDF, 5.7MB) "Summary of Changes" section for information about these changes and more.</p>
15 December 2015 (Java Version 23.11.2)	<ul style="list-style-type: none"> This mod-level release supports z/OS and z/TPF, including CMP, zCAP, and MWP. This release does not support z/VSE. This mod-level release corrects the following problems: <ol style="list-style-type: none"> When Country_Multiplex_Pricing is requested and LPAR data is excluded, SCRT may still generate H4 required LPAR comments for excluded time periods When Country_Multiplex_Pricing is requested, H4 messages may not be generated for LPARs missing a subset of reporting intervals When Country_Multiplex_Pricing is requested, E5 report section does not show 0 MSU products When Country_Multiplex_Pricing is requested, B5 report section may contain incorrect values and/or characters OutOfBounds exception may occur when Exclude processing is requested Problem with Exclude processing for certain z/TPF LPARs.
11 November 2015 (Java Version 23.11.0)	<ul style="list-style-type: none"> This release supports z/OS and z/TPF, including CMP, zCAP, and MWP. This release does not support z/VSE. Updated the product name of one existing sub-capacity MLC product: <ul style="list-style-type: none"> IMS V14 (5635-A05) <p>Note: Since the IMS V14 Quality Partnership Program has ended, SCRT will no longer append "(QPP)" to the product name in the SCRT report.</p>

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	<ul style="list-style-type: none"> • Added one new sub-capacity MLC product to SCRT product list: <ul style="list-style-type: none"> ◦ DB2 12 for z/OS (QPP) (5650-DB2) <p>Note: During the period of time that DB2 12 is available only through the Quality Partnership Program, the suffix “(QPP)” will be displayed in the SCRT Report after the name of the product.</p> <ul style="list-style-type: none"> • Added seven new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. IBM WebSphere MQ Advanced Message Security for z/OS V8 (5655-AMS) 2. IBM WebSphere MQ Managed File Transfer for z/OS V8 (5655-MFT) 3. IMS DB VUE V14 (5655-DSE) 4. IMS TM VUE V14 (5655-TM3) 5. IBM Enterprise COBOL Suite for z/OS (5697-CDT) 6. IBM Enterprise COBOL VUE V5 (5697-ECV) 7. IBM Capacity Management Analytics on z/OS V2 (5698-CMA) • Corrects an error in certain instances where the “(All)” line is missing from the report. When multiple versions of a given product are running in the Multiplex, SCRT should include the “(All)” line which displays the combined concurrent peak MSUs for that product family across the Multiplex. • Corrects an error causing SCRT to incorrectly apply a hypervisor offset during the reporting period. <p>Please see the SCRT Users Guide (PDF, 5.7 MB) "Summary of Changes" section for information about these changes and especially see “Appendix D” for specific installation and use information for V23.11.0.</p>
11 November 2015 (Classic Version 23.5.0)	<ul style="list-style-type: none"> • This release supports z/VSE, and it also supports z/OS and z/TPF, but it does not support CMP, zCAP, nor MWP. • Updated the product name of three existing sub-capacity MLC products: <ul style="list-style-type: none"> ◦ “z/VSE V5 (Central Functions V9)” is the new name for 5686-CF9 ◦ “z/VSE V4 (Central Functions V8)” is the new name for 5686-CF8 ◦ IMS V14 (5635-A05) <p>Note: Since the IMS V14 Quality Partnership Program has ended, SCRT will no longer append “(QPP)” to the product name in the SCRT report.</p> <ul style="list-style-type: none"> • Added four new sub-capacity MLC products to SCRT product list: <ol style="list-style-type: none"> 1. z/VSE V6 (5686-VS6) 2. CICS TS for z/VSE V2 (5655-VSE) 3. TCP/IP for z/VSE V2 (5686-CS1) 4. DB2 12 for z/OS (QPP) (5650-DB2) <p>Note: During the period of time that DB2 12 is available only through the Quality Partnership Program, the suffix “(QPP)” will be displayed in the SCRT Report after the name of the product.</p> <ul style="list-style-type: none"> • Added seven new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. IBM WebSphere MQ Advanced Message Security for z/OS V8 (5655-AMS) 2. IBM WebSphere MQ Managed File Transfer for z/OS V8 (5655-MFT) 3. IMS DB VUE V14 (5655-DSE) 4. IMS TM VUE V14 (5655-TM3) 5. IBM Enterprise COBOL Suite for z/OS (5697-CDT) 6. IBM Enterprise COBOL VUE V5 (5697-ECV) 7. IBM Capacity Management Analytics on z/OS V2 (5698-CMA) <p>Please see the SCRT Users Guide (PDF, 5.7 MB) "Summary of Changes" section for information about these changes and more.</p>
23 October 2015 (Java Version 23.10.1)	<ul style="list-style-type: none"> • Corrects an error causing SCRT to issue message SCRTTOOL254, indicating that the data set specified on the INPUTCSV DD statement contains an incorrect number of tokens • Corrects an error causing SCRT report sections H5 and M5 to contain LPARs that were inactive during the reporting period • Corrects an error when processing z/TPF systems running as a z/VM guest where SCRT might not correctly recognize the identity of the z/TPF guest systems
2 October 2015 (Java Version 23.10.0)	<ul style="list-style-type: none"> • This release supports z/OS and z/TPF, including CMP, zCAP, and MWP. This release does not support z/VSE. • Added support in SCRT for Country Multiplex Pricing (CMP) • Added support in SCRT for z Systems Collocated Application Pricing (zCAP) • Added support in SCRT for Mobile Workload Pricing (MWP) • Fixed an error in the IWP calculation when soft capping was in place. <p>Notes:</p> <ol style="list-style-type: none"> 1. SCRT V23.10 requires the following software on the z/OS system on which you will run SCRT:

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	<ul style="list-style-type: none"> ○ IBM Runtime Environment, Java Technology Edition, Version 7.0 or later ○ IBM JZOS Batch Launcher (included with IBM Runtime Environment, Java Technology Edition) <p>2. SCRT V23.10 is installed under z/OS UNIX System Services (z/OS UNIX) and requires a user ID with an OMVS segment defined.</p> <p>Please see the SCRT Users Guide (PDF, 5.7 MB) "Summary of Changes" section for information about all of these changes and more.</p>
15 July 2015 (Version 23.4.2)	<ul style="list-style-type: none"> • Corrects an error when data from multiple CPCs are present within a single execution of SCRT and local time offsets are in use: Excludes against the 2nd CPC may not be processed correctly.
12 May 2015 (Version 23.4.1)	<ul style="list-style-type: none"> • Added two new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. IBM SPSS Modeler Gold with Scoring adapter for z Systems V17 (5655-SP7) 2. IBM Operations Analytics for z Systems V2 (5698-AAP) • Corrects error with 5655-R95 when usage equals zero in a month with a timezone change • Corrects error where 5655-UM4 was not being reported • Corrects error when an SMF89-2 record has a start date after the end date
10 March 2015 (Version 23.4.0)	<ul style="list-style-type: none"> • Added support for the IBM z13 (z13) family of servers. Note: See the SCRT Maintenance page for Required APARs which must be applied to your z/VSE operating system in support of the z13 servers. • Added 1 new sub-capacity MLC product to SCRT product list: <ol style="list-style-type: none"> 1. IMS V14 (QPP) (5635-A05) <p>Note: During the period of time that IMS V14 is available only through the Quality Partnership Program, the suffix "(QPP)" will be displayed in the SCRT Report after the name of the product.</p> • Added 2 new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. IBM Integration Bus for z/OS V10 (5655-AB1) 2. IBM Integration Bus Standard Edition for z/OS V10 (5655-AB2) • Added support for the z/TPF Transformation Engines offering • Correct processing of SMF type 70 records with erroneous data in the logical processor effective dispatch time field • Correctly account for duplicate intervals when a negative local time adjustment occurs • Correct processing of LPAR_Comment PARMS parameter when input data contains multiple CPCs for the same SCRT execution <p>Please see the SCRT Users Guide (PDF, 5.7 MB) "Summary of Changes" section for information about all of these changes and more.</p>
10 October 2014 (Version 23.1.0)	<ul style="list-style-type: none"> • Added 3 new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. IBM PD Tools Modernization Solution Pack V1 (5655-DMS) 2. Tivoli Storage Manager for z/OS Media V7 (5698-AAH) 3. Tivoli Storage Manager Extended Edition for z/OS Media V7 (5698-AAK) • Updated the product names of 2 existing sub-capacity MLC products: <ol style="list-style-type: none"> 1. IBM MQ for z/OS V8 (5655-W97) 2. IBM MQ for z/OS VUE V8 (5655-VU8) • Corrected the Product Id of 1 Execution-based sub-capacity IPLA product: <ol style="list-style-type: none"> 1. SmartCloud Analytics Log Analysis Insight Packs WAS3 (5698-AAB) • Corrected processing of 5655-R95 when used intermittently across multiple LPARs • Correctly handles the IWP adjustment for the earliest four hours of SMF data where UTC time is reported <p>Please see the SCRT Users Guide (PDF, 5.7 MB) "Summary of Changes" section for information about all of these changes and more.</p>
12 May 2014 (Version 22.2.0)	<ul style="list-style-type: none"> • Added one new sub-capacity MLC product to SCRT product list: <ol style="list-style-type: none"> 1. WebSphere MQ for z/OS V8 (5655-W97) • Updated the product name of one existing sub-capacity IPLA product: <ol style="list-style-type: none"> 1. IBM Business Process Manager for z/OS V7 (5655-W05) formerly known as WebSphere Process Server for z/OS V7 • Added support as an IWP Defining Program to one existing sub-capacity IPLA product: <ol style="list-style-type: none"> 1. IBM Business Process Manager for z/OS V8 (5655-Y02) • Added 10 new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. IBM SPSS Modeler with Scoring Adapter for zEnterprise V16(5655-AA8) 2. IBM Standards Processing Engine for Healthcare Payer V8 (5655-Q19) 3. IBM Standards Processing Engine for Supply Chain EDI V8 (5655-Q22) 4. IMS TM VUE V12 (5655-TM1) 5. IMS TM VUE V13 (5655-TM2)

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	<ul style="list-style-type: none"> 6. WebSphere MQ for z/OS VUE V7 (5655-VUE) 7. WebSphere MQ for z/OS VUE V8 (5655-VU8) 8. SmartCloud Analytics Log Analysis Insight Packs SYSLOG (5698-ARA) 9. SmartCloud Analytics Log Analysis Insight Packs WAS (5698-ARB) <ul style="list-style-type: none"> ▪ Product id 5698-ARB was added to SCRT V22.2.0 but it was an incorrect product id. The correct product id is 5698-AAB. This error will be corrected in the next release of SCRT. 1. IBM Tivoli Netview Monitoring for GDPS V6 (5698-BMP) <ul style="list-style-type: none"> • Added support for a new Report_Time control statement to enable customers to request special local time reporting or UTC time reporting when they use some form of Hypervisor time offset (Sysplex Timer Offset, LPAR Timer Offset), instead of the TIMEZONE parameter of the CLOCKxx member of SYS1.PARMLIB, to set the local time used by z/OS. • Corrects a very unusual problem concerning Group Capacity Limits processing for NO89 products when LPAR names are replicated across multiple CPCs in same SCRT execution. This error might cause SCRT to incorrectly report a NO89 product for a CPC where a NO89 control statement indicates that the NO89 product is not being used. <p>Please see the SCRT Users Guide (PDF, 5.7 MB) "Summary of Changes" section for information about all of these changes and more.</p>
24 January 2014 (Version 22.1.1)	<ul style="list-style-type: none"> • Corrects a very unusual problem with SCRT reporting incorrect MSUs when customers meet all four of the following conditions: <ol style="list-style-type: none"> 1. the data from multiple CPCs is being processed in the same execution of SCRT, and 2. an Exclude control statement is being used for one of the CPCs, and 3. the Exclude control statement uses UTC times instead of local times, and 4. the CPC for which the Exclude statement is being used is reported by SCRT in local time not UTC time <p>The reporting problem can occur for z/OS, z/TPF and z/VSE systems whenever all four conditions are met. The reporting problem does not occur if any one or more of the four conditions do not exist. Only customers who meet all four of the above conditions need to use this SCRT V22.1.1 modification level.</p>
10 October 2013 (Version 22.1.0)	<ul style="list-style-type: none"> • Added support for the IBM zEnterprise BC12 (zBC12) family of servers, and for the IBM zEnterprise EC12 (zEC12) GA2 level microcode. <p>Note: See the SCRT Maintenance page for Required APARs which must be applied to your operating system(s) in support of the new LPAR Physical Capacity Limit hardware function of the zEC12 and zBC12 servers.</p> <ul style="list-style-type: none"> • Added support for z/OS V2 as a new sub-capacity MLC operating system, and support for multiple versions of a z/OS operating system on a server including support for zNALC in mixed workload environments: <ul style="list-style-type: none"> ○ z/OS V2 (5650-ZOS) • Updated the product names of three existing sub-capacity MLC products: <ol style="list-style-type: none"> 1. Tivoli Workload Scheduler for z/OS V8 (5697-WSZ) 2. DB2 11 for z/OS (5615-DB2) 3. IMS V13 (5635-A04) <p>Note: Since the DB2 11 and IMS V12 Quality Partnership Programs have ended, SCRT will no longer append "(QPP)" to the product name in the SCRT report for products 5615-DB2 and 5635-A04.</p> • Added 16 new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. IBM SPSS Modeler with Scoring Adapter for zEnterprise V15 (5655-AA6) 2. IMS DB VUE V13 (5655-DSM) 3. IBM Problem Determination Testing Solution Pack for z/OS V1 (5655-DTS) 4. zSecure CICS Toolkit V2 (5655-N18) 5. zSecure Alert V2 (5655-N21) 6. IBM Problem Determination Solution Pack for z/OS V1 (5655-PDS) 7. Application Perf Analyzer for z/OS V13 (5655-Q09) 8. Debug Tool for z/OS V13 (5655-Q10) 9. Fault Analyzer for z/OS V13 (5655-Q11) 10. File Manager for z/OS V13 (5655-Q12) 11. IBM Multi-site Workload Lifeline V2 (5655-UM4) 12. IBM HourGlass V7 (5655-U59) 13. DB2 VUE 11 (5697-P43) 14. IBM Capacity Management Analytics on z/OS V1 (5698-AA6) 15. IBM Automation Control for z/OS V1 (5698-LSA) 16. Tivoli Workload Scheduler for z/OS V9 (5698-T08)

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	Please see the SCRT Users Guide (PDF, 5.7 MB) "Summary of Changes" section for information about all of these changes and more.
28 June 2013 (Version 21.2.2)	<ul style="list-style-type: none"> • Corrects errors in the reporting of MSUs when z/OS customers are using Defined Capacity (also known as Soft Capping) or Group Capacity Limits. <p>Note: All z/OS customers using Defined Capacity or Group Capacity Limits should download and use SCRT V21.2.2. z/VSE customers are not affected so there is not a V21.2.2 deliverable for z/VSE.</p>
10 May 2013 (Version 21.2.1)	<ul style="list-style-type: none"> • Added three new Execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. IMS DB VUE V12 (5655-DSQ) 2. IBM Integration Bus for z/OS V9 (5655-IBB) 3. IBM Integration Bus Standard Edition for z/OS V9 (5655-IBC) <p>Note: The two Integration Bus products are also IWP Defining programs, customers who desire IWP support when running either of these products must upgrade to SCRT V21.2.1.</p>
10 Apr 2013 (Version 21.2.0)	<ul style="list-style-type: none"> • Added one new sub-capacity MLC product to SCRT product list: <ul style="list-style-type: none"> ○ Enterprise COBOL for z/OS V5 (5655-W32) • Added three new Execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> ○ Migration Utility for z/OS V4 (5655-MGU) ○ Cognos BI for z/OS V10 (5655-Y26) ○ CICS TS VUE V5 (5722-DFJ) 2. Updated the product name of one existing sub-capacity IPLA product: <ul style="list-style-type: none"> ○ WebSphere Business Rules for z/OS V8 (5655-Y31) <ul style="list-style-type: none"> ○ Enhanced SCRT support to automatically propagate the comment on the LPAR_Comment control statement to the corresponding comment field for the Exclude control statement for that LPAR when all of the SMF and SCRT89 data for the reporting period, as well as outside the reporting period, are excluded. ○ Fixed SCRT to list the correct UTC date/time for busy z/TPF LPARs in sections H5 and M5. ○ Made the following enhancements to the documentation in the SCRT Users Guide: <ul style="list-style-type: none"> ○ Explain changes to SCRT support in support of new ten-digit customer numbers ○ Recommend process changes for selecting the range of dates for z/TPF SCRT89 records <p>Please see the SCRT Users Guide (PDF, 5.7 MB) "Summary of Changes" section for information about all of these changes and more.</p>
10 Oct 2012 (Version 21.1.0)	<ul style="list-style-type: none"> • Added three new sub-capacity MLC products to SCRT product list: <ol style="list-style-type: none"> 1. DB2 11 for z/OS (QPP) (5615-DB2) 2. IMS V13 (QPP) (5635-A04) 3. CICS TS for z/OS V5 (5655-Y04) <p>Note: During the period of time that DB2 11 and IMS V13 are available only through the Quality Partnership Program, the suffix "(QPP)" will be displayed in the SCRT Report after the name of the product.</p> <ul style="list-style-type: none"> • Updated the product name of one existing sub-capacity IPLA product: <ul style="list-style-type: none"> ○ WebSphere Operational Decision Management for z/OS V7 (5655-Y07) • Added twelve new Execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> ○ WebSphere eXtreme Scale for z/OS V8 (5655-VX8) ○ WebSphere MQ Adv Message Security for z/OS V7 (5655-W50) ○ File Manager for z/OS V12 (5655-W68) ○ Fault Analyzer for z/OS V12 (5655-W69) ○ Debug Tool for z/OS V12 (5655-W70) ○ Application Perf Analyzer for z/OS V12 (5655-W71) ○ IBM Business Monitor for z/OS V8 (5655-W96) ○ WebSphere Service Registry and Repository for z/OS V8 (5655-WBS) ○ IBM Business Process Manager for z/OS V8 (5655-Y02) ○ WebSphere Portal Enable for z/OS V8 (5655-Y16) ○ WebSphere Operational Decision Management for z/OS V8 (5655-Y17) ○ WebSphere Business Rules for z/OS V8 (5655-Y31) 2. Made the following enhancements to the documentation in the SCRT Users Guide: <ul style="list-style-type: none"> ○ Revised and consolidated information concerning operating systems that run with the time set to the future or the past ○ Consolidated information in a new chapter entitled "Viewing and editing the sub-capacity report" <p>Please see the SCRT Users Guide (PDF, 5.7 MB) for information about all of these changes and more. Please see the "Summary of Changes" section.</p>

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10 Sep 2012 (Version 20.2.10)	<ul style="list-style-type: none"> • Added support for the IBM zEnterprise EC12 (zEC12) family of processors. <ul style="list-style-type: none"> ○ Sub-Capacity customers who use a zEC12 prior to October 2 should <u>download</u> the new SCRT V20.2.10 deliverable • Corrects an error when multiple SMF 89-1 records were collected within an interval for a GSSP-eligible product and there was a Hipervisor Offset (HOF) value set for that LPAR. This sometimes resulted in non-GSSP values being reported for GSSP-eligible products. <ul style="list-style-type: none"> ○ The ONLY customers affected are z/OS customers who use <u>products eligible for Getting Started Sub-capacity Pricing (GSSP)</u> and who also specify an HOF value other than zero. ○ If you are z/OS customer without any GSSP-eligible products then you are NOT AFFECTED. ○ Customers who are affected should <u>download</u> the new SCRT V20.2.10 deliverable
10 Apr 2012 (Version 20.2.0)	<ul style="list-style-type: none"> • Updated the product name of one existing sub-capacity MLC product: <ul style="list-style-type: none"> ○ IMS V12 (5635-A03) Note: Since the IMS V12 Quality Partnership Program has ended, SCRT will no longer append "(QPP)" to the product name in the SCRT report for product 5635-A03. • Updated the product name of one existing sub-capacity IPLA product: <ul style="list-style-type: none"> ○ Optim pureQuery Runtime for z/OS V2 (5655-V80) • Added four new Execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> ○ IBM Multi-site Workload Lifeline V1 (5655-U24) ○ Optim pureQuery Runtime for z/OS V3 (5655-W92) ○ IBM CPLEX Optimizer for z/OS V12 (5655-Y21) ○ WebSphere Message Broker for z/OS V8 (5697-P44) 2. Made the following changes and enhancements to SCRT (see details in the SCRT Users Guide): <ul style="list-style-type: none"> ○ Enhanced SCRT to verify the format of the Customer_Number parameter value on the PARMS DD statement and to terminate SCRT processing when the format is incorrect ○ Changed the format for the identities of z/OS guest systems <ul style="list-style-type: none"> ○ Added the following fixes to SCRT (since V20.1.0) (see details in the SCRT Users Guide): ○ Fix SCRT loop (S322 ABEND) when processing GSSP-eligible products ○ Fix SCRT S0C4 ABEND when using GSTRACE DD ○ Fix SCRT S0C7 ABEND when Excluding data from z/TPF LPARs which provide no SCRT89 records ○ Correctly process positive date/time offsets for GSSP products ○ Report IWP control statement for CPCs that do not support IWP ○ Correctly assign LPAR group membership when SMF data is split across multiple records <ul style="list-style-type: none"> ○ Made the following enhancements to the documentation in the SCRT Users Guide: ○ Revised the recommendation for using the spreadsheet method to change the sub-capacity report file prior to uploading the file to LMS ○ Updated several topics to describe the level of double-byte character set (DBCS) support provided by SCRT and the sub-capacity reporting process ○ Clarified the differences between a machine replacement and a machine model upgrade ○ Added new SYSPRINT message explanations <ul style="list-style-type: none"> ○ Customers who are affected should <u>download</u> the new SCRT V20.2.0 deliverable <p>Please see the SCRT Users Guide (PDF, 5.7 MB) for information about all of these changes and more. Please see the "Summary of Changes" section.</p>

Version/Date	Description
26 Oct 2011 (Version 20.1.1)	<ul style="list-style-type: none"> • Corrects three problems with SCRT V20.1.0: <ol style="list-style-type: none"> 1. SCRT loop (S322 ABEND) when processing GSSP-eligible products 2. SCRT S0C4 ABEND when using GSTRACE DD 3. SCRT S0C7 ABEND when Excluding data from z/TPF LPARs which provide no SCRT89 records • The ONLY customers affected are the following: <ol style="list-style-type: none"> 1. z/OS customers who use <u>products eligible for Getting Started Sub-capacity Pricing (GSSP)</u> 2. z/TPF customers who attempt to Exclude data under certain conditions <ul style="list-style-type: none"> ○ If you are z/OS customer without any GSSP-eligible products then you are NOT AFFECTED. ○ If you are z/TPF customer who does not use the Exclude control statement then you are NOT AFFECTED. ○ If you are a z/VSE customer then you are NOT AFFECTED.

Version/Date	Description
10 Oct 2011 (Version 20.1.0)	<ul style="list-style-type: none"> • Customers who are affected should <u>download</u> the new SCRT V20.1.1 deliverable • Added two new sub-capacity MLC products to SCRT product list: <ul style="list-style-type: none"> ○ VSE Central Functions V9 (5686-CF9) ○ Tivoli NetView for z/OS V6 (5697-NV6) • Updated the product name of one existing sub-capacity MLC product: <ul style="list-style-type: none"> ○ Tivoli NetView for z/OS V5 (5697-ENV) • Added nine new Execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> ○ Cognos BI for z/OS V8 (5455-U99) ○ WebSphere Extended Deployment for z/OS V8 (5655-V62) ○ WebSphere Virtual Enterprise for z/OS V7 (5655-V64) ○ WebSphere Application Server for z/OS V8 (5655-W65) ○ Websphere Operational Decision Manager for z/OS V7 (5655-Y07) ○ IBM Sterling Connect: Direct for z/OS V5 (5655-X01) ○ IBM Sterling Connect: Express for z/OS V4 (5655-X03) ○ IBM Sterling Connect: Enterprise for z/OS V5 (5655-X05) ○ IBM Sterling Gentran for z/OS V6 (5655-X07) 2. Made the following changes and enhancements to SCRT (see details in the SCRT Users Guide): <ul style="list-style-type: none"> ○ Changed the LRECL for the OUTPUT DD from 1024 to 4096 ○ Added support for up to 128 native and guest systems ○ Added support for multiple versions of z/VSE ○ Enhanced power save mode support for z/TPF LPARs which do not provide SCRT89 records ○ Enhanced support for reporting of z/TPF and z/VSE guest systems ○ Enhanced support for (iv) and (viii) footnotes <ul style="list-style-type: none"> ○ Added the following fixes to SCRT (since V19.2.10) (see details in the SCRT Users Guide): <ul style="list-style-type: none"> ○ Use SCRT89 records from z/TPF guest systems, instead of busy time for z/TPF LPAR ○ Correctly support multiple z/TPF guest systems running in the same LPAR ○ Fix SCRT S0C7 ABEND when Excluding data from a z/TPF LPAR ○ Correctly handle OOCOD condition which incorrectly causes SCRT capping ○ Correctly process z/OS, z/TPF, z/VSE guests referenced by Exclude's Image_Id parm ○ Correctly handle power save mode condition which incorrectly causes z/TPF and z/VSE capping <ul style="list-style-type: none"> ○ Made the following enhancements to the documentation in the SCRT Users Guide: <ul style="list-style-type: none"> ○ Added a step to SCRT overview process to check SCRT return code ○ Enhanced description of values listed for Input Data Start/End Date ○ Enhanced explanation for restrictions and special conditions for Getting Started Sub-Capacity Pricing (GSSP) products ○ Enhanced description of z/TPF reporting both with and without SCRT89 records ○ Clarified descriptions and examples for several common SCRT problems <p>Please see the SCRT Users Guide (PDF, 5.7 MB) for information about all of these changes and more. Please see the "Summary of Changes" section.</p>
12 Sep 2011 (Version 19.2.10)	<ul style="list-style-type: none"> • Added support for the IBM zEnterprise 114 (z114) family of processors.
10 Feb 2011 (Version 19.2.0)	<ul style="list-style-type: none"> • Added support for Integrated Workload Pricing including: <ul style="list-style-type: none"> ○ a new SCRT SPECIAL control statement ○ a new footnote in the Product Summary Information section ○ a new IWPTRACE DD JCL statement and file ○ a new SYSPRINT message • Added one new sub-capacity MLC product to SCRT product list: <ul style="list-style-type: none"> ○ IMS V12 (5635-A03) <p>Note: During the period of time that IMS V12 is available only through the Quality Partnership Program, the name "IMS V12 (QPP)" will be displayed in the SCRT report for product 5635-A03.</p> • Updated the product name of one existing sub-capacity MLC product: <ul style="list-style-type: none"> ○ DB2 10 for z/OS (5605-DB2) <p>Note: Since the DB2 10 for z/OS Quality Partnership Program has ended, SCRT will no longer append "(QPP)" to the product name in the SCRT report for product 5605-DB2.</p> • Added seven new execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> ○ WebSphere ILOG Business Rules for z/OS V7 (5655-ILG) ○ Debug Tool for z/OS V11 (5655-W45) ○ Fault Analyzer for z/OS V11 (5655-W46) ○ File Manager for z/OS V11 (5655-W47)

Version/Date	Description
	<ul style="list-style-type: none"> ○ IBM Rational Asset Analyzer V6 (5655-W57) ○ DB2 10 for z/OS Value Unit Edition (5697-P31) ○ Application Perf Analyzer for z/OS V11 (5697-Q03) <p>2. Added the following fixes to SCRT (since V19.1.0):</p> <ul style="list-style-type: none"> ○ Enhanced the Exclude logic to allow SCRT to exclude SMF records by LPAR name when SMF70 records are missing but SMF89 records are present. This enables customers to exclude the partial SMF data responsible for the SCRTTOOL053 due to missing SMF70 records, avoiding the SCRTTOOL103 error message. ○ Enhanced the Exclude logic to allow z/TPF customers to exclude LPARs for which SCRT89 data was not provided. ○ Enhanced processing to report all of the Static Power Savings Mode hours even when SMF89-1 records are missing usage sections. ○ Fixed an SMF89 data problem for "IBM WebSphere Data Interchange for z/OS V3" (5655-I40) which caused the product not to appear on the SCRT report. ○ Fixed two problems concerning z/TPF customers with corrupted or invalid SCRT89 data, avoiding S0C9 ABENDs and the erroneous reporting of LPARs which did not exist. <p>Please see the SCRT Users Guide (PDF, 5.7 MB) for information about all of these changes and more. The "Summary of Changes" section starts on page xix.</p>
11 Oct 2010 (Version 19.1.0)	<ul style="list-style-type: none"> ● Added one new sub-capacity MLC product to SCRT product list: <ul style="list-style-type: none"> 1. IBM Enterprise PL/I for z/OS V4 (5655-W67) ● Added four new execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> 1. WebSphere Business Monitor for z/OS V7 (5655-W11) 2. WebSphere Portal Enable for z/OS V7 (5655-W49) 3. Optim pureQuery Runtime for z/OS V2 (5655-V80) 4. Tivoli Composite Application Manager for Appl Diag V7 (5698-B48) ● Added the following fixes to SCRT (since V18.2.10): <ul style="list-style-type: none"> ○ Report specific DB2 V4 instances as DB2 V5 ○ Do not treat hard-capped LPARs as members of an LPAR group ○ Correctly support two native z/OS SYSIDs in the same LPAR in the same hour ○ Also use logical processor dispatch time to verify inactive LPARs ○ Stop reporting on PHYSICAL LPAR for z/VSE systems ○ Fix SYSPRINT messages and return code for LPAR_Comment processing ○ Correct the fixed-point divide ABEND when processing data from z/VSE systems with dedicated engines ○ Fix NO89 control statement continuation on z/VSE deliverable ○ Prevent incorrectly listing product 5655-R95 in S9 section of sub-capacity report <p>Please see the SCRT Users Guide (PDF, 5.7 MB) for information about all of these changes and more. The "Summary of Changes" section starts on page xix. Also please review the new "Skill Requirements for SCRT Users" section added on page xv.</p>
10 Sep 2010 (Version 18.2.10)	<ul style="list-style-type: none"> ● Added support for the IBM zEnterprise 196 (z196) family of processors. <p>Note: z/VSE customers must also apply the APARs listed on the SCRT Maintenance page to enable CMT support for z196 processors.</p>
11 Apr 2010 (Version 18.2.0)	<ul style="list-style-type: none"> ● Added two new sub-capacity MLC products to SCRT product list: <ul style="list-style-type: none"> 1. 1.IPv6/VSE V1 (5686-BS1) 2. DB2 10 for z/OS (5605-A02) <p>Note: During the period of time that DB2 10 for z/OS is available only through the Quality Partnership Program, the name "DB2 10 for z/OS (QPP)" will be displayed in the SCRT report for product 5605-A02.</p> ● Updated the product name of one existing sub-capacity MLC product: <ul style="list-style-type: none"> 1. DB2 V9 for z/OS (5635-DB2) ● Enhanced the Start and End dates/times in section H5 to only list dates/times within the Reporting Period. ● Enhanced to issue the z/TPF Data Corruption message only when data corruption is encountered within the Reporting Period. ● Terminate SCRT processing when customers accidentally corrupt month constants used by SCRT (e.g. JAN, FEB, MAR, etc.). ● Enhanced support for z/TPF and z/VSE systems whose CPU serial numbers are different than the CPC serial number. ● Added the following fixes to SCRT (since V18.1.1): <ul style="list-style-type: none"> 1. Correct the reporting of UTC time values in the Detail Data Collection section.

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	<ol style="list-style-type: none"> 2. Report the correct MSUs and hour counts for CPCs with LPARs whose data is only outside the reporting period. 3. Treat LPARs with Effective Dispatch Times of zero as inactive LPARs. 4. Correct capping for GSSP products which also support NO89 releases. 5. Generate reports for CPCs with z/TPF LPARs which use less than 1 MSU which provide no SCRT89 records. 6. Update the z/TPF Corruption message in the Special Conditions section. <p>Please see the SCRT Users Guide (PDF, 5.7 MB) about all of these changes, as well as information about additional changes to the TIME and REGION parameters and the GSTRACE DD in the SCRT JCL. The "Summary of Changes" section starts on page xvii.</p>
22 Dec 2009 (Version 18.1.1)	<ul style="list-style-type: none"> • Corrects a problem where SCRT V18.1.0 may report product MSUs higher than should be reported in the Product Summary Information section (E5) and in the Product Max Contributors section (P5) of the SCRT report. This problem can occur for z/OS, z/TPF, or z/VSE systems. The number of hours reported in the Detail LPAR Data section (N5) may also be incorrect whenever this problem occurs. • This problem only happens when ALL THREE of the following symptoms occur: <ol style="list-style-type: none"> 1. The SMF / SCRT89 Input Data Statistics section (M5) of the report lists one or more LPARs whose Input Data Start or Input Data End values are outside the reporting period. (For example: a date earlier than the reporting period, or a date later than the reporting period.) 2. AND at least one of those LPARs identified in step 1 does not appear in the Product Max Contributors section (P5) of the same SCRT report 3. AND the Product Max Contributors section (P5) contains data for two or more LPARs
12 Oct 2009 (Version 18.1.0)	<ul style="list-style-type: none"> • Added one new sub-capacity MLC product to SCRT product list: <ol style="list-style-type: none"> 1. IMS V11 (5635-A02) • Updated the product names of three existing sub-capacity IPLA products: <ol style="list-style-type: none"> 1. Debug Tool for z/OS V9 (5655-U27) 2. Fault Analyzer for z/OS V9 (5655-U28) 3. File Manager for z/OS V9 (5655-U29) • Added ten new execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. Debug Tool for z/OS V10 (5655-V50) 2. Fault Analyzer for z/OS V10 (5655-V51) 3. File Manager for z/OSV10 (5655-V52) 4. WebSphere Message Broker for z/OS V71 (5655-V60) 5. WebSphere Process Server for z/OS V71 (5655-W05) 6. WebSphere Business Services Fabric for z/OS V71 (5655-W06) 7. WebSphere Enterprise Service Bus for z/OS V71 (5655-W09) 8. WebSphere Business Events for z/OS V71 (5655-W16) 9. WebSphere Service Registry & Repository V71 (5655-W17) 10. Application Perf Analyzer for z/OS V10 (5697-P36) • Added a TIME parameter to the JCL for the z/OS version of the SCRT program. • Added two new footnotes to the Group Capacity LPARs section to clarify the interaction between Group Capacity Limits and Hard Capping. • Added support for z/VSE native and guest systems whose capacities are less than one MSU. Please see Chapter 9, "Sub-capacity reporting for z/VSE systems," on page 145 in the SCRT Users Guide (PDF, 5.7 MB) for more information and specific APAR requirements. • Added the following fixes to SCRT (since V17.1.0): <ul style="list-style-type: none"> ○ Report specific DB2 V4 instances as DB2 V5 ○ Do not treat hard-capped LPARs as members of an LPAR group ○ Correctly support two native z/OS SYSIDs in the same LPAR in the same hour ○ Also use logical processor dispatch time to verify inactive LPARs ○ Stop reporting on PHYSICAL LPAR for z/VSE systems ○ Fix SYSPRINT messages and return code for LPAR_Comment processing ○ Correct the fixed-point divide ABEND when processing data from z/VSE systems with dedicated engines ○ Fix NO89 control statement continuation on z/VSE deliverable ○ Prevent incorrectly listing product 5655-R95 in S9 section of sub-capacity report • Please see the SCRT Users Guide (PDF, 5.7 MB) for more information about all of these changes and more. The "Summary of Changes" section starts on page xvii.
11 May 2009 (Version 17.1.0)	<ul style="list-style-type: none"> • Added three new sub-capacity MLC products to SCRT product list: <ol style="list-style-type: none"> 1. CICS TS for z/OS V4 (5655-S97) 2. IBM Rational COBOL Runtime for z/VSE V7 (5648-F66)

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	<ul style="list-style-type: none"> 3. WebSphere MQ for VSE/ESA V3 (5655-U97) • Updated the product name of one existing sub-capacity MLC product: <ul style="list-style-type: none"> 1. MQSeries for VSE/ESA V2 (5686-A06) • Added seven new execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> 1. SCLM Admin Toolkit V5 (5655-U74) 2. Data Studio pureQuery Runtime for z/OS V2 (5655-V57) 3. WebSphere Business Events V6 (5655-V54) 4. WebSphere ILOG JRules for z Systems V7 (5655-V82) 5. WebSphere ILOG Rule Team Server for z Systems V7 (5655-V84) 6. WebSphere ILOG Rules COBOL for z Systems V7 (5655-V87) 7. WebSphere ILOG Decision Validation Svcs for z Systems V7 (5655-V89) • Added support for several changes to Getting Started Sub-Capacity Pricing: <ul style="list-style-type: none"> 1. Enhanced support by changing the scaling factor value from 10 to 2 2. Updated support for the report sections "Getting Started Sub-capacity Pricing Equal to Traditional Sub-capacity Pricing" and "Getting Started Sub-capacity Pricing Not Assigned" 3. Changes to trace records and to NO89 support <ul style="list-style-type: none"> ○ Changed the LPARs reported in the "Detail Data Collection" section of the SCRT report. Only LPARs that supply SMF or SCRT89 data for the SCRT reporting period will now be listed in that section. There is a new SCRT report section called "SMF / SCRT Input Data Statistics" which will indicate the presence of SMF data from LPARs which were active outside of and/or during the reporting period. ○ Added the following fixes to SCRT (since V16.1.1): <ul style="list-style-type: none"> 1. Include LPAR group capping in the Getting Started Sub-capacity Pricing algorithm. 2. Correctly support the Application Programming feature and Integration Server feature of the WebSphere Transformation Extender for z/OS V8 (5655-R95) product. 3. Process Exclude control statements for Getting Started Sub-capacity Pricing eligible products without an SCRT S0C4 ABEND. 4. Select the correct reporting period when the only data supplied is for the first day of the year. <ul style="list-style-type: none"> ○ Please see the SCRT Users Guide (PDF, 5.7 MB) for more information about all of these changes. Also, significant updates were made to the SCRT Users Guide in Chapter 12, "Troubleshooting SCRT errors and problems" as well as to Appendix A, "SCRT messages".
5 Nov 2008 (Version 16.1.1) (z/OS Only)	<ul style="list-style-type: none"> • Corrected an SCRT formatting problem which occurs whenever a product is eligible for IBM Getting Started Sub-capacity Pricing. <p>The problem will cause customers to receive a "Corrupted SCRT Data" message from both the LMS eMail and LMS Web interfaces.</p> <p>This problem only affects a subset of z/OS customers, it does not affect any z/VSE customers, therefore there is only a new download deliverable Version 16.1.1 for the z/OS version of SCRT.</p>
10 Oct 2008 (Version 16.1.0)	<ul style="list-style-type: none"> • Added support for the IBM z Systems10 Business Class (z10 BC) family of processors. • Added nine new execution-based sub-capacity IPLA products to SCRT product list: <ul style="list-style-type: none"> 1. IBM WebSphere Application Server for z/OS V7 (5655-N02) 2. Debug Tool V9 (5655-U27) 3. Fault Analyzer V9 (5655-U28) 4. File Manager V9 (5655-U29) 5. WebSphere MQ File Transfer Edition for z/OS V7 (5655-U80) 6. Data Studio pureQuery Runtime for z/OS V1 (5655-U93) 7. Application Perf Analyzer for z/OS V9 (5697-P10) 8. Tivoli System Automation Application Manager V3 (5698-B07) 9. Tivoli OMEGAMON XE for Messaging V7 (5698-B23) • Changed the format and use of placeholders for alternate Customer MSUs values and for comments. The former placeholder value, ZZZZ, is no longer used. Prior to this change, the Product Summary Information section of the sub-capacity report allowed you the option to specify a Customer MSUs value to override the listed Tool MSUs value for every product. Now, Customer MSUs values are only supported for products that show a placeholder in the Customer MSUs field. See the SCRT Users Guide for more information. • Added new support requiring comments for LPARs without data in the Detail Data Collection section. An explanation will now be required for any LPAR reporting no data. A new LPAR_Comment control statement may be used in some circumstances, see the SCRT Users Guide for more information. • Renamed the End keyword on the Exclude special control statement to Resume. The End keyword

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	<p>has been replaced by the Resume keyword in order to more closely match the intended meaning of this keyword. The operation of the Exclude statement has not changed.</p> <ul style="list-style-type: none"> • Corrected the list of supported values in the SCRT Users Guide for the Product_Id keyword of the Exclude control statement by removing the *ALL value, which was never supported. • Added "SUB-CAPACITY" to the title line of the sub-capacity report. • Made minor wording changes to the first paragraph located at the bottom of section B5 of the sub-capacity report.
8 Aug 2008 (Version 15.1.2)	<ul style="list-style-type: none"> • Corrects Getting Started Subcapacity Pricing (GSSP) for the zNALC environment when an LPAR switches from Traditional to zNALC workloads during the reporting period. • Corrects Exclude processing whenever multiple CPCs are processed by the same execution of SCRT, even when only one of the CPCs is referenced on the Exclude statement. • Fixes an SCRT S0C4 ABEND when SCRT processes SCRT89 records from a machine with one or more inactive LPARs, where data from only 1 system image was processed.
12 May 2008 (Version 15.1.0)	<ul style="list-style-type: none"> • Added two new sub-capacity MLC products to SCRT product list: <ol style="list-style-type: none"> 1. IBM Enterprise COBOL for z/OS V4 (5655-S71) 2. WebSphere MQ for z/OS V7 (5655-R36) • Added five new execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. DB2 V8 for z/OS Value Unit Edition (5697-N29) 2. DB2 V9 for z/OS Value Unit Edition (5697-P12) 3. Lotus Active Insight for z/OS V6 (5655-U15) 4. WebSphere Business Services Fabric for z/OS V6 (5655-S30) 5. WebSphere Dashboard Framework for z/OS V6 (5655-U13) • Corrected the support for an existing product by changing the SCRT support from SMF89 support to NO89 support: <ol style="list-style-type: none"> 1. Debug Tool Utilities and Adv Functions for z/OS V8 (5655-S16) • Added support for the new pricing option, IBM Getting Started Sub-capacity Pricing for z/OS IPLA software: <ol style="list-style-type: none"> 1. New pricing algorithm 2. Product footnotes 3. Three new report sections 4. New, optional GSTRACE DD • Added support for a new, optional Suppress_Report_Section control statement under the SPECIAL DD statement • Added support for UTC values to SCRT's Exclude control statement • Added the following fixes to SCRT (since V14.1.0): <ol style="list-style-type: none"> 1. Corrected LPAR group capacity logic when SMF type 89 records are not created on hour boundaries 2. Corrected group capacity assignment of NO89 LPARs when NO89 control statement references a CPC 3. Corrected group capacity for multiple CPCs that have LPAR groups and are processed by the same execution of SCRT 4. Corrected group capacity when z/OS switches between z/OS traditional and zNALC workloads 5. Corrected UTC processing that occurs at year end 6. Corrected the tracking of mixed z/OS - z/OS.e hours as z/OS hours 7. Corrected reporting for the count of hours excluded by the Exclude control statement 8. Base the (zNALC) suffix for the LPAR ID on the use of zNALC and not the LPAR name from the VMGUESTS DD control statement 9. Corrected group capacity whenever two or more native z/OS systems use different z/OS SYSIDs in the same LPAR 10. Report the correct percent data collected value for the z/OS hours prior to running zNALC in the same LPAR 11. Calculate correct times when z/OS systems are IPLed with dates in the future 12. Corrected UTC processing when SCRT executes on a z/VSE system
21 Mar 2008 (Version 14.2.10 (z/VSE Only)	<ul style="list-style-type: none"> • Corrected an SCRT reporting problem which occurs whenever SCRT is run on a z/VSE system that has a UTC offset other than zero. <p>This problem does not occur when SCRT is run on a z/OS system to create SCRT reports based on data collected from z/OS, z/TPF or z/VSE systems.</p>
26 Feb 2008 (Version 14.2.9)	<ul style="list-style-type: none"> • Added support for the IBM z Systems10 Enterprise Class (z10 EC) family of processors • Added three new execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. WebSphere Business Srvs Fabric for z/OS V6 (5655-S30) 2. DB2 V8 for z/OS Value Unit Edition (5697-N29)

Version/Date	Description
	<p>3. DB2 V9 for z/OS Value Unit Edition (5697-P12)</p> <ul style="list-style-type: none"> • Corrected a problem where SCRT might ABEND or report an incorrect count of the number of hours excluded by an EXCLUDE statement. • Corrected a problem encountered when processing LPARs with different UTC offsets when the time period crossed a year boundary. • Corrected a problem with the assignment of Group Capacity Limits when SMF89 records were not created on the usual hour boundaries. • Corrected a problem with the assignment of Group Capacity Limits to NO89 products when a NO89 control statement referenced one or more CPCs and referenced specific LPARs (e.g. listed one or more LPARs instead of using "*ALL"). • Corrected a problem with the assignment of Group Capacity Limits whenever a single execution of SCRT processed data for two or more CPCs, each of which had LPAR groups defined. • Corrected a problem with the assignment of Group Capacity Limits whenever two or more native z/OS systems belonging to the same group used different z/OS sysids in the same LPAR.
<p>10 Oct 2007 (Version 14.2.0)</p>	<ul style="list-style-type: none"> • Added two new sub-capacity MLC products to SCRT product list: <ol style="list-style-type: none"> 1. IBM Debug Tool for z/OS V8 (5655-S17) 2. Lotus Domino for z/OS V8 (5655-S73) • Added six new execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. File Manager for z/OS V8 (5655-S14) 2. Fault Analyzer for z/OS V8 (5655-S15) 3. Debug Tool Utilities and Adv Functions for z/OS V8 (5655-S16) 4. SCLM Developer Toolkit V3 (5655-S72) 5. File Export for z/OS V8 (5697-N62) 6. Application Perf Analyzer for z/OS V8 (5697-N63) • Added support for z/OS with zNALC running as z/VM guest systems, which either run in an LPAR named ZNALxxxx or have been IPLLED with LICENSE=ZNALC. The zNALC rules for "native" z/OS systems (non-guest systems) remains unchanged. Note: The LICENSE=ZNALC support requires z/OS APAR OA20314 • Added support for SCRT to run natively on a z/VSE system so that customers who only have z/VSE can create their own SCRT reports. <p>Note: If z/VSE and z/OS are on the same machine it is still required that the data from all of those systems must be processed by a single execution of SCRT running on a z/OS system so that all of those systems appear on the same SCRT report. If z/VSE customers have a separate z/OS machine, they may still choose to use that z/OS system to create the SCRT reports for the data collected from the z/VSE system.</p> <ul style="list-style-type: none"> • Added support for the new SCRT SPECIAL DD statement and new SCRT Exclude control statement that direct SCRT to exclude specified SMF and SCRT89 records from SCRT processing. • Corrected a reporting problem when multiple z/OS 1.6 (or earlier) guest systems run in the same LPAR • Corrected a reporting problem when z/OS.e and z/OS are running on the same CPC • Corrected an SOC4 Abend when multiple z/OS guest systems, with APAR OA20314 applied, run in the same LPAR • Corrected a reporting problem when a z/OS zNALC LPAR reported 0 MSUs for the month • Corrected a reporting problem when an LPAR Group was defined with a group capacity of 0 MSUs
<p>10 Jul 2007 (Version 14.1.0)</p>	<ul style="list-style-type: none"> • Added three new execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. IBM WebSphere Portal Enable for z/OS V6 (5655-R17) 2. zSecure Alert V1 (5655-T11) 3. zSecure CICS Toolkit V1 (5655-T05) • Added support to treat z/OS systems IPLed with LICENSE=ZNALC as zNALC LPARs Note: This support requires z/OS APAR OA20314 • Corrected a problem where on rare occasions the MSUs reported for z/OS would be lower than the MSUs reported for a NO89 product • Corrected a problem where NO89 products might report during times when the supporting Operating System was not running in that LPAR • SCRT will now correctly format the report when there are more than 24 LPARs from the same CPC • SCRT will now correctly attribute capping to LPAR capping or Group capping as appropriate • SCRT will now correctly format the Detail Data Collection section when a truncated SCRT report is generated • SCRT will now correctly issue Footnote 3 in the Group Capacity LPARs section
<p>10 Apr 2007 (Version 13.1)</p>	<ul style="list-style-type: none"> • Added one new sub-capacity Monthly License Charge product to SCRT product list: <ol style="list-style-type: none"> 1. IMS V10 (5635-A01)

Version/Date	Description
	<ul style="list-style-type: none"> • Changed one existing execution-based sub-capacity IPLA product from NO89 status to SMF89 status: <ol style="list-style-type: none"> 1. WebSphere Extended Deployment for z/OS V6 (5655-P28) • Added six new execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. WebSphere Studio Asset Analyzer V5 (5655-R10) 2. WebSphere Service Registry and Repository for z/OS V6 (5655-R41) 3. WebSphere Transformation Extender for z/OS V8 (5655-R95) 4. WebSphere Extended Deployment Individual Comps for z/OS V6 (5655-S33) 5. SCLM Developer Toolkit V2 (5655-R37) 6. SCLM Admin Toolkit V3 (5697-N51) • Added support for Midrange Workload License Charge (MWLC) products, i.e. z/VSE V4 products. • Added 13 new z/VSE sub-capacity Monthly License Charge products to the SCRT product list: <ol style="list-style-type: none"> 1. VSE Central Functions V8 (5686-CF8) 2. CICS TS for VSE/ESA (5648-054) 3. DITTO/ESA for VSE (5648-099) 4. IBM C for VSE/ESA V1 (5686-A01) 5. TCP/IP for VSE (5686-A04) 6. MQSeries VSE/ESA (5686-A06) 7. ACF/VTAM V4 VSE/ESA (5686-065) 8. IBM COBOL VSE/ESA (5686-068) 9. IBM PL/1 for VSE/ESA (5686-069) 10. High Level Assembler VSE (5696-234) 11. DB2 Server for VSE (5697-F42) 12. IBM DFSort/VSE V3 (5746-SM3) 13. DL/1 DOS/VS (5746-XX1) • Added support for z Systems New Application License Charges (zNALC). • Added support for group capacity limits (soft capping across multiple LPARs). • Made a significant number of changes to the format of the SCRT report (changes are summarized in the "Summary of Changes for SCRT V13.1.0" section of the SCRT V13.1.0 Users Guide). • Corrected the calculation of product MSUs for pre-z/OS V1R7 systems which use the z/OS zIIP SPE and runs on LPARs with dedicated engines. • Corrected error message SCRTT00L044 by providing the product ID instead of the product name. • Enhanced SCRT to process RMF records which report less than one MSU from z/OS systems with APAR OW55509 installed.
10 Oct 2006 (Version 12.2)	<ul style="list-style-type: none"> • Added one new sub-capacity Monthly License Charge product to SCRT product list: <ol style="list-style-type: none"> 1. IBM Debug Tool for z/OS V7 (5655-R44) • Added six new execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. WebSphere Process Server for z/OS V6 (5655-N53) 2. WebSphere Enterprise Service Bus for z/OS V6 (5655-R15) 3. Debug Tool Utilities and Adv Functions for z/OS V7 (5655-R45) 4. Fault Analyzer for z/OS V7 (5655-R46) 5. File Manager for z/OS V7 (5655-R47) 6. Application Perf Analyzer for z/OS V7 (5697-N53) • Corrected a problem where on rare occasions the MSUs reported for z/OS would be lower than the MSUs reported for a middleware product. • Corrected a problem with the Start and End times listed in the Detail Data Collection section of the SCRT report. Note that the values in the other sections of the report were not incorrect and are not affected by this change. • Added support for a new z/TPF message if internal data table corruption occurs.
12 June 2006 (Version 12.1)	<ul style="list-style-type: none"> • changed SCRT JCL program PARMS to be Keyword parameters instead of Positional parameters. Customers with tailored JCL from previous versions of SCRT must be sure to make the appropriate changes. • added one new sub-capacity Monthly License Charge product to SCRT product list: <ol style="list-style-type: none"> 1. DB2 V9 (5635-DB2) • added five new execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> 1. IBM Migration Utility for z/OS V3 (5697-N44) 2. SCLM Admin Toolkit V2 (5697-J19) 3. WebSphere Extended Deployment for z/OS V6 (5655-P28) 4. Tivoli OMEGAMON XE for Messaging V6 (5698-A87) 5. Automated Tape Alloc Manager (5697-H62) • corrected SCRT support for Debug Tool Utilities and Adv Functions for z/OS V6 (5655-P15) as a NO89 product. • added support for IBM z9 Systems9 Business Class processors

Version/Date	Description
	<ul style="list-style-type: none"> added strategic support for SCRT89 records produced by z/TPF V1.1 (5748-T15) PUT 2 changed "XXXX" fields in SCRT Report to be "ZZZZ" to avoid firewall and spam filter problems revised the legal disclaimer at the end of the SCRT Report
17 Nov 2005 (Version 11.3)	<ul style="list-style-type: none"> resolved problem where MSUs were reported incorrectly for LPARs with PR/SM hardcaps
10 Nov 2005 (Version 11.2)	<ul style="list-style-type: none"> added one new sub-capacity Monthly License Charge product to SCRT product list: <ol style="list-style-type: none"> IBM Debug Tool for z/OS V6 (5655-P14) added ten new execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> Debug Tool Utilities and Adv Functions for z/OS V6 (5655-P15) Fault Analyzer for z/OS V6 (5655-P16) File Manager for z/OS V6 (5655-P17) WebSphere Event Broker for z/OS V6 (5655-M75) WebSphere Message Broker for z/OS V6 (5655-M74) WebSphere Message Broker with R&F for z/OS V6 (5697-J09) Tivoli Composite Application Manager for CICS V6 (5698-A69) Tivoli Composite Application Manager for IMS V6 (5698-A70) Tivoli Composite Application Manager for WebSphere V6 (5698-A71) IBM Tivoli System Automation for OS/390 V3 (5698-SA3) corrected SCRT support for IBM z9 Systems 109 machines to show proper MSU rating at the top of the SCRT report corrected SCRT S0C4 abend whenever valid SMF data is not provided calculate a rolling 4 hour average value when a test LPAR reports less than 4 hours of SMF data updated the SCRT User Guide to clarify the Report Period % Data in the Detail Data Collection section of the SCRT report
12 Sept 2005 (Version 11.1)	<ul style="list-style-type: none"> added four new sub-capacity Monthly License Charge products to SCRT product list: <ol style="list-style-type: none"> z/TPF V1 (5748-T15) z/TPPDF V1 (5748-F15) Lotus Domino for z/OS V7 (5655-N14) Encryption Facility for z/OS V1 (5655-P97) added three new execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> SCLM Developer Toolkit V1 (5655-M99) Application Perf Analyzer for z/OS V1 (5697-N37) WebSphere Business Integration Server Foundation for z/OS V5 (5655-L85) is now supported via SMF89 records and a NO89 control card is no longer necessary support for IBM z9 Systems 109 support of z/OS V1.7 ability to report rolling 4-hour averages for z/OS V1.7 guests of z/VM when all z/OS instances are at the V1.7 level or higher support customer testing environments with SMF data having dates in the future or past, which are the result of using the sysplex timer offset field on the LPAR configuration panel
10 June 2005 (Version 10.3)	<ul style="list-style-type: none"> added one new sub-capacity Monthly License Charge product to SCRT product list: <ol style="list-style-type: none"> MQSeries for z/OS V6 (5655-L82) added three new execution-based sub-capacity IPLA products to SCRT product list: <ol style="list-style-type: none"> WebSphere Application Server for z/OS V6 (5655-N01) WebSphere Portal Enable for z/OS V5 (5655-M44) WebSphere Studio Asset Analyzer V4 (5655-M22) enhance usability by providing a summary of JCL changes required by each release as a block of comments in the JCL accurately display end dates for which SCRT has received SMF data for each LPAR on each machine correct documentation so that the customer section of the report contains LPAR names for VM guest LPARs consistent with the names for native LPARs
16 Feb 2005 (Version 10.2)	<ul style="list-style-type: none"> corrected SCRT to enable output to be targeted for GDGs that are in Partition Data Set (PDS) format
10 Feb 2005 (Version 10.1)	<ul style="list-style-type: none"> added two new sub-capacity monthly license charge product to SCRT product list: <ol style="list-style-type: none"> CICS TS for z/OS V3 (5655-M15) IBM Debug Tool for z/OS V5 (5655-M18)

Version/Date	Description
	<ul style="list-style-type: none"> • added seven new sub-capacity IPLA product to SCRT product list: <ol style="list-style-type: none"> 1. Debug Tool Utilities and Adv Functions for z/OS V5 (5655-M19) 2. Fault Analyzer for z/OS V5 (5655-M20) 3. File Manager for z/OS V5 (5655-M21) 4. File Export for z/OS (5607-I12) 5. IMS Data Collector for WebSphere Studio Appl Monitor V3 (5697-J01) 6. CICS Data Collector for WebSphere Studio Appl Monitor V3 (5697-J17) 7. WebSphere Studio Application Monitor for z/OS V3 (5697-J18) • display both SYSID and LPAR name for a given LPAR • indicate when defined capacity affects billable MSU values • add robustness for 'DETAIL LPAR DATA COLLECTION' section, indicating active but non-reporting LPARs • change selection of reporting period, now reporting period is based upon majority of SMF data in input stream (rather than midpoint of data in input stream) • ability to generate one .csv file, rather than separate .csv files for each machine (for use with the SCRT Web Interface)
10 Sept 2004 (Version 9.1)	<ul style="list-style-type: none"> • added support for Sub-Capacity zSeries IPLA, announced 10 August 2004 • created a new section called 'detailed data collection' which provides data start date, data end date and % data collected for each LPAR. This section is for informational purposes only and will not affect billing
10 May 2004 (Version 8.1)	<ul style="list-style-type: none"> • added support for processing SMF data from z890 (Machine Type 2086) • changed SCRT to ignore deactivated LPARs that are listed in the NO89 DD Statement, SCRT no longer produces an error/warning message
10 Dec 2003 (Version 7.1)	<ul style="list-style-type: none"> • added one new sub-capacity monthly license charge product to SCRT product list: ALCS V2 (5695-068) • added one new sub-capacity IPLA product to SCRT product list: WebSphere Studio Asset Analyzer V3 (5655-L21) • added one decimal places to the product Grid Snapshot section of the Sub-Capacity Report to improve accuracy
10 Oct 2003 (Version 6.1)	<ul style="list-style-type: none"> • added support for Entry Workload License Charges (EWLC), which offers sub-capacity pricing for z800 customers • added support for Sub-Capacity Charging for select WebSphere products on z/OS, which replaced the Entry Option offering. A complete listing of the select WebSphere products is listed on the web. • added four new sub-capacity monthly license charge products to SCRT product list: <ul style="list-style-type: none"> DB2 UDB for z/OS V8 (5625-DB2) IMS V9 (5655-J38) IBM Debug Tool for z/OS V4 (5655-L24) z/OS.e (5655-G52) - - EWLC allows sub-capacity pricing for z/OS.e • added support for spanned SMF70 records, which may be generated in certain z990 configurations • updated the z990 software pricing MSU values to reflect the new, reduced MSU values. Please note that z/OS Workload Manager will continue to measure rolling 4-hour average according to the old software pricing MSU values until a z990 microcode patch is applied. See the SCRT Maintenance page on the web for more information on the microcode patch. • customer number is now a required SCRT parameter
23 May 2003 (Version 5.1)	<ul style="list-style-type: none"> • added support for processing SMF data from z990 (Machine Type 2084) • added 8 new IPLA products to the SCRT product list (to support IBM's Entry Option (PDF, 49.6KB)): <ul style="list-style-type: none"> - WebSphere Application Server V4 for z/OS and OS/390 (5655-F31) - WebSphere Application Server for z/OS V5 (5655-I35) - WebSphere Portal for z/OS and OS/390 V4 (5655-K12) - WebSphere Host Publisher for z/OS and OS/390 V4 (5655-I03) - WebSphere MQ Integrator Broker for z/OS V2 (5655-I58) - WebSphere MQ Integrator for z/OS V2 (5655-G97) - WebSphere MQ Workflow for z/OS V3 (5655-BPM) - WebSphere Data Interchange for z/OS V3 (5655-I40) • added a new Variable WLC products to SCRT product list: Lotus Domino for z/OS V6 (5655-K36) • changed "Product Information" section of the Sub-Capacity report to display only active (executing) products • improved "Max Contributors" section of the Sub-Capacity report to display products indicated as

Version/Date	Description
	<ul style="list-style-type: none"> 'NO89' parameters improved error reporting to help customers identify missing SMF records
06 Nov 2002 (Version 4.2)	<ul style="list-style-type: none"> enhanced SCRT to handle (discard) SMF record duplicates (caused by events such as Daylight Saving Time) resolved problem where LPARs with PR/SM hardcaps were incorrectly reported by SCRT with a utilization of zero (0) MSUs
18 Oct 2002 (Version 4.1)	<ul style="list-style-type: none"> enhanced support for products that do not create SMF type 89 records. SCRT now calculates the highest concurrent utilization based on a customer-supplied mapping of these products to the LPARs they run in (new customer inputs required in JCL) added functionality to process data from a machine where different LPARs are set to different time zones improved Detail Data Sections of Sub-Capacity Report, including: <ol style="list-style-type: none"> displaying information only regarding active (executing) products transforming the "Product Summary Drill Down" section into a new section called "Product Max Contributors" that better explains which LPAR(s) contribute to forming peak utilization(s) enhancing the "Product Grid Snapshot" section to give a view across all hours in the month, rather than the first/last 24 hours.
02 Aug 2002 (Version 3.2)	<ul style="list-style-type: none"> corrected SCRT to recognize that Query Management Facility V3 (5706-254) does not have SMF89 records based measurement of z/VM LPARs, LPARs with dedicated CPs and LPARs with PR/SM Hardcaps on the number of engines available to the partition.
14 June 2002 (Version 3.1)	<ul style="list-style-type: none"> added support for WLC changes, shift from LPAR defined capacity model to LPAR utilization model enhanced Detail LPAR Data Section on Sub-Capacity Report, to help support new utilization-oriented WLC model
01 April 2002 (Version 2.2)	<ul style="list-style-type: none"> refreshed code for environments having VM with z/OS guests Note: VM environments, please see the updated SCRT User Guide for Instructions
15 Mar 2002 (Version 2.1)	<ul style="list-style-type: none"> added support for processing SMF data from z800 (Machine Type 2066) enabled data from multiple machines to be processed in a single SCRT run by changing the output dataset to a PDS with one member per machine Note: SCRT continues to generate one report per machine, which must be submitted to IBM parameterized repeated customer values (customer number, submitter's name, submitter's e-mail, submitter's phone number, purchase order number) eliminated need to manually update Sub-Capacity Report, for environments with z/OS guests of VM Note: IBM is completing the final validation for the VM enhancement; new findings may necessitate we provide an SCRT refresh for environments having VM with z/OS guests. added one new Variable WLC products to SCRT product list: Tivoli Netview for z/OS (5697-ENV) added one non-Variable WLC product, z/OS.e, for informational purposes only
07 Dec 2001	<ul style="list-style-type: none"> resolved problem causing 0C2 abends; problem stemmed from SMF data in input stream generated after 30 Nov 2001 resolved problem causing SCRT to incorrectly detect OS/390; problem stemmed from z900 machines with dual serial numbers added three new Variable WLC products to SCRT product list: Tivoli Workload Scheduler for z/OS (5697-WSZ) IBM Enterprise COBOL for z/OS and OS/390 (5655-G53) IBM Enterprise PL/I for z/OS and OS/390 (5655-H31)
26 Oct 2001	<ul style="list-style-type: none"> machine serial number, an existing calculated field on the SCReport, is updated to provide additional accuracy customer number is a new optional parameter (supplying your customer number will facilitate IBM billing procedures) customer number is a new field on the SCReport which contains the value provided in the parameter, above "reporting period" is a new calculated field on the SCReport; this field indicates the reporting period covered by the generated report (given the range of dates found in the input data set(s), the SCRT determines the most likely month being described) "% data collected", an existing calculated field on the SCReport, is updated to improve the accuracy of the calculation (new calculation = number of actual hours reported/number of hours in "reporting period") In light of the new field "reporting period", existing calculated fields on the SCReport, "data start date" and "data end date", are moved to the report footer To streamline documentation, a numeric identifier is appended to each error message.

