



Research for Enterprise Systems Suite V4.1 supports the optimization of the processes and systems governance for all areas of business

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At a glance

Research for Enterprise Systems (RES) Suite helps streamline systems governance, operations, automation, quality control, and data management in System z® environments. They also help enhance and complete IBM® Tivoli® Workload Scheduler for z/OS® .

RES Suite:

- RES Suite J-MAN V4.1 - Reduces development and maintenance efforts while migrating System z and scheduling objects definition from development, to test, to production environments. It implements changes of Job Control Language and Tivoli Workload Scheduler for z/OS or other vendor scheduler's objects, plus automatic cloning and replication of environments.
- RES Suite Docet/MP V4.1 - Supports consistency of Tivoli Workload Scheduler for z/OS and IT system objects through complete documentation and cross-reference mapping of all IT assets.
- RES Suite Re-Engineering V4.1 - Reduces CPU consumption by reducing the batch window through increased parallelism in workload execution.
- RES Suite Uptown/MP V4.1 - Facilitates scheduling operations by giving complete autonomy for users to execute and manage on-demand batch processing.
- RES Suite Ws-Planning V4.1 - Reduces human intervention to a minimum level through predictive analytics on business services.

For ordering, contact Your IBM representative. For more information, contact the Americas Call Centers at 800-IBM-CALL (426-2255).

Reference: YE001

Overview

Research for Enterprise Systems (RES) Suite helps organizations increase efficiency and quality of their information systems. The suite also works with IBM Tivoli Workload Scheduler for z/OS to improve optimization and reliability.

RES Suite

- **RES Suite J-MAN V4.1** provides automatic management of Job Control Language and batch processing (validation, quality, generation of cloned copies, automatic changes, and migrations from different environments).

- **RES Suite Docet/MP V4.1** provides complete documentation, mapping, and impact analysis of the entire information system environment.
- **RES Suite Re-Engineering V4.1** helps increase parallelism of workloads for batch window reduction and helps save resource costs.
- **RES Suite UpTown/MP V4.1** provides complete autonomy for users to execute and manage on-demand batch processes along with the related customization parameters.
- **RES Suite Ws-Planning V4.1** helps with the understanding of what will happen in the next production processing window and helps identify possible impacts on the service against any delays in processing.

Key prerequisites

Refer to the [Software requirements](#) section for details.

Planned availability date

March 01, 2013: Electronic general availability (eGA)

Description

Research for Enterprise Systems (RES) Suite helps streamline systems governance, operations, automation, quality control, and data management in IBM System z environments. It also enhances and completes IBM Tivoli Workload Scheduler for z/OS .

RES Suite augments Tivoli Workload Scheduler for z/OS .

RES Suite J-MAN provides syntax checking, quality control, cloning for multiple environments, automatic application of the rules based on predefined standards, and other features. It gives an effective response to problems that can arise related to the generation and maintenance of batch production environments. It provides features for:

- Elimination of logic and structural syntax errors in production objects
- Automatic generation of documentation within the same batch object showing used resources such as files, tables, databases, and programs used by the job
- Automatic management of grouping of JCLs as logical units of work so as to manage all the issues associated with any given moment within a set of activities against those objects
- Consistency and adherence to predefined standards for the JCL relating to site required quality control rules
- Automatic propagation of objects such as jobs and batch schedules between different environments
- Automatic generation of different production versions from a single source object

RES Suite Docet/MP is a complete solution for detailed documentation, mapping, and impact analysis of the corporate IT assets for both the mainframe and distributed systems. It provides you with a comprehensive view of all the information system objects, including the Tivoli Workload Scheduler objects, and their relationships, to guarantee data consistency and facilitate object management. It provides features for:

- Synchronous alignment between documentation and objects
- Improved understanding of relationships and links between objects and application components residing on different platforms
- Immediate, accurate, and complete impact analysis of all activities

RES Suite Re-Engineering improves the performance and quality of batch processing flows and reduces the batch windows, helping you to efficiently design the scheduling networks and jobs. It provides the following features:

- Generation of standard scheduling networks and jobs
- Standardization of processes in regards to amends
- Reliability of backup and restore processes
- Increased parallelism and optimization of the processing time of applications

RES Suite UpTown/MP supports batch modernization projects providing complete autonomy for users to execute and manage on-demand batch processes. It provides features for:

- Designing characteristics of each batch process and the relevant parameters
- Organizing processes into functional groups and business lines, and provide complete access management only to authorized users
- Submitting and monitoring previously defined batch processing activities into Tivoli Workload Scheduler for z/OS

RES Suite Ws-Planning provides the ability to monitor and predict the performance of a batch production environment. It is essential for the advanced understanding of what will happen in the next production processing window and to help identify possible impacts on the service against any delays in processing. It provides the following features:

- Forecasting of any diversion from the flow of the processing that would differ from the actual planning timeline
- Monitoring processes contained in high-level business objects
- Planning processes and simulating the impact of the production environment prior to being implemented

Section 508 of the US Rehabilitation Act

IBM makes no representation about the Section 508 status of the third-party electronic and information technology product in this offering. Contact the vendor for specific, current information on the Section 508 status of this product.

Program number

Program number	VRM	Program name
5655-T69	4.1	RES Suite UpTown/MP
5655-T64	4.1	RES Suite Docet/MP
5655-T65	4.1	RES Suite J-MAN
5655-T71	4.1	RES Suite Re-Engineering
5655-T72	4.1	RES Suite ws-Planning
5655-T70	1.1	RES Suite UpTown/MP S&S
5655-T63	1.1	RES Suite Docet/MP S&S
5655-T66	1.1	RES Suite J-MAN S&S
5655-T68	1.1	RES Suite Re-Engineering S&S
5655-T67	1.1	RES Suite ws-Planning S&S

Product identification number

Program PID number	Subscription and Support PID number
RES Suite Docet/MP 5655-T64	5655-T63

RES Suite J-MAN
5655-T65 5655-T66

RES Suite UpTown/MP
5655-T69 5655-T70

RES Suite Re-Engineering
5655-T71 5655-T68

RES Suite ws-Planning
5655-T72 5655-T67

Education support

IBM training provides education to support many IBM offerings. Descriptions of courses for IT professionals and managers are on the IBM training website

<http://www.ibm.com/services/learning/>

Call IBM training at 800-IBM-TEACH (426-8322) for catalogs, schedules, and enrollments.

Offering Information

Product information is available via the Offering Information website

<http://www.ibm.com/common/ssi>

Publications

No publications are shipped with these programs.

Publications can be downloaded by entitled customers from RES website:

<http://www.res-it.com/en>

Technical information

Specified operating environment

Hardware requirements

None.

Software requirements

The products in this announcement are designed to operate with:

- IBM z/OS V 1.10, or later
- IBM DB2® 7, or later

The program's specifications and specified operating environment information may be found in documentation accompanying the program, if available, such as a readme file, or other information published by IBM, such as an announcement letter. Documentation and other program content may be supplied only in the English language.

Planning information

Packaging

The program package is distributed via electronic software downloaded by entitled customers from RES website

<http://www.res-it.com/en>

- The RES Suite product
- Research for Enterprise Systems Srl License Agreement
- Proof of Entitlement

Security, auditability, and control

The product uses the security and auditability features of the host hardware or software. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Software Services

IBM Software Services has the breadth, depth, and reach to manage your services needs. You can leverage the deep technical skills of our lab-based, software services team and the business consulting, project management, and infrastructure expertise of our IBM Global Services team. Also, we extend our IBM Software Services reach through IBM Business Partners to provide an extensive portfolio of capabilities. Together, we provide the global reach, intellectual capital, industry insight, and technology leadership to support a wide range of critical business needs.

To learn more about IBM Software Services or to contact a Software Services sales specialist, visit

<http://www.ibm.com/software/sw-services/>

Licensing metric definitions and pricing examples

Licensing metric definitions

Value Unit-based pricing

Value Unit pricing for eligible IBM System z IBM International Program License Agreement (IPLA) programs enables a lower cost of incremental growth and enterprise aggregation. Each System z IPLA product with Value Unit pricing has a single price per Value Unit and a conversion matrix, called Value Unit Exhibit, for converting from some designated measurement to Value Units. Most commonly, Millions of Service Units (MSUs) is the measurement designated by IBM to be converted to Value Units. Some other measurements are engines or messages.

Value Unit pricing offers price benefits for you. For each System z IPLA program with Value Unit pricing, the quantity of that program needed to satisfy applicable IBM terms and conditions is referred to as the required license capacity. Each of the various Value Unit Exhibits stipulate that the larger your required license capacity, the fewer Value Units per MSU you will need. Value Unit Exhibits are uniquely identified by a three digit code and referred to using the nomenclature VUExxx, where xxx is the three digit code.

Subsequent acquisitions of Value Unit priced programs offer additional price benefits. The quantity of each System z IPLA program that you have acquired is referred to as entitled license capacity. If you wish to grow your entitled license capacity for a System z IPLA program, the calculation to determine additional needed Value Units is based upon the number of Value Units already acquired.

For each System z IPLA program with Value Unit pricing, you should:

- Determine the required license capacity, in MSUs
- Aggregate the MSUs across the enterprise
- Convert the total MSUs to Value Units, using the applicable Value Unit Exhibit
- Multiply the price per Value Unit by the total number of Value Units to determine the total cost

To simplify conversion from the designated measurement to Value Units or vice-versa, use the Value Unit Converter Tool. For additional information or to obtain a copy of the Value Unit Converter Tool, visit the Value Unit Converter Tool website

<http://ibm.com/zseries/swprice/vuctool>

Note that Value Units of a given product cannot be exchanged, interchanged, or aggregated with Value Units of another product.

To determine the required license capacity for the System z IPLA program you selected, refer to the [Terms and conditions](#) section.

Engine

An engine is also referred to as a central processor (CP) or processor. Engines for traditional workloads are called General Purpose CPs. Engines for Linux™ workloads are called Integrated Facility for Linux (IFL) engines or Linux-only engines. Engines for Coupling Facility workloads are called Integrated Coupling Facility (ICF) engines.

IBM Integrated Facility for Linux (IFL)

This optional facility enables additional processing capacity exclusively for Linux workload, with no effect on the model designation of a System z or OS/390® server. Consequently, executing Linux workload on the IBM IFL will not, in most cases, result in any increased IBM software charges for z/OS , OS/390 , VM, VSE, or TPF operating systems or applications. There is, as indicated, a charge associated with the IFL, and there may also be a charge for applications that run on the IFL. The IFL may be dedicated to a single Linux-mode logical partition or it may be shared by multiple Linux-mode logical partitions. Installations should note that the Linux workspace enabled by this facility will not support any of the S/390® traditional operating systems (OS/390 , TPF, VSE, or VM). Only Linux applications or Linux operating in conjunction with the Virtual Image Facility, an environment that operates within a logical partition or in native S/390 mode and provides the capability to create multiple Linux images, is supported by the IBM S/390 IFL.

MSU

Millions of Service Units (MSU) is defined as millions of CPU service units per hour; the measure of capacity used to describe the computing power of the hardware processors on which S/390 or System z software runs. Processor MSU values are determined by the hardware vendor, IBM , or Software Compatible Vendors (SCVs). For more detailed information about System z software pricing, go to

<http://www-03.ibm.com/systems/z/resources/swprice/>

Standby or backup systems

For programs running or resident on backup machines, IBM defines three types of situations: cold, warm and hot. In cold and warm situations, a separate entitlement for the copy on the backup machine is normally not required and typically no additional charge applies. In a hot backup situation, the customer needs to acquire other licenses or entitlements sufficient for that server. All programs running in backup mode must be solely under the customer's control, even if running at another enterprise's location.

As a practice, the following are definitions and allowable actions concerning the copy of the program used for backup purposes.

Cold: A copy of the program may reside, for backup purposes, on a machine as long as the program is not started. There is no additional charge for this copy.

Warm: A copy of the program may reside for backup purposes on a machine and is started, but is idling, and is not doing any work of any kind. There is no additional charge for this copy.

Hot: A copy of the program may reside for backup purposes on a machine, is started, and is doing work. The customer must acquire a license or entitlement(s) for this copy and there will generally be an additional charge.

Doing work includes, for example, production, development, program maintenance, and testing. It also could include other activities such as mirroring of transactions, updating of files, synchronization of programs, data, or other resources (for example, active linking with another machine, program, database or other resource, and so on), or any activity or configurations that would allow an active hot switch or other synchronized switchover between programs, databases, or other resources to occur.

In the case of a program or system configuration that is designed to support a high availability environment by using various techniques (for example, duplexing, mirroring of files or transactions, maintaining a heartbeat, active linking with another machine, program, database, or other resource), the program is considered to be doing work in the hot situation and a license or entitlement must be obtained.

Value Units

A Value Unit is a unit of measure by which the program can be licensed. Value Unit entitlements are based on the quantity of a specific designated measurement, for example MSUs, users, engines, tape drives, and so on, for the given software. Licensee must obtain sufficient entitlements for the number of Value Units required for licensee's environment as specified in the specific program terms. The Value Unit entitlements are specific to the program and may not be exchanged, interchanged, or aggregated with other Value Unit entitlements of another program.

Pricing example

Pricing steps:

- Obtain number of managed MSU customer would need.
- Convert managed MSUs to required number of Value Units via VUE 020 table.
- Once managed, MSUs are converted to Value Units, multiply the Value Units by the price.

Example:

- Customer has 30 MSUs and price of the product is X.
- Thirty MSUs are converted to 8 Value Units using VUE 020 table.
- Multiply 8 by product price X (list price = 8 * X).

Ordering information

Charge metric

Program name	Part number or PID number	Charge metric
RES Suite UpTown/MP	5655-T69	Per Value Unit
RES Suite Docet/MP	5655-T64	Per Value Unit

RES Suite J-MAN	5655-T65	Per Value Unit
RES Suite Re-Engineering	5655-T71	Per Value Unit
RES Suite ws-Planning	5655-T72	Per Value Unit

VUE 020 table

	No. MSUs minimum	No. MSUs maximum	Value Units per MSU
Tier 1	1	3	1.00
Tier 2	4	45	0.15
Tier 3	46	175	0.08
Tier 4	176	315	0.04
Tier 5	316	>316	0.03

The programs in this announcement all have Value Unit-Based pricing.

Program number	Program name	Value Unit exhibit
5655-T69	RES Suite UpTown/MP	VUE020
5655-T64	RES Suite Docet/MP	VUE020
5655-T65	RES Suite J-MAN	VUE020
5655-T71	RES Suite Re-Engineering	VUE020
5655-T72	RES Suite ws-Planning	VUE020

For each System z IPLA program with Value Unit pricing, the quantity of that program needed to satisfy applicable IBM terms and conditions is referred to as the **required license capacity**. Your required license capacity is based upon the following factors:

- The System z IPLA program you select
- The applicable Value Unit Exhibit
- The applicable terms
- Whether your current mainframes are full capacity or sub-capacity

Value Unit exhibit VUE020

Level	Minimum	Maximum	Value Units/MSU
Base	1	3	1
Tier A	4	45	0.15
Tier B	46	175	0.08
Tier C	176	315	0.04
Tier D	316	+	0.03

Value Units for mainframes without MSU ratings:

HW	Value Units/machine
MP3000 H30	3
MP3000 H50	4
MP3000 H70	6
ESL models	1

Basic license

Ordering information for 5655-T64, 5655-T65, 5655-T69, 5655-T71, and 5655-T72 MSU-based System z offerings. To order, specify the program product number and the appropriate license or charge option.

Program name: RES Suite Docet/MP V4.1
Program PID: 5655-T64

Entitlement identifier	Description	License option/ Pricing metric
S017718	RES Suite Docet/MP	Basic OTC, per Value Unit

Basic OTC, per MSU-day TUC

Program name: RES Suite Docet/MP S&S
Subscription and Support PID: 5655-T63

Entitlement identifier	Description	License option/ Pricing metric
S01770V	RES Suite Docet/MP S&S	Basic ASC, per VU SWS&S No charge, decline SW S&S Per MSU SW S&S reg.

Program name: RES Suite UpTown/MP V4.1
Program PID: 5655-T69

Entitlement identifier	Description	License option/ Pricing metric
S01771S	RES Suite UpTown/MP	Basic OTC, per Value Unit Basic OTC, per MSU-day TUC

Program name: RES Suite UpTown/MP S&S
Subscription and Support PID: 5655-T70

Entitlement identifier	Description	License option/ Pricing metric
S01771W	RES Suite UpTown/MP S&S	Basic ASC, per VU SWS&S No charge, decline SW S&S Per MSU SW S&S reg.

Program name: RES Suite J-MAN V4.1
Program PID: 5655-T65

Entitlement identifier	Description	License option/ Pricing metric
S01771C	RES Suite J-MAN	Basic OTC, per Value Unit Basic OTC, per MSU-day TUC

Program name: RES Suite J-MAN S&S
Subscription and Support PID: 5655-T66

Entitlement identifier	Description	License option/ Pricing metric
S01771G	RES Suite J-MAN S&S	Basic ASC, per VU SWS&S No charge, decline SW S&S Per MSU SW S&S reg.

Program name: RES Suite Re-Engineering V4.1
Program PID: 5655-T71

Entitlement identifier	Description	License option/ Pricing metric
S017720	RES Suite Re-Engineering	Basic OTC, per Value Unit Basic OTC, per MSU-day TUC

Program name: RES Suite Re-Engineering S&S
Subscription and Support PID: 5655-T68

Entitlement identifier	Description	License option/ Pricing metric
S01771N	RES Suite Re-Engineering S&S	Basic ASC, per VU SWS&S No charge, decline SW S&S Per MSU SW S&S reg.

Program name: RES Suite Ws-Planning V4.1
Program PID: 5655-T72

Entitlement identifier	Description	License option/ Pricing metric
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S017723	RES Suite ws-Planning	Basic OTC, per Value Unit Basic OTC, per MSU-day TUC
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Program name: RES Suite ws-Planning S&S
Subscription and Support PID: 5655-T67

Entitlement identifier	Description	License option/ Pricing metric
S01771K	RES Suite ws-Planning S&S	Basic ASC, per VU SWS&S No charge, decline SW S&S Per MSU SW S&S reg.

Terms and conditions

The information provided in this announcement letter is for reference and convenience purposes only. The terms and conditions that govern any transaction with IBM are contained in the applicable contract documents such as the IBM International Program License Agreement, IBM International Passport Advantage® Agreement, and the IBM Agreement for Acquisition of Software Maintenance.

Licensing

Supplier's license terms apply.

Limited warranty

Not warranted by IBM . Warranty, if any, provided by supplier.

Volume orders

Not applicable

Educational allowance

Yes. 15% to qualified educational institutions.

Statement of good security practices

IT system security involves protecting systems and information through prevention, detection, and response to improper access from within and outside your enterprise. Improper access can result in information being altered destroyed or misappropriated or can result in misuse of your systems to attack others. Without a comprehensive approach to security, no IT system or product should be considered completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to be part of a comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective. IBM does not warrant that systems and products are immune from the malicious or illegal conduct of any party.

Prices

Information on charges is available at

<http://www.ibm.com/support>

Choose the option entitled Purchase/upgrade tools.

Order now

To order, contact your local IBM representative.

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Reference: YE001

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Note: Shipments will begin after the planned availability date.

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