IBM CICS Transaction Server and WebSphere Application Server Feature Packs for Dynamic Scripting can help to build applications quickly to meet situational needs

Table of contents

At a glance

CICS® Transaction Server for z/OS® and WebSphere® Application Server for Multiplatforms will deliver Feature Packs for Dynamic Scripting, enabling IT professionals and lines of business developers to leverage the agility benefits of dynamic scripting languages to address less-critical situational applications.

Customers using the Feature Packs for Dynamic Scripting will be able to benefit from reduced application backlogs, greater business agility, and tighter control over the enterprise's computing resources.

Overview

A Smart SOA Application Foundation can help you to deliver on business objectives and contain or even reduce costs across mainframe and distributed applications and all interaction modes (for example, Web 2.0). As part of the Smart SOA Application Foundation, three foundational attributes allow both IBM® CICS Transaction Server for z/OS (CICS TS) and IBM WebSphere Application Server to run robust and agile business applications, leading to:

- Efficient development and management
- Highly effective performance
- Application innovation

The CICS Transaction Server for z/OS (CICS TS) and WebSphere Application Server Feature Packs for Dynamic Scripting promote efficient development and application innovation by enabling enterprise application developers with an agile dynamic scripting programming model. This innovative programming model gives developers the power to rapidly create, assemble, and run situational applications to address departmental, project, and team requirements.

Based on technology from WebSphere sMash V1.1.1, CICS and WebSphere Application Server Feature Packs for Dynamic Scripting provide support for dynamic scripting languages: PHP: Hypertext Preprocessor (PHP), and Groovy. The Feature Packs can enable developers to exploit the programming languages and leverage Web 2.0 technologies, such as Asynchronous JavaScript™ and XML (AJAX), representational state transfer (REST), Atom, JavaScript object notation (JSON), and Really Simple Syndication (RSS) to unleash and reuse enterprise content. The built-in Zero Resource Model (ZRM) provides a simplified way to create RESTful resource

handlers with a data store that can be mapped to both IBM DB2® for z/OS and Multiplatforms for improved resilience, security, and performance.

The Feature Packs for Dynamic Scripting can be used to:

- Rapidly develop, evolve, and deploy rich Web applications, using dynamic scripting languages
- Expose RESTful Web services and widgets for use in mashups and consoles
- Compose composite services, widgets, and applications that combine Web 2.0-style public and enterprise data feeds

The Feature Packs for Dynamic Scripting are optional product extensions for IBM CICS Transaction Server for z/OS, V4.1, and IBM WebSphere Application Server V6.1 and V7.0.

Key prerequisites

CICS Transaction Server for z/OS V4.1

The minimum required level of operating system for CICS TS V4.1 is IBM z/OS V1.9 (5694-A01).

CICS TS V4.1 has no conditional operational requisites.

WebSphere Application Server V6.1 or V7.0

One or more of the following WebSphere products:

WebSphere Application Server V6.1 or V7
WebSphere Application Server Network Deployment V6.1 or V7
WebSphere Application Server Express® V6.1 or V7
WebSphere Application Server Hypervisor™ Edition

Planned availability date

June 18, 2010, WebSphere Application Server Feature Pack for Dynamic Scripting

June 22, 2010, CICS Transaction Server Feature Pack for Dynamic Scripting

Description

In order to become more agile and productive, business users are seeking applications that address various situational needs at a departmental, project, or team level. While individual "situational" applications are often less critical and utilized by a relatively small number of users, when deployed in numbers, they can still provide significant value to the enterprise.

Traditionally, enterprise developers have struggled to address the time-to-market requirements of these situational applications, resulting in a growing application backlog and the existence of applications outside of the control of IT. What is needed is a new approach that leverages agile programming models such as those provided in dynamic scripting languages and lightweight Web 2.0 technologies.

The CICS TS and WebSphere Application Server Feature Packs for Dynamic Scripting can help enterprise IT to address situational application needs by providing a Web-oriented programming model focused on agility through the use of Web 2.0 and dynamic scripting technologies. Based on technology from WebSphere sMash, the Feature Packs for Dynamic Scripting deliver to CICS TS and WebSphere Application Server customers the PHP and Groovy dynamic script languages and an innovative Web 2.0 programming model. The built-in Zero Resource Model (ZRM) provides

a simplified way to create RESTful resource handlers with a data store that can be mapped to IBM DB2 for z/OS and for Multiplatforms for improved resilience, security, and performance.

For more information on the CICS Transaction Server Feature Pack for Dynamic Scripting, visit

http://www.ibm.com/cics/scripting

For more information on CICS Transaction Server, visit

http://www.ibm.com/cics

For more information on the WebSphere Application Server Feature Pack for Dynamic Scripting, visit

http://www.ibm.com/websphere/was/featurepacks

A focal point for development activity related to the CICS TS and WebSphere Application Server Feature Packs for Dynamic Scripting is provided at

http://www.projectzero.org

Developers can use this site to interact directly with the CICS and WebSphere development teams and to download content that can streamline their application development experience.

For more information on WebSphere sMash, visit

http://www.ibm.com/websphere/smash

Key features

Common features

The Feature Packs for Dynamic Scripting from CICS and WebSphere Application Server can be used to develop and deploy lightweight situational applications that meet personal, departmental, project, and team requirements. For example, the Feature Packs:

- Leverage dynamic scripting with PHP and Groovy to quickly address application requirements
- Incorporate WebSphere sMash technology to provide a Web 2.0-oriented programming model for exposing data through RESTful Web services and Asynchronous JavaScript and XML (AJAX)
- Includes PHP and Groovy scripting run times
- Includes the Dojo toolkit for creating rich Web clients with AJAX
- Incorporates the WebSphere sMash programming model, including the built-in Zero Resource Model (ZRM) that provides a simplified way to create RESTful resource handlers to store, maintain, and display situational data
- Enables reports, dashboards, and widgets to be created
- Can be used to help in the creation of productivity applications
- Can be used to quickly prototype and evolve new business ideas, based on continuous customer feedback
- Can help to improve business agility by developing applications that do not yet justify their own budget for development

CICS specific Dynamic Scripting features

The CICS Transaction Server Feature Pack for Dynamic Scripting contains the following features:

- Provides a robust, managed environment for situational applications, built on scalable CICS TS V4 JVMServer technology

- Executes both PHP and Groovy scripts using JVM-based technology, eligible for execution on zAAP engines
- Can be used to Web-enable existing CICS applications, quickly and simply
- Enables new PHP and Groovy programmers to quickly build their CICS skills

WebSphere specific Dynamic Scripting features

The features of the WebSphere Application Server Feature Pack for Dynamic Scripting are:

- Deployment of WebSphere sMash PHP and Groovy applications for production use on entitled WebSphere Application Server V6.1 and V7.0 servers to address less-critical situational application needs where time to market is a key consideration
- Run WebSphere sMash V1.1.1 applications unchanged
- Access to the Project Zero community Web site for developer support with forums, documentation, and samples
- Community-supported browser-based tooling and an Eclipse plug-in for application developers -- available at no charge on the Project Zero community Web site
- Community-supported centralized management and deployment -- sMash Enterprise Packager -- available on the Project Zero community Web site

Accessibility by people with disabilities

A U.S. Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at

   http://www.ibm.com/able/product_accessibility/index.html

Section 508 of the U.S. Rehabilitation Act

The CICS Transaction Server and WebSphere Application Server Feature Packs for Dynamic Scripting are capable, as of June 18, 2010, when used in accordance with the associated IBM documentation, of satisfying the applicable requirements of Section 508 of the U.S. Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it. A U.S. Section 508 Voluntary Product Accessibility Template (VPAT) can be requested at

   http://www.ibm.com/able/product_accessibility/index.html

Product positioning

CICS Transaction Server for z/OS (CICS TS) and IBM WebSphere Application Server are strategic middleware products that perform well using new technologies such as event processing, Web 2.0, Web services, and service components to support SOA environments. These middleware products exploit and complement z/OS qualities of service, such as high availability and scalability, at low cost per transaction, with excellent security and governance capabilities. In combination, WebSphere Application Server and CICS TS support almost any mission-critical solution.

IBM is simplifying the way you consume WebSphere Application Server and CICS with Feature Packs. In order to balance customers' desire for less frequent releases while still making available the latest standards to our customers who need them, IBM has introduced Feature Packs. With Feature Packs, customers can selectively take advantage of new standards and features while maintaining a more stable release cycle.

CICS Transaction Server Feature Pack for Dynamic Scripting delivers a supported and customized version of WebSphere sMash and is designed for customers who wish to develop and deploy situational applications within a supported CICS environment on z/OS, especially those that need to integrate with CICS managed assets or information. For more details of the CICS family, visit

http://www.ibm.com/software/htp/cics/

WebSphere Application Server Feature Pack for Dynamic Scripting delivers an entitled, fully supported version of WebSphere sMash for deploying PHP and Groovy applications to Version 7 and Version 6.1 servers with current subscription support. The feature pack for Dynamic Scripting is designed for customers who want to develop and deploy situational applications within supported WebSphere Application Server environments running on distributed platforms. For more details of the WebSphere Application Server Feature Packs, visit

http://www.ibm.com/websphere/was/featurepacks

For more details of the WebSphere Application Server family, visit

http://www.ibm.com/software/webservers/appserv/was/

WebSphere sMash is designed for IBM Business Partners and independent software vendors (ISVs) seeking a lightweight run time and Web 2.0-oriented programming model to simply and quickly build and deploy Web applications in traditional and cloud computing configurations. For more details on WebSphere sMash, visit

http://www.ibm.com/software/webservers/smash/

WebSphere sMash Developers Edition (DE) is a no-cost, community-supported run time available through Project Zero -- the sMash online user and development team community. WebSphere sMash DE provides developers with a lightweight development run time and includes browser-based tooling known as App Builder. For more details on WebSphere sMash DE, visit

http://www.projectzero.org/

Reference information

IBM software announcements

A software announcement from IBM describes the content of a new version or release of a software product. A full product announcement will contain information such as overall description of the product, details of the functional content, availability date, and ordering information. The following software announcements are relevant to the Feature Packs for Dynamic Scripting:

For information on CICS Transaction Server for z/OS V4.1, refer to Software Announcement 209-135, dated April 28, 2009.

For information on WebSphere Application Server V6.1, refer to Software Announcement 206-076, dated April 11, 2006.

For information on WebSphere Application Server V7.0, refer to Software Announcement 208-266, dated September 09, 2008.

Program numbers

Parent program number for CICS Transaction Server Feature Pack for Dynamic Scripting: 5655-S97

Parent program number for WebSphere Application Server Feature Pack for Dynamic Scripting: 5724-J08

Entitlement, download, and support

CICS Dynamic Scripting

Program-unique terms

This program is supplied only for use with IBM CICS Transaction Server for z/OS, V4.1. Licensee is prohibited from using this program in connection with any other software. If Licensee ceases to be licensed to use IBM CICS Transaction Server for z/OS V4.1, then Licensee's license to use this program automatically terminates.

How to obtain

To download CICS Transaction Server Feature Pack for Dynamic Scripting, visit

   http://www.ibm.com/cics/scripting

Licensee's support authorization for CICS Transaction Server for z/OS V4.1 authorizes support for CICS Transaction Server Feature Pack for Dynamic Scripting.

WebSphere Dynamic Scripting

Proof of entitlement

The proof of entitlement (PoE) for your WebSphere Application Server product includes this Feature Pack. Licensee must have a current Software Subscription and Support (Software maintenance) agreement to deploy the program into production for:

- WebSphere Application Server V7.0
- WebSphere Application Server V6.1
- WebSphere Application Server Hypervisor Edition

How to obtain

To download WebSphere Application Server Feature Packs, visit

   http://www.ibm.com/software/webservers/appserv/was/featurepacks

Licensee's support authorization for any of the following, authorizes support for WebSphere Application Server Feature Pack for Dynamic Scripting:

   WebSphere Application Server V7.0
   WebSphere Application Server V6.1
   WebSphere Application Server Hypervisor Edition

Offering Information

Product information is available via the Offering Information Web site

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

Publications

For CICS Transaction Server Feature Pack for Dynamic Scripting product documentation, visit

   http://www.ibm.com/cics/scripting

For WebSphere Application Server Feature Pack for Dynamic Scripting product documentation, visit

http://www.projectzero.org/

Product documentation will be available at product availability.

Licensed documentation for CICS Dynamic Scripting

International Program License Agreement (IPLA): L-AFOS-838JD9

Licensed documentation for WebSphere Dynamic Scripting

International Program License Agreement (IPLA): L-LZYL-84AMV7

IBM software license agreements are available at

http://www.ibm.com/software/sla/sladb.nsf

Technical information

Specified operating environment

Hardware requirements

None

Software requirements

For CICS Transaction Server Feature Pack for Dynamic Scripting

For additional information on software requirements for CICS Transaction Server for z/OS (CICS TS), V4.1, refer to the CICS TS V4.1 Program Directory (GI13-0536). For online information, click *Detailed system requirements* under *Planning upgrades* at

http://www.ibm.com/software/htp/cics/tserver/support/

Operating environment

- The minimum required level of operating system for CICS TS V4.1 is IBM z/OS V1.9 (5694-A01). CICS TS V4.1 will not initialize in an environment with a lower level of operating system installed.
  - If used with IBM z/OS V1.9, PTF for APAR OA19565 is required.
  - Ensure that the following APARs are applied: OA20352, PK45354, OA20343, and OA19958.
  - If used with WebSphere MQ for z/OS, V6.0, then the following APARs are required: PK38772 and PK42616.
- The IBM SDK for z/OS, Java™ Technology Edition, V6, Service Refresh 4 (SR4) is required for use of Java application programs, enterprise beans, or the CICS Web services assistant.
- The IBM SDK for z/OS is available, without charge, on tape or by download from

    http://www.ibm.com/servers/eserver/zseries/software/java/
- **Note:** The IBM 64-bit SDK for z/OS, Java 2 Technology Edition V1.4 (5655-M30) is not supported. Also, IBM 31-bit SDK for z/OS, Java 2 Technology Edition V5 (5655-N98) is not supported.

For WebSphere Application Server Feature Pack for Dynamic Scripting

The WebSphere Application Server Feature Pack for Dynamic Scripting is based on technology from WebSphere sMash V1.1.1 and supports a subset of platforms available for WebSphere Application Server. In line with WebSphere sMash V1.1.1, the following minimum operating system and hardware requirements must be met

on the deployment and development machines (as indicated below) to support the basic installation and use of the Feature Pack.

```
Operating system       Software           Hardware

Linux on Intel/AMD,    SUSE Linux® Enterprise Deployment disk
32- and 64-bit         Server 10 and 11,  space (including
                       32- and 64-bit; Red JDK): 250 MB + 1 MB
                       Hat Enterprise Linux per application
                       5, 32- and 64-bit

Linux on IBM System z®, SUSE Linux Enterprise Deployment disk
31- and 64-bit         Server 10 and 11,  space (including
                       32- and 64-bit; Red JDK): 250 MB + 1 MB
                       Hat Enterprise Linux per application
                       5, 32- and 64-bit

Microsoft Windows®     Microsoft® Windows  Deployment disk
Server 2003            Server 2003, 32- and space (including
                       64-bit             JDK): 250 MB + 1 MB
                                          per application

Microsoft Windows      Microsoft Windows   Deployment disk
Server 2008            Server 2008, 32- and space (including
                       64-bit             JDK): 250 MB + 1 MB
                                          per application

Microsoft Windows XP   Microsoft Windows XP Deployment disk
Professional           Professional, 32-bit space (including
                                          JDK): 250 MB + 1 MB
                                          per application
```

The minimum operating system and hardware requirements for WebSphere sMash V1.1.1 are also listed at

http://www.ibm.com/software/webservers/smash/reqs/

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

For technical support or assistance, contact your IBM representative or visit

http://www.ibm.com/support

Packaging

CICS Transaction Server Feature Pack for Dynamic Scripting is available for free download from the following Web site

https://www14.software.ibm.com/webapp/iwm/web/preLogin.do?source=swg -cicse

Note: Free registration with ibm.com® is required. This program, when downloaded from a Web site, contains the applicable IBM license agreement and License Information, if appropriate, and will be presented for acceptance at the time of installation of the program. For future reference, the license and License Information will be stored in a directory such as LICENSES.

Security, auditability, and control

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/

IBM Electronic Services

IBM has transformed its delivery of hardware and software support services to help you achieve higher system availability. Electronic Services is a Web-enabled solution that offers an exclusive, no-additional-charge enhancement to the service and support available for IBM servers. These services are designed to provide the opportunity for greater system availability with faster problem resolution and preemptive monitoring. Electronic Services comprises two separate, but complementary, elements: Electronic Services news page and Electronic Services Agent.

The Electronic Services news page is a single Internet entry point that replaces the multiple entry points traditionally used to access IBM Internet services and support. The news page enables you to gain easier access to IBM resources for assistance in resolving technical problems.

The Electronic Service Agent™ is no-additional-charge software that resides on your server. It monitors events and transmits system inventory information to IBM on a periodic, client-defined timetable. The Electronic Service Agent automatically reports hardware problems to IBM. Early knowledge about potential problems enables IBM to deliver proactive service that may result in higher system availability and performance. In addition, information collected through the Service Agent is made available to IBM service support representatives when they help answer your questions or diagnose problems. Installation and use of IBM Electronic Service Agent for problem reporting enables IBM to provide better support and service for your IBM server.

To learn how Electronic Services can work for you, visit

   http://www.ibm.com/support/electronic

The charges are unchanged by this announcement.

Feature Pack availability

The Feature Packs will be available after the planned availability date for free download from

http://www.ibm.com/cics/scripting

http://www.ibm.com/websphere/was/featurepacks

Trademarks

Hypervisor and Electronic Service Agent are trademarks of IBM Corporation in the United States, other countries, or both.

CICS, z/OS, WebSphere, IBM, DB2, Express, System z and ibm.com are registered trademarks of IBM Corporation in the United States, other countries, or both.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Windows and Microsoft are registered trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, product, and service names may be trademarks or service marks of others.

Terms of use

IBM products and services which are announced and available in your country can be ordered under the applicable standard agreements, terms, conditions, and prices in effect at the time. IBM reserves the right to modify or withdraw this announcement at any time without notice. This announcement is provided for your information only. Additional terms of use are located at

http://www.ibm.com/legal/us/en/

For the most current information regarding IBM products, consult your IBM representative or reseller, or visit the IBM worldwide contacts page

http://www.ibm.com/planetwide/us/