

PROGRESS® DATADIRECT® SHADOW® z/SERVICES

MAINFRAME WEB SERVICES AND SOA

The role of the mainframe has dramatically changed with the advent of Web services and Service-Oriented Architectures (SOA). Organizations dependent on the mainframe are realizing it is far more efficient to re-use and re-combine legacy assets rather than expend business capital moving data and logic off the mainframe.

Progress® DataDirect® Shadow® z/Services is the industry's most comprehensive platform for mainframe SOA enablement, with integrated technologies that support bi-directional web services publishing, consumption and orchestration.

SHADOW'S PATENT PENDING TECHNOLOGY FOR SOA

Shadow's unique exploitation of IBM's new mainframe specialty engines allows customers who have purchased the System z9 Integration Information Processor—zIIP and System z Application Assist Processor—zAAP, the added benefit of diverting processing intensive Web services and BPEL workloads to these unmeasured environments, opening the mainframe to new workloads, while providing the potential to dramatically lower mainframe Total Cost of Ownership and significantly improve performance.

KEY FEATURES

- > *Unified integration architecture*
- > *Point and click Studio IDE*
- > *Bi-directional Web services support*
- > *Web services orchestration/ BPEL*
- > *Specialty engine exploitation*

KEY FEATURES

Unified integration architecture	Point and click Studio IDE	Bi-directional Web services support	Web services orchestration/BPEL	Specialty engine exploitation
Industry standard interfaces supporting broad range of mainframe datasources JVM in runtime to support Java, BPEL and Web services specifications	Eclipse based interface simplifies development of mainframe Web services	Publish mainframe business logic, screens or data as reusable Web services Consumption of distributed Web services external to mainframe	Industry standard WS Orchestration via BPEL 2.0 Cost-effective offloading of XML parsing into zAAP specialty engine	Ability to exploit zIIP engine to divert SOA related workloads away from mainframe GPP Ability to exploit zAAP engine to run Java workloads on mainframe, outside of measured GPP

SECURITY OPTIMIZATION AND MANAGEMENT FOR WEB SERVICES

A unique feature of Shadow z/Services is Security Optimization and Management (SOM). SOM provides improved Web services processing through a sophisticated caching mechanism for ACEE credentials.

Through integration to the Extended Security Management, z/Services maintains the integrity of the security infrastructure by subscribing to the security database and purging changed credentials. SOM provides improved performance and lower cost by avoiding the redundant re-authentication and re-authorization of each stateless web service invocation on the mainframe.

BI-DIRECTIONAL SOA AGILITY FOR THE MAINFRAME

Shadow z/Services Web Services Consumption (WsC) is a feature of the product that enables the mainframe to consume Web services that reside outside the mainframe on distributed platforms. The distributed Web services are automatically parsed into COBOL copybooks, eliminating any programming for developers. With Shadow WsC, organizations now has true bidirectional Web services support for enhanced mainframe interoperability and agility within service-oriented architectures.

WEB SERVICES ORCHESTRATION – BPEL SUPPORT

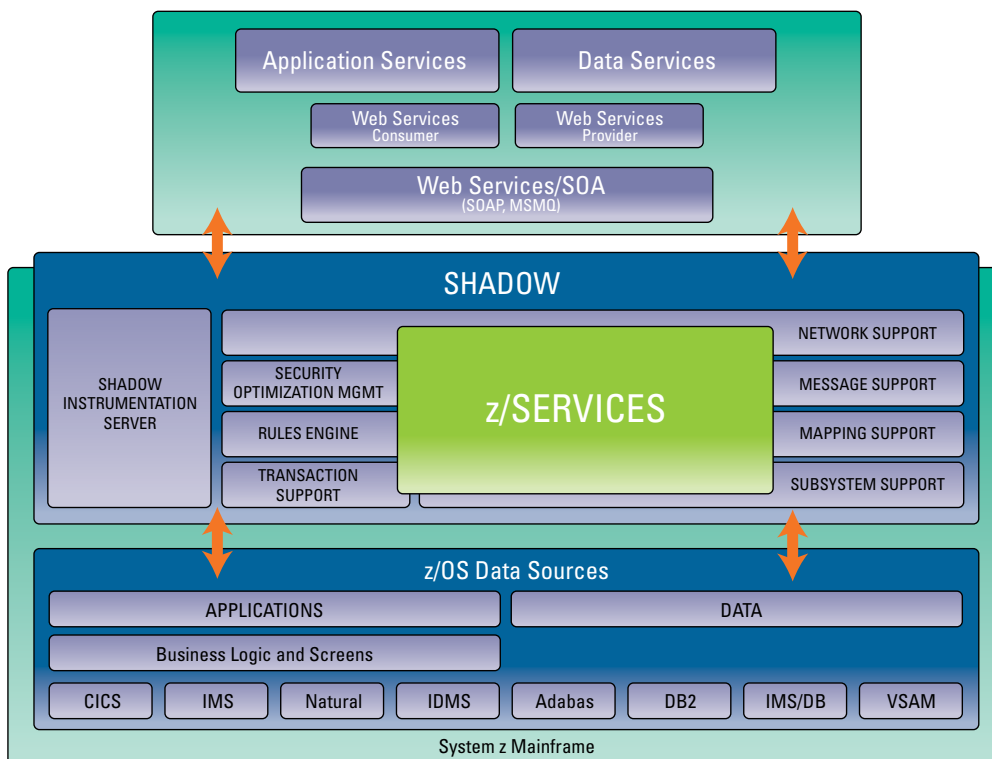
The Shadow Studio has been enhanced to include an industry standard Business Process Execution Language (BPEL) Designer for orchestration of Web services, both distributed and mainframe, allowing organizations to create long-running macro Web services that underpin business process optimization.

For deployment, Shadow takes advantage of the zAAP specialty engine by instantiating a JVM (Java Virtual Machine) under Shadow's control that executes on the specialty engine. The z/OS operating system has been enhanced to automatically make the JVM eligible for processing on the zAAP processor(s) so the deployment of BPEL or any Java workload to the zAAP engine(s) is straightforward. With the zAAP specialty engine, the XML processing requirements of BPEL orchestration no longer hits the General Purpose Processor, but is handled within the unmeasured and unrestricted performance environment of the specialty engine, reducing MSU consumption and improving performance.

SIMPLIFIED WEB SERVICES PROCESS

Shadow z/Services automatically exposes mainframe applications and data as ready-to-use Web services. Shadow offers a broad range of mainframe target systems from which to create Web services, including:

- > Business Logic: CICS, IMS/TM, CA-IDMS, Natural
- > Screens: CICS, IMS/TM, CA-IDMS, CA-Ideal, Natural
- > Data: Adabas, DB2, IMS/DB, VSAM



ACCELERATE SOA WITH SHADOW

Shadow and its Web services component, Shadow z/Services, can accelerate your mainframe SOA initiatives, with new technologies for improved performance and reduced mainframe TCO, providing the ability to re-use mission-critical mainframe resources and spur the development of new applications that drive increased business value.

PROGRESS SOFTWARE

Progress Software Corporation (NASDAQ: PRGS) is a global software company that enables enterprises to be operationally responsive to changing conditions and customer interactions as they occur. Our goal is to enable our customers to capitalize on new opportunities, drive greater efficiencies, and reduce risk. Progress offers a comprehensive portfolio of best-in-class infrastructure software spanning event-driven visibility and real-time response, open integration, data access and integration, and application development and management—all supporting on-premises and SaaS/cloud deployments. Progress maximizes the benefits of operational responsiveness while minimizing IT complexity and total cost of ownership.

WORLDWIDE HEADQUARTERS

Progress Software Corporation, 14 Oak Park, Bedford, MA 01730 USA

Tel: +1 781 280-4000 Fax: +1 781 280-4095 On the Web at: www.progress.com/datadirect

For regional international office locations and contact information, please refer to the Web page below:

www.progress.com/worldwide

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Rev. 09/09 6525-127899

