2008 WebSphere System z Podcasts – 'Did you say Mainframe?'

TITLE: New WebSphere MQ for z/OS v7.1 - 15 years of connecting business applications

HOST: Hi, and welcome to the "Did you say Mainframe?" podcast series. This is where we regularly interview IBM technical experts who can help you to understand important IBM mainframe hardware and software issues. I'm your host Sherrie Abshire.

Today we're going to talk about WebSphere MQ for z/OS V7, the new version of the popular product.

Our guest today is Elena Wood, Application Integration for System z Marketing Manager. Elena, it's great to have you here.

SME: I'm delighted to be here.

HOST: Before we begin, I'd like to mention to our listeners that you can listen to the replay of the MQ sessions at the Connectivity in Action Virtual Conference which was dedicated to celebrating the 15th birthday of WebSphere MQ. I'll be giving out more information at the end of this podcast.

HOST – Question 1: Before we look at the new functions in WebSphere MQ V7, could you please remind us how z/OS customers use WebSphere MQ?

SME – Answer 1: You can connect your core IBM System z platform-hosted applications (CICS, IMS, WebSphere Application Server or WAS, batch) to other System z or distributed applications, including those of your business partners, in many ways. One of the more flexible and mature solutions available today is IBM* WebSphere MQ for z/OS*.

Connectivity plays an important part in reusing the valuable System z assets more effectively. With the growing awareness of service oriented architecture (SOA), many IBM clients view connectivity as a key aspect of delivering business services to facilitate asset reuse. WebSphere MQ is the universal messaging backbone central to the IBM SOA strategy. It supports more than 80 different platform configurations, many programming languages and interfaces and is used by more than 10,000 customers in many industries. It provides a standard way to deliver inter-process communications between applications running on CICS, IMS, WAS for z/OS, batch or TSO.

So, WebSphere MQ is the messaging backbone which provides reliable messaging coupled with transactional integrity, which supports composition of complex applications to fully support parallel processing, exploits System z quality of service.
WebSphere MQ is often used when assured delivery, loose coupling, and/or asynchronous invocation is needed. E.g. It can provide reliable transport for Web Services.

HOST – Question 2: What does the new version of WebSphere MQ offer to z customers to make the z assets reuse easier?

SME – Answer 2: On April 1, IBM announced new WebSphere MQ for z/OS V7, which delivers a wealth of function to give you easier Web connectivity, out-of-the-box support for Web 2.0, more flexible programming options and enhanced performance. This version is generally available as of 27 of June.

WebSphere MQ for z/OS V7 provides even more connectivity options to extend the reach of your mainframe applications to business data both inside and outside of your enterprise, and extract more value from your mainframe assets. In V7, publish and subscribe is integrated into the z/OS queue manager and is fully configurable in the graphical MQ Explorer tool. MQ V7 provides new Message Queue Interface (MQI) calls and adds new options for publish and subscribe messaging to existing MQI calls. If you are looking to Web 2.0 standards for new applications, WebSphere MQ V7 delivers a bridge for HTTP that links AJAX applications to the WebSphere MQ backbone using a RESTful programming model.

HOST – Question 3: Can you go into more details on Publish and subscribe?

SME – Answer 3: In version 7, publish and subscribe is integrated into the z/OS queue manager and is fully configurable in the graphical MQ Explorer tool, which can be used to view, navigate and configure the entire WebSphere MQ network, including those deployed on z/OS.

With integrated support for publish and subscribe messaging, WebSphere MQ v7 is an ideal transport layer for an event-driven SOA. The solution lets receiving applications subscribe to message content without the sending application keeping track of who wants what and where.

The linkage between applications that publish and receive messages isn’t defined explicitly, so you don’t need to update requests when changing an application. Instead, the path between applications is determined dynamically by WebSphere MQ for z/OS, based on topics or keywords that declare interest in certain messages when subscribing, or that tag a message when publishing. This enables you to handle application changes better as you do not need to address point to point messages. e.g. when adding new application you introduce to the pub/sub domain and everyone can access this application.

Can introduce hierarchy of topics

- You can query multiple topics – providing ad hoc access to the z data by topic without writing new applications
- The receiving application controls what data it needs.

For developers who use the MQI for publish and subscribe messaging, MQ v7 provides new MQI calls and adds new options

for publish and subscribe messaging to the existing MQI calls.

In many ways, this new capability is taking WebSphere MQ on z beyond the traditional messaging oriented middleware capabilities, supporting your most demanding SOA requirements.

Host – Question 4: What are the new Web 2.0 capabilities in WebSphere MQ for z/OS?

SME – Answer 4: Many IBM clients are looking to Web 2.0 standards as a way to rapidly deliver dynamic new applications with business-appropriate qualities of service. WebSphere MQ v7 delivers a bridge for HTTP that links AJAX applications to the WebSphere MQ backbone using a RESTful programming model (earlier available as MA0Y SupportPac* for WebSphere MQ V6). WebSphere MQ is inherently asynchronous, which makes it ideal for Web connectivity. Web 2.0 developers don't need WebSphere MQ knowledge or skills to connect their new applications to core business systems.

This bridge capability can simplify administration for large communities of applications that require simple access to WebSphere MQ. Because client applications don't require installation or configuration of WebSphere MQ client code, you can use the bridge for HTTP when you need zero client footprint.

A lot of MQ clients use JMS. We are Increasing JMS listener throughput on z/OS by up to 220%*. On other platforms, including Linux for System z, JMS client applications can benefit from performance enhancements in this version, e.g. non-persistent JMS throughput by up to 300 percent. For current performance figures, visit the WebSphere MQ support page.

WebSphere MQ V7 offers Remote, graphical configuration of JMS and Publish-and-Subscribe on z/OS for easier use, via Eclipse-based MQ Explorer now enabled for up to 5 connections without need for Client Attach Feature license.

I would also like to call out Message Queue Interface (MQI) enhancements and client enhancements, especially quality of service.

HOST – Question 5: Are these enhancements available on Linux for System z?

SME – Answer 5: Linux for System z is a popular consolidation platform which offers you a lot of possibilities for cost savings and improved energy efficiency. If you are considering System z for the first time, WebSphere MQ has an important connectivity role to play in the Linux for System z solution. All of the enhancements are available to our Linux for System z customers.

HOST – Question 6: WebSphere MQ is celebrating its 15th

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Birthday this year. Where can our listeners find out more information?

SME – Answer 6: First of all, I invite everyone to listen to the session replays of the Connectivity in Action Virtual Conference which was dedicated to celebrating the 15th birthday of WebSphere MQ. Celebrations will continue through the year, so please visit the MQ family web site for events details and interesting articles about the history of MQ.

HOST: Elena, that was really interesting.

SME: Thanks for giving me the opportunity to talk about WebSphere MQ.

HOST: Well, that wraps up this podcast discussion. To find out more about the Connectivity in Action Virtual Conference I mentioned earlier, please go to the description for this podcast at:
http://www.ibm.com/software/os/systemz/podcasts/websphereonz/

Join us next time as we talk about another important mainframe topic. For now, this is Sherrie Abshire saying "Thanks for listening".