Why WebSphere Application Server for z/OS?

Total Cost of Ownership

• **Fully Virtualized, Shared Everything Platform**	➢ All hardware resources are virtualized and shared, for maximum efficiency and responsiveness. Combining many individual workloads enables capacity optimization when individual application peak usage occurs at different times. System z provides application isolation through software and hardware resources
• **Consolidated environment**	➢ Less square footage, less power, less cooling. Simplified network infrastructure eliminates TCP/IP overheads and reduces network traffic. WAS for z/OS leverages zAAP specialty processors, thereby significantly reducing hardware and software costs for WebSphere workloads.
• **Consolidated staffing**	➢ System z delivers more with fewer people than distributed platforms. Common WAS Admin interface ensures skill portability across platforms.
• **Potential for consolidated software licensing**	➢ By consolidating from many to few (or one) platform there is the potential to reduce SW licensing charges.
• **Total Cost of acquisition**	➢ *Getting Started Subcapacity Pricing* (GSSP) or *Solution Edition* provide options that may dramatically reduce the acquisition costs for IBM SW and/or HW
• **Robust monitoring and accounting tools**	➢ Usage, chargeback and service level agreement monitoring is made easier with mature tools that have been proven historically

Quality of Service Differentiation

• **Greater reliability**	➢ System z, z/OS and WAS for z/OS are designed to work in concert with each other to provide a highly reliable platform system. E.g. WAS for z/OS uses efficient intra-component signaling via the Sysplex to provide higher reliability
• **Greater availability**	➢ Parallel Sysplex, coupling facility data sharing, DVIPA and Sysplex Distributor, IRD, WLM – all provide 24x7 service with disaster recovery functionality as part of a total system high availability application server platform. WAS for z/OS also provides clustering which can span the Sysplex for greater availability
• **Greater scalability**	➢ Vertical scalability due to System z and z/OS superior I/O capabilities and ability to add resources dynamically. Horizontal scalability using Parallel Sysplex with coupling facility shared data for key subsystems such as DB2, MQ, CICS, IMS.
• **Greater security**	➢ Cross-memory communications is entirely secure; SAF provides robust security structure; System z Servers achieved Common Criteria EAL5 security ranking, and in concert with WAS for z/OS, provides the highest levels of security

Open Standards Compatibility

• **WebSphere Application Server has the same open standard specification support on all platforms.**	➢ IBM is committed to this strategic direction. Applications designed and written to a given specification level are compatible across platforms. This provides flexible portability options.
• **IBM maintains a common source repository with a common build process**	➢ This ensures consistent execution and testing of WebSphere Application Server across all platforms, providing a more reliable environment for our customers.
• **WebSphere Application Server has the same release and maintenance schedule**	➢ Eliminates concern about platform concurrency. Releases are aligned.
• **IBM's application development tooling is compatible across all platforms**	➢ Customers can leverage common development and tooling strategy for WebSphere Application Server regardless of the platforms

Functional Differentiation and Co-Location Value

• **Exploitation of z/OS and Parallel Sysplex capabilities are transparent to applications**	➢ Common programming model and common administrative function provide consistent features and functions to programmers. This provides flexibility to deploy Java workload on "fit-to-purpose" platform without being locked-in on a platform. Platform exploitation below programming model. Best of both worlds.
• **WebSphere Application Server for z/OS exploits key attributes of the platform, such as WLM, SAF, SMF, RRS and cross memory services**	➢ Illustrates platform exploitation while maintaining application compatibility. z/OS has significant availability, reliability, scalability and security differentials. WAS for z/OS exploits them directly. E.g. In coordination with WLM on z/OS, WebSphere can start or quiesce application servant regions to dynamically meet the response time requirements
• **WAS z/OS co-located with key enterprise data provides significant value proposition**	➢ z/OS is where most customers' primary data assets are found today. Fast, reliable access, high throughput, low latency and hence lowest cost per transaction are ensured by running WAS on the same platform. Co-location with data allows WAS to take advantage of local access mechanisms to provide: a) cross-memory performance; b) greater security identity options; c) elimination of SSL encryption overhead; d) better two-phase commit recovery using RRS.