CCEVS APPROVED ASSURANCE CONTINUITY MAINTENANCE REPORT

**ASSURANCE CONTINUITY MAINTENANCE REPORT FOR
IBM WebSphere MQ 6.0.2.2**

Maintenance Report Number: CCEVS-VR-06-0031a

Date of Activity: 03/26/2008

References: Common Criteria document CCIMB-2004-02-009 "Assurance Continuity: CCRA Requirements", version 1.0, February 2004

Impact Analysis Report, "WebSphere MQ EAL4 Impact Analysis Report", Version 1.1, March 25, 2008

Documentation Updated: *WebSphere MQ EAL4 Security Target*, Version 1.0, July 25, 2006 (v6.0.1.1) – updated to *WebSphere MQ EAL4 Security Target*, Version 1.2, March 25, 2008 (v6.0.2.2)

WebSphere MQ v6.0 EAL4 InfoCenter (including System Administration online help)

WebSphere MQ v6.0 documentation in PDF format

Assurance Continuity Maintenance Report:

The vendor for the IBM WebSphere MQ 6.0.2.2 product submitted an Impact Analysis Report (IAR) to CCEVS for approval on 28 December 2007, with an updated version on 25 March 2008. The IAR is intended to satisfy requirements outlined in Common Criteria document CCIMB-2004-02-009, "Assurance Continuity: CCRA Requirements", version 1.0, February 2004. In accordance with those requirements, the IAR describes the changes made to the certified TOE, the evidence updated as a result of the changes and the security impact of the changes.

Changes to TOE:

This maintenance activity consists of changes to both the previous evaluated TOE and the previous evaluated TOE environment. The Impact Assessment Report provides details on the changes; the following is a summary of the changes:

Product Changes

Security Relevant Changes

- The TOE incorporates a number of bug fixes, detailed at http://www-1.ibm.com/support/docview.wss?rs=171&uid=swg27007069, that correct reported anomalies in the product. These bug fixes were reviewed, and although some of them do affect functions provided by the TOE, none are significant enough to change the

TSF or the TSF Interface. All fixes appear to have the goal of making product behavior agree with documented behavior.

- The TOE has been updated to use the Global Security Kit Version 7.0.4.11, which supports a broader set of platforms than in the v6.0.1.1 evaluation. As such, platform coverage for the Websphere MQ v6.0 product has been extended. These platforms are in the IT environment.

- After 19th May 2007, SSL CipherSpecs that use DES cryptography were no longer compliant with the FIPS 140-2 standard. Release 6.0.2.2 ships a version of GSKit which will reject DES-based CipherSpecs when the queue manager or client is in SSLFIPS mode.

As can be seen, all security relevant changes are either in the scope of GSKit (which is a separately evaluated component) or are bug-fixes below the level of the SFRs or TSF Interface.

Non-Security Relevant Changes

The following non-security relevant changes were made to the product as part of this fix-pack. None are related to TOE security functionality.

- Release 6.0.2.1 or later includes a J2EE Connector Architecture (JCA) version 1.5 resource adapter for WebSphere MQ.

- Release 6.0.2.1 includes support for the V6.0 32-bit WebSphere MQ product and 32-bit applications running on Windows XP Professional x64 Edition, Windows Server 2003 Standard x64 Edition and Windows Server 2003 Enterprise x64 Edition. **Note that use of the product on the 64-bit platform is not part of the evaluation configuration, nor has such usage been covered by the evaluation testing.**

- The 32-bit version of the .NET framework versions 1.1 and 2.0 are both supported for use with Windows 64-bit operating systems. **Note that use of the product on the 64-bit platform is not part of the evaluation configuration, nor has such usage been covered by the evaluation testing.**

- The product provides support for the Open Services Gateway Initiative (OSGi), which is a general-purpose, secure, and managed Java framework that supports the deployment of extensible and downloadable applications known as bundles.

- Refresh pack 6.0.2.2 adds the new plug-ins for use with WebSphere MQ Explorer, the graphical administration application provided with WebSphere MQ for Windows V6.0 and WebSphere MQ for Linux (x86 platform) V6.0. These plug-ins provide the ability to connect to JNDI contexts for administering WebSphere MQ JMS objects with similar functionality as the command line JMS Administration tool; the ability to manage authorities for users and groups, compare accumulated authorities, find authorities, and refresh security options; and the ability to check the configuration of a queue manager and

its objects. However, WebSphere MQ Explorer is specifically excluded from the scope of evaluation.

- Support for managed.Net clients, as detailed in "WebSphere MQ Using .NET", GC34-6605-01, http://www.ibm.com/software/integration/wmq/library/

- Components to enable WebSphere MQSeries support in the IBM Support Assistant (ISA).

Supporting Platform Changes

In the previous WebSphere MQ evaluation (6.0.1.1), the only product supported was WebSphere MQ for AIX, and the only evaluated platform was AIX v5.2.

This evaluation broadens the environment significantly to include:

- WebSphere MQ for AIX
- WebSphere MQ for HP-UX
- WebSphere MQ for Linux Intel
- WebSphere MQ for Linux zSeries
- WebSphere MQ for Sun Solaris
- WebSphere MQ for Windows

The specific operating systems (OS) are supported within this evaluation have been broadened to include:

- AIX v5.2
- HP-UX 11.11
- SUSE Linux Enterprise Server 8 SP3 (for Linux Intel and Linux zSeries)
- RedHat Enterprise Linux AS 3 (for Linux Intel)
- Sun Solaris 8
- Microsoft Windows 2000 (this includes all combinations of Advanced Server, Server, Professional, Service Packs and hotfixes) – 32 bit editions only
- Microsoft Windows 2003 (this includes all combinations of Standard, Enterprise, Service Packs and hotfixes) – 32 bit editions only.

The Impact Assessment Report also indicates that corresponding updates have been made to the appropriate assurance evidence, including the test matrices. Regression testing has been performed by the developer on all evaluated platforms to ensure the TOE is invoked as in previous versions.

Conclusion:

The changes to the TOE and TOE environment, as described in the Impact Assessment Report, were analyzed and found to have no effect on the security of the evaluated TOE. The non-security relevance of the set of changes (with respect to the TOE's SFRs) leads to the conclusion that the updates included in the transition from IBM WebSphere MQ v6.0.1.1 to IBM WebSphere MQ

v6.0.2.2 can be classified as a **minor change** and that certificate maintenance is the correct path to continuity of assurance.

Note that this maintenance action includes some changes outside the TOE boundary that could be construed as security functionality. It is important to note that these excluded security-relevant features **are not covered** by this maintenance action. However, these additional security relevant features in the product will be required to be covered by the TOE's Security Functions at the next major change (sooner if CCEVS policy changes) based on CCEVS Policies 10 and 13 (and their addenda).