



## A New Way for Messaging : The MQ Appliance

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### SOA and Connectivity

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### MQ-as-an-Appliance

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As today's enterprise becomes much more connected, messaging plays a crucial role in ensuring that your connected architecture is flexible, simple and reliable. After years of dominance in the Messaging and Connectivity space, this February IBM announced the arrival of MQ v8.0 in the form factor of a physical appliance. The MQ Appliance brings great aspects such as simplicity, scalability, security, rapid and remote deployment, and also high availability through paired appliances.



Some of the new features of the MQ Appliance 2000 are,

- The hardware and OS of the MQ Appliance is based on the proven IBM DataPower Appliance
- Firmware includes MQ v8.0 and has the ability to utilize existing MQ networks and clusters
- Built in high availability using paired appliance with automatic queue manager fail over
- Advanced security options with LDAP-based authentication and authorization with MQ AMS
- Administration concepts are very similar to existing MQ Software Administration
- Premium performance right out-of-the-box with a very simple deployment procedure

## The MQ M2000 A/B

The new MQ Appliance comes in two unique models, the M2000 A and the M2000 B. Both the models are based on the same physical appliance, with the major difference being the number of processor cores, which reduces the price and performance of the M2000 B model.

Some of the features of the two models are,

### MQ M2000 A

- For Enterprise Deployment and Consolidation options
- Capable of handling larger messaging workloads
- Host multiple queue managers to be used as a Messaging Hub
- Built in HA with paired appliance and AMS for security
- Can be used to move MQ MFT files between MFT End Points

## MQ M2000 B

- For Branch/Remote/Factory low-end Deployment options
- Lower Processor Utilization and lower messaging throughput
- Trade up part available from M2000 B to M2000 A
- Built in High Availability with paired appliance and AMS for security
- Can be used to move to move MQ MFT files between MFT End Points

## Appliance = Advantage

With MQ being used in a software based approach for so many implementations, the whole idea of the appliance prompts questions regarding the advantages and value of moving to an appliance based deployment model for messaging.

Some of the prime advantages and deployment options for the new MQ Appliance are,

- With a dedicated appliance your messaging footprint is simpler and smaller
- Easier administration with separated roles and MQ Console Tool (Browser Based)
- Pre-Optimized Hardware for highest and optimum performance
- Certified firmware updates from IBM for both MQ and firmware
- Lower data center costs, space usage and power requirements
- High Availability provided with the appliance out-of-the-box

## Use Existing Deployments

Another question that is bound to pop up is the usage of your existing MQ deployments along with new appliance based Queue Manager Deployments. Is it possible to use our new MQ Appliance along with existing MQ networks and clusters?

The answer is YES!

The firmware of the MQ Appliance includes MQ v8.0 capabilities and thus allows the appliance to participate in existing MQ networks and clusters. Since applications cannot be run on the appliance, all existing



MQ applications connect to the appliance as clients with no code changes required.

## The Differences

Even though the MQ Appliance comes with MQ v8 on it, the deployment capabilities of the two versions varies vastly. Some of the major differences between software-based MQ and the appliance-based MQ are,

- The Appliance uses a Hub-Based pattern, which means that applications must connect as remote clients
- No user exits can be run on the appliance and monitoring must be done with remote monitoring agents
- Shared file systems and disks are not required for providing MQ Appliance
- All firmware updates are done through single installable fix packs which are certified by IBM
- The CLI of the appliance should not be used as a general purpose shell

## Appliance Security

The MQ Appliance comes with advanced security features, AMS and also a tamper-proof physical appliance, which ensures that your messaging components stay secure for your enterprise. Some of the new key security aspects of the appliance are,

- The appliance supports SSL/TSL connectivity and also gives you the option to upload existing certificates for authentication
- You can managed your users both locally(Small Group) and using an external LDAP repository for larger user groups (With LDAP users can become global across appliances)
  - With MQ Internet Pass-Thru you can enable proxy based tunneling for appliance connectivity
  - With the MQ Appliance you can now separate Messaging Administrators and Appliance Administrators



## **Deployment Use Cases**

The deployment options and use cases with the new MQ Appliance are limitless, but some of the most important and possible use cases within your messaging infrastructure would be,

### **A Messaging Hub**

Lack of standardization within your messaging infrastructure makes rapid changes, migrations and upgrades a complex activity. The MQ Appliance can help you to deploy a simpler and smaller footprint in a standardized deployment model, which in turn makes sure that your messaging is contained in a Highly Available Messaging Hub.

### **For Business Partners**

In today's demanding market-place it is important for an enterprise to be connected to its business partners and this becomes complicated when the partners lack MQ skills and support personnel. This is where the MQ Appliance can be used to connect you with your business partners in a simple, secure and reliable manner.

### **Remote Deployment**

Remotely deployment messaging options used to need strong IT Administration Teams, and difficulties with failover support. This all changes with the remote deployment options of the new MQ M2000. The MQ Appliance makes the deployment, operation and maintenance of your remote messaging in retail stores, factories, warehouses and various other remote locations. You can have a remote pre-configured MQ Appliance up-and-running with simple setup steps and plug-in options (or) remotely configure the appliance.

### **Appliance Administration**

Administering the new MQ Appliance will be very much similar to administration of existing MQ deployments. The following are the

- Command Line Interface for appliance specific commands with remote scripts also supported
- Browser Based MQ Console for administering the appliance
- MQ Explorer for existing administrators
- PCF support for remote administration of all existing MQ Tools

