



TxMQ, Inc. Introduces: MQ Capacity Planner™

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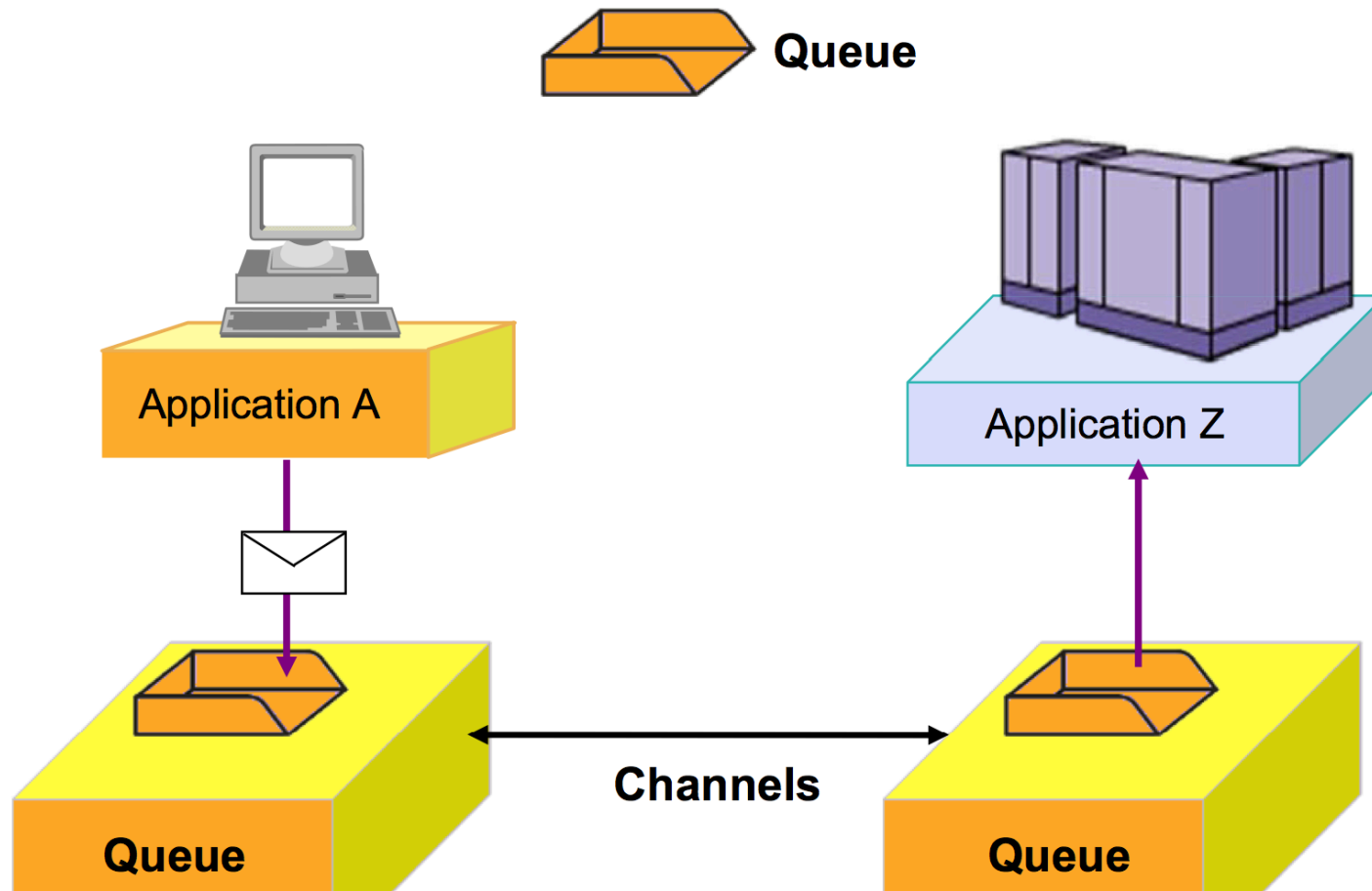




What is IBM MQ?

- The Industry Standard Application Messaging-oriented Middleware
- For how long ?
 - MQM MVS/ESA V1.1 - 1993
 - MQSeries V2.x – 1995
 - WebSphere MQ V5.3 – 2002
 - Latest V8.0 - 2014
- Platforms Supported
 - AIX, HP, IBM I, Linux, 4690, Solaris, Windows, z/OS
 - Both Client and Server
- MQ APIs
 - IBM Message Queue Interface (MQI) for C, Java, Cobol, PL/1, RPG and C++
 - Java Message Service (JMS)
 - XMS for C/C++ and .NET
 - Not Officially supported
 - Perl, Python, Windows PowerShell

How Does MQ Work?





Flexible Architecture

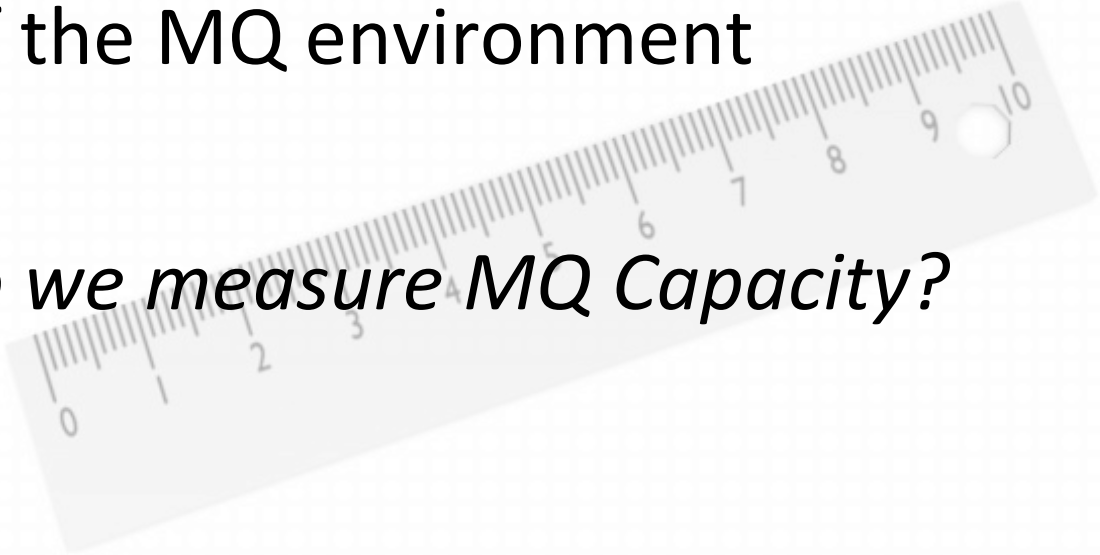
- **MQ Server Based**
 - Any to Any
 - Hub and Spoke
 - Zoned Hub and Spoke
- **Enterprise Shared MQ Service**
 - Centralized MQ Service
 - Applications are Clients
 - Physical deployment
 - Hub and Spoke
 - May include Zoning



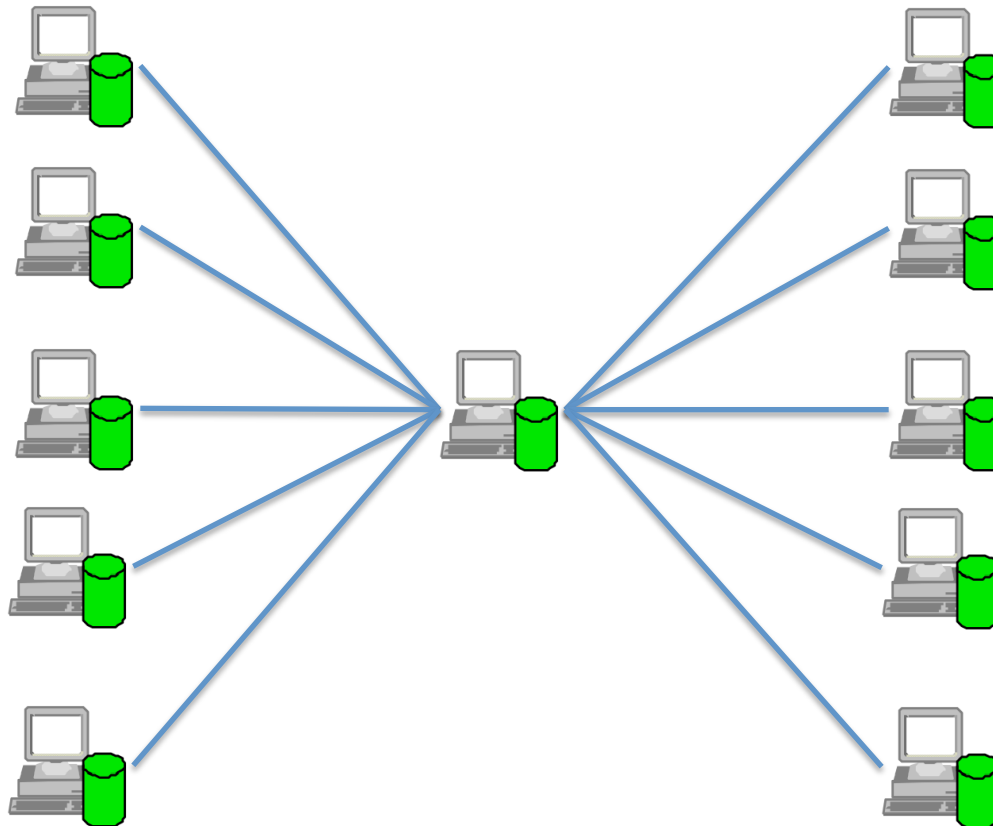
Big Questions

- What is the capacity of a Queue Manager?
- Capacity of the MQ environment
- Segments of the MQ environment

How do we measure MQ Capacity?



Basic Hub & Spoke Example





MQ Capacity Planner™



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How Does MQCP™ Do This?

- By using a process
 - Repeatable
 - Measurable
 - Quantifiable
- Measures Queue Manager responses vs. system utilization

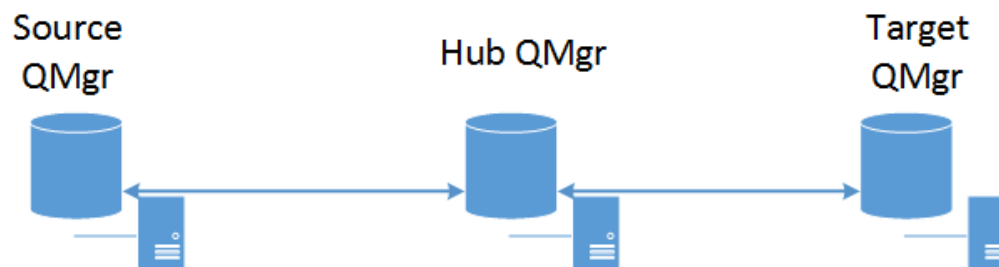


What makes MQCP™ *Unique?*

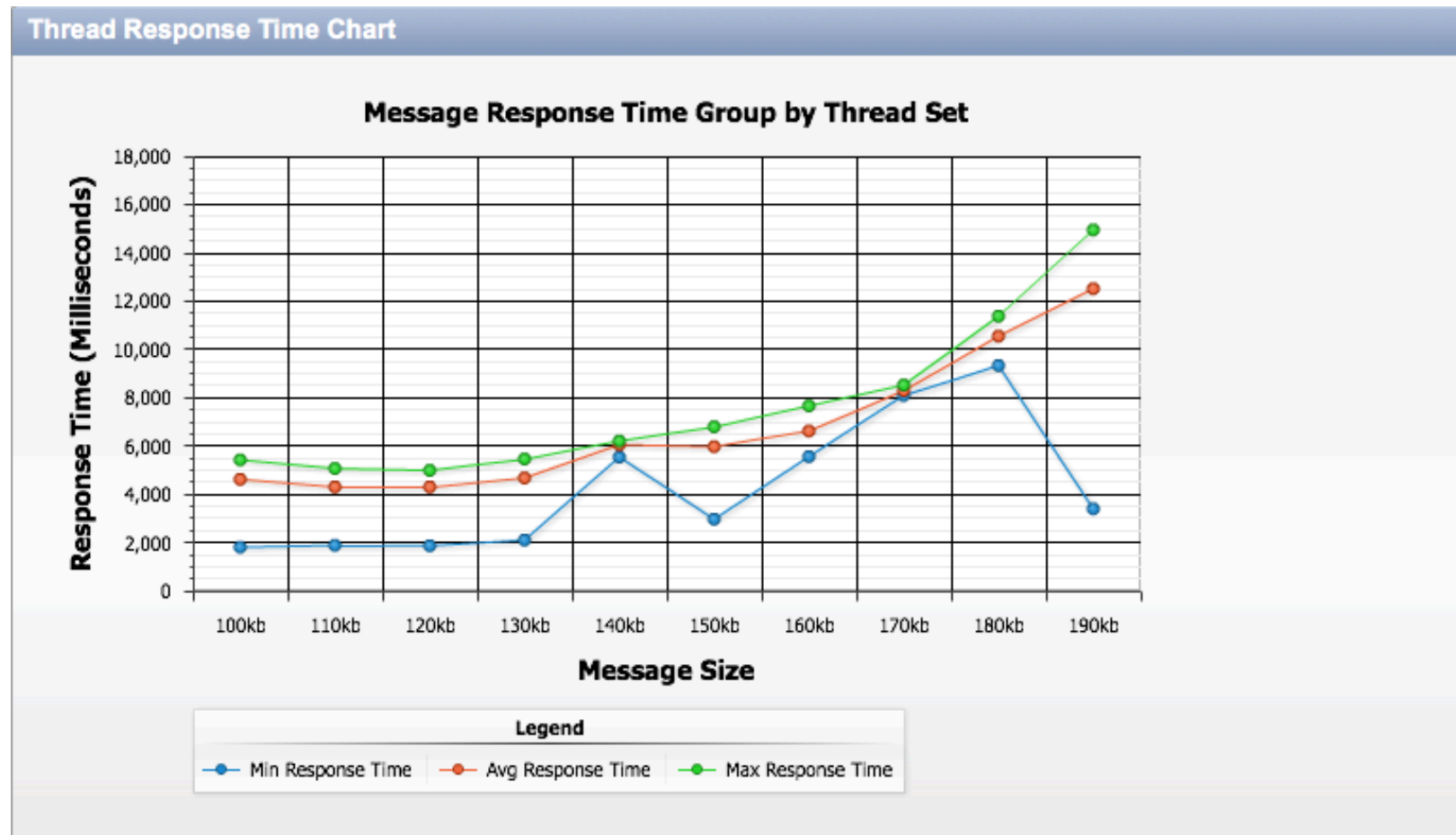
- Configurable process
 - Multi-threaded
 - Produces 1000 messages per thread
 - Puts
 - Gets
 - Puts & Gets
- Capture system utilization
- Produce charts

Sample Environment

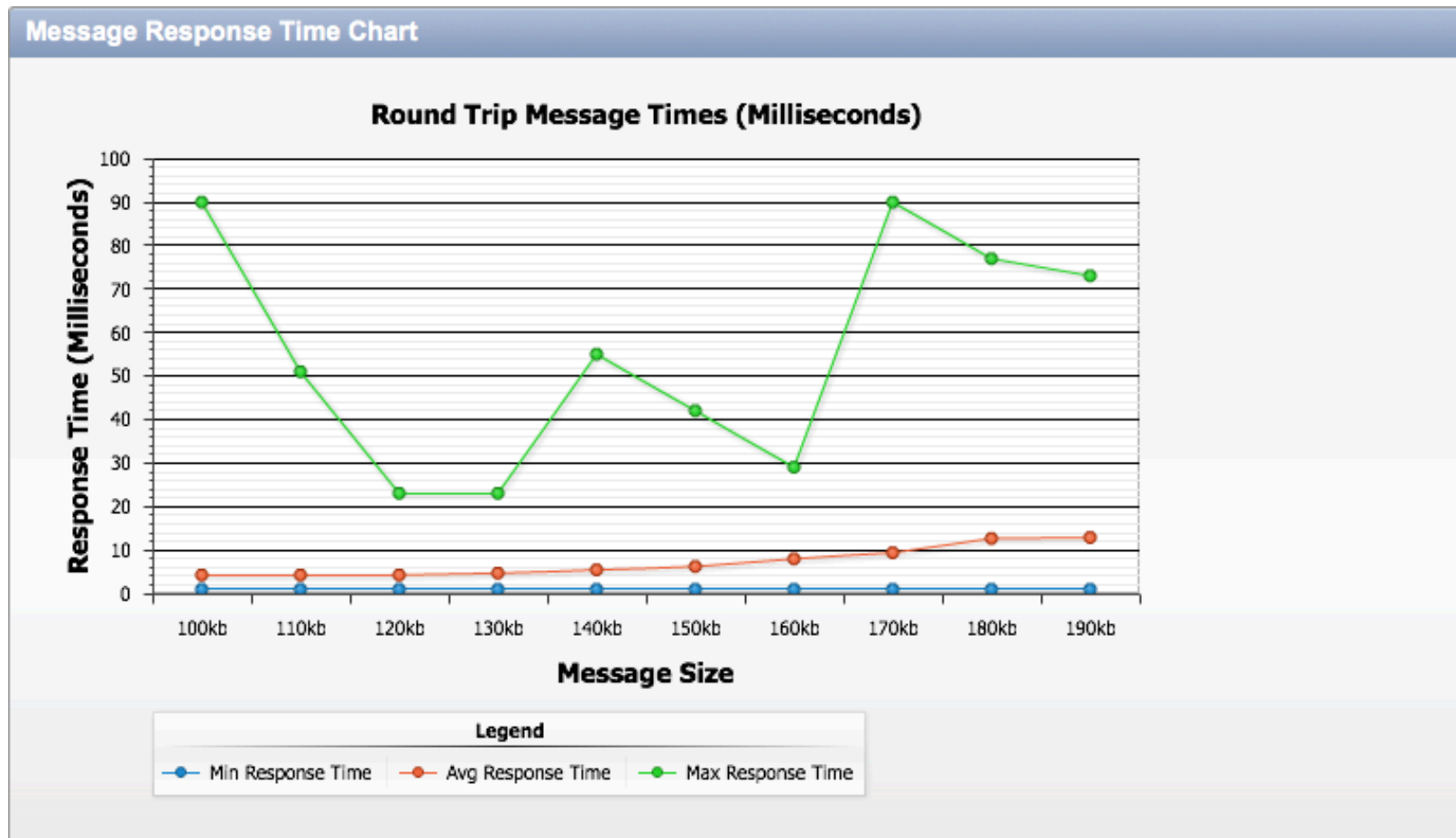
- Linux Redhat 2.6 VM
 - 4 cores (i7 2.8 Ghz boosting to 3.6 Ghz)
 - 4 GB Memory
 - Storage, SSD
- MQ Version 7.5
 - Hub and Spoke Queue Managers



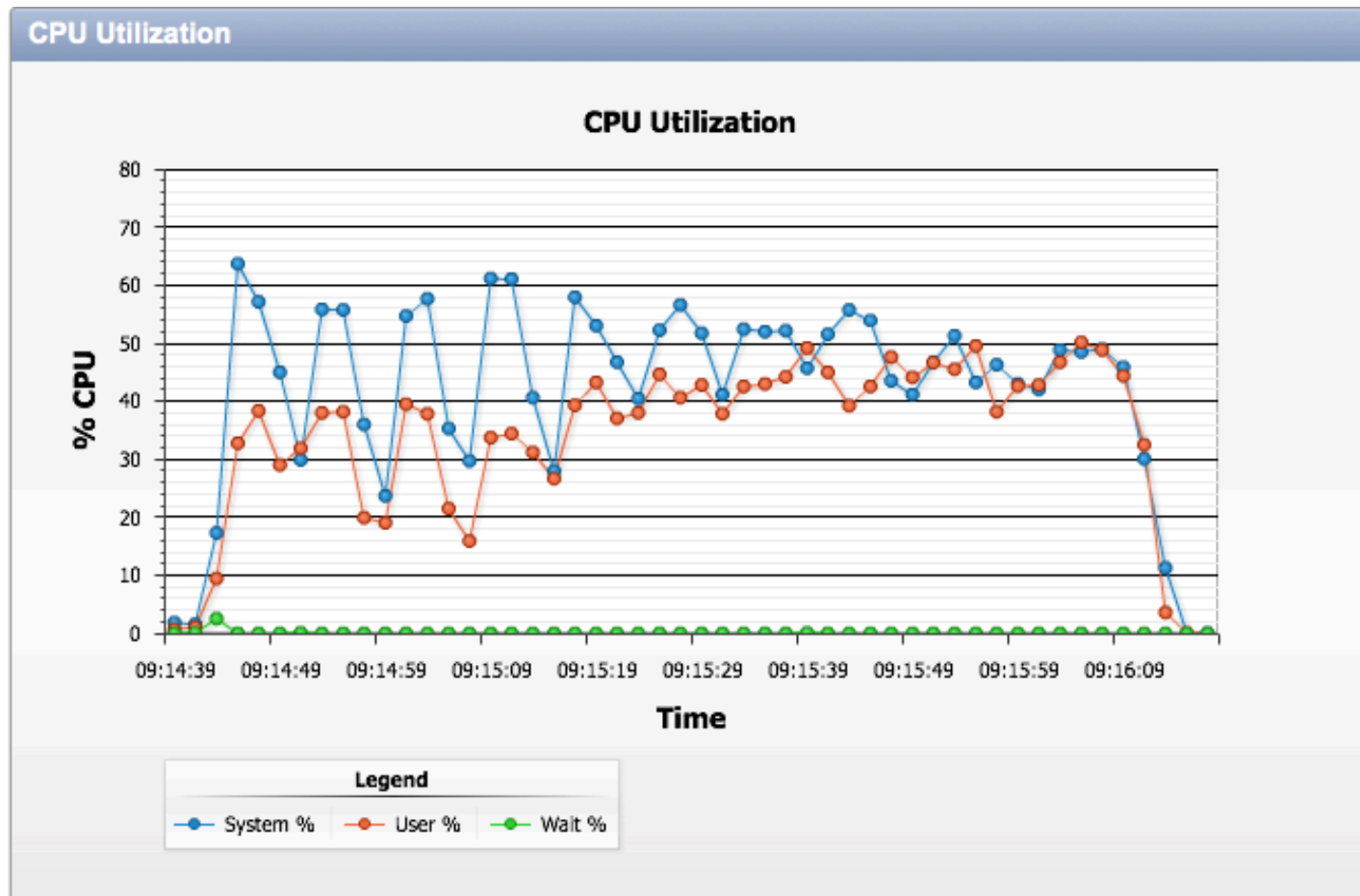
Thread Response Time



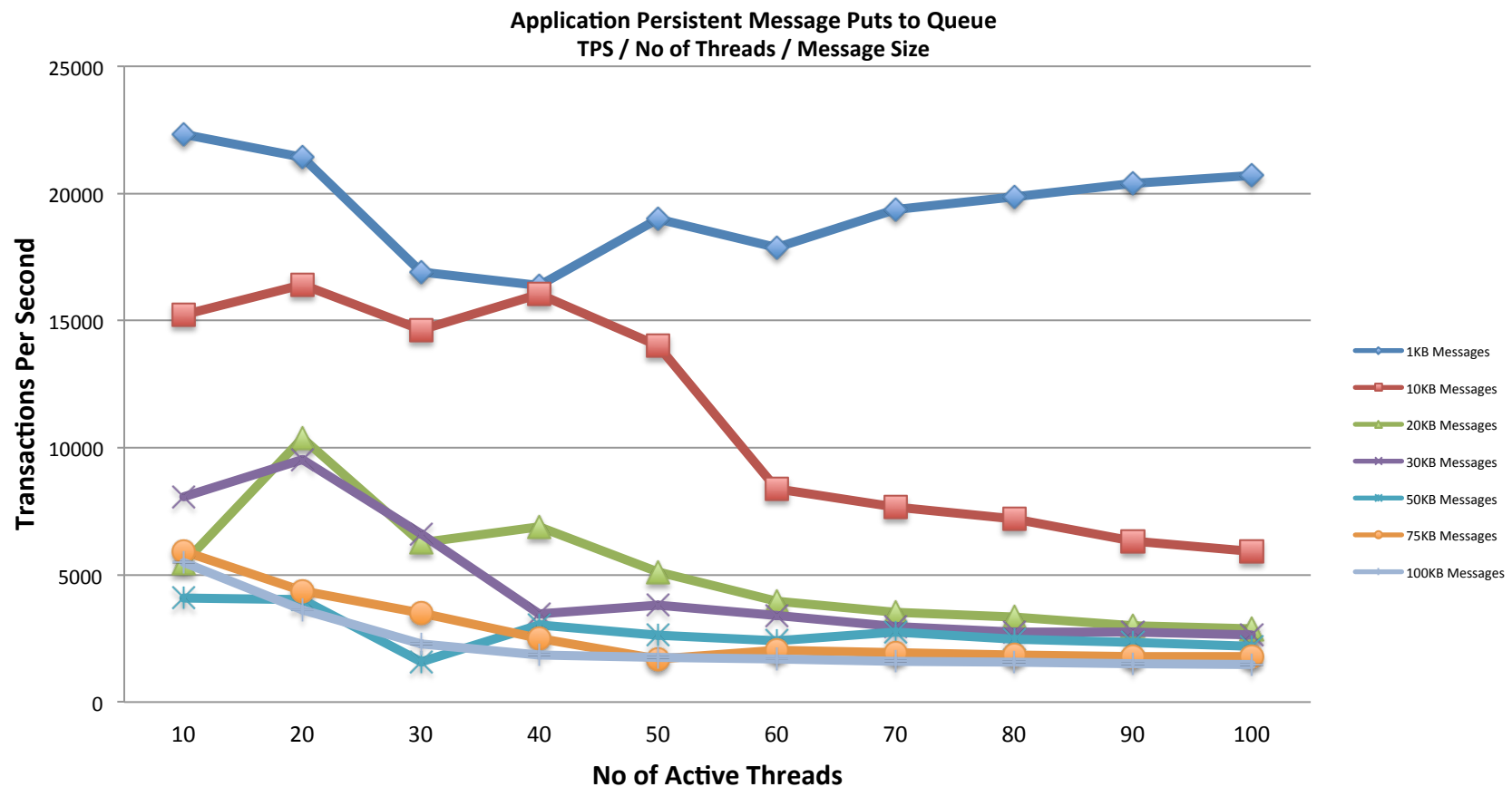
Message Response Time



CPU Utilization

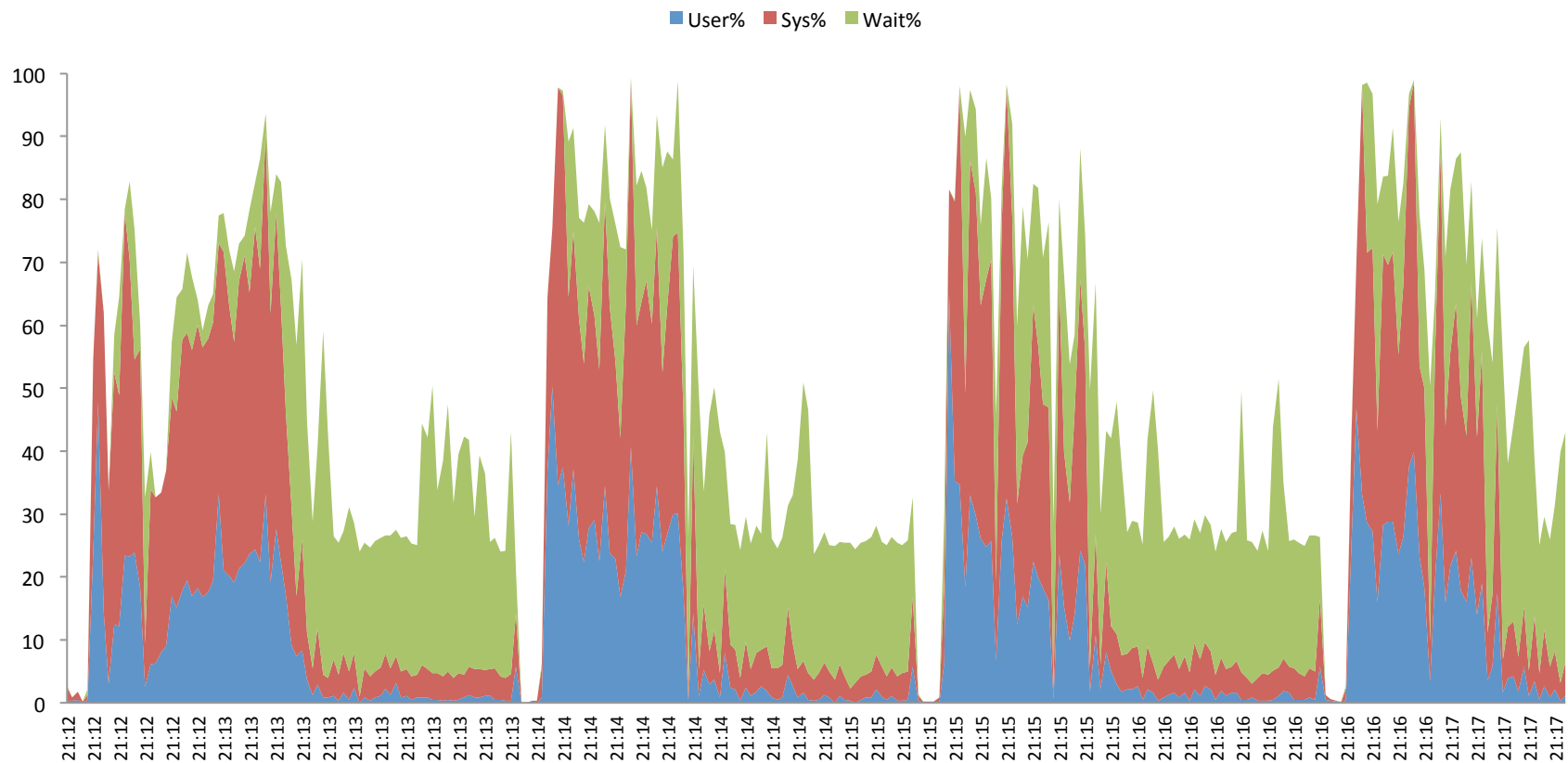


Transaction Per Second



CPU Utilization

CPU Total : 100 Threads : 100Kb Messages





What is MQ Capacity Measuring?

MQ Capacity => $\text{sum}(\text{Response Time} = \text{MsgSize} + (\text{latency} * 2) * \text{demand})$



Summary

- Cost management
- Understand your current MQ capacity
- Effectiveness of your virtual and horizontal program



Contact Us

Contact us about Scheduling your MQ Capacity Planner engagement.

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Be one of our early customers and take advantage of special pricing options!

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