



# ***TxMQ, Inc. Introduces: MQ Capacity Planner™***

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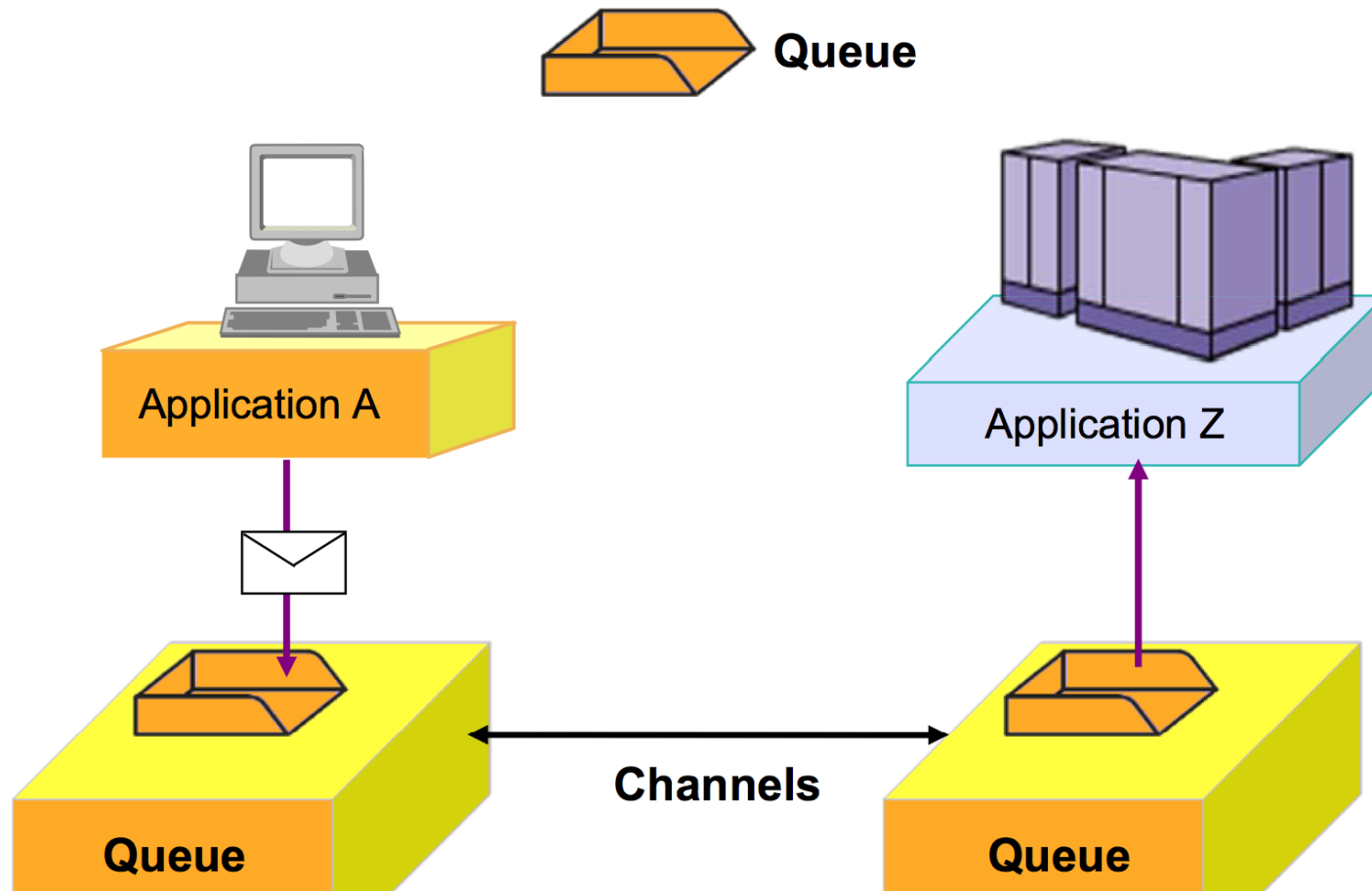




# What is IBM MQ?

- 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

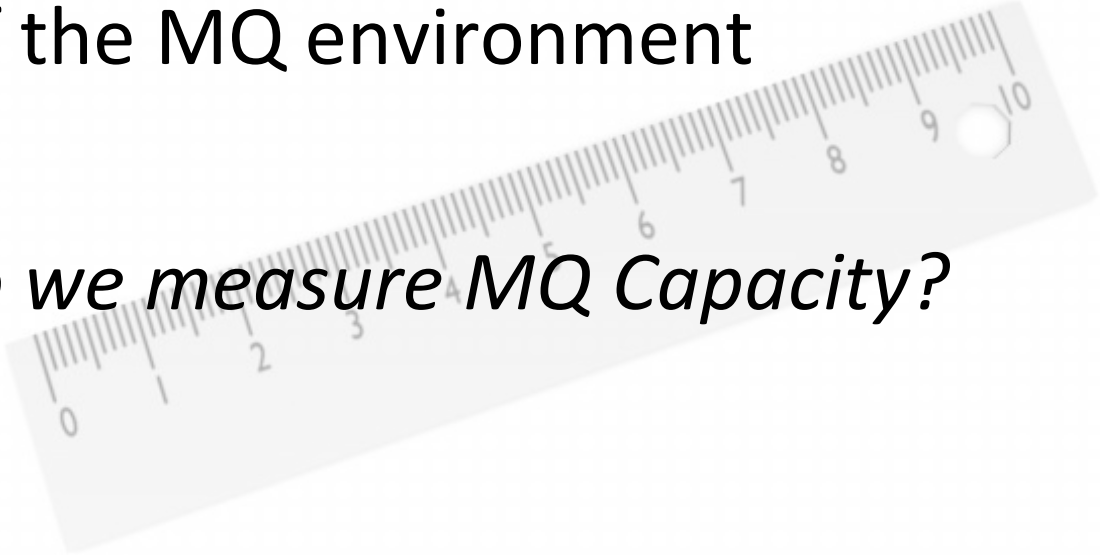
- **MQ Server Based**
  - Any to Any
  - Hub and Spoke
  - Zoned Hub and Spoke
- **Enterprise Shared MQ Service**
  - Centralized MQ Service
  - Applications are Clients
  - Physical deployment
    - Hub and Spoke
    - May include Zoning



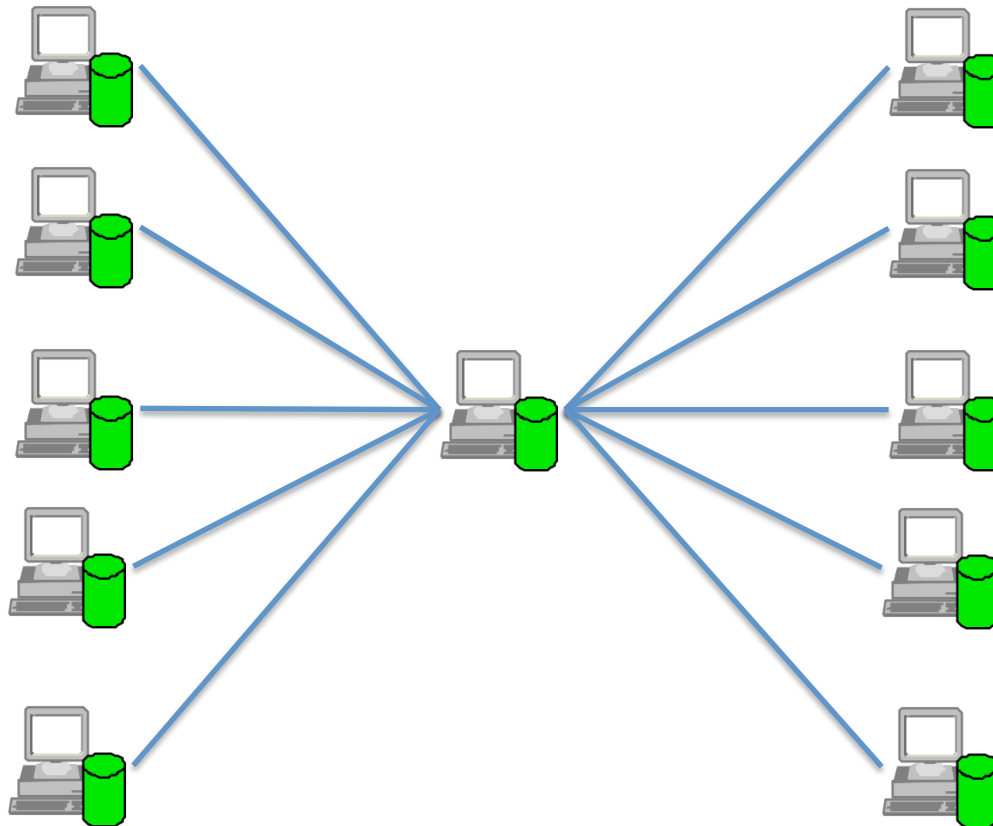
# Big Questions

- 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™***

***TxMQ***



***MQCP™***  
***TxMQ***

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# How Does MQCP™ Do This?

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

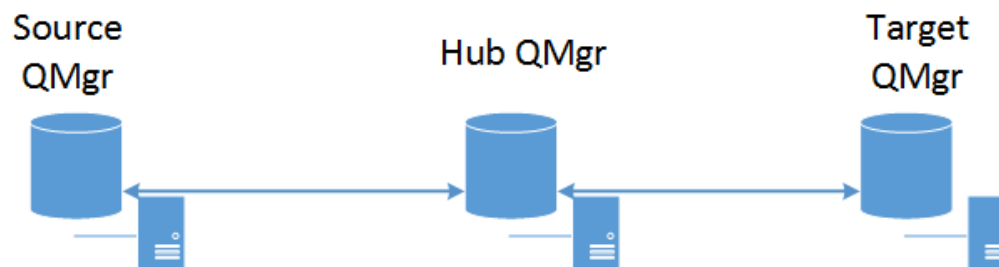


# What makes MQCP™ *Unique?*

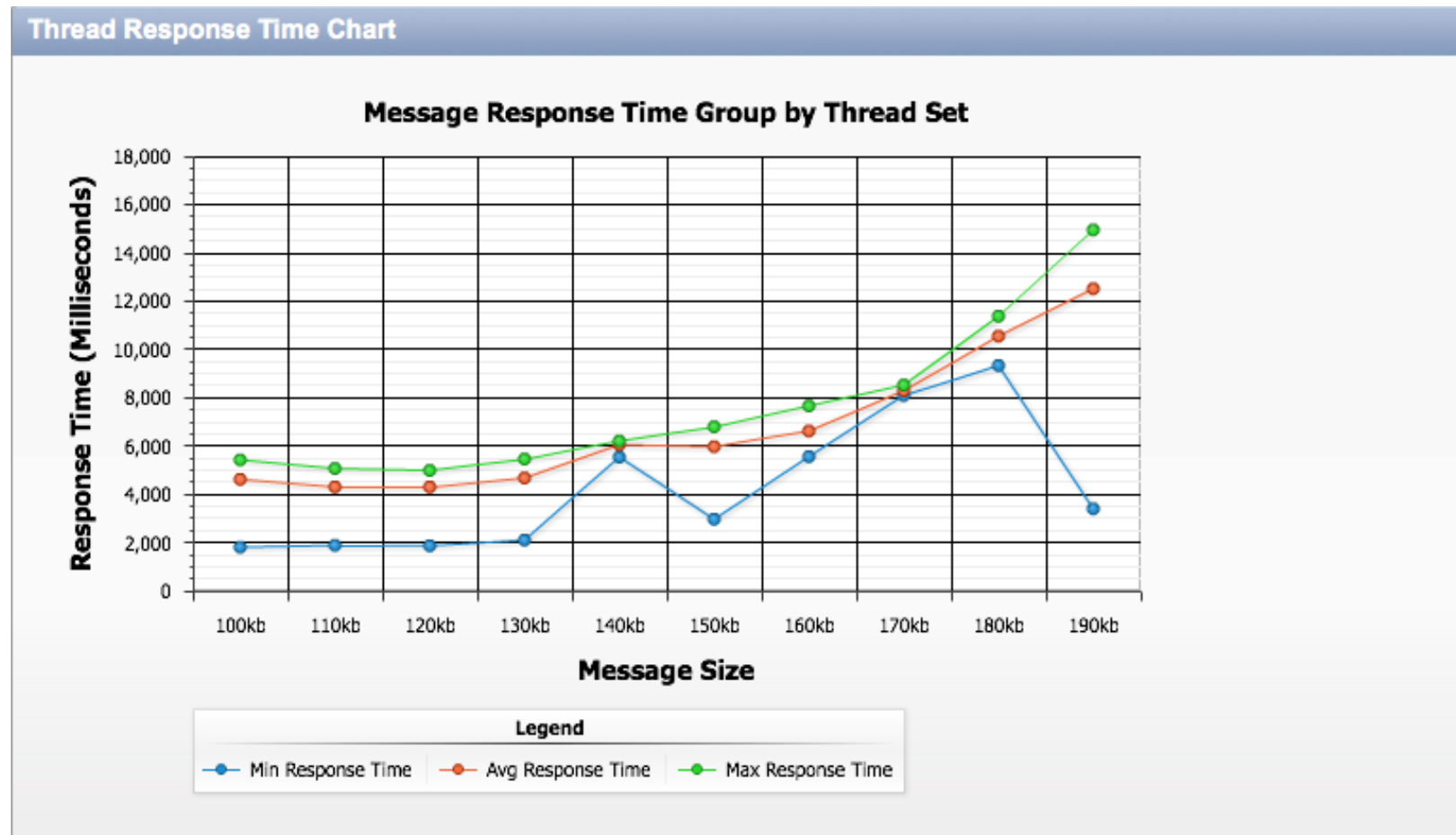
- Configurable process
  - Multi-threaded
  - Produces 1000 messages per thread
  - Puts
  - Gets
  - Puts & Gets
- Capture system utilization
- Produce charts

# Sample Environment

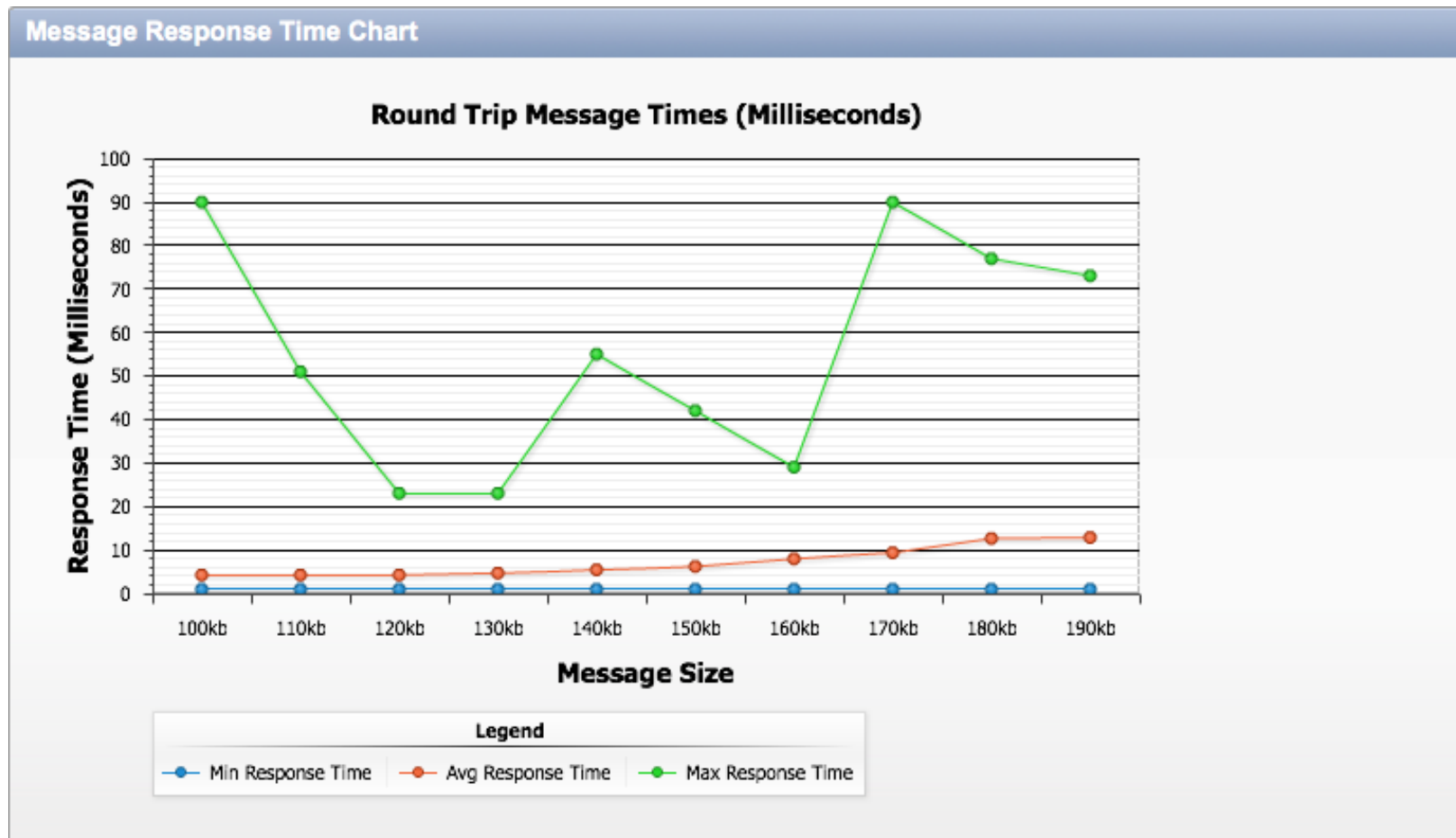
- Linux Redhat 2.6 VM
  - 4 cores (i7 2.8 Ghz boosting to 3.6 Ghz)
  - 4 GB Memory
  - Storage, SSD
- MQ Version 7.5
  - Hub and Spoke Queue Managers



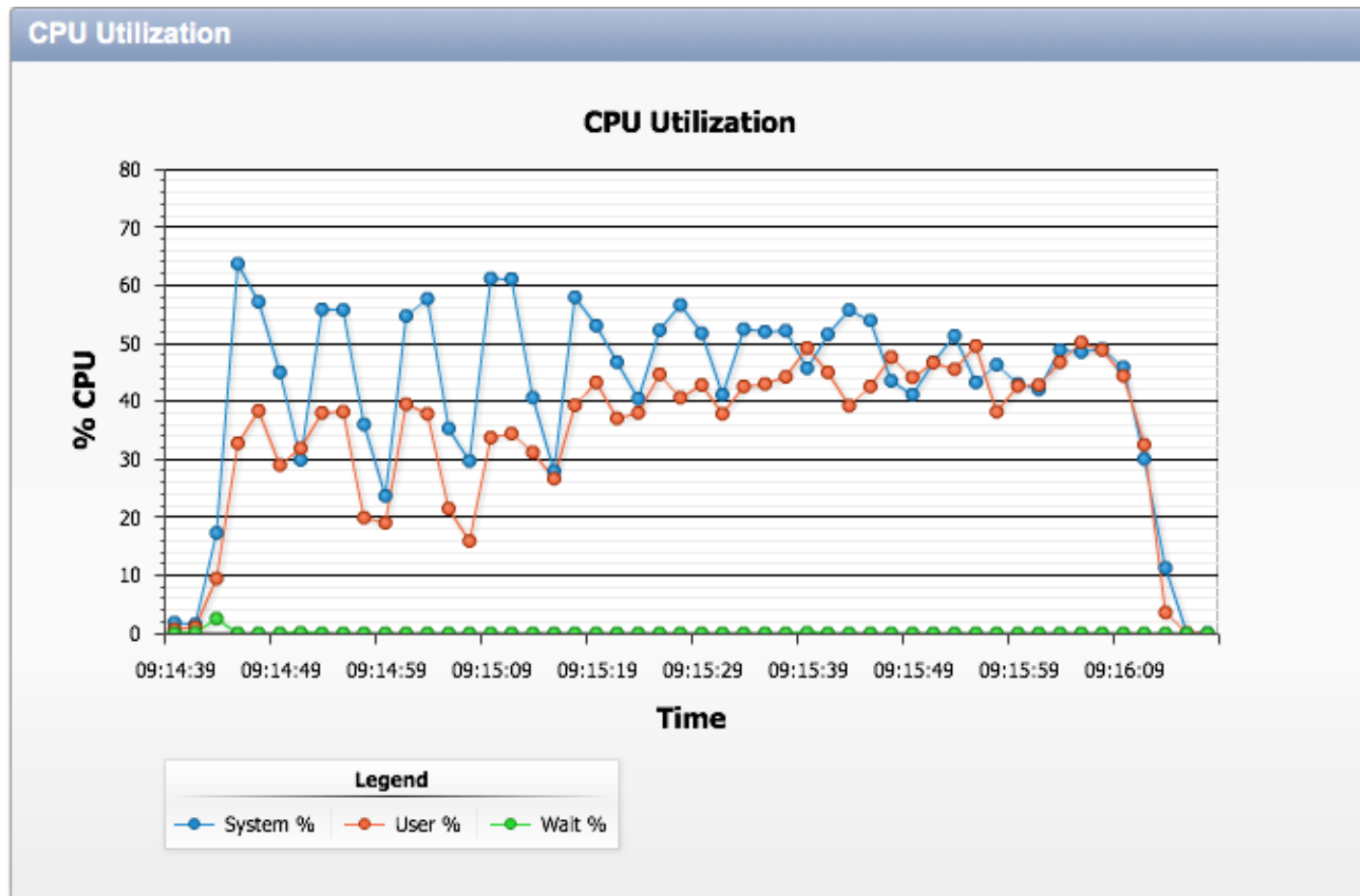
# Thread Response Time



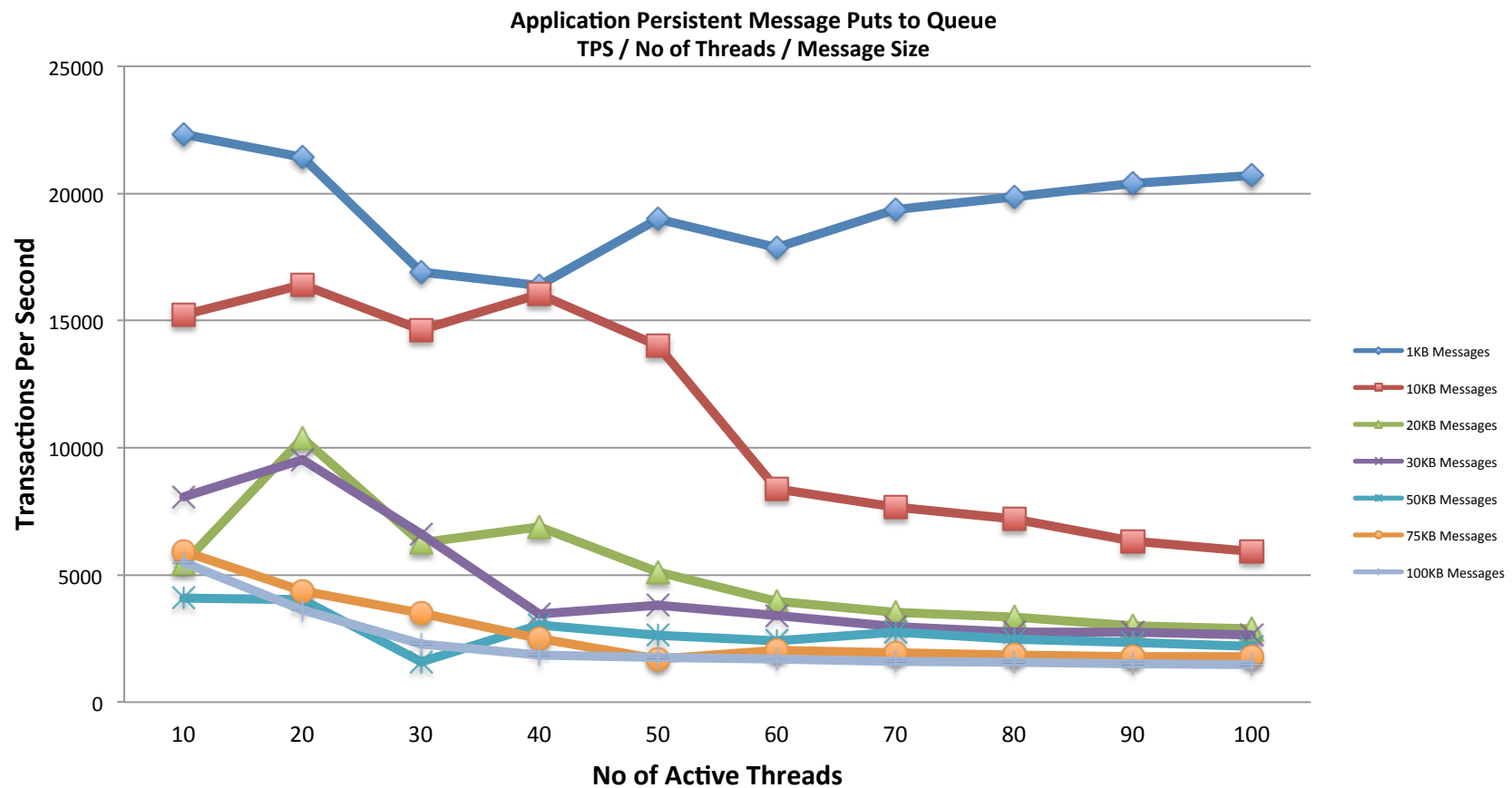
# Message Response Time



# CPU Utilization

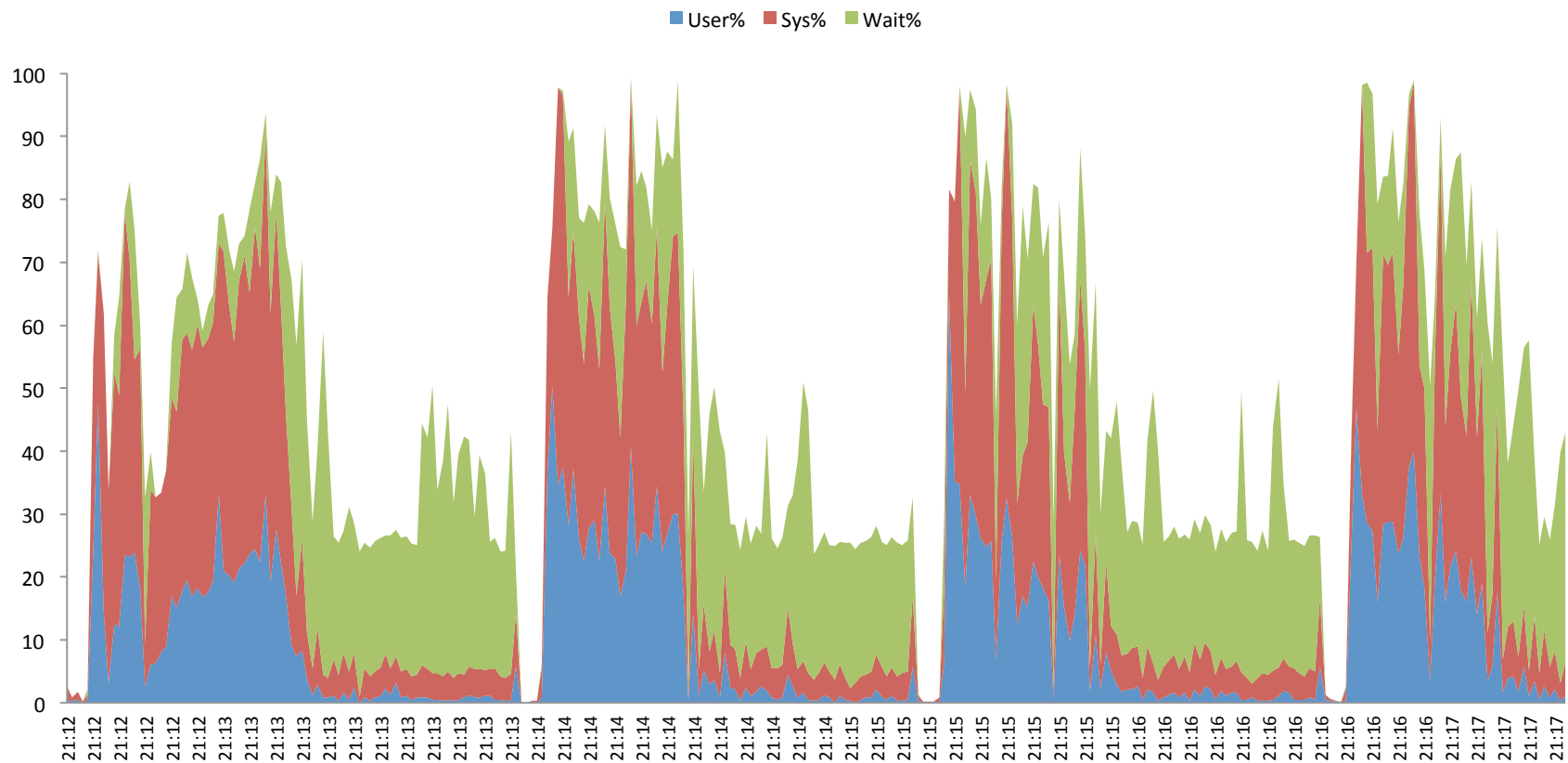


# Transaction per second



# 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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