Connecticut Computer Measurement Group presents our

Autumn Conference Meeting
Friday October 21, 2016

To be held at the Courtyard by Marriott, Cromwell. All are welcome and Wi-Fi is available.

Our Autumn regional conference is coming next month and although we’re still putting together the finishing touches we have another great program already in place. Again, very strong mainframe topics including those from our sponsor, BMC. We want to thank them for helping to solidify the day for us.

On the capacity planning and forecasting side, we’ll have both a general overview of the process, plus another Mullen winner to help us refine our use of percentile-based measurements for forecasting when certain resources begin to approach their capacity limits. Finally, we’ll have a deeper dig into the Internet of Things (IoT) and how we are going to manage all that much more data passing through our systems. It promises to be an exciting day with great learning and networking opportunities.

Our Autumn conference is made possible with the help of this meeting's sponsor:

BMC is a global leader in innovative software solutions that enable businesses to transform into digital enterprises for the ultimate competitive advantage.

Preregistration Cost: $45 (Walk-ins $55) Deadline to preregister via email is October 17 Simply reply now to this email with your request to preregister. Or, at any time you can notify us by sending a “Preregister me” email to Ccmgboard@gmail.com.

Please forward this announcement to your friends and colleagues who might be interested in our conference. Remember, you do not have to be a CMG member to attend our meetings.

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<th>CCMG AGENDA Friday, October 21, 2016, Cromwell, CT</th>
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<td>Alex Gilgur, Facebook</td>
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Percentile-Based Approach to Forecasting Workload Growth
Alex Gilgur, Facebook
When forecasting resource workloads (traffic, CPU load, memory usage, etc.), we often extrapolate from the upper percentiles of data distributions. This works very well when the resource is far enough from its saturation point. However, when the resource utilization gets closer to the workload-carrying capacity of the resource, upper percentiles level off (the phenomenon is colloquially known as flat-topping or clipping), leading to under-predictions of future workload and potentially to undersized resources. This paper explains the phenomenon and proposes a new approach that can be used for making useful forecasts of workload when historical data for the forecast are collected from a resource approaching saturation.

ThingSpeak
Rohith Bakkannagari, MathWorks
The Internet of Things (IoT) provides access to a broad range of embedded devices and web services. ThingSpeak is an IoT platform that enables you to collect, store, analyze, visualize, and act on data from sensors or actuators, such as Arduino®, Raspberry Pi™, BeagleBone Black, and other hardware. For example, with ThingSpeak you can create sensor-logging applications, location-tracking applications, and a social network of things with status updates, so that you could have your home thermostat control itself based on your current location. In this talk, I will go over what ThingSpeak is and its applications.

Challenges of MSU Capping Without Impacting SLA
Don Zeunert, BMC
Is your Coupling Facility a Friend or a Thief? The Coupling Facility is a great advantage in Sysplex environments. However, it can create a hidden impact upon CPU resources. The Coupling Facility is a great advantage in Sysplex environments. However, it can
create a hidden impact upon CPU resources. We’ll show how a simple calculation of data found in your capacity management database yields some interesting statistics and possible issues. We’ll also offer a few solutions to the issues you may find.

**Improving XCF Performance to Keep up with CPC Improvements (NEW)**
Don Zeunert, BMC
Significant hardware improvements have occurred since the 2006 IBM white paper on XCF performance. It’s time to revisit the performance of a critical component of response time. Even though XCF’s CF requests are all ASYNC, it can still indirectly impact GCP MSUs and certainly application response. This session will discuss how to measure current performance and how to improve it if not satisfactory.

**Capacity Management Essentials: a Framework for Capacity Analysis**
Debbie Sheetz, MBI Solutions LLC
What are the essential steps of a Capacity Analysis? This is an introduction to the topic, focusing on the required elements. We begin with defining the purpose of the capacity study, analyzing historical measurements, proceeding to the ‘what-if’ phase, and reporting our results. Actual capacity study content is used to illustrate the principles described.

**You Test Where? Performance Testing in DR and Prod!**
Kyle Parrish, Fidelity Investments
How do you stress test a brokerage system in production if you can't risk orders processing, trades executing, or violating regulatory obligations? The answer used to be, "we don't." But the flash crash and other market anomalies exposed the risks inherent in not testing production. Hear what we learned as we built a way to do what had been written off as "too big to test." This presentation deals with the challenges and opportunities inherent in using production class disaster recovery systems and actual production systems to run cloud based testing, in order to simulate real user activity at larger than peak volumes. Over 100K users, 300K accounts, and thousands of transactions per second at market open, fully executed and monitored to see where the system will fail.

**Power Linux**
TBD, IBM

**Biographies**

**Alex Gilgur – Facebook**
Alexander Gilgur is a Data Scientist and Systems Analyst with over 20 years of experience in a wide variety of domains - Control Systems, Chemical Industry, Aviation, Semiconductor Manufacturing, Information Technologies, and Networking - and a solid track record of implementing his innovations in production. He has authored and co-authored a number of know-hows, publications, and patents.

Alex enjoys applying the beauty of Math and Statistics to solving capacity and performance problems and is interested in non-stationary processes, which make the
core of IT problems today. Presently, he is a Network Data Scientist at Facebook and an occasional faculty member at UC Berkeley's MIDS program. He is also a father, a husband, a skier, a soccer player, a sport psychologist, a licensed soccer coach, a licensed professional engineer (PE), and a music aficionado. Alex's technical blog is at http://alexonsimanddata.blogspot.com.

Rohith Bakkannagari – MathWorks
Rohith Bakkannagari is a Senior Performance Engineer at The MathWorks, Inc., working on performance analysis, scalability and benchmarking. Works on performance automation which enables him to quickly identify performance regressions and solve other performance puzzles. He holds a master’s degree in Electrical Engineering from West Virginia University and is an avid cricket player.

Don Zeunert – BMC
Don Zeunert joined BMC 3 years ago, as a Principal SW Consultant for Mainframe Service Management supporting customers worldwide. He was previously with Candle / Tivoli for 24 years. In his last position in the Advanced Technologies Group he provided expertise to help ensure optimum use and effectiveness of monitoring products at hundreds of customers worldwide. Prior to this he spent 15 years as a Candle Field Systems Engineer and was also worked for the Tivoli Competitive Action team and Performance labs and ensuring new versions' efficiency. He is the author of numerous tuning articles as well as authoring major portions of multiple tuning Redbooks.

He specializes in tuning of monitoring products and the subsystems for MVS, USS, CICS, DB2, and MQSeries. He was also a frequent speaker at SHARE as well as PULSE, System z Expo and regional CMG meetings. Before joining Candle / Tivoli he had over 12 years experience in systems programming, performance management, database design and application programming.

Debbie Sheetz – MBI Solutions LLC
Debbie Sheetz joined the Capacity Practice of MBI Solutions, LLC as a Principal Consultant in August 2015. She provides in and out-of-the-box solutions for capacity and performance questions as a Professional Service, specializing in Distributed Systems platforms and BMC Software’s Capacity Management software.

Originally hired to work on the first version of BEST/1 at BGS Systems, she had 38 years of experience developing and supporting capacity and performance analysis software with BMC Software/BGS Systems. She provided applied solutions for performance analysis and capacity planning challenges for customers, partners, and BMC field consultants. Based in Customer Support, she worked with product engineering and marketing on refining existing solutions and designing new solutions.

Kyle Parrish – Fidelity Investments
Kyle currently works as a Director of Technology Risk in the Fidelity Information Security group at Fidelity Investments. Kyle joined Fidelity in January of 2011 as a
Director of Performance Architecture charged with driving end-to-end testing of the Fidelity Brokerage systems. Prior to joining Fidelity, Kyle worked as a consultant for over 13 years, after a career in both the private sector and a university research setting. Kyle’s roles have spanned everything from program management to performance engineering to security, across industries as varied as airlines, financial services, manufacturing, retail, pharmaceuticals, and state government.

Again, Connecticut CMG would like to thank BMC for their sponsorship and participation in this Autumn Conference.

Check our website https://www.cmg.org/regions/connecticut-cmg/ regularly for next meeting updates.