



American Society for Quality (ASQ) — Washington, DC & Maryland Metro Section (509), Software Special Interest Group (SSIG)
IEEE Computer Society — Washington, DC & Northern Virginia Chapters
Society for Software Quality (SSQ) — Washington, DC Area Chapter

Supercomputing – Cray’s Hardware and Software Technology – Product and Custom

by: Dan Poznanovic

Tuesday October 26, 2010

Cray has defined Supercomputing since Seymour Cray developed the Cray-1 in the 1970’s, and currently a Cray system has the number one spot in the Top 500 list at 2.3 PF. Today Cray has a range of systems from small to large, that push the limits. That first Cray-1 was delivered without any software. Today, a software stack is a key component to delivering performance on Cray’s systems. The hardware and software technology that define Cray’s standard products, as well as custom systems, will be presented with emphasis on the software that enables the hardware to deliver to the limit.



Dan Poznanovic, Director System Architecture, Custom Engineering, leads the Systems Architecture Group in Custom Engineering for Cray, Inc. This group develops custom systems solutions to customer problems that cannot be solved utilizing standard products. He and his group have worked with heterogeneous systems based upon multi-core, GPU, and FPGA based processors, as well as new memory board technologies. Prior to re-joining Cray, Dan headed Software Development at SRC Computers, where he led the development of compilers and systems software for FPGA-based reconfigurable high-performance computers. He earned a B.A. in Chemistry from the University of Minnesota, and M.S.E. in Computer and Information Science from the University of Pennsylvania. He holds seven patents and is a member of IEEE and ACM.

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Tuesday October 26, 2010

6:30 PM – Networking and Pizza(*)

7:00 - 8:00 PM – Program

(*) *There is no cost to attend at McLean and Silver Spring.*

Locations:

The presentation will originate at the McLean facility, with video tele-conferencing (VTC) between:

MITRE, room **1N100**
7515 Colshire Drive
McLean, VA 22102
host: Scott Ankrum
cell: 240-731-7581

FDA, Bld 66, room G512
10903 New Hampshire Ave
Silver Spring, MD 20993
host: James Simpson
cell: 301-996-4976

MITRE, room 1002
260 Industrial Way West
Eatontown, NJ 07724
host: Richard Eng
cell: 703-201-9112

~~MITRE, room 1M306~~
~~202 Burlington Rd (Rt. 62)~~
~~**Bedford, MA 01730**~~
~~*host: Tim Rice*~~
~~*cell: 978-758-2704*~~

**Bedford is
not
available
this month.**

TZIf you can host another location via VTC, please contact Scott Ankrum (below)

Note: Our attempt to use Skype has been discontinued. If you cannot attend in person at one of the VTC sites, you must dial into one of the sites.

Registration:

Registration Website: <http://www.asq509.org/ht/d/DoSurvey/i/26913>

You must register by noon on Monday, October 25. If you cannot attend at any location, select telephone dial-in when you register. To RSVP for FDA (Silver Spring), please indicate citizenship. If not a US citizen, please provide your title, employer, and address. Allow two business days for registration before the meeting.

For registration problems or further information contact Scott Ankrum at: ankrums@mitre.org or 703-983-6127

Software SIG Chairman: T. Scott Ankrum (ASQ & IEEE)
Software SIG Committee: Richard Eng (ASQ); Chris Jones (ASQ & SSQ); Alfred Kromholz (SSQ);
Tim Rice; James M. Simpson (ASQ); Tom Starai (IEEE), Tom Neff (IEEE),
Lance Kelson (SSQ & IEEE)

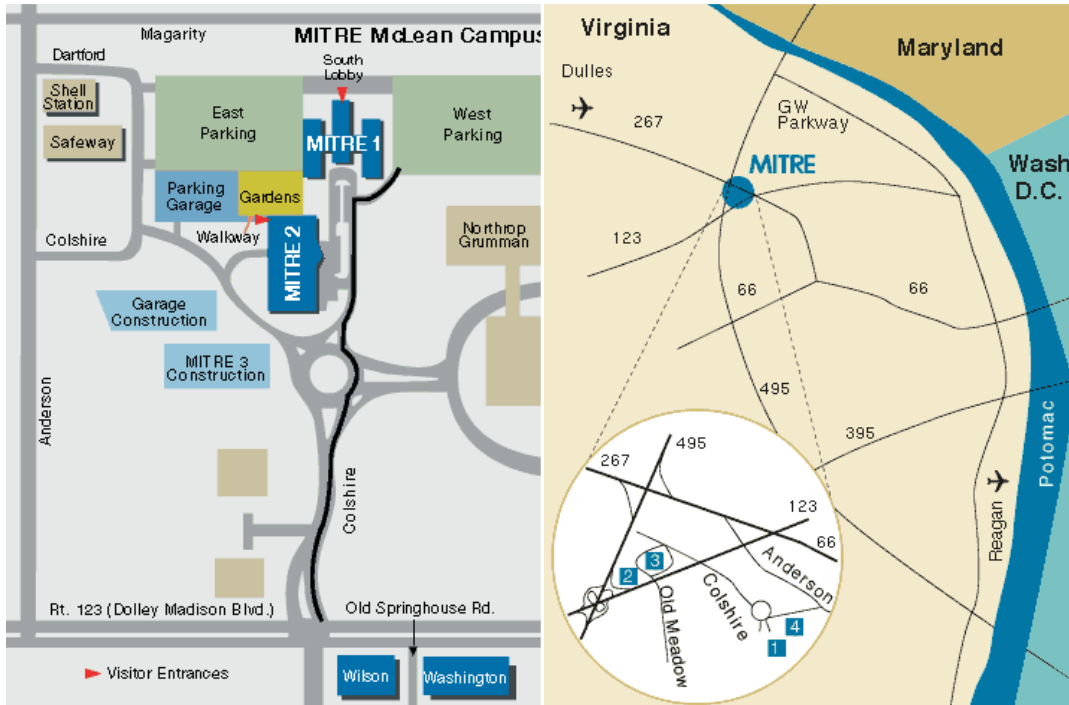
Sponsored Jointly By: The American Society for Quality (ASQ), Washington DC & Maryland Metro Section (509), Software Special Interest Group (SSIG); IEEE Computer Society, Washington, DC & Northern Virginia Chapters; and Society for Software Quality (SSQ), Washington, DC Area Chapter.

Members of the **ASQ SSIG** include software quality professionals, software engineers, and others interested in applying quality principles to the field of software development. See our web page: <http://www.asq509.org/ht/d/sp/i/2499/pid/2499>. We meet every month, usually at the MITRE facility in Tyson’s Corner, Virginia, with VTC to other locations.

Next Month: ‘Risk Management’ by Kelly Yamaguchi on Tuesday, November 30, 2010

Directions to the MITRE Facility in McLean, Virginia:

Take the Beltway, I-495 to Virginia. Take Exit 46B (McLean, Route 123). Take Route 123 North, (also called Dolley Madison Blvd.) and go to the second traffic light at Colshire Drive. Turn right on Colshire Drive and continue through circle on Colshire. **Park in front of or to the right of the buildings, before passing the gate. (The gates are closed at 7:00).** Additional directions can be found at: http://www.mitre.org/about/locations/mitre1_map.html



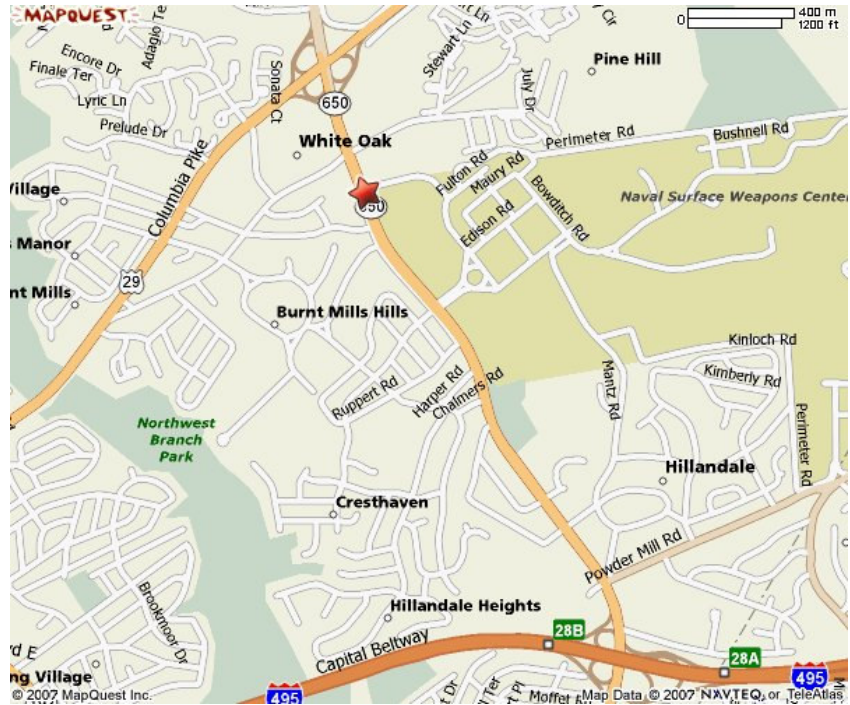
Directions to the FDA facility in Silver Spring, MD:

From the Capital Beltway, I-495, take New Hampshire Ave, Rt 650 north to Michelson Rd.

From Columbia Pike, Rt 29, take New Hampshire Ave, Rt 650 south to Michelson Rd

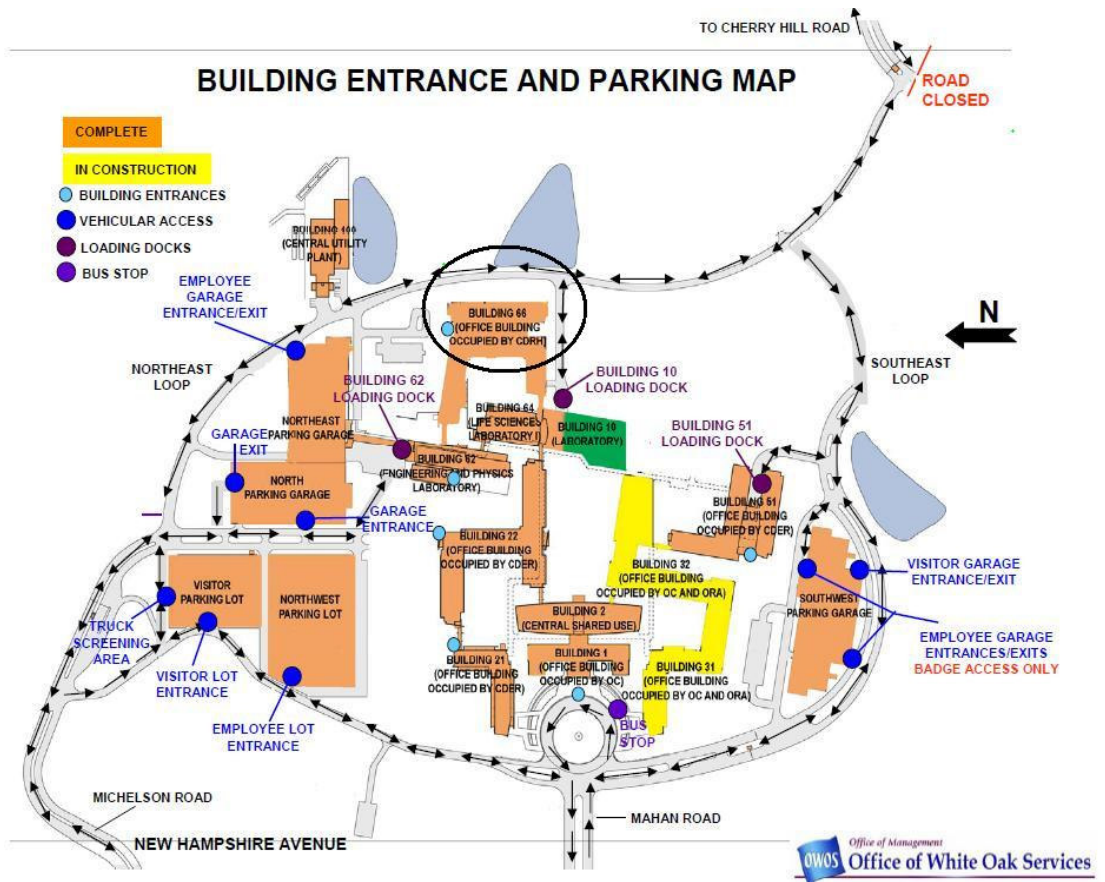
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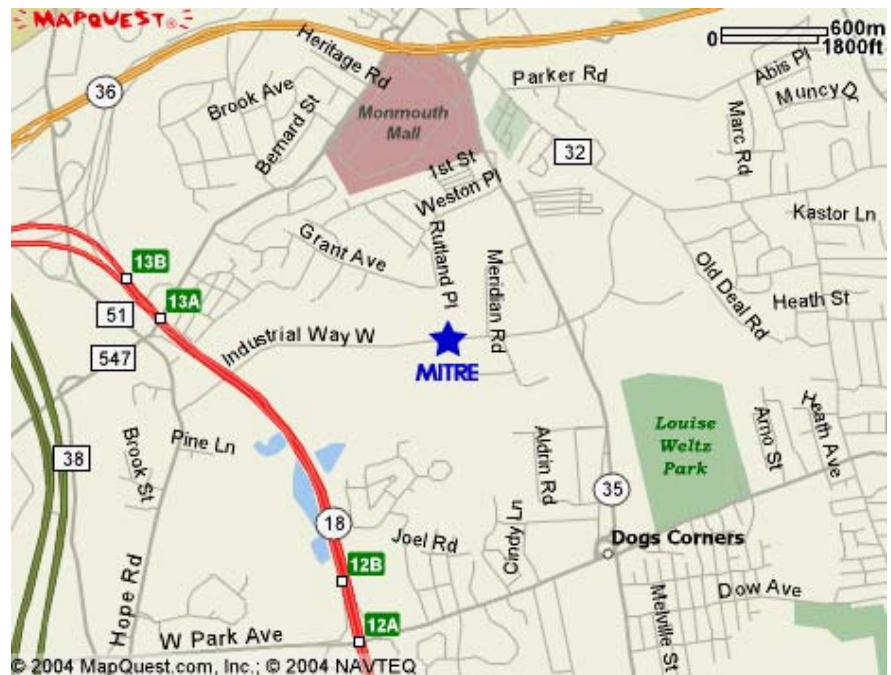
White Oak Building 66 (circled), room G512. This is a large conference room just beyond the Security desk on the right side of the grand atrium.

After 6 PM, visitors may use the surface parking closest to the building 66 entrance which are reserved for commuters with car pools. The north east parking garage is also an option.



Directions to the MITRE Facility in Eatontown, New Jersey:

From the New Jersey Turnpike If traveling from the **SOUTH**, get off the Turnpike at Exit 7A (195 toward Shore Points). Take 195 East towards the ocean and shortly after 195 turns into Route 138 (approximately 35 miles) watch for Route 18 North (Eatontown). Take Route 18 North to Exit 13A (Wayside West/Wyckoff Road). At end of ramp, bear left. At first traffic light (Hope Road) make a left turn. Make second left turn onto Industrial Way. The MITRE Corporation is next to the First Atlantic Credit Union on the left hand side of Industrial Way. There is a MITRE sign out front.



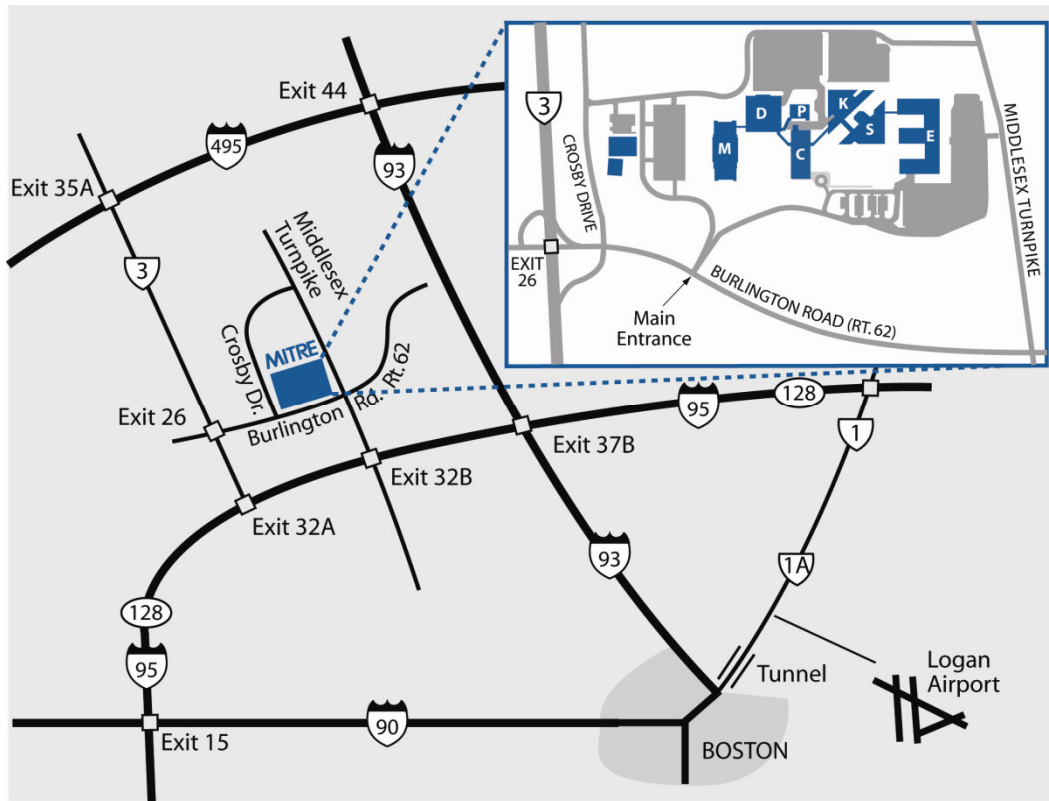
There are two buildings on the left side of Industrial Way. The first building is MITRE, the second building is TYCO. Take a left turn into the parking lot of the first building, which is MITRE.

If traveling from the **NORTH**, get off the Turnpike at Exit 11 (Garden State parkway exit). Follow the Garden State Parkway until Exit 105 (Eatontown). Follow the directions from the Garden State Parkway below.

From the Garden State Parkway: Follow the Garden State Parkway from the North or from the South to Exit 105 (the exit numbers increase going from south to north). After paying the toll at Exit 105, make first right turn onto Hope Road. Follow Hope Road to Industrial Way (second left turn after crossing Wyckoff/Shafto Road). Make second left turn onto Industrial Way. The MITRE Corporation is next to the First Atlantic Credit Union on the left hand side of Industrial Way. There is a MITRE sign out front. There are two white buildings on the left side of Industrial Way. The first building is MITRE, the second building is TYCO. Take a left turn into the parking lot of the first building, which is MITRE.

When you are facing the front of the MITRE building, the entrance to the ASQ meeting will be from the left parking lot opposite First Atlantic bank. Follow the signs to the conference room.

Directions to the MITRE complex in Bedford, Massachusetts:



From New Hampshire to MITRE Complex:

Take Route 3 South to Exit 26 (Route 62)

Turn Left on Route 62. It is a short distance to the MITRE entrance on left--watch for building directories on MITRE grounds

From Manchester Airport (NH) to MITRE Complex:

Start out going West on Airport Rd. toward parking

Turn slight right onto Brown Ave/NH-3A

Merge onto NH-101 West via the ramp on the left toward Bedford/Nashua

Take the Everett Turnpike South exit toward Merrimack/Nashua

Merge onto Everett Turnpike (toll road)

Everett Turnpike becomes US-3 South

Take exit 26 (Route 62) toward Bedford/Burlington

Turn Left onto (Route 62) Burlington Road

At second set of traffic lights, turn left at MITRE Bedford Campus entrance--watch for building directories on MITRE grounds.

Logan Airport to MITRE Complex:

Exit airport towards Route 1A South/Summer Tunnel (I-93) Boston.

Proceed through tunnel towards Storrow Drive (I-93 North).

Take I-93 North eleven miles to Exit 37B (Route 128 (I-95) South).

Take Route 128 (I-95) South six miles to Exit 32A.

Take Exit 32A, and proceed on Route 3 North.

Take Route 3 North for two miles to Exit 26 (Route 62).

Bear right on Route 62.

Take Route 62 a short distance to the MITRE Bedford Campus entrance on left--watch for building directories on MITRE grounds.