The Inaugural MIT-Army Chief Data Officer Forum

Tuesday, 11 January 2011

Lockheed Martin Global Vision Center
2121 Crystal Drive, Arlington, VA 22202

Edited by:

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Gartner, Inc.

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Lockheed Martin Fellow
Information & Data Architect
Lockheed Martin Corporation
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<td>1230-1315</td>
<td>Lunch – provided on site</td>
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<td>Keynote: Mr. <strong>Frank Petroski</strong>, the MITRE Corporation</td>
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<td>Moderator: Mr. <strong>Gary Blohm</strong>, Acting AON Director, U.S. Army CIO/G-6</td>
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<td>1600-1830</td>
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<td>1600-1700</td>
<td>Flight simulator fun, Global Vision Center visit</td>
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**Location:** 2121 Crystal Drive, Arlington, Virginia, 1st Floor, Lockheed Martin GVC  
**Forum Co-Chairs:** Richard Wang (rwang@mit.edu, 617-304-3120), Joseph Bugajski (Joseph.Bugajski@gartner.com), Willa Pickering (willa.e.pickering@lmco.com)  
**Venue Contact:** Sue Bois (susan.bois@lmco.com, 703-413-5758)
Invited Participants

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<td>Bechtold</td>
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<td>Blohm</td>
<td>Gary</td>
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<td>Bottega</td>
<td>John</td>
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<td>Bowman</td>
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<td>Jeanne</td>
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<td>Bugajski</td>
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<td>Lee</td>
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Acknowledgements

The Inaugural MIT-Army Chief Data Officer (CDO) Forum has been made possible by the support of Massachusetts Institute of Technology (MIT), the U.S. Army, Lockheed Martin Corporation, and Gartner, Inc.

We are indebted to Mr. Thomas E. Kelly III and Ms. Susan Bois at Lockheed Martin for their generosity hosting the Forum in the Lockheed Martin Global Vision Center.

Collaborations among industry, government, and academia are critical to shape and mature the emerging CDO position and its value proposition. We wish to extend our acknowledgement to all participants. We thank you for sharing your ideas, experiences, success stories, and lessons learned. Importantly, we thank you for collectively establishing the CDO as a critical role in the 21st century organization, in which data must be treated as a strategic asset.

The Co-chairs also thank Mr. Michael Krieger, Major General Mark Bowman, Mr. Gary Blohm, Ms. Carol Wortman, Mr. Cliff Daus, and Mr. David Osteen at U.S. Army CIO/G-6 for their advice and assistance.

Thanks are also due to Ms. Forea Wang, Prof. Yang Lee, and Prof. Stuart Madnick at the MIT Information Quality Program for their support throughout the project.

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On the Chief Data Officer Forum

The Chief Data Officer (CDO) Forum recognizes that just as over the last ten years increasingly more organizations have come to understand the importance of high-quality data, the criticality of the CDO’s role in modern organizations has similarly grown exponentially. For example, the U.S. Department of Defense (DoD) and its Services strive to provide high-quality data and information that are visible and accessible to support commanders in situational awareness, decision-making, and simultaneous collaborations. In the private sector, the CDO’s role emerged during the past five years as the executive guarantor of an enterprise’s information reliability and authenticity.

The purpose of this Forum is two-fold:

- Provide a setting to promote discussion and definition of best practices to assist all CDOs to provide authoritative, relevant, understandable, trustworthy, and sufficient data in their enterprises’ best interests. The Forum will also endeavor to define the CDO’s role, mission, and responsibilities
- Provide the DoD and its Services with a very efficient and effective mechanism to learn CDO best practices in the public and private sectors, and then to collaborate with thought leaders and leading practitioners on this subject.

The discussions during the Forum will address these themes:

1. What is the CDO’s job and to whom should this executive report?
2. What responsibilities and authorities rest on the CDO’s shoulders?
3. What policies should a CDO promulgate and what programs should the CDO lead?
4. What strategies and future directions should CDOs adopt for their organizations?

MIT and the U.S. Army are grateful to all participants from the private and public sectors and thank them for their contributions to the discussions. It is through their generous sharing of the strategies that they have used, the challenges they have faced, and the guidelines they have developed that this Forum will meet its goals and contribute to the maturation of the CDO’s role in support of international security, prosperity, and economic well-being. Finally, participants in the Inaugural CDO Forum are invited to join the Forum’s founding members, MIT, U.S. Army, Gartner, Inc., and Lockheed Martin to:

- Develop strategies that CDOs can use to win executive support.
- Define management and technical issues that CDOs should address.
- Provide guidelines that help an enterprise adopt the CDO role and disciplines.
- Elaborate opportunities for CDOs to engage business units.
- Consider guidelines to help CDOs assure their tactical and strategic success.
Introduction
The introduction will be made by the Forum Co-Chairs, Dr. Richard Wang, Mr. Joe Bugajski, and Dr. Willa Pickering, as well as by Mr. Thomas Kelly of Lockheed Martin, the Forum venue host.

Opening Remarks
Opening remarks will be made by Mr. Michael E. Krieger, Acting CIO/G-6 of the U.S. Army. He will discuss the critical role of Management of Data to the DoD and the U.S. Army. Mr. Krieger may illustrate the U.S. Army business with the following examples:

1. Response to events in theaters; adaptive adversary that uses technology to its advantage. Our ability to rapidly make data actionable is critical to defeating the enemy.
2. Wikileaks: In addition to the lessons learned from this incident, greater effort must be devoted to finding the “best practices” and success stories where the sharing of knowledge, information, and ideas have had a positive impact. We need to continue to foster a shift from the culture of “need to know” to “responsibility to share.”
3. Enterprise Resource Planning (ERP) implementation

The goal is to collaborate among industry, government and academia to help shape and mature the DoD and U.S. Army data initiatives.

Private Sector Session
This session will be moderated by Michael Abbott (VP of Engineering, Twitter) and will include the following panelists:

Mark Goloboy (Director of Global Data Governance, Monster.com)
David Guzmán (CTE, Axciom Corporation)
Jeff Hammerbacher (Former CDO, Facebook; Founder & Chief Scientist, Cloudera)
Peter Kaomea (CIO, Sullivan & Cromwell)
Lee Kenyon (VP and Director of Data Governance and Enterprise Reporting, Eaton Vance Management)
Tim Sinclair (CDO, Microsoft)

The Private Sector panel will discuss these important data leadership themes:

1. Ubiquitous social networking makes access to the net invaluable to modern enterprises and complicates enterprise data management.
2. Data volumes have grown prodigiously during the first decade of the 21st century.
3. Changes in financial and privacy regulations create new challenges for enterprises to assure the reliability of their data.
4. A rapid rise in cloud computing creates new challenges data leaders as the develop strategies for data management and access.
The panelists will address the themes in their responses to these questions:

- Has the rapid growth in data volume caused your enterprise to adopt new data management strategies?
- Has the proliferation of social networking and staff demand for access helped or hindered data leaders?
- Do top management and boards of private enterprises consider data governance and effective data management an issue that appears on their meeting agenda?
- What strategies should private sector data leaders adopt to guide the enterprise to better manage its data?
- What message should data leaders give to the enterprise?
- What factors inhibit the success of a data leader?
- Would you recommend the creation of a CDO office in all private enterprises or just certain ones?
- What is the role of a data leader in addressing data quality challenges?

In a larger context, the discussion will also address broader issues set forth for the CDO Forum:

- What is the fundamental value that a CDO delivers to the enterprise?
- What problems inhibit a CDO’s success?
- How best does a CDO address information quality (IQ) problems?
- What messages does the CDO deliver to the executive team (e.g., Chief Information Officer, Chief Financial Officer, and Chief Executive Officer)?
- What experiences or case studies prove most helpful to CDOs?

**Public Sector Session**

This session will be moderated by Willa Pickering (Lockheed Martin) and will include the following panelists:

Suzanne Acar (Senior Advisor for Enterprise Data Strategies, FBI)
Ron Bechtold (CIO, Office of the Secretary of Defense)
John Bottega (CDO, Federal Reserve Bank of NY)
Ted Campbell (VP Strategic Planning, Lockheed Martin)
Greg Elin (CDO, Federal Communications Commission)
Dat Tran (Executive Director of National Center for Veterans Analysis and Statistics, Veterans Affairs Department)

Since many of the participants, if not all, realize the need for a CDO, we may not have to elaborate on the data problem. Instead we will concentrate on the solutions, especially the role of the CDO. The moderator will introduce everyone and state a question to the panel at large.
The intent is to focus on the following themes:

2. How does the CDO interact with data suppliers, data stewards, data users?
3. What is the CDO’s role in protecting sensitive data, solving issues such as “need to share” versus “need to know”?
4. What challenges will a CDO face in establishing a consistent vision and data strategy? How can these challenges be addressed and resolved?
5. What processes should the CDO develop to manage the data, control the volume of the data, and deliver the data to the appropriate systems or personnel?

Below are some related questions:

✓ What is the data problem that needs to be solved?
✓ Who is or should be responsible for solving the data problem, business or IT?
✓ With all the other existing roles for data currently in place (i.e., enterprise data administrator/manager, enterprise data architect, enterprise data strategist, etc), why would a CDO be needed? In other words, what gap would the CDO position fill?
✓ Would a CDO role and responsibilities in the public sector be that much different than CDO’s in private sector?
✓ What skills and level of authority does the CDO need to be successful?
✓ Should the public sector CDO be a peer with or a subordinate to the CIO?
✓ How would the role of CDO be institutionalized in the public sector?

Lunch Keynote

Lunch will be provided on-site, presenting on opportunity for networking and continued discussion of the CDO’s role, goals, and objectives. A brief keynote address will be resent by Mr Frank R. Petroski of the MITRE Corporation. Mr. Petroski plans to provide his perspective on the DoD Data Strategy and the key challenges that face a Chief Data Officer in the implementation of that strategy.

Round Table Discussion

This will be an open discussion including all participants. This session will be moderated by Mr. Joseph Bugajski and Dr. Yang Lee. Mr. Bugajski is Research VP, Gartner, Inc., and former CDO of Visa, Inc. Dr. Yang Lee is a tenured professor at Northeastern University and Deputy Director of the MIT Information Quality Program.

The intent is to hone in on the true roles and responsibilities of the CDO and how the CDO add values to their organizations. The goal is to develop insights and actionable recommendations through the collective wisdom of all participants, building upon the knowledge gathered during discussions in the private and public sector sessions.
Open Forum

The Open Forum will begin with opening remarks by Mr. Gary Blohm, the U.S. Army’s CDO. Mr. Blohm’s remarks will be followed by questions and answers by all Forum participants. The discussion will focus on how CDO best practices in the public and private sectors, as discussed in earlier sessions, can be applied to the U.S. Army. What can the U.S. Army learn from the experiences in industry and other government agencies? As a point of departure for discussion of CDO strategy, the open forum might:

✓ Consider the official definition of data resource management provided by Data Management Association: "The development and execution of architectures, policies, practices and procedures that properly manage the full data lifecycle needs of an enterprise." What does this mean for the CDO?

✓ Discuss the CDO’s success strategies and plans:
  - What should be the Army CDO’s long term goals?
  - What would be the resources required for success?
  - What are some strategies? What about risk mitigation?
  - What are the priorities to set and achieve?
  - How would the CDO measure progress?
  - What should the CDO NOT do?
  - What is the end state of the CDO?

✓ Address the following data concerns:
  - How does the CDO get his or her hands on the Army’s data?
  - What do the customers expect from the CDO? How should the Army meet and exceed expectations of customers? Should the expectations differ from industry and non-military agencies?
  - How good is the quality of data in Army systems?
  - What driving forces could shape Army data?

Closing Remarks

Closing remarks will be given by Dr. Richard Wang, Deputy CDO & Chief Data Quality Officer, U.S. Army CIO/G-6. Dr. Wang is currently on leave from MIT where he serves as the Director of MIT Information Quality Program.

Data improvement efforts in large enterprises often fail to deliver on expectations. As with any service provision, the key to avoiding such disappointment is to look at the problem from the beginning through the eyes of the business executives. Leading organizations realize that data, just like capital and people, are an asset that must be explicitly managed as are other valuable corporate assets. Evidenced by the increasingly critical role that data leaders, and in particular CDOs, play in managing data, private and public sector organizations now recognize the importance of treating data as a strategic asset. The CDO Forum foresees that the next ten years promise to be even more exciting for data leaders.
In order to produce an event that meets the needs of data and information practitioners, the CDO Forum’s organizing committee will reach out to communities of experts across a range of industries and sectors to delineate issues and opportunities. In particular, should the CDO Forum continue and include the following objectives in its mission:

1. Help CDOs accomplish their mission
2. Survey CDOs about best practices
3. Disseminate CDO success stories and breakthroughs
4. Collect CDO job descriptions
5. Elaborate the varies roles and responsibilities of a CDO
6. Set strategic directions for CDOs to achieve on behalf of their enterprises
7. Analyze the CDO position, and its roles and responsibilities

**Sustaining the CDO Forum**

This Inaugural MIT-Army Chief Data Officer Forum was sponsored by MIT, the U.S. Army, Lockheed Martin Corporation, and Gartner, Inc. Although it is too early to discuss whether and how to sustain the CDO Forum, it is conceivable that as more organizations realize the importance of high-quality data and the critical role of the CDO in assuring that quality, they will want the CDO Forum to continue and prosper. One way to sustain the Forum is to make it self-sustained to fund it and to:

1. Provide support for CDO Forum events
2. Offer administrative support including making appointments, preparing for meetings, and binding documents

Such funding could be secured in part through membership in the CDO Forum. Benefits of membership would include but are not limited to:

- Invitation with complimentary registration to future CDO Forums.
- Collaboration with other members, many to be facilitated by CDO Forum organizers, to discuss further the “trials and tribulations” of the CDO position.
- Receiving value-added white papers, position statements, policy documents, and other material on topics of interest to the CDO Forum members

Your membership and engagement will help shape (and reshape) the critical role that the CDO will most certainly plays in all modern organizations. If you believe in the proposition of sustaining the CDO Forum, and are interested in membership, please contact Dr. Richard Wang (rwang@mit.edu, +1(617) 304-3120), Mr. Joseph Bugajski (joseph.bugajski@gartner.com, +1(408) 738-1106) or Dr. Willa Pickering (willa.e.pickering@lmco.com).
# Biographies and Photos of Invited Participants

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<td><strong>Abbott, Michael</strong></td>
<td>VP of Engineering Twitter</td>
<td>Michael is Twitter’s Vice President of Engineering. Previously, he led the application platform and services development for Palm’s next-generation Palm webOS platform. He has extensive experience in building technically challenging web-based applications and services. Before joining Palm, Michael was the general manager of .NET Online Services at Microsoft, where he led efforts to deliver a services platform that enabled the development of large-scale Internet-based services. Prior to Microsoft, he co-founded Passenger Inc., where he served as chairman and led the development of the company’s consumer marketing SaaS platform. Michael also founded Composite Software, creator of industry-leading enterprise information integration software, where he served as the CEO/CTO. Michael holds a bachelor’s degree in biochemistry from California Polytechnic State University, and has completed coursework toward a Ph.D. at the University of Washington.</td>
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<td><strong>Acar, Suzanne</strong></td>
<td>Senior Advisor for Enterprise Data Strategies FBI</td>
<td>Dr. Suzanne Acar possesses 30 years of government experience in enterprise data management. She currently serves as the Senior Advisor for enterprise data strategies, planning, and execution at the Federal Bureau of Investigation (FBI). She teaches data architecture courses that she developed at the Federal Enterprise Architecture Certification (FEAC) Institute and U.S. Graduate School. Dr. Acar led data management program development and execution seminars to governments of other nations by invitation. She is Co-chair of the inter-agency Federal Data Architecture Subcommittee (DAS) under the Architecture and Infrastructure Committee (AIC) of the Federal CIO Council responsible for providing data interoperability related advice based on implementation of the Federal Data Reference Model (DRM). As co-chair of DAS, she organized and launched a 253 member inter-agency Points of Contact Working Group to facilitate the provisioning of government data to the public for the Presidential Open Government Initiative Data.gov. In her former roles Dr. Acar led award winning enterprise data management programs for Department of the Interior and the U.S. Army. She spearheaded inter-agency teams in developing and publishing the Office of Management and Budget (OMB) Federal Enterprise Architecture (FEA) Data Reference Model (DRM) and the Federal Data Quality Framework document. She was a key contributor for the OMB Federal Segment Architecture Methodology (FSAM) and the National Association for State CIOs (NASCIO) publications on data governance and open government data. The Data Management Association International Government Award and the Federal 100 Award are among the honors and awards granted Dr. Acar.</td>
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<td>Bechtold, Ron</td>
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As OSD CIO, Mr. Ronald Bechtold provides leadership to the Office of the Secretary of Defense by ensuring that acquired information technology and resources are managed using Government policies and procedures.

Previously, he served as Director, Army Architecture Integration Center, at Headquarters, Department of the Army, Chief Information Office/G6. He also served as the Executive Director, Information Technology Agency, where he managed the operations of information infrastructure supporting all Pentagon organizations. He also provided leadership and direction for desktop operations supporting the Army staff.

Prior to serving as Director, Mr. Bechtold served as the Deputy Director for two years. As the Deputy Director, he was responsible to the Administrative Assistant for information technology matters in support of the Headquarters, Department of the Army and information technology operations support services for the Pentagon and National Capital Region.

Mr. Bechtold began his career in the Federal Government in 1975 as an Army Material Command quality assurance intern, and has held a variety of professional positions of increased responsibility throughout his 30 years of government service. Ron changed careers when he joined the Europe Division of the Corps of Engineers as a software developer he developed his project management skills supporting the Army Military Construction Program. Upon returning to the United States he worked on the Army Staff as the systems manager of the Army’s Supercomputer Program and later as a strategic planner for the Army’s $4B Command, Control, Communications and Computer Investment Program. Ron returned to Europe in the early 90s to assist in establishing the Marshall Center, a school to educate senior officials of Central and Eastern Europe about democracy, market economies and civilian control of the military.

Mr. Bechtold began his tenure in the Office of the Administrative Assistant in July 1997, as Director of Architecture and Engineering in the Single Agency Manager. In October 2001, he became the Technical Director, Information Technology Agency, and in September 2003, became the Deputy Director Information Technology.

Mr. Bechtold holds a Bachelor of Science Degree in Mathematics and is a graduate Industrial College of Armed Forces. His numerous awards include: two Decorations for Exceptional Civilian Service, the Superior Civilian Service Award and the Achievement Medal for Civilian Service.

Ron resides in Clifton, Va. He is married to Madeline Dillman Bechtold. They have two children, Erika and Alyssa.
| **Blohm, Gary**  
Acting Army AON Director  
U.S. Army CIO/G-6 |
|---|
| Mr. Gary W. Blohm assumed the position of Director, Army Architecture Integration Center, at Headquarters, Department of the Army, Chief Information Office/G6 on 10 October 2010.  
Previously he served as the Director, Communications Electronics, Research Development and Engineering Center (CERDEC) where he was responsible for Science and Technology programs involving the development of advanced Command, Control, Communication, Computers, Intelligence and Information Warfare, and Night Vision & Electronic Sensors technology for the U.S. Army.  
He also served as the Deputy Program Manager for Network and Complementary Programs, Future Combat Systems (Brigade Combat Team). As the Deputy Program Manager Future Combat Systems, he was responsible for integration of all Network elements of FCS to include the Standards, Communications (Transport) Systems, Enterprise Services, development of Future Force Battle Command applications, and Intelligence, Surveillance and Reconnaissance (ISR) Systems.  
In September of 2003, Mr. Blohm became the Director of Space & Terrestrial Communications Directorate in the Communications Electronics Research, Development and Engineering Center (CERDEC) in Fort Monmouth, New Jersey.  
He was the focal point for providing the technology, system and network integration and engineering design to implement tactical communications systems for America's warfighters.  
Mr. Blohm also served as the Principal Engineer for Department of Army Satellite Communications Systems Engineering. He was the Army's representative for numerous satellite architecture developments instrumental for the development of the SHF Tri-Band Satellite Communications Military Standards.  
Mr. Blohm earned his Bachelor of Electrical Engineering degree from Stevens Institute of Technology and also received a Master of Business Administration from Fairleigh Dickinson University. He is a recognized member of the Armed Forces Communications Electronics Association (AFCEA) and the Association of the United States Army (AUSA).  
He, his wife Jane and their three children, Kevin, Leigh and Lindsey reside in Bel Air, MD. |
John Bottega is Vice President and Chief Data Office for the MARKETS DIVISION of the Federal Reserve Bank of New York. John joined the Bank in February of 2009, responsible for driving and implementing the MARKETS DIVISION Data Management strategy, as it satisfies its responsibilities in supporting financial stability, markets analysis and markets monitoring. In this role, John has been responsible for bringing together business, technology and governance processes in order to establish a sustainable business data management function supported by a strategic technology infrastructure.

John has also been involved in advancing data management strategies within the Bank, across the Federal Reserve Bank system and has been involved in a number of data management and information standards efforts in support of the various financial crisis and systemic risk legislations.

Prior to joining the Bank, John held the position as Chief Data Office for Citi, making him the first person in the finance industry to hold this title. At Citi, he was responsible for planning and managing the Investment Bank’s data management strategy, data policies, operational line functions and data investments.

John has over 29 years of experience managing and transforming reference data functions, having spent 9 of those years at Lehman Brothers from 1990 to 1999 building their data management infrastructure of centralized market data processing and data quality, and 9 years collectively at Merrill Lynch, first as an applications developer, then as Product Manager for their Product & Pricing Data environments.

As an active industry participant, John has given over 2 dozen presentations and participated in dozens of round-table discussions on data management best practices at various Data Conferences globally, including a presentation to the State banks of China, an anti-money laundering conference in Singapore, and a presentation on data management organizational structure and strategy to the US Department of Defense.

John is currently the Chairman of the Board of Directors of the EDM Council (Enterprise Data Management Council), an industry association focused on Financial Industry Data Management. He has also served as the chairman of the executive committee of the Financial Information Services Division of the SIIA, has been a member of the SIA Standards and Protocol Committee, the Market Data Definition Language Committee and has been a member of the ISO Working Group 10 and Working Group 11 industry standards bodies.
Major General Mark Bowman serves as the Director of Architecture, Operations, Networks, and Space for the Department of the Army CIO/G-6. He is responsible for establishing and maintaining strategy, policy, and guidance for building, integrating, communicating, and facilitating the seamless implementation of the LandWarNet in a Joint and Coalition environment. He is responsible for ensuring compliance with statutory and regulatory mandates, employing the Army Architecture Integration Center to develop the Enterprise Architecture, identify and coordinate technical standards, and to create and maintain architecture processes for Army Transformation. He is further responsible for providing support to Overseas Contingency Operations, and supporting natural disaster relief efforts.

MG Bowman received a Reserve commission in the Infantry in 1978 upon graduation from Norwich University. He received a master’s degree in public administration from Shippensburg University in 1998. His military education includes the Infantry Officer Basic Course, Signal Officer Advanced Course, Training with Industry, U.S. Army Command and General Staff College, Joint Command and Control Course, the Armed Forces Staff College, and the U.S. Army War College.


His decorations include the Defense Superior Service Medal with Oak Leaf Cluster, Legion of Merit with Oak Leaf Cluster, Bronze Star Medal, Defense Meritorious Service Medal, and the Meritorious Service Medal with five Oak Leaf Clusters. He is also authorized to wear the Joint Staff Identification Badge, Army Staff Identification Badge, and the Parachutist Badge.
Brooks, Jeanne  
Director, Military Human Resources Integration  
U.S. Army G-1  

Biography will be made available at http://mitiq.mit.edu/cdo and provided on site.

Bugajski, Joe  
Research VP  
Gartner, Inc.  

Research Vice President, Gartner, Inc., the world’s leading and largest IT advisory firm, helps clients define and implement programs for IT governance; data management, data integration, business intelligence (BI), legacy software modernization, and application portfolio management. Joe co-chairs MIT’s Information Quality Industry Symposium (IQIS) and Object Management Group’s Finance Domain Task Force. Prior to Gartner, Joe was chief data officer at Visa where he ensured the global interoperability and near faultless operation of VisaNet, the world’s largest payment system. Prior to Visa, Joe was CEO of BI software provider, Triada. Joe holds 4 patents and authored 45 peer-reviewed publications.

Campbell, Ted  
VP Strategic Planning  
Lockheed Martin  

Frank B. “Ted” Campbell joined Lockheed Martin in January 2002; he is Vice President and Managing Director, Command, Control, Communications and Information Operations (C3 & IO), Lockheed Martin Advanced Concepts. The mission of C3 & IO is to develop business opportunities requiring highly integrated, network-centric solutions across the Department of Defense C3 capability area and serve as Lockheed Martin Corporation’s focal point for overarching architectures, systems, strategies, research and development, strategic teaming, and new business captures for this area. He leads Lockheed Martin’s Net Centric Operation integrating concept and chairs both the C3 and Info Operations Horizontal Integration teams. He served in the United States Air Force for 32 years, retiring from active duty in January 2000 as Lieutenant General. He was a command pilot and has served in a variety of command and leadership positions in the Air Force and the Joint Chiefs of Staff. In his last position,
he was director for force structure, resources and assessment, J-8, the Joint Staff, the Pentagon, and Washington, D.C. and secretary of the Joint Requirements Oversight Council.

A native of South Carolina, Mr. Campbell is a graduate of The Citadel in Charleston, South Carolina, with a degree in Political Science. He also has a master’s degree in Business Administration from Auburn University and a master’s degree in National Security and Strategic Studies from the Naval War College and is a Seminar XXI Fellow, Foreign and International Relations from Massachusetts Institute of Technology.

Carroll, Ned  
Senior Business Executive – Technology  
Bank of America

Ned Carroll is the Information Management Operations and Analytics Executive at Bank of America, where he is responsible for Data Warehouse platform operations and delivery, Business Intelligence and Analytical Platform delivery and management, Data Management tools delivery and management, Cyber Forensics, and Litigation Support. In addition Ned chairs the Data Steward Executive Council which is responsible for managing the quality and integrity of data at Bank of America. Ned has held various technology, change and risk leadership roles at the Bank since 2001.

Ned and his family live in Charlotte, NC. Ned graduated from Davidson College where he majored in Economics.

Daus, Cliff  
Information Architecture Division Chief  
U.S. Army CIO/G-6

Mr. Cliff Daus was assigned to Army Architecture Integration Center on 2 September 2008. He is currently the Information Architecture Division Chief. In this position, he is leading a team responsible for developing and implementing the Army Information Architecture and addressing Net-Centric Data Strategy across the Army.

Mr. Daus retired from the Army after twenty-one years of service. He served in acquisition positions with the U.S. Army Chief Information Office/G-6, Missile Defense Agency, and Program Executive Office Command Control Communications – Tactical. He has also held numerous leadership positions within the United States Army Corps of Engineers.

A graduate of the United States Military Academy with a degree in Engineering Management-Mechanical Engineering, he also holds a Masters of Science in Industrial and Systems Engineering from Rutgers University. He is a graduate of the Defense System Management College School of Program Management and is a Certified Acquisition Corp member.

He is married to Theresa Solaski Daus and they are raising their ten year old daughter, Lily in Fairfax, Virginia.
| DiCicco, Ralph  
Deputy Acquisition CIO  
U.S. Air Force | Ralph DiCicco is Deputy Acquisition Chief Information Officer (CIO), working for the Deputy Assistant Secretary of the Air Force (Acquisition Integration), SAF/AQX. The Acquisition CIO is responsible for developing architecture, data strategy, systems migration plan, and a portfolio management process for the acquisition domain (defined as one of 14 domains in the Air Force enterprise architecture).

Mr. DiCicco spent 25 years on active duty in the Air Force and retired as a colonel in April 2006. As an Air Force officer, he served as an acquisition program manager, test manager, and in various staff positions involved in planning, resource allocation, and congressional appropriations liaison. He joined Federal service as an Air Force Civilian in 2006 and served as acting director of the Air Force Acquisition Center of Excellence as well as program manager of a Major Automated Information Systems program.

Mr. DiCicco received his Bachelor’s of Science degree in Mechanical Engineering from the University of Massachusetts (Lowell) in 1980 and a Master of Science degree in Electrical Engineering from George Washington University in 1988. He is a graduate of the Defense Systems Management College Program Managers Course and Executive Program Management Course. He has attended executive management seminars at University of North Carolina, Chapel Hill and the Center for Creative Leadership. |

| Edwards, Terry  
CIO  
U.S. Army ASA(ALT) | Mr. Terence Edwards is the Director for System-of-Systems Engineering, directly reporting to the Principal Military Deputy. He is responsible for directing the activities of management and oversight of engineering that aggregate the performance of individual systems into system of systems operational capabilities.

He develops policy, and conducts oversight of, systems engineering at both the program and enterprise levels. Mr. Edwards is the Army’s enterprise level SoS Architect. He is responsible for maintaining an enterprise level system Architecture that links Army programs to the DoD environment. His office supports the Army Staff and the Program Executive Offices in enabling our Army through portfolio management of material solutions across its architecture.

Previously, Mr. Edwards served as the U.S. Army Materiel Command’s Chief Information Officer/Chief Technology Officer/G6. He served on the Army Staff from May 2005 until June 2006, as Director of the Army Architecture Integration Cell in the Chief Information Office/G6. His education includes a Bachelor of Science degree in Mechanical Engineering from the University of Alabama; a Master of Science in Computer Science from Farleigh Dickenson University in New Jersey and a Master of Science in National Resource Strategy, Industrial College of the Armed Forces, Ft. McNair, Washington DC. |
| **Elin, Greg**  
CDO  
Federal Communication Commission | Greg Elin is the Federal Communication Commission's Chief Data Officer where his role is to turn data into an asset for daily use. As part of the agency's Data Innovation Initiative, Mr. Elin launched the FCC's first web service APIs and hosted the agency's first Open Developer Day. Previous to the FCC, he worked served as United Cerebral Palsy's Chief Technology Officer exploring the opportunities of a technology-fueled future for extreme users. From 2006 to 2009, Mr. Elin was at the Sunlight Foundation where he created the Sunlight Labs and initiated and promoted web service APIs for government and political data. He also served as Chief Evangelist for the Foundation and was routinely quoted in the media about technology and transparency. Mr. Elin also created Fotonotes, an open source Web-based image annotation tool whose meme has (and sometimes code) has been widely adopted. |
| **Finneran, Sherrian**  
Data Strategist  
Department of the Navy | Ms. Finneran is responsible for developing the Department of the Navy net-centric data service implementation plan. Ms. Finneran created the Enterprise Architecture Coordination Board for the Department of the Navy (DON). Additionally she served as a green belt during the lean six sigma meetings to design and implement a change management process for the DON application and database management system (DADMS).  
Prior to her position within the office of the Chief Information Officer, Ms. Finneran reviewed the Navy laboratory plans to acquire, test, install, and maintain a critical infrastructure for conducting warfare systems integration and interoperability tests for carrier strike groups.  
Ms. Finneran transitions from supporting the engineer of submarines to consulting with Senior Program Managers within Team Submarine to facilitate the use of the $32M budget increases Congress stipulated could only be used to modernize display systems onboard submarines. During this effort she was one of the creators of the Joint Display Acquisition working group (JDAWG).  
Ms. Finneran supported the engineering of U.S. Navy submarines by serving as the Operations Manager for the Submarine Maintenance and Monitoring Office where she maintained system of United States Submarines data and providing secret level connection to 10 remote submarine bases. Her responsibilities included preparing and defending the budget to provide life cycle support for this system.  
Ms. Finneran was the elected Chair of the Enterprise Server Integration Local User’s Group during the 90s, holding public meeting to encourage the exchange of information between government and industry regarding effectively managing technology. |
Ms. Finneran has a bachelor of science in mathematics and a Master’s of Science in Technology Management. She is a certified Defense Acquisition Professional in advanced program management and systems planning, research, development, and engineering. Ms. Finneran is a graduate of the National Security Executive Education Program. Additionally, she has completed graduate courses in Submarine Combat Systems and CR4ISR Information Technology at the Massachusetts Institute of Technology.

**Goloboy, Mark**  
Director of Global Data Governance  
Monster Worldwide, Inc.

Mark Goloboy manages Global Data Governance for Monster where his responsibilities include delivering accurate, complete, timely and consistent information to executive decision makers. Additionally, Mark drives Global Sales and Marketing process and technology improvement programs leveraging Monster’s most valuable data assets.

Previously, Mark managed Global Marketing Analytics and Technology for Monster and has led successful Global Segmentation, Marketing Measurement, and Global Data Acquisition programs. Prior to joining Monster, Mark was an Engagement Manager at Harte-Hanks where he built marketing systems for Sallie Mae and TD Bank. Mark began his career as a Technology Consultant for Accenture’s Resources Data Warehouse Initiative, where he quickly progressed into team lead and architect roles at clients including Bank of America, Corning, and Freddie Mac.

**Green, David**  
CTO, C4  
U.S. Marine Corps

Mr. David E. Green is the Chief Technology Advisor to the Director of the Command, Control, Communications, and Computers (C4) Department. As such, Mr. Green provides essential support to the Director for the continuing assessment of ongoing Information Technology acquisition and operations to determine their success in achieving technology objectives. He also serves as the senior technical expert for all matters pertaining to the identification of IT requirements and leads the continuing assessment and identification of promising emerging C4 and information technologies for exploitation and application in the warfighting and business domains.

Hailing from Boise, Idaho, Mr. Green served in the Marine Corps from 1972-1992. He served with the 1st Radio Battalion (one tour), the 2nd Special Security Communications Team (SSCT) attached to 1st Marine Division (two tours), the 1st SSCT attached to 3rd Marine Division (one tour), Marine Support Battalion (two tours, one with Company A at Fort Meade, MD and one with Company I in Adak, AK), and one tour with Marine Corps Systems Command.

Following his retirement, Mr. Green entered private industry. Over the next seven years, he analyzed methods and means to improve communications and levels of interoperability between
various tactical UNIX and Windows-based systems exchanging data over diverse tactical communications systems. Mr. Green also authored several technical papers and reports to improve interoperability at the system and architectural level.

Mr. Green entered Civil Service in 1999 when he took a position with the Marine Corps Tactical Systems Support Activity (MCTSSA) to develop processes and infrastructure essential for planning, executing, and reporting on system-of-systems tests. After leading the first two system-of-systems test events conducted at MCTSSA, he went on to define and establish MCTSSA’s efforts that influenced and implemented Navy and Marine Corps systems commands' integration of Navy and Marine Corps C4I systems into net-centric architectures. Focus was to define, establish, and direct organizational efforts that identified and resolved equipment, process and integration issues between Navy and Marine Corps Expeditionary Strike Group (ESG) systems.

Mr. Green graduated Magna Cum Laude from National University in San Diego, California with a Bachelor of Science Degree with a major in Information Technology and a minor in Computer Science. Mr. Green also holds a Masters in Science in Systems Engineering from The Naval Postgraduate School in Monterey, California.

Grossman, Robert
Faculty
University of Chicago

Robert Grossman is a faculty member at the University of Chicago. He is the Director of Informatics at the Institute for Genomics and Systems Biology, a Senior Fellow at the Computation Institute, and a Professor of Medicine in the Section of Genetic Medicine. His research group focuses on bioinformatics, data mining, data quality, cloud computing, data intensive computing, and related areas. He is also the Founder and a Partner of Open Data Group, which provides strategic consulting and outsourced services in analytics, data quality and related areas. He has written over 150 technical articles. For more information, please see: rgrossman.com

Guzmán, David
Chief Information Officer
Axiom Corporation

David R. Guzmán has been an award-winning, senior Information Technology executive with several Fortune 500 companies for over 30 years, currently serving as Chief Technology Executive for Axiom Corporation in Conway, Arkansas.

Most recently, he was Senior Vice President, Technology Information Services at GSI Commerce, the leading provider of ecommerce solutions in the retail industry with 84 retail partners, who outsource the development and hosting of their websites to GSI. These are marquee brands such as Calvin Klein, Kenneth Cole, Kate Spade, Liz Claiborne, Levi-Strauss, Toy’s R Us, PetSmart, American Express, Proctor & Gamble, all the major sports leagues, et al. Mr. Guzmán was Executive Vice President/Chief Information Officer at Accretive Commerce, which was acquired by GSI Commerce. Before his position at GSI, he was Executive Vice President/Chief Information at
Owens & Minor, a Fortune 500 company in Richmond, Virginia, serving the healthcare industry.

He serves on the Board of Directors for the Midwest ISO and is a member of the National Association for Corporate Directors. He is a former member of the Advisory Boards for Information Week, Computerworld, and CIO Magazine; served as CIO Advisor to the Governor of Virginia; and has been on the Customer Advisory Boards for BEA, Cyclone Commerce, Sterling Commerce, Business Objects, Informatica and Teradata. He formerly served as a member of the Board of Directors for NeoIT, a high tech company in Silicon Valley. Mr. Guzman was CEO of a healthcare technology startup, jointly sponsored by Duke University’s Medical School and Fuqua School of Business. He is currently a Senior Scholar at the Fuqua School of Business.

He also served as Senior Vice President of Systems Development for Office Depot; Chief Research Officer at The Yankee Group; Managing Director, Global Information Services at Alcoa; Chief Technology Officer at K-Mart; Director of Architecture at Federated Department Stores; Senior Manager at Deloitte; Vice President, Trading Systems at Credit Suisse; and began his career at Morgan Stanley. He has received numerous awards, including #1 on the Information Week 500 top Innovators in Technology twice (2001, 2003); Computerworld Premier 100 IT Leaders (Best in Class); Business Week Web Smart 50; Data Warehousing Institute Best Practice Award and Leadership Award; Outsourcing Center, Outsourcing Excellence Award. He is a graduate of Yale University, where he earned a Bachelor of Arts degree in politics and economics, with Honors. He currently lives in Conway, Arkansas with his spouse of 30 years and 3 children.

Jeff Hammerbacher is a founder and the Chief Scientist of Cloudera. Jeff was an Entrepreneur in Residence at Accel Partners immediately prior to founding Cloudera. Before Accel, he conceived, built, and led the Data team at Facebook. The Data team was responsible for driving many of the applications of statistics and machine learning at Facebook, as well as building out the infrastructure to support these tasks for massive data sets. The Data team produced open source projects such as Hive and Cassandra and their work was recognized at conferences such as CHI, ICWSM, SIGMOD, and VLDB. Before joining Facebook, Jeff was a quantitative analyst on Wall Street. Jeff earned his Bachelor’s Degree in Mathematics from Harvard University and recently served as a Contributing Editor for O'Reilly's "Beautiful Data".

**Hammerbacher, Jeff**

Former CDO
Facebook

Founder & Chief Scientist
Cloudera
| **Hirsch, Steve**  
| CDO  
| NYSE Euronext |
|---|---|
| In his current role as Chief Data Officer of NYSE Euronext, Steve Hirsch is responsible for the data vertical which includes data governance, data architecture, database development, operations, platform engineering, storage, and dataflow automation. Prior to entering the exchange space at Archipelago (which later merged with the NYSE), Steve served in other data centric roles at various companies, including Nextcard, one of the first online providers of consumer credit, as well as household names Del Monte Foods and the Walt Disney Company. Steve's passion for technology began early on in life, coding his first database engine and accounting system while he was still in elementary school and co-founding his first software development firm during his high school years. |

| **Kaomea, Peter**  
| Chief Information Officer  
| Sullivan & Cromwell |
|---|---|
| Peter Kaomea is the Chief Information Officer for Sullivan and Cromwell LLP, one of the most well established and prestigious law firms in the world. He is responsible for creating and driving information policies, processes, and systems for competitive informatics advantage. He has worked across defense, financial, and legal industries in research, development, and operational capacities. The theme of his career across this span has always been the optimization of data content and quality to create non-linear advantage for information critical industries.  

He came to the legal industry in 2000 from Citibank, where he was consecutively the VP of Process Reengineering and Director of e-Commerce Technology. Peter has also served as a research scientist for 13 years for the Department of Defense, where he designed knowledge management and command and control systems using artificial intelligence, machine vision, and neural network technologies. He is proud of the opportunity he has had to serve as a Captain in the Air Force.  

His educational background spans hardware, software, and business layers with MS degrees from MIT in Management Science and from the University of Hawaii in Computer Engineering as well as a BS degree from MIT in Electrical Engineering. |
Mr. Robert Kazimer is the Chief Information Officer for the U.S. Army Corps of Engineers and serves as the principal advisor to the Corps Commanding General on information technology issues. He is responsible for all aspects of information resource management and information technology for the Corps.

Previously, Mr. Kazimer was the Army’s Chief Knowledge Officer and was responsible for the policy, governance, oversight, proponency and technical management of critical Army information technology, e-business, and knowledge management programs. He led Army Information Management Civilian Career Program (CP34) and was the functional proponent for AKO/DKO and its 2.2 million users.

He has also held various supervisory positions throughout the course of his career including Director, Business Mission Area, Office of the Deputy Under Secretary of the Army; Chief, Pacific Division, Center for Army Analysis; Deputy Director, Plans, Resources, and Operations; Army Deputy Chief of Staff, G-1; Chief, Strategic Studies and Analysis, U.S. Strategic Command, Omaha, NE; Chief, Operations Analysis, U.S. Forces Korea, Seoul, Korea; and Brigade Executive Officer, Engineer Brigade, Fort Stewart, GA.

He holds a professional membership with Armed Forces Communications and Electronics Association, Association of the United States Army, Military Operations Research Society, and is a lifetime member of the Army Engineer Association.

Mr. Kazimer earned a B.S. degree with a concentration in nuclear engineering from the U.S. Military Academy, West Point, NY in 1978, and received a M.S. degree in Operations Research at U.S. Naval Post Graduate School, Monterey, CA in 1984. He is a graduate of the U.S. Armed Forces Staff College, and the U.S. Army Engineer Officers Advanced Course.

Tom Kelly is the Vice President for Strategic Initiatives with Lockheed Martin Missiles and Fire Control (M & FC). Prior to joining Lockheed Martin M & FC in August 2009 he served in the Department of the Army as the Deputy Under Secretary for Secretaries of the Army Fran Harvey and Pete Geren. He was responsible to the Secretary of the Army for IT Portfolio Governance and Congressional Compliance. In that role he created and ran the management system for the Army’s complex ERP development process and created the requirement for the Army Chief Data Officer and Army Chief Data Quality Officer. Together with the Director of DARPA he also created the Wireless Network After Next (WnAN) Program.

In his previous tour as a Department of the Army Civilian, Tom Kelly was the founder and Director of the Army’s Artificial Intelligence Center, the only software development center in the Pentagon. The center developed management decision support tools for the Army’s senior leaders. Between his two tours in the Pentagon Mr. Kelly had a had a number of senior industry
assignments with Ford Aerospace Corporation where he managed the Space Missions Group’s IRAD portfolio and with Maxwell Technologies where he was Vice President for Strategy and New Business Development. During this time frame he was also a consultant to the Army Science Board. As an enlisted soldier he served on the staff of the Army War College where he lectured on foreign policy issues. He has a Masters degree from the MIT Sloan School of Management.

**Kenyon, Lee**  
VP  
Eaton Vance Management

Elizabeth (“Lee”) Kenyon is a vice president of Eaton Vance Management and director of data governance and enterprise reporting & analytics. Her primary responsibility is the oversight of data governance, including policy and process implementation, while also overseeing enterprise reporting & analytics. Lee joined Eaton Vance in 1993 and has more than 20 years of experience in the investment industry. Prior to becoming part of the firm’s IT department in 2008, she was co-director and portfolio manager of the Investment Grade Fixed-Income group, where she managed money market and fixed-income portfolios and shared responsibility for overseeing $5 billion in assets under management. Prior to joining Eaton Vance, Lee was affiliated with Heritage Capital Management in various capacities. Lee earned a B.S. in engineering psychology from Tufts University and is a CFA charterholder.

**Kirby, Michael**  
VP, U.S. Army Account Executive  
Computer Sciences Corporation

Mike Kirby is Vice President and Army Account Executive for CSC. From 2005 to 2008, he served as Deputy Under Secretary of the Army for Business Transformation (DUSA - BT). In this role, he was responsible for implementing the U.S. Army's business transformation initiatives, which included continuous process improvement, business situational awareness, organizational analysis and design, and professional development. Previously, he was the Business Development Deputy of Mission Systems for Northrop Grumman. Additionally, he served as a member of the U.S. Army Science Board. During service in the Army, Mike was a combat arms officer and commanded a tank battalion during the first Persian Gulf conflict. He received a Bachelor of Science degree in engineering from the U.S. Military Academy at West Point, a Master of Science in national security strategy from the National War College and a Master in Business Administration from the Harvard Business School.
<table>
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<tr>
<th>Knox, Jim</th>
<th>Mr. James A Knox serves as the Department of the Navy Chief Information Officer (DON CIO), Director of Information Sharing, Knowledge and Records Management. Mr. Knox served in the United States Navy as a Surface Line Officer for over 21 years. His duty assignments included six sea tours on Pacific Fleet ships. Ashore, he recruited, attended the Naval Postgraduate School, and worked for the Program Executive Officer, Undersea Warfare. After retiring in 1995, he went to work for the Navy’s Undersea Weapons Program Office. In 2000, he joined the DON CIO and engaged in issues involving eBusiness, eGovernment, knowledge management, and records management. In December 2004, he was selected for Government Service and his current position with the DON CIO.</th>
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</table>
| Krieger, Michael | Mike Krieger became Army Deputy Chief Information Officer/G-6 in July 2008. CIO/G-6 oversees the Army’s $10 billion IT investments, manages the Enterprise IT architecture, establishes and enforces Enterprise IT policies, and directs the delivery of operational C4IT capabilities to support warfighters and to enable the Army’s slice of joint information dominance.  
Mr. Krieger is a Senior Executive with broad experience in Information Technology. He served 25 years in the U.S. Army, with operational assignments in tactical communications and command and control. He previously was the Principal Director for the Deputy DoD Chief Information Officer, and also formerly held the position of Director for Information Policy and Integration in the Office of the DoD Chief Information Officer.  
Mr. Krieger believes information assets must be visible, accessible, understandable and trusted to achieve an information advantage for our Soldiers and mission partners.  
Mr. Krieger holds a B.A. from the United States Military Academy, an M.S. in Physics from the Georgia Institute of Technology, and an M.S. in National Security Strategy from the National Defense University. |

| Knox, Jim | CIO  
Department of the Navy, SECNAV |
|---|---|
| Krieger, Michael | Acting CIO/G-6  
U.S. Army |
Lavagnino, Merri Beth
CIO and Compliance Coordinator
Indiana University

Merri Beth Lavagnino is Chief Privacy Officer and Compliance Coordinator for Indiana University. In this role, she is charged with management of high-level strategies, plans, policies, and processes for legal and policy-compliant deployment and use of information, information systems, and technology, university-wide.

Before coming to IU, Lavagnino served as Director for Learning and Information Technologies for the Committee on Institutional Cooperation (CIC)-the academic consortium of the Big 10 schools plus the University of Chicago. As Director, she coordinated the collaborative information technology activities sponsored by the Chief Information Officers of those institutions. Prior to her work with the CIC, Lavagnino served as Associate Professor of Library Administration and Director of Library Systems at the University of Illinois at Urbana-Champaign, where she coordinated information and technology systems in 47 library units in 21 different buildings. She held similar positions at the University of Vermont and Yale University.

She earned her Master's degree in Library and Information Science from Indiana University, and a Bachelor's degree in Education from Temple University. She holds the Certified Information Privacy Professional (CIPP) and the Certified Information Privacy Professional – Information Technology (CIPP-IT) credentials.

Lee, Carolyn
Senior Technical Advisor Plans and Integration
CIO, AF/A1 (HR Division)
U.S. Air Force

Ms Lee is the Senior Technical Advisor for Plans and Integration, AF/A1X, the Pentagon. In this capacity she supports the Directorate of Plans and Integration in Air Force Enterprise-wide Human Resource Information Technology. Her responsibilities include oversight of AF and joint personnel systems and IT initiatives including technical management and direction of Air Force’s total force personnel service delivery transformation. Her experience includes network and data security, capital planning, acquisition, architecture development/compliance, process improvement, and technology assessment and deployment.

Prior to joining AF/A1, she held a variety of IT-related positions including Senior Program Director (SPD) managing Air Force contracting information systems and paperless initiatives, deputy Chief Information Office for US Air Forces in Europe, and several positions in the command and control, and intelligence mission areas. She also served as the US representative to NATO’s Air Command and Control System software committee and as Adjunct Professor at the (then-named) Joint Military Intelligence College.
| Lee, Yang | Professor Yang W. Lee is a renowned researcher and leader in the data and information quality field. She is Associate Professor of Information, Operations, and Analysis Group in the College of Business Administration at Northeastern University. Professor Lee investigates the role of differentiated quality of information in information systems, work processes, and structural mechanisms given data-rich, service-critical, and extended organizational contexts. Her current research projects explore quality information products, extended enterprise systems integration, IT-mediated institutional learning, context-reflective problem solving, and medical errors. Dr. Lee’s work includes numerous prestigious academic journal publications, as well as several books on data quality: *Journey to Data Quality* (MIT Press, 2006), *Data Quality* (Kluwer Academic Publishers, 2000), and *Quality Information and Knowledge* (Prentice Hall, 1999).

Dr. Lee received her Ph.D. from MIT. She was a visiting assistant and associate professor at MIT, Associate Director of MIT’s Total Data Quality Program and co-founder of the International Conference on Information Quality. She is currently Deputy Director of MIT’s Information Quality Program. She also co-founded Cambridge Research Group, through which she has put her research results into practice, providing consultation and solutions for companies and agencies in the private and public sectors in the US and internationally for over 20 years. She was awarded for her work from many institutions including the US intelligence community. She is the founding and current Co-Editor-in-Chief of ACM Journal of Data and Information Quality. |
|---|---|
| Madnick, Stuart | Professor Stuart Madnick has been a faculty member at M.I.T. since 1972. He has served as the head of MIT’s Information Technologies Group for more than twenty years. During that time the group has been consistently rated #1 in the nation among business school information technology programs (U.S. News & World Reports, BusinessWeek, and ComputerWorld). He has also been an affiliate member of MIT’s Laboratory for Computer Science, a member of the research advisory committee of the International Financial Services Research Center, and a member of the executive committee of the Center for Information Systems Research.

Dr. Madnick is a prolific writer and is the author or co-author of over 250 books, articles, or reports including the classic textbook, Operating Systems (McGraw-Hill), and the book, The Dynamics of Software Development (Prentice-Hall). He has also contributed chapters to other books, such as Information Technology in Action (Prentice-Hall).

His current research interests include connectivity among disparate distributed information systems, database technology, software project management, and the strategic use of information technology. He is presently co-Director of the Productivity From |
Information Technology (PROFIT) Initiative and co-Heads the Total Data Quality Management (TDQM) research program.

He has been the Principal Investigator of a large-scale DARPA-funded research effort on Context Interchange which involves the development of technology that helps organizations to work more cooperatively, coordinated, and collaboratively. As part of this effort, he is the co-inventor on the patents "Querying Heterogeneous Data Sources over a Network Using Context Interchange" and "Data Extraction from World Wide Web Pages."

He has been active in industry, making significant contributions as a key designer and developer of projects such as IBM's VM/370 operating system and Lockheed's DIALOG information retrieval system. He has served as a consultant to many major corporations, such as IBM, AT&T, and Citicorp. He has also been the founder or co-founder of several high-tech firms, including Intercomp (acquired by Logicon), Mitrol (acquired by General Electric's Information Systems Company), Cambridge Institute for Information Systems (subsequently re-named Cambridge Technology Group), iAggregate (acquired by ArsDigita which was subsequently acquired by Red Hat), and currently operates a hotel in the 14th century Langley Castle in England.

Dr. Madnick has degrees in Electrical Engineering (B.S. and M.S.), Management (M.S.), and Computer Science (Ph.D.) from MIT. He has been a Visiting Professor at Harvard University, Nanyang Technological University (Singapore), University of Newcastle (England), Technion (Israel), and Victoria University (New Zealand).

McKinney, Charles
Enterprise Data and Portfolio Management
Freddie Mac

Currently, Charles McKinney runs analytics and develops loss-mitigation strategies for Freddie Mac's $1.8 trillion single-family portfolio. Previously, Mr. McKinney led a department of statisticians, analysts and data mining professionals that provides business intelligence to the firm. Before that, Mr. McKinney led an information quality program which introduced metrics for the firm's critical information and partnered with business areas to improve data integrity. Mr. McKinney joined Freddie Mac in 2006 to create a Standards and Quality department in the Mission Oversight and Development Division; Mission is responsible for the firm's affordable housing goals, regulatory reporting functions, and fair lending compliance.

Prior to joining Freddie Mac, Mr. McKinney worked in management consulting. As principal with a boutique consultancy, he introduced service offerings, developed business, and led engagements for financial services clients. At KPMG, Mr. McKinney led engagements for commercial and public sector clients and developed service offerings for the Risk Advisory Services business. His consulting experiences focused on
enterprise risk management, regulatory compliance and internal control reviews, business process redesign, business transformation programs, and business intelligence and data mining.

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<tr>
<th>Petroski, Frank</th>
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<td>Director for Integration for Data Services</td>
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<td>The MITRE Corporation</td>
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Frank R. Petroski is the Director for Integration CIO Integration in the C2 Center. Mr Petroski is responsible for topics of common concern across the MITRE engineering activities for the Air Force, Army, and DoD CIO work program. Working closely with the CIO senior executives, his most recent focus has been on the IT Efficiencies activities in the DoD, as well as the development and deployment of enterprise directory services, beginning with Enterprise Email and Enterprise Identity Data Stores.

Previous assignments include the following:

Director of Integration for Data and Services in MITRE’s C3I Federally Funded Research Center. He was responsible for the horizontal integration of all activities related to data and services. He focused on approaches for implementing the DoD Data and Services Strategy, and in particular, the implementation of a set of Core Enterprise Services across the DoD and Intelligence Community networks. Those core services included authentication, access control, collaboration, search services and various enterprise directories. He worked closely with government counterparts in the DoD CIO and DNI CIO offices to define common strategies and implement the complementary governance necessary to architect, develop, operate, and manage these services across networks. In addition, he worked with key programs in the DoD and IC to adopt these services and deliver improved information sharing capabilities.

Chief Engineer for the Joint and Defense Wide Systems Division. He was responsible for technical content of the division work program for the Defense Information Systems Agency (DISA), the DoD CIO (Assistant Secretary of Defense, Networks and Information Integration), Missile Defense Agency, Joint Tactical Radio System JPO and other DoD Sponsors.

Chief Engineer for Enterprise Systems Engineering. He was responsible for defining and executing foundation building activities, leveraging related technical efforts across MITRE, championing technical exchange and consensus building activities, and engaging with the DoD leadership and Program Managers to effect technical recommendations.

Director for Air Traffic Management. He was responsible for managing approximately 140 technical staff whose activities included the prototyping, operational procedures, and daily use of the advanced air traffic management research tools, and the subsequent transfer of the resulting technologies to industry. He worked extensively to develop relationships with other research organizations and several universities.

Mr. Petroski was a member of the Air Traffic Services
Subcommittee of the FAA’s Research and Development Advisory Committee and served on the program committee for the ATM-2001 Air Traffic Management Seminar, the premier technical forum for international research in Air Traffic Management.

Prior to joining the MITRE Corporation in 1983, Mr. Petroski was the Division Chief for the Computer Performance Management Division at the Air Force Data Services Center at the Pentagon.

He received a Bachelor’s of Science Degree with a Major in Mathematics from Drexel University in 1977, and a Master’s of Science Degree with a Major in Operations Research from George Washington University in 1981.

Mr. Petroski maintains professional memberships with the ACM.

| Pickering, Willa | Willa Pickering is a Lockheed Martin Fellow and a certified Lockheed Martin Information and Data Architect. She has served as the data architect on many large DoD contracts over thirty years and is currently the architecture group lead and data architect for the Missile Defense Agency National Team B. She is responsible for the data architecture for the Command, Control, Battle Management and Communication system, including the development and implementation of XML standards, data flow between components, and the objective data model. She participates in the Joint Air and Missile Defense Common XML Interchange, the Global Sensor Integrated Networks data harmonization, and NATO XML Interchange format workshops. She has been the recipient of the Lockheed Martin Individual Service Recognition Award, PRIDE team award, Technical Achievement Award, and the Gold Medallion for Excellence. Dr. Pickering was the author of the Lockheed Martin Data Integration Reference Model and the Information Reference Model, and was the company representative for the sector enterprise architecture project to develop the information technology strategy. She teaches a graduate class on data warehousing techniques at the University of Maryland University College and is a speaker on data issues at several major conferences. She was a member of the official delegation for organizational information systems to South Africa, where she presented a paper on data warehousing concepts to the Computer Society of South Africa. Dr. Pickering actively supports the MIT Information Quality Industry Symposium and is co-chair for the 2011 symposium. She received an MS in electrical engineering and computer science from the University of New Mexico, Los Alamos, and a Ph.D. from the School of Information Technology and Engineering, George Mason University |

<p>| Lockheed Martin Fellow and Information &amp; Data Architect | Lockheed Martin |</p>
<table>
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<tr>
<th>Plotkin, David</th>
<th>David is the Data Governance Manager for AAA NCNU, where he has been busy implementing Data Governance for nearly 3 years. He was formerly the Data Quality Manager for Well Fargo Bank, where he spent 5 years implementing a DQ improvement program – and was a victim of the Mortgage collapse. He has over 20 years experience in data modeling, data quality, metadata capture and validation, and tool selection. He has implemented 4 metadata repositories in his career (he’ll get it right the next time!) and is firm believer in the two-pronged approach of quality DATA and quality METADATA.</th>
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<tr>
<td>Data Governance Manager</td>
<td>AAA of Northern California, Nevada &amp; Utah (AAA NCNU)</td>
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| Ponzio, Frank | Frank Ponzio, Jr. is President and CEO of Symbolic Systems, Inc., an information services company he founded in 1968. Frank has guided Symbolic Systems though the multiple transformations of the computer and software industries, evolving it into an IT services company providing global services touching such countries as Russia, France, Belgium, Mexico, and Costa Rica. With over 100 employees, Symbolic Systems is organized into high performance teams located in six cities across the United States supporting its customers in project, data, and quality management; process development and operations; and problem solutions. Competencies include commercial and business applications, real-time data collection and process control systems, defense acquisition systems, and knowledge management systems. Business areas have encompassed automotive, pharmaceutical, medical, biometrics, C2, and C4ISR. Frank has architected, designed, and built processes and directed the operation of teams for data fusion, data mediation, and data quality. He is the author of the Authoritative Data Source (ADS) Framework and the ADS Maturity Model for assessing and ranking data providers, which enables data users to identify and rank sources of quality data. He holds several patents for his invention and design of DATAMRI® and is currently directing Symbolic’s DATATIVITY® effort, an innovational web service cloud computing technology for data analysis. Frank is a frequent speaker to the software industry on various IT topics. Frank has a Bachelors degree in Engineering and a Masters degree in Mechanical Engineering from Notre Dame University and a Masters degree in Technology Management from Stevens Institute of Technology. He is a member of ACM, IEEE, and Automotive Industry Action Group. Frank also serves on the |
| President and CEO | Symbolic Systems, Inc. |

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<th>Board of Directors of International Research and Exchanges (IREX), headquartered in Washington, DC, and of the Project for Ethnic Relations, headquartered in Princeton, NJ.</th>
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| **Servaes, Mike**  
Lieutenant Colonel  
United Kingdom Army |
| Lt Col Mike Servaes is the SO1 Plans – Management Information Branch Policy, within Headquarters Land Forces in Andover, Hampshire. He has been the lead in creating a Business Information Competency Centre for the British Army and in creating a unified “programme” view of information for the army. He is leading on the creation of an Army Data Board.  
He commissioned into the Royal Artillery in 1986 and has served at Regimental Duty with Field and Air Defence Artillery in Germany and the UK with operational service in DESERT STORM, Bosnia, with the UN in Cyprus and Iraq.  
He commanded T Battery (Shah Sujah’s Troop) in 12 Regiment RA and 49 (Inkerman) Battery in 40 Regiment RA and 16 Regiment RA on operations in Cyprus.  
He has completed a mix of E1 and E2 staff posts in the Joint Arms Control Implementation Group, HQ Director Royal Artillery, HQ 145 Brigade, MOD Directorate of Individual Training Capability and HQ 1ST (UK) Armoured Division.  
Lt Col Servaes married to Jane, a Royal Artillery Officer who recently returned from Afghanistan, and they have 3 children. |
| **Sinclair, Tim**  
CDO  
Microsoft |
| Tim Sinclair has been with Microsoft for over 19 years and has held numerous engineering positions. Tim is the General Manager of Business Intelligence and Data Engineering team responsible for Microsoft’s data warehouse and business intelligence solutions across Microsoft divisions. He has extensive experience in building large scale systems and products.  
Prior to this position, Tim lead Microsoft’s Security Technology and Research team responsible for the product development which includes Microsoft’s Security Essentials product, Anti-Malware Engine, Anti-Malware Research and Response, Network Access Protection (NAP) product, and components of Microsoft’s Forefront Security products.  
As General Manager in the Systems Center product team, Tim led several successful company acquisitions focused on virtualization, security and systems management technologies. As General Manager of Microsoft.com, he incubated grew the site into one of the top 10 most visited sites on the internet, managing worldwide operations, development, test, as well as content and UI design.  
Previous to Microsoft, Tim was Vice President of Research and Development for 2 commercial software companies; led software development for a distributed Operating System used for message and communications on the Boeing E-4 Advanced Airborne Command Post (747 version of Air Force One); and developed automated simulation and test systems for guided missiles systems for Texas Instruments. Tim holds a Masters in Computer Science from the University of Colorado and Bachelors in Electrical Engineering from Texas Tech University. |
Tran, Dat  
Executive Director of NCVAS  
Veterans Affairs Department  

Mr. Tran was appointed as the Executive Director of the National Center for Veterans Analysis and Statistics (NCVAS) in August 2008. NCVAS is the VA’s authoritative source for data and statistics on veterans and VA programs. Mr. Tran has over 10 years of experience directing data analysis and statistical activities in the VA. He is currently responsible for leading the effort to implement data governance across the Department to ensure VA’s data is accurate, reliable, and accessible. He is also serving as the Acting Deputy Assistant Secretary for Data and Evaluation in VA’s Office of Policy and Planning.

From 1995 to 2001, Mr. Tran served as a professional staff member for the U.S. Senate Veterans Affairs’ Committee. He was responsible for all oversight activities of VA’s IT programs and coordination of congressional hearings and legislative activities for the Committee.

Prior to his government service, Mr. Tran served as the Manufacturing Operations Manager for Square D Electrical Company in Milwaukee, WI. He was responsible for managing the manufacturing, business planning, procurement, and customer service operations. He has also served as a Senior Project Manager and Industrial Systems Engineer at several Square D manufacturing facilities.

Mr. Tran is a native of Vietnam. He holds a degree in Industrial Systems Engineering from the Ohio State University and is a certified Project Management Professional. He and his wife, Carol, currently reside in Dunn Loring, VA, with their two children, Logan and Reilly.

Wang, Richard  
Deputy Chief Data Officer & Chief Data Quality Officer  
U.S. Army CIO/G-6  
Director  
MIT Information Quality Program (On Leave)  

Richard Y. Wang is the Chief Data Quality Officer of the U.S. Army, on leave from MIT Information Quality (MITIQ) Program. He also holds an appointment as University Professor of Information Quality, University of Arkansas at Little Rock. Before heading the MITIQ program, Dr. Wang served as a professor at MIT for a decade. He received a Ph.D. in Information Technology from MIT.

Dr. Wang is the recipient of the 2005 DAMA International Achievement Award. Previous recipients of this award include Codd for inventing the Relational Data model, Chen for the Entity Relationship model, and Inman for data warehousing.

Dr. Wang has extensive interactions with industry and government, serving as an expert consultant, principal investigator, and advisor to execute enterprise data quality, data warehousing, and data governance projects.

Wang has put the term Information Quality on the intellectual map with myriad publications. In 1996, Prof. Wang organized the premier International Conference on Information Quality, which he has served as the general conference chair and currently serves as Chairman of the Board. Wang’s books on information quality include Journey to Data Quality (MIT Press, 2006), Information Quality: Advances in Management.

Prof. Wang has been instrumental in the establishment of the Ph.D. and Master of Science in Information Quality degree program at the University of Arkansas at Little Rock, the Stuart Madnick IQ Best Paper Award for the International Conference on Information Quality, the comprehensive IQ Ph.D. dissertations website, and the Donald Ballou & Harry Pazer IQ Ph.D. Dissertation Award.

**Whall, Doug**  
VP for Data Management and Integration  
Alanthus Associates

Doug Whall has over 30 years focused on the development and use of advanced software systems and large databases. He is a senior information technology architect and manager with a heavy emphasis in enterprise level data, software, and systems engineering methods, tools, environments and projects. Doug is currently supporting the Director of National Intelligence (DNI) Directorate of Analysis’ efforts as a member of the data management and integration team. He authored the Library of National Intelligence (LNI) Concept of Operations (ConOps). Doug has coordinated intelligence community and DoD data standards, data policies, and metadata to make more data discoverable, accessible, trusted, useable, and managed (DATUM). Doug has coordinated systems and data architecture integration efforts between the DNI’s supported systems and those being developed across the intelligence and DoD communities. He has developed comprehensive identity and access management (IdAM) requirements for LNI, A-Space, Intelligence Community Data Layer (ICDL), and Catalyst.

**Wortman, Carol**  
Acting Army AAIC Director  
U.S. Army CIO/G-6

Ms. Carol Wortman assumed the position of Acting Director, Army Architecture Integration Center, at Headquarters, Department of the Army, and Chief Information Office/G6 in June 2010. Prior to serving as the Acting Director, Ms. Wortman served as the Deputy Director from August 2008-June 2010.

Previously, she served as the Chief Architect, Battle Command, PEO C3T, Fort Monmouth, NJ where she provided the unifying technical vision for the Army Battle Command System of Systems. She led a multifunctional team of technical and operational thinkers responsible for the development of the BC technical vision based on the Army Battle Command Migration Plan.

Ms. Wortman began her career in the Federal Government in 1991 as an AMC Software Engineering Intern. Her first major tasking at SEC was as a key member of the Maneuver Control System, Version 10 (MCS-10) Post Deployment Software Support (PDSS) team. In this position, Ms. Wortman was responsible for providing life cycle software engineering support for the Maneuver Control System. The responsibilities included...
oversight of software design and development, software integration and test, software problem resolution, and software fielding for the MCS systems.

She also served as Project Leader for the Maneuver Control System Light (MCS Light) in the CECOM Software Engineering Center's Advanced Battlespace Solutions Directorate. In this position, she was responsible for delivering the MCS Light product to Product Manager MCS (PdM MCS) and for leading related SEC support to Program Executive Office for Command, Control, and Communications Systems (PEO C3S) Program Manager for Ground Combat Command and Control (PM GCC2), and PdM MCS.

Ms. Wortman holds a Bachelor of Electrical Engineering, Master of Science, Software Engineering, and Master of Science, Strategic Studies and is a graduate of the Army War College. Her numerous awards include: three Department of the Army Superior Civil Service Awards, Commander’s Award for Civilian Service and the Achievement Medal for Civilian Service.

Carol resides in Alexandria, Va. with her dog May Bell.
Driving Directions to Forum Venue

From Reagan National Airport
- Stay left and take “Airport Exit/RT 1 Crystal City/Alexandria” exit
- Stay right and take Rt 1 Crystal City/Economy Parking/General Aviation/South Airport Services” exit onto Abingdon Rd.
- Stay to the right and make a right at the stop sign following 395 North signs
- Make right onto Crystal Drive Exit ramp
- At intersection of S 29th St, TURN RIGHT into parking garage,
- Follow signs to columns labeled 2121, park your vehicle, and proceed to 1st floor Visitor Desk (Lockheed Martin lobby)

From Washington Dulles International Airport
- Leaving terminal, follow signs for Washington
- Take exit onto I-66 E
- Take exit 75 to merge onto Jefferson Davis Hwy/VA-110 toward Alexandria
- Turn left onto 20th St S
- Turn right at Crystal Drive
- At intersection of S 20th St, TURN RIGHT into parking garage,
- Follow signs to columns labeled 2121, park your vehicle, and proceed to 1st floor Visitor Desk (Lockheed Martin lobby)

From Baltimore Washington Int’l Thurgood Marshall Airport
- Head northeast on Friendship Rd
- Slight left at I-95/Freeway (signs for MD-170/I-95/Washington/Baltimore/295/Annapolis)
- Take exit 28 for Balt/Wash Pkwy/MD-295
- Merge onto MD-295 S (23.6 mi.)
- Take exit onto US-50 W toward Washington
- Follow sign to MD-505 (left lanes)
- Take exit onto I-95 S (2.4 mi.)
- Take exit 6C on left to merge onto US-1 S toward Alexandria/Crystal City
- Turn left at 20th St S
- Turn right at Crystal Dr
- At intersection of S 20th St, TURN RIGHT into parking garage,
- Follow signs to columns labeled 2121, park your vehicle, and proceed to 1st floor Visitor Desk (Lockheed Martin lobby)

From Corporate HQ to Washington Ops (Blue Route)
- Turn right turn out of campus
- Turn left on Fernwood
- Turn right on Democracy
- Turn left onto 27th St to Northern Virginia
- Take exit 42-44 for “Geo Wash Memorial Pkwy”
- Exit at “National Airport Access Road”
- Slight right at Asbjorn Dr
- Slight left toward “National Airport Access Rd/VA-233”
- Make right onto Crystal Drive Exit ramp
- At intersection of S 23rd St, TURN RIGHT into parking garage,
- Follow signs to columns labeled 2121, park your vehicle, and proceed to 1st floor Visitor Desk (Lockheed Martin lobby)

Exiting Washington Operations (Red Route)
- Head North on Crystal City Dr.
- Turn left at 20th Street
- Turn right at US-1 N
- Proceed to destination
Hotels nearby the CDO Forum Venue

- **Crystal City Marriott at Reagan National Airport**
  1999 Jefferson Davis Highway · Arlington, Virginia 22202 · (703) 413-5500

- **Courtyard Arlington Crystal City/Reagan National Airport**
  2899 Jefferson Davis Highway · Arlington, Virginia 22202 · (703) 549-3434

- **Hilton Crystal City at Washington Reagan National Airport**
  2399 Jefferson Davis Highway · Arlington, Virginia 22202 · (703) 418-6800

- **Sheraton Crystal City Hotel**
  1800 Jefferson Davis Highway · Arlington, Virginia 22202 · (703) 486-1111

- **Hyatt Regency Crystal City**
  2799 Jefferson Davis Highway · Arlington, Virginia 22202 · (703) 418 1234

- **Holiday Inn Hotel National Airport/Crystal City**
  2650 Jefferson Davis Highway · Arlington, Virginia 22202 · (703) 684-7200
Lockheed Martin Fighter Demonstration Center
The Fighter Demonstration Center

The Fighter Demonstration Center (FDC) is a private Lockheed Martin facility designed and equipped to educate visitors about the company’s two 5th generation fighter aircraft, the F-35 Lightning II (Joint Strike Fighter) and F-22 Raptor. Various groups within the Department of Defense, as well as congressional members and staffs often use the facility for discussions and demonstrations related to these 5th generation fighters. In addition to our domestic customers, the FDC also hosts various international groups involved in the Joint Strike Fighter program.
Briefings and discussions take place in our large conference room. The FDC’s F-35 and F-22 cockpit demonstrators, along with multiple touch-screen displays, are used to further emphasize capabilities and other unique aspects of each aircraft. Industry partners Northrop Grumman and Pratt & Whitney have offices onsite to easily provide more in-depth explanations of the advanced systems they produce for both programs.

Visitors

Visits to the Fighter Demonstration Center must be coordinated in advance and should be arranged through your Lockheed Martin point of contact. General questions regarding visits and tours can be directed to the FDC at 703-413-5800 or fdc.corp@lmco.com.
MIT 2011 Information Quality Industry Symposium

This premier event fosters the leading edge discussions that create synergy among academics, business, and government leaders. Out of this vibrant exchange have come resolutions for data quality that will harness the true power of information and be the key to dramatically increasing the productivity of people, organizations, and economies.

**MIT Information Quality Industry Symposium**

The MIT IQ Industry Symposium is organized by the MIT Information Quality Program at MIT Center for Technology, Policy, and Industrial Development.

The Symposium offers presentations and panel discussions that focus on Information Quality related issues and best practices. These general IQ topics include, but not limited to Enterprise Architecture, Data Governance, Data Sharing, Business Intelligence, Master Data Management, Data Integration, and Data Warehousing.

In 2011, the Symposium plans to offer parallel sessions on Government, Healthcare, Business, Finance, IQ Societies, and Tutorial Tracks. These tracks address industry-specific topics and promote cross-industry learning.

Presentation by Invitation Only: Please contact the appropriate Program Track Chair if you are interested in presenting. Invited primary speakers will receive complimentary registration.

**CALL FOR SPEAKERS**

We are actively seeking speakers for general IQ topics and industry-specific topics. If you would like to submit your presentation for the Symposium, please forward the following via email to mit2011iqis@mit.edu by November 30:

1. Title and abstract of your presentation (150 words maximum).
2. Bio (150 words maximum) for each co-author.
3. Any additional information you would like to provide (500 words maximum) in consideration of your presentation.
4. Statement indicating that the information included in your presentation has been authorized and cleared for publication by your firm or organization.

**SYMPOSIUM ORGANIZATION**

**Symposium Chair:**
Richard Wang, U.S. Army CIO/G6 (on leave from MIT)

**Symposium Vice Chairs:**
Willa Pickering, Lockheed Martin
Steve Sarsfield, Talend

**Track Chairs:**
Joe Bugajski, Burton Group/Gartner (Business and Finance Track)
Suzanne Acar, FBI (Government Track Chair)
J Peter Anlyan, Anlyan Consulting (Healthcare Track)
Linda Kresl, Yahoo! (Tutorial Track)
Yang Lee, Northeastern University (IQ Societies Track)

**Symposium Manager:**
Forea Wang, MIT IQ Program

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Peter Aiken, VCU/Datablueprint
Peter Benson, Electronic Commerce Code Mgt Association
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Stuart Madnick, MIT Sloan School of Management
Charles McKinney, Freddie Mac
Kelly Morris, Burton Group/Gartner
John Talburt, University of Arkansas at Little Rock

**Acknowledgements:**
MIT 2011 IQIS is supported by MIT Information Quality Program and the U.S. Army CIO/G6. Please email rwang@mit.edu if you are interested in sponsoring.

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It is the policy of MIT IQ Industry Symposium that authors must obtain all appropriate authorization and clearance for materials submitted to, presented at, and included in the Symposium. It is the responsibility of the authors and presenters to obtain any internal authorization and clearance before submitting papers and presentations to the Symposium for consideration and inclusion in the Proceedings. Once accepted for presentation and inclusion in the Symposium Proceedings, all documents, along with any audio or video recordings of presentations, shall become permanent records of the Symposium, and will be made available to the public internationally via the Symposium’s website and the Proceedings electronic distribution.

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Chief Data Officer (CDO) Forum

Tuesday, 11 January 2011

Lockheed Martin Global Vision Center
2121 Crystal Drive, Arlington, VA 22202