May 11, 2012

VIA EMAIL

To: MeriTalk Cloud Computing Exchange – April 25 Meeting Participants

From: Connor Birkner, Steve O'Keeffe, and Liz Vandendriessche, MeriTalk Cloud
        Computing Exchange

Re: MeriTalk Cloud Computing Exchange April 25, 2012 Meeting Synopsis

        The following document summarizes MeriTalk Cloud Computing Exchange's (CCX) notes
from the April 25, 2012 meeting, which was the inaugural meeting of Federal and industry IT
professionals to discuss the state of cloud computing. The CCX meeting featured Stefan Leeb,
cloud computing program manager, National Oceanic and Atmospheric Administration (NOAA), as
the keynote speaker who provided details of his recent cloud implementation. Thank you to all that
participated.

        Mark your calendars for our next meeting on **Wednesday, July 11, 2012 from 8 to 10 a.m.**
at the City Club at Columbia Square in Washington, D.C. RSVP to cbirkner@meritalk.com.

Attendance
        The following government contacts participated in the meeting:

First Name	Last Name	Organization
Najib	Baig Mirza	U.S. Department of Agriculture
Franklin	Bradely	Architect of the Capitol
Reuben	Brown	U.S. Patent and Trademark Office
RoseAnn	Clark	U.S. Environmental Protection Agency
Maria	Hiskikawa	Bureau of Alcohol, Tobacco, Firearms, and Explosives
John	Holmblad	U.S. Senate
Fend	Huang	Smithsonian Museum of Natural History
Jason	Kerben	U.S. Department of State
Thomas	Kireilis	General Services Administration
Jerry	Klotz	Selective Service System
Ricky	Mauer	U.S. Department of Defense
Eugene	McCoy	U.S. Department of Labor
Jolene	Merkel	Federal Aviation Administration

John	Munzer	U.S. Agency for International Development
Tom	Pace	U.S. Government Printing Office
Karen	Petraska	NASA
Trent	Pitsenbarger	National Security Agency
Chuck	Riddle	U.S. Government Printing Office
Deborah	Seal	U.S. Environmental Protection Agency
Roger	Seeholzer	Department of Homeland Security
John	Shimabukuro	U.S. Department of Health and Human Services
Mark	Silverman	National Institutes of Health
Annie	Sokol	U.S. National Institute of Standards and Technology
Garth	Spencer	Homeland Security and Government Affairs Committee
Justin	Stevens	Homeland Security and Government Affairs Committee
Jennifer	Tarr	Senate Committee on Homeland Security & Government Affairs
Kevin	Walsh	U.S. Government Accountability Office
Tye	White	Federal Aviation Administration
Frederick	Whiteside	Department of Commerce
Jeremy	Wood	U.S. Government Printing Office

CCX Introduction:

➢ CCX is a vertical community of Federal cloud leaders, project managers, industry, and other government IT community stakeholders focused on public-private collaboration and best-practice exchange. CCX generates operational content, applications, and programs to help the Federal government clearly define and realize its cloud goals. CCX quarterly meetings serve as in-person opportunities to cross pollinate best practices and identify common challenges in the path to Federal cloud computing

➢ MeriTalk's Cloud Computing Savings Calculator (www.meritalk.com/cloudcalculator) – MeriTalk collaborated with leading Federal IT execs, industry solution providers, and private-sector "brick-and-mortar" companies that have deployed cloud solutions. We aggregated and synthesized a series of industry and government metrics to generate the first free-to-use Federal cloud computing savings calculator. The online calculator projects organizations' potential cloud savings

Insights from NOAA:

➢ Organizational Overview:
The NOAA employs approximately 20,000 employees and contractors in offices across the U.S. Its mission is to keep citizens informed about the world and its changing forecast by providing data that citizens can access anytime and anywhere

➢ Technical Issues:
NOAA found their legacy email and calendar systems did not effectively support its mission. The system also did not support mobile device usage. The organization decided to move to a cloud computing-based platform with a goal to complete implementation by the end of 2011

➢ Solution:
NOAA partnered with Google to implement a reliable and scalable cloud solution. The solution included email and calendar features which contained information from its previous system that NOAA and Google migrated to the new cloud system. This data migration and solution now allows the use of BlackBerry mobile devices and includes collaboration services, such as document and calendar sharing and video chat technology. The switch from the old system to the cloud will save NOAA $400,000 a year in infrastructure, software, and support costs

➢ Transition Process:
The project management team aimed for a three phase transition process; however, NOAA extended the process to include six phases. During the six month transition, it migrated 36 terabytes of data from the old system to the cloud, and NOAA was able to retire 21 mail servers and three calendar servers. The solution team included hundreds of "Google Guides" who oversaw the transition and helped minimize issues. Out of the 25,000 accounts affected by the transition to cloud, less than a quarter of one percent experienced technical issues. Two natural disasters, including an earthquake and a hurricane, did not prevent the transition or pose any performance issues

➢ Issues/Challenges:
NOAA did encounter a few internal issues that may have affected the successful implementation of the cloud solution. These challenges included:
▪ NOAA's organizational culture. NOAA is a diverse and fragmented organization where everyone has disparate processes for fulfilling duties
▪ Archaic technology, including their organizational directory and calendar
▪ 70 terabytes of historical mail on tape and online that needed to be transitioned
▪ Personal, mobile devices were against organizational policy

➢ Lessons Learned:
Reflecting back on the planning and implementation of its cloud system, NOAA provided helpful advice for organizations considering a similar solution:
▪ Meet with those involved beforehand to conduct significant market research and ask numerous questions
▪ Negotiate and agree to all terms of service with your provider before you award the contract
▪ Contract should include incentives and disincentives
▪ Centralize all communication between the implementation team and cloud provider
▪ Do not make training optional
▪ Have a dedicated implementation team to avoid forcing your IT staff to multitask
▪ Create policies and usage guides for the cloud system to avoid chaos and provide instruction
▪ The pilot program for the solution should end before full migration activities begin
▪ Include the support staff in the pilot program to ensure they are familiar with the technology

Federal Agency Roundtable Discussion Points from CCX Participants:

➢ National Aeronautics and Space Administration (NASA) Update:
NASA has been focused on cloud computing implementation since 2009. It has joined the OpenCloud/OpenStack program. It is also currently looking into the available application portfolio to determine if it can achieve increased productivity in the cloud

➢ Department of Labor (DOL) Update:
DOL is researching options to migrate to the cloud for email services, but has security concerns with how emails are exchanged. It continues to search for secure and productive solutions

➢ State of Massachusetts:
The state of Massachusetts is at the ground-breaking stage of implementing cloud computing. Changing the state infrastructure is necessary because there are not enough IT professionals to accommodate the required work and many existing employees are close to retirement. While the focus is on how much money the state can save within the government budget, Massachusetts is also focused on doing more with the currently available budget

➢ General Services Administration (GSA) Update:
GSA is in the process of tying together email and service awards. It is also working on launching infrastructure-as-a-service and platform-as-a-service awards

➢ National Institute of Standards and Technology (NIST) Cloud Computing Working Group Update:
The NIST Cloud Computing Working Group is releasing a framework for Federal agencies to leverage as they move programs to the cloud. While the document strives to provide general guidance, the group also notes it is important to recognize challenges will be different for each agency. To best prepare for a successful implementation, agency leads should identify agencies with past successful implementations and share best practices. On June 5, the NIST Cloud Computing Working Group will host its fifth Cloud Computing Forum and Workshop in the Main Auditorium at the Department of Commerce, 1401 Constitution Avenue, Washington, DC 20230. For more details, please visit http://www.nist.gov/itl/cloud/cloudworkshopv.cfm

➢ Environmental Protection Agency (EPA) Update:
EPA is currently researching and leveraging some collaboration tools. It has moved Web conferencing to the cloud. It noted internal governance issues posed challenges and their full cloud deployment is on hold due to e-discovery issues

Recent Research:

➢ *Cloudy with a Chance of Savings Study:*
  ▪ CCX recently announced findings from a new study, "Cloudy with a Chance of Savings." The study, which identifies where the Federal government stands on cloud today and

what the future holds for cloud adoption, reveals that Federal agencies are saving approximately $5.5 billion with cloud implementations today. This number pales next to the $12 billion annual savings estimates from the Cloud Computing Savings Calculator, based on budget data input by Feds from real IT programs. MeriTalk CCX announced these findings at the inaugural Cloud Computing Brainstorm, co-hosted by Senators Carper (D-Del.) and Brown (R-Mass.). To download the full results, visit www.meritalk.com/ccx/chanceofsavings.

Media Coverage to Date:

Douglas County Department Among Agencies that Benefit from Cloud Efficiency, Savings – May 9, 2012
PRWeb
http://www.prweb.com/releases/2012/5/prweb9483929.htm

Study: Cloud Computing Cuts $5.5 Billion Annually from Federal Budget – May 9, 2012
Sys-Con Media
http://www.sys-con.com/node/2273860

Cloud Priorities Shift Toward Mobility and Interoperability – May 8, 2012
Centerbeam
http://www.centerbeam.com/news/Cloud-Computing/Cloud-priorities-shift-toward-mobility-and-interoperability-CBOID97397775-GRPOID50590013/View.aspx

IT Leaders Security Concerns Slowing Federal Cloud Adoption – May 7, 2012
Government Technology
http://www.govtech.com/policy-management/IT-Leaders-Security-Concerns-Slowing-Federal-Cloud-Adoption.html

We Should Have Gone Fast – US Gov't CIOs on the Cloud – May 3, 2012
BusinessCloud9
http://www.businesscloud9.com/content/we-should-have-gone-faster-us-govt-cios-cloud/10654

Research Report: Feds Rejoice the Cloud Way, with $5 Billion in Annual Savings – May 3, 2012
CloudTweaks
http://www.cloudtweaks.com/2012/05/research-report-feds-rejoice-the-cloud-way-with-5-bn-in-annual-savings/

Editor's Desk: T.W.I.G. Notes – May 3, 2012
Government Health IT
http://www.govhealthit.com/blog/editors-desk-twig-notes-35

Federal IT Managers: $5.5B Cloud Savings Could Have Been $12B – May 2, 2012
ExecutiveGov
http://www.executivegov.com/2012/05/federal-it-managers-5-5b-cloud-savings-could-have-been-12b/

Report: Cloud Savings Could Total $12B – May 2, 2012
FederalNewsRadio.com
http://www.federalnewsradio.com/?nid=241&sid=2850531

The Cloud Benefits Businesses and Stimulates Economic Growth – May 1, 2012
Centerbeam

http://www.centerbeam.com/news/Cloud-Computing/The-cloud-benefits-businesses-and-stimulates-economic-growth-CBOID97036120-GRPOID50590013/View.aspx

Cloud Saves Feds $5B a Year, Study Finds – May 1, 2012
Cloudline
http://www.wired.com/cloudline/2012/05/cloud-fed-savings/

GovWin Recon: May 1: S&P Looks at Defense Contractors; Cloud Computing Savings Feds Billions; 9 Firms Protest NetCents – May 1, 2012
GovWin
http://govwin.com/govwin-news_blog/govwin-recon-may-1-sp/476846

MeriTalk: U.S. Government Could Save $12 Billion with Cloud – May 1, 2012
Talkin' Cloud
http://www.talkincloud.com/meritalk-report-says-govt-cloud-savings-of-12b-possible/

Study: Cloud Computing Cuts $5.5 Billion Annually from Federal Budget – April 30, 2012
CRN
http://www.crn.com/news/cloud/232901204/study-cloud-computing-cuts-5-5-billion-annually-from-federal-budget.htm;jsessionid=P8TS1i7twRf-YDPuNncxsA**.ecappj02

Cloud Could Cut $12 Billion from US Government Annual Deficit: Study – April 30, 2012
Forbes
http://www.forbes.com/sites/joemckendrick/2012/04/30/cloud-could-cut-12-billion-from-us-government-annual-deficit-study/

The Cloud is Vital for Sharing Census Data – April 30, 2012
NextGov
http://www.nextgov.com/emerging-tech/emerging-tech-blog/2012/04/cloud-vital-sharing-census-data/55494/

680% Increase in Cyberattacks Against Government – April 30, 2012
Sys-Con Media
http://www.sys-con.com/node/2264773

Agencies Could Save Twice as Much on Cloud, Survey Says – April 27, 2012
Government Computer News (GCN)
http://gcn.com/articles/2012/04/27/fcw-meritalk-cloud-savings-survey.aspx

Cloud Could Squeeze Even More Savings, Says Survey – April 27, 2012
Federal Computer Week
http://fcw.com/articles/2012/04/27/meritalk-survey-cloud-computer-savings.aspx

Government Moves to the Cloud, Slowly – April 27, 2012
IT World
http://www.itworld.com/networking/271754/government-moves-cloud-slowly

Feds Finally Adopting Cloud Rapidly – April 26, 2012
Bisnow
http://www.bisnow.com/tech/2012/04/26/lockheed-exec-steps-aside/

Threats to CISPA Veto, A 680% Increase in Cyberattacks Against Government and More – April 26, 2012
CTOsite
http://ctosite.com/tag/meritalk/

Government Cloud Services Firm CGS Names Former ServerVault Chief John Kraft its CEO – April 26, 2012
The WHIR
http://www.thewhir.com/web-hosting-news/government-cloud-services-firm-cgs-names-former-servervault-chief-john-kraft-its-ceo
Research Shows Plenty of Further Savings in Government Cloud Computing – April 26, 2012
The WHIR
http://www.thewhir.com/web-hosting-news/research-shows-plenty-of-further-savings-in-government-cloud-computing
Gap in the Clouds – April 25, 2012
AllVoIPNews
http://www.allvoipnews.com/gap-in-the-clouds.html
Government Moves to the Cloud, Slowly – April 25, 2012
Network World
http://www.networkworld.com/news/2012/042512-government-cloud-258678.html
Government Moves to the Cloud, Slowly – April 25, 2012
PCWorld
http://www.pcworld.com/businesscenter/article/254506/government_moves_to_the_cloud_slowly.html

Miscellaneous Items:
- ➢ Data Center Dave:
  - ▪ MeriTalk is releasing a series of videos focused on data center consolidation titled "Data Center Dave." Attendees received a sneak preview of a few of them at the meeting

Next Steps:
- ➢ RSVP for the July 11 CCX meeting (8 to 10 a.m., City Club of Columbia Square, Washington, D.C.). Contact Connor Birkner at cbirkner@meritalk.com for details
- ➢ Use the Cloud Computing Savings Calculator to research your potential cloud savings – www.meritalk.com/cloudcalculator
- ➢ To profile your agency, share documents and templates, and collaborate further, contact Liz Vandendriessche at evandendriessche@meritalk.com

Thank you for taking the time to review this memorandum. If you have any questions, please do not hesitate to contact us at 443-223-3378.