
DRAFT: Federal Open Cloud Computing Initiative (FOCI)

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Federal Open Cloud Initiative (FOCI)

A combined effort of industry, government, academia and standards groups that will provide information exchange, strategic advice, recommend best practices, and suggested standardizations for Federal Cloud Computing activities

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One Definition of Cloud Computing

- Cloud Computing describes information technology (IT) resources with these properties:
 - *Hosted on a remote virtualized infrastructure*
 - *Scalable deployment possible*
 - *Accessed as services*
 - *Support Internet protocols and interfaces*
 - *Payments based on use of resources*

Motivation for FOCl

- Cloud Computing cuts across many areas of applied computing including government, industry, consumer, and academic research.
- In addition to the technology aspects, Cloud Computing supports new business models that will drive future deployments
- Cloud Computing can provide short term benefits and long term strategic advantages to the Federal government and US economy
- Many goals of the new administration line up with the benefits provided by Cloud Computing

White House Goals

- “Appoint the nation's first Chief Technology Officer (CTO) to ... lead an interagency effort, working with chief technology and chief information officers of each of the federal agencies, to ensure that they use best-in-class technologies and share best practices.”
- “Foster a business and regulatory landscape in which entrepreneurs and small businesses can thrive, start-ups can launch, and all enterprises can compete effectively”
- “Invest in a skilled research and development workforce and technology infrastructure”
- “Double federal funding for basic research over ten years, changing the posture of our federal government to one that embraces science and technology”
- “By maximizing the power of technology, we can strengthen the quality and affordability of our health care, advance climate-friendly energy development and deployment, improve education throughout the country, and ensure that America remains the world's leader in technology”

FOCI Goals

- Improve Government Operations
- Provide Training and Employment Opportunities
- Increase US Business Competitiveness
- Encourage Cloud R &D and Startups
- Support Future US Scientific Research

Improve Government Operations

- FOCI can provide recommendations and guidelines for potential projects
- Benefits
 - Reducing need for new hardware and software purchases
 - Improved agility in deploying and running new applications, computing capacity, and services.
 - Sharing of resources and services across multiple government organizations

Provide Training and Employment

- FOCl can document the skills that are needed for key government and enterprise Cloud projects
- Benefits
 - Government Cloud projects will create work for developers, supplier IT staff, and consultants while reducing operating costs
 - Government supported university Cloud training will increase the US base of expertise
 - Government and industry joint projects will support business Cloud Computing job creation

Increase US Business Competitiveness

- FOCI can recommend needed best practices, resources, and standardizations to support business Cloud deployments
- Benefits
 - Best practices for industry Cloud Computing deployments will reduce deployment risks
 - Standardization will provide interoperability for business collaboration
 - Recommended common services can add value to multiple business and government organizations

Encourage Cloud R &D and Startups

- FOCI can recommended needed tools and enhancements for future Cloud Computing
- Benefits
 - Government can support needed research in universities
 - Government can collaborate with industry in needed advanced development
 - Government and the private sector can fund startups working in key Cloud Computing areas

Support Future US Scientific Research

- FOCI can work with groups in specific research areas to develop recommendations and guidelines for Cloud based projects
- Benefits
 - Multiple research projects could benefit from shared elastic Cloud resources (extension of Grid)
 - Many research areas will require Cloud support to handle very large data collections
 - Guidelines and standards will reduce the computing costs and risks for large projects

Next Steps

- Discussion in e-mails
- Get feedback from stakeholders
 - Cloud organizations
 - Standards groups
 - Government groups
- Meeting at Feb 3 Enterprise Cloud Conference
<http://opengroup.org/sandiego2009-eccc/program.htm>
- Future meetings – March 23 Cloud Interoperability Workshop at OMG in Virginia
<http://www.omg.org/news/meetings/tc/dc/info.htm>