The Cloud Standards Customer Council

THE Customer’s Voice for Cloud Standards!

- Provide customer-led guidance to multiple cloud standards-defining bodies
- Establishing criteria for open standards-based cloud computing

2017 Deliverables

- Cloud Customer Architecture for Hybrid Integration
- Impact of Cloud Computing on Healthcare v2.0
- Cloud Customer Architecture for API Management
- Data Residency Challenges
- Cloud Customer Architecture for Blockchain
- Cloud Customer Architecture for Big Data and Analytics v2.0
- Hybrid Cloud Considerations for Big Data and Analytics
- Practical Guide to Cloud Management Platforms
- Practical Guide to Cloud Computing v3.0
- Interoperability and Portability for Cloud Computing: A Guide v2.0
- Security for Cloud Computing: 10 Steps to Ensure Success v3.0

2018 Projects

- Migrating Apps to Public Cloud Services: Roadmap for Success v2.0
- Cloud Customer Architecture for Artificial Intelligence
- And more!

http://cloud-council.org
# Speakers

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</tbody>
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Practical reference to help apply cloud to business challenges

- Aims to remedy confusion & uncertainty by providing comprehensive & actionable information
- Explains in non-technical language the key concepts of cloud computing & how to best adopt cloud to solve enterprise problems

10 Steps to the Successful Adoption of Cloud

1. Assemble your decision team for cloud adoption
2. Develop business case and an enterprise cloud strategy
3. Select cloud deployment model(s)
4. Select cloud service model(s)
5. Determine who will develop, test, deploy and maintain the cloud services
6. Develop governance policies and service agreements
7. Assess and resolve security, privacy and data residency issues
8. Integrate (cloud solution(s)) with existing enterprise services
9. Develop a proof-of-concept before moving to production
10. Manage the Cloud Environment
Revision Highlights

- Essential Characteristics of Cloud Computing revised to reflect characteristics defined in ISO/IEC 17788.
- Select Cloud Deployment Model(s) step rewritten.
- Determine Who Will Develop, Test, Deploy and Maintain the Cloud Services step expanded to include considerations for maintaining cloud services.
- Assess and Resolve Security, Privacy and Data Residency Issues step expanded to include the treatment of data residency management.
- Develop a Proof-of-Concept before Moving to Production step revised to include defined success criteria.
- All other sections updated to reflect evolution and maturity of both business and technical aspects of cloud computing.

Contents

Acknowledgements
Revisions
Executive Overview
Rationale for Cloud Computing
Essential Characteristics of Cloud Computing
  - The Benefits of Cloud Computing
  - What is the Importance of Standards-Based Cloud Computing?
Roadmap for Cloud Computing
  - Step 1: Assemble your Team for cloud adoption
  - Step 2: Develop a Business Case and an Enterprise Cloud Strategy
  - Step 3: Select Cloud Deployment Model(s)
  - Step 4: Select Cloud Service Model(s)
  - Step 5: Determine Who Will Develop, Test, Deploy and Maintain the Cloud Services
  - Step 6: Develop Governance Policies and Service Agreements
  - Step 7: Assess and Resolve Security, Privacy and Data Residency Issues
  - Step 8: Integrate with Existing Enterprise Systems
  - Step 9: Develop a Proof-of-Concept before Moving to Production
  - Step 10: Manage the Cloud Environment
Summary of Keys to Success
Works Cited
Additional References
Step 1: Assemble your team for cloud adoption

Bringing IT and Line of Business together to leverage the Cloud

Strategic Planning (Business Leaders)
- Vision
- Terms of Reference
- Guidelines

Workload Planning (Functional Leaders)
- Business Analysis
- Technical Analysis
- Transformation Roadmap

Operations Planning (Functional Resources)
- Procurement
- Implementation
- Operation

- Business leaders will leverage cloud to increase sales/revenues
- Senior Management leadership/sponsorship is critical
- Technical leaders drive detailed business and technical analysis and drive transformation focus
- Legal / Compliance / Procurement integral to team support
- Common terms of reference & Education are important at all levels
Step 2: Develop business case & enterprise cloud strategy

Comprehensive Strategic Plan reduces potential impacts and facilitates future decisions

Key Elements of Strategic Planning

- Educate the team
- Establish short & long term goals
- Understand required services and functionality
- Execute thorough cost analysis
- Assess impact to service levels
- Identify clear success goals and metrics to measure progress
- Consider existing IT environment
- Assess current operational support model
- Understand Legal/Regulatory Requirements
- Identify required skills
- Track results for extended time
- Understand exit process
Step 3: Select cloud deployment model(s)

Establish criteria for selecting the right deployment model

Options
- Private (On-site)
- Private (Outsourced)
- Hybrid
- Public
- Community

Considerations
- Criticality of cloud services
- Type of workload
- Migration costs
- Elasticity
- Security threats
- Multi-tenancy
- Compliance
- Environment Portability
- Disaster Recovery / Failover

Step 4: Select cloud service model(s)

Many organizations face the challenge of staging a gradual adoption of cloud capabilities, incrementally advancing their IT environment

- A direct move to SaaS may be advisable for many SMBs
- Analyze PaaS offerings in terms of TCO/ROI, availability of new cloud technologies and risks such as vendor lock-in, interoperability and existing IT infrastructure
- IaaS reduces Capex and provides access to scalable IT capacity that otherwise not available

Step 5: Determine who will develop, test, deploy and maintain cloud services

Maximize resources to accelerate Cloud adoption

Options

- In-house development and deployment
- Cloud Provider development and deployment (if available)
- Independent cloud service development provider
- Off the shelf cloud service offerings

Critical Factors

- Cost
- Responsiveness
- Flexibility
- Partnership

Considerations

- Available skills
- Start up considerations
- Updates to existing services
- Testing / deployment / support

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Step 6: Develop governance policies & service agreements

Cloud computing service agreements should be evaluated in conjunction with specific needs, expectations, governance processes and other cultural considerations

Public Cloud Service Agreements: What to Expect & What to Negotiate

CSCC Practical Guide to Cloud SLAs

A reference to help enterprise IT analyze, evaluate and compare SLAs from different cloud service providers

10 Steps to Evaluate Cloud SLAs

1. Understand roles and responsibilities
2. Evaluate business-level policies
3. Understand service and deployment model differences
4. Identify critical performance objectives
5. Evaluate security and privacy requirements
6. Identify service management requirements
7. Prepare for service failure management
8. Understand the disaster recovery plan
9. Define an effective management process
10. Understand the exit process

Considerations

- Policies
- Culture
- Governance
- Objectives
- Metrics / Measures
- T&C’s / AUP
- SLAs
- Remediation & Compensation
Step 7: Assess and resolve security, privacy and data residency issues

Security, privacy and data residency management are risk management and governance issues

Cloud Security Standards: What to Expect & What to Negotiate

CSCC Security for Cloud Computing: 10 Steps to Ensure Success

A reference to help enterprise IT and business decision makers as they analyze and consider the security implications of cloud computing on their business.

10 Steps to Manage Cloud Security

1. Ensure effective governance, risk & compliance
2. Audit operational & business processes
3. Manage people, roles & identities
4. Ensure proper protection of data & information
5. Enforce privacy policies
6. Assess the security provisions for cloud applications
7. Ensure cloud networks & connections are secure
8. Evaluate security controls on physical infrastructure & facilities
9. Manage security terms in the cloud SLA
10. Understand the security requirements of the exit process

Cloud Security Risks

- Loss of governance
- Compliance and legal risk
- Responsibility ambiguity
- Isolation failure
- Data protection
- Insecure or incomplete data deletion
- Handling of security incidents
- Service unavailability
- Management interface vulnerability
- Vendor lock-in
Step 8: Integrate with existing enterprise services

Integration involves a number of different components, both within the organization and within the cloud service provider.

Data integration
- Applications & services share common data
- Synch required between in-house data and data in a cloud service

Process integration
Application or service invokes operations provided by another as part of some workflow

Management capabilities
- Monitor cloud services
- Control cloud services

Business capabilities
- Usage Reporting
- Invoicing
- Payments
Step 9: Develop PoC before moving to production

Proof-of-Concept is critical to validating that proposed cloud services deliver required functionality and meets expected ROI

PoC Team

- **Information Technology**
  - Architects
  - Systems/DB administrators
  - Senior developers
  - Customer support
- **Functional representation**
  - Manage alignment of solution with business user and key stakeholder expectations during the POC

Implementation Activities

- Verify cloud service delivers required functionality
- Verify that all processes work
- Verify data recovery activities, formatting, migration, etc.
- Verify integration with management & monitoring systems
- Ensure that help desk can address questions and problems quickly
- Develop back out plan should there be unexpected problems in early stages of production
- Verify identity & access management
- Verify admin staff have appropriate access
Step 10: Manage the cloud environment

Ensure that the right people understand that the Cloud Services are meeting expectations

- **Consider technical and customer support**

- **Shared responsibility**
  - Enterprise (CIO and Customer Support)
  - Cloud Service Provider

- **SLA will establish process for:**
  - Identifying problems
  - Establishing who is responsible
  - Defines resources responsible to resolve the incidents (from both consumer and provider) and escalation paths

- **Metrics are important**
  - “People do what you inspect, not what you expect”
  - Define, monitor and track trends with existing services
    - Identify changes to improve ROI, customer satisfaction, cloud adoption
  - Establish baseline for future services

Call to Action

- **Join the CSCC Now!**
  - To have an impact on customer use case based standards requirements
  - To learn about all Cloud Standards within one organization
  - To help define the CSCC’s future roadmap
  - Membership is free & easy: [http://www.cloud-council.org/become-a-member](http://www.cloud-council.org/become-a-member)

- **Get Involved!**
  - Join one or more of the CSCC Working Groups
    [http://www.cloud-council.org/workinggroups](http://www.cloud-council.org/workinggroups)

- **Leverage CSCC Collateral**
  - Visit [http://www.cloud-council.org/resource-hub](http://www.cloud-council.org/resource-hub)
Additional CSCC Resources

- Practical Guide to Cloud Computing v3.0

- Migrating Applications to Public Cloud Services: Roadmap for Success

- Practical Guide to Cloud Service Agreements v2.0

- Public Cloud Service Agreements: What to Expect and What to Negotiate v2.0

- Practical Guide to Hybrid Cloud Computing

- Practical Guide to Platform-as-a-Service

- Convergence of Social, Mobile and Cloud: 7 Steps to Ensure Success

- Practical Guide to Cloud Management Platforms

- Data Residency Challenges

- Security for Cloud Computing: 10 Steps to Ensure Success v2.0

- Cloud Customer Architecture for Securing Workloads on Cloud Services
  - [http://www.cloud-council.org/deliverables/cloud-customer-architecture-for-securing-workloads-on-cloud-services.htm](http://www.cloud-council.org/deliverables/cloud-customer-architecture-for-securing-workloads-on-cloud-services.htm)

- Cloud Security Standards: What to Expect and What to Negotiate v2.0
Thank You!

Join the conversation

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