Customer Cloud Architecture for Mobile

http://cloud-council.org/resource-hub.htm#customer-cloud-architecture-for-mobile
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This talk will discuss the second of a series of vendor neutral Cloud Solution Architectures - the Mobile Cloud Architecture that was recently published. We will show how Open Source can be used to implement this architecture.

- What are Cloud Solution Architectures?
- Candidate Architectures
- Mobile Cloud Architecture
- Open source projects that can be used to support this
Cloud Customer Reference Architectures are...
- straightforward description of elements needed to implement particular application solutions using cloud infrastructure, cloud platforms, cloud software, and cloud services
- deployment neutral (public, private, hybrid) & implementable via IaaS, PaaS, SaaS
- general purpose reusable architectures as well as industry specific architectures
- vendor neutral & open

Important because they...
- enable cloud customers to understand unique features & advantages of using cloud computing
- bridge gap between understanding cloud customer needs and cloud provider offerings
- provide practical guidance on how common business applications can be realized from a cloud customer role perspective
- are stable anchors in a rapidly innovating cloud landscape
- save time, effort & money: be more productive

Useful when...
- those planning to build cloud based applications
- talking with cloud providers about their offerings
- understanding of the common elements and relationships in relevant solutions

Target audience:
- those planning on building/purchasing cloud based applications
- developers, architects, managers

Consistent with ISO/IEC 17789 International Standard Cloud Computing Reference Architecture and IBM CCRA
Cloud Customer Reference Architecture Candidates

General
- Mobile
- Web App Hosting
- Big Data / Analytics
- Hybrid Security
- Hybrid Integration
- Social
- DevOps

Industry
- E-commerce
- Financial
- Travel
- Healthcare
- Gaming
- Public Sector
- Telco

Published by CSCC 5/15, Review today!

Published by CSCC 12/14
Mobile and Cloud: A high level view
Mobile Cloud Solution Architecture
Mobile Cloud Solution Architecture

Hybrid cloud: Provider; Enterprise
Mobile Cloud Solution Architecture

Mobile App: Vendor frameworks; Enterprise SDKs
Management Agent: Stores, enforces, and manages policies
Mobile Cloud Solution Architecture

Offline Capabilities:
Store data securely on devices; Sync to the backend
Mobile Cloud Solution Architecture

Edge Services: DNS, CDN, Firewalls, Load balancers
Mobile Cloud Solution Architecture

Mobile Provider Network:
provider of wireless communications
Mobile Gateway: Entry point for mobile app; Services include: Auth, policy enforcement, API analytics, API reverse proxy
Mobile Cloud Solution Architecture

Mobile Backend:
Provides runtime services including operational analytics, push notifications, location services; data synch; app security
Mobile Device Management: Services include: app distribution, device security, device management, device analytics
Mobile Business Apps: Industry specific capabilities: proximity services, campaign management, business analytics, workflow
API Management: Advertise available services endpoints; API versioning
Data Services: Mobile app data/NoSQL, file repositories, cache
Mobile Cloud Solution Architecture

Security Services: ID & access management; App & data protection; Security intelligence
Mobile Cloud Solution Architecture

Transformation & Connectivity:
Enables secure connection to enterprise systems; Filter, aggregate, or modify data
Enterprise User Directory: Provides storage for and access to user security information
Enterprise Data: Systems of record, for example, transactional data or data warehouses
Enterprise Applications: Enterprise business processes and logic
Cloud Customer Reference Architecture for Mobile

PaaS includes all
Cloud Customer Reference Architecture for Mobile: Details
Mobile app installation flow number 1 in blue
Check deposit flow numbers 2-8 in yellow
Push notification flow numbers 9-10 in green
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/application

Get Involved!

- Join one or more of the CSCC Working Groups
  - http://www.cloud-council.org/workinggroups.htm
Additional Resources

- **Customer Cloud Architecture for Mobile**
  - [http://bit.ly/1cGs5Xj](http://bit.ly/1cGs5Xj)

- **Practical Guide to Cloud Service Agreements, V2**

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

- **Practical Guide to Cloud Computing, V2**

- **Security for Cloud Computing: 10 Steps to Ensure Success, V2**
  - [http://bit.ly/1L3D9gZ](http://bit.ly/1L3D9gZ)

- **Cloud Security Standards: What to Expect & What to Negotiate**

  - [http://bit.ly/1Fg7Ikk](http://bit.ly/1Fg7Ikk)

- **Migrating Applications to Public Cloud Services: Roadmap for Success**

- **Web Application Hosting Cloud Solution Architecture**

- **Convergence of Social, Mobile & Cloud: 7 Steps to Ensure Success**
  - [http://bit.ly/1EDTe9o](http://bit.ly/1EDTe9o)

- **Impact of Cloud Computing on Healthcare**
Thank You