

Mobile Cloud Computing & Application Development

An Overview

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Cloud computing

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- Computing resources

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- API access

Advantages of cloud

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- Performance & Speed
- Metered & on demand

Available Cloud Platforms

Popular public cloud platforms: Internet based; little control on data and infrastructure.

- Amazon Web Services (AWS)
- Rackspace Cloud
- Domestic players like Sify, ISPs, etc.

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Public and private clouds may be mixed and used in a hybrid cloud model.

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- Multiple uses

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And that means..

- File access on the move
- Cloud administration on the move
- Trading & commerce on the move
- Education & learning on the move
- Healthcare on the move

Types of Mobile Cloud Computing

Two types:

- Mobile *client* cloud computing
 - ▶ General purpose MCC
 - ▶ Application specific MCC
- Mobile *server* cloud computing

General purpose MCC

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A note on the tradeoffs: Processing vs. Bandwidth costs

Application specific MCC

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- Examples:
 - ▶ Access to online bookstores, music
 - ▶ Calendar and tasks stored on the cloud
 - ▶ Cloud based contact management
 - ▶ Decision making applications

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- Unpredictable hardware
- Unpredictable native applications consuming resources
- Unpredictable network connectivity
- Threat of losing the device
- Things like battery, etc.

Mobile Server Cloud Computing

Server model where mobile devices do the actual crunching!

- Small handle-able task chunks

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Mobile Server Cloud Computing

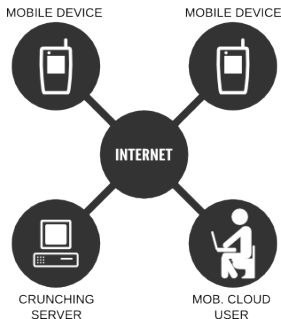
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Bottlenecks:

- Processing power
- Network issues

Development for MCC

All the usual nuts and bolts of cloud computing and mobile application development combined.. :)

- API programming
- Map-Reduce applications
- others

Risks & concerns involved

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- Is this the good ol' grid ??
- Privacy
- data ownership
- legal hassles

Business Model

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Long answer:

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Short answer: Yes!

Long answer: See above :P

Thank You!

Questions??