Introduction to Amazon EC2 Running IBM

Featuring

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Webinar — Introduction to Amazon EC2 Running IBM

Introduction

IBM

SugarCRM
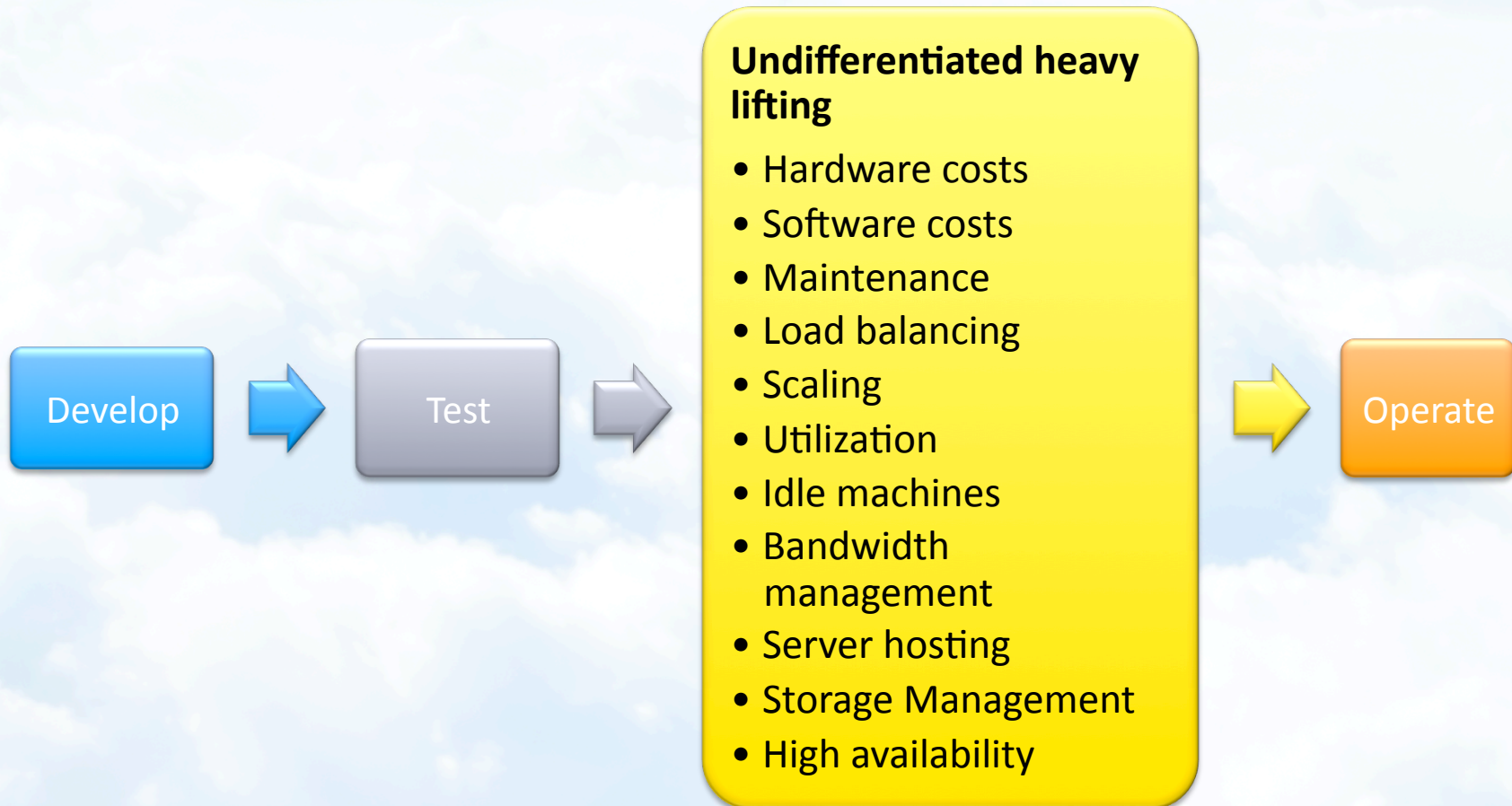
Q&A
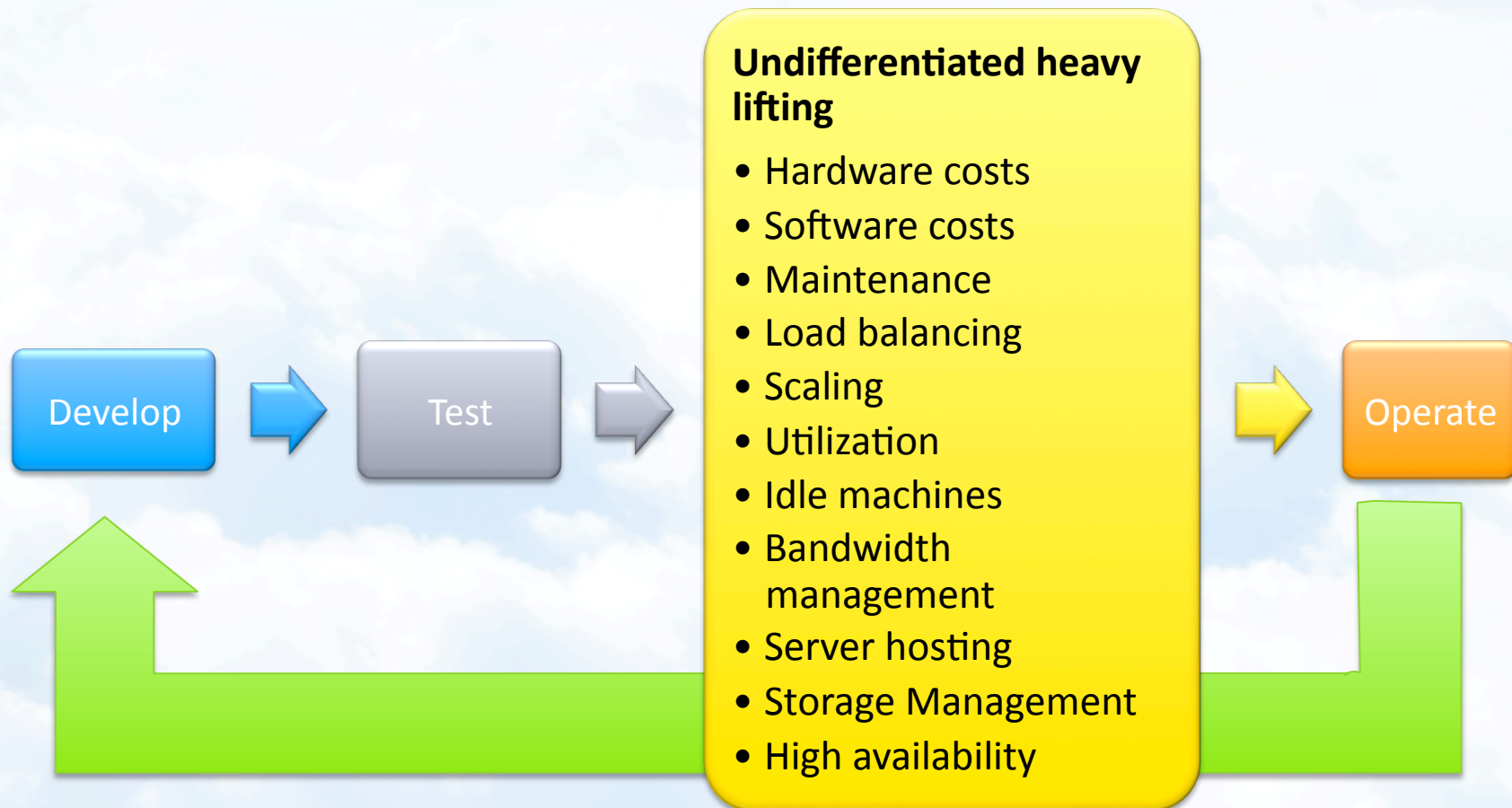
Q&A

Amazon Has Three Parts

1

2

3

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What You Want…

Develop → Test → Operate

What You Get...

Develop → Test →

Undifferentiated heavy lifting

- Hardware costs
- Software costs
- Maintenance
- Load balancing
- Scaling
- Utilization
- Idle machines
- Bandwidth management
- Server hosting
- Storage Management
- High availability

→ Operate

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Continuous Process Improvement Makes it Worse

Develop → Test →

Undifferentiated heavy lifting

- Hardware costs
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→ Operate

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The 70/30 Switch

Undifferentiated Heavy Lifting	Differentiated Value Creation

Undifferentiated Heavy Lifting	**Differentiated Value Creation**

We Think of the Cloud as a Set of Building Block Services

- Infrastructure As a Service
  - Amazon Simple Storage Service
  - Amazon Elastic Compute Cloud
  - Amazon Simple Queue Service
  - Amazon SimpleDB
  - Amazon CloudFront
  - Amazon Elastic MapReduce

- People As a Service
  - Amazon Mechanical Turk

- Payments As a Service
  - Amazon Flexible Payments Service
  - Amazon DevPay

- Fulfillment and Associates
  - Amazon Fulfillment Web Service
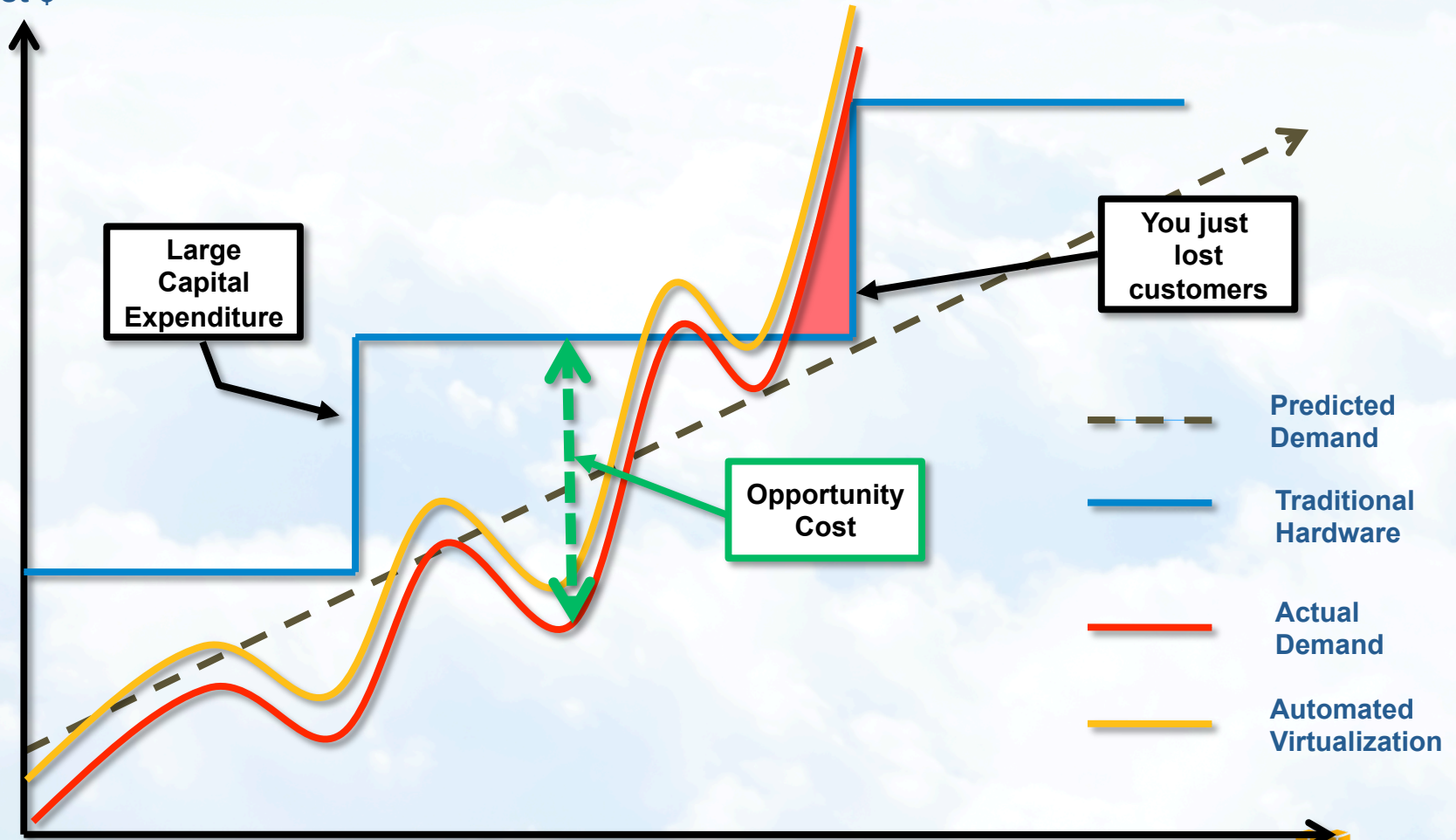 - Amazon Associates Web Service

What is Amazon EC2?

- On-demand virtual computing capacity
- That is essentially unbounded
- Offering full root / administrator access
- Supporting mainstream Enterprise software
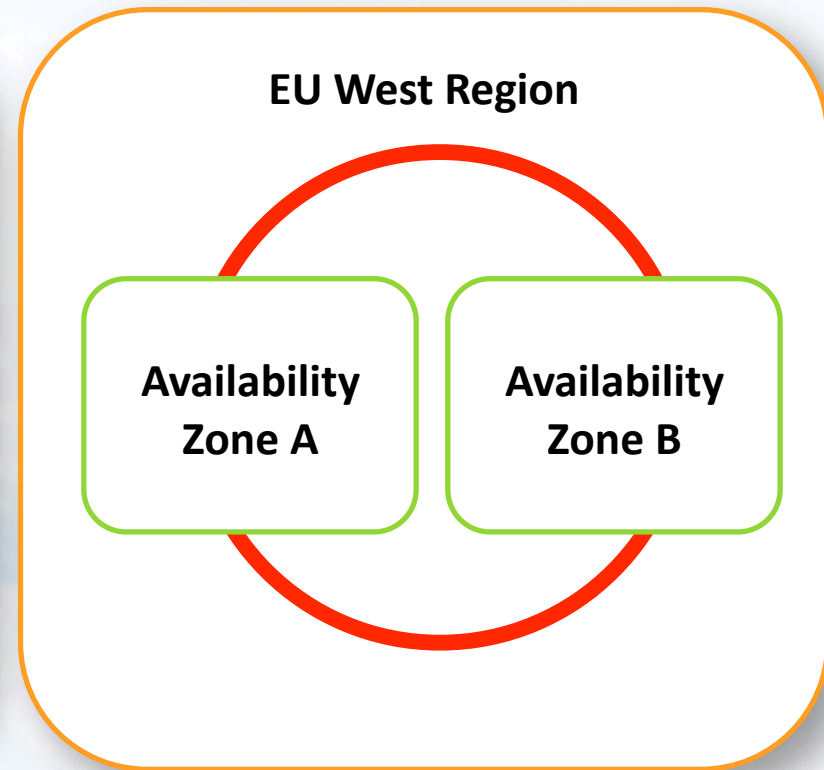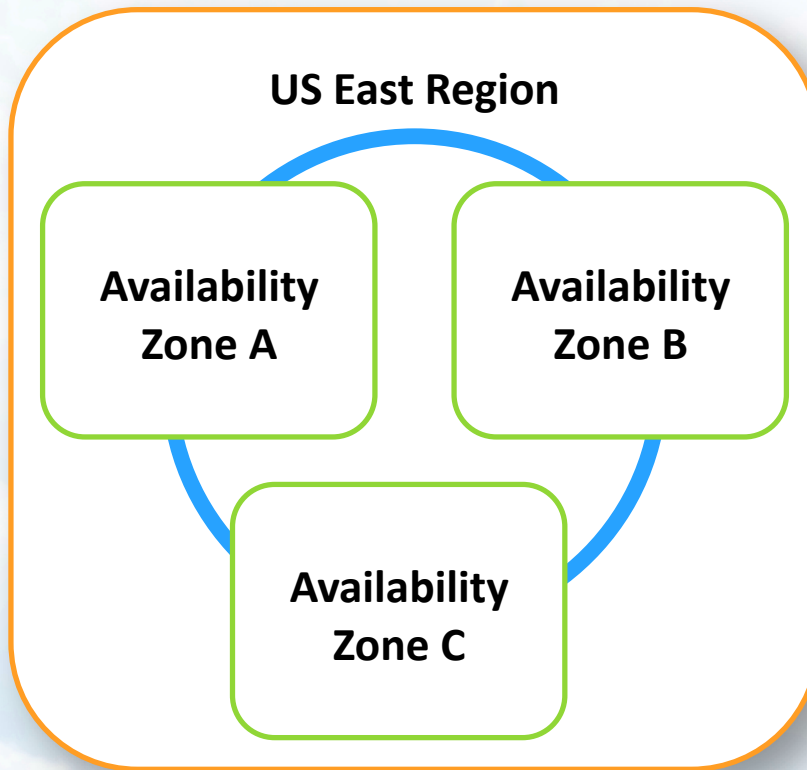- At very affordable prices
- With a SLA

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Can You Do This at Home?
Regions & Availability Zones
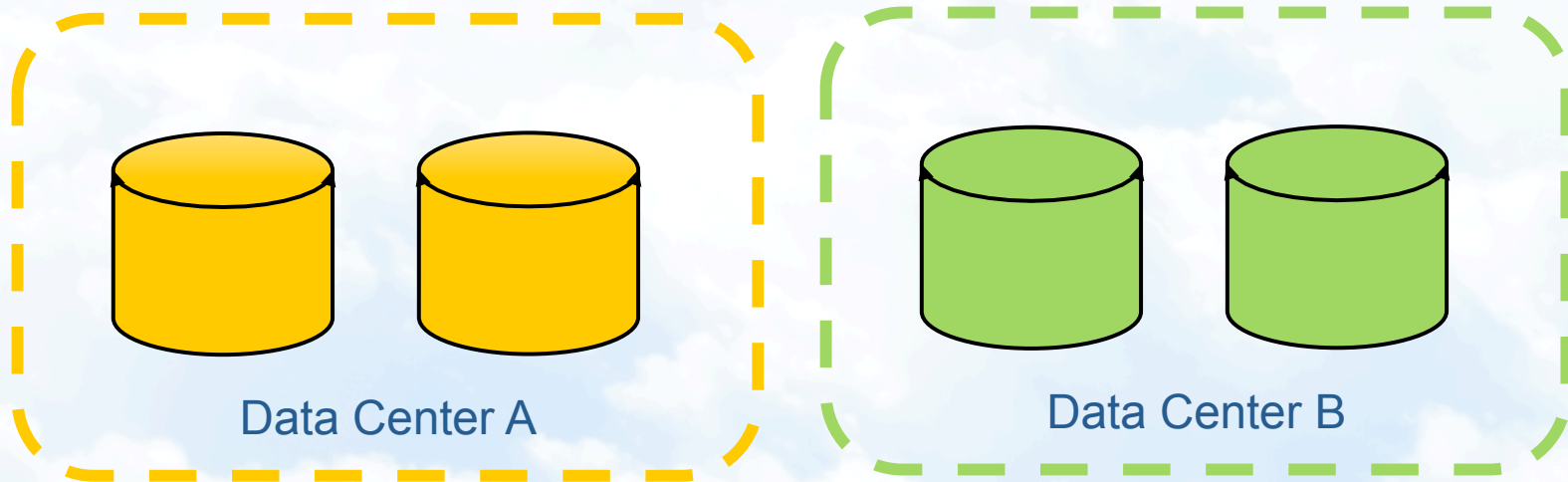
US East Region

Availability Zone A

Availability Zone B

Availability Zone C

EU West Region

Availability Zone A

Availability Zone B

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Amazon EC2 running IBM AMIs
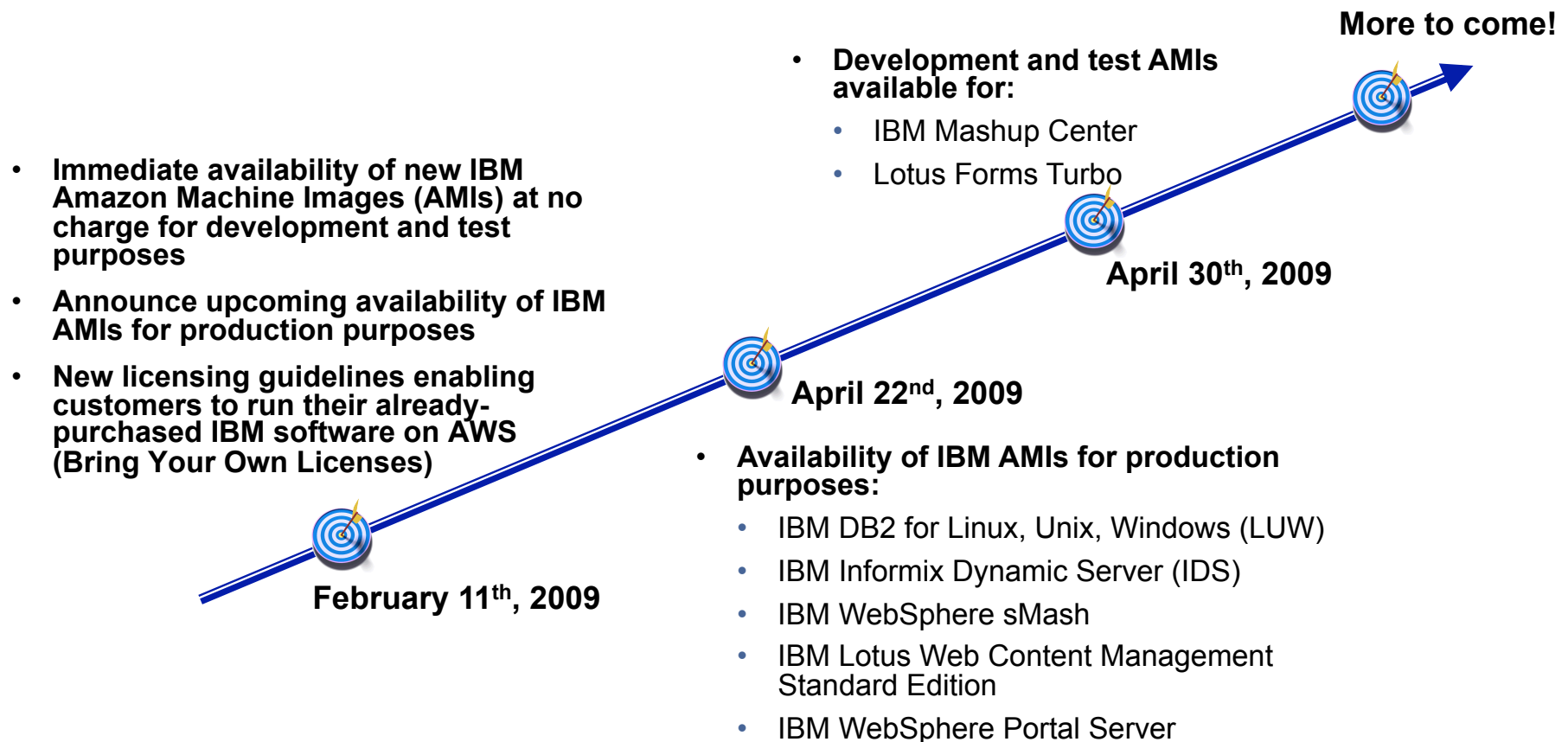
Data Management

Melody Ng (mysng@ca.ibm.com)
Jason Chan (jasoncha@ca.ibm.com)

Data Management Emerging Partnerships and Technologies
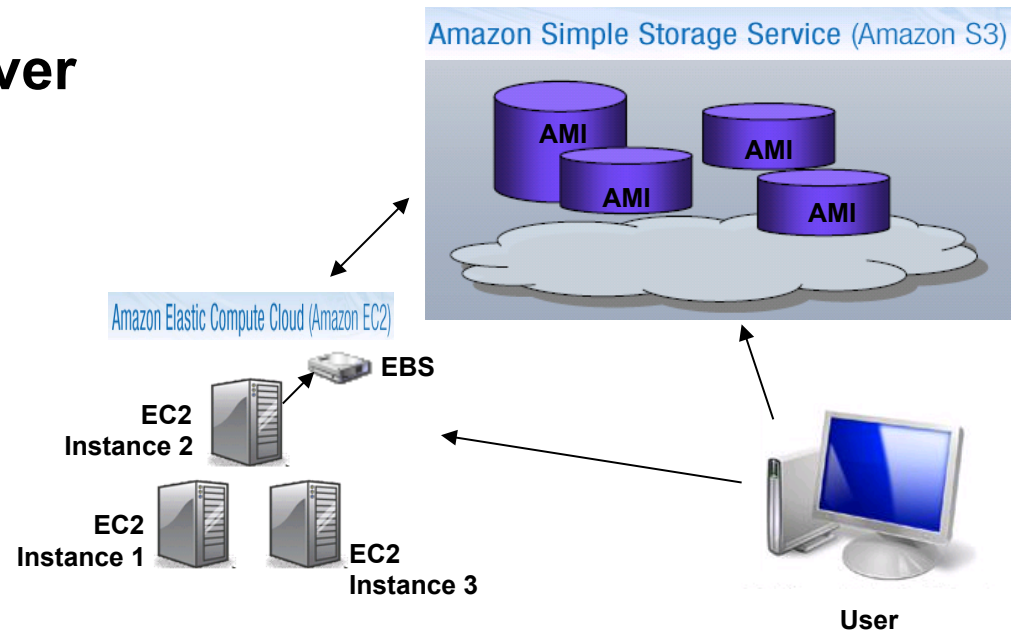*IBM Toronto Lab*

Agenda

- **IBM Amazon Machine Images (AMI) Availability Timeline**

- **Brief overview of IBM software products available on Amazon EC2 as AMIs**

- **In-depth technology brief of DB2 AMI and online demo**

IBM on AWS Availability Timeline

More to come!

- **Development and test AMIs available for:**
  - IBM Mashup Center
  - Lotus Forms Turbo

April 30th, 2009

- **Immediate availability of new IBM Amazon Machine Images (AMIs) at no charge for development and test purposes**

- **Announce upcoming availability of IBM AMIs for production purposes**

- **New licensing guidelines enabling customers to run their already-purchased IBM software on AWS (Bring Your Own Licenses)**

April 22nd, 2009

- **Availability of IBM AMIs for production purposes:**
  - IBM DB2 for Linux, Unix, Windows (LUW)
  - IBM Informix Dynamic Server (IDS)
  - IBM WebSphere sMash
  - IBM Lotus Web Content Management Standard Edition
  - IBM WebSphere Portal Server

February 11th, 2009

IBM SWG Products Available as AMIs

- **IBM DB2 for Linux, Unix, Windows (LUW)**

- **IBM Informix Dynamic Server (IDS)**

- **IBM WebSphere sMash**

- **IBM Lotus Web Content Management Standard Edition**

- **IBM WebSphere Portal Server**

- **IBM Mashup Center**

- **Lotus Forms Turbo**

Amazon Simple Storage Service (Amazon S3)

AMI

AMI

AMI

AMI

Amazon Elastic Compute Cloud (Amazon EC2)

EBS

EC2
Instance 2

EC2
Instance 1

EC2
Instance 3

User

IBM SWG Products Available as AMIs

- **For Development and Testing**
  - IBM DB2 Express-C
  - IBM IDS Developer Edition
  - IBM WebSphere sMash
  - IBM Lotus Web Content Management Standard Edition
  - IBM WebSphere Portal Server
  - IBM Mashup Center
  - Lotus Forms Turbo

More to come

No cost for IBM software. Amazon EC2 usage charges apply:

Instance Size	Usage charge US	Usage charge EU
Standard Small	$0.10 / hour	$0.11 / hour
Standard Large	$0.40 / hour	$0.44 / hour
Standard Extra-Large	$0.80 / hour	$0.88 / hour
High-CPU Medium	$0.20 / hour	$0.22 / hour
High-CPU Extra-Large	$0.80 / hour	$0.88 / hour

IBM SWG Products Available as AMIs

- **Development and Testing – More information:**

  - http://www.ibm.com/developerworks/downloads/cloud.html

IBM SWG Products Available as AMIs

- **DB2 and Informix pricing – Production AMIs**

Pricing for Instances running IBM DB2 Express Edition

Instance Type	US Region	EU Region
Standard Small (Default)	$0.38 per hour	$0.39 per hour
High CPU Medium	$0.65 per hour	$0.67 per hour

Pricing for Instances running IBM DB2 Workgroup Edition

Instance Type	US Region	EU Region
Standard Large	$1.31 per hour	$1.35 per hour
Standard Extra Large	$2.50 per hour	$2.58 per hour
High CPU Extra Large	$3.30 per hour	$3.38 per hour

Pricing for Instances running IBM Informix Dynamic Server Express Edition

Instance Type	US Region	EU Region
Standard Small (Default)	$0.38 per hour	$0.39 per hour
High CPU Medium	$0.65 per hour	$0.67 per hour

Pricing for Instances running IBM Informix Dynamic Server Workgroup Edition

Instance Type	US Region	EU Region
Standard Large	$1.31 per hour	$1.35 per hour
Standard Extra Large	$2.50 per hour	$2.58 per hour
High CPU Extra Large	$3.30 per hour	$3.38 per hour

IBM SWG Products Available as AMIs

- **WebSphere sMash, WebSphere Portal Server, Lotus Web Content Management – Production AMIs**

Pricing for Instances Running IBM WebSphere sMash

Instance Type	US Region	EU Region
Standard Small (Default)	$0.50 per hour	$0.51 per hour
High CPU Medium	$0.60 per hour	$0.62 per hour

Pricing for Instances Running IBM Lotus Web Content Management Server Standard Edition

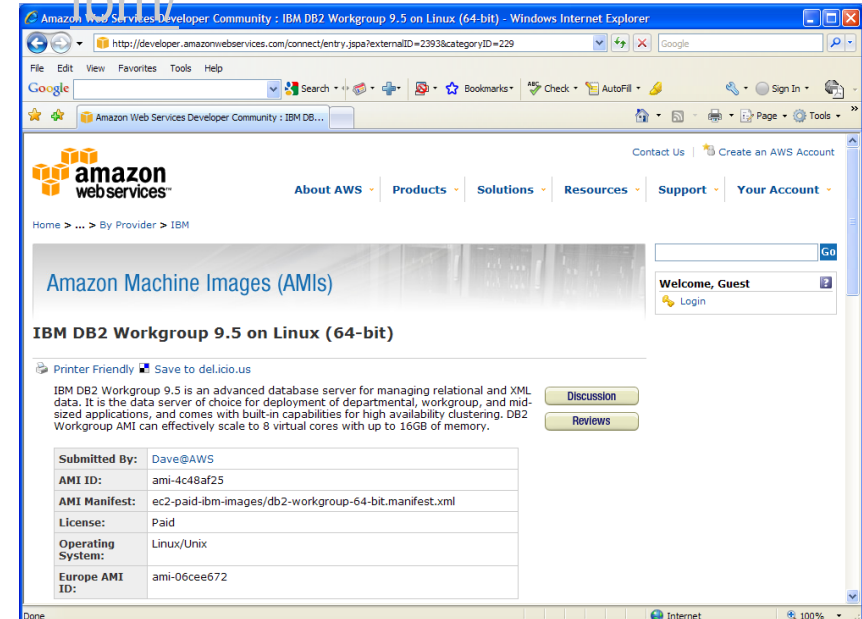| Instance Type	US Region	EU Region
Standard Large	$2.48 per hour	$2.52 per hour
Standard Extra Large	$4.82 per hour	$4.90 per hour
High CPU Extra Large	$8.71 per hour	$8.79 per hour

Pricing for Instances Running IBM WebSphere Portal Server and IBM Web Content Management Server Standard Edition

Instance Type	US Region	EU Region
Standard Large	$6.39 per hour	$6.43 per hour
Standard Extra Large	$12.64 per hour	$12.72 per hour
High CPU Extra Large	$24.35 per hour	$24.43 per hour

More to come

IBM SWG Products Available as AMIs

- **For more information:**

  - http://aws.amazon.com/ibm

  - http://aws.amazon.com/solutions/featured-partners/ibm/
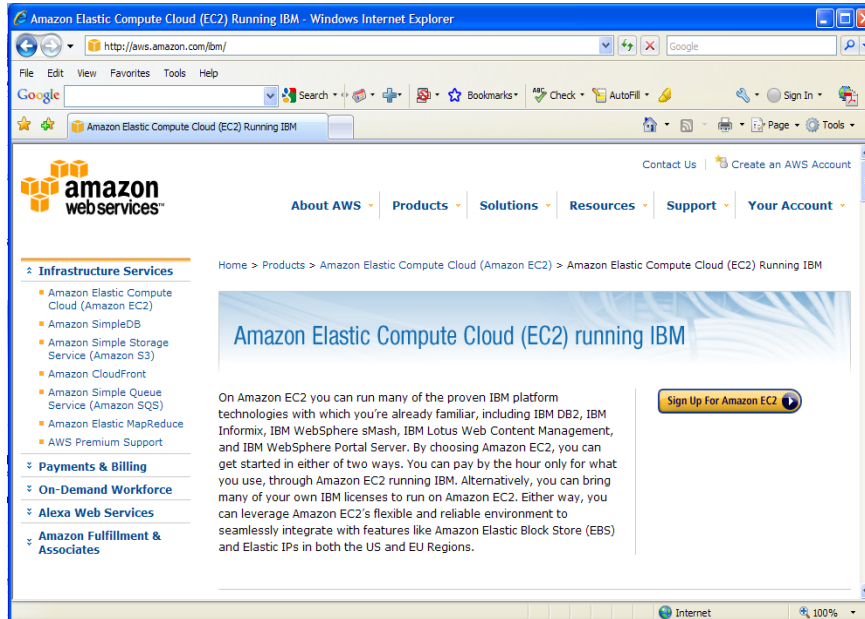
  - Each AMI's catalog entries

IBM Innovation Center Workshops

NEW

Enabling applications for Software as a Service and cloud computing

• ½ day seminar

• SaaS marketplace, IBM programs & resources for business partners

• Three major design approaches for enabling multi-tenancy

• Demonstrate how IBM and AWS can give you a low cost, scalable, pay-as-you-go development and deployment environment

-May 13, 2009 in Waltham MA

-May 26, 2009 in Brisbane, AU

-June 2, 2009 in Sydney, AU

-June 3, 2009 in San Mateo CA

-June 10, 2009 in Melbourne, AU

-June 30, 2009 in Chicago, IL

Rapid enablement of existing applications for deployment on Amazon EC2

• Full day hands on workshop

• Learn how to quickly develop and deliver SaaS offerings in the cloud by using the Amazon EC2 environment

• Launch a SaaS application on EC2 using WebSphere sMash and DB2

(Future workshops planned for other IBM AMIs)

- May 8, 2009 in Dallas, TX

- May 14, 2009 in Waltham, MA

- May 28, 2009 in Austin, TX

- June 4, 2009 in San Mateo, CA

- June 10, 2009 in Chicago, IL

- July 9, 2009 in Chicago, IL

Check for more dates and locations at www.ibm.com/isv/spc/events (Software as a Service)

Technology found in DB2 AMI

- **Latest versions of DB2 9.5 packaged in AMIs**

- **Linux based AMIs**

- **Integrated modules for seamless setup and configuration of AMI**

  - SUSE YaST (Yet Another Setup Tool) modules used for:

    - AWS user setup of private key and certificate file
    - EBS volume configuration within DB2 AMI
    - AMI user configuration
    - DB2 instance setup and configuration

Amazon EC2 running IBM AMIs

Data Management

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SugarCRM on WebSphere sMash

Majed Itani
Chief Software Architect

SUGARCRM.
THE CLOUD IS OPEN

About SugarCRM

World's leading commercial open source

Customer Relationship Management (CRM) application

- Founded in April 2004
- 4,500 Customers in 30 countries
- Over 500,000 users on 60,000 systems
- 115,000 Community members
- 150 Partners on five continents

SUGARCRM.
THE CLOUD IS OPEN

What is Customer Relationship Management?

CRM is a system for **identifying**, **acquiring, and retaining customers**. Key functional modules include:

Software for managing human relationships

Marketing

Customer

Sales

Collaborate

Sugar

BackOffice

Increases the number of and depth of human relationships between organizations or individuals and their customers, partners, friends, etc...

Service

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SugarCRM and IBM

- **Integration with WebSphere sMash**
- **Customers can run PHP applications utilizing Java libraries**
- **Customers can expect superior runtime with sMash's JVM tooling**
- **Customers are provided with simple tooling for basic integration tasks**
  - Module Builder on SugarCRM and App Builder on sMash
  - Exploit the mashup tooling features to create fully functional, integrated applications with minimal code

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Thank You

- Contact Mike Culver at mculver@amazon.com

- Visit the AWS website at http://aws.amazon.com

- Visit the Amazon EC2 Running IBM detail page at http://aws.amazon.com/ibm