

TECH-B19:

Call the Movers! A Practical Guide for Moving a Portal to the Cloud

David Eyerman, Executive IT Architect, IBM
Rich Gorzela, Solution Architect, IBM

IBM Digital Experience 2014

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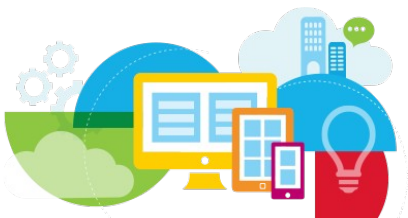


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Hello Anaheim!

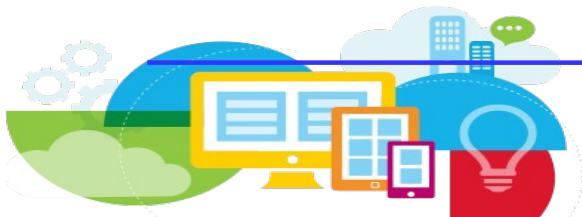


- David Eyeran is an Executive I/T Architect with ISSC who concentrates on large scale WebSphere Portal integration projects working with new and legacy applications, High Availability designs for Portal, and implementation of WebSphere Portal with IBM® Social and Collaborative Software.



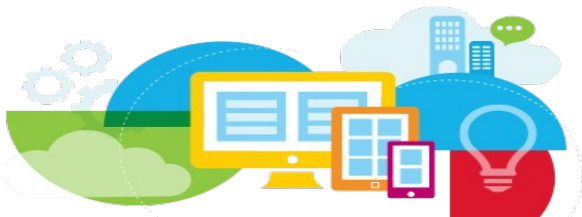
- Rich Gorzela is a Solution Architect and certified IT Specialist with ISSC, specializing in IBM WebSphere Portal and Web Content Manager.

Special Thanks to Tony Higham, Paul Kelsey,...



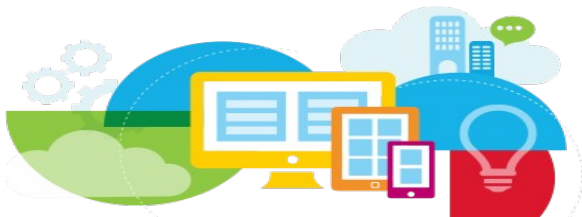
Agenda

- **Welcome and Session Objectives**
- **A summary of Portal/WCM cloud options**
- **Customer scenarios**
- **Cloud specific deployment considerations**
- **Conclusion and Questions**

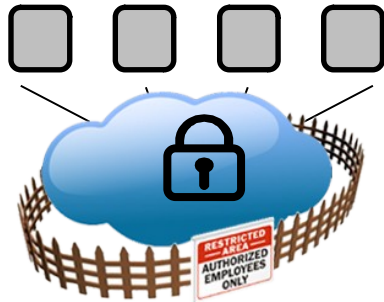


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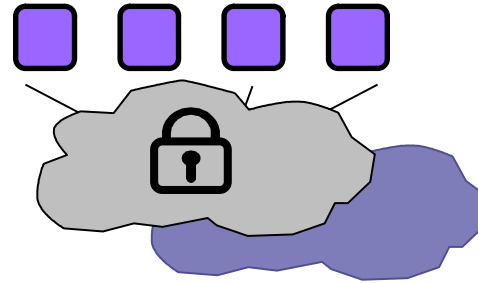


Three Approaches to Cloud Deployments



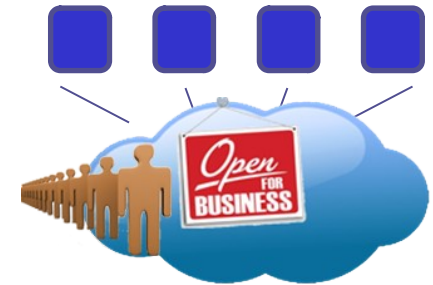
Private

- Designed for, and access restricted to, a single enterprise (or extended enterprise)
- An internal shared resource, not a commercial offering
- IT Org is the “vendor” of the shared/std service to its users



Hybrid

- Enterprise’s cloud services portfolio includes both private and public cloud services
- Some specific services are delivered in a combination of public and private models (e.g., private cloud “bursting to” a public cloud service)



Public

- Designed for a market, not a single enterprise
- Open to a largely unrestricted universe of potential users
- Customers buy at specific level of abstraction (server, application, platform)
- Single-vendor or multi-vendor

Resource Isolation

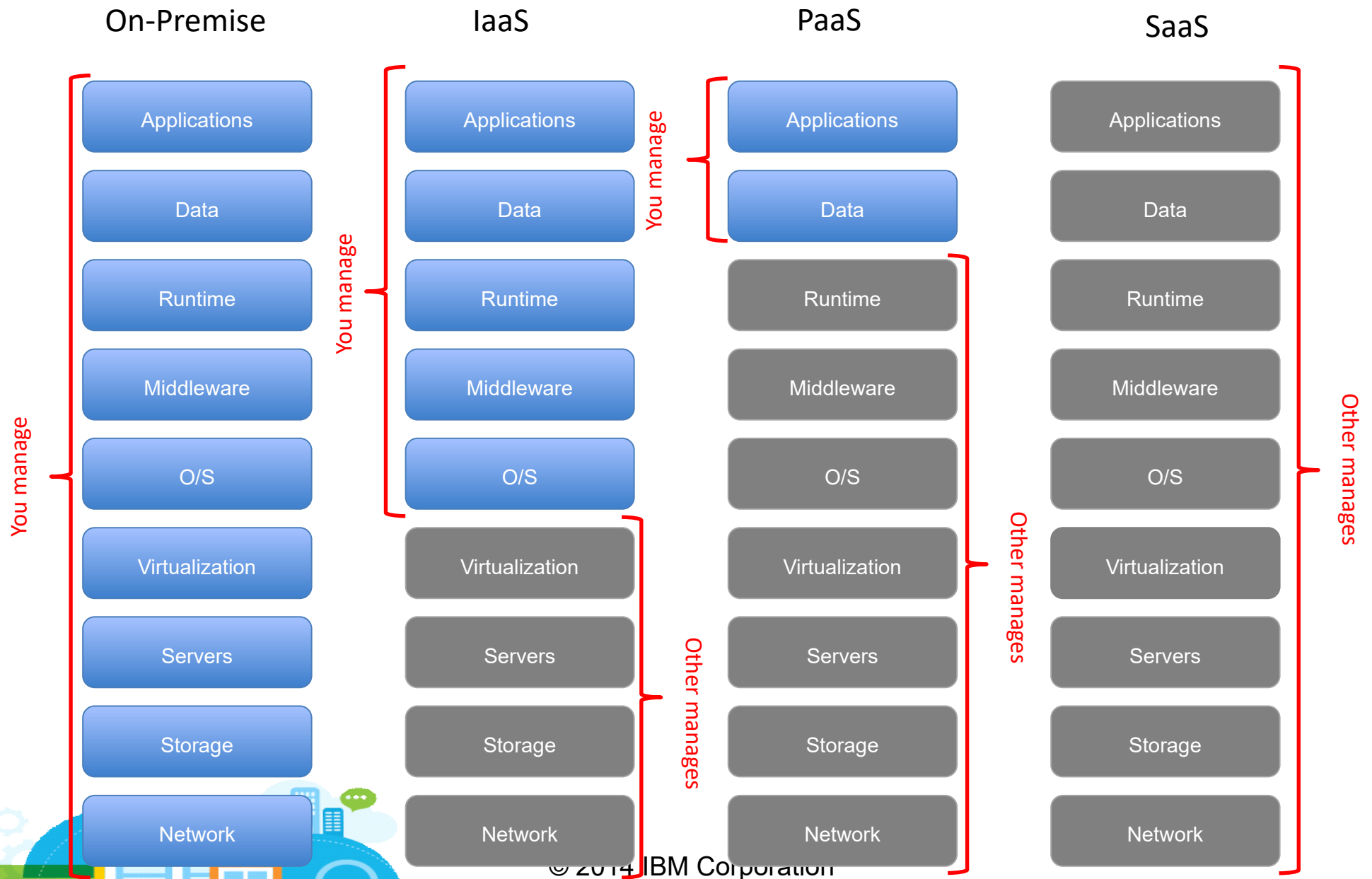
Single enterprise / extended enterprise (dedicated)

Virtual and physical (non-cloud) resources and applications

Multiple unrelated enterprises (shared)

Control | SLA | Specialization | Security | Agility | Price Advantage | Access | Elasticity

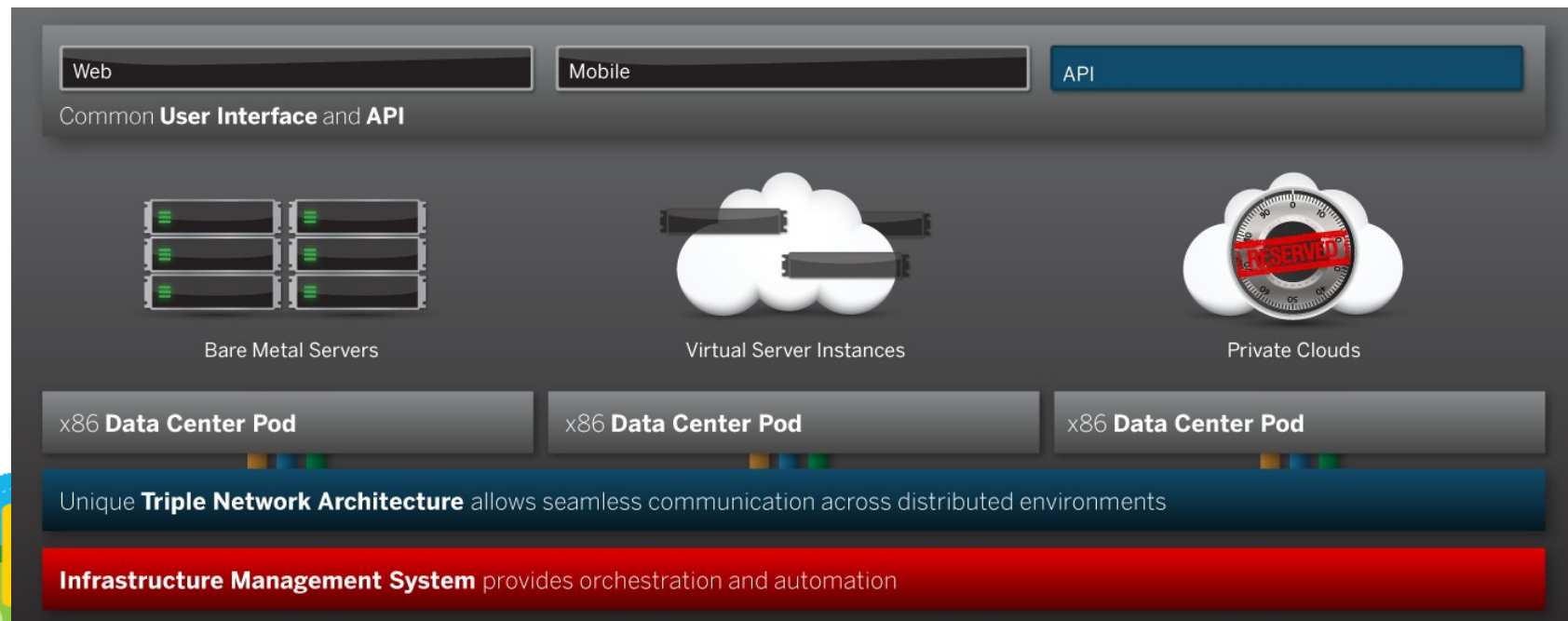
Cloud Definitions and Responsibilities



IBM Infrastructure as a Service (IAAS) on IBM SoftLayer

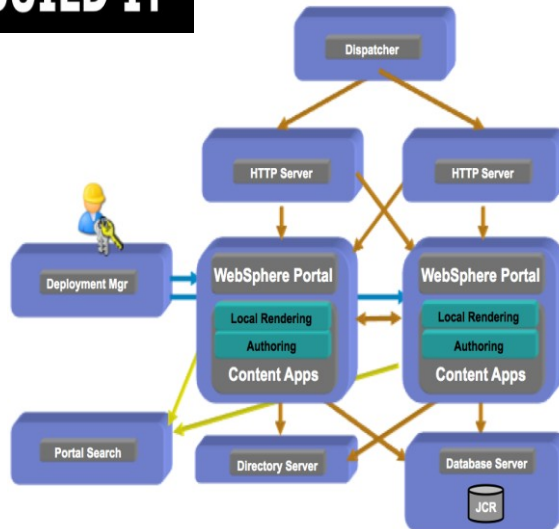
Unified architecture with common management and programming interfaces

- Common command and control interface across a unified architecture
- Combine bare-metal servers, public cloud instances and private cloud deployments into distributed hybrid architectures and manage from a single control pane and API
- All deployed on-demand and provisioned in real-time
- Ideally suited to big data deployments, high I/O and latency-sensitive apps



IBM Platform as a Services (PaaS) on IBM PureSystems

BUILD IT



- Bring your own infrastructure

1 -3 weeks

Time takes a WebSphere Portal or IBM Connections administrator to configure deployment & environment manually

PureSystems

30 minutes

Deploy using PureSystems

30% error reduction

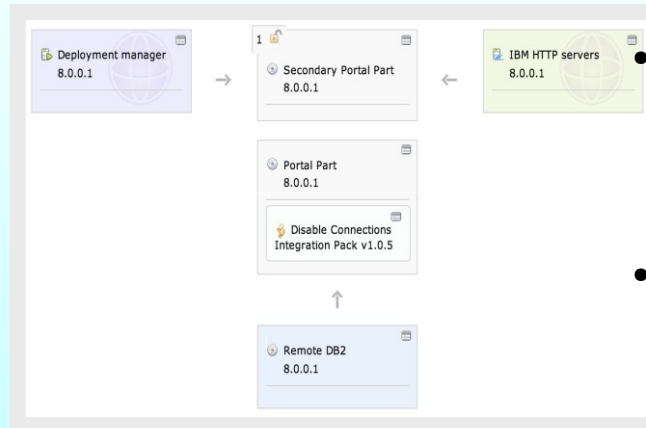
Deploy Virtual System Pattern in PureSystems



Repackage as PureSystems
“Cloud in a Box” - rack includes pattern engine, networking, storage, Hypervisors, system monitoring and management, everything needed to deploy

“Self-Managed” IBM Digital Experience on cloud today

IBM Exceptional Digital Experience Platform Patterns



- Patterns and script packages based on expert practices, deployments that automate setup of simple to complex deployments.
- Enables rapid setup and use of fixpacks and solution updates to Platform Patterns

Private
On-Premise



Public
Off-Premise



Deploy in Minutes

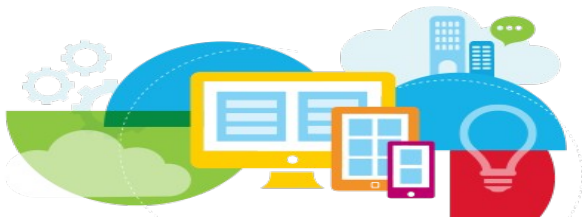


Move Workloads as Needed

Control | SLA | Specialization | Security | Agility | Price Advantage | Access | Elasticity

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Thinking of cloud...

- What recent examples do we see other customers considering and doing?

Note: Please see the following presentations for more detailed information on Digital Experience general cloud related products and offerings:

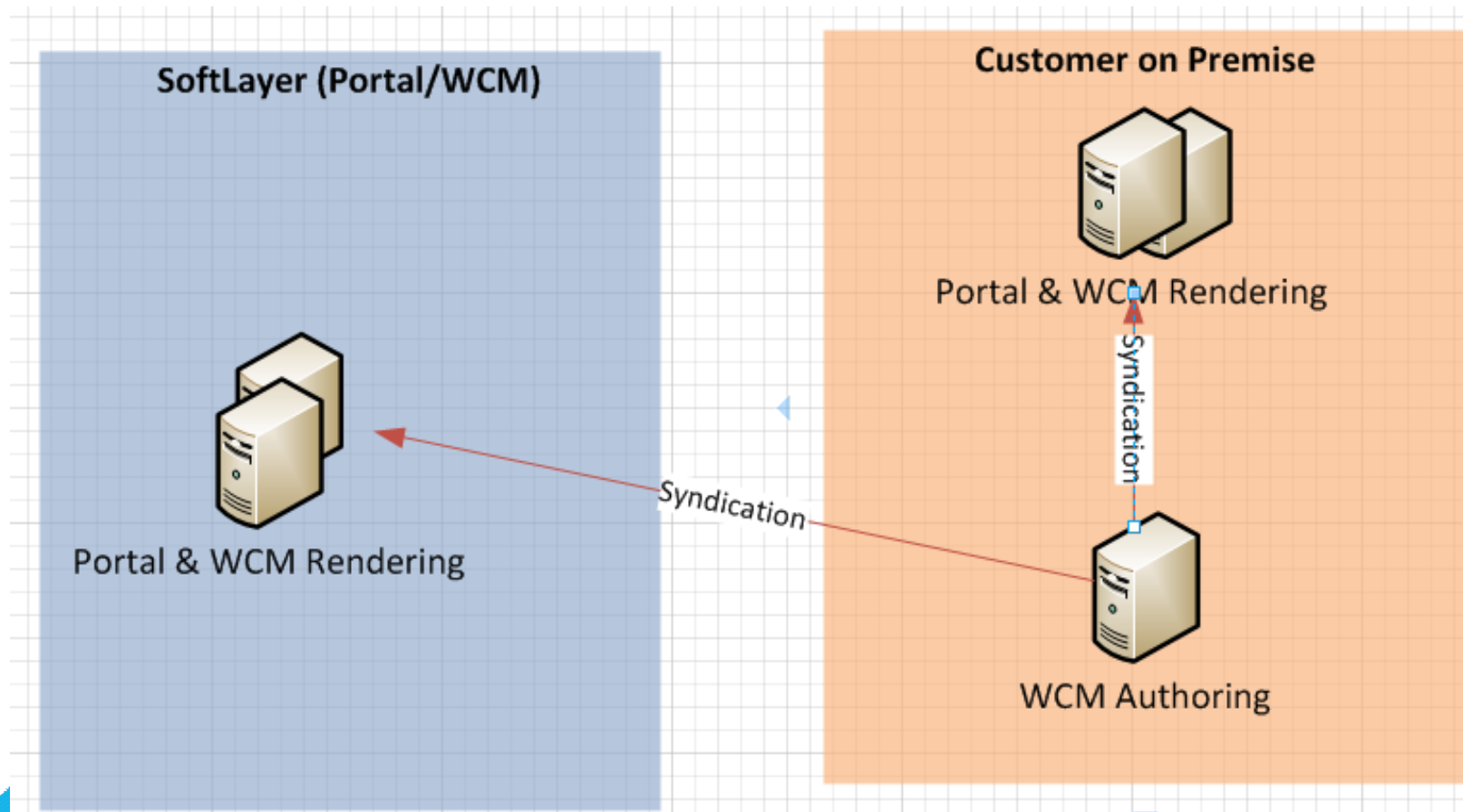
- Bus-R03 IBM Digital Experience on Cloud- Accelerating speed to market and reducing cost
- Tech-P07 Deliver IBM WebSphere Portal and IBM Web Content Manager on IBM Pure Application and Public Cloud platforms



Thinking of cloud... customer scenarios

Customer scenario 1:

- Authoring on premise
- Content rendering on premise and off premise



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Thinking of cloud... customer scenarios

Customer scenario 1:

Why would a customer would consider it?

- Stepping stone to longer term goal of moving to the cloud- start to prove out capability and benefits
- Not ready yet to take on moving their premise deployment
- Start to leverage hosting on Softlayer or other cloud hosting service
- Keep internal information/data internal while external information is all external.
 - Strict separation
- Need external Portal to be available at least 24x7 if not continuously available.
- External Portal needs to dynamically expand and reduce capacity.
- Simplify maintenance of external Portal.

Other things to note:

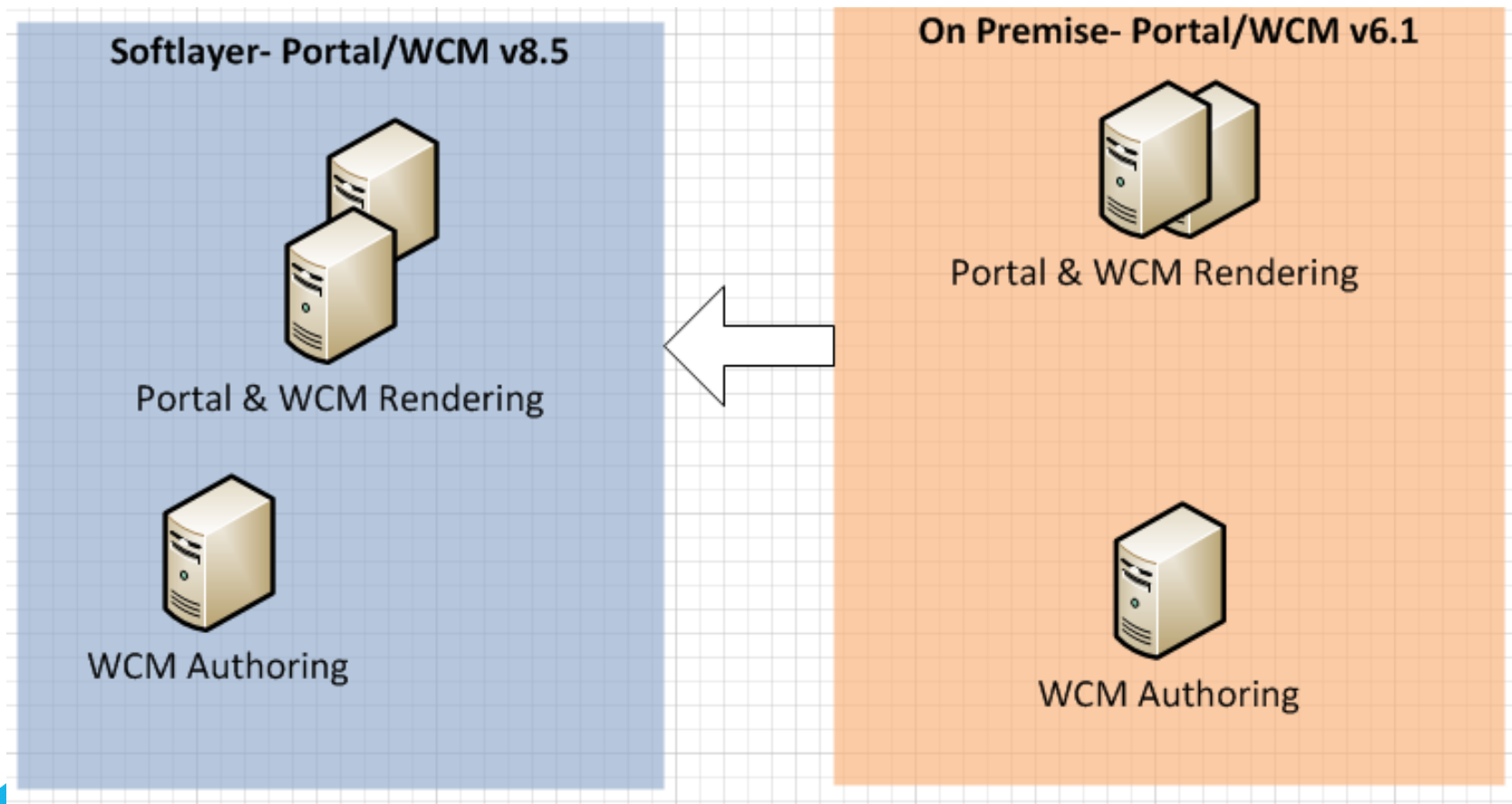
- Cross version syndication capabilities in new versions of Portal/WCM allows flexibility in what the deployed versions are.



Thinking of cloud... customer scenarios

Customer scenario 2:

- Moving an existing Portal/WCM intranet to the cloud
- Upgrading to Portal/WCM v8.5



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Thinking of cloud... customer scenarios

Customer scenario 2:

Why would a customer consider it?

- Due to limited IT resources- leverage managed services
- Leverage hosting on Softlayer or other cloud hosting service
- After upgrading to v8.5, leveraging the flexibility of a virtual platform for expected expansion to additional user communities
- Need at least 24x7 availability
- Good for externally facing Portals.
- Need to author content anytime and anywhere
- New architecture with new release of Portal
 - Very Popular!

Things to consider:

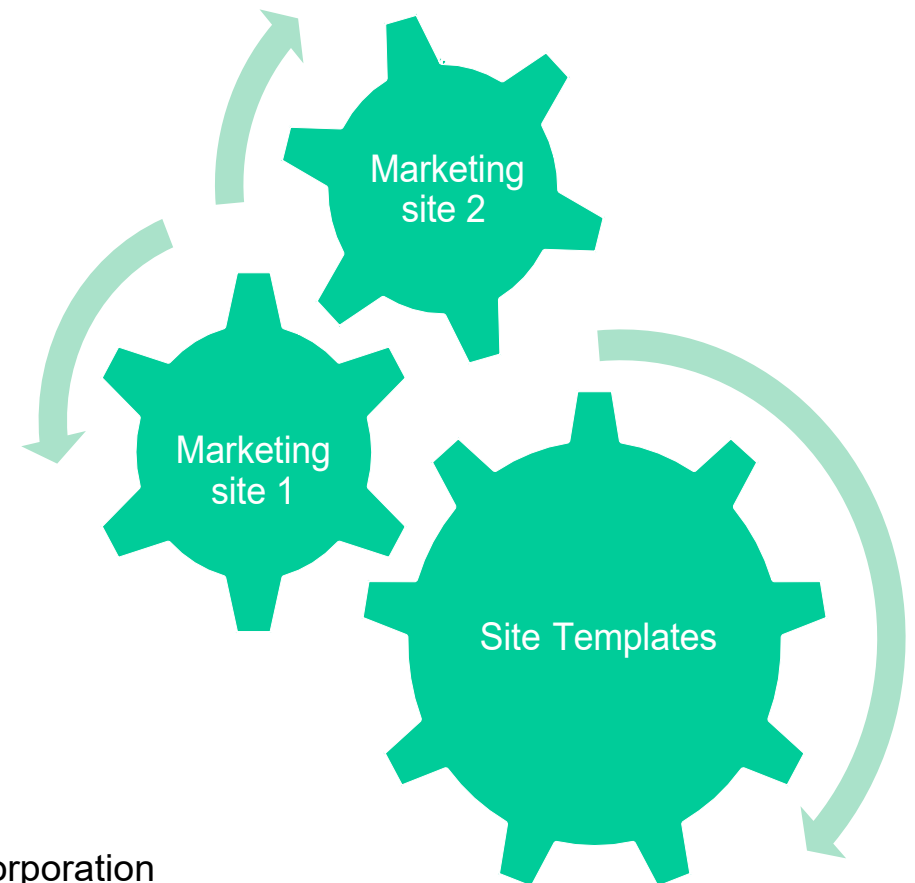
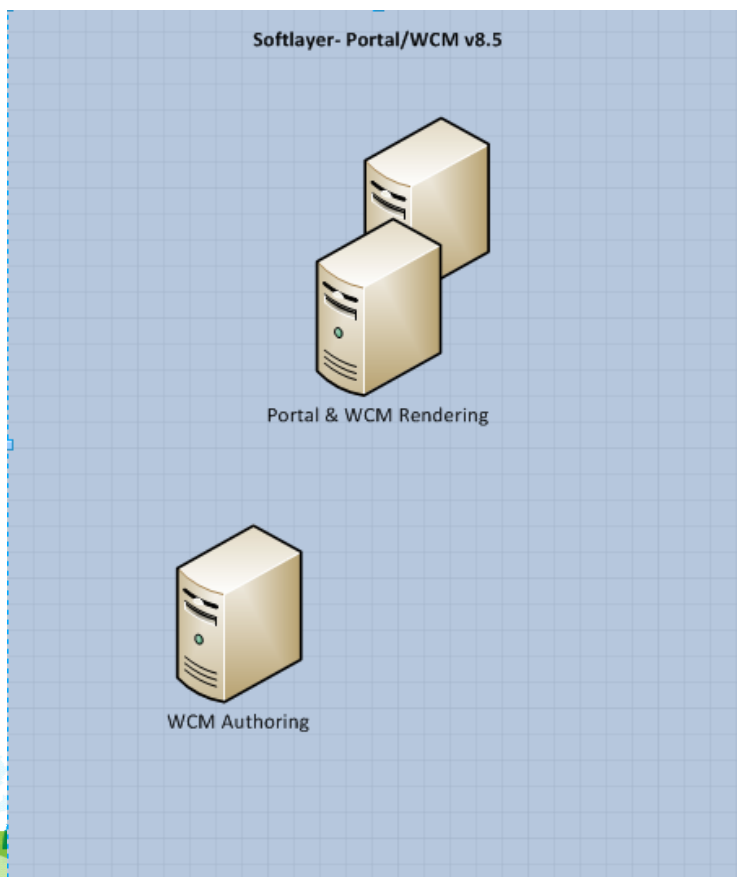
- Single sign on
- LDAP
- Backend services



Thinking of cloud... customer scenarios

Customer scenario 3:

- Deploy templated content content sites to the cloud (new Digital Experience deployment)



Thinking of cloud... customer scenarios

Customer scenario 3:

Why would a customer consider it?

- Due to limited resources, leverage managed services
- Leverage hosting on Softlayer or other cloud hosting service
- Flexibility of a virtual platform to start small, and facilitate deployment, but also be prepared to meet the changing business demands for marketing sites
- Need multi-tenancy for either internal Portals or for external Portals or both.
- Need to be able to quickly and easily generate new Portals for different constituencies – either internal or external groups/divisions/companies.
- Model for Service providers.
- Need 24x7 availability – at least



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Thinking of cloud... Common questions

- Do I need as many environments as I have now?
- Are there performance specific considerations for deployment to the cloud?
- I want to expand the use of our Portal/WCM deployment to other communities, how do I do that?
- Integration with Connections, and other applications ...
- Mobile enablement and support.
- And of course: LDAP, SSO, integration with backend services,...



Backend Application and Cloud Integration

- What system will be used to generate and maintain the SAML certificates to support SSO between WebSphere Portal and the cloud application. The system could be Cast Iron, DataPower, or a security server like Tivoli Access Manager.
 - Security Assertion Markup Language (SAML) is an XML-based open standard data format for exchanging authentication and authorization data between parties, in particular, between an identity provider and a service provider. SAML is a product of the OASIS Security Services Technical Committee.
- Issues to consider:
 - What cloud based data is to be displayed in the Portal? What is the cloud based application? Sales info, email, HR information, etc.
 - What web based services are available from the cloud provider to deliver the desired content to the Portal?
 - Will the data be read-only or will the end users have the ability to change the data?



Traditional Back-end Application Integration

- Also Known As Single Sign On, but now split between Front-end and Back-end SSO.
 - Front-end: Desktop to Portal
 - Back-end: Portal to Back-end application(s)
- SPNEGO is typically used for Front-end application integration to support SSO between Microsoft Windows desktops and WebSphere Portal
- Backend application integration has been supported using a variety of methods including LTPA tokens, TAI, and TAI++ tokens.
- Usually implemented using a security server like IBM Security Services (i.e TAM) or Siteminder.
- The methods should not change with cloud applications



Cloud and Cloud Application Integration

- Developing area
- Standards and Best Practices being defined
- As of the present day, most cloud providers design environments to keep customers within their own cloud.
- Cloud to Cloud could be accomplished by cloud to backend to cloud integration.



Web Content Management and the Cloud

- First question: where is content authored? In the cloud or on-prem?
- On-prem:
 - Can be protected and secured.
 - Can be sent through workflow
 - Can be checked and rechecked before being published
 - Drafts can be stored.
- In Cloud -
 - Good News: Accessible from anyone, anywhere
 - Bad News: Accessible from anyone, anywhere. Authoring environment and its content not sitting behind firewall(s).
 - Workflows can still be implemented
- State of the Art: Create content on-prem utilizing workflows and publish to the cloud and/or on-prem.



Application Maintenance and Upgrades

- For cloud provided applications, this is mostly done by the cloud provider with the new update provided on a specific date.
 - Installation and migration handled “Behind the scenes”
 - New day, new version of the application
- Application integration into a Portal may be affected depending if there is a major change to the application or architecture
- Application maintenance and upgrades for on-prem implementations is not changed.



Licenses

- Customers who are looking to move to a cloud model can purchase Digital Experience licenses monthly if they want to "build their own".
- Customers can also bring existing licenses to a cloud solution
- Customers who want to leverage PureApplication Service may need to purchase a separate license for the Digital Experience patterns for WebSphere Portal Server V8.5 and IBM Web Content Manager Hypervisor Edition V8.5
- Ultimately cloud is about a model without licenses, where a customer pays a monthly subscription cost for the "service" which includes the hardware, network, software and people to run it.
-



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Thinking of cloud... Digital Experience Services

To keep the cost down of this presentation, we had to sell some advertising...



Digital Experience Bridge to Cloud

Move your digital experience applications to the cloud

Pre-requisites

- Old WebSphere Portal or WCM deployment (any version)
- Ability to export current configuration to IBM servers hosted in the secure IBM cloud

What we need from you

- Export portal and WCM configuration for upgrade
- Work with IBM to select appropriate cloud platform for your needs

Digital Experience Bridge to Cloud

Evaluate

- Review existing infrastructure and site design
- Review application and security integration requirements
- Complete migration review to select correct cloud target platform

Migrate

- Export portal database and WAS profile to IBM cloud

- Use cloud environment to migrate configuration to v8.5
- Upgrade theme to v8.5 HTML theme architecture

Deploy

- Deploy new configuration to cloud, including any agreed application and security integration
- Support testing and go-live procedures

Deliverables

- Cloud-hosted digital experience platform, containing custom code
- Could include IBM managed service, in some cases

Benefits

- Realize benefits of cloud deployment models using latest IBM software versions
- Minimize risk of cloud migration by using a proven partner

Digital Experience Upgrade Accelerator

Accelerate and de-risk product upgrade, by using cloud-based migration approach

Pre-requisites

- Old WebSphere Portal or WCM deployment (any version)
- Ability to export current configuration to IBM servers hosted in the secure IBM cloud

What we need from you

- Export portal and WCM configuration for upgrade
- Set up new on-premises portal deployment
- Custom code migration, portlet updates etc
- Testing and promotion to production of migrated config

Digital Experience Upgrade Accelerator

Evaluate

- Review existing infrastructure and site design
- Identify any components not to
- Complete migration questionnaire to identify high-risk or custom artifacts, and agree plan to handle these

Migrate

- Export portal database and WAS profile to IBM cloud

- IBM will upgrade from artifacts to current version, and validate that the server starts up
- [Optional] Upgrade theme to HTML theme architecture

Deploy

- Deliver upgraded portal configuration to customer for reintegration into a new environment
- Provide test support and resolve issues

Deliverables

- Upgraded configuration and content accessible, ready to reintegrate into your environment.

Benefits

- Accelerate and de-risk product upgrade.
- Focus on functional benefits of upgraded software rather than resolving upgrade glitches

Digital Experience Upgrade Accelerator



Customer on-premise environment

Source

- Any supported Portal/WCM version
- Export source environment
 - File system and DB copy
 - Or staging to production



Target

- Portal/WCM 8.5
- Initial deployment to pre-production
 - File system and DB copy
 - Or staging to production
- Validation testing
- Deployment to Production



ISSC Migration Accelerator

ISSC Migration Sandbox



- Matching Portal/WCM version of source environment

- ISSC Migration Automation



- Portal/WCM 8.5
- Validation testing if VPN access provided



Digital Experience Managed Business Solution

IBM Digital Experience platform, set up and managed for you by IBM

Pre-requisites

- None

What we need from you

- Set up VPN, if you would like to integrate any existing applications
- Security integration (LDAP replica or SAML), if integrated sign-on is required

Digital Experience Managed Business Solution

Prepare

- Adapt standard operations and maintenance model to your specifications, if required
- Set up helpdesk escalation process and outage resolution communications

- Prevent outages through proactive monitoring
- Resolve any unplanned outages

Deploy

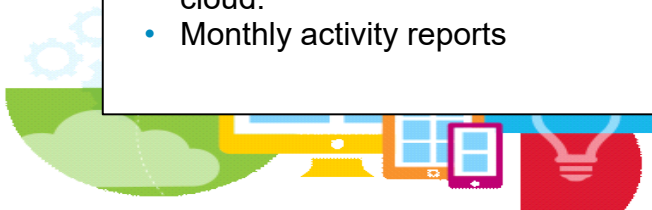
- Perform scheduled system updates

Deliverables

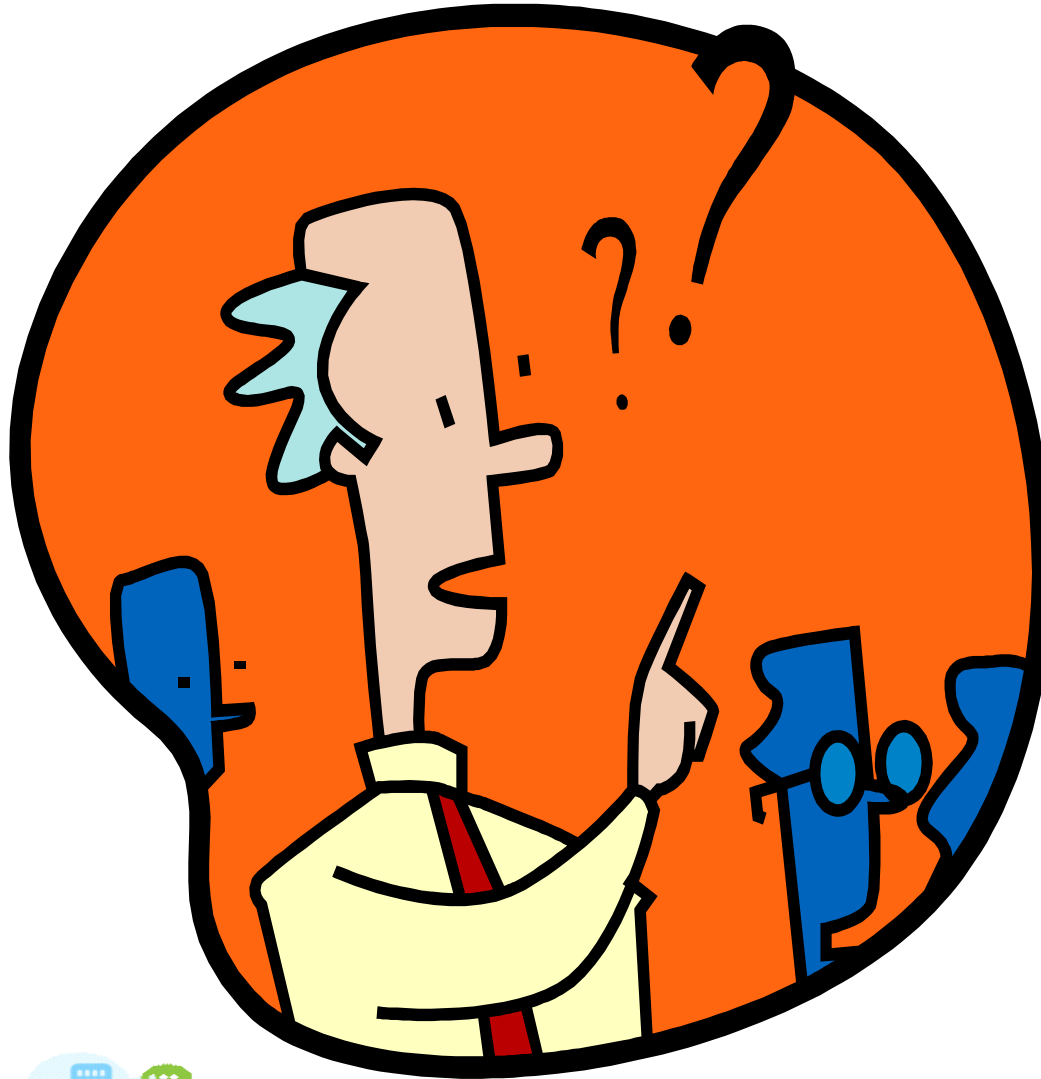
- IBM Digital Experience platform designed to your specification, set up and managed on the cloud.
- Monthly activity reports

Benefits

- Turn your operations budget to more productive uses
- Reduce or eliminate your outages
- Gain the scalability and flexibility of cloud environments.



Questions?



For Additional Information

- **IBM Digital Experience Solutions**
<http://www-01.ibm.com/software/collaboration/digitalexperience>
- **WebSphere Portal and IBM Web Content Manager Information Center Wiki**
<http://www-10.lotus.com/ldd/portalwiki.nsf/>
- **IBM Digital Experience Demonstrations:**
<http://www.youtube.com/user/IBMXWebX>
- **IBM Collaboration Services Business Solutions Catalog**
<https://greenhouse.lotus.com/catalog/>



Session Overview

TECH-B19 Call the Movers! A Practical Guide for Moving a Portal to the Cloud

Thinking about moving your current Portal to the cloud? What about moving multiple Portals to the cloud? Confused about what to move? If so, then come to this session to learn about how to move a current operating Portal or Portals to the cloud! This session will cover many practical techniques and tools for moving to the cloud including what applications and content to move, what not to move, and how to perform the move itself. Customer examples and experiences will be cited along with some of the latest information on multi-tenancy in the cloud. Fear Not! Moving can be fun! Come to this session to get your moving guide!



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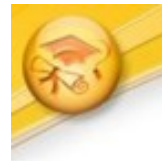
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PortalSupport

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Feed for the WebSphere Portal Support, if you have clarification on any posting, please feel free to send a message otherwise please open a PMR.
<http://www.ibm.com/software/genservers/portal/support/>

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- **WebSphere Portal and IBM Web Content Manager Information Center Wiki**
<http://www-10.lotus.com/ldd/portalwiki.nsf/>
- **IBM Digital Experience Demonstrations:**
<http://www.youtube.com/user/IBMXWebX>
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