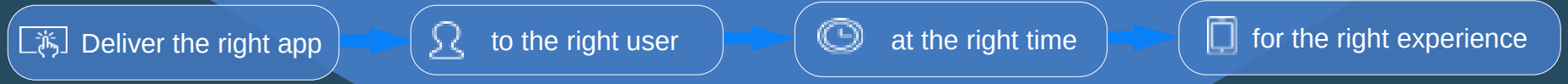
IBM WebSphere Application Server for Bluemix

Innovate, Reduce Cost & Accelerate Time to Market for

Traditional WAS Workloads



IBM

IBM Bluemix Offering Options

Public

- 100+ services
- Fine grained, usage based pricing
- Greatest economies of scale
- Unlimited, dynamic, and elastic scale
- 4 Main Datacenters

Dedicated

- Single-tenant hardware in IBM data center
- Multiple options for secure enterprise connectivity
- All pricing based on allocated capacity
- Additional capacity can be added in hours
- 25+ Softlayer Datacenters

Local

- Customer purchased and maintained IaaS
- One time installation fee
- Collaborative operations with access to Bluemix public services
- Ongoing pricing based on allocated capacity
- Scalability limited to size of underlying IaaS

IBM Bluemix Services leveraging WebSphere Application Server 101

“I want to bring use existing skills, tools & scripts with little configuration changes.”

WAS for Bluemix provides virtual machine instances to create and manage enterprise WAS deployments in a consistent / repeatable manner with significant flexibility to tune your env.

“I want application portability & ability build services and plug them into the Cloud.”

IBM Liberty Container allows you to deploy container images where you can package your Liberty apps and services with resource isolation and allocation that is more portable and efficient

“I am aggregating multiple services to create a new application real quick.”

.java liberty

Highly composable, fast-to-start, dynamic application server runtime environment for running Java EE 7 and OSGi application

Traditional / Cloud Enabled → **Cloud Native**

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WAS For Bluemix - Public

How do you get there?

Customers get to choose the level of infrastructure abstraction and fine-tuned control that suits their apps and services!

"I want to bring use existing skills, tools & scripts with little configuration changes."

WAS for Bluemix provides virtual machine instances to create and manage enterprise WAS deployments in a consistent / repeatable manner with significant flexibility to tune your env.

IBM WebSphere Application Server for Bluemix reduces deployment time, increases consistency, and fosters agility. These benefits you likely expect when exploring cloud-based approaches for your WAS environments.

Optimize

WebSphere Application Server

Same WAS you Know and Love; Same features & capability but gaining the Cloud

Innovative App Server

Flexible runtime environment for a lightweight, dynamic application runtime or an advanced, large-scale application platform.

Rapidly deliver Rich Experiences

Comprehensive set of open standards programming models to better align project needs with capabilities and developer skills.

Bluemix

Your Route to get your applications to the Cloud. Build, run, deploy and manage applications on the cloud with ease.

Extend apps with services

A catalog of IBM, third party, and open source services to grow your solution.

Flexible Pricing

Try some services for free and when you're ready, pay only for what you use. Pay as you go and subscription models offer choice and flexibility.

IBM WebSphere Application Server for Bluemix

Takes WAS to the Next Level with comprehensive cloud orchestration to help you Extend and Evolve.

Lift & Shift WAS to Cloud

Rapidly bring your Apps to Cloud & Drive faster solution delivery ahead of the competition

Best of Both Worlds

Balance Cloud Economics & Agility with WAS quality, security and governance.

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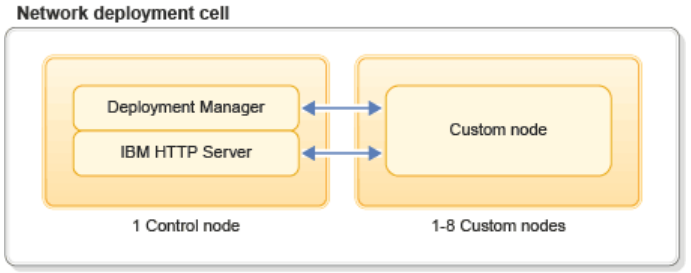
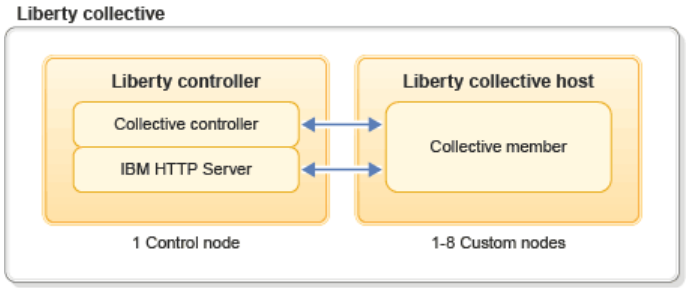
WebSphere Application Server in Bluemix

- WebSphere Application Server on Cloud
  - A service (in the Application Services category)
    - Not a Cloud Foundry runtime
  - Three plans
    - WAS Liberty Core
    - WAS Base
    - WAS ND
  - Runs in a Red Hat Enterprise Linux (RHEL) VM
  - Actually a WAS server in PureApplication Service
  - Requires a VPN to log into the VM and/or access the Admin Console
  - Public IP address can be added for public access to your applications

WebSphere Application Server





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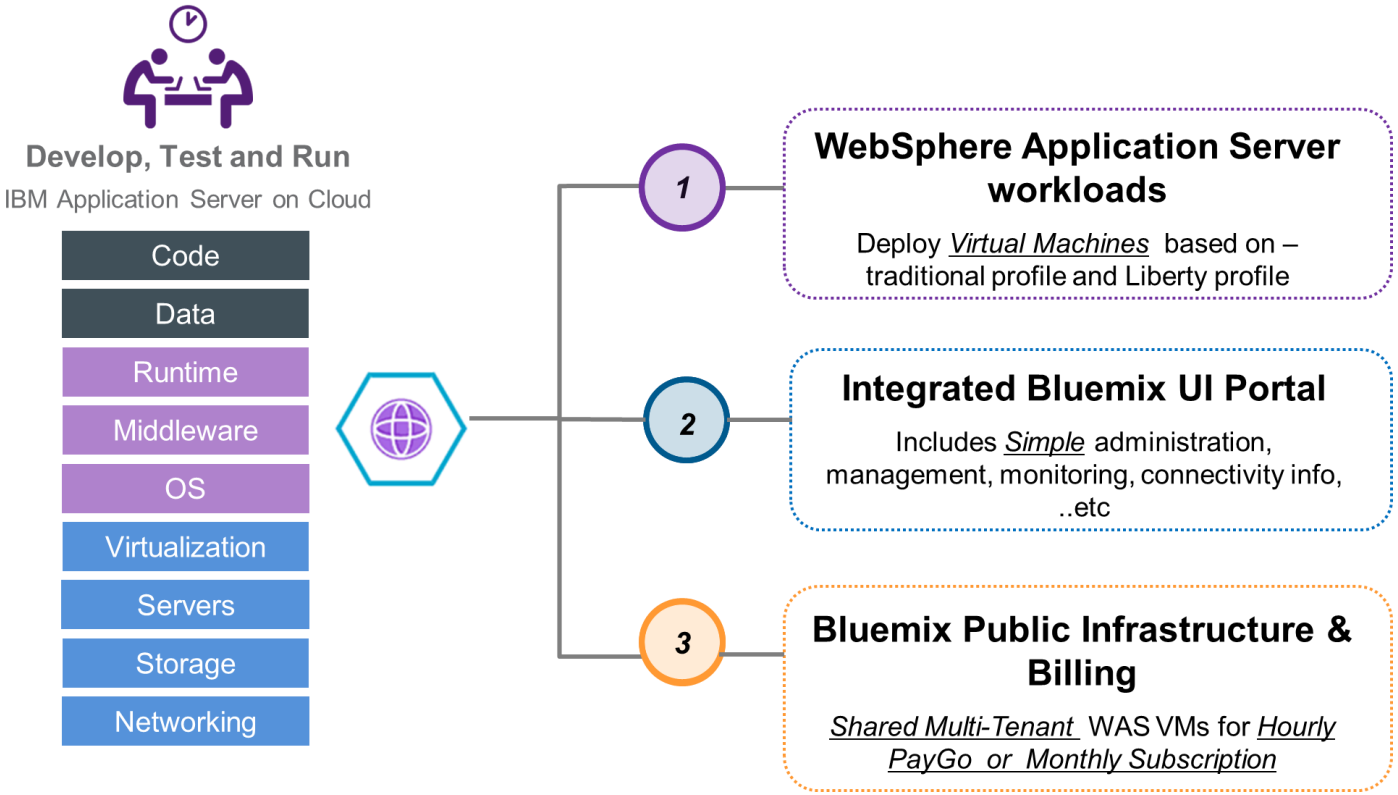
IBM WAS for Bluemix provides the **Building Blocks** for building WAS topologies on Bluemix

Optimize



Standardized virtual machines, pre-configured through automation with self-serviced consumption based pricing.

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Sign up in minutes. Pay for what you use.

Optimize

Easy adoption

- **10 Instance Hours Included each Month** - Designed to allow testing of an application on the platform
- **Free tier for many Bluemix service** - encourages experimentation of new services for applications already running on Bluemix

Multiple Commitment Models

- **Pay-as-you-go** - optimized for flexibility, no term commitment
- **Subscription** - term based optimized for cost, discounted from pay as you go rates

Self Service

- Zero to coding in **less than 5 minutes**
- **Credit card** over the web in many countries - or through your IBM rep

IBM manages:

- 24/7 Support
- Platform Configuration
- Platform Uptime
- Platform Monitoring
- Platform High Availability
- WAS Product Updates
- Platform Scheduled Maintenance with advanced notice

Customer manages:

WAS Maintenance

Version updates on customer's schedule

Capacity and scaling

By default, we provide capacity in customer's regional data center. Additional capacity available by adding my Instances!

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What you need to do to deploy WASaaS and connect to on-premise resources

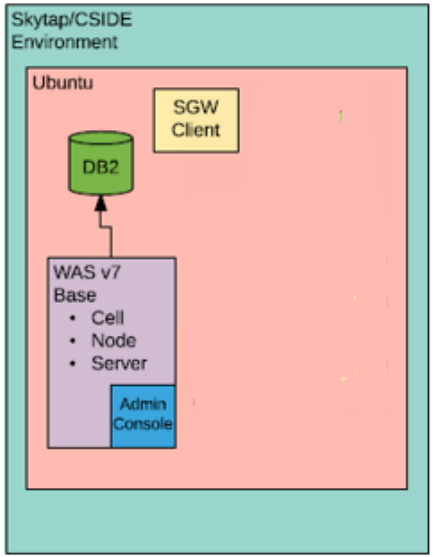
- Environment setup and application deployment to WASaaS on Bluemix
  - ✓ Create the WebSphere Application Server on Bluemix Service
  - ✓ Establish a secure VPN connection between the local VM and Bluemix (To access VM and WAS Admin Console)
  - ✓ Create Secure Gateway and Destinations from WASaaS to on-prmise resources
  - ✓ Upload the application binaries, Database drivers, properties files, automation scripts, etc, to WAS VM on Bluemix
  - ✓ Using wsadmin scripts or admin console, configure your WASaaS on Bluemix environment
  - ✓ Deploy the application to WAS v9 on Bluemix
  - ✓ Test the secure connections between WASaaS on Bluemix to the local on-premise database
  - ✓ Test the application deployed to the WASaaS on Bluemix environment

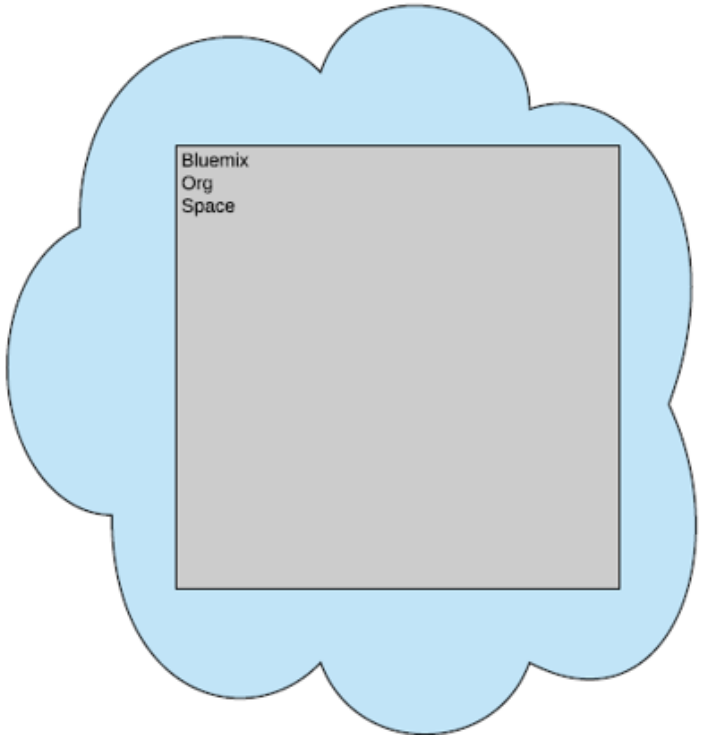
Want to learn how to AUTOMATE all of this, and MORE?

- **Come to my session at 15:30 today in room: "Fry"**

Demonstration: UrbanCode Deploy speeds up migration and deployment of On-Premise WebSphere applications to WebSphere on IBM Bluemix

Runtime Environment – Initial State

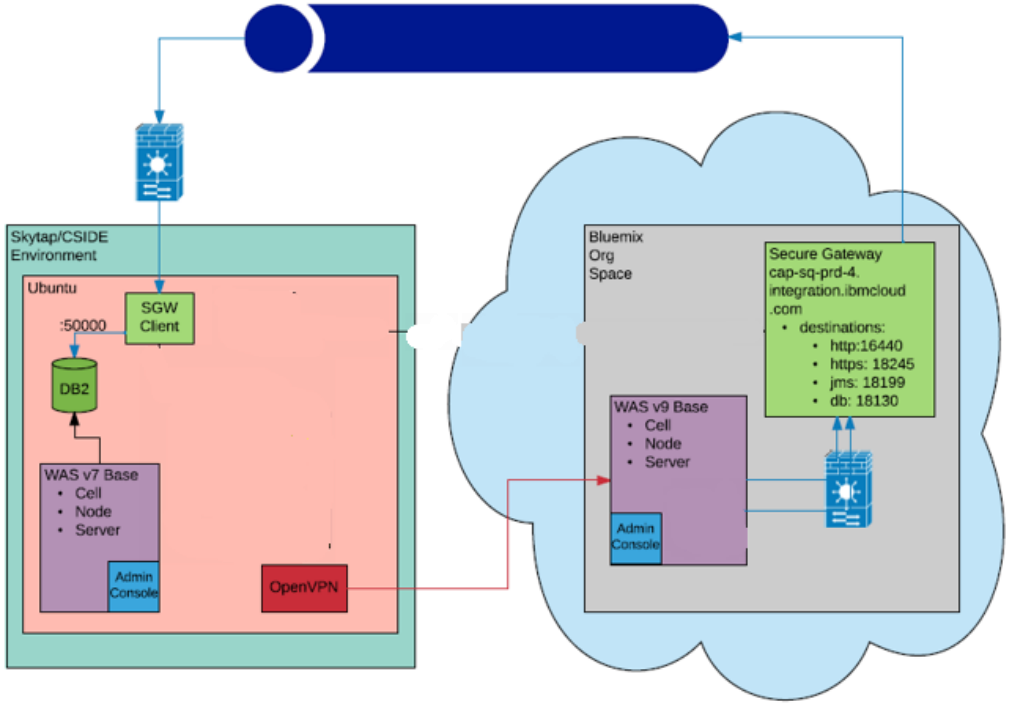




Runtime Environment – Target State

Activities

- Provision WAS on Bluemix
- Provision Secure gateway Service
- Setup SG destinations for DB2
- Setup and start openVPN
- Setup and start SG Client
- Deploy WAS application and configuration to v9 on Bluemix using existing wsadmin scripts or WAS Configuration migration scripts.



Want to learn how to AUTOMATE all of this, and MORE?

Come to my session at 15:30 today in room: "Fry"

Demonstration: UrbanCode Deploy speeds up migration and deployment of On-Premise WebSphere applications to WebSphere on IBM Bluemix

Quick Demo – How to get Started

Quickly get up and running on **pre-configured** WAS Traditional and WAS Liberty Virtual Machines in a hosted cloud environment on Bluemix with **full control** of the underlying OS & middleware.

Optimize

IBM WebSphere Application Server for Bluemix

- Code
- Data
- Runtime
- Middleware
- OS
- Virtualization
- Servers
- Storage
- Networking

WebSphere Application Server

IBM

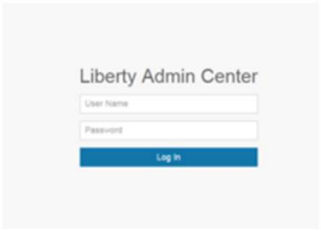
PUBLISH DATE
12/18/2015

TYPE
Service

VIEW DOCS

This service gives you the WebSphere Application Server experience in Bluemix. Choose from Liberty, Classic, or ND installations of WebSphere Application Server, preconfigured and hosted on your own Red Hat Enterprise Linux guest.

- **WebSphere Experience**
  Reuse your WebSphere administration skills and scripts to ease your transition to cloud.
- **Full-Feature Application Servers**
  Leverage sophisticated enterprise features like transactions, just like you do on-premise.
- **Shell and Admin UI Management**
  Use a secure shell, or log into the Admin Center/Console to control your WebSphere environment.
- **Customize just what you need**
  We've already installed and configured WebSphere, now all you have to do is make those minor changes to get your application just the way you need it.
- **Use. Abuse. Repeat.**
  It's a cloud service after all. Use it for an hour. Drive it hard. Delete it. Grab a new one when you need it; it's up to you.



WAS for Bluemix: Ease of Administration of Virtual Machine Environments

allowing Customer to focus on Application Development & Application Integration

Optimize

WebSphere Application Server

IBM

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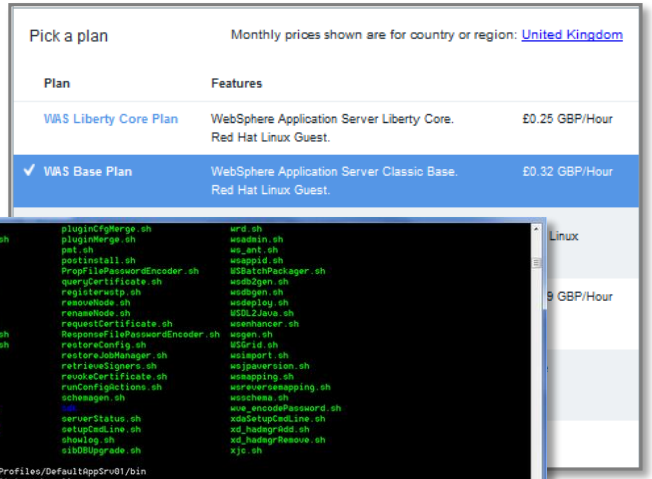

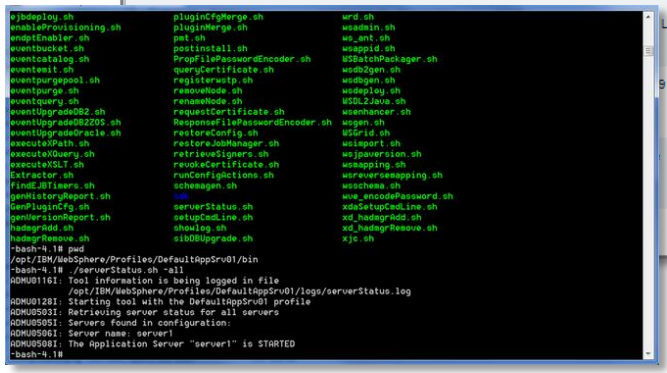

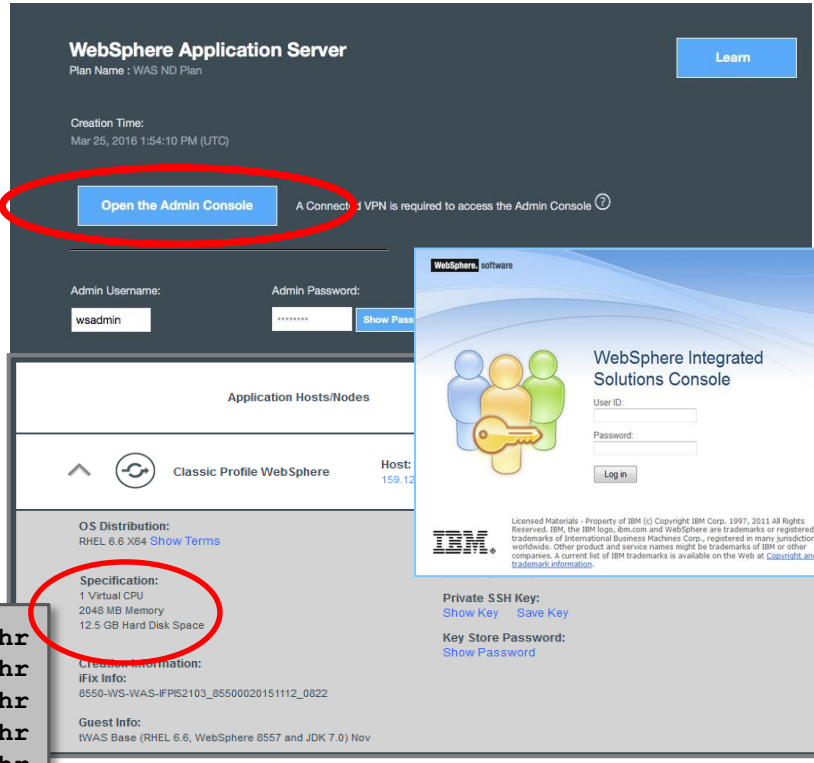


```
 S - 2GB RAM,  1vCP,  12.5 GB disk - WAS ND -  $0.70/hr
 M - 4GB RAM,  2vCP,  25   GB disk - WAS ND -  $1.40/hr
 L - 8GB RAM,  4vCP,  50   GB disk - WAS ND -  $2.80/hr
XL -16GB RAM,  8vCP, 100   GB disk - WAS ND -  $5.60/hr
XXL -32GB RAM, 16vCP, 200  GB disk - WAS ND - $11.20/hr
```

Variable VM sizes – administrative or policy-driven

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WAS for Bluemix – Multitenant VM Size Pricing

Optimize

WAS for Bluemix - Liberty Core

T-Shirt	vCPU	RAM (Gbs)	HD (Gig)	PVU Rating	Price/Hr	Price/Gb
S	1	2	12	70	$ 0.21	$ 0.11
M	2	4	25	140	$ 0.42	$ 0.11
L	4	8	50	280	$ 0.84	$ 0.11
XL	8	16	100	560	$ 1.68	$ 0.11
XXL	16	32	200	1120	$ 3.36	$ 0.11

WAS for Bluemix - WAS Base

T-Shirt	vCPU	RAM (Gbs)	HD (Gig)	PVU Rating	Price/Hr	Price/Gb
S	1	2	12	70	$ 0.30	$ 0.15
M	2	4	25	140	$ 0.60	$ 0.15
L	4	8	50	280	$ 1.20	$ 0.15
XL	8	16	100	560	$ 2.40	$ 0.15
XXL	16	32	200	1120	$ 4.80	$ 0.15

WAS for Bluemix - WAS ND

T-Shirt	vCPU	RAM (Gbs)	HD (Gig)	PVU Rating	Price/Hr	Price/Gb
S	1	2	12	70	$ 0.70	$ 0.35
M	2	4	25	140	$ 1.40	$ 0.35
L	4	8	50	280	$ 2.80	$ 0.35
XL	8	16	100	560	$ 5.60	$ 0.35
XXL	16	32	200	1120	$ 11.20	$ 0.35

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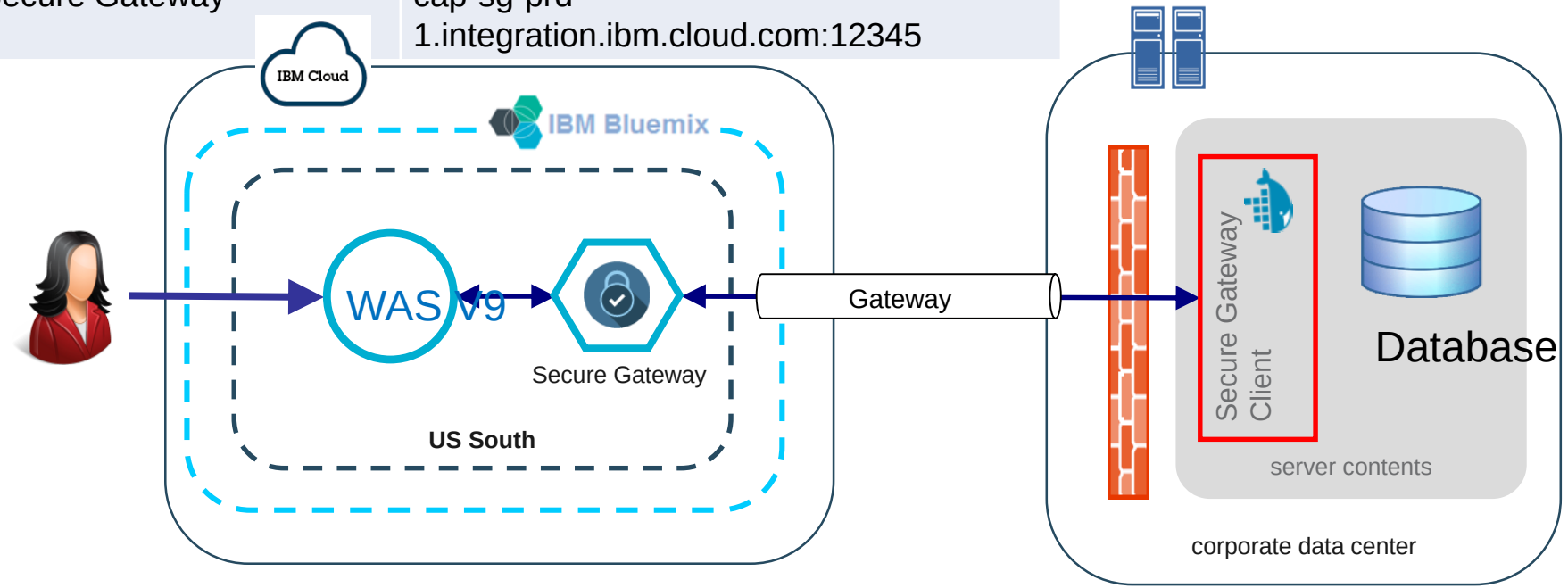
Secure Gateway: Remote connections

Connect Bluemix applications with resources that are not publicly accessible

System of record	10.1.1.1:50000
Secure Gateway	cap-sg-prd-1.integration.ibm.cloud.com:12345



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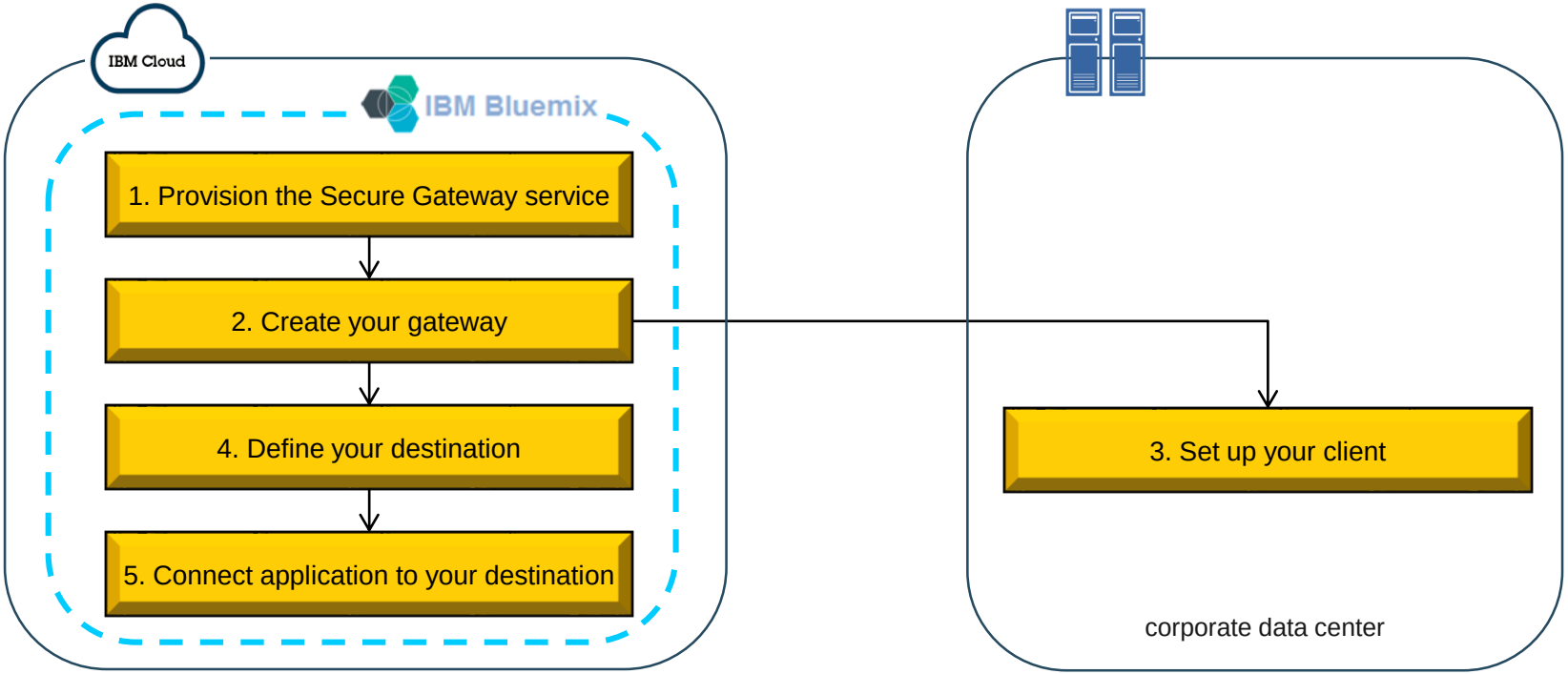
Secure Gateway: Implementation steps

- Secure Gateway has components in Bluemix and in the target data center



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Quick Demo – Secure Gateway, connecting WASaaS to on-premise resources

WAS Single Tenant for Bluemix

Global Footprint: More data centers. In more locations. Around the world.

Maximum Privacy: Hardware Isolated to a single customer for regulatory compliancy or workloads with intensive computing requirements can make full use of the system

Fast & Secure Networking Option: Move data to and from your on-premises data center across 1Gbps or 10Gbps network connections and control every hop of its network path.

"I want to bring use existing skills, tools & scripts with little configuration changes."

WAS for Bluemix provides virtual machine instances to create and manage enterprise WAS deployments in a consistent / repeatable manner with significant flexibility to tune your env.

IBM

WAS for Bluemix – Single-Tenant Option Target Use Cases

Isolate WebSphere Workload

All of the supporting infrastructure running WAS serves a single customer. With single tenancy, each customer has their own independent hardware and instances of WAS. With this option, there's essentially no sharing going on. Everyone has their own, separate from everyone else.

Fully Integrated Hybrid Environment

Blur the lines between on-prem and off-prem resources. With a high speed, direct network link between our Bluemix data centers and customers datacenters, you can move data between servers (literally) at the speed of light.

Super-Secure Data

Customers moving sensitive financial, health, or government-regulated data to and from WAS for Bluemix can further ensure its security by completely avoiding exposure to the public Internet.

WAS in Public Bluemix – Single Tenant Option

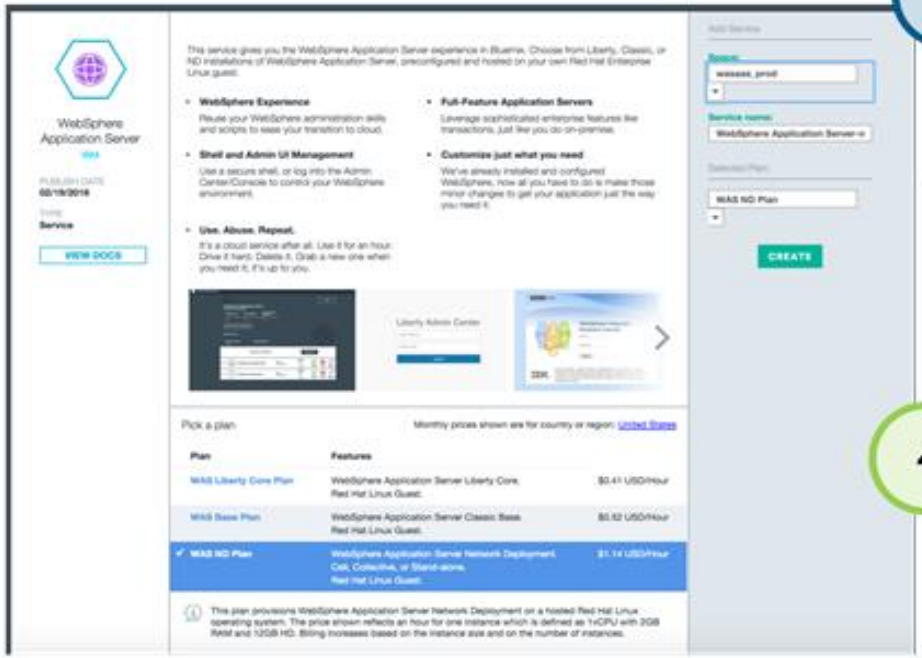
WebSphere Application Server for Bluemix – Single Tenant

1 **WebSphere Application Server workloads**

Deploy *Virtual Machines* based on – WAS ND, Base, & Liberty Core

2 **Integrated Bluemix UI Portal**

Includes *Simple* administration, management, monitoring, connectivity info, ..etc



3 **Single-Tenant Infrastructure**

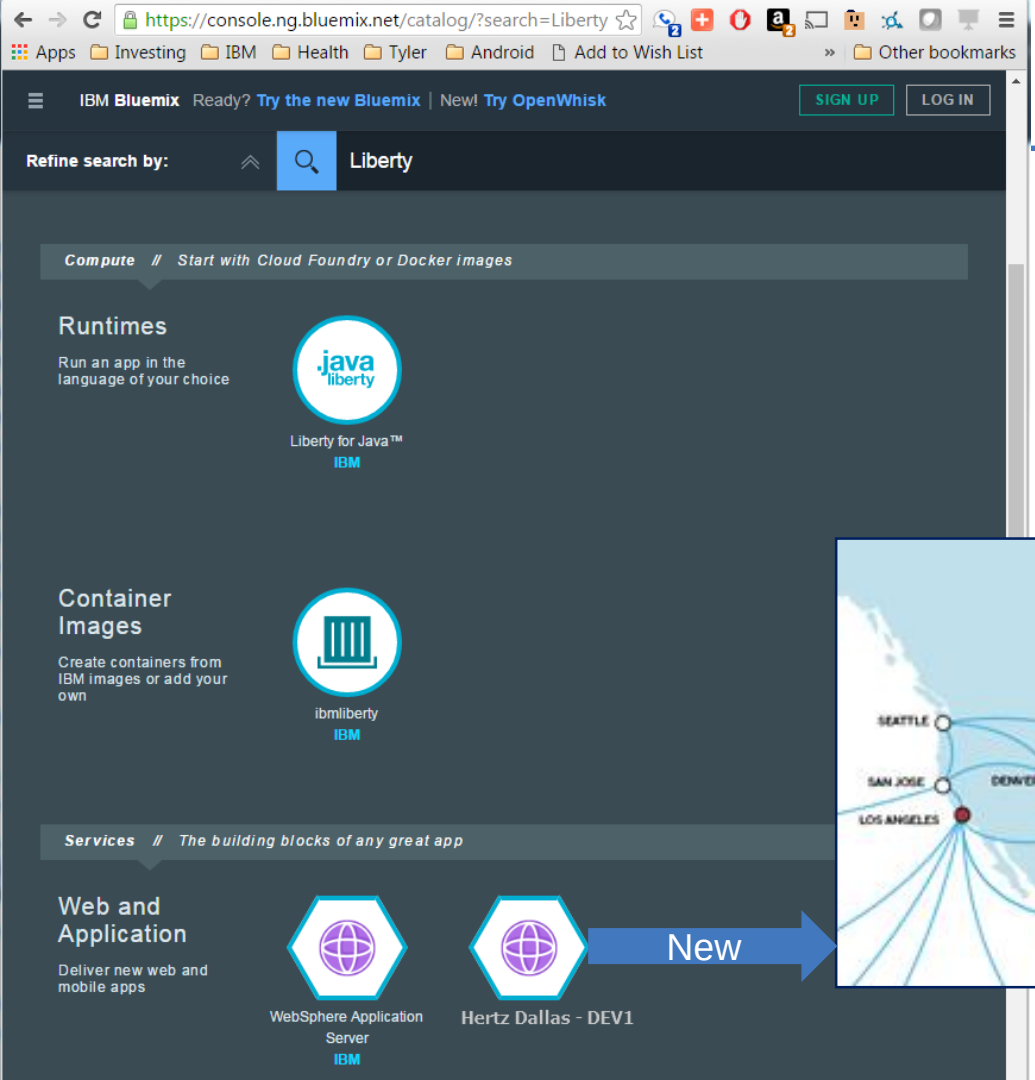
Deploy WAS for Bluemix VM on *Private Bare metal hardware* in which the Physical Cores, Memory, and Storage is Isolated to one customer.

4 **Additional Cloud Services**

Intelligent workload placement, VPN, Firewall, DirectLink High Speed Connection up to 10Gps, & Softlayer VLAN Spanning to expand to additional customer solutions

WAS for Bluemix – Single Tenant Access

- Bluemix Public Portal Management in Dallas, London, and Sydney
- For WAS Workloads in Any Softlayer Datacenter
- On Isolated / Reserved Hardware



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WAS for Bluemix – Single Tenant Topology Customer View

- Bluemix Public Portal Management in Dallas, London, and Sydney
- For WAS Workloads in Any Softlayer Datacenter

DC = Brazil

VLAN1 = Prod

512 GB

VLAN1 = Dev

128 GB

DC = Tokyo

VLAN1 = Proj 1

512 GB

512 GB

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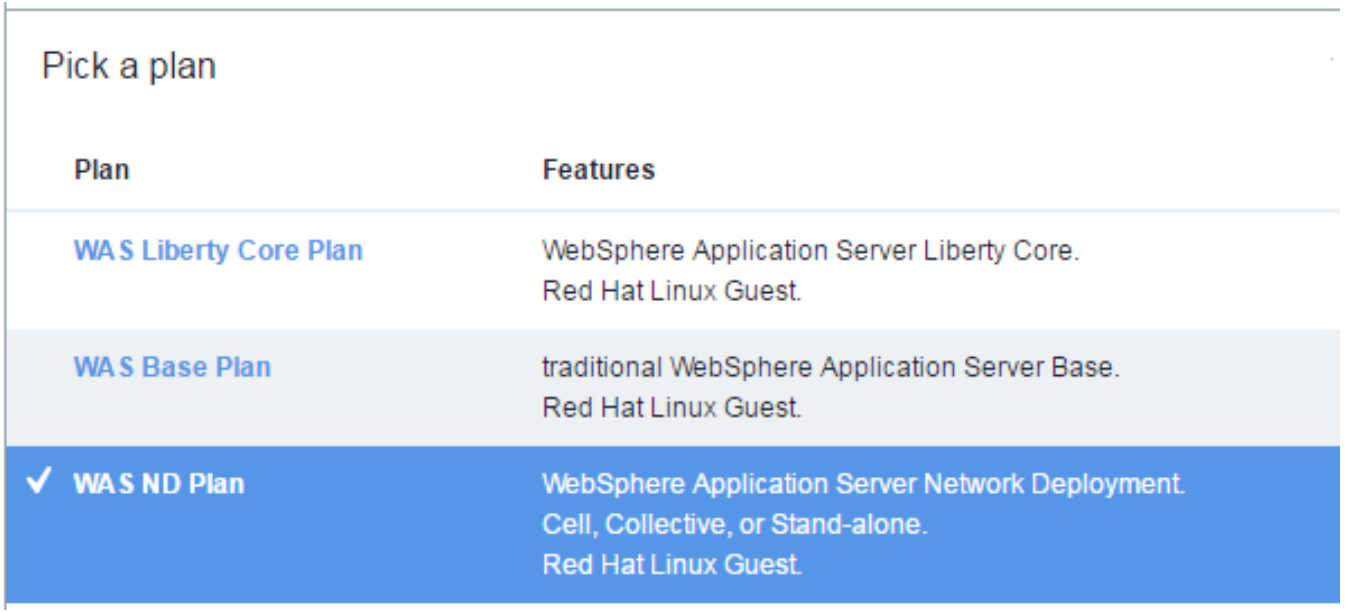
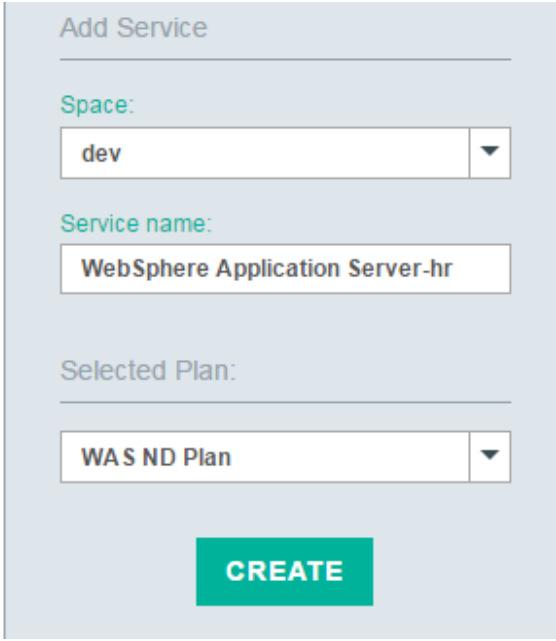
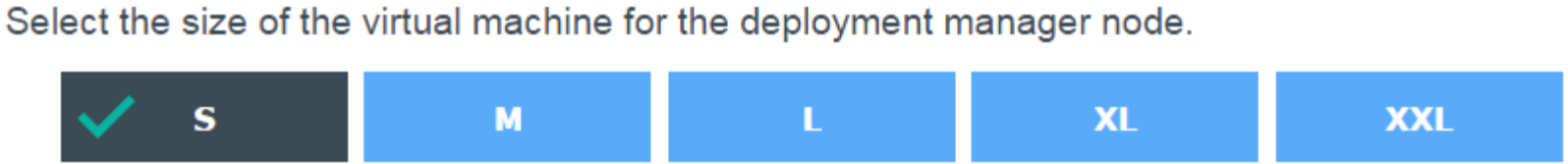
WAS for Bluemix – Single Tenant Plan Selection

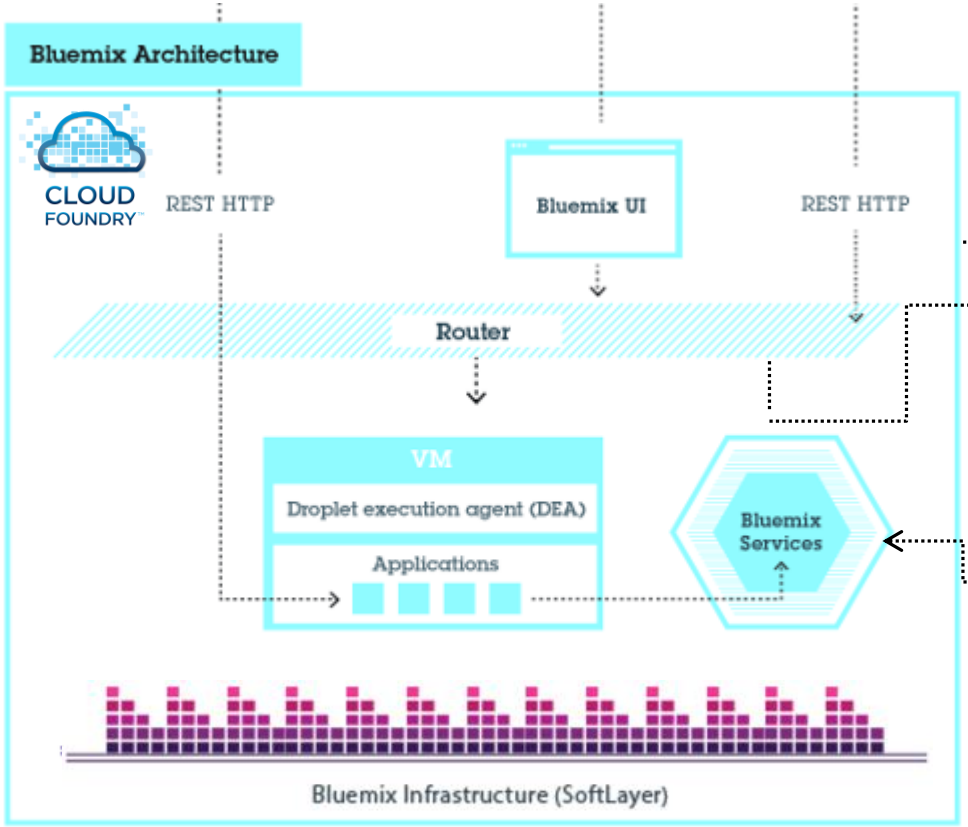




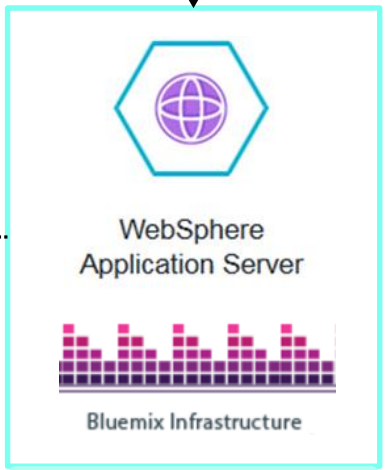


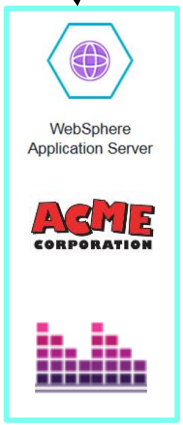
WAS for Bluemix – Single Tenant Architecture

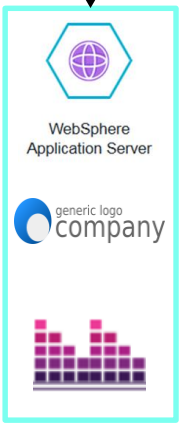
Optimize



WAS for Bluemix – Single Tenant is isolated capacity to provision WAS on physical servers only accessed by that one client.







WAS for BM - Multitenant

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WAS for Bluemix Single Tenant Pricing

Product Name	IBM List Price	*Price per GB-Hr
IBM WebSphere Application Server for Bluemix – Single Tenant Small (64 vCores,128GB RAM) Instance per Month	$25,600	$0.27
IBM WebSphere Application Server for Bluemix – Single Tenant Medium (128 vCores,256GB RAM) Instance per Month	$43,800	$0.23
IBM WebSphere Application Server for Bluemix – Single Tenant Large (256 vCores,512GB RAM) Instance per Month	$80,500	$0.22

Other Required / Prerequisite Parts:

- Bluemix Public Subscription (Min $500)
- Bluemix Public Support (Min $200)

* Theoretical Calculated Price based on 730 Hrs per Month

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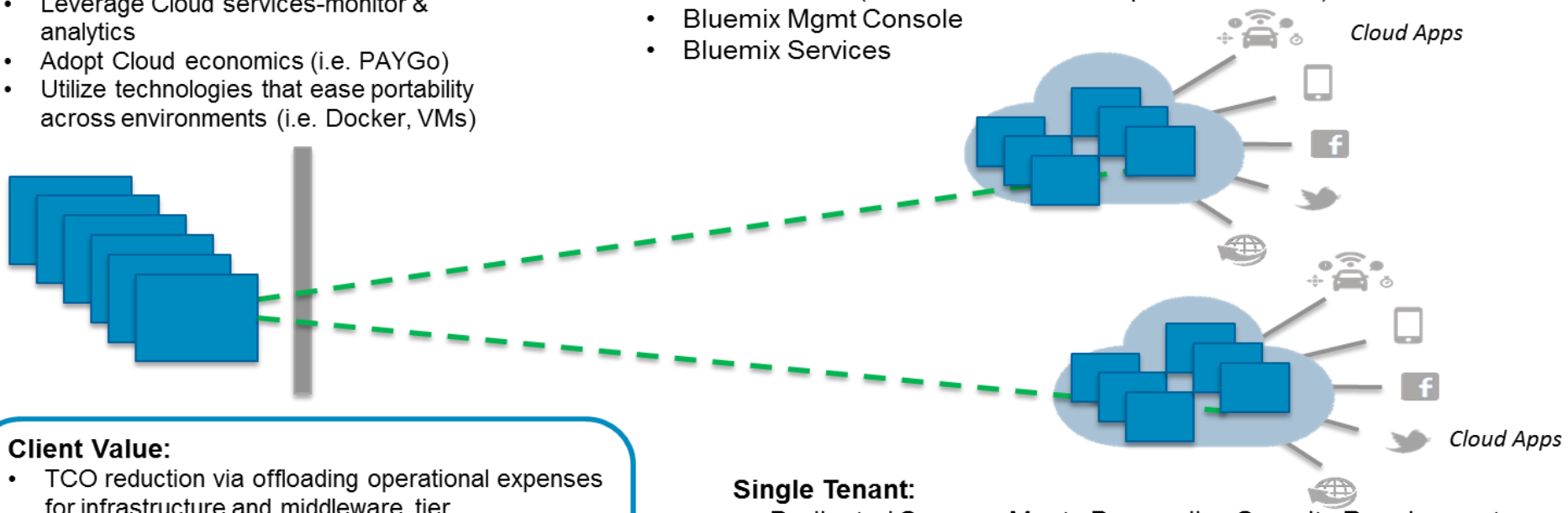
WAS in Public Bluemix Entry Points

What:
- Shift existing Java apps to Cloud as-is
- Leverage Cloud services-monitor & analytics
- Adopt Cloud economics (i.e. PAYGo)
- Utilize technologies that ease portability across environments (i.e. Docker, VMs)

Multi Tenant:
- Cost Effective (Shared Server – Multiple/Secure VMs)
- Bluemix Mgmt Console
- Bluemix Services



Client Value:
- TCO reduction via offloading operational expenses for infrastructure and middleware tier
- Risk reduction via skills and admin artifact reuse
- Prepare for client datacenter capacity limitations with elastic growth in the cloud
- Optimize CAPEX vs. OPEX budgets through hourly, monthly and BYOL pricing options

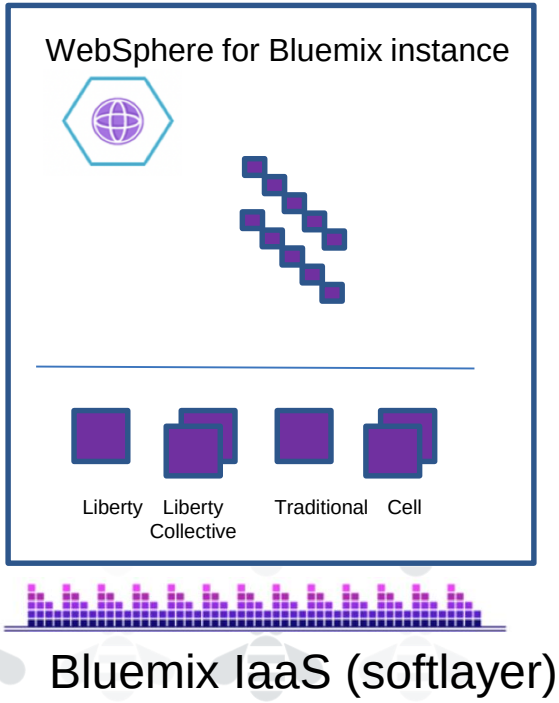
Single Tenant:
- Dedicated Server – Meets Demanding Security Requirements
- Very High Performance
- High Speed (up to 10 GB) direct link to data center
- Bluemix Mgmt Console
- Bluemix Services

Use Cases for WebSphere for Bluemix

- Dev/test of existing workloads
- Upgrade existing back level WebSphere applications to supported runtimes
- Production workloads which can be augmented with Cloud Services
- Augment with Cloud Native

WebSphere for Bluemix for Development / test

- WebSphere for Bluemix is designed for the rapid create, use, and destroy loop of an agile development process.
  - Tools infrastructure is the same as they use today on-premises
    - Traditional WebSphere scripts to configure the environment and deploy the applications
    - Can use rest or scripts to integrate applications into Devops chains
  - The Service keeps pools of preconfigured VMs, to speed the deployments to enable automated regression testing



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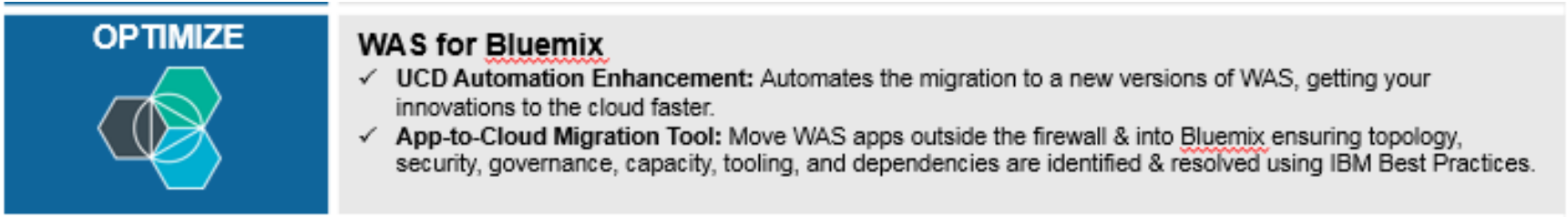
WebSphere for Bluemix for Upgrading of WAS

- Easier to keep current with WebSphere release levels
- Recommend Single Tenant for production workloads where the workload is mission critical
- Today, migration is manual, through out 2017 out intention is to automate the migration



WebSphere for Bluemix for Production

- Traditional WebSphere or Liberty running on a cost effective model.
- Can begin to take advantage of cloud services in their existing application without rewriting the applications
- Applications can be wrapped as services and APIs externally made available.
- Recommend Single Tenant or Dedicated for production workloads where the workload is mission critical and dependent on desire to exploit services.

WAS For Bluemix – Dedicated

Global Footprint: More data centers. In more locations. Around the world.

Maximum Privacy for Entire Cloud: Add WAS VMs on Bluemix Dedicated Hardware Isolated to a single customer for regulatory compliancy or workloads with intensive computing requirements can make full use of entire cloud infrastructure.

Fast & Secure Networking Option: Move data to and from your on-premises data center across 1Gbps or 10Gbps network connections and control every hop of its network path.

WAS for Bluemix – Offering Differences

WAS for Bluemix (Public)			WAS for Bluemix Dedicated
Feature	**Multi-Tenant Plans**	**Single-Tenant Capacity Units**	**Capacity Units**
Bluemix Public Portal Admin	Yes (Dallas, Sydney, UK)	Yes (Dallas, Sydney, UK)	**No – Bluemix Dedicated Portal Admin**
Hardware Sharing	Yes (Reserved VMs / Shared Hardware)	No - (Reserved VMs / Isolated Hardware)	No - (Reserved VMs / Isolated Hardware)
Billing Metric	Per VM	Per Capacity Unit (Set of VMs)	Per Capacity Unit (Set of VMs)
Billing Type	PayGo Hourly , Bluemix Subscription	Direct Sales - Contract	Direct Sales - Contract
WAS VM Location	Dallas, Sydney, UK	Client Defined - Any SL Datacenter	Client Defined - Any SL Datacenter
Capacity Consumption	IBM Pre-Existing Pool	Client Custom Ordered (2-3 weeks)	Client Custom Ordered (2-3 weeks)
WAS VM Provisioning	Seconds-to-Minutes	Seconds-to-Minutes	Seconds-to-Minutes
Softlayer Direct Link	No	Yes - 1GB or 10 GB Speed	Yes - 1GB or 10 GB Speed
Prerequisite Parts	None	None	**Bluemix Dedicated Subscription ($22.5k USD / Mo)** **Bluemix Dedicated Setup Fee ($50k USD)**

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WAS for Bluemix Dedicated Pricing

Product Name	IBM List Price (USD)	*Price per GB-Hr
IBM WebSphere Application Server for Bluemix – Dedicated Small (64 vCores,128GB RAM) Instance per Month	$37,600	$0.40
IBM WebSphere Application Server for Bluemix – Dedicated Medium (128 vCores,256GB RAM) Instance per Month	$64,200	$0.34
IBM WebSphere Application Server for Bluemix – Dedicated Large (256 vCores,512GB RAM) Instance per Month	$112,000	$0.30

Other Required / Prerequisite Parts:

- Bluemix Dedicated Subscription ($22.5k USD / Mo)
- Bluemix Dedicated Setup Fee ($50k USD)

* Theoretical Calculated Price based on 730 Hrs per Month

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Hertz rides high with IBM, accelerates DevOps transformation with Bluemix Garage, WAS for Bluemix, and GitHub Enterprise

Need

With operations in more than 150 countries through multiple lines of business, the Hertz Corporation is one of the world's largest car rental brands.

Seeking to prepare itself for the next phase of growth, Hertz Corp decided to embark on a DevOps journey by moving its core applications to the cloud and consolidating its own data center footprint. Hertz wanted to modernize its existing on-premises WebSphere Application Server (WAS 6.1) infrastructure that runs the current Hertz.com application and migrate to WebSphere Application Server on Cloud with Bluemix Dedicated platform. The company sought a solution whereby it can migrate its monolithic web application to a hybrid cloud solution and then rewrite the application based on micro-services architecture for greater flexibility.

Strategy

In early 2015, following a corporate directive, Hertz began discussions with IBM on moving its WAS-based e-commerce solution to the Bluemix cloud platform. Soon after an initial win in February 2016, the IBM implementation hit a roadblock with Hertz's Security Office raising issues around data security. The IBM team quickly rose to the challenge and brought together experts from multiple IBM departments to deliver a solution that earned the client's confidence in IBM as its strategic cloud provider.

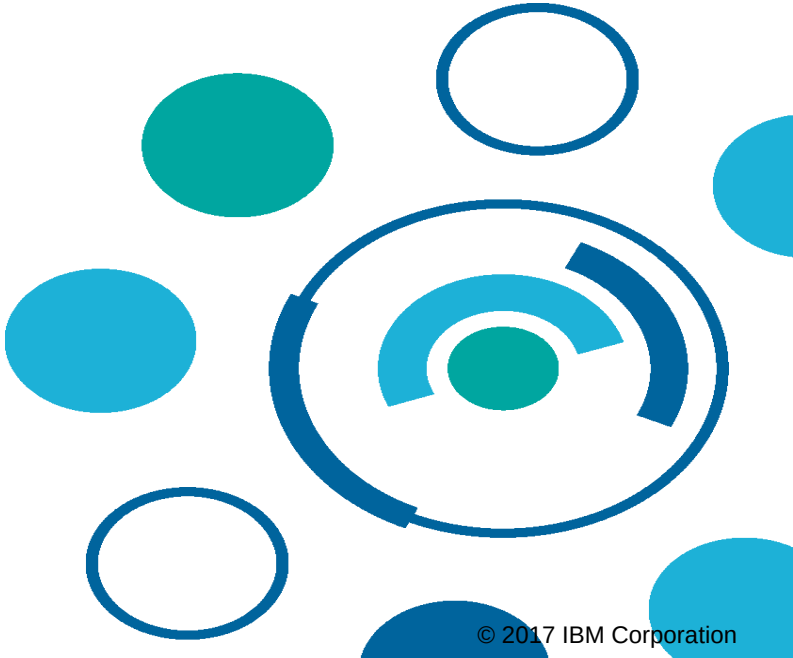
Benefits

In August 2016, Hertz signed a USD $20 million software agreement with IBM that included USD $4.5 million of Cloud Bluemix Dedicated subscription, Bluemix Garage services and premium support. With assistance from an expert team of IBM developers and consultants, **Bluemix Garage helps the company quickly migrate its on-premises WAS environment to a WebSphere-as-a-Service solution on the Bluemix platform.** The team uses a unique set of best practices called Bluemix Garage Method, which is based on IBM Design Thinking, DevOps principles, Cloud, lean and agile methodologies.

Hertz anticipates the following key benefits with this IBM solution:

- A highly secure and flexible solution to grow online sales through a USD $2 billion e-commerce application
- Increased customer loyalty through new and improved Hertz.com rewrite
- Reduced cost of managing and upgrading an on-premises WAS implementation
- Faster time-to-market with a more efficient microservices-based application architecture
- Integration flexibility with third-party as well as home grown applications utilizing benefits of API Economy.

Thank You!



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Backup

IBM WebSphere Application Server for Bluemix

Deliver Stateful applications with Speed and Simplicity of the Cloud!

Develop, Test and Run

IBM WebSphere Application Server for Bluemix

Transactional Integrity

Robust, Proven & Consistent Java Runtime

Develop and deploy Stateful and Transactional applications with identical interfaces & experience for Developers and Operations in the cloud and on-premises

Cloud Enabled

Deploy WAS applications in the Cloud seamlessly

Bring your Traditional WAS & Liberty applications to pre-optimized off-premises managed cloud environment without change.

Do More with Less

Reduce capital expenditures and operational expenses

Leverage Pay-as-You-GO or Subscription to WAS workloads in repeatable and reliable deployments in the Cloud. You can achieve savings by optimizing labor efficiency with hosted hardware consolidation & utilization.

Faster

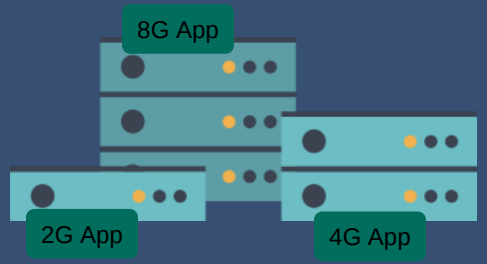
Accelerate WAS Application Delivery in the Cloud

Compared to “Roll your Own”, Deploy apps into test and/or production in minutes, not months. Increase ability to quickly deliver results to capitalize on business opportunities.

WAS for Bluemix : T-Shirt Sized Instances

Right-Sizing your WebSphere Application Server Workloads

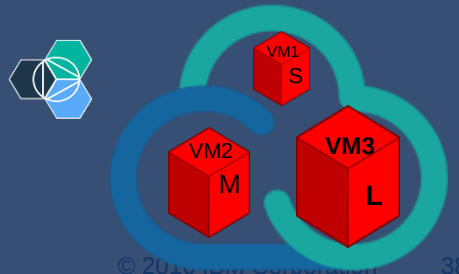
1



2

T-Shirt	vCPU	RAM (Gbs)	HD (Gig)
S	1	2	12
M	2	4	25
L	4	8	50
XL	8	16	100
XXL	16	32	200

3



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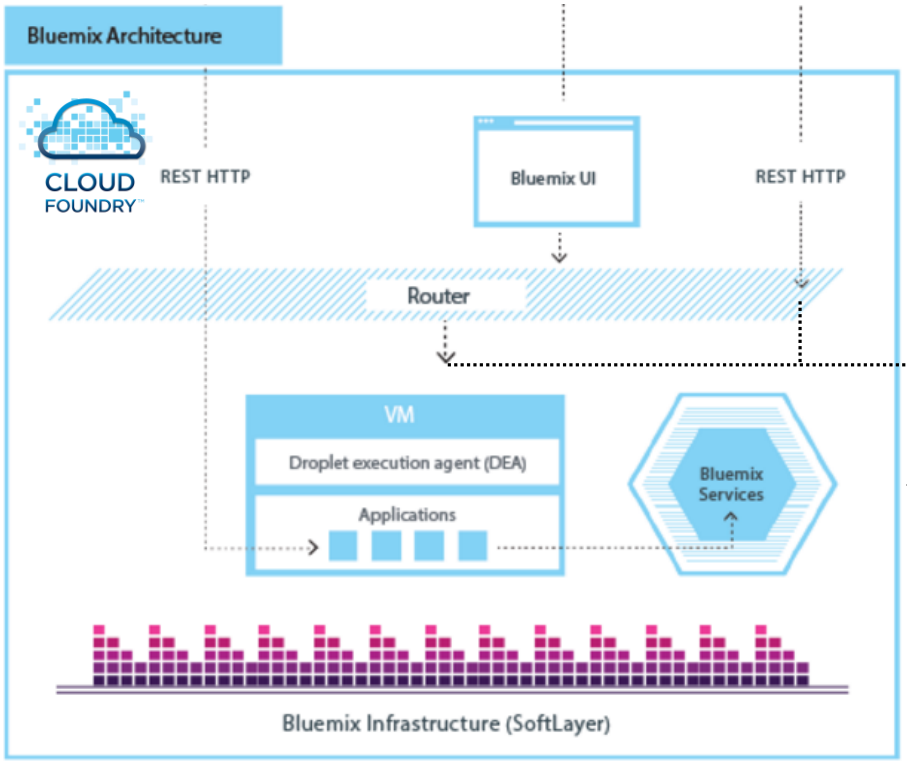
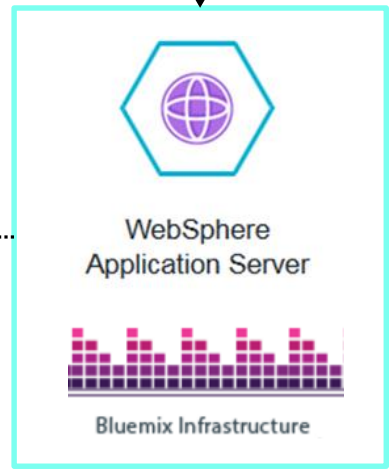
WAS for Bluemix – High Level Architecture

Optimize



WAS for Bluemix today is *not* a Cloud Foundry based Offering, therefore its compute capacity is separated from build packs and containers.



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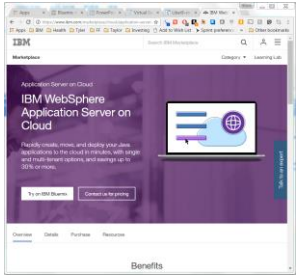
WAS for Bluemix – E2E Experience & WAS Migration Tool & UCD Integration

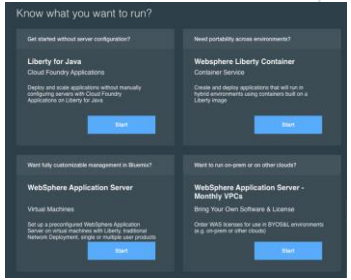
LEARN IT | **CREATE IT** | **RUN & MANAGE IT**

Tell Me About WAS for Bluemix → PRACTICAL LEARNING → Try & Buy → Write Code → Snapshot Dev Environment → Promote Env → Deploy to Test and/or Prod

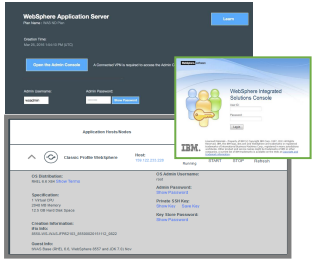


Enhanced Cloud Marketplace
- Videos
- How-tos
- Forum
- Blogs

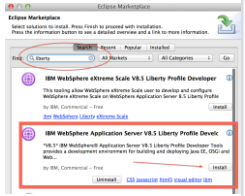
WAS Catalog Page on Bluemix
- Liberty Buildpack
- Liberty Container
- WAS VMs
- WAS VPC



Create & Config

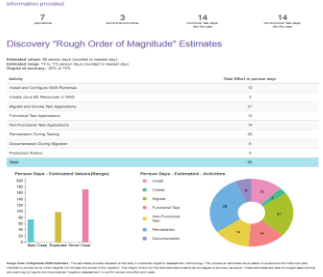


Develop

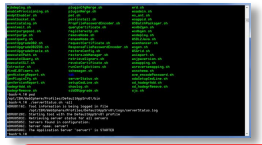


eclipse

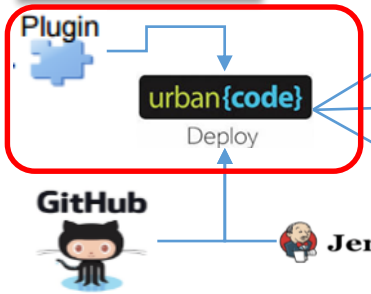
WAS Migration Tool



Capture Env

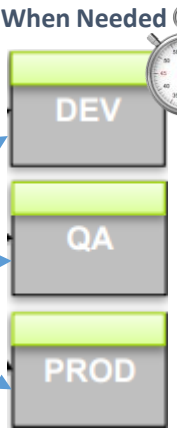


Continuous Integration & Delivery



WAS for Bluemix UCD Integration
- Save Env as baseline for new Dev
- Connect Source Repo + CI/CD
- Re-deploy Exact Env to Test / Prod

Deploy Where and When Needed

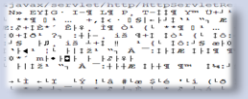
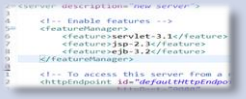


WAS for Bluemix
- Pause Dev Env to reduce $$
- Separate QA / Prod VMs by Org or Bluemix Region
- Can redeploy back On-prem

WebSphere Migration Toolkits provide assistance for full cycle WAS for Bluemix Migration

A set of tools that help you:

- Migrate between older versions of WAS on-prem to v9 on WAS for Bluemix
- Move your applications to WAS for Bluemix
- Migrate from third-party application servers to WebSphere for Bluemix

Migration discovery and planning	*Binary analysis*	*Source analysis*	*Configuration migration*
			
WebSphere Migration Strategy Tool – online tool that helps you • Learn the options for migration including Liberty, on-premises, Docker, and cloud options **WebSphere Migration Discovery Tool** - on-line tool that helps you • Estimate the effort required to migrate your application to WebSphere Application Server from third-party application servers • Select the IBM cloud platform suited to host your application and estimate migration to that platform.	Command-line **binary scanner** that provides • High level evaluation report showing the Java EE technologies your application uses • Inventory report that provides detail of the files and packages and Java EE artifacts in your application. • Detailed analysis for migration between versions of traditional WebSphere, Liberty, and Liberty Core • Cloud migration for instant runtimes differences • Cloud connectivity analysis	**WAMT** - Eclipse plugins that scans application source to provide • High level evaluation report • A line-by-line analysis of code changes required • Detailed analysis from third-party applications servers • Detailed analysis for migration between versions of traditional WebSphere, Liberty, and Liberty Core • Cloud migration for instant runtimes differences • Cloud connectivity analysis	**WASPreUpgrade** and **WASPostUpgrade** commands to move WebSphere traditional configuration between profiles. **WCMT** – Eclipse plugin that helps migrate server configuration • From third-party application servers to WebSphere Application Server. • Between versions of WebSphere Application Server including traditional WebSphere to Liberty **UrbanCode** to move configuration.

41

IBM WebSphere Application Server for Bluemix provides Simple Plan Options

Optimize

Develop, Test and Run

IBM Application Server on Cloud

- Code
- Data
- Runtime
- Middleware
- OS
- Virtualization
- Servers
- Storage
- Networking

Liberty Core Plan Pre-configured Instances based on Liberty Core	**$0.21/Hr or $153/Mo***
WAS Base Plan Pre-configured Instances based on WebSphere Application Server Full Profile.	**$0.30/Hr or $218/Mo***
WAS ND Plan Pre-configured Instances based on WebSphere Application Server Network Deployment	**$0.70/Hr or $511/Mo***
(Optional) Bluemix Standard Support Ticketing system with 24-hour responsiveness. Connect with IBM technical staff. Covers IBM Bluemix offerings and features.	**10% of account charges, with a minimum monthly charge of $200.00 USD**

One Instance of a plan below equates to **1vCPU with 2GB RAM, and 12Gig HD** capacity priced by **Instance-Hr**

Online Forum Support included in All Plans
Approximate monthly Price based on 720 Instance Hours per month.

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WAS for Bluemix – Single Tenant (Ordering & Billing)

WebSphere Application Server

IBM

PUBLISH DATE
05/16/2016

TYPE
Service

VIEW DOCS

This service gives you the WebSphere Application Server experience in Bluemix. Choose from Liberty, Classic, or ND installations of WebSphere Application Server, preconfigured and hosted on your own Red Hat Enterprise Linux guest.

- **WebSphere Experience**

  Reuse your WebSphere administration skills and scripts to ease your transition to cloud.

- **Shell and Admin UI Management**

  Use a secure shell, or log into the Admin Center/Console to control your WebSphere environment.

- **Use. Abuse. Repeat.**

  It's a cloud service after all. Use it for an hour. Drive it hard. Delete it. Grab a new one when you need it; it's up to you.

- **Full-Feature Application Servers**

  Leverage sophisticated enterprise features like transactions, just like you do on-premise.

- **Customize just what you need**

  We've already installed and configured WebSphere, now all you have to do is make those minor changes to get your application just the way you need it.

- **New Option : WAS for Bluemix Single-Tenant.**

  To learn more and order, contact your Americas Call Centers, local IBM representative, or your IBM Business Partner. To identify your representative or partner call 800-426-4968. For more information, contact the Americas Call Centers. Phone: 800-IBM-CALL (426-2255) Fax: 800-2IBM-FAX (242-6329).

1. Customer Order though Sales the Total Capacity for WAS for BM – Single Tenant in a specific Datacenter

2. Access thru Bluemix Catalog view after provisioning.

3. Standard DSW Billing begins. (*Not tied to Public Bluemix Subscription)

4. Customers deploy any combination of Liberty Core, Base, & ND VMs inside their WAS for Bluemix Single – Tenant up to order capacity.

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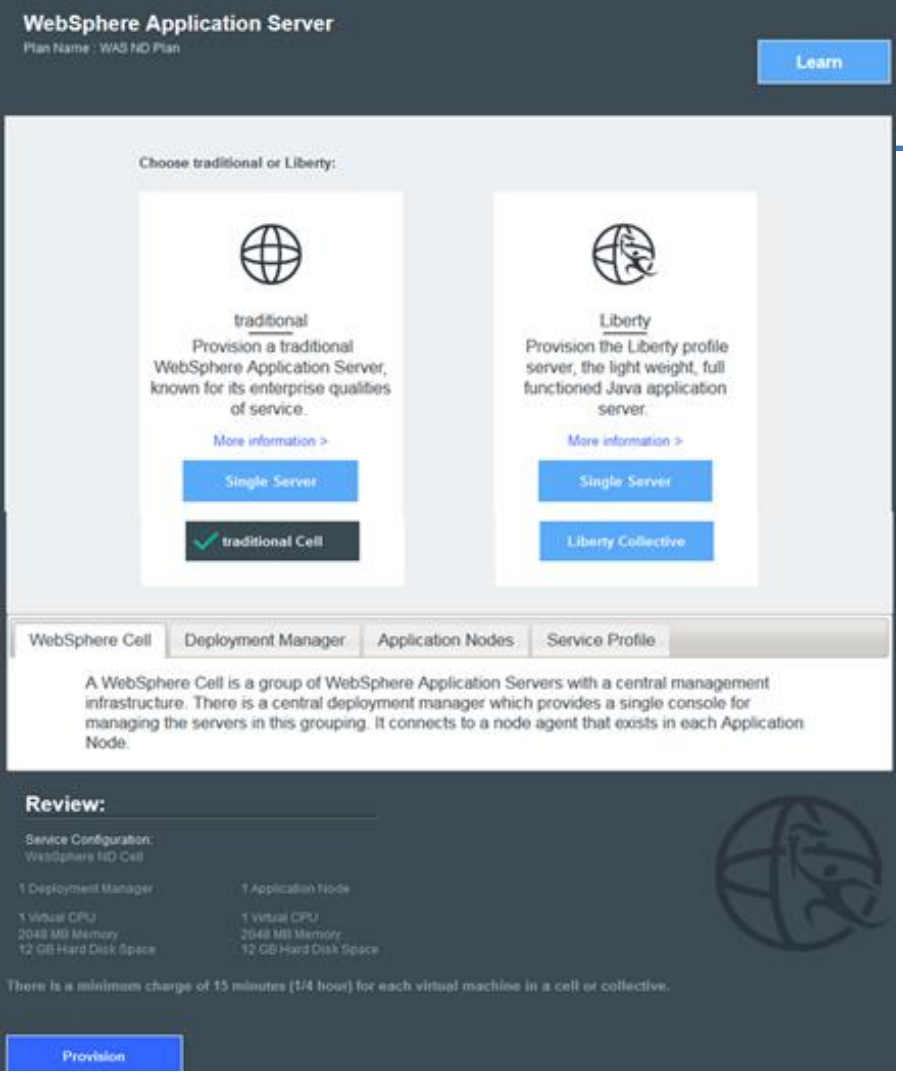
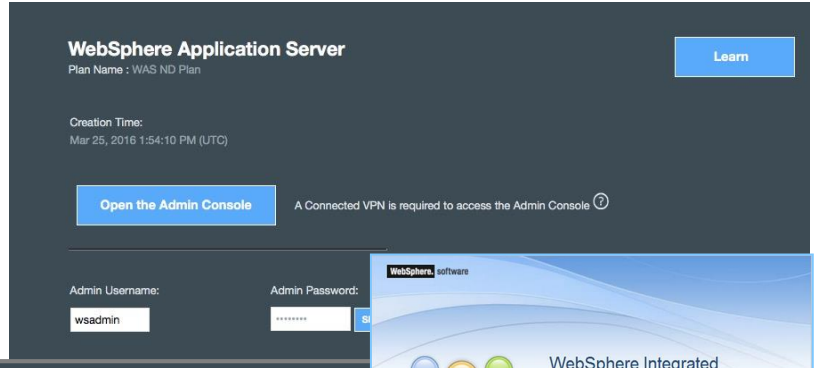
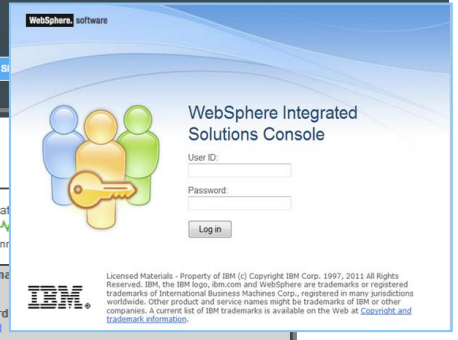
WAS Single Tenant Option in Public Bluemix

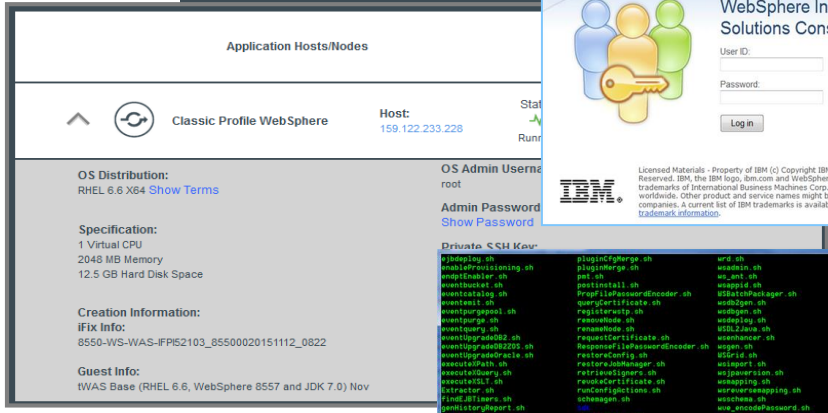
Traditional WebSphere		**Robust , Proven & Consistent Java Runtime** WebSphere Application Server provides the optimal infrastructure for a wide spectrum of emerging workloads.
Cloud Enabled		**Deploy WAS applications in the Cloud seamless** Bring Traditional WAS & Liberty on-premises application to pre-optimized off-premise hosting environment without change.
Dedicated Environment		**Visibility, control and security** Built with dedicated SoftLayer hardware to isolate compute, network & storage to keep applications secure. Align with corporate policies for single-tenancy and Industry Regulations.
Lower Cost & Risk		**Automate and Simplify to minimize errors with Full Lifecycle Mgmt** Leverage Urban Code Deploy and CLI scripting for faster, repeatable and reliable automated deployments. Clients can achieve savings labor cost and hosted hardware consolidation
Ultra-Fast Datacenter Link		**Unparalleled Network Performance To and From your Servers** [Optional] Simplify, secure, and speed up data transfer between your private infrastructure and Softlayer or create a new hybrid solution that leverages the best of your in-house resources. Wide geography options of deployment

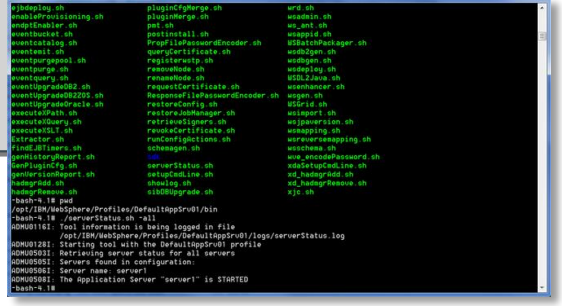
WAS for Bluemix – Single Tenant VM Provisioning







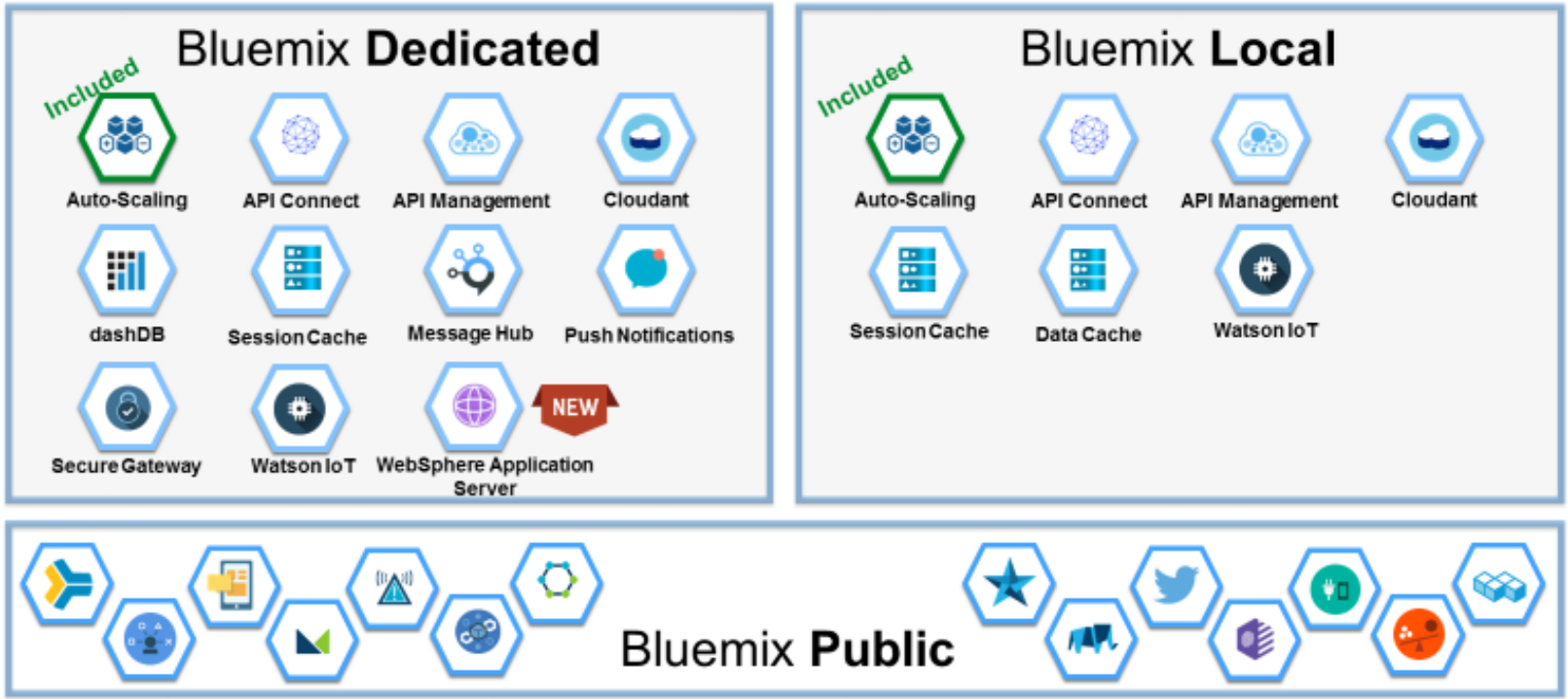




Choice of isolated services now includes WAS for Bluemix!

Enterprise ready private services – **Where** and **When** you want them

Create a true hybrid experience with **access** to over **140+ services** in Bluemix Public



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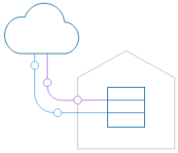
Internal Use Only

Why WAS for Bluemix Dedicated?

Eddy
Line of Business

The fastest path to your own cloud

*For **security, privacy, or performance** reasons, many enterprises need their own cloud environment. With Bluemix Dedicated you can have your own total cloud, with physically isolated hardware for everything, with **Traditional WAS Inside** as **WAS for Bluemix Dedicated .***



Feels like home

***WAS for Bluemix Dedicated** is designed to feel like another set of nodes on your network. Using either **VPN or Direct Link** technology, your Bluemix environment is securely connected to your enterprise.*

Apps and data where you need them

*Bluemix Dedicated Platform is available in **over 25 IBM Cloud data centers** around the world. That means you can keep your data in country and put **WAS for Bluemix Dedicated** and additional Bluemix services where they best serve your users.*

Dedicated to you

*Bluemix Dedicated provides physically isolated hardware in an IBM data center. **As an isolated and provisioned solution, this Bluemix environment is created just for you**. With the syndicated catalog, you can power your apps and services with a combination of **WAS for Bluemix Dedicated , dedicated runtimes, dedicated containers and services, as well as services from the public Bluemix catalog.***