



RBDMS

11/14/2018

RBDMS IN THE CLOUD

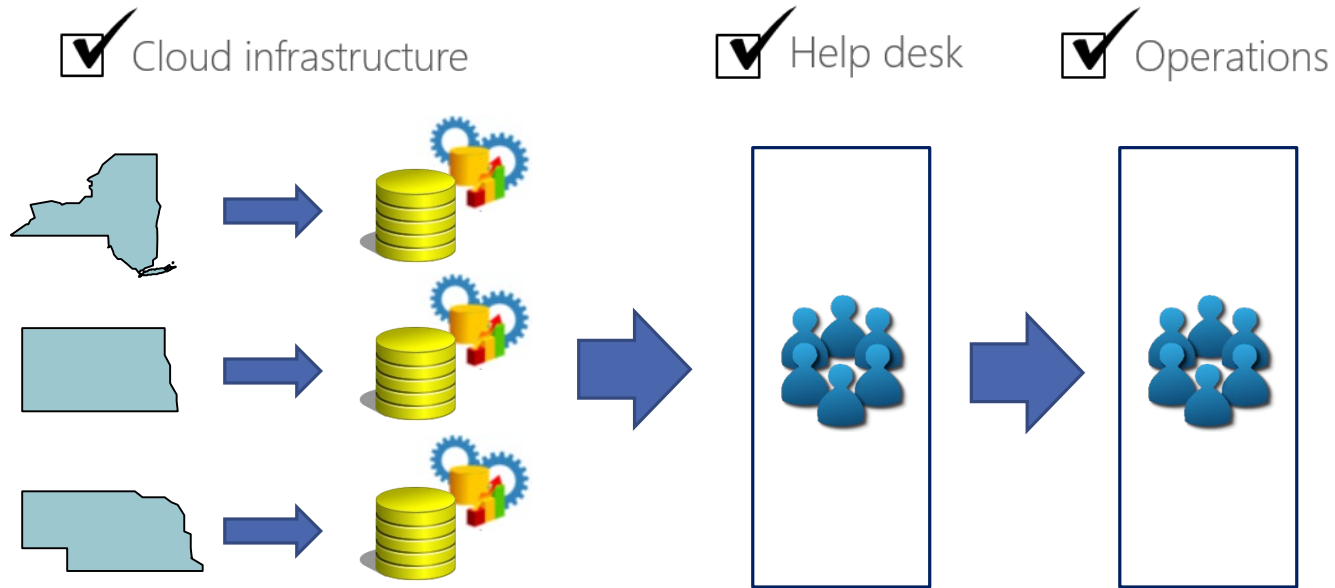
Agenda

- Benefits of Azure
- Infrastructure as a Service
- Multi – Tenant
- Multi – Tenant RBDMS 3.0 Deployment
- Cost Factors
- Multi – Tenant Estimated Environments and Cost

Benefits of Azure

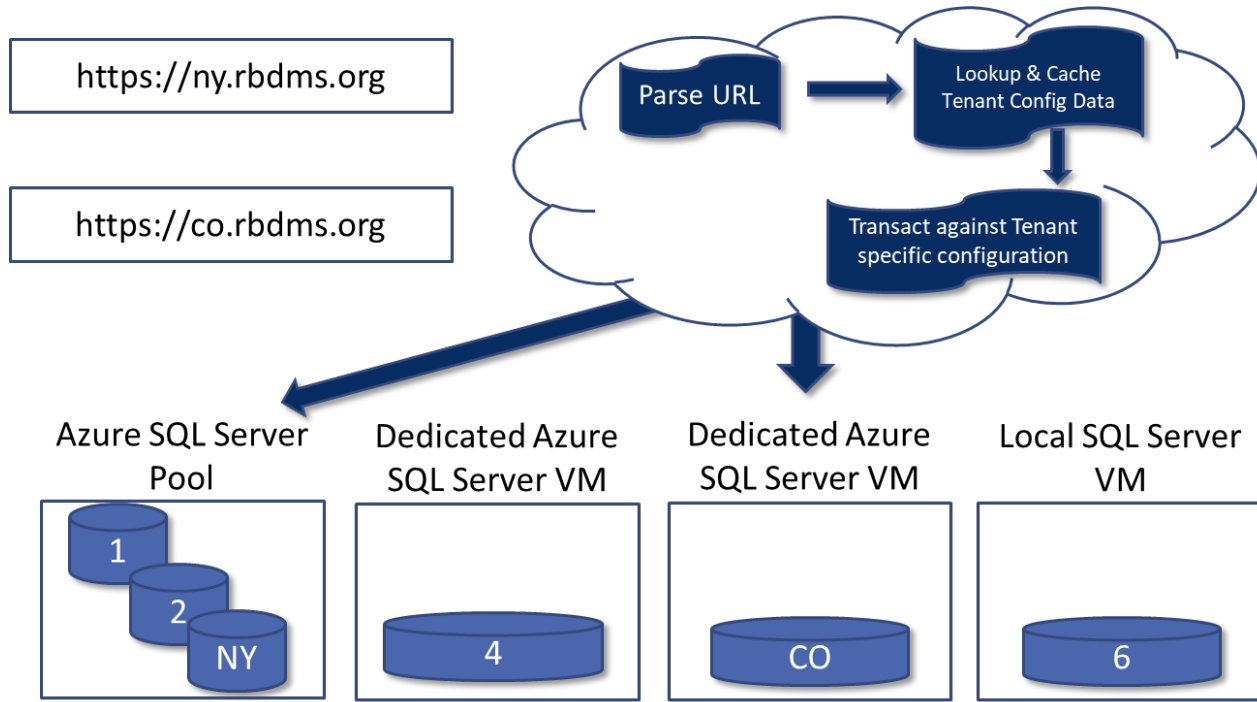
- Speed – Ability to quickly deploy machines, load balancers, etc.
 - California has the ability to build RBDMS Azure application and web servers using Powershell scripts
- Agility – Change resource sizing with the click of a button
 - California increases and decreases resource sizing based on demand
- Flexible Expenditure – Shutdown VMs in the evenings and weekend
 - California schedules VMs to be brought offline when not being used
- Security – Azure Government provides world-class security, protection and compliance services
 - Azure Government services handle data that is subject to certain government regulations and requirements, such as FedRAMP, NIST 800.171 (DIB), ITAR, IRS 1075, DoD L4, and CJIS
- Backup and DR – Replicate VMs and Data to multiple Azure Government Datacenters
 - California's primary datacenter is in Arizona and DR is located in Texas

Infrastructure as a Service



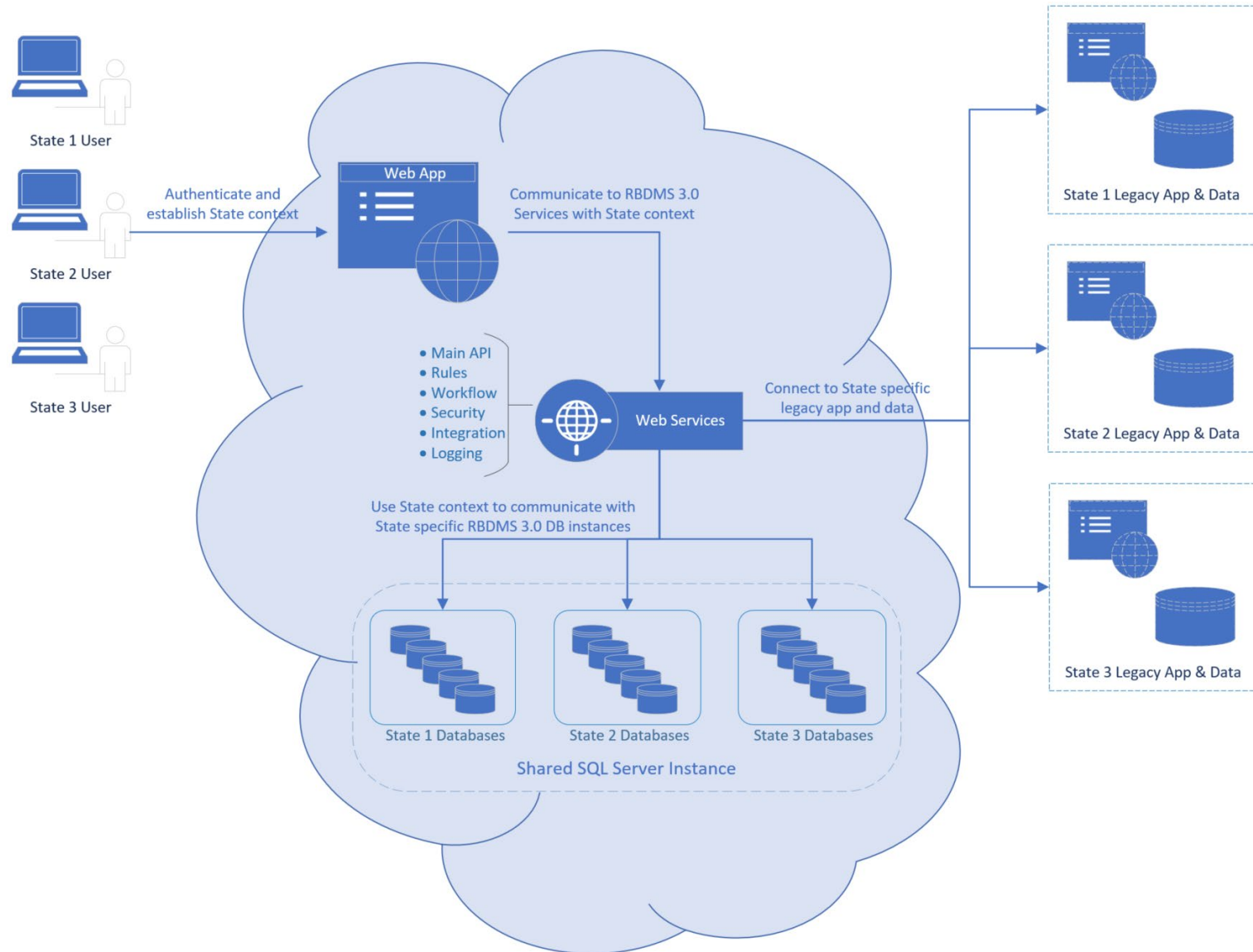
- In the RBDMS 3.0 IAAS model, clients have dedicated cloud infrastructure
- Cost savings are achieved by sharing help desk and operations resources

Multi-Tenant



- RBDMS 3.0 allows toggling so clients can maintain a high level of configuration and awareness
 - Different Authentication Models
 - Different Rules
 - Different Forms
 - Time zones
- Application changes would be required to make RBDMS 3.0 tenant aware

Multi-Tenant RBDMS 3.0 Deployment



Cost Factors & Impact

- Cost Factors
 - Number of users (Internal, External, Public)
 - Active wells
 - Upload/Download of documents or data
- Impact
 - Computing resources
 - Bandwidth
 - Storage

Multi-Tenant Estimated Environments & Cost

- Environments during peak development

Environment Name	Primary Use	Total Server Count
Production*	Production	9
Unit Integration Test*	Used by development team prior to System Test	1
Conversion	Used by conversion development team prior to System Test	1
System Test*	System Test	3
System Integration Test	Interface testing with legacy	1
User Acceptance Test	Department user acceptance testing	1
Performance Test	Performance Testing	6
Training	Used for training	1
Utility*	Build ,deployment, and FTP	3
Total		26

*Environments during M&O

- Features and Cost (IAAS)
 - High Availability for Production & Performance Test
 - Production is using the 3 year reserved pricing and the others use Pay as you Go
 - Non-Prod Environments are set to use an average of 80 hours per week
 - All disks are set to use Solid State Drives
 - Backups are only being taken for Production & Utility
 - Includes OS Licenses and 3 SQL Server Licenses
 - Estimated Azure Commercial
 - Cost during peak: ~ \$6,600/month
 - Cost during M&O: ~ \$4,100/month

Questions?

