Planning Your Cloud Migration

OBUG 2018, Kent State University

Jon-Eric Eliker, Cloud Solution Consultant
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Oracle Cloud Partner

- Management Services, Consulting in Higher Ed., Federal/Local Govt., Healthcare, Commercial
- Full Service Hybrid Enterprise Architectures
  - Data Centers (Equinix, Sungard, etc.)
  - Network/Security Services (Dyn, FireEye)
- Specialized across Oracle IaaS, PaaS and SaaS
- Accelerate Cloud Adoption & Service Consumption
- Early Adopters and Collaborate with Oracle Product Management & Development
- Active Contributors to the Oracle PACs & CABs

Oracle Cloud Customer

- Baseline (Pre-Oracle OPC)
  - Eloqua (Marketing); NetSuite & OpenAir (CRM & ERP)
- Phase 1 (2015) DX & Integration
  - Process Cloud Service (PCS)
  - Documents Cloud Service (DOCS)
  - Sites Cloud Service (SCS)
- Phase 2 (2016) Infrastructure
  - Compute & Storage Cloud Service
  - DB & DB Backup Service (DBCS)
  - Java Cloud Service (JCS)
- Phase 3 (2017) OCI, OMC & Security
  - Oracle Cloud Infrastructure – Compute, Storage, DB
  - Oracle Management Cloud
  - Identity Management
MYTHICS ACHIEVES A RECORD 46TH & 47TH ORACLE PARTNERNETWORK SPECIALIZATIONS FOR ORACLE CLOUD SERVICES

Virginia Beach VA - December 18, 2017 /PRnewswire/ -- Mythics, Inc. an award-winning Platinum Level member of the Oracle PartnerNetwork (OPN), today announced it has achieved Oracle Specializations for Oracle Management Cloud and Oracle Infrastructure as a Service (IaaS). Through the OPN Specialization process, Mythics has demonstrated experience, expertise and success in selling, deploying and managing Oracle Cloud Services in mission critical public sector and commercial environments.
**Oracle’s Biggest & Best Cloud Partner**

- Most Cloud transactions by any Oracle partner – FY15, FY16, FY17, FY18
- Oracle Cloud Advisory Board – inaugural & sustaining member
- Partner Advisory Councils – OMC, IaaS, PaaS
- Customer Advisory Board – FMW
- Oracle Programs – MSP, Velocity, Solution Hub, JumpStart
- Most Oracle Specializations of any partner (51)
  - Applications (4) (two in EBS)
  - Cloud (4)
  - DB (9)
  - FMW (16)
  - Engineered Systems (5)
  - Server & Storage (7)
  - Industry (6)

**Customer Use Cases**

- Application Migration Assessment/Planning
- Roadmap & Implementation Planning
- Infrastructure (Networking, Compute, LB)
- Application Migration (OTS & Custom Apps)
- Application Integration (ICS, OIC, REST, SOA)
- Data Management (DB, ADW, DIPC, GGCS)
- Application Development
- Management (APM, IM, ITA, LA, Orch)
- Security (IDCS, MFA, SMA)
Cloud Methodology & Approach
Standardized approach to Cloud Migrations — Defined and refined: project after project

**Delivery Phases**

1. **Evaluate** (Discover/Recommend)
   - Readiness analysis
   - Discovery
   - Cloud Strategy/Roadmap
   - Success Metrics
   - Pain Points
   - TCO/ROI
   - Architecture/Sizing

2. **Plan** (Strategy/Design)
   - Prioritization
   - Data Classification
   - Business Logic
   - Change Mgmt.
   - Migration Planning
   - Infra. Requirements
   - Security Requirements
   - App. Requirements

3. **Transform** (Migrate/Transition)
   - Deploy
   - Data Migration
   - App. Integration
   - Functional Validation
   - Pilot Testing
   - Transition Support
   - Cutover and Decom.
   - Tuning

4. **Run** (Ops/Improvement)
   - Staff Training
   - Monitoring
   - Incident Management
   - Provisioning
   - Optimize (Metrics)
   - Upgrades
   - Patching

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Evaluate – Cloud Assessment

**Purpose**

The purpose of the topics and data requested during this engagement are to review the capacity, architecture, infrastructure, and strategy to support your future business objectives.

**Duration**

Business Session – IT/Cloud Strategy, Process, Success Measures, Content Management

Technical Session – Present State Infrastructure, Future State, IT Operations

**Resources**

- Program/Project managers
- Business Stakeholders/Owners
- IT Owner(s) – Technical Leads, Support Admins

**Main Engagement Activities**

- Business Drivers – Datacenter/Cloud Strategy
- Process Enhancements and Extensions
- Supporting IT Infrastructure & Facilities
- Measurement Criteria
- Present State Infrastructure
- Future State Infrastructure Objectives
- Operating System Upgrades
- Database/Application Upgrades
- DevOps – Management & Development Tools
- Distribution of Existing Application
- Server Resource Utilization (CPU/RAM/Storage)
- Virtualization/Resource Sharing
- Disaster Recovery/High Avail/Backup Strategy
- Operational Processes
- Change Management
Evalulate – Readiness Planning

Application Readiness?

No

KIII
- Eliminate
  - Documentation Plan
  - Disposition

Sustain
- Retain
  - Life Support
- Relocate
  - Infrastructure Relocation

Modernize
- Reprioritize
  - Increase same location
  - Alternate location
- Reprioritize
  - Migrate to Cloud

Validate Security & Accreditation Requirements

Deployment Model?

Public Cloud

Private Cloud

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Plan – Migration Planning

Approach driven by timeline, complexity, preference

...or...

Dev
Test
Prod

Prod
Test
Dev

App 1
App 2
App 3

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Transform – Migration Accelerators

Data Migration Tools
- GoldenGate
- Data Integration Platform Cloud
- Storage Gateway

Server Migration Tools
- Rackware
- Terraform
- Sureline Systems
- Ravello

Cloud Network Connectivity
- Equinix
- Megaport
- FastConnect

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Transform – To Cloud

ASHBURN

AD 2
VCN Main
Subnet Apps1
Subnet DMZ1
LB Web
Web1

Subnet DMZ2
Web2

Subnet Apps1
OEM1
Reports1
Admin1

Subnet DB1
RAC1

Subnet DB2
RAC2

On-prem

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New or expanded capabilities

– Advanced DNS
  • Fast, world-wide
  • Private pools for DDoS safeguard
  • Vanity name servers

– Shared file storage
  • Highly-elastic (auto-expanding to 8 EB)
  • Highly-available, durable

– Enhanced Fault Tolerance/HA
  • Load Balancer with SSL offload/passthrough
  • Redundancy across Availability Domains, Regions

– System/performance monitoring
  • Oracle Management Cloud with Log Analytics, Application Performance Monitoring, IT Analytics, and more

– Applications
  • Java Cloud Service
  • Application Container (Python, .NET, Node.js, Java, PHP, and others)
Planning Considerations

– Scale of migration
  • Data volume
  • Host count
  • Number of environments

– Migration philosophy
  • Lift & Shift vs. Move & Improve
  • New network or extension?

– Project timeline
  • Constraints from uptime commitments
  • Licensing/renewals
  • Capacity-need drivers

– Cutover window

– Deployment strategy
  • By environment
  • By application

– Application configuration
  • OS versions
  • Migration options

– Integration requirements
  • Bandwidth needs
  • Network design/interoperability

– Management model
  • Mirror on-prem or cloud-native
  • Granularity