

# Identifying Your Migration Options: the 6 Rs

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Part of AWS All Stars Certified Elite

B2B Media - Sharks in IT

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# Who am I

## Bogdan Naydenov

AWS All 5 AWS Certificates holder currently Architect at Progress Software - Platform DevOps team

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- All views and opinions in this presentations expressed are my own do not represent my employer's view in any way.
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ATTENTION!

# AGENDA

In this session, I will cover:

- The 6 Rs of migration
- Discuss each of 6 Rs strategy
- Consideration when to select various Rs

# 6 Rs migration strategy

## 6 Rs migration strategy

1



- Customers will keep host/application in their source environment
- Minimal analysis/validation of scope and application affinity
- Dependency on integrating service management

### Retain (Revisit)

2



- Application and host decommission on source
- No migration to target
- Application owner approvals needed

### Retire

3



- Like for like application migration to target cloud
- Minimal effort to make the application work on the target cloud infrastructure (minimal application layout change)
- Storage migration will be needed (without conversion)

### Rehost

4



- Up-version of the OS and/or database onto the target cloud
- Some level of application changes
- Application reinstallation on the target
- Database to Amazon RDS

### Replatform

5



- OS and/or database porting
- Middleware and application change to cloud service offering
- Data conversion; Database transition to MySQL, Amazon Aurora, or other

### Refactor

6



- Application architecture changes may also require Up-version or Porting
- Use SaaS-based offerings, application architecture changes may require porting
- Middleware, data modernization; application consolidation/stacking

### Rearchitecture (Replace)

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# Assessment-based approach

## Assessment-based approach

- Financial assessment
- Security assessment
- Compliance and regulatory assessment
- Business assessment
- Technical assessment
- Contractual assessment

### Operations

Time spent on hardware acquisition and maintenance  
Time required to perform hardware audits  
Change Management streamlining process gains  
Time spent on remediation of outages  
Time spent deploying new versions of code  
Performance of application

### Business

Time required to launch new application in Production  
Achieved SLA of application  
Customer service experience rating  
Increase in revenue generated by new app  
TCO of application

### Infrastructure

Time spent performing capacity planning exercises  
Simplicity of architecture  
Ability to change architecture rapidly

### Security

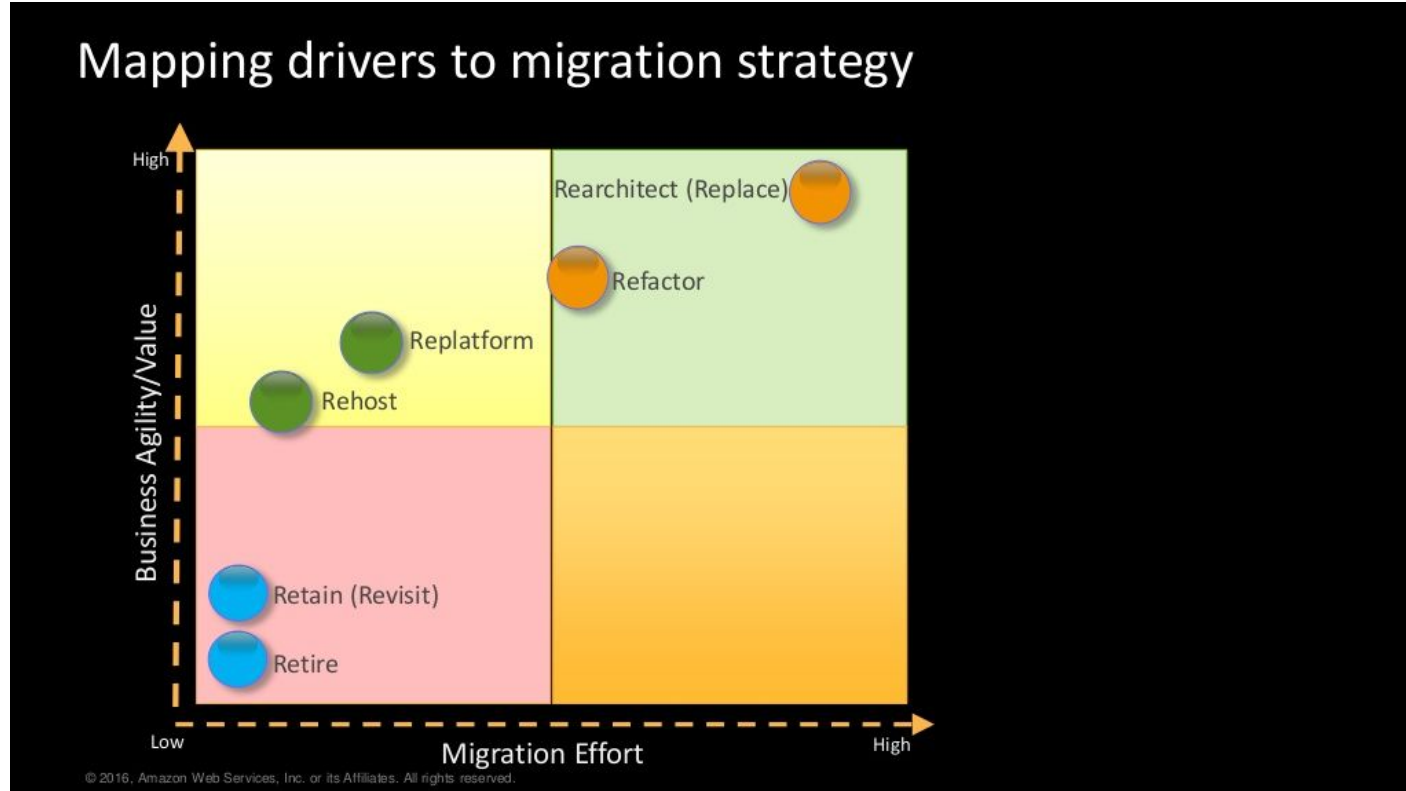
Risk Exposure  
Security Blast Radius  
Ease of enforcing least access privilege  
Overall security posture of application  
Ease of managing security controls  
Time spent applying security patches

# Application consideration

## Application considerations

- What is the application roadmap?
- What are the costs associated with this application?
- What improvement options are available to enhance service?
- Are there any risks of not making changes to this application?
- Where does this application align with the technology goals of the organization?

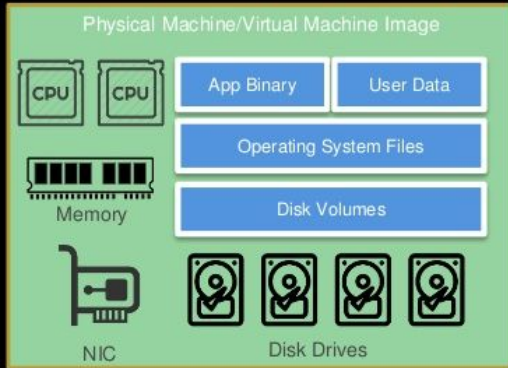
# Mapping drivers to migration strategy





# Retain

## Retain



- Unsupported OS and applications
- Legacy applications that do not have a business justification for migrating to the cloud

Retain

Retire

Rehost

Replatform

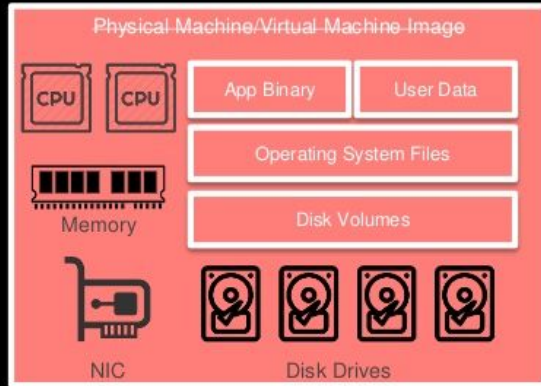
Refactor

Rearchitect  
(Replace)

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# Retire

## Retire



- Duplicate resources due to M&A
- Resources part of an existing decommissioning program scope
- Clustered hosts for DR purposes
- Alternative HA hosts

Retain

Retire

Rehost

Replatform

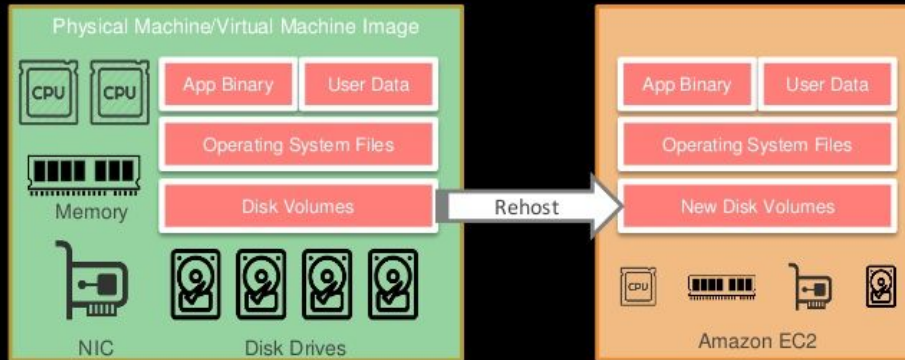
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# Rehost

## Rehost



- Servers running packaged software
- Applications without an active roadmap
- Ad hoc, dev, and test environments

Retain

Retire

Rehost

Replatform

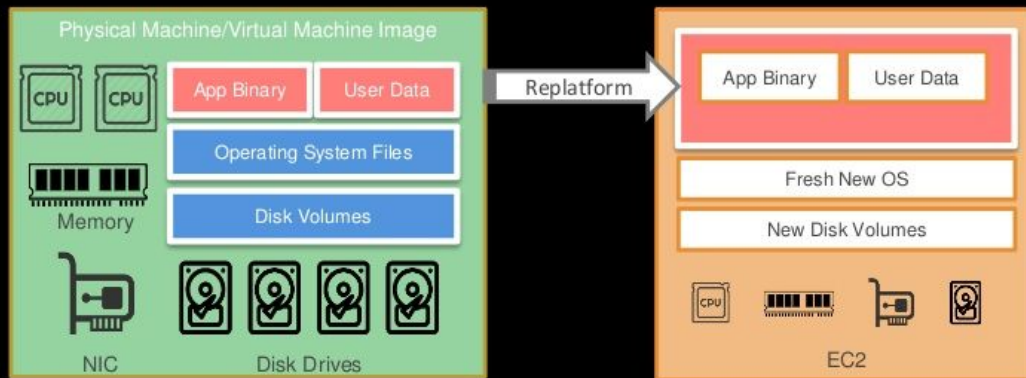
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# Replatform

## Replatform



- Changing the OS or DB engine
- Upgrading to the latest release of an application
- Upgrading the OS from Windows 2003 to Windows 2008/2012
- Upgrading from Oracle 8 to Oracle 11

Retain

Retire

Rehost

Replatform

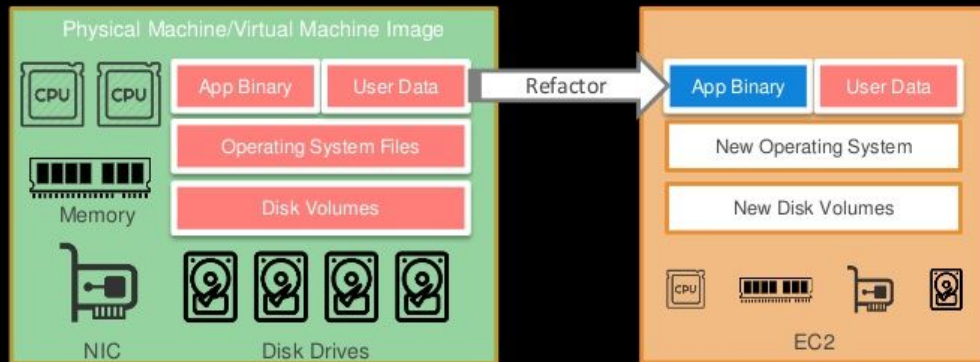
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# Refactor

## Refactor



- Changing middleware
- Recoding application components
- Changing application code to utilize cloud native feature for performance, scaling, agility

Retain

Retire

Rehost

Replatform

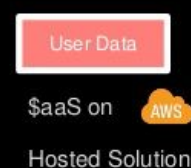
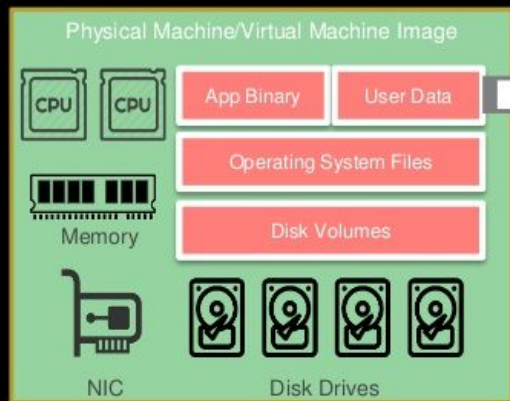
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Rearchitect  
(Replace)

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# Rearchitct (Replace)

## Rearchitct (Replace)



- Changing from RISC to x86
- Changing application components
- Rebuilding application architecture
- Replacing the application with a SaaS offering or COTS product
- Purchasing a cloud-compatible license



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**Thank you**

**Q & A**