

VMWare Launch - Working with Cloud Application Options – Migration vs. Modernization (6 R's)



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Class Roadmap

More Application
Options Than
Ever Before





Application Portfolio Assessment



- Helps with planning for the migration of an enterprise's system and software estate to the Cloud
- During this process, applications created or utilized by the enterprise will be reviewed for migration disposition
- Assessment may be completed for a small subset of the apps (as a starting point or proof of concept) or may include the entire estate



Application Portfolio Assessment



- Through this analysis, a disposition for Cloud readiness will be assigned to each app (based on several factors which we'll review shortly)
- There may also be a determination of which apps are best suited to move first, on the way to defining a plan for migration of all apps in waves
- The assessment will likely include an interview with the application owner (to gain SME knowledge about the application)

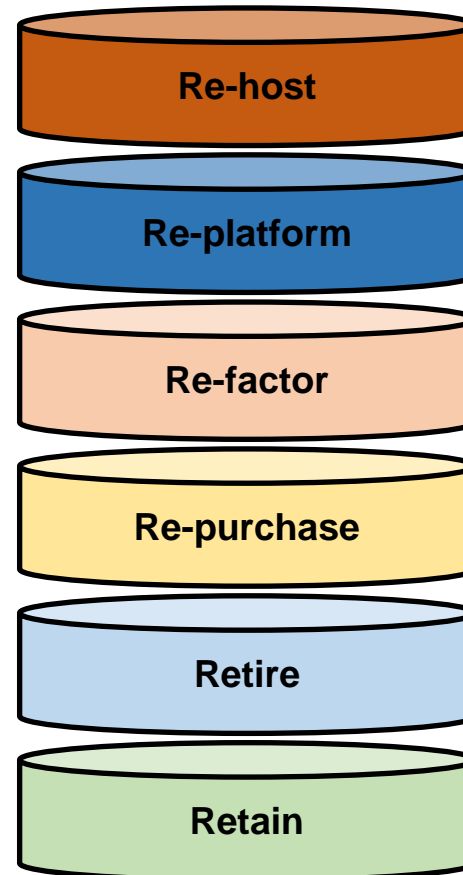


- Will likely include
 - Review of the current state architecture
 - Discussion with stakeholders about roadmap and plans for target state
 - Discussion on expected timing

- The goal is to ensure that migration efforts are focused on the activities that will bring greatest business benefit against optimized cost



The 6 R's – Application Migration Strategies



See <https://docs.aws.amazon.com/whitepapers/latest/aws-migration-whitepaper/the-6-rs-6-application-migration-strategies.html> for additional information



Re-host

- AKA “lift & shift”
- For all intents and purposes, involves recreating the on-premise infrastructure in the Cloud
- Sometimes used to expedite retirement of a data center



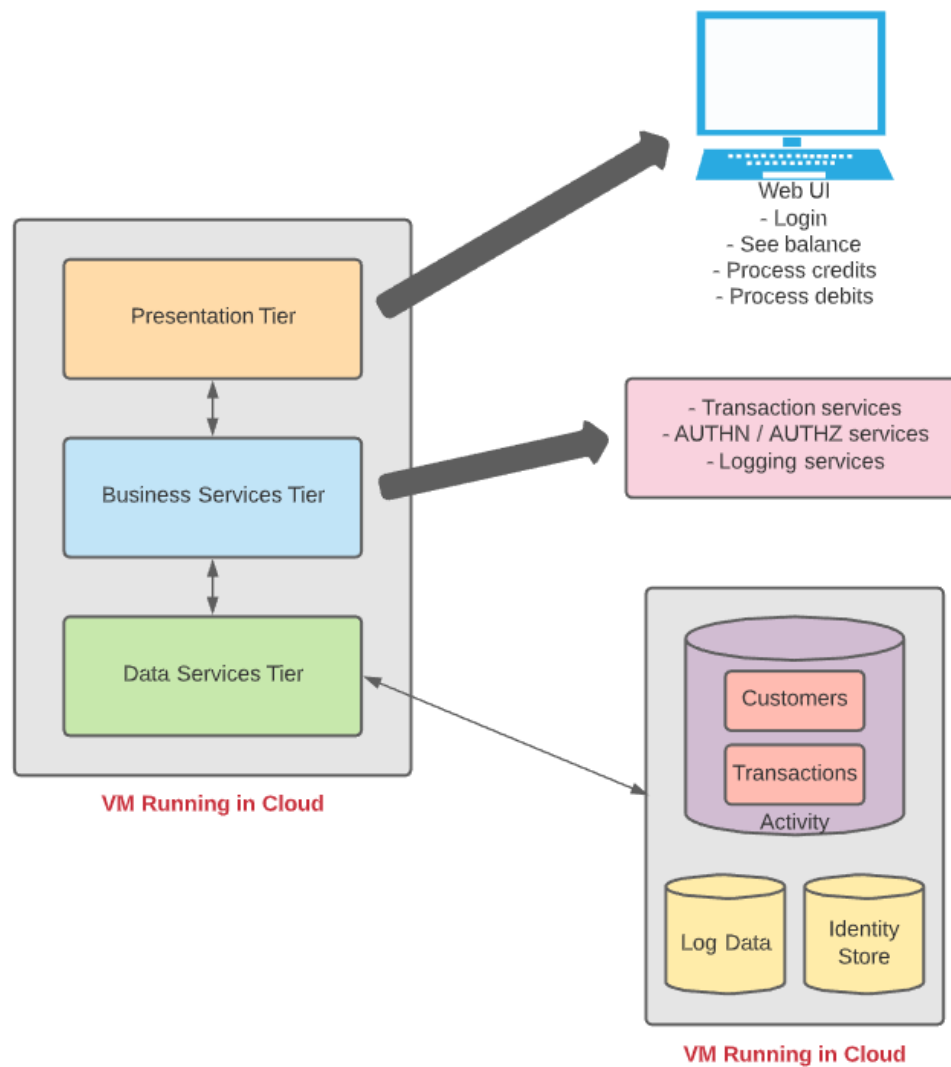
Re-host

- Can be a mechanism to quickly migrate workloads and see immediate cost savings, even without Cloud optimizations
- There are third-party tools available to help automate the migration
- Once the application is in the Cloud, it can be easier to apply Cloud optimizations vs. trying to migrate and optimize at the same time



Re-host

The Banking App





Re-platform

- AKA “lift, tinker & shift” or “lift & fiddle”
- Core architecture of the application will not change
- Involves recreating most of the on-premise infrastructure in the Cloud with a few Cloud optimizations



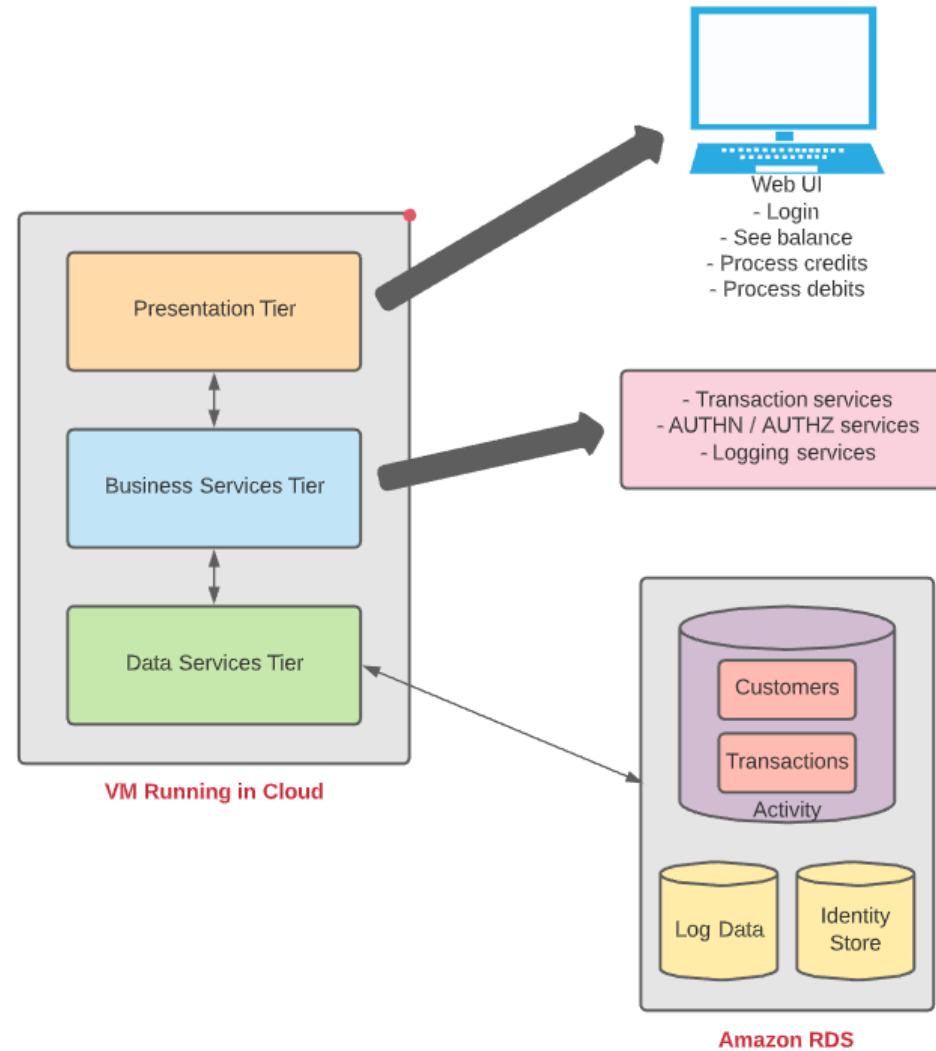
Re-platform

- Those optimizations will involve a move to one or more Cloud native services for a specific, tangible business benefit
- A common example is moving to a managed database (e.g. Relational Database Service, or RDS, in AWS)
- Enables migration speed while providing cost savings or benefit in a targeted portion of the application's architecture



Re-platform

The Banking App





Re-factor

- Involves rearchitecting the application to maximize utilization of Cloud native optimizations
- Likely the most expensive and most complex of the available options
- The application profile needs to fit, and business value must be identified commensurate with the cost required to execute



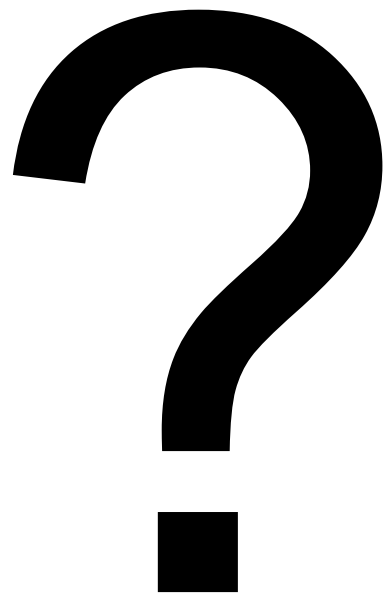
Re-factor

- Good option if the application can benefit from features, scalability or performance offered by the Cloud
- Examples include rearchitecting a monolith to microservices running in the Cloud or moving an application to serverless technologies for scale



Re-factor

The Banking App



To Be Determined – This will be the topic of the Borathon



Re-purchase

- Good fit for applications that are candidates for moving from on-premise licensing (for installed products) to a SaaS model
- Often applications that have been installed to manage a specific type of business capability
- Examples can include Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), HR or e-mail (among others)



Retire

- In some cases, an enterprise may have a “healthy” percentage of legacy applications that are no longer being used or maintained (especially for larger organizations)
- When completing the Application Portfolio Assessment and associated interviews with application owners, look for opportunities to recommend retire of the unused legacy apps
- This type of application can represent a “quick win”



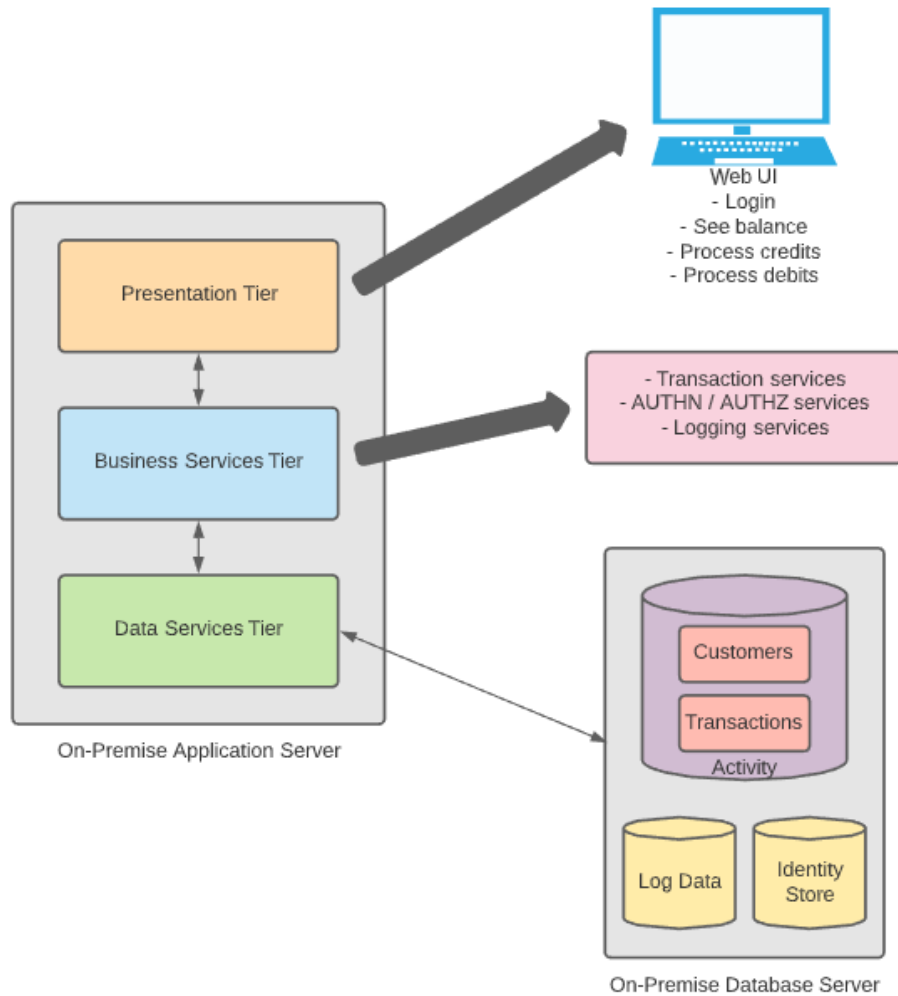
Retire

- The associated savings can potentially be advantageously factored into the business case for the Cloud modernization effort
- Finally, retiring unused apps reduces attack surface area from a security perspective



Retain

- Applications that must remain in place but that cannot be migrated to the Cloud without major refactor
- This type of application profile may prevent the ability to completely move out of the data center (at least in the interim)
- From a cost perspective, it can be difficult for an enterprise to take on both the operating expense of Cloud while continuing to carry the capital expense of a data center and on-premise infrastructure
- The hybrid model can be a good solution to support where needed



If you wanted to sell an investment project to the business for rearchitecting this application for migration to the Cloud, what are some of the potential benefits you might put forth as justification?

Exercise (15 - 20 min.) – In your assigned breakout room, spend a few minutes as teams brainstorming ideas. Organize them into technology benefits and business benefits.



Break (10 min.)

THANK YOU



