

ENTERPRISE CLOUD NATIVE MATURITY MODEL

Superior digital experiences must be built, they can't be bought

Level 2 - Cloud Friendly

- Applications decoupled from the underlying infrastructure, and all major application components (or tiers) should be decoupled from each other.
 - *Ex. decouple application from storage and data management tiers. This may also include configuration data, logs.*
 - *If the application is multi-tenant, data tier should be shared across tenants.*
 - *Decouple the application from network constructs. Use a naming service, rather than rely on IP addresses and ports. This may simply be DNS across tiers, or injecting IP Addresses and ports as part of the deployment (this works for static application components), or a service naming, registration and discovery scheme.*

Level 1 - Cloud Ready

- Self-contained application
- SSO/Security
- Create immutable application images for the application
 - *Ex. If you are using an application container, like Docker, immutable container images can be built using tools like Jenkins.*

Level 0 - Legacy Apps on Dedicated Infrastructure

Level 3 - Cloud Resilient

- Proactive failure testing
- Cloud Agnostic runtime
- Bundled metrics and monitoring
- Abstract application blueprints, deployment policies, scaling policies, affinity and placement rules
- Each application service must be elastic and resilient
 - *It has multiple instances and can survive instance failures*
 - *The application designed in such a way that failures in one service do not cascade to other services*

Level 4 - Cloud Native

- Microservices Architecture
- API-first design
- DevOps
- Self Healing
 - *Application is able to detect or anticipate changes and react to them in a fully automated manner.*
- Separate out application management & control functions, from the application itself
- Easy migration across providers

Moving to Cloud Native Platforms is more than a technology transformation, it's a new way to develop products