

# Testeando en la nube

Cómo aprovechar las ventajas de la nube para las pruebas y que escenarios nuevos se habilitan. Uso de la tecnología para el aprovisionamiento de ambientes y la telemetría para pruebas en producción.

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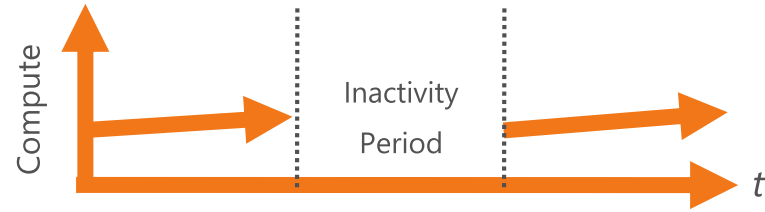
# Cloud Computing Patterns



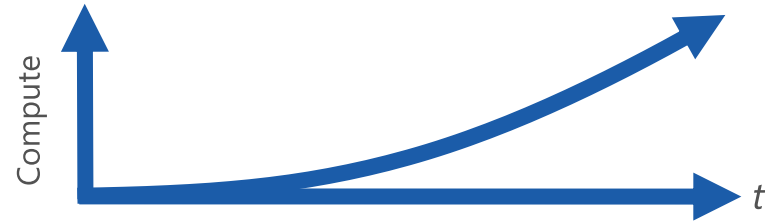
# Why cloud computing?



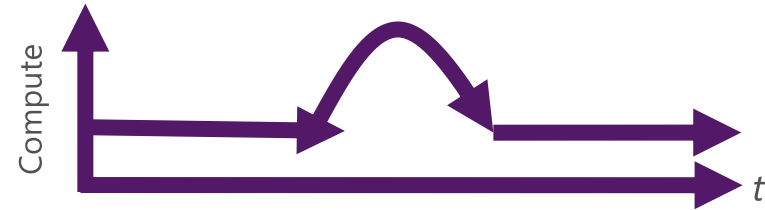
# Scale



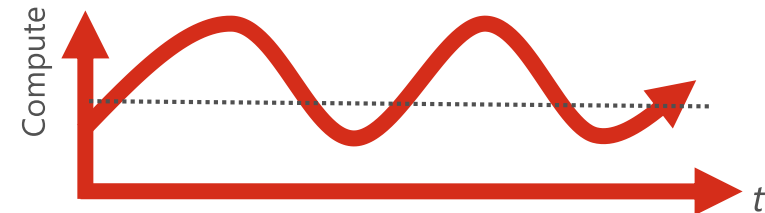
On and Off



Growing Fast



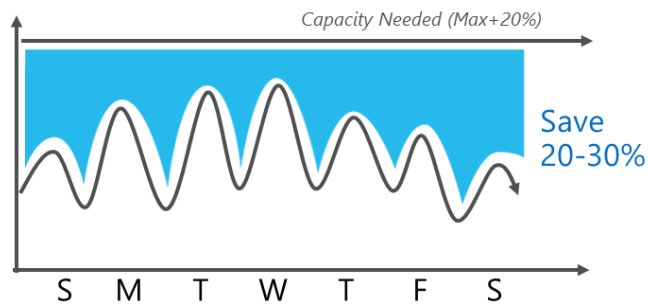
Unpredictable Bursting



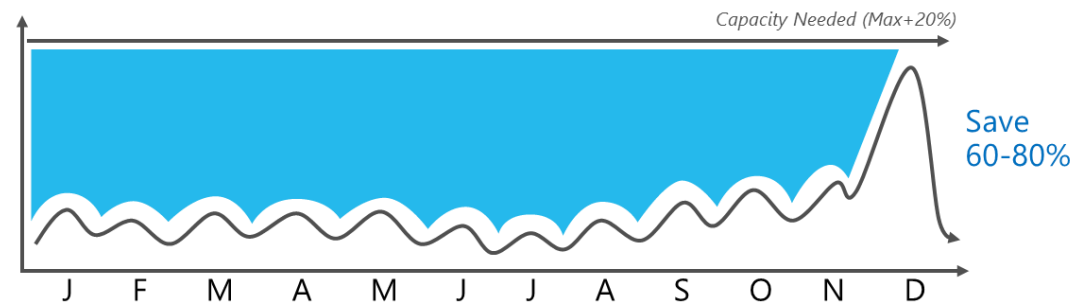
Predictable Bursting

# Economics

Individual Application  
Dev/Test Environment in the Cloud



Application Portfolio  
All Dev/Test *and* Production Environments in the Cloud



Your Application Portfolio – What does it look like?

On and Off (30%)

Growing Fast (15%)

Unpredictable Bursting (25%)

Pred. Bursting (20%)

24x7 Steady

# The converged DevOps lifecycle



# DevOps habits and practices

## PRACTICES

### Automated Testing

Continuous Integration  
Continuous Deployment  
Release Management

## PRACTICES

Usage Monitoring  
Telemetry Collection  
**Testing in Production**  
Stakeholder Feedback

## PRACTICES

Code Reviews  
**Automated Testing**  
Continuous Measurement

## PRACTICES

Application Performance Management  
Infrastructure as Code  
Continuous Deployment  
Release Management  
Configuration Management  
Automated Recovery

*FLOW OF  
CUSTOMER VALUE*

*TEAM  
AUTONOMY  
& ENTERPRISE  
ALIGNMENT*

*BACKLOG refined  
with LEARNING*

*EVIDENCE  
gathered in  
PRODUCTION*

*MANAGED  
TECHNICAL  
DEBT*

*PRODUCTION  
FIRST MINDSET*

*INFRASTRUCTURE  
is a FLEXIBLE  
RESOURCE*

## PRACTICES

Enterprise Agile  
Continuous Integration  
Continuous Deployment  
Release Management

## PRACTICES

### Testing in Production

Usage Monitoring  
User Telemetry  
Stakeholder feedback  
Feature flags

## PRACTICES

Application Performance Management  
Infrastructure as Code  
Continuous Delivery  
Release Management  
Configuration Management  
Automated Recovery

# Test Automatizado

Test plans + cases

Ejecución de Unit Tests en el reléase pipeline

Inclusión en el pipeline de reléase

**Visual Studio Team Services**



# Performance & Load Test

Ejecutar pruebas de carga en Azure

Simular usuarios desde distintas geografías

Incluir la prueba de carga en el pipeline de Release

**VSTS Load Test Service + Visual Studio**

Test en producción

Hypotesis-Driven Development

Costo de reproducir ambiente productivo en test

**Application Insights**

# Ambientes de prueba en Azure

Automatizar el despliegue de ambientes de prueba

Definir políticas, imágenes, formulas, artefactos

Automatizar el encendido y apagado de los laboratorios de prueba.

Self-service de ambientes para los testers

**Azure DevTest labs**