Platform Acceleration Lab

Become Cloud Native with an immersive, best practices bootcamp

Platform Acceleration Lab – Pre-Requisites

REQUIREMENTS TO EFFECTIVELY TAKE THE PLATFORM ACCELERATION LAB TRAINING

- ✓ Developers and Lead Developers
- ✓ Proven experience in building and deploying modern software
- ✓ Familiar with design patters, domain driven design, component-based architecture and evolutionary architecture.
- ✓ Experience developing applications using Java 6 and above, Java Enterprise Edition, Java / Spring.

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Market Dynamics

PAL HELPS ORGANIZATIONS ADDRESS IMPORTANT IT PRODUCTIVITY CHALLENGES

Business Challenge

Organizations are burdened

By legacy technologies and software development processes, resulting in protracted development cycles and low developer productivity

72% of developers spend < 3 hours a day productively writing code

Business Opportunity

Organizations can benefit

From a leading cloud-native platform, accelerated adoption of modern software development practices, and faster time-to-market and competitive advantage

+50% Increase in developer productivity

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Platform Acceleration Lab – About the Offering

PAL HELPS CUSTOMERS ACCELERATE THEIR DIGITAL TRANSFORMATION

1. Teaches developers and architects how to develop cloud-native applications and modernize legacy applications

2. Enables customers and partners through “doing it” rather than “talking about it”

3. Instills Pivotal core practices: test driven development, continuous integration and delivery, pairing, standups, retrospectives

4. Conducted in a hands-on setting with experienced Dell EMC practitioners and solution architects

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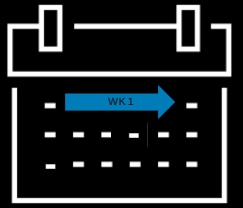
Platform Acceleration Lab – Takeaways

- ✓ Understand what Cloud Foundry is and how it runs applications
- ✓ Learn about key application-centric Cloud Foundry constructs: applications, manifest, build-pack, service instance, binding, domain, route, environment variables
- ✓ Perform app portfolio analysis in an agile way, making use of the “snap analysis” technique
- ✓ Learn how to avoid analysis paralysis
- ✓ Experience common impediments to running an application on Cloud Foundry, and overcome them
- ✓ Learn how to identify, codify, and make use of reusable patterns for building Cloud Native applications
- ✓ Learn how to evolve monolithic applications to be Cloud Native

Platform Acceleration Lab – Topic Coverage



Week 1: Cloud-Native Developer

CLOUD FOUNDRY, SPRING BOOT, CONCOURSE

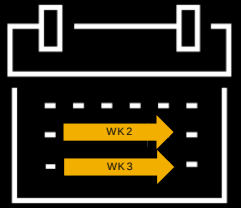
- Best Practices / Architecture
  - 12-Factor applications
  - Domain Driven Design
  - Evolutionary Architecture
  - Test First Development (TDD)
- Pivotal Cloud Foundry Concepts
  - Applications
  - Buildpacks
  - Manifests
  - Organizations and Spaces
  - Users and Roles
  - Domains and Routes
  - Services
  - Environment variables
- Continuous Delivery / Integration
  - Concourse Build Pipeline
- Microservices
  - Resilience
  - Scaling
  - Deployment
  - Replaceability
  - Organization Alignment
  - Service Versioning
  - Service Reuse

SPRING CLOUD SERVICES

- Service Discovery
- Service Configuration
- Cascading Failures
- Service Security
- Service Monitoring
- Distributed Tracing

Platform Acceleration Lab – Topic Coverage

Week 2 – Week 3: Cloud-Native ‘Coding / Application’ Architect



APPLICATION PORTFOLIO ANALYSIS

- Portfolio Analysis
- Application Snap Analysis

RE-PLATFORMING

- Packaging, Build & Deployment
- Configuration
- Bootification
- Data Integration and Data Access Techniques
- Local & Distributed Transactions
- File System Access
- Logging
- Handling Batch and ETL Jobs
- Worker Process and Threading
- External Integrations
- Instance-Specific State
- Mavenization / Gradling
- Security

MODERNIZATION

- Struts to Spring
- Strangling The Monolith
- Microservices
- Data Refactoring Patterns
- Dual Data Storage / Single DB versus multiple DB
- Event Storming
- Event Shunting
- Starving the Event Stream
- Facades
- Event Decorators
- Handling User Interfaces
- Branch By Abstraction

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Platform Acceleration Lab – Customers Benefits

- Accelerate your transition to teams of Cloud-Native developers and architects

- Increase developer productivity and reduce software development costs

- Reduce software maintenance costs through higher-quality software

- Re-platform and modernize existing applications and reduce software operational costs

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