



## Syntel's Cloud Foundry Practice

- Cloud Foundry is an open source cloud computing platform based on the philosophy “build once, deploy anywhere” — meaning that applications built on Cloud Foundry will run on any other instance of Cloud Foundry. The key advantage is extreme application portability between public and private clouds, or between public cloud providers.

Pivotal Cloud Foundry (PCF) is a commercial version of Cloud Foundry that can be deployed on both public and private cloud, and includes installation and administration tools not available in the open source version. Pivotal Cloud Foundry is also available as a web service (Pivotal Web Services) through Amazon Web Services. However, no matter how powerful the platform, you need an experienced partner to implement and customize the solution to meet your organization's unique needs.

### Syntel's Cloud Foundry Offerings

Syntel has implemented PCF for clients in many different industries. Syntel's offerings consist of:

#### Roadmap Consulting

- Impact analysis for applications moving to Cloud Foundry
- Portfolio analysis prescribing suitability for public, private, or hybrid cloud environments
- Reference architecture and roadmap creation
- Process consulting for DevOps and continuous integration & deployment (CI/CD)

#### Product Engineering Services

- DevOps employing the SyntBots® automation platform to simplify tool implementation, build, and deployment
- Deployment of Cloud Foundry components
- Implementation of cloud-native guidelines
- Application lifecycle management setup using CI/CD tools
- Ready-to-use test cases for non-functional testing of Cloud Foundry-based apps

#### Modernization and Migration

- Cloud Migration Factory for mass migration of Cloud Foundry deployments
- Automated code migration rules for basic cloud compatibility
- Dedicated labs for Cloud Foundry environment simulations
- Microservices implementation to fulfill non-functional requirements
- Configuration and implementation of auto scaling and cloud bursting

### Business Benefits

- 90% reduction in analysis effort
- 30% reduction in migration effort
- 95% reduction in SME time
- 35% quality improvement

### The Syntel-Pivotal Partnership

Syntel is a Pivotal advanced system integration partner with deep experience deploying Cloud Foundry in private and public environments. Our reference architecture and accelerators align with PCF for scalability, maintainability and availability, and our trained teams can develop and architect Cloud Foundry applications using 12-factor app guidelines and Microservices architecture.

## Syntel in Action

Reducing Costs and Improving Time to Market for a Leading U.S. Retailer

### Challenges

Cycle times for the client's application development, testing and deployment were quite high, resulting in delayed rollouts of new business functionality, as well as high development and maintenance costs. Their goals were to:

- Reduce time to market for applications
- Reduce high server maintenance costs
- Make applications scalable to adapt to their rapidly growing business
- Manage applications like products, and not traditional IT projects
- Automate environment provisioning for end-to-end application management

## Syntel's Solution

Syntel leveraged the unified cloud transformation model to build and deploy the client's applications to cloud. Syntel devised a Cloud Transformation Factory model to accelerate end-to-end product management on Pivotal Cloud Foundry. Our solution included:

- A parameterized analysis of each app to assess refactoring needs for PCF development
- Analyzing, developing, and validating applications for PCF using automated tools for efficient migration and development
- Implementing a CI/CD pipeline for extreme programming (XP) adaptability after migration
- Building an agile, cross-skilled team with full-stack development capabilities

## Business Benefits

- 30% reduction in time to market for new features and applications
- 25% reduction in server provisioning and maintenance costs
- 20% reduction in operational costs
- XP-oriented product management approach provided business users with incremental feature enhancements

## Syntel's Pivotal Lab

Syntel operates a dedicated PCF lab for performing DOJOs –a camp that pairs seasoned coders with trainees to achieve open source contributor or “committer” status in about six weeks. Syntel's lab is a replica of Pivotal Labs in San Francisco, with modern architecture and an open space concept to support more than 100 applications running concurrently.

The purpose of the lab is to provide advanced training to Syntel and client PCF developers, research and development, proofs of concept and demonstrations, third-party component integration, and other services including:

PCF Deployment	Syntel Tools + Open Source Software'	Other Services
<ul style="list-style-type: none"> <li>▪ Elastic Runtime</li> <li>▪ Apps Manager</li> <li>▪ Redis</li> <li>▪ MySQL</li> <li>▪ Rabbit MQ</li> </ul>	<ul style="list-style-type: none"> <li>▪ SyntBots for Cloud for code scanning and auto remediation</li> <li>▪ SyntBots Orchestrator</li> <li>▪ SyntBots for DevOps</li> <li>▪ Test Automation tools</li> </ul>	<ul style="list-style-type: none"> <li>▪ PCF Migration</li> <li>▪ Agile Coaching</li> <li>▪ Extreme Programming</li> <li>▪ PAL Certification</li> <li>▪ Test Driven Development</li> </ul>

## Syntel Accelerators

- **MACH** (Methodology for Applications to be Cloud Hosted) — a robust portfolio analysis methodology that delivers an ROI-based modernization path to move applications to the cloud.
- **SyntBots®** — an integrated, AI-enabled automation platform that achieves fast, efficient business transformation.
- **SyntBots for Cloud** — automates cloud migration profiling, with 600+ built-in rules for application cloud migration to reduce analysis time by 90% and deliver risk-free, template-based cloud migrations.