



# The Complete Quality Engineering Ecosystem

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## Solution Highlights

### Multi-Premise Solution

We have taken into consideration the need for cloud independent but cost driven compute requirements for non production environments using Nutanix Calm

### Intelligent Integration

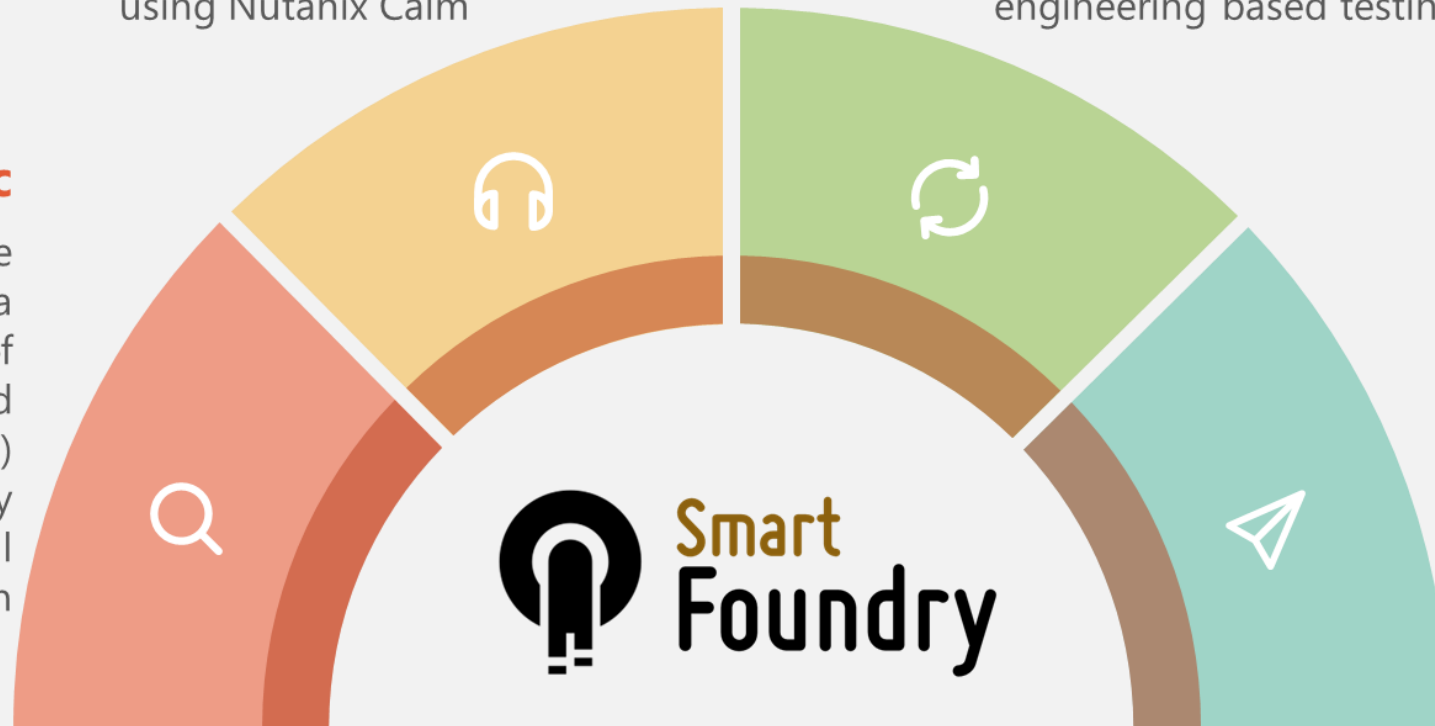
We have studied domain specific needs to carefully integrate test environment and data management functions to continuous testing and delivery pipelines. This includes chaos engineering based testing.

### Domain Centric

We have looked at the environment and data management needs of Guidewire (Insurance) and Temenos (Core Banking) applications to intelligently tailor the functional aspects of the solution

### Tool Agnostic Solution

The solution is API driven and hence can fit into any client eco-system to provide seamless integration and automation capabilities.



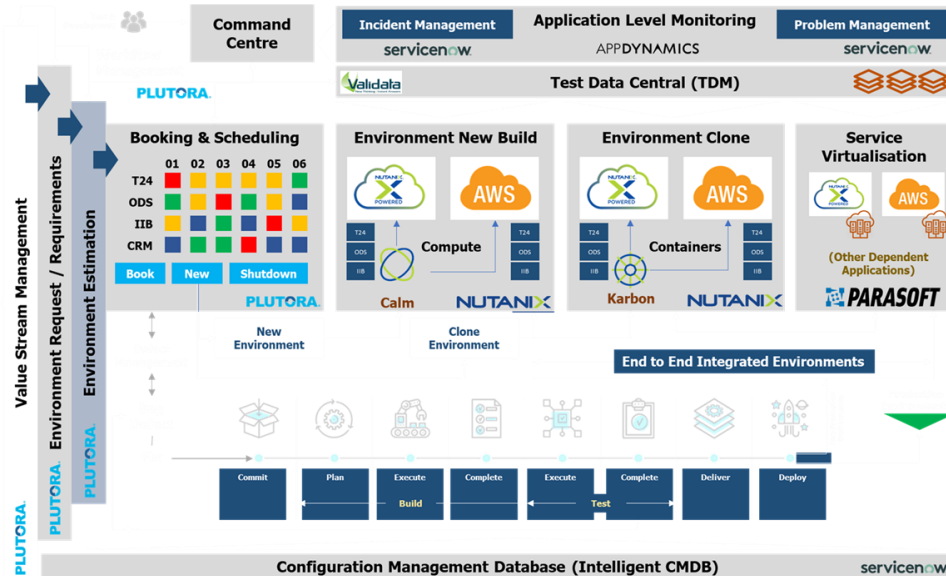
**An End to End Quality Engineering Eco-System**

# Solution Overview



In the fast paced and continuous delivery ecosystem, faster route to live is every organisation is striving for. Proliferation of environments along with **timely availability** of **fit for purpose** non-production environment are some of the key bottlenecks. **Smart Foundry**, a part of SmartQA™ is a Capgemini solution which provides the users a complete view of the ecosystem and help provision **on demand** , **always available** and **fit for purpose** environments on **hybrid platforms**. It improves the **route to live by 30%**, and **productivity improvement by 20%**

## Architecture



## Use Cases

- **UC 1** : Centralised Requirement Gathering (Func/ Non Func) for Env
- **UC 2** : Analysis : a decision to Buy, Rent, Reuse existing hardware
- **UC 3** : Availability & Conflict view for Environments via Calendar
- **UC 4** : Virtual CMDB and Environment Map for the given requirement
- **UC 5** : Automatically Build Environment using Hybrid options
- **UC 6** : Automatically Build end to end environment using Virtualization
- **UC 7** : Compare and Clone Environments
- **UC 8** : Environment Dashboard and Health Status check
- **UC 9** : Ability to take Environment Snapshot
- **UC 10** : Integrate Environment provisioning with CI/CD Pipeline

# Solution Overview

Collaboration Forum

## Practices Involved

Digital Assurance & Quality Engineering | CG Infrastructure Services | Application Development & Maintenance | Next Generation Talent | Banking

## Partners Involved



PLUTORA

NUTANIX

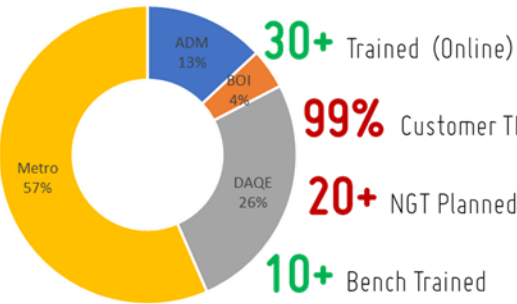
servicenow

APPDYNAMICS

TEMENOS

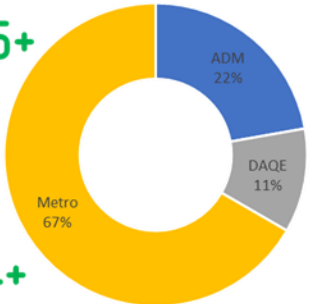
Training & Certification

PLUTORA



30+ Trained (Online)  
99% Customer TEM team  
20+ NGT Planned  
10+ Bench Trained

NUTANIX

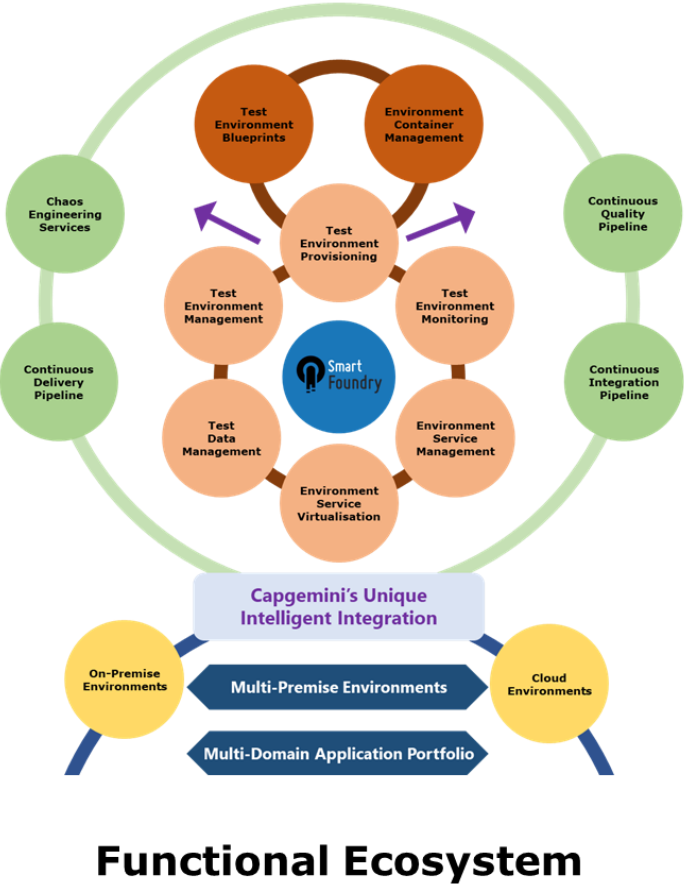


Online Trained 15+  
50% Customer TEM team  
NGT Planned 20+  
Bench Trained 4+

New Talent Pool

- Number of NGT Pool Trained: **30+**
- Date of commencement: **18 May 2020.**
- Location of FLP: **Chennai**
- Total Duration of Training: **2 Weeks**
- Learning Mode: Part time – **Self Learning**
- Day 1: High Level Concepts of Test Environments
- Day 2-6: **Plutora Technical Training** - Environments (PTE-101) v.1
- Day 6-9: **Nutanix Technical Training** Enterprise Cloud Administration Course (ECA) 5.10
- Day 10: **Familiarity with the customer**
- **Agile BDD** Training

“Domain Centric, Multi-Premise & Intelligently Integrated”

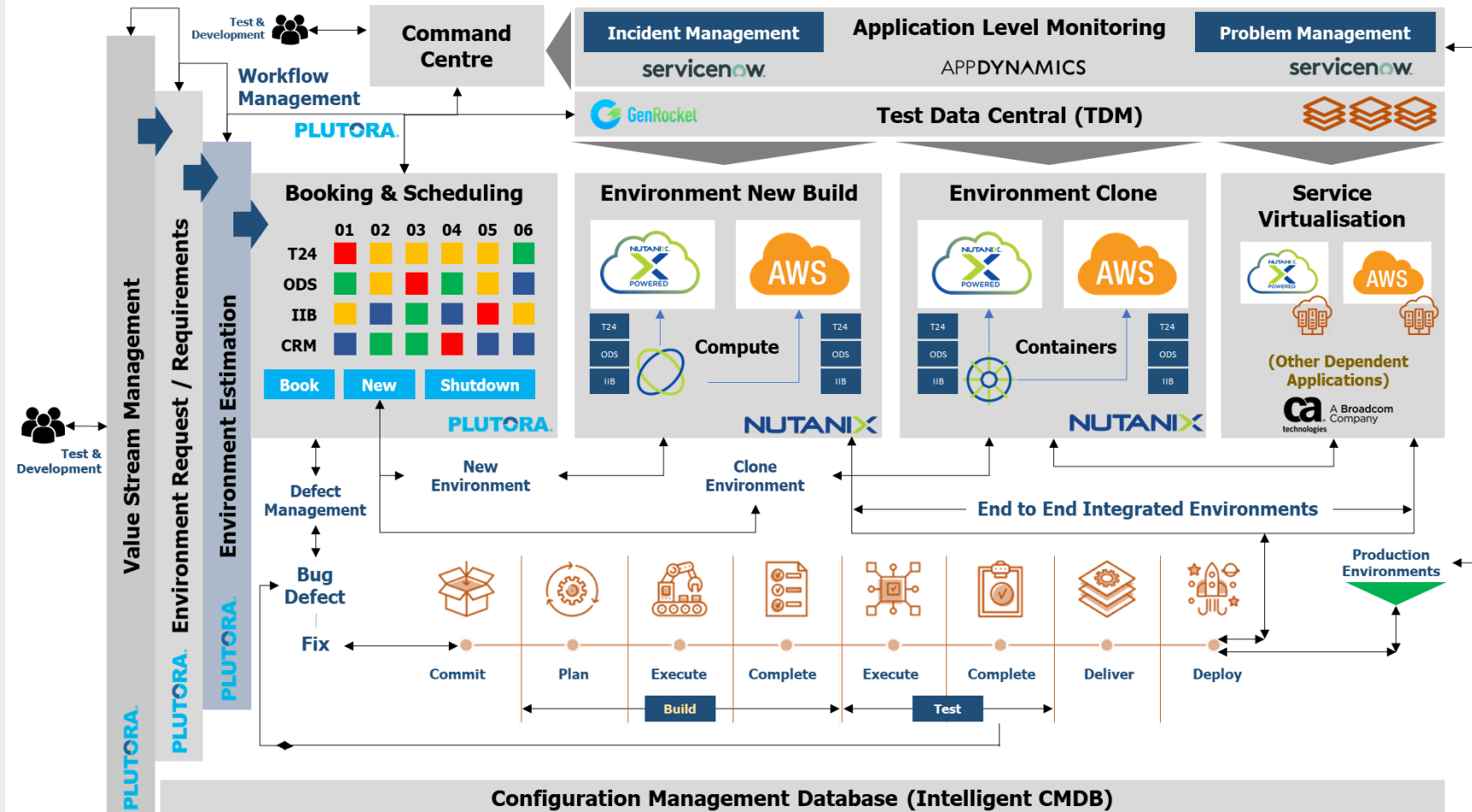


- The construct is domain focussed, tool agnostic and function centric
- The differentiator is “**Intelligent Integration**” based on Capgemini’s domain specific experience
- The primary components of this solution is driven by **Nutanix** (Multi-Premise concept) and **Plutora** (Value Stream Management)

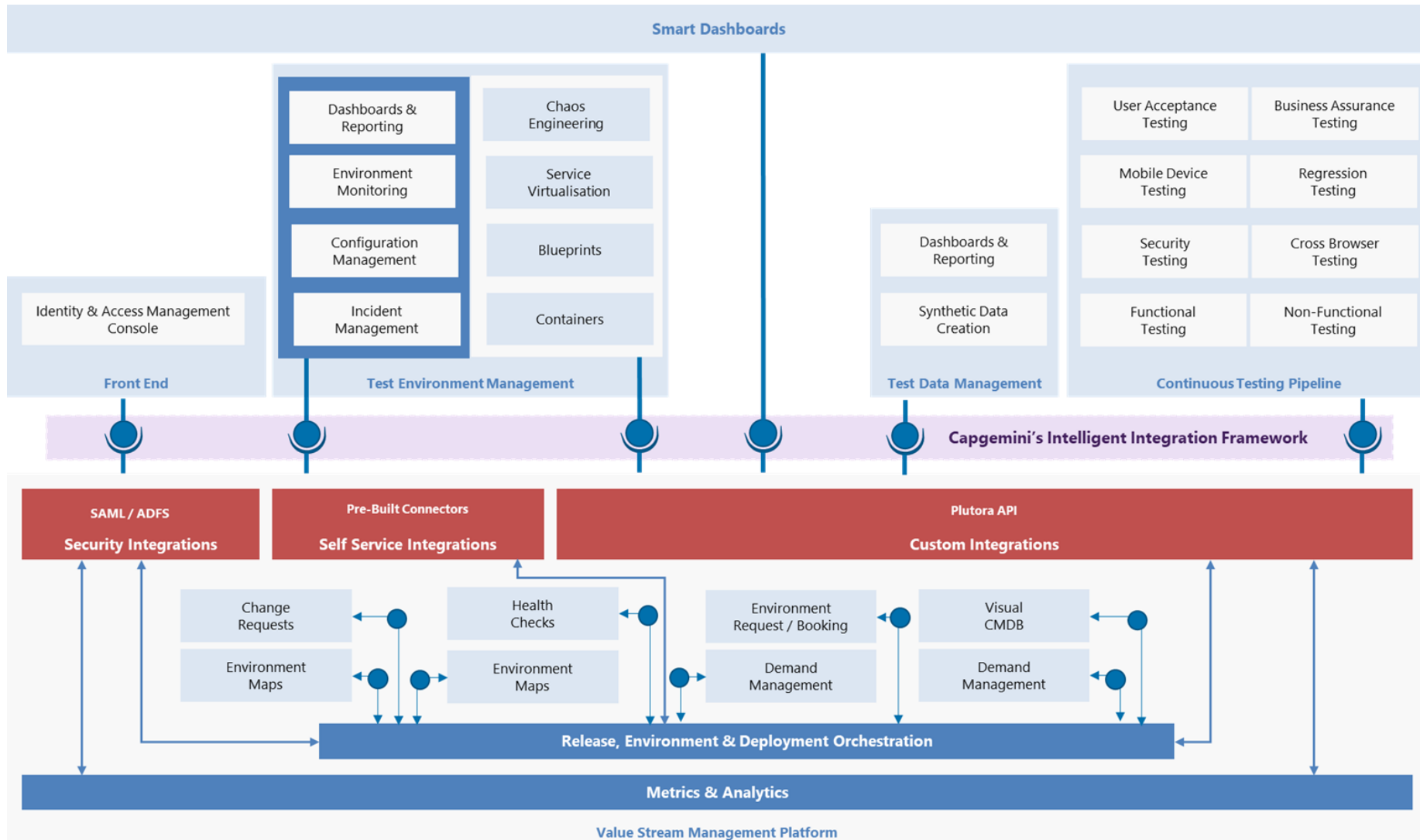


# Environments – end-to-end solution components

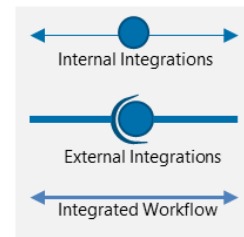
- View of all the “point-in-time” utilisation of environments
- A mechanism / workflow to book, release or invoke build of environments based on a contention
- An end-to-end workflow to request environments through a managed process
- An end-to-end environment map showing all of the dependent application and interdependencies between multiple environments



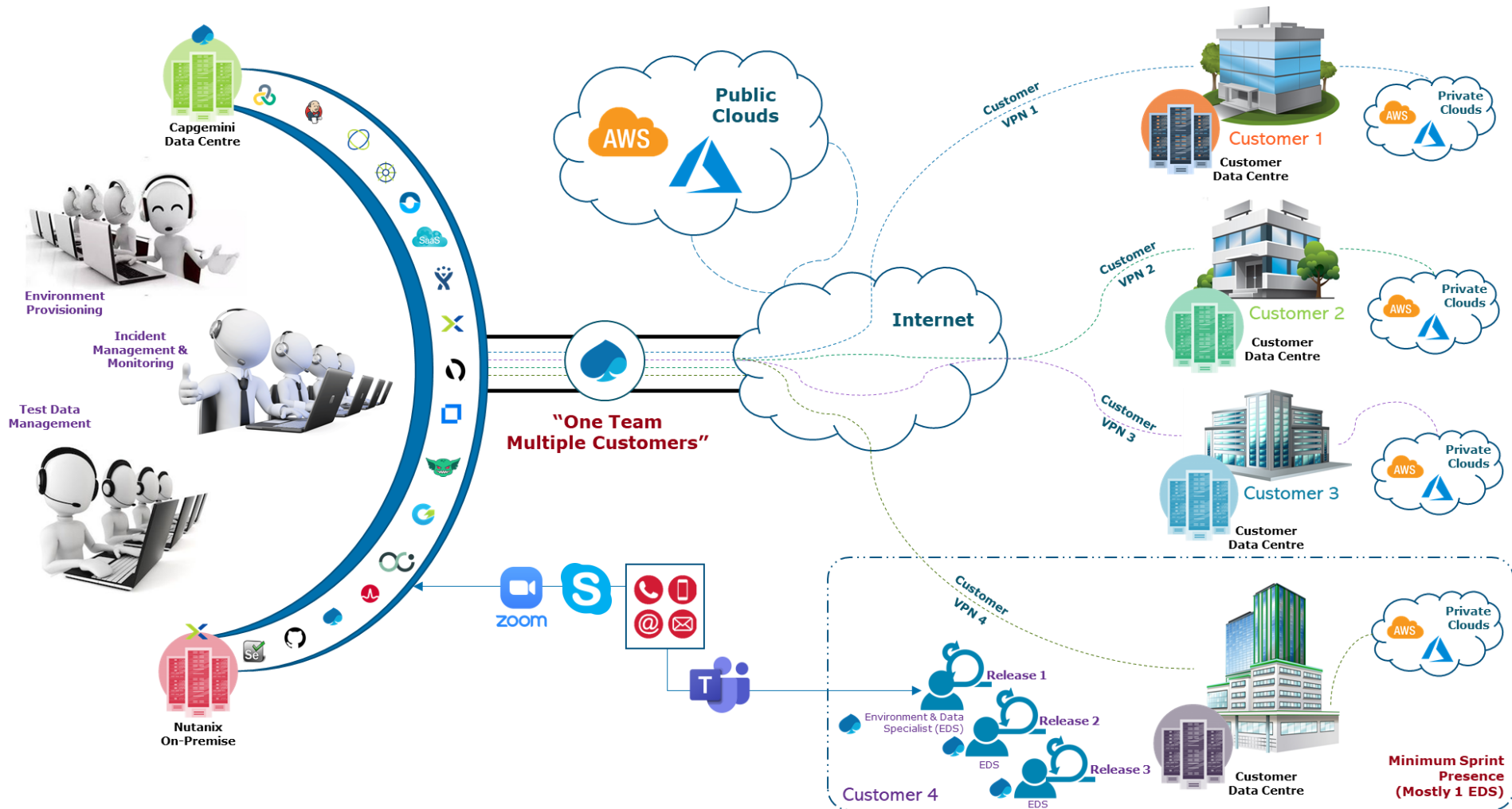
# Smart Foundry Integrated Architecture



- Capgemini's intelligent integration framework enables smart workflows through custom built API's that ensure complete end to end data flow between various tools
- Tools can be re-used from client or can be implemented as pre-built



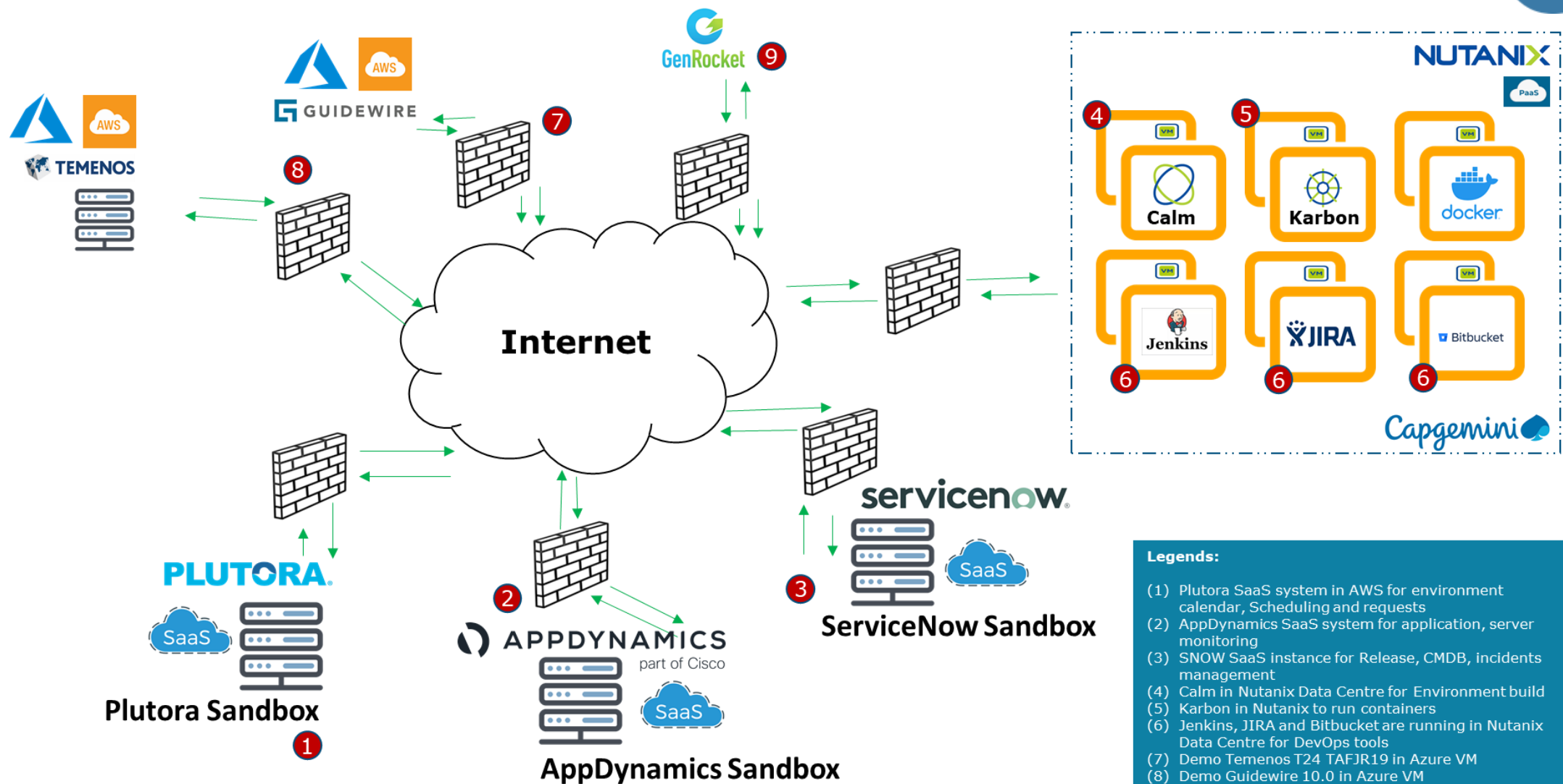
# Smart Foundry Service Model



- No Tool Costs for the Client
- No large teams at customer locations
- One stop shop for all environment and data needs
- SLA based service
- Anytime service coverage
- Dedicated Environment & Data Specialist per release
- Agile & Waterfall friendly
- Can re-use client tools
- Secure VPN connectivity per customer



# Sandbox Ready Solution



**Legends:**

- (1) Plutora SaaS system in AWS for environment calendar, Scheduling and requests
- (2) AppDynamics SaaS system for application, server monitoring
- (3) SNOW SaaS Instance for Release, CMDB, incidents management
- (4) Calm in Nutanix Data Centre for Environment build
- (5) Karbon in Nutanix to run containers
- (6) Jenkins, JIRA and Bitbucket are running in Nutanix Data Centre for DevOps tools
- (7) Demo Temenos T24 TAFJR19 in Azure VM
- (8) Demo Guidewire 10.0 in Azure VM
- (9) GenRocket ( Data management tool) embedded in to the End 2 End flow



**People matter, results count.**

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