



Automate cloud infrastructure provisioning with vPaaS - Virtusa Pattern as a Code

Enterprises today are looking for ways to accelerate their cloud adoption while quickly setting up cloud infrastructure. Appropriate cloud infrastructure setup is time-consuming and resource-intensive. Other challenges include reduced developer productivity, lack of visibility on the provisioned infrastructure, and lack of standardized processes.

Virtusa Pattern as a Code (vPaaS) is a curated library of pre-defined environment patterns or blueprints that are reusable, security tested, and easily customizable. It is developed to automate cloud infrastructure deployment with security by design to increase agility, operational flexibility, and productivity.

Why clients choose vPaaS for cloud infrastructure automation?



15-30% reduction in time to market



25-40% increase in productivity



Increase in agility and efficiency



Better cloud security posture management



Zero wait time for infrastructure provisioning



App deployment following the pattern at scale



Standardized processes ensuring security adherence



Enhanced governance and optimized cost

Capabilities

Setting up an appropriate cloud environment

vPaaS on Azure codifies all necessary infrastructure components using ARM and Terraform to set up enterprise-ready cloud environments. The vPaaS solution comprises blueprints built using VS code wizard Terraform Studio to ensure that blueprints generated are compliant with enterprise policies and security requirements. These can be easily integrated with the Azure DevOps to provide a seamless one-click infrastructure to enhance the application development experience. vPaaS blueprints comprise:

Azure foundational building blocks

- **Compute services:** Azure Virtual Machines, Azure App Service, Azure Container Instances, Azure Kubernetes Service, Azure Functions
- **Data services:** Azure SQL
- **Storage services:** Azure Storage Services, Azure Disk, and Snapshot Services
- **Networking:** VNET, RouteTables, Network Security Groups, VPN Gateway, App Gateway, Front Door, External and Internal Load Balancer, API Gateway
- **Identity and security services:** IAM, RBAC, Azure Identity (user and system)
- **Security:** Azure Security Center, Azure Key Vault, Azure Policies, Azure Firewall
- **Application integration services:** Azure Logic Apps, Azure APIM
- **Analytics:** Azure Synapse, Azure DataLake, Azure Data Factory
- **Logging and monitoring:** Azure Log Analytics, Azure Monitor

Representative list of Azure Blueprints

- Hub and Spoke Landing Zone Blueprint (Azure Cloud Adaptation Framework (CAF))
- Azure Lift & Shift Migration (Azure Virtual Machines and SQL server)
- Two-tier Application Blueprint (Azure Front Door, App Services, SQL)
- Azure App Containerization Migration (App Gateway, AKS, Azure SQL Server)
- Logging and monitoring: Azure Log Analytics, Azure Monitor

Success story

U.S. based financial payment processing organization builds the basic infrastructure using vPaaS on Azure

The client planned to embark on a digital transformation journey to optimize the cost of running IT infra in its two data centers. Migrating the on-premise Windows workload to Azure Cloud and codifying infrastructure deployment while integrating with the DevOps pipeline was the need of the hour.

Virtusa built a robust and dynamic landing zone that evolved and created target state architecture for each application. Our team of experts leveraged the vPaaS solution to automate the infrastructure provisioning with security by design. The outcome includes:

Key benefits:

Operational cost reduced by 50%

Increase in performance by 40%

Successful deployment of enterprise-grade Cloud Foundation using IaC

For more information, please contact us at marketing@virtusa.com