

Prolifics[®]

Application portfolio modernization

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▶ Agenda

Overview

Our approach

Sample tech stack

About Prolifics

Overview

This offering is for clients who have business applications & want to

- Optimize for and move to containers or
- No change, lift & shift to IaaS

Additional requirements

- Spend less time on infrastructure management / reduce administrative overhead
- Scale on demand
- Automation & continuous delivery

Recommended use-case

- Start with web LoB Apps
- Next, consider high business impact apps
- Next, consider apps that need to be re-architected

Coverage & assumptions

- Assessment workshop document for 3 tiers of application
 - MVC .NET, Angular, React, Java, SQL, PostgreSQL, Oracle
- Proposal & reference architecture
- Artifacts required to containerize & deploy to
 - AKS or Red Hat OpenShift
 - If containers are not possible, consider, hosting on VMs
- Related code & configuration changes
- CI/CD pipelines from Azure DevOps or GitHub (or other, upon agreement)
- Duration will be 4-6 weeks

▶ Our Approach

Discover & Assessment

Key Accomplishments

Understanding of the environment

- **Identify application for migration**
- **Review application AS-IS / current state**
- **Identify changes manually, as well as automated tools**
- **Review infrastructure topology**
- **Discuss integration with other applications**
- **Discuss deployment of application & methodology of all tiers**
- **Security Assessment**
- **Agreement on tooling**
- **Proposal several options and agree on approach**
- **Design Document reviewed and Sign Off provided**

Implementation

Key Accomplishments

- **Code & config changes**
- **Environment build out**
- **Environment validation**
- **Software installation and validation**
- **Software configuration and validation**
- **Deployment Process Automation (CI/CD)**
- **Document for Installation**
- **Document for Configuration**
- **Unit test cases execution**
- **Reviewed and sign off provided**

Feedback loop

Key Accomplishments

- **Optimized deployment processes**
- **Defect/errors addressed and remedied**
- **Incorporation feedback**
- **Further discussion for day 2 activities, such as, Right-sizing Azure services, cost optimization, long term maintenance & support, governance**

▶ Sample Technology Stack

Frameworks

Java, .NET & Other



Microsoft Azure

Traffic Manager



Application Gateway



Load Balancer



Log Analyzer



Infrastructure-as-a-service

Virtual Machines



Container platform-as-a-service

Azure Container App



Azure Kubernetes Service



Red Hat OpenShift



Platform-as-a-service

Azure App Service, Azure Spring Cloud



Control

Productivity

Databases

Azure Database for PostgreSQL



Azure Database for MySQL



Azure Cosmos DB



Azure Cache for Redis



Azure SQL Managed Instance



Azure SQL Database



Tooling

IDEs



Build tools



GitHub



Prolifics Azure Journey

1st Stop: Code Analysis

Use migration tools to scan and identify changes (front end code, database code, configuration...)

3rd Stop: Implementation

Code and configuration changes; commit code to repo and build CI/CD pipelines; test & feedback.

4th Stop: Operationalize

Cost optimization, support, maintenance, monitoring, logging & governance

2nd Stop: Proposal

Agree on approach & establish reference architecture

About Prolifics

Prolifics At a Glance

40+
Years in Business

2000+
Experts Worldwide

11
Global Locations



Awards

Over 20+ Technology and Solutions Awards since 2009 including coveted IBM Beacon awards for:

- Business Agility
- Customer Integration
- Information Management
- Technology Excellence



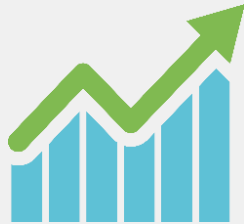
Technology Expertise

Best-in-class architects and specialty experts:

- Business Process
- Integration
- Digital Experience
- Security
- Testing
- Information Management
- Analytics
- Enterprise Content Management



5 Years Compound
Annual Growth Rate



91% Rate of
Repeat Engagements



80+
Technology
Accelerators

700+
Technical
Certifications



Fortune 1000

Over 150 global customers
are currently Fortune
1000 companies



Sample Clients



What Our Clients Say

“Prolifics has been a terrific partner in every sense of the word. They were easy to work with. They were also understanding of the challenges from the beginning. And that really gave me the confidence on the front end to move forward. Without Prolifics, PainScript would not be what it is today.”

CEO, PainScript

“As we began to initiate plans to expand globally, the expertise Prolifics provided was invaluable. Their solution was delivered on time and on budget and allowed us to do what many retailers in today’s climate struggle with. If it weren’t for them during this make-or-break moment, we may not have the success we currently enjoy.”

**Director of Multichannel,
International Sports Fashion Retailer**

“I honestly believe it would not have been as successful if we had a different team. Thank you to the countless hours and late nights/long days that everyone put in on this project. All of your hard work was realized throughout the project in how we quickly and succinctly addressed problems and delivered apps to the environments.”

**Software Engineering Manager,
Multinational Financial Services Organization**

“Really, we see [Prolifics] as an integral part of our business planning.... every technical purchase, every project we, do we involve them.”

CTO, Verus Financial

Sample client success stories

▶ Migrate Enterprise LOB Apps to Cloud

Customer:

Large Distributor of Healthcare products

Business Value:

Reduced Maintenance Costs, Accelerated Feature Development



Challenge: Global large an American distributor of Healthcare products and services with a presence in 32 countries. Client is seeking for solutions that can handle spikes and reduce the total cost of ownership for IT infrastructure assets. The company sets its sights on leveraging cloud services to streamline and optimize its core operations to free up infrastructure staff and enable App Dev teams to drive more innovation for customers. This included quickly setting up environments for development, utilizing cloud services and extending production workloads to cloud to improve performance and throughput.

Solution: Prolifics provided the company with an assessment of 8 Java & JSP, MVC/AJAX applications that helped them define their cloud architecture by extending their on-premise environment. We then implemented the solution which encompassed client's core services:

- Application design patterns & reference architecture
- Security controls, governance, network applications
- RBAC, policy definitions and assignments, capacity management
- Options to migrate to containers or cloud native
- Terraform templates & blueprints
- Firewalls/gateways, traffic manager, layer 7, load balancer, ingress
- DevOps, GitHub, environment, builds, pipelines
- Logs, alerts & monitoring dashboards

Benefits: Client achieved elasticity, improved security controls and freed up time for infrastructure team. The solution saves the company as much as 30% cost. Now, client is looking to migrate more applications and shift spending and resources to continue driving innovative initiatives.

Cloud Native Accelerated Innovation with Red Hat OpenShift

Customer:

*Large US Healthcare
Payer*

Business Value:

*Scale on-demand
during open enrollment*



Challenge: Global Large Payer Organization is an American multinational corporation based in the Hartford Connecticut. To support the innovation required by the business, IT needed to more aggressively enable rapid functionality development using cloud-native and container technologies. But they had significant value in their legacy systems that they also wanted to leverage. Scaling during peak seasonality like open enrollments. They needed a hybrid architecture that would support their need for migrating their legacy code to cloud-native application environment.

Solution: Prolifics helped implement, assisted building and testing environments to enable cloud-native development with secured integration to the legacy systems. Provision OpenShift Container platform on Cloud, building CI/CD pipelines integrate with existing toolchains. Integration with GIT source code repository and automated pipelines deployment into Kubernetes runtime. Platform provision and application deployment leveraging Ansible automation, Jenkins and Artifactory.

Prolifics was also responsible for decomposing the customer monolithic application to micro services and Agile architecture, enabling API and micro-services mesh architecture to scale applications. Implemented Spring cloud Architecture and developed best practices for application Development to maintain best design and build pattern practices.

Provided assistance with Day0, Day1 and Day 2 services to Architect, Install and manage OpenShift Container Platform and Deployment services.

Benefits: Customer sees this as an anchor for their future direction across their enterprise solutions. With this ability to scale Cloud Native applications during member enrollments. OpenShift allowed to address scaling during open enrollments avoiding outages.

Migrate Existing Middleware Workloads To Azure

Customer:

Large US Healthcare Payer

Business Value:

Established pattern for new migration & cost reduction



Challenge: A large healthcare payer organization serving millions of Medicare members across the U.S. wanted to migrate existing middleware applications (ACE, MQ, ODM) running on-premise to an environment where it is easily to scale-up/down with the critical workloads with lot of processing running periodically. The goal is building a foundational framework, reusable components and approaches of migrating workloads to containerize and deploy on scalable platform that can be applicable to assess the feasibility of other integration projects

Solution: Customer has chosen AKS (Azure Kubernetes Service) as the target cloud platform service and as a first step need to perform a Proof of Concept (PoC) for Claims Letters application involving

- Containerizing the existing technology platforms of the solution
 - IBM App Connect Enterprise (ACE)
 - IBM Message Queue (MQ)
 - IBM Operation Decision Manager (ODM)
- Refactoring of any application components to efficiently run in containers
- Logging and Monitoring Solution offered through Azure Monitoring Vs Prometheus and Grafana/Kibana
- Developing CI/CD pipelines on Azure DevOps with JFrog Artifactory as container registry
- Integrating the AKS environment with enterprise Azure active directory to apply controls
- Automating Scale up/Scale down based on the request through put
- Ecosystem of cloud services needed for effective management of Kubernetes clusters

Benefits: The outcome was a scalable, cloud-based solution that delivered a modern, scalable and robust integration application. By leveraging a Microservices and asynchronous architecture we modernized the integration platform for scalability, efficient resource utilization, faster development with better security meeting the compliance needs. Prolifics enabled the customer to create a repeatable pattern that could be applicable to other integration projects Prolifics in partnership with the customer leveraged the scale of AKS to deliver better claims letter processing.