Multi-tenant SaaS Marketplace Streamlines Business for a Top Insurance Solutions Provider
Headquartered in California, United States, our customer is one of the world’s top providers of software products to general insurers. They have an established ecosystem of clients in the P&C insurance space and believe in the value of a completely modernized architecture in scaling up for the “engagement era.”

Their large, globally dispersed customer base demanded frequent release cycles and several customizations. However, in the absence of a multi-tenant model, customizations were being done manually by deriving instances from the original software to create products on demand. Some of their key challenges were:

1. **A Non-integrated Business Ecosystem:**
   A complex web of applications and services distributed across the world, which was difficult to access, manage and optimize.

2. **Operational Complexities:**
   They lacked the ability to control the software upgrade cycle for their customers, see and act on real-time insights.

3. **Absence of a scalable architecture:**
   Without a scalable architecture, the ability to ramp up business for a growing customer base was affected.
The customer was using AWS to manage their manual and semi-automatic deployments. And they needed a trusted technology partner to develop and implement a multi-tenant marketplace for all of their products.

From ideation of the solution through to implementation, Aspire collaborated with the customer every step of the way, and developed a complete project roadmap to fulfill their needs and drive best practices into the solution while meeting their budget.

**Our scope of engagement:**

1. Building a multi-tenant SaaS marketplace for all of their products
2. Creating a customized CI/CD pipeline for each customer.
3. The solution was built as a microservices based platform using Netflix OSS.
4. It used a combination of AWS services that delegate most of the work to AWS, while helping the customer retain control.
   - AWS Organizations allowed the creation of an organization structure within AWS. The feature enabled them to create subaccounts for all of their tenants and a common repository under each subaccount to share their source code with their customers.
   - The customer managed build and deploy for every client, enabling real-time insights whenever changes/customizations are made in their products.

**The Solution in Detail:**

1. Aspire built a portal that helped the customer to dynamically provision their tenants at the click of a button.
2. Once tenants are provisioned, they can effortlessly launch an instance of their own repository.
3. Whenever customizations need to be made, their CI/CD pipeline can again be launched into an AWS instance by any registered user of the portal, after which automated builds and tests can be run. Easier customizations, per tenant, would in turn enable them to create a controlled workspace setup with more effective inter-service communication.
4. An elaborate setup for managing user privileges as well as metering and billing management was provided.
**Technology Snapshot**

**Service**
- Java 8
- Spring
  - Core
  - Boot
  - Spring Web-MVC
- Hibernate
- Netflix OSS
  - Eureka
  - APIGateway
  - Zuul
- Jenkins

**User Interface**
- Angular 1.6
- Angular Bootstrap

**Database**
- MYSQL

**AWS Services**
- AWS Organizations
- AWS Service Catalog
- Cloud Formation
- S3
- EC2
- Simple Email Service
- Simple Notification Service
- Code Commit
- Code Build
- Code Deploy
- Code Pipeline
Aspire’s agile approach to technology delivery enabled implementation with a fast paced approach and helped to reduce time to market for their customers.

They will now be able to:

1. Streamline their integration efforts and bring it under their control. This would bring about agile service delivery and enable proactive monitoring of applications.

2. Enable much faster development, testing and delivery of integrations for each customer.

3. Achieve improved operational efficiencies across their myriad customer base.

Rather than diverting their attention towards building, operating and maintaining infrastructure for an expanding customer base, they will be able to focus on building a differentiated software offering in a competitive marketplace. The scalable and dynamic architecture would provide adequate flexibility to ramp up and down effortlessly, thereby creating a stronger and more stable balance sheet.
Aspire Systems is a global technology services firm serving as a trusted technology partner for our customers. We work with some of the world’s most innovative enterprises and independent software vendors, helping them leverage technology and outsourcing in our specific areas of expertise. Our core philosophy of “Attention. Always.” communicates our belief in lavishing care and attention on our customer and employees.