ActioNews

SUMMER 2019
THE NEWSLETTER OF ACTIONET

Turning VISION into ACTION®

PRESIDENT'S NOTE

Dear Friends:

Continuing on our "Agile" theme from our Summer 2019 newsletter, we have taken Scrum to the next level with the implementation of the Scaled Agile Framework® (SAFe) with a focus on remaining lean, while managing ever increasing complexity.

We also share examples from real world implementations leveraging multi-vendor Enterprise Cloud Platforms to reduce cost and quickly deploy low code, out of the box solutions for multiple customers across the Federal space.

The heat of the Summer is approaching and we all need to continue to be agile, flexible and responsive. Best wishes and be SAFe!

Ashley W. Chen
Chairman & CEO

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An Overview of Scaled Agile Framework (SAFe) - *All Aboard the (Release) Train!*

By Mike Genebach, EVP & COO

What is SAFe and why implement it?

The concepts of employing a 'Lean Agile' process for meeting information technology (IT) development and engineering objectives is probably familiar to you. Embraced by many commercial firms and Government organizations undertaking product development, Lean Agile is nearly synonymous with incremental product creation. This is accomplished via Scrum cycles where a distinct subset of a product is developed during time-limited activities called Sprints.

For background, Scrum Teams are composed of a Product Owner, a Scrum Master, and a Development Team. Using Agile Scrum, product requirements are decomposed into a set of User Stories. The whole set of User Stories are collectively called a Product Backlog. A subset of this Product Backlog is selected during a sprint planning meeting, and this User Story subset becomes the Sprint Backlog. The Sprint Backlog, therefore, forms the basis for Tasks when conducting that particular sprint.

> "Embraced by many ... Lean Agile is nearly synonymous with incremental product creation."

The Sprint Team breaks down User Stories into Tasks, or pieces, that can be coded within the given Sprint timeframe. A Sprint generally lasts 2 to 4 weeks, and involves daily Scrums, where the development team meets for a brief period each day in order to check on progress towards the Sprint's objectives. At the end of a Sprint, a Sprint Review is conducted to assess what's been done, as well as to update the Product Backlog with changes as needed. Additionally, post-sprint, a Sprint Retrospective is performed to look at what went well, and what can be improved upon. In Agile SAFe, this typical Scrum cycle comprises the foundational layer, and is called the Team Level.

SAFe takes Scrum, enhances a few aspects at the Team level, and then scales the process to additional levels to

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An Overview of Scaled Agile Framework (SAFe)

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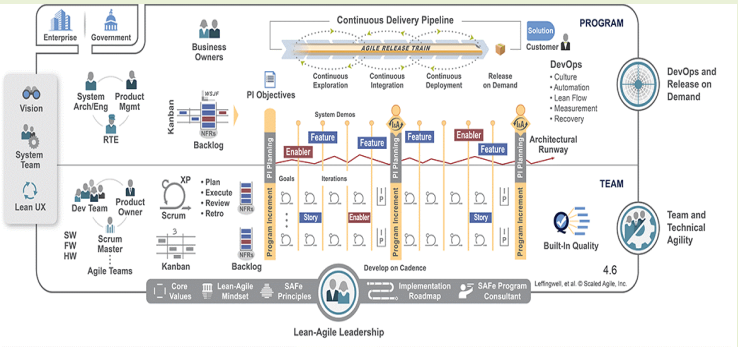
better handle greater complexity, scope and scale. These additional levels are the Program, Solution, and Portfolio levels. SAFe also slightly modifies Scrum nomenclature.

The Basic Elements of SAFe

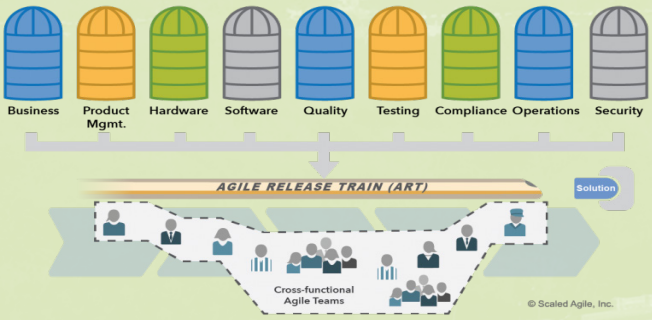
For this article, we will focus on what's called Essential SAFe. As shown in ***Figure 1***, Essential SAFe includes only the Team and Program levels. The facets of Essential SAFe that truly enable Agile scalability involve two major concepts: 1) the Continuous Delivery Pipeline (think DevOps); and, 2) the Agile Release Train (ART).

Figure 1: Essential SAFe



ARTs are made up of Agile Teams which are cross-functional - see ***Figure 2*** – and employ scrum, Kanban and built-in quality practices. ARTs are anchored by sequenced 'scrum of scrums', each iteration termed a Program Increment (PI). Powered by the Agile Teams, every PI along the Release Train drives an outcome that is a working system increment. A PI System Demo provides the evidence for stakeholders of a tangible result. In addition to scrum teams, the cross-functional teams include, among others, a system architect, system engineers, business owners, product management, and most importantly, a Release Train Engineer (RTE). The RTE has the responsibility for keeping the train – the ART – 'on the track'.

Figure 2: Cross-Functional Agile Team Composition



Program Increments have a Program Backlog comprised of Features, which is really a higher abstraction from User Stories. A PI is organized during PI Planning sessions. Each PI consists of scrum sprints, system demos, reviews, and retrospectives, all governed by the RTE. An important benefit of the sequenced Program Increment's is that they help to establish the ART cycle's cadence and synchronization. SAFe best practices indicate that a sprint team's efficiency and effectiveness relies on setting work-in-progress (WIP) limits. WIP limits help ensure that the task flow is optimized. For example, limiting the tasks undertaken in the development queue prevents the testing queue from getting overwhelmed, and keeps task work flowing – not unlike a finely-tuned automotive assembly line.

SAFe ARTs deliver other benefits. Through embedded automated testing and integration, for instance, DevOps is delivered via the ART's Continuous Delivery Pipeline (CDP) framework. The ultimate goal of the CDP is to deliver Release on Demand capability, reaching a point where a fully tested system increment can be released when desired or needed into the production environment. A good way to picture this is to think about how Apple or Google develop and release updates to their respective mobile operating systems, globally, while in users' hands. As a system increment is developed, via an ART, code quality is enforced through robust automated integration and testing, check-pointed during PI system demos, then placed in a 'release queue'. The production-ready increment can then be released on-demand when appropriate, or when necessary (as in the case of a security update).

What about the other levels?

Above the Program level of Essential SAFe, are the Solution and Portfolio levels. The Solution level, using Solution Trains, addresses scaling SAFe agile processes to manage large, complex solutions that may involve multiple products with challenging interfaces. The Solution level also introduces the concept of an economic framework for in depth solution cost analysis. The Portfolio level brings in Enterprise

considerations, such as organizational Strategic Themes, Epic generation (i.e. Epic is the highest level backlog item abstraction -> Stories/Features/Capabilities/Epics), incorporating lean budgets for greatest ROI, and viewing the increment lifecycle as Value Streams. More about these two levels can be found via the links provided in "How do I learn more?" below.

How do I learn more?

To learn more about SAFe and Scrum, as well as Lean Agile in general, check out the following links. These resources also cover how and where to get training and certification. Get aboard the (release) train - become a SAFe Agilist!

SAFe information links (current SAFe version is 4.6): www.scaledagile.com and Scrum: www.scrumalliance.org. For more information on how to implement SAFe,please contact info@actionet.com.

Note: Graphics are courtesy of the Scaled Agile Community

"ActioNet designed, developed, and deployed a custom Salesforce gateway, implementing a Single-sign-on (SSO) solution ..."

Delivering Secure Cloud Solutions Via The Agile Development Framework

By Jeffrey Ondris, Executive Director, Cyber Security

Executive Summary

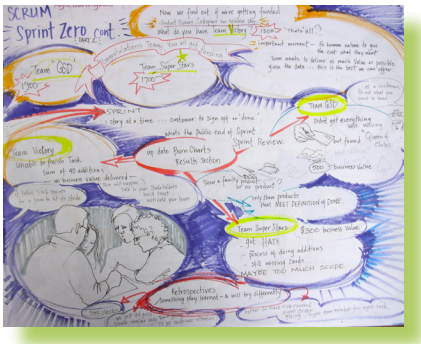
A large Health Agency enforces requirements for the Health Insurance Portability and Accountability Act (HIPAA) and all federal policies for both cloud and application development solutions. Upon the initiation of the HIPAA Administrative Simplification Optimization Program – this agency was tasked with proactively auditing covered entities' compliance with HIPAA regulations. The solution required a partner to enhance the Administrative Simplification Enforcement Testing Tool to conduct audits, facilitate the resolution of complaints, and to meet future business needs. Also, this Health Agency had eleven Salesforce application instances that operated independently. Its user account and authentication process controlled access to each application instance separately, and each required a Security Controls Assessment (SCA) and Authority to Operate (ATO). Standardization and consolidation of the applications were needed to address the Agencies risk controls for the Salesforce platform and to reduce the costs of the systems across the enterprise.

The Solution That was Developed

Modernizing this enforcement tool required a massive cleanup effort, within one year we migrated data from a legacy system, analyzed business needs and recommended Salesforce platform. ActioNet rebuilt this tool on a modern cloud platform and, leveraged the Agile Scrum framework. The original system was hosted in a traditional 3-tier on-prem environment developed on the Java Enterprise Edition (JEE) platform and required separate hosting and reporting contracts. We converted and migrated this tool from the JEE platform to the Salesforce Cloud, extracted the legacy system's data from Java, prepared and mapping it to Salesforce data elements, and transferring it to the new system.

Transitioning to Salesforce eliminated the application's data center hosting requirement. The Salesforce cloud includes reporting needed as part of the business requirements. Salesforce provided an integrated, end-to-end lifecycle designed for high-performance agile development, deploying enhancements to end-users faster. The team effectively manages live operations while simultaneously planning new functionality to support the HIPAA Administrative Simplification Optimization Program. ActioNet also coordinates administrative and supportive services for Complaint and Audit Management.

ActioNet designed, developed, and deployed a custom Salesforce gateway, implementing a Single-sign-on (SSO) solution to address all eleven Salesforce instances. This gateway provides SSO capabilities across all Agency Salesforce applications, which provided user access within their Enterprise Portal. We successfully performed a one-time integration with the Agency Enterprise products implementing Shared Services Integration (SSI), a Cloud-to-Cloud integration between Amazon Web Services (AWS) and Salesforce, to address malware and anti-virus scanning requirements and access to other shared services.



ActioNet solutions are built on **People, Innovative Processes, Technology** and **Partnership**. ActioNet has established an outstanding track record of creating continuously forward-looking, cost-effective IT solutions, meeting such Federal mandates as 'Cloud-First' initiatives. Our ActioNetCloud® family of service offerings include:

- **ActioNetDesk®**
- **ActioNetAgile™**
- **ActioNetHosting®**
- **ActioNetMobility®**
- **ActioNetCyber™**
- **ActioNet360®**

For a complete list of ActioNetCloud® Solutions, visit www.actionet.com/Solutions/ActioNetCloud.asp

ActioNet's Core Values center on Customer Service, Employee Growth and the Quality of our Work. We continually invest in our people and our capabilities with a continual process improvement focus based on ISO 20000, ISO 27000, ISO 9000, HDI and CMMI® Level 3. We are proud to have many certified staff:

- 500 ITIL Certified
- 100 PMP Certified
- 80 DoD 8570 Compliant
- 35 ScrumMasters
- 24 AWS Certified Technical

The key to successful transformation into a performance-based, customer-focused organization is clearly defining the current state of the organization and building a detailed roadmap for improving service delivery

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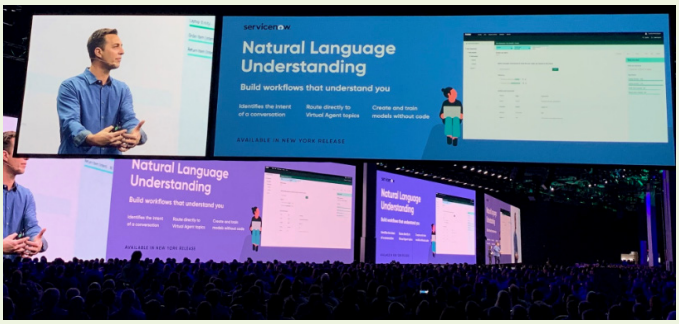
ActioNet Attends ServiceNow Knowledge 19 Conference

By Eric Chasteen, Solution Architect



Staying Ahead of the Innovation Curve

ActioNet continues to look ahead for the latest and upcoming trends and best practices in cloud based technology and innovation. We recently attended the ServiceNow Knowledge 19 Conference during the week of May 6th. ServiceNow provided a jam-packed week of Key Note briefings from ServiceNow leadership, testimonials from commercial and government organizations embracing the NOW platform, Developer Creator Cons, Hacka-thons, and Hands-on laboratories instructed by ServiceNow technical experts.

Upcoming New York Release

ActioNet, as a ServiceNow partner, participated in multiple activities bringing back knowledge to incorporate into our ServiceNow Practice Area. Our ServiceNow Practice Area is a key part of our ActioNet Innovation Center and Service Delivery made available to our customers. We learned about new capabilities, features and functions in the upcoming New York release scheduled for this year. New York will change how IT does business by adding new user personas for Virtual Agent, Service Owner, and Network Operations Center operator that provide more emphasis on Artificial Intelligence, Machine Learning, Knowledge Management and Mobile accessibility. New York further enables shift left support providing knowledge to the end user at their fingertips using ServiceNow's Mobile App anytime and from anywhere. ServiceNow is planning an upcoming move to FedRAMP High/DoD IL-4 platform to increase security and protection of the data of the Federal Government.

Using the NOW Platform to get Business Done More Efficiently

Commercial companies shared how they are using the ServiceNow Project and Portfolio Management and Customer Service Portal modules as part of their day-to-day business operations. ServiceNow experts presented how Delegated Development can be performed using secure DevOps based workflow in the NOW platform. For Government agencies, ServiceNow has built applications addressing governance, risk management, and security operations; including offering out-of-the-box templates for managing the National Institute of Standards and Technology Risk Management Framework from a single platform.

The NOW platform offers many out-of-the-box automated capabilities enabling commercial and government agencies to accomplish work done more efficiently, quickly and reduce the friction that can occur with inefficient manual processes from multiple systems. ServiceNow Performance Analytics provides an enterprise level visibility and single source of truth providing real-time tracking, trending and response to key performance indicators for IT and non-IT services. ServiceNow Asset Management provides a single source of truth, visibility and real-time tracking, trending and chain of custody for hardware, software and mobile devices.

Enterprise level Project and Portfolio Management combines delivery of Mission and Technical services tightly integrated with the Configuration Management Database. An end-to-end service delivery lifecycle encompassing business need, capability, cost, architecture, supportability, security, fulfillment, delivery, operations and support can be managed more efficiently across the enterprise. Mechanisms to control multiple development efforts simultaneously with administration and upgrades have been improved by using ServiceNow's Automated Test Framework to improve delivery and quality.

Contact Us for More Information

If you are interested in how ActioNet can help harness the full capabilities of the NOW platform and transform your mission or business processes to run more smoothly, please contact info@actionet.com.