A Manager's Guide to RESTful APIs and Why They Matter

August 2016

RESTful APIs are quickly becoming the standard for development of applications where agility, reliability and scalability are key solution requirements. This brief article provides a guide to managers as to why RESTful APIs matter in the delivery of the agile enterprise.

Metavine, Inc.

2001 Gateway Place
Suite 330E
San Jose, CA 95110

www.metavine.com

What are RESTful APIs?

REST is an acronymn for REpresentational State Transfer. Simply put, it is an architecture that defines a stateless approach to developing solutions that are reliable, scalable and fast. A stateless approach removes the need for a server to maintain and communicate session information which results in improved utilization of server side resources and increased performance. A RESTful API is simply an Application Programming Interface that uses the HTTP protocol to PUT, POST, GET and DELETE data.

RESTful APIs are being adopted by solutions architects and developers as a means of decoupling services. The approach enables the deevolution of the traditional monolithic application model. Through the use of RESTful APIs, a solution can exist as a separate set of services where changes to a service can occur in isolation from the remaining solution. This reduces the risk of code changes impacting the entire solution. The result is a reduction in testing requirements and improved time to market delivery. Additionally, the use of RESTful APIs enable cross platform and solution interoperability where applications can take advantage of services provided by business partners and numerous vendors such as Google, Salesforce, HP, IBM and so on.

Why RESTful APIs Matter

As the majority of software vendors move toward a REST based architecture and offer RESTful API based products, it reduces the dependency of enterprise developers to write proprietary code. This facilitates a number of opportunities for solutions architects and software development managers to exploit to their advantage. First, it enables applicatons to be assembled rather than written. The result is that applications can be quickly constructed to meet customer and business line demand facilitating agility in solution delivery. Second, it enables delivery of applications at reduced cost. Maintenance of applications is distributed across those vendors providing the services that the applicatons consume. Furthermore, it removes the requirement on specialized skills within the development team where the domain knowledge of the service being consumed is managed by the software vendor and not the enterprise.

As commerce continues to move to an online delivery model, scalability, reliability and speed of service become increasingly important in providing customer satisfaction. The use of RESTful APIs can play a significant role in improving that outcome.

Introducing Metavine

Metavine is a zero code platform for the delivery of enterprise-class cloud and IoT applications. The platform allows developers and non-developers alike to create micro-services and expose those micro-services as RESTful APIs. Vendor RESTful APIs can also be called from within Metavine micro-services. It enables the creation of applications at up to 10x faster than traditional approaches. Through the use of RESTful APIs, Metavine applications are scalable, reliable, fast and deliver true enterprise agility.