

NFV Implementation Filling the OSS Gaps that prevent Virtualization Benefits

Service providers are moving quickly to recognize the benefits of virtualizing their infrastructure. This will provide for significant savings in equipment cost, as well as space and power consumption. On top of this NFV can simplify infrastructure management and

improve time-to-market for new services. In order to obtain these benefits one of the key areas that must be addressed is the limitation of the legacy OSS systems that are currently in place. These gaps include the lack of a dynamic data model, the lack of

distributed processing capabilities, and the lack of suitable integration with cloud management systems. There are two approaches that can be undertaken to address these gaps. See the table below for a comparison of the approaches.



LEGACY OSS MODIFICATION

Description: This method involves overhauling the data models and processing engines of the current OSS systems. It also involves adapting the interfaces to be CMS compliant.

Time-to-Implement: Since these modifications require a re-write of the OSS data model, processing engine and interfaces you would expect a lengthy implementation.

Cost: Since the re-implementation or extension of legacy OSS systems would be significant it is expected that the cost would also be significant.

Benefits: No additional software will be required.

Limitations: There is a risk that OSS modifications might not address the spectrum of virtualization needs and the benefits of virtualization may not be fully realized.

Approach Best Suited For: Service Providers who are satisfied with the speed and cost by which their OSS implementations and enhancements have been performed.

NFV AUGMENTATION

Description: This method involves dropping in a service management module that abstracts the physical and virtual elements providing overall service orchestration.

Time –to-Implement: There are no changes required to the legacy systems and the SM module can easily be integrated with the legacy and CM systems so time-to-implement is short.

Cost: Since the cost of the SM module is modest and the effort required to implement it is only a few man-months the cost is low.

Benefits: Faster implementation time, lower cost, no disruption to legacy systems.

Limitations: Since the service manager module is designed to fully augment the legacy OSS capabilities there are no expected limitations.

Approach Best Suited For: Service Providers who do not want to modify their existing OSS systems and are looking for a fast and cost effective method to implement NFV.