The Challenge

The majority of mobile network operators (MNOs) today address service provisioning and element configuration through a mix of manual processes and "spot" automation tools. This approach is time consuming and error prone, resulting in delayed market entry and frequent customer service issues. Instead of end-to-end service automation and orchestration, MNOs struggle to manage networks featuring products from multiple vendors— and often multiple product versions from the same vendor. This multiplicity doesn't lend itself to simplicity, requiring network operations teams to individually configure services for each specific device and device version. As a result, MNOs experience significant delays when attempting to roll out new services, deploy new networks or onboard new customers.
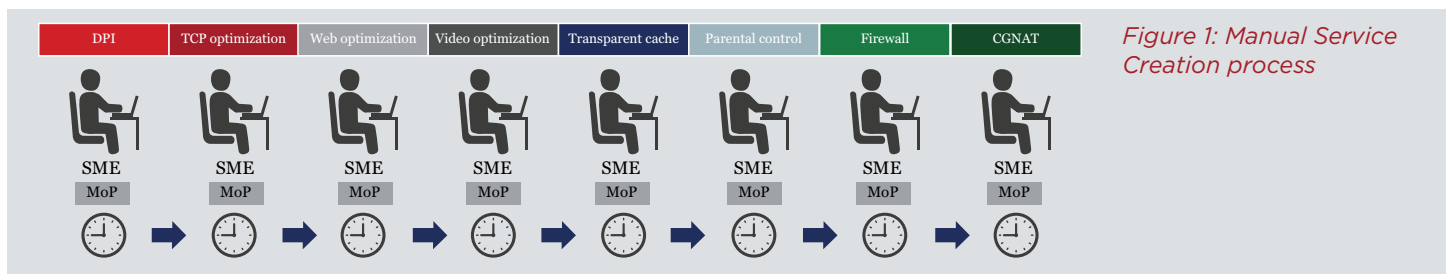
Figure 1: Manual Service Creation process

ASAP: It's About Time

Think about the time your network operations team spends defining and provisioning new services, configuring elements, managing updates and testing new services. Now imagine being able to automate those processes to shave weeks from your production cycle. That's the power of ASAP: a network-wide service automation and orchestration platform that radically simplifies service creation, service provisioning and the turn-up of new virtual network function (VNF) instances in your network.
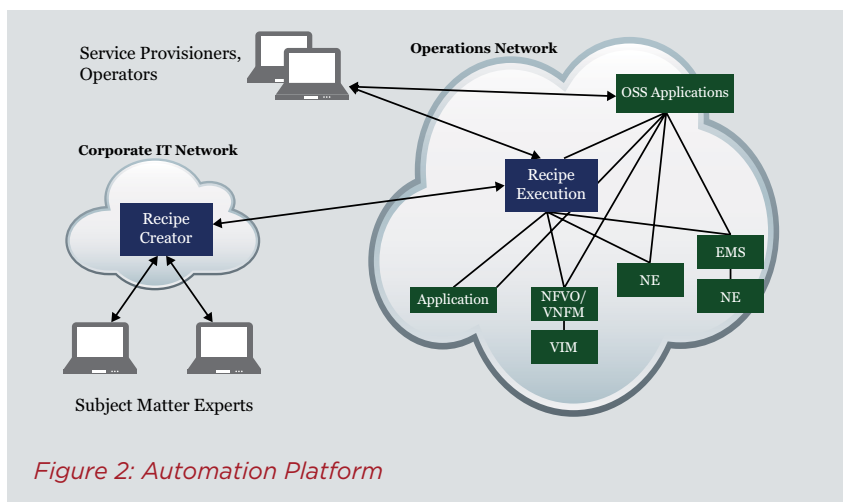
Figure 2: Automation Platform

Instead of controlling just a subset of network devices, ASAP provides broad service automation and orchestration across a wide range of standard network element interfaces including SOAP, REST, NETCONF/YANG and CLI. The ASAP solution enables non-programmers to quickly create service templates or recipes from existing methods of procedure (MOPs) and execute those recipes across the entire network, providing a complete solution for service lifecycle management.

Mobile Network Operators are struggling to compete with agile web companies. Being able to launch, modify, and kill services in a matter of days, rather than months or years is crucial to capture consumers' and enterprises' business," said Patrick Lopez, Founder and CEO of Core Analysis. "Current network architectures simply do not allow fast services provisioning and roll out. An automated service creation environment that can lift legacy networks to the cloud's levels of agility and elasticity can be a game changer."

ASAP goes beyond current service orchestration, automation and flow-through provisioning tools to provide complete configuration management across multi-vendor virtual and physical network elements and network-wide service instances. It empowers network operators to create new service definitions faster with no complex coding required, and liberates OSS/BSS support teams from the tiresome task of provisioning each element or virtual instance in the network to support those services. By extending the benefits of service automation across the entire network, ASAP enables carriers to reap the full rewards of network virtualization sooner.
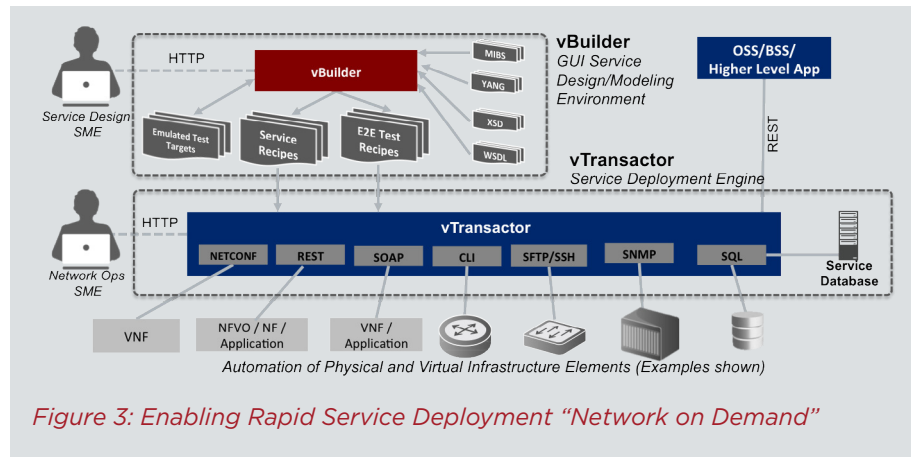
Figure 3: Enabling Rapid Service Deployment "Network on Demand"

Why ASAP?

» Allows subject matter experts (SMEs) to quickly create new service definitions without complex coding
» Frees OSS/BSS teams to concentrate on creating policy/business logic rather than implementing it
» Accelerates service deployment in your network
» Eliminates provisioning and configuration errors that result from manual processes
» Delivers northbound/southbound configuration synchronization between the ASAP platform and all deployed network functions
» Provides rapid onboarding of new customer services instances in your network
» Supports end-to-end testing and validation of services before and after production deployment
» Simplifies service deployment in new regions

Features

» GUI-driven service creation screens with drag-and-drop commands
» Secure sandbox for seamless movement between testing and production environments
» Monitors, modifies and synchronizes service recipes across a wide ecosystem of networked devices including both virtual and physical packet gateways, policy servers, switches and session border controllers
» Supports service integration across complex, multivendor networks including both physical and virtual instances of network elements
» Support of multiple interfaces (NETCONF, REST, SOAP, CLI, etc)
» Device and network element agnostic
» Coding-less service creation-operational Subject Matter Experts (SMEs) are empowered to create services ("recipes") without the need of a programing language or coding requirements
» Agent-less service execution-no need to support a client agent on the Managed Device

By the Numbers

18 The number of months it can take to roll out a new service using traditional methods.

50X The acceleration of time-to-market for new services when Affirmed Service Automation Platform is used.

90 The percent of opex reduction when new services are created with Affirmed Service Automation Platform (ASAP).

Accelerate and Reduce Costs of Existing Services

The use cases in this section are composite examples of commercial deployments from individual case studies and their corresponding proje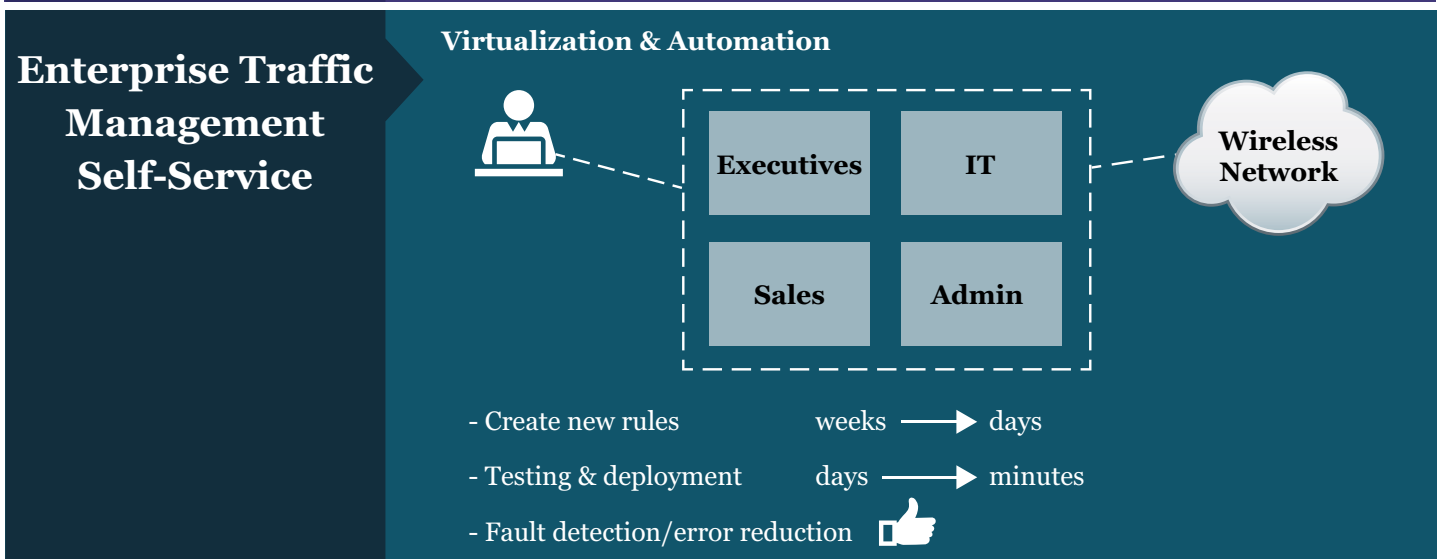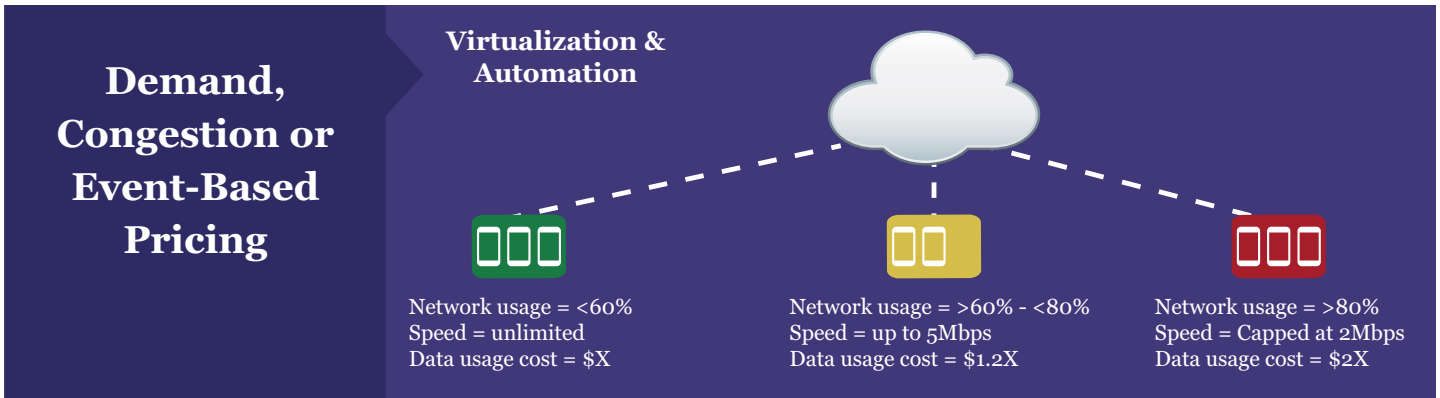ct plans. The products deployed are a virtual EPC with collapsed Gi LAN functionality and a stateful Automated Configuration Management Platform that records and automates third-party physical and virtual element configuration.

EPC and MVNO

Legacy EPC	EPC Virtualized + Automation
$3.1 million	$0.78 million
19.5 months	9.75 months

Add MVNO	Add MVNO with Automation
$48,000	$1,610
2 months	2 days

Sponsored Data

Legacy Zero Rating	Zero Rating with Automation
$9,660	$1,610
12 days	2 days

Parental Control

Legacy	Virtualized + Automation
$0.9 million	$0.38 million
8 months	4 months

Subsequent Service	Subsequent Service with Automation
$64,400	$1,610
2 months	2 days

Enterprise VPN as a Service

Legacy VPNaaS Enterprise Onboarding	Virtualized + Automation VPNaaS Enterprise Onboarding
$12,075	$1,610
2 weeks	2 days

New Services Enabled by Automation

One has to look at the Automated Configuration Management Platform (ACMP) as a best practice that accelerates and multiplies service opportunities. The real benefit of automating service provisioning in virtualized and hybrid environments is the opportunity to launch services that were otherwise too daunting or too expensive to launch.

Demand, Congestion or Event-Based Pricing

Virtualization & Automation

Network usage = <60%
Speed = unlimited
Data usage cost = $X

Network usage = >60% - <80%
Speed = up to 5Mbps
Data usage cost = $1.2X

Network usage = >80%
Speed = Capped at 2Mbps
Data usage cost = $2X

Enterprise Traffic Management Self-Service

Virtualization & Automation

Executives

IT

Sales

Admin

Wireless Network

- Create new rules   weeks ⟶ days
- Testing & deployment   days ⟶ minutes
- Fault detection/error reduction 👍

Blockbuster/ Niche Services

Short Tail Services with Virtualization & Automation

Hockey Season Pass

Montreal Canadiens

Boston Bruins

Eastern Conference Championships

U.S. Team Pass

Stanley Cup Pass

French, English, Spanish

20 packages

4 days

$30,000