

How PacketFront can assist Operators to reach business goals



WHEN WE TALK TO OPERATORS, THEY TYPICALLY RAISE FOLLOWING PROBLEM AREAS CONCERNING THEIR NETWORK:

- Delivery times are too long
- Too much time spent on standard service provisioning
- Unique configuration style of the network engineers making the network incoherent
- Poor or completely lacking documentation
- Configuration errors costing time and decreasing customer satisfaction
- Unoptimized use of network resources
- Too much dependency on a few key employees knowledge of the network

Does the list sound familiar? PacketFront BECS is a multivendor capable network orchestrator that can help you to solve all these problems. It does this via configuration and documentation automation that results in a harmonized and easy to operate network from core down to CEs. But that is not all. Below you find some additional benefits of using BECS.

Increasing ROI

Investors are expecting a high Return On Investment (ROI). At the same time the competition is fierce, severely limiting the Average Revenue Per User (ARPU) potential from standard services.

The best way to reach long term profitable result is by keeping your cost level lower than the competition. PacketFront can help you with this by introducing highly automated workflows for the day-to-day operation of the networks. These workflows assist customer support, operations and network engineers eliminating many of the routine tasks and radically shorten the Time-To-Revenue.



BECS can be combined with a customer phasing portal creating fully automated workflows from customer order to delivery, not only for service activation/decommissioning, but for tasks, such as IP address allocation, VLAN configuration, running network health checks and much, much more. This means your automation platform is doing the work and your personnel is not involved in most, if any, of the day-to-day changes.

New revenue streams

However, just cutting costs can not be the only answer. You need new revenues as well and that is what BECS can provide you. Just to give you some ideas:

Due to automation and speed BECS gives you possibilities to create services that you could never be able to offer with traditional network management. This includes, for example, on-the-fly bandwidth changes and date/time dependent services.

Network consolidation

Even if the services operators provide are identical on the paper, the implementations behind the sales items can look very different. This makes mergers many times a painful process as different hardware vendors and service templates are being used. BECS converts simple service + port API calls to complex network topology and hardware dependent configuration and pushes them to devices through-out the service delivery path. This means BECS harmonizes your network and you can use the same business processes even if the underlaying network(s) can take many shapes and forms.



Access to personnel

The access to skilled personnel has become a limiting factor for many operators, partly due to increasing demand and partly due to Brexit limiting the possibility to hire from abroad.

Again, the automation provided by PacketFront will help you to alleviate the problem: You simply do not need as much staff to run the network and the personnel you have can focus on developing the network and services Instead of working with routine tasks.

Besides, using a tool like BECS makes on-boarding new employees a much easier task as the network is templated, error-free and documented.

Telecom Security Act

One of the biggest new pieces of legislation applicable for operators is the Telecom Security Act (TSA). If your turnover is more than £50m you are affected by this law. Even if your turnover is smaller, the TSA may still apply if you are co-operating with larger operators or ISPs as they are obliged to secure their whole delivery chain.



PacketFront BECS Network Orchestrator is already used by UK's tier 1 and 2 operators. As a consequence, PacketFront has implemented and will continue to implement support for TSA, not only when it comes to functionality, but also to comply with organisational requirements set for the suppliers.

BECS as a point product

We understand that it not that easy to go all in with network orchestration, at least not from day 1. Luckily you do not need to automate your whole network or use all available functionality to gain significant benefits. Examples of more limited use are partial device configuration, management of a single network layer or vendor, zero-touch element deployment and firmware management. You can simply start from where it currently hurts the most.

SOUNDS GOOD, BUT...

Many times, we hear that the idea of network automation is fantastic, but the network in question is too special, the operator doesn't even know how the devices are configured and there is no reliable documentation or required resources. **Luckily again, we have created tools to tackle all those problems enabling gradual, automation assisted and controlled migration path for networks of all forms and shapes.**

The core principles of BECS

BECS is an API driven system designed to streamline network management and simplify the complexities of multi-vendor networks. It is an intent-based Network Orchestrator, meaning it makes sure that the network is always in sync with your other systems and fully documented.

At the heart of BECS is a hyper-efficient core, in which the network topology, service and element models are defined. Together with functions such as resource management (VLANs, IP addresses etc.) BECS creates unique configuration for each device in real time. This ensures a solid foundation for the system, providing a reliable and robust framework to build upon.



Built on top of the core are “element managers” that communicate seamlessly with various vendors’ devices. These add abstraction which enables a single style of communication with any overlaying systems, reducing the challenge of multi-vendor networks and simplifying their management as northbound systems have no need to understand the complexities of the network.

Meeting the Tier 1 operator requirements



BECS network orchestrator has been designed to meet carrier class requirements to manage up to millions of device ports. This is done by using scalable Core and Cell architecture. As the network expands, BECS allows you to add extra capacity by adding new Cells. Core and Cells can be used in site separated High Availability (HA) mode ensuring services in the unlikely event of a fatal hardware or software errors.

Service management

Activation, deactivation, and changes to services can cause numerous updates to service profiles. BECS automates these tasks, thus reducing human intervention and the risk of errors to a minimum.

BECS is designed to work broadly with the concepts of 'services' and 'ports'. Simply design your services, map them to ports, and the system will work out how to program all the equipment in the chain to achieve the service functioning on that given port.

Orchestration that adapts to your network

BECS has many ready service models. However, every operator has built the network in their way to suit the business requirements and technical preferences. Taking the automation path should not mean that the existing services or network topologies must be changed. With BECS you can do, yourself or with our Professional Services help, any changes to the provided models to make them fit your requirements and, most importantly, you can continue to adapt the solution based on ever changing environment.



Zero-touch device configuration and firmware management

BECS automates the complex and time-consuming task of initial device configuration or when replacing a faulty unit. During the start-up process the right parameter settings and firmware are provisioned to a device. BECS renders correct configuration based on information like hardware model, element role, network topology and device's location in the network. This allows zero-touch mass deployment of devices, such as CE's and access nodes.

Firmware version management is becoming a key concern due to ever increasing security risks. With BECS you know exactly what FW versions your devices are running, can do network-wide upgrades and enforce right FW versions as soon as devices are on-line.

Southern Communications Group and PacketFront in partnership for network orchestration



Southern Communications Group have instigated the “buy back time” program, which aims to identify where an engineering process can be automated and release the personnel from through life management, whilst improving their design capabilities.

Read the article in its entirety where SCG’s CTO Matthew Wring, describes SCG’s decision to partner with PacketFront for network orchestration.

Click on the links below:

<https://pfsw.com/scg-and-packetfront-in-partnership-for-network-orchestration/>

https://pfsw.com/media/pfsw_case-SCG_web.pdf

PacketFront

Software

PacketFront Software Solutions AB

Since 2001, PacketFront Software has delivered efficient automation solutions for telecom operators, city carriers and enterprises in more than 20 countries. Our multi-vendor network orchestrator, BECS, provides true end-to-end network automation - enabling functionality such as zero touch configuration and automated service provisioning for all IP networks. It also offers a seamless migration from legacy networks to SDN and NFV.

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