To stay competitive in today’s market, service providers need to have the ability to deploy and manage services at scale in a rapid and efficient manner. However, growing traffic volumes and increased network complexity, including Network Function Virtualization (NFV), have made network management and service deployment significantly more complex and costly. This drives the need for sophisticated and agile Element Management Systems (EMS) and Network Management Systems (NMS) with high demands on functionality, scalability and reliability.

**ELEMENTCENTER PLATFORM**
ElementCenter is a model-driven EMS/NMS development platform that provides a collection of management features for configuration, monitoring and control of physical and virtual devices (i.e. PNs and VNFs) through a powerful and customizable web-based user interface. ElementCenter saves you and your team valuable development time and risk, so that you can focus on the features that uniquely differentiate and add value to your product.

**Model driven:** ElementCenter leverages modeling and code generation technologies to provide unprecedented accuracy, maintainability, and rapid development. The device’s native data models (i.e. NETCONF YANG, SNMP MIB) are used by ElementCenter to drive device communications, data storage, statistics, and GUI screens. Additional custom models can be added easily for extensibility.

**Service Orchestration:** ElementCenter enables users to orchestrate services transactionally across mixed networks of physical and virtual devices or network functions. Operators can schedule deployment of services, configure, and monitor service statuses.

**Manage services at scale:** ElementCenter’s powerful web GUI allows hundreds of users to manage thousands of devices from one server simultaneously. Furthermore, ElementCenter is capable of processing thousands of events per second to ease management of large complex networks.

**Shorten time-to-market even further with Enea On-Device Management,** a management agent for both physical and virtual devices (VNFs) that supports all major network management protocols (NETCONF, SNMP, etc.). Furthermore, Enea offers in-depth platform training as well as professional services for architectural, design and development engineering.

**TRUST ENEA IN YOUR NFV JOURNEY**
An industry-leading company in the NFV domain, Enea was the first company to demonstrate a complete ARM-based OPNFV reference platform and to host an ARM-based OPNFV community lab (Pharos lab). Enea invests 20% of its revenue on R&D to maintain leadership in the NFV domain and provide best expertise and advice to customers.
Extensive experience and reputation in networking and telecom sector. Enea is the company behind the most extensively deployed embedded operating system in the communication market. In fact, Enea's solutions are deployed in a variety of networking nodes (i.e. over half of the world's cellular base stations and a majority of the world's satellite base stations).

ElementCenter customers enjoy world-class support coverage to address immediate and long term support needs, from technical support for developers to regular releases and platform upgrades. Enea ensures the lifetime of your application with over 400 engineers and offices in 8 countries within Europe, North America and Asia.

**VNF and Virtual Infrastructure Management (VIM)**
Manage and monitor infrastructure services such as OpenStack. Map service instances to virtualized network functions on demand. Scale VNFs dynamically to respond to load variation.

**Alarm and Events**
Persist alarms and events and automatically age them out. Correlate alarm status to configuration objects. Add rules to override default alarm behavior. Provide alarm email notifications to users and track operator handling of alarms.

**Configuration**
Drive all your configuration GUI screens from the devices' models. Support concurrent management of multiple versions of various devices. Declare permissions per object type. Perform transactional cross-device (service) configuration.

**Topographical Map**
Manage your network using a hierarchical organization. View alarm statuses rolled up through sub-maps. Use static maps or live Google Maps integration.

**High Availability**
Provide redundant Active and Standby servers to ensure high availability. Provide single IP for the client using shared virtual IP.

**Performance Management**
Collect and persist binned statistics as defined in your model. Aggregate statistics on hour, day, week, month and year boundaries. Query and display historical statistics. Define thresholds that raise alarms when violated.

**Graphic Device View**
Quickly create a graphic device view to reflect device state and enable configuration using menus and controls.

**COMPLETE FCAPS FEATURE SET**

**Device Interfaces**
Manage NETCONF, SNMP and Enea On-Device Management-based devices out-of-the-box. Handle custom devices with additional or proprietary protocols with incremental development effort. Scan and discover physical and/or virtualized (VNF) instances on subnets on a schedule.

**Northbound Interfaces**
Automatically generate SOAP and REST northbound interfaces from service models for OSS and SDN integration. Naturally fits into a vendor-agnostic NFV management architecture.

**Security**
Configure users to be authenticated locally, or via LDAP or RADIUS. Plug in additional AAA schemes. Automatically authenticate and audit all incoming requests. Leverage the underlying rich permissions framework for users, groups and devices.

**Service Orchestration**
Deploy, manage and monitor network-wide services that operate across multiple devices or network functions. Correlate service failures with device faults.