

SOLUTION OVERVIEW

Accelerating IMS deployments with validated solutions

Ericsson and Broadcom



ERICSSON

vmware[®]
by Broadcom

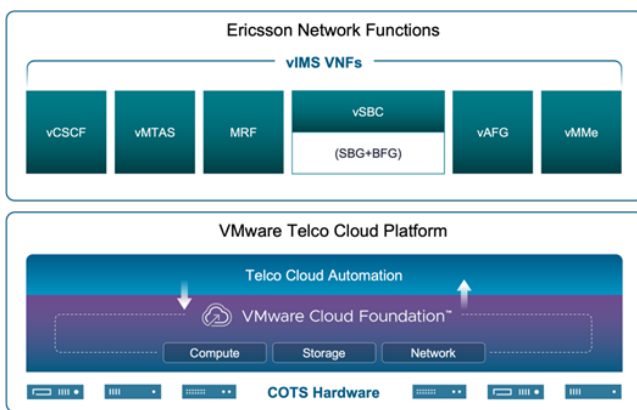
Accelerating IMS Deployments with Validated Solutions from Ericsson and Broadcom

As communications service providers (CSPs) transform their networks, ensuring seamless integration between virtual network functions and cloud platforms has become increasingly more critical. Ericsson and Broadcom have collaborated to validate Ericsson's virtual IP Multimedia Subsystem (vIMS) solution on Broadcom's VMware Telco Cloud Platform, so as to enhance interoperability, performance, and lifecycle management capabilities in a virtualized environment.

Partnership overview

Ericsson delivers a mature, carrier-grade vIMS solution that enables CSPs to deliver voice, video, and messaging services across 2G, 3G, 4G, 5G and WiFi networks. Built on a robust virtual network function (VNF) architecture, the Ericsson vIMS solution is designed to offer high availability, scalability, and operational flexibility. Broadcom's VMware Telco Cloud Platform, built on VMware Cloud Foundation (VCF), is a field-proven and industry leading solution with over deployments worldwide. It is a horizontal platform to host, automate, and manage VNFs and CNFs. For IMS workloads, the integration is built through VMware Telco Cloud, enabling CSPs to orchestrate and manage virtualized network functions with efficiency and consistency.

Figure1: VMware Telco Cloud Platform with Ericsson Network Functions



Why this partnership matters

- The joint solution validation between Ericsson and Broadcom empowers CSPs to:
- Reduce time-to-market for new network services
- Maintain operational continuity with validated interoperability
- Future-proof infrastructure with multi-functions support
- Ericsson and Broadcom offer a seamless path for CSPs to to deploy and operate IMS solutions while minimizing operational complexity.

Key benefits

• Validated Interoperability for VNFs

This joint validation is a mission focused collaboration with the goal that all components of the Ericsson vIMS solution can be reliably deployed and operated on VMware Telco Cloud Platform, supported by an integration that enables a seamless operation of complex VNF service chains in a multi-tenant cloud environment.

• Streamlined Onboarding and Deployment

The combination of Ericsson vIMS solution deployed and operated on VMware Telco Cloud Platform becomes a solution that leverages VMware Telco Cloud automation and resource management capabilities to onboard and deploy Ericsson IMS network functions efficiently. Broadcom and Ericsson teams executed manual and automated testing to confirm that all VNFs were correctly instantiated, configured, and connected.

• Lifecycle Management with Platform Reliability

CSPs benefit from full lifecycle support, including resource allocation, monitoring, scaling, and software upgrades. VMware Telco Cloud Platform's consistent VNF management and observability capabilities help reduce operational overhead and simplify troubleshooting across the IMS stack.

• Carrier-Grade Performance and Scalability

The validated IMS solution was tested under real-world conditions to ensure stability, performance, and robustness. VMware NSX provides high-throughput virtualized networking, while vSphere delivers the compute reliability needed to support latency-sensitive IMS workloads.

Solution capabilities

To further support the Ericsson vIMS solution's seamless integration with Broadcom's VMware Telco Cloud Platform 5.0, a joint technical validation was conducted across both Ericsson and VMware environments. This end-to-end exercise confirmed that CSPs can confidently deploy IMS with predictable performance, simplified operations, and reduced integration risks. The validation activities emulated real-world service provider conditions, demonstrating the robustness of the solution under scale, failover, and lifecycle operations.

VMware and Ericsson Validated Solution:

- **Onboarding readiness:**

Both manual and automated workflows for VNF package import, resource allocation, and service chaining were validated for consistency and reliability.

- **Infrastructure compatibility:**

Testing across VMware core components (e.g. NSX, ESXi, vCenter) ensured smooth integration and operational alignment.

- **Performance and resiliency:**

VNFs were evaluated under scale-out and failover scenarios, validating system robustness in demanding environments.

- **Operational automation:**

Leveraging VMware Telco Cloud, template-driven instantiation and full lifecycle management of VNFs were verified to simplify operations and reduce overhead.

Virtual IMS for VMware is delivered as a pre-integrated, pre-verified system composed of distinct VNFs specific to the IMS domain. These VNFs realize network functions as defined in the 3GPP-based IP Multimedia Core Network Subsystem and interoperate seamlessly with other VNFs or PNFs through standard 3GPP/IETF interfaces.

For more details on joint collaboration from VMware or Ericsson please visit [VMware Ready for Telco Cloud Program](#) site.

Solution Components

Ericsson Network Functions

- vMTAS - Multimedia Telephony Application Server
- vCSCF - Call Session Control Function
- vSBC - Session Border Controller
- vSBG - Session Border Gateway
- vBGF - Border Gateway Function
- vMRF - Media Resource Function
- vAFG - Authentication Federation Gateway
- vEMe - Enriched Messaging

VMware Telco Cloud Platform

- Design networks for high performance, scale, availability, and security
- Deploy and manage multi CNFs and VNFs on a unified IaaS and CaaS infrastructure
- Day 0/1/2 lifecycle operations across infrastructure IaaS and CaaS workloads
- Built-in for fault and cyber-threat isolation
- Support for both ETSI and GitOps frameworks for application management

Ericsson IMS - vIMS 2.22

- vMTAS 1.35 (Multimedia Telephony Application Server)
- vCSCF 1.31 (Call Session Control Function)
- vSBC 2.33 (Session Border Controller):
 - vSBG 2.27.1 (Session Border Gateway)
 - vBGF 1.42 (Border Gateway Function)
- vMRF 1.24 (Media Resource Function)
- vAFG 2.18 (Authentication Federation Gateway)
- vEMe 1.25 (Enriched Messaging)

VMware Telco Cloud Platform

- VMware Telco Cloud Platform 5.0.1

Get Started

The successful validation of Ericsson's vIMS solution on Broadcom's VMware Telco Cloud Platform provides CSPs with a robust, carrier-grade voice and multimedia solution built on a proven cloud infrastructure. This collaboration ensures that service providers can modernize their IMS core with confidence, backed by pre-tested interoperability and operational readiness.

Ericsson and Broadcom remain committed to supporting future enhancements of the IMS solution and ensuring alignment with upcoming VMware Telco Cloud Platform releases.