

# NITRO Wireless

## 5G Cloud Core Offload

A TeraVM Core Test Solution to Optimize  
the Cost of 5G Core Deployment in the Cloud

### The Challenge Facing Operators

Financial considerations along with open, disaggregated, software driven network architectures are driving the telco to the cloud. Estimates suggest nearly half of telco network capacity will be cloud native in 3-5 years.

Moving processing and network functions to the cloud is still a relatively new and untested concept. Evaluating performance and estimating hosting requirements remains a challenge and performance in the cloud remains uncertain: overprovision of cloud resources and the network incurs excessive costs; under provision and customer performance is impacted leading to subscriber churn or SLA breaches.

### The VIAVI Solution

By creating a cloud-hosted emulated RAN and Core network and customer usage scenarios, TeraVM can benchmark realistic performance metrics to allow optimal dimensioning of cloud compute power; the data can also be used to plan for future growth and cloud hosting cost estimates.

TeraVM Cloud Core Test allows step-by-step testing, covering everything from entire 5G core test, individual element wraparound test, scale, performance, error, cloud platform and security test.

### Business Impact

Testing and validating 3GPP functions and real traffic on cloud platforms can position cloud providers with realistic benchmark figures pushing them to the fore of the competition.



## Sample Use Cases

**Use Case 1:** Scale test a 5G core network on Amazon Public Cloud. Deploy the test tool on the same Amazon Web Services (AWS) platform as the Core Network under test and scale with real traffic to verify the platform is fit for telecoms grade connections.

**Use Case 2:** Test cloud platform resiliency. Telco networks are architected with a lot of resilience. Cloud platforms can suffer outages – test cloud failure in the safety of the lab to ensure hot standby kicks in and full resiliency is maintained.

## VIAVI Benefits

- ✓ **Best All Round Core Test Tool**  
Only Core Test tool capable of functionality, scale, performance, cloud and security testing.
- ✓ **Cloud Enabled Testing**  
Test core network on any Cloud or Cloud Edge platform.
- ✓ **3 S's of TeraVM Core Test**  
Scalable – Scales easily in the cloud  
Shareable – Cost optimization through license sharing  
Speed – Fast test execution increases productivity
- ✓ **Core Network Firewall Test**  
Stress test integrated Firewalls with real traffic intermixed with cybersecurity threats.



### Get started with VIAVI Core Test solutions

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