

The RADCOM logo is positioned in the upper right quadrant of the page. It features the word "RADCOM" in a dark blue, sans-serif font. The letter "A" is stylized with a small blue triangle above it. The background of the slide includes a large blue diagonal stripe on the left, a light blue dotted pattern at the bottom, and two colorful brushstrokes (orange and blue) on the right.

RADCOM

RADCOM Network Intelligence

Solution Overview

RADCOM is the leading provider of cloud-native network visibility, service assurance, as well as customer and service experience management.

Supporting telecom operators in their transition to NFV and 5G, RADCOM Network Intelligence uses a combination of probe-based data and correlates it with multiple data sources to deliver valuable customer and service experience insights.

RADCOM Network Intelligence is field proven among top-tier operators, worldwide. Ready for the challenges in the transition to NFV and 5G RADCOM Network Intelligence empowers operators to deliver top-quality services to their customers.



Introduction

The continual growth of network traffic is creating multiple challenges for operators. The growing demand for data-rich services is only set to increase with the introduction of 5G and the services associated with it.

Operators are also transitioning to the implementation of a centrally controlled, distributed, cloud network which deploys services on the edge. To assure advanced data services such as AR/VR, UHD video streaming, and gaming, operators need the ability to focus on a specific area of the network and troubleshoot service quality

on-the-fly. Therefore, an on-demand approach is required for monitoring network traffic.

Another major challenge is the increase in encrypted traffic. Indeed, over 50% of all data is encrypted, and YouTube has stated it currently sends 97% of its traffic over encrypted connections, with the goal to make this 100%. Video traffic dominates network usage, which if encrypted creates a huge blind spot for operators on the network, threatening the quality of service delivered to the customer. To compound this, as encryption becomes more sophisticated in 5G, classic probing will have limited visibility. In order to ensure end-to-end service quality, the

operator must take data from multiple data points such as network packets, OpenTracing from multiple vendors, network interfaces, and event notifications (as defined in 3GPP). This data then needs to be processed and correlated to deliver smart insights so operators can deliver a top customer experience for new 5G services.

This has given rise to an additional challenge, which is the need for operators to differentiate themselves from their competition which now includes OTT services such as Netflix and YouTube. Operators, therefore, need to find new ways to stand out, and they can do so by becoming a digital service provider, delivering their own streaming and gaming services alongside a superior level of service. These factors combined will cause operators to adopt a new approach to monitoring their networks.



Market Challenges

Assuring the operator's network in the transition to NFV and 5G

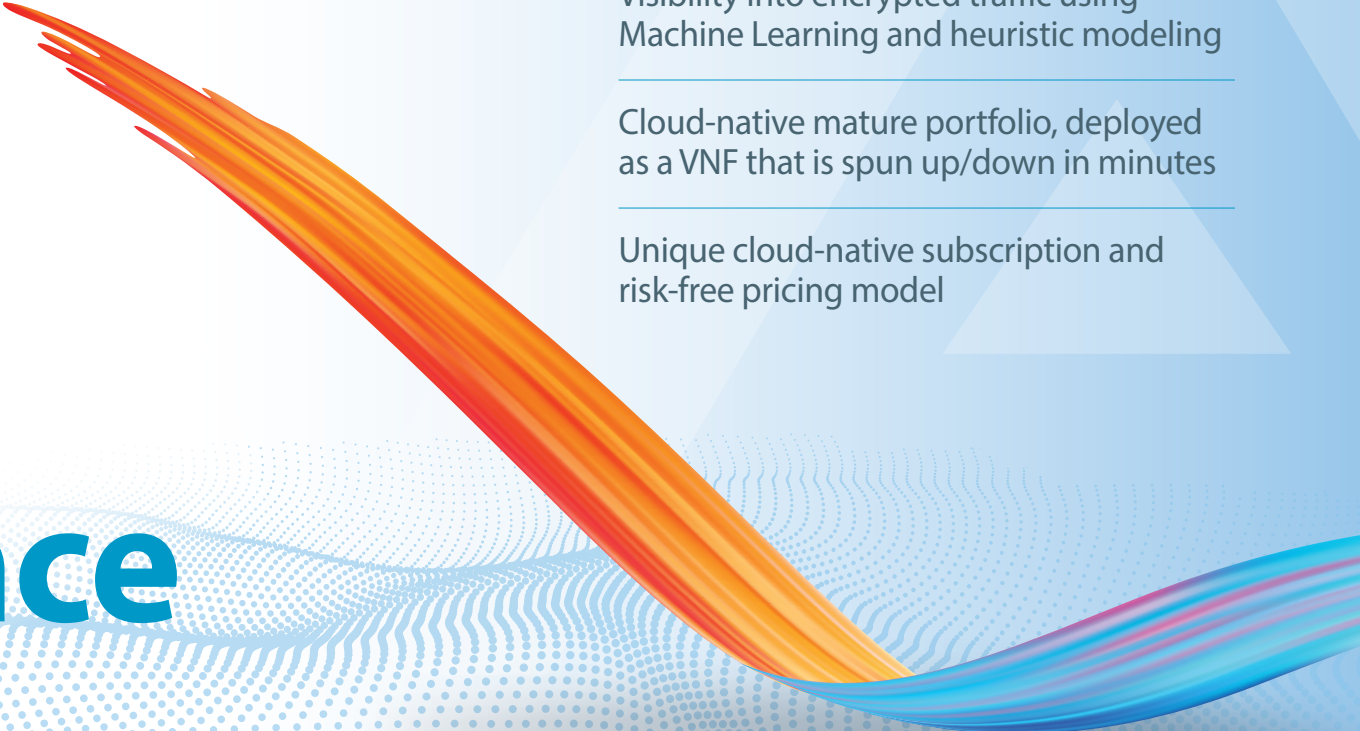
Customer and Service Experience Management solution delivers business critical insights for an improved Quality of Service

Smart, on-demand troubleshooting of the network with on-the-fly analysis

Visibility into encrypted traffic using Machine Learning and heuristic modeling

Cloud-native mature portfolio, deployed as a VNF that is spun up/down in minutes

Unique cloud-native subscription and risk-free pricing model



RADCOM Network Intelligence

RADCOM Network Intelligence is a smart, on-demand, and automated solution which maximizes insights while minimizing packet processing.

RADCOM's Network Intelligence solution is a three-module system. RADCOM Service Assurance which allows operators to fully VISUALize their network.

RADCOM Network Visibility acts as a virtual network packet broker to help OPTIMIZE the network.

Finally, RADCOM Network Insights deliver critical business intelligence with a focus on the customer. Together they are a fully integrated system that works both as one unified solution as well as standalone.

RADCOM Network Intelligence enables the operator to choose which data to monitor, store and analyze. By deploying a fully virtualized system, operators can save up to 50% in costs, reducing both CAPEX and OPEX spend from day one.

RADCOM's innovative architecture delivers automated, real-time, and on-demand analysis. Data is captured and stored in a way that allows operators to run queries on-demand and analyze data at the packet-level efficiently.

RADCOM Network Intelligence allows the operator to understand the customer experience and troubleshoot service performance with smart virtualized solutions for NFV, 5G, and IoT.

RADCOMize
your
NETWORK

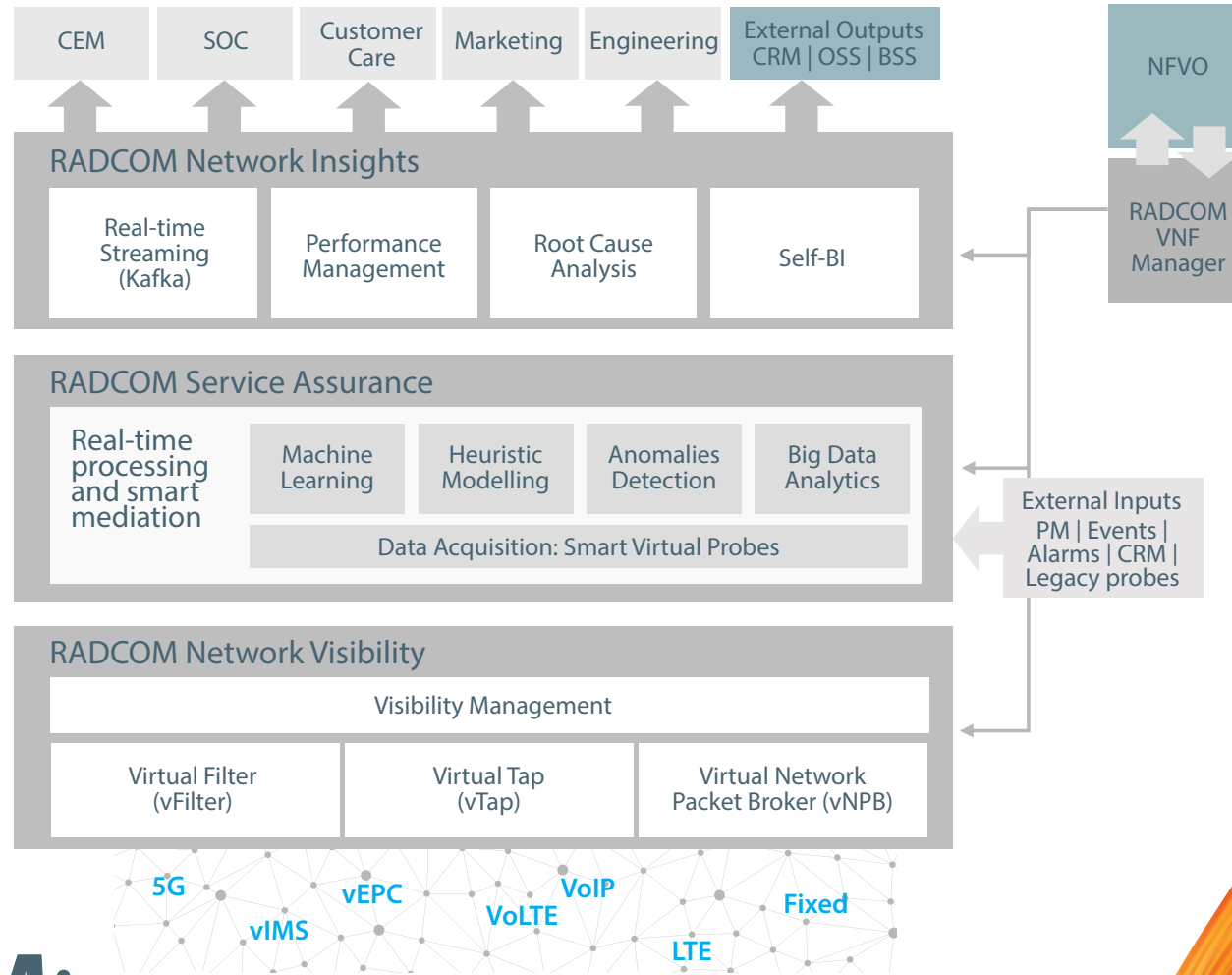
RADCOM Network Intelligence



RADCOM NETWORK INTELLIGENCE:

A smart, on-demand and automated solution.

Maximizes insights while minimizing packet processing.



RADCOMize *your* NETWORK

RADCOM Network Intelligence



RADCOM Network Visibility

Gain 100% visibility across the network

Intelligently distribute traffic with smart filtering, load-balancing and sampling creating a more efficient network

Automate and orchestrate visibility and assurance onboarding, configuration and scaling

Simultaneously manage high volumes of traffic across a distributed cloud environment utilizing Management at Scale

A solution built for large scale deployments

The RADCOM Network Visibility solution includes a virtual packet broker which distributes network packet traffic from the network switching layer or close to the virtual network function (VNF).

These actions are performed on-demand while smartly filtering, load balancing and sampling traffic, which helps the operator to avoid bottlenecks in traffic and remove problematic traffic closer to the source, creating a more efficient network.

RADCOM Network Visibility adapts in real-time to the continually changing network, and captures, optimizes, smartly load balances and distributes network traffic from multiple cloud environments to service assurance probes, security tools, and other systems.

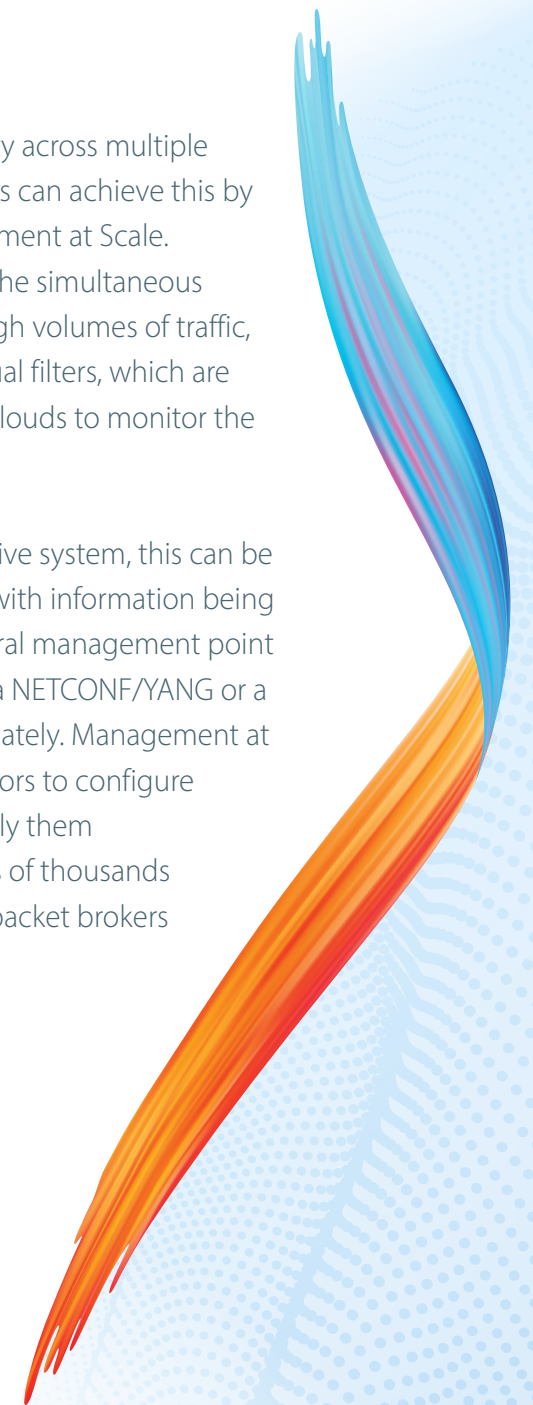
Deployed as a VNF, RADCOM Network Visibility can be instantiated in minutes, and managed by NFV Management and Orchestration (NFV MANO). This means that as network changes occur, they are automatically reflected in the visibility layer. Larger scale operators who are looking to deliver

full network visibility across multiple cloud environments can achieve this by deploying Management at Scale. Doing so, enables the simultaneous management of high volumes of traffic, using multiple virtual filters, which are placed within the clouds to monitor the network.

As a fully cloud-native system, this can be set up in minutes, with information being sent back to a central management point (in a central GUI, via NETCONF/YANG or a CLI) almost immediately. Management at Scale allows operators to configure rules once and apply them on-demand to tens of thousands of virtual network packet brokers (vNPBs) instantly.

OPTIMIZE *your* NETWORK

RADCOM Network Visibility





RADCOM Service Assurance

Complete end-to-end network visibility with a smart and flexible architecture at the heart of the solution

Deliver on-demand, automated intelligence for real-time understanding of network performance

Proactive troubleshooting on the network edge with predictive analytical insights to reduce churn

A smart, fully cloud-native, automated and on-demand approach to network monitoring, essential in the transition to NFV and 5G

RADCOM Service Assurance brings a smart and on-demand approach to network monitoring, with an automated and innovative architecture at the heart of the solution.

RADCOM Service Assurance extracts the raw data from the network using smart virtual probes and combines it with data from external systems through RADCOM Smart Mediation. Utilizing advanced Machine Learning and heuristic modeling the operator is able to gain insights from encrypted traffic. The data is then converted into rich, actionable network intelligence.

RADCOM's innovative architecture delivers automated, real-time and on-demand analysis, which is essential for the constantly evolving network.

The changes in the network architecture which will be introduced to manage the challenges of 5G will allow operators to utilize Multi-access Edge Computing (MEC) which involves running applications and performing tasks closer to the customers' devices. In turn this will create a more efficient network, reducing the signal load on the core network and improve the customer and service experience.

RADCOM Service Assurance is built to work seamlessly with the cloud and integrated into standard ETSI-compliant NFV Management and Orchestration (MANO) delivering on-demand and closed-loop functionality.

By taking an on-demand approach to service assurance, operators can benefit from the flexibility to either monitor the whole network or take a smart perspective and zoom in on a specific area or issue for speedy resolution.

Both RADCOM Network Visibility and RADCOM Service Assurance can be deployed as a standalone solution or as an integrated system which works together to provide a fully automated solution from virtual tapping point to network insights.

VISUALize *your* NETWORK

RADCOM Service Assurance





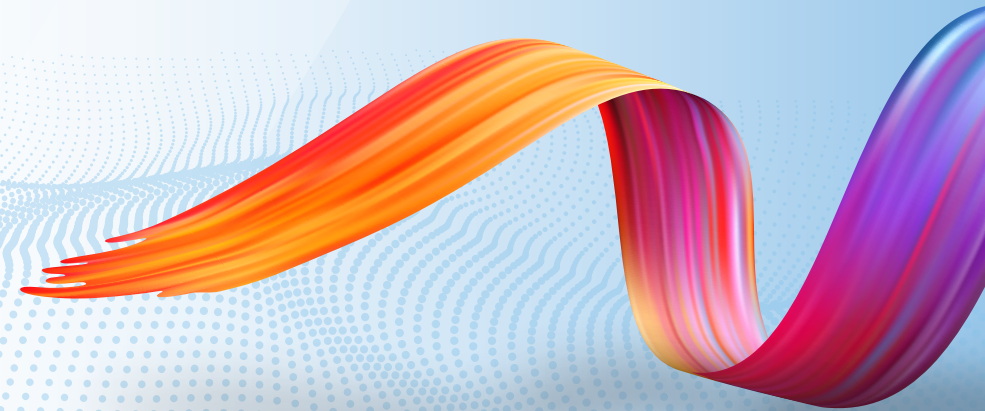
RADCOM Network Insights

Gain a 360° view of the customer experience to enhance the service delivered

Integrate multiple data sources for intelligent enrichment of the data collected by virtual probes

Drill down for root-cause analysis and proactive resolution of network issues

Deliver customer impact analysis to improve the overall Quality of Experience (QoE)



RADCOM Network Insights uses the above two solutions and other data sources to convert raw data into rich, actionable network intelligence, allowing operators to fully visualize their networks and improve the service and customer experience.

The data provided can then be used to drill-down and perform root-cause analysis, helping operators to prioritize service-affecting problems and resolving issues on the network before the

customer is even aware of them. Using a customer impact analysis, the operator is able to fully understand the customer experience and offer an improved Quality of Experience (QoE)

The RADCOM SOC (Service Operations Center) and CEM (Customer Experience Management) solution provides an end-to-end smart view of the overall user and service experience, across a range of technologies.

By integrating multiple data sources (such as data from virtual probes, legacy probes, CRM, and other sources)

through RADCOM Smart Mediation, the operator gains full end-to-end network visibility and critical network intelligence. This information is used to enrich the data already collected through RADCOM Service Assurance and RADCOM Network Visibility. Together RADCOM can deliver smart customer insights to the operator.

RADCOM Network Intelligence uses cutting edge technologies such as Machine Learning and heuristic modeling to work with the existing technology and provide insights into encrypted traffic by analyzing patterns of traffic. Once these patterns are understood, Machine Learning can develop algorithms for enriching the operators KQI's.

INTELLIGize *your* NETWORK

RADCOM Network Insights



RADCOM is leading the way for service assurance, network visibility, and network insight solutions and defining the future with its innovative and disruptive approach. RADCOM is 5G-ready, field-tested among top-tier operators, worldwide and built with a cloud-native architecture that offers a disruptive technology-based subscription pricing model.

5G Network Intelligence

5G and the data-rich services it will deliver require an updated network architecture. These include Control and User Plane Separation as defined in 3GPP and EPC+ to provide Ultra Low Reliable Low Latency Communications (ULRLLC) and massive Machine Type Communications (mMTC), all of which are built in a cloud-native environment.

RADCOM fully supports these 5G services by combining probe-based assurance and network

event handling to deliver insights of encrypted 5G traffic, ensuring full network visibility and excellent customer and service experience.

Technology-based pricing model

RADCOM offers a disruptive technology-based subscription pricing model. This is risk-free for the operators, with a forecastable fee over multiple years irrespective of capacity or subscriber growth. RADCOM's cloud-native pricing model for a cloud-native solution delivers CAPEX and OPEX savings from day one.

Transitioning to RADCOM Network Intelligence means significant savings from day one. It means operators no longer need to invest in outdated legacy solutions and can benefit from an automated, smart and on-demand solution that is ready for the transition to NFV and 5G.

MAXIMIZE *your* 5G SERVICES

RADCOM Network Intelligence



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RADCOM Network Intelligence

The image features a light blue background with a pattern of small dots and wavy lines. A large, colorful wave graphic, transitioning from orange to blue, curves across the lower half of the image. The word "RADCOM" is prominently displayed in the upper center.

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RADCOMize
your
NETWORK