



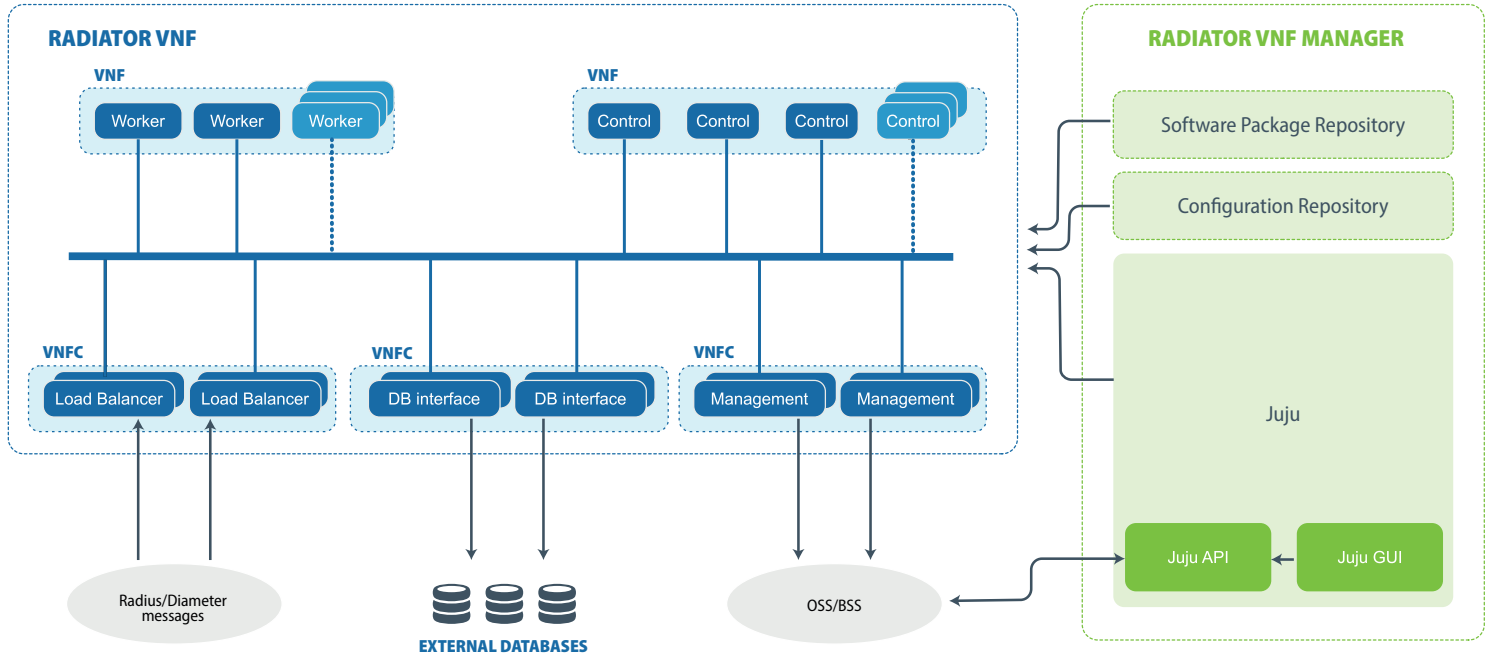
RADIATOR VNF 2017

DELIVERING THE NFV PROMISE

Network Functions Virtualisation (NFV) promises a lot. Instead of the old, rigid, single-vendor environment, there is now a new vendor-agnostic infrastructure based on open standards. A complete service provider solution, which is capable of automatic scaling, efficient configuration management, and runs on a cost-efficient, off-the-shelf hardware. The NFV is a dream of an open multi-vendor infrastructure, where you select the components freely by their capabilities and functions, avoiding any proprietary interfaces and brands.

**RADIATOR VNF 2017 IS DESIGNED
TO DELIVER YOU THAT DREAM.**

We started our design with a clean slate. Instead of a plain Radiator installation on virtual hosts, we followed the NFV concept. We designed Radiator Authentication, Authorisation, and Accounting (AAA) service from the ground up to fully utilise the modern cloud technologies and services. Built around the trusted Radiator Core, the new Radiator VNF consists of multiple interoperable components. They work and scale independently like a true cloud service is meant to do. This allows us to combine Radiator's well-known flexibility and interoperability with the efficiency and scalability of modern cloud services to build Radiator VNF – a true NFV solution.



RADIATOR VNF

SCALABILITY

We designed separate RADIUS and Diameter load balancers to cooperate and communicate with the other VNF Components (VNFC). Our design, controlled by Radiator VNF Manager, enables precise, automatic scaling of any components to ensure that you have always the right amount of AAA capacity at your service. You no longer need to manually adjust the number of software instances.

INTEROPERABILITY

Radiator VNF interfaces are open for integration. All interfaces are at your disposal with the same license price. These interfaces are free to use and you are free to provide them to your partners. The Radiator VNF interfaces toward network devices, databases, and OSS/BSS systems are open and use open industry standards when applicable.

COMMUNICATION

All Radiator VNF components communicate using a redundant message queue, which connects them together. This message queue is open and provides excellent possibilities for third-party or inter-VNF integration. All components are capable of making decisions based on the information and actions of other components. You can completely automate some actions and thus reduce the need for manual work.

CONFIGURATION MANAGEMENT

Reducing manual work and automation are the goals of NFV. Earlier AAA servers were managed and secured manually. With Radiator VNF, components and virtual hosts are automatically configured and managed through a centralised configuration management system. This reduces the probability of human errors and ensures proper configuration of Radiator VNF with full configuration versioning, audit, and rollback functionalities.

RADIATOR VNF MANAGER

One of the major unfulfilled promises of NFV has been the unified management and orchestration. While VNFM (VNF manager) solutions are currently being defined, we have designed our own solution to meet the current and future needs for managing and orchestrating Radiator AAA as a virtualised network function.

To be able to scale and manage an AAA solution, you need to measure the amount, latency, and process time of AAA requests in addition to regular measurements such as memory and processor time usage. Radiator VNFM implements the control and management components for our VNF. Thus, it is able to detect the need to scale Radiator VNF's components more precisely and efficiently.

Radiator VNF and Radiator VNF Manager form a complete solution for virtualising and unifying your RADIUS and Diameter AAA infrastructure. It is a unique and innovative combination of the flexible AAA software and modern cloud technology for evolving your existing AAA infrastructure to the future.