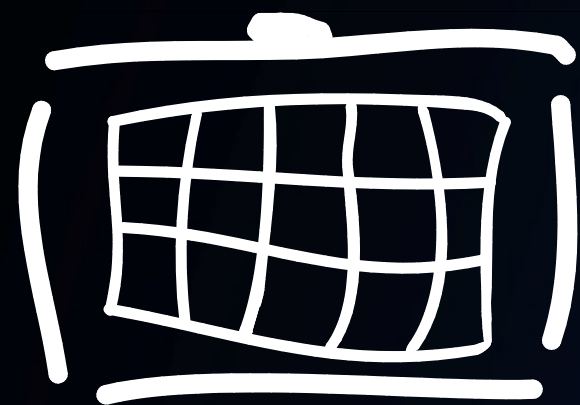


# RADIATOR SIM PACK

ALL YOU NEED FOR SIM AUTHENTICATION,  
AUTHORISATION AND ACCOUNTING



**Radiator**

# The Challenge of Provisioning

- The amount of mobile devices is constantly increasing. Internet of Things (IoT) multiplies both the amount and the growth rate.
- Provisioning user and device credentials and configuration is already difficult because of the variety of devices and the variety is bound to increase in the future.
- All the devices in the network will not be authenticated, authorised and accounted by a single service provider. There will be devices from multiple operators roaming in networks as mobile phones do now in mobile networks.
- The device and network specific solutions do not scale when the same network must serve a heterogeneous set of devices, services and users.
- An interoperable, secure and scalable method for authentication, authorisation and accounting is needed.

# The Benefits of SIM Authentication, Authorisation and Accounting

- Interoperable
- Secure
- Scalable
- Available



# Interoperable

- EAP-SIM, EAP-AKA, EAP-AKA' are IETF and 3GPP developed protocols for SIM authentication — they combine Internet and mobile industry interests and requirements.
- These specific EAP protocols are encapsulated within general EAP protocol, which means that they are supported by any Wi-Fi hardware capable for example for WPA2 Enterprise support — even consumer Wi-Fi access points.
- AAA EAP messages travel between AAA servers via IETF standard RADIUS protocol, which is then utilised to create static or dynamic roaming federations capable of supporting multiple operators or other identity providers.
- Wireless Roaming Intermediary Exchange (WRIX) specification by WBA recommends network operators support the following EAP methods: EAP-SIM, EAP-AKA, EAP-TLS, and EAP-TTLS.
- These EAP protocols are supported by the majority of mobile platform vendors including Apple, Samsung, Nokia and Microsoft, especially for the purposes of Wi-Fi offloading.
- RADIUS interfaces are compatible and interoperable with any RADIUS protocol implementing servers.

# Secure

- EAP SIM protocols are designed and developed by industry experts, they are already part of 3GPP specifications and IETF standards.
- EAP SIM protocols provide strong authentication without requiring the use or provisioning of X.509 certificates.
- In the SIM AAA the required credentials have already been distributed and provisioned via SIMs. Accepting these for Wi-Fi authentication is the only thing needed to enable SIM authentication.
- Using SIMs for AAA is as secure and reliable as using them for your mobile subscription and infrastructure — they are also as easy to use.
- SIM accounting provides reliable accounting data with strong authentication and privacy support.

# Scalable

- SIM authentication is designed and already used with mobile devices and infrastructure. It is the base of mobile phone AAA already.
- The credentials have already been distributed to customers with SIMs.
- SIM authentication is easier to use than customer/client certificates or username-password authentications reducing the customer support load.
- SIM authentication does not require managing certificate infrastructure and certificates (PKI/OCSP/CRL servers, certificate validity times etc.)

# Available

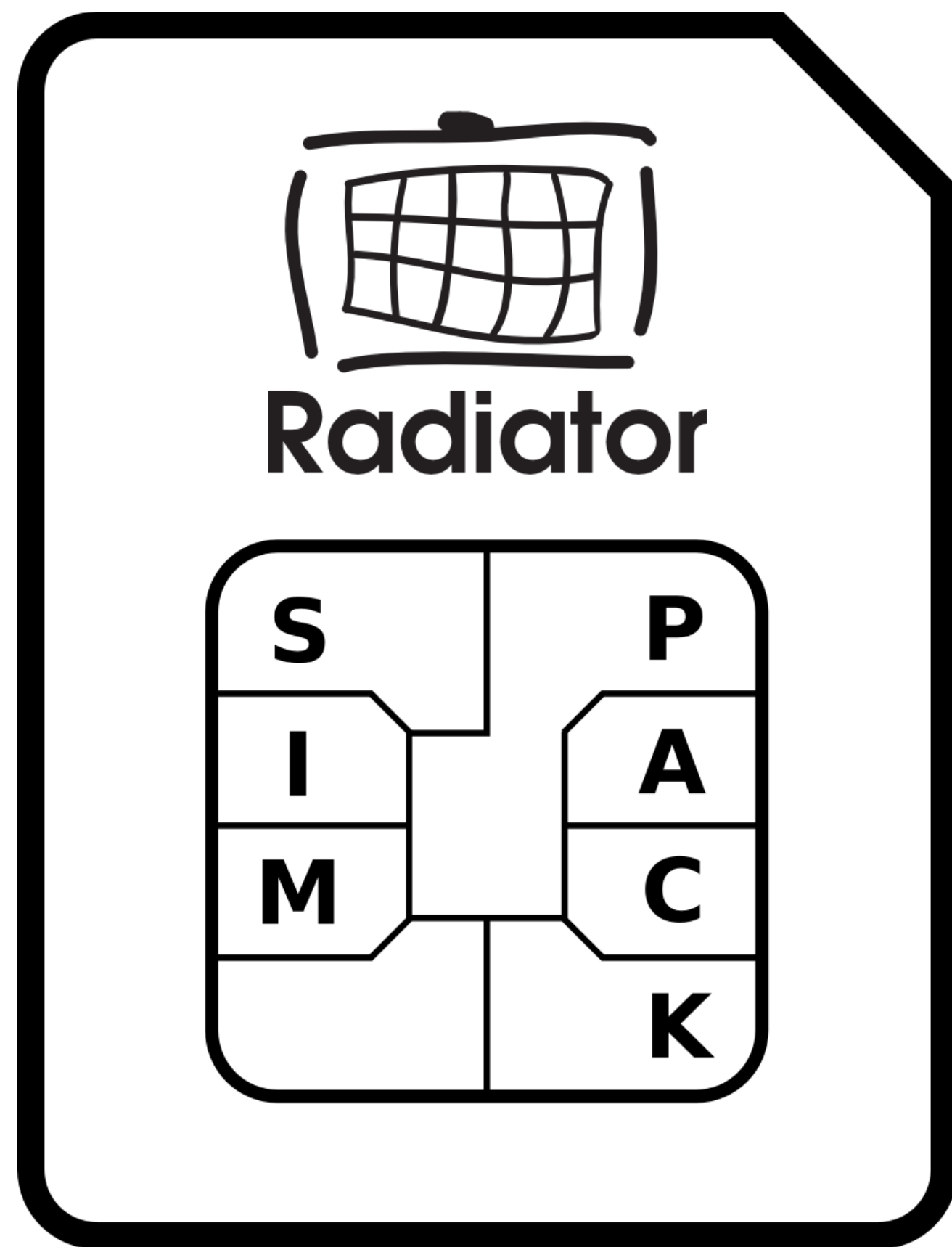
- SIM authentication does not need specialised hardware. Any WPA2 Enterprise capable RADIUS based Wi-Fi network is able to use SIM authentication.
- SIM authentication is implemented in the authenticating RADIUS servers. What is between, does not matter as long as it forward the EAP protocols.
- The EAP protocols needed were specified already in the late 1990s and early 2000s. They have been present already in Nokia's Symbian phones (which still work with EAP-SIM based Wi-Fi authentication).
- SIM authentication is already integral part of Wireless Broadband Alliance (WBA) and Wi-Fi Alliance specifications, recommendations and certifications.
- All you need for enabling SIM AAA is RADIUS server capable of authenticating EAP-SIM, EAP-AKA or EAP-AKA' EAP protocols.

# Radiator SIM Pack

- SIM authentication, authorisation and accounting support for Radiator AAA server
- EAP-SIM, EAP-AKA, EAP-AKA' support
- 3GPP interface support (Diameter-Wx, Diameter-SWx) for interoperating with mobile infrastructure
- Can be combined with Radiator Diameter Pack for additional 3GPP policy and charging support (Diameter-Gx, Diameter-Gy, Diameter-Gz)
- Unlimited Radiator AAA server license
- Available also as an OEM licensed version
- Full support options from expert email support to 24/7 expert support
- Available for evaluation with actual test SIMs included



# Radiator SIM Pack — All you need for SIM AAA



<https://www.open.com.au/radiator-sim-pack/>

