5G with Druid Software

5G NSA and SA with Raemis™

Raemis™

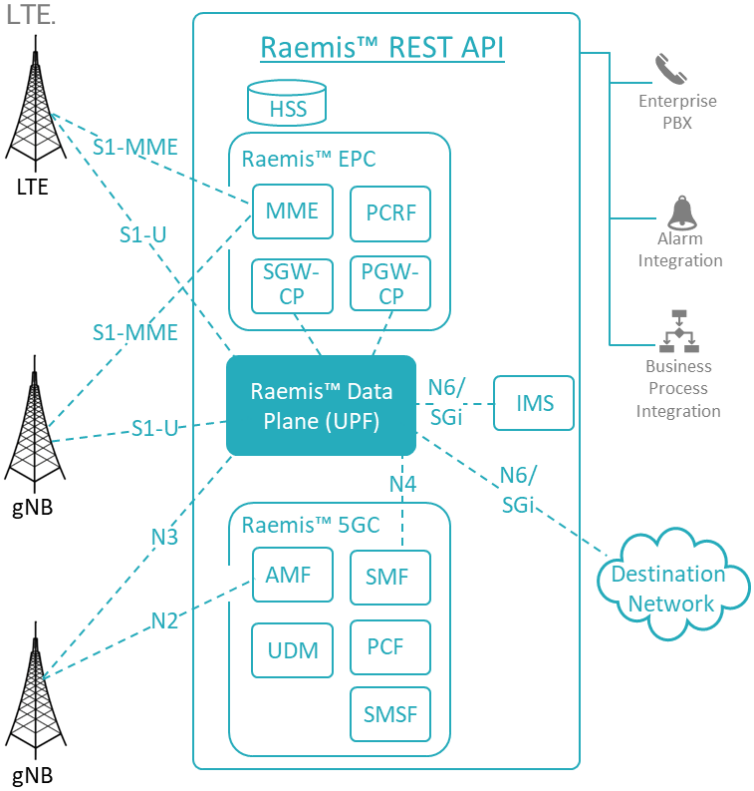
More than just a core network

Druid's 5G cellular solutions are built on our **Raemis™** technology platform, which is comprised of a 3GPP compliant 4G/5G core, RestAPI and additional functionality.

Flexible Deployment | Radio Agnostic | Simple to use | Prioritise Devices | Easy to Integrate | Scale up & down

3GPP to the Core

The Raemis™ technology platform implements all the 3GPP 5G components and features, with an easy migration path from LTE.



Raemis™ 5G includes a private network with private subscribers, private cell network, mobility Xn handover, unknown subscriber rejection, idle mode cell reselection, UE attachment/implicit detach/re-attach and VoNR calls/data service. Raemis™ 5G features are available in the same Raemis™ software product supporting 4G. No additional software (or hardware) installation is required. Note that 5G support is a licensed feature.

Raemis™ PCN Main Features

- Private Core Network Dashboard.
- Easy installation and enhanced integration with enterprise LANs.
- 5G–NSA and 5G–SA capabilites.
- 5G URLLC.
- Location Management Function (LMF).
- Performance and scalability (for both scale up and scale down).
- Resilience and redundancy options.
- 5G Radio Network Slicing – Configuration of Radio QoS and Radio Congestion Control per network.
- Real-time System Monitoring.
- 5G-LAN (non-IP) communication between 5G end devices.
- Group Management and Network Management.
- PBX Integration.
- Cells Management with ACS Integration System Management.
- Admin User with GUI, Expert Mode and Edit permissions.
- Alarm Monitoring, Troubleshooting and Emergency Call.
- Setup Ethernet integration like Wi-Fi.
- User Equipment (UE) IP address assignment using the Dynamic Host Configuration Protocol (DHCP).

Distributed Architecture & MEC

Raemis™ 4G and 5G supports distributed architectures which can be deployed in cloud native environments with central management of multiple edge sites. This enables your network to benefit from the Raemis™ MEC and redundancy capabilities.

Innovate with Druid's 5G SA Launch Pad

Our 5G launch pad is designed to enable customers to demonstrate 5G SA early. You can define, test and prepare your 5G solution for the market. Druid's products are also made available for lab and trial use as part of the Trial & Innovation service, where you can try out different use cases and get it right in the incubator before launching your new service.

What's included

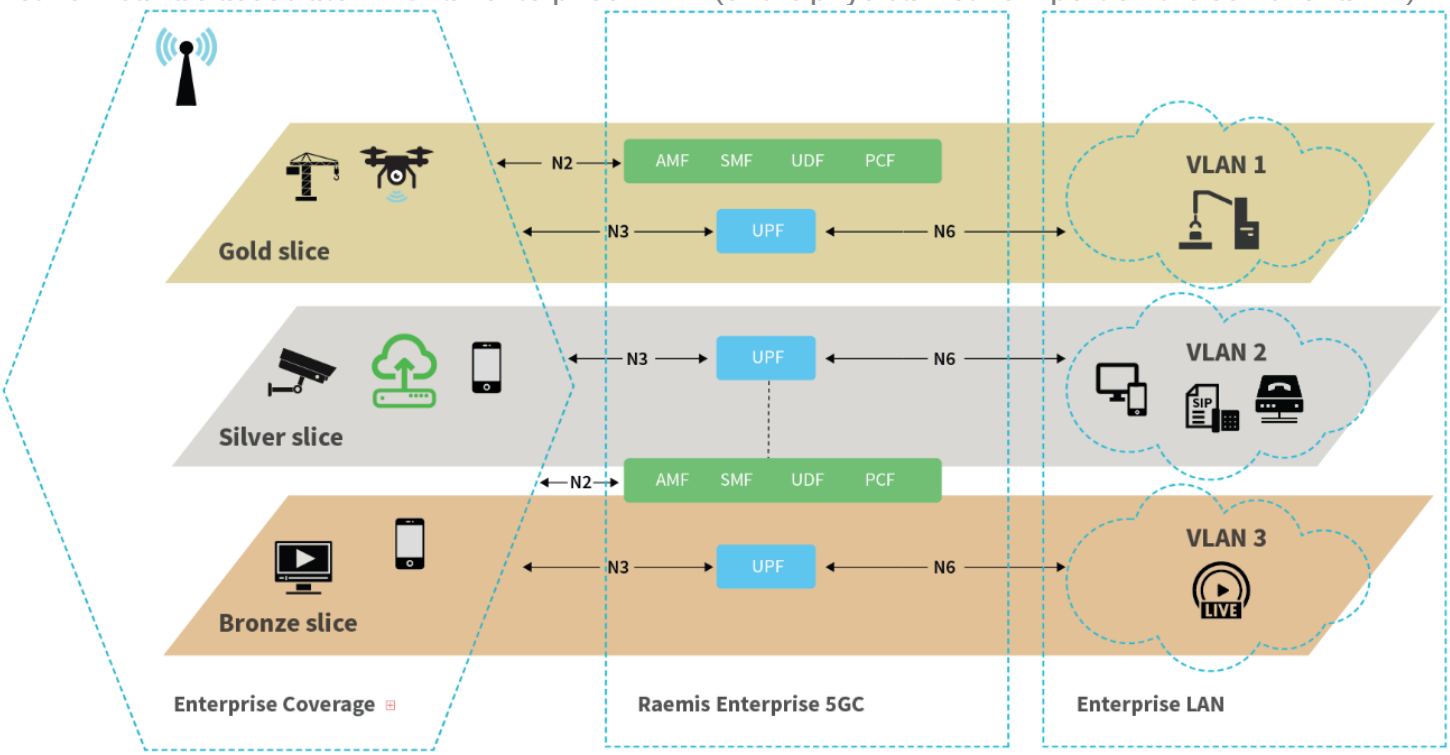
- Network in a Box preinstalled with 5G Raemis™ Core and gNodeB,
- 20 subscribers (with 20 SIM cards),
- Help with the selection of 5G UEs by our team of experienced Network Engineers.

enquiries@druidsoftware.com | www.druidsoftware.com | @druid_software | /druid-software

Enterprise Slicing

Security & Traffic Separation, Load Balancing, and Configurable QoS

The Raemis™ administrator can create multiple Packet Data Networks (PDNs). The Raemis™ PDN logical network can be associated with an enterprise VLAN (or the physical network port on the server or a VM).



PDNs enable the following functions:

- **Security and Traffic Separation :** With Raemis™, you organise users in logical groups, for example by function or department or any other logical grouping. You then assign that group to the PDN best suited to support that group's needs.
- **Load balancing:** For performance reasons and to avoid traffic bottlenecks, you can use PDNs to spread the network traffic load across the different enterprise VLANs.
- **Quality of Service (QoS) allocation:** You can create PDNs that provide different QoS levels on the 4G network (not the enterprise network) and easily control user access to those PDNs.

The Raemis™ GUI

The Raemis™ GUI uses the Raemis™ RestAPI to access the core software and 3GPP components of the network, hiding the complexity of the 3GPP network, enabling an Enterprise's IT manager to perform complex tasks in a few clicks.

The Raemis™ GUI facilitates three levels of customisation:

- White labelling: Replacing the Raemis™ brand logo and product name.
- Extension Apps: Adding a new panel to the GUI.
- New GUI. Replacing the existing GUI with a customer-developed GUI.

The Raemis™ API

The Raemis™ platform exposes a powerful RESTful API that enables application developers to build on top of Raemis™ or integrate external applications with the Raemis™ platform. Druid developed the Raemis™ PCN GUI using the same RESTful API that is available to application developers. Any feature, data, or action that currently available in the Raemis™ GUI is also available using the RESTful API.

Scalability

- The Raemis™ platform works for organizations of any size, from small businesses to large enterprises.
- During the commissioning phase, Raemis is configured for the number of eNodeB devices (from 1 to 1000) and provisioned users (from 1 to 50,000).
- The Raemis platform can scale down to a single eNodeB device and a handful of users all in a single VM that has a small computing and memory footprint.

User Types

User Type	Non - GBR Data	GBR Data	Unlimited through put	Handover Possible
Real Time	Yes	Yes	Yes	Yes
Data Only	Yes	No	Yes	Yes
IOT	Yes	No	No*	Yes
FWA	Yes	No	Yes	CR

GBR - Guaranteed Bit Rate | CR – Cell Reselection | *12 kbs