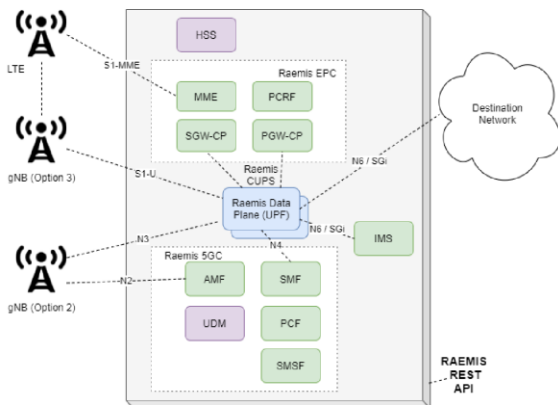


Sustainable Smart Cities Druid Private Networks

Druid's RAEMIS™ 4G/5G Core Private Network Platform introduction

Raemis™ 4G/5G software core is optimized for mission critical use cases. The platform supports 5G, 4G and Wi-Fi radios from any vendor and adheres to 3GPP standards. Raemis™ core stands out for its performance, capacity, reliability, flexibility, security, slicing capabilities, interoperability, and simplified deployment, making it a compelling choice as the mobile core for private network implementation. Druid's technology enables organizations to deploy private networks on-premises, in the cloud, or at the edge with enhanced connectivity, robust security, exceptional reliability and cost-efficiency.



Private Network Core supporting 4G, 5G, Wi-Fi access points

Druid Raemis™ Overview

1. The Raemis™ 4G/5G core is implemented in line with the 3GPP standards, supporting all features necessary to create private networks, and going beyond this in many ways including its business process-oriented APIs, management interface and enterprise slicing concept.
2. SNMP, REST and other API's for integration with monitoring systems and SIP for connection to external PBX systems.
3. Scaling from as low as 1 IMSI to 100,000's to handle Entry level to complete/large private networks.
4. Supporting distributed architecture such as our UPF at edge with N3 interface to Druid or other cores.
5. Supporting Data/SMS/ETWS/VoLTE/VoNR/LMF/TSN on the same platform.
6. Supporting enhanced SIM security and enhanced UE TAC/IMEI checks for private networks.
7. Realtime analytics to monitor the operational status

The case for Sustainable Smart Cities – Device Connectivity, Security & Mobility Challenges

Feature	Wi-Fi	Private 4G/5G Networks
Coverage & Range	❌ Has a limited range	✅ Provides better coverage across large areas without requiring extensive infrastructure.
Reliability & Stability	❌ More prone to interference, especially in industrial environments with heavy machinery, metal structures, and other radio frequency (RF) sources	✅ Operates on licensed or dedicated spectrum, reducing interference and ensuring more stable connections
Security & Data Control	❌ Networks are vulnerable to cybersecurity threats like hacking and unauthorized access	✅ Allows power stations to control their own dedicated spectrum, apply stronger encryption, isolate traffic from public networks and strictly manage which devices models/type and specific units can access the network
Low Latency	❌ Latency is higher and inconsistent	✅ Offers ultra-low latency (URLLC) && TSN support which are critical for real-time monitoring, automation, and grid control systems.
High Device Density support	❌ Struggles with scalability in environments with thousands of IoT sensors, cameras, and devices	✅ Designed to support a massive number of connections with better quality of service (QoS) management.
Mobility & Interworking	❌ Struggles with handover delays when moving between access points	✅ Enables seamless roaming for mobile operators, autonomous robots, and drones within power plants.
QoS & Traffic Prioritization	❌ Lacks strong Quality of Service (QoS) guarantees, which is critical for mission-critical operations	✅ Allows traffic prioritization, ensuring that critical grid operations and SCADA systems receive the highest priority.
Integration with IIoT and Edge computing	❌ Limited efficiency for large-scale IIoT	✅ Designed to work with Industrial IIoT (IIoT), AI-driven analytics, and edge computing for predictive maintenance, grid optimization, and automated operations.
Scalability	❌ Limited scalability	✅ Futureproof to handle increasing demands



Raemis Overview



Sustainable Smart Cities

Druid Private Networks

- Private 4G/5G is the best choice for **critical infrastructure** due to its **reliability, security, coverage, low latency and performance**

The Druid Advantage

Druid – supporting new infrastructure project with a private network or migrating from legacy technology such as Wi-Fi or PHS

Proven Solution	Field-tested and industry-validated for seamless deployment
Footprint & Experience	Extensive expertise in designing, deploying, and managing private networks with over 2,000 private networks deployed globally
Support Structure	24/7 expert technical support and dedicated account management
Ease of Monitoring	Centralized dashboard for real-time network insights
Realtime Analytics	Instant visibility into network performance and user activity
Interworking and Site-to-Site Roaming	Seamless connectivity across multiple locations
Future-Proofing	Designed to adapt to evolving technologies and standards
Scalability	Easily expandable to support growing user and device needs
Reliability / High Availability	High uptime with redundant architecture and failover mechanisms
Efficient IMSI & Device Management	Optimized identity management for seamless device authentication
4G & 5G on the Same Core	Unified core network supporting both LTE and 5G devices
IMSI Security and Encryption	Strong encryption protocols ensuring subscriber identity protection
Device Restrictions Security	Granular access control to only allow authorized models & devices
On-Prem or Cloud	Flexible deployment models to suit enterprise needs
Location Management Function (LMF)	Precise location tracking and geofencing capabilities
SMS & ETWS Alerts	Info & Emergency notifications/alerts to UE on the private network
* Radio Network Quality & Coverage	Optimized RF planning for superior network performance
* UE Device Malware Protection/Browsing Restriction/Anti-Phishing	Advanced threat protection for UE (android / iOS)
* eSIM	Simplified device provisioning and remote management
* mcPTT	Mission-critical Push-to-Talk for instant communication

* Integration with one of our 3rd Party partners is required



Talk to us today

To find out more about Private Networks , please contact us at enquiries@druidsoftware.com / www.druidsoftware.com today