

Enea Unified Data Manager

Cloud-Native Management of Subscriber Data in 5G Networks

Benefits

- ▶ Flexible support for all 5G use cases and interworking with 4G
- ▶ Ability to scale efficiently and handle demanding network sizes and use cases
- ▶ Powerful Enea Rules Engine for introduction of customized rules and interfaces
- ▶ Rigorous implementation of the latest standards and full 3GPP compliance

Deployment Details

Data storage:	From 1 to 10 billion data entries
Transactions:	From 1 to 500,000 transactions per second
Redundancy:	N+1 including geo-redundancy options

A 5G Product With 4G Support

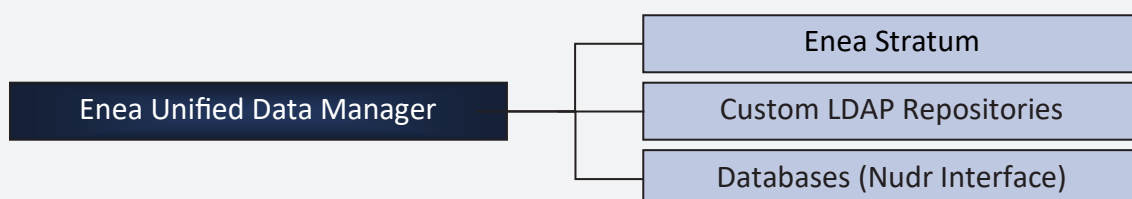
The Enea Unified Data Manager is a key part of the Enea Subscriber Management and Policy Control portfolio. It performs the 3GPP functions of Unified Data Management (UDM) in 5G networks and interworks with any Home Subscriber Server (HSS) in 4G networks. It also supports the interfaces and services required for operation of 4G and 5G networks, including the 5G standalone and non-standalone deployment options, and all associated interworking scenarios with 4G.

Designed by Cloud-Native Experts

High availability and scaling are critical when addressing the huge potential market for the Internet of Things and 5G, with use cases requiring ultra-reliability. It is essential to have a good understanding of cloud-native design to solve issues such as operational efficiency, redundancy and resiliency, and to integrate seamlessly with a range of management tools.

The Enea Unified Data Manager was developed based on more than 15 years' experience delivering software components to Tier 1 network operators, and leading in-house expertise in the field of cloud-native design. The architecture of the Enea Unified Data Manager and the design of its platform make it possible for network operators to address the challenges and opportunities of tomorrow. The management of subscriber data is a key element of the new core network, and a comprehensive, agile feature set is needed to support a multitude of new use cases.

Support for Backend Systems



Service Differentiation

Network operators often need to create customized offerings beyond those which the standards support. For such cases the Enea Unified Data Manager has proven very reliable, and the product serves hundreds of millions of subscribers. The rules are managed by means of the Enea Rules Engine, a powerful tool that makes it possible to accommodate requests for adaptations and provide attractive service differentiation.

Operation and Interworking

When 5G is deployed standalone, interaction with the 4G functions is regularly required. A key strength of the Enea Unified Data Manager is the flexibility to act as a UDM while interworking with an HSS to provide services both for 5G and 4G. The Enea Unified Data Manager excels at HSS interworking, supporting the main standardized scenarios 'out-of-the-box' and providing customized features through the Enea Rules Engine.

The Enea Unified Data Manager also provides flexibility in the choice of backend Unified Data Repository (UDR). While the Enea Enea Stratum Cloud Data Manager is an ideal cloud backend choice, the Enea Unified Data Manager can integrate with any other backend supporting the Nudr interface or using a standard access technology, such as LDAP.

The Enea Subscriber Management and Policy Control portfolio also supports other functions such as AUSF and PCF, which together with the Enea Unified Data Manager provide a complete 5G subscriber core network solution.

5G Interfaces and 4G Interworking	
5G:	<ul style="list-style-type: none"> ▪ Nudm_SubscriberDataManagement Service ▪ Nudm_UEContextManagement Service ▪ Nudm_UEAuthentication Service ▪ Nudm_EventExposure Service ▪ Nudm_ParameterProvision Service
4G	<ul style="list-style-type: none"> ▪ Nhss (TS 23.632, UDICOM)

Deployment Platforms	
Private Cloud	<ul style="list-style-type: none"> ▪ VMware ▪ OpenStack ▪ Kubernetes
Public Cloud	<ul style="list-style-type: none"> ▪ AWS
Bare-Metal	<ul style="list-style-type: none"> ▪ HP Blades ▪ RedHat

Standards Compliance			
3GPP	▪ TS 23.501	▪ TS 29.503	▪ TS 29.571
	▪ TS 23.502	▪ TS 29.504	▪ TS 33.501
	▪ TS 29.500	▪ TS 29.505	
IETF	▪ RFC 3748	▪ RFC 5448	▪ RFC 7540

Scan the QR code and learn more about the product at the Enea website



Enea is a world-leading supplier of innovative software components for telecommunications and cybersecurity. Focus areas are cloud-native, 5G-ready products for mobile core, network virtualization, and traffic intelligence. More than 3 billion people rely on Enea technologies in their daily lives. For more information: www.enea.com