



xeNet:: Goals



Global Networking with .xebax Networking Services

CONNECTING

people, companies, organisations and science



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xeNet Network Technology

ODN (Object Data Network)

The xeNet it's self is an object oriented network. Today in a globalized and networked world data is sent around the world and different kind of information must be available at each place, on each location we are. This requirements of our daily digital life can only be provided by an intelligent and secure network technology.

A network based on the ODN technology has much more advantages than a common network technology. Data is labeled during the network transportation as well and even the data is stored or cached at an other location, data don't lose the reference to it's original owner or home location. Specialized objects can be used for several services.

Unlike Internet the xeNet is a structured network. Using the different system components in combination, you have a network without any barriers, restrictions and muss less security leaks than the common web.

OTNP (Object Transfer Network Protocol)

The communication between the different components is based on the new OTNP. Technically, the OTNP protocol is based on the OSI layer 7, the application layer, and is attributable to the TCP / IP reference model. xeNet as an object-oriented data network needs a protocol which supports the advantages of this type of network. During the transfer the data is encapsulated in a data specific Container model.

This ensures that data is always transported in connection with their meta data and corresponding access rights. The structure of a transfer container is made of multiple layers. (Protocol Layer, Security Layer, Access Layer, Service Layer, Data Layer).

This has advantage, that data can be verified during transportation or routing between different services. One more advantage is, that data of different sections can be treated or verified by different types of processes. That's the guarantee that data can never be corrupted during transportation. User data can be crypted during transportation process or can also be stored crypted as well.



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The xFile-System

In a global network environment you need a file system with special properties. User data or the data of companies or organizations are growing in a huge manner. The world wide availability of data and the independence of a special user device is one more challenge of future oriented file systems without having any security risks for the data.

The xFile-System is provided by the xeCloud File-Manager Service. To handle files in a great network is a great challenge. The user himself connects to an abstract File-System. The advantage is, that researches within the xFile System are much more faster than in a common File-System.

The xFile-System consists of three core elements

1. The User Interface to handle the files.
One of the user interfaces is xeDesk. With menu selection Document Center you reach your personal Document Center. This is the connector to xeCloud File-Manager.
2. File storage Manager
The Storage Manager is part of the domain-services and manages the files of an domain. Files are not stored further on in the common manner of hierarchical file system. Files are indexed according to different criteria, or grouped, and with the support of semantic service layer automatically assigned to groups of corresponding documents.
3. The Store Engine
The Store Engine stores the documents physically within the storage resources of the xeCloud. The locations can be distributed across multiple systems, depending on the particular read or write times.



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Domain-System

The xeNet domain is an virtual domain-system within the xeNet. The xeNet Domain is the main point of the user administration, service management, communication between domain users and other xeNet members. The xeNet domain services are the primary services for the users to have access to the xeNet. The xeNet domain services provide the users a file system for different file operations. The files system its self is virtual file system independent from physical storage locations within the xeNet. The xeNet domain is the main point that users can share data, knowledge and to organize their work flows. The xeNet domain-services are managing the relationships between single users, domains, content or the services which are provided to the users or enterprises.

xeNet Services

xeNet Messaging

eMail transmission is today one of the most used services within the internet. But at the same time it is the greatest risk for users to be a target off attacks. One more huge problem is the transmission of spam emails within the internet. The costs of spam and malware are estimated to be over 750 Billion USD worldwide. Some researches declare, that the percentage of spam is more then 80% of the total transmission traffic.

xeMail is the message system within the xeNet.

The difference to traditional email for one thing, is the real-time transmission between the different mail accounts and, second, the message classification. One more advantage of xeNet messages is, that all messages are processed by the xeCloud message services, as well the definition of the xeNet message object class. This makes it impossible to fake the messages. Due the object-oriented architecture of the xeNet, messages are designed as a special object type with dedicated properties. If an object is able to send or receive mes-



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sages, so it will be addressed by his object name. If the object type is person, so it will be addressed by the persons Name. If you want to send a message to a person, first the xeNet messaging service delivers the communication profile of the person to you and then you can select one of the opportunities which are enabled by the recipient. The message target address will be internally handled for the exchange between the two process engine hosts. It is not necessary anymore to handle separate email-addresses of users for sending messages.



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