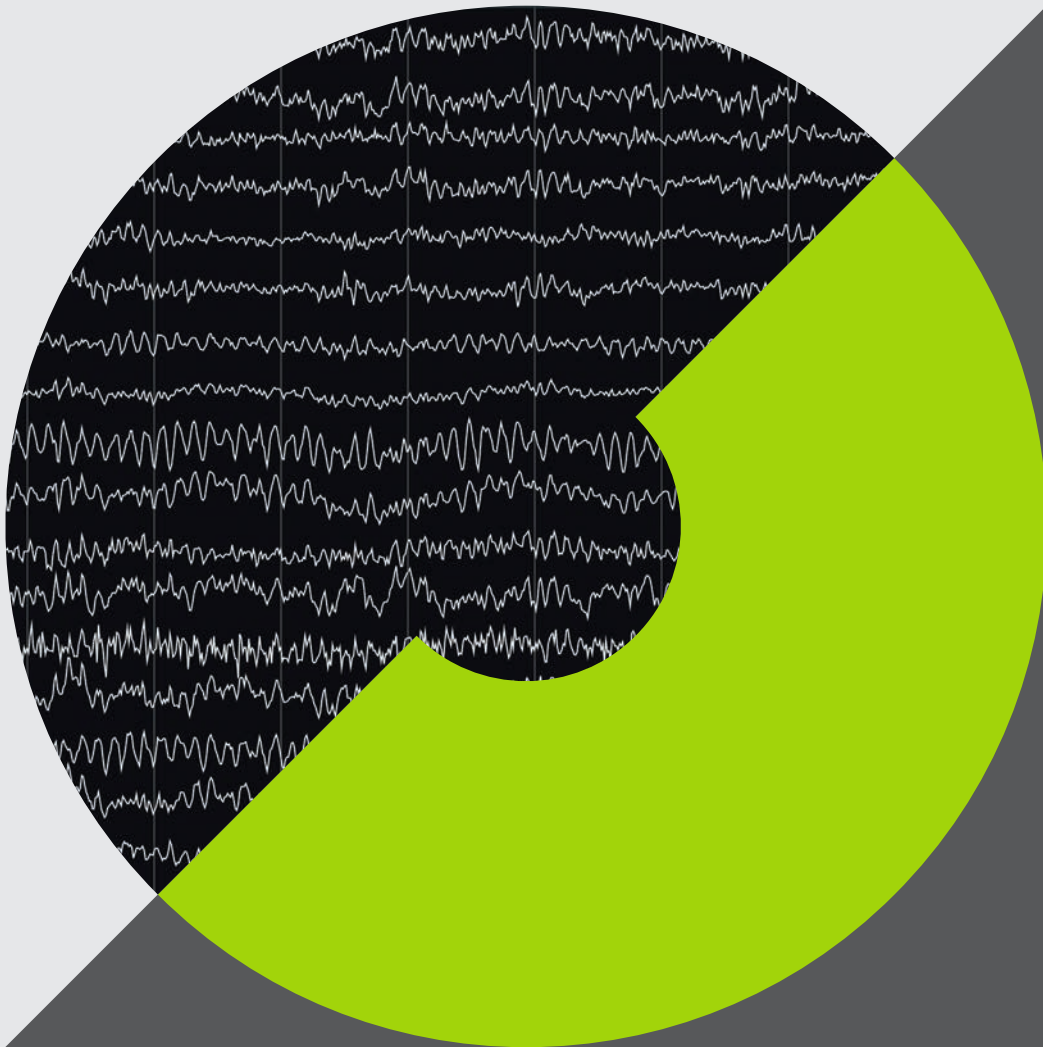NEUROPRO
VML**PRO**

The virtual
mobile laboratory•

About VMLpro

The Virtual Mobile Laboratory (VML) is an advanced data base management and analysis platform for collaborative medical cases analysis. It is built with scalability and security from the ground up, offering all the benefits that come with cloud architecture, big data analysis and remote accessibility.

Key features

- Secure collaboration

- Easy data sharing

- Personal user group management

- Database management

- Event and Note marking

- EEG viewer

- Medical Image viewer (DICOM) for MRI and CT scans

- Rapid, scalable parallel processing

- Flexible cloud storage

The VMLpro platform offers a comprehensive set of powerful tools for the remote review and management of medical data including EEG, MRI and CT scans. Various kinds of formats are supported to make medical data legible, structured and accessible for all involved health care professionals.

VMLpro improves the communication and collaboration between family physicians and their multidisciplinary specialist consulting partners. Medical cases can easily be shared remotely within groups of healthcare partners and the collaboration tools enhance fast, secure real-time communication.
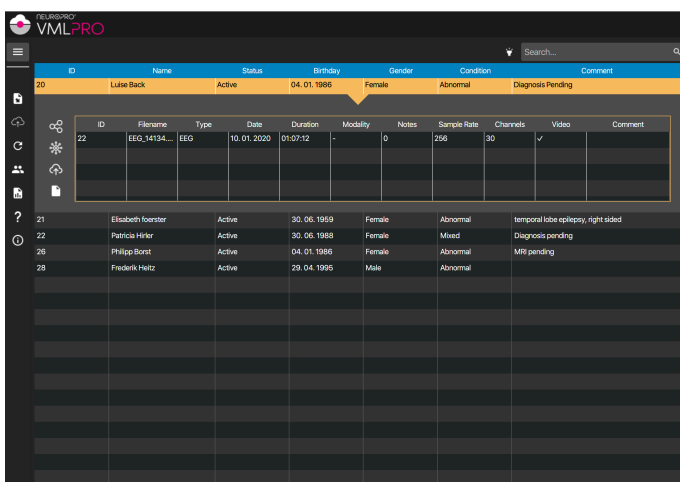
The VMLpro infrastructure offers a multi layered data protection scheme that ensures complete data security in line with Swiss law, with GDPR compliance, data encryption on local Swiss servers, encrypted data storage and SSL tunnelled communication.

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VMLpro is a solution providing researchers and healthcare professionals with the ability to easily leverage the latest developments in cloud computing technology, **radically reducing the time** *of conventional data analysis at a* **fraction of the traditional computing costs**.

Dr Jamil El-Imad
Chief Scientist
NeuroPro AG

Clients / User-interface

Case Structure

EEG Viewer

Data Security infrastructure
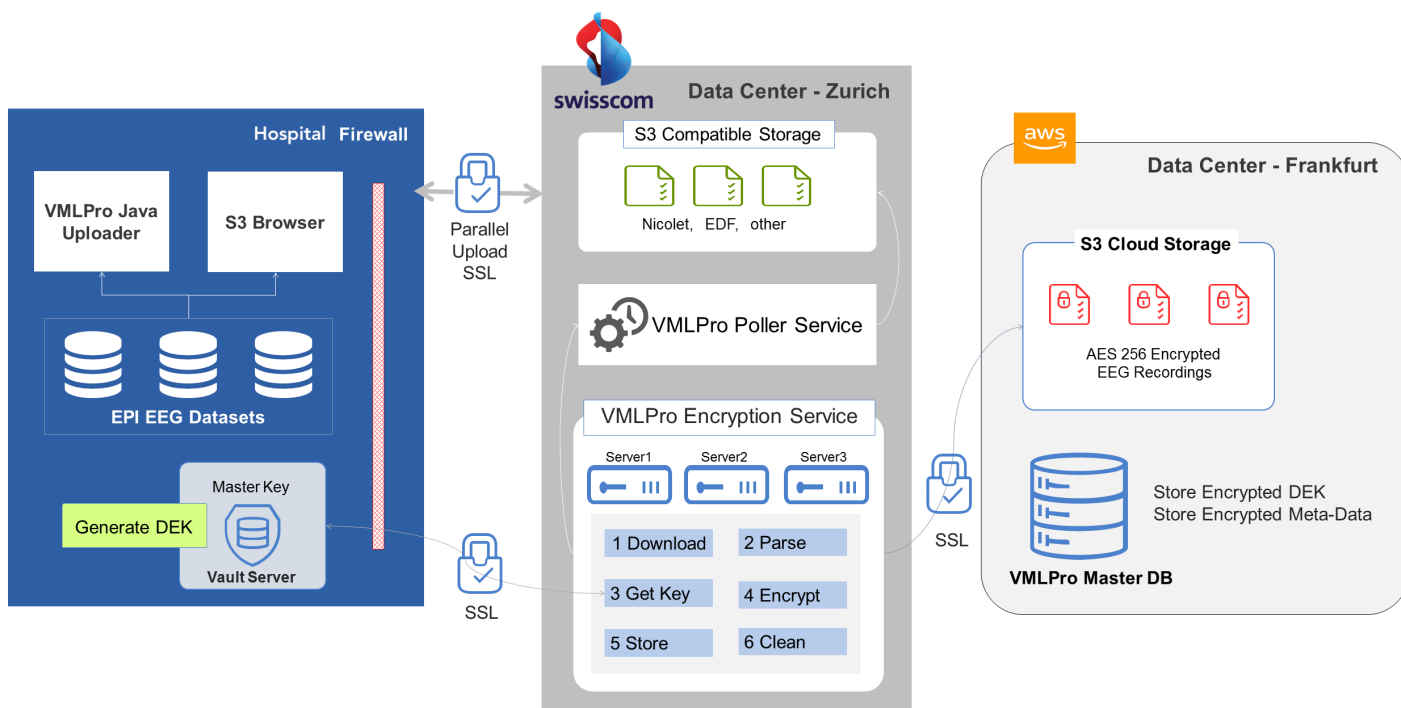
Platform Infrastructure

- Latest technologies from Amazon Web Services (AWS) and Swisscom
- Decoupled and distributed: no single point of failure Load balancing to handle growing users / databases
- Disposable analysis servers (Spark on EC2)
- On demand platform scaling Improved cost efficiency
- EDF, HDF5 and NXE data formats supported
- JSON / REST API
- Supports Android, iOS and web clients

Security

- GDPR compliance
- SSL communication between clients and servers
- Encrypted user repository (at rest and in transit)
- Multi-tenant access privileges
- Fully audited API calls
- AWS firewalls protect database and analysis servers
- Multi-factor authentication

Support

- Centralised error logs via Papertrail
- Help desk for bugs, issues and requests within 24 hours

Key Features

- Research data management
- Dynamic user groups
- Single copy data sharing
- Collaboration platform: Insert "Notes", see "Events"
- Real-time update to physician
- Big data analytics
- Machine learning for EEG biomarker detection
- Remote tele-monitoring

re-defining brain data management

NEURO•PRO

Who we are

NeuroPro incorporates specialists from the fields of computer science, neurophysiology, bioengineering, and product and user-interface design. This combination of skills allows us to adopt an informed inter-disciplinary approach to the specific challenges facing those working in brain science.

Our tools for monitoring and analysing brain activity will contribute to accelerating brain research by supporting researchers, clinicians and innovators in pushing the boundaries of brain science and its applications.

Our tools provide an advanced platform for the development of a wide range of health and wellness applications from supporting the development of brain observatories to remote telemonitoring, patient led research, neurofeedback and cognitive wellness. Additionally, NeuroPro's tools are relevant to innovative entertainment, lifestyle and interaction solutions driven by brain computer interface technologies.

Contact us

Partnership is a key element in the way we work. We collaborate with global leaders in the design, development and implementation of our products and welcome new collaborations.

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