

Building a virtual infrastructure for eHealth application as a bridge between the African Diaspora and the African continent: Approach of the Koenig-eHealth platform

Gilles Kom
Ulrich Kemloh
Xavier Scolard
Patrick Tchakouté
Ghislain Kouematchoua



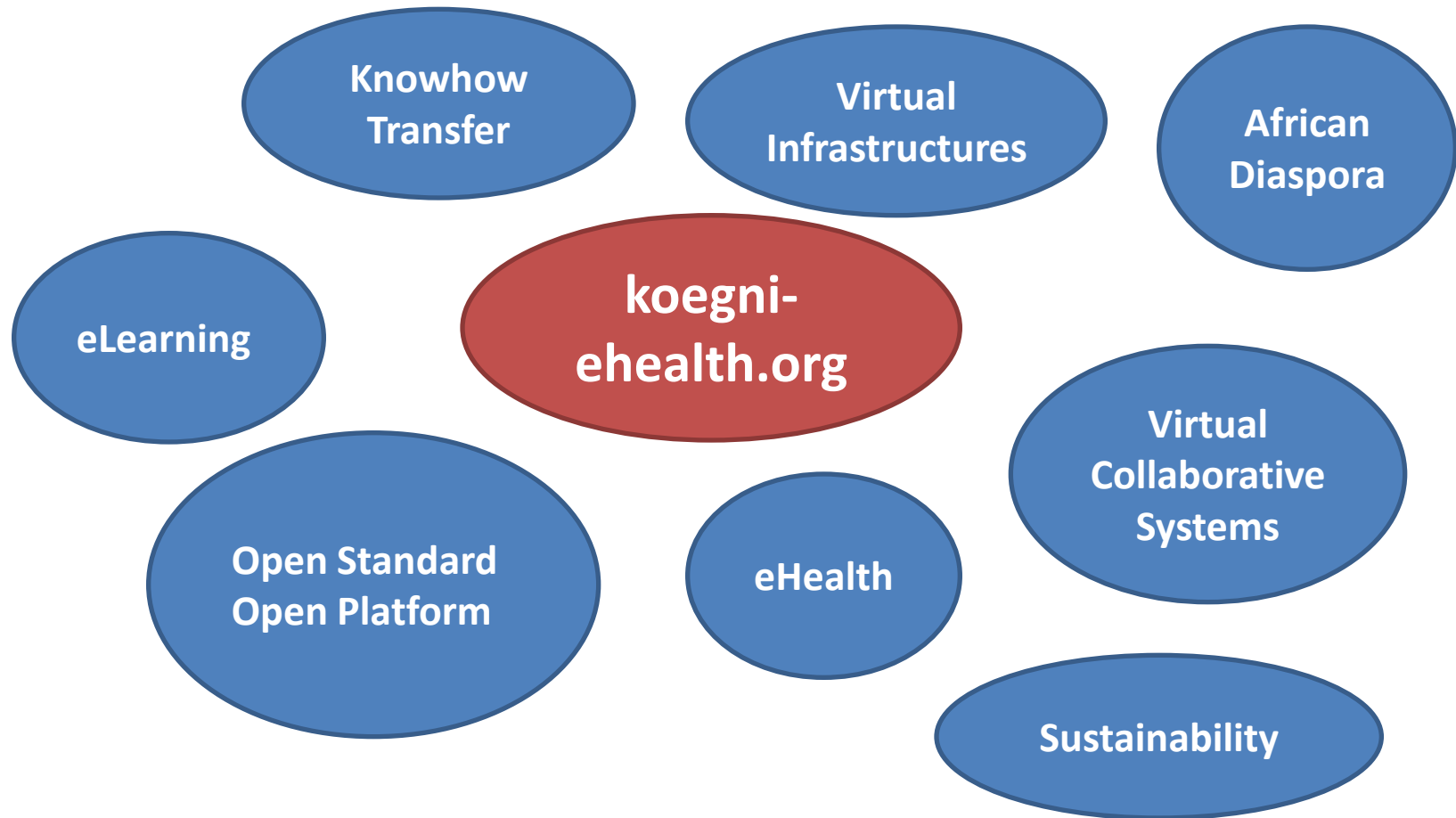
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1. Motivation
2. Koegni-eHealth e.V.
3. Status

- **Africans - Problems**
 - Expensive costs for health care
 - Poor ICT infrastructures
 - Lack/Accessibility of data for strategic decisions and long terms planning
 - ...
- **African diaspora -Solutions**
 - Very powerful African diaspora
 - Willing to help (technology and resources)
 - ...
- **Organisations /Structures willing to help**

➔ Create a bridge between those entities in terms of a virtual environment



Virtual environments and infrastructures for education and research are interactive platforms where many users can communicate and collaborate.

A virtual environment can be described as a framework into which tools, services and resources are plugged in order to offer a series of new possibilities

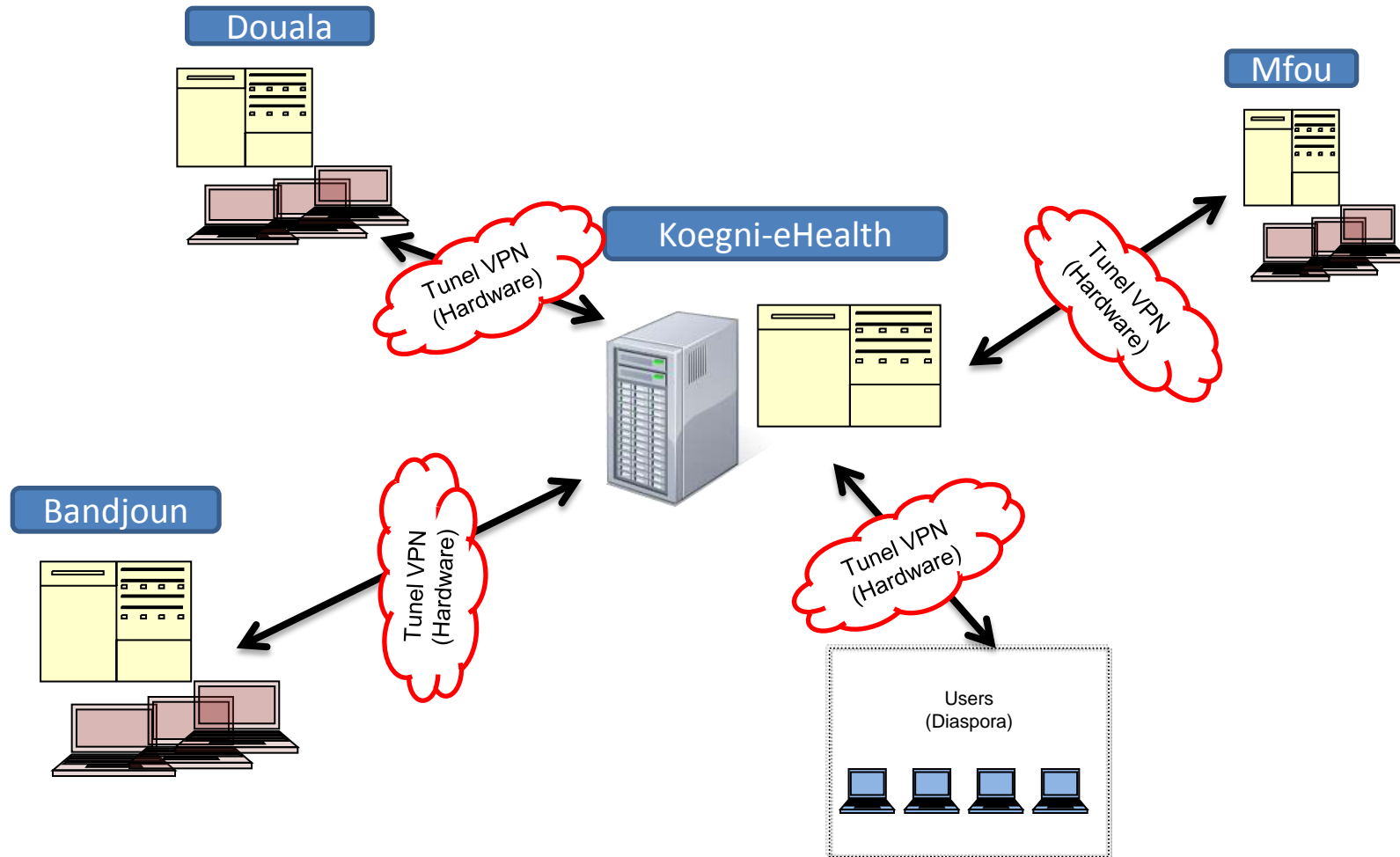
- First contact with operative partners / local sites
 - Dr. Halle , Dr. Choukem (Hôpital général de Douala)
 - Dr. Manga (Hôpital de District de Mfou)
 - Dr. Bouwa (Hôpital Ad Lucem de Bandjoun)
- Description of the local infrastructure (via a questionnaire submitted to the sites and many virtual conferences)
- Definition of the architecture based on the feedback received

- **Human resources**
 - How many people are working in the informatic department (full / parttime) What are their profile?
 - What are the expectations or wishes of the IT Services vis-à-vis our team ?
- **Network**
 - Overall description of the network environment
 - Number of physical and virtual servers, accessories (fax, scanner, printer, etc.)
 - Is there a connection between the various departments?
- **Security**
 - Protection, Security and Privacy of personal data
Description of the concept of network security and internet
Description of the concept of the protection and privacy of personal data
 - Risks to be considered as part of this project?

- HGD
 - High standard infrastructure
- MFOU
 - Basic system
- Bandjoun
 - Non existant

➔ An integration in the existing system of Douala and Mfou is possible. A full deployment might be required for Bandjoun.

Koegni-eHealth platform



- **Servers**

- INTEL Xeon E3-1220 Quad Core 3.1GHz
- 16 GB DDR3-RAM
- SATA RAID-Controller / Level 1 mirroring
- 2 X 500GB SATA Drives



- **Clients**

- Desktops, Laptops

- **Network**

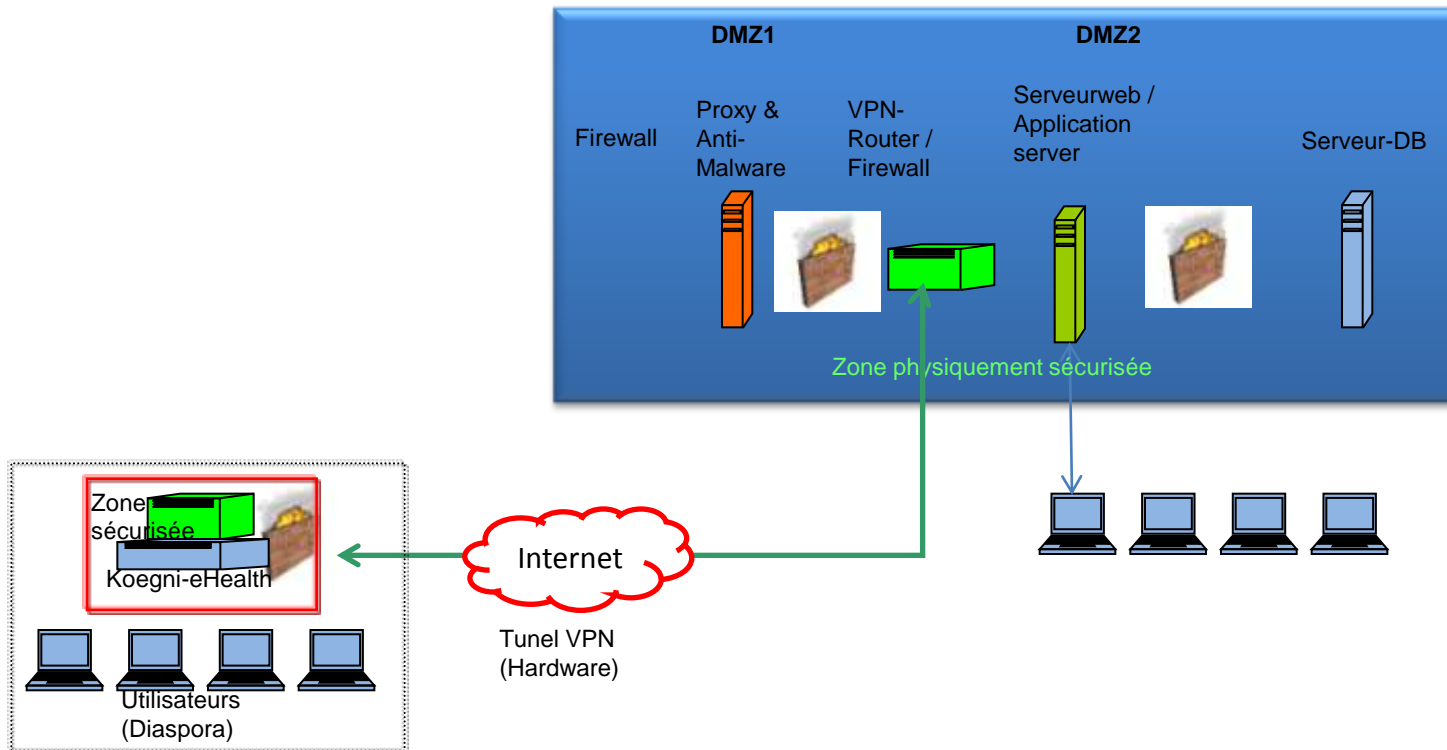
- VPN/Routers, Cables

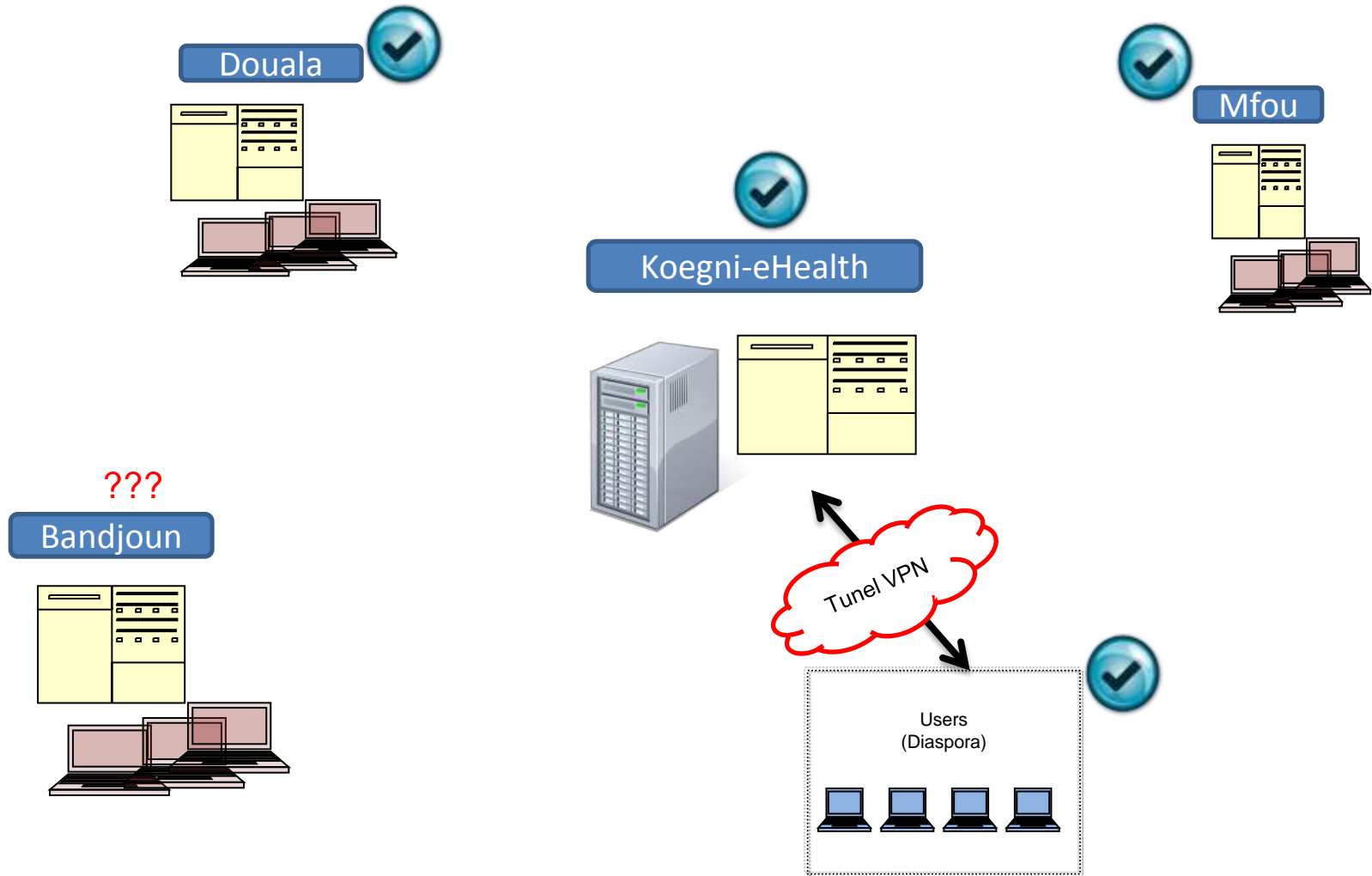
- **Others**

- Scanners/printers
- High definition cameras
- Headsets



- OpenMRS installed and configured on the servers
- First trainings done
 - Use of the medical record
 - Maintenance of the system (installation, backups,...)
- Sustainability





- OpenMRS
 - Open Medical Record System
 - Used for training/Demo purposes
- Moodle for eLearning
 - System maintenance courses
 - Training courses
- Medical Imaging Viewer and analysis



Some impressions of the last two days

Cologne



Mfou



Douala



Thank you for your attention

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