



Switch-AAI and SIP *at the University of Geneva*

Pierre-Yves Burgi
Head of the ICT unit
IT Division



Project's main contributors

Cédric Bontron

Benoît Burdet

Georges Lavoisier

Olivier Lustenberger

Marc Perraudin

Dominique Petitpierre

Nicolas Rod

Patrick Roth



E-Learning

| | | |
|-------------|------------|----------|
| OLAT | Moodle | WebCT CE |
| WebCT Vista | Dokeos | VITELS |
| ADlearn | | DOOR |
| DOIT | CASUS | ILIAS |
| Claroline | Blackboard | |

Libraries

| | | |
|------------|---------------|-------|
| EZproxy | Valet | JSTOR |
| | ScienceDirect | Ovid |
| VirtualLib | DigiTool | RERO |
| EBSCO | | Aleph |

Other Web Applications

| | | | |
|--------------|--------|---------|-------------|
| eConf Portal | BSCW | EVA | SLCS |
| Compicampus | Plone | VASH | |
| OpenCMS | WebSMS | Sympa | |
| ESN | GMT | TWiki | Blue Coat |
| Jahia | Lenya | uPortal | IS-Academia |

Service Providers in SWITCH-AAI

UniGE

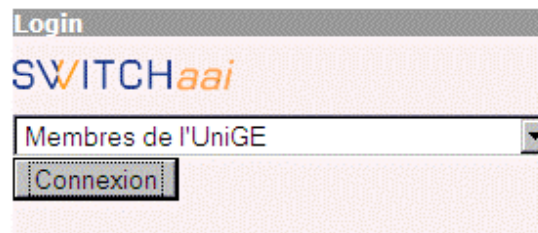


Dokeos

- Code modified to automatically create user logins and assign correct rights to teachers and students
- Dokeos 1.6.5: in production since October 2005
- Dokeos 1.8: done, production scheduled mid-08
- Dokeos 2.0: will be integrated into distribution, production scheduled end-09
- WAYF has been set by default to UniGE (saves one click, as asked by users)

Language: PHP

Users: 15'000





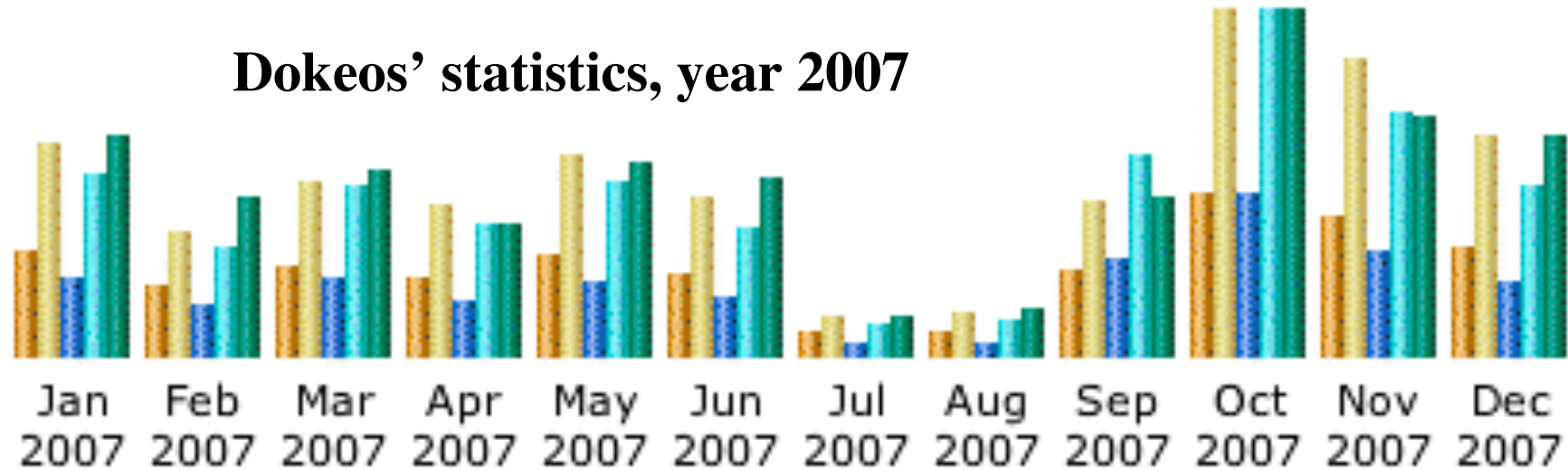
Hotspot!



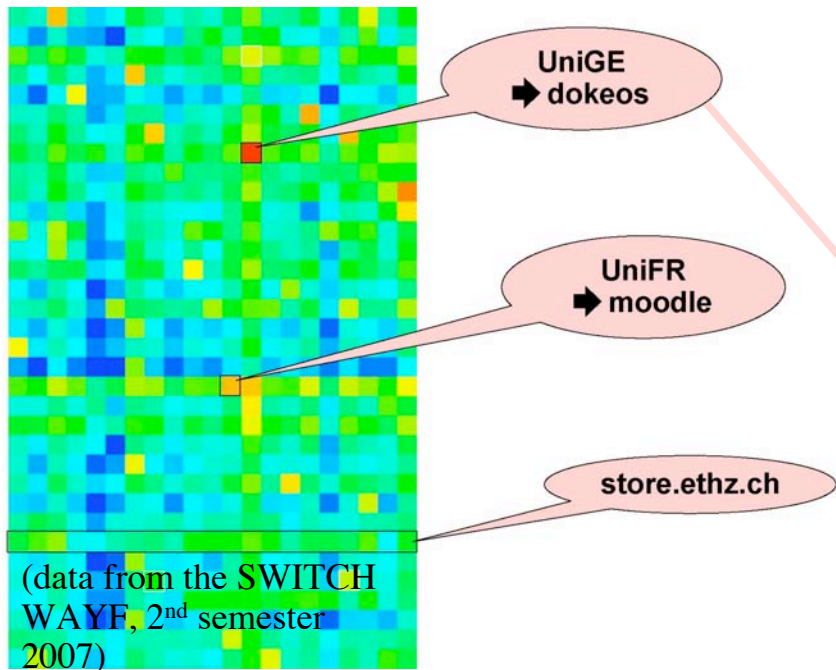
© Copyright Pierre-Yves Burgi



Dokeos' statistics, year 2007



| Month | Number of visits | Unique visitors |
|--------------|------------------|-----------------|
| Jan 2007 | 79811 | 39873 |
| Feb 2007 | 47562 | 27312 |
| Mar 2007 | 65695 | 33966 |
| Apr 2007 | 57482 | 30416 |
| May 2007 | 76250 | 37844 |
| Jun 2007 | 59586 | 31860 |
| Jul 2007 | 15794 | 9901 |
| Aug 2007 | 16008 | 9927 |
| Sep 2007 | 59070 | 32535 |
| Oct 2007 | 130426 | 60965 |
| Nov 2007 | 112685 | 52210 |
| Dec 2007 | 83652 | 41647 |
| Total | 804021 | 408456 |





Moodle

- Plug-in from Switch
- Code adapted to automatically create user logins and assign correct rights to teachers and students
- Moodle 1.6.2, in production
- Moodle 1.8, major updates done but not yet in production

Language: PHP

Users: 3'500



Plone

- Written new module for Plone 2.1.2
 - Group + role assignment – but less sophisticated than Lenya's (UniZh)
 - Bug: target URL lost during authenticating
 - Using Shibb on Zope might solve problem
- rewrite module for Plone 3.x

Language: Python

Users: about 300



Valet (Front-end of Fedora)

- Modified Valet (module of Vital VTLS) to authenticate:
 - Users who submit publications
 - Librarians who validate submissions (one *htaccess* with several File rules)
- Will be in production in March 08 (to meet the Swiss National Science Foundation Open Access requirements)

Language: Perl

Users: soon faculties (> 3'000)



Direct use of Shibboleth

Used to protect:

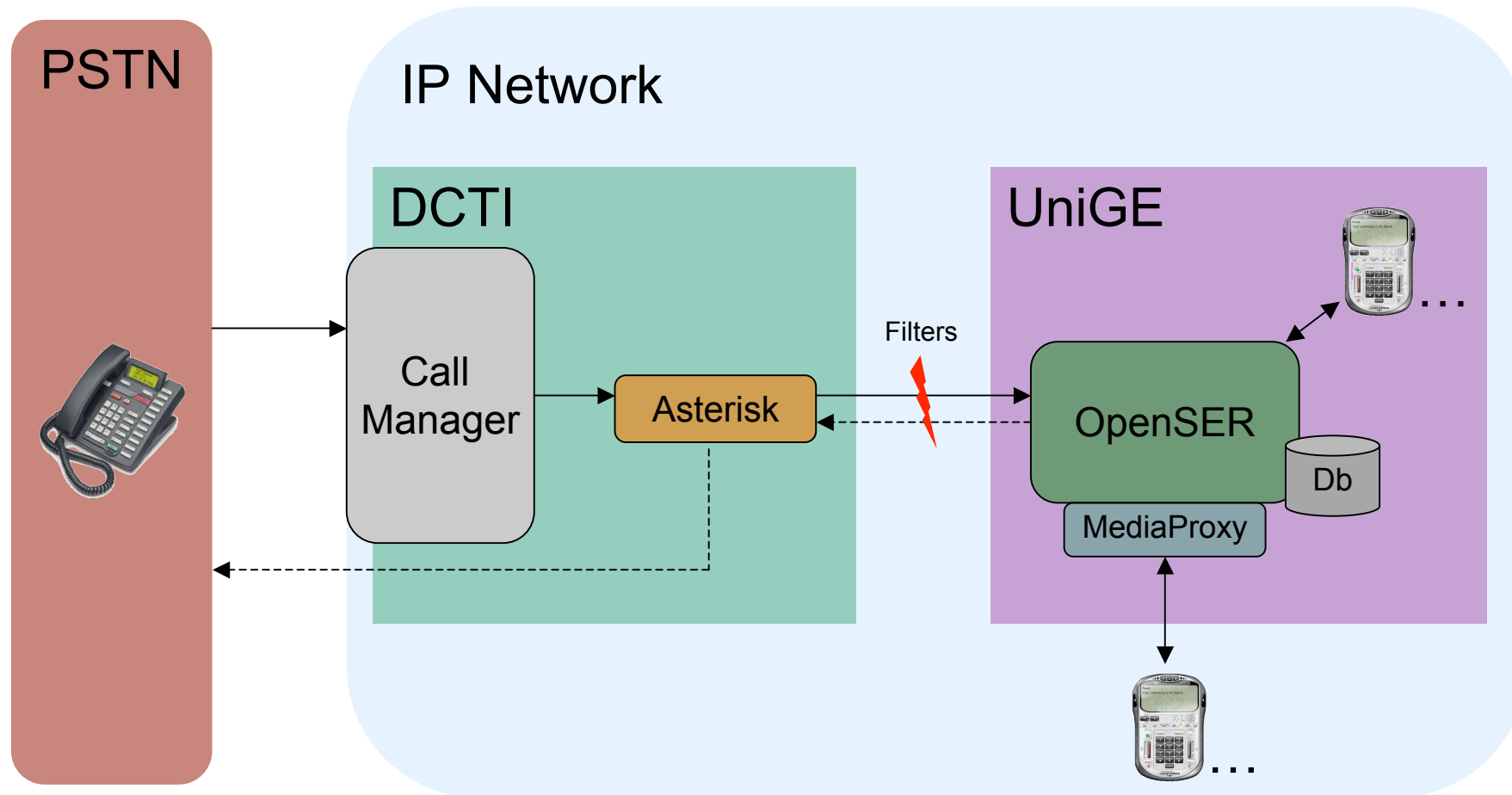
- Audio/video documents (mediaserver.unige.ch)
- Directories (on central Web server)
- Customized to UniGE with specific attributes such as the organizational unit and the users' status



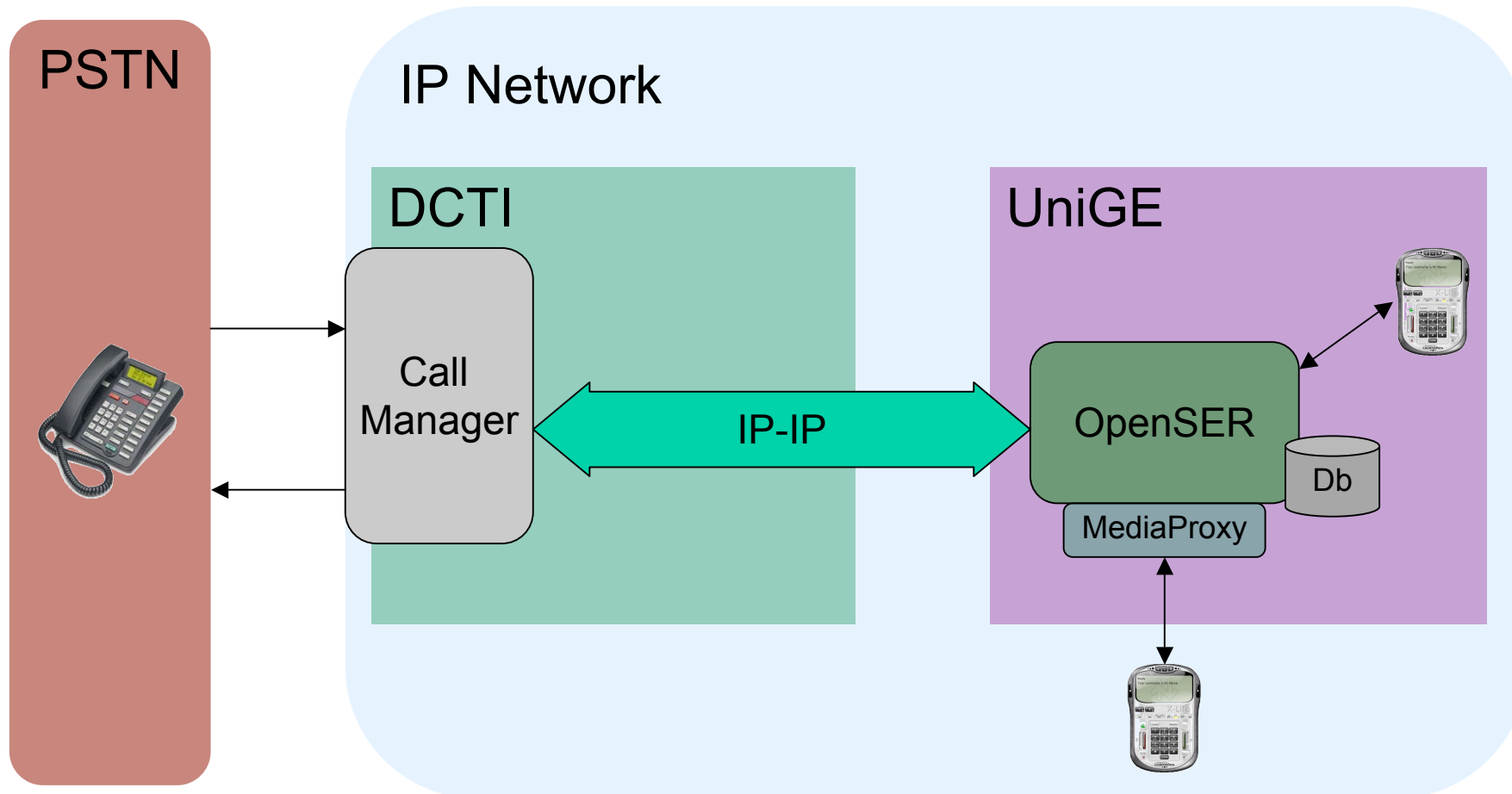
Lessons learned and future work

- User account management is closely related to AAI, and thus regular updates are needed
 - best to integrate Shibb directly into the distributions when possible, e.g. Dokeos 2.0
- Basic use of Shibb at Apache level (i.e. access of directories through *htaccess*) is punctually asked for by users
- CAS versus Shibb not always clear. However, Shibb can reach federations and send attributes
- **Next step: secure Web services and data streams through Shibb...**

Phase 2 (being tested)



Phase 3 (future?)





Lessons learned and future work

- UniGE not being the PSTN's owner, we have only limited ranges of action
- PBX not yet completely mastered
- Waiting for a political lead to get SIP numbers at Swiss level
- ... and we must learn to work with telecom specialists
- **Next steps: we must consolidate the architecture and inform university boards of the financial advantages, if any!**



Final conclusions

- Very positive AAI outcomes from these past 3 years:
 - Applications such as Dokeos secured
 - LMS resources can be shared with other Swiss universities
 - concept is being exported abroad (Moodle, Dokeos 2.0)
- We learnt new technologies (Shibb, SIP, etc.)
- This knowledge must however be maintained by the institutions, not always an easy task
- New partnerships with Swiss Higher Education and Switch

→ COMMUNITY IS STRONGER !



Glossary

- .htaccess file: a configuration file that resides in a directory and indicates which users or groups of users can be allowed access to the files contained in that directory
- PSTN: Public switched telephone network
- Asterisk: telephone private branch exchange (PBX)
- OpenSER: SIP Registrar/Proxy
- MediaProxy: NAT traversal module for OpenSER
- OpenSER administrator: interface to OpenSER administration
- DCTI: Département Constructions et Technologies de l'Information (Etat de Genève)