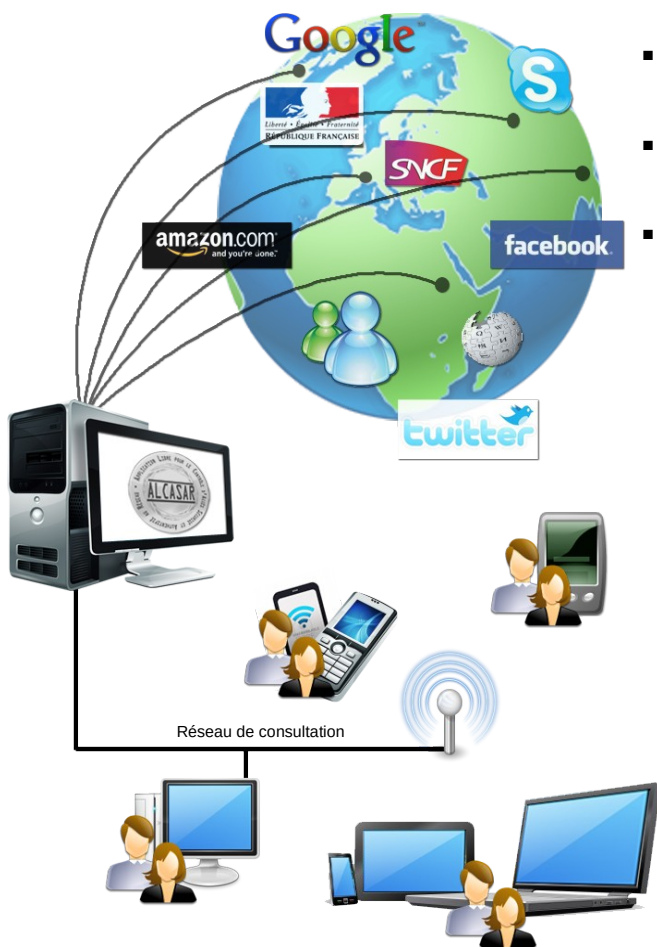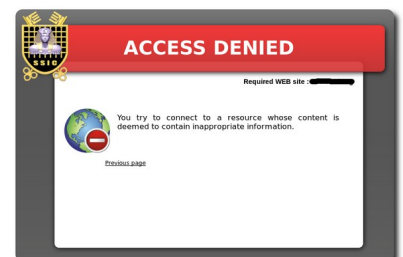# ALCASAR

A secured Network Access Controller (NAC)

ALCASAR is a Network Access Controller which controls the Internet consultation networks. It **authenticates**, **attributes** and **protects** users' access regardless their connected equipment (PC, tablet, smartphone). It includes network filters per users complying various needs especially **for institutions welcoming young people**. **In France** and in Europe, ALCASAR allows people in charge of consultation networks to meet the **laws.**

- ▪ **To authenticate and control accesses**

- ▪ **To trace and impute while respecting privacy**

- ▪ **To protect and filter flows per users**

- ▪ **Free & open source**

Réseau de consultation

Users authentication in 8 languages
(en, fr, de, es, nl, pt, zh, ar)

Filtering by user
- • Blacklist
- • Whitelist
- • Network protocols

ALCASAR is installed on system including two network cards (small PC or virtual machine). It's positioned between Internet and a consultation network. This portal is totally **independent** of both ISP's equipment and consultation network access technologies (WIFI, PLC, Ethernet, etc.). The equipment connected on the consultation network can be any type (PCs, mobile phones, tablets, game consoles, etc.). They require **no changes** in their configuration. An installation's documentation is supplied to allows a **simple** and **quick** deployment.

Nfdump / nfsen

The main page allows users to log-off, to change their password and import the security certificate into their browser. It allows administrators to manage, in a secure way, the portal via the **Alcasar Control Center** (ACC).
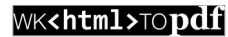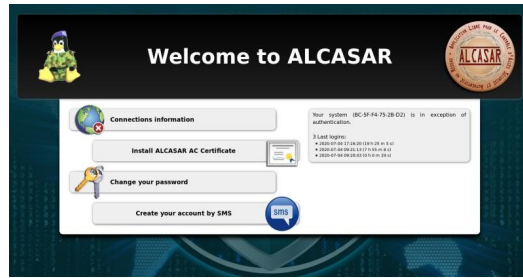
ALCASAR components

- Equipment ou virtual machine with two network cards
- Secured Linux operating system
- Dynamic firewall and filtering router
- WEB intercept gateway (captive portal)
- DHCP, DNS and NTP servers
- Authentication, authorization and accounting server (RADIUS)
- Database management system (users base)
- Can be connected to external directory servers (LDAP or A.D.©)
- Web antimalware
- Auto-registration of users by SMS or Email
- Scripts to deploy, update and manage it
- Load balancing between several WAN gateways
- WEB control (ACC – ALCASAR Control Center) :
    - 3 language (fr,en, es)
    - Management of users and users groups
    - Filters management (protocols, domains, URL)
    - Backup of logs files
    - Network flows report
    - Security report
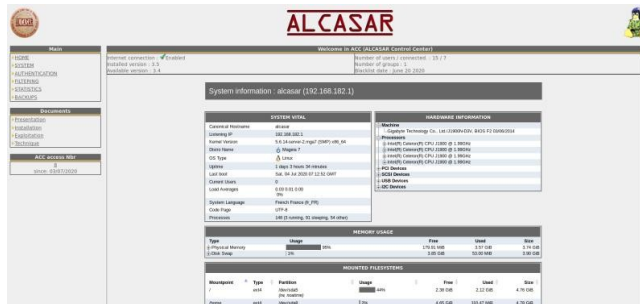
Filtering functions (regulatory / school / parental)

ALCASAR includes a filtering system of type "blacklist" and "whitelist" attributable by user or groups of users:

- Filtering based on Toulouse University list. On ALCASAR, this filter operates both on name resolution process (DNS) and on WEB browsers requests ;
- Filtering search engines and YouTube results filter;
- Filtering of network protocols.

Respects the French and European laws

- European Directive 2006/24/CE about data retention.
- French law N°2004-575 consolidated in 19/05/2011 for the trust in numerical economy (resume in this document of the French Security Agency - ANSSI).
- French decree N°2011-219 about retention and communication of data that should identify somebody who has contributed to create online data.
- Accounting compliant with the needs of CNIL and CERTA (CERTA-2008-INF-005).
- Recommendations of the French security agency "ANSSI" (security pen-test).
- Integration of the European "WIFI4EU" system.

OpenSSH

ALCASAR is a free (GPLV3) and independent project. The developer team is managed by Richard Rey (rexy) and Franck Bouijoux (3abtux). This "ALCASAR team" consists of "senior" developers (Pascal Levant "angel95" and Stéphane Weber "steweb"), "junior" developers, technic hotliners, writers and testers identifiable on the WEB site and on the forum. ALCASAR is also a French non-profit association created to federate the project members and to promote the open-source software. This association is a member of AFUL.

More information on www.alcasar.net