

ALCASAR

A free and open source Internet access manager

Authenticate and control accesses

ALCASAR is a free and open source project for managing Internet access for public, corporate or home networks. It **authenticates**, **attributes** and **protects** users' access regardless of their equipment (PC, tablet, smartphone, game console, TV, etc.). It includes several filtering mechanisms to apply the Internet access regulations of companies, public organizations or home networks (parental control). In France and in Europe, ALCASAR allows

people in charge of local networks connected to Internet to meet legal obligations.

- <complex-block><complex-block>
 - Filtering by user
 - Blacklist
 - Whitelist
 - Network protocols

ALCASAR is installed on a minimalist system that has two network cards (mini-PC or virtual machine). It is positioned as a break between the Internet and the network it protects. It is totally **independent** of both ISP's equipment and consultation network access technologies (WIFI, PLC, Ethernet, etc.). The equipment connected on the network can be of any type and does not need **any modification**. An installation procedure is provided to allows a **quick** and **easy** deployment.









Welcome to ALCASAR



ALCASAR



WK**<html>**TO \mathbf{pdf}

OpenSSL

(GW)ammu

MariaDB

A homepage in 8 languages allows users to authenticate themselves, change their password or import the security certificate into their browser.

- Two self-registration mechanisms can be activated : Bv 'SMS' :
- By 'E-mail of authorized domain names'.

Components

- Light PC or virtual machine with two network cards ;
- Secured and minimalist Linux operating system ;
- WEB intercept gateway (captive portal);
- Authentication, authorization and accounting server (FreeRadius);
- Connectors to external directory servers (LDAP or A.D.[©]);
- Dynamic filtering firewall ;
- Router and DHCP, DNS and NTP servers ;
- Antimalware :
- Load balancing between several WAN gateways;
- WEB control (ALCASAR Control Center ACC) :
 - 3 languages (fr.en, es);
 - Management of users and users groups ;
 - Filters management (protocols, domains, URL);
 - Log files management ;
 - Statistic network flows report ;
 - Security report.





ALCASAR includes a filtering and OOS system attributed to user or to group of users :

- Filtering of DNS and WEB requests by "black list" or "white list" (University of Toulouse);
- Filtering results from major search engines and YouTube ;
- Network protocols filtering ;
- Expiration date ;
- Periods and durations of authorized connections ;
- Data rate and volume limits (incoming & outgoing);
- Number of simultaneous sessions allowed.

Respects the French and European laws

- Article L34-1 of french "Code des Postes et des Communications Électroniques" (CPCE) ;
- CNIL : Fournir un accès à Internet : obligations ?
- French decree N°2021-1362 relating to the conservation of data allowing the identification of any person having contributed to the creation of a content put on line ;
- Chapter 4 of the "Recommendations for connecting an IS to the Internet" guide
- Logging (§ D.3.1 p40) & Linux security in accordance with french ANSSI recommendations;
- Integration of the European "WIFI4EU" system. WIFI4EU

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 & 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.







freeRADIUS







OpenSSH