What is Apache Guacamole™?

Apache Guacamole™ (hereinafter only Guacamole) is a **clientless remote desktop gateway**. This gateway accesses desktops / consoles via VNC, RDP or SSH on one side and makes them available **in a browser** on the other side.

**Clientless** in this case means that **no software** has to be **installed** on the PC/tablet or a browser add-on. You only need a browser!

Guacamole is written in **Java** and is published as **Free** and **Open Source Software** under the Apache License V. 2.0. Commercial product support and other services around Guacamole are offered by companies. These companies provide products based on Apache Guacamole™, develop them further and return the development to the Apache project.

If appropriate prerequisites and requirements are given, **Guacamole can replace** or supplement an **installation and operation of MS Terminalserver** + Paralles RAS/Citrix Virtual Apps/... Thus, high license costs and a complex installation / configuration are avoidable.

Due to the pure operation in the browser, a high level of security is guaranteed, since the client does not directly access the target systems (and vice versa). With a SSL encryption (HTTPS) and secure authentication (2FA) you can/should/must secure the access.

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Guacamole in EGroupware

The **EGroupware Guacamole** app is installed as a package to an EGroupware standard installation. The docker container is downloaded, the reverse proxy is configured, Guacamole is integrated as an app and **Guacamole** is ready to use. Described in detail under [0].

EGroupware can authenticate against its own MariaDB/MySQL database, against an AD, LDAP or mail. Guacamole then authenticates via OAuth against the OpenID/OAuth2 server built into EGroupware.

**Two-factor authentication** is possible with **software authenticator** and **USB/NFC sticks**. The transport encryption is done by the EGroupware proxy. Thus the access to Guacamole is secured.

For the integration **EGroupware** and **Guacamole** access database tables/views together. Thus, connections can be created and authorizations assigned from EGroupware. In Guacamole the **users and groups** from EGroupware are available.

The **installation** and **configuration** is therefore extremely lightweight, especially with an existing EGroupware installation. Also an **installation** of EGroupware/Guacamole only for the operation of Guacamole is very fast and easy.

Links

EGroupware/Guacamole Installation/Troubleshooting  
https://www.egroupware.org/en/guacamole/  
https://github.com/EGroupware/egroupware/wiki/  
Apache-Guacamole-managed-by-EGroupware  
https://help.egroupware.org/t/uk-apache-guacamole-the-integration-into-egroupware/74734  
Service for Guacamole  
https://www.egroupware.org/en/egroupware-support/

Contact:  
Stefan Unverricht  
EGroupware Community Manager  
E-mail: su@egroupware.org  
WWW: www.egroupware.org