

galgus | *Maximizing wireless
performance*



CHT Manager

Cognitive Hotspot Technology (CHT)



CHT Manager is an intuitive and powerful cloud-based tool for remotely monitoring and managing smart WiFi networks both easily and effectively. CHT Manager provides a single central point of administration for all WiFi access points (APs) that use our Cognitive Hotspot™ Technology (CHT).

CHT Manager Features

- Monitor all APs from a single location in the cloud

CHT Manager is the perfect solution for managing and monitoring all the APs in smart WiFi networks in an easy but powerful way.

- Centralized WiFi Network Configuration

CHT Manager saves time with a centralized WiFi network configuration and management platform. In just a few clicks, enable VLANs, SSIDs (encryption and password), CHT algorithms and configure APs (IP, alias, channels, power, bandwidth, ports, SSIDs...). Update the AP firmware version, too.

- APs Verification and Alarm Reception System

CHT Manager identifies problems or failures, as they happen, as it monitors in real time the state of the WiFi networks. Additionally, CHT Manager has an agile tool for receiving alerts regarding the performance of the APs.

- Backup and Data Recovery

CHT Manager provides an easy way to generate and store backups of AP configurations and restore them to one or multiple APs.

- Information about client behavior and services usage

CHT Manager gives detailed information about each connected client in the smart WiFi network. It displays information about MCS, SNR, Mode, status, IP, MAC, hostname, transmitted packets (total and correct packets), AP, supported protocols (802.11 k/r/v), bandwidth and spatial streams.

- Network Layout Generator

CHT Manager generates a network layout which displays the client distribution between the APs and AP radios. Information is obtained in real time and the layout dynamically updates to give an overview of the current network structure.

- AP coverage and client location and positioning

CHT Manager enables the upload of building floor plans which can be defined with a scale. Use the Coverage utility to place APs onto the floor plan and estimate cell coverage at both 2.4Ghz and 5Ghz. Use the very same floor plans and AP placements (to represent actual AP location) with the Action Map utility. Action Map works in conjunction with CHT location algorithm to accurately locate client devices. The information is obtained and displayed in real time (the refresh rate is configurable) to view the dynamic client environment. Colour coordinated masks can be applied to clients to give a quick overview of the MCS, SNR and Mode. Clicking upon a client displays MAC, hostname, transmitted packets (total and correct packets), AP to which connected, supported protocols (802.11 k/r/v), bandwidth and spatial streams.

- Data depiction and graphical representation

CHT Manager provides graphical representations of gathered information. Users are able to get a quick overview of useful information such as the number of clients per SNR, per supported protocol (802.11 k/r/v), per synchronization rate, per emission radios, etc.

- Exportation of Analytics/Statistics

CHT Manager allows to export statistics in PDF format. Information can be saved, shared and consulted easily at all times.

- Integration Capability and Flexibility

CHT Manager includes a REST API providing a powerful integration capability with all existing networking managers with REST support.

- Geographical representation of Zone Manager location and the current status using Google Maps®

CHT Manager uses Google Maps® to give a geographical representation to the location of a Zone Manager. A Zone Manager is an isolated unit of management for all the APs in the smart WiFi network. The status of a Zone Manager is reflected in its color (green, yellow and red) which helps to quickly identify errors and failed devices.

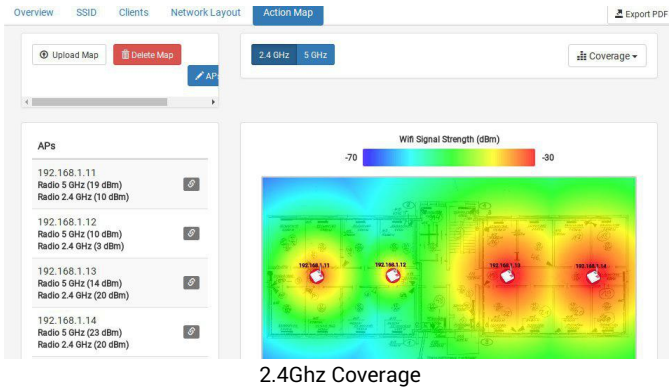
- Creation of groups for mass configuration

In CHT Manager create groups and subgroups to represent APs physical location, department, manufacturer or model of APs. Groups allow applying configurations, backups and firmware to multiple APs all at the same time.



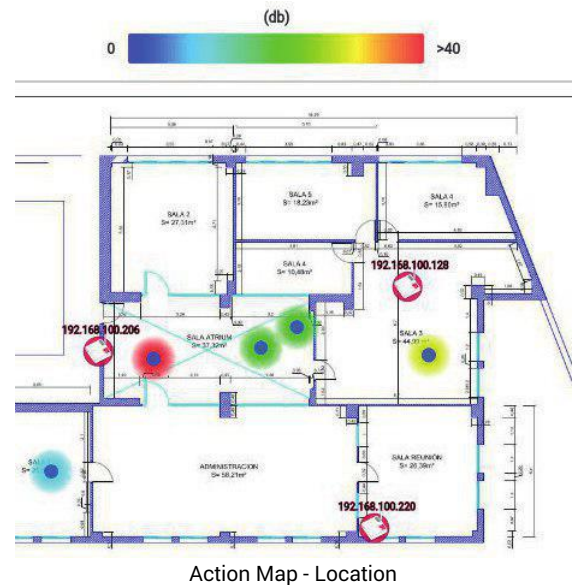
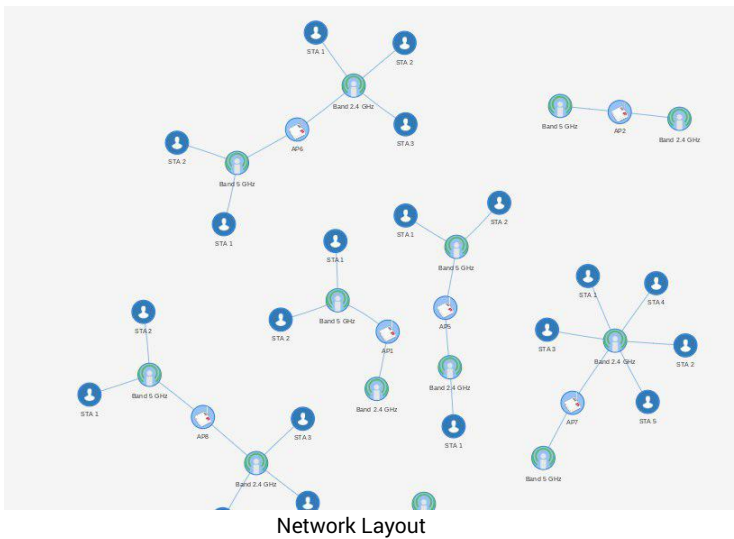
CHT Zone Manager - General Overview

Utilities - Layout, Coverage and Location



- AP coverage estimation tool (2.4Ghz and 5Ghz).

- Upload floor plans and click and drag APs to estimate cell coverage



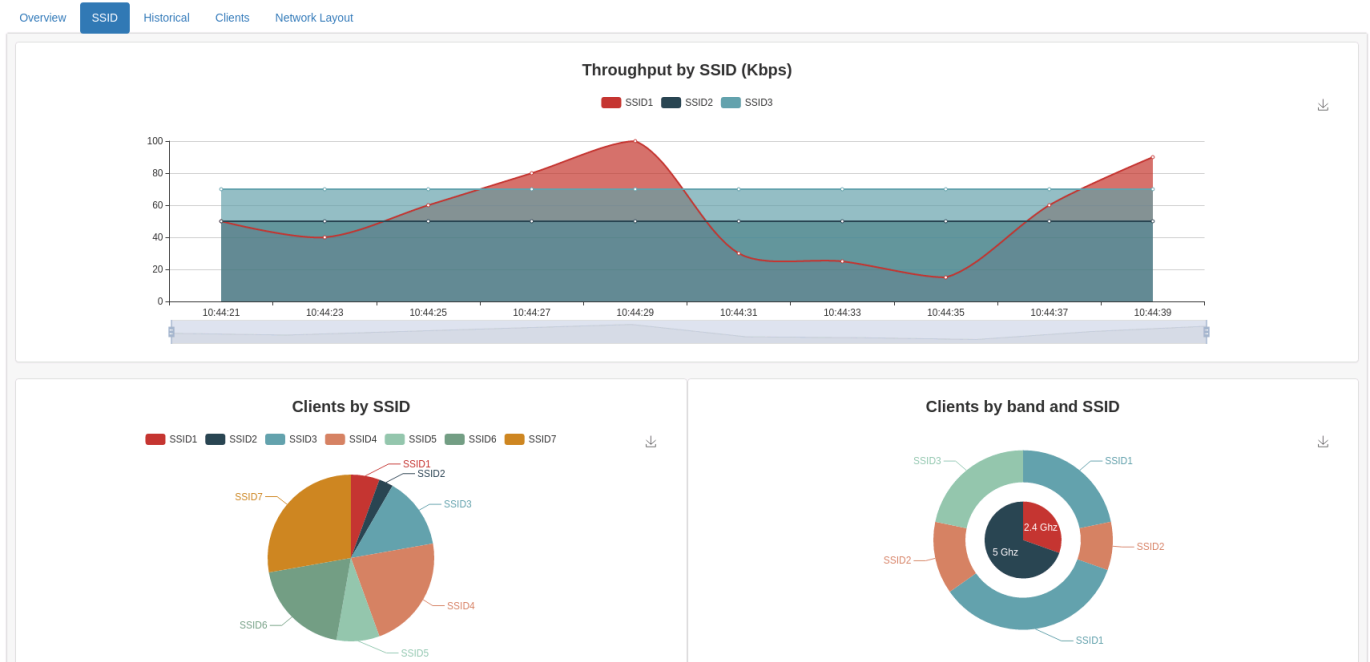
- Network Layout - A dynamic display of client distributions between APs and AP radios

- Action Map - Location of client devices complete with various display masks (SNR, MCS, Mode)



Utilities - Graphs, Diagrams and Tables

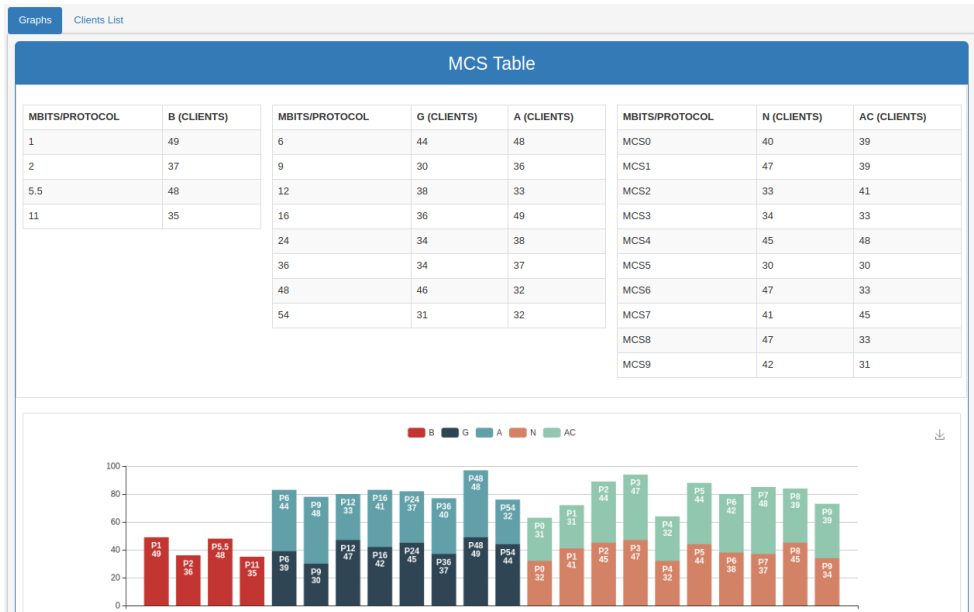
- General performance of the system.
- Throughput per SSID.
- Number of connected clients per AP, per SSID, per frequency band.
- Number of connected clients per SNR, per supported protocol (802.11 k/r/v), per MCS.
- Summary of throughput: minimum and maximum throughput.
- Summary of clients: minimum and maximum number of clients.



An improved way to show data: graphs.

Available Information

- **General information:**
Complete and detailed list of APs, VLANs and SSIDs.
Groups of APs, CHT zones and users.
List of backups and firmware versions.
- **Information per each AP:**
Alias, MAC, IP, Serial Number, enabled frequency bands, SSIDs, Status...
- **Information per group of APs or selected APs:**
General performance.
Number of clients connected to each selected AP or group.
- **Information per SSID:**
Temporary configurable throughput.
Number of clients connected to each selected AP or group.
- **Information per frequency band:**
Number of clients connected to each band.
- **Information per each client:**
MCS, SNR, transmitted packets, correct transmitted packets, 802.11 k/r/v support...
- **Information about total number of clients per:**
AP, SSID, frequency band, SNR, MCS and supported protocol.



Overview SSID Historical Clients Network Layout

Graphs Clients List

Filter Filter by STA IP

STA MAC	STA IP	HOSTNAME	THROUGHPUT (Kbps)	AP ALIAS	AP MAC	AP IP	
C7:0F:E6:A5:4E:4D	192.168.1.105		235	AP 1	E3:48:B1:23:C1:AF	10.0.0.1	👁
94:C6:09:1A:E1:A3	192.168.1.106		181	AP 1	E3:48:B1:23:C1:AF	10.0.0.1	👁
88:A2:7F:51:01:33	192.168.1.110		21	AP 1	E3:48:B1:23:C1:AF	10.0.0.1	👁
50:11:4B:BA:83:E3	192.168.1.112		482	AP 1	E3:48:B1:23:C1:AF	10.0.0.1	👁
BE:7A:FA:48:22:A4	192.168.1.118		7	AP 2	83:BB:A6:FB:A2:A5	10.0.0.2	👁

First Previous 1 Next Last

General information about each client.

STA: mac

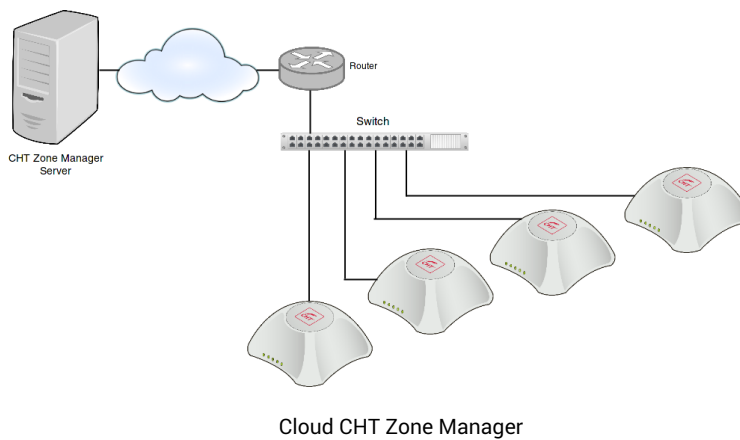
MCS	7
SNR	23 dBm
MODE	802.11ac
STATUS	
IP	192.168.1.5
MAC	BF:AC:23:1F:56:D3
HOSTNAME	
TX PACKETS	15825
CORRECT TX PACKETS	11254
AP	AP 1
R/V/K SUPPORT	R/V
BW	40 MHz
SPATIAL STREAMS	2

Close

Information breakdown of each client.

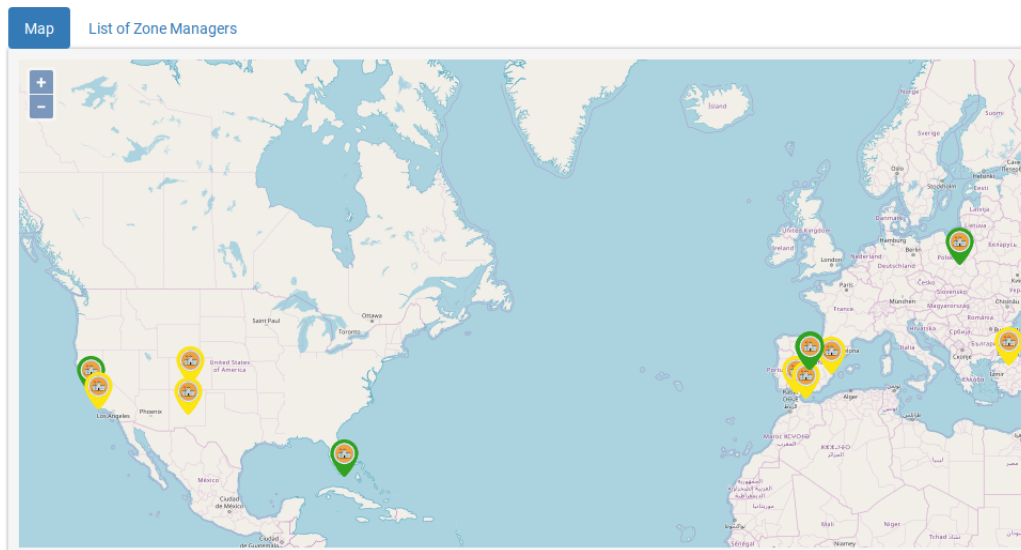


Topology - Cloud location



Key features

- Geographical representation of the location of all CHT Zone Managers.
- Alert system to notify and locate failed devices.
- Privilege control for assigning roles to users.
- Quick access to all the APs on your smart WiFi network through SSL certificate.



Geographical representation of registered CHT Zone Managers



Register Managers

Map List Administration

Details Users Roles

Filter Filter by USERNAME ▼ Add new User

USERNAME	ROLE	MANUFACTURER	CONFIG	DELETE
admin	Super Admin	Galgus	⚙️	🗑️
user-admin	Galgus_Admin_noZM	Galgus	⚙️	🗑️
user-zm	Galgus_noAdmin_ZM	Galgus	⚙️	🗑️
user-nozm	Galgus_noAdmin_noZM	Galgus	⚙️	🗑️

List of users and assigned roles

New Role

Name:

Super Admin Reset Form

Select All Unselect All

Add new role

New User

Username

Password Reset

Email

Role Select a Role ▼

- Super Admin
- Galgus_noAdmin_ZM
- Galgus_Admin_noZM
- Galgus_noAdmin_noZM

Reset Form Save Cancel

ok cancel

Add new user



hello@galvus.net
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41900 Camas, Seville. Spain.