



# Green PI

## Products Catalogue

*By Green Communications*

## GREENSOFT

Green Communications' software (the GreenSoft) is the key enabler of Green PI. The GreenSoft is a set of programs from low-level to end-user web apps that allows hardware to:

- i) connect with nearby Green PI devices to create a dynamic and self-configuring wireless network with quality of service (QoS);
- ii) access and share a common edge cloud with edge-based services.

## EDGE SERVICES

Green PI hosts programs, applications, and services at the data source and in a distributed way to ensure speed, resilience and quick server response time. Some edge services:

- Visualization
- Geo-location
- Instant messaging
- Push-to-Talk (PTT)
- File sharing



## PLATFORMS

Green Communications provides ready-to-use platforms for the easy setup of an Internet of Edges. IoE platforms are tiny and low power routers (YOI) featuring 5 to 7W energy consumption. Each platform comes with a GreenSoft license and a set of edge services.

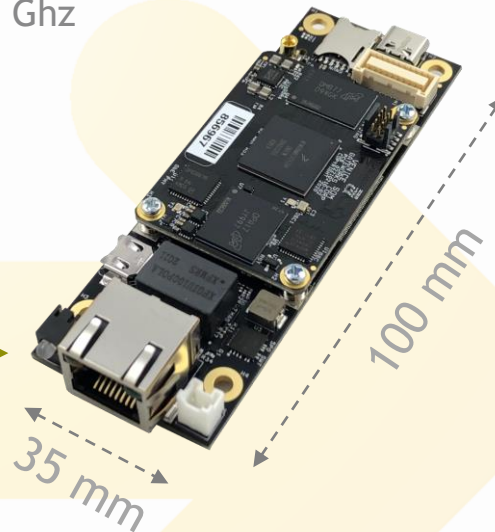
 <p><b>Wi-Fi</b></p> <p>&lt; 6W 50 g</p> <p><i>nYOI</i></p>	 <p><b>Wi-Fi</b></p> <p>≤ 6W 280 g</p> <p><i>YOI</i></p>	 <p><b>Wi-Fi + 4G<sub>LTE</sub></b></p> <p>≤ 7W 320 g</p> <p><i>YOI with 4G/LTE</i></p>	<p><b>Wi-Fi 6e</b></p> <p><b>Wi-Fi 6</b></p> <p><b>Wi-Fi 4</b></p> <p><i>Wi-Fi Generation Available</i></p>	<p> GPS</p> <p> Bluetooth</p> <p> Battery</p> <p> Accessories</p> <p> Enclosures</p> <p><i>Optional Features</i></p>
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Access & Backhaul  
MIMO - Tri-band  
2,4 Ghz, 5 Ghz, and 6 Ghz

Weight: 50g  
Energy consumption: < 6W  
Additional battery ( $\approx$  22h lifetime): 10Ah - 600g

Ethernet  
Access or Backhaul



# Y0I-6e

Access & Backhaul

**WiFi 6e**

MIMO - Tri-band

2,4 Ghz, 5 Ghz, and 6 Ghz



Weight: 280g

Energy consumption:  $\approx 6W$

Additional battery ( $\approx 20h$  lifetime): 10Ah - 600g

Option: GPS

Option: Bluetooth

Access or Backhaul  
Ethernet

# YOI-6

Access & Backhaul



MIMO dbdc



Weight: 280g

Energy consumption:  $\approx 6W$

Additional battery ( $\approx 20h$  lifetime): 10Ah - 600g

Option: GPS

Option: Bluetooth

Access or Backhaul  
Ethernet

# YOI-6-4G/LTE

GPS  Gateway  
**4G<sub>LTE</sub>**  
MIMO 2x2

Access and Backhaul

**WiFi 6**  
MIMO dbdc

Weight: 320g  
Energy consumption:  $\approx 7W$   
Additional battery ( $\approx 16h$  lifetime): 10Ah - 600g  
4G modem  
Option: GPS  
Option: Bluetooth

Access or  
Backhaul)  
Ethernet



# Other YOI (Wi-Fi 4)



## YOI router

- Weight: 324g
- Energy consumption:  $\approx 5W$
- Additional battery ( $\approx 22h$  lifetime): 10Ah - 600g
- Option: GPS
- Option: Bluetooth

## YOI-4G/LTE

- Weight: 324g
- Energy consumption:  $\approx 5W$
- Additional battery ( $\approx 22h$  lifetime): 10Ah - 600g
- 4G modem
- Option: GPS
- Option: Bluetooth



## THE GREEN CLOUD

Green PI combines the computing capacity of each router of the network to create an edge cloud distributed near end-users and devices, the Green Cloud.

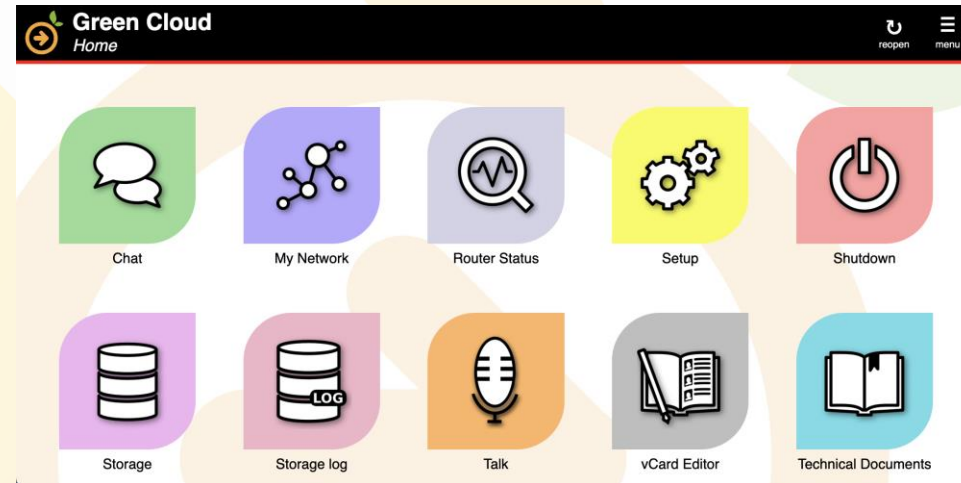
Green Cloud's Web Portal

## THE EDGE SERVICES

The Green Cloud hosts applications and services close to the user and of the data source such as: a push to talk and a chat application, a geo-location service and a file sharing system, among others.

Edge services are always available, even when there is no gateway in the network. They provide better quality and privacy as local data stays local and is processed at source.

**OPEN:** The Green Cloud is open and can easily integrate third-parties' applications and services.

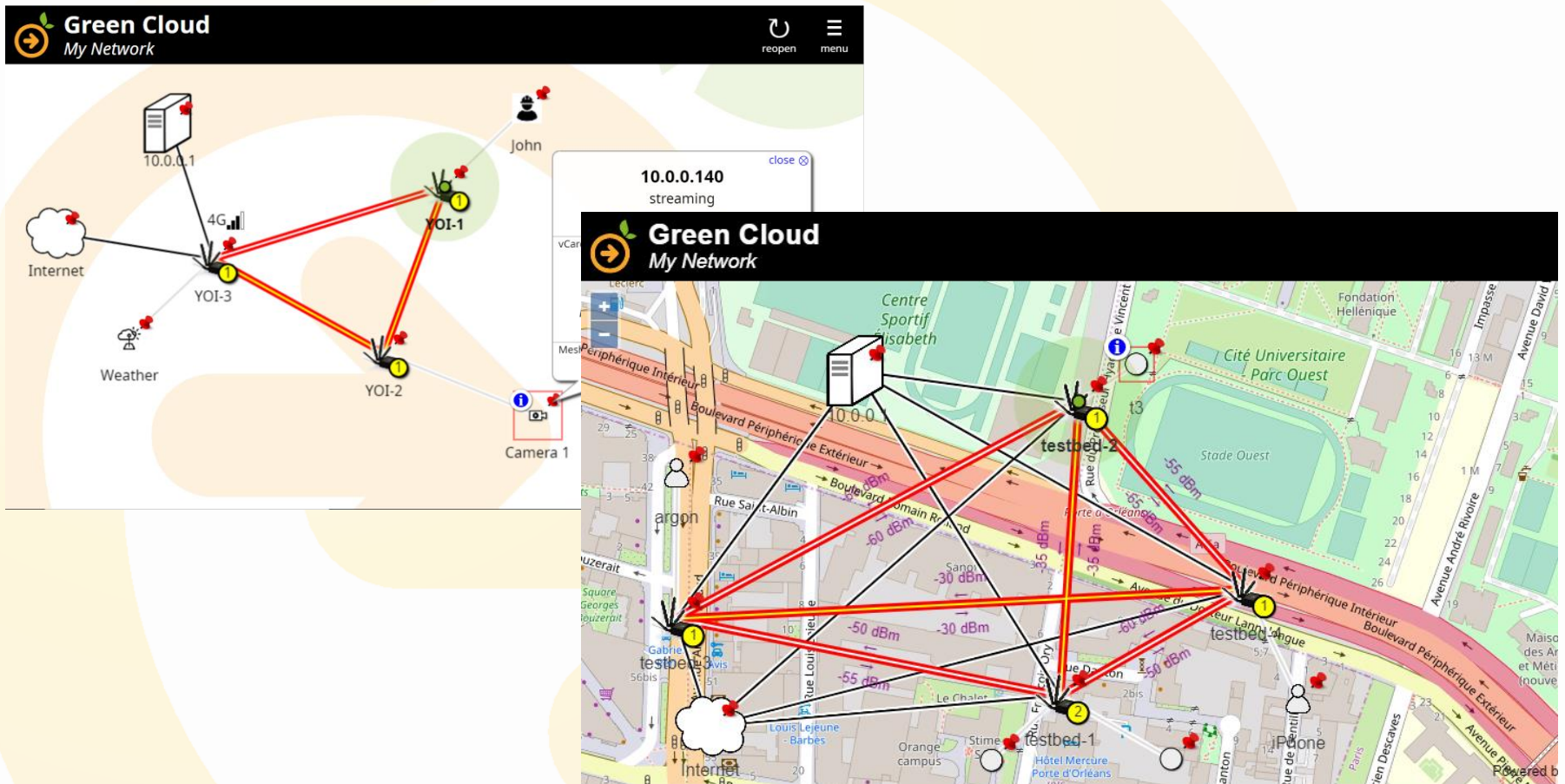




# Visualization - Location

## MY NETWORK

Embedded and distributed service for network and clients visualization and location.

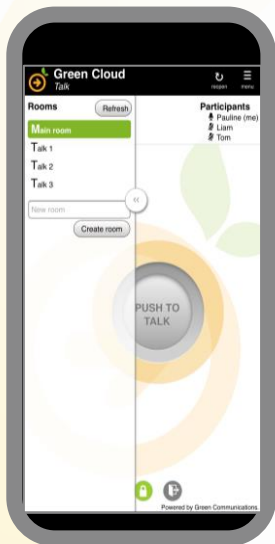


# Voice over IP

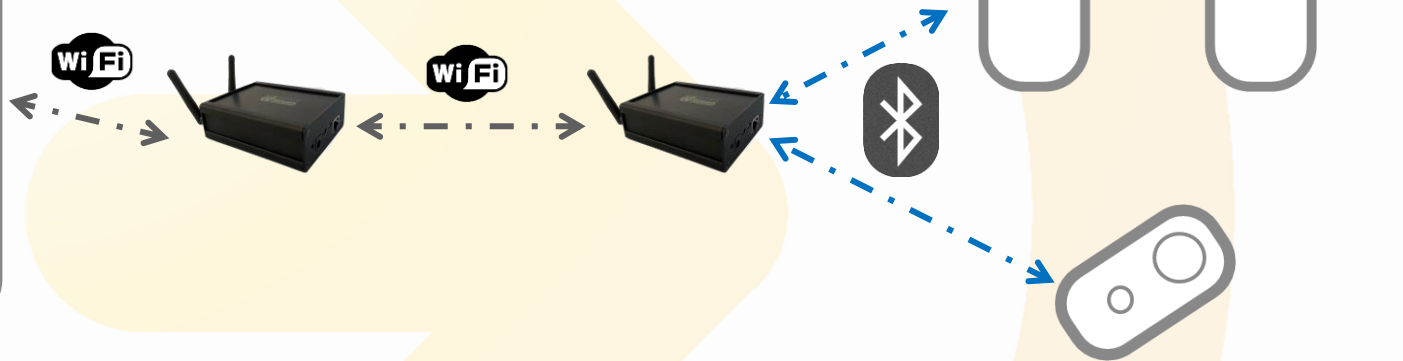
## TALK

Embedded and distributed Push to Talk (PTT) application.

One can use the application via its web interface or directly with a Bluetooth headset and a PTT button.



Talk's Web  
Interface

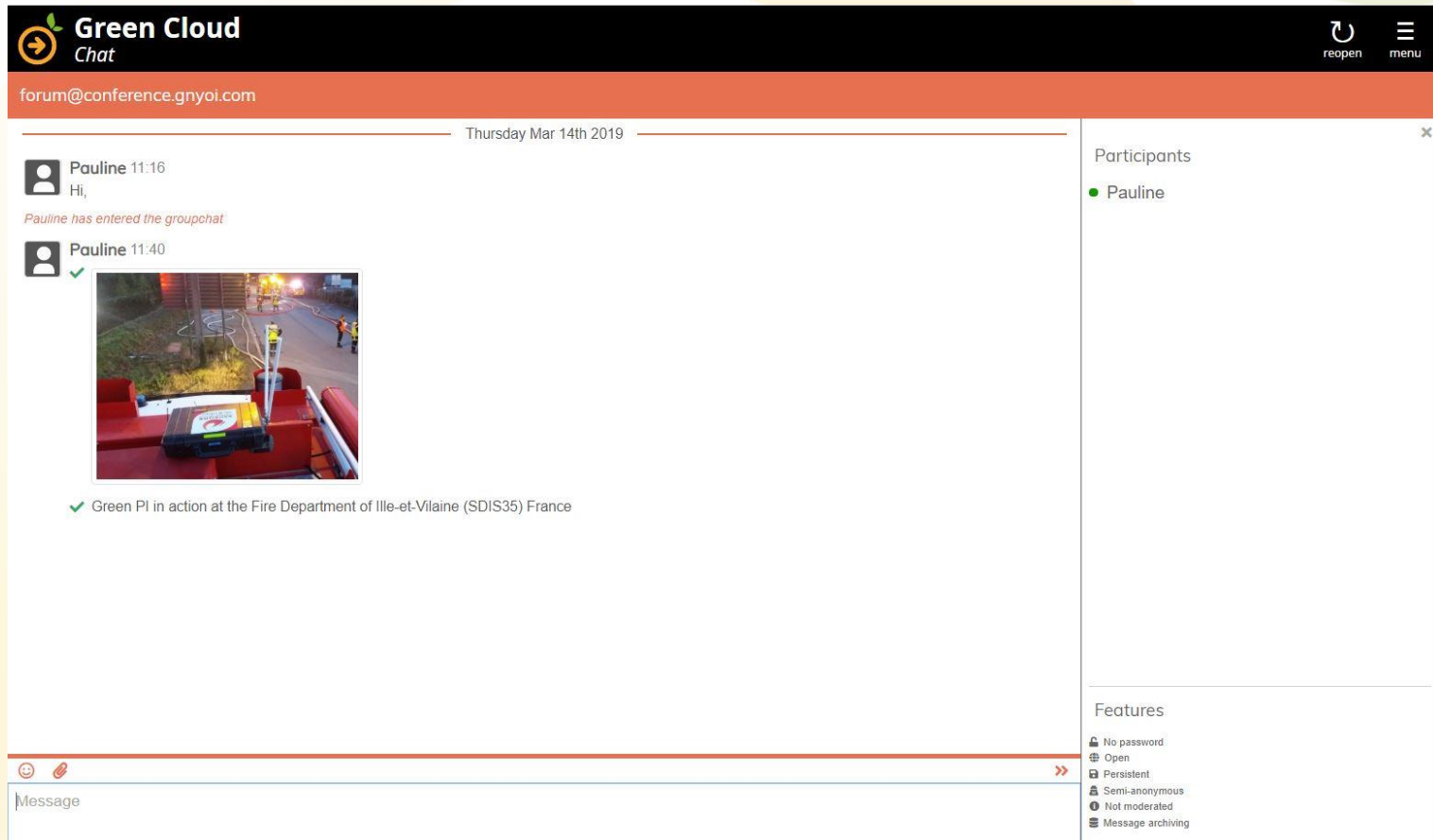


Talk direct with Bluetooth  
headset and PTT button

# Instant Messaging

## CHAT

Embedded and distributed instant messaging service.

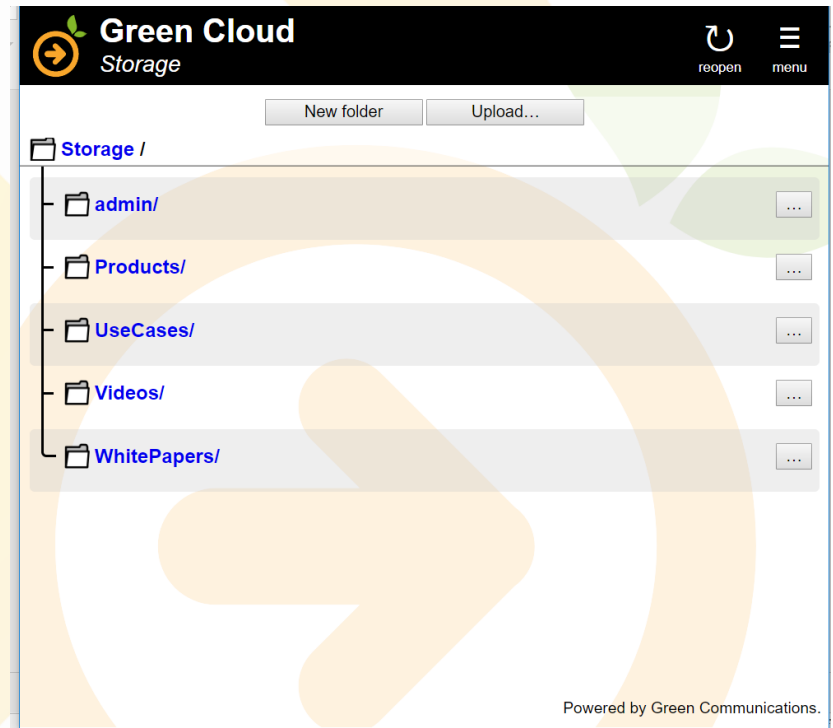
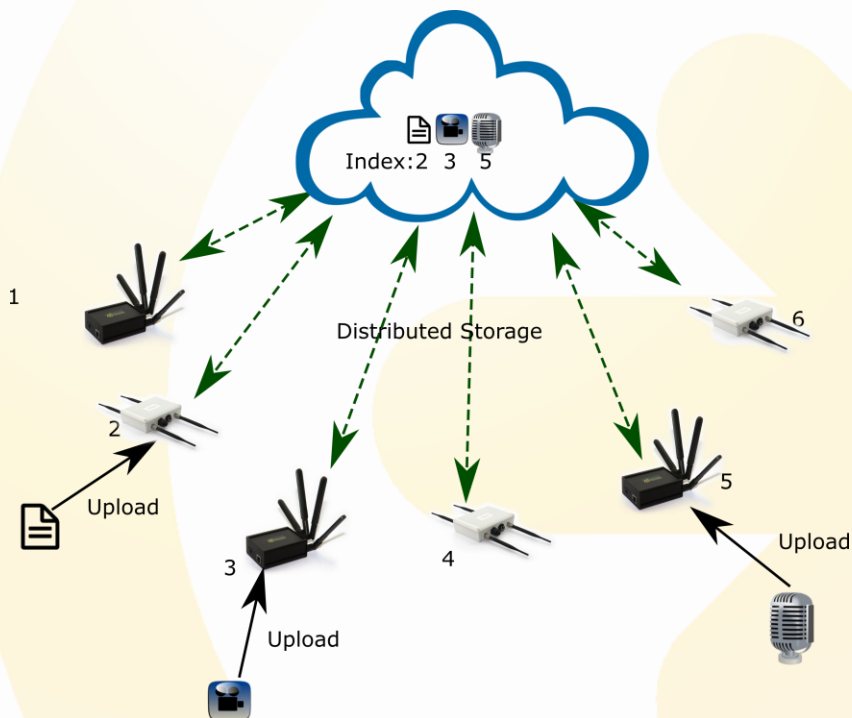


# File Sharing

## STORAGE

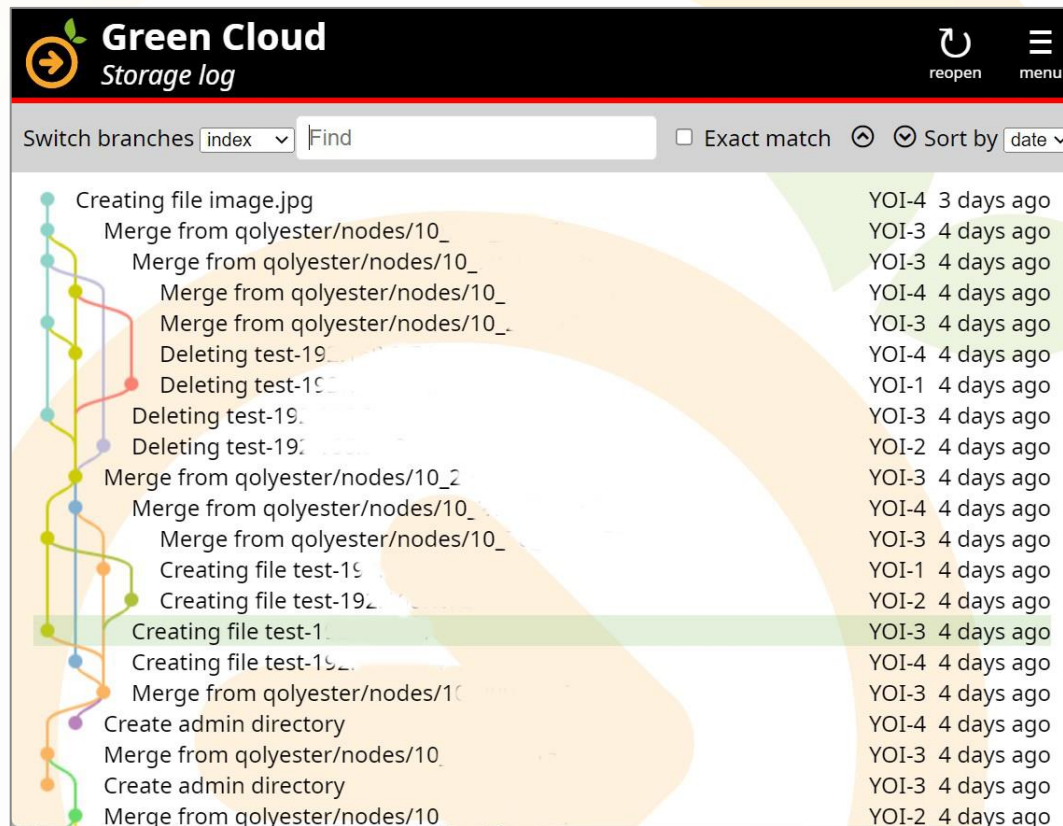
Embedded and distributed file sharing system.

Storage synchronizes files and stores lists of transactions using blockchain technics. One can browse Storage's transaction database using the Storage Log application.



## STORAGE LOG

Blockchain visual-frontent service to browse Storage's transaction database.



# They Trust Us





## GREEN COMMUNICATIONS

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<http://www.green-communications.fr>

**ABOUT US:** Green Communications is an innovative company created in 2010 with a unique expertise in wireless networks and distributed systems. The company is strongly engaged in answering the challenge of Internet mobility, saturation and energy footprint. Therefore, we created Green PI, a low carbon impact Internet and edge cloud platform providing fast and resilient services for IoT, mobility and critical applications. Green PI is the result of 20 years of research and development and a technology transfer from top French universities (Sorbonne University and Paris Saclay) and the CNRS.