# ECHELONEWS

MULTIPLEX NEWS FROM ALL OVER THE WORLD

## WHAT IS IT?

# ECHELONEWS IS A NEWS MULTIPLEXER

IT FETCHES NEWS FROM ALL
OVER THE WORLD, CLASSIFYING
THEM BY TOPIC AND GIVING
THEM BACK TO USERS
ACCORDING TO THEIR
PREFERENCES

MULTIPLEXING PARAMETERS CAN BE ORIGIN COUNTRIES AND RELATED TOPICS

### TECNOLOGIES USED

#### **TECHNOLOGIES:**

- EXPRESS
- AMQPLIB
- PINO
- PEERSEST
- VALIDABLE
- PASSPORT
- BODY-PARSER
- JSONWEBTOKEN
- BCRYPT

### **External services:**

- GOOGLE OAUTH2 API
- GOOGLE TRANSLATE API
- NEWS FETCHER THAT RETRIEVE RSS FEEDS

### **Testing:**

- MOCHA
- CHAI
- CHAI-HTTP
- DOTENV
- NOCK
- SINON



### ARCHITECTURE

STRUCTURED AS A SET OF LOOSELY-COUPLED, STANDALONE MODULES

**RED EDGES:** EXTERNAL INTERACTIONS

**GREEN EDGES: INTERNAL RESTFUL CALLS** 

PINK EDGES: INTERNAL AMOP CALLS



Scalability

A modular architecture is the basis for infrastructure elasticity



Modularity

The project is split in separated, indipendent modules



Resilience

A failing module compromises just the own-provided functionalities

# ARCHITECTURE BENEFITS

### MODULES



### **RESTful API**

It interfaces with a plethora of separated independent microservices to provide echelonews functionalities



### Web frontend

It uses the api as it were an external service, being completely separated from the infrastructure



### News fetcher

Fetch news via the rss protocol ffrom various websites and pass them to the news organizer as a json object.



### News organizer

Organize news and save them in a permanent data structure offering a simple restful service

## MODULES



News Multiplexer According to topic or category and ret urn them to a user interface micr oservice.



User Handler

Management of user is handled by the user handler



Oauth Bridge

Act as a bridge between the Web Frontend and the User Handler