Building application dashboards using WireCloud

Álvaro Arranz García
UPM Researcher. WireCloud lead / architect
aarranz@fi.upm.es | @aarranzgarcia
What is WireCloud?

Object Storage API
NGSI API
Context Broker
Backend service
Backend service
Backend service

wiring
Dashboard/Workspace

operator
piping
data

FIWARE
Perspectives

- From the **developer** perspective:
  - Use web technologies for easily developing mashable web components (widgets & operators)
  - Integrate web mashups with backend services (e.g. support for pub/sub, “connectors” to a number of FIWARE GEs, etc.)

- From the **user** perspective:
  - Develop application mashups: integrate heterogeneous data, application logic, and UI web components to create value added instant applications.
    - Without the need of programing skills (e.g. end users, infomediaries, etc.)
    - Fostering the reuse and shareability of widgets, mashups, etc.
Configurable dashboards... and much more

- **Wiring**
  - Wiring and support for channel creation
- **HTTP proxy**
  - Cross-origin HTTP requests
- **Integration with other GEs**
  - APIs: Context Broker, Object Storage
  - Components for Orion, Kurento, CKAN, Cosmos…
  - System: Business API Ecosystem, Authentication using IdM
- **Shared dashboards**
  - Including for public dashboards (allowing anonymous users)
- **Embedded dashboards**
  - Integrate dashboards in any website
Orion: Markers updated in realtime
Orion: Markers updated in realtime (Wiring)
Orion: administration panel (2/3)
Orion: Admin your own Orion instance
CKAN: PoI Example
CKAN: PoI Example wiring
Sharing preferences

Visibility options

- **Public**: Anyone on the Internet can find and access this dashboard.
- **Private**: Shared with specific people and organizations.

Users and groups with access

- Álvaro Arranz García (You)
- alvaro-arranz-garcia

[Save] [Cancel]
CKAN: WireCloud views

CSV

URL: https://data.lab.fiware.org/dataset/valencia-traficotrans-camaras/resource/dde9a5ae-4b21-47b0-ac71-c297c386acbe/download

From the dataset abstract

Cámaras de tráfico existentes en la ciudad de Valencia. Esta obra está bajo una Licencia Creative Commons Atribución 4.0 Internacional (http://creativecommons.org/licenses/by/4.0/deed.es)

Source: Valencia: Tráfico y Transportes: Cámaras de tráfico

Web Browser

Cámaras actualizándose automáticamente - Actualizadas en negrita

JÁTIVA - RUZAFA dirección GUÍLLEM DE CASTRO (18:52)
CKAN: WireCloud views (Wizard)
CKAN: WireCloud views (Wizard)
Agile dashboards

- **Filters**
  - Sprints
    - Sprint 5.1.3
  - Assignee
    - All
  - Status
    - All
  - Type
    - All
  - Issue Key
    - All
  - Creation month
    - All

- **Project backlog evolution**

- **Burndown chart**

- **Reliability chart**

- **Data Viewer (Table)**

- **Sprint backlog status**

- **Backlog composition**

- **Powered by FIWARE**
Kurento: videocalls, crowd detection, etc
Others: FIDASH (Open Stack - Cloud)
How to get WireCloud?

- Using the global instance at FIWARE Lab:
  - [https://mashup.lab.fiware.org](https://mashup.lab.fiware.org)

- FIWARE Lab:
  - Image: wirecloud-image-RX.Y
  - Blueprint: Wirecloud

- Docker:
  - [https://hub.docker.com/r/fiware/wirecloud/](https://hub.docker.com/r/fiware/wirecloud/)
  - `docker run -d -p 80:80 --name wirecloud fiware/wirecloud:latest`
#Community
Community

- Not only WireCloud is on Github, also the official components are.
- This means that components have an issue tracker associated.
Community

My Resources / NGSI source

Description
This operator allows you to use any Orion Context Broker server notifications about changes on the entities of interest.

References
- Orion Context Broker info

Tags

Detailed data
Internal ID
CoNWeT/ngsi-source/3.0.8
Author(s)
Álvaro Arranz García
Contributor(s)
N/A
Size
28.28 KiB

Advanced operations

2016 © FIWARE. The use of FIWARE Lab services is subject to the acceptance of the Terms and Conditions,
Community

Wirecloud Starter Kits

This catalog contains different packs of widgets, operators, and already built mashups in order to help you starting working with it.

Kurento Starter Kit
v1.1
10 days ago
Offering composed of several kurento mashable application
Free

Charts Starter Kit
v1.1
3 days ago
Offering composed of several chart mashable application components.
Free

Orion StarterKit
v1.3
8 hours ago
Offering composed of three mashable application components.
Free
More info

- [https://catalogue.fiware.org/enablers/application-mashup-wirecloud](https://catalogue.fiware.org/enablers/application-mashup-wirecloud)

- Installation, administration & reference documentation is available on Read The Docs:
  - [https://wirecloud.readthedocs.io/](https://wirecloud.readthedocs.io/)

- FIWARE Academy:

- Do you want to develop new WireCloud components?
  - **Wednesday 14th 12:45-13:30**: “Advanced development and publishing of dashboards using WireCloud”

- StackOverflow Support:
  - Ask your questions using the “fiware-wirecloud” and “fiware” tags
Thank you!

http://fiware.org
Follow @FIWARE on Twitter