

# FIWARE ChanChan

<https://github.com/Bitergia/fiware-chanchan>

Sample application using Authentication and Authorization  
for publish CKAN contents using Orion Context Broker

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FIWARE Friendly Testing

# Goals

- Create a sample application integrating FIWARE GEs for publish Internet of Things (IoT) content in CKAN.
- Use Authentication (IDM Key Rock) and Authorization (Thales Access Control) for user permissions management using organizations.
- Use Orion Context Broker (through Cygnus CKAN) to publish content in CKAN.

# Results

- Web based (SPA) application with two panels:
  - Manual publishing of data in CKAN.
  - Santander Sound Level Meters sensors publishing in CKAN.
- Provision system for deploying automatically all platform using VAGRANT or a FIWARE Image based in Ubuntu 14.04.

User

Admin

# FIWARE ChanChan GLOBAL ARCHITECTURE

<http://chanchan.server>

<https://idm.server>

ChanChan VAGRANT  
IMAGE

CKAN

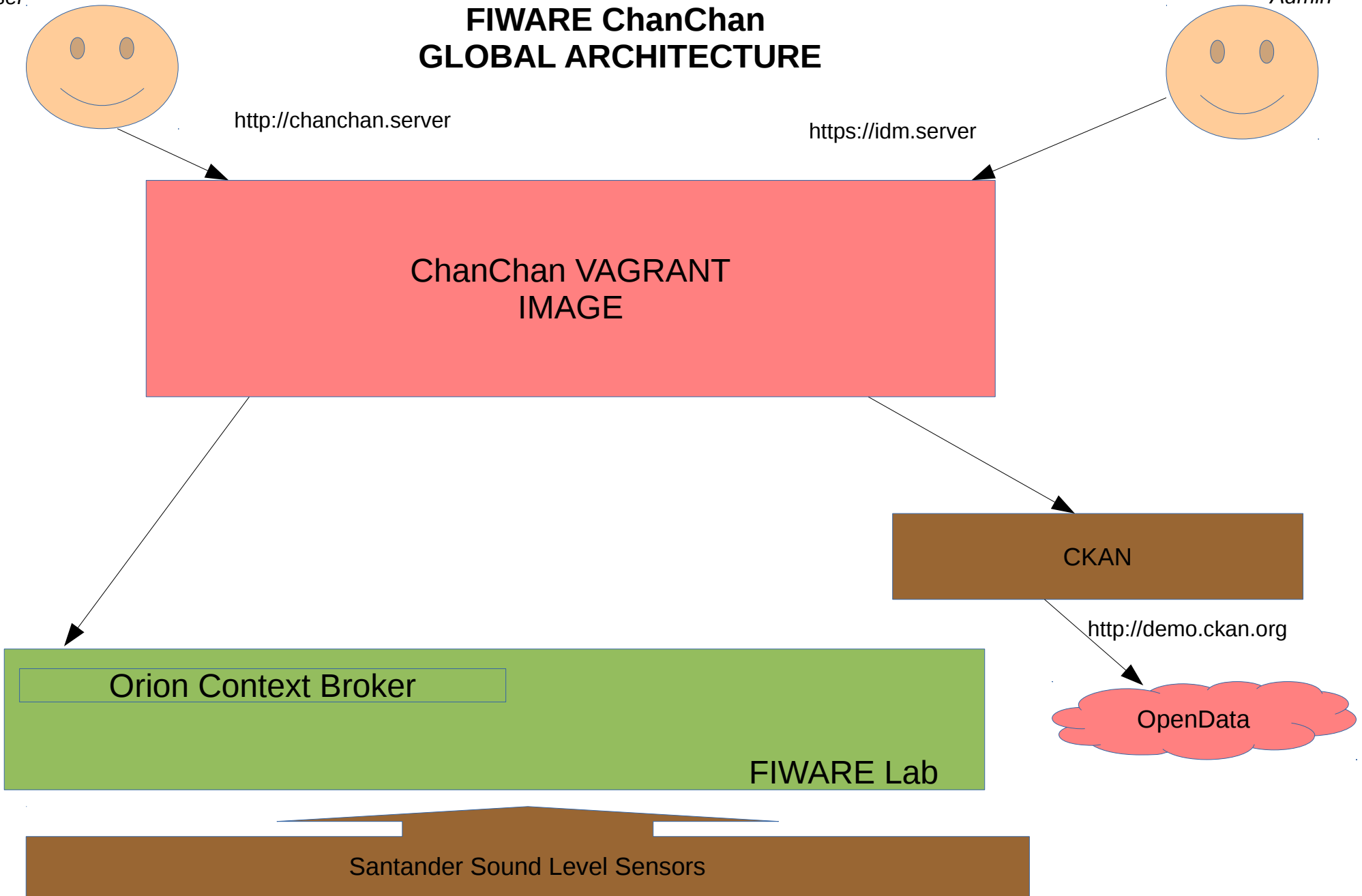
<http://demo.ckan.org>

Orion Context Broker

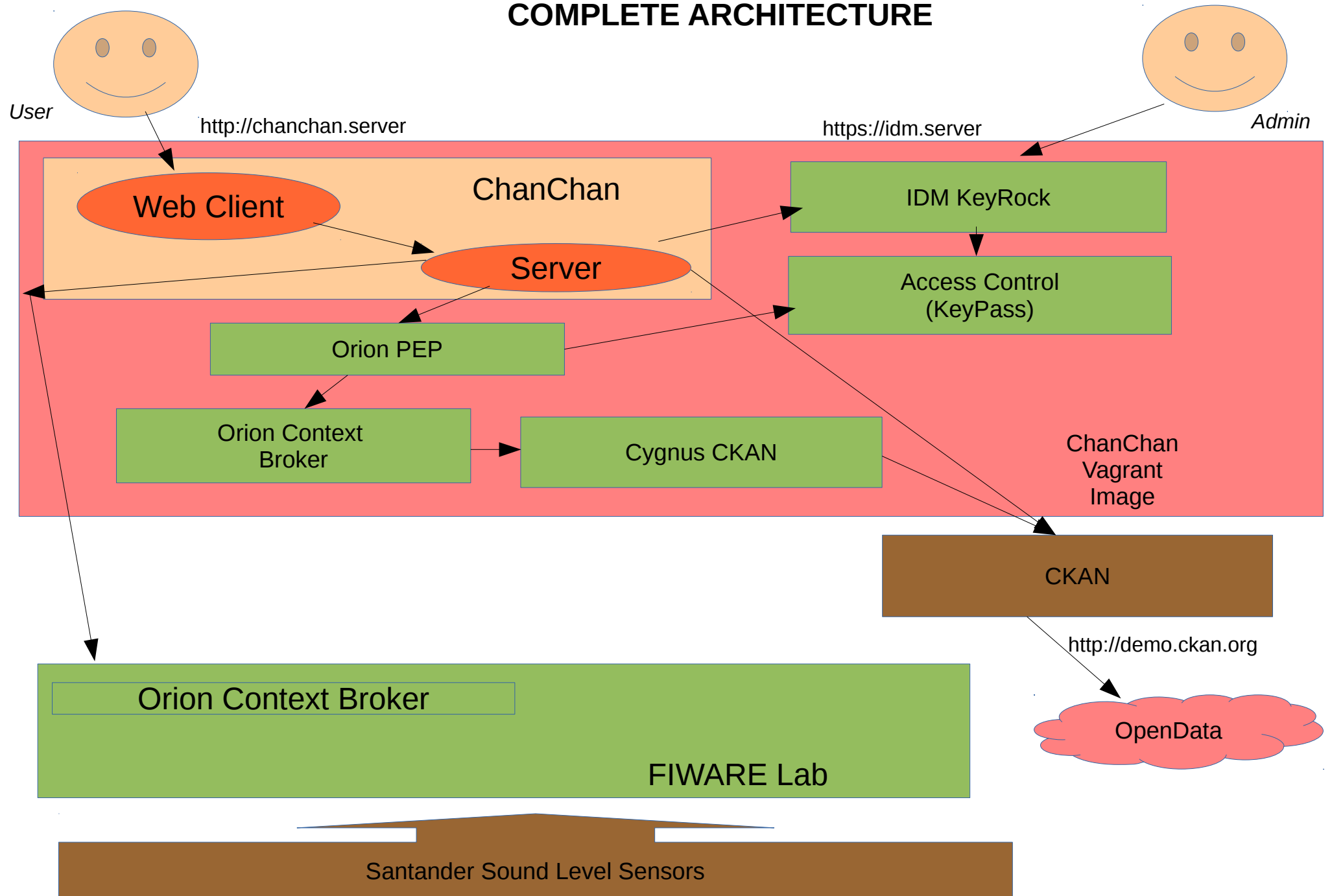
OpenData

FIWARE Lab

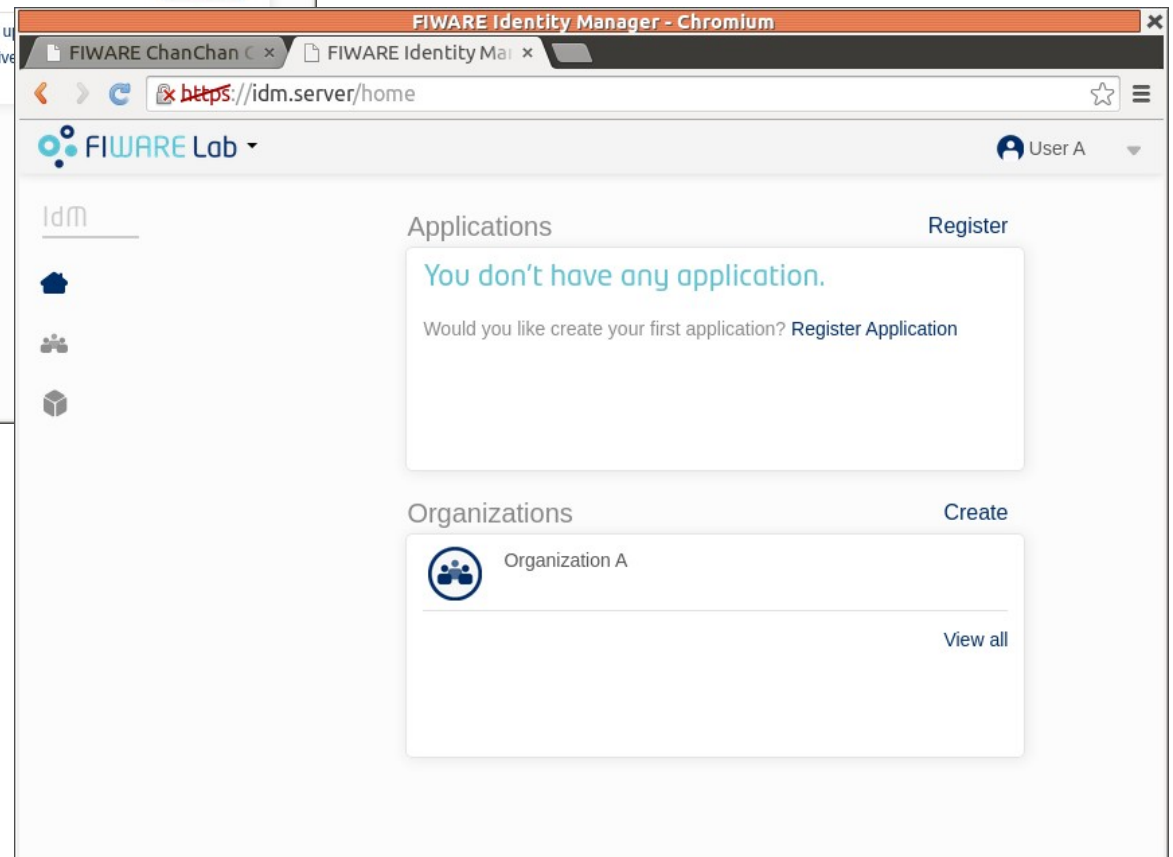
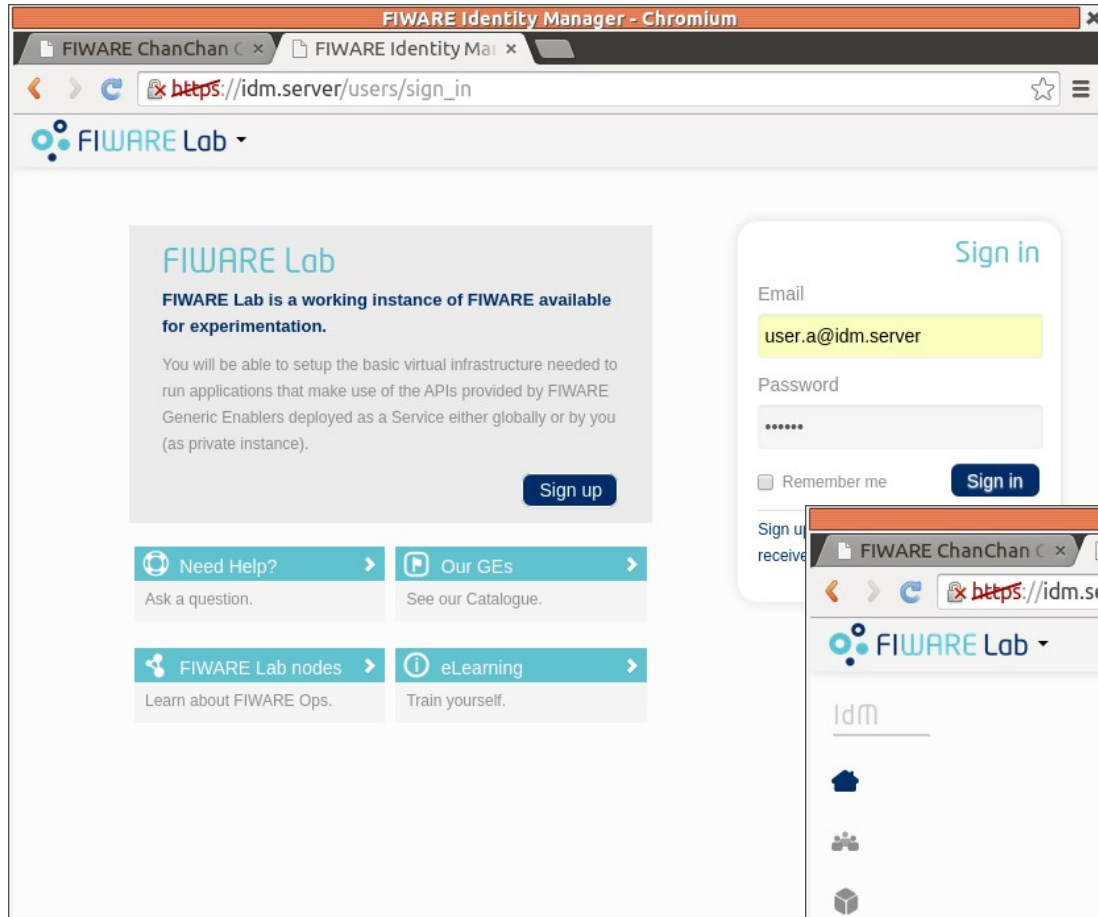
Santander Sound Level Sensors



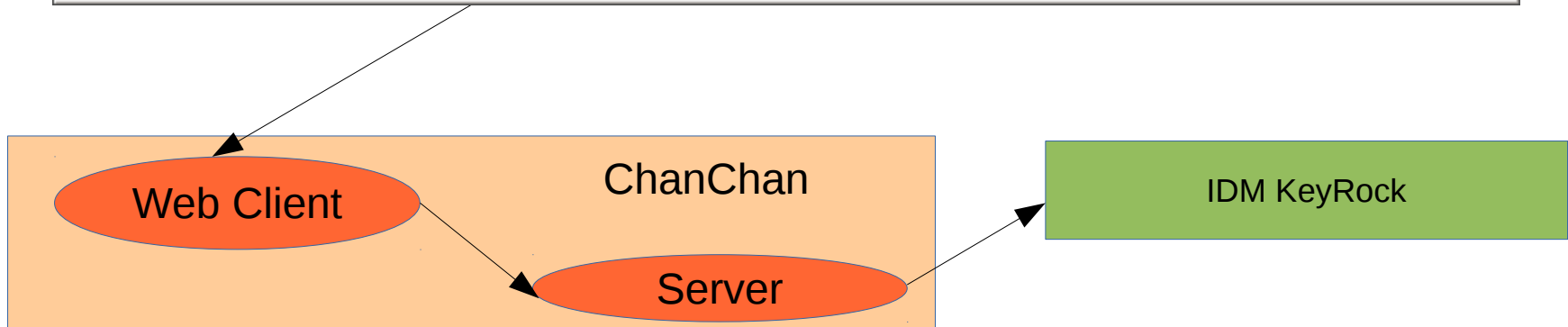
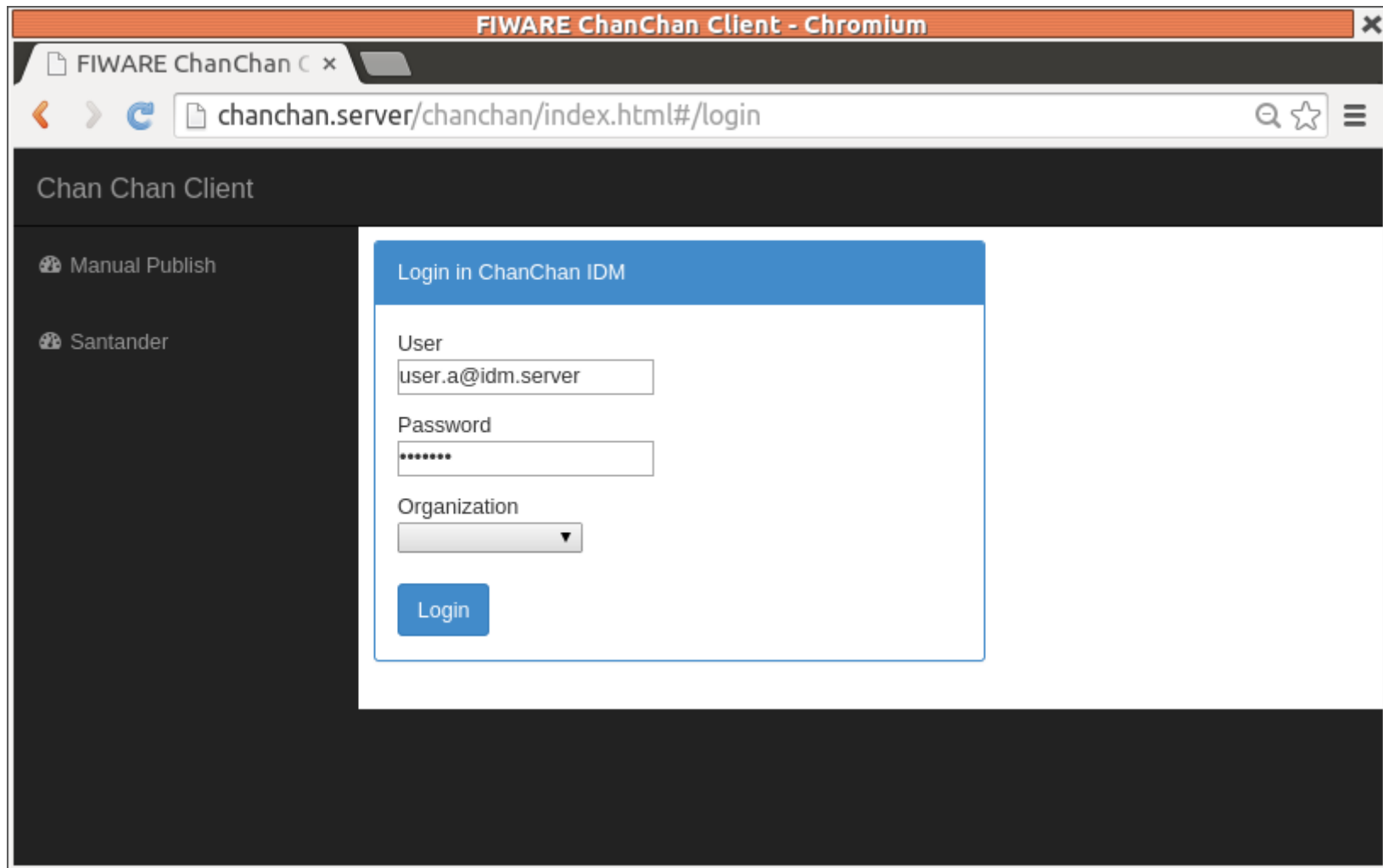
# FIWARE ChanChan COMPLETE ARCHITECTURE



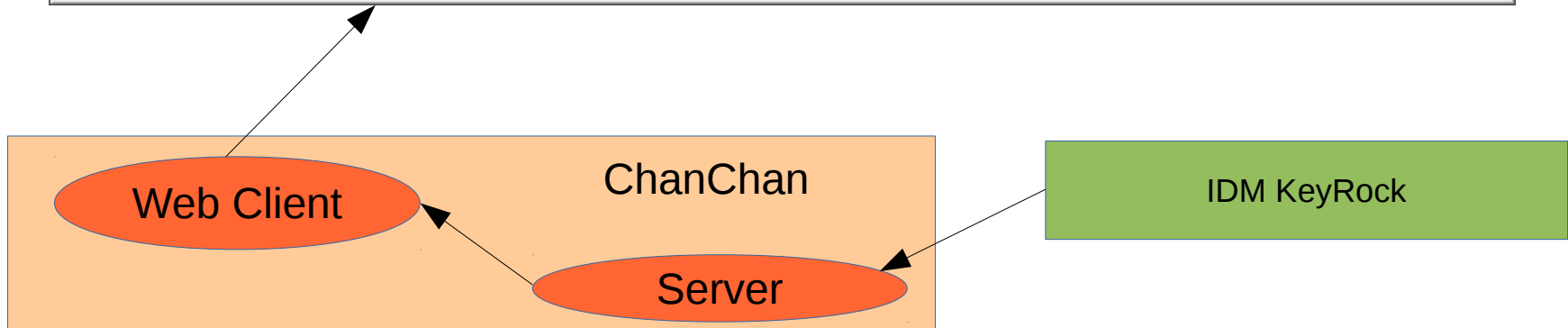
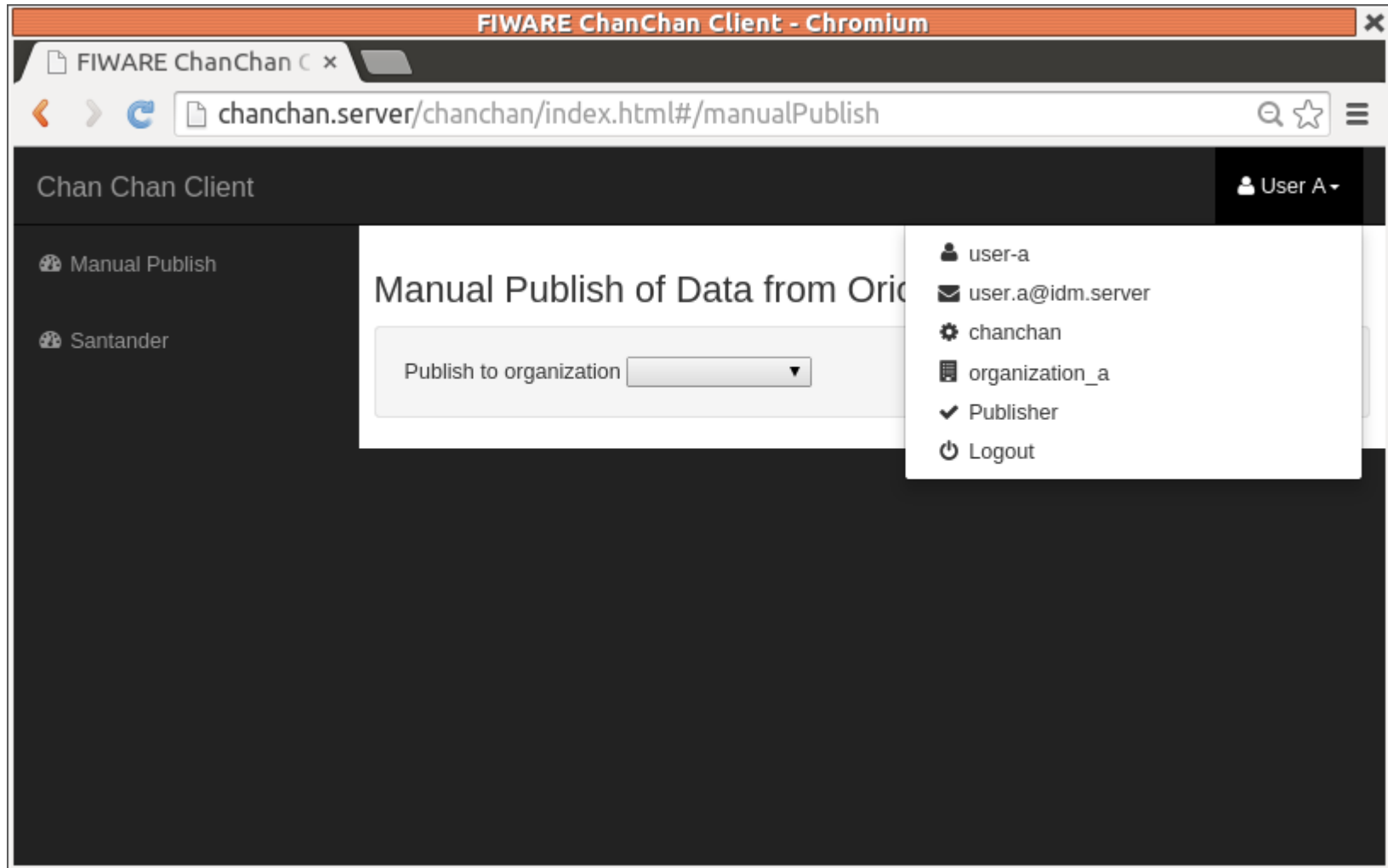
# Authentication (I)



# Authentication (II)

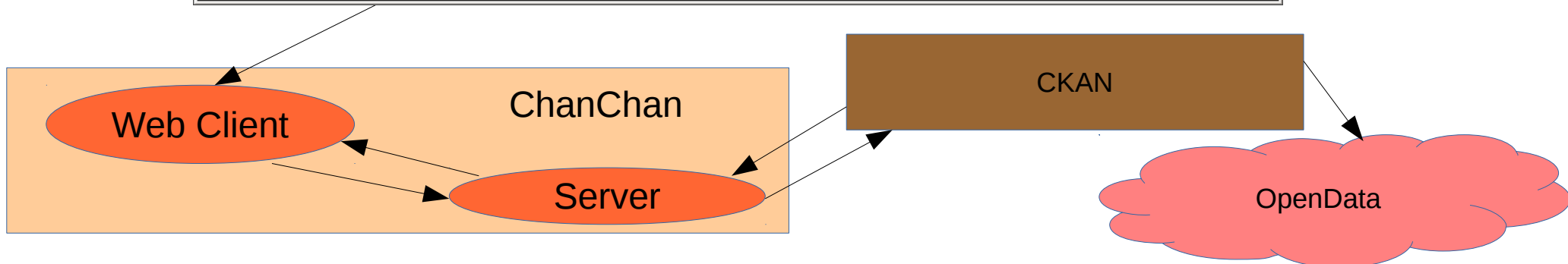
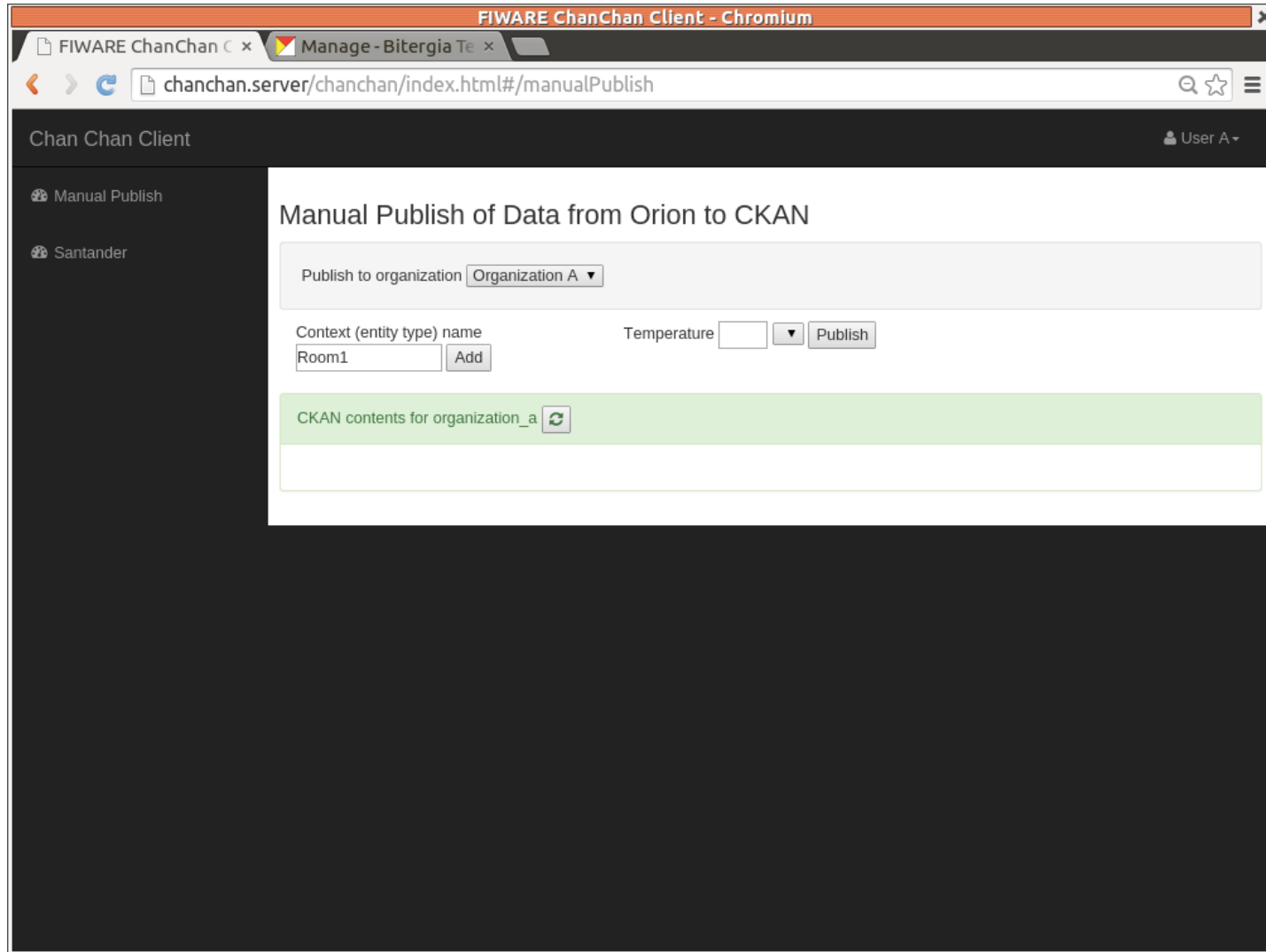


# Authentication (II)





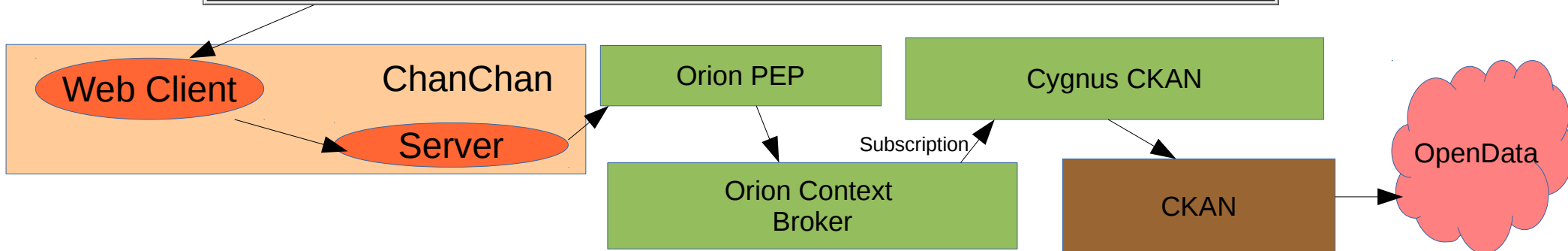
# Manual Publish (Data from CKAN)



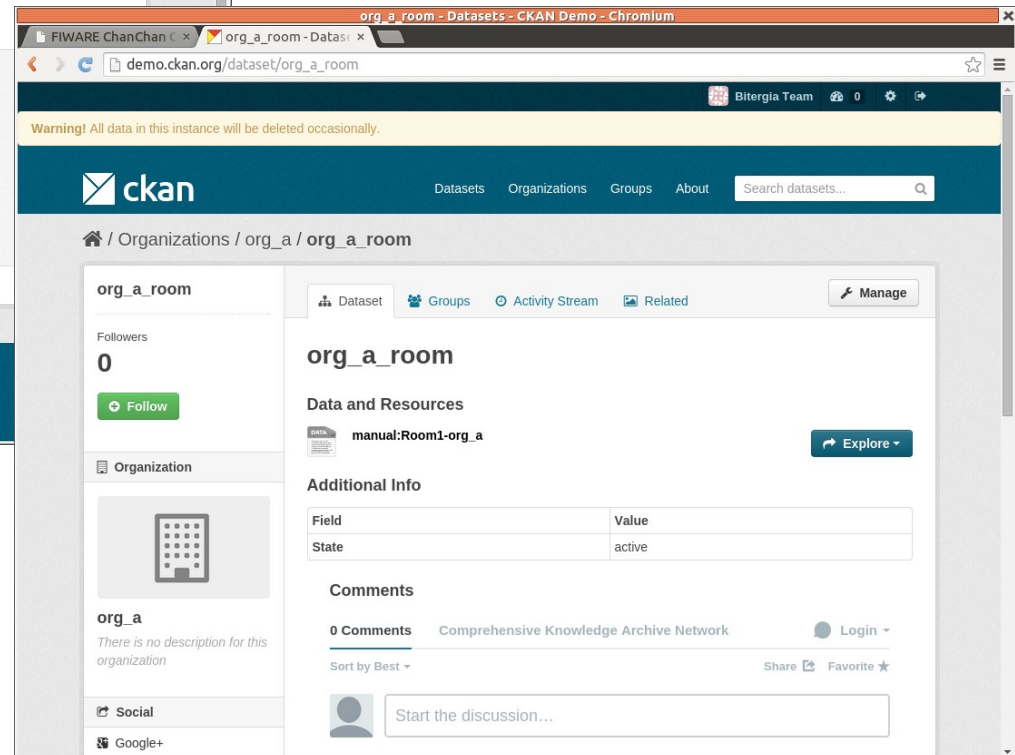
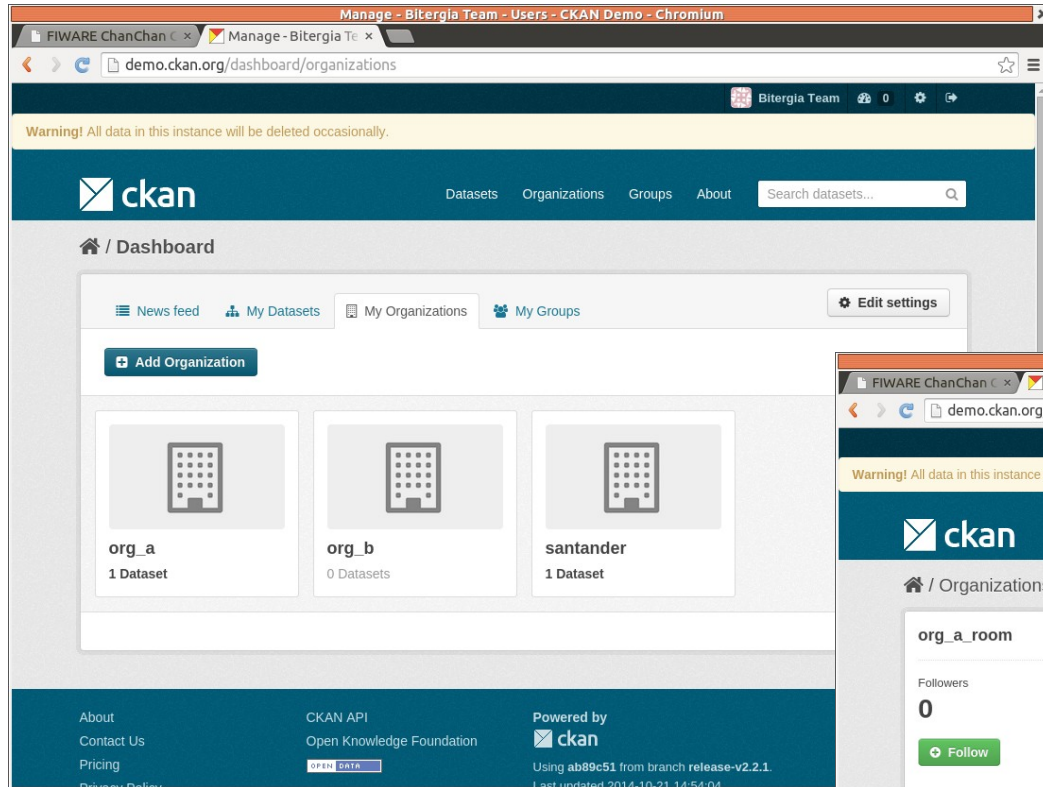
# Manual Publish (Data to CKAN)

The screenshot shows a web browser window titled "FIWARE ChanChan Client - Chromium". The address bar displays "chanchan.server/chanchan/index.html#/manualPublish". The page header includes "Chan Chan Client" and a user profile "User A". The left sidebar contains links for "Manual Publish" and "Santander". The main content area is titled "Manual Publish of Data from Orion to CKAN". It features a form with the following elements:

- A dropdown menu for "Publish to organization" set to "Organization A".
- A section for "Context (entity type) name" with a text input "Room1" and an "Add" button.
- A "Temperature" input field with a dropdown arrow and a "Publish" button.
- A green box labeled "CKAN contents for organization\_a" with a refresh icon.

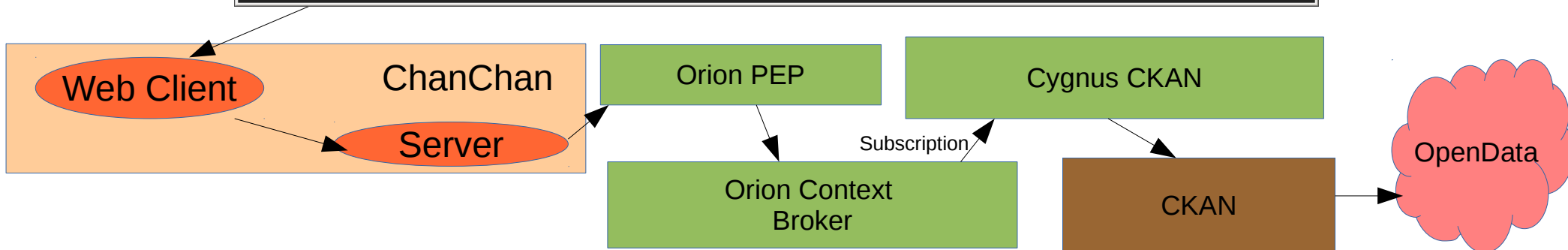


# Manual Publish (Data in CKAN)

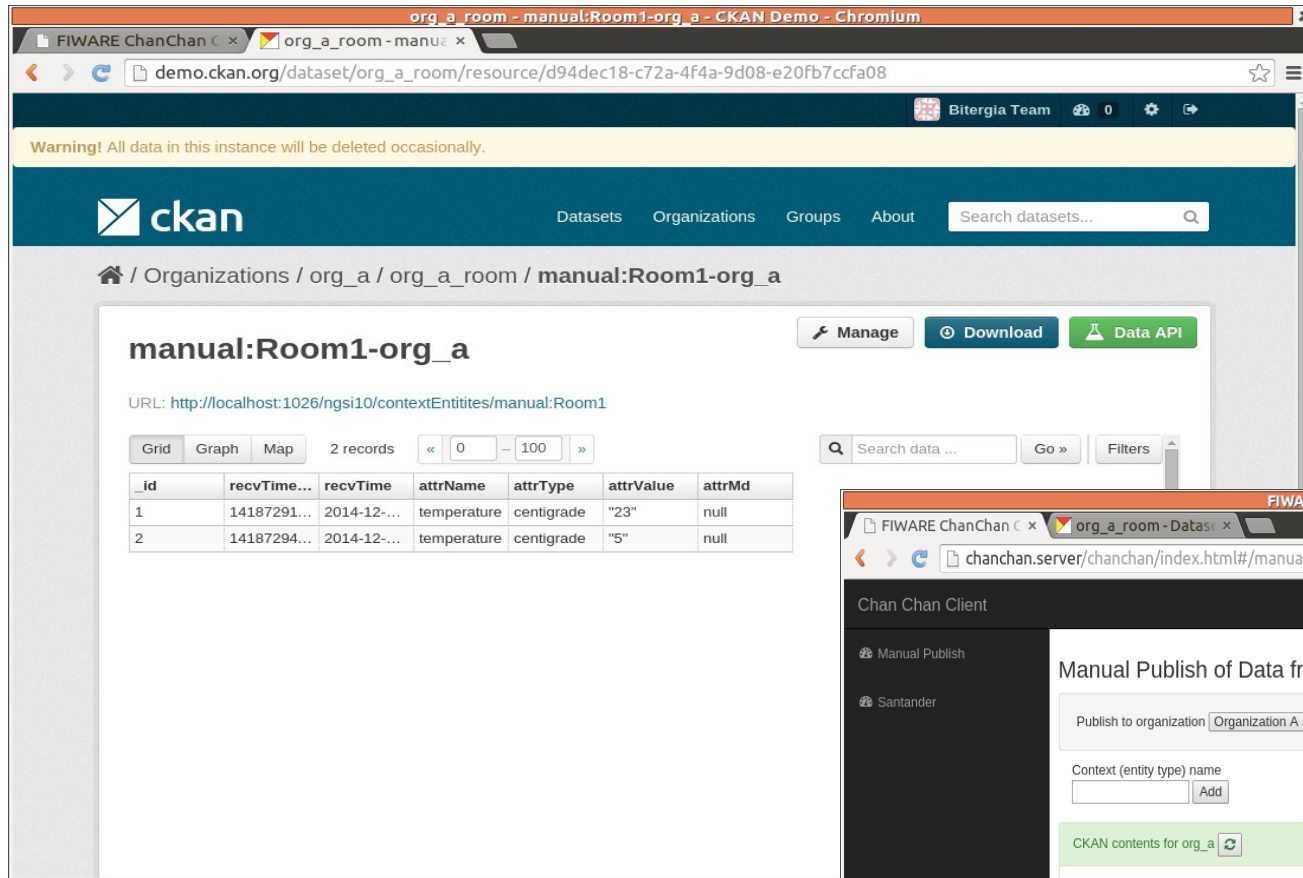


# Manual Publish (Data to CKAN)

The screenshot shows a web browser window titled "FIWARE ChanChan Client - Chromium". The address bar displays "chanchan.server/chanchan/index.html#/manualPublish". The page header includes "Chan Chan Client" and a user profile "User A". The left sidebar has a "Manual Publish" menu item. The main content area is titled "Manual Publish of Data from Orion to CKAN". It features a "Publish to organization" dropdown set to "Organization A". Below this, there are input fields for "Context (entity type) name" (with an "Add" button) and "Temperature" (set to 5). A "manual:Room1-org\_a org\_a org\_a\_room" dropdown is also present, followed by a "Publish" button. A green box labeled "CKAN contents for org\_a" contains a tree structure: "org\_a\_room" (parent) containing "manual:Room1-org\_a" (child), which in turn contains a timestamp "23 2014-12-16T11:26:35.385000".

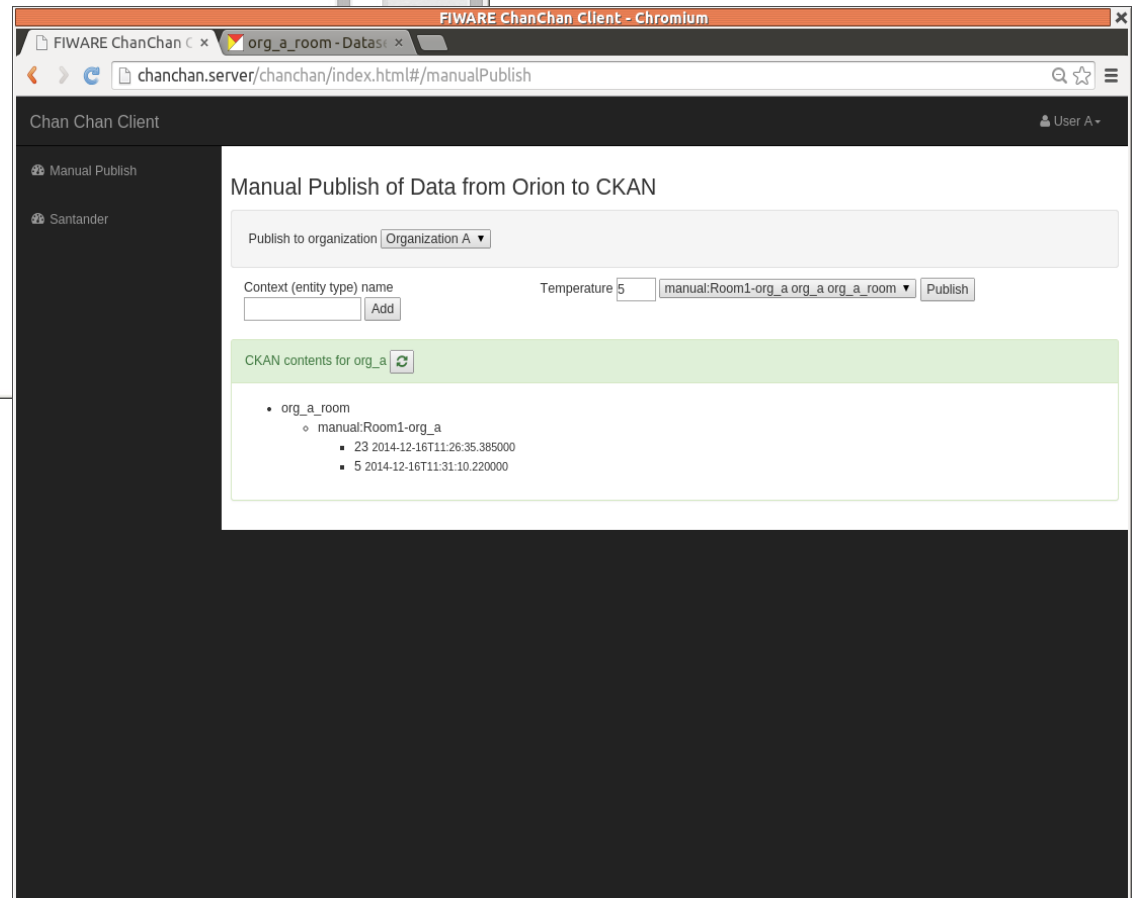


# Manual Publish (Data in CKAN)



The screenshot shows the CKAN demo interface in a Chromium browser. The address bar displays the URL: `demo.ckan.org/dataset/org_a_room/resource/d94dec18-c72a-4f4a-9d08-e20fb7ccfa08`. The page title is `org_a_room - manual:Room1-org_a - CKAN Demo - Chromium`. A warning banner at the top states: "Warning! All data in this instance will be deleted occasionally." The CKAN logo and navigation links (Datasets, Organizations, Groups, About) are visible. The breadcrumb trail is: `/ Organizations / org_a / org_a_room / manual:Room1-org_a`. The dataset page for `manual:Room1-org_a` is shown, with a URL: `http://localhost:1026/ngsi10/contextEntities/manual:Room1`. Below the URL, there are tabs for Grid, Graph, and Map, and a record count of 2 records. A table displays the data:

_id	recvTime...	recvTime	attrName	attrType	attrValue	attrMd
1	14187291...	2014-12-...	temperature	centigrade	"23"	null
2	14187294...	2014-12-...	temperature	centigrade	"5"	null



The screenshot shows the FIWARE ChanChan Client interface in a Chromium browser. The address bar displays the URL: `chanchan.server/chanchan/index.html#/manualPublish`. The page title is `FIWARE ChanChan Client - Chromium`. The interface is titled "Manual Publish of Data from Orion to CKAN". It includes a form for publishing data to an organization. The "Publish to organization" dropdown is set to "Organization A". The "Context (entity type) name" field is empty, and the "Temperature" field is set to "5". The "manual:Room1-org\_a org\_a org\_a\_room" dropdown is selected. A "Publish" button is visible. Below the form, a section titled "CKAN contents for org\_a" displays a tree structure of the data:

- org\_a\_room
  - manual:Room1-org\_a
    - 23 2014-12-16T11:26:35.385000
    - 5 2014-12-16T11:31:10.220000

# Manual Publish (Access Control)

FIWARE Identity Manager - Chromium

FIWARE ChanChan x FIWARE Identity Ma x

https://idm.server/applications/chanchan/edit

FIWARE Lab Cloud Store Mashup Data Account Help&info Organization A

Identity Manager

Home Members My Applications

Name  
Chanchan

Description  
Demo application

URL  
http://chanchan.server

Callback URL  
http://chanchan.server/login

Save

Roles

- Provider
- Purchaser
- Member
- ☒ Publisher

+ New role

Permissions in Publisher role

- ☐ Manage the application
- ☐ Manage roles
- ☐ Manage authorizations
- ☐ Subscribe
- ☒ Create
- ☒ Update
- ☐ Delete

FIWARE Identity Manager - Chromium

FIWARE ChanChan x FIWARE Identity Ma x

https://idm.server/applications/chanchan/edit

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# Manual Publish (Access Control)

