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FINESCE

Get access to FINESCE data and trial sites via the FINESCE API

Joint FINESCE/INCENSE Workshop
Rome, June 25th 2015



OPEN APIS FOR OPEN MINDS

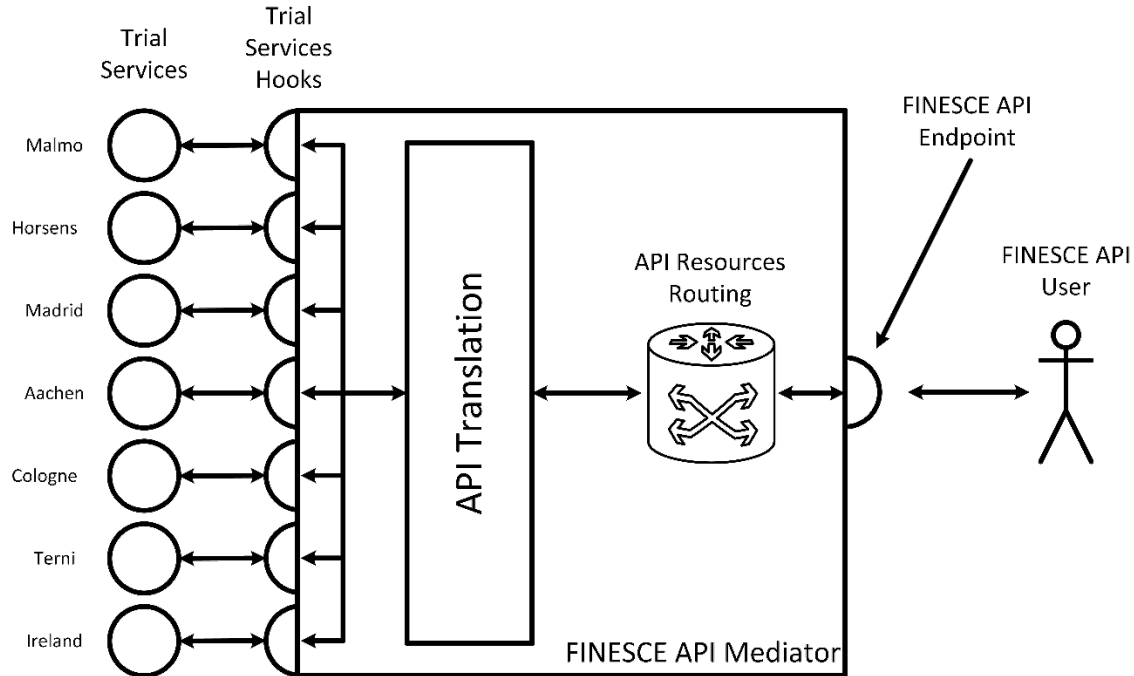


FINESCE API Overview

- Access to all external trial sites APIs
- Homogeneous representation of data
- Homogeneous authentication mechanisms
- Comprehensive, easy to consume RESTful services
 - Both XML and JSON are supported
- Documentation through APIARY, Swagger and FINESCE D7.7
 - <http://docs.fam.apiary.io>
 - <https://130.206.82.22/finesce/api/docs>

FINESCE API Overview

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FINESCE API Restrictions - NDA

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<i>Trial</i>	<i>Requires NDA</i>	<i>Data Handling</i>
Malmo	<i>No</i>	<i>Data are open for public use*</i>
Horsens	<i>Yes</i>	<i>An NDA with the trial owner should be signed</i>
Madrid	<i>No</i>	<i>Data are open for public use</i>
Cologne	<i>No</i>	<i>Data are open for public use</i>
Aachen	<i>No</i>	<i>Data are open for public use</i>
Terni	<i>Yes</i>	<i>An NDA with the trial owner should be signed</i>
Ireland	<i>Yes</i>	<i>An NDA with the trial owner should be signed</i>

* Weather data originate from the online web service <http://www.yr.no/> and not from the trial infrastructure, hence following the relevant terms of service.



FINESCE API - Usage

- General service endpoint URL:
 - `<base_endpoint_URL>/<trial_site>/<service>/<options>`
- Base endpoint URL:
 - <https://130.206.82.22/finesce/api/v0.1/>
- Supported Trial names:
 - Aachen
 - Horsens
 - Ireland
 - Madrid
 - Malmo
 - Terni



FINESCE API – Usage - Authentication

- ```
$ curl -X POST -d '{"authorization_id":"an_auth_id",
"password":"a_password"}' -k
https://130.206.82.22/finesce/api/v0.1/Terni/tokens
```

Response: 200 OK

```
{
 "metadata": {
 "api_version": "0.1",
 "trial": "Terni",
 "created": "2015-06-24T21:48:26+02:00",
 "updated": "2015-06-24T21:48:26+02:00"
 },
 "expires": null,
 "role": "read",
 "token": "dm91bGtpZGlzQHN5bmVScSaYzUiy5jb206YXJOM20xcw==",
 "refresh_token": null
}
```



# FINESCE API – Usage - Weather

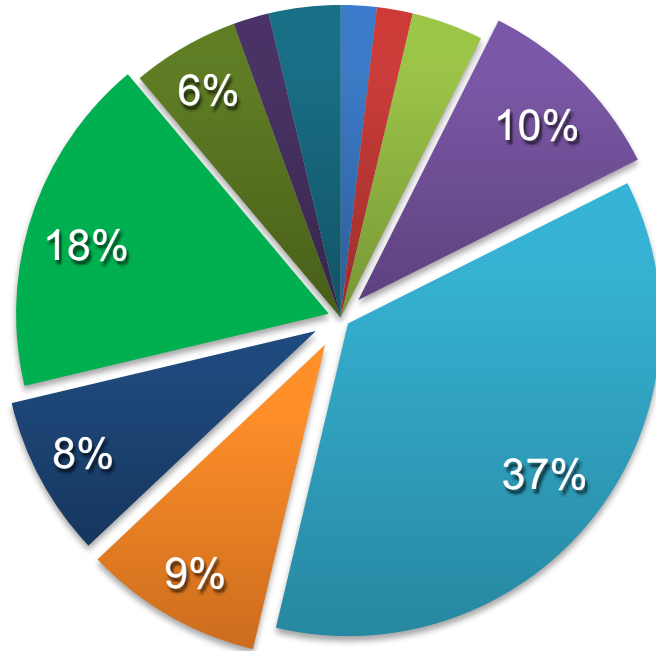
- `$ curl -X GET -H "Accept: application/json" -H "x-auth-token: dm91bGtpZG1zQHNSbmVsaXhpcy5jb206YXJOM20xcw==" -k https://130.206.82.22/finesce/api/v0.1/Terni/weather/2014-12-20T02:15:00+02:00/2014-12-20T03:15:00+02:00`

Response: 200 OK

```
{
 "metadata": {
 "api_version": "0.1",
 "trial": "Terni",
 "created": "2015-06-24T21:51:01+02:00",
 "updated": "2015-06-24T21:51:01+02:00"
 },
 "weather_data": [
 {
 "measurement_type": "Temperature",
 "values": [
 {
 "id": null,
 "datetime": "2014-12-20T01:30:00+01:00",
 "value": 7.33
 },
 ...
]
 }
]
}
```

# FINESCE API statistics

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- Authentication
- Smart Factory
- VPP
- Smart Buildings
- Electric Vehicles
- Pricing
- Demand Response
- Energy Monitoring
- Optimization/Simulation
- External Events
- Weather





# THANK YOU FOR YOUR ATTENTION

Any Questions?