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#forumpa2016

Connettere le applicazioni ai dati.

Cosa sono le API, come si utilizzano e perché sono importanti

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Dati Live

Dati meteo Roma

<http://api.openweathermap.org/data/2.5/weather?q=Rome,%20Italy&units=metric&APPID=2d4309c5ff73cafca0b7e3f04037f1cc>

Disponibilità parcheggi Torino

http://opendata.5t.torino.it/get_pk

Infomobilità Bari

<http://bari.opendata.planetek.it/OrariBus/v2.1/OpenDataService.svc/REST/OrariPalina/08129003/>









API sta per *'Application Programming Interface'*. Nel mondo degli sviluppatori Web con il termine 'API' vengono indicati i ***"servizi web online"*** attraverso cui le applicazioni web possono interagire con i dati.

REST: REpresentational State Transfer (REST) è un tipo di architettura software per i sistemi di ipertesto distribuiti come il World Wide Web.

(Wikipedia)



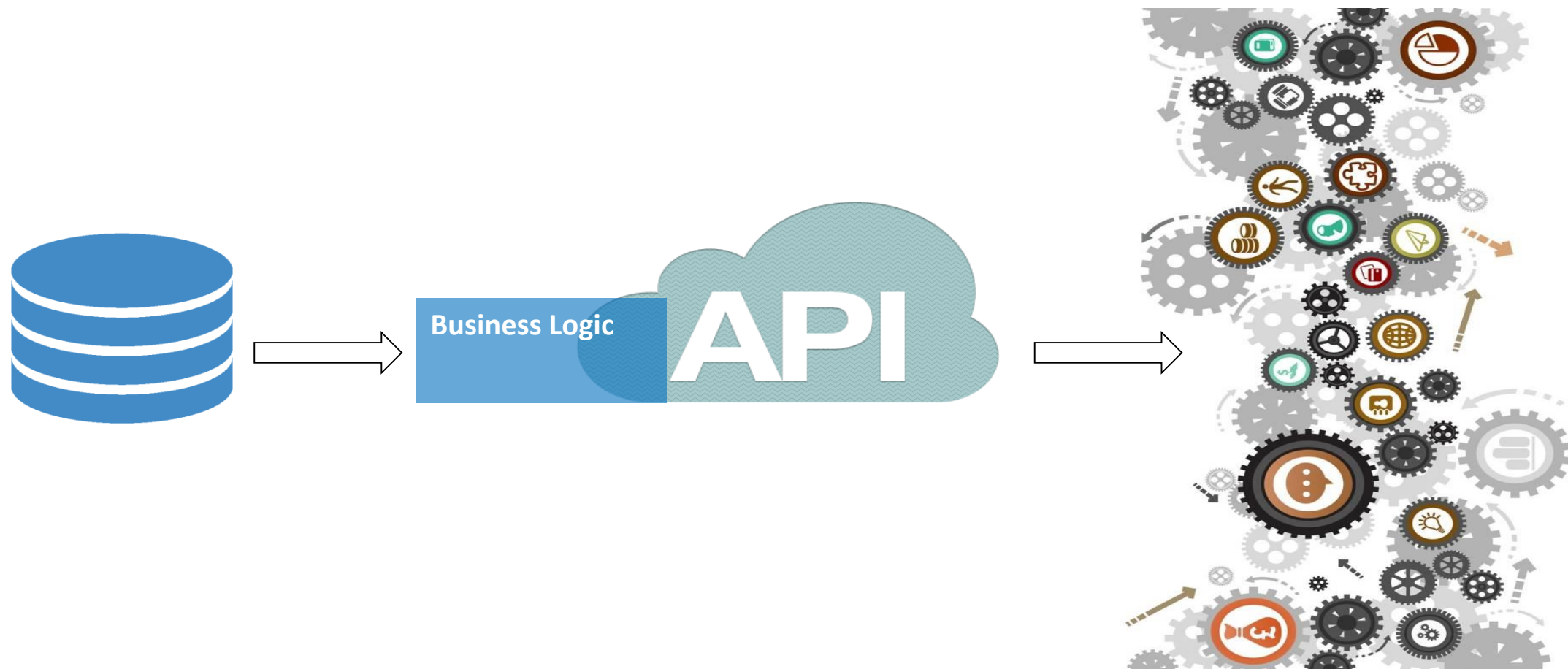


Json: acronimo di **JavaScript Object Notation**, è un formato adatto all'interscambio di dati fra applicazioni client-server

XML (sigla di **eXtensible Markup Language**) è un metalinguaggio per la definizione di linguaggi di markup, ovvero un linguaggio marcatore basato su un meccanismo sintattico che consente di definire e controllare il significato degli elementi contenuti in un documento o in un testo. *(Wikipedia)*

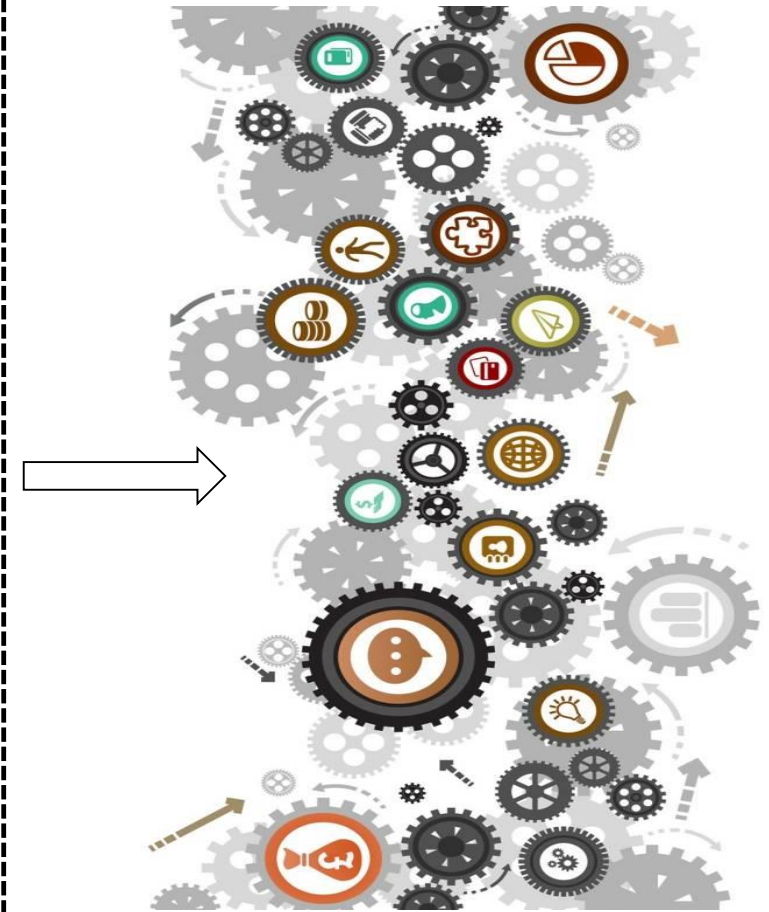
(Wikipedia)







Data producer



Data consumer



Esempio 1



<http://www.vincenzopatruno.org/forumpa2016/parcheggina.php?city=Torino>

<?php

```
$parkurl= "http://opendata.5t.torino.it/get_pk";  
$park = simplexml_load_file($parkurl);  
$park->registerXPathNamespace('td', 'http://www.5t.torino.it/simone/ns/traffic_data');
```

```
//print_r($park->xpath('//td:*'));
```

```
$counter = 0;
```

```
// Qui gli attributi dei singoli elementi
```

```
foreach ($park->xpath('//td:PK_data') as $parking) {  
    echo 'markers["m".($counter)."] = {};"\n";  
echo "markers["m".($counter)."].lat = ".$parking['lat'].";\n";  
    echo "markers["m".($counter)."].lon = ".$parking['lng'].";\n";  
    echo "markers["m".($counter)."].nome = ".addslashes(trim($parking['Name'])).";\n";  
    echo "markers["m".($counter)."].totali= ".$parking['Total'].";\n";  
    echo "markers["m".($counter)."].liberi = ".$parking['Free'].";\n";  
    $counter++;  
}
```

?>

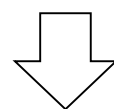
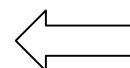
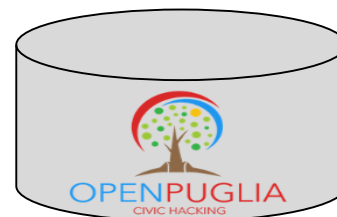
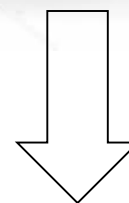


**Keeping
up-to-date**





<http://www.arpa.puglia.it/web/guest/qariainq>

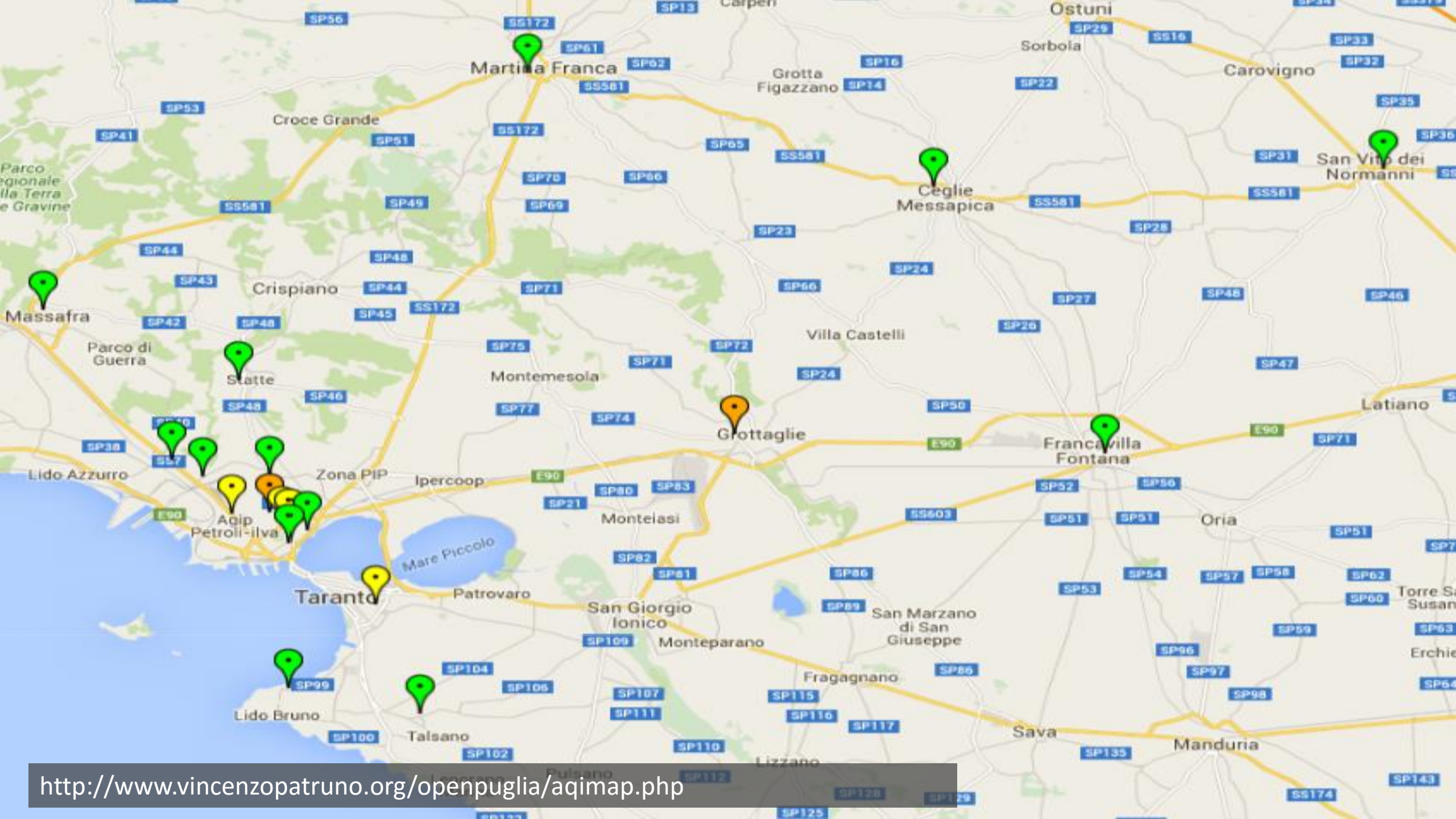


<http://vincenzopatrano.org/api/?q=getdata&comune=Bari&giorni=30&polluting=PM10>

<http://www.vincenzopatrano.org/openpuglia/chart.php?comune=Bari&giorni=200&inquinante=PM10>

http://www.vincenzopatrano.org/openpuglia/pm10_anno.html





AQI	Air Pollution Level	Health Implications
0–50	Excellent	No health implications.
51–100	Good	Few hypersensitive individuals should reduce outdoor exercise.
101–150	Lightly Polluted	Slight irritations may occur, individuals with breathing or heart problems should reduce outdoor exercise.
151–200	Moderately Polluted	Slight irritations may occur, individuals with breathing or heart problems should reduce outdoor exercise.
201–300	Heavily Polluted	Healthy people will be noticeably affected. People with breathing or heart problems will experience reduced endurance in activities. These individuals and elders should remain indoors and restrict activities.
300+	Severely Polluted	Healthy people will experience reduced endurance in activities. There may be strong irritations and symptoms and may trigger other illnesses. Elders and the sick should remain indoors and avoid exercise. Healthy individuals should avoid outdoor activities.

<http://www.vincenzopatrino.org/openpuglia/aqichart.php?comune=Taranto>

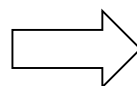
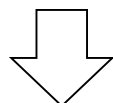
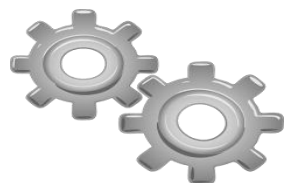
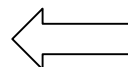
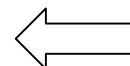
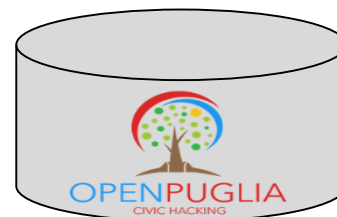
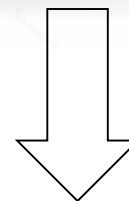


https://docs.google.com/spreadsheets/d/1fdcm3Ju-8qzZhpJsDD4Z1LBBSwiWcdeo_y4UxYvfNf8/edit?usp=sharing

https://docs.google.com/spreadsheets/d/1fdcm3Ju-8qzZhpJsDD4Z1LBBSwiWcdeo_y4UxYvfNf8/export?gid=0&format=csv



<http://www.arpa.puglia.it/web/guest/qariainq>





I.Stat

versione di prova

il tuo accesso diretto
alla statistica italiana

http://apistat.istat.it/?q=getdatajson&dataset=DCIS_POPSTRRES1&dim=1,1,0,0,0&lang=1&tr=&te=

http://apistat.istat.it/?q=getdatajson&dataset=DCIS_POPSTRRES1&dim=1,1,0,0,0&lang=1&tr=&te=

connect

Resident foreigners on 1st January by Gender, Age and Year - Italy - population on 1st January

Filters

Males Gender

Rows & Columns

Age ↔ Year

	2012	2013	2014	2015
0 years	33,399	37,259	40,068	37,867
1 years	33,456	35,468	41,791	38,897
2 years	33,958	35,558	39,248	40,238
3 years	32,362	36,261	39,220	38,870
4 years	30,489	33,960	39,654	38,531
5 years	29,247	32,079	37,170	38,451
6 years	27,101	31,077	34,684	36,200
7 years	25,259	28,406	33,266	33,599
8 years	22,543	26,618	30,410	31,829
9 years	22,092	23,724	28,464	29,111
10 years	22,081	23,487	25,553	27,253
11 years	21,882	23,521	25,257	24,665
12 years	20,718	23,534	25,438	24,402
13 years	20,391	22,302	25,542	24,651
14 years	20,378	22,175	24,386	24,926

JSON-stat

eurostat

2016
FORUM PA

<http://json-stat.org/format/browser/>

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connettersi ai dati

Grazie dell'attenzione!

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