

Integrazione di basi di dati eterogenee per la gestione di serie storiche

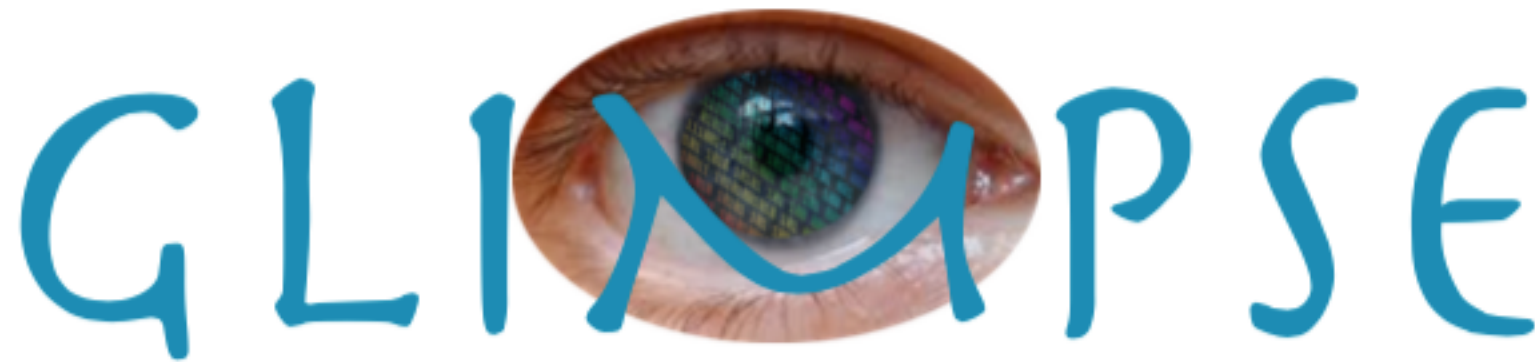
Relatore
Prof. Luca Cabibbo

Correlatore
Ing. Luigi Bellomarini

Laureando
Marco Faretra

Tutor
Ing. Eleonora Laurenza

Cos'è Glimpse?

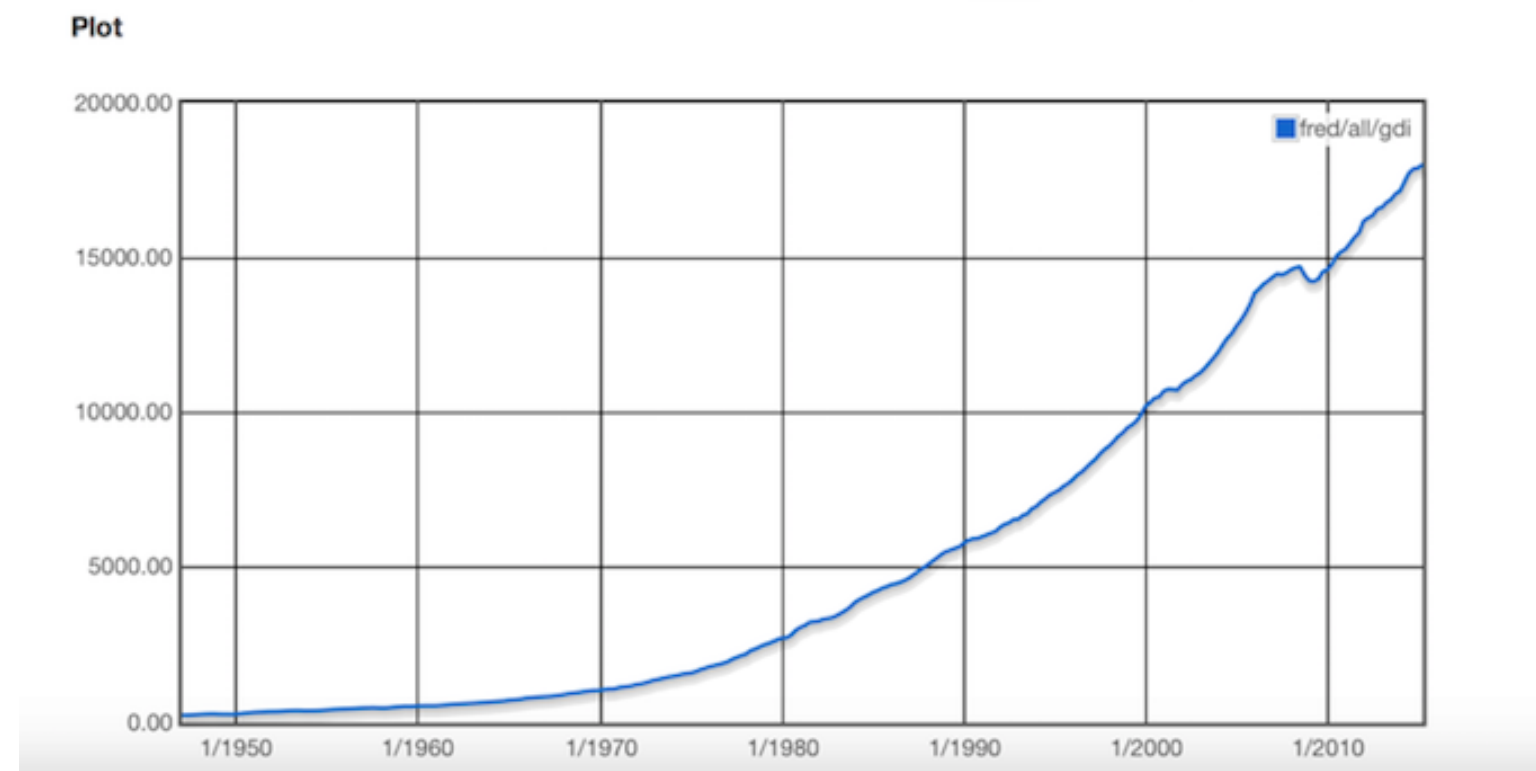


THE OPEN PROVIDER OF FINANCIAL TIME-SERIES

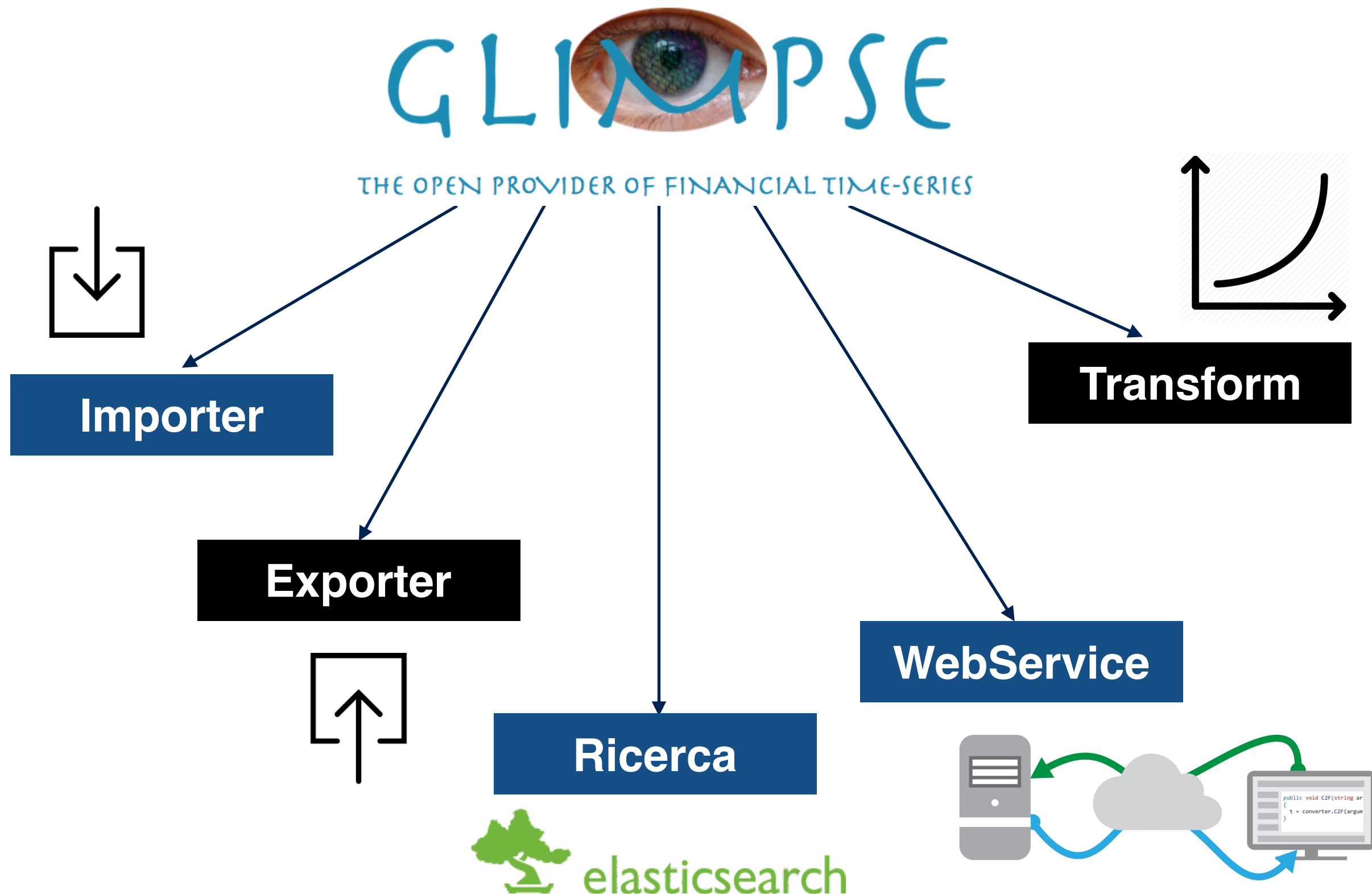
Cos'è una serie storica?

È definita da:

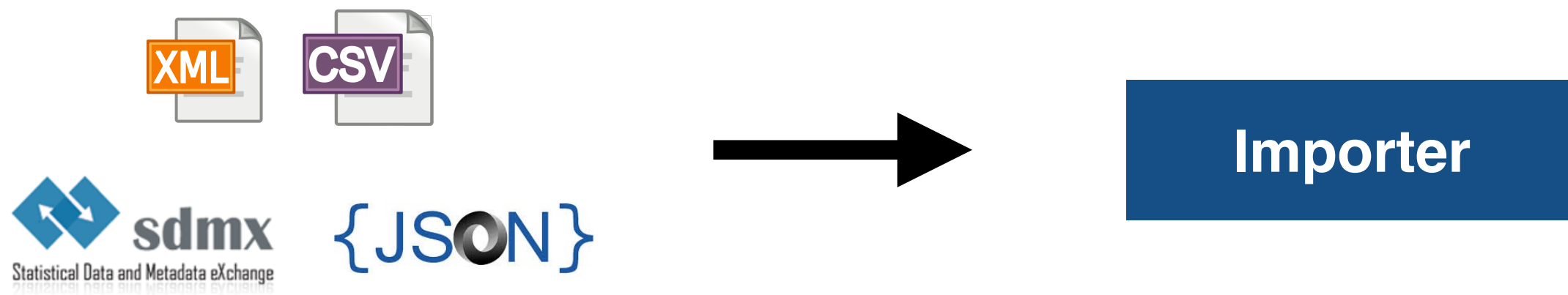
- Un valore
- Una data



Componenti dell'applicazione



Il componente importer



Il componente importer



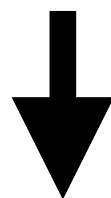
{JSON}

xml.etree.ElementTree

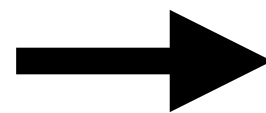
xlrd

eval

Dictionary



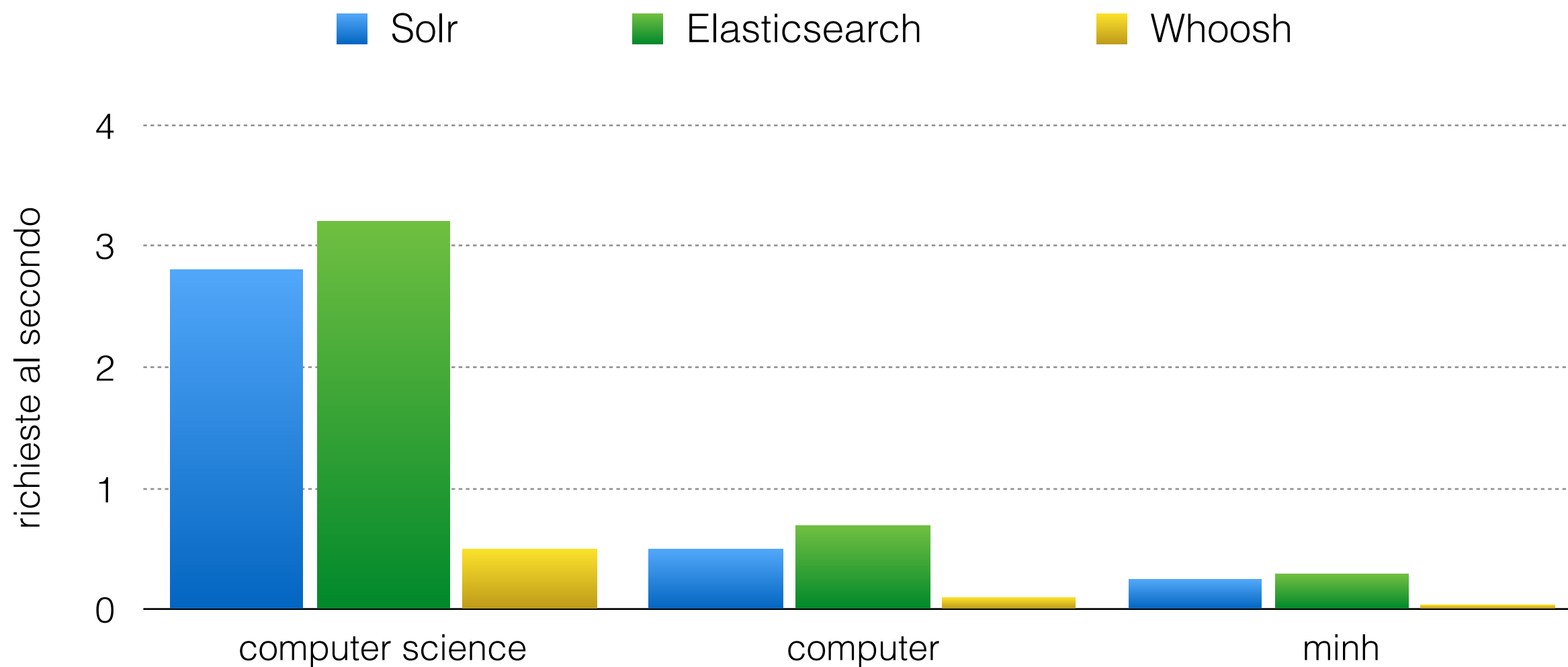
mongoDB



```
metadata : {  
  "id": "AAA"  
  "source": "FRED"  
  . . .  
}  
data : [  
  {  
    "date": "2015-10-22"  
    "value": 10  
    . . .  
  },  
  . . .  
]
```

- Serie storiche come documenti
- Osservazioni come sottodocumenti

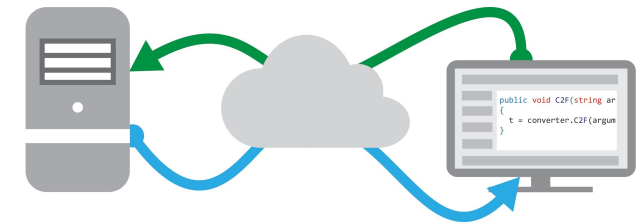
Ricerche full-text in Big Data.





- Creazione dell'indice
- Aggiornamento dell'indice
- Interrogazione dell'indice





GET: /timeseries/:idSorgente/:idPaese/:idSerie

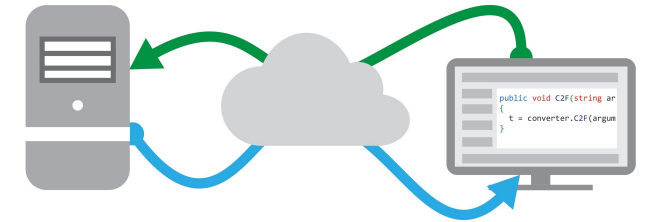
10M+ di time series disponibili

8 formati diversi di export

9 tipologie di trasformate matematiche

```
{
    String: query,
    String: format,
    String: transformation
    ...
}
```

WebService REST: Alcuni esempi

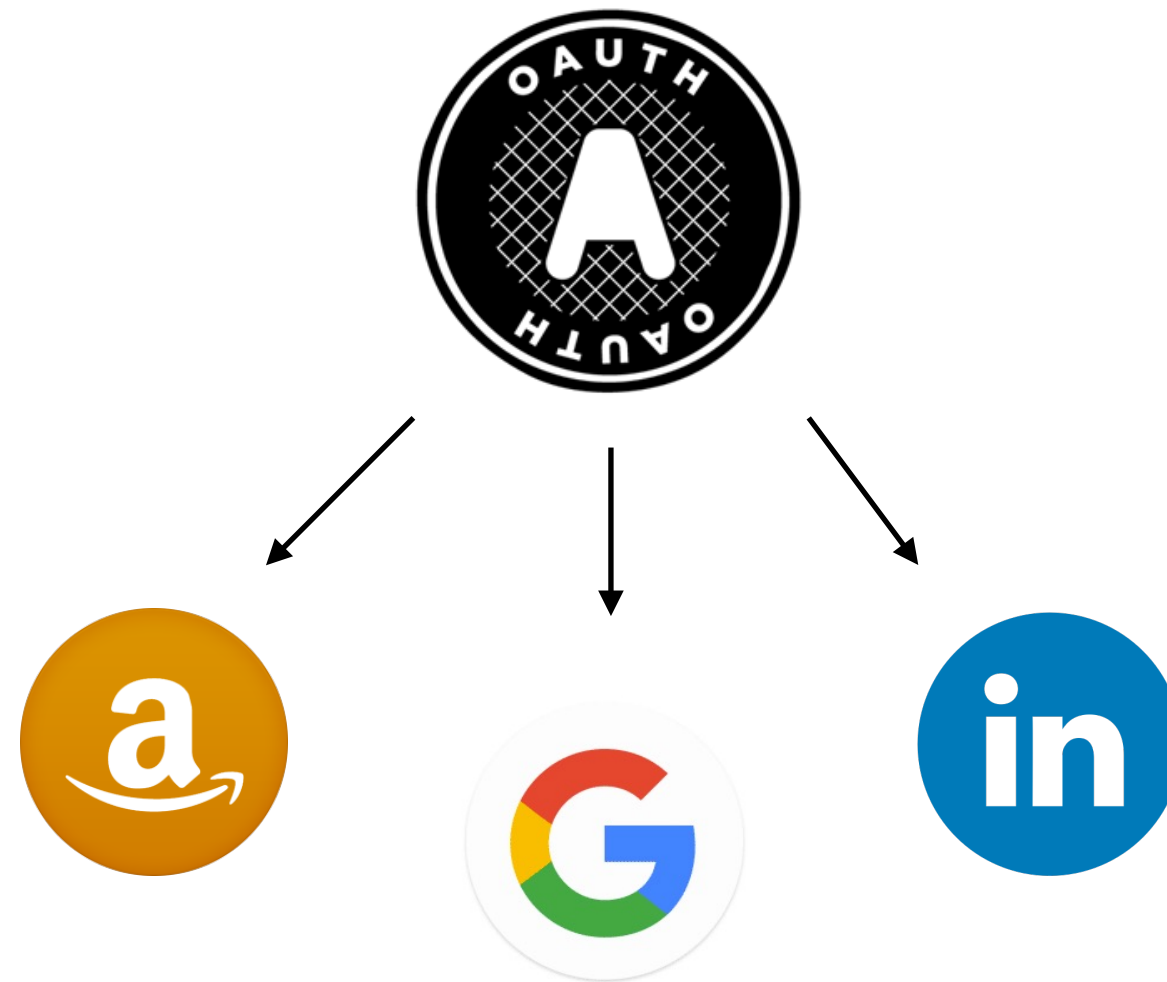


GET: /timeseries/worldbank/it/ny.gdp.mktp.cd

GET: /timeseries/worldbank/it/ny.gdp.mktp.cd?format=PNG

GET: /timeseries/worldbankit/ny.gdp.mktp.cd?transformation=log

GET: /timeseries/worldbank?query="Gross Domestic Product"



Vantaggi

Sicurezza

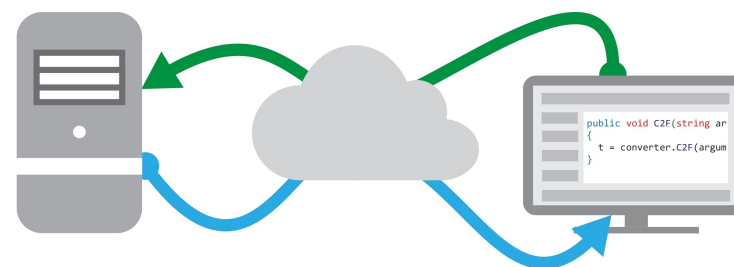
Semplificazione

Ampliamento delle sorgenti dati



Ricerca ottimizzata con Elastisearch

WebService REST



Integrazione protocollo OAuth2.0

Integrazione di basi di dati eterogenee per la gestione di serie storiche



THANK YOU
for your
ATTENTION!

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