Pubblicare LOD ////////////////////////////////

lo stato in Italia /////////////////////////////////////
un'analisi dei requisiti tecnologici/////////////
una dimostrazione di interoperabilità//////

DIEGO VALERIO CAMARDA / REGESTA.EXE / LODLIVE

LINKED OPEN DATA:
WHERE ARE WE?

rome, 20th february 2014

@dvcama

dvcama

diego.camarda@regesta.com

This presentation is based on data generated using
https://github.com/dvcama/lod-tester

The tool has been written expressly for this
conference and has been published in open source
to verify and allow further analysis

STATE
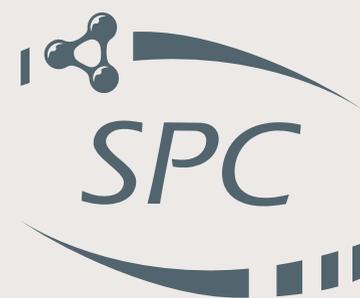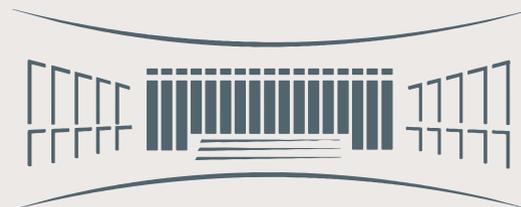## OF THE **ART**

STATE
OF THE **ART**

analyzing

COMUNE DI
FIRENZE

Consiglio
Nazionale delle
Ricerche

reload

DBpedia
Italiana

Camera
dei
deputati

SPC

Provincia di
Carbonia Iglesias

2012, November

COMUNE DI FIRENZE

Consiglio Nazionale delle Ricerche

reload

Archivio Centrale dello Stato

S

Senato della Repubblica

DBpedia Italiana

RAGIONERIA GENERALE DELLO STATO
RGS

cultura italia

Camera dei deputati

SPC

Provincia di Carbonia Iglesias

COMUNE DI FIRENZE

Consiglio Nazionale delle Ricerche

reLOaD

Archivio Centrale dello Stato

DBpedia Italiana

Senato della Repubblica

RAGIONERIA GENERALE DELLO STATO

RGS

cultura italia

Camera dei deputati

SPC

Provincia di Carbonia Iglesias

2014, February
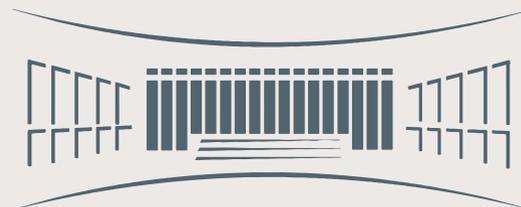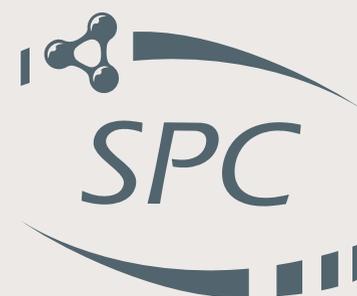
STATE
OF THE ART

in figures

	triples	entities	bn	classes	properties
Archivio Centrale dello Stato	12 346 270	1 231 399	307 806	52	232
Camera dei deputati	90 681 359	9 141 620	295 989	72	245
CNR	8 862 396	485 977	365	120	207
Comune di Firenze	63 389	8 422	–	4	22
CulturaItalia	30 387 982	8 098 235	3 192 174	104	249
DBpedia Italia	89 980 667	1 133 907	6	337	12 296
Progetto Reload	17 493 969	818 194	935 048	45	234
Provincia Carbonia Iglesias	201 817	62 952	–	13	17
Ragioneria Generale dello Stato	4 896 967	227 255	–	32	436
Senato della Repubblica	28 927 154	1 336 959	300 013	50	225
SPCdata	1 756 258	290 245	70	46	181

		triples /entities	bn /entities	prop /classes
	Archivio Centrale dello Stato	10	0.25	4.46
	Camera dei deputati	10	0.03	3.40
	CNR	18	0.00	1.73
	Comune di Firenze	8	0.00	5.50
	CulturaItalia	4	0.39	2.39
	DBpedia Italia	79	0.00	36.49
	Progetto Reload	21	1.14	5.20
	Provincia Carbonia Iglesias	3	0.00	1.31
	Ragioneria Generale dello Stato	22	0.00	13.63
	Senato della Repubblica	22	0.22	4.50
	SPCdata	6	0.00	3.93
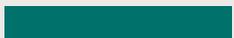
triples

entities

bn

classes

properties

- Archivio Centrale dello Stato
- Camera dei deputati
- CNR
- Comune di Firenze
- CulturaItalia
- DBpedia Italia
- Progetto Reload
- Provincia Carbonia Iglesias
- Ragioneria Generale dello Stato
- Senato della Repubblica
- SPCdata
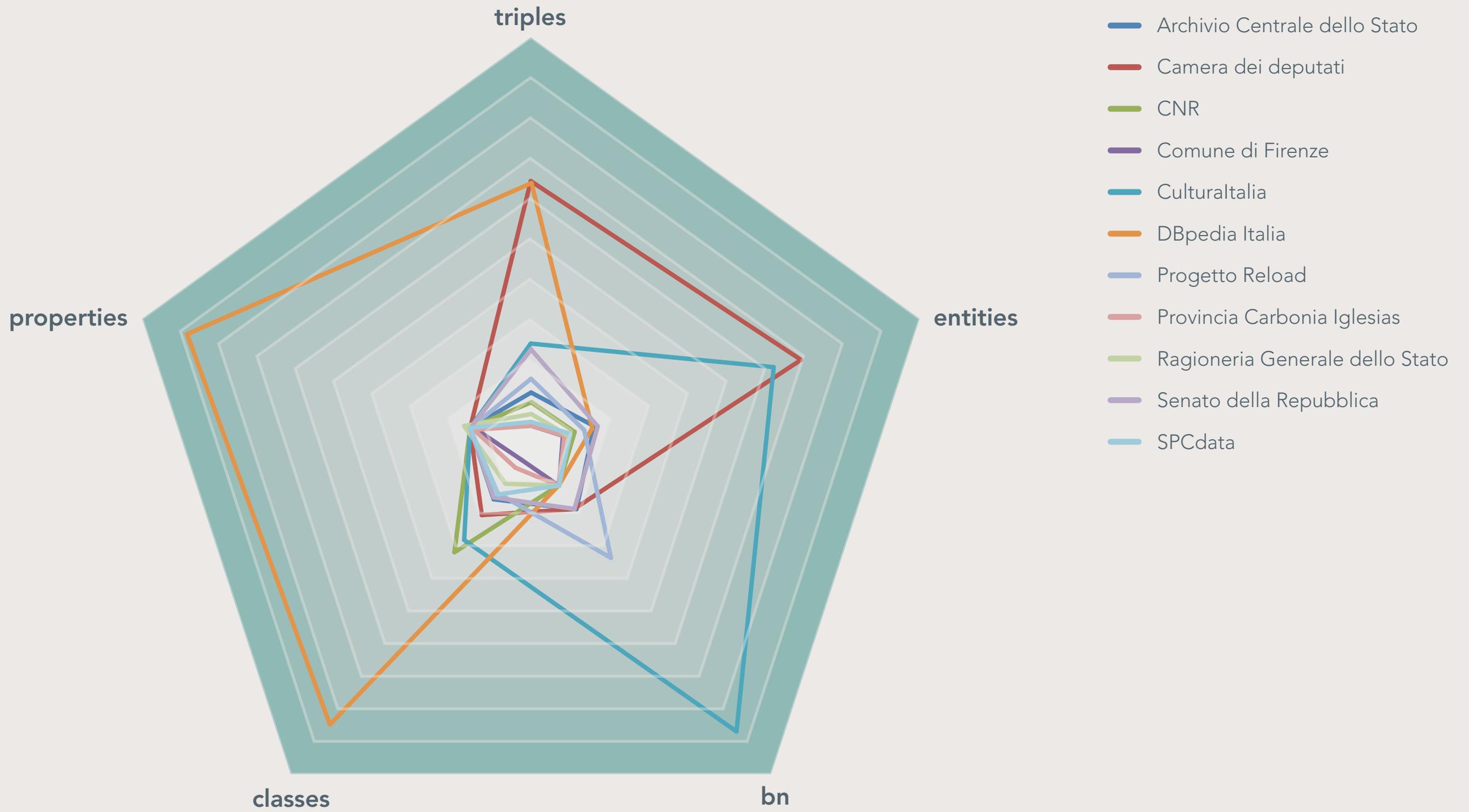
STATE
OF THE ART

italian linked data cloud

Archivio
Centrale
dello Stato
➤0

Camera
dei deputati
➤3 985

Ragioneria
Generale
dello Stato
➤0

2 504

8 941

791

5

304

587

894

DBpedia
Italia
➤343

Progetto
Reload
➤0

4

7 096

507

7 096

DBpedia
➤17 689

30

1

1

SPCdata
➤2

LinkedGeoData
➤14 699

6 582

1 375

Senato
della
Repubblica
➤0

Provincia
Carbonia
Iglesias
➤0

CNR
➤2

2

Cultura
Italia
➤0

Comune
di Firenze
➤0
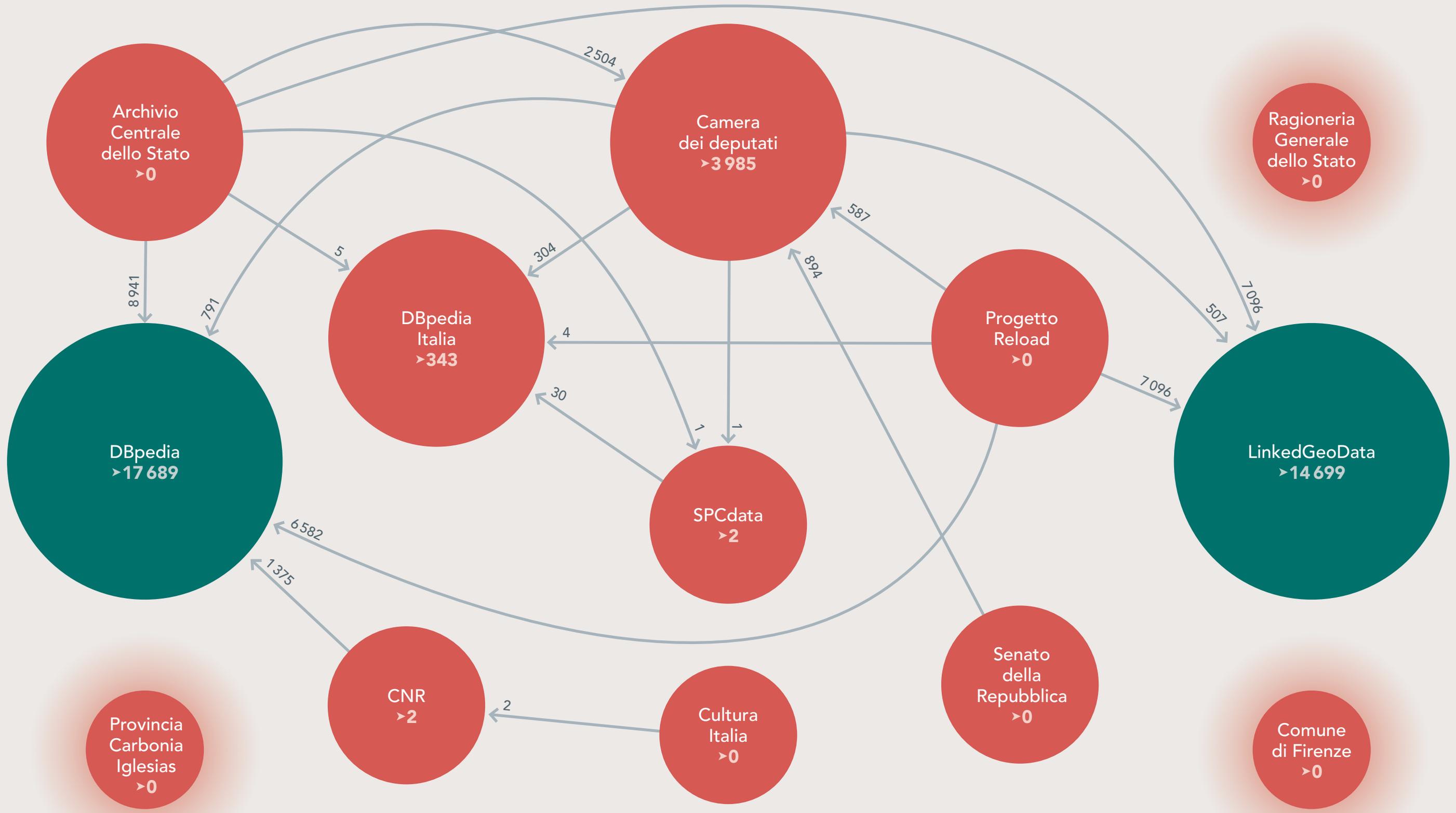
PUT YOUR
LOD ONLINE

PUT YOUR
LOD ONLINE

focusing on goals

WEB VS. DATA

the goals:

› build a *new* web, different but complementary to the *classic* web

› allow machine exploration through standard technologies

› guarantee reliability as in the *classic* web

› accept that publishing LOD is not a goal, it's just a starting point

› use owl:sameAs (and similar) as the new Hypertext Links

PUT YOUR
LOD ONLINE

for machines, not for humans

machine experience issues: 84% mastered

›the endpoint supports SPARQL content negotiation **11**/11 ▮▮▮▮▮▮▮▮▮▮▮

›the endpoint (triplestore) is up-to-date **9**/11 ▮▮▮▮▮▮▮▮▮▮▮

›the endpoint uses port 80 (HTTP) **9**/11 ▮▮▮▮▮▮▮▮▮▮▮

›the endpoint supports JSONP calls **9**/11 ▮▮▮▮▮▮▮▮▮▮▮

›the endpoint URL is easy to deduce from resources **8**/11 ▮▮▮▮▮▮▮▮▮▮▮

›the resources are on-line **10**/11 ▮▮▮▮▮▮▮▮▮▮▮

›the URIs support rdf+xml via content negotiation **9**/11 ▮▮▮▮▮▮▮▮▮▮▮

›the resources are described by dc:title or rdfs:label **9**/11 ▮▮▮▮▮▮▮▮▮▮▮

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ok, humans also are important

user experience issues: 79% mastered

› the endpoint hosts a page for humans   **8**/11

› the resources and the endpoint are on the same domain   **9**/11

› the URIs support text/html via content negotiation   **9**/11

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and the winner is…

Italian Linked Data Cloud

11 endpoints
22 544 920 entities
283 841 970 facts

And the best endpoints are…

Italian Linked Data Cloud

11 endpoints
22 544 920 entities
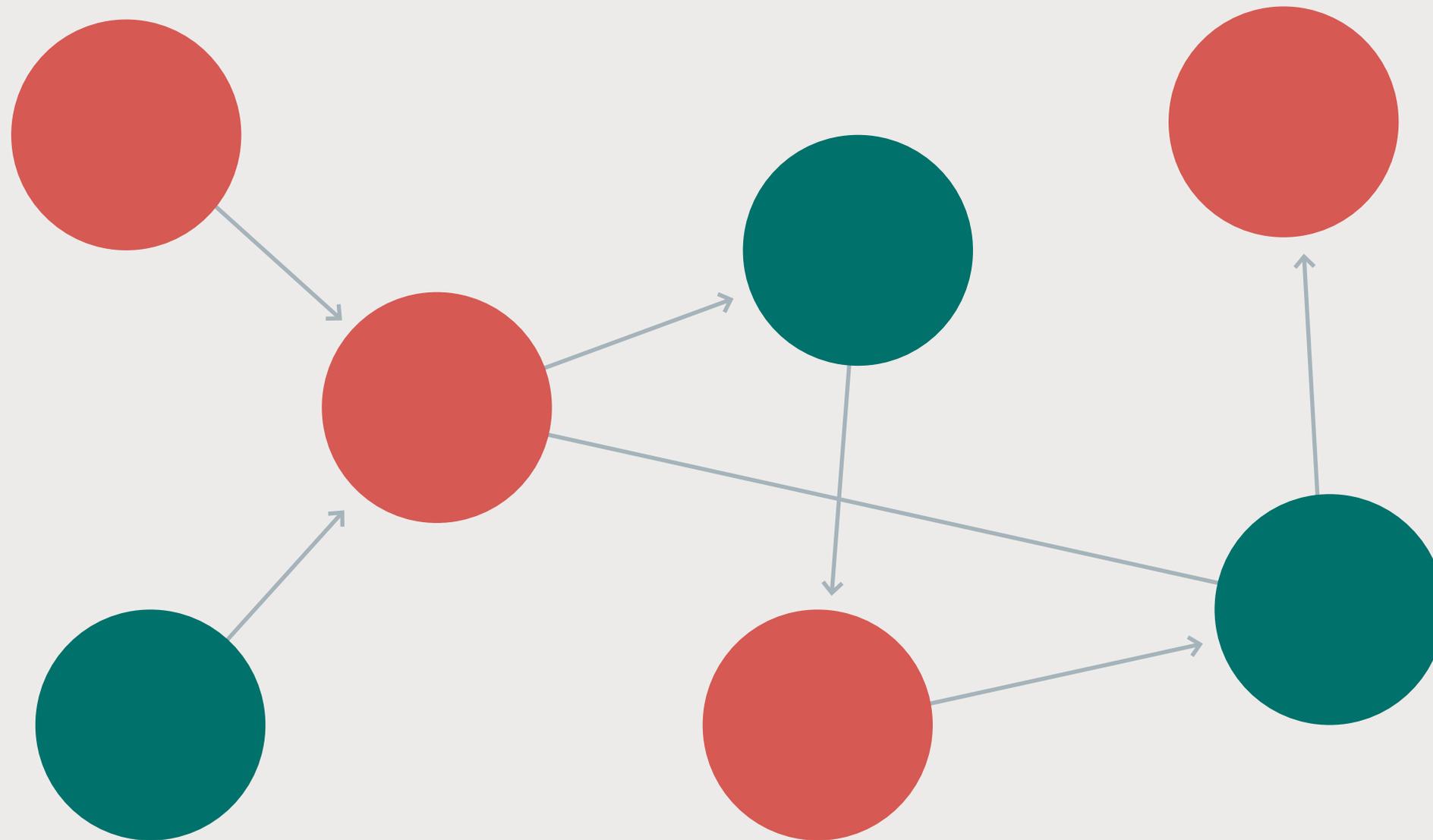**283 841 970** facts

And the best endpoints are…

The b CLASSIFIED points

TIME
FOR **ACTION**

TIME
FOR **ACTION**

testing interoperability

REFERENCES

REFERENCES

italian endpoints adresses

	Archivio Centrale dello Stato	http://dati.acs.beniculturali.it/sparql
	Camera dei deputati	http://dati.camera.it/sparql
	CNR	http://data.cnr.it/sparql-proxy
	Comune di Firenze	http://linkeddata.comune.fi.it:8080/sparql
	CulturaItalia	http://dati.culturaitalia.it/sparql
	DBpedia Italia	http://it.dbpedia.org/sparql
	Progetto Reload	http://lod.xdams.org/sparql
	Provincia Carbonia Iglesias	http://www.provincia.carboniaiglesias.it/sparql
	Ragioneria Generale dello Stato	http://dwrgsweb-lb.rgs.mef.gov.it/DWRGSXL/sparql
	Senato della Repubblica	http://dati.senato.it/sparql
	SPCdata	http://spcdata.digitpa.gov.it:8899/sparql