

Boca, Salsa, and Queso

Spreadsheets, the Web, and the primacy of data

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[Required Background]

- RDF
- Spreadsheets
- Major League Baseball

[The Setting]

- Boca – enterprise RDF server
- Salsa – RDF + spreadsheets
- Queso – RDF on the Web

All parts of the open-source IBM Semantic Layered
Research Platform:

<http://ibm-slrp.sf.net>

[The Big Picture]

- Data is the center of the universe.
- Everything can share the data.
 - No format silos.
 - No user interface silos.
 - No application silos.

[What is Boca?]

- Boca is an enterprise Semantic Web store.
- Boca features:
 - Scalable RDF database that stores named graphs
 - Transactions, optimistic concurrency
 - Role-based access control
 - Revision tracking
 - Replication and real-time notification

[What is Salsa?]

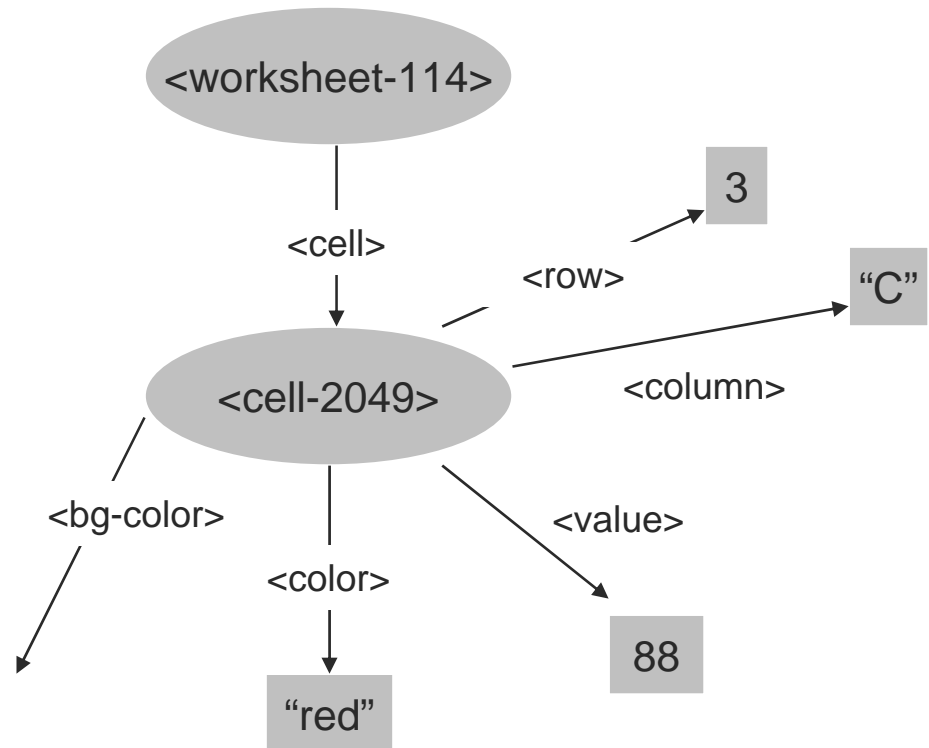
- Salsa is a Boca client embedded within the OpenOffice Calc spreadsheet program
- Salsa is also an exploration into the question:

*What happens when we join spreadsheets and
Semantic Web technologies?*

Salsa + Boca = ? (part 1)

	A	B	C
1	Team	Wins	Losses
2	Mets	96	66
3	Red Sox	74	88

- Serialize spreadsheets to a Boca RDF server
- Spreadsheets become...
 - *Shared*
 - *Securable*
 - *Versioned*
 - *Queryable*
 - *Collaborative*



Demo: Collaborative Spreadsheets

Untitled2 - OpenOffice.org Calc

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Arial 10 B I U

D2 fx 250,000,000

	A	B	C	D
1	Team	City	State	2006 Payroll
2	Yankees	New York	NY	250,000,000
3	Red Sox	Boston	MA	120,099,824
4	Angels	Anaheim	CA	103,472,000
5	White Sox	Chicago	IL	102,750,667
6	Mets	New York	NY	101,084,963
7	Dodgers	Los Angeles	CA	98,447,187
8	Cubs	Chicago	IL	94,424,499

Untitled2 - OpenOffice.org Calc

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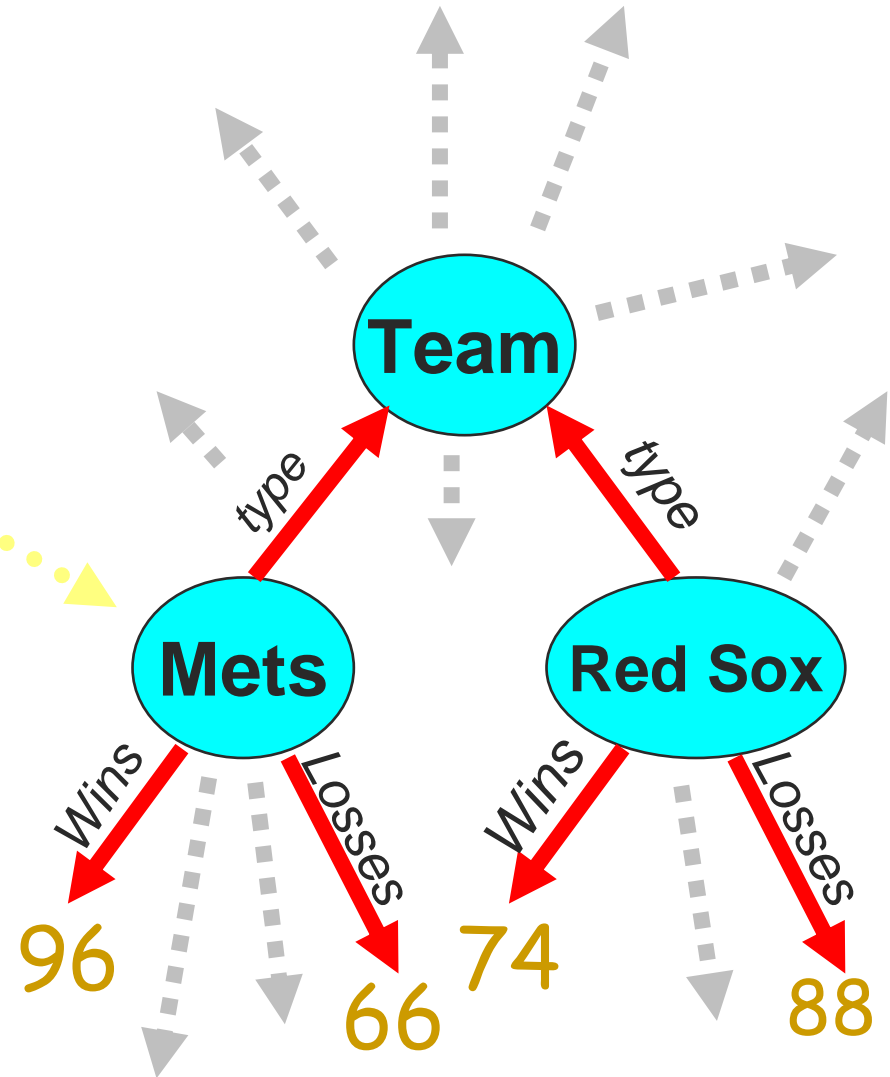
Arial 10 B I U

D2 fx Σ = 194,685,200

	A	B	C	D
1	Team	City	State	2006 Payroll
2	Yankees	New York	NY	194,685,200
3	Red Sox	Boston	MA	120,099,824
4	Angels	Anaheim	CA	103,472,000
5	White Sox	Chicago	IL	102,750,667
6	Mets	New York	NY	101,084,963
7	Dodgers	Los Angeles	CA	98,447,187
8	Cubs	Chicago	IL	94,424,499

Salsa + Boca = ? (part 2)

	A	B	C
1	Team	Wins	Losses
2	Mets	96	66
3	Red Sox	74	88



- Make implicit relationships explicit
- Nodes in the graph represent real-world things (“resources”) rather than spreadsheet cells
- Data is decoupled from layout

Demo: Sharing Spreadsheet Data

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Arial 10 B / U

D2 f(x) Σ = 194685200

	A	B	C	D
1	Team	City	State	2006 Payroll
2	Yankees	New York	NY	194,685,200
3	Red Sox	Boston	MA	120,099,824
4	Angels	Anaheim	CA	103,472,000
5	White Sox	Chicago	IL	102,750,667
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Arial 13 B / U

D4 f(x) X ✓ Worcester

Function Wizard

	A	C	D	
1		Wins	Losses	City
2	Mets	92	70	New York
3	Yanks	78	84	New York
4	BoSox	88	74	Worcester

[What is Queso?]

- Salsa : spreadsheets :: Queso : Web
- Queso provides HTTP access to...
 - RDF graphs
 - SPARQL result sets
 - Boca update notifications (events)
- (Queso does Atom, too. Just not in this demo.)

[Boca + Salsa + Queso = ?]

- The big picture.

[The Big Picture]

- Data is the center of the universe.
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 - No application silos.

Demo: Spreadsheet Data on the Web

2006 MLB Team Payrolls



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Arial 13 B I U

D4 Worchester

	A	C	D
1		Wins	Losses City
2	Mets	92	70 New York
3	Yanks	78	84 New York
4	BoSox	88	74 Worcester

[Thanks]

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