

# PAT

The future of Open Source Interactive OLAP  
.....honest



# PAT.... Er What?

We used to have a slide explaining the name, but  
we don't know ourselves so I removed it.



# What PAT is.....

- Thin client, 100% Open Source OLAP Analysis Tool
  - Browse
  - Explore
  - Slice and Dice
  - Visualize
- Business user friendly JPivot replacement
- Standalone and BI Server Integration
- Works with any XML/A data source (Mondrian, MS Analysis Services, SAP BW....)

# Some Quick Stats

- Completely Community Driven
- 29,391 Lines of Java Code
- 2 Core Developers (Part Time)
- 8 Unique SVN Commiters
- \$467k Projected Project Cost

(Stats from Ohloh)



# PAT Technologies

- Frontend:
  - GWT(<http://code.google.com/webtoolkit>)
  - GWT Mosaic(<http://code.google.com/p/gwt-mosaic>)
  - HTML + CSS
  - Flash (for now)
- Backend
  - Normal Java + GWT Servlets
  - Spring Security
  - Olap4J(<http://olap4j.org>)



# PAT History

- December 2008 Tom and Paul fork Halogen
- February 2009 – 0.1 (gwt-ext, maven)
- April 2009 – 0.2 (gwt-mosaic, basic DnD, XML/A)
- June 2009 – 0.3 (GWT 1.6, new table, multiple queries)
- July 2009 – 0.4 (GUI Improvement, advanced table, basic bi-server integration)
- October 2009 – 0.5b (Persistence layer, GUI rewrite, basic charting, dimension browser, drill support)
- March 2010 – 0.6 (New and improved BI Server plugin, new query design widgets, excel export, mdx input and color coded formatting, beta query saving and loading)
- Near future – 1.0 released alongside the Sugar BI Server

# PAT Demo



# What can PAT do already?

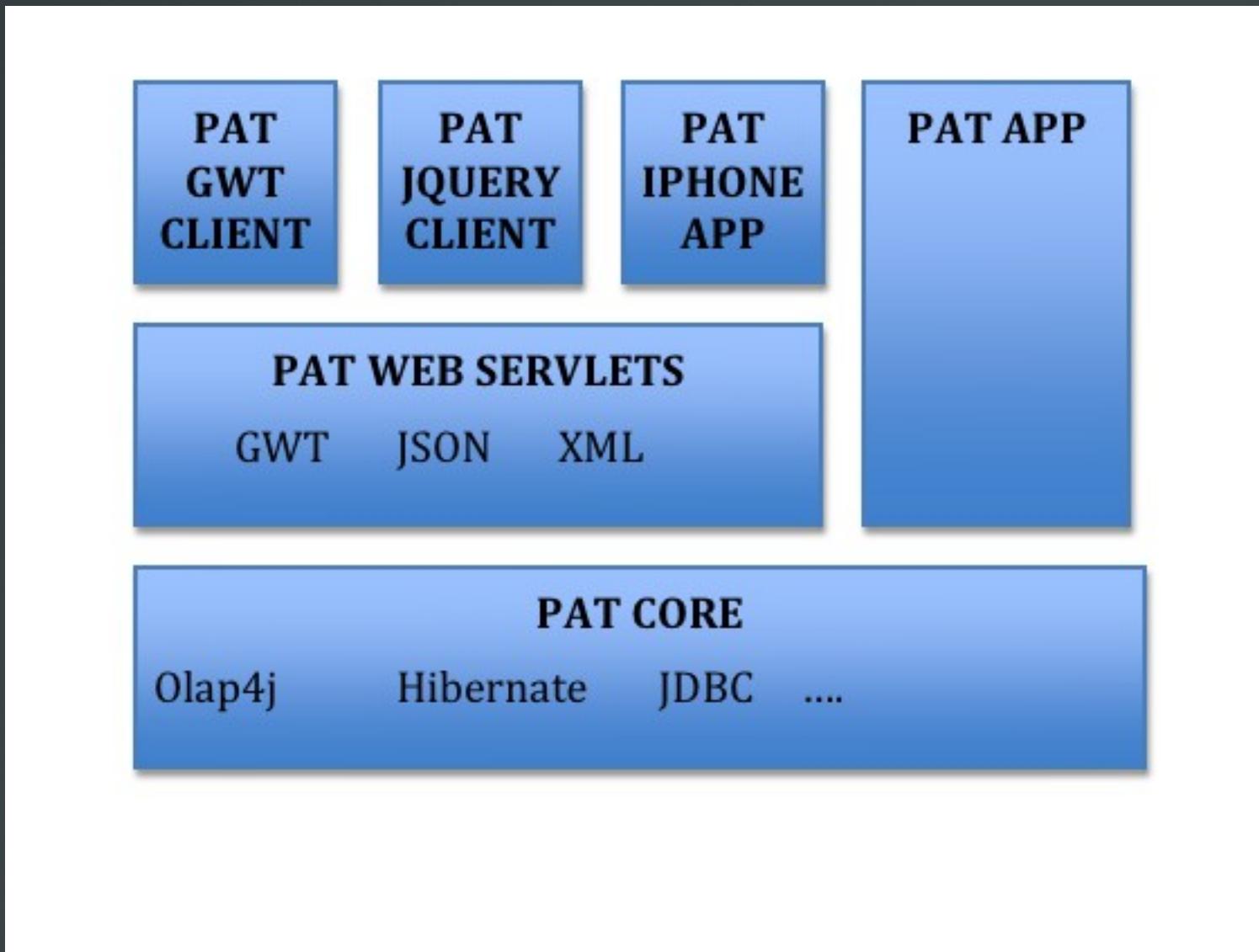
- Connect to its internal Mondrian instance
- Connect to any XML/A data source
- Discover all available cubes
- Query without any user written MDX
- Tabbed multiple query support
- Drag and drop query generation
- Browse your dimensions
- Drill down(drill expand, drill replace)
- Drillable Charts
- MDX query support
- Swap axis
- Sort
- Translated into 8 languages
- Excel export
- Query saving and loading

# What is on the PAT roadmap?

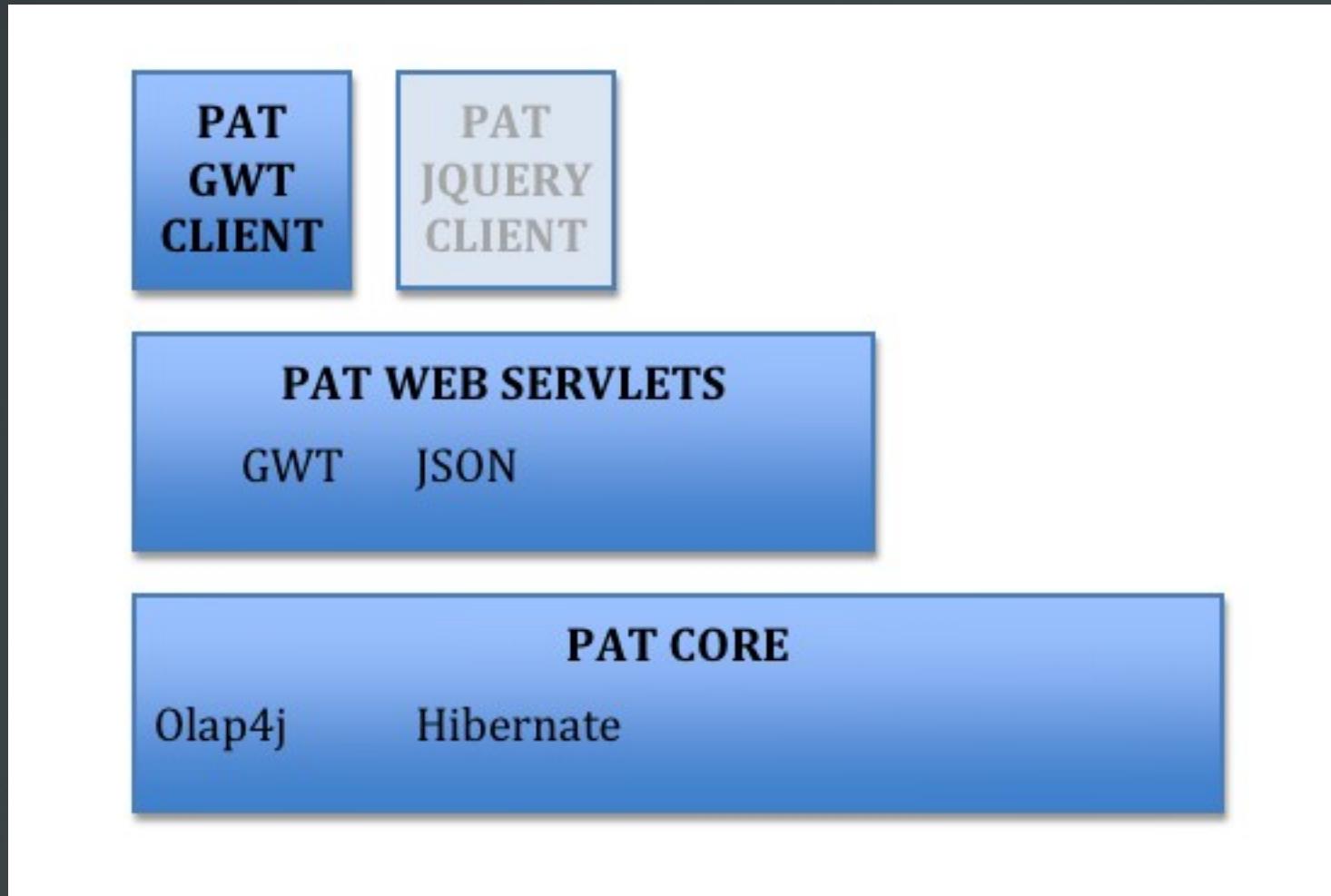
- Mondrian writeback
- Visual totals
- Calculated member wizard
- Sparklines
- 'Smart' cells
- Scriptable visualizations
- More drag and drop functionality



# PAT Architecture 2.0



# PAT Architecture 2.0



Here are some mockups I made earlier.....



# Sparklines

Connections Cubes Save Load Logout

PAT Analysis Tool

Welcome Quadrant Analysis X

Dimensions

Unused

- Positions
- Region

Rows

- Department

Columns

Measures

- Actual
- Budget
- Variance

Filter

Execute Query Export Layout Drill Style Show MDX Hide Blank Cells Pivot/Swap Axis Create Scenario

		Actual	Variance	Budget	
All Departments		143,639,982.00	-440,593.00	143,199,389.00	
	Executive Management	6,299,022.00	195,144.00	6,494,166.00	
	Finance	12,224,220.00	-136,814.00	12,087,406.00	
	Human Resource	13,075,463.00	-86,122.00	12,989,341.00	
	Marketing & Communication	13,910,753.00	-140,486.00	13,770,267.00	
	Product Development	10,644,102.00	142,509.00	10,786,611.00	
	Professional Services	76,317,649.00	-219,443.00	76,098,206.00	
	Sales	11,168,773.00	-195,381.00	10,973,392.00	

# Protovis integration....

Connections Cubes Save Load Logout

PAT Analysis Tool

Welcome Quadrant Analysis X

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# Rich layout

The screenshot displays the PAT Analysis Tool interface, featuring a top navigation bar with 'Connections', 'Cubes', 'Save', 'Load', and 'Logout' buttons, and a title 'PAT Analysis Tool'. Below the navigation is a 'Welcome' tab and a 'Quadrant Analysis' tab.

The main area contains several visualizations:

- Actual Data Table:** A table showing financial data for different departments. The total value is 143,639,982.00.

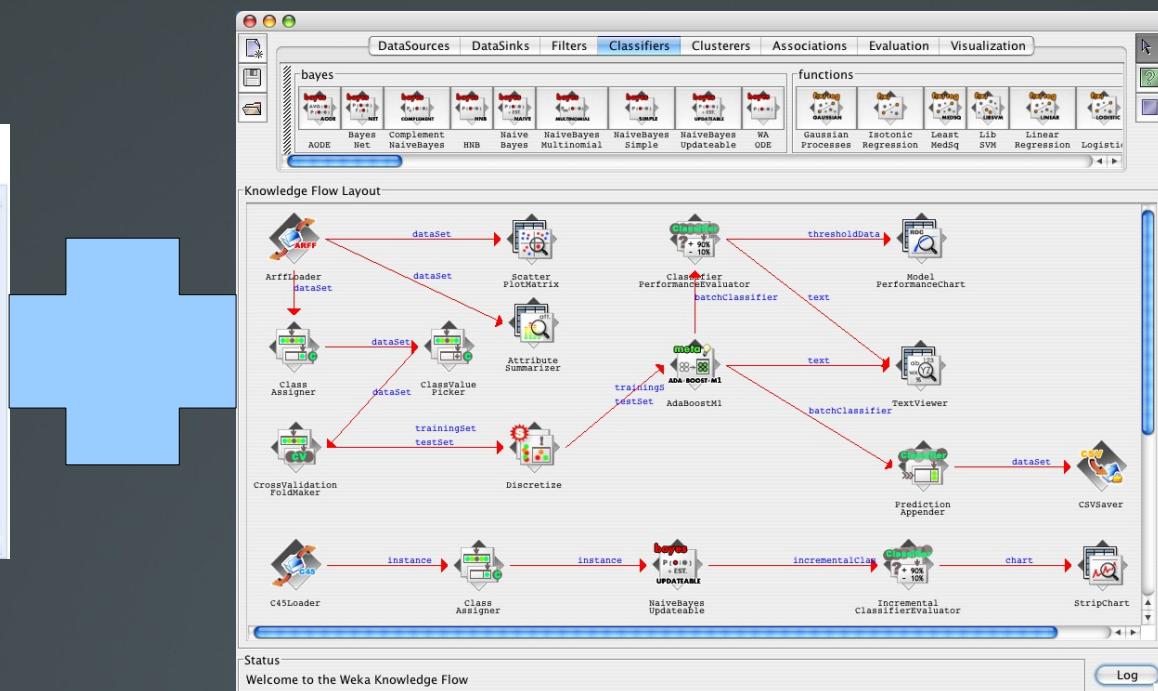
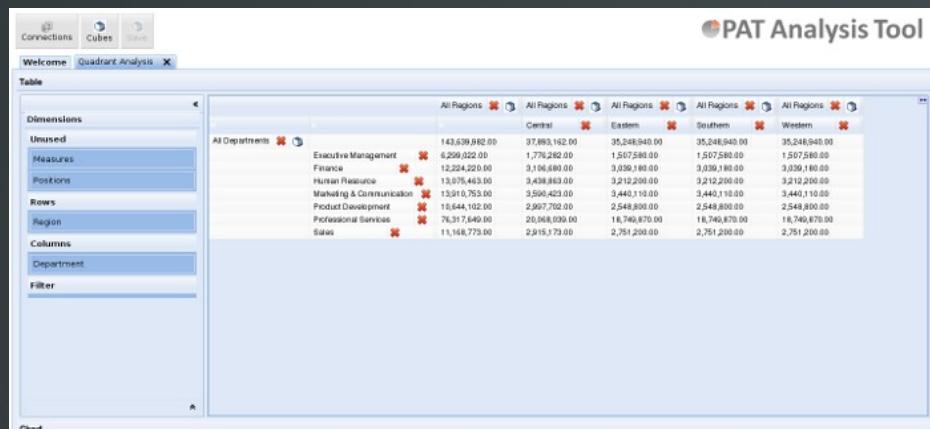
	Actual
All Departments	143,639,982.00
Executive Management	6,299,022.00
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- Line Chart:** A line chart showing a fluctuating trend over 10 time points, ranging from 0 to 4.
- Horizontal Bar Chart:** A chart comparing values across categories A through J. Category J has the highest value at 1.0.
- Treemap Visualization:** The largest visualization, showing a hierarchical treemap of Java packages. The root node is 'com.jcabi'. Other major nodes include 'java.awt', 'java.util', 'java.lang', 'java.io', 'java.net', 'java.math', 'java.util.concurrent', and 'java.util.zip'. Each package is further subdivided into sub-packages and classes.

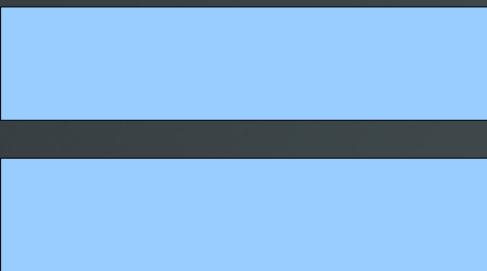
# What about.....

WEKA

PAT



# Predictive OLAP



More Importantly What Would You Like  
To See?

<http://www.surveymonkey.com/s/T7CRWQ5>



# PAT is cool as hell for a community run project, how can I help?

- Testing
- Suggesting functionality
- Coding
- CSS Theming
- PAT Logo
- Icon set
- Translation maintenance
- Documentation
- <ahem>Paypal</ahem>
- USING IT!



# Contact us

- PAT Project Base : <http://code.google.com/p/pentahoanalysistool>
- PAT Online Demo: <http://212.227.135.127:8080/pat-0.6/>
- PAT Continous Integration Builds: <http://212.227.135.127:8080/hudson/>
- PAT Wiki <http://code.google.com/p/pentahoanalysistool/wiki/StartPage?tm=6>
- Google Groups
  - Users: <http://groups.google.com/group/pentahoanalysistool-users>
  - Developers: <http://groups.google.com/group/pentahoanalysistool-dev>
- IRC Channel : ##pentaho.pat @ Freenode.net
- Bug Reports / Feature Requests : <http://jira.pentaho.com/browse/PAT>

