

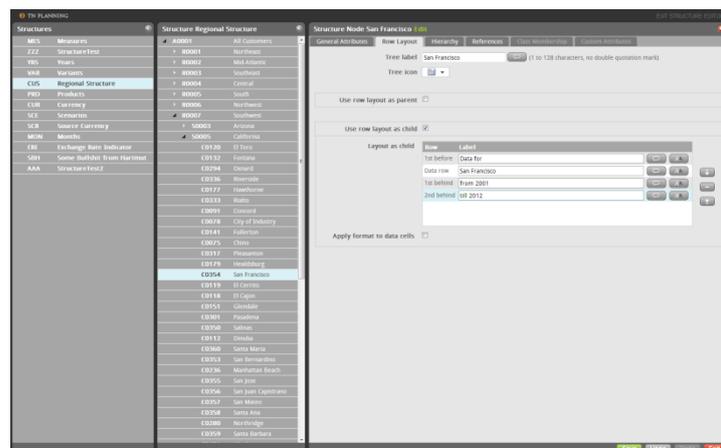
Thinking Networks AG

Thinking Networks AG is among the leading companies operating in the German software market.

ABOUT THINKING NETWORKS AG

Thinking Networks is a software vendor specializing in corporate planning solutions. Its core product, TN Planning, is a software suite which is used by a number of large companies and institutions for intricate and challenging planning tasks. The client list includes Beiersdorf, Deutsche Bank, Fresenius Kabi, Hermes Logistik, OTTO Group, Postbank and others. Rich configuration options and extensibility through freely programmable macros and plug-ins make it possible to adapt TN Planning to the most specialized needs and requirements in the areas of planning, simulation, cost allocation, and legal consolidation.

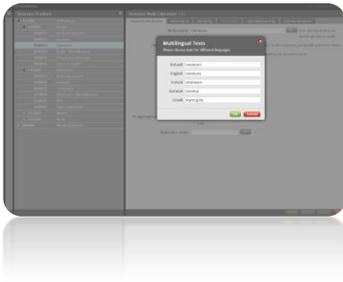
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THE PROJECT

For more than 30 years the products of Thinking Networks have been based on a proprietary, platform independent programming language, data base and GUI framework for both desktop and Web applications.

In order to be able to keep pace with new technological developments and to achieve an enhanced level of connectivity, it was decided to undertake a technology change towards a Java based Web application, backed by a choice of standard relational databases, with a responsive and usability oriented Ajax powered GUI.



“Option to seamlessly integrate parts written in dynamic languages in order to retain TN Planning’s extensibility through user defined macros”

The intention is to replace the traditional components of TN Planning one-by-one by modernized and improved renewals.

WHY ZK

After extensive evaluation, supported by experts from RWTH Aachen University, ZK was chosen as the new GUI framework.

One of the most important reasons was ZK’s server-centric approach to programming, minimizing the need to think about the details of Ajax communication or browser issues. The large number of existing GUI elements suited the requirements of the project, and the ability to implement new components also opens up possibilities for the future. It was decisive that components meant for handling data, like grids and trees, perform well for large data volumes. Another factor was the option of seamlessly integrating parts written in dynamic languages like Python in order to retain TN Planning’s extensibility through user defined macros.

First experiments quickly confirmed that using ZK it would be possible to build a rich internet application with a look and feel that would make it unnecessary in the future to supply a separate desktop version of TN Planning.

General Attributes	Row Attributes	Column Attributes	Structure Nodes	Node Classes	Custom Attributes	
	Label	Short label	Input mode	Planning mode	Aggregation	General class
▲ A0001	All Customers	All Customers	✓	✓		Default
▶ R0001	Northeast	Northeast	✓	✓	✓	Default
▶ R0002	Mid-Atlantic	Mid-Atlantic	✓	✓	✓	Default
▶ R0003	Southeast	Southeast	✓	✓	✓	Default
▶ R0004	Central	Central	✓	✓	✓	Default
▶ R0005	South	South	✓	✓	✓	Default
▶ R0006	Northwest	Northwest	✓	✓	✓	Default
▶ R0007	Southwest	Southwest	✓	✓	✓	Default
▶ S0003	Arizona	Arizona	✓	✓	✓	Default
▶ S0005	California	California	✓	✓	✓	Default
▶ C0120	El Toro	El Toro	✓	✓	✓	Default
▶ C0132	Fontana	Fontana	✓	✓	✓	Default
▶ C0294	Oxnard	Oxnard	✓	✓	✓	Default
▶ C0336	Riverside	Riverside	✓	✓	✓	Default
▶ C0177	Hawthorne	Hawthorne	✓	✓	✓	Default
▶ C0333	Rialto	Rialto	✓	✓	✓	Default
▶ C0091	Concord	Concord	✓	✓	✓	Default
▶ C0078	City of Industry	City of Industry	✓	✓	✓	Default
▶ C0141	Fullerton	Fullerton	✓	✓	✓	Default
▶ C0075	Chino	Chino	✓	✓	✓	Default
▶ C0317	Pleasanton	Pleasanton	✓	✓	✓	Default
▶ C0179	Healdsburg	Healdsburg	✓	✓	✓	Default
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▶ C0118	El Cajon	El Cajon	✓	✓	✓	Default
▶ C0151	Glendale	Glendale	✓	✓	✓	Default
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▶ C0350	Salinas	Salinas	✓	✓	✓	Default

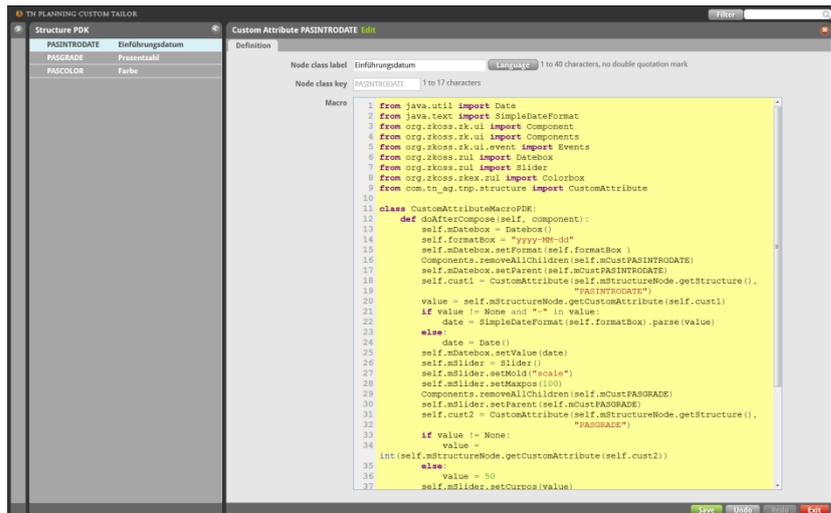
THE ARCHITECTURE

ZK is used for implementing the new presentation layer of TN Planning, residing on top of a complex business logic layer and a data layer in which data access is mostly carried out by stored procedures of the DBMS. Ample use is made of Java frameworks and extensions like Spring and AspectJ.

ZK fits well into this environment. However, in some places it was necessary and possible to deviate from the standard usage. Also, the styling was changed in accordance with the ideas of Thinking

Networks' graphic design team.

Basically, both patterns supported by ZK for the GUI architecture are used: the classic MVC pattern for the explorers, which are trees for displaying, selecting, and ordering the elements of TN Planning's multidimensional and hierarchical models, as well as the MVVM pattern in the forms which serve to edit the elements' properties. These benefited highly from the new data binding introduced in ZK6.



THE RESULT

The first component of TN Planning that was rewritten in the new technology is the Structure Editor. It is the basic component for defining the structures used as dimensions of multidimensional data cubes that form the base for all planning models. A preview of the new Structure Editor was presented on TN Planning's user meeting in May 2012. The experience of the ZK based GUI impressed all participants. The release date of the Structure Editor is November 2012 while other components will follow in the first half of 2013.

About ZK

Potix Corporation develops and supports ZK, the #1 Ajax solution on SourceForge.net, the world's largest open source host. ZK has more than 1,500,000 downloads since its first release in late 2005. ZK is deployed by a large number of Fortune Global 500 companies, including Deutsche Bank, Barclays, Sony, Sun Microsystems and Toyota, providing them with the ability to rapidly create rich Ajax enterprise level applications.

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