

KNIME News

The KNIME Team has been busy since our last newsletter. Among many other activities, we have been preparing the grand opening of an office on the West Coast! You can now find KNIME at the Swissnex building in San Francisco. We are excited to be closer to our KNIME fans in the Bay Area and are looking forward to meeting new people there during our upcoming KNIME Meetup series. We will be arranging local training courses there, but if you happen to be in the city, shoot us an email and let us meet for a coffee and a KNIME chat. Meetups and local days are also scheduled for Boston, Berlin and Milan over the next few months and we are already planning more meetings to be held at different locations around the world for 2014.

Our most recent KNIME UK Day was a good demonstration of the interest such events create – we were overwhelmed at the number of participants, the enthusiasm of the presenters and the lively discussions during our networking sessions. Speakers from a wide range of backgrounds told us about how they use KNIME to reveal hidden information in their data from finance, biochemistry, pharmaceuticals, electricity – to name but a few. We look forward to meeting you at such an event, or if you are in San Francisco, drop by!

KNIME for Happy Bunnies

Did you use facial cream this morning? Or hand lotion? Or any other cosmetics product? Then it's very likely that some of the ingredients may have been tested on rabbits or other animals. In a bid to control the testing of cosmetics ingredients on animals, the European Union brought in legislation that banned testing on finished cosmetic products in 2004. This was supported by bans on the marketing of products with ingredients tested after 2009 for some effects and 2013 for all effects [1]. This is good news for the bunnies, but bad news

for the cosmetics industry as it is required to guarantee that its products are safe for human use. In response, Cosmetics Europe (the trade association for all major European cosmetics manufacturers) and the European Commission have launched a major research initiative, known as SEURAT-1 Cluster, which stands for "Safety Evaluation Ultimately Replacing Animal Testing" [2]. One of the projects in SEURAT-1 Cluster is the COSMOS

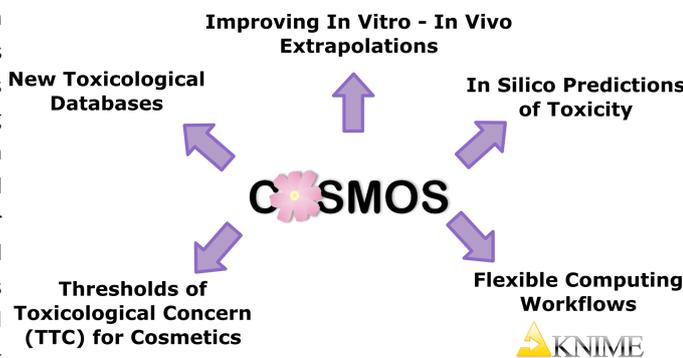
Project, a collaboration addressing the safety assessment needs of the cosmetics industry by conducting research into the development of integrated *in silico* models for the prediction of human repeated dose toxicity for cosmetics to optimize safety [3]. And this is where KNIME comes into play: it has been chosen as the platform for developing

try with very similar demands to those of COSMOS." Other project partners, such as the European Commission's Joint Research Centre in Ispra, S-IN from Italy (also a long-term KNIME partner) and Molecular Networks from Erlangen, Germany, are creating KNIME nodes and workflows that will eventually be used by end-users in

the cosmetics industry or by other interested researchers. In order to satisfy the requirements of COSMOS, KNIME has been – and will continue to be – extended in several directions. One of the major new

and deploying workflows for safety predictions. "There are various reasons why KNIME has been chosen as the workflow platform for COSMOS," says Mark Cronin, Project Coordinator from Liverpool John Moores University. "It is open source, for example, and everyone can use it free of charge. This was one of the requirements for this publicly funded project. It has also already established itself in the pharmaceutical industry, an indus-

try for COSMOS is workflow versioning on the KNIME Server. This allows for an easy retrieval of older workflow versions in order to reproduce predictions reliably. When the project ends in 2015 the models developed will all be available by means of KNIME workflows and accessible via the KNIME WebPortal. And we hope there'll be a lot more happy bunnies and happy consumers by then!



[1] http://ec.europa.eu/consumers/sectors/cosmetics/animal-testing/index_en.htm

[2] <http://www.seurat-1.eu/>

[3] <http://www.cosmostox.eu/>



KNIME User Day Boston

October 22, 2013



KNIME is coming to the US again! A KNIME User Day is going to be held in Boston's NERD Center. The workshop will feature presentations about web crawling, time series analysis, big data, finance, chemistry, and more real-life applications!

<http://www.knime.org/user-day-boston-2013>

More Upcoming Events

KNIME Basic & Advanced User Training
Sept. 30-Oct. 2, 2013
 Technopark,
 Zurich, Switzerland

For more information visit:
<http://www.knime.org/training>

KNIME Meetup San Francisco, CA
Oct. 8, 2013
 Swissnex Office
 San Francisco, CA 94111



KNIME is hosting its inaugural Bay Area meetup from 4-7 p.m. The agenda includes introductory information for KNIME Newbies plus insight into the upcoming 2.9 release and our new interactive R integration.

For more information visit:
<http://www.knime.org/about/events/knime-meetup-san-francisco>

KNIME Meetup Milano/Pavia
10 Ottobre 2013
 Polo Tecnologico di Pavia



Il KNIME Meetup Italia per il 2013 si terrà a Pavia il 10 Ottobre sul tema "KNIME: la piattaforma di integrazione dei tools per l'analisi dei dati".

Per ulteriori informazioni:
<http://www.knime.com/meet-up-pavia-2013>

KNIME Goes Global

KNIME on the Net! Check our list of Webinars



Next Webinar: KNIME Text Mining Webinar October 30, 2013

This webinar illustrates the most commonly used Text Mining features demonstrated with the help of two example applications: topic detection and sentiment analysis. Attendees will be provided with an overview of the Text Mining nodes in KNIME for text integration, parsing, pre-processing, enrichment, transformation, topic detection, sentiment analysis, and visualization.

Come to our KNIME Meetup in Italy on October 10

KNIME is based in Zurich

We have a new KNIME office in San Francisco!

On October 22 we would like to meet you in Boston

Enrol for Developer training on Oct. 7-8 in Technopark, Zurich!

And you'll find us in Berlin on Nov. 5 for our KNIME Meetup there.

NEW DATE for 7th KNIME UGM!
Now: **February 10-14, 2014**
Mark your Calendars. More information soon!

See our **Events** page for more detailed information about how to participate!
<http://www.knime.org/about/events>

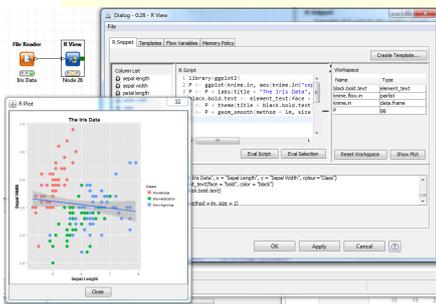
The Top 5 New Features in KNIME 2.8

New Powerful R Integration

KNIME 2.8 has taken another big step in enhancing KNIME and R integration. Coding with R is now easier than ever before using the R nodes!

KNIME Labs contains a new category, named **R (Interactive)**, which endows all previously existing R nodes with a new, more powerful interface.

All R (Interactive) nodes can evaluate their R code, or even segments



of it, and display the results interactively, all from within the dialog. This is indeed a great help for R code debugging!

The R editor of the R (Interactive) nodes offers syntax highlighting and supports creating and reusing R code templates. New is also the ability to pass workspaces from node to node to better modularize the R scripts.

Finally, KNIME 2.8 has a new R node in both R and R (Interactive) categories: the R Source (Table) node. This is an R based reader node that extends the KNIME reading capabilities virtually to all data formats, as supported by the existing R libraries: SAS, SPSS, Stata, XBase, etc.

Improved Excel Integration

The performance of the entire XLS node family has been greatly improved! Check it out!

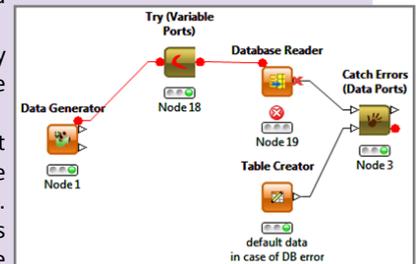
XLS Writer now supports images and multiple sheets! A few extra nodes, like XLS Sheet Appender and Read XLS Sheet Names, complete the picture for the improved XLS integration. XLS Sheet Appender appends a new spreadsheet to an existing workbook, while Read XLS Sheet Names returns the names of the sheets in the Excel file.

Error Handling Blocks

The database is down again? No problem – your workflow can still run successfully and produce a database information message!

This is possible using the new Try and Catch Error nodes in the **Error Handling** category.

The Try node initiates the default workflow branch, for example the one accessing the database. The Catch Error node collects data from two branches: the default branch initiated by the Try node and an emergency exit branch. In case the default workflow branch fails, the Catch Error node displays the data from the emergency exit branch. That is, if the database is down and your default branch fails to connect to the database, a database error message can still reach the Catch Error node and travel till the end of your workflow.



Time Series Lagging

This node shifts a column up by P (P=Lag interval) rows or by 1, 2, ..., L-1 (L=Lag) rows.

If the selected column is a time series and has been sorted with ascending time, this node **lags (embeds)** the time series L-1 steps in the past for time series analysis.

Open Street Maps Nodes

Wouldn't it be nice if you could show a point in a map image on a report or on the WebPortal?

The **OpenStreetMap (OSM)** extension enables users to render geographic points of interest on a map (<http://www.openstreetmap.org>).

The world map with points of interest can either be interactively explored with the "OSM Map View" node or directly rendered into an image by the "OSM to Image" node. In the image below, 50 of the largest cities of the world are rendered in the map as dots with the size derived from their population while color represents their areas. The dots' positions are taken from the input table's longitude and latitude columns.

