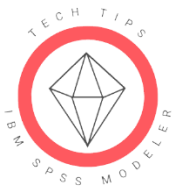




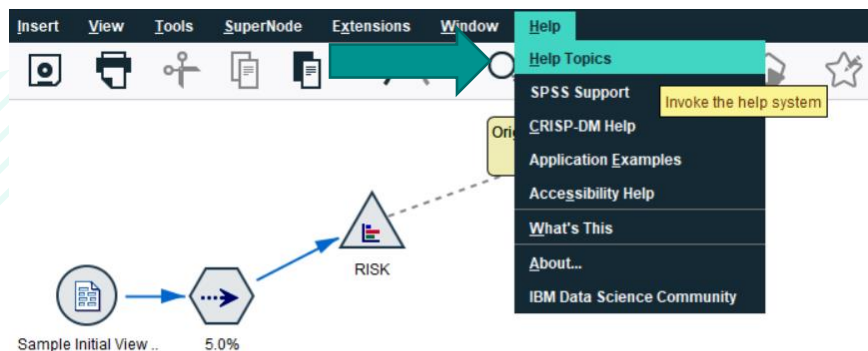
Tech Tips - Learn What's New in IBM SPSS Modeler

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Tech Tips - Learn What's New

- Here's a quick tip to learn what's new in IBM SPSS Modeler.
- Go to the **Help** menu and select **Help Topics**. This will take users to the **'Getting started'** page. On this page, there is a link to **'See what's new in this release'**.



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Getting started

Last Updated: 2022-02-14

Welcome to IBM® SPSS® Modeler, a member of the modeling family of products from IBM Corp. In case you're wondering where to start, here are some suggestions.

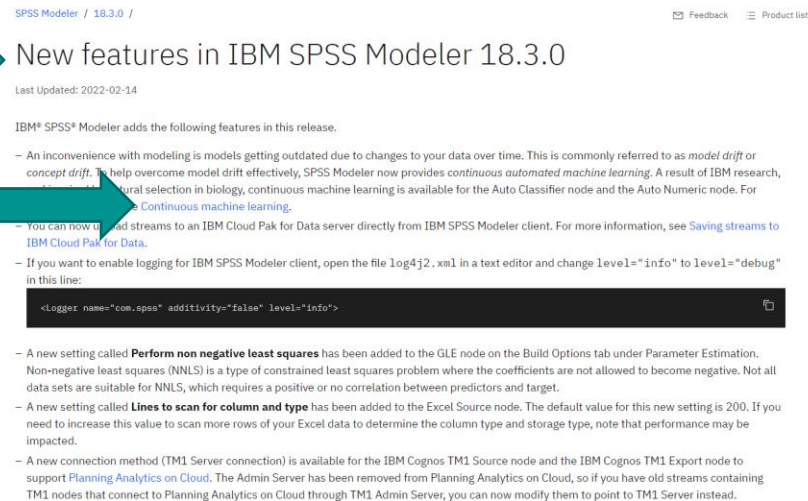
You can...

- Try [building a stream](#).
- See [what's new in this release](#).
- Visit the IBM SPSS Modeler section of the IBM Analytics web site at <https://www.ibm.com/analytics/us/en/technology/spss/>.
- Visit the corporate Support site at <http://www.ibm.com/support>, choosing Information Management as the support type.

There's also an interactive tutorial for IBM SPSS Modeler. On the main menu, click:

Tech Tips - Learn What's New

- Once you have selected 'See what's new in this release', you will see a description of all new features. Below is a portion of new features.
- For example, if you are interested in the new feature **continuous automated machine learning**, a link will be provided to more information about this topic.



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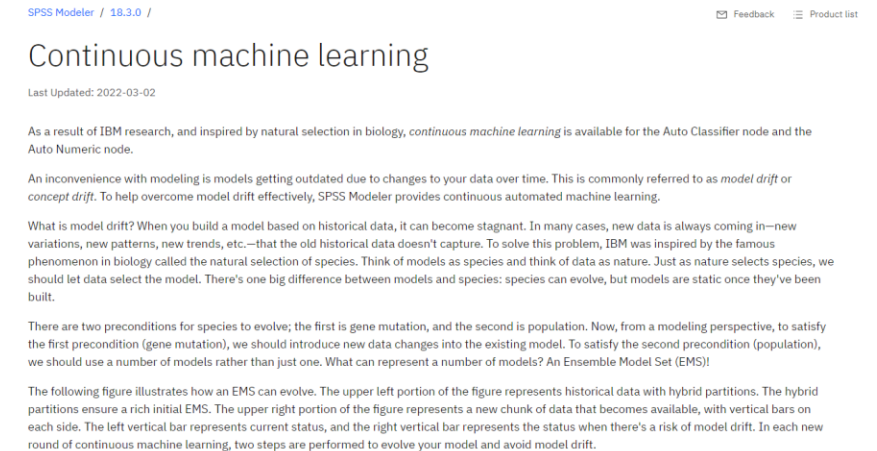
New features in IBM SPSS Modeler 18.3.0

Last Updated: 2022-02-14

IBM® SPSS® Modeler adds the following features in this release.

- An inconvenience with modeling is models getting outdated due to changes to your data over time. This is commonly referred to as *model drift* or *concept drift*. To help overcome model drift effectively, SPSS Modeler now provides *continuous automated machine learning*. A result of IBM research, inspired by natural selection in biology, continuous machine learning is available for the Auto Classifier node and the Auto Numeric node. For more information, see [Continuous machine learning](#).
- You can now upload streams to an IBM Cloud Pak for Data server directly from IBM SPSS Modeler client. For more information, see [Saving streams to IBM Cloud Pak for Data](#).
- If you want to enable logging for IBM SPSS Modeler client, open the file log4j2.xml in a text editor and change level="info" to level="debug" in this line:

```
<logger name="com.spss" additivity="false" level="info">
```
- A new setting called **Perform non negative least squares** has been added to the GLE node on the Build Options tab under Parameter Estimation. Non-negative least squares (NNLS) is a type of constrained least squares problem where the coefficients are not allowed to become negative. Not all data sets are suitable for NNLS, which requires a positive or no correlation between predictors and target.
- A new setting called **Lines to scan for column and type** has been added to the Excel Source node. The default value for this new setting is 200. If you need to increase this value to scan more rows of your Excel data to determine the column type and storage type, note that performance may be impacted.
- A new connection method (TM1 Server connection) is available for the IBM Cognos TM1 Source node and the IBM Cognos TM1 Export node to support [Planning Analytics on Cloud](#). The Admin Server has been removed from Planning Analytics on Cloud, so if you have old streams containing TM1 nodes that connect to Planning Analytics on Cloud through TM1 Admin Server, you can now modify them to point to TM1 Server instead.



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Continuous machine learning

Last Updated: 2022-03-02

As a result of IBM research, and inspired by natural selection in biology, *continuous machine learning* is available for the Auto Classifier node and the Auto Numeric node.

An inconvenience with modeling is models getting outdated due to changes to your data over time. This is commonly referred to as *model drift* or *concept drift*. To help overcome model drift effectively, SPSS Modeler provides continuous automated machine learning.

What is model drift? When you build a model based on historical data, it can become stagnant. In many cases, new data is always coming in—new variations, new patterns, new trends, etc.—that the old historical data doesn't capture. To solve this problem, IBM was inspired by the famous phenomenon in biology called the natural selection of species. Think of models as species and think of data as nature. Just as nature selects species, we should let data select the model. There's one big difference between models and species: species can evolve, but models are static once they've been built.

There are two preconditions for species to evolve; the first is gene mutation, and the second is population. Now, from a modeling perspective, to satisfy the first precondition (gene mutation), we should introduce new data changes into the existing model. To satisfy the second precondition (population), we should use a number of models rather than just one. What can represent a number of models? An Ensemble Model Set (EMS)!

The following figure illustrates how an EMS can evolve. The upper left portion of the figure represents historical data with hybrid partitions. The hybrid partitions ensure a rich initial EMS. The upper right portion of the figure represents a new chunk of data that becomes available, with vertical bars on each side. The left vertical bar represents current status, and the right vertical bar represents the status when there's a risk of model drift. In each new round of continuous machine learning, two steps are performed to evolve your model and avoid model drift.

SPSS Tech Tips

For more **Tech Tips**, go to the Tech Tips section within the Learning Hub.

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Thank you.