



Present Value

Discount or compound cash-flows



Product: IBM® SPSS® Modeler

Extension type: Process

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Description

This node enables you to compute the present value of cash-flow by specifying the desired year and annual rate.

Requirements

- SPSS Modeler v16.0 or later
- SPSS Modeler 'R Essentials' plugin
- R v2.15.x

Installation

Close SPSS Modeler. Save the `.cfe` file in the CDB folder, located by default on Windows in "`C:\ProgramData\IBM\SPSS\Modeler\16\CDB`" or under your Modeler 16 installation directory.

Restart SPSS Modeler: the node will now appear in the process palette.

R Packages used

The R packages will be installed the first time the node is used as long as an Internet connection is available.

- stringr: <http://cran.r-project.org/web/packages/stringr>



User interface

Input fields: Date of a cash flow. Examples: '1984-12-30' (ISO 8601) or 42325 (numeric, with origin in '1970-01-01'). Cash flow amount. Examples: 10000 or 10000.40

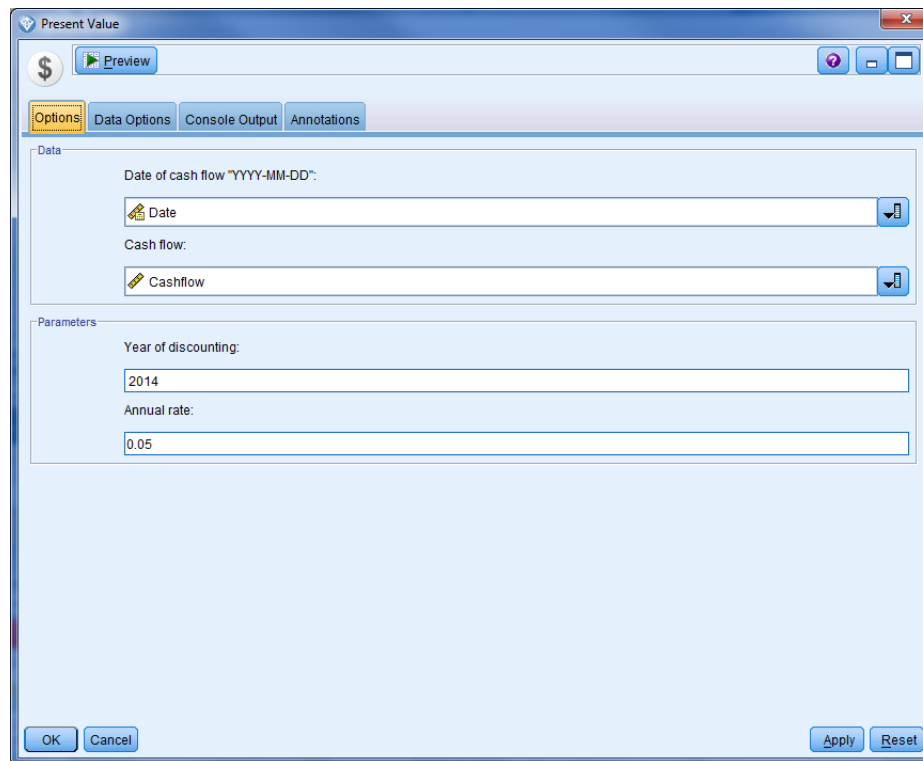
Output field: Present value of the cash-flow in the wanted year. Compounded or discounted at a specified annual rate.

Limitation: Only year is used to compute the present value of the cash-flow.



Example

Double click on the 'Present Value' node.



Now select the fields containing the date and the amount of the cash flow. *Caution: only the year is used in the discounted cash-flow formula.*

Fill the fields:

- 'Year of discounting' is the year in which you want your cash flow to be discounted or compounded to. Example 2014
- 'Annual rate' Example 0.05

Add an output node after the 'Present Value' node in order to visualize the value of cash flows in the desired year.



You can try it yourself with the sample stream 'PresentValue Exemple.str' and the data cashflows.csv



Important links

Learn

- Learn more about [SPSS software](#).
- Visit [developerWorks Business analytics](#) for more technical analytics resources for developers.
- [The Comprehensive R Archive Network](#) is the main site for the R project and each R package. The help pages and manuals that are associated with `optimx`, `nlmrt`, and `Rcgmin` are detailed. Numerous references are provided.
- Read "[Do I need to learn R?](#)" (Catherine Dalzell, developerWorks, September 2013) to learn why R is a valuable tool for data analytics that was expressly designed to reflect the way that statisticians think and work.
- "[Calling R from SPSS](#)" describes how to use R code inside IBM SPSS Modeler 16.
- Read "[Using Google maps API](#)" to discover how to use Google Maps API with R.
- Read "[Create new nodes for IBM SPSS Modeler 16 using R](#)" to learn how to create new extensions easily.

Get products and technologies

- Download the [R plug-in for SPSS](#) plugin.
- Download the [R 2.15.2 for Windows](#) package.

Discuss

- Visit the [IBM SPSS DevCentral developerWorks community](#) to share tips and experiences with other IBM SPSS developers.
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