

## Metadata and Source Information in Mathcad

When you create Mathcad worksheets that you plan to reuse or pass on to colleagues, you may also wish to capture information associated with your work. Mathcad allows you to record metadata at either the [worksheet](#) or [equation](#) level.

### Worksheet Metadata

When you save your worksheet, Mathcad includes metadata in the file that briefly describes the worksheet. Some of this information is automatically generated by Mathcad or obtained from the operating system; other information, such as a brief description and relevant keywords, are provided by you. This information, displayed in the [File Properties](#) dialog, allows you to track the worksheet as it makes its way through your organization.

To add worksheet metadata, open the File Properties dialog by clicking **Properties** on the [File](#) menu. You can add the following metadata on the Summary tab.

### Summary Tab

The **Summary** tab allows you to access - and in some cases control - a standardized set of file metadata useful for archiving worksheets in a document storage and control system. By saving worksheets in one of Mathcad's XML-based formats (XMCD and XMCDZ-compressed XML), you can use XML-friendly tools to search and report on worksheets without opening them in Mathcad.

You can edit five of the metadata fields on the Summary tab:

- **Title** - The name of your worksheet (not to be confused with the filename).
- **Author** - The default is the name supplied during Mathcad installation.
- **Description** - A brief summary of the worksheet.
- **Company** - The default is the company name supplied during installation.
- **Keywords** - A list of key terms for searching.

In addition, this tab displays uneditable metadata of two types:

- Basic file information, such as the filename, type, location, and size.
- Tracking information, such as the creation date, date of the last revision, author of the last revision, and the current revision number.

### Custom Tab

The **Custom** tab allows you to enter non-standardized metadata for your worksheets. For example, you may want to associate a worksheet with a particular project, or note whether or not it has been approved for general usage. You can select the name of the metadata from a drop-down list (or enter your own), specify the type of information the metadata will contain (text, date, general number, or yes/no), and then enter the specific value. All custom metadata associated with the file is displayed in the table at the bottom of the dialog.

### Region Metadata

In addition to attaching metadata to a file, you can provide it at the [math expression](#) or math subexpression level. Mathcad allows you to annotate the source of variables or formulas and add other comments.

Region metadata can be added and viewed in two ways:

1. Select all or part of a math expression, right-click on the selected terms, and choose **Annotate Selection**. In the [resulting dialog](#), you can add comments. You can annotate anything from a single number or variable to the entire expression, and each region can contain multiple annotations.
2. The [Custom tab](#) of the **Properties** dialog. By right-clicking on a region and choosing **Properties**, you can add the same metadata as on the Custom tab of the [File > Properties](#) dialog. This metadata is applied to the entire region, regardless of the portion you select.

### Copying and Pasting Metadata

When you copy a region with metadata, Mathcad also copies the metadata. When you copy math regions or subexpressions from one worksheet into another, Mathcad automatically creates metadata about the originating file. File-tracing metadata of this kind is found in the Sources dialog.

Right-click on the annotated portion of the copied expression and choose **View > Sources**. The dialog displays the worksheet from which the region or expression was copied, the worksheet in which the region originated, and the revision number of each at the time a copy was made. The dialog also displays the [worksheet description](#) of the originating worksheet. If you edit the expression, the annotations disappear, as the expression is no longer the original traceable version.

If you copy and paste multiple expressions to a new worksheet, they each carry source annotations, just as if you had copied them one at a time.

#### Notes:

- Source annotations cannot be associated with plots or [components](#), such as data tables.
  - Mathcad visually indicates annotations with colored parentheses. To view these parentheses, either click on a region with annotations, or choose **Annotations** from the [View](#) menu. To change the color of the parentheses, choose **Color > Annotation** from the [Format](#) menu.
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