

Number Formats

A number format is a string that is used to format dates or numbers. For example, if you enter the value 0.563 in cell A4 and the number format string assigned to cell A4 is "0.00%", the value displayed will be 56.30%. Changing a cell's number format will not change the actual value that is used in calculations. In Microsoft Excel, you will see the cell's actual value in the formula bar.

Number Formats in Excel

In Excel, number formats can be assigned to cells through the **Format Cells** dialog. To apply a new number format to cells in Excel:

1. Select a cell or group of cells.
2. From the **Format** menu, select **Cells**, or, right-click the highlighted cells and select **Format Cells**.
3. Select the **Number** tab.
4. Select a number format category from the list on the left.
5. Set additional attributes (if available) on the right and click **Ok**.

How to Set Number Formats with ExcelWriter

To assign a number format with ExcelWriter's [ExcelApplication](#), use the [Style](#) object's [NumberFormat](#) property. The following lines create a percentage style and assign it to a cell:

```
ExcelApplication xla = new ExcelApplication();
Workbook wb = xla.Create(ExcelApplication.FileFormat.Xlsx);

//--- Create a percentage style and assign
//--- a number format to it.
GlobalStyle stylPercent = wb.CreateStyle();
stylPercent.NumberFormat = "0.00%";

//--- Assign a numeric value and
//--- stylPercent to cell A4 to display
//--- 56.30% in the cell.
ws.Cells["A4"].Value = "0.563";
ws.Cells["A4"].Style = stylPercent;
```

ExcelWriter includes a set of built-in format constants to help you quickly assign commonly used display formats. For example, the constant `NumberFormat.DateFormat.DayOfWeekMonthDayYear` represents the format string "dddd, mmmm dd, yyyy". The following assigns this format to a date style:

```
GlobalStyle styleDate = wb.CreateStyle();
styleDate.NumberFormat = NumberFormat.DateFormat.DayOfWeekMonthDayYear;
```

For a complete list of number format constants, see [The NumberFormat Object](#).

The NumberFormat Object

The [NumberFormat](#) object is a helper class that you can use to create custom number format strings. `NumberFormat` contains methods for creating accounting, currency, fraction, number, percentage, and scientific display formats. For example, the method `NumberFormat.CreateAccounting` creates an accounting format string. This method takes three parameters:

numDecimalPlaces	The number of decimal places to display.
useDollarSign	If true, the dollar sign will be displayed.
negativeColor	A color to use when displaying negative numbers. This parameter may be null.

The following example creates an accounting style with two decimal places, a dollar sign and negative values in red:

```
ExcelApplication xla = new ExcelApplication();
Workbook wb = xla.Create(ExcelApplication.FileFormat.Xlsx);

GlobalStyle stylCurrency = wb.CreateStyle();
NumberFormat numFormat = wb.NumberFormat;
String acctFormat = numFormat.CreateAccounting(2, true, NumberFormat.Color.Red);
stylCurrency.NumberFormat = acctFormat;

Area ar = wb.Worksheets[0].CreateArea("B7:H24");
ar.ApplyStyle(stylCurrency);
```