

Adding and Editing Block Attributes | Extracting Attributes

So far in using AutoCAD you have created geometry: lines, circles, etc. You have also added things such as text and dimensions. All of these things could also be done by hand, so what else does CAD have to offer?

As noted at the beginning of Level 1, AutoCAD is also a database of information. Most of that database contains the information for reproducing what you have drawn, but you can also add information that is non-graphical. One of the easiest ways of adding non-graphical information is to use attributes. An attribute is text that can be attached to a block that conveys more information than just the geometry on its own could convey.

Look at the two drawings below for an example:

The first example shows some lines and arcs that could be anything.

The second example shows the same geometry with the attributes visible so that you see what the shapes represent.

The pictures above show a couch. The attributes describe what the model number, color and cost are as well as the manufacturer. From this simple example, you can see that AutoCAD has a useful tool for showing more than just geometry.

This example shows information about furnishings in an office. Once you have drawn the floor plan, you could insert blocks of furniture that have information about the manufacturer, price, weight, and any other information you may need. This information can then be extracted out of AutoCAD and then used in a spreadsheet or other program which could generate a Bill of Materials. Although you won't normally use the more advanced features of Attributes in your daily work, it's good to know how they work.





In this lesson you will be creating attributes and attaching them to the computer block that you made previously. Like everything you do in AutoCAD, there are particular steps involved when you work with attributes.

First you have to define (or create) the attribute.

Next you will create the block with attributes.

Finally, when you insert the block you will give it the specific information

Many of the commands that you will be using are tough to remember at first. You may find it easier to use icons (but then the icons look very similar). Pull down menus are another option, so you can see exactly what the command is that you are starting.

Command	Keystroke	Icon	Location	Result
Define an attribute	ATTDEF / ATT		Home > Block > Define Attribute	Creates an attribute definition
Edit attributes	DDATTE / ATE		Home > Block > Edit Attributes	Edits the contents of an existing attribute
Display Atts.	ATTDISP		Home > Block > Retain Display	Hides or shows attributes
Extract Attributes	EATTEXT		Insert > Linking & Extraction > Extract Data	Extracts attributes using the wizard

Open up the floor plans you drew earlier with the Computer blocks in Lesson 2-2.

Insert a computer block and then explode it (type X <ENTER> and then select the block - press <ENTER>.)

Begin the Attribute definition command: ATT(or) ATTDEF (or) DDATTDEF

(AutoCAD has kept the commands from previous versions active in the new versions.)

Look at the dialog box below. Fill in the edit boxes just like the example. Make sure to adjust the text height if necessary.

What you did is give the attribute its definition - a name (tag), a prompt to help the user while they're inserting it, and a (default) value for the prompt. .

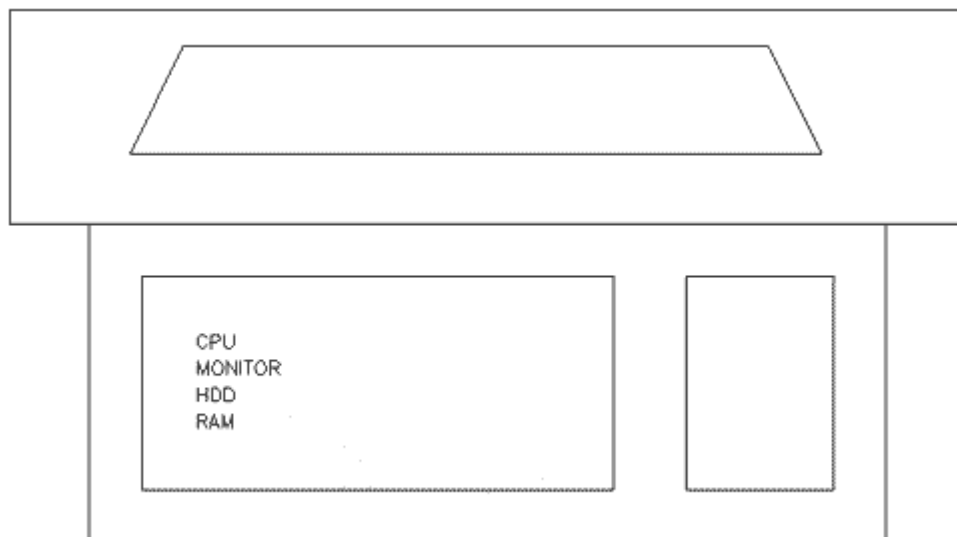
Once everything is entered, select the OK button.

When you are back on the drawing screen, pick a point near the middle of the computer block. When you are done, the dialog box comes back so press OK.

Add the following attributes the same way, except instead of picking a point, check off the **Align below previous attribute** checkbox.

TAG	PROMPT	VALUE
MONITOR	What is the MONITOR SIZE?	XX"
HDD	What capacity is the Hard Drive?	X.XXGB
RAM	How much RAM is installed?	XXXGB
STATION	What station is this	XXX

Once all the attributes are created you should have something like this:



Next you will create a block that includes your four attributes.