Setting a Dynamic List Variable's Allowed Value List from a Database
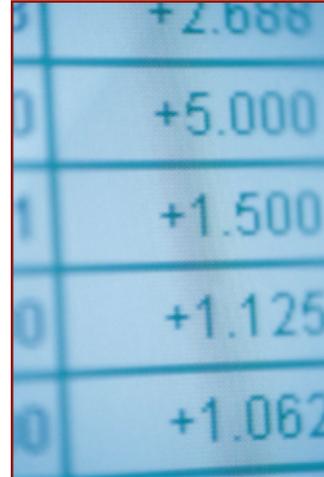
There are 2 types of multiple choice list variables in Corvid – Static and Dynamic List variables. In Static List variables the list of values is created by the developer and is the same for every user that runs the system. Dynamic List variables on the other hand have the list of values set at runtime. This allows the list of values presented to be limited ones that make sense in the context of other information or data that changes.

This allows asking questions with a list of values that all are possible, rather than presenting a more extensive static list and later telling the user that their selection was not acceptable due to other factors.

For example, a construction system might ask about various construction methods. Some methods might be invalid due to climate, location or building codes. If the user were first asked their location, a database call could find all the construction methods appropriate for that location. The results of the database call would be used to set the values for the dynamic list of construction methods that the user would then select among.

Setting the Values for a Dynamic List from a Database Call

Before you start this "How To", you should already know how to interface with a database from Corvid. If you are not familiar with Corvid database commands, see chapter on interfacing to databases in the Exsys Corvid manual.

1. Create a Dynamic List variable.

2. In the Variables window, make sure that the "Show Advanced Options" checkbox at the bottom of the window is checked. Using database commands to get the value list is one of the "Advanced Options" that is blocked when the "Show Advanced Options" is not selected.
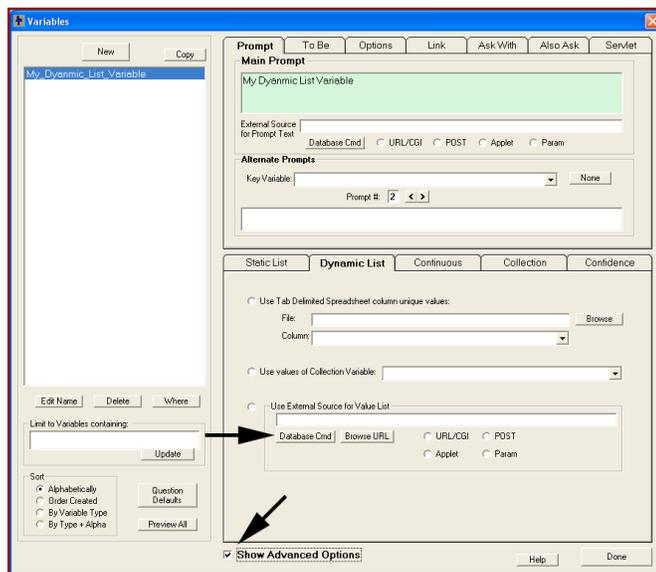
3. At the bottom of the window, under the "Use External Source for Value List" radio button, click the 'Database Cmd' button. This will bring up the database command builder.

4. If you have not already created the database .cdb file, do so now by clicking the "New" button.

    This will display a window to enter the Driver, Connection, and, if needed, User and Password strings. If you are using ODBC, make sure the DSN for your database is a 'System DSN'.
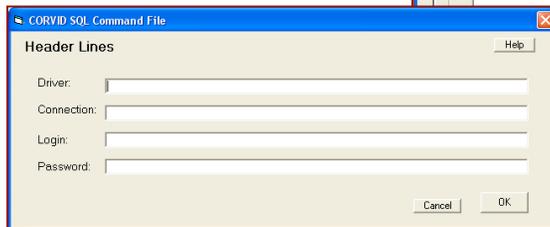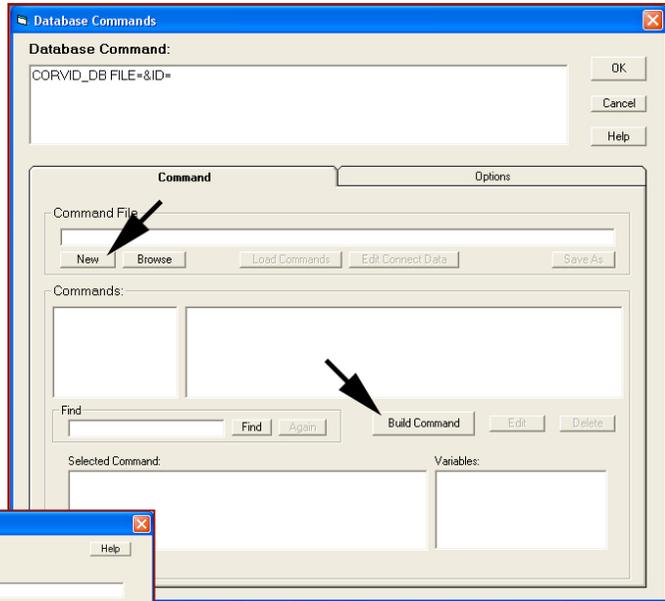
Click the "OK" button and select a place to save the new .cdb file. Normally this will be with the other files for your system.

5. Hit the 'Build Command' button and type the SQL command into the large edit box.

    This SQL command should be one that will return multiple items such as:

    Select ConstructionMethods from table where Country='[Country]'

Each item will be one of the possible values for the Dynamic List and will appear in the value list when this Dynamic List variable is asked.

Type a name into the "Identifier" edit box. The name can be anything you want to call the command (do not include tabs or carriage returns).

Click OK to close the window.
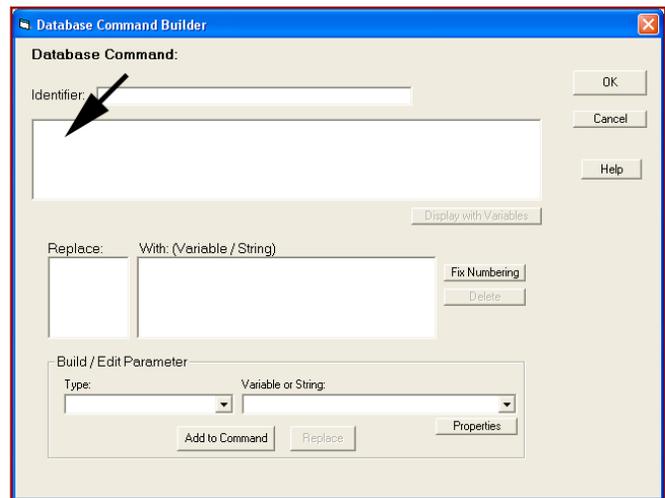
6. Back on the main "Database Commands" window, click the "Options" tab.

   In the "Options" section, select the "Use Tabs to separate items".

7. Run the KB. It can be run with either the Applet or Servlet Runtime, but as with all Corvid database commands, the database location should be on the server serving the applet or running the Servlet Runtime. It should get the value list from the database.