VisualAPL

Using XML Serialization in the Cielo Explorer Session

If a variable is created by the programmer in the Cielo Explorer session using the assignment operator (either the traditional APL “Ctrl+[“ (←) or the Visual Studio standard (=)), the data in that variable may be easily edited in XML format.

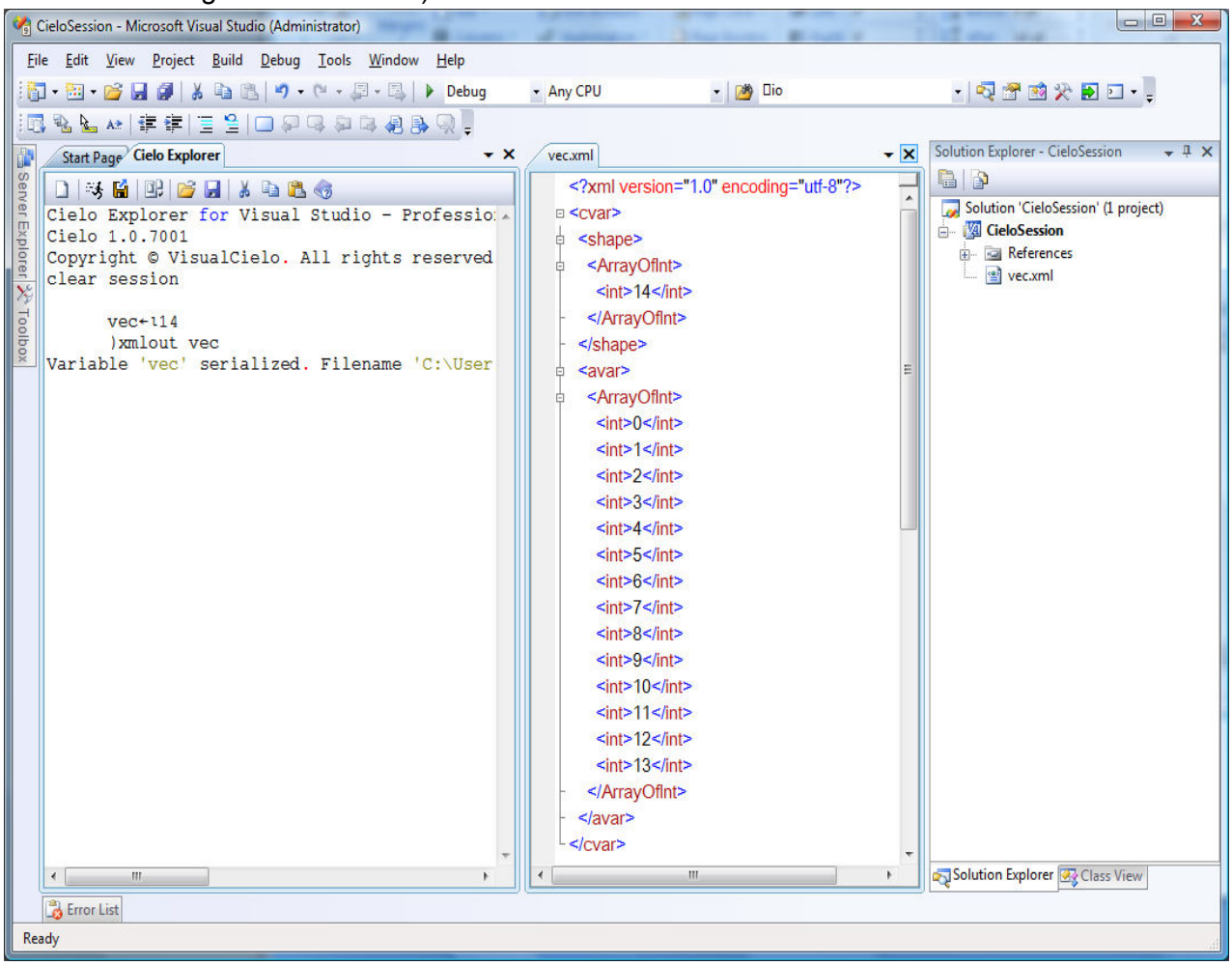
- Define the variable, e.g. vec←⍳14, in the Cielo Explorer session
- Create an XML serialization of the variable, e.g.)xmlout vec
- VisualAPL will present a File SaveAs dialog whereby the programmer can specify the location to save the file containing the XML serialization of the programmer selected variable.
- VisualAPL will update the Cielo Explorer session solution to contain the XML serialization file, e.g. vec.xml
- VisualAPL will open a window of the Visual Studio XML Editor containing the contents of the XML serialization file
- The programmer may now edit the XML serialization file using the Visual Studio XML Editor
- When the programmer types Ctrl+e+e in the editing window for the XML serialization file, the variable will be updated in the Cielo Explorer session.

It is possible to edit more than one variable at a time, e.g.)xmlout var1 var2 … varN

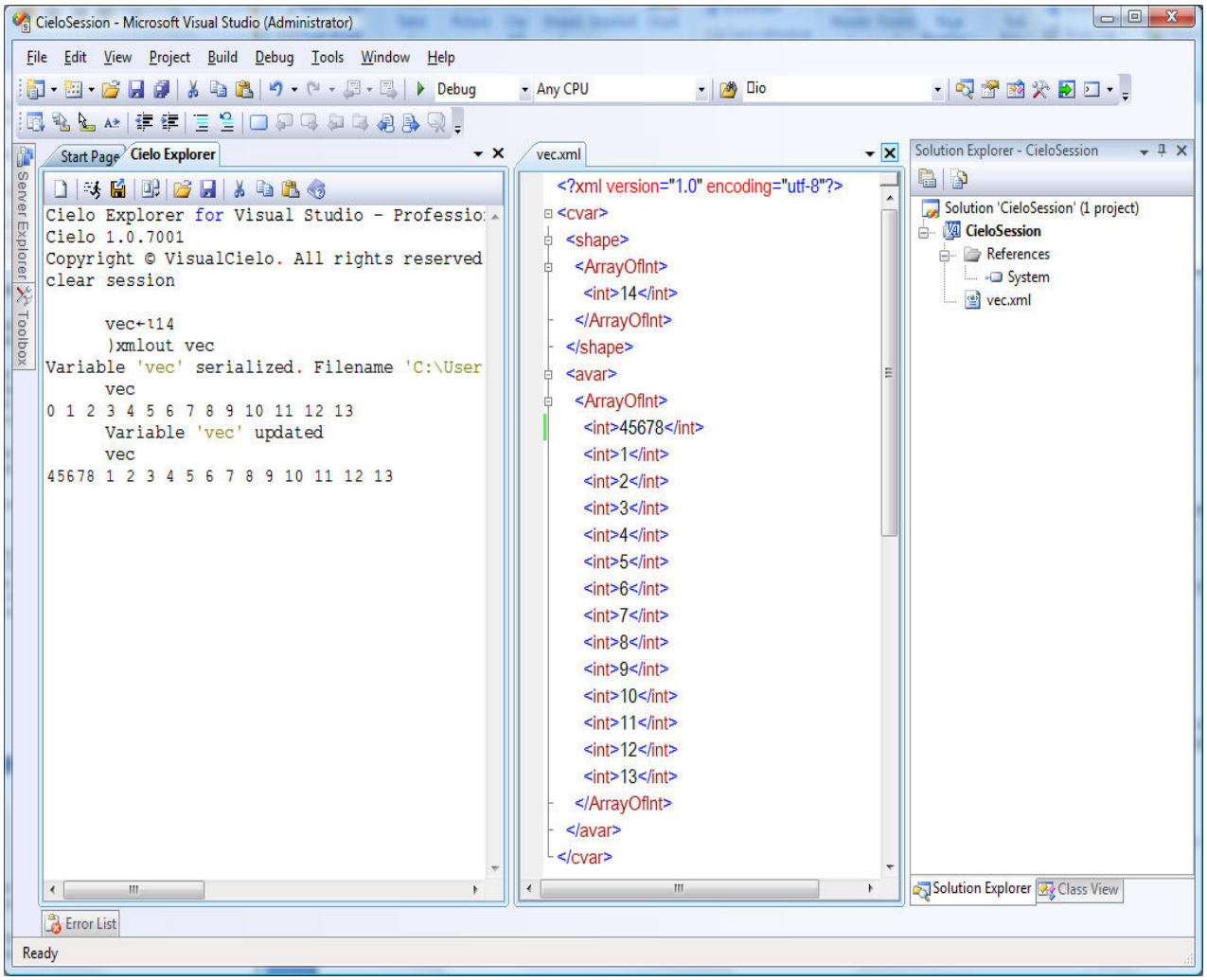
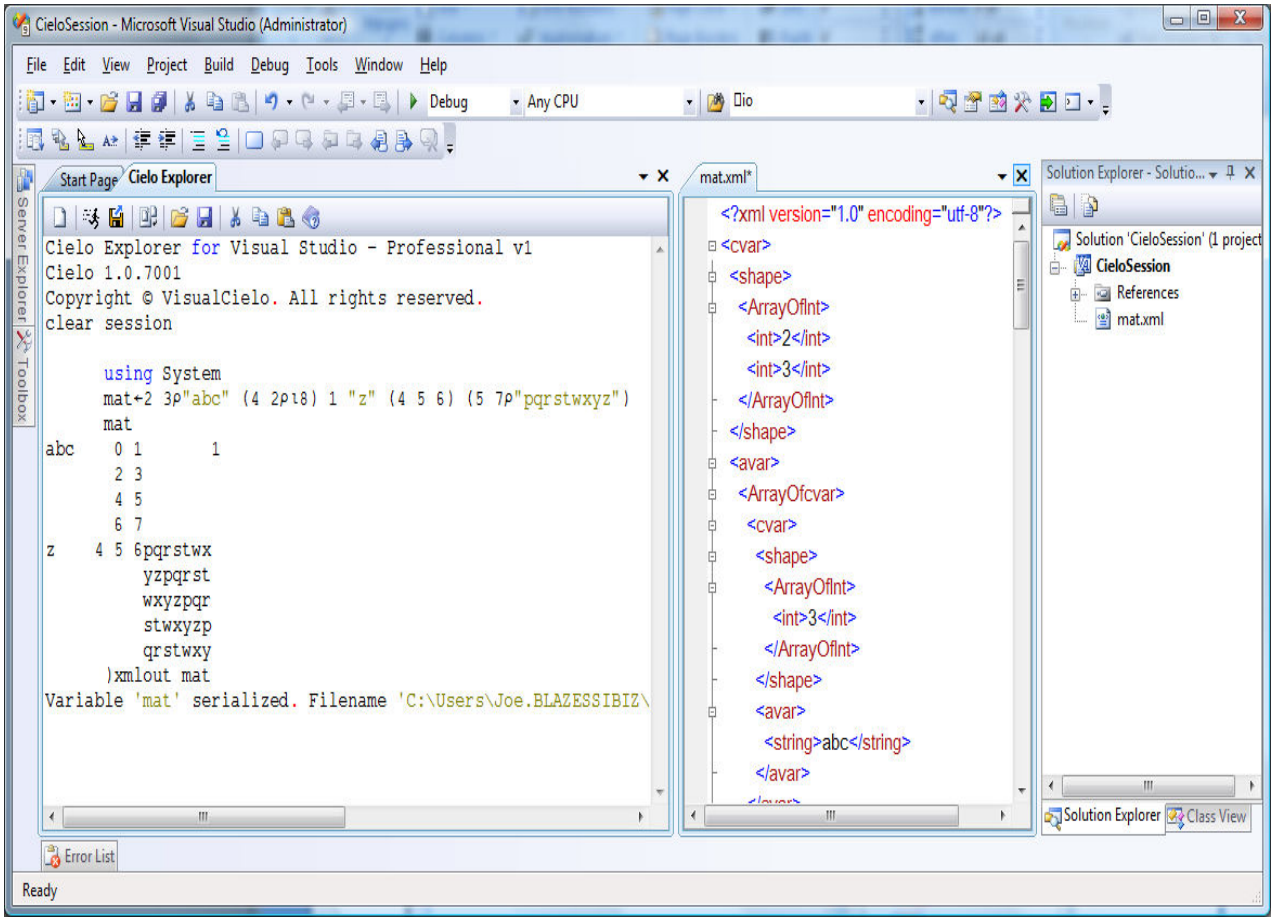
Each variable is placed in a separate Visual Studio XML Editor window by VisualAPL. The Visual Studio XML Editor has full editing functionality, so the programmer can copy and paste from one XML Editor window to another.

The VisualAPL XML serializer in the Cielo Explorer session will work with many .Net data types, i.e. those which have inherited the XML Serializable attribute, such as Hashtables, Dictionaries and other .Net data collections.

In this Cielo Explorer session, the programmer has created the variable “vec” and then XML serialized it using the VisualAPL “)xmlout” immediate-mode command:



The programmer then used the Visual Studio XML Editor window to edit the “vec” variable to modify the value of the first element from 0 to 45678. Then the programmer used the “Ctrl+e+e” command in the Visual Studio XML Editor window to update the “vec” variable in the Cielo Explorer session:



To learn more about the XML format created by the VisualAPL XML Serialization, the programmer should experiment creating VisualAPL variables of various types and then XML Serialize them using the VisualAPL “)xmlout” command. Here is an example of a more elaborate VisualAPL variable “mat” and an excerpt of its XML Serialization: