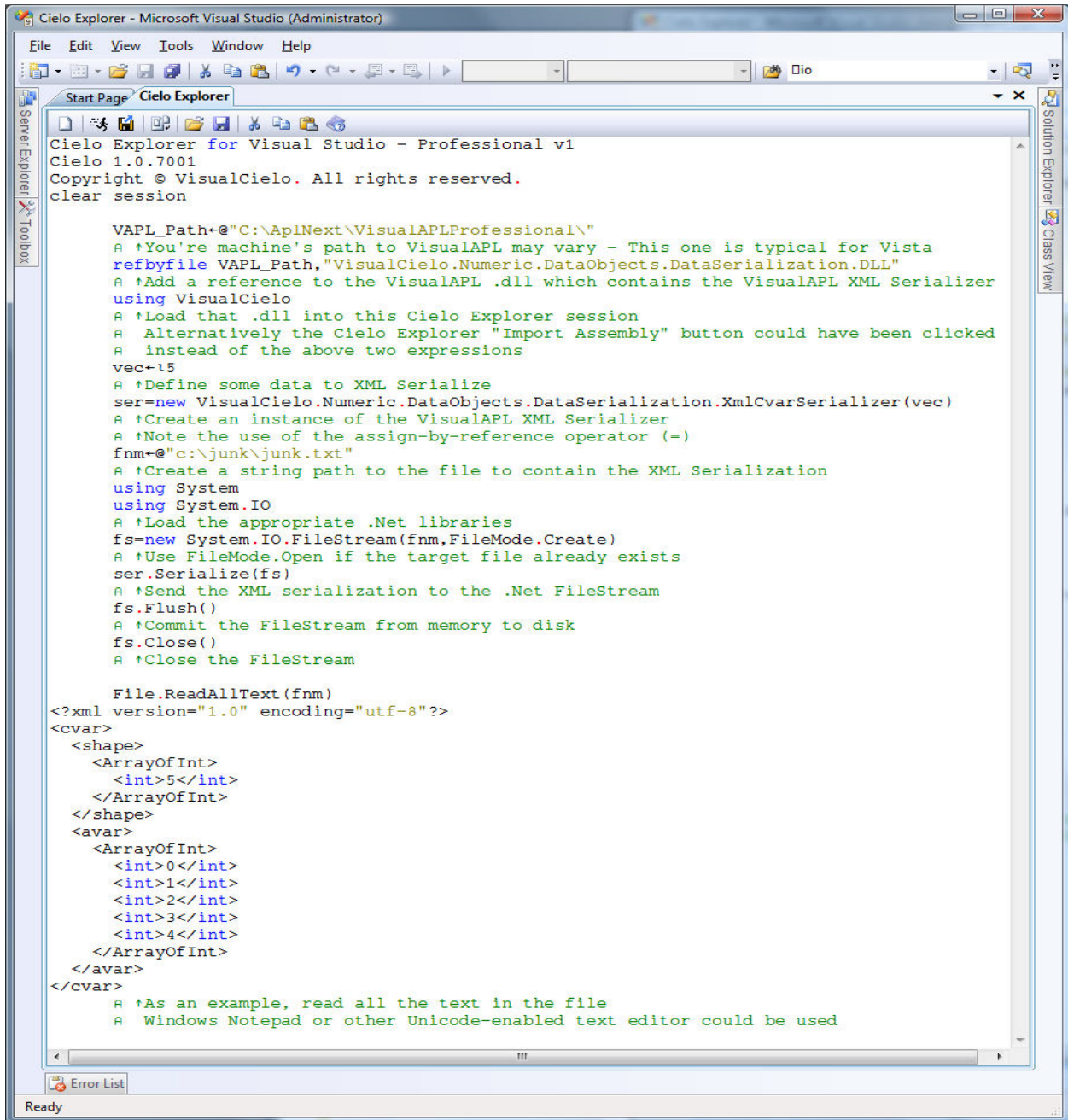


What's Behind the)xmlout Cielo Explorer Session Command?

The following Cielo Explorer session illustrates the basis of the)xmlout command. The first step is to XML Serialize the programmer-selected data which has been defined in the Cielo Explorer session:

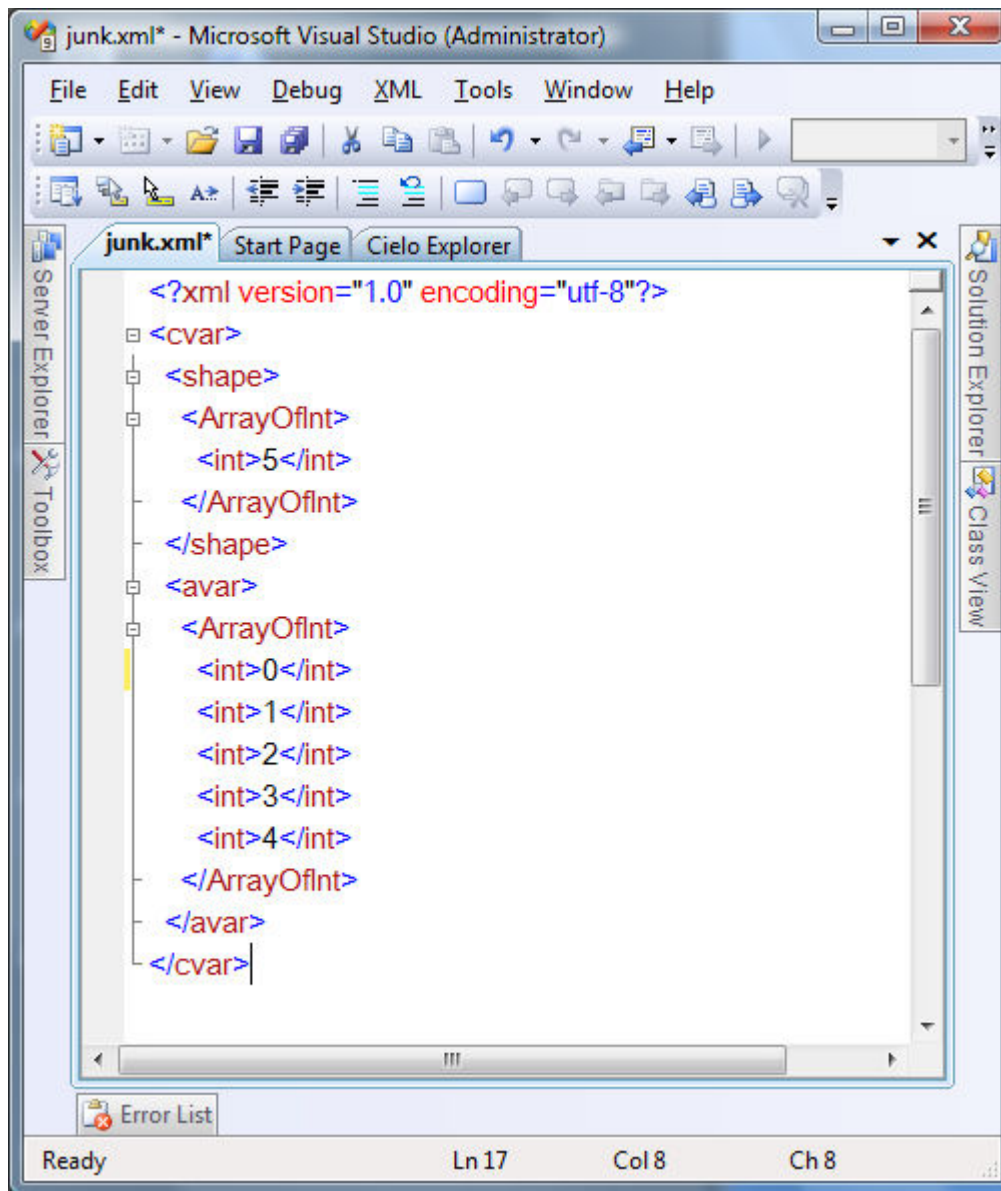


```
Cielo Explorer for Visual Studio - Professional v1
Cielo 1.0.7001
Copyright © VisualCielo. All rights reserved.
clear session

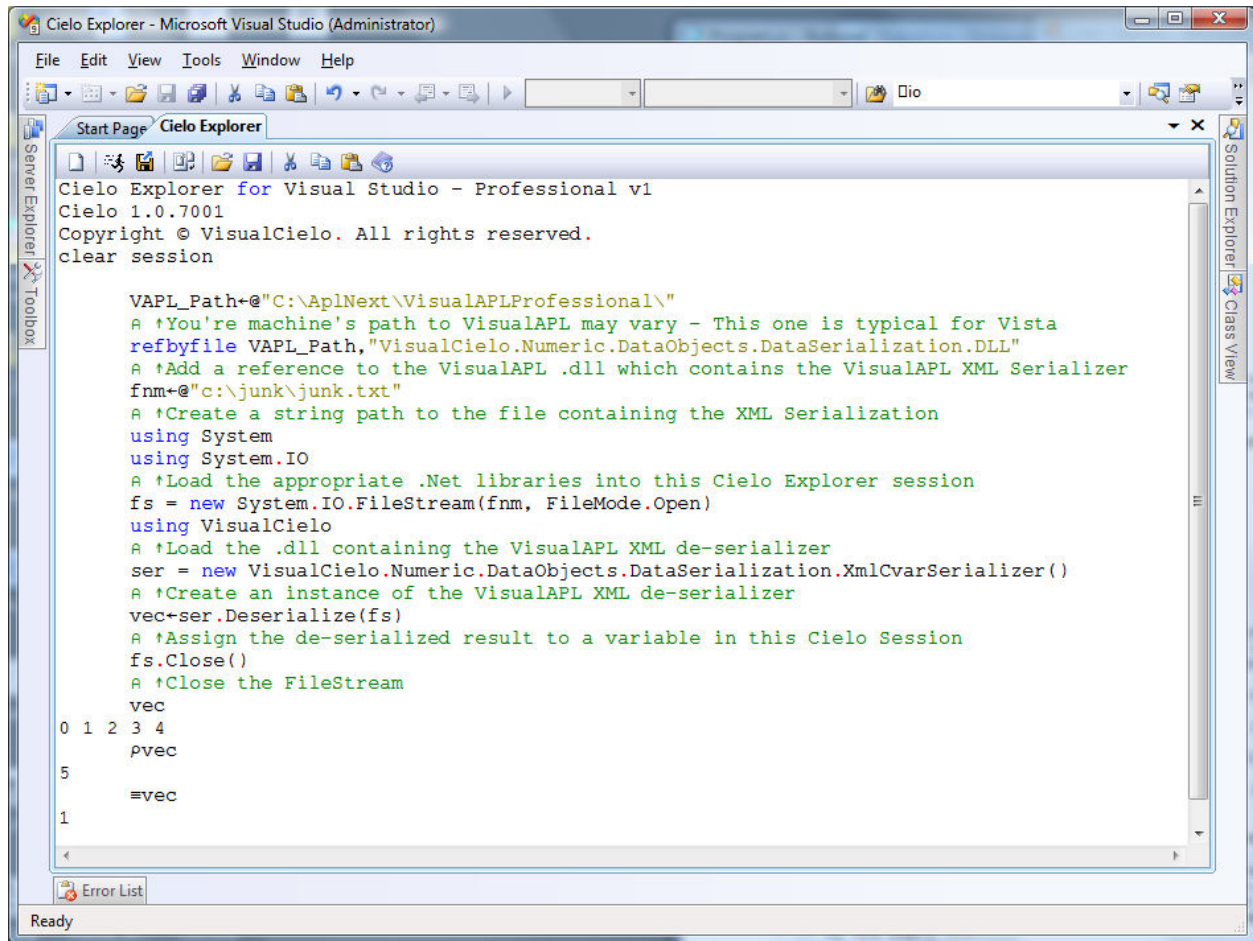
VAPL_Path+@"C:\AplNext\VisualAPLProfessional\"
A *You're machine's path to VisualAPL may vary - This one is typical for Vista
refbyfile VAPL_Path,"VisualCielo.Numeric.DataObjects.DataSerialization.DLL"
A *Add a reference to the VisualAPL .dll which contains the VisualAPL XML Serializer
using VisualCielo
A *Load that .dll into this Cielo Explorer session
A Alternatively the Cielo Explorer "Import Assembly" button could have been clicked
A instead of the above two expressions
vec+15
A *Define some data to XML Serialize
ser=new VisualCielo.Numeric.DataObjects.DataSerialization.XmlCvarSerializer(vec)
A *Create an instance of the VisualAPL XML Serializer
A *Note the use of the assign-by-reference operator (=)
fnm+@"c:\junk\junk.txt"
A *Create a string path to the file to contain the XML Serialization
using System
using System.IO
A *Load the appropriate .Net libraries
fs=new System.IO.FileStream(fnm,FileMode.Create)
A *Use FileMode.Open if the target file already exists
ser.Serialize(fs)
A *Send the XML serialization to the .Net FileStream
fs.Flush()
A *Commit the FileStream from memory to disk
fs.Close()
A *Close the FileStream

File.ReadAllText(fnm)
<?xml version="1.0" encoding="utf-8"?>
<cvar>
  <shape>
    <ArrayOfInt>
      <int>5</int>
    </ArrayOfInt>
  </shape>
  <avar>
    <ArrayOfInt>
      <int>0</int>
      <int>1</int>
      <int>2</int>
      <int>3</int>
      <int>4</int>
    </ArrayOfInt>
  </avar>
</cvar>
A *As an example, read all the text in the file
A Windows Notepad or other Unicode-enabled text editor could be used
```

After XML serialization is complete, the programmer may edit the file containing the XML serialization using a Unicode-aware text editor such as Windows Notepad, or an XML editor such as the Visual Studio File > Open > File menu item (illustrated below):



After editing of the file containing the XML serialization is complete, the last step is to de-serialize the data and assign it back to a variable in the Cielo Explorer session:



```
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clear session

VAPL_Path=@"C:\AplNext\VisualAPLProfessional\"
A †You're machine's path to VisualAPL may vary - This one is typical for Vista
refbyfile VAPL_Path,"VisualCielo.Numeric.DataObjects.DataSerialization.DLL"
A †Add a reference to the VisualAPL .dll which contains the VisualAPL XML Serializer
fnm=@"c:\junk\junk.txt"
A †Create a string path to the file containing the XML Serialization
using System
using System.IO
A †Load the appropriate .Net libraries into this Cielo Explorer session
fs = new System.IO.FileStream(fnm, FileMode.Open)
using VisualCielo
A †Load the .dll containing the VisualAPL XML de-serializer
ser = new VisualCielo.Numeric.DataObjects.DataSerialization.XmlCvarSerializer()
A †Create an instance of the VisualAPL XML de-serializer
vec=ser.Deserialize(fs)
A †Assign the de-serialized result to a variable in this Cielo Session
fs.Close()
A †Close the FileStream
vec
0 1 2 3 4
pvec
5
≡vec
1
```

Now that the behind-the-scenes basis for the)xmlout Cielo Explorer command is explained, this information could be used to create a VisualAPL class library containing XMLSerialize and XMLDeSerialize methods. This class library could then be used in any VisualAPL (or C# or VB.Net) project to incorporate XML serialization technology.