Subject: Re: APGAR cipher to C#/VB.Net Posted by CarrierII on Mon, 26 Jan 2009 15:30:22 GMT View Forum Message <> Reply to Message

I think this will work in VB:

```
Private Function apgar(ByVal pass As String) As String
    If pass.Length = 8 Then
       Dim v(7)
       Dim j As Integer
       For i = 0 To 7
         v(j) = pass.Substring(j, 1)
       Next
       Dim r As String = "" ' my @r;
       Dim U As String =
"abcdefghijklmnopgrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789./"
       Dim i As Integer
       For i = 0 To 7
         Dim t1 as integer
         If i = 0 Then
          t1 = 0
         Else
          t1 = Asc(v(8 - i))
         End If
         Dim a As String = v(i)
         Dim temp As Long
         If (Asc(a) And 1) Then
            temp = (Asc(a) << 1) And t1
         Else
            temp = Asc(a) Xor t1
         End If
         Dim index As Integer = (temp And 63)
         r &= U.Substring(index, 1) 'push @r, substr($U,$index,1)
       Next
       Return r
    End If
  End Function
```

First you missed the ./ off the end of the string U. It needs to be 64 characters long.

Second, the "7 - i" should have read "8 - i" like in the original Perl.

Third, the "8-\$i" in the original Perl points to the null terminator when \$i is zero (for a string s that

is 8 characters long, s[8] returns the null terminator). So Asc(8-i) when i = 0 needs to return 0, as in my revised version.

Fourth, a small optimisation: since we only ever get to this line

temp = $Asc(a) \ll (Asc(a) \text{ And } 1) \text{ And } Asc(v(7 - i))$

if Asc(a) And 1 = 1, I replaced the former by the latter.

I tested it on some of the strings in your table and it looks to be working.

Hope that helps

CarrierII's brother (ahydra)