Subject: Re: byte/unicode mismatch Posted by Allan Whiteford on Fri, 21 Nov 2008 17:51:13 GMT View Forum Message <> Reply to Message

Reimar Bauer wrote:

> That is all orthogonal.

>

> How can I decode and how can I encode?

>

- > cheers
- > Reimar

>

Reimar,

The question (and answer) isn't all that straightforward, byte values over 127 aren't well defined without an encoding system or a codepage.

However, the answer you're probably looking for is:

```
b=byte('i¿½'); assumption 2 print,b[1]+(b[0] eq 195)*64; assumption 1
```

which is assuming:

1) you want byte values from (two byte) UTF-8 to ISO-8859-1

and

2) that the u-umlaut character has entered the intepreter from a UTF-8 environment.

Please don't just cut and paste the above assuming all will be well.

Thanks,

Allan

```
Allan Whiteford schrieb:
```

>> Heinz Stege wrote:

>>> On Thu, 20 Nov 2008 09:23:52 -0800 (PST), mgalloy@gmail.com wrote:

>>>

>>>

>>>

>>>> On Nov 20, 3:19 am, Reimar Bauer <R.Ba...@fz-juelich.de> wrote:

>>>>

```
>>>>
>>>> >Hi
>>>> >
>>>> >the ascii table is gone.
>>>> >
>>>> >IDL> print,byte('�')
>>>> >195 188
>>>> >
>>
>>> The string entered in the workbench command line is encoded in UTF8.
>>
>> Picking up on this point (and the one made by Mike) - it's mostly to do
>> with your editor. The workbench seems to be unicode aware so it really
>> is passing a two byte representation of i, ½ into the interpreter.
>>
>> If I use the simple command line interface running through an xterm
>> (X.Org 6.8.99.903) which I guess isn't unicode aware then I get 252 with
>> the same version of IDL:
>>
>> IDL> print,!version
>> { x86 linux unix linux 7.0 Oct 25 2007
                                                   64}
>> IDL> print,byte('�')
>> 252
>>
>> but with the workbench:
>>
>> IDL> print,!version
>> { x86 linux unix linux 7.0 Oct 25 2007
                                            32
                                                   64}
>> IDL> print,byte('�')
>> 195 188
>> I would expect that if you read the character from a file (either as
>> data or in a .pro file) it depends on the program which wrote the file
>> and whether your editor was unicode-aware.
>>
>> In saying all this, I don't understand unicode properly (does anyone?!?)
>> - I'm just reporting on the fact that it isn't just the IDL interpreter
>> which is the issue, it's to do with the editor which sends the character
>> to the interpreter.
>>
>> This has already been said - I've just rephrased it using more
>> (unnecessary?) words. I hope it's helpful.
>>
>> Thanks,
>>
>> Allan
```