
Subject: Value: String to int - problem or feature?
Posted by [steffen](#) on Wed, 23 May 2012 17:59:28 GMT
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Hi,

Maybe I have a wrong understanding of how Value should work, but I keep getting Asserts on simple data conversions.

I have a `VectorMap<String, Value>` holding configuration data read from a section in an .ini file. When using numeric values in this ini file I get the asserts.

Could anyone please explain to me why I cant do the following:

```
Value v = "122";  
int i = v;
```

Subject: Re: Value: String to int - problem or feature?
Posted by [dolik.rce](#) on Wed, 23 May 2012 18:42:21 GMT
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Hi Steffen,

Value is not meant for converting types. It is just container that can store various types. In most cases, you always get out the same type you put in. If there implicit conversion is possible, it will be done the same way as you can do e.g. `<double> = <int>`, but for incompatible types such as `int` and `String`, error occurs.

What you need to do is to call `StrToInt` in between:

```
Value v = "122";  
int i = StrToInt(v);
```


If you are not sure what is in your `Value` variable, you can test it before the conversion using `Is<>()` method, e.g:

```
Value v = "122";  
if (v.Is<int>()) { ... }  
else if (v.Is<String>()) { ... };
```


Also, as a special case, you can convert any type of `Value` into `String` using `v.ToString()`.

Did that answered your question?

Best regards,
Honza

Subject: Re: Value: String to int - problem or feature?
Posted by [steffen](#) on Wed, 23 May 2012 19:13:32 GMT
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Thank you for the explanation.

I always thought Value was something like the Delphi Variant type.

I imagined it would use something like CParser::IsNumber if one was trying to convert a string to int.

The manual conversion is OK, I was just annoyed by having to manually convert it every time I looked something up in my configuration map.

I will add some overloaded array operators to my class instead.

My usage will be something like:

```
ClientSocket(socket, gConfig["Host"], gConfig["Port"])
```

Subject: Re: Value: String to int - problem or feature?

Posted by [mirek](#) on Thu, 24 May 2012 06:56:49 GMT

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dolik.rce wrote on Wed, 23 May 2012 14:42Value v = "122";

```
if (v.Is<int>()) { ... }
```

```
else if (v.Is<String>()) { ... };
```

Also note the existence of IsNumber (returns true for int, double, int64 and bool) and IsString (returns true for String and WString), Value is convertible to any of these 'compatible' types.

Subject: Re: Value: String to int - problem or feature?

Posted by [steffen](#) on Fri, 25 May 2012 05:29:17 GMT

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OK, I think I understand the idea with the Value type now.

I ended up making an IniValue derived from String, with operators for int and bool. Now my config object can be used as I want it to.

Thank you both for the explanations.