

## CoCoALib - Feature #426

### ConvertTo with optional arg to give more helpful error message

27 Jan 2014 16:11 - John Abbott

<b>Status:</b>	Closed	<b>Start date:</b>	27 Jan 2014
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	John Abbott	<b>% Done:</b>	100%
<b>Category:</b>	Tidying	<b>Estimated time:</b>	2.50 hours
<b>Target version:</b>	CoCoALib-0.99532	<b>Spent time:</b>	2.00 hours
<b>Description</b>			
The <b>ConvertTo</b> fn is used extensively in the interface between the C5 interpreter and the CoCoALin fns which actually do the work. To improve readability of this code Anna proposes adding a variant of <b>ConvertTo</b> which accepts a 2nd arg, being a CoCoA::ErrorInfo object containing the error which should be thrown if conversion fails (thus allowing more meaningful messages to appear in C5).			
<b>Related issues:</b>			
Related to CoCoALib - Feature #233: AsINT and AsRAT -- ConvertTo<BigInt> and...		<b>Closed</b>	<b>25 Sep 2012</b>
Related to CoCoA-5 - Feature #317: BuiltInFunctions: evalArgAsLong		<b>Closed</b>	<b>20 Feb 2013</b>
Related to CoCoALib - Feature #61: Conversion functions -- documentation		<b>Closed</b>	<b>13 Dec 2011</b>

### History

#### #1 - 28 Feb 2014 16:30 - Anna Maria Bigatti

- Status changed from New to Feedback

- Assignee set to John Abbott

- Target version set to CoCoALib-0.9953

- % Done changed from 0 to 90

Jon implemented this and forgot to say it?

anyway it is very nice:

code was

```
long n;
if (!IsConvertible(n, NumIndets)) CoCoA_ERROR(ERR::ArgTooBig, "RingQQt");
return RingQQt(n);
```

now is

```
const ErrorInfo ErrMesg(ERR::ArgTooBig, "RingQQt");
return RingQQt(ConvertTo<long>(NumIndets, ErrMesg));
```

it can be done in a single line, but this is more readable.

Of course this means that we are always creating the error message (instead of only when the error occurs), but I find the code much more readable (therefore maintainable).

**#2 - 28 Feb 2014 17:10 - Anna Maria Bigatti**

added example and documentation (cvs-ed)

**#3 - 21 Mar 2014 14:29 - Anna Maria Bigatti**

- *Target version changed from CoCoALib-0.9953 to CoCoALib-0.99532*

**#4 - 01 Apr 2014 19:33 - Anna Maria Bigatti**

- *Status changed from Feedback to Closed*

- *% Done changed from 90 to 100*

We are all happy about this. Tested and documented. Closing.

**#5 - 03 Apr 2014 11:54 - Anna Maria Bigatti**

- *Estimated time set to 2.50 h*