
Subject: the type parser

Posted by [R.Bauer](#) on Sun, 15 May 2005 09:27:48 GMT

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Dear all

I am searching for the function which tells idl what kind of type a variable gets by it's assignment. e.g.

```
IDL> a=1
```

```
IDL> help,a
```

```
A          INT      =      1
```

```
IDL> a=50000
```

```
IDL> help,a
```

```
A          LONG      =      50000
```

```
IDL> a=1.
```

```
IDL> help,a
```

```
A          FLOAT      =      1.00000
```

Any ideas otherwise I will write such a parser. To duplicate one is always bad.

cheers

Reimar

--

Forschungszentrum Juelich

email: R.Bauer@fz-juelich.de

<http://www.fz-juelich.de/icg/icg-i/>

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a IDL library at Forschungszentrum Juelich

http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro.html

Subject: Re: the type parser

Posted by [marc schellens\[1\]](#) on Wed, 15 Jun 2005 18:53:27 GMT

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Addendum:

PLOT implicitly converts everything to DOUBLE.

Thats why strings work here fine.

Subject: Re: the type parser

Posted by [marc schellens\[1\]](#) on Wed, 15 Jun 2005 19:01:25 GMT

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Thats a different issue:

In an *expression*, IDL always converts the lower to the higher type in this order:

STRING<BYTE<(INT|UINT)<(LONG|ULONG)<(LONG64|ULONG64)<FLOAT
<DOUBLE<COMPLEX<COMPLEXDBL

before evaluation.

Before we were taking about reading a string and determining the type (for storing it appropriately).

Note that for proper conversion one of the types has to have the proper type beforehand:

```
IDL> print,'1.23' gt '2e-10'
```

```
0
```

```
IDL> print,1.23 gt 2e-10
```

```
1
```

but:

```
IDL> print,1 gt '2e-10'
```

```
0
```

Cheers,
marc

Subject: Re: the type parser

Posted by [R.Bauer](#) on Thu, 16 Jun 2005 13:04:22 GMT

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m_schellens@hotmail.com wrote:

> Thats a different issue:

> In an *expression*, IDL always converts the lower to the higher type in

> this order:

> STRING<BYTE<(INT|UINT)<(LONG|ULONG)<(LONG64|ULONG64)<FLOAT
> <DOUBLE<COMPLEX<COMPLEXDBL

> before evaluation.

> Before we were taking about reading a string and determining the type

> (for storing it appropriately).

> Note that for proper conversion one of the types has to have the proper

> type beforehand:

```
> IDL> print,'1.23' gt '2e-10'
```

```
> 0
```

```
> IDL> print,1.23 gt 2e-10
```

```
> 1
```

> but:

```
> IDL> print,1 gt '2e-10'
```

```
> 0
```

```
>
```

> Cheers,
> marc
>

You are right,

I missed this test.

cheers

Reimar

--

Reimar Bauer

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a IDL library at ForschungsZentrum Juelich

http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro.html

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