
Subject: Application Development
Posted by [Russell\[1\]](#) on Mon, 26 Oct 2015 18:25:15 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello everyone

I'm working on a large application with ~100 separate files/routines. I want to know the names of all the files that are currently used (since some of them have become deprecated) so I can distribute the source code properly. I know about `resolve_all`, but the catch is many of these potential files are objects, so of course if I knew the list of classes, i could happily include it, but alas that's the problem. Yes, I built the class file `*__define.pro` in the 'proper' way (or at least what I understand to be proper: all the methods are contained therein, the order is correct, everything has an `::init` and `::cleanup`, etc). So is there a way to get a list of all the routines, including objects, for this project?

All the best,
Russell

Subject: Re: Application Development
Posted by [Heinz Stege](#) on Tue, 27 Oct 2015 19:54:32 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Mon, 26 Oct 2015 11:25:15 -0700 (PDT), rryan.asu@gmail.com wrote:

> So is there a way to get a list of all the routines, including objects, for this project?

Hello Russel,

24 hours and no answer. So I will tell you my solution(s), which may be a little bit exotic. [*]

The simple way is to write an extra line of code for each object class. If FOO is the name of the object class, write
 if 0b then foo__define
preferably in every routine creating objects of the class FOO. This statement may look a little bit strange, because this line is never executed. (0b of cause is always FALSE.) However the IDL routine `ROUTINE_INFO,/UNRESOLVED` responds to this line, and therefore `RESOLVE_ALL` compiles the file `foo__define.pro`. As you said, you have all methods of an object class in this file.

The second way uses the same trick, but works with an extra file `foo.pro`:

```
function foo,par1,par2,...,_ref_extra=extra  
return,obj_new('foo',par1,par2,...,_strict_extra=extra)
```

```
foo__define
end
```

Again the line `foo__define` is never executed, however `ROUTINE_INFO,/UNRESOLVED` finds this procedure, when you write

```
obj=foo(par1,par2,...,key1,key2,...)
```

instead of

```
obj=OBJ_NEW("foo",...)
```

at object creation. (This is important!) Note that this way does not interfere with the "simplified object creation", introduced in IDL 8.0. Even better, it makes it possible for older IDL versions.

I think, the second way would be beneficially, if you had separated files for your class methods, e.g. one file for every method. You would need to write the list of all the files at one place only.

I hope, the above is clearly understandable.

Cheers, Heinz

[*] The best of cause would be, the IDL developers gave `ROUTINE_INFO,/UNRESOLVED` a new keyword to include the methods in the list of procedures/functions. However I don't know, if this is possible. ;-)

Subject: Re: Application Development
Posted by [Russell\[1\]](#) on Wed, 28 Oct 2015 16:27:51 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Monday, October 26, 2015 at 2:25:19 PM UTC-4, rrya...@gmail.com wrote:

> Hello everyone

>

> I'm working on a large application with ~100 separate files/routines. I want to know the names of all the files that are currently used (since some of them have become deprecated) so I can distribute the source code properly. I know about `resolve_all`, but the catch is many of these potential files are objects, so of course if I knew the list of classes, i could happily include it, but alas that's the problem. Yes, I built the class file `*__define.pro` in the 'proper' way (or at least what I understand to be proper: all the methods are contained therein, the order is correct, everything has an `::init` and `::cleanup`, etc). So is there a way to get a list of all the routines, including objects, for this project?

>

> All the best,

> Russell

Heinz,

That's thinking outside the box and really tricking the compiler. I've got to do some functional work today, but I'll have a look at that tonight! Thanks for the tips!

-Russell

Subject: Re: Application Development

Posted by [Russell\[1\]](#) on Wed, 28 Oct 2015 19:32:22 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Heinz,

I'm working on this, but this still has the somewhat clunky requirement that I know a priori which objects and structure definitions are used a priori. I guess I could grep on "obj_new" at the command line, and then know which files use objects, but I think it'll be tougher to know which structures were used. But this is a good idea of a place to start.

thanks again,
Russell

On Tuesday, October 27, 2015 at 3:54:23 PM UTC-4, Heinz Stege wrote:

> On Mon, 26 Oct 2015 11:25:15 -0700 (PDT), @gmail.com wrote:

>

>> So is there a way to get a list of all the routines, including objects, for this project?

>

>

> Hello Russel,

>

> 24 hours and no answer. So I will tell you my solution(s), which may
> be a little bit exotic. [*]

>

> The simple way is to write an extra line of code for each object

> class. If FOO is the name of the object class, write

> if 0b then foo__define

> preferably in every routine creating objects of the class FOO. This

> statement may look a little bit strange, because this line is never

> executed. (0b of cause is always FALSE.) However the IDL routine

> ROUTINE_INFO,/UNRESOLVED responds to this line, and therefore

> RESOLVE_ALL compiles the file foo__define.pro. As you said, you have

> all methods of an object class in this file.

>

> The second way uses the same trick, but works with an extra file

> foo.pro:

>

> function foo,par1,par2,...,_ref_extra=extra

> return,obj_new('foo',par1,par2,...,_strict_extra=extra)
> foo__define
> end
>
> Again the line foo__define is never executed, however
> ROUTINE_INFO,/UNRESOLVED finds this procedure, when you write
> obj=foo(par1,par2,...,key1,key2,...)
> instead of
> obj=OBJ_NEW("foo",...)
> at object creation. (This is important!) Note that this way does not
> interfere with the "simplified object creation", introduced in IDL
> 8.0. Even better, it makes it possible for older IDL versions.
>
> I think, the second way would be beneficially, if you had separated
> files for your class methods, e.g. one file for every method. You
> would need to write the list of all the files at one place only.
>
> I hope, the above is clearly understandable.
>
> Cheers, Heinz
>
>
> [*] The best of cause would be, the IDL developers gave
> ROUTINE_INFO,/UNRESOLVED a new keyword to include the methods in the
> list of procedures/functions. However I don't know, if this is
> possible. ;-)
