
Subject: Re: Code Metrics tools for IDL

Posted by [David Fanning](#) on Thu, 28 Aug 2003 16:12:26 GMT

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

John writes:

> Does anyone know of any tools to calculate quality metrics for IDL
> code. For example, does anyone have a tool that would calculate
> cyclomatic complexity metrics?

I think because IDL is a dynamically typed language
that the cyclomatic complexity metrics always
approach infinity. This is especially true if you
have tried to incorporate any of JD's tricks into
your code. :-)

Cheers,

David

--

David W. Fanning, Ph.D.

Fanning Software Consulting, Inc.

Phone: 970-221-0438, E-mail: david@dfanning.com

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Code Metrics tools for IDL

Posted by [James Kuyper](#) on Thu, 28 Aug 2003 16:18:33 GMT

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

David Fanning wrote:

>

> John writes:

>

>> Does anyone know of any tools to calculate quality metrics for IDL
>> code. For example, does anyone have a tool that would calculate
>> cyclomatic complexity metrics?

>

> I think because IDL is a dynamically typed language
> that the cyclomatic complexity metrics always
> approach infinity. This is especially true if you
> have tried to incorporate any of JD's tricks into
> your code. :-)

I'm a little confused by that joke. What does dynamic typing have to do
with the number of control paths in a program?

Subject: Re: Code Metrics tools for IDL
Posted by [David Fanning](#) on Thu, 28 Aug 2003 16:27:08 GMT
[View Forum Message](#) <> [Reply to Message](#)

James Kuyper writes:

> I'm a little confused by that joke. What does dynamic typing have to do
> with the number of control paths in a program?

Oh, oh. I guess I should have googled for "cyclomatic complexity metrics" before I made a fool of myself. Obviously they aren't what I *thought* they were. :^)

Cheers,

David

--

David W. Fanning, Ph.D.
Fanning Software Consulting, Inc.
Phone: 970-221-0438, E-mail: david@dfanning.com
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Code Metrics tools for IDL
Posted by [Liam E. Gumley](#) on Thu, 28 Aug 2003 17:05:56 GMT
[View Forum Message](#) <> [Reply to Message](#)

"John" <jgreive@starband.net> wrote in message
news:c53c914e.0308280754.25f84ccb@posting.google.com...

> Hello,
> Does anyone know of any tools to calculate quality metrics for IDL
> code. For example, does anyone have a tool that would calculate
> cyclomatic complexity metrics?

See "Code Complete" by Steve McConnell, pp 394-396. To paraphrase:

The McCabe complexity for a routine may be estimated as follows:

- (1) Start with 1 for the straight path through the routine
- (2) Add 1 for each of the following control statements: IF, WHILE, REPEAT, FOR, AND, OR
- (3) Add 1 for each case in a CASE statement

Guidelines: if the complexity is

0-5 The routine is probably fine
6-10 Think about ways to simplify the routine
10+ Break part(s) of the routine into smaller routines which can be called from within the parent routine

No doubt you could write a shell script to parse an IDL source file and compute the total complexity.

Cheers,
Liam.
Practical IDL Programming
<http://www.gumley.com/>
