
Subject: Re: IDL on the NET(ION) Anybody used it?

Posted by [wmc](#) on Thu, 03 Feb 2000 08:00:00 GMT

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Peter Brooker <ra5589@email.sps.mot.com> wrote:

> Does anybody have experience with this? I want to create a fairly simple
> modeling program that could be accessed through the net. The program
> will display a multiline graph that will change as the user changes
> inputs.

I haven't used it, but, I have written a sort-of el cheapo replacement. My version is primitive and insecure but it works, a bit. To use it publicly, you'd definitely have to fix the security problems. But in case its useful, here it is:

-W.

--- the perl script ---

```
#!/users/icd/wmc/bin/perl
```

```
# This script runs as a server. It listens to port $PORT for IDL
# commands encoded in URLs and responds to them, drawing pictures
# to the Z-buffer and returning the image as image/gif.
# If the plot fails you get an unhelpful error message (but hey, you do at least get one).
```

```
# Security:
```

```
# The script runs as me. It will reject commands with "spawn" in.
```

```
# This should be beefed up a bit
```

```
# State:
```

```
# The idl process retains state - you can use variables defined in one call for the next.
```

```
# But... you may inherit things you don't want (!p.multi, for example)
```

```
# Interface:
```

```
# See http://www.nbs.ac.uk/public/icd/wmc/perl/idl-server.html
```

```
# Bugs:
```

```
# Needs a reset mechanism for state
```

```
# Fixes:
```

```
# 2000/02/02 - prefix commands with "retall" to catch some errors
```

```
use IO::Socket;
```

```
use Time::HiRes qw(sleep);
```

```
$|=1;
```

```
$server = IO::Socket::INET->new(LocalPort => 1234, Type => SOCK_STREAM, Reuse => 1,
Listen => 10) or
    die "Can't open port";
```

```
open IDL, "| idl" or die "Failed to open IDL";
```

```
IDL->autoflush;
```

```

print IDL " set_plot,'Z'\ndevice,set_res=600*[1,1.25]\npolyfill,[0,1,1,0
,0],[0,0,1,1,0],col=!p.background,/norm\nxyouts,0.5,0.5,/nor m,'sorry your plot failed\n";

$Nclient=0;
while ($client = $server->accept()) {
    $data=<$client>;
    ($requested)=($data=~^?([ ]*?) /);
    $requested =~ s/\+ / /g;
    $requested =~ s/%(\w\w)/sprintf("%c", hex($1))/ge;
    #print "<req: $requested>\n";
    ($cmd)=($requested=~ /idl-cmd\=(.*)/ms);
    $cmd =~ s/\n\n/g;
    #print "<cmd: $cmd>\n";

    if ($cmd =~ /spawn/) {

        print $client "HTTP/1.0 404\nContent-type: text/html\n\nBad command."

    } elsif ($cmd) {

        `echo 1 > idl-server-lock`;
        $idl_cmd="retail\n$cmd \ngettwogifs,/nosm,out='/tmp/wmc/wmc-idl-junk'\nspawn,'rm
idl-server-lock\n";
        print "Will send to IDL:\n".$idl_cmd;
        print IDL $idl_cmd;
        while (-r "idl-server-lock") {
            sleep(0.5)
        };
        open IDLIN,"/tmp/wmc/wmc-idl-junk.gif";
        $image=join("",<IDLIN>);
        print $client "HTTP/1.0 200 Document follows\nContent-type: image/gif\n\n".$image;
        close IDLIN;

    } else {

        print $client "HTTP/1.0 404\nContent-type: text/html\n\nFailure, sorry. Try again?"

    };
    close $client;
    $Nclient++;
};

--- End ---

```

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Climate Modeller, British Antarctic Survey | Disclaimer: I speak for myself