
Subject: Re: IDL on the Net (ION)

Posted by [p.sommer](#) on Wed, 15 Dec 2004 06:11:06 GMT

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Randy Shaughnessy wrote:

> <p.sommer@comcast.net> wrote in message

> news:1102908938.797563.229670@c13g2000cwb.googlegroups.com.. .

>>

>> Randy Shaughnessy wrote:

>>> Hi Folks,

>>>

>>> Not sure if this directly applies to this group?

>>>

>>> Has anyone had firewall problems reported from external users,
when

>> using

>>> ION Java on their public web site?

>>>

>>>

>>> Thanks,

>>> Randy Shaughnessy

>>

>>

>> Hi Randy,

>>

>> Is this a new problem, or have you just noticed the behavior? Is
your

>> ION Java Server behind, or outside a firewall? In short, ION Java

>> communicates on a port that by default, is not typically open to

>> internet clients sitting behind a firewall. However, if you start
the

>> ION Java Tunnel Broker server-side (assuming ION Server is outside

>> firewall), ION Java should be able to tunnel through the client's

>> firewall on port 80 -- typical web services port. The most
efficient

>> protocol is to open a port in the firewall that ION Java can use

>> directly and avoid the Tunnel Broker. This is often doen on
intranets

>> where the network admin folks can exercise a greater level of
control

>> over both server and client.

>> If I missed the mark, let me know.

>>

>> Thanks,

>> -Paul

>>

> Hi Paul,

>

> Thanks for responding.
>
> I believed as you, that Tunnel Broker would work through port 80. In fact,
> it just uses a different port (9085) and http code through that port. I set
> up a test computer to simulate the problem seen by others. I blocked out
> bound connections to port 7085 and 9085 on the server running ION and Tunnel
> Broker. I also logged what was occurring and found that the client still
> tries to reach port 7085 and/or 9085. One of the people having trouble with
> the site was also able to open up port 7085 on their firewall and everything
> worked.

I have to confess, I'm a bit embarrassed. I should have known that routing to port 80 would ultimately cause a collision with whatever web service happened to be listening there. I have worked with ION quite a bit over the years and in all honesty, never needed the Tunnel Broker, so I just plain misspoke. My apologies for not fully understanding the technology either!

Most of the serious ION Java projects I have worked on have been fairly large, but built for deployment over LANs (intranets). For example, the state of Alaska's Department of Natural Resources and a number of National Labs. Historically, there hasn't been a problem for general internet use either, but as organizations become more secure about routing traffic, I guess I'm not surprised this detail is now beginning to become an issue.

>
> There seems to be a lot of confusion at RSI with this. They do not even have
> the means to simulate the problem. I find it hard to believe that this
> problem has not been reported before. The reason we never saw it before is
> that our firewall doesn't block this port, so all the tests we ran were
> fine. Ours does not seem to be the standard. Most corporate firewalls block
> non-standard ports including both 9085 and 7085. It is not very practical or
> security conscious to expect these locations to open up these ports.

Sorry you got the run around. I hope you can understand that for someone in Tech Support to simulate, they would have had to spend possibly days securing appropriate hardware, setting up web services, RSI software, a firewall, etc, etc. It just goes beyond what they are typically equipped to manage, especially given the volume of calls they are expected to manage. I suspect they deferred to the developer since he has the entire infrastructure in place to test. Regardless, my suggestion would be to speak with your sales rep who can make sure you get the kind of support you need whenever you feel your blood pressure rising, or if it's a time critical issue.

- > A simple test to tell whether or not your site is blocking these ports is to
- > go to the RSI site and test the examples pages. Of course, they do not have
- > Tunnel Broker running on their site, but either way it won't work if you
- > have, what I would consider, a reasonable firewall security set up.

I'm actually wondering just how common this problem is with other vendors. I mean, I'm fairly sure other 'common' services run on ports up in the 7000 range like ION Java. For example, doesn't QuickTime Streaming Server run up in the 7000s? Sounds to me like we need to talk to a network administrator who is accustomed to managing corporate network infrastructures. It just seems a bit overly paranoid to close all ports above a certain number. I'm actually very curious myself, so I'll check with our network gurus to get their take on it.

- > I am working with a techie, but they do not seem to know their own product
- > very well at all. One e-mail said they will pass it on to the developers as
- > a feature request. I responded that this is a necessity and they are not
- > dealing with the real world if they think everyone should have those ports
- > open by default. I am still waiting.

I don't know how many opportunities they have had to get down to this level in the product. Again, I suspect it was passed to the developer since he's got all the pieces of the puzzle at his disposal to use for testing. I am confident they will ultimately provide you with a thoughtful response...it just might take some time.

- > Here is the link to the examples. I would be curious to know if others are
- > getting the "Unable to establish connection with ION Java server" message.

>
> <http://ion.researchsystems.com/IONJava/examples/basic.html>
>

That console message you mention above is obviously bad news. I'm left thinking about other options we might be able to come up with if your clients are locked down tightly for good. Before I mention any options, can you tell me a little bit about what you need in general terms as it relates to both IDL processing and client-side interactivity? Also, are you running Apache, or? Lastly, are there other web services (enterprise software) worked into your architecture?

> Thanks,
>
> Randy

Sure. Hang in there and thanks in advance for the additional information. We'll figure something out...

Best regards,
-Paul
