

Re: Http server implementation for Windows Media Server

Source:

<http://www.tech-archive.net/Archive/Development/microsoft.public.win32.programmer.networks/2007-08/msg00060>

- *From:* "Arkady Frenkel" <arkadyf@xxxxxxxxxxxxxxxxxxxx>
 - *Date:* Tue, 7 Aug 2007 10:21:22 +0300
-

On that level (protocol driver) that already extra raw data even not sockets :) and goes out of normal stream at all
Arkady

"Gur" <gur@xxxxxxxxxx> wrote in message
news:u%23F4KVL2HHA.728@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

Thanks.,
Actually I used the send_packet feature of WinPcap but I think that a similar problem applies to me as would happen with raw sockets. Now I think that this feature is not relevant to tcp but only to udp or similar protocols.

Regards

Gur
"Alexander Nickolov" <agnickolov@xxxxxxxx> wrote in message
news:#F6nGjG2HHA.5740@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

You'd be much better off recording the TCP-level data instead of the raw packets. I'm assuming you are using a raw TCP socket. Dump that idea and use a regular TCP socket instead.

To answer your question, the packets aren't ACKed because they are all discarded as lying outside the TCP window for the current TCP connection (due to your sequence number mismatch).

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=====
Alexander Nickolov
Microsoft MVP [VC], MCSO
email: agnickolov@xxxxxxxx
MVP VC FAQ: <http://vcfaq.mvps.org>
=====

"Gur" <gur@xxxxxxxxxx> wrote in message

Re: Http server implementation for Windows Media Server

news:%23xmNAkB2HHA.5360@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

In the previous post I forgot to indicate a very important fact – that is, the client (which is a Windows Media Player) doesn't ACKs the above packets which it should, since my Http server simulates for him a Windows Media Server and sends the original packets with the slight modification of a modified port.

Regards

Gur

"Gur" <gur@xxxxxxxx> wrote in message
news:e3118aA2HHA.1208@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

I do it inside the Http server code. As described in the first post,

the

Http server reads packets one by one from the dump, sending them to

the

client after modifying tcp parameters like addresses, ports etc. In

this

case everything left unchanged but the port, and the "relative sequence number" jumps to a huge value.

Regards

Gur

"Arkady Frenkel"
<arkadyf@xxxxxxxxxxxxxxxx> wrote in message
news:eNrISB\$1HHA.4880@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

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Where do you do(modify) it
?
Arkady

"Ronny"
<ronny@xxxxxxxxxxxx>
wrote in message
news:uR9ltw%231HHA.5772@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Thanks,
I think I
understand
a bit more
following
your
direction...
Now to a
real case
that I
encounter,
as described
in the first
post
of
this
thread,
modifying
in the tcp
packet
before
transmitting,
just the
port

of

the client as
the port is
usually
different
than the
original
one,

causes

a
real time
sniffer to
indicate a
huge

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"relative
sequence
number".

Leaving

it
without
modification
causes an
indication
of 1 – just
as it was in
the
original
packet.
Why should
the port
value
influence on
that?
Can you
explain
that?

Regards

Gur
"Arkady
Frenkel"
<arkadyf@xxxxxxxxxxxxxxxxxxxx>
wrote in
message
[news:OSB8\\$\\$y1HHA.5884@xxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:OSB8$$y1HHA.5884@xxxxxxxxxxxxxxxxxxxxxxxxxxxx)

On
the
tcp
layer,
both
server's
and
client's
tcpip
stack
do
that
Arkady
"Gur"
<gur@xxxxxxxx>
wrote

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in
message
news:eGqSoat1HHA.484@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

Thanks,
Suppose
a
common
scenario
where
a
standard
Web
Server
responds

to

a

GET

Http
request.
Does
the
server
ever
ACKs
the
client
and
when?

Thanks

Gur
"Arkady
Frenkel"
<arkadyf@xxxxxxxxxxxxxxxxxxxx>
wrote
in
message
news:uystfhs1HHA.1204@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

That
strange
that
no
ACK
appear

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because
any
data
should
be

ACKed

Arkady

"Gur"

<gur@xxxxxxxx>

wrote

in

message

news:ukd9yIq1HHA.1336@xxxxxxxxxxxxxxxx

Hi
all,

I'm
trying
to
implement
a
specific
Http
server
that
listens
on

port

8080

(not
the
standard
80).
Actually
it
resembles
a
Windows
Media

Server

that

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also
works
as
a
HTTP
server
(among
some
other
modes).
I
have
a
dump
file
of
prerecorded
transmission
from
an
actual

Window

Media

Server
and
Windows
Media
Player,
and
my
server
implementation

should

transmit
them
after
establishing
the
tcp
connection
with
the

Player.

In reality, the connection is established but the server

behaves

with

the following anomalies—
1. After the "GET" transaction by the Player, the server

transmits

an

ACK which doesn't appear in the normal case.
2. The first dump packet that is being transmitted starts

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with

a
huge
"Relative
Sequence
Number"
instead
of
a
1.

Can
someone
advise
please?

Regards

Gur

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