

Re: how to wait for socket communications

Source:

<http://www.tech-archive.net/Archive/Development/microsoft.public.win32.programmer.networks/2007-05/msg00188>

- *From:* Ali <abdulrazaq@xxxxxxxx>
 - *Date:* 20 May 2007 23:00:59 -0700
-

On May 20, 9:34 pm, Ananya <Ana...@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote:

Thanks, I really appreciate all your help.

Well, in C++ I am converting the unsigned chars to chars, but I don't know how to communicate the chars to Java.

(I actually posted another question: how to communicate unsigned char* to Java.)

I wish that in Java I would be able to read a file of bytes rather than a file of chars, because it seems that C++ chars are the same as Java bytes.

So, can I make a file of chars in C++ and read it as a file of bytes in Java?

Thanks again!

"Ali" wrote:

On May 20, 9:59 am, Ananya <Ana...@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote:

Thank you so much for your detailed answer!

Well, actually at this point I am ready to try out your file I/O suggestion.

The picture information is an unsigned char*, with first all the red values listed for each pixel, and then all green values, and finally all the blue values. So if I can just make a file out of that, the communication from C++ to Java might actually be pretty fast.

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Could you please tell me where I can learn about the file I/O method? It's probably very simple, I am just a beginner at it.

Thanks!

"Ali" wrote:

On May 17, 11:32 pm, Ananya
<Ana...@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>
wrote:

No, that's exactly what I want to change in my programs. I no longer want to use JNI, since there are some disadvantages such as not being able to destroy the JVM when the Java program gets closed, and ending up with memory leaks.

So I was trying to call the Java native executable from my C++ program and to use socket communication between my C++ program and my Java program.

Unfortunately, in connection with getting advised not to use sockets, my original question about how to wait for socket communications both in my C++ program and in my Java program was never

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answered.

May I still receive an answer for my original question at the beginning of this topic?

Thanks!

"Alexander Nickolov"
wrote:

Well,
naturally I
assumed the
Java
program
would use
JNI
for
retrieving
the file data
via a C/C++
DLL...

--

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

"Ali"
<abdulra...@xxxxxxxx>
wrote in

Re: how to wait for socket communications

"Alexander
Nickolov"
wrote:

I
think
OP
is
worried
about
performance
and
housekeeping
(not
leaving
temporary
files
around).
However,
with
memory-
mapped
file
you
don't
need
an
actual
file
to
back
the
mapping
-
there's
a
standard
approach
of
using
the
swap
file
for
backing
the
data.
Then
even
file
I/O

Re: how to wait for socket communications

may
not
occur
and
all
communication
be
in
memory.
Memory-mapped
files
should
really
be
considered
in
this
context
as
memory
allocation
technique,
not
file
I/O.

--

=====
Alexander
Nickolov
Microsoft
MVP
[VC],
MCSD
email:
agnicko...@xxxxxxxxx
MVP
VC
FAQ:<http://vcfaq.mvps.org>
=====

"Ali"
<abdulra...@xxxxxxxxx>
wrote
in
message
<news:1179210849.716145.295730@xxxxxxxxx>

Re: how to wait for socket communications

that
sockets
are
not
the
right
tool.
I
think
that
the
advantage
using
sockets
might
be
that
it
is
faster
than
writing
a
file,
since
you
can
communicate
a
whole
array.

Thanks
for
all
your
communications!

"Ali"
wrote:

On
May
14,
9:02
am,
Ananya

Re: how to wait for socket communications

<Ana...@xxxxxxxxxx
wrote:

I
am
trying
to
do
socket
communicat
between
my
C++
and
my
Java
program.

I
created
a
Java
program
for
drawing
curves
and
I
connected
it
to
Adobe's
C++
program
for
making
a
Photoshop
plugin.

I
am
calling
ShellExecut
for
calling
my

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Java
program
from
C++,
and
it
brings
up
a
separate
window.

First
I
would
like
to
communicate
the
Photoshop
picture
information
into
my
Java
window.
Originally
I
tried
to
to
that
with
the
lpParameters
string
in
ShellExecute
but
it
is
too
slow
to
build
this
string.

Re: how to wait for socket communications

So
now
I
am
trying
to
communicate
this
with
socket
communications
I
first
create
a
server
in
C++
before
calling
ShellExecute
then
I
create
a
client
in
Java
in
the
main
method,
but
how
can
I
wait
in
C++
for
this
Java
client
to
be
created
before
calling
accept
and
sending

Re: how to wait for socket communications

the
Photoshop
picture
information?

I
know
I
could
just
wait
for
a
few
seconds
to
make
sure
that
my
Java
program
came
up
by
calling:
if
(
ei.hProcess
!=
NULL
)
{
WaitForSing
10*1000
);}

But
I
would
rather
not
lose
any
time
and
just

Re: how to wait for socket communications

wait
exactly
until
the
Java
client
is
created.

And
how
can
I
wait
in
Java
before
receiving
the
picture
information?

Finally,
how
can
I
wait
in
C++
for
the
Java
program
to
close,
at
which
point
the
information
of
curves
that
were
drawn
in
Java

Re: how to wait for socket communications

is
sent
to
C++
(to
be
received
for
the
workpath
in
Photoshop)?

Thanks
for
your
time
looking
at
this.

Hmm,
i
though
someone
else
will
jump
in
to
make
this
point
clear.
As
pointed
by
Alexander
that
using
socket
is
not
a
good
design
approach.

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His
suggestion
for
mapped
file
is
indeed
flexible
and
commercial
grade
solution
BUT
you
can
do
that
with
simple
file
operation
as
i
told
in
previous
thread.
Why
simple
file
I/O
cant
be
your
solution?
and
what
makes
you
think
that
sockets
are
good
to
use?

ali

Re: how to wait for socket communications

Snip:

I
am
not
sure
why
Alexander
thought
that
sockets
are
not
the
right
tool.
I
think
that
the
advantage
using
sockets
might
be
that
it
is
faster
than
writing
a
file,
since
you
can
communicate
a
whole
array.

You
must
be
kidding;-)

Re: how to wait for socket communications

Re: how to wait for socket communications

BTW
sockets
are
also
no
more
than
files
with
over
head
of
clumsy
protocol
(tcp/udp
anyother)
on
the
top

.
Yeah,
sockets
can
work
and
if
you
familiar
with
that
then
go
head
and
do
it.
I
bet
socket
design
can't
be
never
faster
then
file
I/O
given
the
facts
that

Re: how to wait for socket communications

you
will
doing
all
the
stuff
on
single
machine.
If
you
are
not
familiar
with
files
thats
another
story
but
usually
writing
or
reading
to
file
wont
take
more
than
3
to
4
lines.
Easy
peasy
Japanese
;-)

ali

Snip
form
Alexander:

I
think

Re: how to wait for socket communications

OP
is
worried
about
performance
and
housekeeping
(not
leaving
temporary
files
around).

But
you
can
always
delete
the
file
once
you
are
done.
BTW
the
data
that
OP
wants
to
store
is
few
Kbs
anyway.

Then
even
file
I/O
may
not
occur
and
all
communication

Re: how to wait for socket communications

be
in
memory.
Memory-mapped
files
should
really
be
considered
in
this
context
as
memory
allocation
>technique,
not
file
I/O.

IIRC
zwCreateFile
file
be
called
at
the
end
to
associate
the
mapped
memory
with
an
address
space
;-)
maybe
i'm
missing
something
here.
I
think
file
I/O
is
more

Re: how to wait for socket communications

appropriate
for
non-programmer
and
its
easy
to
do.
Where
as
mapping
file
in
C++
and
reading
that
one
in
Java
would
be
another
task;-)
but
worth
doing
for
robust
design.

...

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Snip:

So, can I make a file of chars in C++ and read it as a file of bytes in Java?

Sure! ya can. Make it simple first, just write the file in C++ and then read it via your java app. Once you are able to do described steps then tune it according to your requirement; conversion in writing/reading.

BTW, you want jsut 0 to 255 values so char* is ideal and read it in java string . You can easily convert that string to array of characters/bytes.

Re: how to wait for socket communications

ali

.