

Hello Mirek, Tom, Koldo, and everyone,

It's been a while since I last updated the package.

SSH package's been through a major rewrite, and I wanted to have a solid foundation to build it upon. Well, I believe it is finally here.

New design hopefullt fixes the main problems of the previous one. To do this I focused on the major component of SSH package: SFtp, since it was the most complex part of it.

I am here to share the results. Below package contains only Ssh and SFtp components for the time being. But please take your time to examine and test SFtp. It can do some

nice tricks easily, such as peeking and poking at files, or -experimental- multithreading support (we'll return to that later.).

I also included a simple testcase where you can see how SFtp class behaves. Note that, every other component (be it SCP, channel, exec) will behave in a similar way. :)

Here is the highlights, and changes:

- 1) This version brings a major redesign of overall components. SSH package's classes are redesigned around a core class named SshCore. SshCore allows a uniform interface for both blocking and non-blocking modes of operation. Visible result of this new design is a single set of methods for both modes of operation for each class. Methods starting with "Start" prefix are removed in favor of a simple "NonBlocking()" switch.
- 2) In accordance with this behaviour, a sort of "feature parity" is successfully kept, thanks to the new design. Namely, in non-blocking mode, any result can be gathered using the new GetResult() method, which returns Value.
- 3) All SSH package classes now has pick semantics.
- 4) New design allows creation of higher-level ("complex") SFTP methods where needed. Unlike the simple SFTP methods, which work on file handles, Complex methods take care of (allocate/free) file handles internally.
- 5) Experimental multithreading support is added (using AsyncWork). This is still at a primitive stage.
- 6) Network proxy support is added. This new feature uses NetProxy (Http/Socks4/4a/5) package It works through a plugin, provided via Ssh::WhenProxy callback. And it is completely optional.

- 7) Cancellation mechanism is added. Any operation can be cancelled at any time using the Cancel() method.
- 8) SFTP::DirEntry class now has a ToString() method. (It will also gain a ToXml() method.) This method will give an output similar to Unix ls command.
- 9) libssh2 configured to use OpenSSL by default (WinCNG will be made a compile-time option in the next release).

The code is not entirely cleaned-up, so there may be also small cosmetic issues (for now.)

I appreciate feedbacks, patches, criticism, etc.

[See below posts for updated package]

Cheers!

Oblivion
