

Re: Speed Difference SCP vs. RCP

Source: <http://www.derkeiler.com/Newsgroups/comp.security.ssh/2005-01/0275.html>

From: Darren Tucker (dtucker_at_dodgy.net.au)

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In article <10vb42vs0a1015a@corp.supernews.com>,

Michael <michaeln@twentyten.org> wrote:

> *We're running network backups on the private LAN of our production network.*

> *We've grown to a point where our incremental backups are taking quite a long*

> *time. Our default transport method is SCP, but since it's the local LAN, I*

> *was wondering what this groups thoughts were on doing these backups over*

> *plain RCP. I consider our LAN secure, but I've also always been a fan of*

> *being secure whenever possible.*

>

> *In our speed tests, we push about 472 MB/min via SCP and 960 MB/min via RCP.*

> *Do these numbers (or at least ratios) seem right to you for a*

> *gigabit-over-copper network?*

A couple of suggestions for improving throughput, in approximate order of importance:

1) try different ciphers. arcfour is usually the fastest, but this might vary depending on the platform.

2) If you still want/need more performance, try these patches:

<http://www.psc.edu/networking/projects/hpn-ssh/>

They do some buffer streamlining to improve throughput.

They also have an option to rekey to the "none" cipher after authentication for improved throughput (although with no confidentiality).

3) If your data set is large but does not change rapidly then try rsync over ssh (especially the `--whole-file` option if you have more bandwidth than CPU).

4) Fiddle the compiler flags. Tuning OpenSSL in particular can gain some speed.

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PGP key 8FF4FA69 / D9A3 86E9 7EEE AF4B B2D4 37C9 C982 80C7 8FF4 FA69

Good judgement comes with experience. Unfortunately, the experience usually comes from bad judgement.