Remote file transfer

Adapted from materials by Dr. Carrier







We've discussed ssh - **S**ecure **SH**ell

We've discussed ssh - Secure SHell

Now, we're talking about scp - Secure CoPy

We've discussed ssh - Secure SHell

Now, we're talking about scp - Secure CoPy

Reminder, we locally copy files like this:

We've discussed ssh - Secure SHell

Now, we're talking about scp - Secure CoPy

Reminder, we locally copy files like this:

cp <source> <destination>

We've discussed ssh - **S**ecure **SH**ell

Now, we're talking about scp - Secure CoPy

Reminder, we locally copy files like this:

cp <source> <destination>

scp is the same, but works remotely!

We've discussed ssh - Secure SHell

Now, we're talking about scp - Secure CoPy

Reminder, we locally copy files like this:

cp <source> <destination>

scp is the same, but works remotely! However, we need more info!

We've discussed ssh - **S**ecure **SH**ell

Now, we're talking about scp - Secure CoPy

Reminder, we locally copy files like this:

cp <source> <destination>

scp is the same, but works remotely! However, we need more info!

The host we are copying to/from

We've discussed ssh - **S**ecure **SH**ell

Now, we're talking about scp - Secure CoPy

Reminder, we locally copy files like this:

cp <source> <destination>

scp is the same, but works remotely! However, we need more info!

- The host we are copying to/from
- The username to use on that host

We've discussed ssh - Secure SHell

Now, we're talking about scp - Secure CoPy

Reminder, we locally copy files like this:

cp <source> <destination>

scp is the same, but works remotely! However, we need more info!

- The host we are copying to/from
- The username to use on that host

Thus we get:

We've discussed ssh - Secure SHell

Now, we're talking about scp - Secure CoPy

Reminder, we locally copy files like this:

cp <source> <destination>

scp is the same, but works remotely! However, we need more info!

- The host we are copying to/from
- The username to use on that host

Thus we get:

scp [[user@]src_host:]src_path [[user@]dest_host:]dest_path

We've discussed ssh - Secure SHell

Now, we're talking about scp - Secure CoPy

Reminder, we locally copy files like this:

cp <source> <destination>

scp is the same, but works remotely! However, we need more info!

- The host we are copying to/from
- The username to use on that host

Thus we get:

```
scp [[user@]src_host:]src_path [[user@]dest_host:]dest_path
```

Note that items in [] can sometimes be omitted

We've discussed ssh - Secure SHell

Now, we're talking about scp - Secure CoPy

Reminder, we locally copy files like this:

cp <source> <destination>

scp is the same, but works remotely! However, we need more info!

- The host we are copying to/from
- The username to use on that host

Thus we get:

```
scp [[user@]src_host:]src_path [[user@]dest_host:]dest_path
```

Note that items in [] can sometimes be omitted

Example, transfer local file to EOS

scp local_file username@eos01.cis.gvsu.edu:~/my_dir

Directedness in scp

scp doesn't care which systems we are moving files to/from

The last example copied a local file to the server

scp local_file username@eos01.cis.gvsu.edu:~/my_dir

What if we want to copy a file from server to laptop?

scp username@eos01.cis.gvsu.edu:~/my_dir/file .

Why stop there? We could also copy files directly from one server to another, all from out local machine!

rsync is like a fancier scp

rsync is like a fancier scp

It checks to make sure there are differences between the files

rsync is like a fancier scp

It checks to make sure there are differences between the files If there are differences, it only copies them, not the whole file

rsync is like a fancier scp

It checks to make sure there are differences between the files If there are differences, it only copies them, not the whole file

Command format is very similar to scp:

rsync is like a fancier scp

It checks to make sure there are differences between the files If there are differences, it only copies them, not the whole file

Command format is very similar to scp:

```
rsync [[user@]src_host:]src_path
[[user@]dest_host:]dest_path
```

rsync is like a fancier scp

It checks to make sure there are differences between the files If there are differences, it only copies them, not the whole file

Command format is very similar to scp:

```
rsync [[user@]src_host:]src_path
[[user@]dest_host:]dest_path
```

Note that rsync has a ton of options!

- Automatic compression
- Progress bars
- Partial files (in case of restarts)
- Much more!