

Rsync how-to

How and why to use rsync for backups and archives.

Why rsync & cautions.

- Use rsync to backup working files.
 - Good as either primary or secondary backup method.
- Benefits of using rsync:
 - Fast, efficient.
 - Only transfers “differential” data.
- Cautions when using rsync:
 - The trailing ‘/’ : changes where the data goes.
 - Dangers of “differential” data backups (can lose data).
 - --delete is **PERMANENT**.

Basic rsync Operation

- When using a remote server (e.g., your UW webspace):

```
rsync -a /source/file/path/ username@<remote.host>:/destination/file/path
```

```
[ulfgard@numenor ~]$ rsync -aP /home/ulfgard/source/ ulfgard@zeos.ling.washington.edu:/home/ulfgard/destination
```

- When using a local drive:

- `rsync -a /source/file/path/ /destination/file/path`

- Important Flags:

- `-a` : archive mode, essential to the use of rsync detailed in the how-to guide.
- `-P` : verbose output, helpful to see what is being copied.
- `--delete` : removes files which are not in the source but are in the destination.
- `--exclude` : excludes a matching pattern – e.g., `--exclude=another/folder`

```
[ulfgard@numenor ~]$ rsync -aP /home/ulfgard/source/ ulfgard@zeos.ling.washington.edu's password:
sending incremental file list
./
file1                0 100%   0.00kB/s   0:00:00 (xfr#1, to-chk=3/5)
file2                0 100%   0.00kB/s   0:00:00 (xfr#2, to-chk=2/5)
dir/
dir/file3            0 100%   0.00kB/s   0:00:00 (xfr#3, to-chk=0/5)
```