

# Pinger Public FTP Archive daily update

## FTP Space

The FTP space is at: <ftp://ftp.slac.stanford.edu/users/cottrell/>. The equivalent local file space at SLAC is /afs/slac/public/users/slac

## Downloading recent data from the FTP:

The idea is that you retrieve all the existing [Archived Pinger hourly data from Anonymous FTP](#) one time and then incrementally append recent data on say a daily basis. To append recent data proceed as follows:

There is a file called *download.pl* in the FTP. This file can be used to download recent data from the FTP.

1. Download the file from the FTP, i.e. copy it from <ftp://ftp.slac.stanford.edu/users/cottrell/download.pl>
2. Copy *download.pl* to the location you want to download the files (e.g. /home/Documents/Pinger)
3. Through your command line interface type: *perl [path to download.pl]/download.pl -d [number of days]* (make sure to have perl installed)
  - a. -d specifies how many days to go back in time. For example -d 3 will download files related to the previous three days.

```
pinger@pinger $ perl /tmp/tar/download.pl -d 3
```

PS: If needed files for the a period larger than 60 days, they must be downloaded manually from the FTP: <ftp://ftp.slac.stanford.edu/users/cottrell/>, see [Retrieving Archived Pinger hourly data from Anonymous FTP](#)

## Downloading all the data from the FTP:

1. Download the file from the FTP, i.e. copy it from [ftp://ftp.slac.stanford.edu/users/cottrell/download\\_all.pl](ftp://ftp.slac.stanford.edu/users/cottrell/download_all.pl)
2. Copy *download\_all.pl* to the location you want to download the files (e.g. /home/Documents/Pinger)
3. Through your command line interface type: *perl download\_all.pl* (make sure to have perl installed)

```
pinger@pinger $ perl download_all.pl
```

## Updating the FTP

This section is only for the FTP maintainer at SLAC.

The script responsible to update the public FTP site at SLAC is in the following location:

```
/afs/slac/package/pinger/ftp-update.pl
```

To run this script you must use the following command:

```
$ /opt/TWWfsw/bin/perl /afs/slac/package/pinger/ftp-update.pl
```

You can SSH to the pinger machine with the following command:

```
ssh pinger@pinger.slac.stanford.edu
```

## Output from running the command ftp\_update.pl:

	node	node
	100	1000
minimum_rtt	0	0
average_rtt	0	0
ipdv	0	0
throughput	0	0
packet_loss	0	0
iqr	0	0
MOS	0	0
alpha	0	0
maximum_rtt	0	0
unreachability	0	0
unpredictability	0	0
conditional_loss_probability	0	0
zero_packet_loss_frequency	0	0
out_of_order_packets	0	0
duplicate_packets	0	0
minimum_packet_loss	0	0

It represents how many files were missing during the update process.

## Cron Job to run ftp-update.pl automatically each day

The script runs every morning at 4AM. To modify the cron job you should edit the trsrontab:

```
$ trsrontab -e
```

and edit the following line:

```
lnxcron;480 00 4 * * * /opt/TWWfsw/bin/perl /afs/slac/package/pinger/ftp-update.pl
```

### Log Files:

Log files with missing files can be found at:

```
$ /afs/slac/public/users/cottrell/pinger_log_files AKA ftp://ftp.slac.stanford.edu/users/cottrell/pinger\_log\_files/
```

```
[pinger@pinger $ ls -l /afs/slac/public/users/cottrell/pinger_log_files/
total 31
-rw-r--r-- 1 pinger sf 2294 Jun 29 15:22 MOS-100-log.txt
-rw-r--r-- 1 pinger sf 2442 Jun 29 15:26 alpha-100-log.txt
-rw-r--r-- 1 pinger sf 858 Jun 29 14:31 average_rtt-100-log.txt
-rw-r--r-- 1 pinger sf 1232 Jun 29 15:43 conditional_loss_probability-100-log.txt
-rw-r--r-- 1 pinger sf 1035 Jun 29 15:49 duplicate_packets-100-log.txt
-rw-r--r-- 1 pinger sf 704 Jun 29 14:36 ipdv-100-log.txt
-rw-r--r-- 1 pinger sf 682 Jun 29 15:19 iqr-100-log.txt
-rw-r--r-- 1 pinger sf 2886 Jun 29 15:35 maximum_rtt-100-log.txt
-rw-r--r-- 1 pinger sf 1034 Jun 29 15:51 minimum_packet_loss-100-log.txt
-rw-r--r-- 1 pinger sf 819 Jun 29 14:24 minimum_rtt-100-log.txt
-rw-r--r-- 1 pinger sf 276 Jul 14 09:33 minimum_rtt-100.txt
-rw-r--r-- 1 pinger sf 1056 Jun 29 15:47 out_of_order_packets-100-log.txt
-rw-r--r-- 1 pinger sf 819 Jun 29 15:15 packet_loss-100-log.txt
-rw-r--r-- 1 pinger sf 2812 Jun 29 14:45 throughput-100-log.txt
-rw-r--r-- 1 pinger sf 44 Jul 8 17:21 throughput-100.txt
-rw-r--r-- 1 pinger sf 968 Jun 29 15:41 unpredictability-100-log.txt
-rw-r--r-- 1 pinger sf 924 Jun 29 15:37 unreachability-100-log.txt
-rw-r--r-- 1 pinger sf 1188 Jun 29 15:45 zero_packet_loss_frequency-100-log.txt
```

Each .txt file contains the names of the files missing in the FTP.

The log files are generated automatically by ftp-update.pl everytime a file is missing in the pingerreports folder.

The files also can be generated by the following script:

```
$ /opt/TWWfsw/bin/perl /afs/slac/package/pinger/ftp-update-log.pl
```

### Algorithm

```
Foreach metric
    Copy correspondent tar file to pinger_temp_files folder
    Untar the file inside pinger_temp_files folder
    Check the most recent file in the recently untared folder
    Copy from pingerreports folder to the pinger_temp_files folder all the correspondent files until the
current previous day
    Tar the updated folder
    Copy back to the FTP main folder
```

ftp main folder folder:

```
$ /afs/slac/public/users/cottrell AKA ftp://ftp.slac.stanford.edu/users/cottrell/
```

pinger\_temp\_files folder:

```
$ /afs/slac/public/users/cottrell/pinger_temp_files AKA ftp://ftp.slac.stanford.edu/users/cottrell/pinger\_temp\_files/
```

pingerreports folder:

```
$ /nfs/slac/g/net/pinger/pingerreports/hep
```

