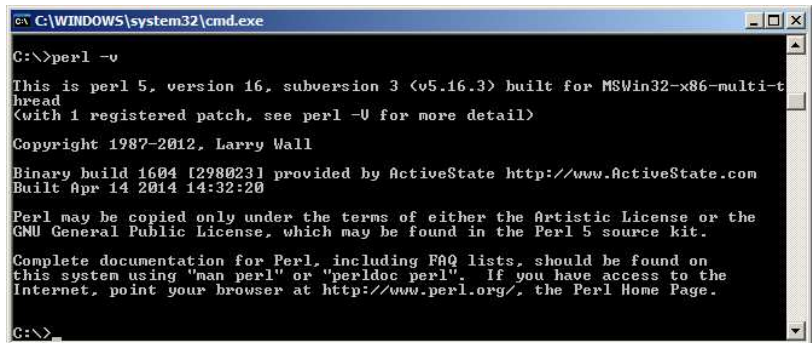PERL-FTP Installation for Callisto

A. PERL-FTP is a script written by Christian Monstein to replace FTP-WatchDog as the FTP client for uploading
    Callisto data to FHNW. New versions of FTP-WatchDog are no longer free plus FTP-WatchDog fails if the
    data folder reaches a certain (but unknown) size limit.

B. PERL-FTP does the following:

    ✪ Check the Callisto data directory for FITS files

    ✪ If a new FITS file is available, copy it to the FTP-server at FHNW

    ✪ Move the new FITS file to a predetermined location for backup such as another Windows folder, another
        drive on the same PC, a mapped drive, USB-stick, or USB-disk

    ✪ Wait a predetermined time and repeat the whole process

C. Steps needed:

    1. Install ActivePERL (PERL5 or higher) on your Windows-PC from http://www.ActiveState.com or
        http://www.activestate.com/activeperl

    2. Open the Windows console
        (command line interface) with
        Start - Run - cmd.exe

    3. Type perl –v to confirm that PERL
        is running (image right)

    4. Create new folders for the Perl
        script and Callisto data Backup
        location, for example,
        C:\Callisto\Perl and C:\Callisto\Backup

    5. Download PERL-FTP from http://www.e-callisto.org/Software/perl-ftp.zip

    6. Unzip perl-ftp.zip into the new Perl folder created above, for example, C:\Callisto\Perl

    7. Use a text editor such as NotePad to edit the file tst.pl. Go to the new Perl folder, right-click tst.pl and
        select Open with – Notepad or Choose program… and select your text editor. Change **my $sourcePath**
        and **my $DestinationPath** to your configuration. For example, if your Callisto data and backup folders
        are C:\Callisto\Data and C:\Callisto\Backup, then:

        my $SourcePath   = "C:/Callisto/Data";
        my $DestinationPath = "C:/Callisto/Backup";

        Note: The source and destination paths must use forward-slash / as shown; do not use backward-slash \

    8. Edit **$filename** and replace the text **HB9SCT** with your instrument name. This is the [instrument]
        parameter in your Callisto configuration file, callisto.cfg. For example, if [instrument]=ALASKA, then
            if ($filename =~ /^ALASKA_(\d\d\d\d)(\d\d)(\d\d)_.*\.fit?$/)

9. Optionally edit **$timedelay** to desired time in seconds. The script checks for a new file using this time interval. The default is 20 seconds, but to change to 60 seconds, then
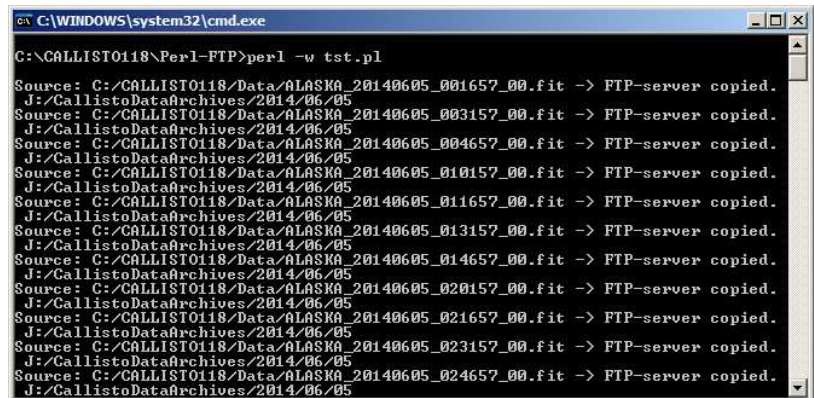
     my $timedelay = 60;

10. Obtain the FTP server password by email inquiry to Christian Monstein at ETH Zurich, monstein@astro.phys.ethz.ch. Replace the word "password" in the line below with the value received,

     $ftp->login("solarradio","password") or die "Cannot login ", $ftp->message;

11. Save tst.pl

12. Either start the application in a console window by typing: perl -w tst.pl or double click the batch file do.bat
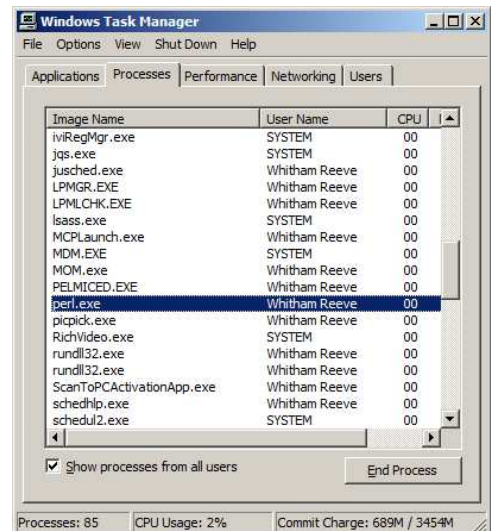

13. When the script is running successfully, the console will look similar to the image right.

14. To ensure the Perl script is automatically run when the PC is rebooted, put a copy of the do.bat file in the Windows Startup folder

15. The PERL application can be ended by pressing Ctrl^C in the console (command line) window or with Windows Task Manager as shown right. Select perl.exe and then click on the End Process button at bottom-right.

16. If PERL-FTP seems to be failing due to not being able to resolve the FTP server name, possibly due to timeouts on satellite links, enter the IP address in place of the FTP server name. The script line below shows the line to be changed. Note that it shows "ftpexchange.cs.technik.fhnw.ch" as the FTP server. It is this field that needs to be changed

Original showing server name:

     my $ftp = Net::FTP->new("ftpexchange.cs.technik.fhnw.ch", Timeout => 500, Passive => 1, Debug => 0);

Modified showing server IP address:

     my $ftp = Net::FTP->new("147.86.8.73", Timeout => 500, Passive => 1, Debug   => 0);

Document information

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Revision: 0.0   (Original draft based on C. Monstein information, 03 Jun 2014)

0.1   (Corrections per C. Monstein, 03 Jun 2014)

0.2   (Added screenshots, link to PERL-FTP, added password, 13 Jun 2014)

0.3   (Added FTP server IP address, 25 Oct 2016)