

Computer Data Logging Using Putty

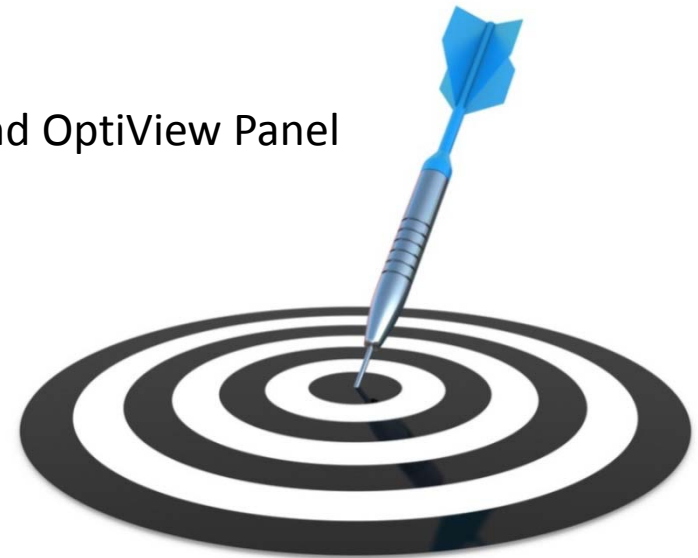


Computer Data Logging Objectives



At the conclusion of this course, you will be able to:

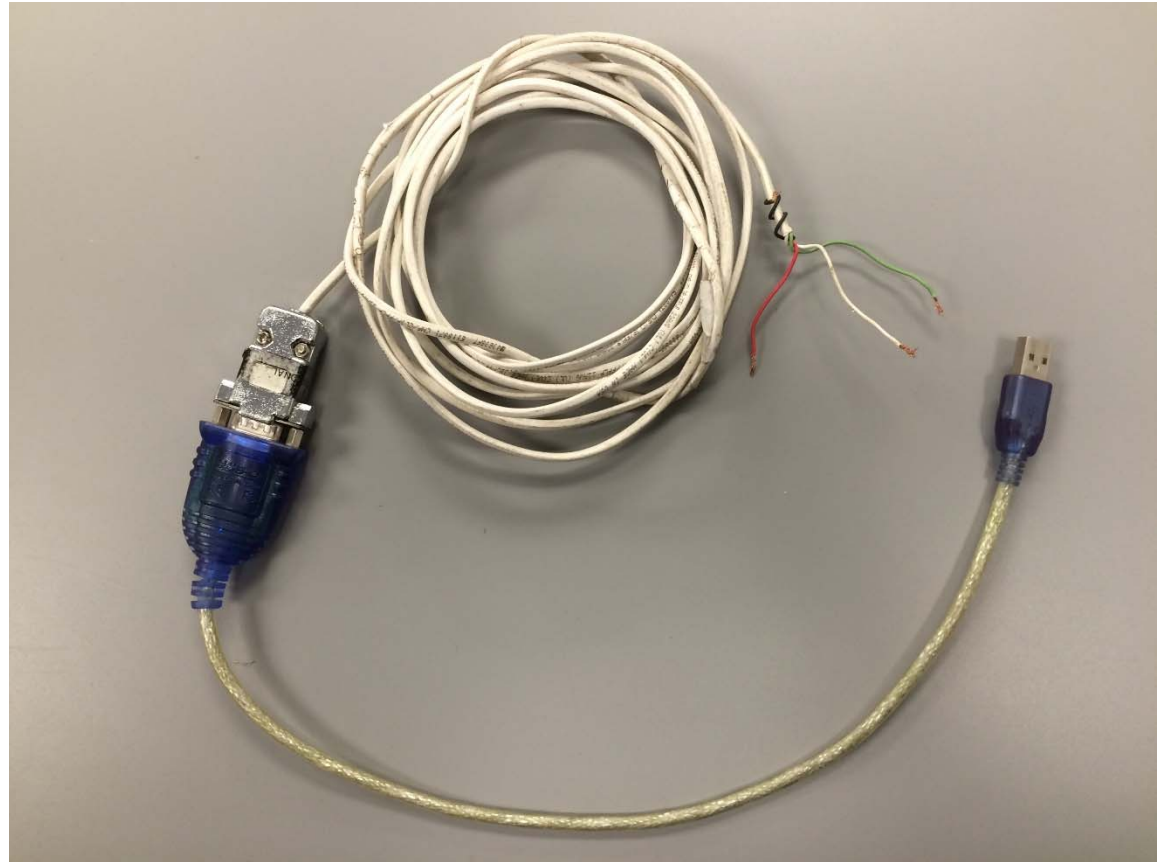
- Select a USB to Serial Port Connector
- Select the correct computer port being used by your USB to serial Adaptor
- Select the correct pin connections
- Load Putty
- Setup Putty for the first time connection
- Setup putty for the return user
- Setup the log file
- Open communications between the computer and OptiView Panel
- Close Putty
- Email Data Text file to Tech support



Computer Connection



This program communicates through a serial connection between your computer and the OptiView Panel. If your computer does not have a serial port you will need a USB to serial converter. There is several converters that will perform this function.



Computer Connection



Data cable (only need to choose one type)

USB/Serial cable – may be purchased from

<http://www.ftdichip.com/Products/Cables/USBRS232.htm>

Please purchase part number USB-RS232-WE-1800-BT_0.0 [will need to download VCP (Virtual

Com Port) drivers from website <http://www.ftdichip.com/Drivers/VCP.htm> for appropriate OS]

031-02430-xxx Micro-board

USB-RS232-WE-1800-BT_0.0

031-01731-xxx Micro-board

Connector	Terminal	Pin #	Description
J2 2 (DSR)	Connects to	Brown & Green	CTS
J2 4 (TXD)	Connects to	Yellow	RX
J2 9 GND	Connects to	Black	GND

or

USB/Serial port – Edge port, Black Box, Gigawere, exc. (this selection you will need a Serial Cable to connect between your computer and the OptiView Panel).

Data Cables



Serial cable – may purchase part number 092-22669-000 from York Parts Center or from a local supplier.

You can make your own if you need a longer cable than is available from local supplier. Cut off one end and strip the wires back.

You will need the following parts.

- 9 Pin, D Sub Receptacle
- 18/3 shielded cable of the length you need
- Heat shrink tubing

031-02430-xxx Micro-board

Laptop (DB9 RS232 serial Port)

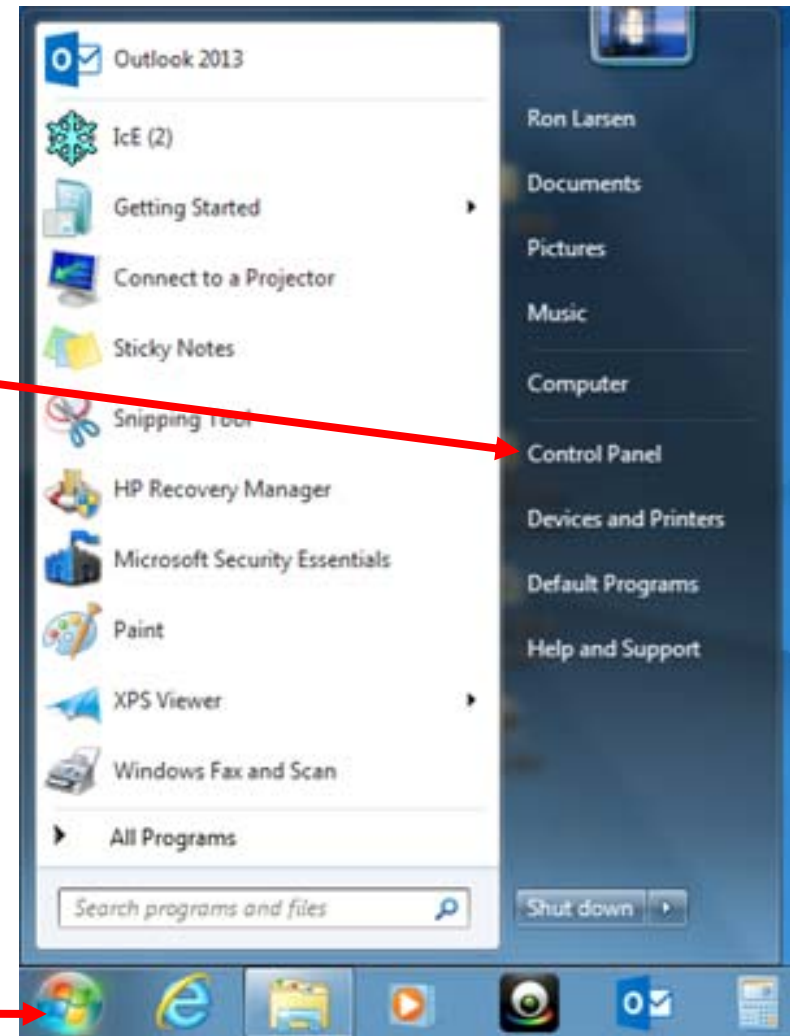
031-01731-xxx Micro-board

Connector	Terminal	Terminal	Pin #	Description
J2	2 (DSR)	Connects to	7	RTS
J2	4 (TXD)	Connects to	2	RX
J2	9 GND	Connects to	5	GND
J2	8 GND	Connects to	Cable shield	

USB Adaptor Location



Open your computer's control panel by clicking on "Control Panel" in the start menu

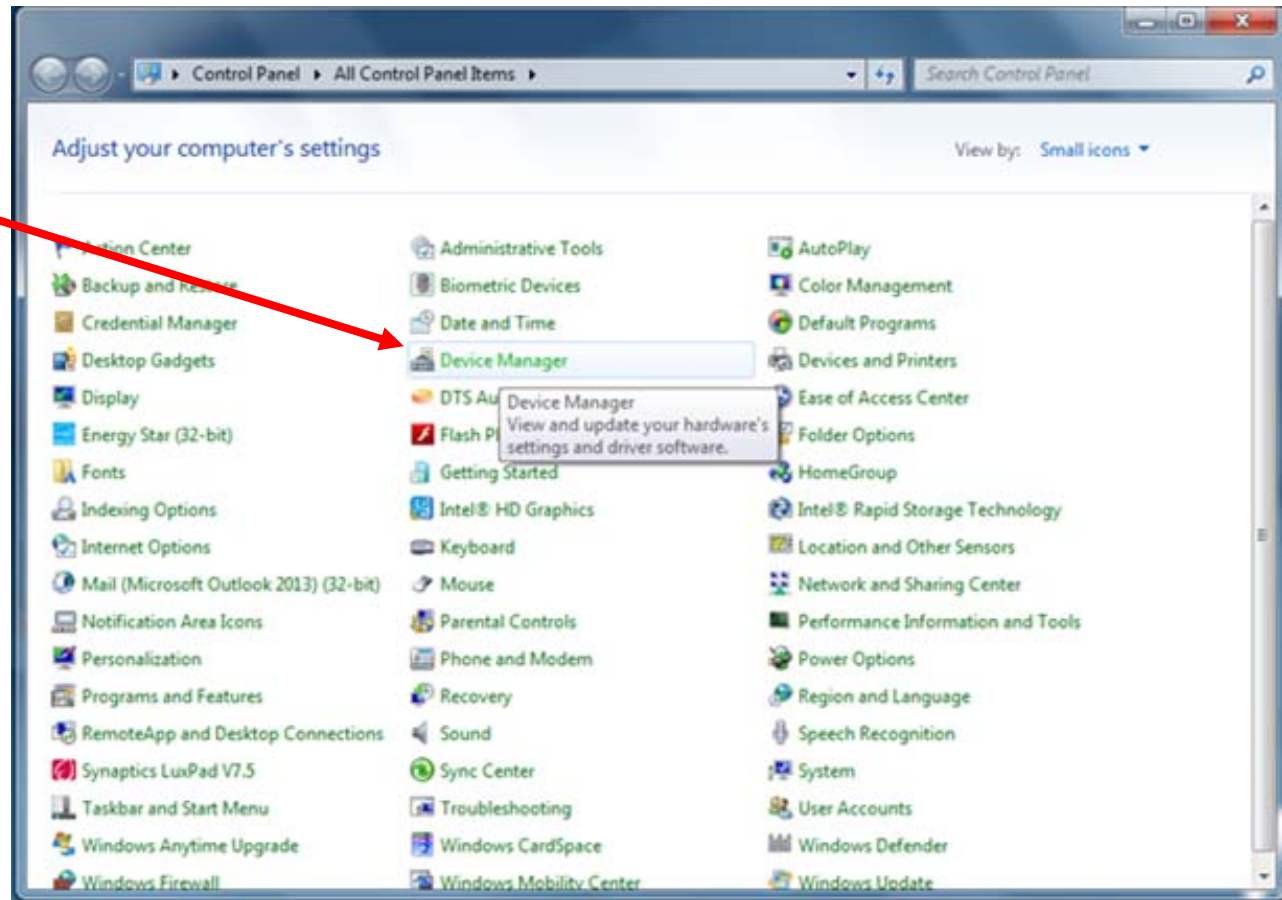


First click on "Start Menu"

USB Adaptor Location



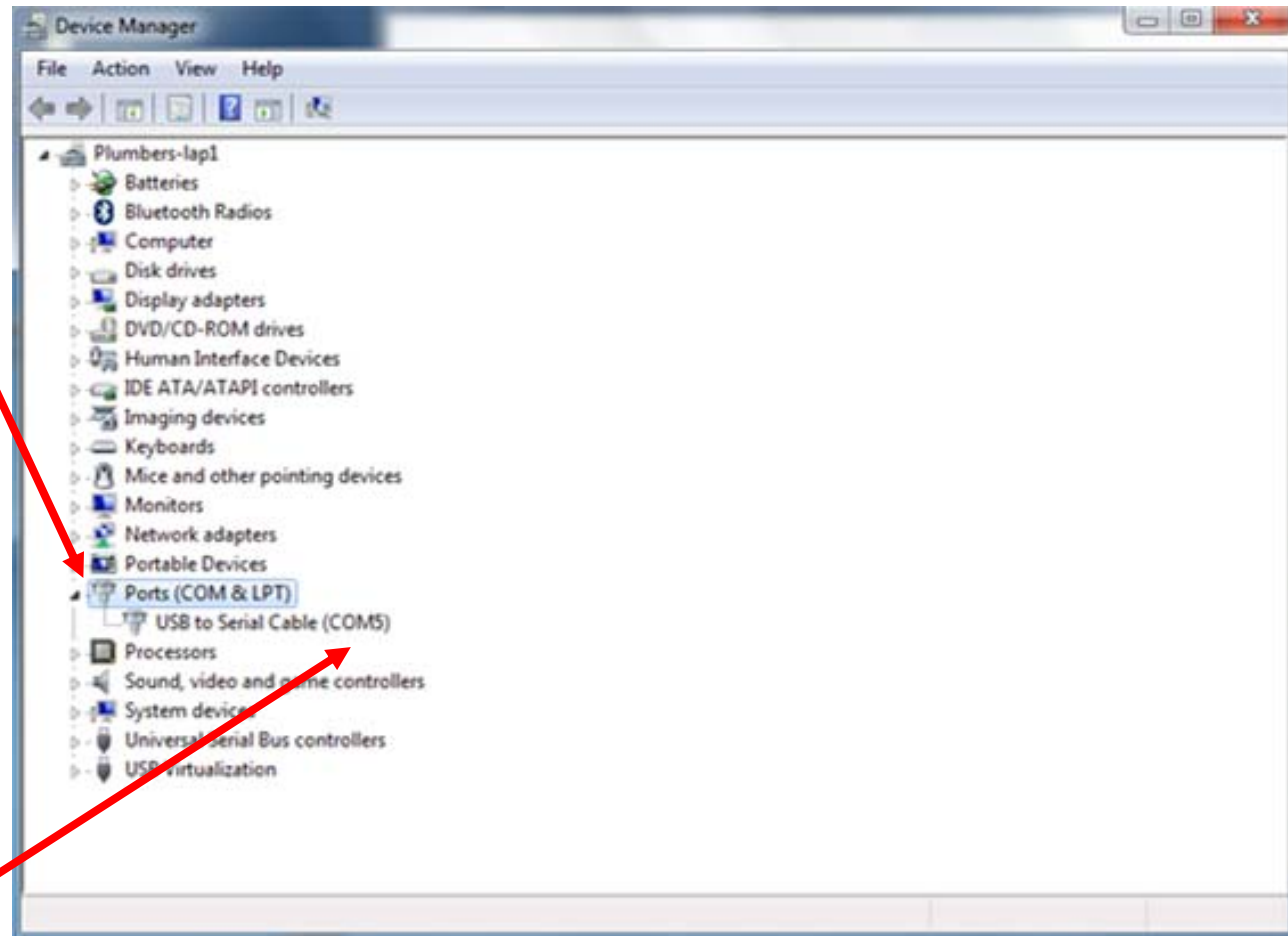
Click on Device Manager
In the Control Panel
screen



USB Adaptor Location



In the Device Manager click on Ports (COM & LPT)

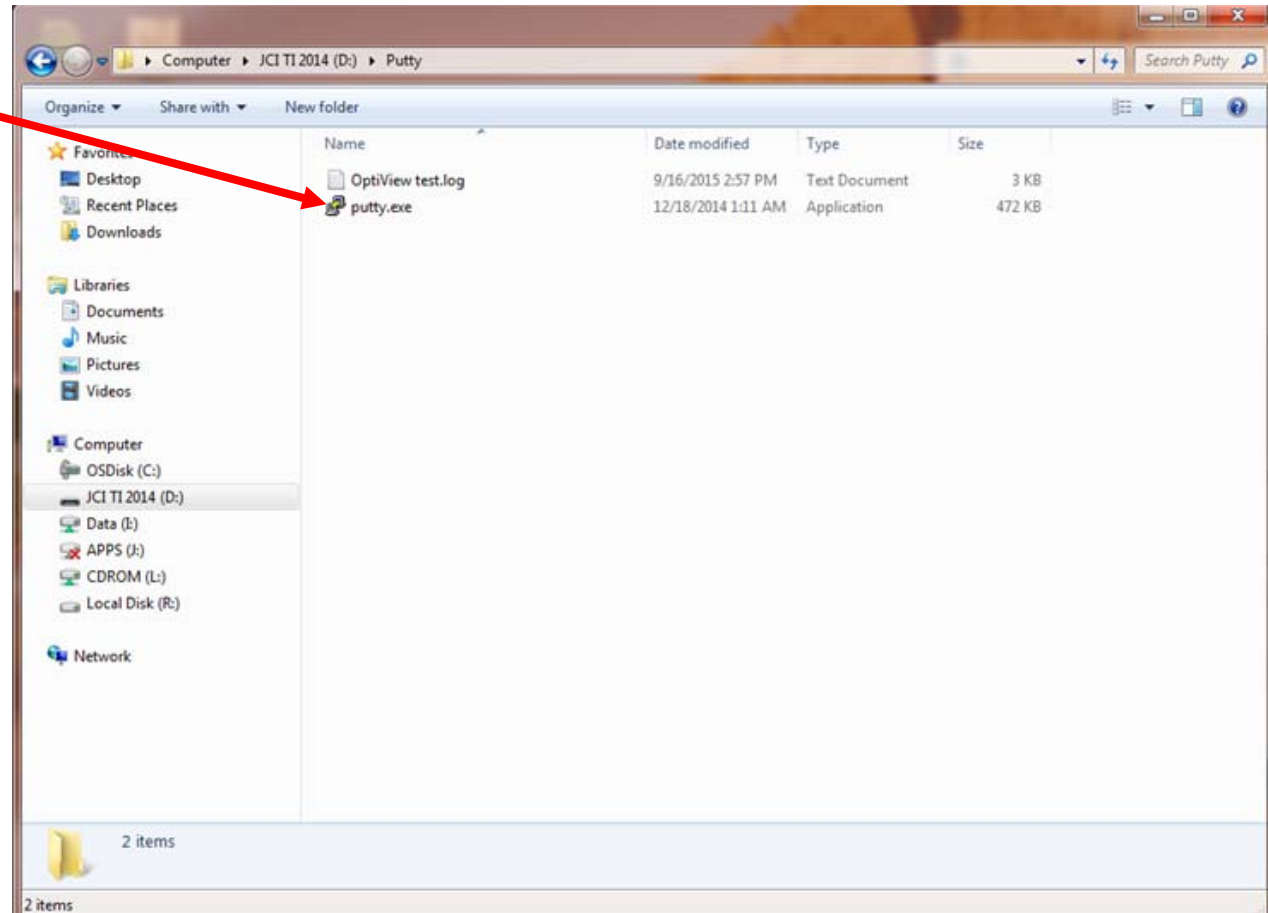


Check what port your adaptor is attached to.
In this case COM5

Start PUTTY Program



Click on “Putty.exe” in
your documents storage

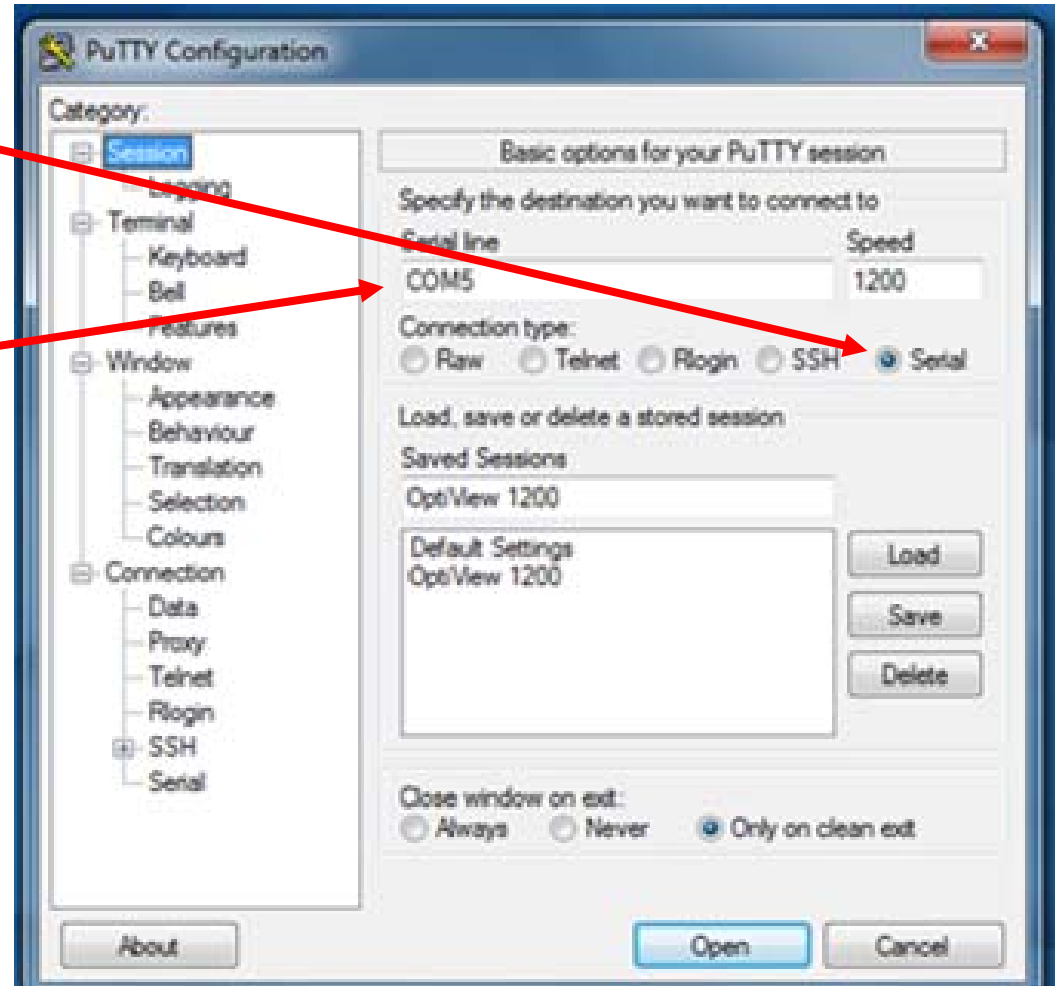


First Time User on Chiller Type



First time setup: Click on the serial button

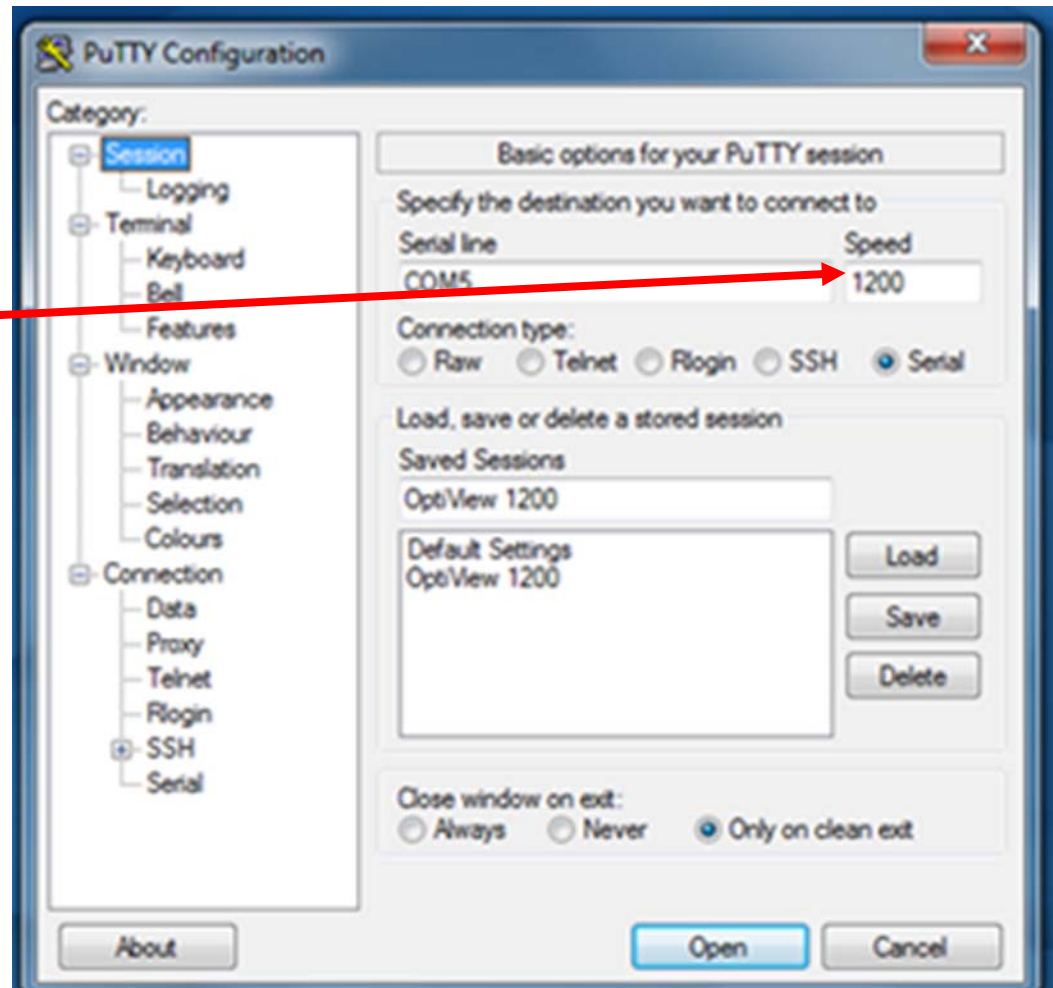
Second: Set to COM5



First Time User on Chiller Type



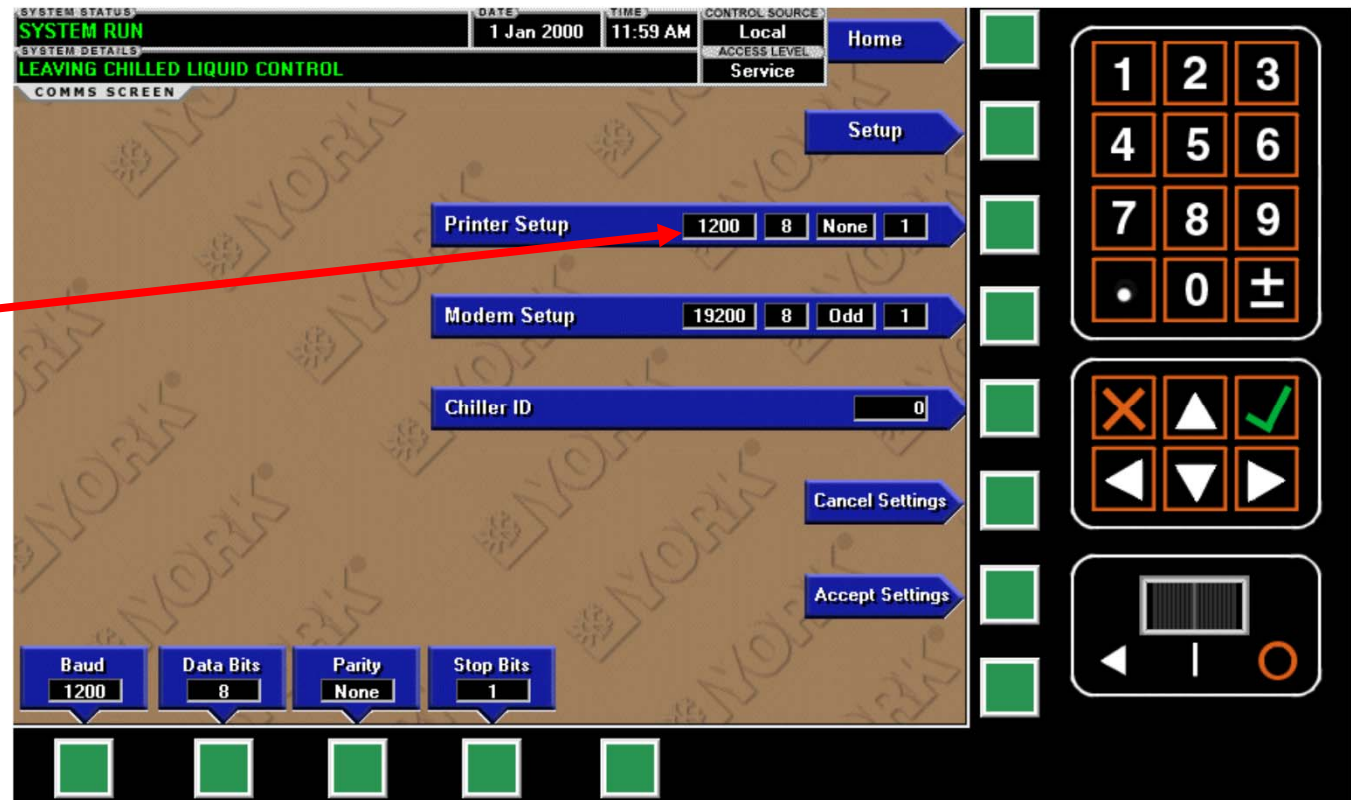
The Baud rate on the COMMS screen on the OptiView panel must match the SPEED setting in Putty



First Time User on Chiller Type



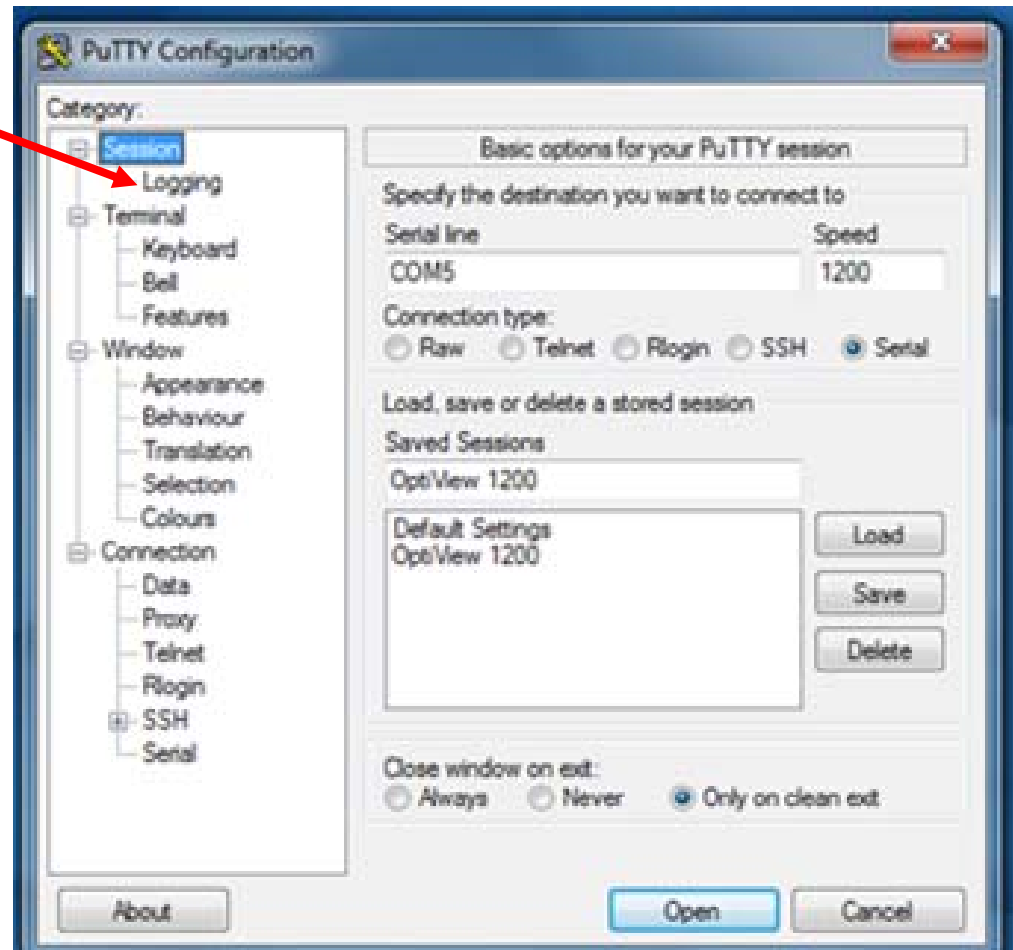
On the OptiView panel: press “SETPOINT”, then press: “SETUP”, then press: “COMMS” and then press: “PRINTER”. The Printer Baud rate must match the SPEED setting in Putty



First Time User on Chiller Type



To save a printout to your computer click on Logging

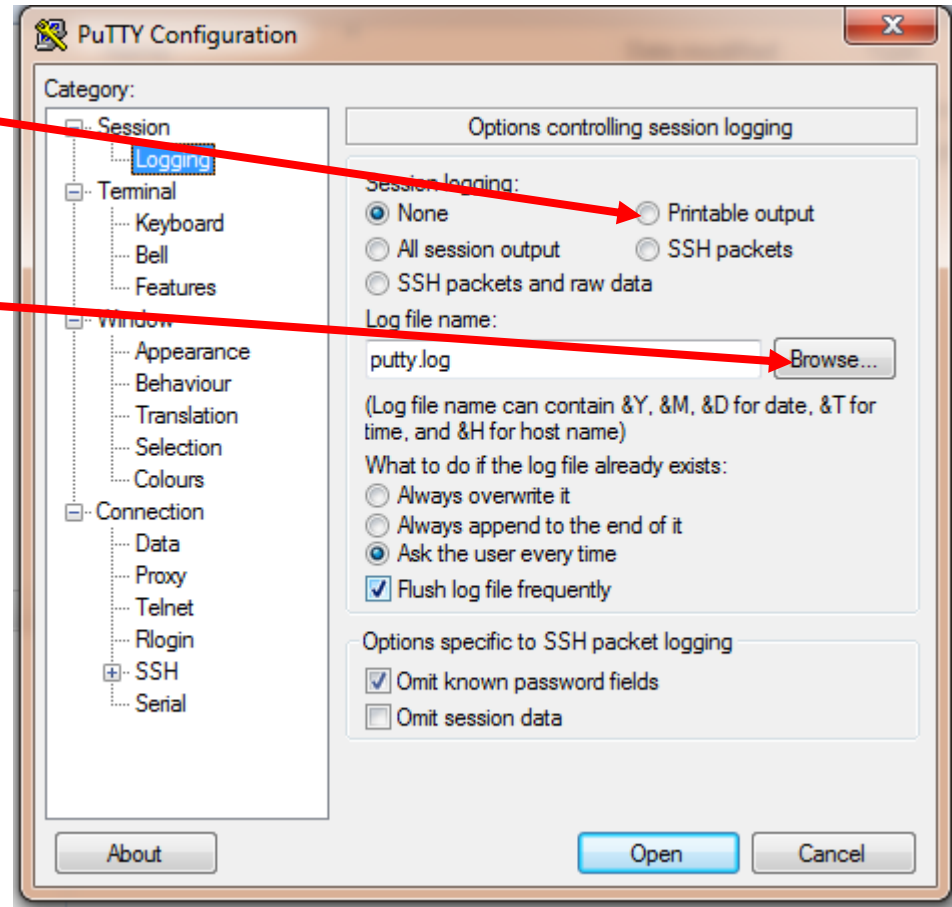


First Time User on Chiller Type



Select printable output

Click on Browse to select storage Path.



First Time User on Chiller Type



Select file location

Type file name

Click save

The screenshot shows a Windows Explorer window titled "Select session log file name". The address bar indicates the current location is "JCI TI 2014 (D:) > Putty". The left sidebar shows the "Computer" section with "JCI TI 2014 (D:)" selected. The main pane displays a table of files:

Name	Date modified	Type
OptiView test.log	9/16/2015 2:57 PM	Text Docu...
putty.exe	12/18/2014 1:11 AM	Applicati...

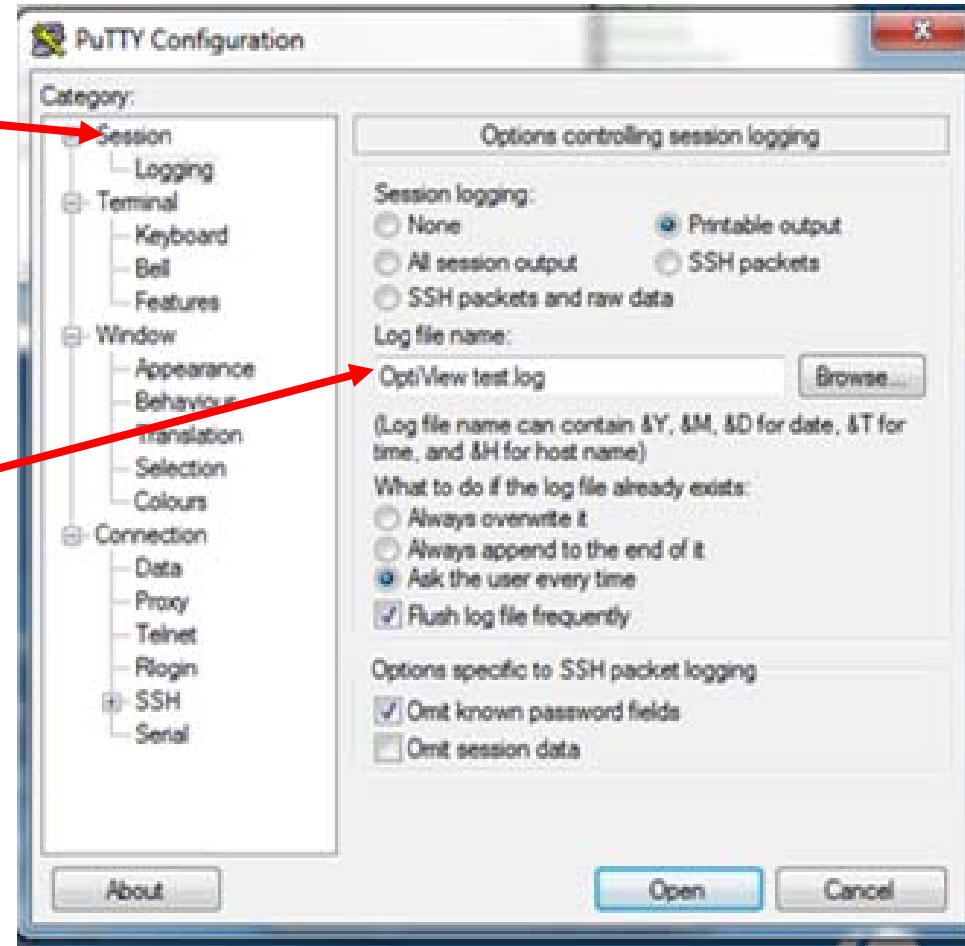
The "File name" field at the bottom contains "putty.log" and the "Save as type" dropdown is set to "All Files (*.*)". A red arrow points from the text "Click save" to the "Save" button.

First Time User on Chiller Type



After verifying file name click on session

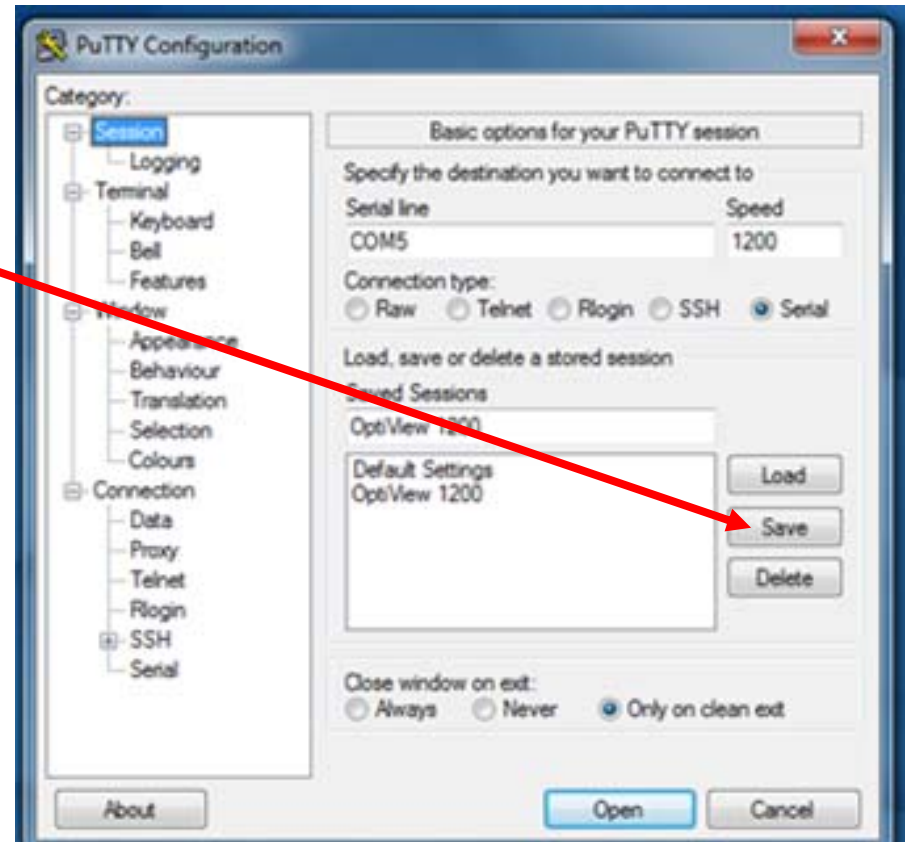
File name that putty is writing to shows in the log file name space



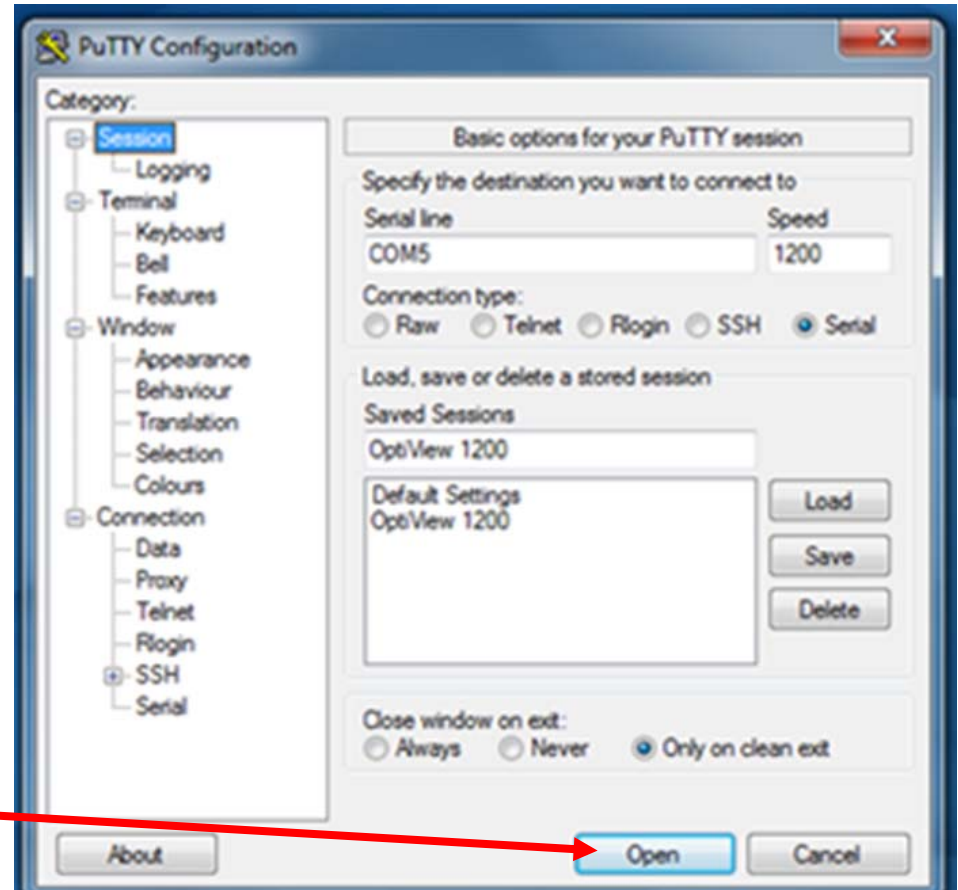
First Time User on Chiller Type



Click on save to save setup



First Time User on Chiller Type



Click on Open

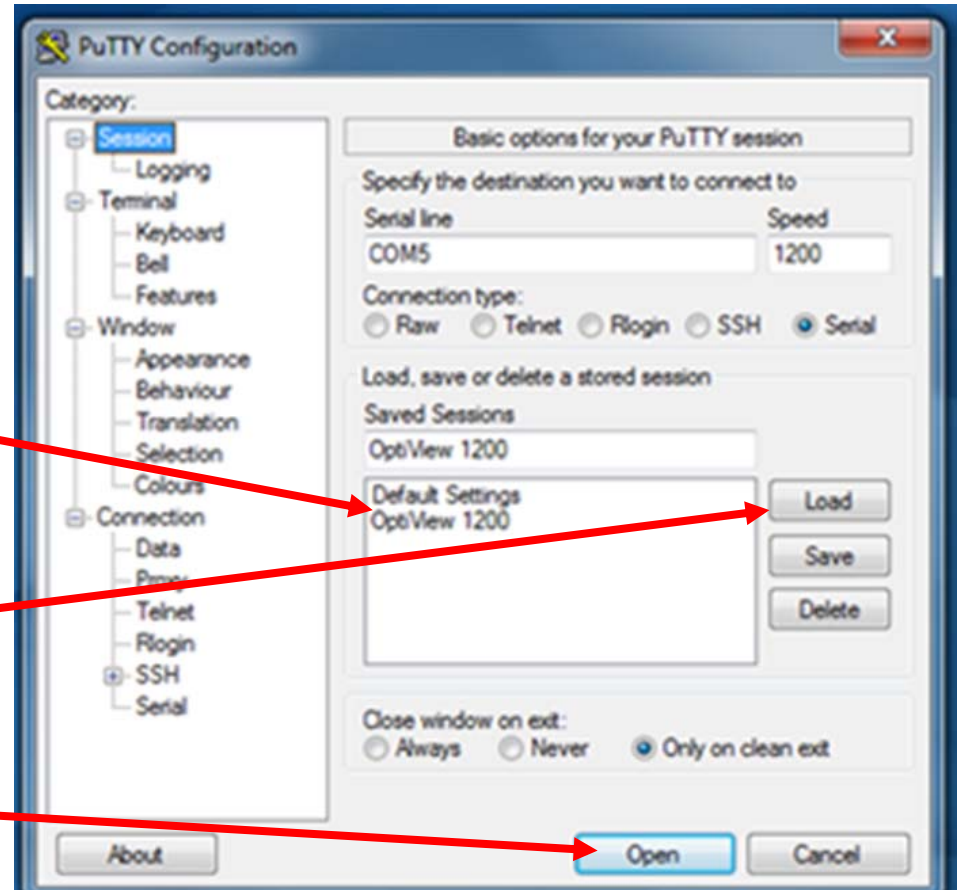
Return User on Chiller Type



Click on Session Name

Click on Load

Click on Open



Computer Display



Press the desired printout button on the OptiView panel and the information will display on your computer.

```
COM5 - PuTTY
YORK Update
Chiller ID 0
(c) 1997 - 2007 YORK, a Johnson Controls Company
Wed 16 Sep 2015 12:33:16 PM

CYCLING SHUTDOWN - AUTO RESTART
CONTROL PANEL - POWER FAILURE

Controls C.OPT.01.17.307
Run Time 0 Days 0 Hr 0 Min

Operating Hours = 157 Hr
Number Of Starts = 45
Control Source = Local

Evaporator
-----
Leaving Chilled Active Se = 45.0 ~F
Chilled Liquid Pump = Stop
Chilled Liquid Flow Switc = Closed
Leaving Chilled Liquid Te = 49.2 ~F
Return Chilled Liquid Tem = 55.1 ~F
Evaporator Pressure = 37.0 PSIG
Evaporator Saturation Tem = 42.0 ~F
Evaporator Refrigerant Te = 43.5 ~F
Small Temperature Differe = 5.7 ~F

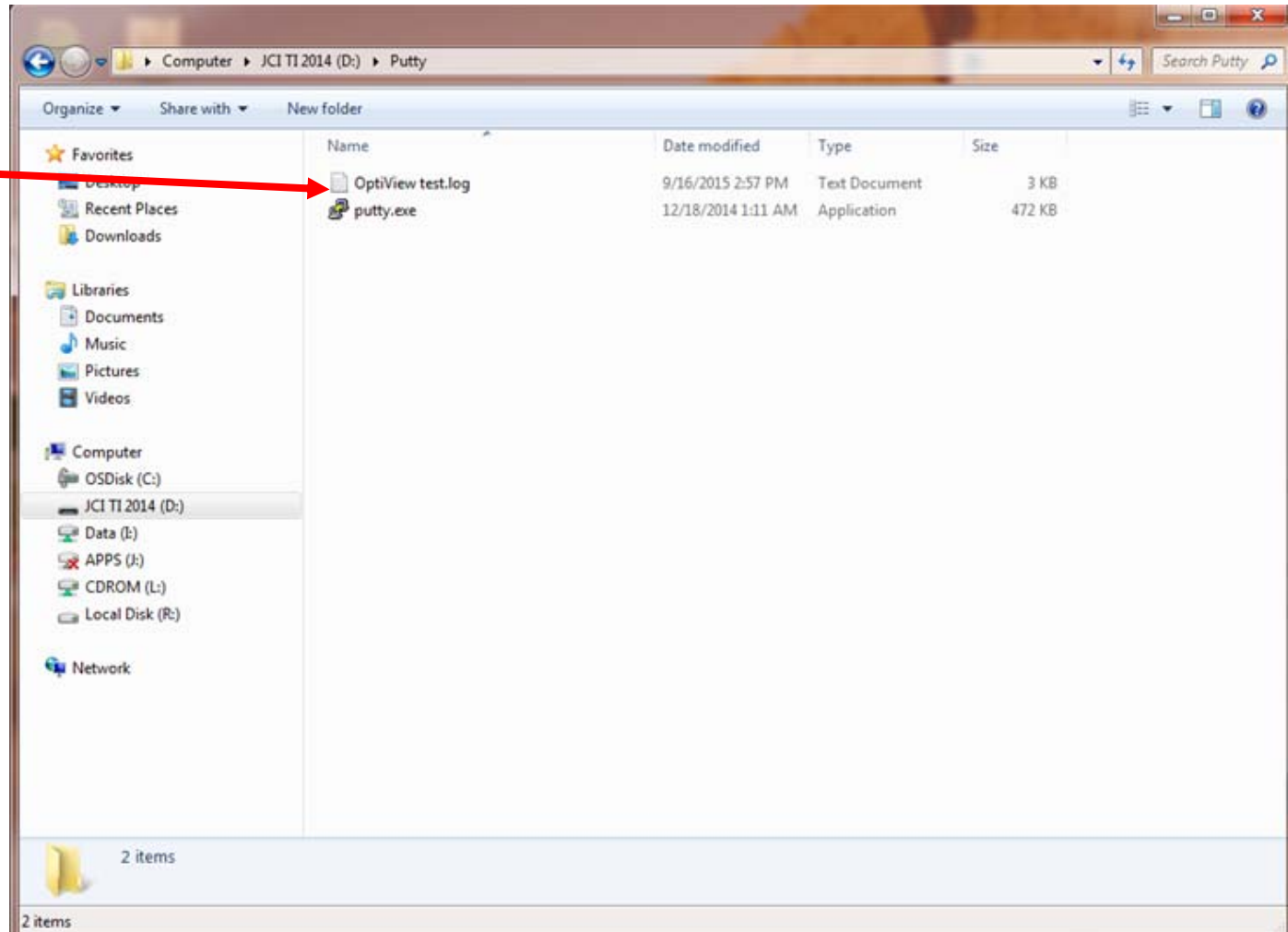
Condenser
-----
Condenser Liquid Pump = Stop
Condenser Liquid Flow Swi = Closed
Leaving Condenser Liquid = 59.7 ~F
Return Condenser Liquid T = 85.1 ~F
Condenser Pressure = 111.1 PSIG
Condenser Saturation Temp = 93.6 ~F
Small Temperature Differe = 33.9 ~F
Drop Leg Refrigerant Temp > 121.8 ~F
Sub Cooling Temperature = XXX.X ~F

Compressor
-----
Discharge Temperature = 131.7 ~F
Liquid Line Solenoid = Off
Vent Line Solenoid = Off
```

Computer Text File



Click on the file name to open Text File



Computer Text File



Check date and time for current information. You may continue to use this file as long as the PUTTY program is open. Once the program is closed or computer is turn off you must use a new log file name or you will write over this file.

Close file when done

```
OptiView test - Notepad
File Edit Format View Help
----- PUTTY log 2015.09.16 12:51:34 -----
YORK Update
Chiller ID 0
(c) 1997 - 2007 YORK, a Johnson Controls Company
wed 16 Sep 2015 12:33:16 PM

CYCLING SHUTDOWN - AUTO RESTART
CONTROL PANEL - POWER FAILURE

Controls C.OPT.01.17.307
Run Time 0 Days 0 Hr 0 Min

Operating Hours = 157 Hr
Number Of Starts = 45
Control Source = Local

Evaporator
-----
Leaving Chilled Active Se = 45.0 ~F
Chilled Liquid Pump = Stop
Chilled Liquid Flow Switc = Closed
Leaving Chilled Liquid Te = 49.2 ~F
Return Chilled Liquid Tem = 55.1 ~F
Evaporator Pressure = 37.0 PSIG
Evaporator Saturation Tem = 42.0 ~F
Evaporator Refrigerant Te = 43.5 ~F
Small Temperature Differe = 5.7 ~F

Condenser
-----
Condenser Liquid Pump = Stop
Condenser Liquid Flow Swi = Closed
Leaving Condenser Liquid = 59.7 ~F
Return Condenser Liquid T = 85.1 ~F
Condenser Pressure = 111.1 PSIG
Condenser Saturation Temp = 93.6 ~F
Small Temperature Differe = 33.9 ~F
Drop Leg Refrigerant Temp > 121.8 ~F
Sub Cooling Temperature = XXX.X ~F

Compressor
-----
Discharge Temperature = 131.7 ~F
Liquid Line Solenoid = Off
Vent Line Solenoid = Off

Oil Sump
```

Closing Putty Program



Click to close session and Putty program. This will end the information you can add to this file.

The screenshot shows a Windows desktop with a terminal window titled "COMS - PuTTY". The terminal displays the following text:

```
YORK Update
Chiller ID 0
(c) 1997 - 2007 YORK, a Johnson Controls Company
Wed 16 Sep 2015 12:33:16 PM

CYCLING SHUTDOWN - AUTO RESTART
CONTROL PANEL - POWER FAILURE

Controls C.OPT.01.17.307
Run Time 0 Days 0 Hr 0 Min

Operating Hours = 157 Hr
Number Of Starts = 45
Control Source = Local

Evaporator
-----
Leaving Chilled Active Se = 45.0 -F
Chilled Liquid Pump = Stop
Chilled Liquid Flow Switc = Closed
Leaving Chilled Liquid Te = 49.2 -F
Return Chilled Liquid Tem = 55.1 -F
Evaporator Pressure = 37.0 PSIG
Evaporator Saturation Tem = 42.0 -F
Evaporator Refrigerant Te = 43.5 -F
Small Temperature Differe = 5.7 -F

Condenser
-----
Condenser Liquid Pump = Stop
Condenser Liquid Flow Swi = Closed
Leaving Condenser Liquid = 59.7 -F
Return Condenser Liquid T = 85.1 -F
Condenser Pressure = 111.1 PSIG
Condenser Saturation Temp = 93.6 -F
Small Temperature Differe = 33.9 -F
Drop Leg Refrigerant Temp > 121.8 -F
Sub Cooling Temperature = XXX.X -F

Compressor
-----
Discharge Temperature = 131.7 -F
Liquid Line Solenoid = Off
Vent Line Solenoid = Off
```

A red arrow points from the text on the left to the close button (X) in the top right corner of the PuTTY window. The Windows taskbar at the bottom shows the time as 12:53 PM on 9/16/2015.

E-mailing Text File



Copy and paste
in email, drag
and drop on
body of e-mail,
or right click
on file and
click sent to
mail recipient

