SYSTEM & NETWORK TECHNOLOGIES

LAB EXCERCISES MARCH 16TH 2016

Excercise A

Objective: Send an email from the command line

1: Download the executable "mailsend" from moodle and save it in to **"C:\Windows"**. This is a utility that will allow you to send emails from the command line. It needs an email server to provide the service to deliver the email. I have created an email address that we can use for this. The credentials are as follows:

Username: sysclass2016@gmail.com
Password: systems2016

Alternatively you can use your own email credentials if you wish.

There are full help notes and command examples on how to use this utility here.
Note this is a more complex utiltiy so you will need to be careful with your spelling and syntax.

The command below will send a basic email.

mailsend.exe -t recipient@gmail.com -f sysclass2016@gmail.com -ssl -port 465 -auth -smtp smtp.gmail.com -sub Subject -M "Hello World" -user sysclass2016@gmail.com -pass systems2016

Note: Replace "recipient@gmail.com" with the address that you want to send the email to. Send it to your own address to test it.

What does all this mean? It's explained in the link above, but in a nutshell:

mailsend.exe *: Starts the program*
-t recipient@gmail.com *: This specifies what recipent the email is sent to*
-f sysclass2016@gmail.com *: This specifies what recipent the email is sent to*
-ssl -port 465 -auth -smtp smtp.gmail.com *: These are the appropriate settings for use with gmail. (ssl is secure sockets layer, using port 465, and authenticating with a server called smtp. gmail.com. Note that SMTP stands for simple mail transfer protocol - see below)*
-sub Subject *: Is the subject line of the email*
-M "Hello World" *: Is the first line of the body of the email.*
-user sysclass2016@gmail.com -pass systems2016 *: These are the credentails used to logon to the gmail mail service.*

Simple Mail Transfer Protocol (SMTP) is an Internet standard for electronic mail (email) transmission. SMTP by default uses TCP port 25. The protocol for mail submission is the same, but uses port 587. SMTP connections secured by SSL, known as SMTPS, default to port 465 (nonstandard, but sometimes used for legacy reasons).
Although electronic mail servers and other mail transfer agents use SMTP to send and receive mail messages, user-level client mail applications typically use SMTP only for ***sending*** messages to a mail server for relaying. Using a process called "store and forward," SMTP moves your email on and across networks. It works closely with something called the Mail Transfer Agent (MTA) to send your communication to the right computer and email inbox. SMTP spells out and directs how your email moves from your computer's MTA to an MTA on another computer, and even several computers. Using that "store and forward" feature mentioned before, the message can move in steps from your computer to its destination. At each step, Simple Mail Transfer Protocol is doing its job. Lucky for us, this all takes place behind the scenes.

Excercise B

Objective: Create a scheduled task that creates a file containing information about the computer it is run on, and automatically emails it your email address (using a batch file).

Similar to last weeks lab, create a batch file that writes the following information to a file:

Host Name, IP Address, System Model.

Attach this file to the email you are sending via sendmail in a batchfile. For details on how to achieve this, see the usage for this tool here.

Excercise C

Objective: Amend previous excercise so that the following is performed: Create a scheduled task that creates a file containing basic information about the computer it is run on. Encrypt and compress this file, and email to yourself. All this should be achieved via a batch file.

See last weeks lab on how to compress and encrypt.
Once it is working, please edit your batch file so that it runs again and emails the file to: michael.duignan@gmit.ie

Excercise D

Explore the other options/switches available in sendmail such as name of sender, and having multiple lines of text on your email.