

Memory Jogging Notes From SAMAG seminar “Technology Bytes Again”

The Standard 4 Computer Setup

1. Most small organizations and home users have this setup.
2. Works well for 4 computers only really accessing the internet and maybe a shared printer.

The 5th PC the Slow Way

1. Adding and extra 4 port switch is slower and not an ideal setup.

The 5th PC the Faster Way

1. A 16/24/48 port business grade switch will make connections faster and 16 port switches are not too expensive.

POP External Email. Domain names and External Servers

1. Domain name hosting = buying an internet name eg www.stuartwilkins.net and having the name point to a computer where your web page and/or email live.
2. Buy the name and hosting from same provider and they will automatically point to the right place.
3. Email hosting = having email boxes on another computer that is connected to the internet 24/7.
4. Advantages, Renting space on another computer means you have 24/7 connectivity and you don't have to worry about security etc, Able to check email from anywhere.
5. Disadvantages, Once the emails are downloaded they have to be backed up individually on each computer, space is expensive, Have to set out of office at host, Hosting staff could read your email.

What Happens to External Email when your Internet is Down

1. Mail waits at the mail server (as long as you have enough space) until you get back online.

In House Email Server

1. Domain name points to permanent IP address where the mail server resides onsite.
2. Advantages. Central location for backup, You have large amounts of storage space for little money, Emails between employees don't leave building and incur download fees. Out of office done in outlook. Shared calendars in exchange, privacy.
3. Disadvantages. If your server goes down you lose email for all staff. Your power supply and backups are probably not as good as a web hosts, you have to open the firewall. Spam Risk if you don't have I.T. staff checking it for security.

What Happens to an In House Email Server when the internet is down.

1. Emails bounce back to the sender

Connecting to POP External Email from home.

1. Home computer set to check same external email.
2. If the home PC retrieves first then mails will not be received at the office.
3. You can check and then leave a copy. Can cause mailbox bloating and bounces.
4. Sent items are PC specific. Some of your sent items may be at home.

Connecting to an In House Email Server from home

1. If you try to come in from home you should bounce off the firewall.
2. If you open the firewall then there are Security issues.
3. See Remote access section for a solution.

What is a Server?

Are rugged computers with an optional screen that runs 24/7. Client computers connect to the server.

Usually their main jobs are:

1. File sharing (all files in one location accessed by multiple machines).
2. Email hosting. A central email storage.
3. Printer sharing. One printer accessed by multiple machines.
4. Backups of all centralized data on the server.
5. Central user authentication.

Advantages:

1. Able to deal with requests from multiple computers effectively.
2. Built better to deal with continuous high use.
3. Don't need to leave on a computer with printer attached for printing.
4. Backup from one location.
5. Able to hot desk between machines with same user account.
6. Shared Calendars.
7. Manage permissions of users by group.
8. Push out software and shortcuts when users log on.

Disadvantages:

1. All eggs are in one basket. If that basket fails then everyone is offline.
2. Cost to set up.
3. License Fees per user.

Types of Server Software

1. Windows Server plus Exchange Server. (2008 coming)
2. Windows Small Business Server (5 users onboard)
3. Apple Server. 10 users or Unlimited
4. Linux
5. Linux for Dummies. Clark Connect, SME server.

Pros and cons:

Windows: the main player. Easy to get support. Most things work with it.

Small Business server more cost effective.

Can be buggy. Security concerns if not behind firewall and antivirused and patched

Apple: very stable, easy to use. Apple related stuff works well with it, More secure as less common. Best option for mac based shops.

Can only use it on expensive mac supplied hardware.

Linux:

Totally free if you don't want support.

Harder to find linux trained support techs and more expensive.

Harder to use.

Lots of stuff doesn't work on it.

Clark Connect Or SME

Totally free and easy to use.

If you want to do anything apart from what is supplied it is a pain.

OEM

If you buy software with hardware at the same time it is OEM software and is much cheaper BUT it is only licensed for use on the one machine and if that machine is replaced you need to buy new software.

Remote Access with VPN

1. A combination VPN/firewall device checks user name and password and then creates an encrypted "tunnel" via the internet (much like internet banking).
2. The user is then connected to the network from home without opening the firewall to an internal server.
3. Disadvantages: any viruses etc on the computer at the end of the remote connection have access to your network from inside. I only recommend this for company laptops that are taken home. Also be aware that if a laptop is unsecured and then stolen they have remote access to your office.

Donation Ware

<http://www.donortec.com.au>

There are conditions and you have to meet their eligibility criteria <http://www.donortec.com.au/donors/microsoft-eligibility> but it is incredibly cheap donation software for things like Office, Windows and Windows Server.

Handy Links

Firewall Checker “Shields UP”: <https://www.grc.com/x/ne.dll?bh0bkyd2>

Password generator: <https://www.grc.com/passwords.htm>