A COMPANY VIEW; by Anthony.Victor.Booth 2013

(Title Page)

COURSE TITLE: FD NETWORK MANAGEMENT

UNIT TITLE: ISO (HEMOD0702)

COLLEGE NAME: THE MANCHESTER COLLEGE (OCP)

ACADEMIC YEAR: 1, (2013-2014)

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DEADLINE DATE: 06/12/2013

SUBMISSION DATE: (see submit.ak.uk)

TABLE OF CONTENTS

INTRODUCTION

This report (A Company View) relates to my personal experiences with I.T systems over the years, please read my supplementiary note 'YESTERDAY-to-TOMORROW' along with this introduction;

My first formal training in computers was with Plymouth IteC in the early eigthies, we were using Commodore 64, BBC and Apple IIe machines arranged as a 'U-Net'; - this was connected to using the RS-232 ("RS232 Specifications and standard," n.d.)connectors available on ALL 'modern' units (back then when computers ran off coal), it is an Industry Standard Connector which I am personally VERY sad to see 'leave the theatre' and can only see it as the writing on the wall for such entities as X.25, ISDN; - Basically, anything that is not at LEAST a 1 Gbps connection (including my beloved CISCO Catalyst 3560 multilayer network switch) will ALL follow the REST of historys GREATS such as the PENTIUM 75, the CRT
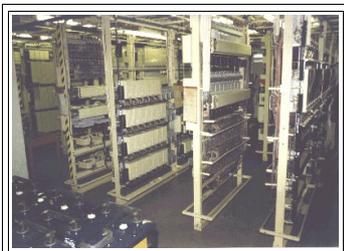
monitor (many of us did our time with freelance TV repairs, some of us are alive to read and interact with THIS!); - But it is ALL now either another contributor to the LANDFILL issue within our ENVIRONMENT – or managed to find (for the time being) a place of REFUGE in a MUSEUM! Illustrated (left) is a Strowger Switch exchange ("Strowger - Switching Concepts," n.d.) , a technology that is relatively pre-historic in these times, it was the Network Switch of its day and I feel pivelidged to have witnessed it first hand!

My I.T background;

Anthony.V.Booth – RESUME COMPUTERS AND I.T;

From the ZX-Spectrum to present day, I have had constantly experience with computers, my history takes me from the ZX-Spectrum, Apple IIe, BBC Micro, Atari 800 XL, Commodore 64 and friends; Onwards -Via the Amstrad PC 1640 (Among the projects with That machine was a custom interface card, a 16 channel scanning type security alarm called watchdog, and a sequencer for an electronic synthesiser that did not have a MIDI interface). At this stage in my life, I was already a very adept and advanced system designer (working freelance for individuals). I progressed onwards to the realms of the 286, 386, 486 and PENTIUM machines -from the construction from the ground up, including customization at component level of said hardware and the custom design of any

hardware that was required by either myself personally or the customer.These are qualities that I still have today – thanks especially to my experiences with surface mount technology as well as my years of experience in all aspects of electronic and electrical from micro-electronics to marine and industrial. The total design, re-wire and/or repair of electrical systems on motorbikes, cars, caravans, boats, houses, hotels, cafés, restaurants -to name a few Are all part of my life's working history to date. With the software side of things, my journey took me from DOS 3.1 > 6.22, also becoming extremely adept at 6502, Z80 and 8080 Machine Code, GW-BASIC and Borland Pascal to Windows 3.11 -I am also a veteran and survivor of Windows 95 June test release. As the years rolled by I was able to make myself useful with any Win 95,98,ME and XP machines that would appear before me in the workplace. The present day has me fully conversant with Win XP, Windows 7, Linux; UBUNTU, ZORIN,MINT, FEDORA to name but a handful of today's state-of-the-art with operating systems -my personal outfit at the time if writing is a Semi-Virtualized Mac-Win-Lin Hybrid Micronet… -I am current with most of today's software (office stuff like word-processing, spreadsheets etc are like holiday times to me) -my specialties include works with today's (ReWire) Digital Audio Workstation apps and I can create theme tunes even ring-tones. Inter-platform project migration, file type conversion are all services that I currently have to offer. Besides all of these, it goes

without saying that I can produce custom units by the container-load!!!.

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CISCO STUFF

I have already stated on my various (newly created) blog sites (anthonyvictorbooth.com) and certain others about my deep satisfaction in having acquired just ONE piece of CISCO kit; - namely a Catalyst 3560 switch. The aquisition of a Multi Layer CISCO switch simply TRANSFORMED my Personal Network, making it more easy to implement even Old ISR's as semi-remote Accces Points.

It was when I acquired one of these and RE BUILT my Personal LAN into something NEW!;

It was by Hand in Hand attending The Manchester College at OPENSHAW campus and learning all about Sub-Netting that I have not only now got my City & Guilds Level 3 ITC but some MTA tickets from Microsoft and a Discovery ticket from CISCO;

My personal network is now a Semi-Virtualized Mac-Win-Lin Hybrid Micro (Mini) Net…

I am a devout CONNOISSEUR of ALL operating systems and devising effective methods for them to Communicate and INTERACT;

…Imagine how it will be when the WHOLE WORLD is FINALLY CONNECTED

- not only to each other, but Maybe the Answer to LIFE??? (Google ROCKS!!!)

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ACTIVE DIRECTORY

Being an all-round Technocrat and FAN of Active Directory, I am MORE than HAPPY to USE it!!! HOWEVER; it is, as a result of providing so many features, bells and whistles – VERY C.P.U and Resource hungry!!!

From my own personal experiences, AND by chatting with people in various government facilities (including the local library, hospital etc) – we have ALL observed that logging on to a system that has been put under the control of Active Directory using a Domain Controller makes logging on a LOT SLOWER!!!

My personal reccomendation for anybody who uses Active Directory COMMERCIALLY should Seriously consider UPGRADING their Network Infrastucture (that their Domain Controllers operate across) to at LEAST a 1.0Gbps Ethernet or Fibre connection.

NETWORK STUFF

My personal LAN started as just a simple crossover cable and was used to connect two machines together, the IP adresses were provided by the APIPA feature found in Windows, this system of connecting two machines together was very primitive and un-reliable; later, I acquired an ISR (Integrated Services Router, the type that comes Free from the ISP), I was next able to connect two or more machines together.

Learning about Sub-Netting was something that can easily be compared to Staff Training, gaining an understanding of Static Addressing was something that went nicely hand in hand with learning about sub-netting, whether we talk here about a (busy) individual such as myself or a company with ten or more staff; Staff Training is as CRUCIAL as equipment/ software upgrades!!!

Something which ALL of us must REMEMBER is that the LIFE FORCE behind ANY NETWORK is US HUMANS!!! - The organising of all these meetings, seminars, presentation plus all that other mondaine kind(s) of clerical work must work with all the technology or else the technology Can and WILL find itself the subject to an *electical fault* generated by the accounts department back at the *electricity company*!!!

It is a funny notion really, but a TRUE one, that there could exist and HAS EXISTED Networks of people functioning at Corporate Level – WITHOUT COMPUTERS!!! (a look at some good Old Fashioned BUSINESS ADMIN will prove That point!!! - in 1991, when I lived in Thanet (UK) and ran a washing machine shop, I used to write ALL my sales records down into a HAND WRITTEN LEDGER – and issue HAND WRITTEN + CARBON COPIED receipts!!! There could NEVER be ANY network with No Humans, not one that would live so long – something will eventually break and need You or I to go and fix it!

The IT WORLD and MUSIC PRODUCTION

Over the years, most of the world has watched the technology develop. I can remember in my youth when the backbone of many synthesisers was a master tone generator, or a collection of analog oscillators, and a piano keyboard; nowadays, it is a small computer – with interfaces such as MIDI, Firewire and USB being commonplace in todays state-of-the-art hardware.

As the technology with most consumer/ commercial/ military hardware has improved, so has the technology around computers – with the arrival of what can be best described as a 'C64 Revival'; ("Commodore 64 rises from the 80s | News | PC Pro," n.d.) a sleek new client computer that has all the features of most of today's towers included Inside the Keyboard!!!

In the music production side of the computer world there has been a small revolution, with the evolution especially of a software protocol called ReWire; it works not only with REASON (by propellerheads software) but with a growing list of music/media production related software applications – this subject is covered in more detail in another article. But among the greats are Steinberg ("Home : Welcome to Steinberg | http://www.steinberg.net/," n.d.), Ableton("Music production with Live 9 and Push | Ableton," n.d.);

A link to a page on the propellerheads website; detailing ReWire; ("Propellerhead - Reason - List of ReWire capable software," n.d.)

 https://www.propellerheads.se/products/reason/index.cfm?fuseaction=get_article&article=rewire

From the angle of an amateur rendition artist and entrepeneur, I have found the same old picture of machines getting faster but the whole picture being hampered by LAN speed issues when working with network drives; waiting ten, twenty or more minutes for a project to load from a network place. When innovations such as Active Directory and Encryption are used there is AGAIN an argument that All of the LAN across the studio(s) must be at Least a 1Gbps connection – With at LEAST an i7 equivalent for ALL workstations within the organization.

VIRTUALIZATION

One of the BIGGEST developments that has EVER hit the I.T world has been VIRTUALIZATION, with not only Desktops (client units) becoming virtualized but Servers can exist on the HUGE storage racks of today's corporate mainframes; - All controlled by a SERVER Operating System, among the operating systems in use on today's servers (real **or** virtual) are Microsoft Server 2008/2012 (R2) as well as various options available from the Apple, MAC & LINUX fraternities.

The technology of virtualization is one which we can thank, not only for its positive impact on the carbon economy but, for the amount of Physical Space and Money which it **has** and **Does** and **WILL** save us! Even NIC cards are among the hardware that can be virtualized. Today's state-of-the-art in virtualization can be implemented using **VMware** (player/workstation), **Hyper-V**, **Virtualbox**; there are probably *others* – but that would be down to imagination and 007 movies for *most* of us!

I recommend *any* company that is *serious* about their corporate systems have got a **server farm** which includes platforms for **all three** of the solutions detailed above; - this makes the import/export of entire virtual desktops a lot easier, I have used *all* of these (as *well* as **Microsoft Virtual-PC**) and can *value* the **strengths** or *respect* the **weaknesses** of *any* of them.

OPERATING SYSTEMS

The past several decades especially have seen the most technological advances ever in the history of humankind!!! One of the areas that has seen much development (and obsolescence) has been (besides in software applications) has been with the actual operating systems; - from the ROM based scripts which were included with the various systems to the punch packing examples which can be found spread across the Linux, Microsoft and Apple/Mac theatres and beyond!

It is only the smaller minded element(s) of the I.T world which could ever say negative words against any of the Linux, Microsoft and Apple/Mac theatres!; better to say some nice and complimentary words about each of them in turn!!! In any high performance collaborative LAN, there will more than likely be a mixture of Linux, Microsoft and Apple/Mac hosts; - each desktop/workstation will be custom tailored to a given set of features and most frequently carried out tasks.

```
GW-BASIC 3.23
(C) Copyright Microsoft 1983,1984,1985,1986,1987,1988
60300 Bytes free
Ok
_




1LIST   2RUN←   3LOAD"  4SAVE"  5CONT← 6,"LPT1 7TRON←  8TROFF←9KEY    0SCREEN
```

Detailed above is a GW-BASIC screen; obsolescence of industry standards has occurred *across* the *WORLD,* over the past century *just* as *FAST* as new things have been
invented!............................

Among the biggest problems regarding inter-desktop issues are compatibility and/or obsolescence! The more recently released an operating system is, the less likely it will be to have all the drivers for the unit upon which the proposed installation is supposed to take place. As time goes forward and the I.T world continues along with it, there are more and more small devices (such as Smartfones, Tablets, Media-Streamers, Wireless HDD's to name but a few!) - each Local Area Network out there will have its own unique little collection of advantages/dis-advantages!

On my personal network, I can and do run a range of operating systems (Server 2008/2012, Linux ZORIN, Win 8, Win 7, Win XP even DOS) – they each have their own 'dialect' when being interacted with (constant interaction with all and/or any of these is the only real way acquire and maintain any level of proficiency with all/any of these; I have seen, over the decades, that even the oldest engineers in the workshop **NEVER STOP LEARNING!!!**

DETAILING A JOURNEY; FROM YESTERDAY to TOMORROW...

This article is a story about our world and us, about the **huge** distance that human kind has travelled in just 100 years, the way(s) that we have progressed both forward **and** backward in that time. When I was young, my hobby was electronics and I used to even use my school dinner money as collateral for my various wheelings and dealings with these things, I used to hold single transistors in my fingers and could somehow 'feel' that this was a Big Thing! (little did **any** of us know just **how** big).

As the years went by, I discovered integrated circuit chips and became equally addicted to antics with these. Among the projects that I completed were a wind speed analyser, computer controlled alarm system and a custom job to adapt an old VCR into a **security cam recorder -** the security cam system was **still working** after **fifteen years** (after my last conversation with Nigel House, 6 Dalby sq, Cliftonville) we know now that the system is now **obsolete.**

For **all** of my life, I have been a fan of electronic music, synths, drum machines and sequencers; as a schoolboy, I remember starting to build a synthesiser using an old school desklid. It was as recently as the turn of the millenium that I **still** had the 'ambition' to build a master tone generator (H & D, 1974) and install it inside a **marble** keyboard!!! ...also, the idea to create audio filters using real components; and then, I discovered the ReWire group of software suites.

http://www.propellerheads.se/products/reason/index.cfm?article=rewire&fuseaction=get_article

Going back to my youth, I used to make things for the garden (using old wood from around) my friends and I used to take market stalls from Glossop to Prestatyn and sell our products, I found that I was good at and enjoyed market trading (back there in the 'old world'). Slowly slowly, as time has passed, much of the 'first world' has changed beyond all recognition – more people than ever are buying and selling **online,** but I (as an 'old skool' head) can **still** appreciate the values of **real** shops that sell **real** CD's, Vinyls even tapes!!!

I am, at the time of writing, **convinced** that I will **always** understand the concept of a **real shop** with **real customers** coming and going – but will **never** see an online store as a replacement for all this, however – an online store could **always** serve as an **extension** to any **real** outfit but not neccesarily the other way around. I think that **any** kind of web based entity is **'dead in the water'** without some kind of 'drive' from the **real world** and some good Old Fashioned business admin. This kind of business admin would be in the shape of promotional flyers, leaflets, letters – even posters and/or banners.

Personally, I have had now some **five years** of experience with social media and found it (to-date) nigh on **impossible** to communicate with old friends with whom I had seemingly re-connected with; - as a result, it is my **rock solid** oppinion that I should have actually gone and made contact **in person!** The only trouble with that approach is that I would still be travelling NOW between all the various places! Is it perhaps fair to say that all this virtual ways of connecting everything together will likely yield **quantity** rather than the **quality** that any Real Life equivalents have to offer!

During the past years, I created some amateur renditions ("PENNINESHIRE_CENTRAL's stream on SoundCloud - Hear the world's sounds," n.d.) using some of today's state-of the-art in Digital Audio Workstation applications including Ableton ("Music production with Live 9 and Push | Ableton," n.d.) . Reason, Cakewalk, Steinberg were among my other favourites.

For quite some time, my cyber acoustic tantrums have simply been sat there (webside) as well as on my hdds and backup DVD's. - I am thinking that when I finally become a good enough network manager to sufficiently organise myself that I might eventually come up with a product. Adjusting to the new school technologies is the **primary key** to becoming a piece of the action in **any** aspect of the I.T world.

The idea that the ordinary **CD** is now **semi-obsolete** is a **stunning fact** that all of humankind is slowly realising. More and more people are using phones and tablets to listen to music; portable devices these days can hold anything from a shoe box full to a **suit case** full of **media** CD's **AND** DVD's!!! slowly slowly, people are **waking up** to what they are **holding** in their **hand**!!!

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MY ITC BACKGROUND

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