

RADYR AND MORGANSTOWN COMMUNITY COUNCIL IT SYSTEM RECOMMENDATIONS



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Contents

Introduction	3
Current System Notes	3
Recommended Improvements	4
Upgrade the broadband to a FTTC service	4
Install a newer Wireless Access Point.....	5
Replace the small TP Link Switch	5
Install Suitable Anti-Virus Software	5
Encrypt the PC Hard Disk Drives	5
Upgrade / Replace the Office 365 subscriptions	6
Set up a cloud drive service	7
Set up a PC support agreement	7
The Next Steps	7

RADYR AND MORGANSTOWN COMMUNITY COUNCIL

IT SYSTEM RECOMMENDATIONS DECEMBER 2017

Introduction

Radyr and Morganstown Community Council are looking at ways to improve their IT system and enable access to data and email from outside of the office as well as protecting their data against system failure through reliable backups.

Current System Notes

Currently there is a small network in place that comprises two PCs in the office of which one has a shared folder for the other to access data.

The two PCs have a fairly good specification with both having Intel Core i processors and 8Gb. RAM running Windows 10 Home 64 bit operating systems.

There is no commercial anti-virus program on these PCs and Windows 10 Defender is in use. The hard disks on these PCs are not encrypted meaning that should the machines be stolen the data stored on the hard disks would be accessible either by cracking the Windows password on the machine or by removing the hard disk and installing it into another computer.

The version of Microsoft Office currently installed on each PC is an Office 365 monthly subscription that appears to be registered by a third party.

The shared data is predominantly Office documents and there is an installation of Sage Accounts that is accessed across the two PCs. It has been mentioned that in some cases there are difficulties in opening files located on the 'shared' PC.

There is presently only one email address in use on both PCs which is clerk@radyr.org.uk and the radyr.org.uk domain name is registered with 123-Reg and is not owned by the Council but by an associate, Adam Coleman, who set up the domain originally.

Even though there seems to be only one email address in use, looking at the website radyr.org.uk shows that there is a web-team@radyr.org.uk email address so additional email addresses have been configured for the domain.

There is no obvious backup in place for the user data. A Lacie Cloudbox is located in the 'server room' where the broadband comes in to the building but it doesn't seem to be working properly and being such a small box, it does pose a security risk in that it can be relatively easily picked up should an opportunist have access to the room.

In addition to this, even if the backup was working it means that there is only one device with the backups stored on it so if that device fails the backups are lost.

The computers in the main office are connected via a small TP-LINK mini switch on the wall and this has been known to lock up causing communication issues.

Internet is currently via a BT broadband connection which is a standard ADSL circuit giving approximately 15Mbps download and 0.91Mbps upload and this is shared with the other users of the building through the wireless facility.

There is currently no remote access to the system although the users would like the facility to be able to access shred data remotely should it be required.

Recommended Improvements

There are a number of recommendations we would suggest to improve data security and provide secure access to data and emails from outside of the office.

The recommendations are:

1. Upgrade the broadband to a FTTC service
2. Install a newer Wireless Access Point
3. Replace the small TP Link Switch
4. Install Suitable Anti-Virus Software
5. Encrypt the PC Hard Disk Drives
6. Upgrade / Replace the Office 365 subscriptions
7. Set up a cloud drive service
8. Set up a PC support agreement

Each of these points are expanded in the following paragraphs.

Upgrade the broadband to a FTTC service

By running a test against the telephone number 029 2084 2213 which is the main number for the office it confirms that faster fibre broadband is available in the area attaining speeds of up to 76Mbps download and 20Mbps upload:

Telephone Number 02920842212 on Exchange RADYR is served by Cabinet 9

Featured Products	Downstream Line Rate(Mbps)		Upstream Line Rate(Mbps)		Downstream Handback Threshold(Mbps)	WBC FTTC Availability Date	WBC SOGEA Availability Date	WBC FTTC 18x2 Provide Availability	WBC FTTC 18x2 Sim Availability	Left in Jumper
	High	Low	High	Low						
VDSL Range A (Clean)	76	55	20	14	49	Available	--	--	--	--
VDSL Range B (Impacted)	64.5	40	18.2	9.9	35	Available	--	--	--	--
Featured Products	Downstream Line Rate(Mbps)	Upstream Line Rate(Mbps)	Downstream Range(Mbps)		WBC FTTP Availability Date					
FTTP on Demand	330	30	--		Available	--	--	--	--	--
ADSL Products	Downstream Line Rate(Mbps)	Upstream Line Rate(Mbps)	Downstream Range(Mbps)		Availability Date					Left in Jumper
WBC ADSL 2+	Up to 15	--	12 to 17.5		Available	--	--	--	--	--
WBC ADSL 2+ Annex M	Up to 15	Up to 1.5	12 to 17.5		Available	--	--	--	--	--
ADSL Max	Up to 8	--	7 to 8		Available	--	--	--	--	--

WBC Fixed Rate	2	--	--	Available	--	--	--	--
Fixed Rate	2	--	--	Available	--	--	--	--
Other Offerings				Availability Date				
VDSL Multicast	--	--	--	Available	--	--	--	--
ADSL Multicast	--	--	--	Available	--	--	--	--
Premise environment	Status							
Bridge Tap	N							
VRI	N							
NTEFaceplate	N							
Last Test Date	20-05-2017							

For all ADSL and WBC Fibre to the Cabinet (VDSL or G.fast) services, the stable line rate will be determined during the first 10 days of service usage.

This would give a much faster broadband service to the council which is beneficial when using any online services and would also mean the other users of the building would get better wireless internet service as well and other users on the broadband would not affect the council as much as may currently be happening on the slower connection.

Install a newer Wireless Access Point

Combine this fibre broadband service with a newer Ubiquiti access point the wireless users will get better wireless connections around the building which again should not compromise other users of the network.

Replace the small TP Link Switch

As the small TP-Link switch in the main office has locked several times it would be worth replacing this with a more robust model.

TP-Link manufacture a range of small metal cased switches which tend to be more substantial than the mini plastic models so replacing the current switch will hopefully provide a more stable network for the office PCs.

Install Suitable Anti-Virus Software

Any existing consumer Anti-Virus software should be removed and a commercial package be installed such as ESET Endpoint Protection which imposes a lower overhead on the computer as well as regular Anti-Virus updates.

This can be acquired at a reduced price as ESET have government pricing in place that can be used in this case.

Encrypt the PC Hard Disk Drives

Due to the environment within the organisation where, in some cases there is public access to the office, it is feasible that PCs could get stolen and these PCs could contain Council or indeed personal

data, as well as email data, it is highly recommended that the disks on the computers be encrypted to ensure that data cannot be obtained from the machines in the event of theft.

ESET Endpoint Encryption will encrypt the contents of a computer hard disk and protect it via a password that needs to be entered BEFORE Windows boots up – this password is in addition to the Windows logon password for the system.

The use of ESET Endpoint Encryption safeguards the organisation's data against theft of a PC as it means that if a computer is stolen then the hard disk cannot be read in another PC.

ESET Endpoint Encryption will also allow users to create encrypted USB sticks that cannot be read unless a password is entered meaning that data can be distributed to colleagues and transported safely without risk of breach should a USB stick be lost or stolen.

It is also possible with ESET Endpoint Encryption to prevent access altogether to removeable devices so no unauthorised user can take data from the organisation via USB or writeable optical disk.

Again, as ESET provide special Government pricing this product can be acquired in this case at a reduced rate.

Upgrade / Replace the Office 365 subscriptions

If the current subscription can be upgraded then the council would benefit from Office 365 mailboxes being configured as this will give the users a 50Gb. mailbox for emails as well as full use of the Microsoft Office products and, as long as the subscription remains, can upgrade to the latest version of Microsoft Office as and when it is released.

Alternatively, a new subscription could be invoked and the existing domain name moved across (if the current owner agrees to this), or a new domain name could be created for the council separate to the radyr.org.uk domain name if moving the current domain is not an option.

Office 365 Business Premium gives full use of the Word, Excel, PowerPoint, Outlook and Publisher as well as online cloud storage that can be utilised in the future and services such as Skype for communicating with other Skype users (requires web camera and speakers)

Each user can install their license on up to 5 devices so users can install the Office suite at home and on tablets or mobiles and as email is stored in the Microsoft Cloud it means that work PCs, Home PCs and mobile devices are all synchronised with email allowing users to access mail services from outside the office.

This also allows users to access a OneDrive service giving a personal cloud storage of 1Tb. each so files can be synchronised between computers that have the same Office 365 account.

Should the user not have their computer or mobile device available and not be at home then Office 365 also provides a webmail service so email can be accessed from any web enabled computer via a web browser.

Office 365 does not include a comprehensive backup facility so mailboxes should be protected through the use of a suitable backup utility such as the Datto Office 365 backup service which automatically backs up users' Office 365 accounts to a UK based encrypted cloud store three times a day allowing for recovery in the event of users deleting emails or cloud stored data.

Set up a cloud drive service

A cloud drive service would allow data to be synchronised between PCs in the office or at home allowing users to access data and synchronise back to all devices as changes are made.

A Datto Drive service gives 1Tb. of cloud storage which is backed up daily and retained for 7 days so gives a combined shared drive and backup service with unlimited users.

External users can be added to access certain folders should the Council require to share documents with other parties from time-to-time, such as allowing Councillors access to minutes or other documents when the need arises.

Set up a PC support agreement

In order to keep the above systems working and maintained as well as facilitate changes as and when required a suitable support agreement should be implemented which allows the council to request support as and when required.

In this particular case, it may be sufficient to have a telephone / email support option only which covers everything on a remote support basis only and doesn't include calls out to site – users would call or email their issues creating a support ticket on our system whereby an engineer would then call back (if not available at the time of call) to establish a remote support connection to the user's computer to attend to the issue.

As much of the above is concerned with cloud based systems we would have access to all of the relevant portals to configure and check systems meaning that a lot of issues can be attended to remotely so a support agreement that doesn't include calls out should be considered where any calls to site would be charged at a reduced rate.

Should it be felt that a support agreement that includes site visits would be required then this could be discussed and an agreement that includes a certain number of visits, or support hours, could be negotiated.

The Next Steps

It is suggested that the next stage in this process would be to meet so we can discuss this proposal in more detail and address any questions that may arise.