Windows 10 Upgrade Plan for Tetra Shillings Accounting LLC

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Objective

Tetra Shillings is a reputable accounting firm that is in its periodicity to overhaul their equipment and upgrade their systems. As technology improves, there have been increased attempts on cyber security breaches and attacks to major corporations, which has been an example and impact on how their systems are being protected against threats to steal personal information and classified documents. With that, it's been highly recommended to update to Windows 10, which provides a higher level of security against these attacks. Upgrading from Windows 8, you will have increased security measures against attacks and police all internal staff with certain policies. Moving to Windows 10 would give an elevated level of security because of its wide variety of built-in security features[1]. Tetra Shillings will be getting updated patches and important security fixes as they come. To add, since you have been using Microsoft products from the beginning, it would make the transition to Windows 10 seamless[1].

The opportunity: Benefits of upgrading to Windows 10

As with all software that gets a major upgrade from the old, Windows 10 is a complete overhaul of Windows 8.1. Because Windows 8 has not been updated in such a long time, shows that it is no longer supported by Microsoft and they have not provided any updated security patches that would help protect the computer system from cyber threats. In turn, if Tetra Shillings Accounting were to stay on Windows 8, it would leave them vulnerable to almost any cyber-attack currently to date, as cybercriminals are more sophisticated to breach older systems.

Windows 10 could alleviate all the major concerns withing Tetra Shillings. Some of the new added security features that would protect your devices are Secure Boot, Device Guard, Windows defender and Windows Hello[1]. There's the ability to use BitLocker to safeguard your information as well. When using Windows defender, it raises your level of protection by designating a list of trusted websites or opening untrusted websites in an area separate of your primary network connected to installed applications, memory, local storage or any other resources that may come under cyberattack[2]. Windows hello provides multi-factor authentication before having access to your device. You can now work with biometric data as well as be paired with "companion devices" (smart phones, smart watches, etc.) to ensure only

authorized users can have access to the computer on which Windows 10 is installed. BitLocker is already integrated into the Windows OS, encrypting your entire drive, making it impossible for malicious actors to steal your information [2]. Microsoft has also adapted to the modern cloud-technology and has cloud-based storage that can be setup as backup for each end user automatically and manually.

Upgrade plan

The enterprise version of Windows 10 would be the preferred choice for Tetra Schillings. It's the version designed for organizations requiring more options for deploying, managing and controlling Windows – and now, more control over upgrade and the support lifecycle [3]. The best way to ensure all devices are equipped with the business standard, The upgrade plan would include the Microsoft Deployment Service (WDS) and Microsoft Deployment toolkit (WDT). The process will be simple to start. You use the WDS to fire up your computers and get them ready for deployment. Then, you use MDT to customize the image that gets pushed to those computers [4]. MDT would be used first to set up an image of what the client computers would have as default when they initial boot up the computer. You can create setup files, packages and additional policies and have an unattended installation. Then, you would incorporate WDS to deploy the images to each client computer. All of this would be set up on a central server, where the administrator can push the images through the server to each client connected to the network. The disadvantages of using MDT is that it's not the easiest tool to use, there's no official technical support, and supporting diverse hardware can be a time-consuming and complicated affair [5]. It is critical to backup each end users files so there is minimal impact on the operation as a whole. This is where the cloud-based storage provided by Microsoft will be helpful.

In order to have successful upgrade, careful planning and communication is key to all administrators and end users. Informing all personnel in Tetra Schillings of the planned date and time of when the upgrade plan will take place and approximately how long it will take will ensure everyone does their part to not interrupt the process.

Strategy for keeping the operating system updated

From the negative outcomes from previous security breaches, Windows 10 Enterprise will be the solution. It has extensive security measures and policies to minimize damage from any cyber threat. As cyber attackers infiltrate daily, Microsoft learns how they are doing it and provides patches and hotfixes for end users using its software to prevent the any threats happening to them. To keep all machines up to date, auto-update features need to be enabled at each workstation. It must be advised as policy to all end users and administrators that all workstations should never be turned off so that updates can occur as needed and from Microsoft and periodic updates are executed after working hours. Windows 10 has a system restore point feature that you can have it automatically save a certain time. Backing up each workstation is vital to the operation, so utilizing Microsoft's One Drive cloud storage is essential in having every workstation auto backup at every idle period of the day. It can even occur right after using a document or file. It is also each end users responsibility to make it a common practice to save documents and files on a back-up server as well.

References

[1] M. S. Villanueva, "Windows 10 home, pro, or enterprise: What's the difference?," Intelligent Technical Solutions, 10-Sep-2021. [Online]. https://www.itsasap.com/blog/windows-10-versions (accessed Nov. 4, 2024).

[2] D. Kostadinov, "Windows 10 security features," Infosec, 20-Jul-2020. [Online]. https://www.infosecinstitute.com/resources/operating-system-security/windows-10-security-features/ (accessed Nov. 4, 2024).

[3] M. Branscombe, "Everything you need to know about windows 10 enterprise support," TechRepublic, 10-Sep-2018. [Online]. https://www.techrepublic.com/article/everything-you-need-to-know-about-windows-10-enterprise-support/ (accessed Nov. 4, 2024).

[4] R. Bishop, "What is Windows Deployment Services?," SmartDeploy, 23-Oct-2024. [Online]. https://www.smartdeploy.com/blog/what-is-windows-deployment-services/ (accessed Nov. 5, 2024).

[5] J. Yip, "What is Microsoft Deployment Toolkit (MDT)? Pros & Cons," SmartDeploy, 27-Jun-2024. [Online]. https://www.smartdeploy.com/blog/microsoft-deployment-toolkit-pros-cons-of-a-free-tool/ (accessed Nov. 5, 2024).