

Branden Barnes

CYSE 280 – Windows Systems Management

Professor Malik A. Gladden

Mod 5,6,7,8,

### **Configuring and Managing Data Storage & Configuring and Managing Network Services**

1. The main problem with fragmented files is access time. When more files are created and stored into the hard disk, large files can be placed in different areas. To fix this problem, defragmenting locates fragmented files and moves them to a location on the hard disk where they can be stored and read as a single unit.

2. Backing up an organization's server is important because the responsibilities of a server administrator are to ensure data on the system is protected. Backing up data is the most reliable way to protect data. There are many providers that you can purchase and use to help back up files.

3. Creation of a DNS implementation plan. First what must be done is to install and configure the DNS Server role. You can manage your DNS server by clicking DNS from the Tools menu in Server Manager to configure properties the way you want it. You can configure a primary lookup zone on a DNS server to hold resource records that are authoritative for a zone in the Domain Name Space. You can also create a reverse lookup zone by clicking on the Reverse Lookup Zones folder and start a new zone to the properties of your choosing.

4. Advantages of DHCP include providing the IP address of one or more default gateway routers to listing the FQDN or IP address of a server that hosts a bootable operating system image. Disadvantages of DHCP include tracing internet activity, and you must have device that support the DHCP configuration. You can manage a DHCP server in the Tools menu and organize using scopes.

### **Episode #73: WannaCry of the DarkNet Diaries podcast:**

5. The WannaCry ransomware attacks hit hospitals in the UK's National Health Service. It exploited Windows computers connected to the network. They were able to use machines not connected by the ethernet, like CT scans, which saved their function.

6. The NHS had to cancel 6,912 appointments because of the WannaCry attack. Forty-five hospitals were affected out of several hundred. It is a worldwide attack to several countries, but its just in the UK that hosts the most impact to NHS.

7. What can be learned from the WannaCry attack about the importance of cybersecurity and the potential risks of relying on outdated or unsupported software is several organizations will research these attacks and find technical responses to stop these ransomwares. A group called FireEye, a threat intelligence company, try to reverse-engineer pieces of malware to resolve into an antivirus. Other small companies also try to get their hands on these ransomware codes to figure out how they work.

Hopefully in the future all these big attacks will provoke a national race to better security practices.

### **Configuring Resource Access & Configuring Printing**

1. Benefits of folder and file auditing include the ability to track activity on a folder or file. If you have a folder or file that includes accounting and payroll, auditing allows you to track read or write activities on financially sensitive information. You can also see which users access information.

2. advantages of using an encryption algorithm include the protection of the data stored in a filesystem.

Once the file is encrypted other users trying to open the file will not be able to decrypt data without the private key. However, if a malicious user attempts to clear or reset your password using another utility, the private key is lost, and so is your encrypted file.

3. Several events must occur before a document can be successfully printed. A locally attached or network attached system like (XPS) must be configured. XML Paper Specification is supported by Windows Vista and later systems that print from applications that use the Windows Presentation Foundation framework. It stores documents within a spool folder using XPS format, which provides a standard graphical layout format like Portable Document Format. It helps to identify the beginning and end of each printout.

4. A Separator Page helps to organize paper copies of documents and folders. It is used to place an information page at the beginning of each printed document that lists the document name and user that printed it