

Lab 8.4.2 Planning a Backup Solution

Objective

- Based on the business scenario, plan an appropriate backup solution.

Background / Preparation

You have been asked to plan and propose a backup solution for a small business customer of the ISP for which you work. The small business is concerned about losing valuable company data, and in the last three years, they have lost data due to hardware failure and user error. They want to ensure they have the quickest data recovery plan available built into the solution. The customer is willing to take on all local administrative tasks to monitor and manage the local backup system.

Current data requirements:

Server 1: 50GB

Server 2: 100GB

Server 3: 10GB

Based on their current growth in the amount of data, the company anticipates 10% growth in total volume of data each year.

The company has decided that they would like a backup solution that allows them to have 4 weeks worth of daily backups, and an additional 12 months worth of monthly archives. They would also like a solution that will last 5 years without outgrowing its capacity.

NOTE: You can assume that they are not able to purchase a tape autoloader or library system, which means that the capacity of the backup media needs to accommodate all the data in one unit.

Step 1: Choose the media and backup hardware

Based on the media types described in this course, use the Internet to identify a suitable media with the capacity that meets the requirements of the business. You are also required to investigate the cost of purchasing additional hardware, if required, and the price of the media. Also based on the history requirements, identify the number of backup media. Enter your recommendations in the table below.

NOTE: The company's normal business hours are Monday through Friday, 8:00 a.m. to 6:00 p.m., but employees can come in as early as 7:00 a.m. and stay until as late as 8:00 p.m. Therefore, the company has decided that backups cannot start until after 10:00 p.m. and must be completed before 6:00 a.m. The equipment and backup media selected must be fast enough to back up all data from all servers within this time period.

Equipment / Media	Price	Quantity

Step 2: Design a backup plan and procedure

Now that you have decided on the backup media, it is time to assemble the backup proposal and procedure for the company to manage their backup system. You need to decide what backup type is most appropriate for the business and how the business should schedule the swapping of the media. The business needs to have a procedure developed that is simple and easy to follow. Media needs to be labeled properly so the customer knows what is backed up on each day. Be sure to address the customer's needs in your proposed backup plan. Also identify any other open issues or questions that may still need to be asked to achieve a good solution for the customer. Describe your plan in the following steps:

- a. Describe the equipment recommended and explain why you selected this equipment:

- b. Describe location of the equipment in the network and the network link speeds to the equipment:

- c. Describe the backup media to be used and also explain why you selected this media:

- d. Describe the backup schedule:

- e. Describe the backup and restore procedure, including: what kind of backup (Normal, Differential, Incremental), how it will be tested, what kind of maintenance the equipment requires. How tapes will be labeled and where tapes that have been backed up will be stored. When backups need to be restored, what is the specific procedure for a file, a folder, a drive (use extra sheets if necessary)?
