San – controlled and application server-controlled backups essay

Storage area networks (SAN) controlled backups are found in tape libraries that are directly attached to the SAN. Data in these libraries is sent via the SAN rather than via the production network.

These backups are quicker since the SAN Fabric Channel carries out data transfer faster than the distinctive network based on Ethernet. SAN-controlled backups ensure better performance in the network. This is because bog downs are eliminated during backups as data is being transferred through the SAN. Besides, network users are not impacted whenever backup process, which can be undertaken at any time, is in progress. Since SAN supports capacity sharing among all the networked devices, efficient use of the backup resources is ensured. Additionally, this backup approach guarantees better accessibility to recovery of data.

The reason is that the data recovery is not tied to a specific server backup device (Edgington, 2001). On a SAN, the operations undertaken for backups are more faults tolerant since Fibre Channel is endowed with multiple data pathways In handling data backup and recovery, an application-controlled backup strategy employs the Recovery Manager (RMAN) tool. This tool is characterized by working on the data at a block level rather than at the file level. Backup information is maintained by a catalog. This catalog is usually fashioned in a separate database are indicates the available backups and their location in the server storage device. Moreover, in the application server-controlled backup technology, outdated backups can be automatically deleted by configuring the RMAN. During file recovery and restoration, the catalog is utilized in locating the backup. Application server-controlled

backups provide for a complete backup of data thus avoids data lose due to

various changes (Greenwald, Stackowiak, Bales, 2004).