IN719 Systems Administration
Setting Up Network Backups with Bacula

Introduction

Last time we performed a basic installation of Bacula and walked through a backup and restore process. Now we will set up Bacula components across our networks and configure it to perform appropriate backups for the rest of the semester.

1 Setup Procedures

1.1 Management Server

Right now the management server is configured to perform only a sample backup job and we need to configure a more realistic one. There are four keys parts to a backup job: the client, the fileset, the schedule, and the job. Most of the configuration takes place in `bacula-dir.conf`.

Client This is the machine we want to back up. We don't need to add or change anything to this right now.

Fileset These are the files we want backed up. We can specify files to be saved and files to ignore. Using the `Full Set` as an example, define a more appropriate file set.

Schedule The `WeeklyCycle` Schedule is close to what we want. Change it so that a full backup is performed every Sunday.

Job We define at least one backup job for each client. The `BackupClient1` job does what we want, provided that we adjust any parameters to match our changes. Note that this job uses a `JobDef`. If you have more than one job that uses shared parameters you may define a `JobDef` and reference it int he relevant jobs.

After you modify this backup you should test it to be sure that it works before proceeding.

1.2 Database Server

You need to install a Bacula File Service daemon on the database server. Very little configuration is required here; just give the server an appropriate name in `bacula-fd.conf`.

On the management server, you'll need to define a new client, fileset, schedule, and job to back up the database server. Note that you should be able to reuse some of the same resources you defined earlier. After you modify this backup you should test it to be sure that it works before proceeding.

1.3 Active Directory Server

You need to install the Windows version of the File Service on this server and configure it. The installer for this is on the I: drive.

Next, configure the management server to set up a backup job for this client. Since it has a different operating system, the fileset resource will be different and you'll need to consult the documentation to see how it is done.

1.4 Restore Jobs

You have defined the appropriate backup jobs, but now you need to define corresponding restore jobs. Note that when you restore files onto a client machine, you probably shouldn't just overwrite the existing files by default. It's a good idea to have a restore directory on each client, restore the files there, then copy them to the desired locations - at least as a default behaviour.

1.5 Storage

You will need a storage server with more disk space. Create a new Debian VM with a larger hard disk in your vApp. Install the bacula-sd package on it and configure it. You will need to set up an appropriate space on the server to store your backup files. Then configure the director to use the new storage server and label some volumes on it.

1.6 Documentation

The job isn't done until the documentation is complete. You must modify and/or create the relevant documentation for your new backup service. We will be bringing more servers online, and you will need to have a procedure to add them to the backup jobs.