Recovery in the Cloud Project Proposal

1. Vision and Goals Of The Project:

The goal of this project is to create a simple solution for small businesses in times of server failure. The vision is to create a client app that continuously backs up a Windows 2012 server into the cloud (AWS S3 storage space). When the Windows server has failed the user can start up an instance of his backed up server on the cloud (AWS EC2) and connect to it using an automated VPN connection.

<u>Users/Personas Of The Project:</u>

- Franchise stores, doctors offices, i.e small to medium sized businesses
- Generally non-technical users

2. Scope and Features Of The Project:

Scope: Failover of client's server to the cloud

Features:

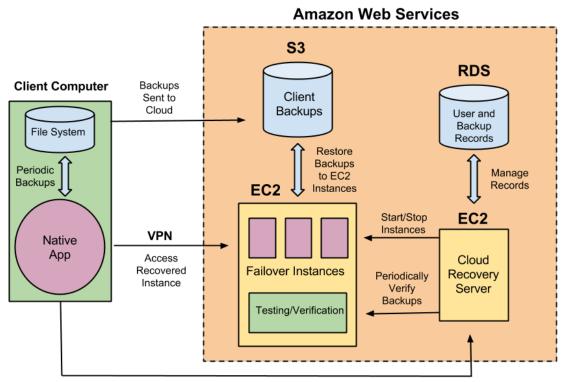
- Lightweight C# App allows user to backup their file system to AWS
- Client software to give users access to their backups and initiate recovery
- Server manages the creation of recovered hosts (in AWS)
- Use minGW, NSIS to help create Windows installers
- VPN connection between the client and the restored server in AWS

Reach Goal: Failback to client's server from the cloud

3. Solution Concept:

Global Architectural Structure Of the Project:

- 1. Image a Windows Server
- 2. Format and save this data in cloud on S3 (.vhd, .vhda formats)
- 3. Test that the saved Format of Image on Windows Server works
- 4. Use a UI method to create an EC2 instance using a saved server image from S3
- 5. Establish VPN connection from client to the restored server



Create Account, Manage Backups, Initiate Failover

Design Implications and Discussion:

- Windows Application as opposed to a web application
- AWS for its detailed documentation and robust API

4. Acceptance criteria:

Working failover for the client's file system.

5. Release Planning:

Release #1 (due by Week 6):

• First iteration of client app with authentication.

Release #2 (due by Week 7):

Release #3 (due by Week 9):

Release #4 (due by Week 9):

Release #5 (due by Week 13):