

Cloud Recovery

Sprint 1

Carlton Duffett, Deema Kutbi, Emilio Teran
Konstantino Sparakis, Minhan Xiang

Project Overview


Our Clients

- Small to medium-sized businesses, e.g. franchise stores, doctors offices
- Generally non-technical users
- Administration by Carbonite employees

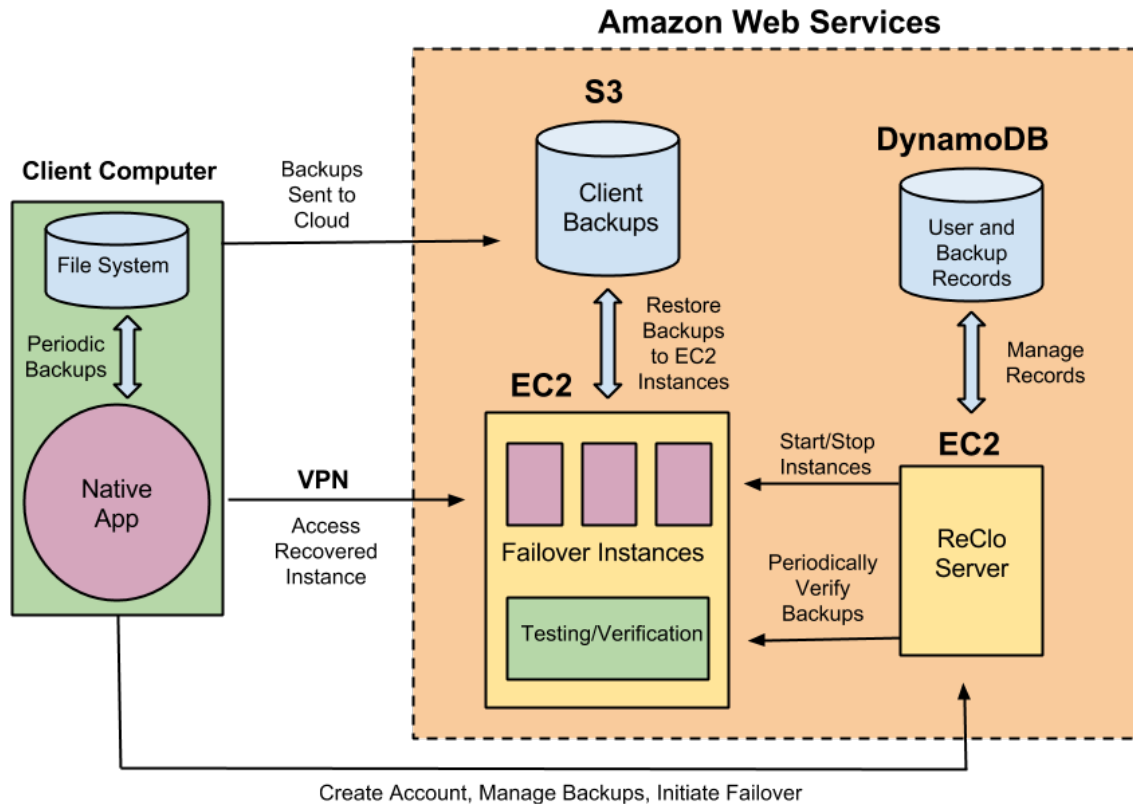
Key Features

- Lightweight native Windows app allows user to initiate the backup process and establish a VPN connection to backups in the event of failure
- Server manages a database of user accounts, backups, and recovered instances in AWS
- VPN connection between the client and the restored server in AWS

Our product name

Recovery in the cloud  ReClo

Architecture



This Sprint: Our Goals

- Setup AWS (EC2, DynamoDB, S3)
- PowerShell scripts and WBADMIN commands
- Client app designs
- Iconography and branding
- User authentication server

Setup AWS: EC2

2 Instances:

- AMI Linux instance running ReClo server
- Windows Server 2012 instance simulating client's server that will be backed-up

Security Groups:

- Currently limit inbound traffic to only BU IP addresses.
No hacking please!

Setup AWS: DynamoDB

2 Tables for User Authentication:

- Tokens - list of deactivated and active session tokens used by logged-in users
- Users - list of active and inactive clients registered to use ReClo

Scales automatically with need as we gain more users and expand our footprint on AWS

PowerShell Script

PowerShell

- A task automation and configuration management framework from Microsoft
- Executes command-line shell and scripting language built on the .NET Framework.
- Usage: Get date, find files meet certain conditions, rename files, etc

PowerShell Script

WBADMIN

- A backup & recovery program for Windows OS
- Creates .vhd image for the whole disk or certain files

WBADMIN START BACKUP -backupTarget:<Backup Destination> -include:<Volumes to Include>

PowerShell Backup Demo

Client Designs

ReClo



ReClo

☐ Remember Me

Log In

Forgot your password?

New user? Sign up

ReClo

Home Backup

My Backups

My First Backup10 hours ago | 150.5 GB | 2003 files | 1492 folders

New Backup4 hours ago | 132.5 GB | 5434 files | 2323 folders

...

In Progress

Weekly Backup0%100%

Client Designs

ReClo

Home Backup

Backup source: C:\ Browse

Backup destination: D:\ Browse

Description: My First backup

What to backup: Everything

When to backup: Continuously

Start Now

ReClo

Recover

Recovery source: My First Backup Browse

File version to recover: ☐ Latest ☐ Specific Date: 2/25/14

Recovery destination: C:\ Browse

What to recover: Everything

Description: Recovery

RECOVER

Iconography



User Authentication





- EC2 Instance running Node.js
- Processes HTTP requests sent from client
- Accesses AWS DynamoDB to manager users and session tokens

Restful API

- Express JS routing framework
- Easy to add new API calls to existing framework
- Accessible from any client that makes HTTP calls to our server

User Authentication Demo

This Sprint: Trello

EC500 - Sprint 1   Private  [Burndown Chart](#) 






Sprint Backlog

Add a card...






In Progress

12








User Authentication and Management System

  1  4/6  8  KS

Design of Client UI

  1/4  3  

Iconography





  1  2/6  1   

Add a card...




Done

9



Setup AWS Environments

  7/7  3  KS



PowerShell Script for Creating .vhd Backups

 4/4  5 

Product Name

 1  0

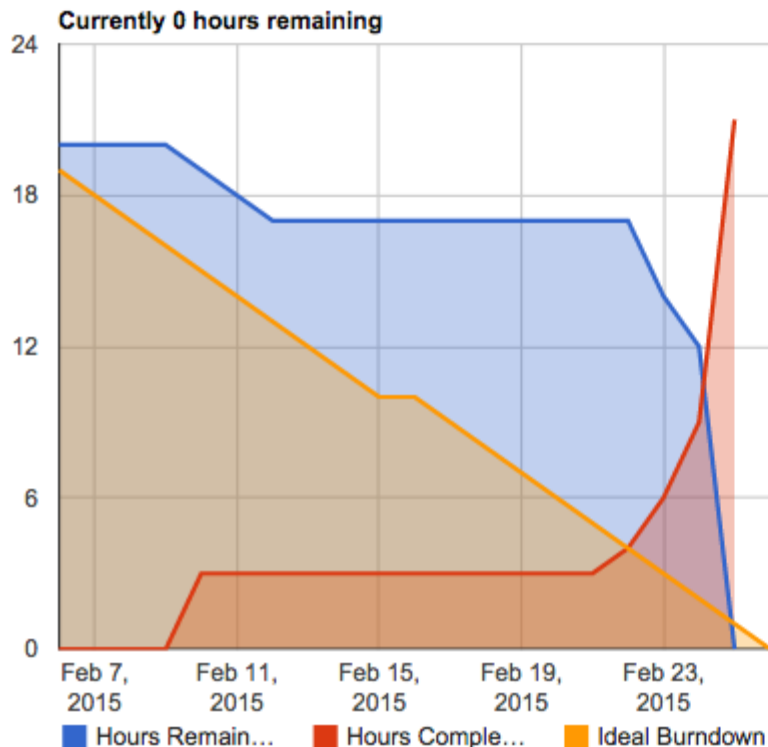
Setup DDNS

 1  1

Add a card...

This Sprint: Burndown

Burndown Chart



Summary stats

Total Cards:	8
Remaining Cards:	0
Done Cards:	8
Percent of cards done:	100%
Hours at start:	20 (edit)
Hours est total:	21
Hours remaining:	0
Hours done:	21
Percent of hours done:	100%
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Days Elapsed	19
Daily Burndown	1.11
Est. Days Left	0
Est. Completion Date	02/25/15

Next Sprint: Goals

Substantial client UI that can:

- Initiate a full backup to S3
- Start a new EC2 instance from a backup

Product website with information about our product and links to download the client applications

Better estimation of tasks and better burndown pace