Automation Process Documentation

# Process Overview

This document outlines the steps performed by an automation script, which uses Selenium WebDriver, ChromeDriver, and other tools to perform actions like logging into a system, taking screenshots, fetching data from a Dell EMC Unity API, and sending the results via email.

# Process Steps

## 1. Selenium Web Driver Initialization

The automation process begins by setting up the environment and initializing Selenium WebDriver. This tool allows the script to control and interact with the browser to perform tasks such as logging in and capturing screenshots.

## 2. ChromeDriver Setup

The ChromeDriver is configured to match the Chrome browser version installed on the system. It enables Selenium WebDriver to automate the Chrome browser for interacting with the web application.

## 3. Sign-In to Website

The script logs into the target website by entering the credentials and handling any 'Stay Signed In' or other popup windows. This ensures that the script can access the necessary features within the web application.

## 4. Zoom Adjustment and Screenshot Capture

The script adjusts the zoom level of the browser for optimal viewing. It captures screenshots of various tabs (e.g., Performance, System View) after adjusting the zoom, saving these screenshots locally for further use.

## 5. API Data Fetching

The script fetches data from the Dell EMC Unity API, including information like free space, total space, used space, and preallocated space. This data is formatted and stored for later use in the email.

## 6. Email Composition

The script composes an email that includes the fetched API data and the screenshots as attachments. The data is formatted into a table, and the images are embedded within the email body.

## 7. Sending Email via SMTP

The email is sent through an SMTP server (in this case, Outlook) to a specified recipient. It contains all the screenshots and API data, allowing the team to review the collected information and visual content.

## 8. Azure DevOps Pipeline Execution

The entire process is executed through an Azure DevOps pipeline. The pipeline runs on a Linux agent and automates the execution of the Python script, which includes ChromeDriver setup, data capture, and email sending.

# Process Flow Diagram

The following diagram visually represents the entire automation process:

