### **Accessing the AWS Management Console**

1. At the top of these instructions, click **Start Lab** to launch your lab.
2. Wait until the message **Lab status: ready** appears, then close the **Start Lab** panel by clicking the **X**.
3. At the top of these instructions, click **AWS**.

### **Task 1: Exploring AWS CloudShell**

1. In the AWS Management Console, click the **AWS CloudShell** icon at the top of the screen.
2. If a "Welcome to AWS CloudShell" pop-up appears, click **Close**.
3. Verify that the AWS CLI is installed:
   * Run the command: aws --version
   * Confirm that the output shows **AWS CLI version 2.x.x**.
4. Test AWS CLI functionality:
   * Run the command: aws s3 ls
   * A list of S3 buckets should appear.
5. Adjust the layout:
   * From the **Actions** menu, select **Tabs layout > Split into columns**.
6. Test SDK for Python:
   * Download list-buckets.py.
   * Upload the file to CloudShell:
     + Go to **Actions > Files > Upload file**, select list-buckets.py, and click **Upload**.
   * Run the following commands:
     + cat list-buckets.py (to display the file contents).
     + python3 list-buckets.py (to execute the file).
     + Confirm that the S3 bucket name is returned.
7. Copy a file to an S3 bucket:
   * Note the bucket name containing **-sample-bucket-**.
   * Run: aws s3 cp list-buckets.py s3://<bucket-name> (replace <bucket-name> with your actual bucket name).
8. Check CloudShell storage:
   * Run: df -H /home

### **Task 2: Creating an AWS Cloud9 Instance**

1. In the AWS Management Console, search for **Cloud9** and select it.
2. Click **Create environment** and configure as follows:
   * **Name**: MyCloud9.
   * **New EC2 instance**: Choose **Additional Instance Types**, then select **t2.medium**.
   * **Network settings**: Select **Secure Shell (SSH)**.
3. Click **Create**.
   * Within 1–2 minutes, the Cloud9 environment will be created.
4. Click the **Open** link to access the Cloud9 IDE.

### **Task 3: Exploring the AWS Cloud9 IDE**

1. Copy a file from Amazon S3 to Cloud9:
   * Run: aws s3 ls (to get your bucket name).
   * Download list-buckets.py with:  
     aws s3 cp s3://<bucket-name>/list-buckets.py .
2. Open and run the Python file:
   * Double-click list-buckets.py to open it in the editor.
   * Verify Python syntax: **View > Syntax > Python**.
   * Run the file: Click the **Run** icon.
   * If an error (ModuleNotFoundError: No module named 'boto3') appears:
     + Install the SDK: sudo pip3 install boto3.
     + Re-run the file using either the **Run** button or the terminal command: python3 list-buckets.py.
3. Create and upload a new file to S3:
   * Create a new HTML file: **File > New From Template > HTML File**.
   * Add <body>Hello World</body> content.
   * Save the file as index.html.
   * Use the AWS Explorer:
     + Click the **AWS** icon, then **Add regions to AWS Explorer...**.
     + Search for and select **us-east-1**.
     + Navigate to **S3 > [Your Bucket Name]**.
   * Upload the file:
     + Right-click the bucket, select **Upload Files**, choose index.html, and click **Upload**.

### **Submitting Your Work**