# GitHub - RhinoSecurityLabs/ccat: Cloud Container Attack Tool (CCAT) is a tool for testing security of container environments.

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*Cloud Container Attack Tool (CCAT) is a tool for testing security of container environments.*


## Quick reference

- **Where to get help**: the Pacu/CloudGoat/CCAT Community Slack, or Stack Overflow
- **Where to file issues**: https://github.com/RhinoSecurityLabs/ccat/issues
- **Maintained by**: the Rhino Assessment Team

## Requirements

- Python 3.5+ is required.
- Docker is required. Note: CCAT is tested with Docker Engine 19.03.1 version.
- Named profile is required for using AWS functionality.
- A service account or access token is required for using GCP functionality.

## Installation

> We recommend using the provided Docker image to run CCAT, so that you will not face any difficulty with the required dependencies on your own system.

Install CCAT from source

```
 $ git clone https://github.com/RhinoSecurityLabs/ccat.git
$ cd ccat
$ python3 setup.py install
$ python3 ccat.py
```

Use CCAT's Docker Image

> Warning: Running this command will mount your local AWS configuration files into the Docker container when it is launched. This means that any user with access to the container will have access to your host computer's AWS credentials.

> Warning: Running this command will mount your local Unix socket that Docker daemon listens on by default into the Docker container when it is launched. This means that users with access to the container will have access to your Docker daemon, meaning they could escape to your host computer with ease.

```
$ docker run -it -v ~/.aws:/root/.aws/ -v /var/run/docker.sock:/var/run/docker.sock -v ${PWD}:/app/ rhinosecu
```

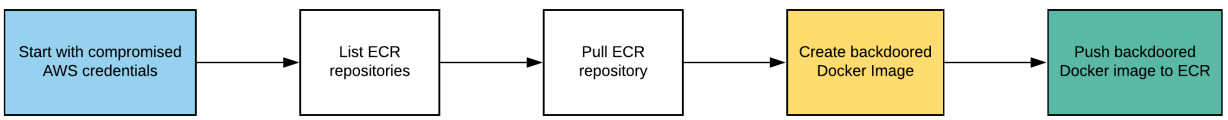
## Getting Started

### Example Usage

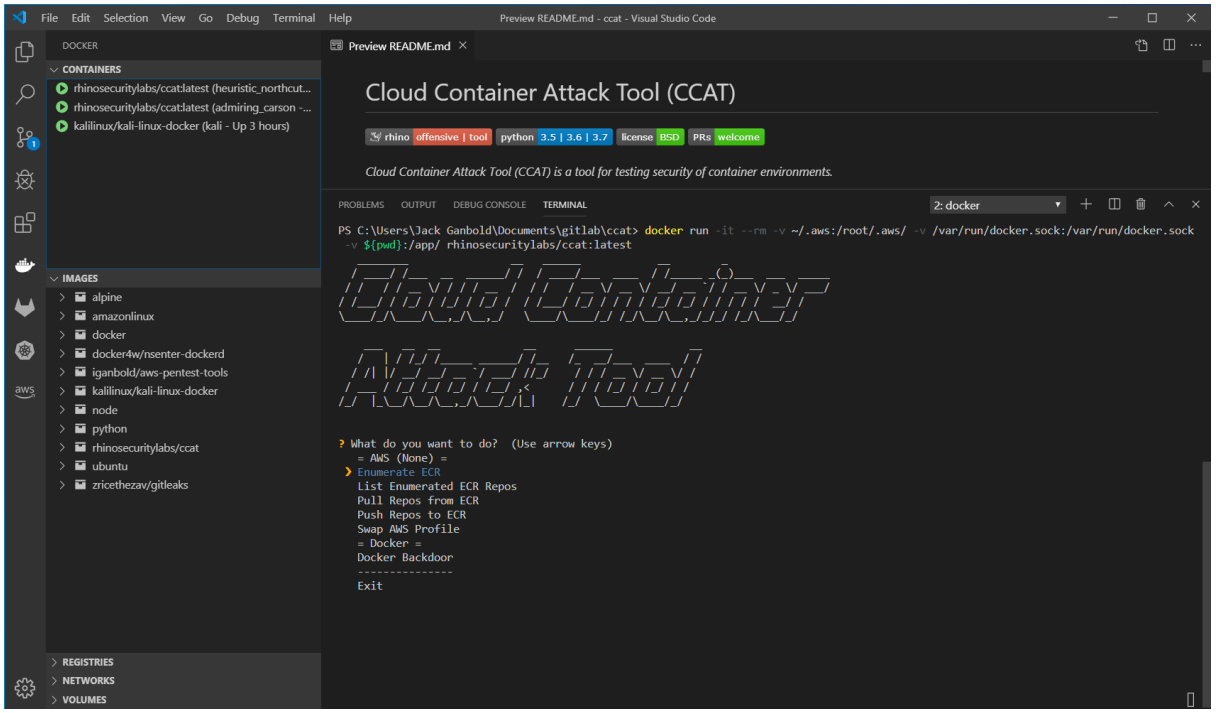
Below is an example scenario to demonstrate the usage of CCAT.

Starting with compromised AWS credentials, the attacker enumerates and explores ECR repositories. Then, the attacker found that they use NGINX Docker image and pulled that Docker image from ECR. Furthermore, the attacker creates a reverse shell backdoor into the target Docker image. Finally, the attacker pushes the backdoored Docker image to ECR.

### Exploitation Route:




- **VIDEO Exploitation Route Walkthrough with CCAT:**




- **Exploitation Route Walkthrough with CCAT:**

  Visit Step by Step Scenario Page.

## Roadmap

- Container Escape Features
- Amazon ECS Attack Features
- Amazon EKS Attack Features
- Azure Container Related Attack Features
- GCP Container Related Attack Features
- OpenShift Container Related Attack Features
- IBM Cloud Container Related Attack Features
- Alibaba Cloud Container Related Attack Features

## Disclaimer

- CCAT is tool that comes with absolutely no warranties whatsoever. By using CCAT, you take full responsibility for any and all outcomes that result.

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Source: https://github.com/RhinoSecurityLabs/ccat