



# Overview

## Overview

An open-source security log auditing & RDP, VNC, SSH bastion platform:

## Casvisor Features

1. Asset managment: Remote connection via RDP, VNC protocols.
2. Log managment



The Basics



Server Installation

# Server Installation

## Prerequisite

Casvisor server uses Casdoor as the authentication and authorization system. So you need to install Casdoor first. If you haven't installed Casdoor, please refer to [Casdoor Installation](#).

## Casdoor configuration

You have installed Casdoor, now you need to do some necessary configuration in Casdoor in order to use Casvisor.

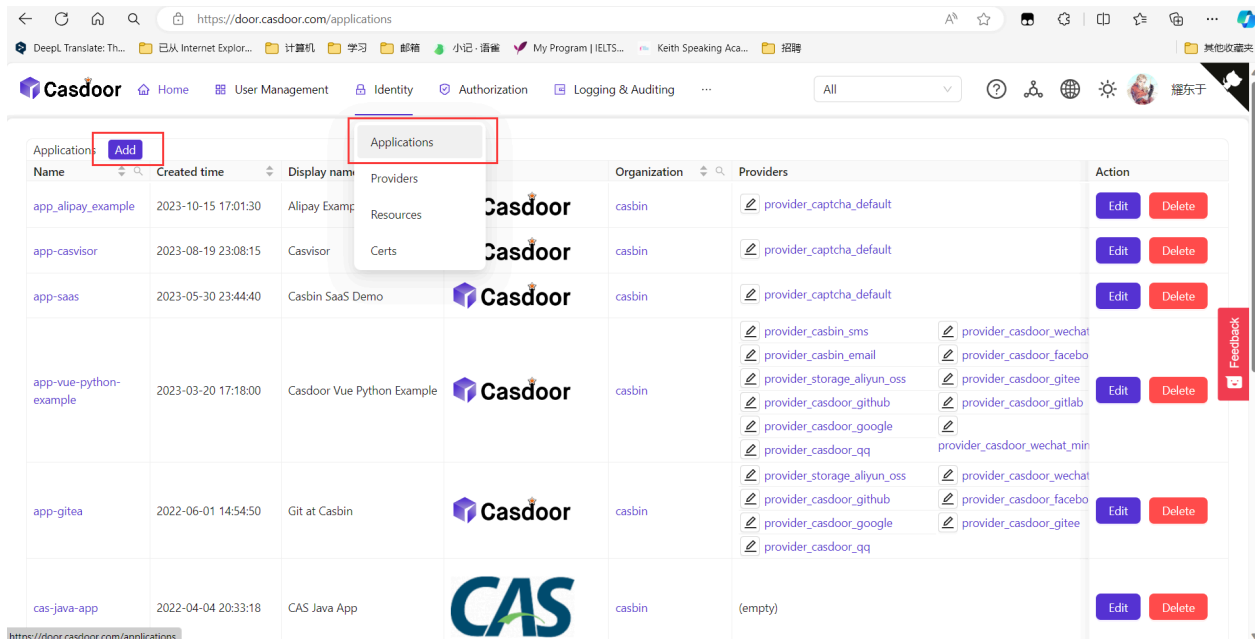
### Create an organization

First, you need to create an organization (Except for the `build-in`) in Casdoor. The organization page is at **User Management → Organizations**. And you can create an organization by clicking the `add` button.



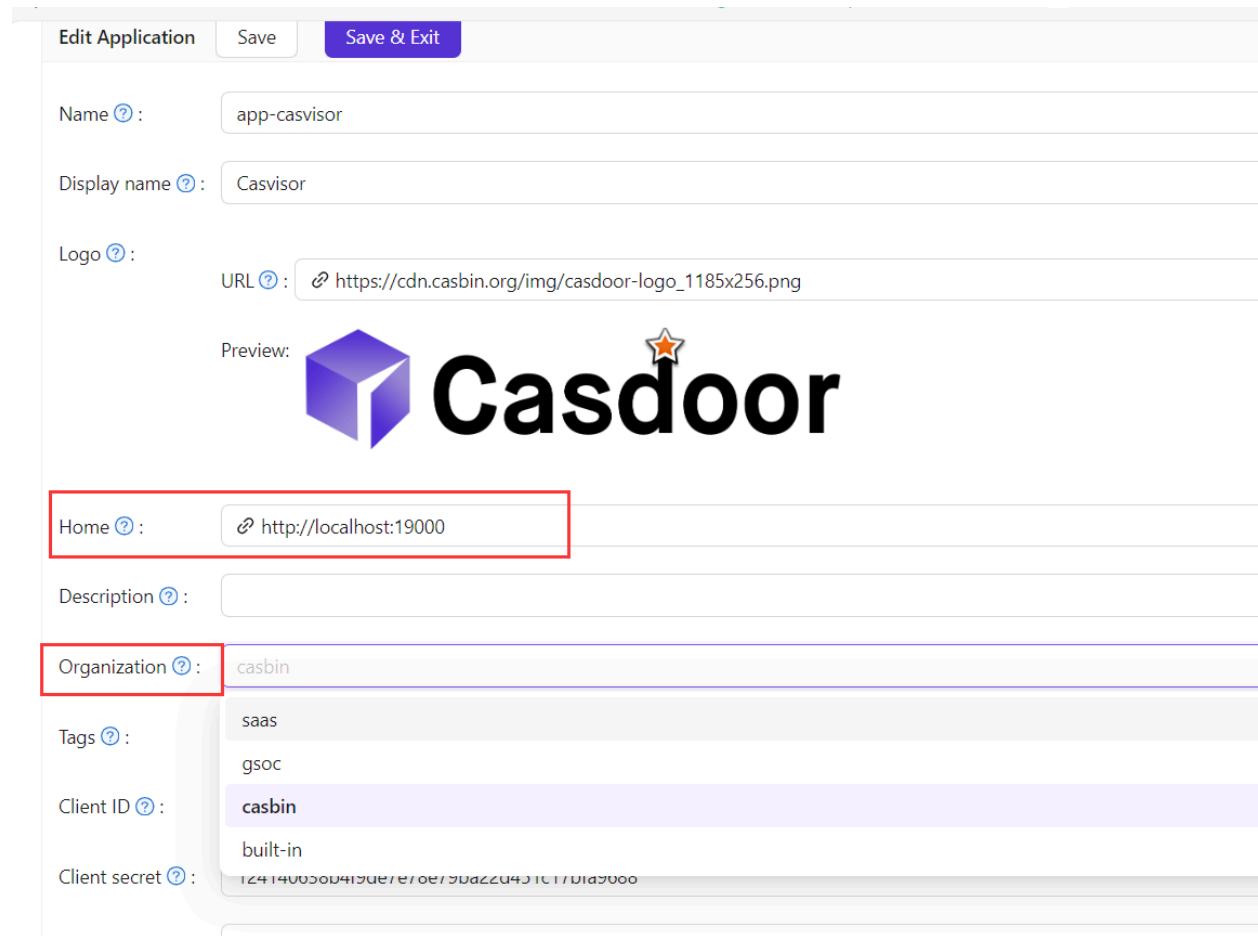
## Create an application

You need to create an application for Casvisor in Casdoor. The application page is at Identity → Applications. And you can create an application by clicking the **add** button.



Required fields:

1. **Home**: The host of Casvisor server, e.g. `http://localhost:16001`.
2. **Organization**: The organization you created in the previous step.
3. **Callback URLs**: The callback URL of Casvisor server, e.g. `http://localhost:16001/callback`. You can add multiple callback URLs by clicking the **add** button. These are the urls that is allowed to be redirected after login.



The screenshot shows the 'Edit Application' form in the Casdoor management console. At the top, there are three buttons: 'Edit Application', 'Save', and 'Save & Exit'. The form contains several fields:

- Name**: 'app-casvisor'
- Display name**: 'Casvisor'
- Logo**: A URL field containing 'https://cdn.casbin.org/img/casdoor-logo\_1185x256.png'. Below this is a preview of the Casdoor logo, which consists of a blue 3D cube icon and the word 'Casdoor' in a bold, black, sans-serif font.
- Home**: A URL field containing 'http://localhost:19000', which is highlighted with a red rectangular border.
- Description**: An empty text field.
- Organization**: A dropdown menu with 'casbin' selected, also highlighted with a red rectangular border.
- Tags**: A list of tags including 'saas' and 'gsoc'.
- Client ID**: A dropdown menu with 'casbin' selected.
- Client secret**: A dropdown menu with 'built-in' selected.

## Download

The source code of Casvisor is hosted on GitHub: <https://github.com/casbin/>

[casvisor](#). Both the Go backend code and React frontend code are contained in a single repository.

Name	Description	Language	Source code
Frontend	Web frontend UI for Casdoor	JavaScript + React	<a href="https://github.com/casbin/casvisor/tree/master/web">https://github.com/casbin/casvisor/tree/master/web</a>
Backend	RESTful API backend for Casdoor	Golang + Beego + XORM	<a href="https://github.com/casbin/casvisor">https://github.com/casbin/casvisor</a>

Casvisor supports `Go Modules`. To download the code, simply clone the code using git:

```
git clone https://github.com/casbin/casvisor
```

## Configuration

### Backend

The configuration file of Casvisor backend located at `conf/app.conf`. You need to modify the following fields:

#### Database

Modify `dataSourceName` to your own database connection string. Casvisor will create a database named `casvisor` if it doesn't exist.

```
driverName = mysql
dataSourceName = root:123456@tcp(localhost:3306)/
dbName = casvisor
```

## Connect Casdoor

Modify `casdoorEndpoint`, `clientId`, `clientSecret`, `casdoorOrganization` and `casdoorApplication` to your own Casdoor configuration. You can get the `clientId` and `clientSecret` from the application page that you created in the previous step.

```
casdoorEndpoint = http://localhost:8000
clientId = c34fdf145f41313727a8
clientSecret = 615c503d4552d24a40360cf908b6d17e3b7f8832
casdoorOrganization = "casbin"
casdoorApplication = "app-casvisor"
```

## Frontend

In `web/src/conf.js`, you need to modify the following fields:

```
export const AuthConfig = {
  serverUrl: "http://localhost:8000",
  clientId: "c34fdf145f4131b727a8",
  appName: "app-casvisor",
  organizationName: "casbin",
  redirectPath: "/callback",
};
```

# Run

Before running Casvisor, make sure Casdoor is running.

## Production

In production, you need to build the frontend code first, then run the backend code.

### Build frontend

```
cd web  
yarn install  
yarn build
```

After building successfully, the frontend bundle will be generated in `web/build` directory.

### Run backend

```
go build
```

Visit backend server at <http://localhost:19000>.

## Development

In development, you need to run the frontend code and backend code at the same time.

## Run frontend

```
cd web  
yarn install  
yarn start
```

## Run backend

```
go build
```

Visit frontend server <http://localhost:16001>.





Assets

# Assets



## Overview

Casvisor Assets Overview



## RDP

Casvisor Assets RDP



## VNC

Casvisor Assets VNC

# Overview

Casvisor helps you to manage assets, and connect to your assets remotely, it currently supports the following protocols:

- RDP
- VNC

In this chapter, you will learn how to start connecting to your assets.

Let's explore together!

# RDP

Casvisor Support Connect to your assets via RDP protocol:

## Rdp connection

### 1. Start Guacamole Server

```
docker run --name guacd -d -p 4822:4822 guacamole/guacd
```

### 2. Add a new asset, set protocol to rdp

The screenshot displays the Casbin web interface. The top navigation bar includes 'casbin', 'Home', 'Records', and 'Assets'. The 'Assets' tab is active, showing a table with columns: Organization, Name, Created time, Description, Protocol, IP, Port, Username, Language, Auto query, Is permanent, Enable Remote App, Remote Apps, Services, and Action. Three assets are listed: 'machine\_2' (vnc, 192.168.1.103, 5900), 'machine\_1' (rdp, 192.168.1.103, 3389), and 'machine\_3' (New Machine - 0, 127.0.0.1, 22). Below the table, the 'Edit Asset' form is shown for 'machine\_1'. The form includes fields for Organization (casbin), Name (machine\_1), Description (Win10\_RDP), Protocol (rdp), IP (192.168.1.103), Port (3389), Username (111), Password (123456), Language (zh), Auto query (off), Is Permanent (off), and Enable Remote App (on). The 'Remote Apps' section shows a table with columns: No., Remote App, Remote App Dir, Remote App Args, and Action. The 'Services' section shows a table with columns: No., Name, Path, Port, Process ID, Expected status, Status, Message, and Action. The 'Save' button is at the bottom.

Organization	Name	Created time	Description	Protocol	IP	Port	Username	Language	Auto query	Is permanent	Enable Remote App	Remote Apps	Services	Action
casbin	machine_2	2023-09-16 16:43:49	Win10_VNC	vnc	192.168.1.103	5900	Administrator	zh	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 / 0	0 / 0	<a href="#">Connect</a> <a href="#">Edit</a> <a href="#">Delete</a>
casbin	machine_1	2023-09-30 23:12:40	Win10_RDP	rdp	192.168.1.103	3389	111	zh	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1 / 1	0 / 1	<a href="#">Connect</a> <a href="#">Edit</a> <a href="#">Delete</a>
casbin	machine_3	2023-09-30 10:15:00	New Machine - 0		127.0.0.1	22	Administrator	zh	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 / 0	0 / 0	<a href="#">Connect</a> <a href="#">Edit</a> <a href="#">Delete</a>

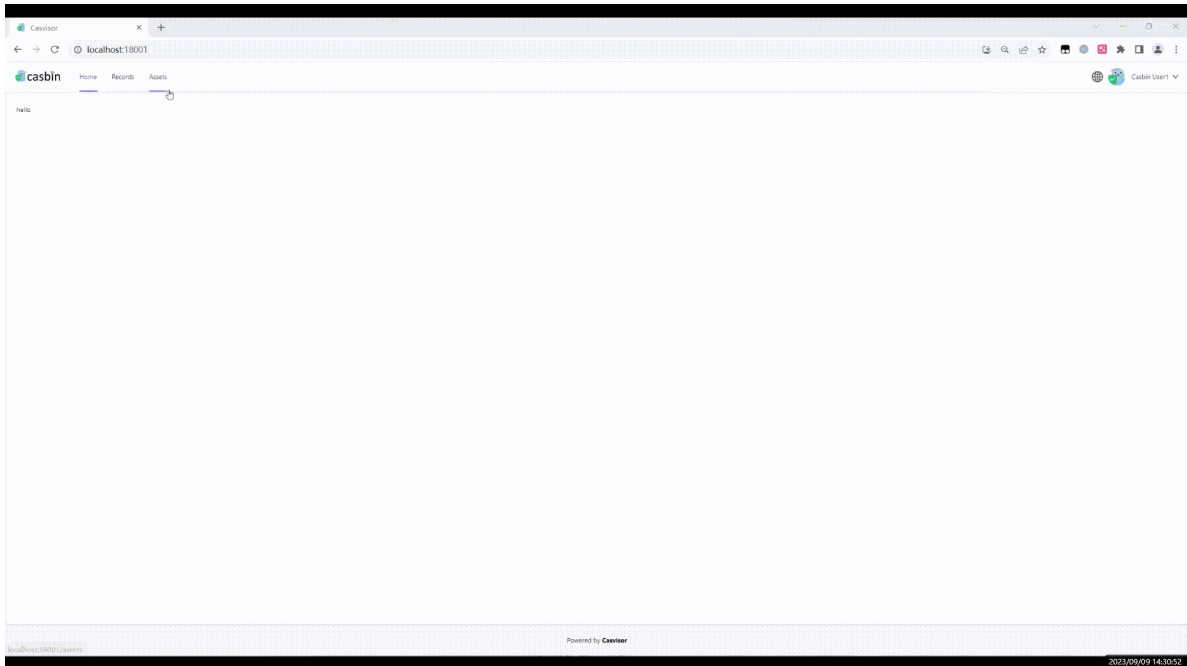
  

No.	Remote App	Remote App Dir	Remote App Args	Action
0	cmd	C:\Windows\System32\cmd.exe		<a href="#">Add</a> <a href="#">Edit</a> <a href="#">Delete</a>

No.	Name	Path	Port	Process ID	Expected status	Status	Message	Action
0	New Service - 0	C:\path\app\casbin-0a	10000		Stopped	0		<a href="#">Add</a> <a href="#">Edit</a> <a href="#">Delete</a>

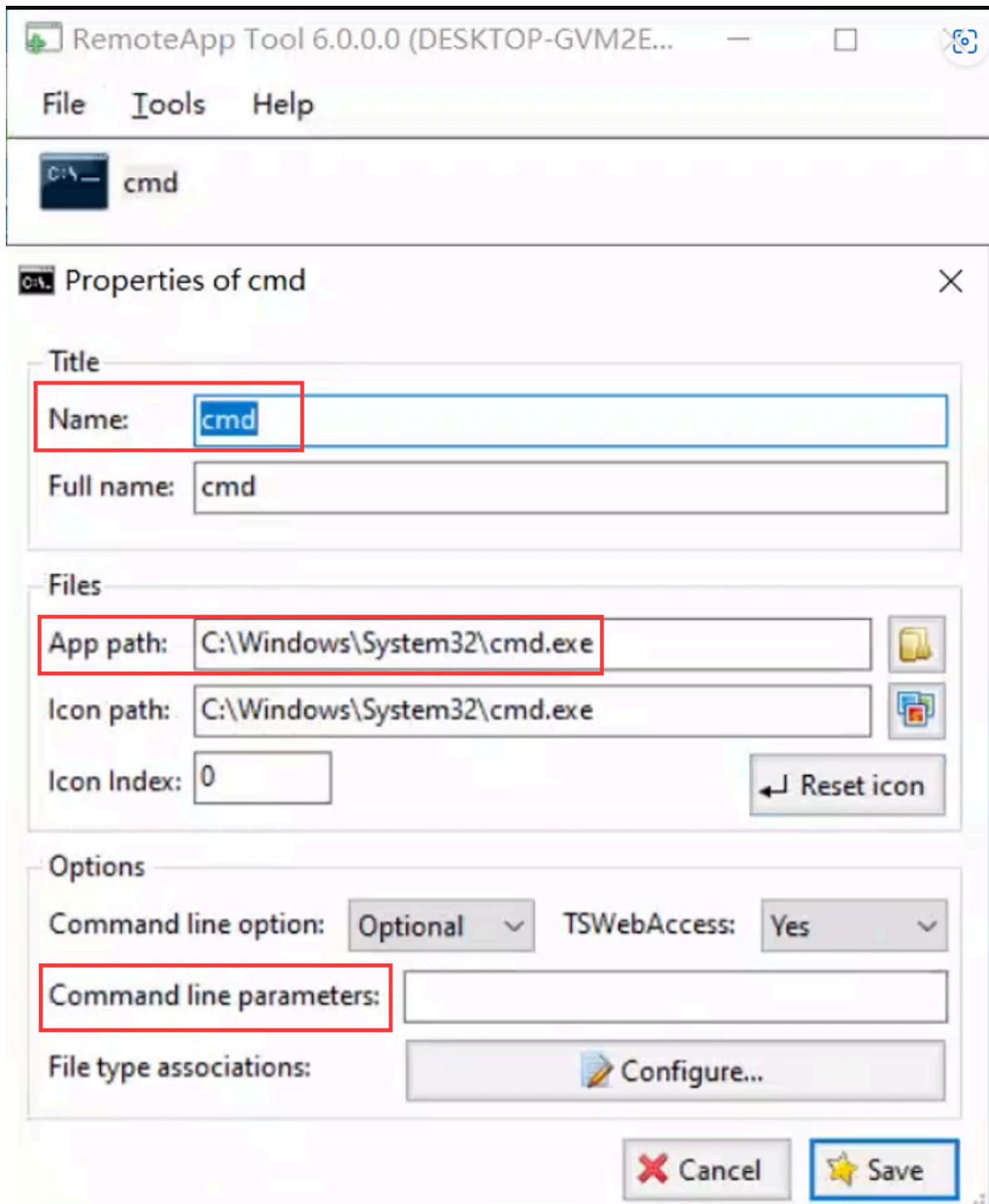
### 3. Connect to your asset by clicking the connect button



## Remote App

We support remote app on Windows assets, you can add remote apps on **Asset Edit** page, and then you can connect to your remote app by clicking the **connect** button.

1. Configure your remote app on the server end.  
You can use [RemoteApp Tool](#) to register apps.



2. Configure the remote app information in the asset edit page according to the server-end configuration. 'remoteAppName', 'remoteAppDir', and 'remoteAppArgs' are required.

Enable Remote App ☒

Remote Apps [Add](#)

No.	Remote App	Remote App Dir	Remote App Args	Action
0	cmd	C:\Windows\System32\cmd.exe		<a href="#">Add</a> <a href="#">Edit</a> <a href="#">Delete</a>

refer to [Configuring Guacamole — Apache Guacamole Manual v1.5.3](#)

### 3. Connect to your remote app.

Casdoor x +

localhost:18001/assets

casbin Home Records Assets

Casbin User1

Assets	Organization	Name	Created time	Description	Protocol	IP	Port	Username	Language	Auto query	Is permanent	Enable Remote App	Remote Apps	Services	Action
casbin	casbin	machine_2	2023-09-16 16:43:49	Win10_VNC	vnc	192.168.1.103	5900	Administrator	zh	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 / 0	0 / 0	<a href="#">Connect</a> <a href="#">Edit</a> <a href="#">Delete</a>
casbin	casbin	machine_1	2023-08-30 23:12:40	Win10_RDP	rdp	192.168.1.103	3389	111	zh	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1 / 1	0 / 1	<a href="#">Connect</a> <a href="#">Edit</a> <a href="#">Delete</a>
casbin	casbin	machine_0	2023-08-30 10:15:00	New Machine - 0		127.0.0.1	22	Administrator	zh	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 / 0	0 / 0	<a href="#">Connect</a> <a href="#">Edit</a> <a href="#">Delete</a>

1 / 10 / page

Powered by Casdoor

# VNC

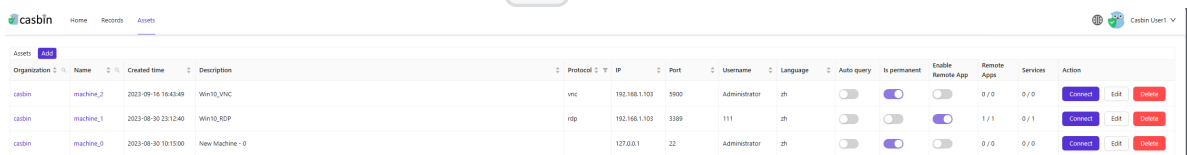
## VCN Connect

VCN connection is similar to RDP connections.

1. Start Guacamole Server

```
docker run --name guacd -d -p 4822:4822 guacamole/guacd
```

2. Add a new asset, set protocol to `vnc`



Organization	Name	Created time	Description	Protocol	IP	Port	Username	Language	Auto query	Is permanent	Enable Remote App	Remote Apps	Services	Action
casbin	machine_2	2023-09-16 10:43:49	Win10_VNC	vnc	192.168.1.103	5900	Administrator	zh	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 / 0	0 / 0	<a href="#">Connect</a> <a href="#">Edit</a> <a href="#">Delete</a>
casbin	machine_1	2023-08-30 23:12:40	Win10_RDP	rdp	192.168.1.103	3389	111	zh	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1 / 1	0 / 1	<a href="#">Connect</a> <a href="#">Edit</a> <a href="#">Delete</a>
casbin	machine_0	2023-08-30 10:15:00	New Machine - 0		127.0.0.1	22	Administrator	zh	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0 / 0	0 / 0	<a href="#">Connect</a> <a href="#">Edit</a> <a href="#">Delete</a>

3. Connect to your asset by clicking the `connect` button

