

CIAB Remote Desktop System Installation Guide

by Brian Mullan (bmullan.mail@gmail.com)
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IMPORTANT – Only Install CIAB on a fresh Ubuntu 20.04 Server, VM or Cloud Server !

Major changes:

1. CIAB now utilizes a Dockerized Guacamole container running on the Server in an “nesting enabled” LXD container which then allows the Guacamole Docker container to run inside (ie nested) the LXD ciab-guac container.
2. The CIAB Remote Desktop is still installed in an LXD container called ciab-cn1. As part of the Installation an application called **TaskSel** will be executed which will allow you the installer to choose which *Desktop Environment (DE)* you want to utilized for the CIAB Remote Desktop the End-Users will see.

Choices include:

- a) KDE
- b) Ubuntu Gnome
- c) XFCE
- d) MATE
- e) LXDE

NOTE:

TaskSel also allows you to select quite a few other Linux services/applications you may be interested in having available to your ciab-cn1 Remote Desktop sessions.

The Installation of the CIAB Remote Desktop System is now a bit hybrid where there are a few steps you the installer will need to do manually but there are also scripts which can do much of the work.

Instructions are provided in three separate CIAB Installation Mind Maps which will be shown on the following pages.

Please substitute the *UserName* you intend to utilize anywhere in *Part 1 and Part 2* where ever you see “*UserID*”.

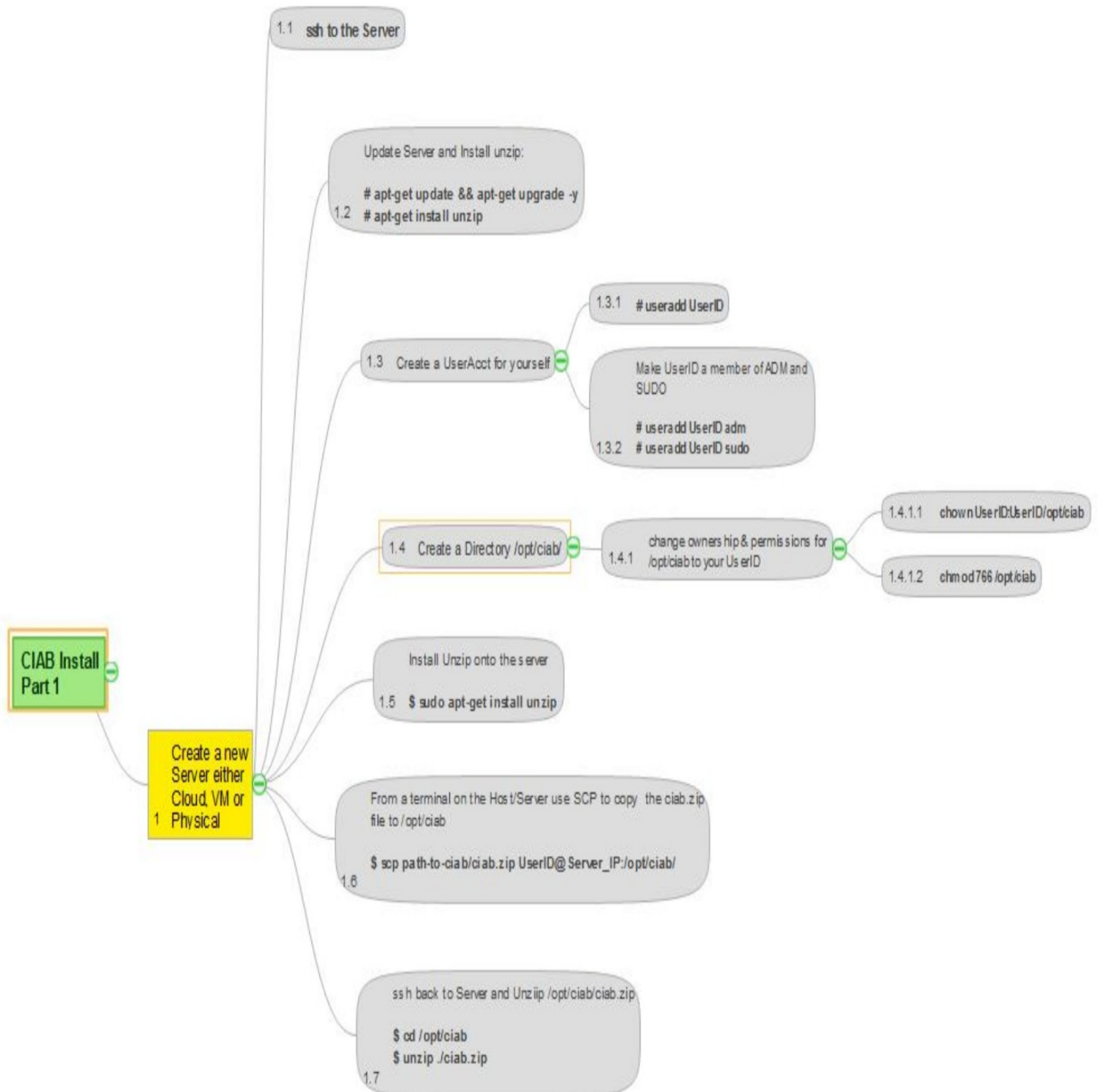
Following Installation point a Web Browser at the IP Address of the Server you installed CIAB on.

<https://A.B.C.D>

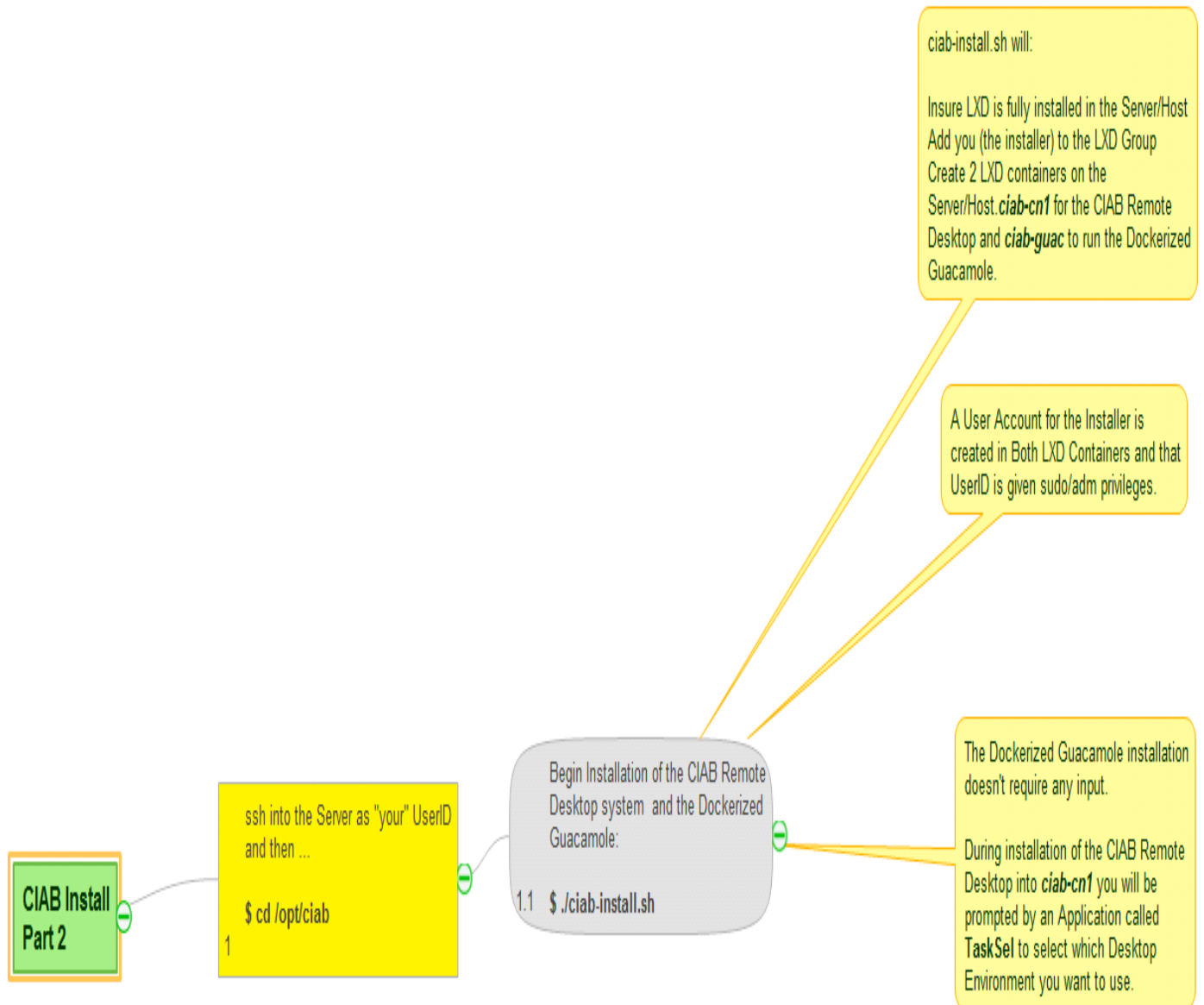
Default Admin login is:

guacadmin
guacadmin

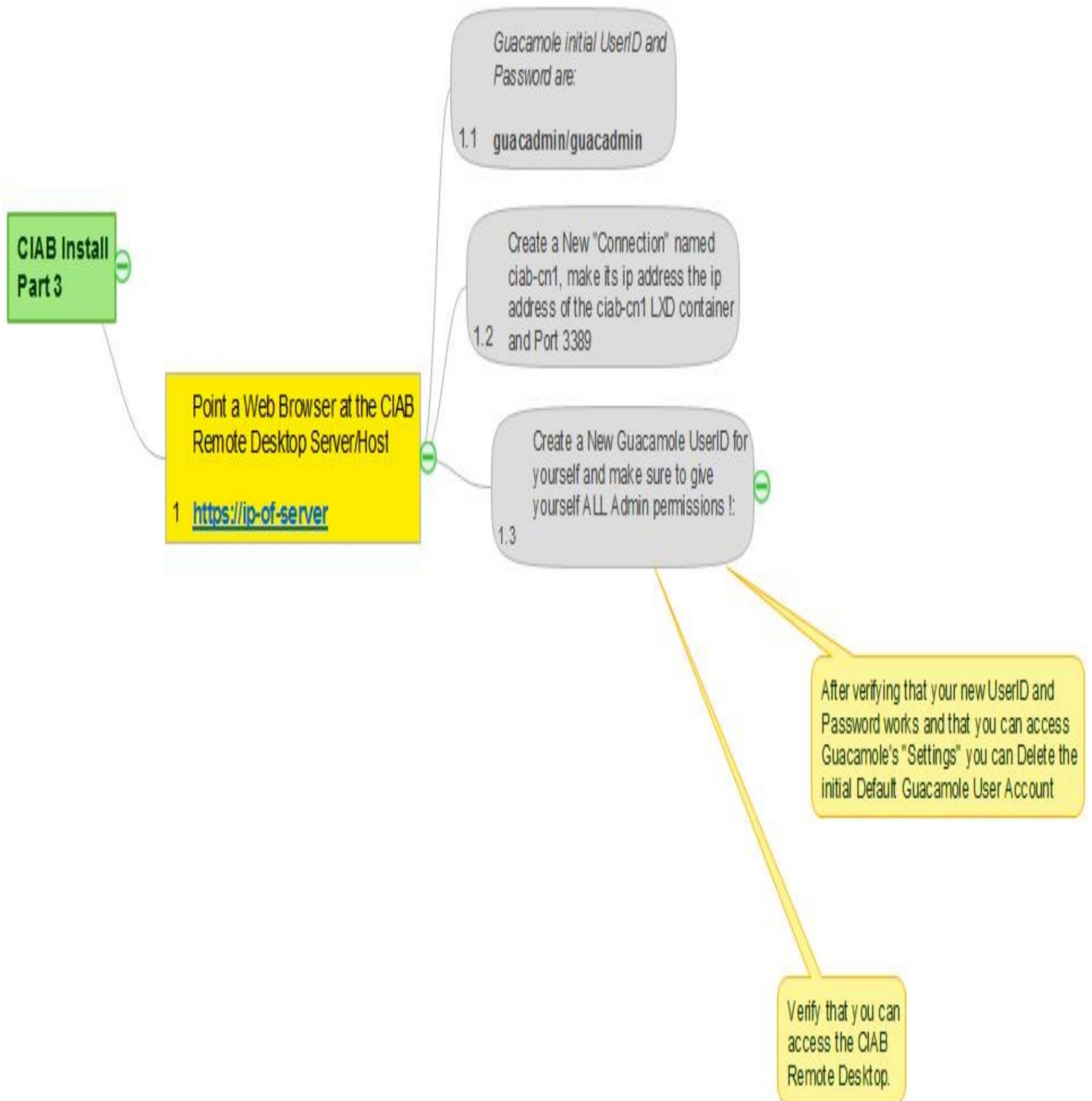
CIAB Remote Desktop System Installation – PART 1



CIAB Remote Desktop System Installation – PART 2



CIAB Remote Desktop System Installation – PART 3

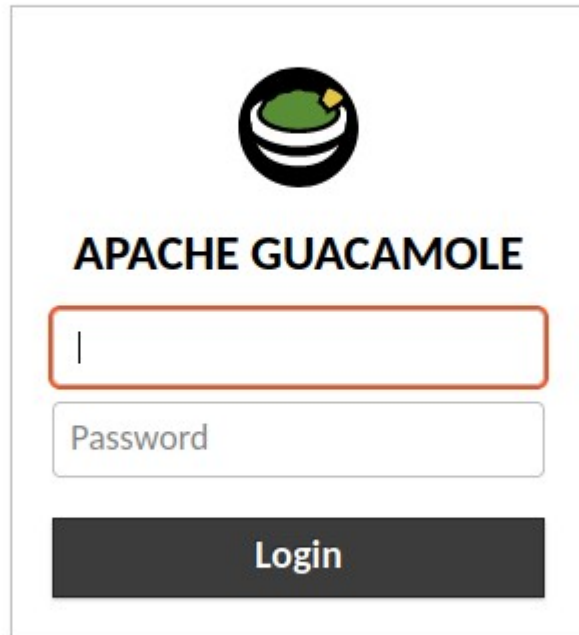


Basic CIAB Guacamole Configuration Steps

Point your web browser to the IP address of your CIAB Server:

<https://X.X.X.X>

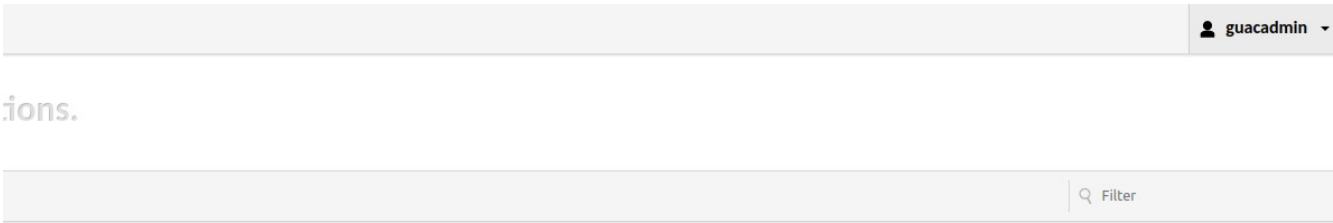
and you will see the Guacamole Login Menu:

The image shows the Apache Guacamole login interface. At the top is the Guacamole logo, which consists of a black circle containing a green bowl with a yellow spoon. Below the logo, the text "APACHE GUACAMOLE" is displayed in a bold, black, sans-serif font. Underneath the text are two input fields: the first is for the username, containing a single vertical bar character "|", and the second is for the password, with the placeholder text "Password" in a light gray font. At the bottom of the form is a dark gray rectangular button with the word "Login" in white, bold, sans-serif font.

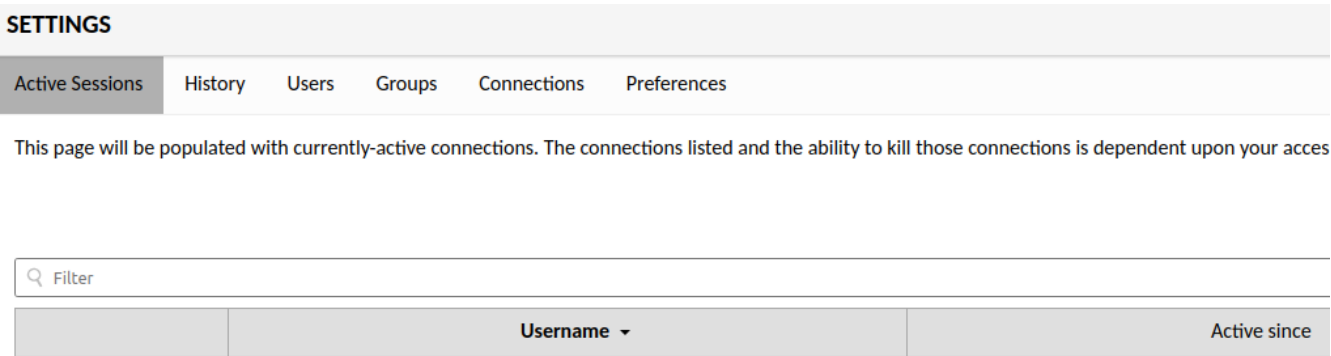
Default initial Login & Password are:

guacadmin
guacadmin

In the upper right corner of the next screen you will see:



Click on “**guacadmin**” and choose “**Settings**” and the next screen you will see is:



For basic configuration of CIAB we will show configuring a “new” Connection (ie to ciab-cn1) and a “new User.

Configure a new Connection

Click on “Connections” and you will see the following screens. I will fill in the forms and take a screen shot of each so you can see what you will need to do. *The only difference will be the IP address of your ciab-cn1 LXD container.*

Note: you can find ciab-cn1 IP by logging into the Server/Host and executing:

\$ lxc ls

example:

NAME	STATE	IPV4	IPV6	TYPE	SNAPSHOTS
ciab-cn1	RUNNING	10.141.152.153 (eth0)	fd42:5bb2:5eb8:abf7:216:3eff:fe45:f784 (eth0)	CONTAINER	0
ciab-guac	RUNNING	172.18.0.1 (br-1d564e39cffc) 172.17.0.1 (docker0) 10.141.152.249 (eth0)	fd42:5bb2:5eb8:abf7:216:3eff:fe9b:250c (eth0)	CONTAINER	0

EDIT CONNECTION

Name:

Location:

Protocol:

CONCURRENCY LIMITS

Maximum number of connections:

Maximum number of connections per user:

LOAD BALANCING

Connection weight:

Use for failover only: ☐

GUACAMOLE PROXY PARAMETERS (GUACD)

Hostname:

Port:

Encryption:

PARAMETERS

Network

Hostname:

Port:

Authentication

Username:

Password:

Domain:

Security mode:

Disable authentication: ☐

Ignore server certificate: ☐

Remote Desktop Gateway

Hostname:

Port:

Username:

Password:

Domain:

Note: those are “curly braces” around Username and Password !!

Basic Settings

Initial program:	<input type="text"/>
Client name:	<input type="text"/>
Keyboard layout:	US English (Qwerty) ▼
Time zone:	America ▼ New York ▼
Enable multi-touch:	<input type="checkbox"/>
Administrator console:	<input type="checkbox"/>

Display

Width:	<input type="text"/> ⬆ ⬇ ⬆
Height:	<input type="text"/> ⬆ ⬇ ⬆
Resolution (DPI):	<input type="text"/> ⬆ ⬇ ⬆
Color depth:	True color (32-bit) ▼
Force lossless compression:	<input type="checkbox"/>
Resize method:	 ▼
Read-only:	<input type="checkbox"/>

Clipboard

Line endings:	 ▼
Disable copying from remote desktop:	<input type="checkbox"/>
Disable pasting from client:	<input type="checkbox"/>

Device Redirection

Support audio in console:	<input type="checkbox"/>
Disable audio:	<input type="checkbox"/>
Enable audio input (microphone):	<input type="checkbox"/>
Enable printing:	<input type="checkbox"/>
Redirected printer name:	<input type="text"/>
Enable drive:	<input checked="" type="checkbox"/>
Drive name:	<input type="text" value="ciab-drive"/>
Disable file download:	<input type="checkbox"/>
Disable file upload:	<input type="checkbox"/>
Drive path:	<input type="text" value="drive/"/>
Automatically create drive:	<input checked="" type="checkbox"/>
Static channel names:	<input type="text" value="rdpdr"/>

This form will have Guacamole & xRDP create a directory on your CIAB Desktop named “ciab-drive”.

If you copy/paste a file into that Directory it will be transferred to your local machine.

To upload a file from you local machine to your CIAB Remote Desktop just right click & copy the file on your local machine and drop it “anywhere” on your CIAB Remote Desktop.

Finally scroll to the Bottom of the form and Click SAVE...

Configure a New Guacamole User

NOTE: you will need to create a User Account in the CIAB-CN1 LXD container for each Guacamole User you create !

SETTINGS

Active Sessions

History

Users

Groups

Connections

Preferences

Click or tap on a user below to manage that user. Depending on your access level, users can be added and deleted, an

👤 New User

🔍 Filter

Username ▾	
<div><div>👤</div>guacadmin</div>	

Click on “**Users**” then click on “**New User**”.

EDIT USER

Username:

bmullan

Password:

.....

Re-enter Password:

.....

PROFILE

Full name:

Email address:

Organization:

Role:

ACCOUNT RESTRICTIONS

Login disabled:

☐

Password expired:

☐

Allow access after:

-- : -- --

Do not allow access after:

-- : -- --

Enable account after:

mm / dd / yyyy

Disable account after:

mm / dd / yyyy

User time zone:

America

New York

PERMISSIONS

Administer system:

☒

Create new users:

☒

Create new user groups:

☒

Create new connections:

☒

Create new connection groups:

☒

Create new sharing profiles:

☒

Change own password:

☒

CONNECTIONS

Current Connections

All Connections

☒

ciab-cn1

Important Notes on New User creation.

For yourself as the CIAB Installer give your Guacamole Account ALL Permissions

Make sure you select the ***ciab-cn1*** Connection

Finally, Click SAVE.

Back on the next Screen Click on **guacadmin** again and Select Logout.

	Last active
	2022-01-10 09:29:14

guacadmin ▾

- Home
- Settings
- Logout

Login with your own UserID and Password and you will see something like the following. Clicking on either the **Icon** or the connection name “**ciab-cn1**” should log you into your CIAB Desktop.

RECENT CONNECTIONS



ciab-cn1

ALL CONNECTIONS

 ciab-cn1

Installation Errata

Installation only requires you to execute 2 Scripts.

Do not use “sudo” or “root” to execute these, just your normal UserID:

1. **ciab-pre-install.sh**

then

2. **ciab-install.sh**

Note for UBUNTU MATE Desktop Environment !

Mate itself has a “bug” described here:

<https://ubuntu-mate.community/t/upgraded-to-20-04-and-the-menu-keeps-closing/21781/16>

For Ubuntu Mate Desktop I fixed this problem by editing (as sudo):

`/usr/share/applications/caja.desktop`

and change:

Exec=/usr/bin/caja

to:

Exec=/usr/bin/caja --force-desktop

Log out and back in and now it all works.

Note for UBUNTU Budgie Desktop Environment !

Just install CIAB like normal.

When the install of ciab-cn1 starts and you get the TaskSel menu select **Budgie Desktop**.

Next, when everything is done do this:

`lxc exec ciab-cn1 bash`

`cd /etc/xrdp`

Edit the file "**startwm.sh**"

At the very bottom you will see:

```
wm_start  
exit 1
```

Change that to:

```
## wm_start  
budgie-desktop  
exit 1
```