

CIAB Remote Desktop System Installation Guide

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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: KDE, Ubuntu Gnome, XFCE, MATE, 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.

Installation only requires you to execute 2 Scripts.

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

1. ciab-pre-install.sh

then

2. ciab-install.sh

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.

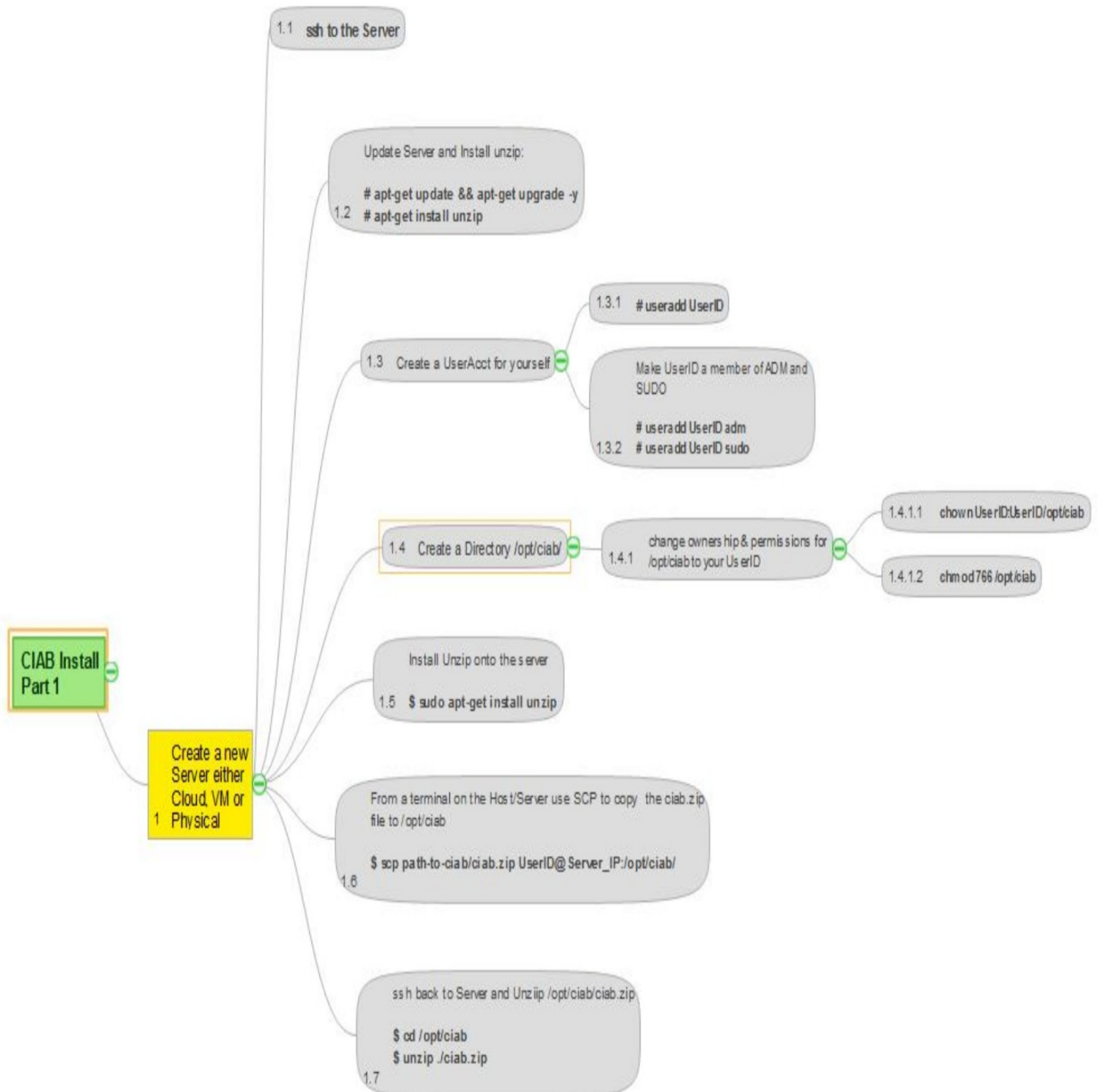
<https://A.B.C.D>

Default Admin login is:

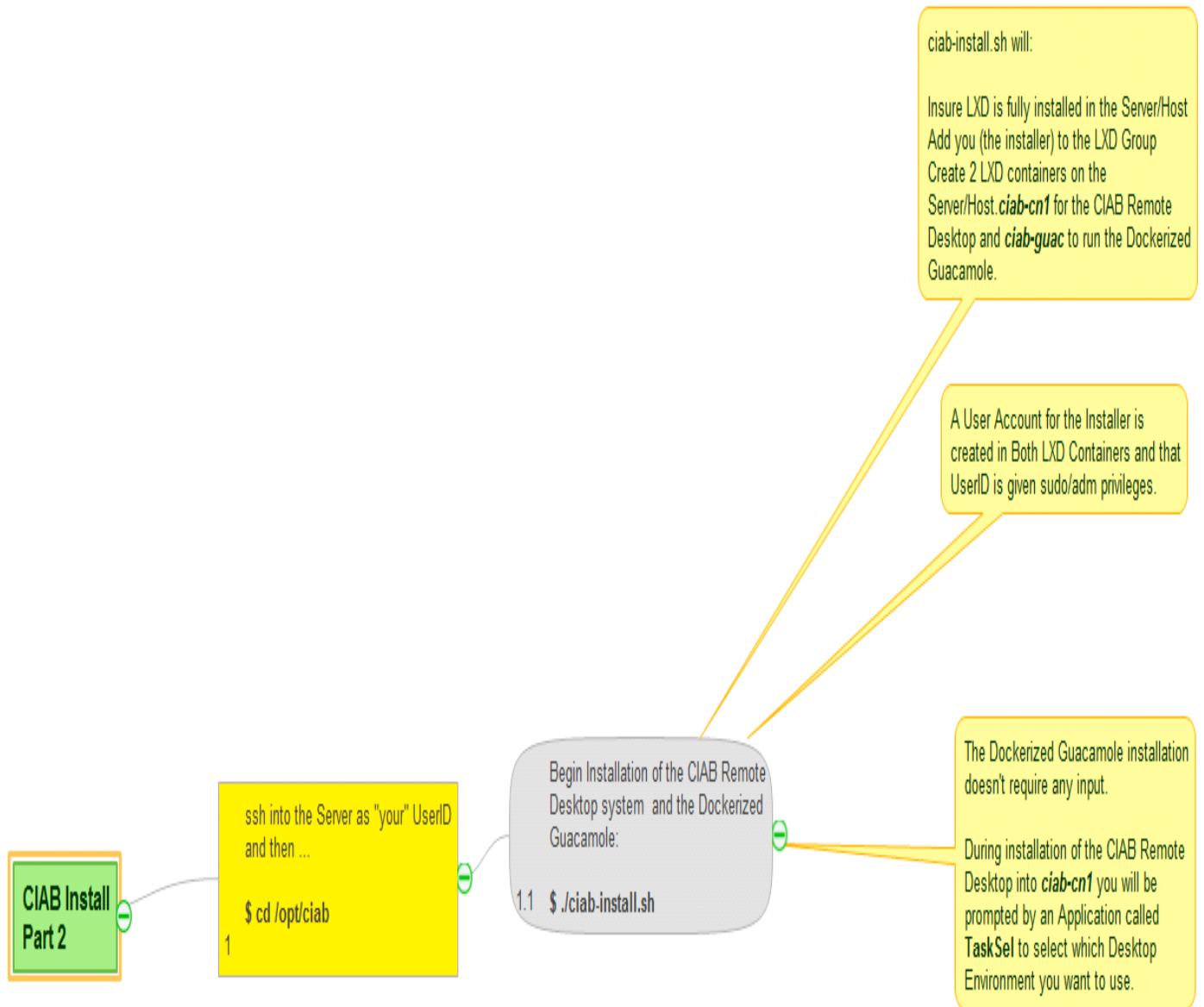
guacadmin

guacadmin

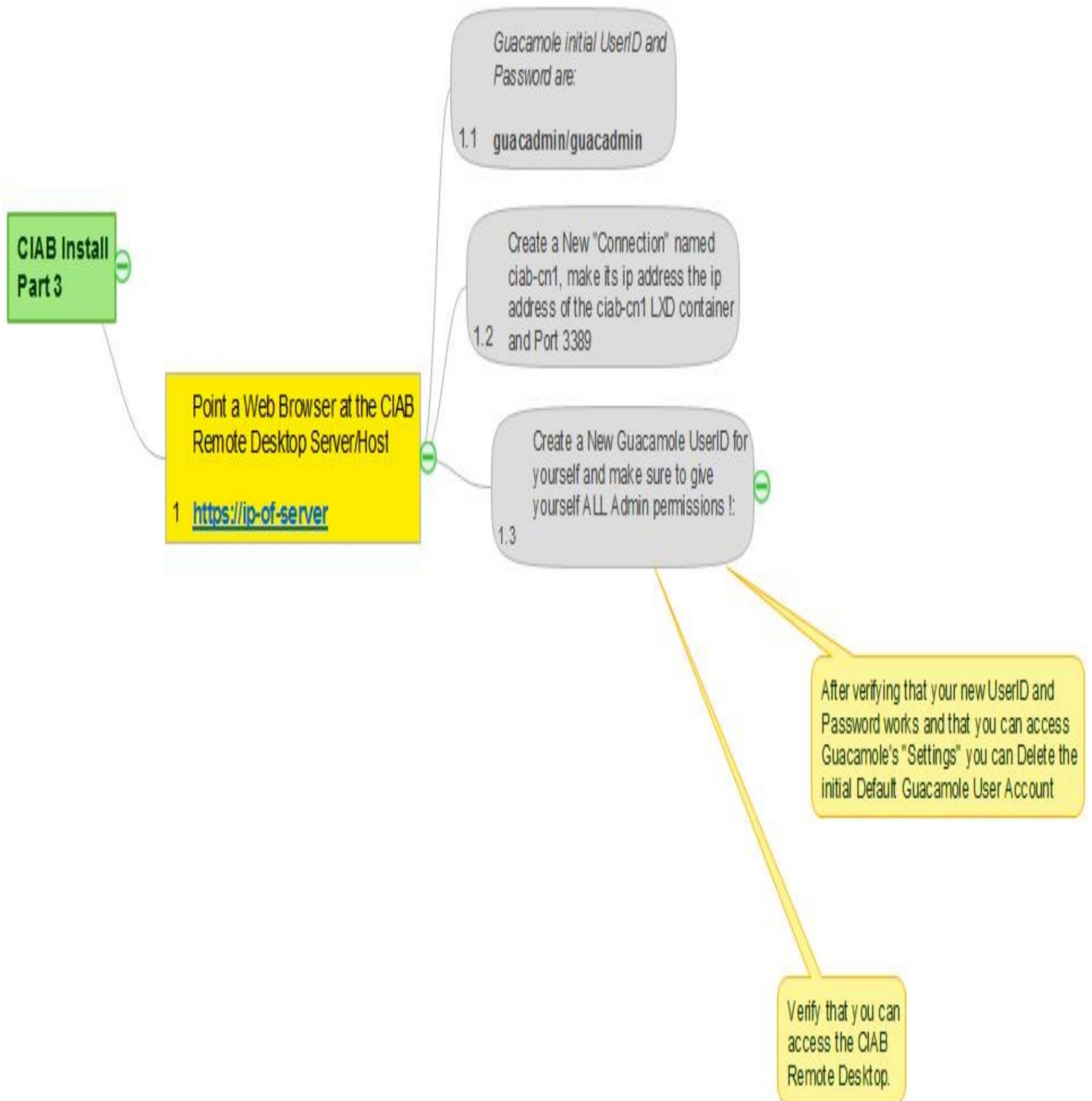
CIAB Remote Desktop System Installation – PART 1



CIAB Remote Desktop System Installation – PART 2



CIAB Remote Desktop System Installation – PART 3

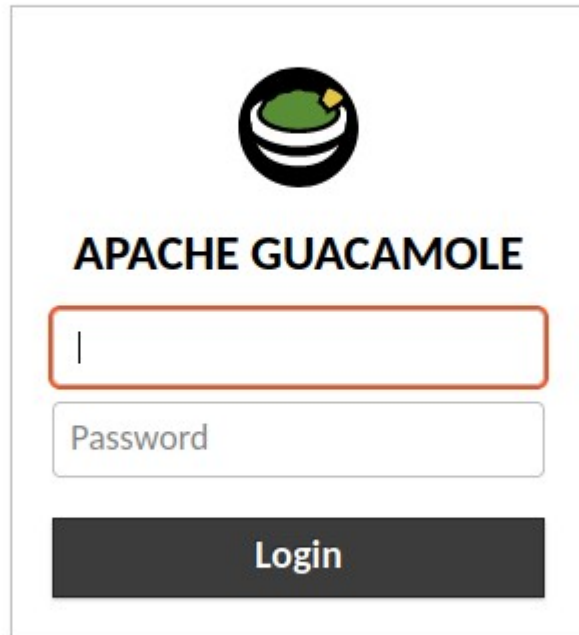


Basic CIAB Guacamole Configuration Steps

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:

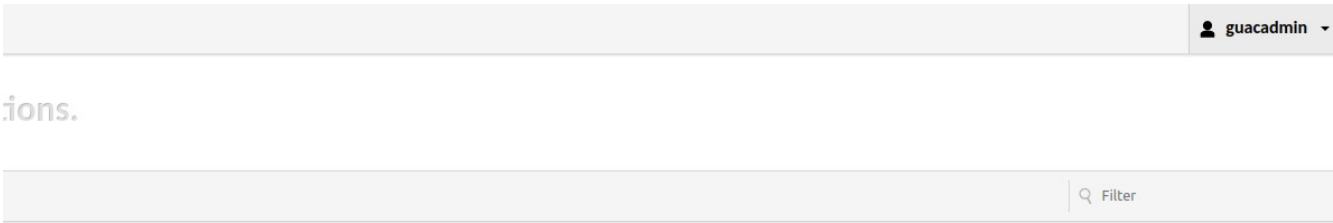


The image shows the Apache Guacamole login interface. At the top is the Guacamole logo, which consists of a black circle containing a green bowl with a yellow spoon. Below the logo, the text "APACHE GUACAMOLE" is displayed in a bold, black, sans-serif font. Underneath the text are two input fields: the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

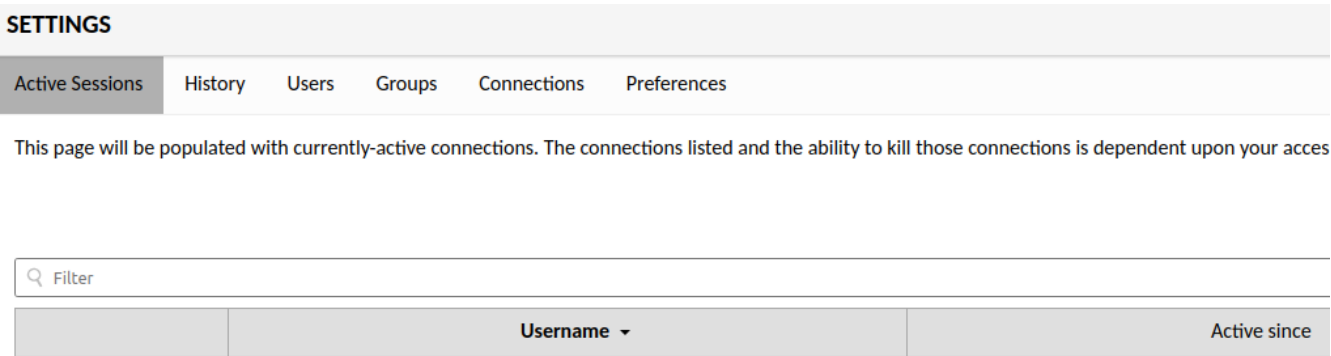
Default initial Login & Password are:

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:

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:

Disable account after:

User time zone:

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.

| | |
|--|--------------------------|
| | guacadmin |
| | Home |
| | Settings |
| | Logout |

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

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:

3. ciab-pre-install.sh

then

4. 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.
