## **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:

- 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.

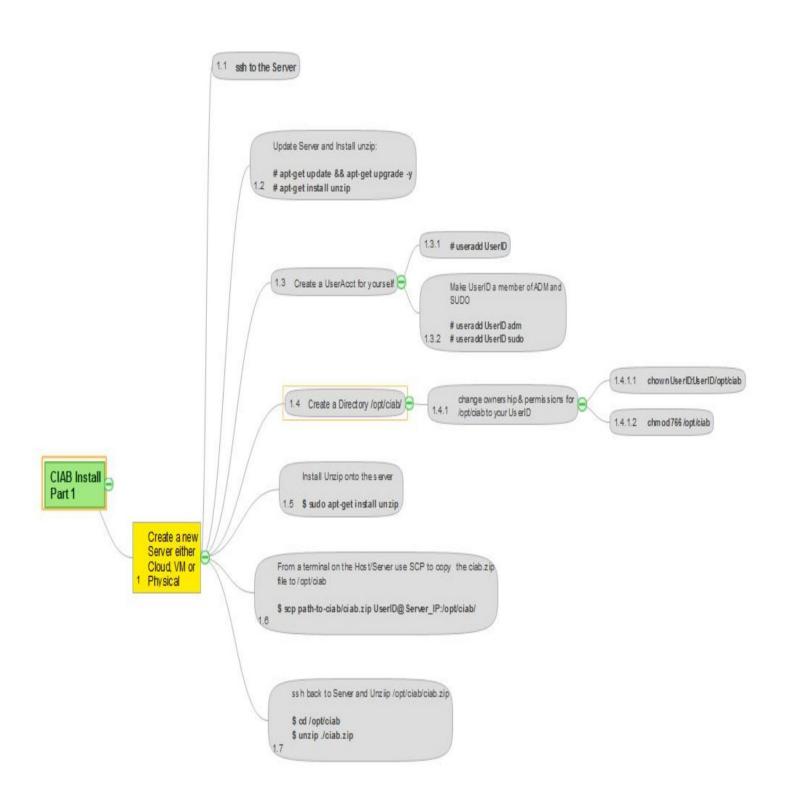
Please substitute the *UserName* you intend to utilize anywhere in *Part 1 and Part 2* where ever you see "*UserID*".

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

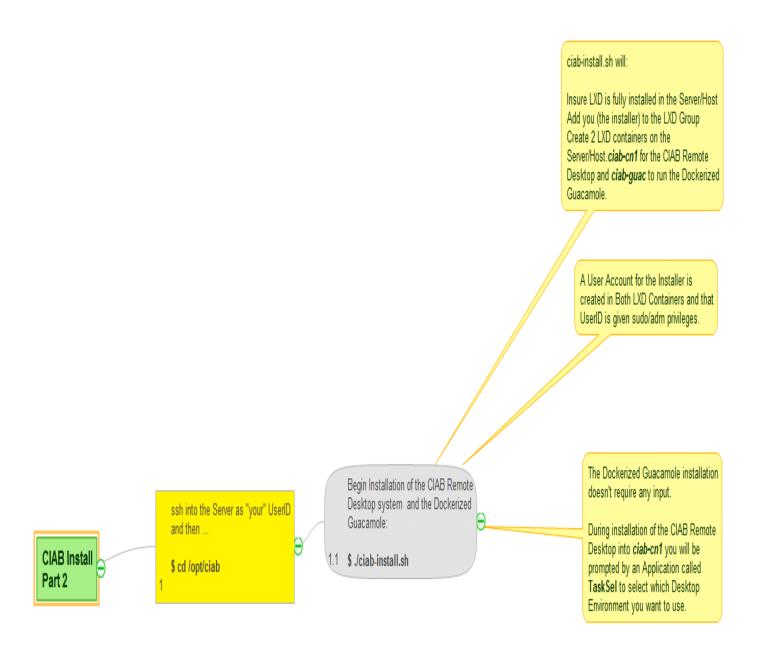
https://A.B.C.D

Default Admin login is: guacadmin guacadmin

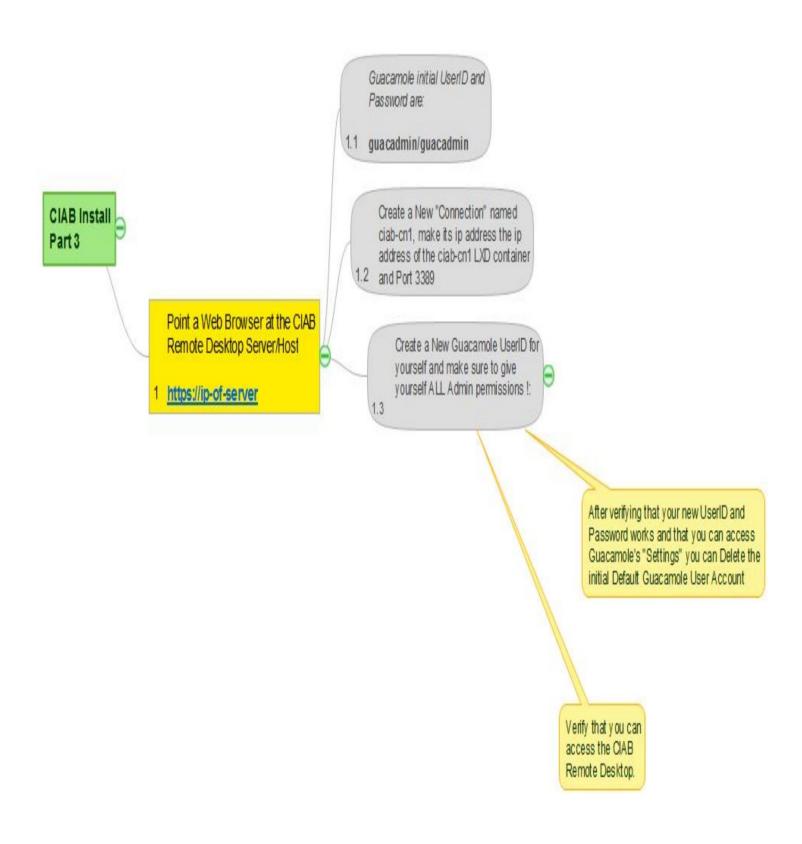
# **CIAB Remote Desktop System Installation – PART 1**



# **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:

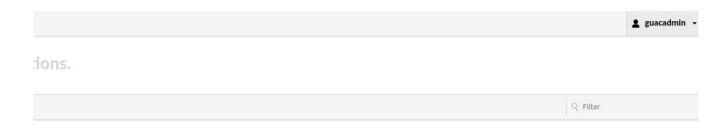
https://X.X.X.X

and you will see the Guacamole Login Menu:

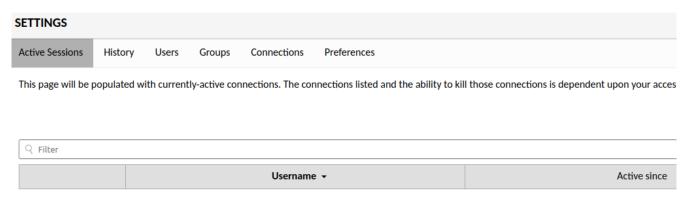


Default initial Login & Password are:

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: ciab-cn1 Location: ROOT Protocol: RDP   V			
CONCURRENCY LIMITS			
Maximum number of conne			
LOAD BALANCING			
Connection weight:  Use for failover only:			
GUACAMOLE PROXY PA	ARAMETERS (GUACD)		
Port: Encryption:  PARAMETERS			
Network			
Hostname: 10.141.152.1 Port: 3389	53 ≎		
Authentication			
Username: Password: Domain:	\${GUAC_USERNAME}  \${GUAC_PASSWORD}		
Security mode: Disable authentication: Ignore server certificate:	RDP encryption		
Remote Desktop Gatew	<i>y</i> ay		
Hostname: Port: Username:			
Password: Domain:	<u> </u>		

Note: those are "curly braces" around Username and Password!!

# **Basic Settings**

Initial program:					
Client name:					
Keyboard layout:	US E	inglish (Qv	verty)	~	
		erica v	New York		~
Enable multi-touch:					
Administrator console:					
Display					
Width:				<b>\$</b>	
Height:				<b>\$</b>	
Resolution (DPI):				<b>\$</b>	
Color depth:		True colo	r (32-bit) v		
Force lossless compression:					
Resize method:					~
Read-only:					
Clipboard					
Line endings:				<b>v</b> ]	
Disable copying from rer	note c	lesktop:			
Disable pasting from client:					

### **Device Redirection**

Support audio in console:	
Disable audio:	
Enable audio input (microphone):	
Enable printing:	
Redirected printer name:	
Enable drive:	
Drive name:	ciab-drive
Disable file download:	
Disable file upload:	
Drive path:	drive/
Automatically create drive:	<b>▽</b>
Static channel names:	rdpdr

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

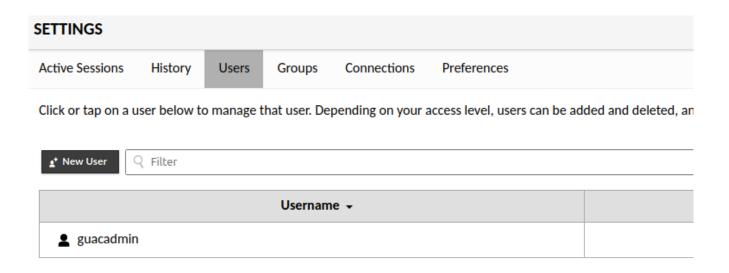
*If you copy/paste a file into that Directory it will be transferred to your local machine.* 

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!



Click on "Users" then click on "New User".

EDIT USER				
Username: Password: Re-enter Password:	bmullan			
PROFILE				
Full name:  Email address:  Organization:  Role:				
ACCOUNT RESTRIC	TIONS			
Login disabled: Password expired: Allow access after: Do not allow access af Enable account after: Disable account after: User time zone:	:			
PERMISSIONS				
Administer system: Create new users: Create new user group Create new connection Create new connection Create new sharing processes Change own password	ns:  ofiles:			
CONNECTIONS				
Current Connections	All Connections			
□ 🔽 🔽 ciab-cn1				

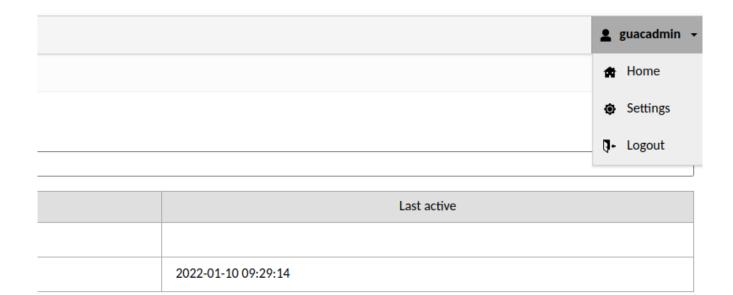
Important Notes on New User creation.

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.



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**



## **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.