

Ghidra Server Installed on Ubuntu

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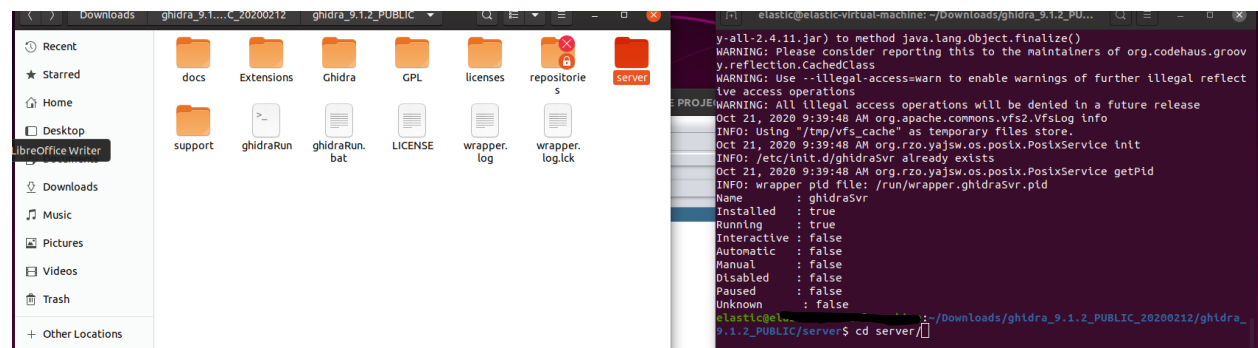
Thanks for coming by and checking out my report on how to setup a Ghidra server on Ubuntu. Feedback is greatly appreciated

The first step, I did was a google search with the keywords Ghidra Download, on my Ubuntu VMware machine. About 10 minutes later, I found the file in the Downloads folder, unzipped, and clicked open in terminal.

Next, I typed the command below:

```
Disabled : false
Paused   : false
Unknown  : false
elastic@elastic-vm: ~/Downloads/ghidra_9.1.2_PUBLIC_20200212/ghidra_
9.1.2_PUBLIC/server$ sudo ./ghidraRun
```

Then, I changed to the server directory.



Followed by the Ghidrasever command:

```
elastic@elastic-vm: ~/Downloads/ghidra_9.1.2_PUBLIC_20200212/ghidra_
9.1.2_PUBLIC/server$ ./ghidraSvr
```

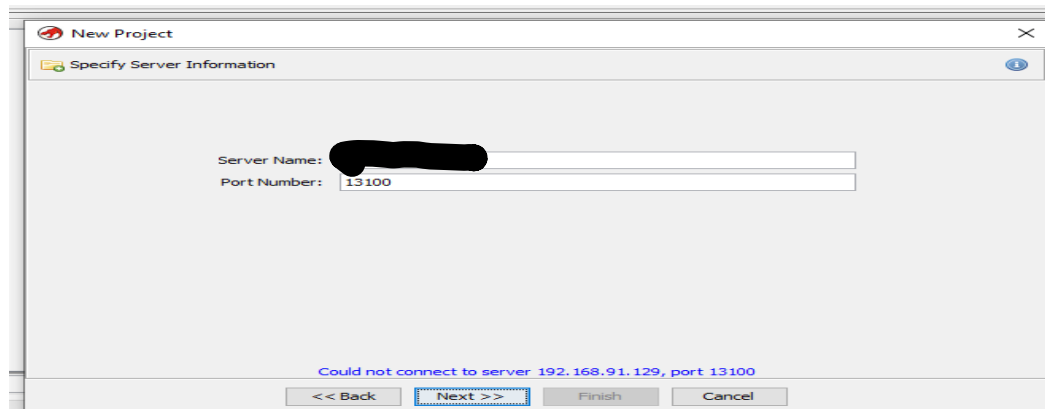
Next, I wanted to do a check on the status of the server, looks good at this junction:

```
INFO: wrapper pid file: /run/wrapper.ghidraSvr.pid
Name      : ghidraSvr
Installed : true
Running   : true
Interactive : false
Automatic : false
Manual    : false
Disabled  : false
Paused    : false
Unknown   : false
elastic@ [REDACTED] ~/Downloads/ghidra_9.1.2_PUBLIC_20200212/ghidra_
9.1.2_PUBLIC/server$ ./ghidraSvr status
```

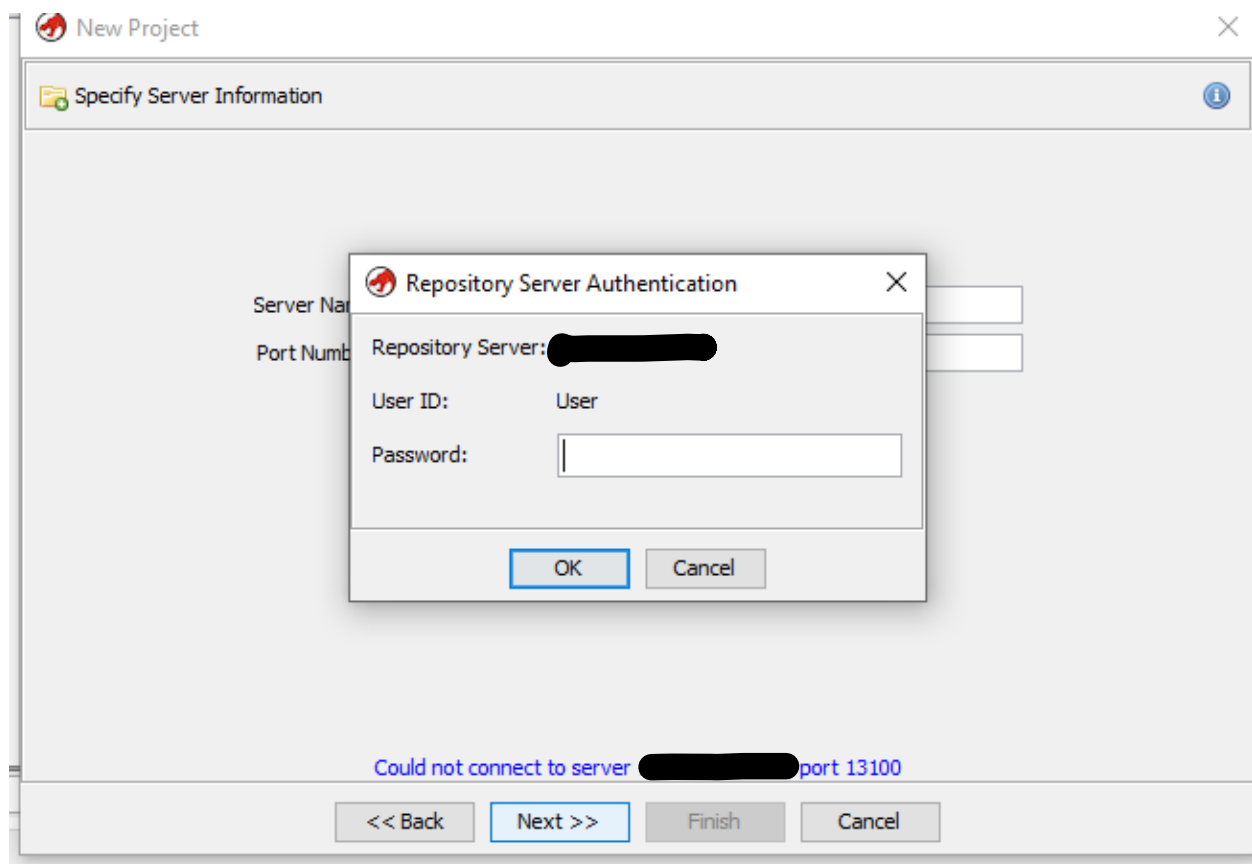
After the status looks good on the Ubuntu machine, I checked the IP address, which as you can see I blacked out the IP address, but you get the point.

```
elastic@ [REDACTED] ~/Downloads/ghidra_9.1.2_PUBLIC_20200212/ghidra_
9.1.2_PUBLIC/server$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 00:0c:29:8a:8d:e9 brd ff:ff:ff:ff:ff:ff
    inet [REDACTED] scope global dynamic noprefixroute ens33
```

Next, I go to my other VMware machine with Ghidra already installed. And I use the same IP address from my Ubuntu machine in the Server Machine field:



Now, I'm prompted with a username and password, which I need to change the settings back on the Ubuntu machine.



In the Ubuntu command line, I use the `sudo gedit` command, and place the `serconf` file there to make the changes to username settings. Scrolled down to the wrapper settings, and first I changed to `anonymous`.

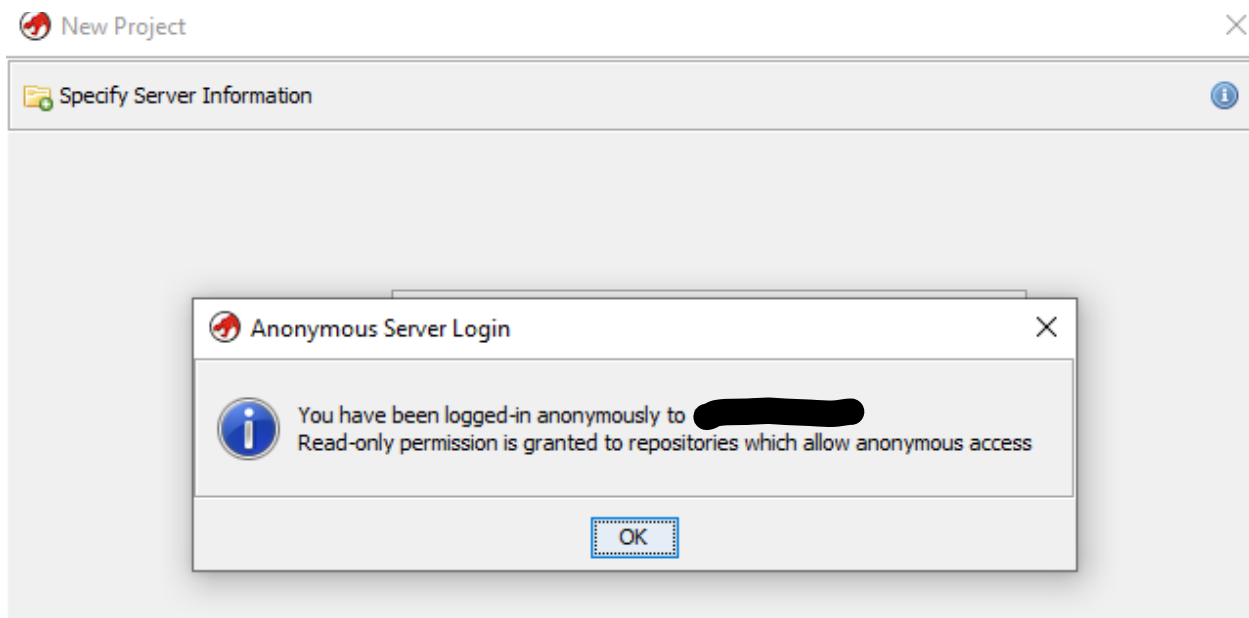
```
# -autoProvision : enable the auto-creation of new Ghidra Server
#                  users when they successfully authenticate to the server (-a1 and -a4 modes only).
#                  Users removed from the authentication provider (e.g., Active Directory) will need to be
#                  deleted manually from the Ghidra Server using svrAdmin command.
#
# -anonymous : enables anonymous repository access (see svrREADME.html for details)
#
# -ssh : enables SSH authentication for headless clients
#
# <repository_path> : Required. Directory used to store repositories. This directory must be dedicated to this
#                    Ghidra Server instance and may not contain files or folders not produced
#                    by the Ghidra Server or its administrative scripts.
#                    Relative paths originate from the installation directory
#
# ${ghidra.repositories.dir} : config variable (defined above) which identifies the directory
#                             used to store repositories. Use of this variable to define the
#                             repositories directory must be retained.
wrapper.app.parameter.1=-anonymous
wrapper.app.parameter.2=${ghidra.repositories.dir}
```

To make this change work, I typed in the restart command below, as seen below.

```
elastic@[REDACTED]:~/Downloads/ghidra_9.1.2_PUBLIC_20200212/ghidra_
9.1.2_PUBLIC/server$ ./ghidraSvr restart

Command option "restart" must be run as administrator (use elevated shell - see
svrREADME.html)
```

Then, I go to my Ghidra on my other VMware machine, and was able to see the login settings changed.



Following this, I want to create user name settings, I used the from the servconf to make the changes, after using the sudo gedit command. The -u allows for usernames. I also added in a new parameter, from 2 to 3 now.

```
"
#
wrapper.app.parameter.1=-a0
wrapper.app.parameter.2=-u
wrapper.app.parameter.3=${ghidra.repositories.dir}
```

Now I went to the Ubuntu command line, and typed the following command to add the username Bill

```
elastic@elastic:~/Downloads/ghidra_9.1.2_PUBLIC_20200212/ghidra_9.1.2_PUBLIC/server$ sudo ./svrAdmin -add Bill
OpenJDK 64-Bit Server VM warning: Archived non-system classes are disabled because the java.system.class.loader property is specified (value = "ghidra.GhidraClassLoader"). To use archived non-system classes, this property must be not be set
openjdk version "11.0.7" 2020-04-14
OpenJDK Runtime Environment (build 11.0.7+10-post-Ubuntu-2ubuntu219.10)
OpenJDK 64-Bit Server VM (build 11.0.7+10-post-Ubuntu-2ubuntu219.10, mixed mode, sharing)
Using server directory: /home/elastic/Downloads/ghidra_9.1.2_PUBLIC_20200212/ghidra_9.1.2_PUBLIC/repositories
1 command(s) queued.

elastic@elastic:~/Downloads/ghidra_9.1.2_PUBLIC_20200212/ghidra_9.1.2_PUBLIC/server$
```

Finally, from here I restarted the Ghidra machine from using command previously stated, and checked out the new users that were added as you can see below. Once you get on Ghidra, you can change the username and use the default Password Changeme.

```
elastic@elastic:~/Downloads/ghidra_9.1.2_PUBLIC_20200212/ghidra_9.1.2_PUBLIC/server$ sudo ./svrAdmin -users
OpenJDK 64-Bit Server VM warning: Archived non-system classes are disabled because the java.system.class.loader property is specified (value = "ghidra.GhidraClassLoader"). To use archived non-system classes, this property must be not be set
openjdk version "11.0.7" 2020-04-14
OpenJDK Runtime Environment (build 11.0.7+10-post-Ubuntu-2ubuntu219.10)
OpenJDK 64-Bit Server VM (build 11.0.7+10-post-Ubuntu-2ubuntu219.10, mixed mode, sharing)
Using server directory: /home/elastic/Downloads/ghidra_9.1.2_PUBLIC_20200212/ghidra_9.1.2_PUBLIC/repositories
0 command(s) queued.

Repository Server Users:
  Bill
  Ted
```

Thanks again, for taking the time to read my report on how to setup a Ghidra server on Ubuntu. Now, you can go on your most excellent adventure!

References:

Stryker2k2 <https://www.youtube.com/watch?v=MhDtaFqcLUM>

The Ghidra Book: The Definitive Guide. Chris Eagle and Kara Nance