Add windows server for RDP via browser

92 admin October 3, 2024 Features & Functionalities 42788

How to add Windows server for one-click RDP access via web browser in Ezeelogin?

Overview: This article provides step-by-step instructions on how to add a Windows server for one-click RDP access for gateway users via a web browser in Ezeelogin.

Ensure that the desktop browser has enough CPU(2GHZ) and RAM(2- 4 GB). Close out browser tabs to reduce the CPU footprint so that the browser-based RDP works without slowness.

- Web RDP will work only if the web interface is accessed via **HTTPS**.
- RDP is still in **beta**. However many features including NLA are currently supported. Some features like shared clipboard, audio redirection, etc. are not present.

1. On the gateway server install nodejs.

Step 1(A): On Centos 7

```
root@gateway:~# yum install epel-release

root@gateway:~# yum install npm
```

Step 1(B): On Ubuntu 16/18 and Debian 10

```
root@gateway:~# apt install npm
```

Step 1(C): On Ubuntu 20/22

```
root@gateway:~# apt-get update
```

```
root@gateway:~# apt install npm
```

2. Install n, Node's version manager:

Step 2(A): If you are not using SSL, you need to set the repo to HTTP by running :

```
root@gateway:~# npm config set registry  http://registry.npmjs.org/

root@gateway:~# npm install -g n
```

3. Install node:

Step 3(A): To install the latest version:

```
root@gateway:~# n latest
```

Step 3(B): To install the corresponding version :

```
root@gateway:~# n version.number
```

For example, the below command will install node 19

```
root@gateway:~# n 19
```

```
[root@localhost ~]#  npm install -g n

added 1 package, and audited 2 packages in 1s

found 0 vulnerabilities
[root@localhost ~]# n 14
  installing : node-v14.21.2
       mkdir : /usr/local/n/versions/node/14.21.2
       fetch : https://nodejs.org/dist/v14.21.2/node-v14.21.2-linux-x64.tar.xz
     copying : node/14.21.2
   installed : v14.21.2 (with npm 6.14.17)
```

Step 3(C): Run the following command to install the node without SSL

```
root@gateway:~# n --insecure latest
```

Step 3(D): To switch between node versions run the following command and refer to the given screenshot.

```
root@gateway:~# n
```

```
    node/16.18.1
  o node/19.7.0

Use up/down arrow keys to select a version, return key to install, d to delete, q to quit
```

Install node using NPM or NVM in Ezeelogin

4. Install NodeJS module dependencies

Step 4(A): Install the **NodeJS module dependencies** for the Web RDP Console application by running the following command.

```
root@gateway:~# php /usr/local/ezlogin/eztool.php -- -install_node_modules -node_component webrdp
```

OR

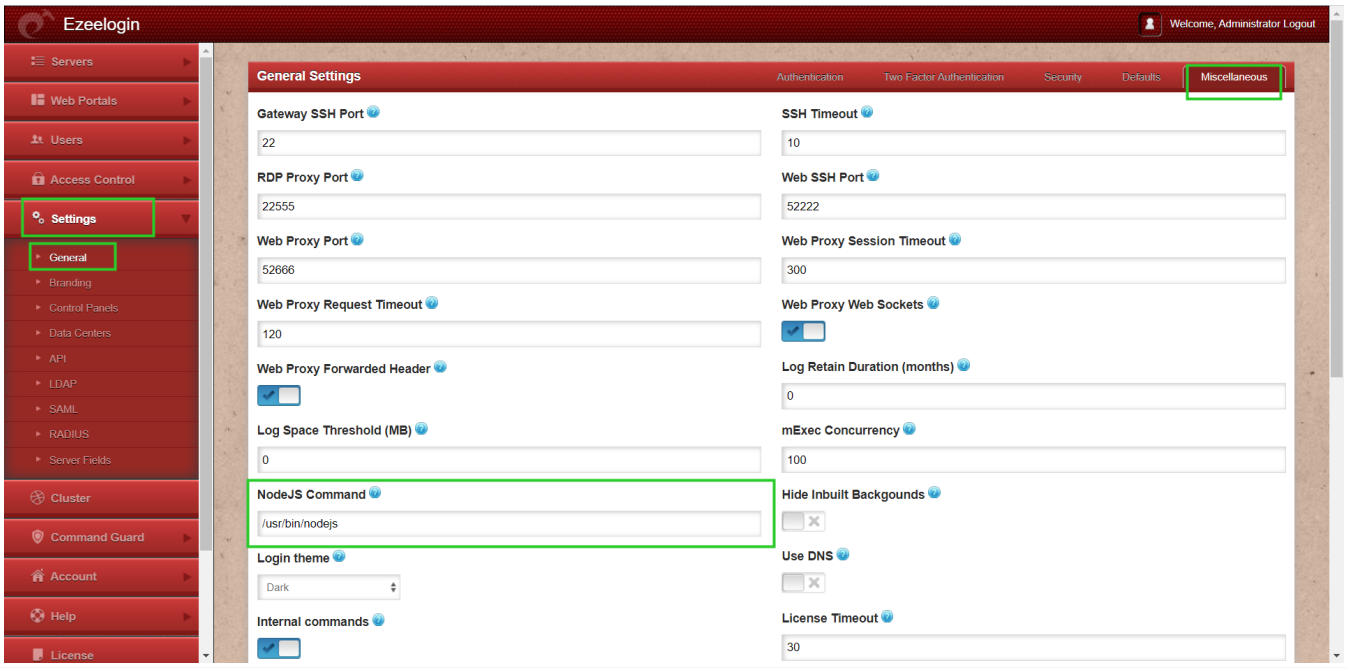
```
root@gateway:~# cd $(awk '/^system_folder/ {print $2}' /usr/local/etc/ezlogin/ez.conf)/application/external/mstsc/&& npm install
```

5. Update Settings

Step 5(A): The nodejs command field should have the path to the **node** or **nodejs** binary which usually is **/usr/bin/node** in the case of **Centos7** and **/usr/bin/nodejs** in the case of **Ubuntu 14-04.** Run below commands to get the path to the node binary.

```
root@gateway:~# which node or which nodejs or whereis nodejs or whereis node
```

Step 5(B): Specify the path to the node binary correctly under **Settings -> General -> Miscellaneous -> Nodejs Command**.



Ensure that **inbound** TCP traffic on **port 22555** is open as nodejs server listens on this port. (you can confirm the port from **Ezeelogin GUI** > **Settings** > **General** > **Miscellaneous** > **RDP Proxy Port**)

Ensure that **outbound** TCP traffic on port **3389** is open as RDP listens on this port.

6. SSL for the browser.

Step 6(A): To ensure SSL for the browser tab that opens up for the web RDP, generate a **self-signed cert** with the following command. Web Shell will work only if the web interface is accessed via **HTTPS**

```
root@gateway:~# openssl req -new -days 365 -x509 -nodes -newkey rsa:2048
-out /usr/local/etc/ezlogin/tls_cert.pem -keyout
/usr/local/etc/ezlogin/tls_key.pem
```

Make sure to install SSL (self-signed or a valid cert)even if you have installed an SSL certificate on the Load balancer (ELB/ALB).

Also, make sure to add a listener and routing for the port RDP Proxy Port 22555

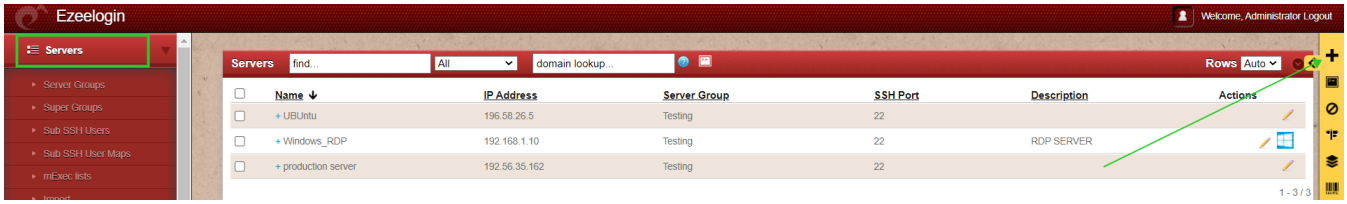
Step 6(B): Or put a valid ca, cert, and key in the files: **/usr/local/etc/ezlogin/tls_ca.pem**, **/usr/local/etc/ezlogin/tls_cert.pem** & **/usr/local/etc/ezlogin/tls_key.pem** respectively. You can rename your current **.crt** / **.key** file to **.pem** file.

Also, make sure that the .pem files are readable by the webserver user such as nobody/www-root/apache, etc.

An easy way to grant the web user read privileges would be chmod 644 /usr/local/etc/ezlogin/*.pem

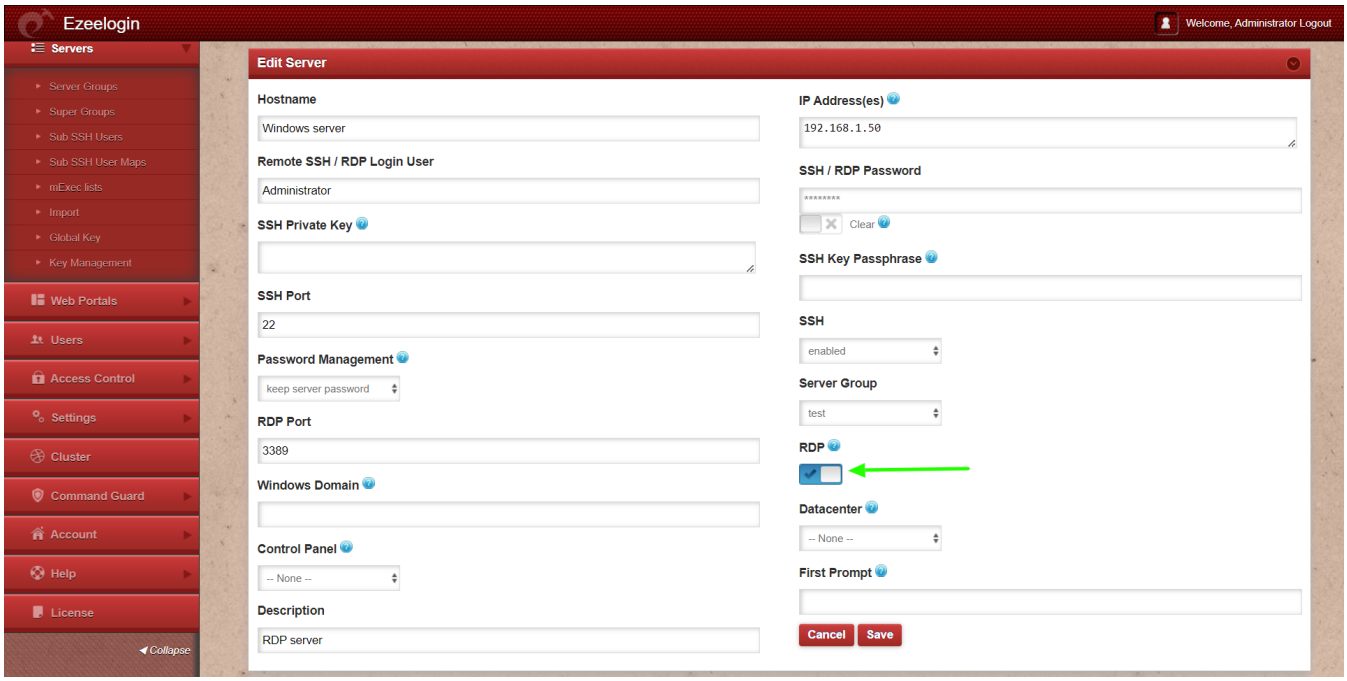
7. Add windows-server

Step 7(A): Add windows-servers by clicking the **add** button as shown below:



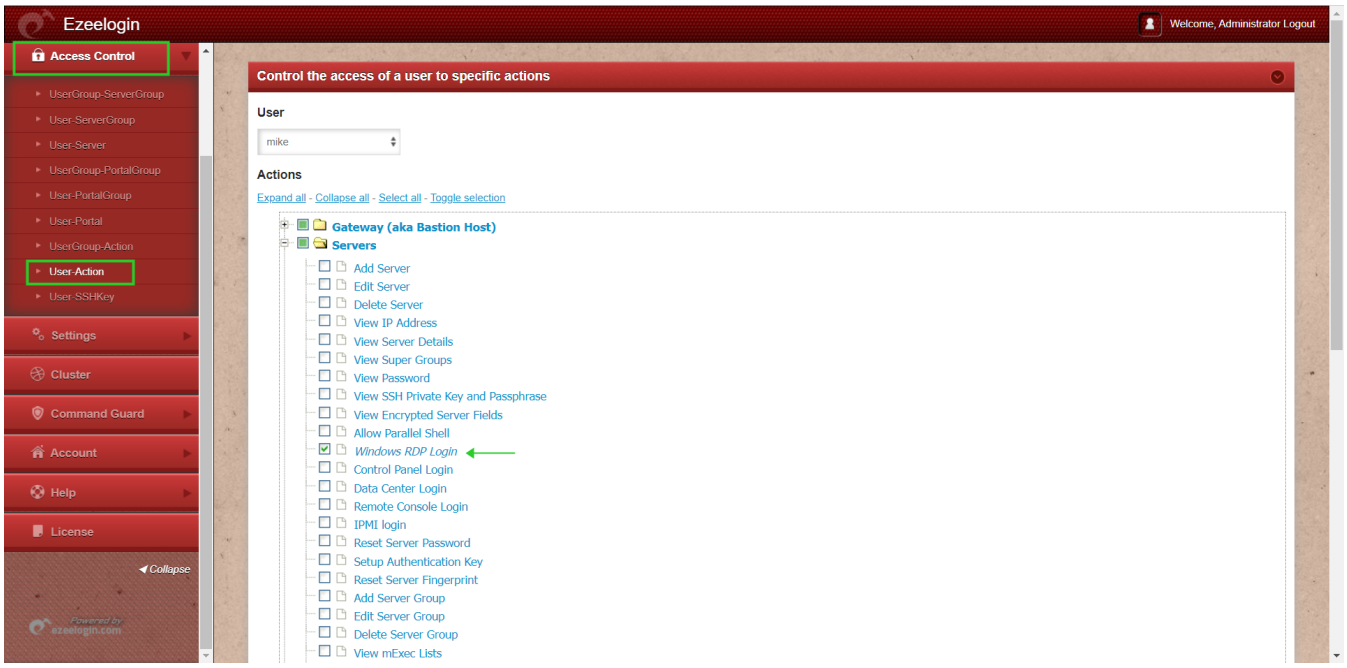
8. Enable RDP

Step 8(A): Ensure that you have provided the correct **username** and **password** while adding windows server, when **Network Level Authentication** (**NLA**) is enforced on the remote Windows machine. Also, make sure that while adding a windows server you have **enabled** the **RDP** and mentioned the default RDP **port number**(3389).



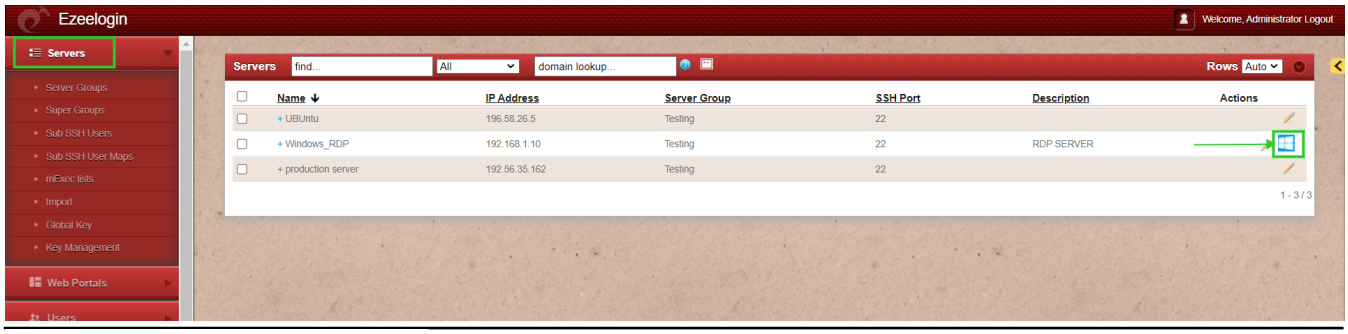
9. Granting access

Step 9(A): Make sure that the users have the privilege to access ' **Windows RDP Login** '



10. Access Windows server.

Step 10(A): Click on the **Windows icon** to RDP into the remote machine



Pros of browser-based RDP

- Easily RDP via browser in one click
- Don't have to remember the administrator passwords
- No RDP client needed

Cons of browser-based RDP

- Unable to copy and paste the document to the remote desktop.

RDP session recording is available from version 7.10.0

If you are getting a protocol error, after upgrading the Node version you just need to add --tls-min-v1.0 to the nodejs command in **Settings** -> **General** -> **Miscellaneous** -> **Nodejs** Command.

How to fix: “EPROTO” Error after upgrading Node’s version?

Troubleshooting Steps:

Step 1: Ensure that the Node version is above 19 and the NPM Version is >=6

```
root@gateway:~# npm -v

6.14.6

root@gateway:~# node -v

v19.0.0
```

Step 2: To get more detailed errors, append **log_level trace** in ez.conf.

How to get detailed errors from Ezeelogin error logs?

Step 3: Kill the current running node

```
root@gateway:~# pkill node
```

Step 4: Access the web RDP and check the application logs under **{system folder}/application/logs/**, (for example, **/var/www/ezlogin/application/logs/log-2020-12-16.php**). Append DEBUG=* at the beginning of the command which you've got from the application logs to manually start the web RDP.

For example:

```
root@gateway:~# DEBUG=* PORT=52666 XFWD=1 WS=1 SESSION_TIMEOUT=300000
REQUEST_TIMEOUT=120000 DBP='94Y6[@MhW]@Qb' node
/var/www/ezlogin/application/external/mstsc/server.js
```

The **recording RDP session** feature is available from Ezeelogin version **7.10.0**

Related Articles:

How to fix RDP SSL error in Ezeelogin?

RDP Error: This computer can’t connect to the remote computer

Troubleshooting "Connection has been closed" Error in Ezeelogin RDP via Browser

Ezeelogin RDP proxy could not be started

How to record and download RDP recordings?

Forcing RDP to use TLS Encryption

Record RDP sessions