

Add windows server for RDP via browser

92 admin January 24, 2024 [Features & Functionalities](#) 41331

Add Windows server into Ezeelogin GUI for one-click RDP via the web browser.

Recording RDP session feature is available from Ezeelogin version 7.10.0

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, make sure to install nodejs.

On Centos 7

```
root@localhost:~ yum install epel-release
```

```
root@localhost:~ yum install npm
```

On Ubuntu 16/18 and Debian 10

```
root@localhost:~ apt install npm
```

On Ubuntu 20/22

```
root@localhost:~ apt-get update
```

```
root@localhost:~ apt install npm
```

2. Install n, Node's version manager:

If you are not using SSL, you need to set the repo to HTTP by running :

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

```
root@localhost:~ npm install -g n
```

3. Install node by running :

To install the latest version:

```
root@localhost:~ n latest
```

To install the corresponding version :

```
root@localhost:~ n version.number
```

For example, the below command will install node 19

```
root@localhost:~ 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)
```

Run the following command to install the node without SSL

```
root@localhost:~ n --insecure latest
```

To switch between node versions run the following command and refer to the given screenshot.

```
root@localhost:~ 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 with rpm in Ezeelogin](#)

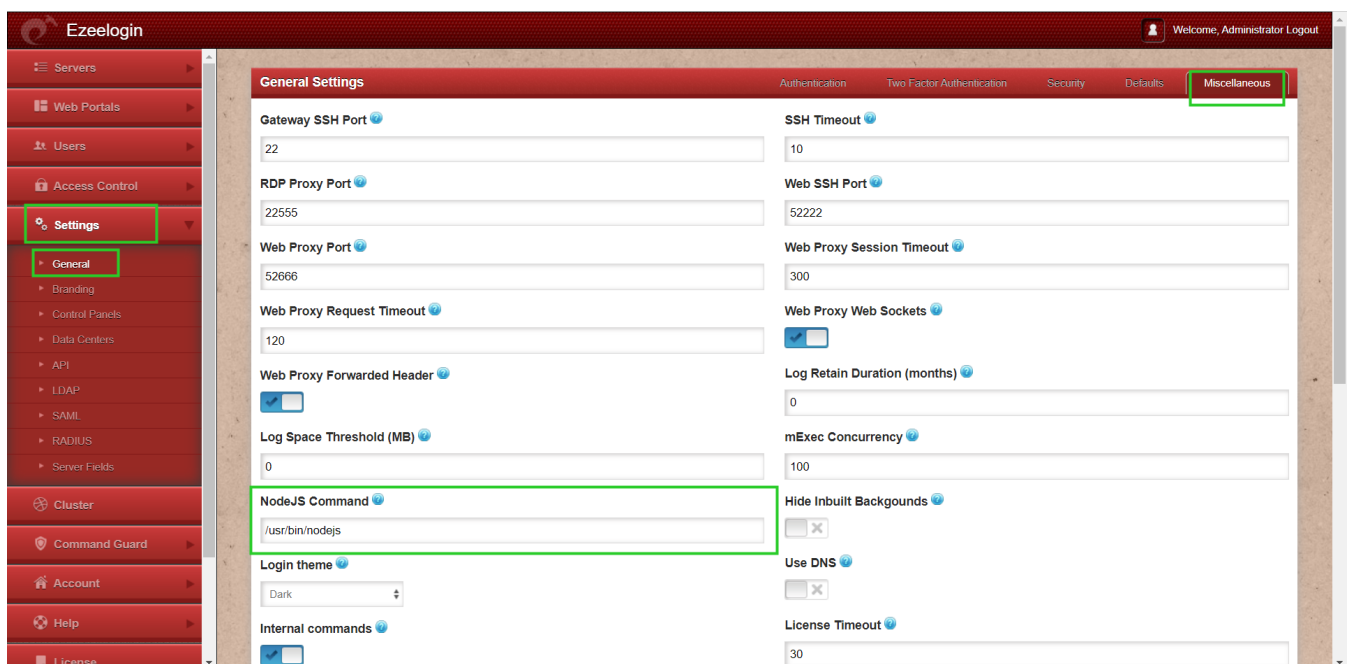
4. Install the NodeJS module dependencies for the Web RDP Console application by running the following command.

```
1. php /usr/local/ezlogin/eztool.php -- -install_node_modules -node_component webrdp
```

or

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

5. Once installed, ensure that the path to the node binary is specified correctly under **Settings > General > Miscellaneous > Nodejs** Command.



The nodejs command field should have the path to the node / nodejs binary which usually is **/usr/bin/node** in the case of **Centos7** and **/usr/bin/nodejs** in the case of **Ubuntu 14-04**

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. 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

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

```
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
```

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-servers by clicking the add button as shown below:



8. Make sure that while adding a server you have enabled the RDP and mentioned the RDP port number.

Edit Server

Hostname: Windows_RDP

IP Address(es): 192.168.1.10

SSH Private Key: [Empty]

SSH Key Passphrase: [Empty]

SSH Password / RDP Password: [Empty]

Server Group: Testing

SSH: enabled

Remote SSH login user / RDP login user: Administrator

Datacenter: None

Windows Domain: [Empty]

Cancel Save

RDP ☒

RDP Port: 3389

9. Also, make sure that the users have the privilege to access ' *Windows RDP Login* '

Access Control

User: mike

Actions

Expand all - Collapse all - Select all - Toggle selection

- Gateway (aka Bastion Host)
 - Servers
 - Add Server
 - Edit Server
 - Delete Server
 - View IP Address
 - View Server Details
 - View Super Groups
 - View Password
 - View SSH Private Key and Passphrase
 - View Encrypted Server Fields
 - Allow Parallel Shell
 - ☒ Windows RDP Login
 - Control Panel Login
 - Data Center Login
 - Remote Console Login
 - IPMI login
 - Reset Server Password
 - Setup Authentication Key
 - Reset Server Fingerprint
 - Add Server Group
 - Edit Server Group
 - Delete Server Group
 - View mExec Lists

10. Click on the Windows icon to RDP into the remote machine

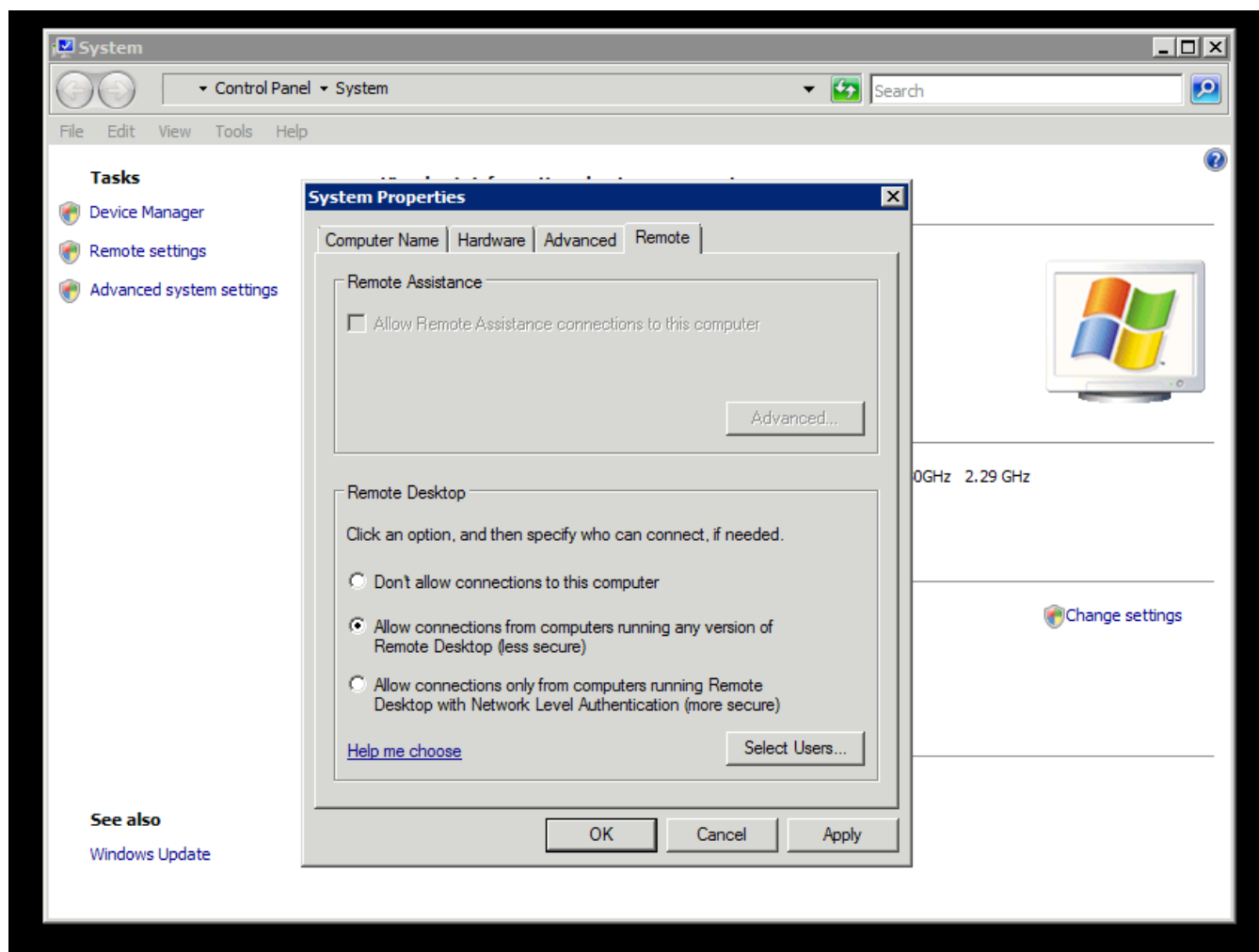
Servers

find... All domain lookup...

| Name | IP Address | Server Group | SSH Port | Description | Actions |
|---------------------|---------------|--------------|----------|-------------|------------|
| + UBUNTU | 196.58.26.5 | Testing | 22 | | |
| + Windows_RDP | 192.168.1.10 | Testing | 22 | RDP SERVER | [RDP Icon] |
| + production server | 192.56.35.162 | Testing | 22 | | |

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11. Ensure that Network Level Authentication (NLA) is disabled on the remote Windows machine as shown.



If **Network Level Authentication (NLA)** is enforced on the remote Windows machine then make sure to provide the correct **username** and **password** in the Ezeelogin software GUI.

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

- Ensure that the Node version is above 19 and the NPM Version is ≥ 6

```
[root@otp webrdp]# npm -v  
6.14.6  
  
[root@otp webrdp]# node -v  
v19.0.0
```

To get more detailed errors, append `log_level trace` in `ez.conf`.

[How to get detailed errors from Ezeelogin error logs?](#)

Kill the current running node

```
root@jump-host:~# pkill node
```

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) to get the command to manually start the web RDP.

Note: Append **DEBUG=*** at the beginning of the command which you've got from the application logs.

For example

```
root@jump-host:~# 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
```

Online URL: <https://www.ezeelogin.com/kb/article/add-windows-server-for-rdp-via-browser-92.html>