

Remote Access to NovelRank Enterprise Database

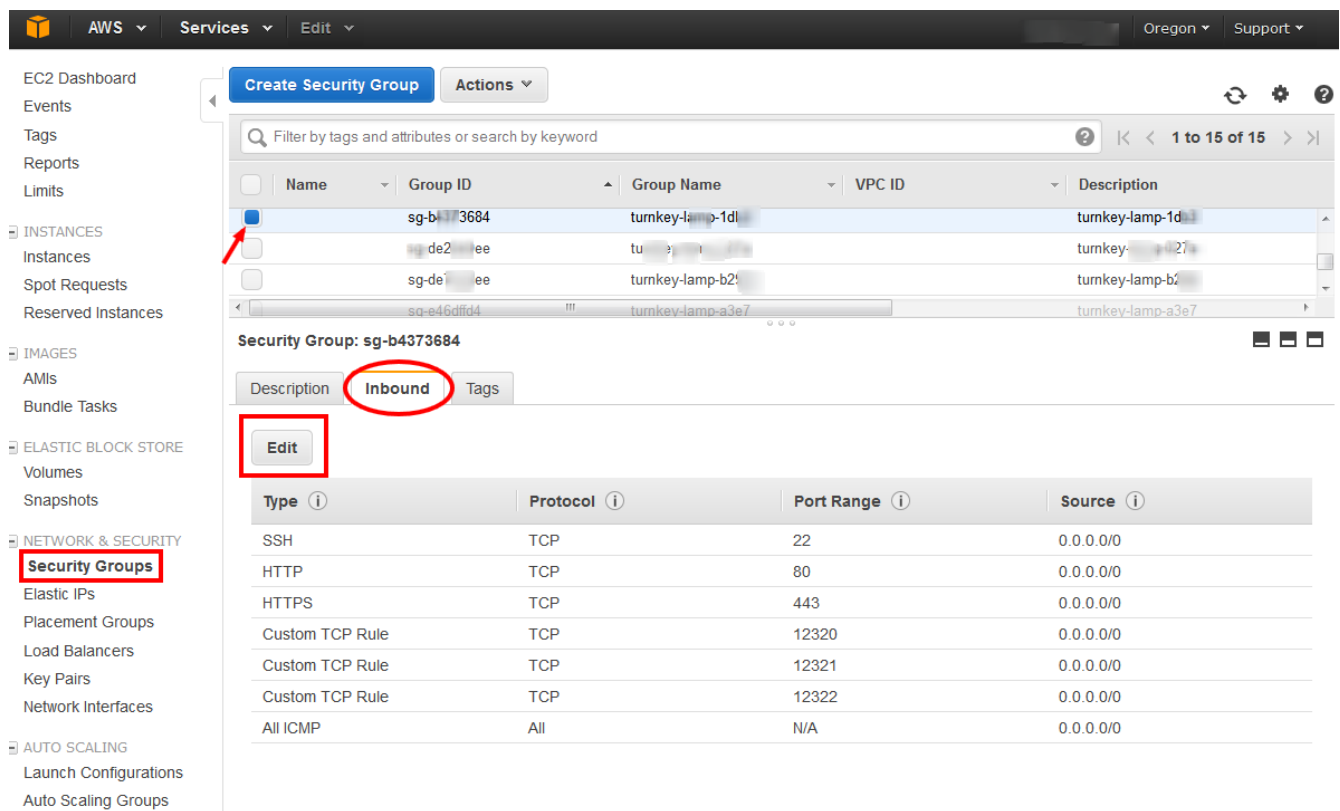
While NovelRank Enterprise Software offers a plethora of CSV/Excel exporting options, you may wish to use the raw data in other ways. To do so, you may need to connect an external server/source to your NovelRank server/software.

This guide is specifically meant to accompany the existing guide for setting up your NovelRank software on Amazon EC2 & TurnKey. *If this is not the case, then STEP 1 can be skipped.*

1) Configure AWS-EC2 Security Groups (Firewall)

<https://console.aws.amazon.com/ec2/v2/home#SecurityGroups>

- Login to your AWS account on Amazon and select EC2.
- Select **Security Groups** on the left-side.
- Select your server in the top box.
- Click on the **Inbound** tab.
- Press the **Edit** button.



The screenshot shows the AWS Management Console interface for configuring a Security Group. The left sidebar shows the navigation menu with 'Security Groups' highlighted. The main console area displays a table of security groups. The first group, 'turnkey-lamp-1d...', is selected. Below the table, the 'Inbound' tab is selected and circled in red. An 'Edit' button is also circled in red. The table below shows the inbound rules for the selected security group.

| Type | Protocol | Port Range | Source |
|-----------------|----------|------------|-----------|
| SSH | TCP | 22 | 0.0.0.0/0 |
| HTTP | TCP | 80 | 0.0.0.0/0 |
| HTTPS | TCP | 443 | 0.0.0.0/0 |
| Custom TCP Rule | TCP | 12320 | 0.0.0.0/0 |
| Custom TCP Rule | TCP | 12321 | 0.0.0.0/0 |
| Custom TCP Rule | TCP | 12322 | 0.0.0.0/0 |
| All ICMP | All | N/A | 0.0.0.0/0 |

- Select *MySQL* from the drop-down **Type** box, which automatically sets it to *TCP* and port *3306*.
- Set the **Source** to *Anywhere* to allow you access it from any IP address.
- Click **Save** and you're all done with Amazon AWS.

Edit inbound rules ✕

| Type <small>(i)</small> | Protocol <small>(i)</small> | Port Range <small>(i)</small> | Source <small>(i)</small> | |
|-------------------------|-----------------------------|-------------------------------|---------------------------|-------------|
| SSH | TCP | 22 | Anywhere | 0.0.0.0/0 ✕ |
| HTTP | TCP | 80 | Anywhere | 0.0.0.0/0 ✕ |
| HTTPS | TCP | 443 | Anywhere | 0.0.0.0/0 ✕ |
| Custom TCP Rule | TCP | 12320 | Anywhere | 0.0.0.0/0 ✕ |
| Custom TCP Rule | TCP | 12321 | Anywhere | 0.0.0.0/0 ✕ |
| Custom TCP Rule | TCP | 12322 | Anywhere | 0.0.0.0/0 ✕ |
| All ICMP | ICMP | 0 - 65535 | Anywhere | 0.0.0.0/0 ✕ |
| MYSQL | TCP | 3306 | Anywhere | 0.0.0.0/0 ✕ |

Add Rule
Cancel
Save

1b) (optional) Configure firewall through TurnKey Instead

The following screenshots demonstrate how to make these changes in TurnKey rather than in AWS. **Either option will work.**

● Micro LAMP Stack
IP not assigned

Status Stopped Start Destroy

IP address None

Firewall rules PING, SSH, HTTP, HTTPS, Web shell, Webmin ... Edit

Display console output

Snapshots 0 snapshots Clone a new server from latest snapshot

Backups 0 backups Enable backup support

Region Oregon (West USA)

EC2 instance i-632e9d6a (T1.micro EBS-backed - 0.615 GB RAM, Variable ECU, 10G rootfs)

Server lamp-12.0-squeeze-x86 Change server label

Add rule

Protocol

Port or port range to open

IP or IP range to allow

Port or port range, e.g.:

- 80 - allow access to port 80 (HTTP)
- 1:65535 - allow access to all ports
- 6667:7000 - allow port 6667 to 7000

IP or IP range (CIDR notation), e.g.:

- 1.2.3.4 - allow this IP only
- 0.0.0.0/0 - allow all IP's
- 1.2.3.0/24 - allow 1.2.3.0 to 1.2.3.255

2) Create MySQL User with Remote Access Permissions

Login to PHPMyAdmin on your server. If you followed the EC2/TurnKey guide, you would go to your server's address (e.g. <http://myserver.tklapp.com/> or its IP address) and add **index2.php** to the end of the url. This would bring up the link to PHPMyAdmin.

Once logged into PHPMyAdmin, it's best to select the NovelRank database on the left-side, the database you created when you installed the software. For the purposes of the following screenshots, this database is called *nree*.

- Select the **Privileges** tab.
- Click **Add New User** near the bottom.

The screenshot shows the PHPMyAdmin interface for the 'nree' database. The 'Privileges' tab is selected, displaying a table of users with access to the database. The 'Add a new User' button is highlighted with a red circle.

| User | Host | Type | Privileges | Grant | Action |
|------------------|-----------|--------|----------------|-------|--------|
| debian-sys-maint | localhost | global | ALL PRIVILEGES | Yes | |
| root | 127.0.0.1 | global | ALL PRIVILEGES | Yes | |
| root | localhost | global | ALL PRIVILEGES | Yes | |

Add a new User

Note: You can use whatever username you wish (e.g. remote).

- Set the **Username** text-field.
- Set the **Host** to *Use Text Field* and then set the text-field to `%`. (This allows access from any IP address).
- Set a password (twice) for the new user.
- Make sure that under **Database for user** you've granted privileges on the database.
- Hit **Go** on the bottom-right to save your new user and wrap up your work in this section.

phpMyAdmin

localhost

Databases SQL Status Variables Charsets Engines Privileges Replication Processes Export

Import Synchronize

Add a new User

Login Information

User name: Use text field: remote

Host: Use text field: % ¹

Password: Use text field:

Re-type:

Generate Password:

Database for user

None

Create database with same name and grant all privileges

Grant all privileges on wildcard name (username_%)

Grant all privileges on database "nree"

Global privileges (Check All / Uncheck All)

Note: MySQL privilege names are expressed in English

| Data | Structure | Administration | Resource limits |
|---------------------------------|--|---|--|
| <input type="checkbox"/> SELECT | <input type="checkbox"/> CREATE | <input type="checkbox"/> GRANT | Note: Setting these options to 0 (zero) removes the limit. MAX QUERIES PER HOUR <input type="text" value="0"/> MAX UPDATES PER HOUR <input type="text" value="0"/> MAX CONNECTIONS PER HOUR <input type="text" value="0"/> MAX USER_CONNECTIONS <input type="text" value="0"/> |
| <input type="checkbox"/> INSERT | <input type="checkbox"/> ALTER | <input type="checkbox"/> SUPER | |
| <input type="checkbox"/> UPDATE | <input type="checkbox"/> INDEX | <input type="checkbox"/> PROCESS | |
| <input type="checkbox"/> DELETE | <input type="checkbox"/> DROP | <input type="checkbox"/> RELOAD | |
| <input type="checkbox"/> FILE | <input type="checkbox"/> CREATE TEMPORARY TABLES | <input type="checkbox"/> SHUTDOWN | |
| | <input type="checkbox"/> SHOW VIEW | <input type="checkbox"/> SHOW DATABASES | |
| | <input type="checkbox"/> CREATE ROUTINE | <input type="checkbox"/> LOCK TABLES | |
| | <input type="checkbox"/> ALTER ROUTINE | <input type="checkbox"/> REFERENCES | |
| | <input type="checkbox"/> EXECUTE | <input type="checkbox"/> REPLICATION CLIENT | |
| | <input type="checkbox"/> CREATE VIEW | <input type="checkbox"/> REPLICATION SLAVE | |
| | <input type="checkbox"/> EVENT | <input type="checkbox"/> CREATE USER | |
| | <input type="checkbox"/> TRIGGER | | |

i ¹ When Host table is used, this field is ignored and values stored in Host table are used instead.

3) Configure MySQL Server (*my.cnf*)

Connect to your server either via the online Web Shell option (see the link in Step 2) or via an SSH connection (recommended). Login as **root**.

Enter the following command:

```
nano /etc/mysql/my.cnf
```

You are now in an editor, editing the my.cnf file. Use your arrow keys to find the section that contains the following line:

```
bind-address          = 127.0.0.1
```

Change it to read the following:

```
bind-address          = 0.0.0.0
```

Press **CTRL+X** to *Exit*.

Press **Y** to *Save modified buffer*.

Press **ENTER** to confirm the *File name to Write*.

4) Restart MySQL Server

Enter the following command:

```
/etc/init.d/mysql restart
```

It will take a few seconds to complete, but once it has, you're all set to connect to the database from an external IP address using the username/password you created in Step 2.

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