

# Configuring a microk8s Single Node Instance to Use a Network Proxy

## Overview

If you are using the microk8s Single Node Installer and your site requires proxy access to get to the internet, making a few quick changes to your operating system configuration will enable our installer to access the resources it needs over the internet. This document discusses these changes.

## Steps

We also cover the case where you need to use a proxy to access the internet. Please make sure that the following host variables are set:

## Ubuntu Specific Directions

If your company's proxy is `http://corporate.proxy:3128`, you would edit `/etc/environment` and add the following lines:

```
HTTPS_PROXY=http://corporate.proxy:3128
HTTP_PROXY=http://corporate.proxy:3128
https_proxy=http://corporate.proxy:3128
http_proxy=http://corporate.proxy:3128
NO_PROXY=10.1.0.0/16,10.152.183.0/24,<node ip>,localhost,*.svc
no_proxy=10.1.0.0/16,10.152.183.0/24,<node ip>,localhost,*.svc
```

The IP Ranges specified to `NO_PROXY` and `no_proxy` are specific to the microk8s cluster and prevent microk8s traffic from going over the proxy. `<node ip>` needs to be replaced by the IP of your server

# EL Specific Directions

Using the same example of having a company proxy at `http://corporate.proxy:3128`, you would edit `/etc/profile.d/http_proxy.sh` and add the following lines:

```
export HTTP_PROXY=http://corporate.proxy:3128
export HTTPS_PROXY=http://corporate.proxy:3128
export http_proxy=http://corporate.proxy:3128
export https_proxy=http://corporate.proxy:3128
export NO_PROXY=10.1.0.0/16,10.152.183.0/24,<node ip>,127.0.0.1,localhost,*.svc
export no_proxy=10.1.0.0/16,10.152.183.0/24,<node ip>,127.0.0.1,localhost,*.svc
```

The IP Ranges specified to `NO_PROXY` and `no_proxy` are specific to the microk8s cluster and prevent microk8s traffic from going over the proxy. `<node ip>` needs to be replaced by the IP of your server

## In Conclusion

You will need to log out and back in for the environment variables to be re-read after setting them. If you already have microk8s running, you will need to issue:

```
microk8s.stop
microk8s.start
```

to have it reload the new environment variables.

If you need to use an authenticated proxy, then the URL schema for both EL and Ubuntu is as follows:

```
protocol:user:password@host:port
```

So if your proxy is `corporate.proxy` and listens on port 3128 without SSL and requires a username of `bob` and a password of `inmye1em3nt` then your url would be formatted:

```
http://bob:inmye1em3nt@corporate.proxy:3128
```

For further help with proxies, we suggest that you contact your proxy administrator or operating system vendor.