

Unison

What is Unison?

Install Unison

Unison will need to be installed on both servers that are sharing files.

RHEL:

```
yum install unison
```

Debian:

```
apt install unison
```

Configuration of unison

Before configuring unison itself, you need to ensure that the hosts have shared keys (since this connection is made via SSH).

```
ssh-keygen -t rsa
```

```
ssh-copy-id root@otherserver
```

Once that's sorted, the unison service itself can be configured.

default unison config file:

```
/root/.unison/default.prf
```

```
root = /
```

```
root = ssh://b4sed-01//
```

```
path = var/spool/cron/  
path = etc/passwd  
path = etc/shadow  
path = etc/group  
path = etc/motd  
path = etc/drbd.conf  
path = etc/cluster/cluster.conf  
path = etc/php.ini  
path = etc/nginx/  
  
ignore = Name access.log*
```

To have unison run automatically, you'll need to configure a cron:

```
vi /usr/local/bin/sync.sh
```

Contents of the file (the SISTER= value needs to be updated).

```
#!/bin/bash  
  
SISTER=ABC-WEBDB-01  
  
[ -f /var/run/file_sync.pid ] && exit 1;  
  
trap "{  
    rm /var/run/file_sync.pid;  
    exit;  
}" EXIT;  
  
trap "{  
    echo 'Bailing out!' 1>&2  
    ssh -T -p2020 root@$SISTER <<<'killall unison; exit' &>/dev/null  
}" KILL ABRT INT TERM HUP SEGV  
  
touch /var/run/file_sync.pid  
/usr/bin/unison -sshargs "-p 2020" -batch -terse -silent -owner -group -numericids -prefer /
```

Once added, then the cron needs setting up

```
crontab -e
```

```
* * * * * /usr/local/bin/sync.sh > /root/.unison/unison.log
```

You would then need to add a cron on the 2nd server, you'll need to add this with the '-prefer' omitted, as below:

```
#!/bin/bash

SISTER=ABC-WEBDB-01

[ -f /var/run/file_sync.pid ] && exit 1;

trap "{
    rm /var/run/file_sync.pid;
    exit;
}" EXIT;

trap "{
    echo 'Bailing out!' 1>&2
    ssh -T -p2020 root@$SISTER <<<'killall unison; exit' &>/dev/null
}" KILL ABRT INT TERM HUP SEGV

touch /var/run/file_sync.pid

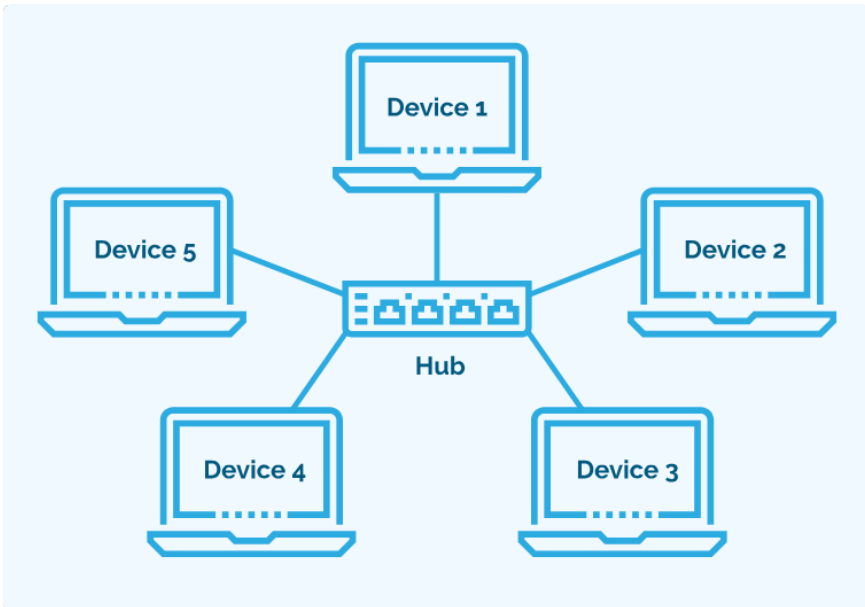
/usr/bin/unison -sshargs "-p 2020" -batch -terse -silent -owner -group -numericids /
```

```
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```

Multi-server (2+) Unison setup

To preface this; Advanced Unison topologies such as the one I detail on this page aren't ideal, one reason for this is that any change requires that unison be run bidirectionally for each node - meaning that synchronisation is definitely not instant. Depending on the content type, a better option might be to have an NFS Share configured.

There are different methods that can be used to setup Unison when more than 2 servers are installed, for example, ring and star topology. In this example, I've focussed on the star topology:



To set the context for this example and give some explanation;

This setup consists of 6 servers, with 1 of those servers acting as the 'master' - being the middle of the star.

Unison should be configured on only the master node, from here, you'll need to configure the .prf files and alter the Unison cronjob script accordingly.

Configuration

1. Install Unison on the master node

Decide which node is going to be the master, and install Unison on there.

- 2.

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