# AKIPS Network Monitor
# User Manual
# Version 16.x


AKIPS Pty Ltd

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# Contents

# 1 Backup / Restore

The AKIPS backup / restore is designed to be:

- Secure
- Robust
- Fast
- Simple to configure
- GUI only driven

*Note: An AKIPS server can ONLY be backed up using the builtin backup mechanism. You can not just take a copy of the database files as they are constantly being modified by the poller and background database processing.*

## 1.1 Features

- The backup is automatically triggered after the 80 minute database processing has completed. This ensures that the most recent data is backed up.
- Pre-backup filesystem and database integrity checks ensure only valid data is backed up.
- Secure ssh/scp data transfer to/from the backup server.
- Incremental backup only copies files which have changed.
- Backup logs accessed via the System Log Viewer.
- Warning in the GUI if a successful backup has not occurred for two hours.
- No messy copying of ssh keys between the servers as it is all handled by the GUI controls.

## 1.2 How it works

1. The backup runs as the *root* Unix user.
2. The ZFS file system is placed in *snapshot* mode.
3. The ZFS file system is validated for integrity.
4. The AKIPS databases are validated for integrity.
5. A backup *lock* is applied to the backup server.
6. All modified files are copied to the backup server using secure copy (ssh and scp).
7. The backup *lock* is removed from the backup server.
8. The ZFS snapshot is removed.

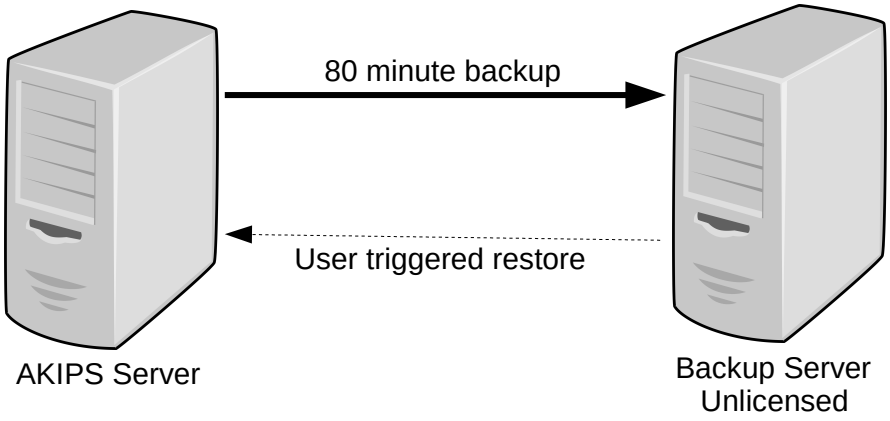
## 1.3 Important Notes

- A backup server only needs to be a VM with sufficient disk space to store the data from the main AKIPS server.
- A backup server does not require a licence key.
- A redundant server will need to be spec'ed similar to the main AKIPS server.
- A redundant server does require a licence key to be able to perform a restore, then go online.

## 1.4 Backup Setups

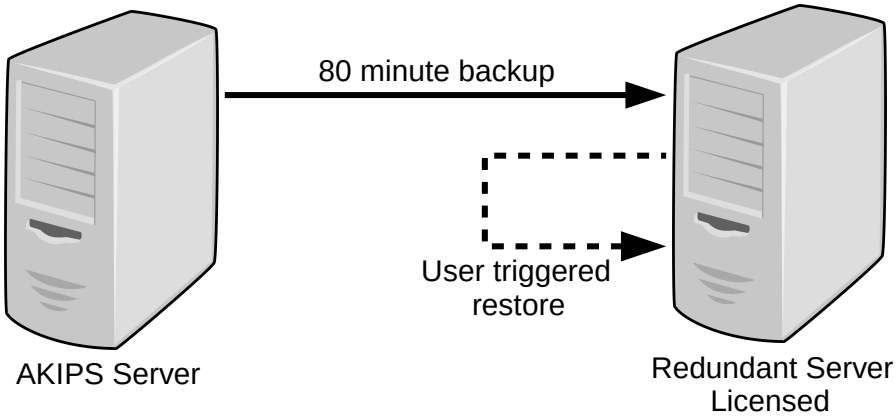
### 1.4.1 Setup 1

Backup to another copy of AKIPS installed on a separate VM or physical server. The backup server does not require a license. If a failure occurs on the main AKIPS server (eg. hardware fault, VM failure), then a user triggered restore can be performed after the fault has been rectified (eg. replace hard disk).



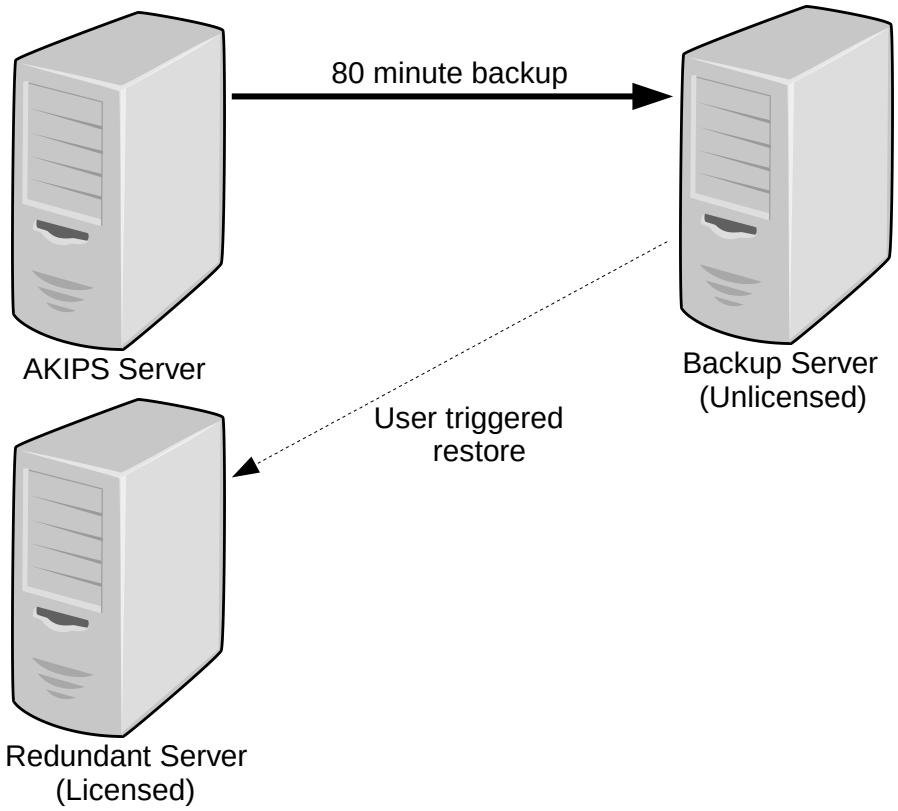

### 1.4.2 Setup 2

Backup to redundant copy of AKIPS installed on a seperate VM or physical server. If a failure occurs on the main AKIPS server, then a user triggered restore can be performed on the backup server. The redundant server will require a software license.



### 1.4.3 Setup 3

Backup to another copy of AKIPS installed on a separate VM or physical server. The backup server does not require a license. If a failure occurs on the main AKIPS server (eg. hardware fault, VM failure), then a user triggered restore can be performed to the redundant server. The redundant server will require a valid software license.




## 1.5 Backup Procedure

### 1.5.1 Backup Server

A backup server:

1. requires enough disk space to store all the data in */home/akips* on your main server
2. only needs a single CPU core and 1 GByte RAM
3. does NOT require a licence key

### 1.5.2 Redundant Server

A redundant server:

1. needs to be of a similar specification as your main production server
2. does require a licence key to perform a restore and go online

### 1.5.3 Configure a Backup

1. Install a copy of AKIPS Network Monitor on the backup VM or physical server.
2. On your main server
   (a) Go to Admin -> AKIPS Software -> Backup
   (b) Turn *State* to on.
   (c) Enter the IP address of the backup server
   (d) Enter the password for the 'akips' user on the backup AKIPS server.

*NOTE: This password is NOT saved. It is only used to copy the ssh public authentication key to the backup server.*

(e) Click *Save Authentication*. This will copy the relevant ssh authentication key to the the backup server.

(f) Click *Test Authentication*. This will test the ssh connection to the backup server by logging in a and creating an empty file.

(g) Use the *Check Status* button to display:

- Last successful backup
- Backup disk usage
- Backup server disk space
- Backup file listing

## 1.6 Restore Procedure

1. Perform a clean install of AKIPS Network Monitor onto the server that data is to be restored to
2. Go to Admin -> AKIPS Software -> Restore
3. Enter the IP Address of the backup server
4. Enter the password for the 'akips' user on the backup server
5. Click *Restore*

*Note: the restore time is highly dependent on the amount of data to be copied from the backup server to the redundant server.*