# AKIPS

# Backup & restore guide

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# Table of Contents

# 1 About this guide

The AKIPS *Backup & restore guide* assists users to back up and restore AKIPS Networking Monitoring Software.

The following **Abbreviations** (see 1.1), **Text conventions** (see 1.2) and **Syntax** (see 1.3) are used throughout AKIPS' guides.

## 1.1 Text conventions

Menu options are in **bold**.

E.g. **Go to Admin > System > System Settings**

**Bold** is also used for emphasis or clarity.

E.g. The **backup server** must have double the disk space of the production server.

Links to other parts of this guide are shown as red boxes.

E.g. The following **Abbreviations** (see 1.1), **Text conventions** (see 1.2) and **Syntax** (see 1.3) are used throughout AKIPS' guides.

Websites and email addresses are in blue.

Code is in `monospace`.

Further:

Command syntax is in `red monospace`.

E.g. `{ddd} {hh:mm} to {hh:mm}`

Input (by the user) is in `blue monospace`.

E.g. `tf dump last7d`

Output (by AKIPS) is in `cyan monospace`.

E.g. `cisco-74-1-1 sys ip4addr = 10.74.1.1`

## 1.2 Syntax

Syntax may be presented in this guide across multiple lines due to layout constraints. When using AKIPS, you will need to run commands in a single line.

Parameters (fields expecting a substituted value) are contained within { } (braces).

E.g. `{type} {value}`

Optional parameters are contained within [ ] (square brackets).

E.g. `[index,{description}]`

Optional parameters may be nested.

E.g. `mlist {type} [{parent regex} [{child regex} [{attribute regex}]]]`

For values separated by a | (pipe), choose one option only.

E.g. `[any|all|not group {group name} ...]`

Multiple parameters will have an ... (ellipsis).

E.g. `not group {group name} ...`

# 2 Backing up AKIPS

AKIPS automatically backs up every 80 minutes. It transfers backups securely using the SSH protocol.

The backup copies the following data:

- ADB, configuration and log files
- system firewall rules
- password and group files.

Backups are incremental: to reduce network bandwidth and disk usage, AKIPS transfers only modified files.

To view the video *Backing up AKIPS*, visit: https://vimeo.com/manage/videos/515593967

## 2.1 Backup servers

The **production server** is the server which you wish to back up. This server requires a licence key. Refer to the 'AKIPS licence' chapter in the AKIPS *Install & upgrade guide*.

The **backup server** stores the backups. This has a standard installation of AKIPS but is not configured to poll your network.

This server does not require a licence key.

The **redundant server** manually restores data to itself, thereby reducing downtime if the production server fails.

This server requires a licence key.

Refer to the 'AKIPS licence' chapter in the AKIPS *Install & upgrade guide*.

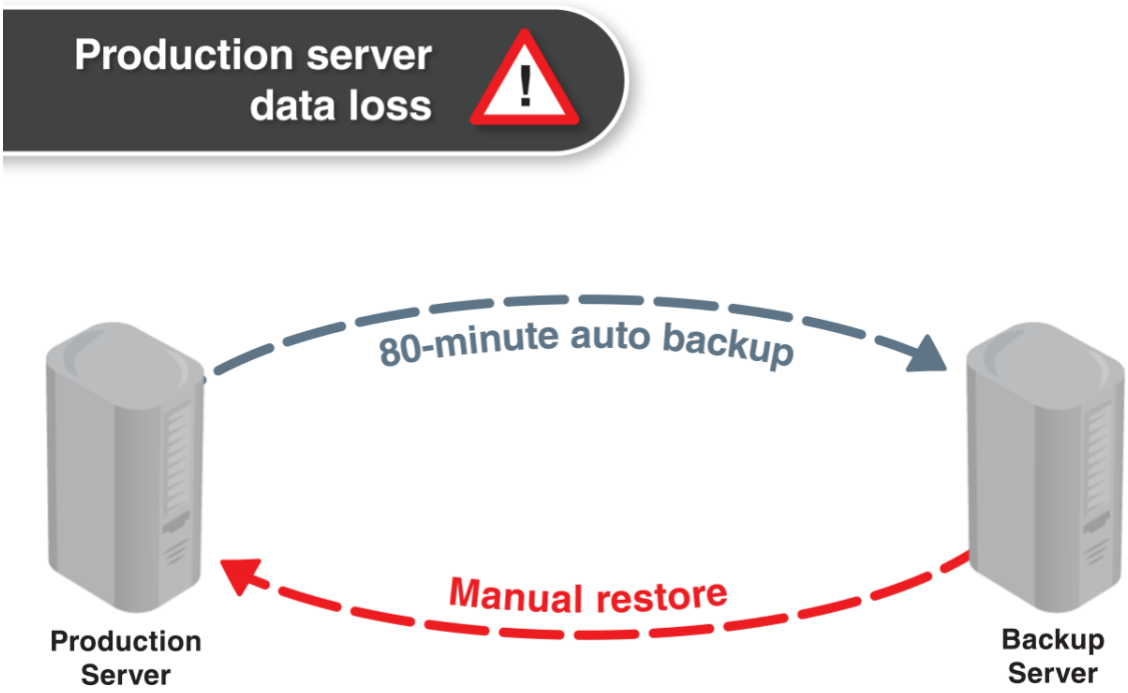
## 2.2 Backup scenarios

To view the video *AKIPS backup scenarios*, visit https://vimeo.com/manage/videos/502901562

### 2.2.1 Restore from backup server to production server

If you lose data from your **production server**, you can recover it by restoring from the **backup server**.

The **backup server** must have double the disk space of the **production server**.




*G45a. Restoring from the backup server to the production server*

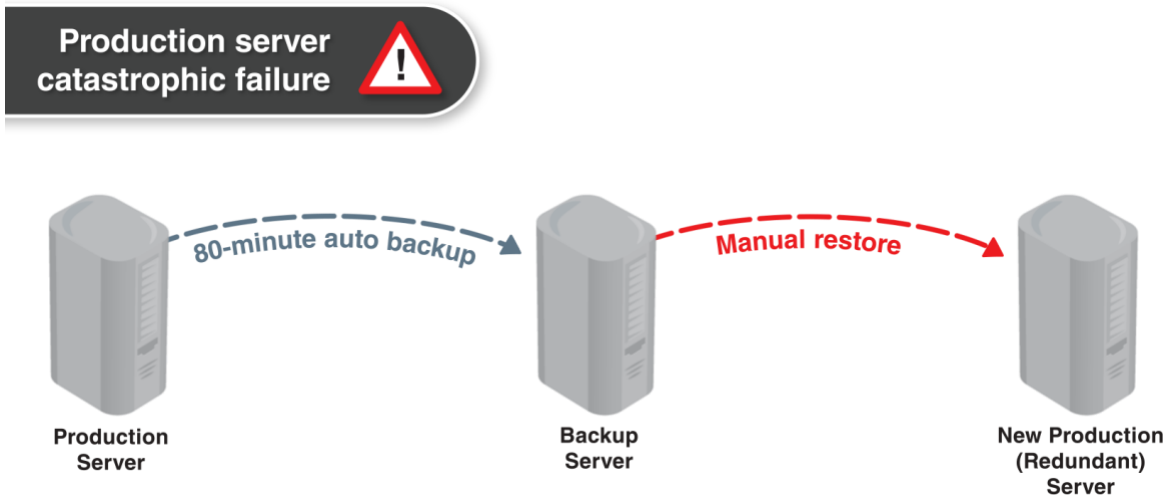
### 2.2.2 Restore from backup server to new production server

If your **production server** catastrophically fails, you can restore backup data to another server, which will then become your new **production server**.

You must first install AKIPS on the new server.

Do not further configure the software (e.g. do not perform a network discover).

The **backup server** must have double the disk space of the **production server**.

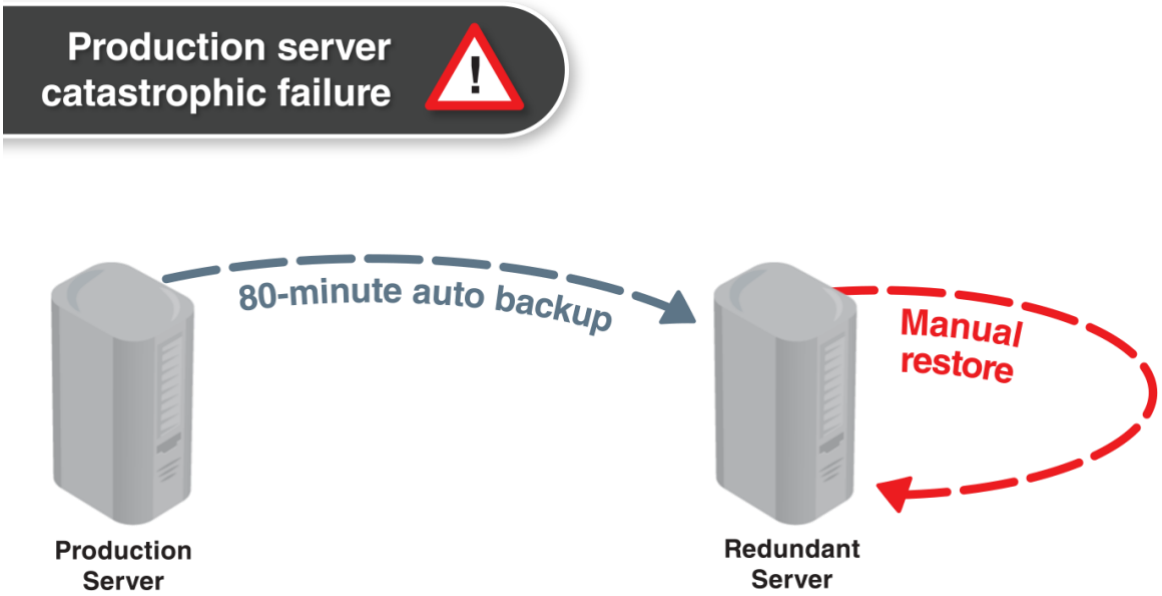



*G45. Restoring from the backup server to the new production server*

### 2.2.3 Restore from redundant server to itself

If your **production server** catastrophically fails, you can restore backup data by saving from the **redundant server** to itself, thereby continuing to monitor your network with minimal downtime.

The **redundant server** must have triple the disk space of the **production server** (x2 for the backup data plus an extra x1 to restore the data).




*G46. Restoring from the redundant server to itself*

## 2.3 Running a backup

### 2.3.1 Configure backup settings:

Log into AKIPS with your admin account on the server you wish to back up.

Go to **Admin > System > Backup**.

Change **Backup** from **Off** to **On**.

We recommend that you leave the backup **Schedule** as every 80 minutes.

Specify the **Backup IP** of the destination server.

Type your password.

### 2.3.2 Test and save an authentication:

Click **Test Authentication**.

AKIPS will display either **ssh test failed** or **ssh test passed**.


*G47.Testing an authentication*

**If the authentication test fails:**

Review and correct the backup IP and/or password.

Click **Test Authentication**.

**When the authentication test passes:**

Click **Save Authentication**.


*G48. Saving an authentication*

### 2.3.3 Run a backup:

Select **Run Backup**. The backup will queue and, after a short delay, will begin running.

**To check the backup progress:** Select **Check Status.**

# 3 Configuring a new server

To view the video *Configuring a new AKIPS server*: visit https://vimeo.com/manage/videos/519764716

## 3.1 Setting the backup server's IP address

On the new server, set the backup server's IP address and authenticate the connection.

On the new server, log into AKIPS with your admin account.

Go to **Admin > System > Restore**.

In the **Restore From** text field, type the IP address of the backup server.

In the **Password** text field, type your password.

Click **Save Authentication**.

AKIPS will connect to the backup server and copy the SSH authentication key.

Click **Test Authentication**.

## 3.2 Restore a backup:

On the new server, log into AKIPS with your admin account.

Go to **Admin > System > Restore**.

Select **List Backups**.

AKIPS will display each backup with a timestamp.

Select **Restore** beside the backup which you wish to restore.

When AKIPS displays the warning prompt, if you are certain that you wish to proceed, click **OK**.

Depending on the size of the backup and your network speed, it may take AKIPS a few minutes or several hours to restore the backup.

When AKIPS has finished restoring the backup, it will reboot.

## 3.3 Test the new server:

Wait for several minutes after AKIPS has rebooted.

Check the following tables:

- Reports > Device > IPv4 Ping Statistics

- Reports > Interface > Statistics

If the tables populate with data, then the new server is working.

**If your aim was to create a new production server: STOP HERE**
Optional: You can also proceed to **3.4** to change the new server's IP address.

**If your aim was only to test configuring a new server:** Proceed to 3.5.

## 3.4 Changing the new server's IP address

Use the following procedure when:

- the old server no longer exists
- you would like the new server to have the old server's IP.

**Change the new server's IP address:**

Shut down the production server by going to **Admin > System > System Shutdown**.

Click **Shutdown Server**.

On the new server, log into AKIPS with your admin account.

Go to **Admin > System > System Settings**.

Change the **IPv4 Address** and **IPv4 Netmask**.

Click **Save**.

Reboot the server by going to **Admin > System > System Shutdown**.

Click **Reboot Server**.

## 3.5 Destroying the test server

If your aim was to create a new production server, **DO NOT** proceed with the following.

If your aim was only to *test* configuring a new server (see 3.3), proceed with the following to ensure that no duplicate copies of AKIPS monitor your network.

Go to **Admin > System > Restore**.

Click **Destroy Database**.

Click **OK**.

# 4 Expanding the virtual disk

AKIPS will display an alert in the top right-hand side of the screen when the disk capacity exceeds 80 per cent.

For best performance, keep the disk capacity below this by expanding the virtual disk.

Go to **Admin > System > System Shutdown**.

Click **Shutdown Server**.

Wait for the VM to completely shut down.

Expand the size of the current virtual disk by increasing the number of CPU cores, memory size and disk space.

Restart the VM.