# Microsoft Snapshot Tools Upgrade Guide

## Contents



## Introduction

This Upgrade Guide has been extracted from the complete guide for the "Microsoft Snapshot Tools for SAP HANA on Azure" and makes references to this guide as it contains instructions on doing an installation of the tools. This guide is available online.

## Upgrading the snapshot tools

This section is intended to provide a high-level workflow for customers to use as a base to aid them in upgrading the snapshot tools they are currently using.

| Note | The snapshot tools continue to be backward compatible with both the configuration file, snapshot process and the stored snapshots. |
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### Gather Existing Installation details

All the tools and configuration files are installed and run from the same directory. Use the following commands to understand the current installation and record information for configuring the system after the upgrade.

To find where the existing installation is:

- check the crontab file (for the current schedule)

```
Terminal session
# crontab -l
```

- search the filesystem for the configuration file (and locate the commands which are in the same location):

```
Terminal session
# find / -name "HANABackupCustomerDetails.txt"
```

### From version 4.0

If version 4.0 of the snapshot tools have been installed, then follow either of the sub-sections based on whether the tools are being run as 'root' super-user or a standard user.

#### *Currently running as standard non-root user (e.g. shoasnap):*

The installer allows a user to upgrade an existing system by using the -X switch to extract the commands and then manually copy them into the target location.

In the following example, the installer has been copied into the $HOME directory for the user the commands are currently run as.

To perform an upgrade, the user should:

1. Backup the existing snapshot tools.
2. Extract the commands into a temporary directory using the -X and -d switches.
3. Remove the empty `HANABackupCustomerDetails.txt` to avoid overwriting the existing version.
4. Copy the commands into the default location (e.g. /home/shoasnap/bin/.)
5. Test the tools by running the standard testing tools.
    a. After testing a storage snapshot, run the removeTestStorageSnapshot command to clean up the storage test snapshots and avoid additional disk usage by storing test snapshots.

Terminal session

```
shoasnap@sapprdhdb80:~> mkdir –p ~/archive/snapshot_tools_4.0

shoasnap@sapprdhdb80:~> cp ~/bin/* ~/archive/snapshot_tools_4.0/.

shoasnap@sapprdhdb80:~> ./azure_hana_snapshot_installer _v4.0.run -X -d tmp/
+------------------------------------------------------------+
|   Azure HANA Large Instance Snapshot Command Installer     |
+------------------------------------------------------------+
|-> Installer version '4.0'
|-> Extracting commands into tmp/.

shoasnap@sapprdhdb80:~> rm tmp/HANABackupCustomerDetails.txt

shoasnap@sapprdhdb80:~> cp tmp/* bin/.

shoasnap@sapprdhdb80:~> ./testHANAConnection

shoasnap@sapprdhdb80:~> ./testStorageSnapshotConnection

shoasnap@sapprdhdb80:~> ./removeTestStorageSnapshot
```

| Note | It is possible to complete an initial install using this method, but requires thorough knowledge of setting Unix/Linux user profiles for the correct paths, etc. |
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*Currently running as 'root' user, follow the guide to install.*

If the current tools are being run as the 'root' superuser account, it is recommended to follow the installation process as defined in the "Microsoft Snapshot Tools for SAP HANA on Azure" guide to install as a non-root user. If the system is already performing snapshots as the root user, then the pre-requisites (enabling communication with storage and SAP HANA) are assumed to be met.

| Note | If the tools are being run as root, it is possible they are installed in the /hana/shared/<SID>/exe/linuxx86_64/hdb directory as this was the original installation target directory. |
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## From version <=3.4.1

The older versions of the snapshot tools did not have an installer, and the guidance was to install the snapshot tools into the same directory as other SAP HANA files and run them as the 'root' superuser.

| Note | For earlier SAP HANA on Azure Large Instance installations, the directory of pre-installed snapshot tools was /hana/shared/<SID>/exe/linuxx86_64/hdb. |
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If the administrator has followed the guidance in the section "Gather Existing Installation details", then the location of the tools and config file will already be recorded.

The general recommendation is to install the snapshot tools, using the "Microsoft Snapshot Tools for SAP HANA on Azure" guide allowing the tools to be run as a non-root user.

Before starting the installation, here are some useful tips:

- Use the existing configuration file (HANABackupCustomerDetails.txt), as the tools are backward compatible with both the configuration file and the snapshots.
- Use the existing crontab as an example for creating the schedule for the new user (if following the installation guide).
- Comment out the entries in the existing crontab before setting up the schedule for the newly installed user to avoid snapshot commands being run in parallel.

| CAUTION | Ensure the old crontab file has been updated to comment out running the older commands. If upgrading from <=3.4.1, make sure the all the snapshot tools commands are updated to remove the '.pl' extension as from version 4.0 they are provided as binaries. |
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