

# Installing Sagbase on OpenVMS

This chapter covers the following topics:

- Introduction
  - Installing Sagbase
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## Introduction

Installing Sagbase is the prerequisite for installing Software AG products on the OpenVMS operating system. Sagbase prepares an Alpha AXP or Itanium I64 environment on OpenVMS for the subsequent installation of Software AG products (for example Adabas, Natural, Entire Net-Work).

Sagbase creates the product user's account for all Software AG products, with one top-level directory as the entry point to the Software AG product-specific directory structure. It provides a startup procedure which defines the basic logical names that will be used by all Software AG products.

This section covers the following topics:

- Providing Quotas and Privileges
- Creating the Top-Level Directory
- Defining Logicals
- Enabling Disk Quotas
- Setting up a Boot Time Procedure
- Installing Sagbase in a Cluster Environment

## Providing Quotas and Privileges

The following quotas and privileges are set for the product user's account:

Process Quota	Function	Minimum Value
ASTLM	Asynchronous trap limit	36
BIOLM	Buffered I/O limit	18
BYTLM	Byte limit	8192
DIOLM	Direct I/O limit	34
ENQLM	Enqueue limit	10
FILLM	Open file quota	40
PGFLQUO	Paging file quota	8192
PWDMINIMUM	Minimum password length	6
TQELM	Timer queue entry limit	10
WSEXTENT	Working set extent quota	2048
WSQUOTA	Working set quota	2048

Process Privilege	Description
ALTPRI	May set any priority value.
OPER	May perform operator functions.
PSWAPM	May change process swap mode.
SYSGBL	May create system-wide global sections.
SYSLCK	May lock system-wide resources.
TMPMBX	May create temporary mailbox.
VOLPRO	May override volume protection (set if UIC is not a system UIC group member).
WORLD	May control any process.

If an existing account is used, the installation procedure checks the settings of this account. Changes are only made if the quota settings are too low or if the required privileges are not set. If the settings exceed the minimum required by Sagbase, the existing settings are not changed.

## Creating the Top-Level Directory

A top-level (default) directory *SAG\$ROOT* is used by the product user. This directory must not already exist. It will be created by the installation procedure. Once Sagbase has been installed, this top-level directory contains the following files:

File	Description
<i>LOGIN.COM</i>	Login procedure for the product user account.
<i>GETUAI.EXE</i>	Image to check existence of an account.
<i>SETUAI.EXE</i>	Image to set authorization parameters.

*GETUAI.EXE* and *SETUAI.EXE* will be used for subsequent installations of Software AG products to check that the given account has adequate privileges and quotas.

The Sagbase kit contains images for Alpha AXP and Itanium I64, but only the corresponding images will be moved to the Sagbase top-level directory.

## Defining Logicals

The startup procedure *STARTUP\_SAGBASE.COM* which resides in the directory *SY\$STARTUP* defines two system-wide logicals in the *LN\$SYSTEM\_TABLE* that are the basis for all other Software AG products:

Name	Description
<i>SAG\$DEVICE</i>	The logical name for the device where the Software AG products will be installed.
<i>SAG\$ROOT</i>	The logical name that points to the Sagbase top-level directory as a concealed device. This directory is the installation directory for all Software AG products.

## Enabling Disk Quotas

The installation procedure checks whether disk quotas are enabled on the specified device or not. If they are enabled, you are asked to enter an integer value for the specified account.

## Setting up a Boot Time Procedure

During the installation of Sagbase, the product-specific startup procedure *STARTUP\_SAGBASE.COM* is created in the directory *SY\$STARTUP*. If you are installing in a cluster environment, you are asked to decide whether the startup procedure is to be copied to the common or the specific directory of the system. The installation procedure adds the command procedure as a component to the startup database by using the OpenVMS *SYSMAN* utility. This causes *STARTUP\_SAGBASE.COM* to be executed in the phase *LPBEGIN* at system boot time.

For further information about *SYSMAN*, refer to the *OpenVMS System Management Utilities Reference Manual*.

## Installing Sagbase in a Cluster Environment

Each node in a cluster on which Software AG products are to be used has to be prepared with Sagbase. The installation procedure checks whether Sagbase is already installed on another node in the cluster. If it was installed in the common root directory, *STARTUP\_SAGBASE.COM* is executed. If it was installed in the specific root directory, a complete, independent Sagbase installation will be performed in this node's local root.

In a mixed cluster environment (Alpha AXP and Itanium I64), Sagbase must be installed with separate root directories on Alpha AXP and Itanium I64. This means that the logical name *SAG\$ROOT* must point to different top-level directories for the Alpha AXP and Itanium I64 machines.

In a mixed cluster environment, all Software AG products must be installed on both Alpha AXP and Itanium I64.

# Installing Sagbase

This section covers the following topics:

- Preparing for Installation
- Installation Overview
- Installation Steps

## Preparing for Installation

In order to install Sagbase on an Alpha AXP or Itanium I64 system, the prerequisite is

- Version 8.2 or above of the Alpha AXP/OpenVMS operating system, or
- Version 8.3 of the Itanium I64 operating system.

You must have access to the SYSTEM account on the machine or to an account with the user privilege SETPRV. You will also need BYPASS, CMKRNL and SYSNAM privileges.

## Installation Overview

Sagbase is installed using VMSINSTAL, the command procedure that is used to install software products in the OpenVMS environment. Refer to the OpenVMS documentation set for further information about VMSINSTAL.

VMSINSTAL guides the user through the installation step by step. Sagbase is contained in a single saveset: *SAGBASE013.A*. Sagbase has to be installed before any other Software AG products in a given OpenVMS environment. The Sagbase installation procedure only takes a few minutes to complete.

## Installation Steps

Sagbase is installed by executing the following steps:

1. Invoke VMSINSTAL as follows:

Log in to the privileged OpenVMS system manager's account.

Establish the default directory *SYS\$UPDATE*:

```
SET DEFAULT SYS$UPDATE
```

Start the installation procedure by entering the following command:

```
@VMSINSTAL
```

During the installation procedure, a number of general information messages are displayed. Read all messages carefully and follow any advice they may provide.

The following messages are displayed once the procedure has started:

```
OpenVMS Software Product Installation Procedure Vx.y
```

```
It is dd-mmm-yyyy at hh:mm.
Enter a question mark (?) at any time for help.
```

where *dd-mmm-yyyy* and *hh:mm* are the current date and time.

If DECnet is active on the system, the following message appears:

```
%VMSINSTAL-W-DECNET, Your DECnet network is up and running.
```

If other users are accessing the system, the following message appears:

```
%VMSINSTAL-W-ACTIVE, The following processes are still active:
<name>
.
.
.
* Do you want to continue anyway [NO]?
```

where *<name>* refers to the process name of a user logged into the system. Enter "YES" and continue processing: the installation of Sagbase is not affected if users are active.

The following message is then displayed:

```
* Are you satisfied with the backup of your system disk [YES]?
```

It is not necessary to back up the system disk because the files and directories that are installed by Sagbase can be removed easily.

The following message is then displayed:

```
* Where will the distribution volumes be mounted:
```

Enter the name of the device on which the distribution medium is to be mounted.

## 2. Now enter the products to be processed from the first distribution volume set:

```
* Products: SAGBASE
* Options:
```

If the distribution medium is not already mounted on the specified device, VMSINSTAL requests the distribution medium to be mounted on the device specified when VMSINSTAL was invoked, or when the response to the device prompt was entered. If, for example, Sagbase is to be installed from the device MTA0, VMSINSTAL will display the following:

```
Please mount the first volume of the set on MTA0:.
```

VMSINSTAL then displays the following:

\* Are you ready ?

The first volume of the distribution medium should now be mounted.

Enter "Y" and press RETURN when the volume has been mounted. VMSINSTAL now mounts the distribution medium and a message is displayed, e.g.:

```
%MOUNT-I-MOUNTED, <label> mounted on _MTA0:
```

The following products will be processed:

```
SAGBASE V1.2
```

```
Beginning installation of SAGBASE V1.2 at hh:mm
```

```
%VMSINSTAL-I-RESTORE, Restoring product saveset A ...
```

Sagbase does not contain any release notes. If "N" was specified in the Options field, the following messages will be printed:

```
%VMSINSTAL-W-NOFILE, New file *.RELEASE_NOTES does not exist.
```

```
%VMSINSTAL--NORELNNOTE, Unable to locate release notes.
```

```
* Do you want to continue the installation?
```

Enter "Y" to continue with the installation.

3. If you are installing on a cluster, VMSINSTAL displays the following prompt:

```
* Enter to install in [C]ommon or [S]pecific root ? [C]:
```

Press RETURN to install in the common directory root or enter "S" and press RETURN to install in the specific directory root.

4. VMSINSTAL then displays the following prompt:

```
* Which account do you want to use ? [DBA]:
```

Specify the account that will be used by layered Software AG products. Press RETURN if the default name "DBA" is to be used, or enter another name in response to this prompt. The installation procedure checks whether the specified account exists or not.

5. If the specified account does not exist, you are asked:

```
* Do you want to create this account ? [YES]:
```

Press RETURN to create the account. If an existing account is to be used, the installation procedure will set *SYS\$LOGIN* for this account to the default directory that is requested in step 9.

6. VMSINSTAL now displays:

```
* Which UIC do you want to use ? [2,0]:
```

Enter the UIC for the account to be created, using correct UIC syntax, or press RETURN to accept the default.

## 7. VMSINSTAL now displays:

\* Please enter password for account DBA [ ]:

Enter a password to create the Sagbase account.

VMSINSTAL now displays:

\* Please verify password for account DBA [ ]:

Enter the password a second time in order to verify it. The password must conform to any minimum length rules set up by your system manager. VMSINSTAL does not provide a dummy password.

## 8. VMSINSTAL now displays:

\* Which disk do you want to use ? [SYS\$SYSDEVICE]:

Enter a system logical name of a disk device or press RETURN to accept the default value. All layered Software AG products will then be installed on the specified device.

If a device name is entered which is not in the system logical name table, the installation procedure will ask whether you want to enter another logical device name.

\* Do you want to enter a new device name? [YES]:

Enter "N" to keep the device name given, or press RETURN to reenter a disk device name.

## 9. VMSINSTAL now displays:

\* Which top level directory do you want to use ? [SAG]:

Enter the directory name of the top-level directory, which will then be used by all Software AG products. The specified directory is created by the installation procedure, with the UIC given in step 6. Software AG recommends that the default directory name "SAG" is used. If an existing account is used, note that the installation procedure sets the default of the account to this directory.

The Sagbase installation will not allow an existing directory to be used. Therefore, if the given directory name already exists on the given device, VMSINSTAL now displays:

\* Enter new device and directory name ? [YES]:

Press RETURN to go back to step 8 to enter a new device and/or a new directory name, or enter "N" and press RETURN to terminate the installation procedure.

## 10. If disk quotas are enabled on your disk and it is a new account, VMSINSTAL now displays:

\* How many blocks do you want to use ? [200000]:

Enter an integer, or press RETURN to accept the default value.

If the account already exists, VMSINSTAL now displays its disk quota settings. If the settings are less than the default values, VMSINSTAL displays the following:

\* How many blocks do you want for user <account> ? [200000]:

Enter an integer, or press RETURN to accept the default value.

Sagbase is now installed.