

OpenAccess Configuration Guide

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Configuring OpenAccess

The OpenAccess API is a C++ programming interface for integrating design tools and design methodologies through a common, open database. Many Cadence products use this API to store and access design data.

Cadence products that require OpenAccess automatically install OpenAccess in the following directory:

```
<cadence_install_dir>/oa_v22.60.<xxx>/
```

The directory name contains information about the OpenAccess version number and the data model revision:

```
<cadence_install_dir>/oa_v22.60.<xxx>
```

Version 2.2

Data Model 6

Low level version number
(minor change)

A symbolic link is automatically created from *cadence_install_dir/share/oa* to the OpenAccess installation directory shown above. Although you can change the OpenAccess installation that your application uses, it is strongly recommended that you do not do so because products are tested with the version of OpenAccess which is shipped with the product. Data produced by versions of OpenAccess from 22.04 and 22.4x are compatible, enabling interoperability between products using those versions of OpenAccess. However, if it is necessary to use a different version of OpenAccess, you can do so with one of the following approaches:

- Use the Configure utility available through InstallScope to specify a different default OpenAccess installation.
- Use the `OA_HOME` environment variable to override the default OpenAccess installation.

Use the Configure Utility to Specify a Different Default OpenAccess Installation

Important

You must complete the configuration on the target execution platform. The InstallScape Wizard View has a *Configure* button that lets you access the OpenAccess configuration utility.

1. In the *Configure* part of your installation of the Cadence tools, provide the path to the Cadence installation to configure and specify that you want to configure *all the products*.

The OpenAccess configuration utility opens in a shell window.

2. Press `Enter` to continue.

The utility shows the OpenAccess installation you are currently using and asks if you want to choose a different OpenAccess installation.

3. Type `y`.

You are prompted for a path to a valid OpenAccess installation.

4. Specify the OpenAccess installation you want.

Do not use the tilde character (`~`) to represent home directories. Instead, use the full path name, such as `/home/username`.

A symbolic link is created from `<cadence_install_dir>/share/oa` to the OpenAccess installation location.

InstallScape displays a dialog box indicating that the task is complete.

Override the Default OpenAccess Installation

It is possible that different design groups using different versions of a design flow might need to use different versions of OpenAccess. For example, you might want to try a new version of OpenAccess for a particular group. In such cases, set the `OA_HOME` environment variable to override the symbolic link set up by the Cadence tool installation process. This will ensure that for that particular design group, Cadence tools use the desired OpenAccess installation when invoked.

```
setenv OA_HOME <oa_install_dir>
```

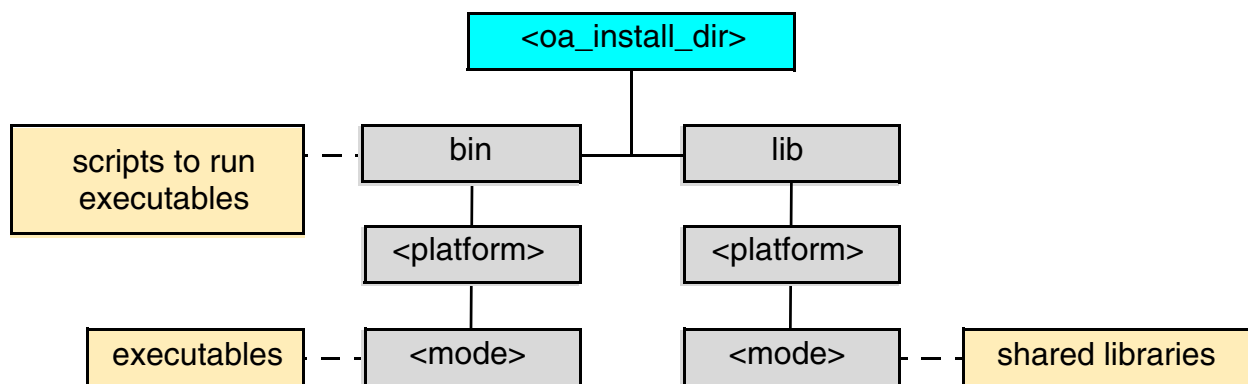
Where `<oa_install_dir>` is the path to the OpenAccess installation to use.

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Installation Hierarchy

The following shows the directory structure of the OpenAccess hierarchy.



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Running OpenAccess Executables Standalone

In order to run OpenAccess binaries standalone (outside of the Cadence environment), append the path to the wrapper scripts for the OpenAccess binaries to your `PATH` variable.

For example, append `<oa_install_dir>/bin` to your `PATH` variable, where `<oa_install_dir>` is the path to your OpenAccess installation directory. The wrapper scripts for the OpenAccess binaries automatically set your shared library path.

You might want to set your shared library path manually. You might do this, for example, if you want to create your own wrapper scripts. Set the shared library environment variable according to your platform as shown in the following table.

You can use the `oaGetLibPath` script, available in the `<oa_install_dir>/bin` directory, to return the path to the libraries on your platform.

Requirement for Linux Platforms

To run OpenAccess binaries standalone (outside of the Cadence environment) on a Linux platform, you must have the gcc shared libraries in your library search path. If you have not installed the appropriate gcc compiler, you must set the `LD_LIBRARY_PATH` environment variable according to the table that follows.

Platform	Variable Name	Values
Linux, 64-bit	<code>LD_LIBRARY_PATH</code>	<code><cadence_install_dir>/tools.lnx86/lib/64bit</code>

Where `<cadence_install_dir>` is the path your Cadence product installation directory.