

# ADOBE® AIR® Runtime Redistribution Instructions



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# Adobe AIR Runtime Redistribution Instructions

Once you have an Adobe® AIR™ Runtime Distribution License Agreement with Adobe® Systems Incorporated, you may redistribute the Adobe AIR installer and installer files. This guide provides instructions on configuring and using the runtime installer.

## More Help topics

[Pursuit of Simplicity: Upgrade Codes, Product Codes, and Silent AIR Application Uninstall](#)

## Obtaining permission to redistribute the runtime

To obtain permission to redistribute Adobe AIR, read the Adobe AIR Runtime Distribution Agreement and apply for a license: [Adobe® AIR™ Runtime Distribution](#).

Also, be sure to read the Adobe AIR FAQ page, which contains important information on the runtime distribution and license terms: [Adobe® AIR™ Runtime Distribution FAQ](#).

**Important:** *You may distribute Adobe AIR with your product only if you follow the Adobe AIR Runtime Distribution License Agreement application process and are then approved by Adobe. Otherwise, users can download and install Adobe AIR from the [adobe.com](http://adobe.com) site.*

## Installer files and options

There are two options for distributing Adobe AIR:

- Stand-alone Adobe AIR Runtime distribution—Use this Adobe AIR Runtime Installer if you plan to distribute the Adobe on individual systems, on an intranet, or via an enterprise setting. See the next section, “[Using the stand-alone runtime installer](#)” on page 2
- Bundled deployment of Adobe AIR Runtime Installer files—this is also known as a “sidecar installation.” Use this to include the Adobe AIR installer on a CD, DVD, USB, or DMG. This option lets users install an AIR application and the runtime simultaneously. See “[Using the bundled runtime installer](#)” on page 2.

In addition to the files for each of these two options, the Adobe AIR download site also includes the following:

- A link to this documentation.
- The AIR Redistribution Helper (ARH) utility, which you can use to streamline the install process. See “[Using the ARH utility](#)” on page 5.
- The OSID Generator application has been replaced by the ARH utility. The OSID Generator program is still supplied for developers who have existing installation code. If you are developing a new installer, use ARH instead. The OSID Generator helps you discover the file path to an installed AIR application, given the application ID and publisher ID of the application. See “[Using the OSID Generator application](#)” on page 6.

- The Adobe AIR logo. You may download the logo and use it in accordance with the Adobe AIR Runtime Distribution License Agreement you accepted and the “Includes Adobe AIR Logo Usage Guidelines” found at [Includes ADOBE® AIR™ 3rd-party guidelines for the ”Includes Adobe AIR” badge](#).

## Using the stand-alone runtime installer

Once Adobe has approved your request to distribute Adobe AIR, you can include the stand-alone runtime installer file on individual systems or on an intranet. For Windows, this installer is an EXE file. For Mac OS, this is a DMG file. For Linux, this is an RPM, DEB, or BIN file. Administrative users can run this file to install Adobe AIR.

**Important:** *The Adobe AIR Runtime Distribution Agreement does not allow you to distribute the Adobe AIR installer from your web site. However, you can use the Adobe AIR seamless install feature on your web site, which downloads and installs the Adobe AIR Runtime on end-user system as part of the AIR application installation. For details, see [Distributing, Installing, and Running AIR applications](#) and [Updating AIR applications](#).*

If you need to redistribute Adobe AIR using an enterprise deployment tool, contact Adobe for available options: [license-air-enterprise@adobe.com](mailto:license-air-enterprise@adobe.com).

## Using the bundled runtime installer

You can include a bundled installer on a CD, DVD, USB, or DMG. The user can use this installer to simultaneously install your AIR application and install or update the Adobe AIR installer (as needed).

**Note:** *This is like the seamless install feature, which also lets a user install Adobe AIR and an AIR application simultaneously. However, the seamless install feature installs from a web page, not from a disk.*

- 1 Download the bundled runtime installer from the runtime redistribution download site. For Mac OS, this is a DMG file. For Windows, this is a ZIP file. For Linux, this is a tar.bz2 archive. Extract the contents of the file to a directory, which this document refers to as the *bundled runtime installer directory*.

On Linux, extract the file using the following command:

```
tar xvf AIR_Linux_installer_files.tar.bz2
```

- 2 Rename the Adobe AIR installer to match your application name. For example, on Mac OS or Linux if your application is named MyApp 2.0, rename the installer MyApp 2.0 Installer. On Windows, rename it MyApp 2.0 Installer.exe.

- On Linux, rename `setup` to MyApp 2.0 Installer
- On Mac OS, rename MacOS/Adobe AIR Installer to MacOS/MyApp 2.0 Installer
- On Windows, rename Adobe AIR Installer.exe to MyApp 2.0 Installer.exe

- 3 In the bundled runtime installer directory, add a text file named `.airinstall.cfg` (note the initial dot).

- 4 Edit the `.airinstall.cfg` to include the relative path to the AIR file to be installed.

You can deploy the contents of the bundled runtime installer directory on a CD, DVD, USB, or DMG and instruct the user to double-click the renamed installer file.

You can also call the AIR installer from a bootstrapper application. A bootstrapper application is a native application that manages multiple processes (such as the installation of many files and applications). You can also use a bootstrapper application to manage the process of downloading all files and calling the appropriate installer commands when downloaded. The bootstrapper application can provide a custom user interface (for example giving users options to install other files or applications). The ARH utility can be used to initiate most of the AIR-related tasks of the installation.

You can use a tool to bundle all of the files into a self-extracting executable file. A bootstrapper application can load this self-extracting executable file and run the installer.

For Linux, support for bundled runtime installation was added in AIR 2.

**Note:** On Mac OS, take care to preserve the symbolic links when repackaging the installer files. Do not unpack or repack the files on a file system that does not support symbolic links.

## Silent installation

Generally, the AIR Installer presents its own user interface while installing the runtime and the AIR application. The *silent installation* feature lets you install an application without presenting or interacting with the AIR Installer interface.

You can use silent mode to install Adobe AIR using an enterprise deployment tool (such as Microsoft SMS, IBM Tivoli, or any deployment tool that allows silent installations that use a bootstrapper).

To run the Adobe AIR installer silently, start the Adobe AIR installer with the following command-line options:

```
-silent { -eulaAccepted -pingbackAllowed ( -location <loc> ) -desktopShortcut -programMenu } path
```

- **silent**—The `-silent` option tells the AIR installer to run in silent mode.
- **eulaAccepted**—With the optional `-eulaAccepted` option specified, if the AIR application installer installs Adobe AIR, it records *acceptance* of the Adobe AIR end-user license agreement (EULA). The Adobe AIR installer records this acceptance *for all users* of the target computer.

**Important:** Use the `-eulaAccepted` option only if your organization has agreed to the Adobe AIR end-user license agreement. You can only specify the `-eulaAccepted` option if the organization has agreed to the Adobe AIR end-user license for all users of the computer. You can only specify the `-eulaAccepted` option for deployment within an intranet.

If you do *not* include the `-eulaAccepted` option and Adobe AIR is installed during a silent installation, Adobe AIR will later present the Adobe AIR end-user license agreement to each user of the machine. Users see the end-user license agreement (with the option to accept it) upon first running an AIR application.

If used, specify the `-eulaAccepted` option immediately after the `-silent` option.

- **pingbackAllowed** — Allows the installer to check for updates to the AIR runtime and report a successful install to Adobe over the Internet. No identifying information is transmitted.
- **location**—The optional `-location` option provides the location (an absolute file system path) to install the AIR application. The default location is the standard application installation location.
- **desktopShortcut**—The optional `-desktopShortcut` option causes the installer to install a desktop shortcut for the installed AIR application. If you do not specify this option, no desktop shortcut is installed.
- **programMenu**—The optional `-programMenu` option causes the installer to install a program menu shortcut for the installed application (on Windows). If you do not specify this option, no program menu shortcut is installed.

- **path**—The `path` option specifies the path to the AIR file to install.

The AIR application installer installs the correct version of Adobe AIR on the target computer, as required by the AIR application to be installed. For example, if the AIR application to be installed requires the AIR 1.1 runtime, and the end user's computer has only AIR 1.0 installed (or no version of AIR installed), the installation process installs the AIR 1.1 runtime along with the AIR application. The version of the AIR application installer must be compatible with the version required by the AIR application.

You *cannot* use the silent installer option to update an *installed* AIR application. This is because the AIR installer cannot determine whether the version to be installed is newer than the installed version, and it would pose a security risk to downgrade the application.

To install or update the runtime only, use the `-silent` option without specifying a `path` or any other options.

## Silent uninstallation

You can silently uninstall an AIR application using the ARH utility.

While ARH is the recommended method, you can also use the following methods:

On Mac OS, use `rm -rf` to remove the AIR application installation directory.

On Windows:

- 1 Use the OSID generator to look up the upgrade GUID for the application (see [“Using the OSID Generator application”](#) on page 6).
- 2 Pass the upgrade GUID as the `lpUpgradeCode` parameter to the `MsiEnumRelatedProducts()` function. The function stores the product GUID in the buffer passed as the `lpProductBuf` parameter to the function.
- 3 Pass the product GUID to `msiexec /x` (or an equivalent).

On Linux, pass the application ID and publisher ID for the application to the package manager (such as RPM or Debian), as in the following:

```
sudo dpkg -P HelloWorld.e146c51663394ee63585200f02ce0969fc8dd73c.1  
sudo rpm -e HelloWorld.e146c51663394ee63585200f02ce0969fc8dd73c.1
```

## Runtime installer exit codes

The Adobe AIR installer outputs the following exit codes:

Exit code	Description
0	Successful install
1	Successful, but restart required for completion
2	Usage error (incorrect arguments)
3	Runtime not found
4	Loading runtime failed
5	Unknown error
6	Installation canceled

Exit code	Description
7	Installation failed
8	Installation failed; update already in progress
9	Installation failed; application already installed

The AIR installer automatically creates log files in the following locations:

- Windows XP: C:\Documents and Settings\user name\Local Settings\Application Data\Adobe\AIR\logs
- Windows Vista / Windows 7: C:\Users\user name\Local Settings\Application Data\Adobe\AIR\logs (Note that some of these folders are hidden by default.)
- Mac OS X: Open "Console" to view logging.
- Linux - an Install.log file is automatically created during installation in the following folder:  
~/appdata/Adobe/AIR/Logs

## Using the ARH utility

The AIR Redistribution Helper (ARH) utility is a small executable that you can use as part of a custom installer.

### To check whether the runtime is installed:

```
arh -isRuntimeInstalled
```

ARH exits with code 0 if the runtime is installed. It exits with code 1 if the runtime is not installed.

### To get the installed AIR version number:

```
arh -runtimeVersion
```

### To install an application:

```
arh -installAppSilent { ( -location <loc> ) -desktopShortcut -programMenu } <file>
```

-location — the install location.

-desktopShortcut — if present a desktop shortcut icon is added.

-programMenu — if present, an entry is added to the program menu (Windows only).

file — the AIR file to be installed.

### To uninstall an application:

```
arh -uninstallAppSilent <appid> <pubid>?
```

appid — the application identifier specified in the application descriptor.

pubid — Required if and only if the application specifies a publisher ID. Publisher IDs are deprecated as of AIR 1.5.3. Only applications created prior to AIR 1.5.3 should use a publisher ID.

### To query the state of an installed application:

```
arh -isAppInstalled <appid> <pubid>?
```

appid — the application identifier specified in the application descriptor.

pubid — the publisher ID, if used by the application.

**To locate an installed application:**

```
arh -appLocation <appid> <pubid>?
```

**To obtain an installed application's version (as a string):**

```
arh -appVersion <appid> <pubid>?
```

appid — the application identifier specified in the application descriptor.

pubid — the publisher ID, if used by the application.

**To update the current user's runtime state:**

```
arh -updateUserState
```

Updates the current user's registry and configuration settings to reflect the fact that the application has been installed for that user. This command must be run from a non-elevated process (in other words, using the user's account, not a separate administrator account).

If the `updateUserState` command is not performed, the AIR in-browser will not be able to detect the AIR application.

## Using the OSID Generator application

 *The OSID generator application has been supplanted by the ARH utility. You can use ARH to detect and uninstall AIR applications directly.*

An OSID, or *operating system identifier*, is a platform-specific identifier for an installed application. The OSID Generator application reports the OSID of an AIR application. The OSID for an application is the same on every computer. The OSID generator uses the application ID and either the publisher ID string, or, if a publisher ID is not used, an empty string.

**Note:** *Prior to AIR 1.5.3, every application was assigned a publisher ID that was based on the certificate used to apply the application signature. While a publisher ID is no longer assigned automatically, applications published before AIR 1.5.3 can still use one. Such an application still uses the same publisher ID even after being updated to AIR 1.5.3 or later.*

In AIR 1.5.3, or later, both the application ID and the publisher ID, if used, are specified in the application descriptor file.

For AIR applications published before AIR 1.5.3, you can determine the publisher ID by reading the contents of the `publisherid` file, which is in the META-INF/AIR directory in the installed AIR application.

On Mac OS, the OSID Generator application returns a bundle identifier. To find the application, pass the OSID as the `inBundleID` parameter of the `LaunchServices LSFindApplicationForInfo()` function. The object passed as the `outAppURL` parameter of the `LSFindApplicationForInfo()` function is set as a pointer to the application.

On Windows, the OSID Generator application returns a globally unique identifier (GUID). This GUID is the upgrade GUID as well as the component GUID of the component containing the main application executable. You can use these to locate the installed application:

- Use the Windows Installer `MSIEnumRelatedProducts()` function to find an associated product GUID. Pass the upgrade GUID as the `lpUpgradeCode` parameter.

- Use the Windows Installer `MSIGetComponentPath()` function to obtain the path to the application's executable. Pass the product GUID as the `szProduct` parameter and pass the component GUID as the `szComponent` parameter.
- Before installing the AIR application, a bootstrapper application can use the OSID to query the system to get the path to the currently installed AIR application (if it is installed).

On Linux, OSID returns the name of the native package for the application.