

# Working with Build Configurations

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Every Flash module in IntelliJ IDEA includes one or more build configurations. A build configuration defines how the module source files are transformed into the target output type (SWF or SWC) and then packaged.

One build configuration is created when creating a module. You can add more build configurations if and when needed.

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## Build configuration types

The build configuration type is defined by the following:

- Target platform (i.e. the environment in which the developed content is going to be used): Web (for Flash player / Web browser-targeted content), Desktop (for [Adobe AIR](#)-targeted content), or Mobile (AIR Mobile, for the content intended for Android and iOS mobile devices).
- Whether the build configuration uses the Flex framework or is pure ActionScript.
- Output type: Application (a runnable application, an SWF file), Library (an SWC file), or a Runtime-loaded module (a dynamically-loadable [module](#), an SWF file).

## Main options for build configurations

Once the build configuration type is defined, the following main options can be specified:

- For the Applications and Runtime-loaded modules: the [main class](#).
- The output file name.
- The output folder.
- For Web Applications: the folder with the [HTML wrapper](#) template.
- For Web and Desktop Applications: the [modules](#) and [runtime style sheets](#).

## Build configuration dependencies (build path)

Generally, the build path for each build configuration may be defined by the following:

- Flex SDK. The necessary SDK SWCs are selected automatically depending on the build configuration type. Additionally, you can manage the set of the SWCs by selecting the following:
  - For the Web target platform: the Flash player version. If the SDK includes more than one player version, you can choose which of the corresponding SWCs should be used.
  - For Flex framework-based build configurations: the Flex 4 component sets. You can specify that only the Spark or MX or both component sets should be used.  
For Flex components you can specify their [framework linkage type](#) (Merged Into Code, RLS or External).

- Other build configurations that generate libraries and runtime-loaded modules.
- 3rd-party libraries, both SWC and raw ActionScript.

## Compiler options

Each build configuration is associated with a set of compiler options.

IntelliJ IDEA provides the default sets of compiler options at the level of the IDE, project and module.

The defaults at a lower level may be inherited from the upper level or redefined. At the level of individual build configurations, similarly, the compiler options may be inherited from the module level defaults. Alternatively, build configuration-specific values may be specified.







IntelliJ IDEA provides a convenient interface for editing the defaults at various levels. There is also an ability to restore the defaults for the values that were changed.

## Active build configuration

One of the build configurations is set active for the corresponding module.

The active build configuration provides the basis for source code highlighting in the editor. So when you change the active configuration, the code highlighting in the module changes as well.

## Managing build configurations and their settings

1. [Open the Project Structure dialog](#) (Ctrl+Shift+Alt+S).
2. Under **Project Settings**, select **Modules**.
3. In the area under **+** **-**  |  |  , expand the necessary Flash module node and select any of the build configurations. Now you can:
  - View and edit the settings for the selected build configuration on the [Build Configuration page](#) shown in the right-hand part of the dialog.
  - Create a copy of the selected build configuration. To do that, click  or select **Copy** in the context menu. Specify the settings for the copy the build configuration in the dialog that opens. Note that depending on the settings, the copy of the build configuration may have the **type** different from that of the original. See [Possible changes when changing the build configuration type](#).
  - Find the usages of the selected build configuration in the project. To do that, click , press Alt+F7 or select **Find usages** in the context menu.
  - Delete the selected build configuration. To do that, click **-**, press Delete or select **Delete** in the context menu.
  - Create a new build configuration. To do that:
    1. Click **+**, press Alt+Insert or select **New** in the context menu.
    2. Select **Flash build configuration**.
    3. In the **Add Build Configuration** dialog that opens, specify the name and select the main options for the new build configuration, and click **OK**.
    4. If necessary edit the build configuration settings on the [Build Configuration page](#).
  - Change the build configuration **type**. To do that, click **Change** on the **General** tab (to the right of the area where the build configuration type is shown) and specify the build configuration properties in the dialog that opens. See [Possible changes when changing the build configuration type](#).
4. Click **OK** in the **Project Structure** dialog.

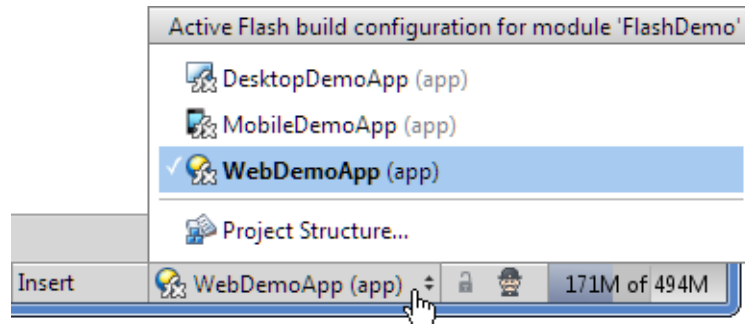
See also, [Using shortcuts to open build configuration settings](#).

## Selecting an active build configuration

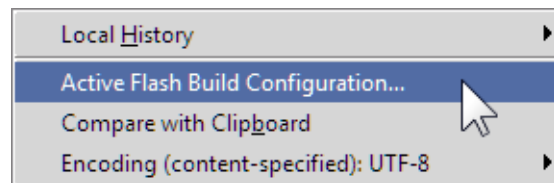
The name of the build configuration which is currently **active** is shown in the right-hand part of the status bar.

To make a different build configuration active, click this name.

As a result, the **Active Flash build configuration** menu is shown in which you can select a different build configuration which will become active.



The **Active Flash build configuration** menu can also be accessed from the editor when working with a `.as` or `.mxm1` file. The **Active Flash Build Configuration** command is available for this purpose.



## Using shortcuts to open build configuration settings

As already mentioned, the **Active Flash build configuration** menu is used to select an active build configuration (see [Selecting an active build configuration](#)).

In addition, this menu provides a shortcut for accessing build configuration settings (the **Project Structure** option).

When you select **Project Structure** in the **Active Flash build configuration** menu, the **Project Structure** dialog opens showing the settings for the active build configuration.

See also, [Managing build configurations and their settings](#).

## Possible changes when changing the build configuration type

When changing the build configuration **type** (by using the Change type command or when creating a copy of a build configuration), the following changes may occur if the build configuration output type has changed (e.g., from Application to Library):

- The output file name extension may change (from `.swf` to `.swc` and vice versa).
- If the output type has changed to Library, dependencies on runtime-loaded modules (if existed) are removed.
- If dependencies on the build configuration with the changed type have become inappropriate, such dependencies are removed.

When creating a copy of a build configuration, the following changes occur in addition:

- The output file name changes.
- If applicable, the package file name or names change.

## See Also

Procedures:

- [Building ActionScript and Flex Applications](#)

**Language and Framework-Specific Guidelines:**

- [ActionScript and Flex](#)

**Reference:**

- [Build Configuration Page for a Flash Module](#)
- [Compiler: ActionScript & Flex Compiler](#)

**Web Resources:**

- [Developer Community](#) 