

Java Coding Conventions

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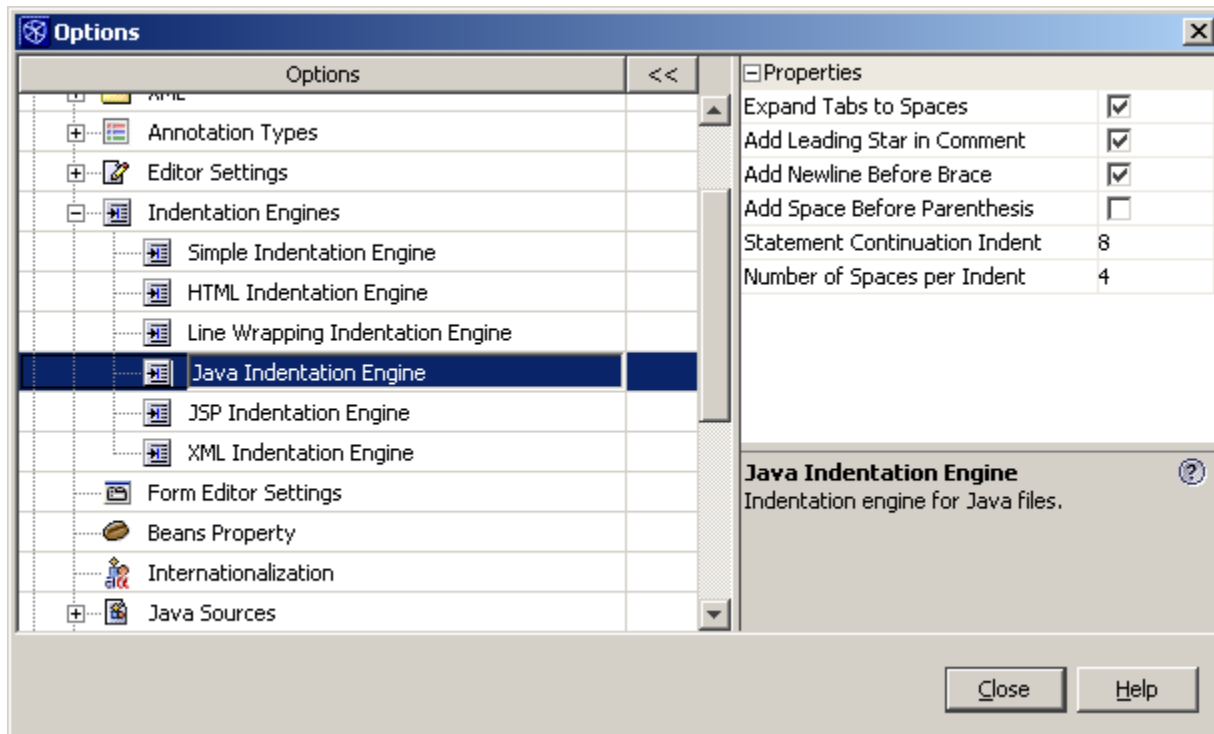
Indentation

Please use *4 spaces per tab*.



You can access the indentation settings for Java code in Netbeans from the **Tool -> Options** menu.

Setup your Java Indentation settings in Netbeans to look like this.



Naming

In general, abbreviations should not be used in naming.

Method Names

Methods should be named with a verb and a noun. The noun should be capitalized.

Please do not use underscores in Java names.

Here are examples of good method names.

```
computeSum( )  
getX( )  
setY( )
```

Getters should start with **get** and setters should start with **set**. Method names such as **x()** instead of **getX()** are ambiguous.

Variable Names

Variables should start with a lowercase letter. Subsequent words should be capitalized.

Here are examples of variable names.

```
thetaIndex  
phiBins  
binValues
```

No distinction is made between local variables and member variables as far as naming conventions. To disambiguate local and member variables, use the **this** keyword.

For instance, this is a perfectly valid way of assigning a member variable that has the same name as the method argument.

```
void setFoo(int foo)  
{  
    this.foo = foo;  
}
```

Interfaces and Implementations

Java makes a distinction between interfaces, which have no method bodies, and implementations, which are classes that may also be abstract. There is no distinction made in naming conventions between abstract and non-abstract (concrete) classes.



Abstract classes have some functions without method bodies. These are indicated with the **abstract** keyword.

In general, the interface should have the "natural" name. For instance, an interface could be called **Identifier**, while the implementation should have a suffix such as **Basic**, **Base** or **Impl** as in **IdentifierBase**. Using some other suffix to identify an implementing class, such as in **IdentifierExpanded**, is probably fine, too.

Even better is to separate the implementations into a subpackage such as **org.lcsim.ids.impl**.