Convert to Instance Method

Convert to Instance Method refactoring is used to convert a static method to a non-static, class instance method, with a class being the type parameter of the initial method.

This refactoring is also available from UML Class diagram.

Example

Consider classes `MyClass`, `ClassB` and `ClassB` residing in the same package. `MyClass` contains the following code:

```
public class MyClass {
    ClassA classA = new ClassA();
    ClassB classB = new ClassB();

    static public void greatMethod(ClassA classA, ClassB classB){
        System.out.println("classA = " + classA);
        System.out.println("classB = " + classB);
    }

    public void myMethod(){
        MyClass.greatMethod(classA, classB);
    }
}
```

After refactoring, `MyClass` and `ClassB` become:

```
public class MyClass {
    ClassA classA = new ClassA();
    ClassB classB = new ClassB();

    public void myMethod(){
        classB.greatMethod(classA);
    }
}

public class ClassB {
    public void greatMethod(ClassA classA){
        System.out.println("classA = " + classA);
        System.out.println("classB = " + this);
    }
}
```

Converting a method to an instance method

1. In the editor, place the caret on the declaration or usage of a method to be refactored. The method should be static and the types of its parameters should be the classes from the project. In other words, you cannot use such parameters types, as `String`.
2. Do one of the following:
   - On the **Refactor** menu, choose **Convert to Instance Method**.
   - Right-click the method and select **Refactor | Convert to Instance Method**.

   > The selected method must be static and must receive at least one of the classes included in the current project as a parameter.

3. The **Convert to Instance Method** dialog appears.
4. In the **Select an instance parameter** list select the class you want the method to belong to after the conversion. All the usages of this class inside the method are replaced with **this**.
5. To change the visibility scope of the converted method, select the new scope in the **Visibility** area. By default the converted method will have no scope declaration (equivalent to **public**).
6. Preview and apply changes.

See Also

Reference:

- Convert to Instance Method Dialog

Web Resources:

- Developer Community