

# Programatic manipulation of project...

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[Shmulik](#) 12 posts since

Sep 23, 2002

Hi,

I need to perform the following operations programmatically from a plugin. I don't manage to find it in the openapi, I would appreciate if you can help me on this:

1. Modify the dependencies of a given module - specify that it uses a certain jar
2. Set a different output folder for a given module
3. Remove a named facet from the facets of a module
4. Add an Ant build file to the list of ant files included by the project, and later execute it (showing the output in IntelliJ console)
5. Given a certain VirtualFile that belongs to the project, make it the selected node in the project-view

Thanks,

Shmulik



Guest [1](#). **Re: Programatic manipulation of project settings** May 19, 2008 1:25 PM

Hello Shmulik,

I need to perform the following operations programmatically from a plugin. I don't manage to find it in the openapi, I would appreciate

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if you can help me on this:

1. Modify the dependencies of a given module - specify that it uses a certain jar

There's a number of steps involved in here - see, for example, `TestNGUtil.checkTestNGInClasspath()`

for a code sample.

2. Set a different output folder for a given module

`ModuleRootManager.getInstance(module).getModifiableRootModel().setCompilerOutputPath()`

3. Remove a named facet from the facets of a module

`FacetManager.getInstance(module).getModifiableModel().removeFacet()`

4. Add an Ant build file to the list of ant files included by the project, and later execute it (showing the output in IntelliJ console)

`AntConfiguration.getInstance(project).addBuildFile()`

5. Given a certain `VirtualFile` that belongs to the project, make it

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the selected node in the project-view

```
SelectInManager.getInstance(project).getTarget(SelectInManager.PROJECT).selectIn()
```

--

Dmitry Jemerov

Development Lead

JetBrains, Inc.

<http://www.jetbrains.com/>

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[Shmulik](#) 12 posts since

Sep 23, 2002 2. **Re: Programatic manipulation of project settings** May 19, 2008 1:55 PM

Dmitry Hi,

Thank you so much for you prompt response!

bye,

Shmulik



[Shmulik](#) 12 posts since

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Sep 23, 2002 3. Re: **Programatic manipulation of project settings** May 19, 2008 4:03 PM

Hi,

When I try to change the output path of the project, it is not changed but no exception is thrown. The new output path exists and the output path remains the same also after reloading the project.

Here is the code that I'm using:

```
ApplicationManager.getApplication().runWriteAction(new Runnable() {  
  
    public void run() {  
  
        try {  
  
            VirtualFile moduleFile = module.getModuleFile();  
  
            VirtualFile classesFile = moduleFile.getParent().findChild("bin").findChild("classes");  
  
            System.out.println("Exists? " + classesFile.exists() + " " + classesFile.isDirectory());  
  
            ModifiableRootModel rootModel =  
ModuleRootManager.getInstance(module).getModifiableModel();  
  
            rootModel.setCompilerOutputPath(classesFile);  
  
            rootModel.setCompilerOutputPathForTests(classesFile);  
  
            rootModel.commit();  
  
        } catch (Exception e) {  
  
            e.printStackTrace();  
  
        }  
  
    }  
  
});
```

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any ideas?

thanks,

Shmuliik



Guest [4](#). **Re: Programatic manipulation of project settings** May 19, 2008 7:27 PM

Hello Shmulik,

You also need to call `inheritCompilerOutputPath(false)`.

When I try to change the output path of the project, it is not changed but no exception is thrown. The new output path exists and the output path remains the same also after reloading the project.

Here is the code that I'm using:

```
ApplicationManager.getApplication().runWriteAction(new Runnable()
{
    public void run() {
        try {
            VirtualFile moduleFile = module.getModuleFile();
            VirtualFile classesFile =
```

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```
moduleFile.getParent().findChild("bin").findChild("classes");  
  
System.out.println("Exists? " + classesFile.exists()  
"+classesFile.isDirectory());  
  
ModifiableRootModel rootModel =  
ModuleRootManager.getInstance(module).getModifiableModel();  
  
rootModel.setCompilerOutputPath(classesFile);  
  
rootModel.setCompilerOutputPathForTests(classesFile);  
  
rootModel.commit();  
} catch (Exception e) {  
e.printStackTrace();  
}  
}  
});  
  
any ideas?  
  
thanks,  
  
Shmuliik
```

--

Dmitry Jemerov

Development Lead

JetBrains, Inc.

<http://www.jetbrains.com/>

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[Shmulik](#) 12 posts since

Sep 23, 2002 5. **Re: Programatic manipulation of project settings** May 21, 2008 12:20 AM

Hi,

Thanks, it works!

I looked for such a method, but expected something like setInherit..., sorry for asking too fast.

bye,

Shmulik



[Shmulik](#) 12 posts since

Sep 23, 2002 6. **Re: Programatic manipulation of project settings** May 26, 2008 10:12 AM

Hi,

Sorry, it is still not clear to me how exactly to make a file selected in the project tree. You've mentioned:

```
SelectInManager.getInstance(project).getTarget(SelectInManager.PROJECT).selectIn(...)
```

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I need to hand this method a SelectInContext, I do I get this context given a VirtualFile?

thanks,

Shmulik



[Gaurav Joshi](#) 20 posts since

Feb 8, 2010 7. **Re: Programatic manipulation of project settings** Feb 8, 2010 8:37 AM

I am Working on IntelliJ 9 and migrating my plugin from 5.x to 9.x, facing the same problem of how to set the output path as ModuleRootManager setOutputPath is removed altogether from the API.



[Dmitry Jemerov](#) 11,708 posts since

Aug 19, 2002 8. **Re: Programatic manipulation of project settings** Feb 8, 2010 1:43 PM

Hello Gaurav,

I am Working on IntelliJ 9 and migrating my plugin from 5.x to 9.x,  
facing the same problem of how to set the output path as  
ModuleRootManager setOutputPath is removed altogether from the API.

The replacement API is  
`CompilerModuleExtension.getInstance(module).setCompilerOutputPath()`.

--

Dmitry Jemerov

Development Lead

JetBrains, Inc.

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Gaurav Joshi 20 posts since

Feb 8, 2010 9. **Re: Programatic manipulation of project settings** Feb 9, 2010 11:05 AM

Hello Dmitry,

Thnaks for replying but when I try and use  
CompilerModuleExtension.getInstance(module).setCompilerOutputPath(). I am thrown with  
an exception

*Configuring project failed for unexpected reason*

*java.lang.AssertionError: Writable model can be retrieved from writable  
ModifiableRootModel*

*at*

*com.intellij.openapi.roots.impl.CompilerModuleExtensionImpl.a(CompilerModuleExtensionImpl.java:225)*

*at*

*com.intellij.openapi.roots.impl.CompilerModuleExtensionImpl.setCompilerOutputPath(CompilerModuleE*

*at*

*com.intellij.openapi.roots.impl.CompilerModuleExtensionImpl.setCompilerOutputPath(CompilerModuleE*

*at com.yolus.intellij.yde.ProjectConfigurer*

*\$YDEModule.configureModuleOrFail(ProjectConfigurer.java:340)*

*at com.yolus.intellij.yde.ProjectConfigurer\$YDEModule.access*

*\$000(ProjectConfigurer.java:280)*

*at*

*com.yolus.intellij.yde.ProjectConfigurer.configureProjectOrFail(ProjectConfigurer.java:148)*

*at com.yolus.intellij.yde.ProjectConfigurer.run(ProjectConfigurer.java:96)*

*at*

*com.intellij.openapi.application.impl.ApplicationImpl.runWriteAction(ApplicationImpl.java:748)*

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```
at
com.yolus.intellij.yde.ProjectSettingsAction.actionPerformed(ProjectSettingsAction.java:45)
  at com.intellij.openapi.actionSystem.impl.ActionMenuItem
$ActionTransmitter.actionPerformed(ActionMenuItem.java:214)
  at javax.swing.AbstractButton.fireActionPerformed(AbstractButton.java:1995)
  at
com.intellij.openapi.actionSystem.impl.ActionMenuItem.fireActionPerformed(ActionMenuItem.java:82)
  at com.intellij.ui.plaf.beg.BegMenuItemUI.a(BegMenuItemUI.java:496)
  at com.intellij.ui.plaf.beg.BegMenuItemUI.access$300(BegMenuItemUI.java:43)
  at com.intellij.ui.plaf.beg.BegMenuItemUI
$MyMouseInputHandler.mouseReleased(BegMenuItemUI.java:516)
  at java.awt.Component.processMouseEvent(Component.java:6263)
  at javax.swing.JComponent.processMouseEvent(JComponent.java:3255)
  at java.awt.Component.processEvent(Component.java:6028)
  at java.awt.Container.processEvent(Container.java:2041)
  at java.awt.Component.dispatchEventImpl(Component.java:4630)
  at java.awt.Container.dispatchEventImpl(Container.java:2099)
  at java.awt.Component.dispatchEvent(Component.java:4460)
  at java.awt.LightweightDispatcher.retargetMouseEvent(Container.java:4574)
  at java.awt.LightweightDispatcher.processMouseEvent(Container.java:4238)
  at java.awt.LightweightDispatcher.dispatchEvent(Container.java:4168)
  at java.awt.Container.dispatchEventImpl(Container.java:2085)
  at java.awt.Window.dispatchEventImpl(Window.java:2475)
  at java.awt.Component.dispatchEvent(Component.java:4460)
  at java.awt.EventQueue.dispatchEvent(EventQueue.java:599)
  at com.intellij.ide.IdeEventQueue.f(IdeEventQueue.java:621)
  at com.intellij.ide.IdeEventQueue.b(IdeEventQueue.java:507)
  at com.intellij.ide.IdeEventQueue.dispatchEvent(IdeEventQueue.java:372)
  at
java.awt.EventQueueDispatchThread.pumpOneEventForFilters(EventDispatchThread.java:269)
  at java.awt.EventQueueDispatchThread.pumpEventsForFilter(EventDispatchThread.java:184)
  at
java.awt.EventQueueDispatchThread.pumpEventsForHierarchy(EventDispatchThread.java:174)
  at java.awt.EventQueueDispatchThread.pumpEvents(EventDispatchThread.java:169)
```

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```
at java.awt.EventQueue.pumpEvents(EventDispatchThread.java:161)
at java.awt.EventQueue.run(EventDispatchThread.java:122)
```

Can't I use ModifiableRootModel, setExplodedDirectory method instead.



[Gaurav Joshi](#) 20 posts since

Feb 8, 2010 10. **Re: Programatic manipulation of project settings** Feb 10, 2010 3:14 PM

Well I am still not able to solve this puzzle



[Gaurav Joshi](#) 20 posts since

Feb 8, 2010 11. **Re: Programatic manipulation of project settings** Feb 15, 2010 9:02 AM

Please help!