

# Using model & module dependencies FAQ

```
// Entry point
// accessing model of the node
model model = node.model;
// "down-"casting it to the interface from MPS open API
SModel sModel = model;
// non-open API interface for MPS model
SModelInternal internalSModel = (SModelInternal) sModel;
// accessing module owning the model
SModule sModule = sModel.getModule();

// Repository or modules
// accessing repository of modules
SRepository sRepository = sModel.getRepository();
// accessing modules from the repository
Iterable<SModule> modules = sRepository.getModules();
SModule module = sRepository.getModule(sModule.getModuleId());
SModule closuresRuntimeModule = sRepository.getModule(module reference/closures.runtime/.getModuleId());

// Languages are represented as a special module type
if (module instanceof Language) {
    Language language = (Language) module;
}

// Getting language by "direct" reference:
// Note: no repository is mentioned here. In the MPS we actually have single repository now,
// so you can use this expression to get module from the single repository
Language mpsBaseLanguage = (Language) module/jetbrains.mps.baseLanguage/;

// Module dependencies
// accessing module dependencies
sequence<SDependency> dependencies = module.getDeclaredDependencies()

// adding used language to a module
AbstractModule internalModule = (AbstractModule) sModule;
internalModule.getModuleDescriptor().getUsedLanguages().add(module reference/jetbrains.mps.baseLanguage/);

// modify module dependencies
sequence<Dependency> internalDependencies = internalModule.getModuleDescriptor().getDependencies();
sequence<SModuleReference> usedModuleReferences = internalDependencies.select({~it => it.getModuleRef()});
};
internalModule.getModuleDescriptor().getDependencies().add(new Dependency(module reference/closures.runtime/
, SDependencyScope.DEFAULT, false));

// working with DevKits:
internalModule.getModuleDescriptor().getUsedDevkits().add(module reference/jetbrains.mps.devkit.general-purpose/);

// Models
// accessing models from the module
Iterable<SModel> models = sModule.getModels();
sModule.getModel(sModel.getModelId());

// working with imported models:
internalSModel.importedModels();
internalSModel.addModelImport(sModel.getReference(), false);
internalSModel.deleteModelImport(sModel.getReference());

// working with imported languages:
internalSModel.importedLanguages();
internalSModel.addLanguage(mpsBaseLanguage.getModuleReference());
internalSModel.addLanguage(module reference/jetbrains.mps.baseLanguage/);

// working with imported DevKits
internalSModel.importedDevkits();
internalSModel.addDevKit(module reference/jetbrains.mps.devkit.general-purpose/);
```

```
internalSModel.deleteDevKit(module reference/jetbrains.mps.devkit.general-purpose/);
```