



 **EGF Tutorial
Pattern Trace**

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- **Identification of involved templates for M2T (Model-to-Text) transformations:**
 - ▶ For large textual generations, the result of a M2T transformation cannot identify the set of templates selected and involved during a transformation
 - ▶ This becomes more difficult when a transformation involves inheritance, delegation, or when the language is declarative
- **For this reason, a trace mechanism was introduced in EGF in order to identify and track the set of patterns (with their templates) involved during a M2T transformation**

Setting the EGF Preferences



When tracing?

Enable trace:

Always

Only for configurations below

Never

Available trace category:

Enable	Name
<input checked="" type="checkbox"/>	Emf generation
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Filter in the selected category:

Comment token	Pattern
<!--{}-->	.*XML
<!--{}-->	.*xml
#	.*Properties
:	.*MF
//	org\.eclipse\.egf\.emf\.pattern\.

Restore Defaults Apply

OK Cancel

Example – EMF Generation - Class



Without Trace

```
Addressable.java X
/**
 * <copyright>
 * </copyright>
 *
 * $Id$
 */

package org.eclipse.egf.examples.extl;

import org.eclipse.emf.ecore.EObject;

* <!-- begin-user-doc -->
public interface Addressable extends

* Returns the value of the '<em>
String getAddress();
```

With Trace

```
Addressable.java X
//begin of pattern 'org.eclipse.egf.emf.pattern.base.HeaderJava:doGenerate'
/**
 * <copyright>
 * </copyright>
 *
 * $Id$
 */
//end of pattern 'org.eclipse.egf.emf.pattern.base.HeaderJava:doGenerate'
//begin of pattern 'org.eclipse.egf.emf.pattern.model.Interface'

package org.eclipse.egf.examples.extlibrary;

import org.eclipse.emf.ecore.EObject;

* <!-- begin-user-doc -->
public interface Addressable extends EObject {
//end of pattern 'org.eclipse.egf.emf.pattern.model.Interface'
//begin of pattern 'org.eclipse.egf.emf.pattern.model.call.Interface.InterfacereflectiveDelegationoverride:doGenerate'

//end of pattern 'org.eclipse.egf.emf.pattern.model.call.Interface.InterfacereflectiveDelegationoverride:doGenerate'
//begin of pattern 'org.eclipse.egf.emf.pattern.model.Interface$1'

//end of pattern 'org.eclipse.egf.emf.pattern.model.Interface$1'
//begin of pattern 'org.eclipse.egf.emf.pattern.model.call.Interface.InterfacegenFeatureoverride'

//end of pattern 'org.eclipse.egf.emf.pattern.model.call.Interface.InterfacegenFeatureoverride'
//begin of pattern 'org.eclipse.egf.emf.pattern.model.call.Interface.InterfacegetGenFeatureoverride'

//end of pattern 'org.eclipse.egf.emf.pattern.model.call.Interface.InterfacegetGenFeatureoverride'
//begin of pattern 'org.eclipse.egf.emf.pattern.model.call.Interface.InterfacegetGenFeaturejavadocoverride'

* Returns the value of the '<em><b>Address</b></em>' attribute.
//end of pattern 'org.eclipse.egf.emf.pattern.model.call.Interface.InterfacegetGenFeaturejavadocoverride:doGenerate'
//begin of pattern 'org.eclipse.egf.emf.pattern.model.call.Interface.InterfacegetGenFeatureoverride:doGenerate'

String getAddress();

//end of pattern 'org.eclipse.egf.emf.pattern.model.call.Interface.InterfacegetGenFeatureoverride:doGenerate'
```

Example – EMF Generation – Build Properties



Without Trace

```
org.eclipse.egf.examples.library x
# <copyright>
# </copyright>
#
# $Id$

bin.includes = org.eclipse.egf.examples.library.jar,\
               model/,\
               META-INF/,\
               plugin.xml,\
               plugin.properties
jars.compile.order = org.eclipse.egf.examples.library.jar
source.org.eclipse.egf.examples.library.jar = src/
output.org.eclipse.egf.examples.library.jar = bin/
```

With Trace

```
MANIFEST.MF x
# begin of pattern 'org.eclipse.egf.emf.pattern.base.HeaderProperties:doGenerate'
# <copyright>
# </copyright>
#
# $Id$
# end of pattern 'org.eclipse.egf.emf.pattern.base.HeaderProperties:doGenerate'
# begin of pattern 'org.eclipse.egf.emf.pattern.model.BuildProperties:doGenerate'

bin.includes = org.eclipse.egf.examples.library.jar,\
               model/,\
               META-INF/,\
               plugin.xml,\
               plugin.properties
jars.compile.order = org.eclipse.egf.examples.library.jar
source.org.eclipse.egf.examples.library.jar = src/
output.org.eclipse.egf.examples.library.jar = bin/
# end of pattern 'org.eclipse.egf.emf.pattern.model.BuildProperties:doGenerate'
```

Example – EMF Generation – plugin.xml



Without Trace

```
org.eclipse.egf.examples.library X
<?xml version="1.0" encoding="UTF-8"?>
<?eclipse version="3.0"?>

<!--
<copyright>
</copyright>

$Id$
-->

<plugin>

<extension point="org.eclipse.emf.ecore.generated_package"
<package
  uri="http://org.eclipse.egf.examples.library/extlibrary.ecore/1.0.0"
  class="org.eclipse.egf.examples.extlibrary.EXTLibraryPackage"/>
</extension>

</plugin>
```

With Trace

```
MANIFEST.MF X
<!--begin of pattern 'org.eclipse.egf.emf.pattern.model.PluginXML'-->
<?xml version="1.0" encoding="UTF-8"?>
<?eclipse version="3.0"?>

<!--end of pattern 'org.eclipse.egf.emf.pattern.model.PluginXML'-->
<!--begin of pattern 'org.eclipse.egf.emf.pattern.base.HeaderXml:doGenerate'-->
<!--
<copyright>
</copyright>

$Id$
-->
<!--end of pattern 'org.eclipse.egf.emf.pattern.base.HeaderXml:doGenerate'-->
<!--begin of pattern 'org.eclipse.egf.emf.pattern.model.PluginXML:doGenerate'-->

<plugin>

<extension point="org.eclipse.emf.ecore.generated_package">
<package
  uri="http://org.eclipse.egf.examples.library/extlibrary.ecore/1.0.0"
  class="org.eclipse.egf.examples.extlibrary.EXTLibraryPackage"/>
</extension>

</plugin>
<!--end of pattern 'org.eclipse.egf.emf.pattern.model.PluginXML:doGenerate'-->
```