• 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
When tracing?

Text associated to the pattern name

Regular expression of pattern name
Example – EMF Generation - Class

Without Trace

```java
/* */
/* <copyright>
/* */
/* */
/* */
public interface Addressable extends EObject {
  /* */
  * Returns the value of the '<em>address</em>' attribute.
  String getAddress();
}
```

With Trace

```java
package org.eclipse.emf.examples.extlibrary;

public interface Addressable extends EObject {
  /* */
  /* */
  public interface Addressable extends EObject {
  /* */
  * Returns the value of the '<em>address</em>' attribute.
  String getAddress();
}
```

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Example – EMF Generation – Build Properties

Without Trace

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

With Trace

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

bin.includes = org.eclipse.emf.examples.library,\nmodel/,,
META-INF/,,
plugin.xml,,
plugin.properties
jars.compile.order = org.eclipse.emf.examples.library.jar
source.org.eclipse.emf.examples.library.jar = src/
output.org.eclipse.emf.examples.library.jar = bin/
# end of pattern 'org.eclipse.emf.emf.pattern.model.BuildProperties:doGenerate'
```
Without Trace

```xml
<?xml version="1.0" encoding="UTF-8"?>
<eclipse version="3.0">  
  <!--
  <copyright>
  </copyright>
  
  <!--Id-->
  
  <plugin>
    <extension point="org.eclipse.emf.ecore.generated_package">
      <package>
        <name>org.eclipse.emf.ecore.generated</name>
        <url>http://org.eclipse.emf.ecore.generated.package</url>
        <class>org.eclipse.emf.ecore.generated</class>
      </package>
    </extension>
  </plugin>
</eclipse>
```

With Trace

```xml
<?xml version="1.0" encoding="UTF-8"?>
<manifest version="3.0">  
  <!--
  <copyright>
  </copyright>
  
  <!--Id-->
  
  <plugin>
    <extension point="org.eclipse.emf.ecore.generated_package">
      <package>
        <name>org.eclipse.emf.ecore.generated.package</name>
        <url>http://org.eclipse.emf.ecore.generated.package</url>
        <class>org.eclipse.emf.ecore.generated.package</class>
      </package>
    </extension>
  </plugin>
</manifest>
```