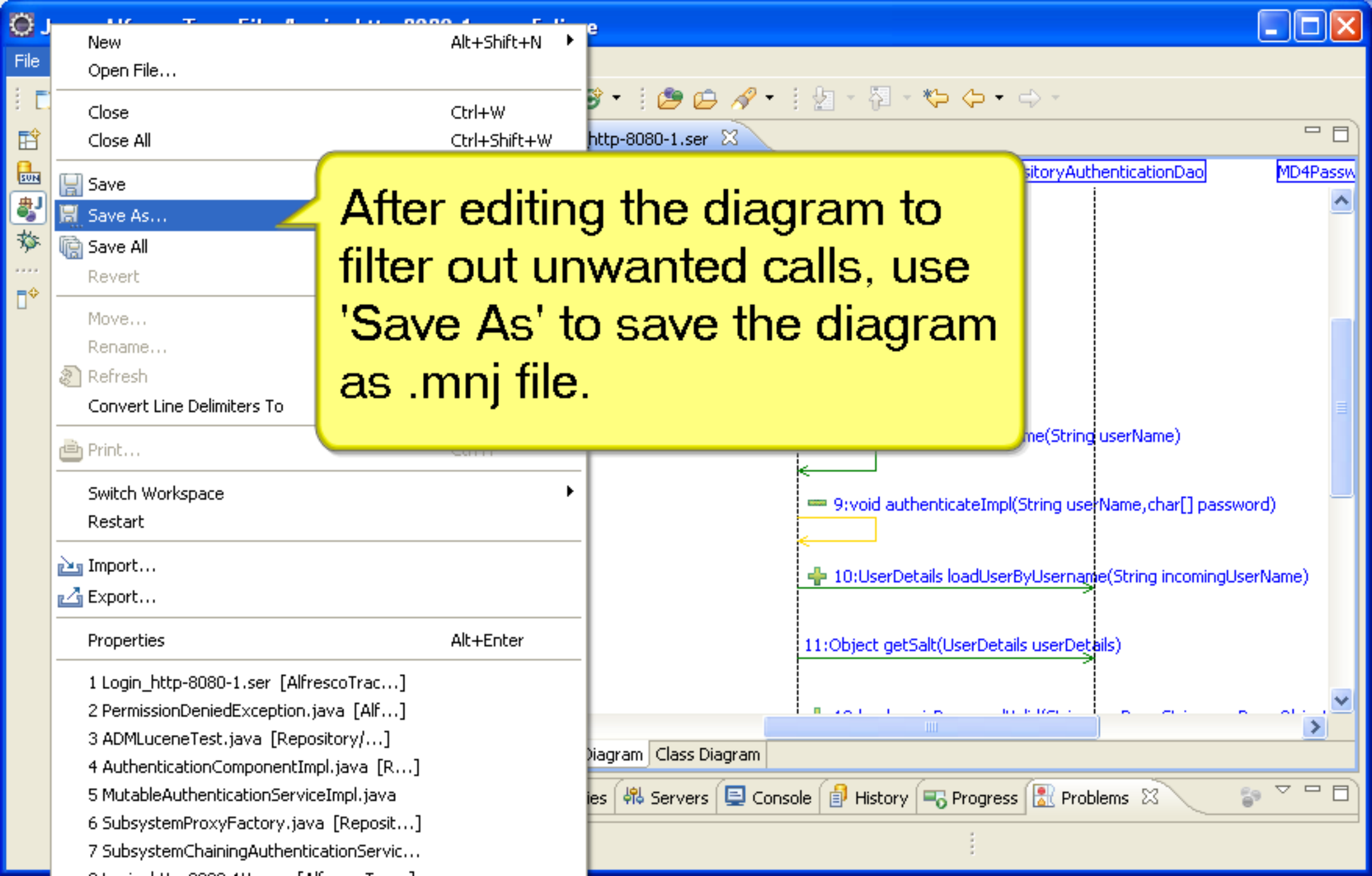


--Export as UML2 Models--

The diagrams can be exported as UML2 models to other UML2 tools like IBM's RSA (Rational Software Architect).



After editing the diagram to filter out unwanted calls, use 'Save As' to save the diagram as .mnj file.

File Edit Navigate Search Project Run Window

Package Explorer Outline

- 3rd Party [alfresco/HEAD/root/projects/3rd-p
- Alfresco JLAN [alfresco/HEAD/root/projects/a
- AlfrescoTraceFiles
  - maintainjDb\_AlfrescoTraceFiles
  - Alfresco\_Login.ser
  - deletedClassesFilter.filter
  - excludeFilters.filter
  - Login\_http-8080-1.ser
  - sampleFilters.filter
  - SaveTask\_http-8080-1.ser
  - ViewTask\_http-8080-1.ser
- Core [alfresco/HEAD/root/projects/core]
- DataModel [alfresco/HEAD/root/projects/data
- Deployment [alfresco/HEAD/root/projects/dep
- MBean [alfresco/HEAD/root/projects/mbeans]
- Repository [alfresco/HEAD/root/projects/repo
- Servers
- Web Framework Commons [alfresco/HEAD/ro

### Save As

Save file to another location.

Enter or select the parent folder:

AlfrescoTraceFiles

- 3rd Party [alfresco/HEAD/root/projects/3rd-party]
- Alfresco JLAN [alfresco/HEAD/root/projects/alfresco-jlan]
- AlfrescoTraceFiles
- Core [alfresco/HEAD/root/projects/core]
- DataModel [alfresco/HEAD/root/projects/data-model]
- Deployment [alfresco/HEAD/root/projects/deployment]
- MBean [alfresco/HEAD/root/projects/mbeans]
- RemoteSystemsTempFiles
- Repository [alfresco/HEAD/root/projects/repository]
- Servers
- Web Framework Commons [alfresco/HEAD/root/projects/web-framework-co
- Web-Client [alfresco/HEAD/root/projects/web-client]

me: Login\_http-8080-1.mnj

OK Cancel

Save the edited diagram as .mnj file.

ionDao MD4Passw

(ame)

char[] password)

g incomingUserName)

Close the just saved mnj file and reopen the same file with the 'MaintainJ Editor to Save As UML2 Model'.

The screenshot shows the Eclipse IDE interface. On the left, the Project Explorer displays a project named 'maintainjDb\_Alfresco'. A file named 'Login\_http-8080-1.mnj' is selected. A context menu is open over this file, listing various actions such as 'Open', 'Copy', 'Paste', and 'Delete'. The 'Open With' option is highlighted, and a submenu is displayed to its right. This submenu lists several editors, with 'MaintainJ Editor to Save As UML2 Model' selected. Other editors listed include 'MaintainJ UML Diagram Editor (.mnj file)', 'Text Editor', 'System Editor', 'In-Place Editor', and 'Default Editor'. The bottom of the IDE shows the Console, History, Progress, and Problems views.

Action	Shortcut
Open	F3
Open With	
Show In	Alt+Shift+W
Copy	Ctrl+C
Copy Qualified Name	
Paste	Ctrl+V
Delete	Delete
Remove from Context	Ctrl+Alt+Shift+Down
Mark as Landmark	Ctrl+Alt+Shift+Up
Build Path	
Refactor	Alt+Shift+T
Refresh	F5

Editor
MaintainJ Editor to Save As UML2 Model
MaintainJ UML Diagram Editor (.mnj file)
Text Editor
System Editor
In-Place Editor
Default Editor

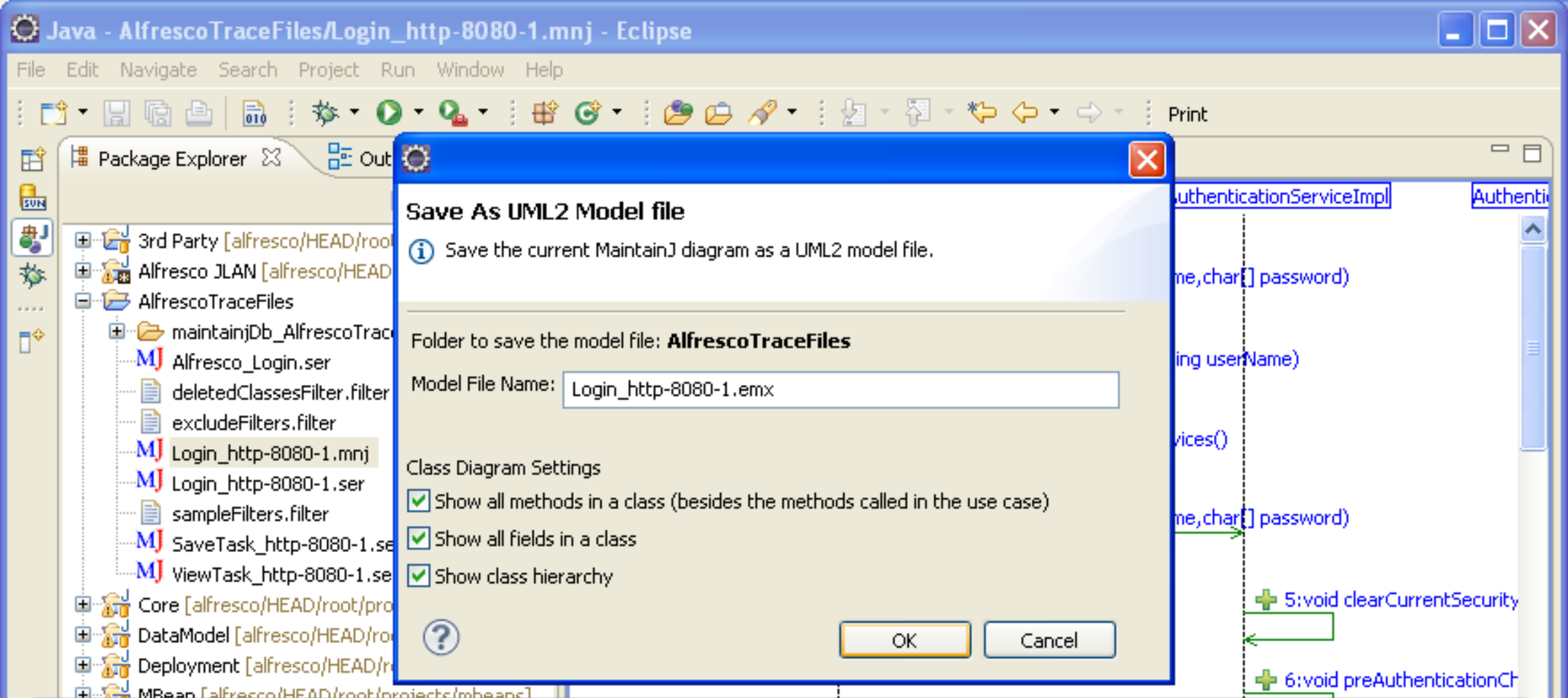
Click 'File->Save As' in the newly opened editor.

The screenshot shows the Eclipse IDE's File menu. The 'Save As...' option is highlighted in blue. A yellow callout bubble points to this option with the text 'Click 'File->Save As' in the newly opened editor.'

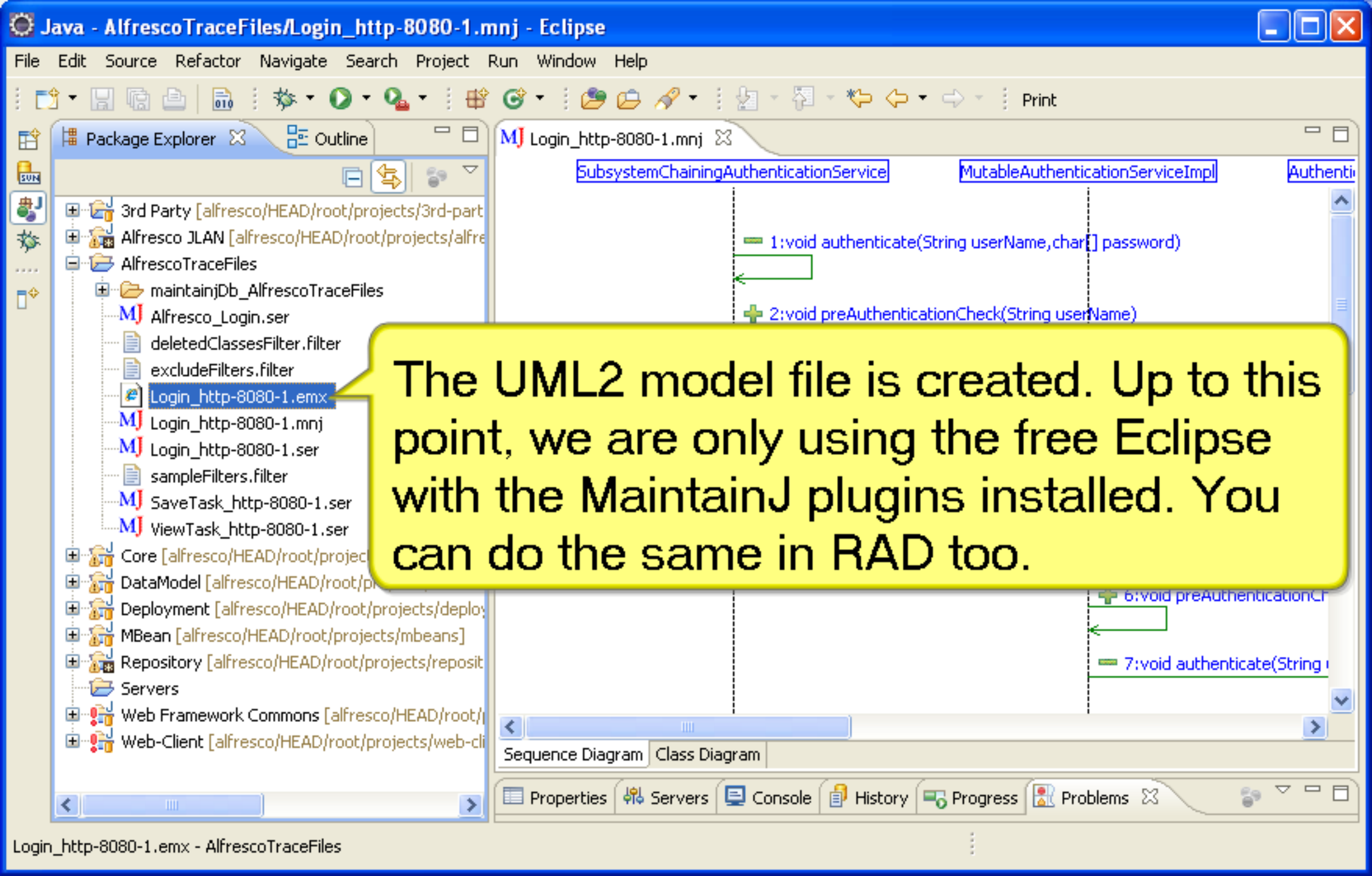
New	Alt+Shift+N
Open File...	
Close	Ctrl+W
Close All	Ctrl+Shift+W
Save	
Save As...	
Save All	
Revert	
Move...	
Rename...	F2
Refresh	F5
Convert Line Delimiters To	
Print...	Ctrl+P
Switch Workspace	
Restart	
Import...	
Export...	
Properties	Alt+Enter

1 Login\_http-8080-1.mnj [AlfrescoTrac...]  
2 Login\_http-8080-1.ser [AlfrescoTrac...]  
3 PermissionDeniedException.java [Alf...]  
4 ADMLuceneTest.java [Repository/...]  
5 AuthenticationComponentImpl.java [R...]  
6 MutableAuthenticationServiceImpl.java  
7 SubsystemProxyFactory.java [Reposit...]  
8 SubsystemChainingAuthenticationServic...

The screenshot shows the Eclipse IDE's UML editor with a sequence diagram. The diagram has two lifelines: 'AuthenticationService' and 'MutableAuthenticationServiceImpl'. The 'AuthenticationService' lifeline has three messages: a green '+' message '2: void preAuthenticationCheck(String userName)', an orange '-' message '3: List getUsableAuthenticationServices()', and a green '-' message '4: void authenticate(String userName, char[] password)'. The 'MutableAuthenticationServiceImpl' lifeline has three messages: a green '+' message '5: void clearCurrentSecurity', a green '+' message '6: void preAuthenticationCh...', and a green '-' message '7: void authenticate(String i...'. The diagram is titled 'Class Diagram'.

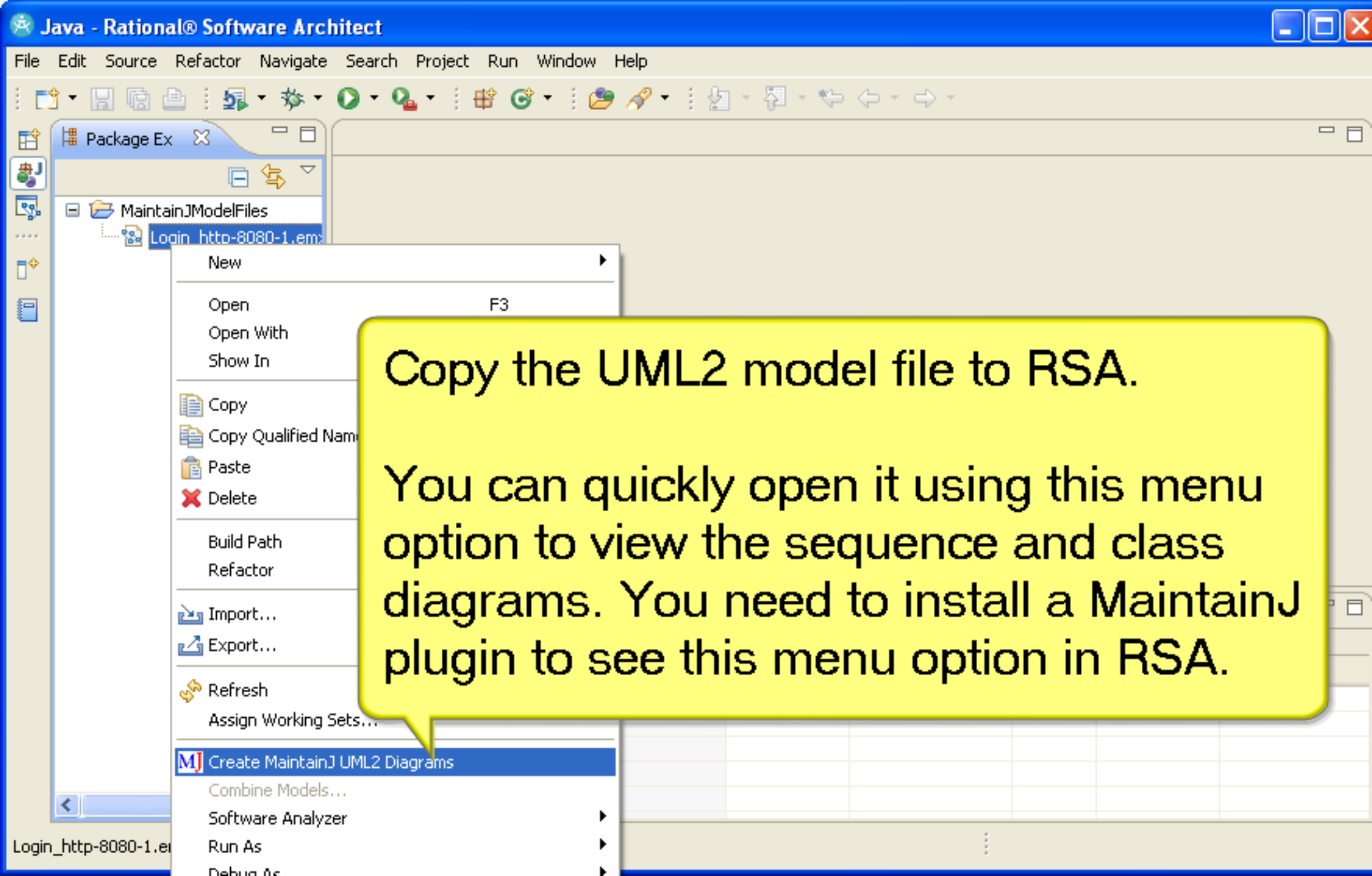


'Save As' dialog allows you to provide the UML2 model file name and to choose if you want to export the class members and hierarchy to the class diagram.



The UML2 model file is created. Up to this point, we are only using the free Eclipse with the MaintainJ plugins installed. You can do the same in RAD too.

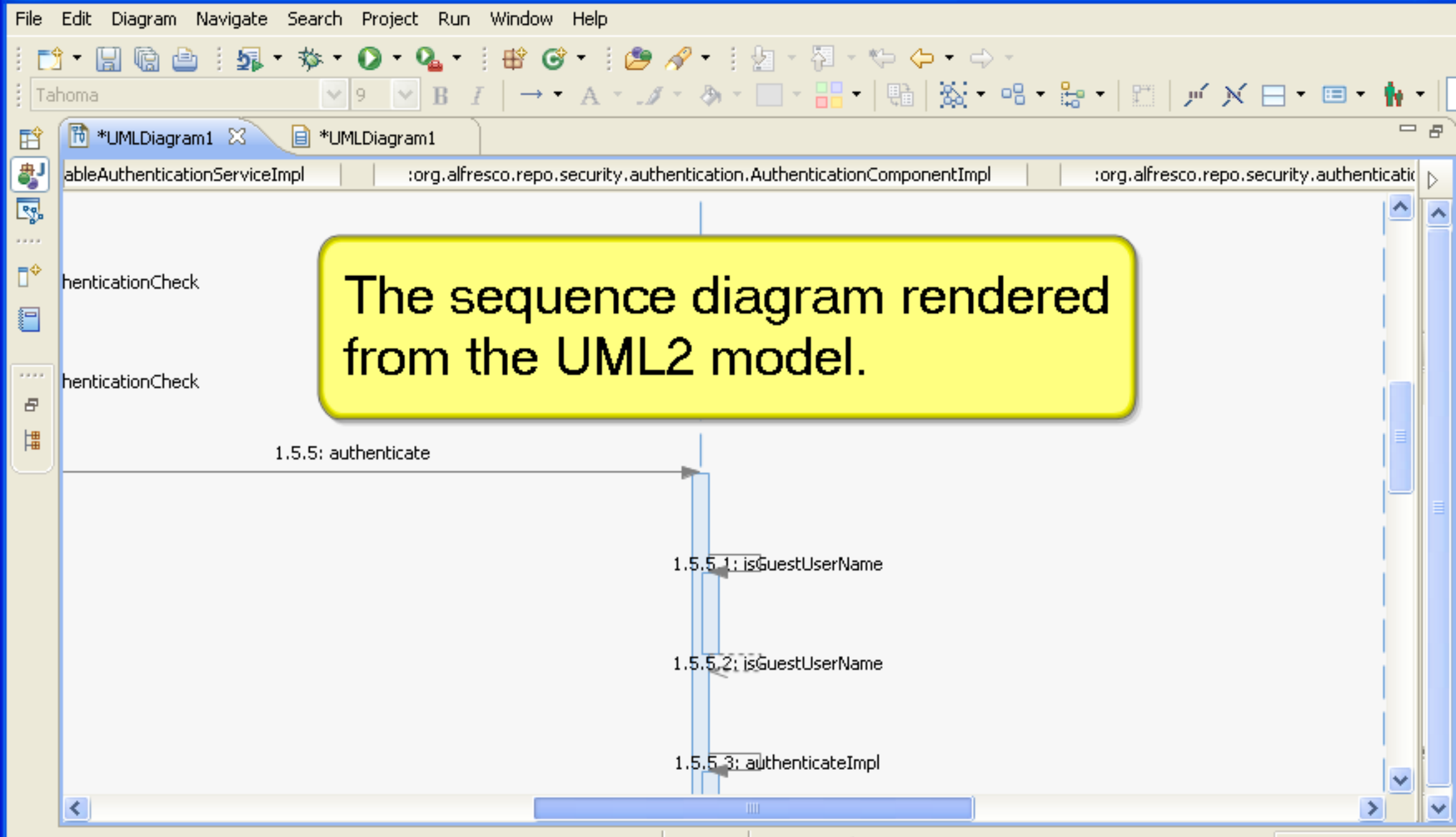




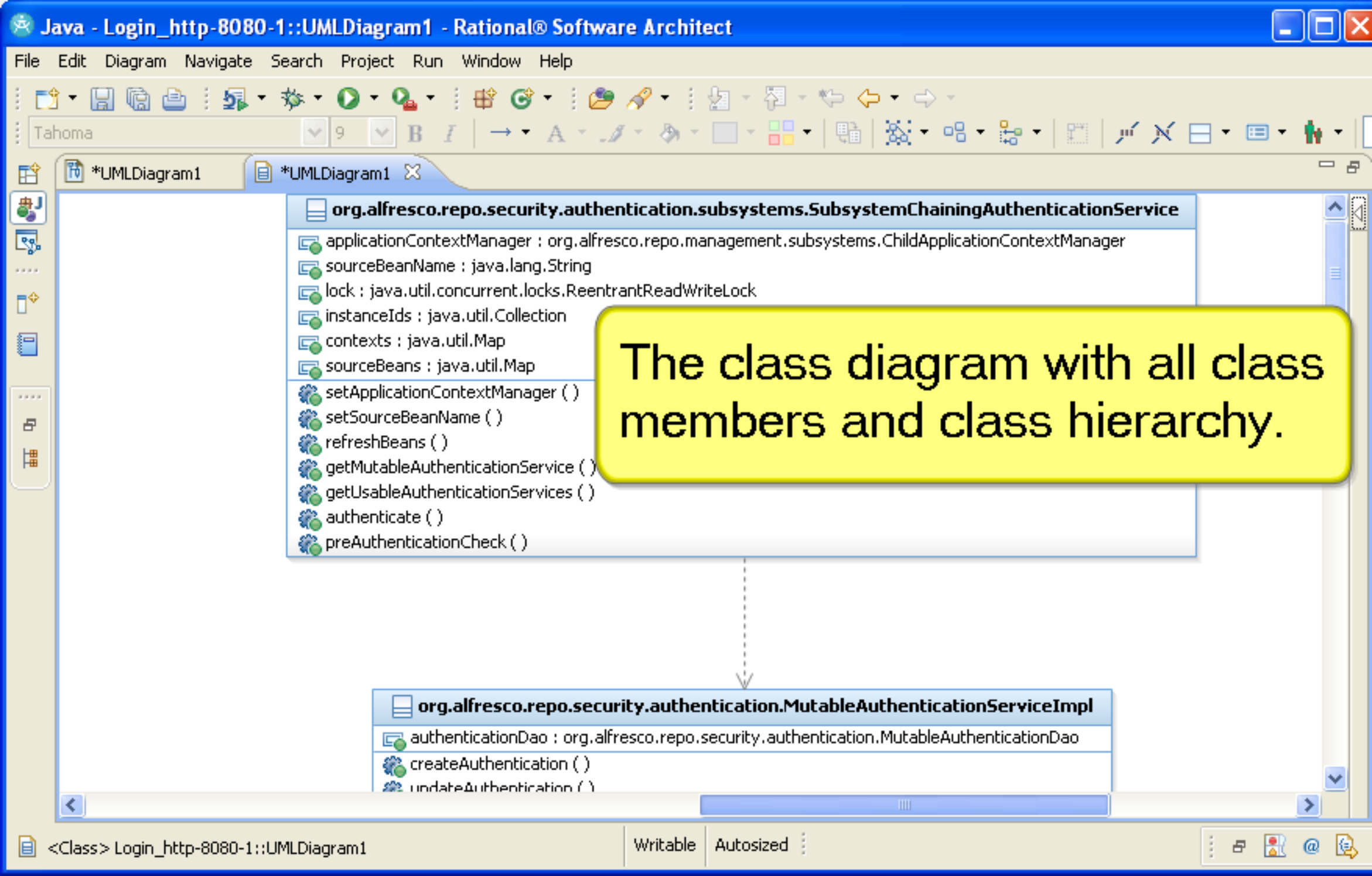
Copy the UML2 model file to RSA.

You can quickly open it using this menu option to view the sequence and class diagrams. You need to install a MaintainJ plugin to see this menu option in RSA.





The sequence diagram rendered from the UML2 model.

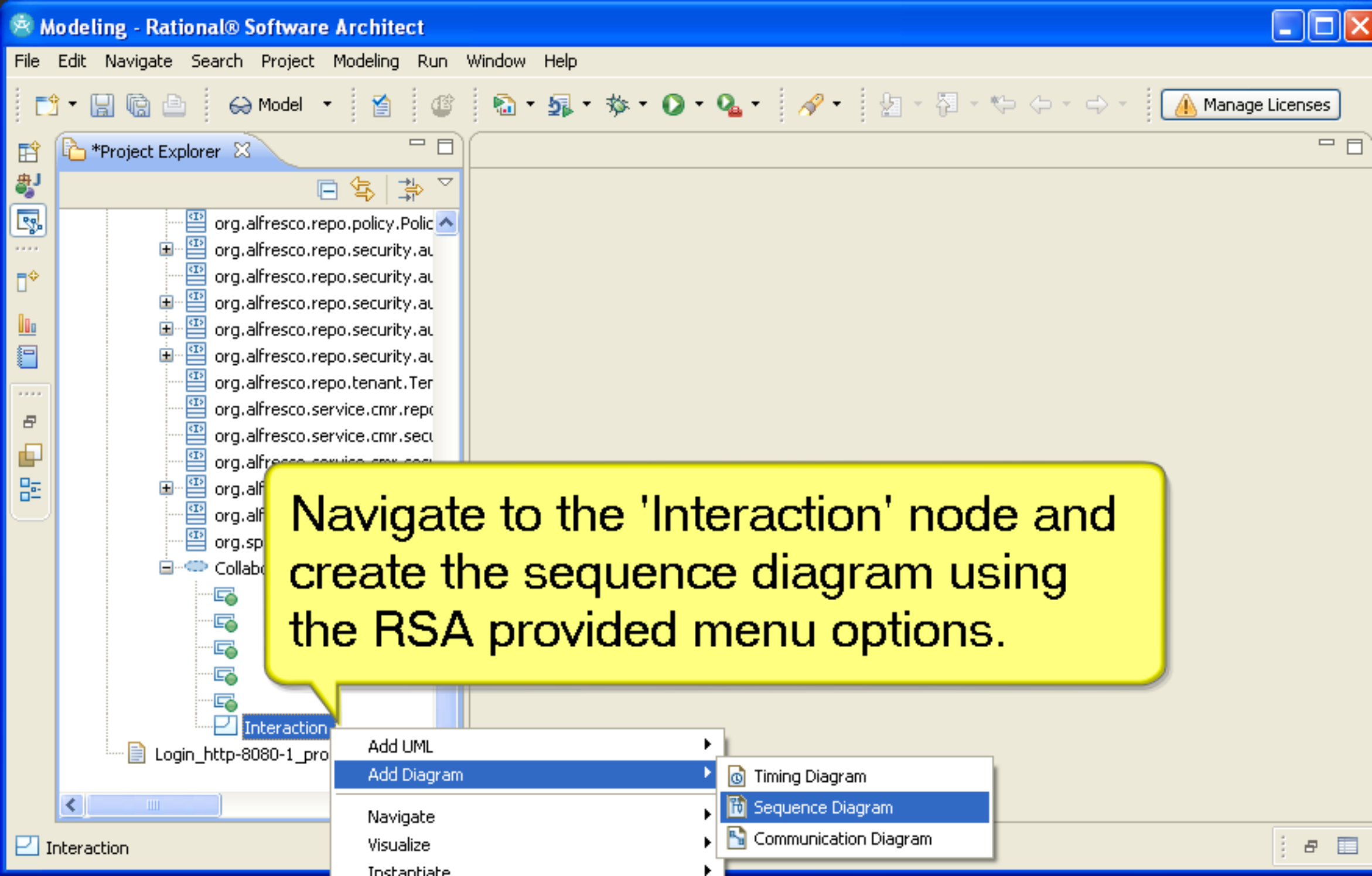


The class diagram with all class members and class hierarchy.

The screenshot shows the 'Project Explorer' window in Rational Software Architect. The project is named 'Login\_http-8080-1'. The structure is as follows:

- MaintainJModelFiles
  - Diagrams
  - Models
    - Login\_http-8080-1
      - Events
        - [C
        - boolean
        - java.lang.Object
        - java.lang.String
        - java.util.concurrent.locks.ReentrantReadWriteLock
        - java.util.Date
        - org.alfresco.repo.security.authentication.AuthenticationComponentIm
        - org.alfresco.repo.security.authentication.MD4PasswordEncoderImpl
        - org.alfresco.repo.security.authentication.MutableAuthenticationServic
        - org.alfresco.repo.security.authentication.RepositoryAuthenticationDa
        - org.alfresco.repo.security.authentication.subsystems.SubsystemChair
        - org.alfresco.service.cmr.repository.NodeRef
        - org.alfresco.service.cmr.repository.StoreRef
        - java.util.Collection
        - java.util.Map
        - net.sf.acegisecurity.Authentication
        - net.sf.acegisecurity.AuthenticationManager
        - net.sf.acegisecurity.providers.dao.AuthenticationDao

You can also open the sequence and class diagrams without installing any MaintainJ plugin in RSA. Open the 'Modeling Perspective' to view the UML2 model.



Navigate to the 'Interaction' node and create the sequence diagram using the RSA provided menu options.

Add UML

Add Diagram

Navigate

Visualize

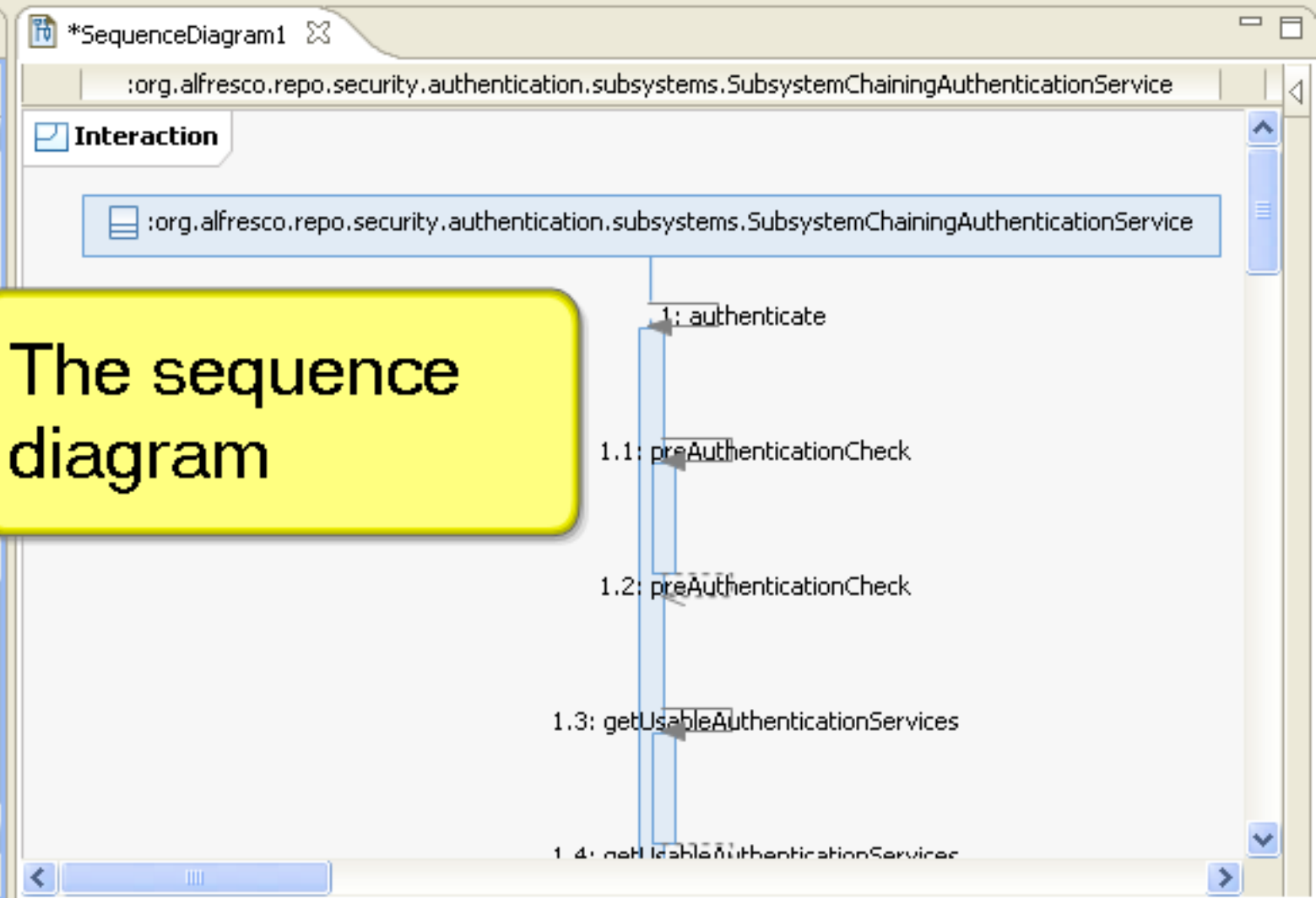
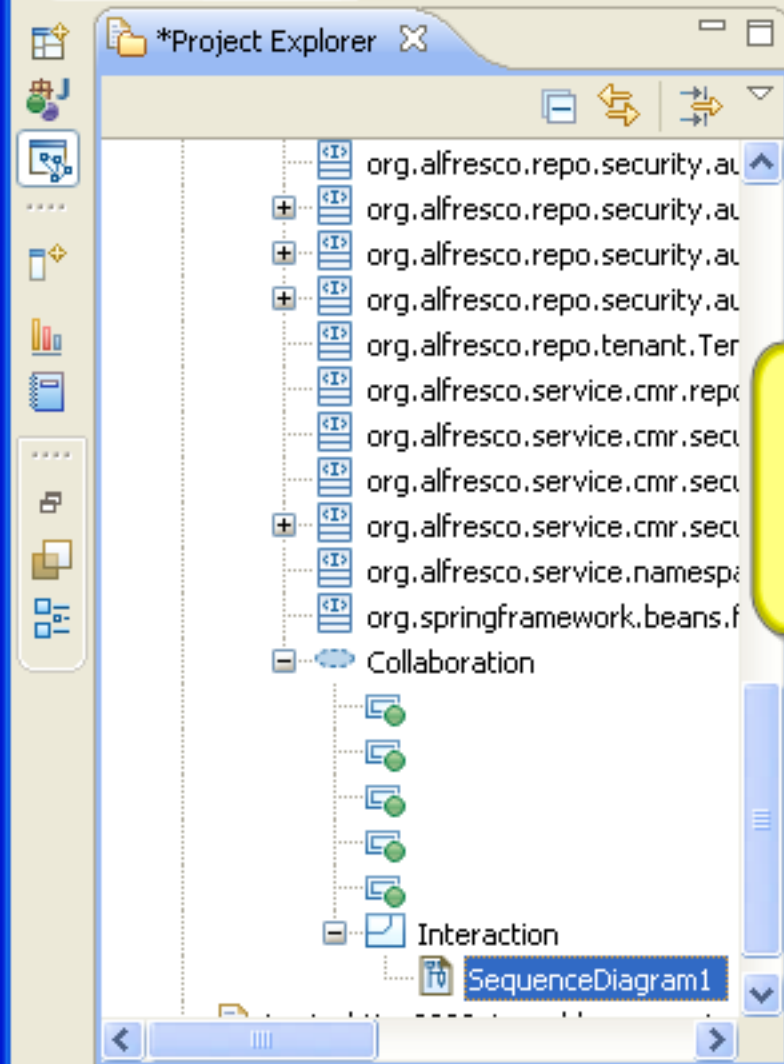
Instantiate

Timing Diagram

Sequence Diagram

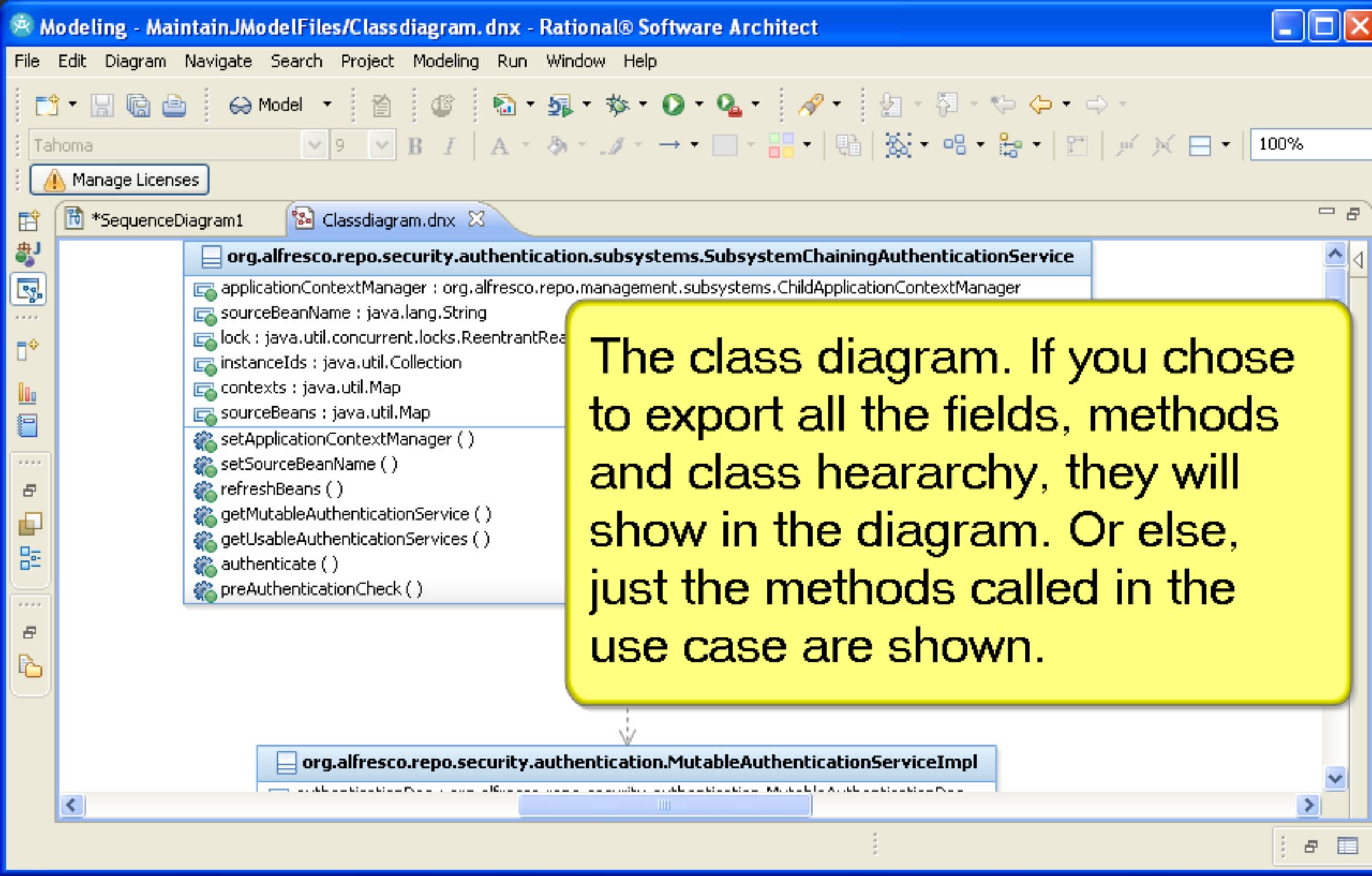
Communication Diagram

Interaction



The sequence diagram





The class diagram. If you chose to export all the fields, methods and class heararchy, they will show in the diagram. Or else, just the methods called in the use case are shown.