



Support for Scenario 1: COTS-Aware Requirements Engineering Tool 1.0

Requirements:

Draft Scenario for CAT: Iteration 1

This scenario exercises some basic functionality of the CAT including:

- Creating a new model
- Adding agent
- Deleting agent
- Adding goal
- Adding a relationship between an agent and a goal
- Deleting a relationship between an agent and a goal
- Searching for COTS components
- Relating (possibly matching) COTS component with a goal
- Saving the model
- Exit the tool

DevCoX-RE is a requirements engineer at Development Company X

(to be renamed something more creative later)

CustY-Lib is a librarian at Customer Company Y

(to be renamed something more creative later)

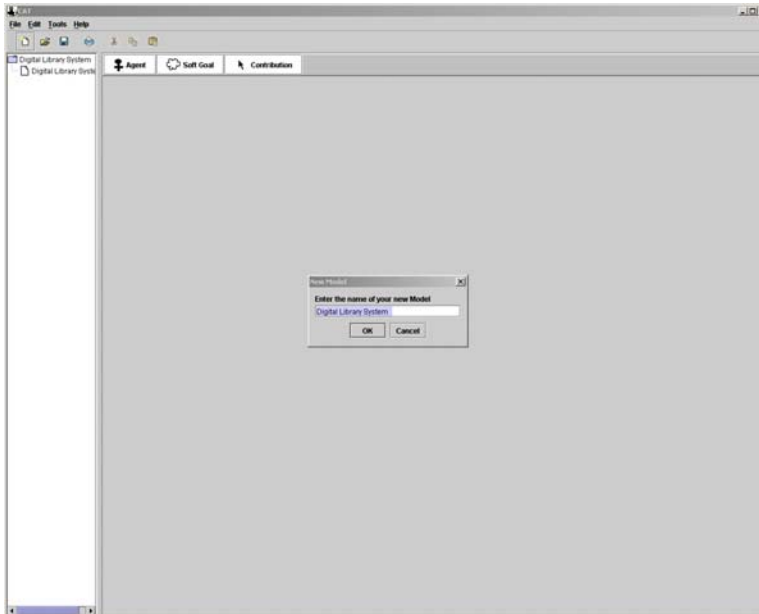
CAT is the CARE Assistant Tool

Requirements:

DevCoX-RE: launches the CAT and creates a new model called Digital Library System

Implementation:

Run the application and hit New (Button)





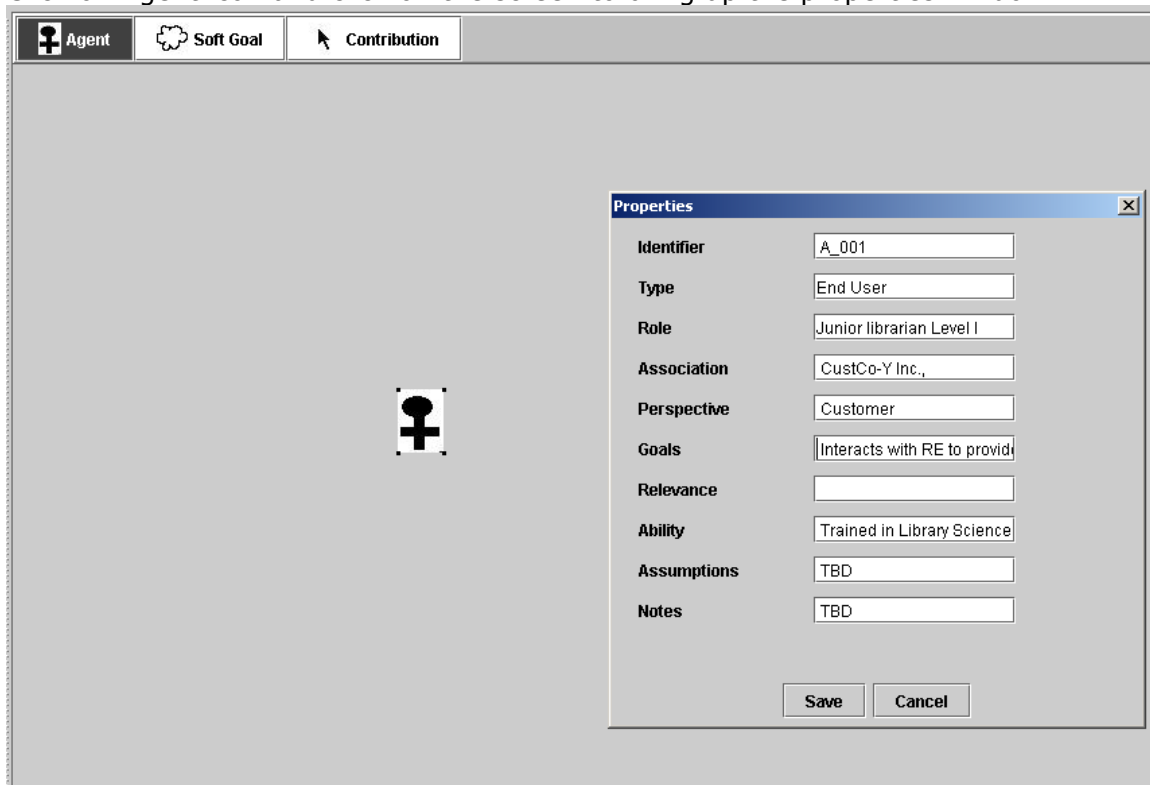
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Requirements:

DevCoX-RE: asks the CustY-Lib “who are the end users for the new Digital Library System?” The CustY-Lib provides the following information:

Implementation:

Click on Agent icon and click on the screen to bring up the properties window.



On save, the agent is created with the properties.

Create another end user agent.

Requirements:

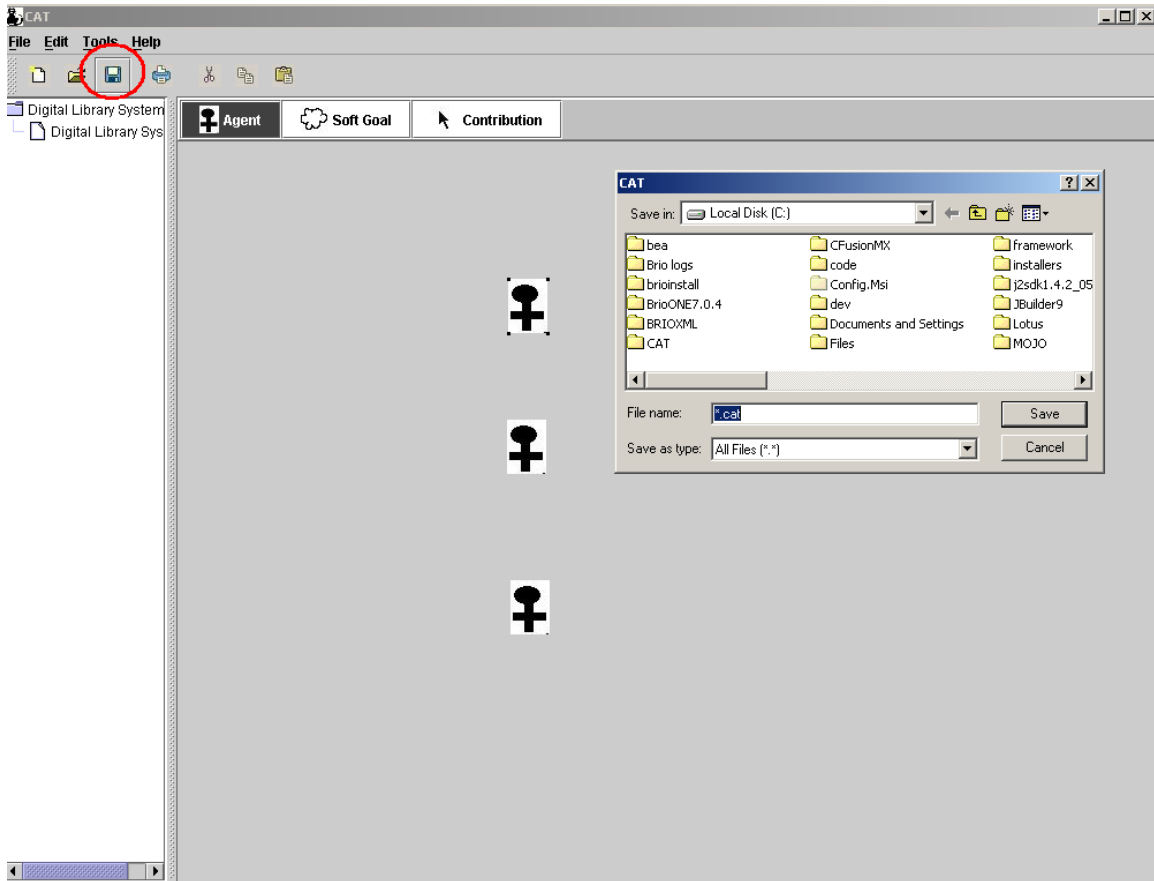
The DevCoX-RE adds the three agents using the CAT and saves the model.

Implementation:

Click on save to bring up the file dialog and type in the name and location of the file to save to. The extension of the file saved is *.cat



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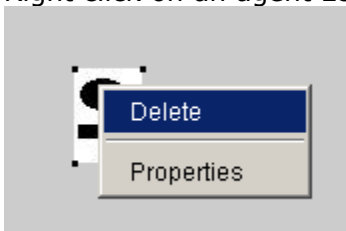


Requirements:

The CustY-Lib recalls a recent memorandum outlining the organizational change from three levels (Levels I, II, III) of librarians to two (Level I and II) and asks the DevCoX-RE to delete the third agent. The DevCoX-RE selects the option to delete the third agent from the CAT model. CAT prompts the DevCoX-RE with a message "Are you sure? This cannot be undone"; the DevCoX-RE confirms the deletion and the agent is permanently deleted from the CAT model

Implementation:

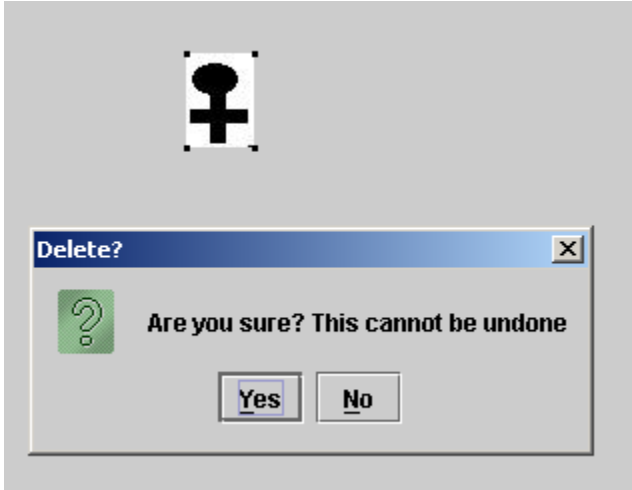
Right click on an agent Level iii and choose delete.





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In the warning window, choose yes to continue.



Requirements:

The DevCoX-RE asks CustY-Lib "what do the Level I librarians need to do with the system?". The CustY-Lib describes that the system needs to:

- a. Present audio/video catalog items that are stored in a variety of file formats
- b. Provide acquisition capabilities

The DevCoX-RE adds the two system goals using the CAT, relates the Level I Librarian to each of the goals, and saves the model.

// Note. This scenario does not distinguish between softgoals and hardgoals.

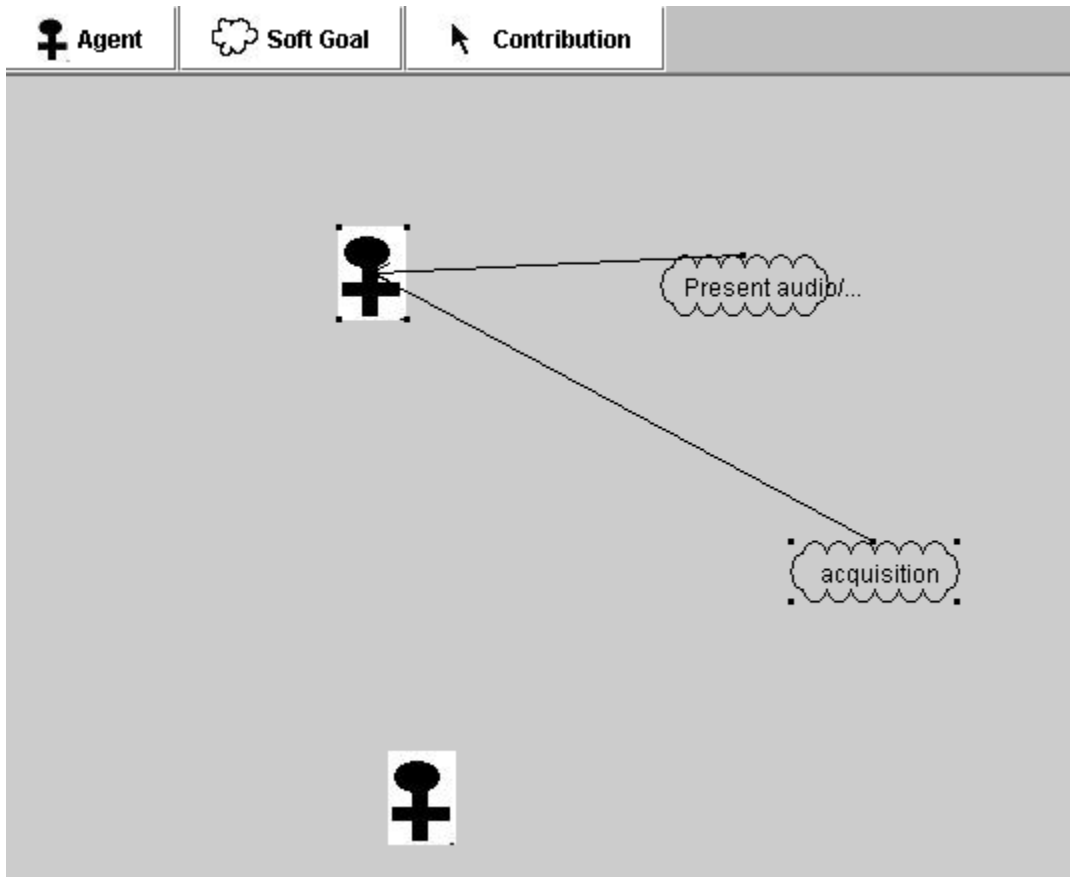
Implementation:

Click on Soft Goal and click on the palette to add the 2 goals.

Click on contribution to select it, Drag and connect Level 1 agent to the 2 goals to associate them.



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Requirements:

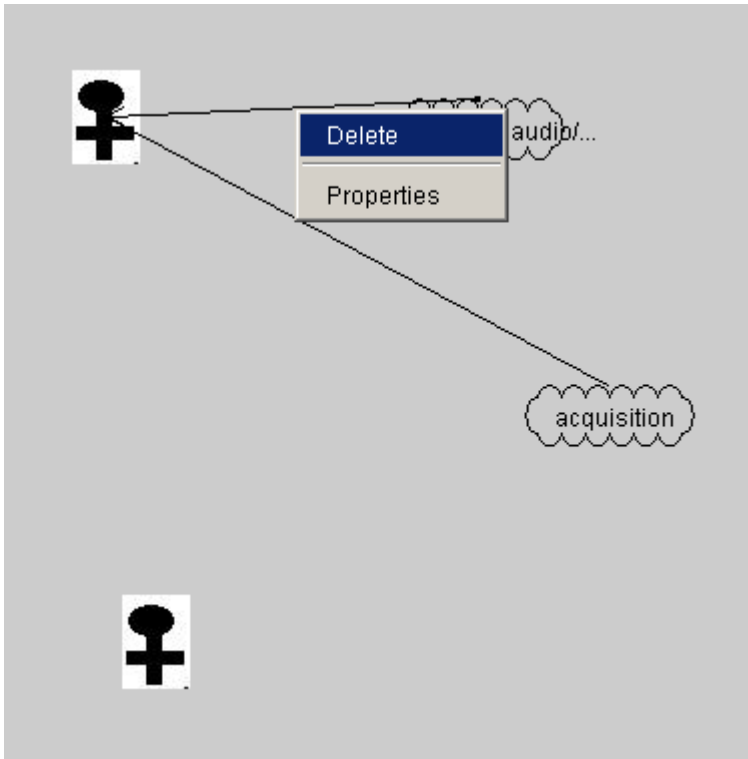
The CustY-Lib notices that there is a mistake, because Level I Librarians do not order new items. The DevCoX-RE deletes the relationship between the Level I librarian and the goal Provide Acquisition Capabilities

Implementation:

Right click on the contribution between the agent and the goal and choose delete from the pop-up menu.



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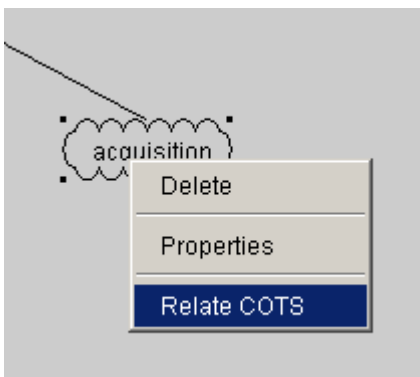


Requirements:

The DevCoX-RE searches the COTS component repository for components that may help to realize the goal to “Display catalog items stored in a variety of file formats”. The keywords used in the search are “file format”.

Implementation:

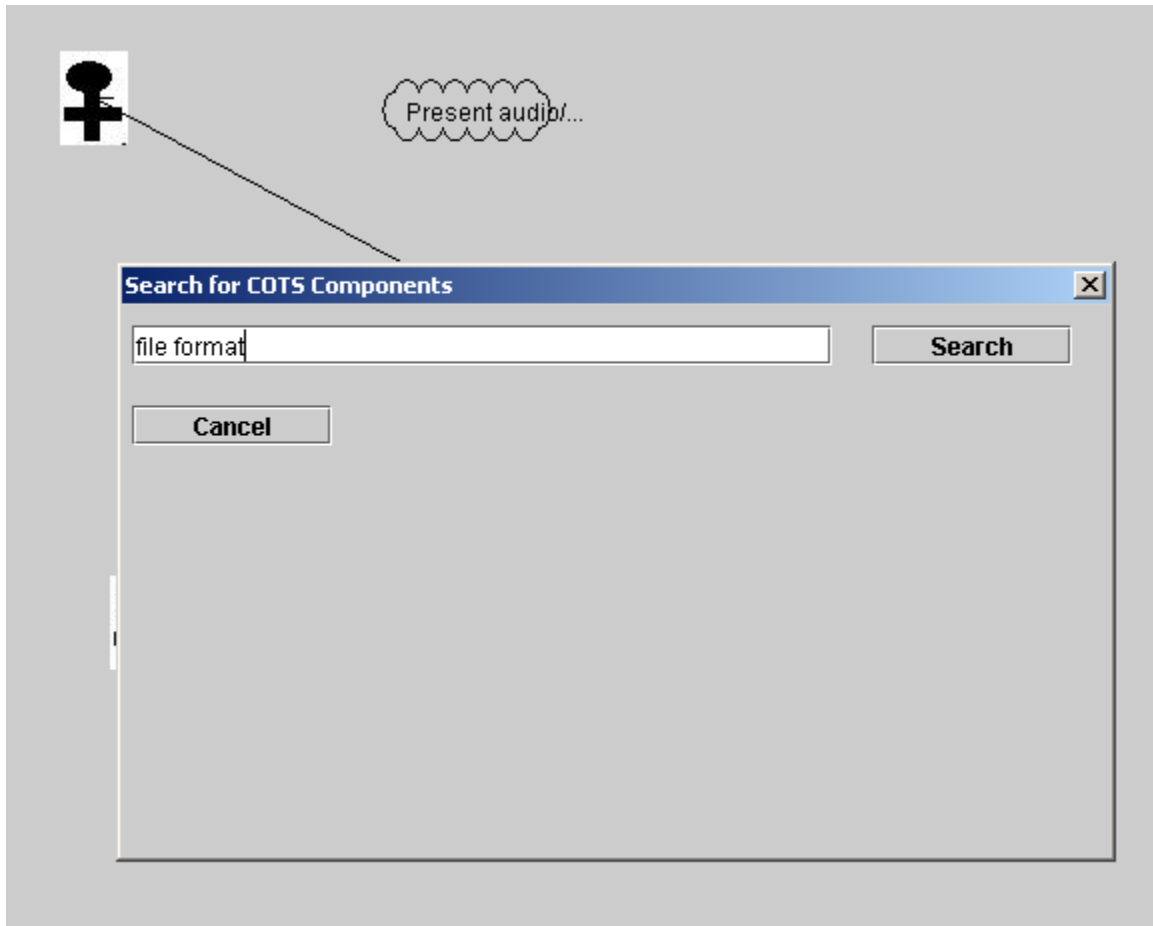
Select a goal and right click to choose *Relate to COTS* from the menu.





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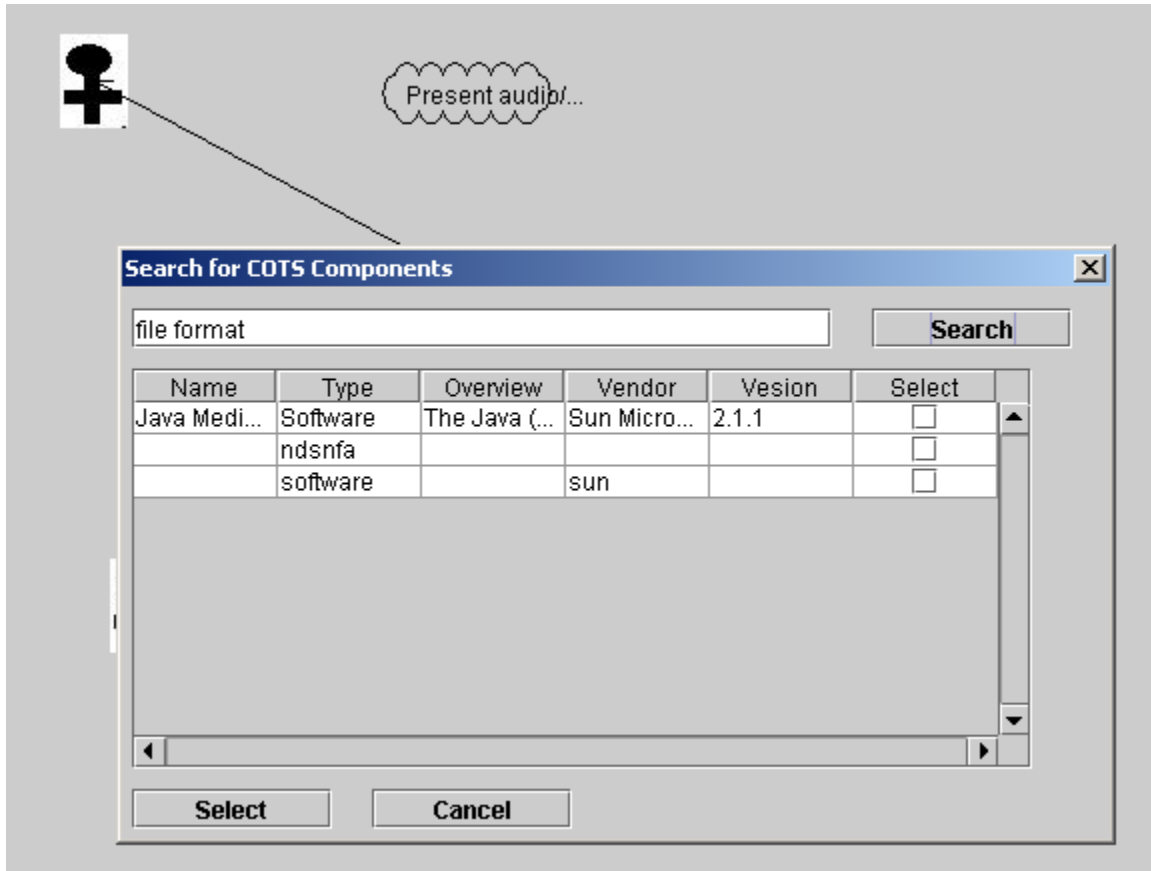
This brings up a modal window where the search keyword can be entered. In this case its 'file format'.



It comes with the search results from the database.



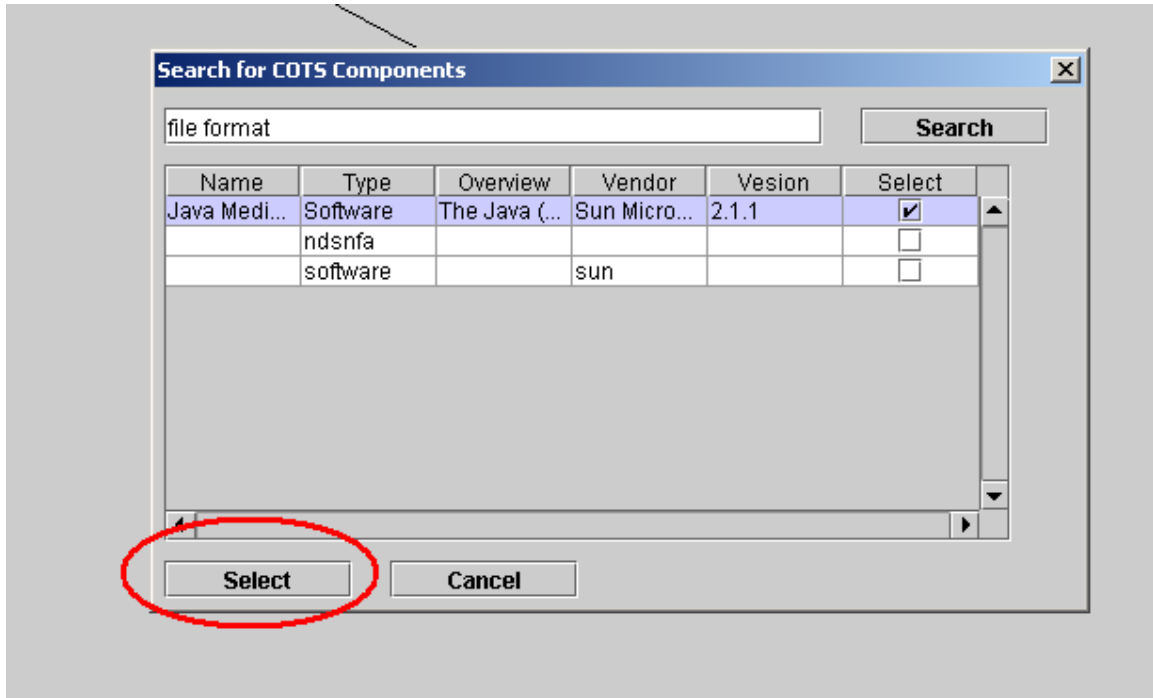
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Select the components to associate to and hit select.



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Requirements:

The DevCoX-RE believes both components may be possible matches and relates both of the components to the goal.

The DevCoX-RE saves the model and exits the program.

Implementation:

Save the diagram as shown before and close the application window. Open the application and click on open to load the saved .cat model.

