# **NVOS-48: Graph Node Visualization**

User Story Name NVOS-48 Graph Node Vizualization

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NVOS-48 - Node Graph Visualization DONE

## **Description**

As a user, I want to be able to visualize the environment ontology in an node graph format so that I can browse and learn more about the concepts in the ENVO ontology and incorporate them into my search queries.

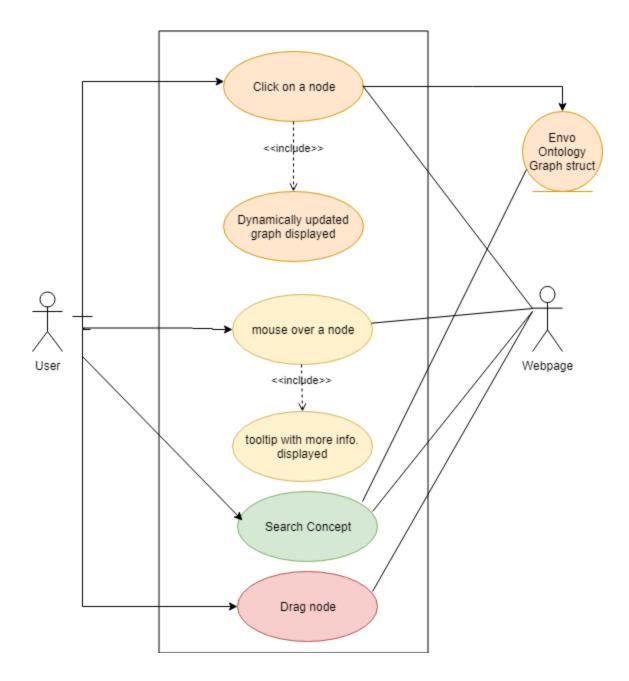
Acceptance Criteria:

- User can access Ontology page
- Ontology is displayed in a node graph format displaying nodes(concepts) and edges (relationships among them).
- Ontology can be browsed and expanded when clicking in a node.
- On mouse over a node, further information about the concept can be viewed in a tooltip.

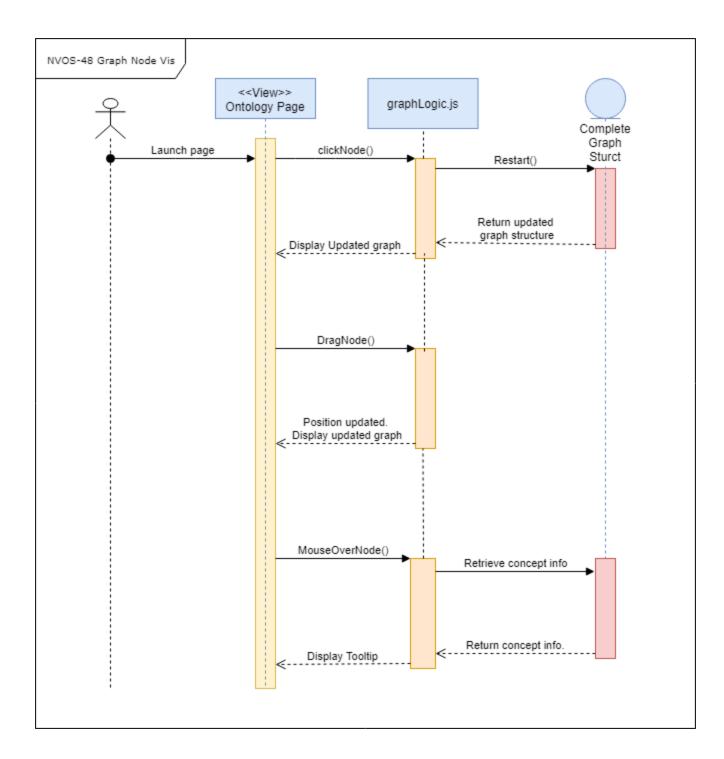
#### **Use Case**

- Name: NVOS-48
- Actor: @User
- Preconditions: Application must be accessible from a web browser
- Description <Flow of events>:
  - User access the web page from a browser.
  - User clicks on the Ontology toggle and select Node graph.
  - Node graph of the ENVO ontology is displayed.
  - User can click in a node to display concepts related to the node.
  - User moves mouse over a node to see more information related to it.
  - · User can drag nodes to rearrange them as desired.

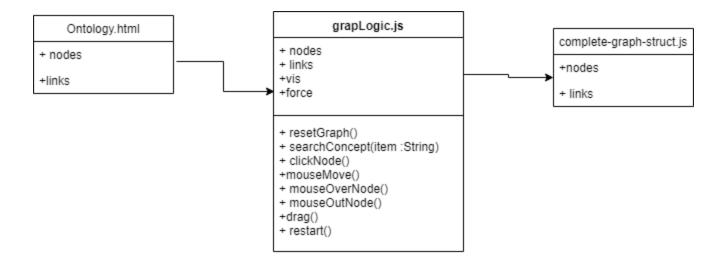
### **Use Case Diagram**



**Sequence Diagram** 



**Class Diagram** 



### **Unit Test**

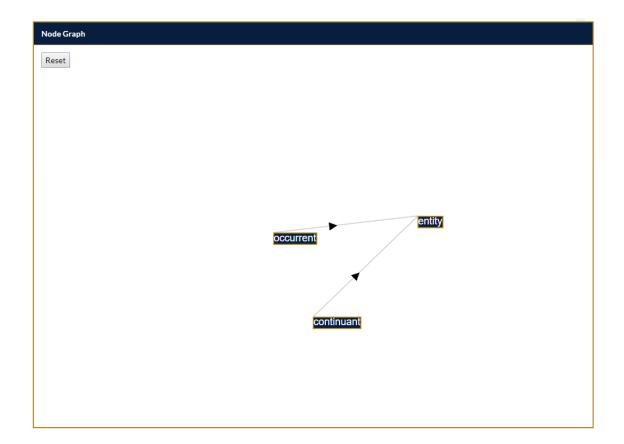
- Test case ID: NVOS-48-T01
- Description/Summary of Test:
  - User has browsed to the node graph view page.
  - · User clicked on a concept
  - node graph dynamically updated related concepts when clicking a node.
- Pre-condition: User is on another page and selects node graph from the navigation bar and then clicks a node.
- Expected Results: User should see the starting dynamic ontology graph and updated graph after clicking.
- Actual Result: User sees ontology graph and its updated when a node is clicked.
- Status (Fail/Pass): Pass

### **Integration Test**

- Test case ID: NVOS-48-T02
- · Description/Summary of Test: Validate that the node graph view can process and display the correct concepts.
- Pre-condition: Ontology is properly retrieved and parsed by the backend.
- Expected Results: The dynamic ontology hierarchy is displayed for any selected concept.
- Actual Result: The node graph page follows the expected result and the proper dynamic ontology graph is shown.
- Status (Fail/Pass): Pass.

#### **Visual User Guide**

Initial graph displayed.





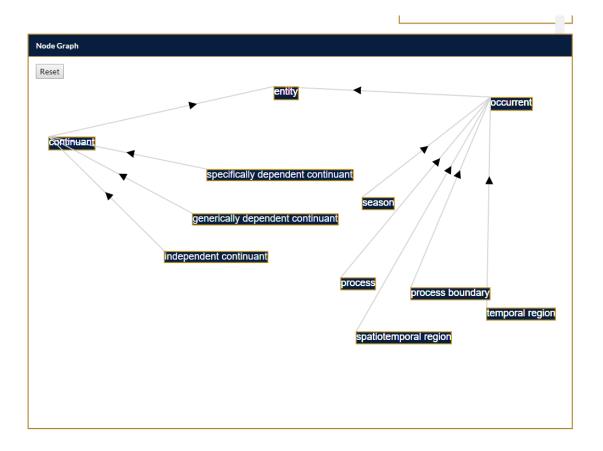
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Updated graph displayed after clicking some nodes to expand concepts.



Tooltip displaying when positioning mouse over a node with more information about the concept.

