

Innovator Data Model Graph View

V1 (April 2020)

Overview

- **Purpose:**
allows Administrators to graphically view the data model of an ItemType with all its Relationships, related Items Types and Item Property links.
- This solution is targeted for Aras Innovator Administrators only.
- 2 new Actions are introduced on Item Type „Item Type“.
- Each starts a different Graph View based on a different Query Definition
 - Graph View: „**Innovator Data Model Down**“ will resolve relationships to other Item Types recursively. And it will also resolve all item Property to their target Item Types.
 - Graph View: „**Innovator Data Model Surround**“ (360°) will resolve relationships to other Item Types one level down and one level up (where used). And it will also resolve all item Property to their target Item Types and item Properties pointing to this Item Type with their source Item Types.
- From the Graph View the displayed ItemTypes, Relationships, and Item Properties can be opened using right click action “Open Item”.
- If on an ItemType block, another right click action “Open Graph View” allows to start this GraphView again starting with the selected ItemType.

ItemTypes ▾ ☆

Search Clear Simple ▾

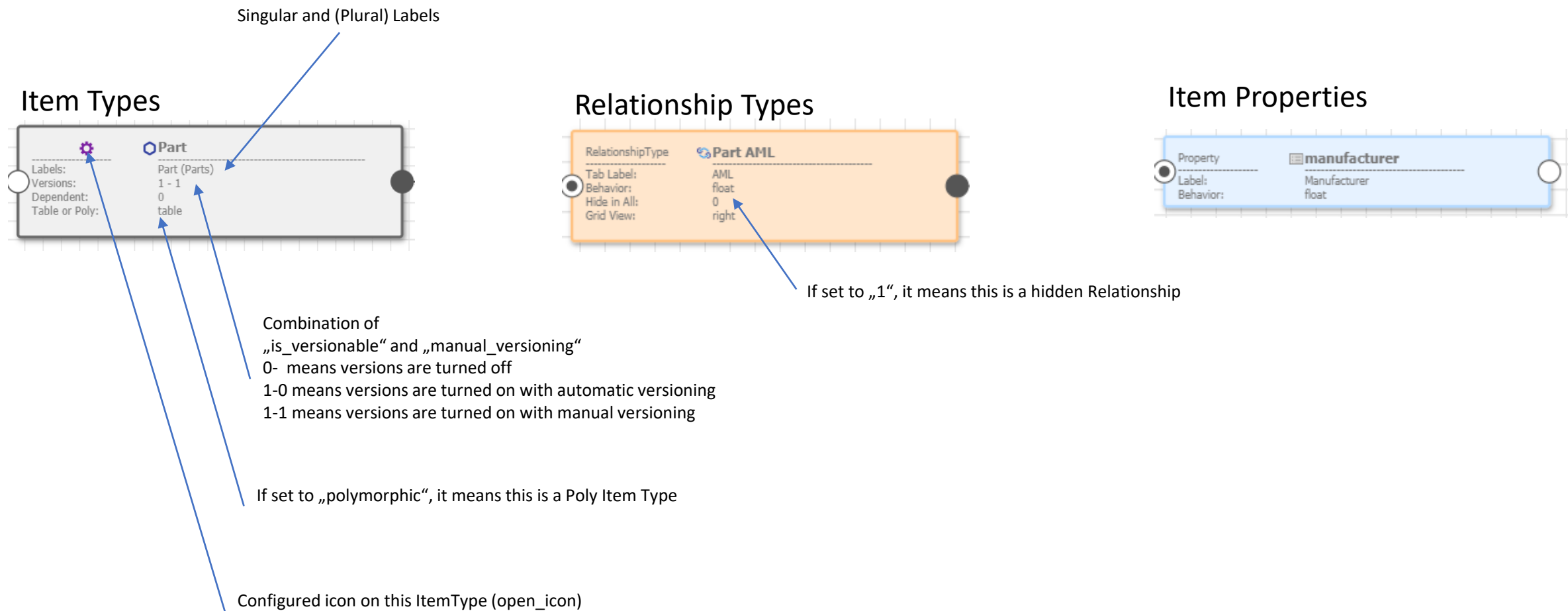
| Name ↑ | Singular Label | Plural Label | Ve |
|--------|----------------|--------------|----|
| part | | | |
| Part | Part | Parts | |

- Open
- Add to Favorites
- Claim
- Promote
- Properties
- Save As
- Delete All Versions
- Structure Browser
- Where Used
- Reset Item Access
- Reset Life Cycle State
- Set Default Life Cycle
- Add to Package Definition
- ItemType Definition Report
- ItemType Permissions Report
- ItemType History Configuration
- Show Related Item Types Data Model
- Show Surrounding Item Types Data Model

Graph View: „Innovator Data Model Down“ will resolve relationships to other Item Types recursively. And it will also resolve all item Property to their target Item Types.

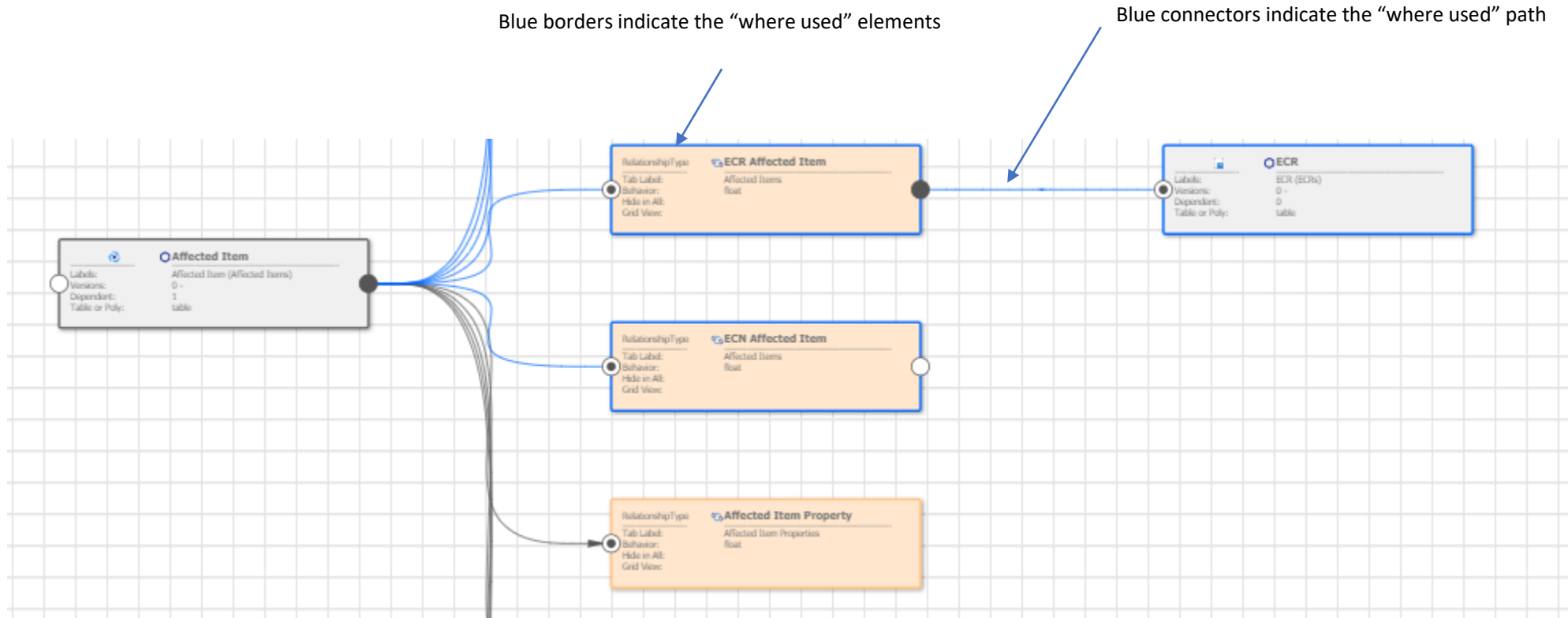
Graph View: „Innovator Data Model Surround“ will resolve relationships to other Item Types 1 level down and 1 level up (where used). And it will also resolve all item Property to their target Item Types and item Properties pointing to this Item Type with their source Item Types.

Graph View Cards

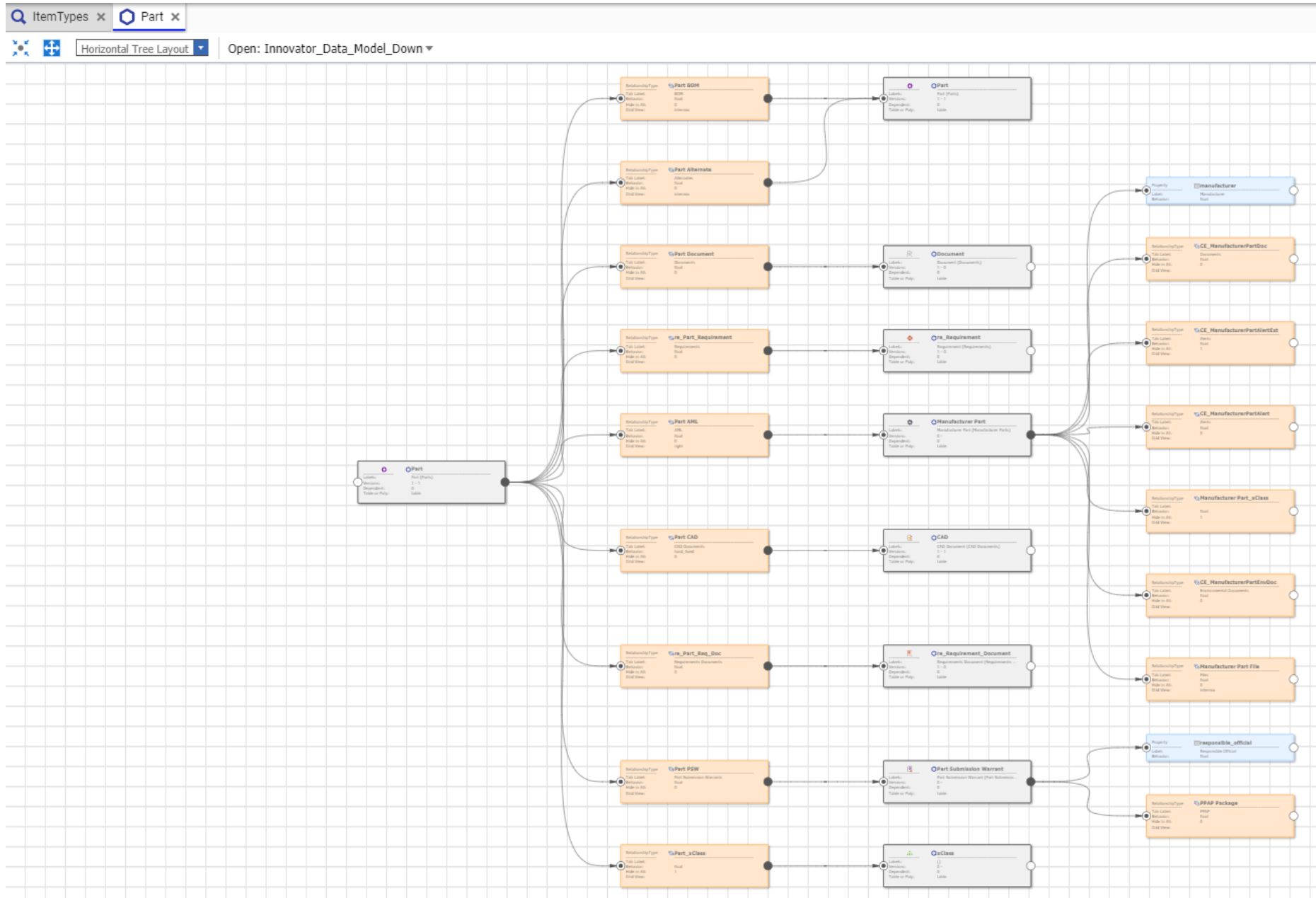


Where Used – Connectors and Colors

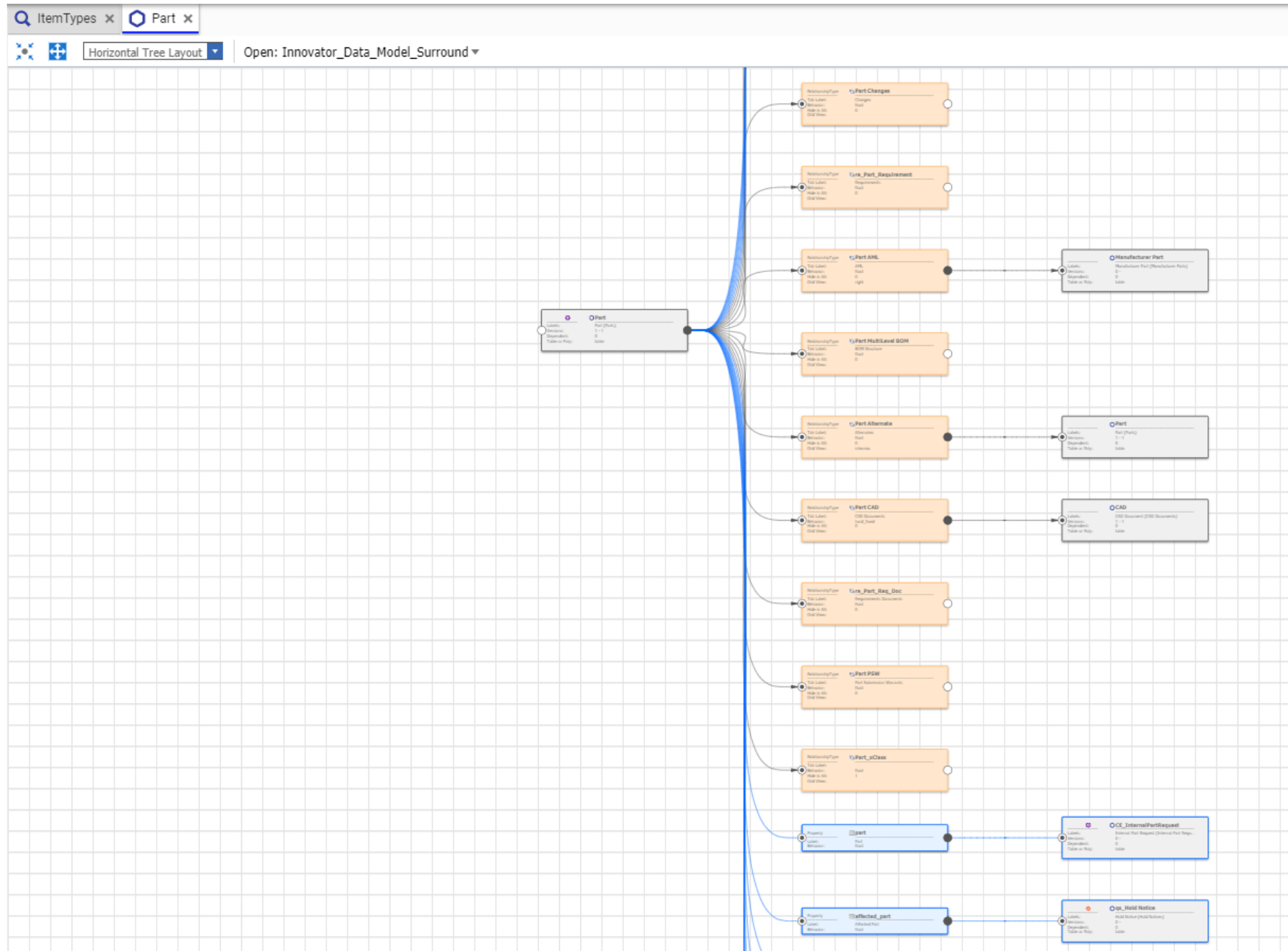
Graph View: „Innovator Data Model Surround“ applies color coding to mark the elements of “where used” (1 level up)



Sample of „Show Related Item Types Data Model”



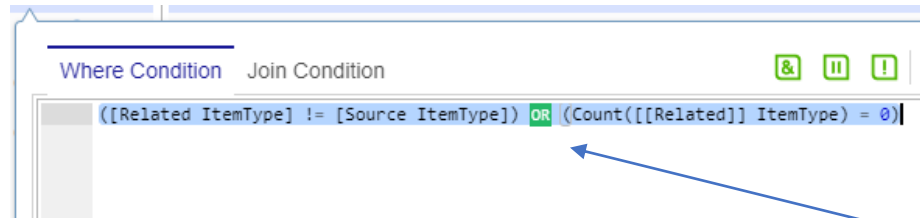
Sample of „Show Surrounding Item Types Data Model”



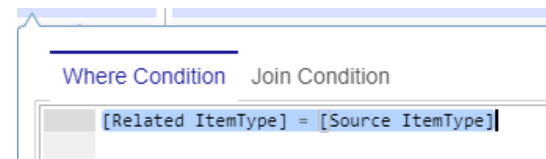
Innovator Data Model Graph View

Implementation Details

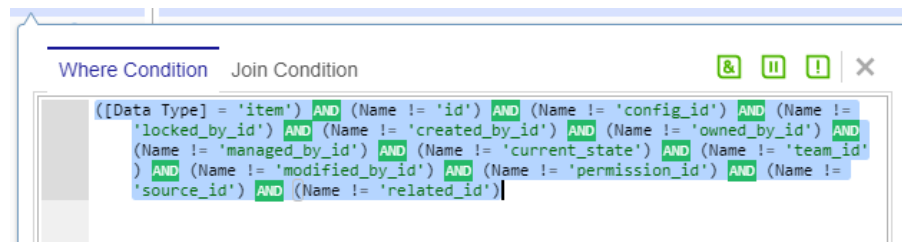
Query Definition



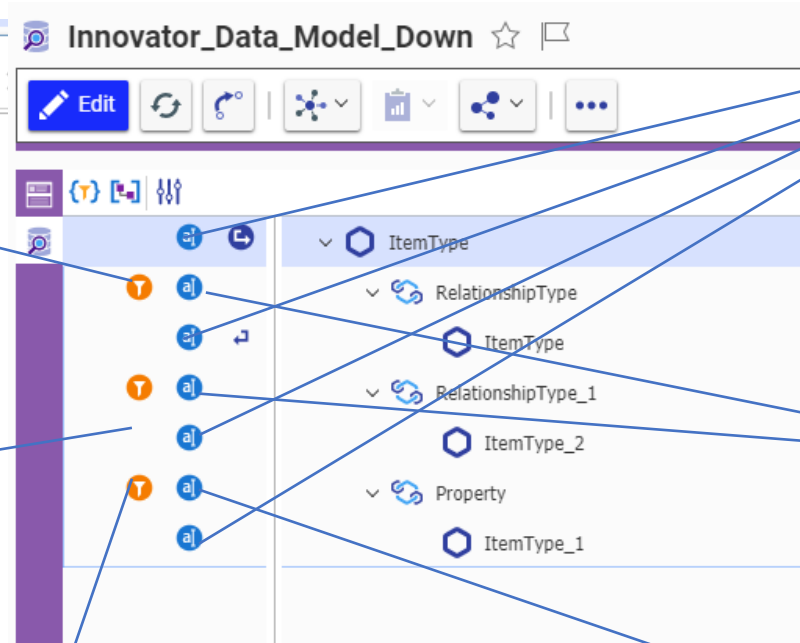
IMPORTANT:
If source and related item type are of same type (like "Part BOM" has it)
Recursive resolution will not work !!
Prevent this case with this condition to allow recursion of the data model
Or condition to include if related count = 0 ensures NULL relationships are in.



Same "Related" definition for the case when source and related item type are the same. With this configuration these are included, but will not allow recursion of the model from here on.



Filter system item properties every item type has but are not relevant to show



| Properties | |
|---------------------|--|
| Name | |
| Plural Label | |
| Implementation Type | |
| Manual Versioning | |
| Dependent | |
| Small Icon | |
| Versionable | |
| Singular Label | |

| Properties | |
|-------------------|--|
| Relationship Name | |
| Behavior | |
| Tab Label | |
| Hide In All | |
| Create Related | |
| Grid View | |

| Properties | |
|------------|--|
| Name | |
| Label | |
| Behavior | |

Query Definition

Use the same Property Definitions as used in other Query !

```
Where Condition  Join Condition  &  II  !  X
```

```
[[Data Type] = 'item' AND (Name != 'id' AND (Name != 'config_id' AND (Name !=  
'locked_by_id' AND (Name != 'created_by_id' AND (Name != 'owned_by_id' AND  
(Name != 'managed_by_id' AND (Name != 'current_state' AND (Name != 'team_id'  
) AND (Name != 'modified_by_id' AND (Name != 'permission_id' AND (Name !=  
'source_id' AND (Name != 'related_id'))
```

Filter system item properties every item type has but are not relevant to show

Innovator_Data_Model_Surround ☆

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- ItemType
 - RelationshipType
 - ItemType_1
 - Property
 - ItemType_3
 - RelationshipType related_id
 - ItemType_2
 - Property data_source
 - ItemType_4