Knowledge

July 22, 2019

Chapter 1

Module Documentation

1.1 Entities

1.1.0.1 ogit/Comment

Defines comments for a ticket, issue or another type of entity. Also known as WorkLog, ChangeLog or HistoryEntry.

- id: http://www.purl.org/ogit/Comment
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem
- scope: SGO
- parent: ogit/Node

attributes

- optional:
    - ogit/content
    - ogit/creator
    - ogit/id

incoming edges

- ogit/contains <= ogit/Knowledge/AcquisitionRoom
- ogit/contains <= ogit/Knowledge/AcquisitionSession

1.1.0.2 ogit/Forum/WorkflowStep

A Workflow Step defines part of a workflow

- id: http://www.purl.org/ogit/Forum/WorkflowStep
- valid-from: Mon Sep 18 00:00:00 UTC 2017
- creator: cwalker@arago.de
- scope: NTO
- parent: ogit/Node

attributes

- mandatory:
    - ogit/title

outgoing edges

- ogit/connects => ogit/Knowledge/AcquisitionSession

1.1.0.3 ogit/Knowledge/AcquisitionSession

Entity to describe a Knowledge Acquisition Session, linking to Conversation, Structured Task Steps and the Knowledge

- id: http://www.purl.org/ogit/Knowledge/AcquisitionSession
- valid-from: Tue Mar 14 00:00:00 UTC 2017
- creator: cwalker@arago.de
- scope: NTO
- parent: ogit/Node

incoming edges

- ogit/connects <= ogit/Forum/WorkflowStep
- ogit/relates <= ogit/Automation/AutomationIssue

outgoing edges

- ogit/contains => ogit/Comment
- ogit/contains => ogit/Knowledge/AcquisitionRoom
- ogit/defines => ogit/Automation/KnowledgeItem
- ogit/defines => ogit/Knowledge/Step

1.1.0.4 ogit/Automation/AutomationIssue

Dynamic information exists within an automation engine in the form of Issues otherwise referred to as Task or Situational Data. From the technical perspective an Issue is a number of attributes (Key/Value tuples) with unique names. From the logical point of view Issues contain information about the change of states on a system. Issues can be injected into an automation engine from external systems e.g. Monitoring or result from the execution of a Knowledge Item. By comparing an Issue with the Issue Condition of a Knowledge Item an automation engine decides which Knowledge Items are are processed in which order. If multiple Knowledge Items can be applied to an Issue the KI with the more precisely defined IssueCondition is processed first.

- id: http://www.purl.org/ogit/Automation/AutomationIssue

- valid-from: Thu May 21 00:00:00 UTC 2015

- creator: Peter Larem

- scope: NTO

- parent: ogit/Node

attributes

- optional:

    - ogit/Automation/deployStatus
    - ogit/Automation/isDeployed
    - ogit/Automation/issueFormalRepresentation
    - ogit/Automation/issueType
    - ogit/Automation/maxIdleTime
    - ogit/Automation/originNode
    - ogit/Automation/parentIssue
    - ogit/Automation/processingNode
    - ogit/Automation/processingTimestamp
    - ogit/Automation/suspendUntil
    - ogit/Automation/webhook
    - ogit/creationTime
    - ogit/modificationTime
    - ogit/status
    - ogit/subject

outgoing edges

- ogit/relates => ogit/Knowledge/AcquisitionSession

1.1.0.5 ogit/Automation/KnowledgeItem

Formalized Knowledge stored in XML format. Serves as the building block for automation solutions.

A KnowledgeItem is a knowledge module, which is applied for execution of an issue. A KnowledgeItem checks therefor the information and decides if it will be executed. In that case, the KnowledgeItem executes operations, which serves the exploitation of information.

- id: http://www.purl.org/ogit/Automation/KnowledgeItem
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem
- scope: NTO
- parent: ogit/Node

attributes

- mandatory:
    - ogit/Automation/knowledgeItemFormalRepresentation
- optional:
    - ogit/Automation/deployStatus
    - ogit/Automation/deployToEngine
    - ogit/Automation/isDeployed
    - ogit/Automation/knowledgeItemSyntaxVersion
    - ogit/Automation/knowledgeItemTier
    - ogit/accessControl
    - ogit/changeLog
    - ogit/creationTime
    - ogit/description
    - ogit/isValid
    - ogit/modificationTime
    - ogit/name

incoming edges

- ogit/defines <= ogit/Knowledge/AcquisitionSession

1.1.0.6 ogit/Knowledge/AcquisitionRoom

Entity to describe a part of Knowledge Acquisition Session, linking to Conversation

- id: http://www.purl.org/ogit/Knowledge/AcquisitionRoom
- valid-from: Thu Jan 03 00:00:00 UTC 2019
- creator: arabtsau@klika-tech.com
- scope: NTO
- parent: ogit/Node

incoming edges

- ogit/contains <= ogit/Knowledge/AcquisitionSession

outgoing edges

- ogit/contains => ogit/Comment

1.1.0.7 ogit/Knowledge/Step

this is the description of a single - hopefully atomic - step in (potentially multi-step) process

- id: `http://www.purl.org/ogit/Knowledge/Step`
- valid-from: Tue Mar 14 00:00:00 UTC 2017
- creator: `cwalker@arago.de`
- scope: NTO
- parent: ogit/Node

incoming edges

- ogit/defines <= ogit/Knowledge/AcquisitionSession

1.2 Verbs

1.2.0.1 ogit/contains

This relationship indicates that something is part of something else. see also "includes"

- id: http://www.purl.org/ogit/contains
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

Allowed Connection

- ogit/Knowledge/AcquisitionRoom => ogit/Comment
- ogit/Knowledge/AcquisitionSession => ogit/Comment
- ogit/Knowledge/AcquisitionSession => ogit/Knowledge/AcquisitionRoom

1.2.0.2 ogit/defines

General relationship indicating that some entitiy defines some other.

- id: http://www.purl.org/ogit/defines
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

Allowed Connection

- ogit/Knowledge/AcquisitionSession => ogit/Automation/KnowledgeItem
- ogit/Knowledge/AcquisitionSession => ogit/Knowledge/Step

1.2.0.3 ogit/connects

Verb showing that an entity is physically/virtually connecting to another entity.

- id: http://www.purl.org/ogit/connects
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

Allowed Connection

- ogit/Forum/WorkflowStep => ogit/Knowledge/AcquisitionSession

1.2.0.4 ogit/relates

General relationship indicating that one entity is related to another one.

- id: http://www.purl.org/ogit/relates
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

Allowed Connection

- ogit/Automation/AutomationIssue => ogit/Knowledge/AcquisitionSession

1.3 Attributes

1.3.0.1 ogit/_modified-by

[internally generated] The id of the identity who did the modification

- id: http://www.purl.org/ogit/_modified-by

- valid-from: Thu May 21 00:00:00 UTC 2015

- creator: Peter Larem

1.3.0.2 ogit/Automation/deployToEngine

Obsolete attribute. Not used for HIRO >=6. Boolean value, true if an automation Knowledge Item can deploy into an Automation Engine.

- id: http://www.purl.org/ogit/Automation/deployToEngine

- valid-from: Thu May 21 00:00:00 UTC 2015

- creator: Peter Larem

used

- optional:

    – ogit/Automation/KnowledgeItem

1.3.0.3 ogit/isValid

Boolean value, true if the object is valid.

- id: http://www.purl.org/ogit/isValid

- valid-from: Thu May 21 00:00:00 UTC 2015

- creator: Peter Larem

used

- optional:

    – ogit/Automation/KnowledgeItem

1.3.0.4 ogit/Automation/suspendUntil

Contains the timestamp until which entity should not be processed by HIRO.

- id: http://www.purl.org/ogit/Automation/suspendUntil
- valid-from: Sat Jun 01 00:00:00 UTC 2019
- creator: cy@arago.co

used

- optional:
    - ogit/Automation/AutomationIssue

1.3.0.5 ogit/_creator

[internally generated] The id of the identity who created the node or edge

- id: http://www.purl.org/ogit/_creator
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

1.3.0.6 ogit/changeLog

String value describing a changelog of an entity.

- id: http://www.purl.org/ogit/changeLog
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- optional:
    - ogit/Automation/KnowledgeItem

1.3.0.7 ogit/Automation/knowledgeItemTier

Numeric value describing KnowledgeItem Tier.

- id: http://www.purl.org/ogit/Automation/knowledgeItemTier
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- optional:
    - ogit/Automation/KnowledgeItem

1.3.0.8 ogit/Automation/knowledgeItemFormalRepresentation

Contains an automation Knowledge Item (KI) in XML representation defined by KiSchema.

- id: http://www.purl.org/ogit/Automation/knowledgeItemFormalRepresentation
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- mandatory:
    - ogit/Automation/KnowledgeItem

1.3.0.9 ogit/status

A status for an entity. At this level of specification no list of values is specified. However, applications using this attribute are expected to allow only a fixed list of values that seems usefual in the application's semantic context.

- id: http://www.purl.org/ogit/status
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- optional:
    - ogit/Automation/AutomationIssue

1.3.0.10 ogit/modificationTime

Modification time.

- id: http://www.purl.org/ogit/modificationTime
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- optional:
    - ogit/Automation/AutomationIssue
    - ogit/Automation/KnowledgeItem

1.3.0.11   ogit/Automation/knowledgeItemSyntaxVersion

Contains an automation Knowledge Item (KI) syntax version.

- id: http://www.purl.org/ogit/Automation/knowledgeItemSyntaxVersion

- valid-from: Tue Oct 31 00:00:00 UTC 2017

- creator: druss@arago.de

used

- optional:

    – ogit/Automation/KnowledgeItem

1.3.0.12   ogit/Automation/maxIdleTime

Sets the maximum idle time of an AutomationIssue. HIRO Engine internally manages the idle time for each AutomationIssue. Whenever a KnowledgeItem gets applied it is reset to zero. If maximum idle time is reached the AutomationIssue is regarded as 'cannot be processed anymore until more knowledge is provided'

- id: http://www.purl.org/ogit/Automation/maxIdleTime

- valid-from: Mon Jul 22 00:00:00 UTC 2019

- creator: fotto@arago.de

used

- optional:

    – ogit/Automation/AutomationIssue

1.3.0.13   ogit/accessControl

The access control level of this Node. Value could mean different things to different applications / policies. Initial intent is that policies would treat "public-read" (inspired by Amazon AWS S3 ACLs) to mean anyone would have read-only access to this node.

- id: http://www.purl.org/ogit/accessControl

- valid-from: Thu Mar 26 00:00:00 UTC 2015

- creator: Chris Walker

used

- optional:

    – ogit/Automation/KnowledgeItem

1.3.0.14 ogit/_owner

[internally generated] The id of the identity who owns the node

- id: http://www.purl.org/ogit/_owner
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

1.3.0.15 ogit/title

Title of any kind. In the context of a Person this can be a courtesy title, an academic title, or a job tilte.

- id: http://www.purl.org/ogit/title
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- mandatory:
    - ogit/Forum/WorkflowStep

1.3.0.16 ogit/content

A string holding any type of content: plain string, XML fragments, RDF documents, ...

- id: http://www.purl.org/ogit/content
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- optional:
    - ogit/Comment

1.3.0.17 ogit/Automation/deployStatus

String value, represents the status if an automation Knowledge Item is not deployed into an Automation Engine.

- id: http://www.purl.org/ogit/Automation/deployStatus
- valid-from: Mon Jan 25 00:00:00 UTC 2016
- creator: Peter Larem

used

- optional:
    - ogit/Automation/AutomationIssue
    - ogit/Automation/KnowledgeItem

1.3.0.18 ogit/Automation/isDeployed

Obsolete attribute. Not used for HIRO >=6. Boolean value, true if an automation Knowledge Item is deployed into an Automation Engine.

- id: http://www.purl.org/ogit/Automation/isDeployed
- valid-from: Mon Jan 25 00:00:00 UTC 2016
- creator: Peter Larem

used

- optional:
    - ogit/Automation/AutomationIssue
    - ogit/Automation/KnowledgeItem

1.3.0.19 ogit/Automation/processingNode

Defines where an AutomationIssue is currently being processed or was being processed last. Must contain a valid vertex id. Replaces the free attribute '/CurrentNodeID'

- id: http://www.purl.org/ogit/Automation/processingNode
- valid-from: Fri Jun 01 00:00:00 UTC 2018
- creator: fotto@arago.de

used

- optional:
    - ogit/Automation/AutomationIssue

1.3.0.20 ogit/Automation/issueFormalRepresentation

Obsolete attribute. Not used for HIRO >=6. Contains an issue in XML representation defined by IssueSchema.

- id: http://www.purl.org/ogit/Automation/issueFormalRepresentation
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- optional:
    - ogit/Automation/AutomationIssue

1.3.0.21 ogit/name

Contains a name.

- id: http://www.purl.org/ogit/name
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- optional:
    - ogit/Automation/KnowledgeItem

1.3.0.22 ogit/Automation/originNode

Defines where an AutomationIssue starts/started its lifecycle. Must contain a valid vertex id. Replaces the free attribute '/NodeID'

- id: http://www.purl.org/ogit/Automation/originNode
- valid-from: Fri Jun 01 00:00:00 UTC 2018
- creator: fotto@arago.de

used

- optional:
    - ogit/Automation/AutomationIssue

1.3.0.23 ogit/description

Contains a description.

- id: http://www.purl.org/ogit/description
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- optional:
    - ogit/Automation/KnowledgeItem

1.3.0.24 ogit/Automation/issueType

Contains the type of the issue.

- id: http://www.purl.org/ogit/Automation/issueType
- valid-from: Thu Nov 01 00:00:00 UTC 2018
- creator: cy@arago.de

used

- optional:
    - ogit/Automation/AutomationIssue

1.3.0.25 ogit/Automation/processingTimestamp

Contains the timestamp indicating last time an aumation issue was processed.

- id: http://www.purl.org/ogit/Automation/processingTimestamp
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- optional:
    - ogit/Automation/AutomationIssue

1.3.0.26 ogit/creator

Creator of an entity.

- id: http://www.purl.org/ogit/creator
- valid-from: Thu Aug 20 00:00:00 UTC 2015
- creator: Aymen Ayoub

used

- optional:
    - ogit/Comment

1.3.0.27 ogit/id

General id.

- id: http://www.purl.org/ogit/id
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- optional:
    - ogit/Comment

1.3.0.28 ogit/creationTime

Creation time of an entity.

- id: http://www.purl.org/ogit/creationTime
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- optional:
    - ogit/Automation/AutomationIssue
    - ogit/Automation/KnowledgeItem

1.3.0.29 ogit/subject

Contains the subject.

- id: http://www.purl.org/ogit/subject
- valid-from: Thu May 21 00:00:00 UTC 2015
- creator: Peter Larem

used

- optional:
    - ogit/Automation/AutomationIssue

1.3.0.30   ogit/Automation/parentIssue

Contains the ID of the issue which created this issue.

- id: http://www.purl.org/ogit/Automation/parentIssue

- valid-from: Sat Jun 01 00:00:00 UTC 2019

- creator: cy@arago.co

used

- optional:

    – ogit/Automation/AutomationIssue

1.3.0.31   ogit/Automation/webhook

a http callback (https://en.wikipedia.org/wiki/Webhook)

- id: http://www.purl.org/ogit/Automation/webhook

- valid-from: Sat Jun 01 00:00:00 UTC 2019

- creator: arago GmbH

used

- optional:

    – ogit/Automation/AutomationIssue