ReqIF OSLC Tracker Specification

Project RM Product Definitions_Private (RM)

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Configuration RM Product Definitions_Private (RM)

Configuration Type Local Configuration

Component RM Product Definitions_Private (RM)

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1 Scope

This document is a brief description of the salient features of the DNG ReqIF OSLC task tracker representation.

2 Version History

Version	Date	Description	Author
1.0	01st June 2021	Initial submission	David Murray

3 Tracker state representations

There are 4 valid states (with variations within some states) for the DNG ReqIF task tracker, shown in the table below :

	References	Title	Percentage	State	Verdicts
Initalized		"INITIALIZED"	0	oslc:queued	oslc:unavailable
Running		"RUNNING REQIF OPERATION"	task progress	oslc:inprogress	oslc:unavailable
Complete (passed)	package descriptor uri	"COMPLETED REQIF OPERATION"	100	oslc:complete	oslc:passed
Complete (error)		"COMPLETED REQIF OPERATION"	100	oslc:complete	oslc:error
Queued		"RETRYING:<count>,<limit>"	0	oslc:queued	oslc:unavailable
Cancelled		"RETRY LIMIT REACHED"	0	oslc:cancelled	oslc:unavailable

Note that the **Initialized** and the **Queued** states can be distinguished by examining the title property.

4 Tracker state transitions

There are 3 basic state flows :

1. Initialized -> Running -> Complete
2. Initialized -> Queued (Retry) -> Running -> Complete
3. Initialized -> Queued (Retry) -> Cancelled (Retry limit exceeded)

5 Examples

5.1 Initialized

```
<rdf:RDF
    xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    xmlns:jfs="http://jazz.net/xmlns/foundation/1.0/"
    xmlns:acp="http://jazz.net/ns/acp#"
    xmlns:calm="http://jazz.net/xmlns/prod/jazz/calm/1.0/"
    xmlns:jazz_rm="http://jazz.net/ns/rm#"
    xmlns:acc="http://open-services.net/ns/core/acc#"
    xmlns:rmTypes="http://www.ibm.com/xmlns/rdm/types/"
    xmlns:process="http://jazz.net/ns/process#"
    xmlns:rmWorkflow="http://www.ibm.com/xmlns/rdm/workflow/"
    xmlns:dcterms="http://purl.org/dc/terms/"
    xmlns:dc="http://purl.org/dc/elements/1.1/"
    xmlns:h="http://www.w3.org/TR/REC-html40"
    xmlns:xs="http://schema.w3.org/xs/"
    xmlns:oslc="http://open-services.net/ns/core#"
    xmlns:nav="http://jazz.net/ns/rm/navigation#"
    xmlns:oslc_config="http://open-services.net/ns/config#"
    xmlns:oslc_rm="http://open-services.net/ns/rm#"
    xmlns:dng_task="http://jazz.net/ns/rm/dng/task#"
    xmlns:rm="http://www.ibm.com/xmlns/rdm/rdf/"
    xmlns:oslc_auto="http://open-services.net/ns/auto#">
  <dng_task:Task rdf:about="null">
    <dng_task:percentage rdf:datatype="http://www.w3.org/2001/XMLSchema#integer"
    >0</dng_task:percentage>
    <dcterms:title rdf:parseType="Literal">INITIALIZED</dcterms:title>
    <oslc_auto:state rdf:resource="http://open-services.net/ns/auto#queued"/>
    <oslc_auto:verdict rdf:resource="http://open-services.net/ns/auto#unavailable"/>
  </dng_task:Task>
</rdf:RDF>
```

5.2 Running

```
<rdf:RDF
    xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    xmlns:jfs="http://jazz.net/xmlns/foundation/1.0/"
    xmlns:acp="http://jazz.net/ns/acp#"
    xmlns:calm="http://jazz.net/xmlns/prod/jazz/calm/1.0/"
    xmlns:jazz_rm="http://jazz.net/ns/rm#"
    xmlns:acc="http://open-services.net/ns/core/acc#"
    xmlns:rmTypes="http://www.ibm.com/xmlns/rdm/types/"
    xmlns:process="http://jazz.net/ns/process#"
    xmlns:rmWorkflow="http://www.ibm.com/xmlns/rdm/workflow/"
    xmlns:dcterms="http://purl.org/dc/terms/"
    xmlns:dc="http://purl.org/dc/elements/1.1/"
    xmlns:h="http://www.w3.org/TR/REC-html40"
    xmlns:xs="http://schema.w3.org/xs/"
    xmlns:oslc="http://open-services.net/ns/core#"
    xmlns:nav="http://jazz.net/ns/rm/navigation#"
    xmlns:oslc_config="http://open-services.net/ns/config#"
```

```
    xmlns:oslc_rm="http://open-services.net/ns/rm#"
    xmlns:dng_task="http://jazz.net/ns/rm/dng/task#"
    xmlns:rm="http://www.ibm.com/xmlns/rdm/rdf/"
    xmlns:oslc_auto="http://open-services.net/ns/auto#">
  <dng_task:Task rdf:about="null">
    <dng_task:percentage rdf:datatype="http://www.w3.org/2001/XMLSchema#integer"
    >95</dng_task:percentage>
    <dcterms:title rdf:parseType="Literal">RUNNING REQIF OPERATION</dcterms:title>
    <oslc_auto:state rdf:resource="http://open-services.net/ns/auto#inProgress"/>
    <oslc_auto:verdict rdf:resource="http://open-services.net/ns/auto#unavailable"/>
  </dng_task:Task>
</rdf:RDF>
```

5.3 Complete

```
<rdf:RDF
    xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    xmlns:jfs="http://jazz.net/xmlns/foundation/1.0/"
    xmlns:acp="http://jazz.net/ns/acp#"
    xmlns:calm="http://jazz.net/xmlns/prod/jazz/calm/1.0/"
    xmlns:jazz_rm="http://jazz.net/ns/rm#"
    xmlns:acc="http://open-services.net/ns/core/acc#"
    xmlns:rmTypes="http://www.ibm.com/xmlns/rdm/types/"
    xmlns:process="http://jazz.net/ns/process#"
    xmlns:rmWorkflow="http://www.ibm.com/xmlns/rdm/workflow/"
    xmlns:dcterms="http://purl.org/dc/terms/"
    xmlns:dc="http://purl.org/dc/elements/1.1/"
    xmlns:h="http://www.w3.org/TR/REC-html40"
    xmlns:xs="http://schema.w3.org/xs/"
    xmlns:oslc="http://open-services.net/ns/core#"
    xmlns:nav="http://jazz.net/ns/rm/navigation#"
    xmlns:oslc_config="http://open-services.net/ns/config#"
    xmlns:oslc_rm="http://open-services.net/ns/rm#"
    xmlns:dng_task="http://jazz.net/ns/rm/dng/task#"
    xmlns:rm="http://www.ibm.com/xmlns/rdm/rdf/"
    xmlns:oslc_auto="http://open-services.net/ns/auto#">
  <dng_task:Task rdf:about="null">
    <dcterms:references
rdf:resource="https://clmwb.com:9444/rdm/reqif/descriptors/RP_Vcqp4H2MEeqtC7UO4ZOcXg"/>
    <dng_task:percentage rdf:datatype="http://www.w3.org/2001/XMLSchema#integer"
    >100</dng_task:percentage>
    <dcterms:title rdf:parseType="Literal">COMPLETED REQIF OPERATION</dcterms:title>
    <oslc_auto:state rdf:resource="http://open-services.net/ns/auto#complete"/>
    <oslc_auto:verdict rdf:resource="http://open-services.net/ns/auto#passed"/>
  </dng_task:Task>
</rdf:RDF>
```

5.4 Queued

In the Queued state, the operation is waiting for the completion of another ReqIF activity running in the same component.

The tracker title property holds a string of the following format :

"**RETRYING:<Retry Count>,<Retry Limit>**"

Example :

"**RETRYING:11,20"**

This is intended to give OSLC clients a method of tracking the current state of the retry logic.

```
<rdf:RDF
    xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    xmlns:jfs="http://jazz.net/xmlns/foundation/1.0/"
    xmlns:acp="http://jazz.net/ns/acp#"
    xmlns:calm="http://jazz.net/xmlns/prod/jazz/calm/1.0/"
    xmlns:jazz_rm="http://jazz.net/ns/rm#"
    xmlns:acc="http://open-services.net/ns/core/acc#"
    xmlns:rmTypes="http://www.ibm.com/xmlns/rdm/types/"
    xmlns:process="http://jazz.net/ns/process#"
    xmlns:rmWorkflow="http://www.ibm.com/xmlns/rdm/workflow/"
    xmlns:dcterms="http://purl.org/dc/terms/"
    xmlns:dc="http://purl.org/dc/elements/1.1/"
    xmlns:h="http://www.w3.org/TR/REC-html40"
    xmlns:xs="http://schema.w3.org/xs/"
    xmlns:oslc="http://open-services.net/ns/core#"
    xmlns:nav="http://jazz.net/ns/rm/navigation#"
    xmlns:oslc_config="http://open-services.net/ns/config#"
    xmlns:oslc_rm="http://open-services.net/ns/rm#"
    xmlns:dng_task="http://jazz.net/ns/rm/dng/task#"
    xmlns:rm="http://www.ibm.com/xmlns/rdm/rdf/"
    xmlns:oslc_auto="http://open-services.net/ns/auto#">
  <dng_task:Task rdf:about="null">
    <dng_task:percentage rdf:datatype="http://www.w3.org/2001/XMLSchema#integer"
    >0</dng_task:percentage>
    <dcterms:title rdf:parseType="Literal">RETRYING:11,20</dcterms:title>
    <oslc_auto:state rdf:resource="http://open-services.net/ns/auto#queued"/>
    <oslc_auto:verdict rdf:resource="http://open-services.net/ns/auto#unavailable"/>
  </dng_task:Task>
</rdf:RDF>
```

5.5 Cancelled

```
<rdf:RDF
    xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    xmlns:jfs="http://jazz.net/xmlns/foundation/1.0/"
```

```
    xmlns:acp="http://jazz.net/ns/acp#"
    xmlns:calm="http://jazz.net/xmlns/prod/jazz/calm/1.0/"
    xmlns:jazz_rm="http://jazz.net/ns/rm#"
    xmlns:acc="http://open-services.net/ns/core/acc#"
    xmlns:rmTypes="http://www.ibm.com/xmlns/rdm/types/"
    xmlns:process="http://jazz.net/ns/process#"
    xmlns:rmWorkflow="http://www.ibm.com/xmlns/rdm/workflow/"
    xmlns:dcterms="http://purl.org/dc/terms/"
    xmlns:dc="http://purl.org/dc/elements/1.1/"
    xmlns:h="http://www.w3.org/TR/REC-html40"
    xmlns:xs="http://schema.w3.org/xs/"
    xmlns:oslc="http://open-services.net/ns/core#"
    xmlns:nav="http://jazz.net/ns/rm/navigation#"
    xmlns:oslc_config="http://open-services.net/ns/config#"
    xmlns:oslc_rm="http://open-services.net/ns/rm#"
    xmlns:dng_task="http://jazz.net/ns/rm/dng/task#"
    xmlns:rm="http://www.ibm.com/xmlns/rdm/rdf/"
    xmlns:oslc_auto="http://open-services.net/ns/auto#">
  <dng_task:Task rdf:about="null">
    <oslc_auto:verdict rdf:resource="http://open-services.net/ns/auto#unavailable"/>
    <oslc_auto:state rdf:resource="http://open-services.net/ns/auto#canceled"/>
    <dng_task:percentage rdf:datatype="http://www.w3.org/2001/XMLSchema#integer"
    >0</dng_task:percentage>
    <dcterms:title rdf:parseType="Literal">RETRY LIMIT REACHED</dcterms:title>
  </dng_task:Task>
</rdf:RDF>
```

6 References

https://jazz.net/wiki/bin/view/Main/DNGTaskTracker

https://archive.open-services.net/wiki/automation/OSLC-Automation-Specification-Version-2.0/index.html

https://archive.open-services.net/wiki/automation/OSLC-Automation-Vocabulary/index.html