

# Repository objects inspection HOWTO

MidPoint performance can be sometimes lower than expected from quite unusual reason: objects in repository could grow too large. This can be the case e.g. because of big operation results (stored e.g. in tasks or shadows), because of model operation contexts stored in approval tasks, or because of evaluated triggers stored as part of assignments.

In order to diagnose such situations we have created the "object integrity check" task. (As for the name: we expect many more uses of such task to come later. Displaying objects size is quite a minor functionality in this respect.)

So, if you want to see how large are objects in your repository, import the following task:

## Task for displaying repository objects size

```
<task xmlns="http://midpoint.evolveum.com/xml/ns/public/common/common-3">
  <name>Object size check</name>
  <extension xmlns:mext="http://midpoint.evolveum.com/xml/ns/public/model/extension-3">
    <mext:objectQuery>
      <!-- put object query here, if needed -->
    </mext:objectQuery>
  </extension>
  <ownerRef oid="00000000-0000-0000-0000-000000000002" type="UserType"/>
  <executionStatus>runnable</executionStatus>
  <handlerUri>http://midpoint.evolveum.com/xml/ns/public/model/object-integrity-check/handler-3</handlerUri>
  <recurrence>single</recurrence>
</task>
```

You can restrict the objects to be included in the scope by using `objectQuery` extension item.

The result will be shown in the log, like this (note that my midPoint is almost empty now, so there are not many objects there):

```
2017-07-06 19:32:00,205 [] [midPointScheduler_Worker-1] INFO (com.evolveum.midpoint.model.impl.integrity.ObjectIntegrityCheckResultHandler):

***** Statistics for com.evolveum.midpoint.xml.ns._public.common.common_3.
SystemConfiguration *****

Count: 1
Min: 6581 (SystemConfiguration(00000000-0000-0000-0000-000000000001))
Max: 6581 (SystemConfiguration(00000000-0000-0000-0000-000000000001))
Avg: 6581

Histogram:

Interval : Items :
Representative
-----
[0-6581] : 1 : ##### :
SystemConfiguration(00000000-0000-0000-0000-000000000001) (6581)

***** Statistics for com.evolveum.midpoint.xml.ns._public.common.common_3.
LookupTableType *****

Count: 4
Min: 1672 (Locales(00000000-0000-0000-0000-000000000210))
Max: 2054 (Languages(00000000-0000-0000-0000-000000000200))
Avg: 1773

Histogram:

Interval : Items :
Representative
-----
[0-2054] : 4 : ##### :
Languages(00000000-0000-0000-0000-000000000200) (2054)
```

\*\*\*\*\* Statistics for com.evolveum.midpoint.xml.ns.\_public.common.common\_3.  
OrgType \*\*\*\*\*

Count: 1  
Min: 85387 (Employee(00000000-0000-0000-0000-0000EMPLOYEE))  
Max: 85387 (Employee(00000000-0000-0000-0000-0000EMPLOYEE))  
Avg: 85387

Histogram:

Interval : Items :  
Representative

-----  
-----  
[0-9999] : 0 :  
[10000-19999] : 0 :  
[20000-29999] : 0 :  
[30000-39999] : 0 :  
[40000-49999] : 0 :  
[50000-59999] : 0 :  
[60000-69999] : 0 :  
[70000-79999] : 0 :  
[80000-85387] : 1 : #####  
Employee(00000000-0000-0000-0000-0000EMPLOYEE) (85387)

\*\*\*\*\* Statistics for com.evolveum.midpoint.xml.ns.\_public.common.common\_3.  
SecurityPolicyType \*\*\*\*\*

Count: 1  
Min: 2264 (Default Security Policy(00000000-0000-0000-0000-000000000120))  
Max: 2264 (Default Security Policy(00000000-0000-0000-0000-000000000120))  
Avg: 2264

Histogram:

Interval : Items :  
Representative

-----  
-----  
[0-2264] : 1 : #####  
Default Security Policy(00000000-0000-0000-0000-000000000120) (2264)

\*\*\*\*\* Statistics for com.evolveum.midpoint.xml.ns.\_public.common.common\_3.  
ReportType \*\*\*\*\*

Count: 7  
Min: 20992 (Certification definitions report(00000000-0000-0000-0000-000000000130))  
Max: 37838 (Audit logs report(00000000-0000-0000-0000-000000000009))  
Avg: 29866

Histogram:

Interval : Items :  
Representative

-----  
-----  
[0-9999] : 0 :  
[10000-19999] : 0 :  
[20000-29999] : 4 : #####  
Certification cases report(00000000-0000-0000-0000-000000000150) (28090)  
[30000-37838] : 3 : #####  
Audit logs report(00000000-0000-0000-0000-000000000009) (37838)





Histogram:

Interval : Items :  
Representative

-----  
-----  
[0-9999] : 4 : ##### :  
Validity Scanner(00000000-0000-0000-0000-000000000006) (6164)  
[10000-15067] : 1 : ##### :  
recompute roles(a693e829-b76a-403c-8f5c-4d540c96728f) (15067)

2017-07-06 19:32:00,205 [ ] [midPointScheduler\_Worker-1] INFO (com.evolveum.midpoint.model.impl.integrity.  
ObjectIntegrityCheckResultHandler): Objects processed with errors: 0