



MidPoint Community Meetup 2025

Use the Studio Luke

Agenda

- Streamlined support for midPoint deployment using GitOps
- Configuration cleanup
- Handling secrets
- Object synchronization
- Live demo
- Discussion

Join at

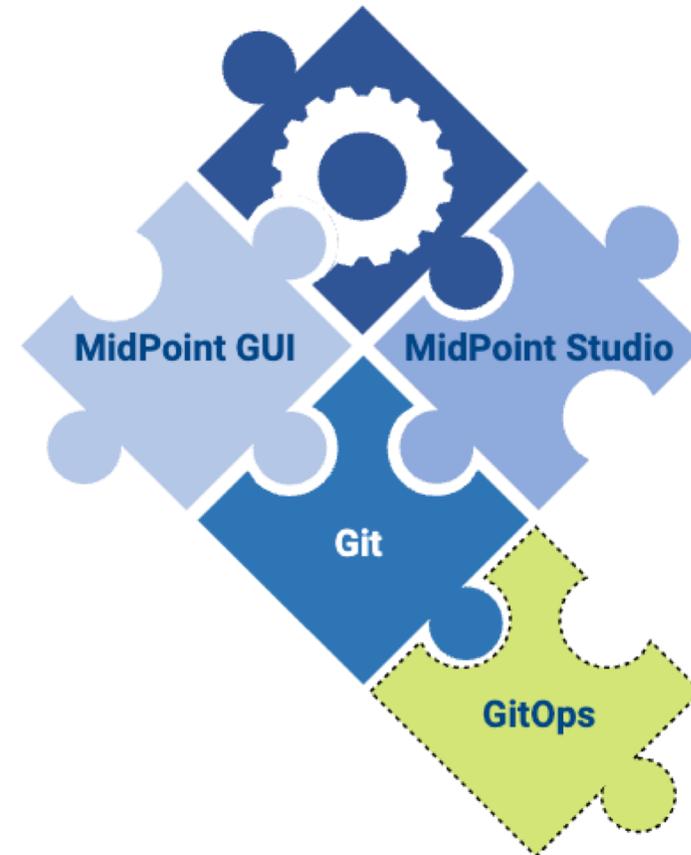
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Streamlined support for midPoint deployment using GitOps

- MidPoint objects configured
 - XML files in Studio
 - Via midPoint GUI
- Configuration versioned in git
- Versioned configuration can be used in multiple environments using GitOps



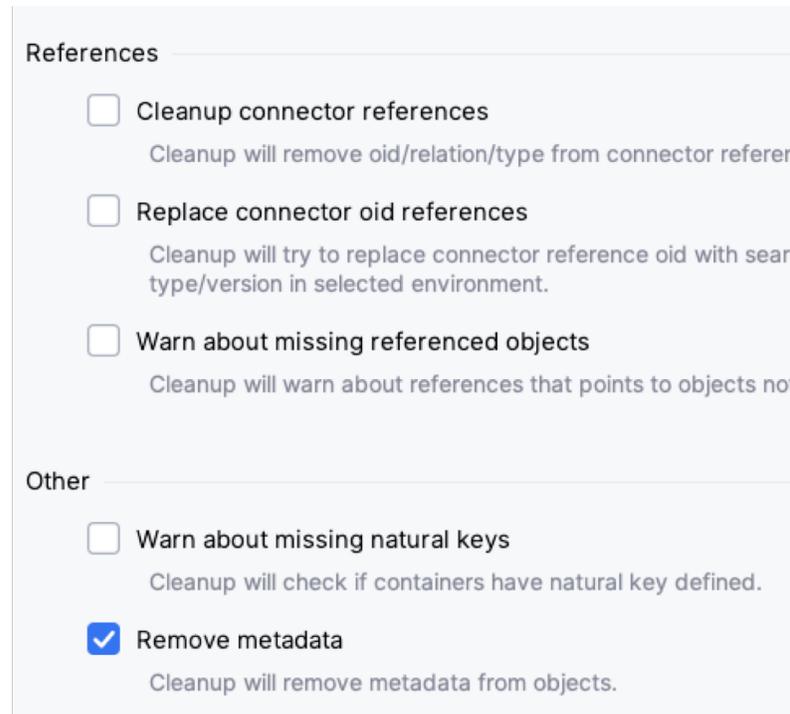
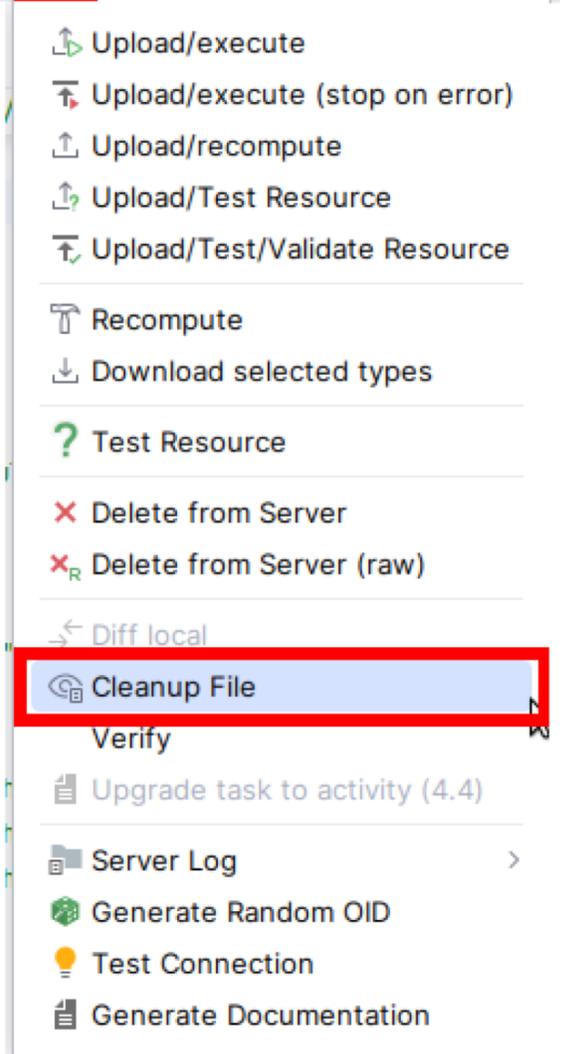
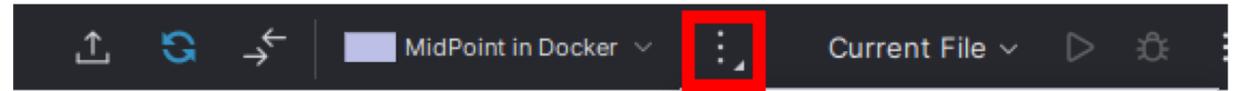
Configuration cleanup: Why?

- Remove unnecessary data from XML
 - All kinds of operational data
 - Optional items like resource schema
- Encrypted passwords
- Update connector references
- Associations based on Shadow oid
- Warn about missing referenced objects in project

```
1 <resource xmlns="http://midpoint.evolveum.com/xml/ns/public/common/common-3" xmlns:c="http://midpoint.evolveum.c
2 <name>AD</name>
3 <description>ExAmPLe, Inc. AD resource</description>
4 >
5 <metadata...>
6 </metadata...>
7 </resource>
8 </resources>
9 <lifecycleState>active</lifecycleState>
10 >
11 <operationExecution id="74"...>
12 </operationExecution>
13 </resources>
14 </resources>
15 </resources>
16 </resources>
17 </resources>
18 </resources>
19 </resources>
20 </resources>
21 </resources>
22 </resources>
23 </resources>
24 </resources>
25 </resources>
26 </resources>
27 </resources>
28 </resources>
29 <iteration>0</iteration>
30 <iterationToken/>
31 >
32 <operationalState...>
33 </operationalState...>
34 </resources>
35 </resources>
36 </resources>
37 >
38 <operationalStateHistory id="78"...>
39 </operationalStateHistory>
40 </resources>
41 </resources>
42 </resources>
43 <connectorRef oid="69c8dff3-72c3-4e08-a115-f9ce51c203f3" relation="org:default" type="c:ConnectorType">
44 <description>Reference to the ConnId LDAP connector. This is dynamic reference, it will be translated to
45 <oid>OID during import.
46 </oid>
47 </description>
48 </filter>
49 <filter>
50 <q:text>connectorType = "com.evolveum.polygon.connector.Ldap.LdapConnector" and available = "true"</q:text>
51 </filter>
52 </connectorRef>
53 <connectorConfiguration xmlns:icfc="http://midpoint.evolveum.com/xml/ns/public/connector/icf-1/connector-sch
54 <schema>
55 < cachingMetadata>
56 < retrievalTimestamp>2024-05-28T12:33:32.622Z</retrievalTimestamp>
57 < serialNumber>1ce3f4d7406f3d34-bcbfd02f7ad2076d</serialNumber>
58 </ cachingMetadata>
59 </connectorConfiguration>
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```

Configuration cleanup: How?

- Cleanup actions are configurable per item
- One or multiple files/folders at once
- Warn about missing references
- Optionally remove metadata



Handling secrets

- Encrypted data are bound to specific environment
- Studio magic - project properties
- Secret providers
 - Since 4.9
 - Docker, File, Environment variables, Properties
- Cleanup warns about encrypted values in midPoint objects

```
<cfg:bindPassword>  
  <t:encryptedData>  
    <t:encryptionMethod>  
      <t:algorithm xmlns="http://prism.evolveum.com/xml/ns/public/types-3">http://  
    </t:encryptionMethod>  
    <t:keyInfo>  
      <t:keyName>aY7PzKsf66rqL0PMYA20p7bVebg=</t:keyName>  
    </t:keyInfo>  
    <t:cipherData>  
      <t:cipherValue>6RmRqz7/fCtZqfEhHn8NyQNVGisLccPFthML1h9jT2w=</t:cipherValue>  
    </t:cipherData>  
  </t:encryptedData>  
</cfg:bindPassword>
```

```
<secretsProviders>  
  <docker>  
    <identifier>my-docker-secrets</identifier>  
    <description>Allow accessing docker secrets. D  
      com.evolveum.midpoint.common.secrets TRACE  
    <cache>PT30M</cache>  
    <display>  
      <label>Docker secrets</label>  
      <icon>  
        <cssClass>fa fa-play</cssClass>  
      </icon>  
    </display>  
  </docker>  
</secretsProviders>
```

```
<cfg:bindPassword>  
  <t:externalData>  
    <t:provider>my-docker-secrets</t:provider>  
    <t:key>ad_password</t:key>  
  </t:externalData>  
</cfg:bindPassword>
```

Object synchronization

- Compare local and remote objects
 - Update local/remote object
- Preview partial changes (deltas)

HR.xml (HR) (Pending: remote)

Select changes to be applied to 'HR.xml (LOCAL)' object:

- schemaHandling/objectType/5 (HR Person)/description
Replace existing with: This object type describes HR employees minus the non-IT employees which are excluded from midPoint pro
- schemaHandling/objectType/5 (HR Person)/documentation
Remove: The delineation filter implements the company directive *IT/2022-119*.
- schemaHandling/objectType/5 (HR Person)/attribute/14 (ref: empnum)/inbound
Remove: <inbound xmlns="http://midpoint.evolveum.com/xml/ns/public/common/common-3" xmlns:c="http://midpoint.evolveum.com
- schemaHandling/objectType/5 (HR Person)/attribute/17 (ref: firstname)/displayName
Add: First name
- schemaHandling/objectType/5 (HR Person)/attribute/25 (ref: status)/inbound/26 (name: status-to-lifecycle-state)/expression
Expression: ScriptExpressionEvaluatorType
- schemaHandling/objectType/5 (HR Person)/attribute/32 (ref: job)/inbound/36 (name: job-to-title-pice)/expression

Side-by-side viewer | Ignores midPoint metadata, operational data | Highlight words

Before: "HR"; HR.xml (LOCAL) (/) | After: "HR"; HR.xml (LOCAL) (/)

```
<expression xmlns="http://midpoint.evolveum.com/xml/ns/public/common/comm
<script>
  <code>switch (input) {
    case 'In':
      'active'
      break
    case 'Long-term leave':
      'suspended'
      break
    case 'Former employee':
      'archived'
      break
  }
//default:
//'suspended'
//break
```

Demo

Join at
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Questions

- What features do you miss in midPoint Studio?
- What features are hard to use?
 - What are the use cases?

Evolveum

Thank you for your attention

Feel free to ask your questions now!



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