

# XML Footprint



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# XML Footprint

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As the OVAL Language has grown in both power and flexibility over the past few years, the XML footprint has also grown. Is this a concern of ours? Would a 10% reduction in size provide any benefit? What can we do to reduce this footprint?



# Background

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- footprint has grown over time
  - SQL was rather small
  - XML made it double in size
  - splitting out of objects and states further increased bloat
- lots of text
  - ids and versions
  - opening / closing tags
  - spelled out tags for readability
- bloat has resulted from our attempt to make it easier to write and read
  - reuse existing tests/objects/states
  - human readable element names and titles



# Example

```
<registry_test id="oval:org.mitre.oval:tst:1"
  version="1"
  comment="registry key value equals one"
  check="at least one"
  xmlns="http://oval.mitre.org/XMLSchema/oval-definitions-5#windows">
  <object object_ref="oval:org.mitre.oval:obj:2"/>
  <state state_ref="oval:org.mitre.oval:ste:3"/>
</registry_test>
<registry_object id="oval:org.mitre.oval:obj:2"
  version="1"
  xmlns="http://oval.mitre.org/XMLSchema/oval-definitions-5#windows">
  <hive>HKEY_LOCAL_MACHINE</hive>
  <key>System\CurrentControlSet\Services\Tcpip\Parameters</key>
  <name>DisableIPSourceRouting</name>
</registry_object>
<registry_state id="oval:org.mitre.oval:ste:3"
  version="1"
  xmlns="http://oval.mitre.org/XMLSchema/oval-definitions-5#windows">
  <type>reg_dword</type>
  <value datatype="int">1</value>
</registry_state>
```



## Break-In <state>

- We could move the state back into the <test>
  - in reality we don't reuse it much
    - especially with variables

```
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  check="at least one"
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  <object object_ref="oval:org.mitre.oval:obj:2"/>
  <state>
    <type>reg_dword</type>
    <value datatype="int">1</value>
  </state>
</registry_test>
<registry_object id="oval:org.mitre.oval:obj:2"
  version="1"
  xmlns="http://oval.mitre.org/XMLSchema/oval-definitions-5#windows">
  <hive>HKEY_LOCAL_MACHINE</hive>
  <key>System\CurrentControlSet\Services\Tcpip\Parameters</key>
  <name>DisableIPSourceRouting</name>
</registry_object>
```



# Discussion

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- Are we worried about the size of our XML files?
  - transport
  - processing
  - maintenance
- Would a 10% savings make any difference?
- Should we put any effort into reducing the XML footprint?
  - shorter tag names
  - only break-out when necessary