

Issues

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1 Conformance profiles

It is not clear that all conformance profiles are supported by the specification. In particular the administration conformance profile is not supported, because the ListProcessInstances operation is undefined.

1.1 Proposal

- a- Remove both the administration conformance profile and the ListProcessInstances. The rationality is that we should not release an incomplete specification. It is better to add the administration conformance profile when it is fully defined in a later version of the specification.
- b- We may need to do some role-play to identify the profiles that are not supported. However, it needs to be clear to the participants, of this role-play, that the objective is to identify the profiles that this specification does not support. The objective is not to modify the specification, but to remove the unsupported profiles. After we identify the profiles that are not supported, then we will need to address this deficiency in the next version of the spec.

2 Inconsistent/unsafe use of fields

There are some operation fields that are used arbitrarily and in an unsafe fashion. For example:

- 1- UserID is used in GetProcessInstanceAttribute, but it is not used in GetProcessInstanceState.
- 2- RoleID is used in GetProcessInstanceAttribute, but it is not used in GetProcessInstanceState.
- 3- BussinessPName is used in GetProcessInstanceAttribute, but it is not used in GetProcessInstanceState.
- 4- ActivityID is used in GetProcessInstanceAttribute, but it is not used in GetProcessInstanceState. It is also used in StartConversation, but it is not used in StopConversation.

Those fields are used inconsistently across the operations, and they do not contribute anything to the protocol. They are used for information purpose only.

The receiving engine is supposed to use those fields to record audit information. This is a bad practice, for two reasons:

- The receiving engine should not record unverified audit information. In this case the receiving engine is legitimizing information that it has not witnessed.
- The receiving engine should not record audit information for an external engine. It should record the audit information that it has witnessed, like I started this process that was requested by that node id (email address).
- It is a bad idea to send via email user and role ids. This creates a security hole for the sending engine. It could be argued that it could be done within your own organization, but it still a security hole.
- It increases the complexity of the specification, by having a set of fields that are not directly related to the purpose of the specification.

2.1 Proposal

Remove UserID, RoleID, and Bussiness definition process name from the specification. Consider removing ActivityID, it maybe useful for some of the conformance profiles, but not in the current form.

3 States

The previous specification did not define the state names. So, I used the name of the removed operations (the Xxx in XxxProcessInstance), plus some other names from the OMG submission.

3.1 Proposal

We should review the states and theirs name.

4 SetProcessInstanceAttributes reply

The reply of set process instance attributes include the names of the attributes that were set. This is good when the operation succeed, but when it fails it becomes impractical. There are two problems:

- 1) the name of the attribute that fails is not in the returned list. This is a problem because the sending engine needs to remember the position of the sent attributes, in addition it breaks the rule of no positionality of fields. In this case both engines must be very aware of the position of the fields.
- 2) Some implementations may want to see set process instance attributes as an atomic operation, in which case if an attribute fails then all attributes are rejected.

The problem is that there is no way to indicate the attribute that failed.

4.1 Proposal

On failure the list of fields should be the list of fields on error.

5 Audit Data

I have not reviewed the audit data. I just moved it into an appendix, but I have not done any work on it.

5.1 Proposal

We should do one of the following:

1. Approve the document with the current audit data appendix
2. Remove the audit data appendix, and give it to wg5 for incorporation in the audit specification.
3. Find somebody to review it, in the next two weeks. I personally do not have any time or intention of working on this area.

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Future Work

These issues must be addressed on the next version of the specification:

- 1- Recovery procedures

The current specification does not address situations like a message with StartConversation and CreateProcessInstance, in which the StartConversation succeed and the CreateProcessInstance fails. The question is who must clean up these situations the sending engine or the receiving engine. There are no recovery procedures in place to handle those issues.

- 2- Process interoperability modeling

Although process modeling is not part of this specification (it is a WPDL issue), the current specification makes it difficult to model process interoperability. Interoperability modeling must not be part of the specification, but it should lend itself to modeling.

The current specification looks like an API for a programmer. It is not suitable to be used in a process map. The conformance profiles are too complex for modeling. Simple chain and suspended animation profiles are the only one suitable for a process map.

We need to work on how is interoperability represented in a process map.