Request for Comment on Amendment to CORBA Profile for SCA Next Adding ORB_init parameters
Document WINNF-10-RFI-0006

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Preface

In August 2009, the JPEO and its JTRS SCA Next Working Panel, invited the WINNF to assist it in developing the specification of a new release of the SCA whose working title is “SCA Next.” The WINNF created a “SCA Next Work Group” to coordinate this work and informed the JTRS SCA Next Working Panel that the WINNF wished to take the lead on developing solutions for two of the previously defined Change Proposals: S047 “Develop CORBA/e and CORBA Services wording” and S013 “SCA Architectural Consistency”, as well as offer comments and suggestions for many of the other change proposals.

Discussions with the JTRS working panel clarified that task S047 was primarily to develop a CORBA profile for use in SCA Next replacing the “Minimum CORBA” profile used in SCA 2.2.2. The WINNF work group has worked since that time, using both teleconferences and in-person meetings, and has completed its work on S047.

The WINNF SCA Next Work Group is pleased to contribute the attached proposed amendment to the specification of a CORBA Profile previously proposed to the JTRS SCA Next Working Panel for use as part of SCA Next. The amendment adds additional standard parameters to the ORB_init call to configure policies of the root POA. Note that this relates to Change Proposal S047. The WINNF requests your consideration and invite your comments.

Please respond with your comments to the WINNF SCA Next Work Group Chair: Terry Anderson, terry.anderson@itt.com.
Request for Comment on Amendment to CORBA Profile for SCA Next Adding ORB_init Parameters

1 Introduction

The previously proposed specification for CORBA Profile for SCA Next WINNF-10-RFI-0002 (PROFILE) is to be amended to add additional standard parameters to ORB_init as introduced in section 5.1 ORB_init of the previous proposed specification.

2 Amendments

2.1 Amendments to Section 5

Section 5.1 ORB_init of PROFILE is to be amended by being replaced with the following:

Profile F includes methods to create certain POA policies (the same as Minimum CORBA and CORBA/e Compact), but these methods are only supported on child POAs. The root POA has default settings for these policies that cannot be changed during the life of the root POA. Profiles C and L do not support the creation of child POAs or calls to the policy creation methods. In some systems it is useful to use a policy other than the default even when it cannot be changed dynamically. The creation of child POAs only to allow static policies other than the default adds undesirable overhead. Therefore it is desirable to allow creating the root POA with policies other than the default. Profiles F, C and L add additional standardized parameters to the ORB_init call to allow the root POA to be created with non-default policies. These additional parameters are not standardized in CORBA/e profiles.

Profiles F, C and L shall support the following additional parameters to the ORB_init() call:

<table>
<thead>
<tr>
<th>Policy</th>
<th>Default value</th>
<th>Alternate value</th>
<th>Optional Parameter to override</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifespan Policy</td>
<td>TRANSIENT</td>
<td>PERSISTENT</td>
<td>-ORBPOAPersistent</td>
</tr>
<tr>
<td>ID Uniqueness Policy</td>
<td>UNIQUE_ID</td>
<td>MULTIPLE_ID</td>
<td>-ORBPOAMultipleId</td>
</tr>
<tr>
<td>ID Assignment Policy</td>
<td>SYSTEM_ID</td>
<td>USER_ID</td>
<td>-ORBPOAUserId</td>
</tr>
</tbody>
</table>

Calls to ORB_init() shall cause the root POA to be created with the default setting for each of these policies unless one or more of the optional parameters appear in the parameter list. If one or more are present then the root POA shall be created with the corresponding alternate value.