

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

Version V1.0.0 8 June 2010

Copyright © 2010 The Software Defined Radio Forum Inc - All Rights Reserved

TERMS, CONDITIONS & NOTICES

This document has been prepared by the SCA Next Work Group to assist The Software Defined Radio Forum Inc. (or its successors or assigns, hereafter "the Forum"). It may be amended or withdrawn at a later time and it is not binding on any member of the Forum or of the SCA Next Work Group.

Contributors to this document that have submitted copyrighted materials (the Submission) to the Forum for use in this document retain copyright ownership of their original work, while at the same time granting the Forum a non-exclusive, irrevocable, worldwide, perpetual, royalty-free license under the Submitter's copyrights in the Submission to reproduce, distribute, publish, display, perform, and create derivative works of the Submission based on that original work for the purpose of developing this document under the Forum's own copyright.

Permission is granted to the Forum's participants to copy any portion of this document for legitimate purposes of the Forum. Copying for monetary gain or for other non-Forum related purposes is prohibited.

THIS DOCUMENT IS BEING OFFERED WITHOUT ANY WARRANTY WHATSOEVER, AND IN PARTICULAR, ANY WARRANTY OF NON-INFRINGEMENT IS EXPRESSLY DISCLAIMED. ANY USE OF THIS SPECIFICATION SHALL BE MADE ENTIRELY AT THE IMPLEMENTER'S OWN RISK, AND NEITHER THE FORUM, NOR ANY OF ITS MEMBERS OR SUBMITTERS, SHALL HAVE ANY LIABILITY WHATSOEVER TO ANY IMPLEMENTER OR THIRD PARTY FOR ANY DAMAGES OF ANY NATURE WHATSOEVER, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF THIS DOCUMENT.

Recipients of this document are requested to submit, with their comments, notification of any relevant patent claims or other intellectual property rights of which they may be aware that might be infringed by any implementation of the specification set forth in this document, and to provide supporting documentation.

Wireless Innovation Forum TM and SDR Forum TM are trademarks of the Software Defined Radio Forum Inc.



Table of Contents

TERMS, CONDITIONS & NOTICES	. i
Prefacei	ii
Request for Comment on Amendment to CORBA Profile for SCA Next Adding ORB_init	
Parameters	.1
1 Introduction	.1
2 Amendments	.1
2.1 Amendments to Section 5	.1



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 inperson 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:

Policy	Default value	Alternate value	Optional Parameter to override
Lifespan Policy	TRANSIENT	PERSISTENT	-ORBPOAPersistent
ID Uniqueness Policy	UNIQUE_ID	MULTIPLE_ID	-ORBPOAMultipleId
ID Assignment Policy	SYSTEM_ID	USER_ID	-ORBPOAUserId

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.