



BEA AquaLogic Enterprise Security™

Release Notes

Version: 2.5
Revised: December 2006

Copyright

Copyright © 1995-2006 BEA Systems, Inc. All Rights Reserved.

Restricted Rights Legend

This software is protected by copyright, and may be protected by patent laws. No copying or other use of this software is permitted unless you have entered into a license agreement with BEA authorizing such use. This document is protected by copyright and may not be copied photocopied, reproduced, translated, or reduced to any electronic medium or machine readable form, in whole or in part, without prior consent, in writing, from BEA Systems, Inc.

Information in this document is subject to change without notice and does not represent a commitment on the part of BEA Systems. THE DOCUMENTATION IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. FURTHER, BEA SYSTEMS DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE, OR THE RESULTS OF THE USE, OF THE DOCUMENT IN TERMS OF CORRECTNESS, ACCURACY, RELIABILITY, OR OTHERWISE.

Third-Party Software License Agreement

Sun Microsystems, Inc.'s XACML implementation v2.0

Copyright © 2003-2004 Sun Microsystems, Inc. All Rights Reserved.

This product includes Sun Microsystems, Inc.'s XACML implementation v2.0, which is governed by the following terms:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistribution of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistribution in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of Sun Microsystems, Inc. or the names of contributors may be used to endorse or promote products derived from this software without specific prior written permission.

This software is provided "AS IS," without a warranty of any kind. ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE HEREBY EXCLUDED. SUN MICROSYSTEMS, INC. ("SUN") AND ITS LICENSORS SHALL NOT BE LIABLE FOR ANY

DAMAGES SUFFERED BY LICENSEE AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THIS SOFTWARE OR ITS DERIVATIVES. IN NO EVENT WILL SUN OR ITS LICENSORS BE LIABLE FOR ANY LOST REVENUE, PROFIT OR DATA, OR FOR DIRECT, INDIRECT, SPECIAL, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF THE USE OF OR INABILITY TO USE THIS SOFTWARE, EVEN IF SUN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

You acknowledge that this software is not designed or intended for use in the design, construction, operation or maintenance of any nuclear facility.

For all third-party software license agreements, see the 3rd_party_licenses.txt file, which is placed in the \ales22-admin directory when you install the AquaLogic Enterprise Security Administration Server.

Trademarks and Service Marks

Copyright © 1995-2006 BEA Systems, Inc. All Rights Reserved. BEA, BEA JRockit, BEA WebLogic Portal, BEA WebLogic Server, BEA WebLogic Workshop, Built on BEA, Jolt, JoltBeans, SteelThread, Top End, Tuxedo, and WebLogic are registered trademarks of BEA Systems, Inc. BEA AquaLogic, BEA AquaLogic Data Services Platform, BEA AquaLogic Enterprise Security, BEA AquaLogic Interaction, BEA AquaLogic Interaction Analytics, BEA AquaLogic Interaction Collaboration, BEA AquaLogic Interaction Content Services, BEA AquaLogic Interaction Data Services, BEA AquaLogic Interaction Integration Services, BEA AquaLogic Interaction Process, BEA AquaLogic Interaction Publisher, BEA AquaLogic Interaction Studio, BEA AquaLogic Service Bus, BEA AquaLogic Service Registry, BEA Builder, BEA Campaign Manager for WebLogic, BEA eLink, BEA Kodo, BEA Liquid Data for WebLogic, BEA Manager, BEA MessageQ, BEA SALT, BEA Service Architecture Leveraging Tuxedo, BEA WebLogic Commerce Server, BEA WebLogic Communications Platform, BEA WebLogic Enterprise, BEA WebLogic Enterprise Platform, BEA WebLogic Enterprise Security, BEA WebLogic Express, BEA WebLogic Integration, BEA WebLogic Java Adapter for Mainframe, BEA WebLogic JDriver, BEA WebLogic Log Central, BEA WebLogic Mobility Server, BEA WebLogic Network Gatekeeper, BEA WebLogic Personalization Server, BEA WebLogic Personal Messaging API, BEA WebLogic Platform, BEA WebLogic Portlets for Groupware Integration, BEA WebLogic Real Time, BEA WebLogic RFID Compliance Express, BEA WebLogic RFID Edge Server, BEA WebLogic RFID Enterprise Server, BEA WebLogic Server Process Edition, BEA WebLogic SIP Server, BEA WebLogic WorkGroup Edition, BEA Workshop for WebLogic Platform, BEA Workshop JSP, BEA Workshop JSP Editor, BEA Workshop Struts, BEA Workshop Studio, Dev2Dev, Liquid Computing, and Think Liquid are trademarks of BEA Systems, Inc. Accelerated Knowledge Transfer, AKT, BEA Mission Critical Support, BEA Mission Critical Support Continuum, and BEA SOA Self Assessment are service marks of BEA Systems, Inc.

All other names and marks are property of their respective owners.

Contents

AquaLogic Enterprise Security 2.5 Features and Changes	1
What's New in BEA AquaLogic Enterprise Security 2.5.	2
ARME and BLM Ported to Java	2
SCM is Now Optional	3
New L10N Support	3
Enhanced Auditing Support.	4
Transactional Support	4
Entitlements User Interface	5
Bea Kodo is Now Used	5
Supported Configurations.	6
Known Issues Fixed in this Release of BEA AquaLogic Enterprise Security 2.5.	8
Known Issues in BEA AquaLogic Enterprise Security 2.5	9
Contacting BEA Customer Support.	17

BEA AquaLogic Enterprise Security Version 2.5 Release Notes

The following topics are covered in this section:

- [“AquaLogic Enterprise Security 2.5 Features and Changes” on page 1](#)
- [“Known Issues Fixed in this Release of BEA AquaLogic Enterprise Security 2.5” on page 8](#)
- [“Known Issues in BEA AquaLogic Enterprise Security 2.5” on page 9](#)
- [“Contacting BEA Customer Support” on page 13](#)

AquaLogic Enterprise Security 2.5 Features and Changes

BEA AquaLogic Enterprise Security (ALES) is a fine-grained entitlements product that was designed to enable centralized management of access to both application resources and application objects. ALES uses a centrally administered, distributed security services architecture that supports hierarchical policies across heterogeneous application environments. It also provides a unified and adaptable security infrastructure that enables a service-oriented approach to securing distributed applications. It allows shared security infrastructure and services to be leveraged and re-used across the heterogeneous enterprise—improving security and increasing IT efficiency.

ALES includes the Administration Application and a set of Security Services Modules (SSM).

The ALES Administration Application provides centralized management of application entitlements, letting you control all of your security policies and configuration data from a single web-based console. Configuration, security policy, and user metadata for ALES-distributed

Security Services Modules are managed and provisioned by the Administration Application. All administrative functions, including delegation, are fully configurable through administrative policies.

BEA AquaLogic Enterprise Security supports a variety of Security Service Modules (SSMs) that reside in the application environments protected by ALES. They provide the runtime enforcement of entitlements and integrate with the underlying security framework to provide services for authentication, auditing, role mapping, and credential mapping. The security framework also provides a simple application programming interface (API) that can be used by security and application developers to define security policies and services. SSMs are provided for the WebLogic Platform, Java applications, and non-Java applications through a generic Web Services SSM.

This section covers the following topics:

- [“What’s New in BEA AquaLogic Enterprise Security 2.5” on page 2](#)
- [“Supported Configurations” on page 6](#)

What’s New in BEA AquaLogic Enterprise Security 2.5

This section describes new and changed features for this release of AquaLogic Enterprise Security.

This release of AquaLogic Enterprise Security has several new and changed features:

- [“ARME and BLM Ported to Java” on page 2](#)
- [“SCM is Now Optional” on page 3](#)
- [“New L10N Support” on page 3](#)
- [“Enhanced Auditing Support” on page 4](#)
- [“Transactional Support” on page 4](#)
- [“Entitlements User Interface” on page 5](#)
- [“BEA Kodo is Now Used” on page 5](#)

ARME and BLM Ported to Java

In this release of AquaLogic Enterprise Security, the ASIAuthorizer, which is also known as the authorization and role mapping engine (ARME), and the BLM have been ported to Java and no

longer require separate services or processes. The WLESarme command is no longer needed and has been removed.

The ASIAuthorizer provider supports the use of Java plug-ins for custom rule extensions for evaluation and credential functions. The functions available for use are described in [Using Java Extensions Plug-Ins](#).

SCM is Now Optional

In this release of AquaLogic Enterprise Security it is possible to deploy an SSM without the SCM. You can use the PolicyIX tool, described in [PolicyIX](#) in the [Administration Reference](#), to communicate directly with the BLM and retrieve configuration data. The PolicyIX tool allows you to export configuration data (configured either through the ALES Administration Console or directly via the BLM API) for a given SSM to an XML file, and use it with the configured SSMs when the SCM is not available.

The SCM is always installed on the ALES Administration server.

See [Installing an SSM Without an Associated SCM](#) for more information.

New L10N Support

The Java, Web Services and WLS (8.1x and 9.x) SSMs are L10N ready for ALES 2.5. This includes all SSM components including the security framework, all related providers, and the ASIAuthorizer. The SSMs support the following functionality:

- Users can log in using a multi-byte username and password.
- It is possible to pass multi-byte values in an Application Context.
- It is possible to return responses as multi-byte strings.
- Auditing of authentication and authorization decisions preserves multi-byte data.

Note: The ALES SSM for Apache Web Server and the ALES SSM for Microsoft IIS are not L10N enabled for this release.

In addition, the BLM, the [BLM Java](#) and [Web Service APIs](#), the Policy Distributor (PD) and the Administration Console are L10N ready. These components support the following functionality:

- Manage users, groups, and roles in the ALES policy store with multi-byte names. Multi-byte user passwords are also supported.

- It is possible to define, view, and use attributes that have multi-byte values in ALES policies. (The attribute name continues to be in ASCII.) This applies to all kinds of attributes: static, resource, user, and dynamic.
- Use multi-byte user, group, and role names in policies.
- Preserve multi-byte data in auditing of management operations

Note: Resource names are not multi-byte enabled (ASCII only).

Enhanced Auditing Support

Audit Events are generated for all cascading actions. For example, when a user is deleted, the user is removed from any groups of which they are a member, and the user attributes are deleted. These subsequent actions are now audited.

In addition, AquaLogic Enterprise Security now audits the following events associated with policy distribution:

- Attempt of the Policy Distributor to contact an SSM and the result (success or fail).
- Attempt of the Policy Distributor to send a policy update to an SSM and the result (successful or fail).
- Attempt of the Policy Distributor to send a “Prepare to Commit” request to an SSM and the result (success or fail). The “Prepare to Commit” request is sent after the last policy update is sent to a SSM.
- Attempt of the Policy Distributor to send a “Commit” request to an SSM and the result (success or fail). The Policy Distributor sends a “Commit” request based on the configuration and the status of “Prepare to Commit” requests.

These new audit events include the SSM ID and identify the policy set to be distributed

Transactional Support

Auditing and the BLM API can now be in the same transactional boundary. The BLM API methods allow you to specify that for a transaction to be successful, the events generated by the BLM API must be audited. If either the BLM API call fails or the auditing call fails, all changes are rolled back. Any calls made to the BLM API will produce an audited event.

In addition, it is now possible to define the transactional boundary for the BLM API such that multiple BLM API calls can be made within a single transaction. If any of the BLM calls fail, the entire transaction fails and all changes are rolled back. The [BLMContextManager API](#) has been updated to include transactional methods.

As of AquaLogic Enterprise Security version 2.5, the policyloader and PolicyIX are now transactional: all policies are loaded, or none.

Entitlements User Interface

This release of AquaLogic Enterprise Security includes a sample web-based Entitlements user interface. The functionality includes the following:

- Role management
- Permission management
- Separation of duties management
- Entitlements reporting

For information about setting up and using this user interface, see [Using the Entitlements Management Tool](#) in the *Policy Managers Guide*.

BEA Kodo is Now Used

BEA Kodo implements Sun's Enterprise JavaBeans Persistence 3.0 (JPA) and Java Data Objects (JDO) specifications for the transparent persistence of Java objects. AquaLogic Enterprise Security uses Kodo to provide database neutrality. This means that you no longer need to install the database client to use AquaLogic Enterprise Security.

See [Installing the Administration Server](#) for additional information.

Supported Configurations

[Table 1](#) lists the platform on which each AquaLogic Enterprise Security core component is supported.

Table 1 Core Components

Component	Platforms	Operating Systems
Admin Console Browser	MS IE 6.0	Windows 2000 SP4, 2003 SP1
Admin Server Platform:	WebLogic Server 8.1 SP4, SP5	Sun Solaris 8 ² , 9, 10 (32-bit)
	WebLogic Server 9.1, 9.2 ¹	Windows 2000 SP4, 2003 SP1
	Tomcat 5.5.15	Red Hat Adv. Server 3.0
	Sun Solaris 82, 9, 10 (32-bit)	
Policy Store	Oracle 9.2.0.5, 10.1.2, 10.2.0.1	
	Sybase 12.5.2 ³	
	MS-SQL 2000 & 2005 ⁴	
	PointBase 5.1	
User Directory	Microsoft Active Directory ⁵	
	SunONE Directory Server v5.2	
	Novell eDirectory v8.7.31	
	Open LDAP v2.2.24	
	Oracle 9.2.0.5, 10.1.2, 10.2.0.1	
	Sybase 12.5.2 ⁶	
	MS-SQL 2000 & 2005 ⁷	
	PointBase 5.1	

1. Works with WLS configured to use either the Sun JVM or the JRockit JVM that ships with the 9.x version of the server. JRockit JVM supported on Intel hardware only.
2. Sun Solaris 8 will not be supported until ALES 2.5 SP1
3. Sybase 12.5.2 will not be supported until ALES 2.5 SP1
4. MS SQL 2005 will not be supported until ALES 2.5 SP1
5. AD/AM is not currently supported.
6. Sybase 12.5.2 will not be supported until ALES 2.5 SP1
7. MS SQL 2005 will not be supported until ALES 2.5 SP1

Table 2 lists the AquaLogic Enterprise Security SSMs, the platforms on which they run, and operating systems under which they are supported.

Note: ALES does not include the JDBC driver for MS SQL and PointBase. If you want to use MS SQL or PointBase for your database, you must download the appropriate JDBC driver. You must use the latest MS SQL 2005 JDBC driver with all versions of MS SQL.

Table 2 ALES Security Service Modules (SSMs)

SSM	Platform Version(s)	Windows 2000, 2003 ¹	Solaris 8 ² , 9, 10	Red Hat AS ³ 3.0	AIX 5.3 ⁴
IIS Web Server	IIS 5.0	Yes	No	No	No
Apache Web Server	ASF Apache 2.0.54	Yes	Yes ⁵	Yes	Yes
Web Services	Microsoft .NET 1.1 & 2.0 ⁶ WebLogic Workshop 9.0	Yes	Yes	Yes	Yes
BEA WebLogic Platform	WLS 8.1 Sp4, Sp5 WLP 8.1 Sp4, Sp5 WLS 9.1, 9.2 WLP ⁷ 9.2	Yes	Yes	Yes	Yes
Java	Sun JVM 1.4.2 Sun JVM 1.5.0 JRockit JVM 1.42 & 1.5.0	Yes	Yes	Yes	Yes

1. Windows 2000 SP4 and higher, Windows 2003 SP1 and higher.
2. Solaris 8 and AIX 5.3 will not be supported until ALES 2.5 SP1.
3. RedHat Advanced Server.
4. Solaris 8 and AIX 5.3 will not be supported until ALES 2.5 SP1.
5. Apache Web Server SSM is supported on Solaris 8 & 9 only.
6. .NET Web Services client on Windows 2000 and 2003 only.

7. Works with WLS configured to use either the Sun JVM or the JRockit JVM that ship with the 9.x version of the server. JRockit JVM supported on Intel hardware only.

Known Issues Fixed in this Release of BEA AquaLogic Enterprise Security 2.5

[Table 3](#) lists the known issues fixed in this release of AquaLogic Enterprise Security 2.5.

Table 3 Known Issues Fixed in this Release

Change Request Numbers	Description
CR289188	Audit Event implementation classes declare member data static
CR289193	User authentication happening for a disabled user in ADS authentication provider
CR276673	sys_subjectgroup attribute is not being populated from Authenticated subject.
CR288567	Refresh schema does not init ALES system similar to Install schema scripts
CR288463	ALES22 is missing demoProviderTrust.jks in the Admin kit
CR287505	cacheclientconfig.wsdd file is missing in ALES 2.2 WS SSM installation
CR287486	failover-client-config.wsdd file is missing in ALES 2.2 installation
CR267115	Need to simplify the process of adding a custom Identity Asserter on edocs
CR287019	ALES22 is missing BEA optimized axis 1.2.1 axis.jar
CR284853	ALES21 providers do not appear on the Admin console in ALES22
CR285683	Wrong default adjudicator in Admin Console

Table 3 Known Issues Fixed in this Release

Change Request Numbers	Description
CR285823	ALES SSM and Admin components can incorrectly read wrong entries from license.bea
CR285570	ASIAuthorizer provider has problems if "Pre Load Attributes" is set to "all" for WS SSM

Known Issues in BEA AquaLogic Enterprise Security 2.5

This section describes known limitations in BEA AquaLogic Enterprise Security, Version 2.5 and may include a possible workaround or fix, where applicable. If an entry includes a CR (Change Request) number, a possible solution may be provided in a future BEA AquaLogic Enterprise Security release where BEA will provide vendor specific code to fix the problem. Refer to the CR number to conveniently track the solution as problems are resolved.

Please contact your BEA Technical Support for assistance in tracking any unresolved problems. For contact information, see the section [“Contacting BEA Customer Support” on page 13](#).

[Table 4](#) lists the known issues in this release of AquaLogic Enterprise Security 2.5.

Table 4 Known Issues in This Release

CR	Description
CR299209	<p>The help message of the ASISignal utility is incorrect. ASISignal supports the following actions only: ping, comtest, wait, waitready, and status. Actions restart, shutdown, and log are no longer supported.</p> <p>CONFIGURATION: ALL</p>
CR289692	<p>If both the WLS 8 SSM and WLS 9 SSM are installed into the same <i>BEA_HOME</i>, the WLS 8 SSM instances enroll scripts will incorrectly point to the 1.5 JRE/JDK instead of the necessary 1.4.2 JRE/JDK.</p> <p>CONFIGURATION: ALL</p> <p>WORKAROUND: Manually change the <i>JAVA_HOME</i> in the enroll script to point to JRE 1.4.x. The enroll script is in <i>BEA_HOME/ales25-ssm/wls-ssm/instance/instancename/adm</i> where instance name is the name you assigned to the SSM instance when you created it.</p>
CR300046	<p>Do not create a user name that includes wildcard character such as % or *.</p> <p>CONFIGURATION: ALL</p>
CR300346	<p>The SCM directory name cannot be specified during an upgrade from 2.2 to 2.5. The directory <i>ales25-scm</i> will be created automatically.</p> <p>CONFIGURATION: ALL</p>
CR300568	<p>SSM configuration names must not start with provider types or the configuration cannot be exported using PolicyIX.</p> <p>CONFIGURATION: ALL</p> <p>WORKAROUND: Modify the name of the SSM configuration so it does not start with the following strings: "Adjudication", "Auditing", "Authentication", "Authorization", "CredentialMapping", "RoleMapping"</p>

Table 4 Known Issues in This Release

CR	Description
CR300593	<p>Policies that use LIKE and UNLIKE must use Java regular expressions. If you have existing policies that use LIKE and UNLIKE, review them to see that the regular expressions conform to Java regular expressions. See the Java documentation on regular expressions. http://java.sun.com/j2se/1.4.2/docs/api/java/util/regex/Pattern.html.</p> <p>CONFIGURATION: ALL</p>
CR300968	<p>After installing a secondary admin server, the secondary admin server will fail to start.</p> <p>CONFIGURATION: ALL</p> <p>WORKAROUND: Run the script <code>ales25-admin/bin/propagateInitialCache.[bat/sh]</code> manually after the install process for the secondary admin server has been completed. The script will complete configuration of the secondary admin server.</p>
CR302516	<p>Policy constraints are not being validated when they are created.</p> <p>CONFIGURATION: ALL.</p> <p>WORKAROUND: Double check policy constraints to make sure that they do not contain typographical errors or reference non-existent attributes.</p>
CR302300	<p>When running in delete mode, the policyIX utility will throw an exception when deleting resources that are bound to delegate and deny rules. The user will need to manually remove the entries before that utility is run.</p> <p>WORKAROUND: Delete or remove the resource from all Delegate and Deny rules using the Admin Console</p>

Table 4 Known Issues in This Release

CR	Description
CR303946	<p data-bbox="350 392 1008 505">If an SSM that does not use an SCM fails to start with a <code>ConfigurationException</code>, change the <code>wles.config.signer</code> property to upper case. The <code>wles.config.signer</code> property contains the host name of the admin server.</p> <p data-bbox="350 520 1016 604">For a Java SSM, the property is set in the <code>BEA_HOME/ales25-ssm/java-ssm/instance/instancename/bin/set-env</code> script.</p> <p data-bbox="350 619 973 732">For a WLS 8.1 SSM, the property is set in the <code>BEA_HOME/ales25-ssm/wls-ssm/instance/instancename/bin/set-wls-env</code> script.</p> <p data-bbox="350 748 1016 831">For a Web Services SSM, the property is set in the <code>BEA_HOME/ales25-ssm/web-service-ssm/instance/instancename/config/security.properties</code> file.</p> <p data-bbox="350 847 1012 899">In the file paths above, <i>instancename</i> is the name you assigned to the SSM instance when you created it.</p>
CR304025	<p data-bbox="350 930 1002 982">In order to use PointBase with ALES 2.5, the default cache size and paging sizes need to have the following settings:</p> <p data-bbox="350 998 615 1024"><code>Database.pagesize = 30720</code></p> <p data-bbox="350 1039 541 1065"><code>Cache.size = 10000</code></p> <p data-bbox="350 1081 1002 1133">WORKAROUND: Edit the <code>pointbase.ini</code> file for your database and set the values there.</p> <p data-bbox="350 1149 1016 1230">Edit the ALES <code>database.properties</code> file found in <code><bea_home>\ales25-admin\config\database.properties</code>.</p> <p data-bbox="350 1246 1005 1315">Append to the end of the <code>javax.jdo.option.ConnectionURL</code> <code>?,database.pagesize=30720,cache.size=10000</code></p> <p data-bbox="350 1331 1016 1414">For example, <code>javax.jdo.option.ConnectionURL:</code> <code>jdbc:pointbase:server://localhost/asipolicy, database.pagesize=30720,cache.size=10000</code></p>

Table 4 Known Issues in This Release

CR	Description
CR302610	<p>If you have configured an ASI Authorization provider to use metadirectory, you must modify the configuration after upgrading to 2.5. First, you must replace database server names with JDBC URLs. In 2.5, the field labeled “JDBC URLs” will have one or more database server names from your previous configuration. For example, the field may contain the Oracle service name “XE”. That must be changed to an Oracle JDBC URL such as <code>jdbc:oracle:thin:@united:1521:XE</code>. Second, you must add a JDBC driver name in the field labeled JDBC Driver. For example, <code>oracle.jdbc.driver.OracleDriver</code>.</p>
CR286171	<p>On a slow machine or with slow database response, the Wrapper process that starts and monitors the WLS Admin process will stop the WLS process before it completes starting. If the WLS process fails to start the first time after an install, the console and BLM/PD web application will be partly deployed and fail to work even after the WLS process is started.</p> <p>CONFIGURATION: ALL</p> <p>WORKAROUND: Modify the <code>wrapper.startup.timeout</code> parameter in <code>WLESAdmin.conf</code> to a number of seconds sufficient to start the WLS process. If the web applications do not work correctly, undeploy them through the WLS administration console and restart the server.</p>

Contacting BEA Customer Support

Your feedback on the product documentation is important to us. Send us e-mail at docsupport@bea.com if you have questions or comments. Your comments will be reviewed directly by the BEA professionals who create and update the product documentation.

In your e-mail message, please indicate that you are using the documentation for the BEA AquaLogic Enterprise Security Version 2.5 release.

If you have any questions about this version of the BEA AquaLogic Enterprise Security product, or if you have problems installing and running the product, contact BEA Customer Support through BEA Web Support at <http://support.bea.com>. You can also contact Customer Support by using the contact information provided on the Customer Support Card, which is included in the product package.

When contacting Customer Support, be prepared to provide the following information:

- Your name, e-mail address, phone number, and fax number
- Your company name and company address
- Your machine type and authorization codes
- The name and version of the product you are using
- A description of the problem and the content of pertinent error messages