



# BEA WebLogic Network Gatekeeper™

## Release Notes

# Copyright

Copyright © 1995-2007 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.

## Trademarks and Service Marks

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

## 1. New Features

New Architecture .....	1-2
The New Platform - WebLogic Server .....	1-2
The Container .....	1-2
Tooling .....	1-2
Core Principles .....	1-3
Use Widely Accepted Standards .....	1-3
Maintain Separation of Concerns .....	1-3
Integration with WebLogic SIP Server 3.0 .....	1-4
New Services .....	1-4
Features for Ease of Extension Development .....	1-5
Features for Ease of Client Application Development .....	1-5
Supported Interfaces .....	1-6
Extension Upgrade Path .....	1-6
Changed Behavior .....	1-7
Supported Configurations .....	1-8

## 2. Resolved Problems from Network Gatekeeper 3.0

Problems from 3.0 Resolved in 3.0 MP1 .....	2-1
---	-----

## 3. Known Issues

Open Issues for version 3.0 .....	3-1
-----------------------------------	-----

# 4. Resolved Problems from Network Gatekeeper 2.2

Problems from 2.2 Resolved in 3.0 ..... 4-1

# New Features

Welcome to BEA WebLogic Network Gatekeeper™ 3.0. As the leading Telecom Service Access Gateway, WebLogic Network Gatekeeper integrates telecom network technologies with Web Services to provide a reliable framework for developing and deploying highly available, scalable, and secure telecommunications applications and features. WebLogic Network Gatekeeper's seamless integration of disparate, heterogeneous platforms and applications enables your network to leverage existing software investments and share the carrier-class services and data that are crucial to building next-generation telecommunication applications.

For version 3.0, Network Gatekeeper has been ported to an entirely new architecture and platform, while retaining significant backwards compatibility. The following sections describe the new features and major improvements made in this release, including the new architecture, platform, service capabilities, available interfaces, and network protocol plug-ins, as well as the support for upgrading and integrating existing extensions and applications.

- [New Architecture](#)
- [Integration with WebLogic SIP Server 3.0](#)
- [New Services](#)
- [Features for Ease of Extension Development](#)
- [Features for Ease of Client Application Development](#)
- [Supported Interfaces](#)
- [Extension Upgrade Path](#)

- [Changed Behavior](#)

**Note:** Because the changes from version 2.2 are so thoroughgoing, the following descriptions are necessarily quite high-level. For more detail on any particular facet, please see the accompanying WebLogic Network Gatekeeper document suite.

## New Architecture

This release of WebLogic Network Gatekeeper marks the debut of an entirely new architecture, based on BEA WebLogic Server 9.2 and a more modular and standards based approach.

### The New Platform - WebLogic Server

Starting with this release, WebLogic Network Gatekeeper runs as a set of standard J2EE applications within WebLogic Server 9.2, MP01, leveraging that platform's well-known and highly scalable container and its extensive tooling support.

### The Container

WebLogic Server's robust clustering support provides Network Gatekeeper with reliable high-availability, failover, and load balancing functionality. WebLogic Server's self-tuning thread pools allow Network Gatekeeper to protect the underlying telecom network by responding quickly to heavy load conditions and throttling traffic, enforcing access according to Service Level Agreements. And the WLS Web Services engine supplies a flexible, standards-based security framework, supporting username/password, X.509 certificate, or SAML token authentication, digital encrypting, and digital signatures for communication with external applications.

### Tooling

Installing and configuring Network Gatekeeper is streamlined and simplified through the use of WebLogic Server's Installation and Configuration Wizards - both GUI and text-based. These tools walk you step-by-step through installing the software and setting up your initial domain configuration. Once your installation is up and running, WebLogic Server's Administration Console provides a single, Web-based, place for controlling your servers, provisioning, configuring, and managing WLNG, and viewing alarms. The WebLogic Scripting Tool allows you to do common administrative tasks using scripts. And Administrative User Security means that you can control access to administrative functionality in a flexible and customizable way.

## Core Principles

In addition to the port to Web Logic Server, certain of the key features of Network Gatekeeper have been re-thought and re-configured in version 3.0, in conformance with a set of core principles:

### Use Widely Accepted Standards

Previous versions of Network Gatekeeper were structured as layers of services deployed in proprietary SLEEs communicating through CORBA. Version 3.0 marks a transition to a more standardized J2EE model.

- Services are now standard J2EE components, distributed as J2EE applications in .ear files, and deployed and packaged in standard ways.
- Connections with Service Providers can be secured using any combination of WS-Security authentication (username/password, X.509 certificates, or SAML token based), W3C's standard XML encryption, and W3C digital signature encryption.
- Although some CORBA support remains - for communication with Parlay/OSA Gateways and for support of backwards compatible traffic paths - most internal communication uses standard Java mechanisms, including RMI and JMS.
- System management and monitoring is based on Java Management Extensions (JMX) technology, both in relation to the WLS Management Console and as a mechanism for OSS integration. Backwards compatible management objects are instrumented as Dynamic MBeans at runtime.
- Because Network Gatekeeper uses Java 1.5, features such as annotation can be used to simplify the coding of extension traffic paths.
- All internal interfaces - except those preserved for backwards-compatibility purposes - are now based on widely accepted standards, including Parlay X 2.1.
- Database access is controlled through WLS-based JDBC Datasources, which manage database connection pool size and allocation.

### Maintain Separation of Concerns

In previous versions of Network Gatekeeper, functionality was sometimes distributed in ways that made it difficult to maintain separation of concerns (SoC). Both the Access Tier and the Network Tier needed access to the database in order to maintain required state. The translation logic at the core of Network Gatekeeper's functionality - from application-facing interface to

network-facing interface - was intermixed with other utility functioning. And cross-cutting functionality such as charging data record generation and policy enforcement was implemented per service rather than in a more generalizable way. These issues have been addressed in version 3.0's architecture.

- State is maintained only in the Network Tier. Session state affinity between tiers has been eliminated.
- All translation tasks are completed in the Network Tier, and transaction logic is separated from more general utility functioning.
- All cross-cutting functionality is provided through the use of aspects, which are woven at compile time. This includes such things as:
  - Policy enforcement
  - EDR/CDR/Alarm generation
  - Trace creation, using Log4j
  - Statistics generation
- All Network Tier invocations - except in the case of some backwards-compatible traffic paths - are wrapped in transactions.

## Integration with WebLogic SIP Server 3.0

With the 3.0 release of Network Gatekeeper, applications can now have access to SIP/IMS based networks in addition to the SS7-based network elements of previous versions. Out of the box, Network Gatekeeper is easily configurable to integrate with WebLogic SIP Server 3.0, in support of Third Party Call, Call Notification, and Presence traffic paths. Any existing policies and SLAs brought over from traditional network traffic paths are supported, as is provisioning through the Partner Management Interface.

In addition, WebLogic SIP Server has access to Network Gatekeeper's Policy Service through a Web Services-based Callable Policy interface.

## New Services

Three new services have been developed for Network Gatekeeper 3.0: the Storage Service, the Budget Service, and the Geo-Redundancy Service.



- The Storage Service is a way of abstracting persistence functionality within Network Gatekeeper, providing consistent interfaces for pluggable storage providers which can be accessed across the cluster. Out of the box, Network Gatekeeper supports a database backed cache (write through) as its standard provider, but additional providers may be provided in future releases.
- The Budget Service is a mechanism for enforcing traffic SLAs across the cluster, and, if desired, across geographically distant sites.
- The Geo-Redundancy Service allows operators to set up geographically distant sites that share SLA information, so that in case of catastrophic site failure, applications can continue to send traffic to the network with little interruption in service.

## Features for Ease of Extension Development

Network Gatekeeper 3.0 ships with the Extension Toolkit, a sophisticated set of tools and samples designed to ease the process of creating customized traffic paths and network plug-ins and of restructuring extensions created for previous versions so that they can run in the new architecture. To create a new traffic path, the WSDL of an application-facing interface is supplied to a provided Eclipse plugin, which then autogenerates all of the Access Tier code and a substantial skeleton for the Network Tier. Your development effort can then focus only on creating that section of the code that interacts with your specific network elements.

Along with the Eclipse plugin, the Extension Toolkit also includes a fully deployable sample traffic path and a set of testing tools, based on JUnit, for making sure your traffic path works just as you intend.

## Features for Ease of Client Application Development

Previous versions of WebLogic Network Gatekeeper supported an Application Testing Environment (ATE) that required a fully installed version of Network Gatekeeper to run. Version 3.0 includes an SDK and Network Gatekeeper Simulator that runs in WebLogic Server without the need for any Network Gatekeeper installation. The Simulator also includes a customizable GUI for testing SMS, MMS, PAP, and Terminal Location. And because all application-facing interfaces are based on Web Services interfaces, application developers can use the tools of their choice for creating their applications.

## Supported Interfaces

Network Gatekeeper 3.0 has added support for a number of application-facing interfaces, in some cases also upgrading from Parlay X 1.0 to 2.1 in the process. The following traffic paths (application-facing interfaces with related network plugins) are new for this release and are built to fully utilize the new, enhanced architectural features of version 3.0. These include:

- Parlay X 2.1 SMS connecting to SMPP 3.4 and Parlay 5.0
- Parlay X 2.1 Audio Call connecting to Parlay 3.3
- Parlay X 2.1 Call Handling connecting to Parlay 3.3
- Parlay X 2.1 Call Notification connecting to Parlay 3.3 and SIP
- Parlay X 2.1 Terminal Status connecting to Parlay 3.3
- Parlay X 2.1 Third Party Call connecting to SIP
- Parlay X 2.1 Presence connecting to SIP

In order to support backwards compatibility, some traffic paths using a form of the older architecture are still supported in version 3.0. These include:

- Parlay X 2.1 MMS connecting to MM7 and Parlay 5.0
- Parlay X 2.1 Terminal Location connecting to MLP3.0/3.2 and Parlay 3.3
- Parlay X 2.1 Third Party Call connecting to Parlay 3.3
- EWS WAP Push connecting to PAP
- Parlay X 2.1 Payment connecting to Parlay 3.3

And, in addition, for use with customized plugins that were created in previous versions, the following application-facing backwards compatible interface (without a plugin component) is also supplied:

- SMS

## Extension Upgrade Path

Although Network Gatekeeper 3.0 is built using an entirely new architecture, great care was taken to ensure the highest possible levels of backwards compatibility for the installed base of service

provider applications and extension traffic paths and plugins. Some key features are completely supported:

- **Authentication and Authorization:** Although version 3.0 introduces a new model for authentication and authorization based on WebLogic Server's implementation of WS-Security, the older model of security based on "login tickets" and the Access Web Service continues to be supported, although deprecated.
- **CDR/EDRs/Alarms and listeners:** Although version 3.0 introduces a new model for the generation and distribution of CDRs, EDRs, and Alarms, the old mechanisms continue to be supported (although deprecated) and CORBA based listeners continue to receive the events, charging data, and alarms for which they are registered.
- **Internal Interfaces:** Although version 3.0 introduces standards-based implementations for internal interfaces and removes CORBA, previous CORBA based interfaces continue to be supported, although deprecated.

Given the magnitude of the changes involved in 3.0, it is unsurprising that some work does need to be done to have 2.2 style traffic paths and plugins work in the new environment. But a great deal of work was put in to make sure the transition is as painless as possible.

- In order to support Separation of Concerns, the functionality of associated with 2.2 style "SESPA" modules has been moved to the Network Tier.
- Plugin only extensions must be wrapped in 3.0 style plugins, but should require minimum rewriting.
- Because the Access Tier now runs in the WLS Web Services container, AXIS-based extensions must be upgraded to the WLS model.

Much of the work to accomplish these changes is largely automated by the Eclipse plugin supplied in the Extension Toolkit. The changes needed are also documented in the *Extension Toolkit - Developer's Guide*, part of the Network Gatekeeper suite.

## Changed Behavior

The change in architecture has meant that some features in earlier versions are either removed or replaced, or their behavior has changed in significant ways..

- All application-facing Parlay X 1.0 interfaces have been replaced with those based on Parlay X 2.1
- The Extended Web Services interfaces are no longer supported, except for WAP Push.

## New Features

- The 2.2 style GUI-based Management Tool is not supported, although a version of the text-based tool is supplied for use with previously existing scripts.
- The Legacy application-facing interfaces SMPP, MM7, PAP are not supported. For this version, all application-facing interfaces are Web Services based.
- Network Plugins for CIMD, USSD, and EAIF are no longer supported.
- The Application Instance Group, a way of regulating multiple instances that connect to Network Gatekeeper using a single ID does not function as it did in previous versions. The Application Instance Group ID now functions essentially as an authentication username, and must now be unique. If multiple instances do login using the same ID, all are logged out when the first logs out.
- The Node SLA XSD has changed. The `serviceType` tag is no longer enforced. If this tag was used in a previous installation to distinguish among service types (for example between SMS and MMS) associated with a single nodeID, the SLAs must be reconfigured to use distinct nodeIDs per service.
- There is a change in the way login tickets are handled. For both modes of authentication, only a single sessionID is associated with a session. Multiple concurrent logins will reuse the same ticket and a refresh of the login extends the lifetime of the ticket but not its value.

## Supported Configurations

The supported configurations have not changed since the writing of the *Architectural Overview*. For a complete listing, see the [Technical Specifications](#) chapter.

# Resolved and Open issues in Network Gatekeeper 3.0 MP1

This section describes the issues resolved in maintenance pack 1 for WebLogic Network Gatekeeper 3.0, and the issues that are open:

- [Issues from 3.0 resolved in 3.0 MP1](#)
- [Issues from 2.2 resolved in 3.0 MP1](#)
- [Open Issues in 3.0 MP1](#)

## Issues from 3.0 resolved in 3.0 MP1

The following table summarizes the issues that were resolved in Network Gatekeeper 3.0 Maintenance Pack 1.

## Resolved and Open issues in Network Gatekeeper 3.0 MP1

<b>Change Request Number</b>	<b>Description</b>
CR330756	<p>The criteria associated with an MO MMS notification request is not stored correctly on the server that receives the StartNotification request from an application, so not all MO MMSs matching the criteria are propagated back to the application.</p> <p>Status: Closed.</p> <p>Storage of criteria is corrected.</p>
CR330207 CR316108	<p>The migration.zip file that contains the migration scripts for upgrades from version 2.2 are not bundled with the installer.</p> <p>Status: Closed.</p> <p>Migration scripts now bundled with installer.</p>
CR331171	<p>Splash screens for Network Gatekeeper SDK GUI installer shows splash screens for WebLogic Server.</p> <p>Status: Closed.</p> <p>Splash screen updated.</p>
CR332088	<p>Network Tier server becomes unavailable during long-term loads with application triggered MMS traffic.</p> <p>Status: Closed.</p> <p>Optimized the slave synchronization for budgets.</p>
CR331116	<p>Budget service queue overflows during long-term loads with application triggered MMS traffic.</p> <p>Status: Closed.</p> <p>Optimized the slave synchronization for budgets.</p>
CR338269	<p>MM7 plug-in for Parlay X 2.1 Multimedia Messaging does not send the attachment to the MMSC.</p> <p>Status: Closed.</p> <p>Attachment propagated to MMSC.</p>

<b>Change Request Number</b>	<b>Description</b>
CR329741	The <code>access-network-rac-cluster.py</code> script used in configuring WLNG using WLST has an error. Status: Closed. Script updated to create the domain successfully.
CR311409 CR329695	No warning alarms are thrown when license utilization has reached 95%. Status: Closed. Added alarm with ID 103833 (2.2 type) and 1035 (3.0 type).
CR335259	RedHat Linux: JRockit 1.5._10 is provided with installer instead of JRockit 1.5._11. Status: Closed Upgraded Linux 32 installer with jrockit 1.5.0_11
CR332333	Incorrect EULA in installer. Status: Closed. Correct EULA for Network Gatekeeper 3.0 has been packaged with installer.
CR328848	An application cannot send an MMS with SOAP attachments that include MIME-headers that use a semi-colon (;). Status: Closed. Support for semi-colon in MIME-headers added.
CR337074	Must use Eclipse version to 3.3 with for Extension Toolkit. Status: Closed. Recommended version is now 3.3 of Eclipse.
CR329975	Missing delivery notifications after SMS duration test. Status: Closed. A delayed retry has been added if SMS state cannot be found in storage when delivery notifications are received from network.
CR328038	Rolling upgrade of <code>wlng_nt.ear</code> and <code>wlng_at.ear</code> requires cluster restart. Status: Closed. Instructions for performing a rolling upgrade is found in <a href="#">Rolling Upgrade (MP01)</a> in <i>System Administrator's Guide</i> .

## Resolved and Open issues in Network Gatekeeper 3.0 MP1

<b>Change Request Number</b>	<b>Description</b>
CR329965	<p>Network Gatekeeper task manager uses the default WebLogic Server work manager.</p> <p>Status: Closed.</p> <p>Network Gatekeeper switches to the application scoped work manager during startup.</p>
CR326750	<p>Rename new_Machine_1 in domain templates.</p> <p>Status: Closed.</p> <p>Renamed machine names to default to NT1, NT2, AT1, AT2, Admin, PRM1, and PRM2, these defaults can be changed using configuration wizard or by editing WLST scripts.</p>
CR331675	<p>Migration scripts in Migration.zip causes errors.</p> <p>Status: Closed.</p> <p>This error was caused because of the reference to non-existent tables in the migration scripts, this has been corrected.</p>
CR329862	<p>Trace from one plug-in is written to the trace files for all plug-ins of the same type.</p> <p>Status: Closed.</p> <p>trace_filename attribute added to srv_depl.xml, which makes it possible for two plug-ins to refer to the same file for their trace output.</p>
CR328740	<p>MMS MO and MT: "org.omg.CORBA.DATA_CONVERSION" error when multibyte characters are used in Subject field.</p> <p>Status: Closed.</p> <p>Internal interfaces changed. Changed string to wstring in ESPA_IF and RESOURCE_IF.</p>



Change Request Number	Description
CR329850 CR329851	Configuration of Validity-Period, Protocol-Identifier parameter in SMPP plug-in. Status: Closed. Traffic paths now support parameter tunneling: See: <ul style="list-style-type: none"> <li>• <a href="#">Parlay X 2.1 Short Messaging Traffic Paths</a> in <i>Traffic Path Reference</i>.</li> <li>• <a href="#">Interacting with Network Gatekeeper</a> in <i>Application Development Guide</i>.</li> <li>• <a href="#">Core and Core Utilities</a> in <i>Extension Toolkit - Developer's Guide</i>.</li> </ul>
CR330301	Configuration of source IP and source Port on SMPP plug-in. Status: Closed. New OAM method for defining: <ul style="list-style-type: none"> <li>• transmitterProxyLocalAddressAndPort</li> <li>• receiverProxyLocalAddressAndPort</li> </ul> See <a href="#">Managing and Configuring Short Messaging Traffic Paths</a> in <i>System Administrator's Guide</i> .
CR339590	When an MMS MO reception notification is triggered from the MM7 plug-in, the message identifier value is put in the Message field instead of the 'MessageIdentifier' field. Status: Closed. ID is now put in MessageIdentifier instead of Message.
CR336649	Document steps to remove unused traffic paths. Status: Closed. See <a href="#">Removing Unused Traffic Paths</a> in the <i>Installation Guide</i> .
CR334799	Error occurs when AlarmBroadcastInterval is changed in SLEE_alarm. Status: Closed. Fixed the alarm broadcast interval setting.
CR329669	The domain template for the PRM cluster includes invalid JMS server configuration. Status: Closed. Removed JMS configuration from PRM domain configuration.

## Resolved and Open issues in Network Gatekeeper 3.0 MP1

<b>Change Request Number</b>	<b>Description</b>
CR336228	Document error for qtaLimit example. Status: Closed. Document updated.
CR336479	The application session ID contains primary and secondary site ID when using geographically redundant configurations. Status: Closed.
CR331365	Log files may be configured to mask MSISDNs. Status: Closed.
CR337655	OAM methods copyChargingData and dumpChargingData in SLEE_Charging, do not work with MySQL. Status: Closed. Updated to work with MySQL.
CR339794	Alarm 2301 has wrong severity. Status: Closed. Severity set to Warning.
CR316108	Include migration scripts in the installer. Status: Closed. Migration scripts are included in the installer.
CR330959	Network tier server goes into unknown state when MLP Location Request Type is set to EME_LIR. Status: Closed. Make sure that the MLP node returns a correct result with regards to slir/eme_lir if you change this in the plug-in.

## Issues from 2.2 resolved in 3.0 MP1

<b>Change Request Number</b>	<b>Description</b>
CR305445	Registrations for notifications for mobile originated messages in backwards compatible SMS and MMS traffic paths are removed if SESPA messaging is started prior to ESPA Messaging. Status: Closed. Scheduler in SESPA Messaging checks when ESPA Messaging is started and recovers the sessions.
CR341180	RefreshLoginTicket still leaves existing login ticket available for use. Status: Closed. Cached Mail Box is cleared when login ticket is refreshed.
CR341182	Unique Constraint Error while receiving MO SMS when using backwards-compatible SMS traffic paths. Status: Closed. Corrected duplicate insert of messages in database.
CR341183	Incorrect UDH padding on concatenated SMS Nokia picture message when using backwards-compatible SMS traffic paths. Status: Closed. UDH is added to all the 3 message segments.
CR331571	Backwards-compatible services get deactivated after too many critical alarms. Status: Closed. Make sure a proper value for the number of alarms is set in each ESPA services deployment descriptor.

## Open Issues in 3.0 MP1

The following table summarizes the issues that have been identified in Network Gatekeeper 3.0 Maintenance Pack 1 and the open issues for Network Gatekeeper 3.0 that have not been resolved in maintenance pack 1.

## Resolved and Open issues in Network Gatekeeper 3.0 MP1

<b>Change Request Number</b>	<b>Description</b>
CR341661	<p>Installing WLNG defaults to a development mode installation instead of production mode.</p> <p>Status: Open.</p> <p>Work around: After installation, edit <code>\$(DOMAIN_HOME)/bin/setDomain.sh</code> (or <code>.cmd</code>) on all servers and make sure the following setting is present:</p> <pre>PRODUCTION_MODE='true'</pre>
CR330939	<p>There is no OAM method to enable trace for Access Tier servers.</p> <p>Status: Open.</p>
CR329979	<p>Changing buffer size property for Trace service erases the trace files content.</p> <p>Status: Open.</p>
CR311065	<p>If you make changes in WS-Security options using the Admin Console, the Console offers to let you store plan.xml in the directory of your choice. But WLS itself only looks for the plan.xml in the default location, so a file saved to other than the default location has no impact on WLS behavior.</p> <p>Status: Open. Workaround: Save to the default location: <code>/domains/&lt;your domain&gt;/servers/WLNG_AT1/stage/wlng_at/plan/Plan.xml</code>.</p>
CR327407	<p>When SLAs are updated, only the server where the SLA is updated gets the current settings immediately. The budget service does not push budget configuration changes to slaves on update, so other Network Tier servers keep the old budget settings until the budget service polls for configuration changes.</p> <p>Status: Open. Workaround: Load the updated SLAs on all servers or lower the configuration update interval to minimize the time different configuration settings are applied. The time interval can be changed using Network Gatekeeper management console in <code>BudgetService-&gt;ConfigUpdateInterval</code></p>
CR326236/ CR328083/ CR328439/CR306501	<p>In some cases of NT failover while running MMS, WAP Push with Delivery Notifications, or Terminal Location traffic, there may be a brief period during which throughput falls to zero and some messages are lost.</p> <p>Status: Open. In normal use this is unlikely to have a major impact.</p>

Change Request Number	Description
CR327200	<p>If you are using the backwards compatible version of the SMS traffic path with SMPP, and you have multiple plug-ins, each of which is set to different limits in the Node SLA, node policy enforcement will not work correctly.</p> <p>Status: Open. Workaround: Set each plug-in to the same limit.</p>
CR319714	<p>When there are multiple address fields in a StartCallNotification message, only the SIP URL in the first address field is checked for format.</p> <p>Status: Open.</p>
CR319715	<p>Trying to stop CallNotification with an invalid correlator produces an SVC001 exception instead of the correct SVC002.</p> <p>Status: Open</p>
CR317967	<p>If an application calls StopSmsNotification with an invalid correlator, an incorrect error message is produced. An SVC0002 exception is thrown, but the variables field in the response message contains the value of the correlator, not the text “Correlator”</p> <p>Status: Open.</p>
CR318556	<p>If an application calls EndCall with an incorrectly formatted identifier, an incorrect error message is produced. An SVC0001 exception is thrown, with error code SIP000003 instead of an SVC002.</p> <p>Status: Open.</p>
CR318555	<p>If an application calls EndCall with an invalid identifier, no error message is produced. An SVC002 should be thrown.</p> <p>Status: Open.</p>
CR318552	<p>If an application calls MakeCall with a charging part defined and the ThirdPartyCall plug-in for SIP has ChargingAllowed set to false, no error message is produced. A POL0008 exception should be thrown.</p> <p>Status: Open.</p>
CR319755	<p>If an application calls StartCallDirectionNotification more than once for a single SIP address, an incorrect error message is produced. An SVC0001 exception is thrown with the error code CN-000001. The correct value would be an SVC0002 exception with a variable field that indicates the SIP address.</p> <p>Status: Open.</p>

## Resolved and Open issues in Network Gatekeeper 3.0 MP1

<b>Change Request Number</b>	<b>Description</b>
CR327292	<p>Both SP and Global node SLA contracts are enforced even if the use period falls outside of specified start and end dates.</p> <p>Status: Open.</p>
CR329959	<p>If there are overlapping <code>&lt;override&gt;</code> tags in the SLA, enforcement may choose either tag value.</p> <p>Status: Open. Workaround: Make sure there are no overlapping tags.</p>
CR327429	<p>Node/Global policy enforcement throws service exceptions instead of policy exceptions.</p> <p>Status: Open.</p>
CR330699	<p>In the Extension Toolkit the Turn On Plug-in Debug option cannot be selected.</p> <p>Status: Open.</p>
CR305817	<p>There is no mechanism for unregistering interfaces for a ManagedPlugin instance. New objects that are registered are simply appended to the existing list.</p> <p>Status: Open. This would only be an issue if the SLEE service for a plug-in is manually deactivated and then reactivated. Doing so could cause duplicate registrations in the Manager.</p>
CR329497	<p>The alarm page of the Management Console does not limit the number of alarms displayed. In a situation where many alarms are being emitted, this may cause significant lag times as the page is being rendered.</p> <p>Status: Open. Workaround: If the page appears to hang, close the tab or window in your browser.</p>
CR326557	<p>The management operation <code>Policy-&gt;reloadServiceProviderXmlDriver</code> does not reload the XSD for the Service Provider SLAs.</p> <p>Status: Works as designed. The XSD for the Service Provider SLAs cannot be updated during runtime. The correct XSD driver is loaded when the server is restarted.</p>

Change Request Number	Description
CR305375	<p>Management operation SLEE-&gt;getFreeDiskSpace does not return the correct value. A NumberFormatException Exception is thrown.</p> <p>Status: This is an artifact from DiskMonitorUnix which was used in Network Gatekeeper 2.2 to monitor disk space on a MySQL installation. This feature is not used in Gatekeeper 3.0 and the exception can be ignored.</p> <p>Workaround: Use operating system tools to monitor disk utilization.</p>
CR327896	<p>Application sessions expire one minute early. If LoginTicket Lifetime (session) check is enabled, the time-out value expires one minute earlier than expected.</p> <p>Status: Open. Work-around: Configure the time-out to one minute more than your desired duration in SESPA_access-&gt;LoginTicketLifetime</p>
CR326236/ CR328083/ CR328439/CR306501	<p>In some cases of NT failover while running MMS, WAP Push with Delivery Notifications, or Terminal Location traffic, there may be a brief period during which throughput falls to zero and some messages are lost.</p> <p>Status: Open. In normal use this is unlikely to have a major impact.</p>

Change Request Number	Description
CR329465	<p>In the SMPP plug-in for SMS, the methods <code>getReceivedSms</code> and <code>getSmsDeliveryStatus</code> produce events, but these are not described in the <code>edr.xml</code> file. This means that the event will not be classified, and will appear to listeners as “Unknown.” As a result, it is impossible to have these events trigger CDRs.</p> <p>Status: Open. Workaround: Edit the <code>edr.xml</code> file manually. Add the following stanzas after the filter for the <code>sendCancel</code> method.</p> <pre data-bbox="427 621 1161 1506"> &lt;edr id="7011" description="getSmsDeliveryStatus"&gt;   &lt;filter&gt;     &lt;method&gt;       &lt;name&gt;GetSmsDeliveryStatusResponse getSmsDeliveryStatus&lt;/name&gt; &lt;class&gt;com.bea.wlcp.wlng.plugin.sms.smpp.SMPPManagedP luginImpl&lt;/class&gt;     &lt;/method&gt;   &lt;/filter&gt; &lt;/edr&gt;  &lt;edr id="7012" description="getReceivedSms"&gt;   &lt;filter&gt;     &lt;method&gt;       &lt;name&gt;GetReceivedSmsResponse getReceivedSms&lt;/name&gt; &lt;class&gt;com.bea.wlcp.wlng.plugin.sms.smpp.SMPPManagedP luginImpl&lt;/class&gt;     &lt;/method&gt;   &lt;/filter&gt; &lt;/edr&gt; </pre> <p>To understand how to do this, see the “Categorizing EDRs” section of the <i>Extension Toolkit - Developer’s Guide</i>.</p>



Change Request Number	Description
CR326808	<p>Network Gatekeeper cannot process MMSes without attachments, as, for example, an MMS that is sent with a subject but no content. If a SOAP attachment is NULL, SVC0001 is thrown to the application and NullPointerExceptions are logged in Network Gatekeeper</p> <p>Status: Open. Workaround: Make sure the client applications do not send MMSes without attachments.</p>
CR306833	<p>If an application calls SendSms with no destination address specified, an incorrect error message is produced. An SVC0001 exception is thrown, but the variables field in the response message reads: "No plug-in available for type: interface com.bea.wlcp.wlmg.px21.plugin.SendSmsPlugin".</p> <p>Status: Open.</p>
CR311849	<p>Service Level Agreements fail to load if there are space characters prior to the &lt;?xml&gt; tag.</p> <p>Status: Open. Workaround: Make sure there are no spaces before the &lt;?xml&gt; tag</p>
CR327194/CR327314/ CR327315	<p>Alarms are not generated in certain circumstances: for Node/Global policy enforcement, when Node SLA limit for application-initiated traffic is reached, and when reaching the threshold value (80%) of the request limits specified in the SP/APP SLAs.</p> <p>Status: Open.</p>
CR318142	<p>If you use the Eclipse plug-in to generate a traffic path skeleton, the GUI does not give you the option of naming the Administration Server anything but AdminServer. Also using the plug-in GUI you cannot specify t3 as the protocol for the WLS administration URL.</p> <p>Status: Open. Workaround: Edit the build file manually.</p>

## Resolved and Open issues in Network Gatekeeper 3.0 MP1

# Known Issues

## Open Issues for version 3.0

The following are known open issues for Network Gatekeeper 3.0.

<b>Change Request Number</b>	<b>Description</b>
CR328038	Rolling/hitless upgrades of wlng_nt.ear and wlng_at.ear are not supported. Status: Open. The only possible workaround at this time is to have multiple sites and upgrade one site at a time.
CR330939	There is no OAM method to enable trace for Access Tier servers. Status: Open.
CR329979	Changing buffer size property for Trace service erases the trace files content. Status: Open.
CR329862	Trace from one plug-in is written to the trace files for all plug-ins of the same type. Status: Open.

Change Request Number	Description
CR311065	<p>If you make changes in WS-Security options using the Admin Console, the Console offers to let you store plan.xml in the directory of your choice. But WLS itself only looks for the plan.xml in the default location, so a file saved to other than the default location has no impact on WLS behavior.</p> <p>Status: Open. Workaround: Save to the default location: /domains/&lt;your domain&gt;/servers/WLNG_AT1/stage/wlng_at/plan/Plan.xml.</p>
CR329497	<p>The alarm page of the Management Console does not limit the number of alarms displayed. In a situation where many alarms are being emitted, this may cause significant lag times as the page is being rendered.</p> <p>Status: Open. Workaround: If the page appears to hang, close the tab or window in your browser.</p>
CR326557	<p>The management operation Policy-&gt;reloadServiceProviderXmlDriver does not reload the XSD for the Service Provider SLAs.</p> <p>Status: Works as designed. The XSD for the Service Provider SLAs cannot be updated during runtime. The correct XSD driver is loaded when the server is restarted.</p>
CR327407	<p>When SLAs are updated, only the server where the SLA is updated gets the current settings immediately. The budget service does not push budget configuration changes to slaves on update, so other Network Tier servers keep the old budget settings until the budget service polls for configuration changes.</p> <p>Status: Open. Workaround: Load the updated SLAs on all servers or lower the configuration update interval to minimize the time different configuration settings are applied. The time interval can be changed using Network Gatekeeper management console in BudgetService-&gt;ConfigUpdateInterval</p>
CR305375	<p>Management operation SLEE-&gt;getFreeDiskSpace does not return the correct value. A NumberFormatException Exception is thrown.</p> <p>Status: This is an artifact from DiskMonitorUnix which was used in Network Gatekeeper 2.2 to monitor diskspace on a MySQL installation. This feature is not used in Gatekeeper 3.0 and the exception can be ignored.</p> <p>Workaround: Use operating system tools to monitor disk utilization.</p>

Change Request Number	Description
CR327896	<p>Application sessions expire one minute early. If LoginTicket Lifetime (session) check is enabled, the time-out value expires one minute earlier than expected.</p> <p>Status: Open. Work-around: Configure the time-out to one minute more than the your desired duration in SESPA_access-&gt;LoginTicketLifetime</p>
CR326236/ CR328083/ CR328439/CR306501	<p>In some cases of NT failover while running MMS, WAP Push with Delivery Notifications, or Terminal Location traffic, there may be a brief period during which throughput falls to zero and some messages are lost.</p> <p>Status: Open. In normal use this is unlikely to have a major impact.</p>
CR327200	<p>If you are using the backwards compatible version of the SMS traffic path with SMPP, and you have multiple plug-ins, each of which is set to different limits in the Node SLA, node policy enforcement will not work correctly.</p> <p>Status: Open. Workaround: Set each plug-in to the same limit.</p>

Change Request Number	Description
CR329465	<p>In the SMPP plug-in for SMS, the methods <code>getReceivedSms</code> and <code>getSmsDeliveryStatus</code> produce events, but these are not described in the <code>edr.xml</code> file. This means that the event will not be classified, and will appear to listeners as “Unknown.” As a result, it is impossible to have these events trigger CDRs.</p> <p>Status: Open. Workaround: Edit the <code>edr.xml</code> file manually. Add the following stanzas after the filter for the <code>sendCancel</code> method.</p> <pre data-bbox="427 621 1161 1506"> &lt;edr id="7011" description="getSmsDeliveryStatus"&gt;   &lt;filter&gt;     &lt;method&gt;       &lt;name&gt;GetSmsDeliveryStatusResponse getSmsDeliveryStatus&lt;/name&gt; &lt;class&gt;com.bea.wlcp.wlng.plugin.sms.smpp.SMPPManagedP luginImpl&lt;/class&gt;     &lt;/method&gt;   &lt;/filter&gt; &lt;/edr&gt;  &lt;edr id="7012" description="getReceivedSms"&gt;   &lt;filter&gt;     &lt;method&gt;       &lt;name&gt;GetReceivedSmsResponse getReceivedSms&lt;/name&gt; &lt;class&gt;com.bea.wlcp.wlng.plugin.sms.smpp.SMPPManagedP luginImpl&lt;/class&gt;     &lt;/method&gt;   &lt;/filter&gt; &lt;/edr&gt; </pre> <p>To understand how to do this, see the “Categorizing EDRs” section of the <i>Extension Toolkit - Developer’s Guide</i>.</p>

<b>Change Request Number</b>	<b>Description</b>
CR328740	An application cannot use multi-byte characters in the subject field of an MMS, either MO or MT. Status: Open
CR328848	An application cannot send an MMS with SOAP attachments that include MIME-headers that use a semi-colon (;). Status: Open.
CR326808	Network Gatekeeper cannot process MMSes without attachments, as, for example, an MMS that that is sent with a subject but no content. If a SOAP attachment is NULL, SVC0001 is thrown to the application and NullPointerExceptions are logged in Network Gatekeeper Status: Open. Workaround: Make sure the client applications do not send MMSes without attachments.
CR330756	The criteria associated with an MO MMS notification request is not stored correctly on the server that receives the StartNotification request from an application, so not all MO MMSes matching the criteria are propagated back to the application. Status: Open.
CR319714	When there are multiple address fields in a StartCallNotification message, only the SIP URL in the first address field is checked for format. Status: Open.
CR319715	Trying to stop CallNotification with an invalid correlator produces an SVC001 exception instead of the correct SVC002. Status: Open
CR306833	If an application calls SendSms with no destination address specified, an incorrect error message is produced. An SVC0001 exception is thrown, but the variables field in the response message reads: "No plug-in available for type: interface com.bea.wlcp.wlng.px21.plugin.SendSmsPlugin". Status: Open.

Change Request Number	Description
CR317967	<p>If an application calls StopSmsNotification with an invalid correlator, an incorrect error message is produced. An SVC0002 exception is thrown, but the variables field in the response message contains the value of the correlator, not the text “Correlator”</p> <p>Status: Open.</p>
CR318556	<p>If an application calls EndCall with an incorrectly formatted identifier, an incorrect error message is produced. An SVC0001 exception is thrown, with error code SIP000003 instead of an SVC002.</p> <p>Status: Open.</p>
CR318555	<p>If an application calls EndCall with an invalid identifier, no error message is produced. An SVC002 should be thrown.</p> <p>Status: Open.</p>
CR318552	<p>If an application calls MakeCall with a charging part defined and the ThirdPartyCall plug-in for SIP has ChargingAllowed set to false, no error message is produced. A POL0008 exception should be thrown.</p> <p>Status: Open.</p>
CR319755	<p>If an application calls StartCallDirectionNotification more than once for a single SIP address, an incorrect error message is produced. An SVC0001 exception is thrown with the error code CN-000001. The correct value would be an SVC0002 exception with a variable field that indicates the SIP address.</p> <p>Status: Open.</p>
CR327292	<p>Both SP and Global node SLA contracts are enforced even if the use period falls outside of specified start and end dates.</p> <p>Status: Open.</p>
CR311849	<p>Service Level Agreements fail to load if there are space characters prior to the &lt;?xml&gt; tag.</p> <p>Status: Open. Workaround: Make sure there are no spaces before the &lt;?xml&gt; tag</p>
CR329959	<p>If there are overlapping &lt;override&gt; tags in the SLA, enforcement may choose either tag value.</p> <p>Status: Open. Workaround: Make sure there are no overlapping tags.</p>



Change Request Number	Description
CR327429	Node/Global policy enforcement throws service exceptions instead of policy exceptions. Status: Open.
CR327194/CR327314/ CR327315	Alarms are not generated in certain circumstances: for Node/Global policy enforcement, when Node SLA limit for application-initiated traffic is reached, and when reaching the threshold value (80%) of the request limits specified in the SP/APP SLAs. Status: Open.
CR311409	No warning alarms are thrown when license utilization has reached 95%. Status: Open. Workaround: Edit the alarm.xml file manually. To understand how to do this, see the “Alarm Generation” section of the Annotations, EDRs, Alarms, and CDRs chapter of the <i>Extension Toolkit - Developer’s Guide</i> .
CR329741	The <code>access-network-rac-cluster.py</code> script used in configuring WLNG using WLST has an error. Status: Open. Workaround: Edit the script as described in the “Configuring the Domain” chapter of the <i>Installation Guide</i> .
CR330207	The migration.zip file that contains the migration scripts for upgrades from version 2.2 are not bundled with the installer. Status: Open. Workaround: Contact BEA Support.
CR330699	In the Extension Toolkit the Turn On Plug-in Debug option cannot be selected. Status: Open.

## Known Issues

<b>Change Request Number</b>	<b>Description</b>
CR318142	<p>If you use the Eclipse plugin to generate a traffic path skeleton, the GUI does not give you the option of naming the Administration Server anything but AdminServer. Also using the plugin GUI you cannot specify t3 as the protocol for the WLS administration URL.</p> <p>Status: Open. Workaround: Edit the build file manually.</p>
CR305817	<p>There is no mechanism for unregistering interfaces for a ManagedPlugin instance. New objects that are registered are simply appended to the existing list.</p> <p>Status: Open. This would only be an issue if the SLEE service for a plug-in is manually deactivated and then reactivated. Doing so could cause duplicate registrations in the Manager.</p>

# Resolved Problems from Network Gatekeeper 2.2

## Problems from 2.2 Resolved in 3.0

The following table summarizes the issues that were resolved in Network Gatekeeper 2.2.

Change Request Number	Description
CR274171	[Axis] Inter operability with WLS 9.1 client Web Services stack. This CR is related to Axis 1.2.1, which was used by Network Gatekeeper 2.2. Status: Network Gatekeeper 3.0 uses WebLogic Server Web Services stack, and not Axis for the application facing interfaces, which resolves this issue.
CR297712	Terminal Location invocations to multiple addresses should result in single invocation in Network Gatekeeper. Terminal Location method invocations towards a list of addresses results in multiple individual invocations through the Network Gatekeeper and to the network rather than a single invocation. Status: A request that contains a list of addresses is now handled as one request.

## Resolved Problems from Network Gatekeeper 2.2

<b>Change Request Number</b>	<b>Description</b>
CR289230	<p>MM7 plug-in treats Partial OK response from MMSC as failure.</p> <p>When sending an MMS to several destinations and one address fails (MM7_PARTIAL_SUCCESS reported from the MMSC), Network Gatekeeper treated the whole request as failed, even though the MMSes to the non-failed addresses were delivered.</p> <p>Status: If a MM7_PARTIAL_SUCCESS is returned, Network Gatekeeper treats the request itself as succeeded, and keeps track of the failed addresses in order to report the correct delivery status to the application.</p>
CR292394	<p>SNMP Traps Generated by WLNG not compatible with HP OpenView.</p> <p>Status: The SNMP service in Network Gatekeeper 3.0 is updated to be compatible with HP OpenView.</p>
CR267437	<p>Not compliant with Parlay X ringtone and logo formats.</p> <p>Status: The new SMPP and Parlay MultiMedia Messaging plug-ins for Parlay X 2.1 Short Messaging support logos in the following formats:</p> <ul style="list-style-type: none"><li>• bmp</li><li>• gif</li><li>• jpg</li><li>• png</li></ul> <p>The supported formats are in black &amp; white, and neither animation nor gray scale is supported.</p> <p>RTX-format for ringtones is supported in either SmartMessaging or EMS format.</p>