Software AG NERV 9.10 Readme

April 2016

This file contains important information you must read before using Software AG NERV 9.10. You can find user documentation on the Documentation website or the TECHcommunity website. At those locations, you can also find the suite-related information listed below.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

1.0   Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the Empower website.

2.0   Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

- EDA-861
  When the JMS provider is unavailable, shutting down NERV gracefully may take too much time. When the JMS provider to which NERV emits events becomes unavailable, shutting down NERV or the runtime in which it is running takes 5 minutes.
  The issue is resolved for the case when a small number of events are available in the Camel inflight message repository. As a workaround for cases of large number of events, you can terminate the JVM process in which NERV is running from the Task Manager of your operating system.

- EDA-1021
  Event not redelivered in case of short-term endpoint unavailability during NERV shutdown. If a route endpoint becomes temporarily unavailable or throws an exception while processing an event during NERV shutdown, the event will not be redelivered if the endpoint becomes available again while the shutdown operation takes place. If guaranteed delivery is enabled, the event will be redelivered after NERV is restarted, which may corrupt the original order of events.
  There is currently no workaround for this issue.

3.0   Usage Notes

This section provides any additional information you need to work with the current release of this product.

4.0   Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

Release 9.10

- EDA_9.9_NERV_Fix1

Release 9.8

- NERV 9.7 Fix 5

Release 9.7

- NERV 9.6 Fix 5

- EDA Event Type Editor 9.6 Fix 3

Release 9.6

- NERV 9.5 SP1 Fix 1

Release 9.5

- Software AG Designer Event Type Editor 9.0 SP1 Fix 1

- webMethods NERV 9.0 SP1 Fix 4

5.0   Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

Release 9.9

- EDA-1846

  In a non-OSGi environment, NERV fails to create events and process component bundles.
  For applications working in a non-OSGi environment, NERV cannot create events and process component bundles successfully. A ClassNotFoundException is thrown.

  This issue is now resolved.

Release 9.7

- EDA-878
  NERV emits cached events at start-up before the activation of deployed emit configuration bundles.
  At start-up, NERV emits all messages found in the NERV cache directory. As a result, the messages are sent to the default endpoint, instead of the endpoint(s) defined in the deployed custom routes.
  This issue occurs randomly.
  The issue is now resolved.

- EDA-874
  A synchronous invocation of the emit() method during the activation of any deployed NERV emit configuration bundle causes NERV to block.
  Invoking the emit(Message message) method of the EventEmitter service during the activation of a deployed NERV emit configuration bundle leads to a deadlock in NERV, and the EventEmitter service becomes unresponsive.
  The issue is now resolved. The emit() method is called asynchronously in a separate thread which does not block the main thread of execution.

6.0   Documentation Changes

This section describes significant changes to the documentation in each release, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

7.0   Terminology Changes

A release is listed in this section only if changes occurred in that release.

8.0   Added, Removed, Deprecated, or Changed Items

This section lists functionality, controls, portlets, properties, or other items that have been added, removed, deprecated, or changed. A release is listed in this section only if changes occurred in that release.

Release 9.10

Removed Item	Replacement, if any
com.softwareag.eda.nerv.hdfs.feature	The HDSF feature has been removed from the product. This functionality is now provided by Software AG Event Routing and webMethods Event Persistence.

Release 9.7

Deprecated Item	Replacement, if any
EDA Orchestrator	EDA Orchestrator is deprecated and no longer distributed with webMethods NERV 9.7. All functionality is available in webMethods NERV.

Release 9.5

Added Item	Description
com.softwareag.eda.nerv.jms.asynch.subscription	A configuration property that defines the way NERV subscribers consume events. The default value is false. If set to true, NERV subscribers consume events asynchronously.

9.0   Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

Release 9.7

Added Parameter	Description
com.softwareag.eda.nerv.security.file.location	Contains the path to the NERV security file. This file contains the encrypted secret key used by NERV for encrypting and decrypting passwords specified in the route bundles making connections which require password authentications. The default value is: *@path\:sag.install.area/common/conf/nerv/nerv-security.xml*. When NERV runs in the Common Platform, the *@path:sag.install.area* token is dynamically resolved at runtime to point to your Software AG installation directory. **Note:** When NERV runs outside the Common Platform, the default value is not taken into account.

Removed Parameter	Replacement, if any
com.softwareag.eda.nerv.orchestrator. compatibility.mode	

Release 9.6

Added Parameter	Description
com.softwareag.eda.nerv.guaranteed.delivery. level	Specifies the guaranteed delivery level for storing events. The default value is MAXIMUM_STRONG. Other possible values are NONE, and MAXIMUM_EVENTUAL. Note: When you set up the guaranteed delivery level to MAXIMUM_STRONG or MAXIMUM_EVENTUAL, the value you have defined for the com.softwareag.eda.nerv.maximum.redelivery.atte mpts property is disregarded. Instead, NERV attempts to redeliver events infinitely.

Added Parameter	Description
com.softwareag.eda.nerv.cache.configuration. location	Specifies the location of the Ehcache configuration files. It is used together with the com.softwareag.eda.nerv.guaranteed.delivery.level property.
com.softwareag.eda.nerv.jms.auto.generate. topics	Enables NERV to create topics automatically on the specified JMS provider. The default value is true. If set to false, users must create topics manually on the JMS provider.

10.0   Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

Release 9.8

The webMethods NERV component and the low-level Java API to it are now deprecated. Note that despite that deprecation, Software AG products continue to communicate using events, and you can still use the high-level webMethods Integration Server built-in services to send and receive events.

Added API	Description
com.softwareag.eda.store.api.parser.EventParser .validate(SchemaElementTree schemaDefinition, String event)	Validates the provided event content against the specified schemaDefinition.
com.softwareag.eda.store.api.EDAEventTypeStore .validate(EDAEventTypeID eventTypeID, String content)	Validates the provided content against the XSD schema of the specified event type.

Deprecated API	Replacement, if any
com.softwareag.eda.jndi	
com.softwareag.eda.nerv	
com.softwareag.eda.nerv.jms	
com.softwareag.eda.nerv.jms.util	
com.softwareag.eda.nerv.nonosgi	
com.softwareag.eda.nerv.nonosgi.util	
com.softwareag.eda.nerv.route.builder	
com.softwareag.eda.nerv.route.conf	
com.softwareag.eda.nerv.route.endpoint	
com.softwareag.eda.nerv.subscription	
com.softwareag.eda.nerv.util	
com.softwareag.eda.nerv.error.handling	

Changed API	Description
com.softwareag.eda.nerv.encrypt.api	This package has been renamed to com.softwareag.event.routing.encryption .

Release 9.7

Added API	Description
EventParser.getProperties()	Retrieves leaf elements of event XML in *Map<String, String>* format.
com.softwareag.eda.nerv.admin.api.beans. blueprint	This package contains the JAXB generated POJO classes of the Blueprint schema used for setting up the Blueprint XML of a deployable JAR file.
NervTextEncryptor.decrypt(String)	Decripts a given string.
NervTextEncryptor.decryptForCamel(String)	Decrypts a given string if the String is in Camel format it is decrypted, else return the input value.
NervTextEncryptor.encrypt(String)	Encrypts a given string.
NervTextEncryptor.encryptForCamel(String)	Encrypts a given string and wrap it for use in the Camel environment.
NervTextEncryptor. NervTextEncryptor()	Default constructor.

Added API	Description
NervTextEncryptor.setSecurityFileLocation (String)	Set the location of the *nerv-security.xml* file.
NervTextEncryptorFactory.createTextEncryptor (String)	Create a new NervTextEncryptor.
NervEncryptionException(String)	Constructs an object based on the provided parameters.
NervEncryptionException(String,Throwable)	Constructs an object based on the provided parameters.
NervEncryptionException(Throwable)	Constructs an object based on the provided parameters.

Removed API	Replacement, if any
All EDA Orchestrator API classes from the packages below have been removed: • com.softwareag.eda.api • com.softwareag.eda.api.exception • com.softwareag.eda.event.schema • com.softwareag.eda.event.schema. internal • com.softwareag.eda.event.schema. relational • com.softwareag.eda.event.schema. xsd • com.softwareag.eda.utility • com.softwareag.eda.utility.cache • com.softwareag.eda.utility.config • com.softwareag.eda.utility.core • com.softwareag.eda.utility.jms • com.softwareag.eda.utility,log • com.softwareag.eda.utility. transform	The functionality of the EDA Orchestrator API is now available using the NERV API.

Changed API	Description
EventParser.getHeaders()	Returns type changed from Map<String, Object> to Map<String, String>.
EventParser.getFiltarableProperties()	Returns type changed from <String, Object> to Map<String, String>.

Release 9.6

Added API	Description
Configuration.THREAD_POOL	New subscription configuration.

Added API	Description
DefaultConstants. DEFAULT_AUTO_GENERATE_TOPICS	The default value is true. If set to false, users must create topics manually on the JMS provider.
DefaultConstants. DEFAULT_IN_MEMORY_CHANNEL_ SIZE_VALUE	Default count of events that can exist in the in-memory channel.
DefaultConstants.DEFAULT_IN_MEMORY_ CONCURRENT_CONSUMERS_VALUE	Default count of consumers that can work at the same time.
DefaultConstants.DEFAULT_MAXIMUM_ REDELIVERY_ATTEMPTS_VALUE	Default count of attempts to redeliver unsent messages.
DefaultConstants. DEFAULT_REDELIVERY_DELAY_VALUE	Default delay in milliseconds between attempts to redeliver unsent messages.
DefaultConstants.GUARANTEED_DELIVERY_ LEVEL_MAXIMUM_EVENTUAL	Value used for enabling the MAXIMUM EVENTUAL level of guaranteed delivery.
DefaultConstants.GUARANTEED_DELIVERY_ LEVEL_MAXIMUM_STRONG	Value used for enabling the MAXIMUM STRONG level of guaranteed delivery
DefaultConstants. GUARANTEED_DELIVERY_LEVEL_NONE	Value used for disabling guaranteed delivery of events.
DefaultConstants. PROP_AUTO_GENERATE_TOPICS	Property to set if the generation of topics is enabled or disabled.
DefaultConstants. PROP_CACHE_CONFIGURATION_ LOCATION	Property for setting the location of the configuration for guaranteed delivery cache.
DefaultConstants. PROP_GUARANTEED_DELIVERY_LEVEL	Property for setting the guaranteed delivery level.
DefaultConstants. PROP_IN_MEMORY_ CONCURRENT_CONSUMERS	Property for setting the concurrent consumers count of the in memory VM channels.
EndpointResolver. generateInMemoryEndpointURINoOptions (EDAEventTypeID)	Generates an endpoint URI denoting the in memory VM channel which corresponds to the specified event type.
EndpointResolver. generateInMemoryEndpointURINoOptions (String)	Generates an endpoint URI denoting the in memory VM channel which corresponds to the specified event type.
NERVSingleton.getAutoCreateTopics()	Returns the status of auto generation of topics in JMS.

Added API	Description
PropertiesProvider.getProperties()	Gets all properties from a preinitialized java.util.Properties object.
PropertiesProvider.getProperty(String)	Gets a value of a property from a preinitialized java.util.Properties object.
Subscription.useThreadPool(int)	Configures the subscription to use a thread pool with the specified size.
Subscription.useThreadPool (ThreadPoolConfiguration)	Configures the subscription to use a thread pool with the specified configuration.
ThreadPoolConfiguration. ThreadPoolConfiguration(int, int, String)	Constructs an object based on the provided parameters.
ThreadPoolConfiguration.getMaxPoolSize()	Gives access to the maximum size of the pool to be used by NERV.
ThreadPoolConfiguration.getPoolSize()	Gives access to the initial size of the pool to be used by NERV.
ThreadPoolConfiguration.getThreadName()	Gives access to the template name used by NERV when processing threads are spawned.
ThreadPoolConfiguration.getType()	Returns the configuration type represented as an integer.
XSDParserResolver.resolveXsdParser()	Resolves a XSDParser instance.
SchemaElementTree.getFilterableProperties()	Gets the filterable properties.
SchemaElementTree.getWalker()	Gets a schema element tree walker.
SchemaElementTreeNode.getEffective Restriction()	Gets the restriction for the current node.
SchemaElementTreeNode.hasRestriction()	Check whether this node has a restriction.
XsdConverter	Converts IS schemata to EDA event types.
XsdConverterFactory	Factory to create instances of XsdConverter and XsdInfo.
XsdInfo	Represents a XML schema.

Removed API	Replacement, if any
EndpointResolver. generateDefaultInMemoryEndpointURI (String)	No replacement. Generates endpoint with a given event type.

Changed API	Description
EndpointResolver. generateDefaultInMemoryEndpointURI(String, PropertiesProvider)	Generates an endpoint URI denoting the default in memory VM channel which corresponds to the specified event type.
DefaultConstants. DEFAULT_IN_MEMORY_CHANNEL_ SIZE_VALUE	Replaces DefaultConstants.IN_MEMORY_CHANNEL_DEF AULT_SIZE. Constant type has been changed from String to int.

Release 9.5

Deprecated API	Replacement, if any
NERVSingleton.loadAssets(Properties, String)	NERVSingleton.loadAssets(Properties)

11.0 Copyright Information

Copyright © 2016 Software AG, Darmstadt, Germany and/or Software AG USA Inc., Reston, VA, USA, and/or its subsidiaries and/or its affiliates and/or their licensors.

The name Software AG and all Software AG product names are either trademarks or registered trademarks of Software AG and/or Software AG USA Inc. and/or its subsidiaries and/or its affiliates and/or their licensors. Other company and product names mentioned herein may be trademarks of their respective owners.

Detailed information on trademarks and patents owned by Software AG and/or its subsidiaries is located at http://softwareag.com/licenses.

This software may include portions of third-party products. For third-party copyright notices, license terms, additional rights or restrictions, please refer to "License Texts, Copyright Notices and Disclaimers of Third Party Products". For certain specific third-party license restrictions, please refer to section E of the Legal Notices available under "License Terms and Conditions for Use of Software AG Products / Copyright and Trademark Notices of Software AG Products". These documents are part of the product documentation, located at http://softwareag.com/licenses and/or in the root installation directory of the licensed product(s).

12.0 Support

Visit the Empower website to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the TECHcommunity website to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

NERV-RM-910-20160415