Oracle® Fusion Middleware Getting Started with Oracle Stream Analytics



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Oracle Fusion Middleware Getting Started with Oracle Stream Analytics, 12c Release (12.2.1.3.0)

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Preface

This document describes how to use Oracle Stream Analytics. The Getting Started Guide helps the users to get familiarized with Oracle Stream Analytics.

Audience

This document is intended for all users of Oracle Stream Analytics and Event Processing.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup? ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Documents

For more information, see the following documents:

- Known Issues for Oracle SOA and BPM Products at: http://www.oracle.com/ technetwork/middleware/soasuite/documentation/ soaknownissues122120-3111966.html.
- Administering Oracle Stream Analytics
- Developing Event Processing Applications for Oracle Stream Analytics
- Getting Started with Event Processing for Oracle Stream Analytics
- Schema Reference for Oracle Stream Analytics
- Using Visualizer for Oracle Stream Analytics
- Customizing Event Processing for Oracle Stream Analytics
- Developing Applications with Oracle CQL Data Cartridges
- Java API Reference for Oracle Stream Analytics
- Oracle CQL Language Reference
- Using Oracle Stream Analytics



Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.



What's New In This Guide?

Screens shown in this guide may differ from your implementation, depending on the skin used. Any differences are cosmetic.

The product has been renamed from Oracle Stream Explorer to Oracle Stream Analytics in the 12c (12.2.1.0.0) release



1 Oracle Stream Analytics Overview

Oracle Stream Analytics is a new tool provided as a part of Oracle Stream Analytics technology platform. The Oracle Stream Analytics caters to the business needs of the users. This tool enables the users to pro-actively identify and act on emerging streaming real time threats and opportunities in their enterprise and improve the operational efficiencies of their business. Oracle Stream Analytics helps in enhancing functional and operational efficiencies of businesses with actionable insight from real-time data by only processing and storing data that is relevant. Users can build applications and monitor them against the real-time streaming data within no time and with no complexity or knowledge of the underlying technologies using Oracle Stream Analytics.

The Oracle Stream Analytics platform provides a compelling combination of a simplistic visual facade to rapidly create and modify Real Time Event Processing applications, together with a comprehensive runtime platform to manage and execute these solutions.

This chapter contains the following sections:

- Overview
- Prerequisites
- Browser Support
- Advantages of Oracle Stream Analytics
- Who Uses Oracle Stream Analytics?
- What Next?

1.1 Overview

Oracle Stream Analytics runs on Oracle Stream Analytics Server. The event processing server contains Oracle Stream Analytics Visualizer. Oracle Stream Analytics uses the same set of users and user roles configured in the Visualizer. Both Oracle Stream Analytics and Visualizer use the Oracle Stream Analytics server authentication and authorization system.

The Oracle Stream Analytics runtime component is a complete solution platform for building applications to filter, correlate, and process events in real-time. With flexible deployment options – stand-alone, integrated in the SOA stack or lightweight on Java SE Embedded, it proves to be a versatile, high performance event-processing engine. Oracle Stream Analytics enables Fast Data and Internet of Things (IOT) – delivering actionable insight and maximizing value on large volumes of high velocity data from varied data sources in real-time. It enables distributed intelligence and low latency responsiveness by pushing business logic to the network edge.

Oracle Stream Analytics can perform the following tasks at a higher level:

Create applications



- Build applications
- Run applications.

1.2 Prerequisites

Oracle Stream Analytics requires Event Processing with Oracle Stream Analytics Server to be up and running. Oracle Stream Analytics runs on top of Oracle Stream Explorer 12.1.3 version and above.

Oracle Stream Analytics requires JDK 7.0 and higher versions.

1.3 Browser Support

A list of browsers that the Oracle Stream Analytics supports is listed here.

- Mozilla Firefox version 24 and higher
- Safari version 6 and higher
- Google Chrome version 28 and higher.

Note:

Oracle Stream Analytics is not supported on Internet Explorer for this release.

1.4 Advantages of Oracle Stream Analytics

Oracle Stream Analytics is not a traditional Business Intelligence (BI) solution. It is designed to work on live data streams.

Oracle Stream Analytics has the following advantages:

- Builds real-time applications quickly for any industry vertical
- Simplifies the usage of event processing technology
- Connects to live streams
- Explores in real-time
- Pro-actively identifies threats or opportunities in the streaming data
- Hides the complexity of Event Processing and makes it easy for non-technical people to use
- Addresses the business solution rather than technology pitch
- Provides a controlled, structured, and more documentable approach to build realtime applications
- Follows a Solution/Pattern approach.



1.5 Who Uses Oracle Stream Analytics?

Users with different personas use Oracle Stream Analytics.

The following users use Oracle Stream Analytics:

- Business integrators
- Real-time business people.

1.6 What Next?

After you have installed Oracle Stream Analytics, you are ready to start using it.



2 Use Cases and Tutorials

Details about few sample use cases and links to sample tutorials are available here.

This chapter contains the following sections:

- Sample Use Cases
- Getting Started with Oracle Stream Analytics
- Related Products and Solutions.

2.1 Sample Use Cases

The Oracle Stream Analytics platform targets a wealth of industries and functional areas.

The following are some use cases:

- **Telecommunications**: Ability to perform real-time call detail (CDR) record monitoring and distributed denial of service attack detection.
- **Financial Services**: Ability to capitalize on arbitrage opportunities that exist in millisecond or microsecond windows. Ability to perform real-time risk analysis, monitoring and reporting of financial securities trading and calculate foreign exchange prices.
- Transportation: Ability to create passenger alerts and detect baggage location in case of flight discrepancies due to local or destination-city weather, ground crew operations, airport security, etc.
- **Public Sector/Military**: Ability to detect dispersed geographical enemy information, abstract it, and decipher high probability of enemy attack. Ability to alert the most appropriate resources to respond to an emergency.
- **Insurance**: In conjunction with Oracle Real Time Decisions, ability to learn to detect potentially fraudulent claims.
- IT Systems: Ability to detect failed applications or servers in real-time and trigger corrective measures.
- **Supply Chain and Logistics**: Ability to track shipments in real-time and detect and report on potential delays in arrival.

Look at the video located at the following location for a quick walk through of Oracle Stream Analytics:

http://www.oracle.com/technetwork/middleware/complex-event-processing/cep05-2471908.html.



2.2 Getting Started with Oracle Stream Analytics

Look at a few videos for a quick run through and tour of the Oracle Stream Analytics application.

See the videos on Oracle Technology Network at: http://www.oracle.com/technetwork/ middleware/complex-event-processing/overview/complex-eventprocessing-088095.html.

- Oracle Stream Analytics tour
- Hands-on exercise.

2.3 Related Products and Solutions

Oracle Stream Analytics works in correlation with a few other products.

The following is a list of products and solutions related to Oracle Stream Analytics:

- Oracle Stream Explorer
- Oracle Coherence
- Oracle Business Activity Monitoring
- Oracle Service Bus
- Oracle WebLogic Application Grid
- Oracle WebLogic Suite
- Oracle Real Time Decisions
- Oracle Java SE Embedded Suite.

