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# HP OSS Analytics Foundation

## Version 1.1.1



### Release Notes

**Edition: 1.0**

**For Linux, RHEL 6.5**

**October 2015**

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# Preface

This document describes information related to the HP OSS Analytics Foundation software component.

Software component name: HP OSS Analytics Foundation

Software component version: 1.1.1

Software kit version: V1.1.1

## Intended audience

This document is intended for solution architects, administrators and users of HP OSS Analytics Foundation.

## Software versions

The terms Unix and Linux are used as a generic reference to the operating system, unless otherwise specified.

The software versions referred to in this document are as follows:

**Table 1 - Software versions**

| <b>Product version</b>  | <b>Supported operating systems</b>   |
|---|--|
| <i>HP OSS Analytics Foundation</i> version 1.1.1                  | <ul style="list-style-type: none"><li>• Red Hat Enterprise Linux Server release RHEL 6.5</li></ul> |
| <i>Wildfly</i> version 8.2.1<br>(formerly known as <i>JBoss</i> ) | <ul style="list-style-type: none"><li>• Red Hat Enterprise Linux Server release RHEL 6.5</li></ul> |
| <i>HP Vertica</i> version 7.1                                     | <ul style="list-style-type: none"><li>• Red Hat Enterprise Linux Server release RHEL 6.5</li></ul> |

## Typographical conventions

Courier font:

- Source code and examples of file contents
- Commands that you enter on the screen
- Pathnames
- Keyboard key names

*Italic text:*

- Filenames, programs and parameters
- The names of other documents referenced in this manual

**Bold text:**

- To introduce new terms and to emphasize important words

## Associated documents

- HP OSS Analytics Foundation Installation Configuration and Administration Guide

## Support

Visit the HP Software Support Online website at <https://softwaresupport.hp.com/> for contact information, and for details about HP software products, services, and support.

The software support area of the website includes the following:

- Downloadable documentation
- Troubleshooting information
- Patches and updates
- Problem reporting
- Training information
- Support program information

## Introduction

The HP OSS Analytics Foundation is part of the HP OSS Analytics program.

It provides a unified solution for external applications to access data and to perform analysis on data stored in data warehouses.

The HP OSS Analytics Foundation is composed of an OSS Analytics application server having two main functionalities:

- OSS Analytics REST server
- OSS Analytics Batch server

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### Note

The HP OSS Analytics Foundation supports access to the *HP Vertica* database only.

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### OSS Analytics REST server

The OSS Analytics REST server acts as an operational interface for the HP OSS Analytics solutions requiring analyzing data stored in data warehouses.

The character generic of the OSS Analytics REST server comes from the usage of “metadata”. Metadata provides an abstraction of the underlying database and allows the OSSA REST server to retrieve and compute data for any domain. The metadata describes the data warehouse schema as a set of associations of Facts to Dimensions, and describes the type of aggregations that are possible. The possible aggregation types are:

- Pre-calculated
- On-the-fly

Once the metadata file is loaded into the OSS Analytics REST server, the server is able to reply to Dimensions-and-Facts client requests in order to perform multidimensional analysis.

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### Note

HP OSS Analytics Foundation does not provide any metadata instantiation. See the HP OSS Analytics solutions for specific metadata.

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### OSS Analytics Batch server

The OSS Analytics Batch services aim at defining, scheduling, monitoring batch jobs for your OSS Analytics solution.

What is a “batch job” in the context of OSS Analytics ?

This is a process that generally handle and transform large amount of data, and for which you want an automatic and periodical execution.

The OSS Analytics Batch framework allows you to define your batch jobs based on some generic pre-defined but customizable tasks. Those tasks allow you to

perform: loading data to Vertica, SQL processing, summarization on data, or report execution and mailing.

For details about those tasks please refer to the *HP OSS Analytics Foundation Integration guide*.

Then, the OSS Analytics Batch services allow you to deploy, schedule and monitor your batch jobs.

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**Note**

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HP OSS Analytics Foundation does not provide any batch job instantiation. See the HP OSS Analytics solutions for specific batch jobs.

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# Installation, Configuration, and Administration

See the HP OSS Analytics Foundation v1.1.1 Installation, Configuration and Administration Guide to understand how to install, configure, administrate, and troubleshoot the server.

## Upgrade from OSSA Foundation 1.1.0

In case you have OSS Analytics Foundation v1.1.0 installed and want to install OSS Analytics Foundation v1.1.1, there are some migration operations to be done.

Follow those steps:

- Uninstall previous OSS Analytics Foundation 1.1.0 (see Installation guide)  
Note that your configuration files will be kept (ossa.cfg, ossa\_xxx.cfg) and will be reused when re-installing.
- Install and configure OSS Analytics Foundation 1.1.1 (see Installation guide)
- Backup your specific metadata.xml file
- **Migrate your specific metadata**, by modifying your metadata.xml file:

### 1/ SurrogateKey move

Within each *Dim* element, the *SurrogateKey* sub element must be moved in order to be the last element of the Dim.

#### Example:

```
<Dim id="dimUserTerm" displayName="Dimension User Term" schemaName="ossa_fault"
  tableName="DIM_USER" category="Fault">
  <Description>...</Description>
  - <SurrogateKey colName="USERID"/>
  <DimCol id="termuserid" type="Integer" displayName="TERMUSERID" colName="USERID"
    lowCardinalityFlag="false" hiddenFlag="true"/>
  <DimCol id="termusername" type="String" displayName="TERMUSERNAME" colName="USERNAME"
    lowCardinalityFlag="false"/>
  + <SurrogateKey colName="USERID"/>
</Dim>
```

### 2/ IsPrivate renaming

Within each *Dim* element, and each *DegeneratedDim* element having the *IsPrivate* element,

*IsPrivate* must be replaced by *Authorization*

#### Example for Dim:

```
<Dim id="Device" schemaName="DATAMART" tableName="DIM_DEVICE" displayName="Device">
  <Description>...</Description>
  - <IsPrivate> <AuthorizedTo roleName="role2" /> </IsPrivate>
  + <Authorization> <AuthorizedTo roleName="role2"/> </Authorization>
  <DimCol type="Integer" displayName="Device Id" colName="DEVICE_ID"/>
```

#### Example for DegeneratedDim:

```
<DegeneratedDim id="ddimApn" displayName="APN" category="NE">
  <Description>Degenerated dimension for APN</Description>
  - <IsPrivate> <AuthorizedTo roleName="role3" /> </IsPrivate>
  + <Authorization> <AuthorizedTo roleName="role3"/> </Authorization>
  <DimCol type="String" displayName="APN" colName="APN" lowCardinalityFlag="false"/>
</DegeneratedDim>
```

- Finally, reload your specific metadata file (refer to OSS Analytics Foundation Installation Configuration and Administration Guide)

## Enhancements and fixes

The main enhancement provided by version 1.1.1 compared to version 1.1.0 is the following:

**Table 2 – HP OSS Analytics Foundation version 1.1.1 enhancement**

| Reference   | Description  |
|-------------|--|
| Enhancement | OSS Analytics Foundation REST API now supports composite conditions filtering that can be used within user access control definition in metadata (users filters can be specified on dimensions and degenerated dimensions) |

The main fixes provided by version 1.1.1 compared to version 1.1.0 are the following:

**Table 3 – HP OSS Analytics Foundation version 1.1.1 fixes**

| Reference | Description of the problem   | Status |
|-----------|--|--------|
| CR#949    | REST API: requests can fail after connection failures from OSSA Server to Vertica database       | Fixed  |
| CR#959    | BATCH: If OSSA Server is stopped while batch job running, the batch job will not start anylonger | Fixed  |
| CR#915    | BATCH: a batch with invalid schedule prevents other batches from running                         | Fixed  |

## Known problems and limitations

This section lists problems discovered during the product test campaign which will be fixed in future versions.

**Table 4 - Known problems**

| Reference         | Description  | Suggested workaround   |
|-------------------|--|--|
| CR#1014<br>Medium | BATCH Summarization: backlog (several millions) of data to summarize into existing large output table (about ten millions) takes long time | None.<br>Will be fixed in a future patch.  |
| CR#914<br>Medium  | REST API: Degenerated Dim "DimCol id" attribute defined in metadata is not supported by Rest API   | - instead of defining a Degenerated Dim prefer defining a standard Dimension<br>or<br>- distinguish the FACTS by defining relations to different standard dimensions (using "DimCol id" on standard dimension)<br>or<br>- force REST API request to add another FACT column or DIM column or Degen Dim column that allows REST API to uniquely identifying the FACT to request |
| CR#735<br>Medium  | REST API: When using aggreg=0 flag, no possibility to return the rows with timestampCol in descending order                                | Add ordering parameter on another relevant column  |
| CR#950<br>Medium  | errors when using OSSA server as a Red Hat Linux service   | Create a new <i>ossa-server.sh</i> (copy of <i>/opt/osa/bin/ossa-server.sh</i> ) with addition of the following commands:<br><pre>chown ossa:ossa /tmp/ossa_env.sh chown ossa:ossa /tmp/ossa_all.sh</pre>  |
| CR#905<br>Medium  | BATCH: even if summarization parameter <code>src_CDCdeltaWindow = 0</code> , some data might be re-processed                               | - Source table data for the summarization must have different <code>update_timestamp</code> (and not a bunch of data having same <code>update_timestamp</code> ) in order to reduce the re-processing<br>or<br>- Truncate the source table after each successful run of the summarization  |