



# **Avaya Analytics™**

## **Release 4.1.2.0**

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Release Notes

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Issue 1.0  
April 2022

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## Publication History

Issue	Change Summary	Date
0.1	Initial Draft	March, 2022
1.0	Avaya Analytics™ 4.1.2.0 Release Notes	April, 2022

## Introduction

This document provides information to supplement Avaya Analytics™ 4.1.2.0 software and documentation. Avaya Analytics™ complements Avaya Oceana® with a fully integrated Real-Time and Historical Operational Reporting solution.

Avaya Analytics™ 4.1.2.0 is a collection of services deployed on the Avaya Common Services Platform (CSP) platform that takes data from relevant sources (Avaya Oceana) and collects, correlates and presents this data in a unified interface for meaningful analysis in both Real Time and Historical scenarios.

Avaya Analytics™ 4.1 supports an equivalent list of Historical and Real Time reports and measures to Avaya Analytics™ 3.x.

For updated documentation and product support notices information for the current GA release, please visit the Avaya Support site at <http://support.avaya.com>

## What's New in Avaya Analytics™ 4.1.2.0

Avaya Analytics™ 4.1.2.0 adds the following functionality:

### Real Time and Historical Reporting Enhancements

- Avaya Analytics Agents States by Routing Services (Real Time)
- Avaya Analytics Pending State and Duration
- Avaya Analytics Real Time Routing Service Performance by Group (Disabled by default)
- Avaya Analytics Dimensions Included on Pump-Up
- Avaya Analytics SLA Reporting on Calls Routed into the CC from IVR
- Avaya Analytics SAML Based Authorization for Historical Reporting
- Avaya Analytics Call Profile(Enhanced) Report for Historical Reporting

### Upgrade and Deployment Improvements

- Pre-staging (downloading and preloading) of CSP and Analytics software images outside maintenance window

### Platform Version Updates

- Common Services 1.2.0.3

## Avaya Analytics™ 4.x vs Avaya Analytics™ 3.x

It's important to understand the differences and positioning between Avaya Analytics™ 3.x and Avaya Analytics™ 4.x

- Avaya Analytics™ 3.x is an Oracle based reporting solution that takes events from Avaya Oceana and allows customers to create a suite of real time and historical reports for their Oceana contact center activities
- Avaya Analytics™ 4.x is a microservices based reporting solution that takes events from Avaya Oceana and allows customers to create a suite of real time and historical reports for their Oceana contact center activities

Existing Analytics 3.x customers must migrate to newer Avaya Analytics 4.x for continued lifecycle support

- No more feature development on Avaya Analytics 3.x.
- Existing Avaya Analytics 3.x customer must upgrade to Avaya Analytics 3.7.0.2 in order to migrate to Analytics 4.x.
- Migration tools are available in Avaya Analytics 3.7.0.2 that support migration to Avaya Analytics 4.x.
- Avaya Analytics 3.7.0.2 is EoMS as of 31st March 2021, so patches will not continue to be developed for it.

Further information is available in the following documents

Avaya Oceana Solution Lifecycle Bulletin - <https://support.avaya.com/css/P8/documents/101065003>  
 Avaya Analytics 3.x Support Statement - <https://sales.avaya.com/documents/1399779888674>

For further information on Avaya Analytics™ 3.7.0.2 please reference the Avaya Analytics™ 3.7.0.2 Release Notes available on support.avaya.com

Release Notes	Link
Avaya Analytics™ 3.7.0.2 for Oceana Release Notes	<a href="https://support.avaya.com/css/P8/documents/101070289">https://support.avaya.com/css/P8/documents/101070289</a>

For further information on Avaya Oceana® Solution Lifecycle, please reference the Lifecycle Bulletin for the Avaya Ocean® Solution available on support.avaya.com

Document	Link
Avaya Oceana® Lifecycle Bulletin	<a href="https://downloads.avaya.com/css/P8/documents/101065003">https://downloads.avaya.com/css/P8/documents/101065003</a>

Avaya Analytics™ 4.1.2.0 with Oceana 3.8.2.0 is for new sales that will be deployed after 28<sup>th</sup> March 2022.

## **Historical Reporting LDAP Configuration**

Analytics 4.1.2.0 supports Active Directory (AD) integration to authenticate and import users and groups. To integrate with Active Directory, an LDAP v3 compatible Directory Server that supports LDAPS (LDAP over SSL) communication is required. LDAP integration is supported with a single domain controller. Integration with multiple domain controller is currently not supported.

## **Data Retention Policies**

See the Analytics Data Dictionary for details on Data Retention policy. An option exists to not store rows to the database where all measures are zero. To enable this option before install/upgrade set the “Prevent Empty Interval Writes to DB” to “TRUE” in the deployment spreadsheet.

## Avaya Analytics™ 4.1.2.0 Reports

### Avaya Analytics™ Real Time Dashboards

The following realtime dashboards are available to run out of the box through Workspaces for reporting users. While it is not possible to modify default dashboards, all users can clone these dashboards.

Real Time Dashboard	Description
Agent Performance	<ul style="list-style-type: none"><li>Real Time dashboards containing two Real Time Views</li></ul>
Contact Summary	<ul style="list-style-type: none"><li>Real Time dashboard containing multiple billboard views (x12)</li></ul>
Routing Performance	<ul style="list-style-type: none"><li>Real Time dashboard containing 1 Real Time View</li></ul>

## Avaya Analytics™ Historical Reports

The following Historical Reports are available to run out of the box through the Avaya Analytics™ Historical User Interface for reporting users.

Report	Description
Account by Agent Summary	<ul style="list-style-type: none"> <li>Displays the performance and productivity of an agent by channel for the reporting period</li> </ul>
Agent Details Report	<ul style="list-style-type: none"> <li>Displays agent's performance at a detailed level</li> </ul>
Agent Interaction Detail Report	<ul style="list-style-type: none"> <li>Displays agent interactions for a selected measure from the Agent performance, Agent by Account and Routing Service by Agent report</li> </ul>
Agent by Routing Service	<ul style="list-style-type: none"> <li>Displays how agent are using Routing Services for the reporting period</li> </ul>
Routing Service Summary	<ul style="list-style-type: none"> <li>Displays the overall performance of a Routing Service for the reporting period</li> </ul>
Agent Configuration	<ul style="list-style-type: none"> <li>Displays agent information and agent properties</li> </ul>
Agent Login and Logout Summary	<ul style="list-style-type: none"> <li>Displays agent login and logout information</li> </ul>
Agent Not Ready by Reason Code	<ul style="list-style-type: none"> <li>Displays the reason code associated with the agent not ready state</li> </ul>
Agent Performance Summary	<ul style="list-style-type: none"> <li>Displays the performance and productivity of an agent for the reporting period</li> </ul>
Agent Performance Top 5 and Bottom 5	<ul style="list-style-type: none"> <li>Displays a performance summary of the top 5 and bottom 5 agents for the reporting period</li> </ul>
Agent Comparison	<ul style="list-style-type: none"> <li>Displays a comparison of different agent measures</li> </ul>
Agent Behaviour	<ul style="list-style-type: none"> <li>Displays individual occurrences of agent behaviors that are associated with contact handling activities</li> </ul>
Contact Center Performance Summary	<ul style="list-style-type: none"> <li>Displays the performance summary of a contact center site</li> </ul>
Engagement Summary Report	<ul style="list-style-type: none"> <li>Displays information related to customer engagements across various parameters</li> </ul>

Report	Description
Supervisor Activity	<ul style="list-style-type: none"> <li>• Displays a summary of a supervisor’s activity for the reporting period</li> </ul>
Supervisor Agent Activity	<ul style="list-style-type: none"> <li>• Displays details of supervisor’s agents and their behaviors for the reporting period</li> </ul>
Supervisor Agent Compare	<ul style="list-style-type: none"> <li>• Displays a comparison of supervised agents for the reporting period</li> </ul>
Time Series	<ul style="list-style-type: none"> <li>• Displays the engagement of agents with an individual Routing Service for the reporting period</li> </ul>
VDN Summary	<ul style="list-style-type: none"> <li>• Displays overall performance of a Routing Point with respect to the customer experience</li> </ul>
Messaging Engagement Summary	<ul style="list-style-type: none"> <li>• Displays details of Async Conversation engagements and groups them into the overall Async Conversation</li> </ul>
Contact Detail Report	<ul style="list-style-type: none"> <li>• Displays the end-to-end details of a call</li> </ul>
Call Profile Abandoned	<ul style="list-style-type: none"> <li>• Displays a count of calls Abandoned by Routing Service in multiple duration intervals in seconds for the selected interval</li> </ul>
Call Profile Answered	<ul style="list-style-type: none"> <li>• Displays a count of calls Answered by Routing Service in multiple duration intervals in seconds for the selected interval</li> </ul>
Call Profile Active Time Duration	<ul style="list-style-type: none"> <li>• Displays a count of calls by Routing Service with Active Time Duration in multiple duration intervals for a selected reporting interval</li> </ul>
Call Profile Waiting in Queue	<ul style="list-style-type: none"> <li>• Displays a count of Calls Waiting in Queue by Routing Service in multiple duration intervals in seconds for a selected reporting interval</li> </ul>
Call Profile Abandoned (Enhanced)	<ul style="list-style-type: none"> <li>• Displays a count of calls Abandoned by Routing Service in multiple duration intervals in seconds for the selected interval that count measures for each leg of the call (after each routing to Oceana from IVR) individually</li> </ul>
Call Profile Answered (Enhanced)	<ul style="list-style-type: none"> <li>• Displays a count of calls Answered by Routing Service in multiple duration intervals in seconds for the selected interval that count measures for each leg of the call (after each routing to Oceana from IVR) individually</li> </ul>

<b>Report</b>	<b>Description</b>
Call Profile Waiting in Queue (Enhanced)	<ul style="list-style-type: none"><li>• Displays a count of Calls Waiting in Queue by Routing Service in multiple duration intervals in seconds for a selected reporting interval that count measures for each leg of the call (after each routing to Oceana from IVR) individually</li></ul>

## Avaya Analytics™ 4.1.2.0 Specifications

### Solution Components

Avaya Analytics™ 4.1.2.0 uses the following technologies

Component	Description
Avaya Analytics™ 4.1.2.0 Historical Database	<ul style="list-style-type: none"> <li>Embedded Crunchy Postgres Database</li> </ul>
Avaya Analytics™ 4.1.2.0 Extract Transfer and Load	<ul style="list-style-type: none"> <li>PostgreSQL Stored Procedures</li> </ul>
Avaya Analytics™ 4.1.2.0 Historical Presentation Layer	<ul style="list-style-type: none"> <li>Powerful and User-Friendly interface for users to interact and consume Historical reports and dashboards</li> </ul>
Avaya Analytics™ Event Processors	<ul style="list-style-type: none"> <li>Set of services that are deployed on the Common Services Platform (CSP).</li> </ul>
Avaya Analytics™ Real Time Presentation Layer	<ul style="list-style-type: none"> <li>Displays in real-time up-to-date contact center performance statistics on dashboards within Avaya IX Workspaces for Oceana</li> </ul>

### Supported Browsers

Following are the supported browsers for Avaya Analytics™ 4.1.2.0

Avaya Analytics™ Component	Microsoft Edge	Microsoft Edge Chromium	Google Chrome	Mozilla Firefox	Mozilla Firefox Enterprise (Quantum)	Apple Safari
Avaya Analytics™ (Real Time Reporting)	Not Supported	84-99	78-99	76-97	68.12, 78.9, 91	Not Supported
Avaya Analytics™ (Historical Reporting)	44	84-98	78-99	76-97	68.2, 78.9, 91.7	12,13,14

### Microsoft Excel

The deployment spreadsheet requires Microsoft Excel. The minimum supported version is Microsoft Excel 2016.

## Avaya Analytics™ Software

Refer to Avaya Support website <https://support.avaya.com> for software download details.

Required Files	Description
ClusterControlManager-1.2.0.3.139001.ova	Base OVA deployed to vCenter providing the Cluster Control Manager (CCM)
Avaya_Oceana_Application_Deployment_4.1.2.0.xlsm	<p>Configuration file that should be updated with the specific details related to the customer's vCenter, CSP, and Analytics deployment</p> <p><b>Notes:</b></p> <p>You must edit the deployment spreadsheet using a Windows 10 client.</p> <p>The deployment spreadsheet uses macros to automate the configuration. You must enable macros in Microsoft Excel before you start editing the worksheets.</p> <p>If you are presented with the following warning message upon opening the Excel document <b>"Security Warning: Macros have been disabled"</b>, please try the following:</p> <ol style="list-style-type: none"> <li>1. Save the Excel document to your local drive</li> <li>2. Email the Excel document to yourself</li> <li>3. Open the emailed version of the Excel document, macros should not be enabled</li> </ol> <p>If macros are still not enabled, please contact your IT department for further assistance.</p>

### Software Lineup

<b>Analytics</b>	Orca chart	<b>6.0.87</b>
	MSTR chart	<b>6.0.69</b>
<b>Required CSP</b>	CSP Version	<b>1.2.0.3.138001</b>
	CCM Version	<b>1.2.0.3.139001</b>
<b>Async</b>	Async	<b>0.3.4</b>

### VMware ESXi Support

Avaya Analytics™ 4.1.2.0 supports VMware ESXi 6.5, 6.7 and 7.0.

VMware vSphere Enterprise Plus (vCenter 6.5+) is required for the deployment of Avaya Analytics™ 4.x. Access to vCenter is also required on an ongoing basis to enable Kubernetes to use the datastore from vCenter.

Avaya Analytics™ 4.1.2.0 HA requires VMware DRS to be enabled in order to ensure that the virtual machines are deployed on different physical hosts.

Avaya Analytics™ 4.1.2.0 non-HA does not require VMware vSphere Enterprise Plus or VMware DRS.

**Note:** Customer responsibility to provide VMware required licenses.

### Red Hat Enterprise Linux Support

Avaya Analytics™ 4.1.2.0 supports Red Hat Enterprise Linux 7.9. No other versions of Red Hat Enterprise Linux are supported.

**Note:** Avaya provided for Avaya Analytics™ 4.1.2.0

### Installations/Upgrades and Migrations – Avaya Analytics™ 4.1.2.0

For performing a fresh installation or an upgrade please refer to the following document on support.avaya.com

Document	Description
Deploying Avaya Analytics™ 4.1.2.0	<a href="https://support.avaya.com/documents/">https://support.avaya.com/documents/</a>

**Notes:**

1. Upgrades from Avaya Analytics™ 4.1.1.0 Patch 8 are supported.
2. Upgrades from Avaya Analytics™ 4.1.0.1 Patch 8 are supported.
3. Upgrades from Avaya Analytics™ 4.0.0.1 Patch 8 are supported.
4. Migrations from existing Avaya Analytics™ 3.7.0.2 deployments (minimum patch 2) are supported. The upgrade path for existing Avaya Analytics™ 3.x (Oracle) to Avaya Analytics™ 4.1.2.0. is to upgrade to Avaya Analytics™ 3.7.0.2 first and then to migrate to Avaya Analytics™ 4.1.2.0.

For details on performing a migration refer to the following document on support.avaya.com

Document	Description
Upgrading Avaya Oceana – Chapter 11: Migrating from Avaya Analytics™ 3.7.0.2 to Avaya Analytics™ 4.1	<a href="https://support.avaya.com/documents/">https://support.avaya.com/documents/</a>

## Disaster Recovery

Avaya Analytics™ 4.1.2.0 with Avaya Oceana® supports Disaster Recovery by deploying two instances of Avaya Analytics™ in separate data centers with Write Ahead Log (WAL) streaming between the operational reporting databases. With WAL streaming, the primary data center (DC1) database is continuously streaming updates to the secondary data center (DC2) which is configured in a different geographic location. The Write Ahead Log (WAL) streaming component is responsible for keeping data in sync between the two instances of Avaya Analytics™ across (DC1) and (DC2)

## High Availability

Avaya Analytics™ Release 4.1.2.0 contains High Availability (HA) by default. The operational reporting database is deployed automatically with a primary and standby instance. The Avaya Analytics™ measures processors are deployed as a primary / standby pair and the streams services are deployed with a replica count of two on the cluster facilitating load balancing and high availability. Avaya Analytics™ services provide producers and measures to Avaya IX™ Workspaces for use in reporting dashboards. Using Avaya IX™ Workspaces, you can view real-time reporting dashboards to monitor up-to-date statistics for your contact center and resources. Using the Avaya Analytics™ historical reporting interface, you can view and analyze historical interaction dashboards to enhance customer experience and agent performance.

Avaya Analytics™ Release 4.1.2.0 also allows for deployment of a non-High Availability (non-HA) option for lab and production deployments up to 1000 agents.

## Product Compatibility

As Avaya Analytics™ is currently sold as a package with Avaya Oceana® there is no separate Commercial Offer for Avaya Analytics™ as a standalone.

Note that the compatibility matrix changes constantly as new products in the wider Avaya portfolio are released. For a complete and most up to date list of supported and tested Avaya Oceana components, you must always refer to the detailed interoperability matrix available on the Avaya support web site at the link below.

For the latest and most accurate compatibility information go to <https://support.avaya.com/CompatibilityMatrix/Index.aspx>

As of 4.1.2.0 the following table captures the versions of Avaya Oceana® supported with Avaya Analytics™:

Avaya Analytics	Avaya Oceana 3.7.0.1	Avaya Oceana 3.8.0.0	Avaya Oceana 3.8.0.1	Avaya Oceana 3.8.1.0	Avaya Oceana 3.8.1.1	Avaya Oceana 3.8.2.0
3.7.0.2	✓	✓	✓	M*		
4.0.0.1	✓	x	x	x	x	x
4.1.0.0	✓	✓	x	x	x	x
4.1.0.1	✓	✓	✓	✓	x	x
4.1.1.0	x	x	✓	✓	✓ <sup>(1)</sup>	x
4.1.2.0	x	x	x	x	✓	✓

**M\***: Avaya Analytics 3.7.0.2 support against Avaya Oceana 3.8.1.0 is to facilitate the data migration to Avaya Analytics 4.1.1.0 only.

<sup>(1)</sup>: Avaya Analytics 4.1.1.0 Patch 5 and above is supported against Avaya Oceana 3.8.1.0.

Avaya Analytics 3.7.0.2 is EoMS as of 31st March 2021, so must only be put into production against Avaya Oceana 3.8.1.0 for a limited time to support upgrade to Analytics 4.1.1.0.

Please refer to the Avaya Oceana™ 3.8.1.1 or Avaya Oceana™ 3.8.2.0 Release Notes for more information.

## Upgrades

### Upgrade Analytics before Oceana

In order to minimise and de-risk the outage window it is possible to split the upgrades of Oceana and Analytics into two separate windows. Avaya Analytics can be upgraded before the Avaya Oceana component.

The following upgrade scenarios are supported:

Existing customer with Oceana 3.7.0.1 and Analytics 3.7.0.1

1. Upgrade existing Analytics 3.7.0.1 to Analytics 3.7.0.2(Patch 2), migrate to Analytics 4.1.2.0 then
2. Upgrade existing Oceana 3.7.0.1 to Oceana 3.8.1.0

Support for Avaya Analytics 3.7.0.2 and Avaya Analytics 4.1.2.0 against Avaya Oceana 3.8.2.0 is available for data migration only. Avaya Analytics 3.7.0.2 must not be put into production against Avaya Oceana 3.8.2.0.

Existing customer with Oceana 3.8.x and Analytics 4.x

1. Upgrade existing Analytics 4.x to Analytics 4.1.2.0 then
2. Upgrade existing Oceana 3.8.x to Oceana 3.8.2.0

See Deploying Avaya Analytics™ 4.1.2.0 for further details.

### Pre-Staging

In CSP 1.2.0.3 there is the added ability to download software images outside of the Maintenance Window prior to upgrading the system.

This done using the following commands:

```
ccm upgrade spec <Deployment Excel> --stage --calculate-size  
ccm upgrade spec <Deployment Excel> --stage
```

If you wish to use this feature, these commands should be used after upgrading the Cluster Control Manager, and prior to upgrading the Cluster Nodes or Services.

### Verify DB Pods in standard state

Before proceeding with the upgrade, the DB pods must be in standard state. To check the status of the crunchy pods using the following steps:

1. Connect to the CCM server using the customer account log in.
2. Check the status of the crunchy pods

- `kubectl describe pod crunchy-primary-service-orca-dbmgr-0 | grep name=`
- `kubectl describe pod crunchy-replica-service-orca-dbmgr-0 | grep name=`

```
[root@ccm112 cust]# kubectl describe pod crunchy-primary-service-orca-dbmgr-0 | grep name=
name=crunchy-replica-service-orca-dbmgr
statefulset.kubernetes.io/pod-name=crunchy-primary-service-orca-dbmgr-0
[root@ccm112 cust]# kubectl describe pod crunchy-replica-service-orca-dbmgr-0 | grep name=
name=crunchy-primary-service-orca-dbmgr
statefulset.kubernetes.io/pod-name=crunchy-replica-service-orca-dbmgr-0
[root@ccm112 cust]#
```

3. If output similar to above is observed, then DB pods are in Rainy Day/non-standard state. Primary definition is pointing at replica pod as end point while replica is pointing at primary pod. If in this state follow the steps below otherwise proceed with appropriate upgrade procedure.

4. Delete the replica db pod

- `kubectl delete pod crunchy-replica-service-orca-dbmgr-0`

```
pod "crunchy-replica-service-orca-dbmgr-0" deleted
```

5. Wait for all the pods to be in running state

```
[root@ccm112 cust]# kubectl get pods | crunchy
crunchy-pgpool-orca-0          1/1      Running 0      4h57m
crunchy-primary-service-orca-dbmgr-0  1/1      Running 0      28m
crunchy-replica-service-orca-dbmgr-0  1/1      Running 0      28m
crunchy-watch-orca-56fdc58f94-24p7t  1/1      Running 0      28m
[root@ccm112 cust]#
```

6. Check the status of the crunchy pod. Pod status should be the same as below. This is Sunny Day state in terms of primary/replica roles. If so, continue with upgrade.

```
[root@ccm112 cust]# kubectl describe pod crunchy-primary-service-orca-dbmgr-0 | grep name=
name=crunchy-primary-service-orca-dbmgr
statefulset.kubernetes.io/pod-name=crunchy-primary-service-orca-dbmgr-0
[root@ccm112 cust]# kubectl describe pod crunchy-replica-service-orca-dbmgr-0 | grep name=
name=crunchy-replica-service-orca-dbmgr
statefulset.kubernetes.io/pod-name=crunchy-replica-service-orca-dbmgr-0
[root@ccm112 cust]#
```

## Async related Upgrades - Pre-Deployment Step

If Async is installed as part of the solution prior to upgrading, it must be removed before proceeding with the upgrade:

- `ccm delete async`

After deleting async manually, the pvc entries `file-transfer-tmp-dir-async-file-transfer-0` and `file-transfer-tmp-dir-async-file-transfer-1` also need to be deleted. Run the following to remove them:

- `kubectl delete pvc file-transfer-tmp-dir-async-file-transfer-0`
- `kubectl delete pvc file-transfer-tmp-dir-async-file-transfer-1`

## Rebuild DR

If upgrading from a previous version of Analytics and a DR solution is deployed it is advised to rebuild DR as outlined in Analytics Deployment Guide, section Configuring Avaya Analytics™ for Disaster Recovery. DB pods should be in standard state as explained above before building DR site.

## Upgrade from Analytics 4.0.0.1

Once the product upgrade completes, the Analytics breeze auth certs will need to be recreated.

- i. Rename the current ssl dir, as root
- ii. `mv /home/cust/ssl /home/cust/ssl4001`
- iii. Follow the post install steps in the Deploying Avaya Oceana guide to re-create the certificates, ensure that you create the new certs in a new folder not named as in the above step.

## Upgrade from Oceana 3.7.x

If Analytics upgrade is part of an overall migration from Oceana 3.7.x then ensure the Analytics input adaptor notification direction configuration is correct. See the following documents for details:

- [Upgrading Avaya Oceana® - Postupgrade checklist](#)

## Installation/Deployment Notes

- For the CCM upgrade the upgrade-config.yaml file should contain the following versions:

```
system: 1.2.0.3.139001
common_services_product_version: 1.2.0.3.138001
```

- During installation, the image **mstr-srv** may take some time to download. Please be patient as this is a large file.
- The Deploying Avaya Oceana guide has UCM settings required for Analytics connectivity.
- The Avaya Oceana Solution Administering guide has ACM settings for the Analytics server.
- On startup the database manager job checks for database schema changes. When migrating from Analytics 4.0.0.1 to Analytics 4.1.2.0 there are quite several schema changes so the first time the database manager job restarts will be quite slow.
  - In 4.1.2.0 the database manager has been changed from a pod to a job. It's new expected state is 0/1 Completed.
- Rolling up legacy data is a post installation task. Some items to be aware of:

Rolling up legacy data does not have to happen during the upgrade window. It can happen in a later window. If the legacy data volume is large this step can take some time.

- While the rollup process is in progress standard ETL is paused so new data will not be seen in historical reports until the rollup is complete.
- There is no data loss. Data is stored temporarily in the stage schema. Once rollup is complete ETL will restart and move the data to the fact schema where historical reporting consumes from.

## Known Issues

<b>Issue</b>	WAVE-17577 LDAP supervisor is not able to login through EASG
<b>Impact</b>	LDAP supervisors cannot use the EASG supervisor impersonation functionality
<b>Workaround</b>	EASG impersonation of a supervisor is available to supervisors created as Local users and assigned to a reporting group

<b>Issue</b>	WAVE-17541 Analytics Basic User is able to create new Filters and Prompts
<b>Impact</b>	In Avaya Analytics Historical Reporting only an Advanced user should be allowed to create new Filters and Prompts. Currently this functionality is not blocked for Basic users. This will be corrected in a future update. Basic users are allowed to *use* Filters and Prompts that have been created by an Advanced user (please refer to customer documentation for more information).
<b>Workaround</b>	Advise basic users to not use this functionality

<b>Issue</b>	WAVE-16605 Historical Reporting export import custom report fails - Exception detected in XMLRequest on import / Specification mandates value for attribute Definition
<b>Impact</b>	Fail to export import mmp package file containing a configuration object for example an External DataSource
<b>Workaround</b>	If sharing report between lab environment and production environment <ul style="list-style-type: none"> <li>1. Create report on the lab environment, test and verify</li> <li>2. Record steps for configuring report</li> <li>3. Create report using recorded steps on the production site</li> </ul>

<b>Issue</b>	CCNXT-18651(FLEX-10529) vcenter network name "10.129.48.0/25" causes ccm install to fail
<b>Impact</b>	A slash in the vCenter network name that is used for the CSP cluster deployment is an invalid character ( <a href="https://github.com/cloudfoundry/bosh-vsphere-cpi-release/issues/275">https://github.com/cloudfoundry/bosh-vsphere-cpi-release/issues/275</a> ) Ex Network 10.10.10.x/25
<b>Workaround</b>	Remove the slash from the vCenter network name in the network label object on the vCenter.

<b>Issue</b>	CCNXT-40693 (FLEX-11655) Handle Node resurrection after cluster node VM is deleted
<b>Impact</b>	Node resurrection / HA failed.
<b>Workaround</b>	Contact Avaya Professional Services

<b>Issue</b>	FLEX-18958 Mechanism to support domain and network migration for CSP
<b>Impact</b>	Unable to change domain or network post deployment

<b>Workaround</b>	Uninstall products and cluster and install with new values for cluster infrastructure. This will need to be done in a maintenance window with adequate time scheduled for the re-installation process.
<b>Issue</b>	FLEX-19526 Load balancing : Need better way to change ip , fqdn and certs
<b>Impact</b>	Multiple steps are needed to change the ingress cluster IP/FQDN after cluster deployment
<b>Workaround</b>	<p>Correct procedure to update the cluster IP/FQDN:</p> <ol style="list-style-type: none"> <li>1. Change the cluster fqdn using command ccm release common-services update-config cluster-fqdn</li> <li>2. Change the IP address of istio ingress gateway using command ccm release common-services update-config istio-ingressgateway</li> <li>3. As root edit the certificates associated with the ingress gateway</li> <li>4. Restart ingress gateway pods</li> </ol> <p>Contact Avaya Support for assistance with this procedure.</p>
<b>Issue</b>	WAVE-23346 New Historical reporting SAML users will fail to login until Web Single Sign-on import users at logon is configured using developer tool
<b>Impact</b>	New SAML users fail to login and their profiles are not created in historical reporting until Web Single Sign-on import users at logon is configured
<b>Workaround</b>	Contact Avaya Professional Services
<b>Issue</b>	WAVE-23045 Historical reporting Export to MMP fails to export report
<b>Impact</b>	Reports are exported with a file size of 0kb
<b>Workaround</b>	None
<b>Issue</b>	WAVE-22780 Historical Reporting - After SAML is disabled radio buttons are not available on UI
<b>Impact</b>	After disabling SAML using post install scripts the next time a user logs into the UI, they are not given the radio buttons to select between standard or LDAP authentication
<b>Workaround</b>	A restart of the mstr-web pod is required.
<b>Issue</b>	WAVE-22287 Historical Reporting - Reconfiguring SAML does not generate new Service Provider files
<b>Impact</b>	Files are not updated for changes when trying to reconfigure SAML

<b>Workaround</b>	<ol style="list-style-type: none"> <li>1. Log in to the Cluster Control Manager (CCM) console as the customer user.</li> <li>2. To switch to the root user, type su and press Enter.</li> <li>3. List all Historical Reporting pods with the following command: <ul style="list-style-type: none"> <li>• <code>sudo kubectl get pods --namespace mstr</code></li> </ul> </li> <li>4. Delete SAML config from configmap on the mstr-md pod with the below command: <ul style="list-style-type: none"> <li>• <code>sudo kubectl exec -it --namespace mstr mstr-md-podNumber -- /bin/bash -c '/usr/pgsqli-11/bin/psql -d avaya_analytics_md -U postgres -c "Delete from avaya_configmap where topic = \\${tag}\\$SAML\\${tag}\\$;"'</code></li> </ul> </li> <li>5. Confirm that properties are deleted from configmap with the below command: <ul style="list-style-type: none"> <li>• <code>sudo kubectl exec -it --namespace mstr mstr-md-podNumber -- /bin/bash -c '/usr/pgsqli-11/bin/psql -d avaya_analytics_md -U postgres -c "Select * from avaya_configmap where topic = \\${tag}\\$SAML\\${tag}\\$;"'</code></li> </ul> </li> <li>6. Delete SAML config files from mstr-web pod with the below commands: <ul style="list-style-type: none"> <li>• <code>sudo kubectl exec -it --namespace mstr mstr-web-podNumber -- /bin/bash -c 'rm /opt/tomcat/webapps/AvayaAnalytics/WEB-INF/classes/resources/SAML/MstrSamlConfig.xml'</code></li> <li>• <code>sudo kubectl exec -it --namespace mstr mstr-web-podNumber -- /bin/bash -c 'rm /opt/tomcat/webapps/AvayaAnalytics/WEB-INF/classes/resources/SAML/SPMetadata.xml'</code></li> <li>• <code>sudo kubectl exec -it --namespace mstr mstr-web-podNumber -- /bin/bash -c 'rm /opt/tomcat/webapps/AvayaAnalytics/WEB-INF/classes/resources/SAML/SamlKeystore.jks'</code></li> </ul> </li> <li>7. Confirm all the three files are deleted with the command <ul style="list-style-type: none"> <li>• <code>sudo kubectl exec -it --namespace mstr mstr-web-podNumber -- /bin/bash -c 'ls -l /opt/tomcat/webapps/AvayaAnalytics/WEB-INF/classes/resources/SAML/'</code></li> </ul> </li> <li>8. Confirm the required SAML setting and reconfigure SAML using master control script.</li> </ol>
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<b>Issue</b>	WAVE-17758 Upgrade may fail due to lack of space
<b>Impact</b>	If an attempt is made to perform an upgrade on a system where a number of upgrades/patches have already been installed it may fail with a lack of space due to ccm unstage not cleaning up orca and mstr images.

**Workaround**

1. Switch to root using “su – root”
2. Check the space usage of /var/lib/docker/ using “df -h”
3. If above 75% then unstage older undeployed charts by running “**ccm unstage <chart>**”
4. Orca and MSTR charts will need some manual clean up after being unstaged.
5. Run the following on the CCM to create a list of orca and mstr images:

**If upgrading from Analytics 4.0.0.1:**

**docker images | grep orca | grep 4.1** - check for repeated image names and remove the older version of the repeated image (e.g. 4.1.12 vs 4.1.14, remove the 4.1.12 image)

**If upgrading from Analytics 4.1.0.0:**

**docker images | grep orca | grep 4.1** - remove all

**docker images | grep orca | grep 5.0** - check for repeated image names and remove the older version of the repeated image (e.g. 5.0.12 vs 5.0.14)

**docker images | grep mstr | grep 4.0.11** - remove all

**docker images | grep mstr | grep 4.1** - check for repeated image names and remove the older version of the repeated image (e.g. 4.1.11 vs 4.1.12, remove the 4.1.11 image)

**If upgrading from Analytics 4.1.0.1:**

**docker images | grep orca | grep 4.1** - remove all

**docker images | grep orca | grep 5.0** - remove all

**docker images | grep orca | grep 5.1** - check for repeated image names and remove the older version of the repeated image (e.g. 5.1.12 vs 5.1.14, remove the 5.1.12 image)

**docker images | grep mstr | grep 4.0.11**

**docker images | grep mstr | grep 4.1** - check for repeated image names and remove the older version of the repeated image (e.g. 4.1.11 vs 4.1.12, remove the 4.1.11 image)

**Example:**

```
[root@env11-ccm ~]# docker images | grep mstr
flex-docker-hosted.forge.avaya.com/mstr-av-mob11.2.4      4.1.1.14      493c2ca776b3      12 days ago      1.83GB
flex-docker-hosted.forge.avaya.com/mstr-av-lib11.2.4      4.1.1.14      36621c8b8774      12 days ago      2.46B
flex-docker-hosted.forge.avaya.com/mstr-av-web11.2.4      4.1.1.14      c48a0f88464f      12 days ago      2.02GB
flex-docker-hosted.forge.avaya.com/mstr-av-srv11.2.4      4.1.1.14      6dfca25809a4      12 days ago      10.2GB
flex-docker-hosted.forge.avaya.com/mstr-av-web11.2.4      4.1.1.13      9f96fc58cc02      2 weeks ago      2.03GB
flex-docker-hosted.forge.avaya.com/mstr-av-srv11.2.4      4.1.1.13      8c3a81263e99      2 weeks ago      10.3GB
flex-docker-hosted.forge.avaya.com/mstr-av-md11.2.4      4.1.1.13      065eba657e1d      2 weeks ago      265MB
flex-docker-hosted.forge.avaya.com/mstr-av-md11.2.4      4.1.1.14      065eba657e1d      2 weeks ago      265MB
```

Here remove the “4.1.1.13” images and not the “4.1.1.14” images.

6. **Important:** Before proceeding, take note of each Image displayed, including Image Name, Image Tag and Image ID. You will need this information later.
7. Run "docker image rm" for each of the relevant Image IDs

**docker image rm <Image ID 1> <Image ID 2> <Image ID 3> ...**

**Example: docker image rm 663e8a4e29d0 76b929a2c9a1**

	<p>8. Once finished cleaning up the Images from CCM, they will also need to be purged from the cluster registry</p> <p>9. Create a list of images available in the cluster registry  <b>ccm registry repos --tags   grep orca</b>  <b>ccm registry repos --tags   grep mstr</b></p> <p>10. For each image removed in step 7, run:  <b>ccm registry purge &lt;image name&gt; &lt;image tag&gt;</b>                  Example: <b>ccm registry purge flex/mstr-av-web11.2.1 4.1.12</b>                  Note: there is a space between &lt;image name&gt; and &lt;image tag&gt;</p>
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<b>Issue</b>	FLEX-23336 The CCM server certificate is changed after CCM upgrading that causing Fail to upload chart image from Windows to CCM.
<b>Impact</b>	Fail to upload chart, images to CCM server.
<b>Workaround</b>	Export <b>** myFlexRootCA.pem</b> from CCM server ( Deployment -> Create Certificate for Workspaces client) then import it to Windows and restart Docker service.

<b>Issue</b>	WAVE-23201 Unable to login to MSTR Portal due to mstr-web crash
<b>Impact</b>	After logging in to MSTR, the following error message appears "upstream connect error or disconnect/reset before headers. reset reason: localreset".
<b>Workaround</b>	The mstr-web pod must be restarted.

## Fixes for issues included in 4.1.2.0 since 4.1.1.0

This is the list of issues fixed in Avaya Analytics™ 4.1.2.0

JIRA ID	Title
WAVE-22812	Governing Rule updates do not persist after MSTR pod restart
WAVE-22413	No reporting data shown in Routing Service by Agent report.
WAVE-20341	Orca-dbmgr pod failing with Readiness Probe error
WAVE-20446	HT – ABA/AP - Agent in two groups show double data if supervisor run the report by selecting both agent groups
FLEX-23221	pvcCleanup - Usage help message has option of '--failed-pvs' incorrectly. The correct option is '--delete-failed-pvs'
FLEX-23661	In Analytics offline installation while pushing images to CCM only works with docker version 3.5.2
FLEX-23141	Upgrade of Analytics/CSP 1.1 to 1.2 intermittently fails.
FLEX-24251	Crunchy primary pod in Pending state due to missing PVCs
FLEX-23958	CSP Upgrade from 1.0.0.x to 1.1.0.x or higher did not clean up infrastructure certificates that are no longer used

## Languages Supported

Avaya Analytics™ 4.1.2.0 supports the following languages.

G14+2 Countries	Language
<b>APAC</b>	
China	Simplified Chinese
China	Traditional Chinese
Japan	Japanese
Korea	Korean
India	English
Australia	English
<b>EMEA</b>	
France	French
German	German
Italy	Italian
Russia	Russian
UK	English
<b>CALA</b>	
Mexico	Lat-Spanish
Brazil	Brazilian-Portuguese
<b>US/Canada</b>	
Canada	French/English
US	English

## Support and Contacting Support

### Contact Support Checklist

If you are having trouble with Avaya Analytics™ for Oceana 4.1.2.0, you should:

1. Follow the instructions in written or online documentation
2. Check the documentation that came with your software for maintenance or hardware-related problems
3. Note the sequence of events that led to the problem and the exact messages displayed.

If you continue to have a problem, contact Avaya Technical Support:

1. Log in to the Avaya Technical Support Web site <http://support.avaya.com>
2. Contact Avaya Technical Support at one of the telephone numbers in the Support Directory listings on the Avaya support Web site

Avaya Global Services Escalation Management provides the means to escalate urgent service issues. For more information, see the Escalation Contacts listings on the Avaya Web site.

### Contact Support Tasks

You may be asked to email one or more files to Technical Support for analysis of your application and its environment.

**End of Document**