

Audit Reports for Pixel Perfect Reports in Oracle Analytics Cloud

A Complete Guide to set up Audit Reports for Pixel Perfect Reports in
Oracle Analytics Cloud

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INTRODUCTION TO AUDIT REPORTS FOR PIXEL PERFECT REPORTS

Now you can view Audit Data for your Pixel Perfect Reports (or BI Publisher reports) in Oracle Analytics Cloud (OAC), where in you can turn on or turn off the Audit logging with few clicks and view the Audit Data in few simple steps. A set of sample Audit & Usage reports are available to download that will not only enable you to view the audit data, but will enable you to get a variety of data insights.

TURNING ON/OFF AUDIT LOGGING

By default, Audit and Performance monitoring option has been turned OFF for all users. To turn ON this feature, one needs to login as Administrator and check the checkbox for 'Enable Monitor and Audit' checkbox and set the Audit Level to Medium.

If we set the Audit Level to None, then only Performance Monitoring will be ON (refer to Note #2 below).

If we uncheck the box for 'Enable Monitor and Audit' then both Performance monitoring and Audit will be turned OFF.

Note:

1. No restart of any service is required to change the audit and performance monitoring setting
2. Ability to view Performance Monitoring data will be available in a future release.

The screenshot shows the Oracle Analytics Cloud Administration console. The top navigation bar includes the Oracle Analytics logo, a search bar, and the 'Administration' link. The main content area is titled 'Administration' and contains several sections: 'Catalog', 'General Properties', 'Caching', 'Database Failover', 'Monitor and Audit', and 'Deployment Mode'. In the 'Monitor and Audit' section, the 'Enable Monitor and Audit' checkbox is checked, and the 'Audit Level' is set to 'Medium'. A red box highlights these two settings.

VIEWING THE AUDIT DATA

You can access the Audit data by connecting to the Audit table using JNDI connection from BI Publisher Admin Page. Just create a SQL data source in the Data Model and fetch the audit data from bipublisher_v table view. Once you have the data, you can create the layout using any of the layout templates. However, to create a meaningful report from Audit data you will require understanding of the Audit events. To make this entire effort simple, we have made available few Sample Audit Reports that you can download and use. This means now you will be able to view Audit Data in just few steps.

SAMPLE AUDIT & USAGE REPORTS

The following 6 reports are available as sample Reports built using Audit Data:

1. Audit Reports
 - a. Audit Data for Report Execution
 - b. Audit Data for Catalog Object Updates
2. Usage Reports
 - a. Hourly Concurrency
 - b. Report Execution-Time Metrics
 - c. Report Performance by Report Type
 - d. Runtime Statistics

Download Instruction

You can download the report from BI Publisher Oracle Technology Network (OTN) Home page:

<http://www.oracle.com/technetwork/middleware/bi-publisher/downloads/index.html>

A direct link to the sample reports download file is:

<http://www.oracle.com/technetwork/middleware/bi-publisher/bipoacaudit-5528918.zip>

Extract Audit.xdrz file from this zip file into your local machine.

Upload & Configure

You can follow the below steps to upload the Sample Audit Reports:

- Login to your BI Server with BI Author or BI Administrator role. URL: <https://servername.companyname.com/xmlpserver>
- Click on Catalog link on the Global Menu on top
- In the Catalog page, navigate to **Shared Folders**
- Click on Upload from the Task window in the Accordion Pane and select Audit.xdrz file for upload.
- After upload you will see the Audit Folder under Custom Folder with all the sample Audit Reports included

Note: If you need to use a different folder under Shared Folders, then after upload of the Audit.xdrz file, edit each report object, click on the explorer icon in the Report Editor page and locate the corresponding data model object in the same folder under data model sub-folder. Once re-mapped, save the report.

- Before you run the report, you need to configure the Audit Data Source. You need to login as BI Administrator to configure a JNDI Connection as a data source.

Click Administration > Data Sources > JNDI Connection,

Click Add Data Source. On Add Data Source page, enter

Data Source Name: AuditViewDataSource

JNDI Name: jdbc/AuditViewDataSource

Click "Test Connection" to confirm the data source works, and click Apply to save.

Administration Home Catalog

Administration > JNDI > Update Data Source: AuditViewDataSource

Update Data Source: AuditViewDataSource

General

Data Source Name: AuditViewDataSource

* JNDI Name: jdbc/AuditViewDataSourc

Pre Process Function:

Post Process Function:

Use Proxy Authentication

Test Connection

Security

Allow Guest Access

Available Roles

- BI Consumer
- BI Content Author
- BI Dataload Author
- BI Data Model Author
- BI Service Administrator
- DV Consumer
- DV Content Author

Allowed Roles

Move

Move All

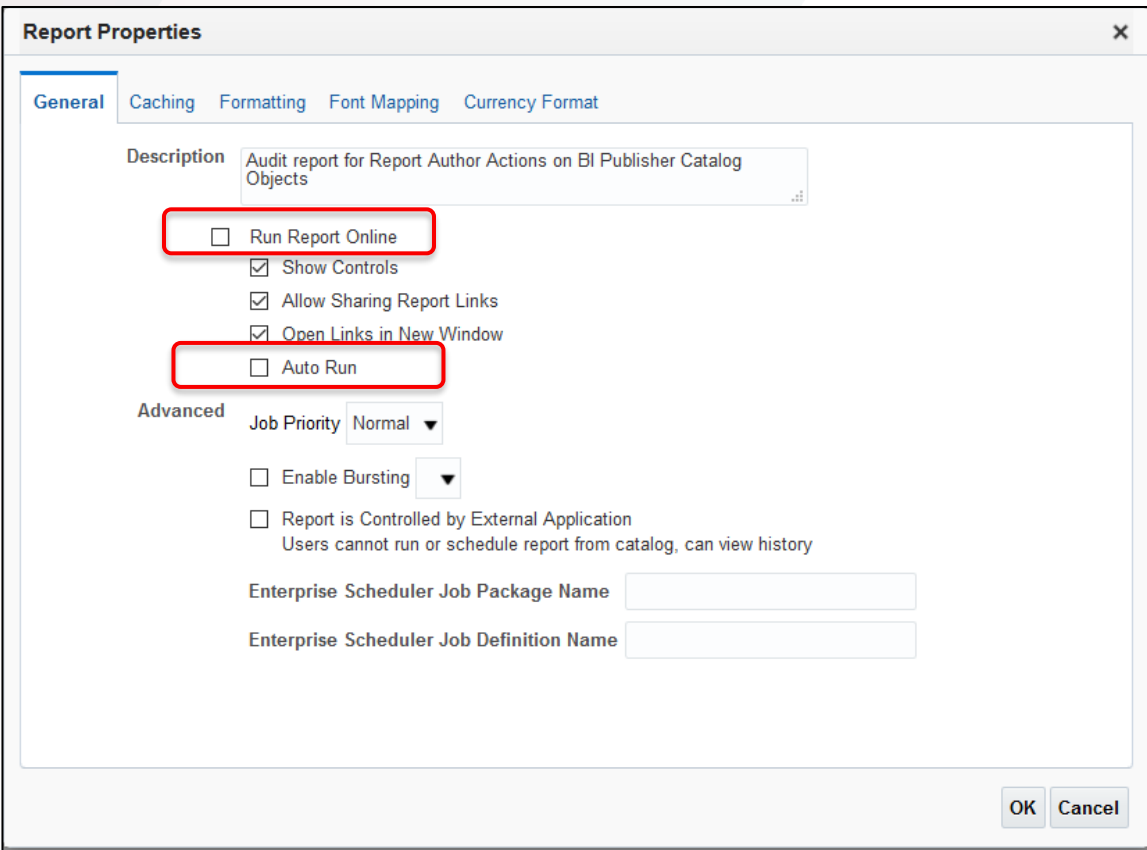
Remove

Remove All

- Under Security section for this Data Source, you can define the roles that will have access to the Audit Data.
- You can further add security permission to the Audit Folder to secure the access to these reports

Schedule & View Audit Reports

The Audit tables for BI Publisher may fill up very quickly and can soon have huge amount of data stored in the tables and may even exceed the data size limits to view these reports online. Therefore, we recommend restricting the audit reports to be run only as scheduled Jobs. To restrict online view you can uncheck the "Run Report Online" option.



NOTE: **Do not enable “Auto Run”** when viewing the report online as this will execute the report with default values for the parameters.

To schedule the report, you can navigate to the report in the BI Catalog, and then click on Schedule. Select “Date From” and “Date To” parameters, keep output format as PDF and then add delivery destinations as suitable. In case you do not want to deliver the report, you can simply save the report output and allow the job to run on server. You will be able to view this report from Job History page after the job completes.

SAMPLE AUDIT & USAGE REPORT DESCRIPTION

A set of sample Audit Reports and Usage Reports are shared to help you quickly access the Audit data in few easy steps. You can further customize the layouts or even add new layouts for your requirement. We recommend that only the layouts be customized or be created on the existing data models. We do not recommend modification of data model or addition of new data models, as this may lead to improper handling of audit data and could potentially create performance issues.

For any requirement for specific data model, not fulfilled by the sample data model, customer can raise a service request with Oracle Support.

NOTE:

1. ‘Date From’ and ‘Date To’ are Mandatory parameters for all the reports, so that the one carefully selects the date interval. In case these parameters are not selected, you will get a blank report.
2. User and Report Path are optional parameters, in case you like to filter the report to a specific user and specific report.

Audit Data for Report Execution

Report Name: BIPReportAuditTrail

This report has been designed from end user or the consumer activity to execute BI Publisher Reports. There are 5 layouts in this report:

- A. **Report Execution History By User:** This layout displays the report execution grouped by a user name. The report is sorted by user name and the report start time.

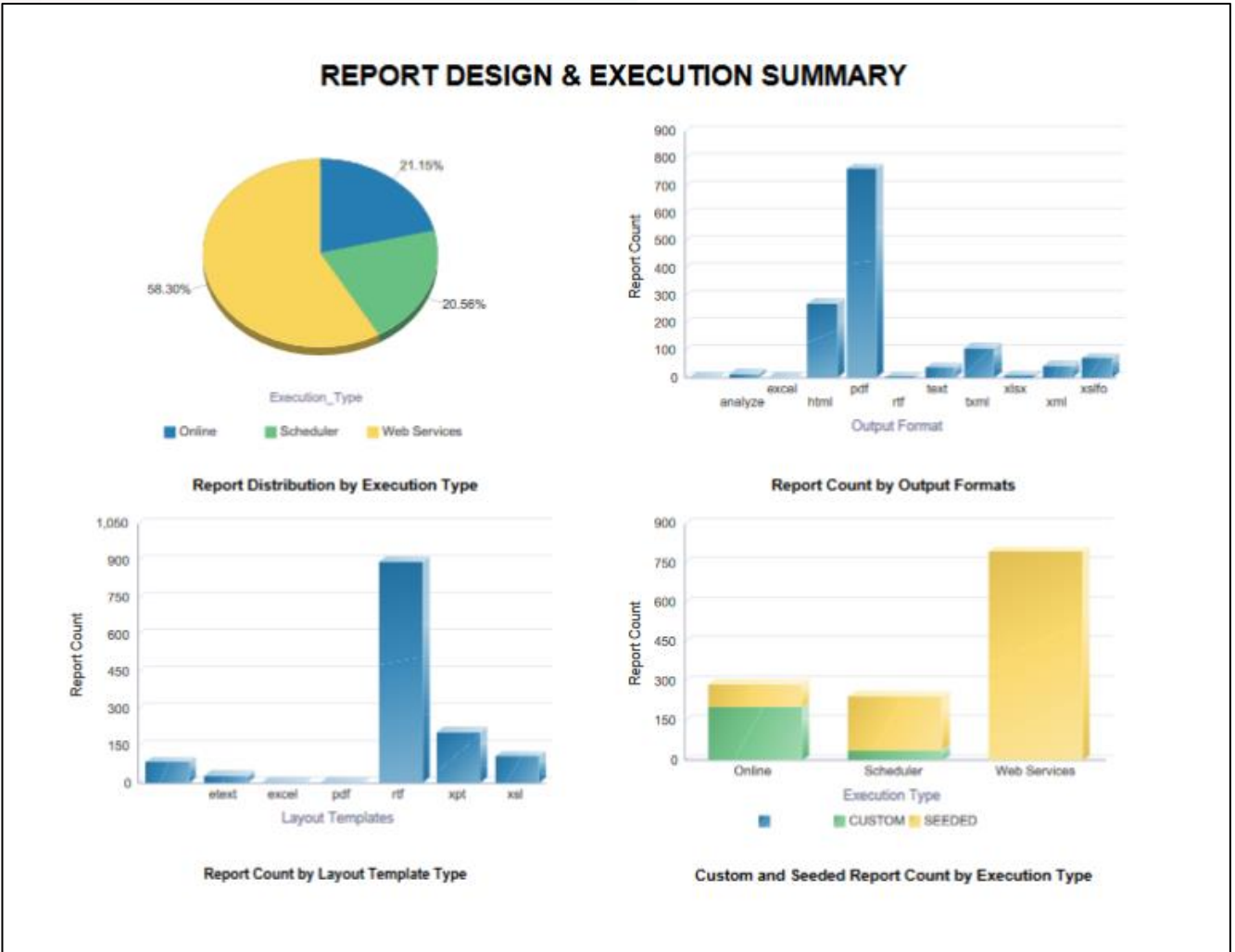
Report Execution History by User								
User	Report Name	Output Type	Report Output Size (kb)	Execution Type	Status	Report Start Time	Report End Time	Total Report Time (sec)
abraham.mason	ImportAndProcessTransactions.xdo	pdf	7.00	Scheduler	Success	11-Feb-2019 14:28:45	11-Feb-2019 14:28:54	8.96
alice.parker	ImportAndProcessTransactions.xdo	pdf	6.98	Scheduler	Success	11-Feb-2019 15:29:12	11-Feb-2019 15:29:20	7.76
	ImportAndProcessTransactions.xdo	pdf	6.98	Scheduler	Success	11-Feb-2019 14:53:07	11-Feb-2019 14:54:44	97.52
	GenerateBurdenTransactionsRep.xdo	pdf	7.47	Scheduler	Success	11-Feb-2019 15:28:26	11-Feb-2019 15:28:26	2.07
	InvoiceGenerations.xdo	pdf	5.25	Scheduler	Success	11-Feb-2019 15:41:09	11-Feb-2019 15:41:14	4.29
	ArInterfaces.xdo	pdf	6.59	Scheduler	Success	11-Feb-2019 16:03:55	11-Feb-2019 16:04:06	11.17
	GenerateRevenue.xdo	pdf	6.10	Scheduler	Success	11-Feb-2019 16:13:06	11-Feb-2019 16:13:17	10.54
	AwardBatchImportReport.xdo	pdf	17.17	Web Services	Success	11-Feb-2019 13:44:11	11-Feb-2019 13:44:14	2.30
	InvoicePreview.xdo	pdf	19.69	Web Services	Success	11-Feb-2019 15:55:28	11-Feb-2019 15:55:33	4.46
ap_mgr_operations	PayablesTrialBalance.xdo	pdf	6.57	Scheduler	Success	11-Feb-2019 16:30:30	11-Feb-2019 16:30:39	9.55
	CashRequirement.xdo	pdf	3.76	Scheduler	Success	11-Feb-2019 16:33:13	11-Feb-2019 16:33:19	6.15
ap_supv_operations	DisbursementPaymentFileFormats.xdo	pdf	1.59	Web Services	Success	11-Feb-2019 17:35:02	11-Feb-2019 17:35:02	0.06
		pdf	1.62	Web Services	Success	11-Feb-2019 17:31:16	11-Feb-2019 17:31:16	0.05
		pdf	1.62	Web Services	Success	11-Feb-2019 17:28:16	11-Feb-2019 17:28:16	0.07
		pdf	1.62	Web Services	Success	11-Feb-2019 17:27:48	11-Feb-2019 17:27:48	0.06
		pdf	1.62	Web Services	Success	11-Feb-2019 17:27:05	11-Feb-2019 17:27:05	0.05
		pdf	1.63	Web Services	Success	11-Feb-2019 17:26:33	11-Feb-2019 17:26:33	0.12
		pdf	1.60	Web Services	Success	11-Feb-2019 17:05:10	11-Feb-2019 17:05:10	0.07
		pdf	1.60	Web Services	Success	11-Feb-2019 17:03:17	11-Feb-2019 17:03:17	0.12
		text	0.46	Web Services	Success	11-Feb-2019 16:35:06	11-Feb-2019 16:35:06	0.28
		pdf	1.65	Web Services	Success	11-Feb-2019 16:12:22	11-Feb-2019 16:12:22	0.13

B. **Report Design & Execution Summary:** This layout displays a history of report executions. You can see the reports run sorted by Report Start Time, therefore most recent report execution will show on top.

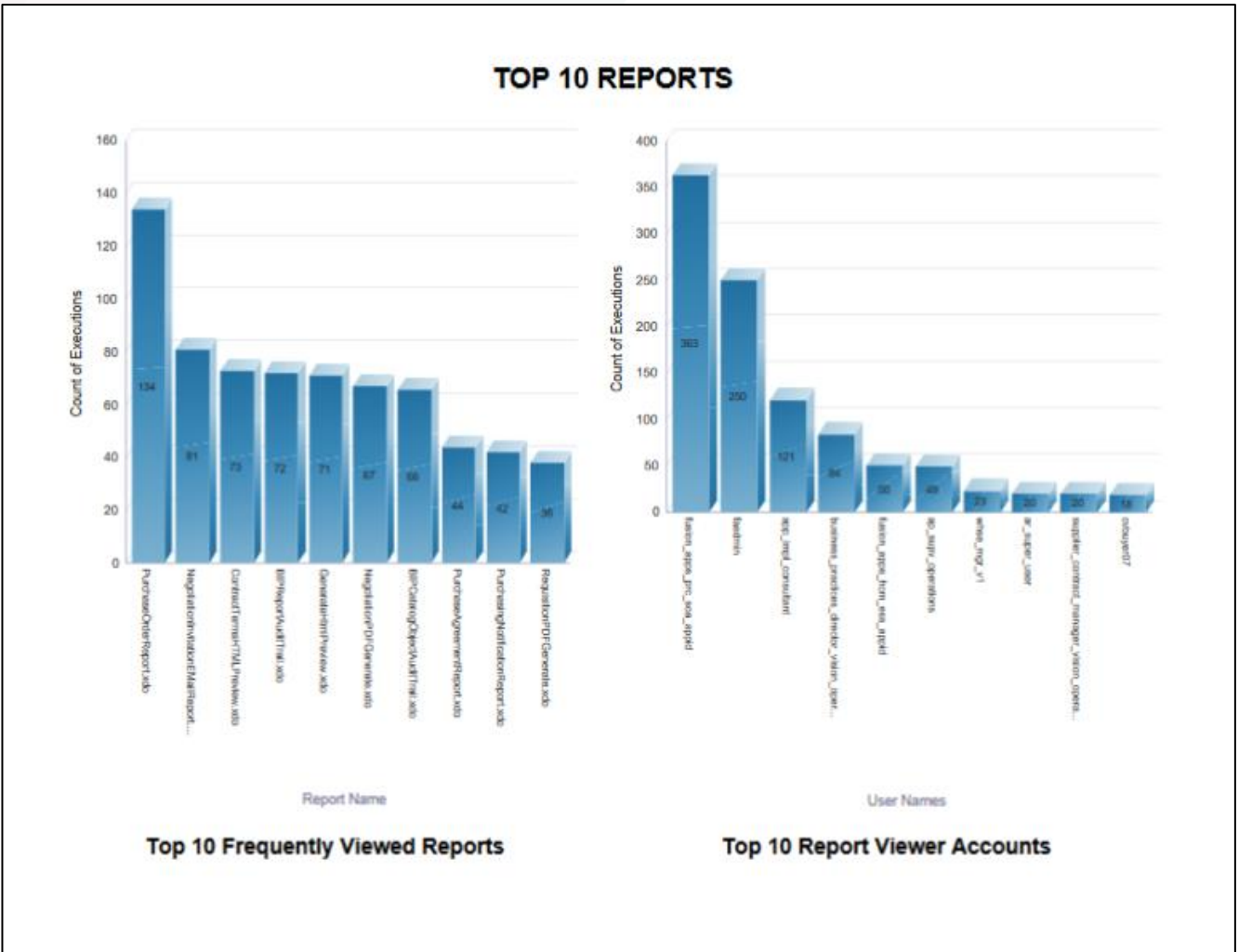
Report Execution History

Report Name	Report Type	Execution Type	Report Start Time	Report End Time	Total Report Time (Sec)	Report Output Size (KB)	User
BIPReportAuditTrail.xdo	CUSTOM	Online	20-Feb-2019 11:11:37	20-Feb-2019 11:11:38	1.00	63.37	faadmin
BIPReportAuditTrail.xdo	CUSTOM	Online	20-Feb-2019 11:07:58	20-Feb-2019 11:07:59	1.16	101.94	faadmin
BIPReportAuditTrail.xdo	CUSTOM	Online	20-Feb-2019 11:04:59	20-Feb-2019 11:05:01	2.25	123.48	faadmin
ReportRuntimeStatistics.xdo	CUSTOM	Online	20-Feb-2019 11:02:48	20-Feb-2019 11:02:57	9.33	30.10	faadmin
ReportRuntimeStatistics.xdo	CUSTOM	Online	20-Feb-2019 10:55:43	20-Feb-2019 10:55:52	9.65	28.91	faadmin
ReportRuntimeStatistics.xdo	CUSTOM	Online	20-Feb-2019 08:38:52	20-Feb-2019 08:37:02	9.53	25.90	faadmin
ReportPerformanceByReportTypeDM.xdm	CUSTOM	Online	20-Feb-2019 08:34:38	20-Feb-2019 08:34:38	0.34		faadmin
ReportRunStatisticsDM.xdm	CUSTOM	Online	20-Feb-2019 06:30:58	20-Feb-2019 06:31:07	8.99		faadmin
HourlyConcurrencyReport.xdo	CUSTOM	Online	20-Feb-2019 05:32:50	20-Feb-2019 05:32:51	0.65	5.01	faadmin
HourlyConcurrencyDM.xdm	CUSTOM	Online	20-Feb-2019 05:31:59	20-Feb-2019 05:32:00	1.82		faadmin
ReportExecutionTimeMetricsDM.xdm	CUSTOM	Online	20-Feb-2019 04:46:29	20-Feb-2019 04:46:30	0.72		faadmin
BudgetaryControlResults.xdo	SEED	Scheduler	19-Feb-2019 18:32:12	19-Feb-2019 18:32:13	1.39	3.36	app_impl_consultant
ReportPerformanceByReportType.xdo	CUSTOM	Online	19-Feb-2019 13:54:06	19-Feb-2019 13:54:06	0.40	2.52	faadmin
ReportPerformanceByReportType.xdo	CUSTOM	Online	19-Feb-2019 13:45:51	19-Feb-2019 13:45:52	0.44	2.52	faadmin
ReportExecutionTimeMetrics.xdo	CUSTOM	Online	19-Feb-2019 13:42:37	19-Feb-2019 13:42:38	0.78	28.93	faadmin
ReportRuntimeStatistics.xdo	CUSTOM	Online	19-Feb-2019 13:38:45	19-Feb-2019 13:38:54	9.76	29.86	faadmin
BIPCatalogObjectAuditTrail.xdo	CUSTOM	Online	19-Feb-2019 13:28:15	19-Feb-2019 13:28:16	0.72	56.03	faadmin
BIPCatalogObjectAuditTrail.xdo	CUSTOM	Online	19-Feb-2019 13:27:53	19-Feb-2019 13:27:53	0.74	33.80	faadmin
BIPReportAuditTrail.xdo	CUSTOM	Online	19-Feb-2019 12:14:24	19-Feb-2019 12:14:28	2.47	122.40	faadmin
TCABulkImportErrors.xdo	CUSTOM	Scheduler	19-Feb-2019 11:39:02	19-Feb-2019 11:39:05	2.92	1.91	app_impl_consultant
TCABulkImportErrors.xdo	CUSTOM	Scheduler	19-Feb-2019 11:34:02	19-Feb-2019 11:34:04	1.93	1.91	app_impl_consultant
TCABulkImportErrors.xdo	CUSTOM	Scheduler	19-Feb-2019 11:29:01	19-Feb-2019 11:29:03	1.79	1.91	app_impl_consultant
TCABulkImportErrors.xdo	CUSTOM	Scheduler	19-Feb-2019 11:24:03	19-Feb-2019 11:24:06	2.76	1.91	app_impl_consultant
TCABulkImportErrors.xdo	CUSTOM	Scheduler	19-Feb-2019 11:19:03	19-Feb-2019 11:19:05	2.36	1.91	app_impl_consultant
TCABulkImportErrors.xdo	CUSTOM	Scheduler	19-Feb-2019 11:14:02	19-Feb-2019 11:14:04	1.97	1.91	app_impl_consultant
TCABulkImportErrors.xdo	CUSTOM	Scheduler	19-Feb-2019 11:09:01	19-Feb-2019 11:09:03	1.91	1.91	app_impl_consultant
TCABulkImportErrors.xdo	CUSTOM	Scheduler	19-Feb-2019 11:04:01	19-Feb-2019 11:04:03	1.79	1.91	app_impl_consultant
TCABulkImportErrors.xdo	CUSTOM	Scheduler	19-Feb-2019 10:59:00	19-Feb-2019 10:59:02	2.49	1.91	app_impl_consultant

D. **Report Execution Summary:** This layout gives a generic report execution insight on how many of the reports are run online on browser vs scheduled to run offline vs requested through web service calls. Also, the layout shows a distribution of different output formats, different layout templates and custom vs seeded reports across all the executions.



E. **Top 10 Reports:** This layout displays Top 10 reports in terms of count of executions, duration of run, size of report and also shows top 10 user accounts with count of report executions.



Audit Data for Catalog Object Updates

Report Name: BIPCatalogObjectAuditTrail

This report has been designed from report author activity usage perspective where a person with BI Author or BI Administrator takes certain action (Update, Delete, Copy, etc) on catalog objects. There are 2 layouts in this report:

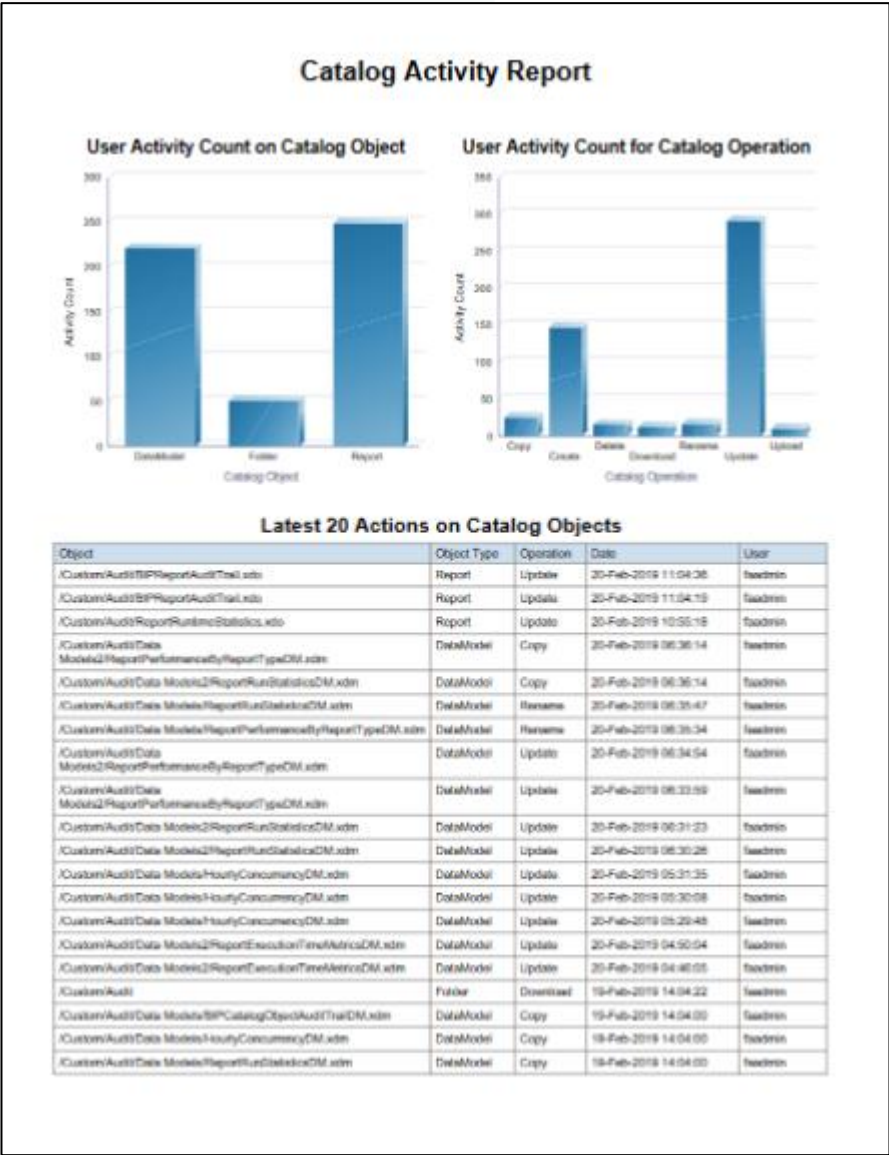
- A. **BI Publisher Catalog Object Update History:** This layout simply lists all the activity on a catalog object performed by any user.

Object	Object Type	Operation	Date	User
/CustomAudit/ReportAuditTrail.rpt	Report	Update	20-Feb-2019 11:04:38	saadmin
		Update	20-Feb-2019 11:04:19	saadmin
		Update	19-Feb-2019 07:20:42	saadmin
		Update	19-Feb-2019 04:50:17	saadmin
		Update	19-Feb-2019 04:42:27	saadmin
		Update	18-Feb-2019 13:40:47	saadmin
		Update	18-Feb-2019 12:49:00	saadmin
		Update	18-Feb-2019 12:43:05	saadmin
		Update	18-Feb-2019 12:42:55	saadmin
		Update	18-Feb-2019 12:23:39	saadmin
		Update	18-Feb-2019 10:58:25	saadmin
		Update	18-Feb-2019 08:09:57	saadmin
		Copy	18-Feb-2019 03:14:29	saadmin
		Update	18-Feb-2019 03:04:31	saadmin
		Update	18-Feb-2019 03:04:18	saadmin
		Update	15-Feb-2019 05:44:19	saadmin
		Update	15-Feb-2019 05:44:14	saadmin
		Update	14-Feb-2019 08:50:20	saadmin
		Create	14-Feb-2019 08:50:20	saadmin
		Update	14-Feb-2019 08:14:54	saadmin
Create	14-Feb-2019 08:14:54	saadmin		
/CustomAudit/ReportRunTimeStatistics.rpt	Report	Update	20-Feb-2019 10:55:18	saadmin
		Update	15-Feb-2019 12:01:56	saadmin
		Copy	15-Feb-2019 11:41:51	saadmin
		Update	15-Feb-2019 05:47:52	saadmin
		Update	15-Feb-2019 05:47:46	saadmin
		Update	14-Feb-2019 08:50:21	saadmin
		Create	14-Feb-2019 08:50:21	saadmin
/CustomAudit/Data Models2/ReportPerformanceByReportTypeDM.rdm	DataModel	Copy	20-Feb-2019 08:38:14	saadmin
		Update	20-Feb-2019 08:34:54	saadmin
		Update	20-Feb-2019 08:33:59	saadmin
/CustomAudit/Data Models2/ReportRunStatisticsDM.rdm	DataModel	Copy	20-Feb-2019 08:38:14	saadmin
		Update	20-Feb-2019 08:31:23	saadmin
		Update	20-Feb-2019 08:30:26	saadmin
/CustomAudit/Data Models/ReportRunStatisticsDM.rdm	DataModel	Rename	20-Feb-2019 08:35:47	saadmin
		Copy	19-Feb-2019 14:54:00	saadmin
		Update	19-Feb-2019 13:16:24	saadmin
		Update	19-Feb-2019 13:16:22	saadmin
		Update	19-Feb-2019 13:16:14	saadmin
		Update	19-Feb-2019 13:16:14	saadmin

B. **User Action History:** This layout shows the History of User Action on Catalog Objects

User Action History on Catalog Objects				
User	Operation	Date	Catalog Object	Catalog Object Type
faadmin	Download	10-Apr-2019 10:04:21	/Custom/Audit	Folder
	Update	10-Apr-2019 08:04:12	/Custom/Audit/BIPReportAuditTrail.xdo	Report
	Update	10-Apr-2019 08:04:30	/Custom/Audit/BIPCatalogObjectAuditTrail.xdo	Report
	Update	10-Apr-2019 08:04:55	/Custom/Audit/BIPCatalogObjectAuditTrail.xdo	Report
	Upload	09-Apr-2019 12:04:18	/Custom/Audit	Folder
	Update	09-Apr-2019 12:04:17	/Custom/Audit/Data Models/ReportRunStatisticsDM2.xdm	DataModel
	Create	09-Apr-2019 12:04:17	/Custom/Audit/Data Models/ReportRunStatisticsDM2.xdm	DataModel
	Update	09-Apr-2019 12:04:17	/Custom/Audit/Data Models/ReportRunStatisticsDM.xdm	DataModel
	Create	09-Apr-2019 12:04:17	/Custom/Audit/Data Models/ReportRunStatisticsDM.xdm	DataModel
	Update	09-Apr-2019 12:04:16	/Custom/Audit/Data Models/ReportPerformanceByReportTypeDM2.xdm	DataModel
	Create	09-Apr-2019 12:04:16	/Custom/Audit/Data Models/ReportPerformanceByReportTypeDM2.xdm	DataModel
	Update	09-Apr-2019 12:04:15	/Custom/Audit/Data Models/ReportPerformanceByReportTypeDM.xdm	DataModel
	Create	09-Apr-2019 12:04:15	/Custom/Audit/Data Models/ReportPerformanceByReportTypeDM.xdm	DataModel
	Update	09-Apr-2019 12:04:15	/Custom/Audit/Data Models/ReportExecutionTimeMetricsDM.xdm	DataModel
	Create	09-Apr-2019 12:04:15	/Custom/Audit/Data Models/ReportExecutionTimeMetricsDM.xdm	DataModel
	Update	09-Apr-2019 12:04:14	/Custom/Audit/Data Models/HourlyConcurrencyDM.xdm	DataModel
	Create	09-Apr-2019 12:04:14	/Custom/Audit/Data Models/HourlyConcurrencyDM.xdm	DataModel
	Update	09-Apr-2019 12:04:13	/Custom/Audit/Data Models/BIPReportAuditTrailDM.xdm	DataModel
	Create	09-Apr-2019 12:04:13	/Custom/Audit/Data Models/BIPReportAuditTrailDM.xdm	DataModel
	Update	09-Apr-2019 12:04:13	/Custom/Audit/Data Models/BIPCatalogObjectAuditTrailDM.xdm	DataModel
	Create	09-Apr-2019 12:04:13	/Custom/Audit/Data Models/BIPCatalogObjectAuditTrailDM.xdm	DataModel
	Create	09-Apr-2019 12:04:12	/Custom/Audit/Data Models	Folder
	Update	09-Apr-2019 12:04:11	/Custom/Audit/ReportRuntimeStatistics.xdo	Report
	Create	09-Apr-2019 12:04:11	/Custom/Audit/ReportRuntimeStatistics.xdo	Report
	Update	09-Apr-2019 12:04:11	/Custom/Audit/ReportPerformanceByReportType.xdo	Report
	Create	09-Apr-2019 12:04:11	/Custom/Audit/ReportPerformanceByReportType.xdo	Report
	Update	09-Apr-2019 12:04:10	/Custom/Audit/ReportExecutionTimeMetrics.xdo	Report
	Create	09-Apr-2019 12:04:10	/Custom/Audit/ReportExecutionTimeMetrics.xdo	Report
	Update	09-Apr-2019 12:04:09	/Custom/Audit/HourlyConcurrencyReport.xdo	Report
	Create	09-Apr-2019 12:04:09	/Custom/Audit/HourlyConcurrencyReport.xdo	Report
	Update	09-Apr-2019 12:04:08	/Custom/Audit/BIPReportAuditTrail.xdo	Report
	Create	09-Apr-2019 12:04:08	/Custom/Audit/BIPReportAuditTrail.xdo	Report
	Update	09-Apr-2019 12:04:07	/Custom/Audit/BIPCatalogObjectAuditTrail.xdo	Report
	Create	09-Apr-2019 12:04:07	/Custom/Audit/BIPCatalogObjectAuditTrail.xdo	Report
	Create	09-Apr-2019 12:04:07	/Custom/Audit	Folder
	Upload	09-Apr-2019 12:04:41	/~faadmin/Audit	Folder

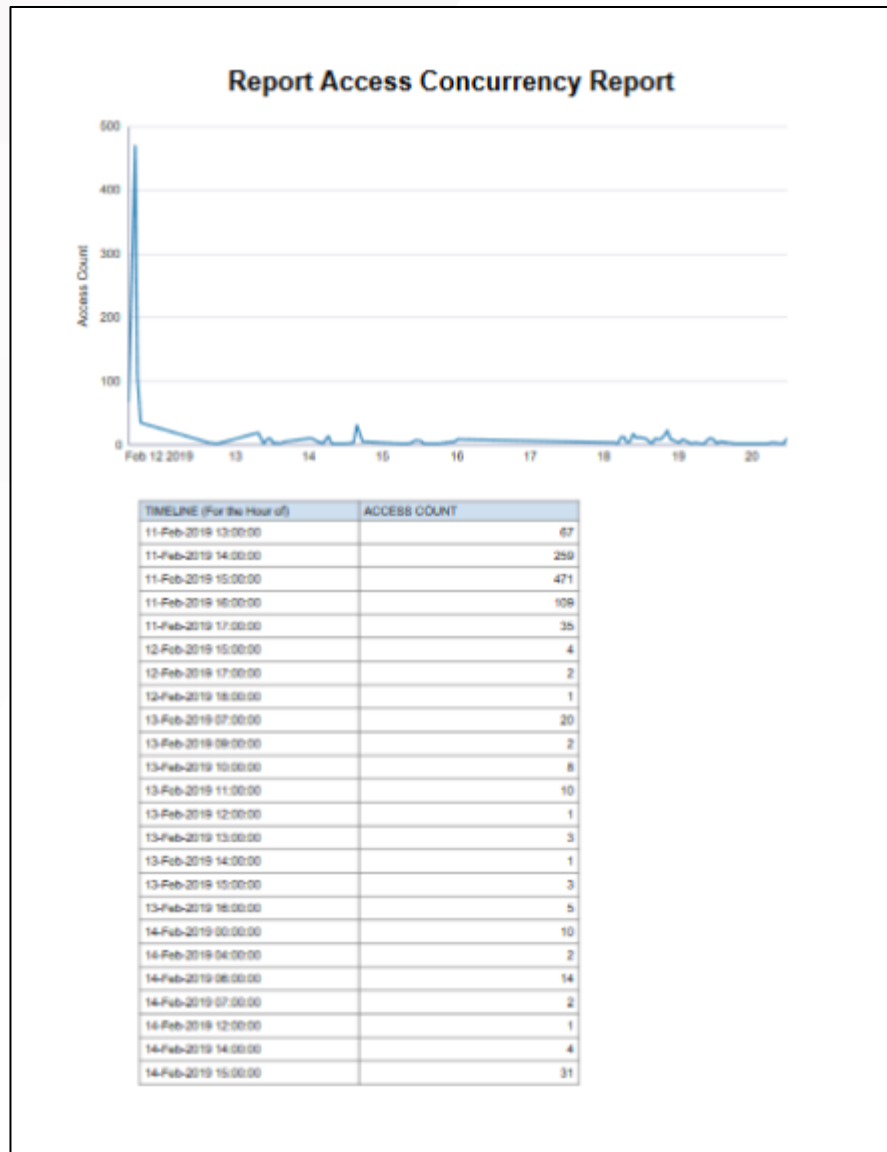
- C. **Catalog Activity Report:** This layout gives an insight into activity count on different catalog objects and also a count of different operations being performed on the catalog objects. You can see the latest 20 actions performed on Catalog Objects.



Hourly Concurrency Report

Report Name: HourlyConcurrencyReport

This report gives you an hourly data for number of concurrent report executions through all different channels (Online, Scheduled Jobs or Web Services). The timeline skips the hours when no reports were executed. This report will help you look at any spike of report executions, planned or unplanned, that could be causing performance bottlenecks and may help plan the resources better.



Report Execution-Time Metrics (Classify into different execution time buckets)

Report Name: ReportExecutionTimeMetrics

This report classifies all the reports into different time interval buckets, such as reports that run in 0-3s, 3s to 1 minute, 1minute to 10 minute, 10m to 1 hour, 1 hour to 2 hour, and reports that run longer than 2 hours. This will help you identify reports in different categories such as small, medium, large and extremely large reports and their count of execution to assess the resource better.

REPORT EXECUTION METRICS

REPORT NAME & PATH	EXECUTION COUNT	UNIQUE USER	NO OF ERRORS	CACHE HIT	0 - 3s	3s - 1m	1m - 10m	10m - 1hr	1 - 2hr	> 2hr	MIN EXEC TIME	MAX EXEC TIME	AVG EXEC TIME
/Customer Data Management/TCABulkImportErrors.xdo	32	2	0	0	26	4	0	0	0	0	1.37	4.34	2.36
/Enterprise Contracts/Contract Terms Printing/ClauseLayout.xdo	5	2	0	0	5	0	0	0	0	0	0.48	0.63	0.56
/Projects/Project Enterprise Resources/MaintainProjectEnterpriseLaborResourcesExecReport.xdo	1	1	0	0	0	0	1	0	0	0	103.71	103.71	103.71
/Human Capital Management/Payroll/Regulatory and Tax Reporting/UK/Pensions Automatic Enrolment Employer Reports.xdo	5	1	0	0	4	1	0	0	0	0	2.48	3.21	2.72
Procurement/Purchasing/PurchaseOrderReport.xdo	134	3	0	1	30	102	2	0	0	0	0.00	68.32	13.49
/Projects/Project Assets/GenerateAssetLines.xdo	1	1	0	0	0	0	1	0	0	0	206.97	206.97	206.97
/Human Capital Management/Payroll/Payroll Calculations/Statutory Deduction Register.xdo	1	1	0	0	0	1	0	0	0	0	4.51	4.51	4.51
/Financials/Collections/Correspondence/PromiseConfirmationDelivery.xdo	1	1	1	0	0	1	0	0	0	0	6.66	6.66	6.66
/faadmin/Audit/ReportExecutionTimeMetrics.xdo	1	1	0	0	1	0	0	0	0	0	1.18	1.18	1.18
Projects/Project Billing/InvoicePreview.xdo	3	3	0	0	0	3	0	0	0	0	3.95	17.70	8.70
/Custom/Audit_latest/BIPCatalogObjectAuditTrail.xdo	1	1	0	0	1	0	0	0	0	0	0.34	0.34	0.34
/Human Capital Management/Payroll/Regulatory and Tax Reporting/UK/FPS.xdo	2	1	0	0	1	1	0	0	0	0	0.05	13.01	6.53
/Custom/Audit/Copy of BIPReportAuditTrail.xdo	12	1	0	4	11	1	0	0	0	0	0.01	3.32	0.50
/Financials/Budgetary Control/BudgetImportAnalysis.xdo	2	1	0	0	0	1	1	0	0	0	6.74	108.04	57.39
/Human Capital Management/Payroll/Regulatory and Tax Reporting/US/Year End/W2Register.xdo	1	1	0	0	0	1	0	0	0	0	4.36	4.36	4.36
/Human Capital Management/Payroll/Regulatory and Tax Reporting/US/Year End/W2RegisterTotals.xdo	1	1	0	0	0	1	0	0	0	0	6.47	6.47	6.47
/Financials/Payables/Payments/CashRequirement.xdo	1	1	0	0	0	1	0	0	0	0	6.15	6.15	6.15
/Financials/General Ledger/Account Analysis/GeneralLedger.xdo	1	1	0	0	1	0	0	0	0	0	1.74	1.74	1.74
/Human Capital Management/Workflow Notifications/AbsenceApprovalNotificationReport.xdo	5	2	0	0	3	2	0	0	0	0	1.12	4.05	2.89
/Procurement/Purchasing/PurchasingNotificationReport.xdo	42	25	0	0	24	18	0	0	0	0	0.97	9.01	3.28
/Financials/Intercompany Accounting/IntercompanyAccountDetails.xdo	3	1	0	0	0	3	0	0	0	0	3.87	5.73	5.06
/Financials/Cash Management/Bank Statements and Reconciliation/InboundBankStatements.xdo	4	1	0	0	4	0	0	0	0	0	0.03	0.07	0.06
/Enterprise Contracts/Transformation	71	15	0	0	71	0	0	0	0	0	0.06	0.53	0.11

Report Performance By Report Type

Report Name: ReportPerformanceByReportType

This report performance metrics by execution type and based on whether the report is seeded or custom.

REPORT PERFORMANCE METRICS BY REPORT TYPE

REPORT TYPE	COUNT OF RUN	UNIQUE USER	REPORT FAILED	FROM DOC CACHE	0-3 s	3s - 1M	1M - 10 M	10 M - 1 Hr	1 - 2 Hr	> 2hr	MIN EXECUTION TIME (Sec)	MAX EXECUTION TIME (Sec)	AVG EXECUTION TIME (Sec)
Custom Scheduler	41	2	32	0	31	8	0	2	0	0	0.27	801.75	43.27
Custom Web Services	351	20	2	1	192	157	2	0	0	0	0	88.32	7.41
Seeded Web Services	443	85	3	0	385	58	0	0	0	0	0.02	51.68	1.65
Seeded Online	3	2	0	0	3	0	0	0	0	0	1.37	2.92	2.28
Custom Online	297	4	6	22	252	41	2	2	0	0	0	827.85	7.98
Seeded Scheduler	239	43	3	0	80	142	17	0	0	0	0.76	214.92	15.8
Total	1374	156	46	23	943	406	21	4	0	0			

Report Runtime Statistics (Execution Count, Time - Min, Max, Median)

Report Name: ReportRuntimeStatistics

This report has been designed from report author activity usage perspective where a person with BI Author or BI Administrator takes certain action (Update, Delete, Copy, etc) on catalog objects. There are 2 layouts in this report:

REPORT RUNTIME STATISTICS

Report_Path	Distinct Users Count	Report Execution Count	Max Execution Time	Avg Execution Time	Median Execution Time	Max Rows Returned by Report	Median Rows Returned by Report	Min Rows Returned by Report	Max Report Output Size (KB)	Median Report Output Size (KB)	Min Report Output Size (KB)
/Custom/Audit/BIPCatalogObjectAuditTrail.xdo	1	52	11355	587.73	341.5	1019	274	0	1594.18	74.09	0.00
/Custom/Audit/BIPReportAuditTrail.xdo	1	40	4708	1937.25	1896.5	1366	1131	0	2368.79	1808.12	1.92
/Custom/Audit/Copy of BIPReportAuditTrail.xdo	1	12	3323	503.17	250.5	1107	26.5	0	1893.03	45.95	0.00
/Custom/Audit/Data Models/BIPCatalogObjectAuditTrailDM.xdm	1	4	284	160	128.5	5	2.5	0	1.40	0.83	0.30
/Custom/Audit/Data Models/BIPReportAuditTrailDM.xdm	1	8	480	262.88	252.5	78	0	0	112.28	0.32	0.27
/Custom/Audit/Data Models/HourlyConcurrencyDM.xdm	1	3	1821	1677.67	1607	50	45	27	4.79	4.29	2.68
/Custom/Audit/Data Models/ReportExecutionTimeMetricsDM.xdm	1	3	491	430	476	100	50	5	59.79	30.12	3.13
/Custom/Audit/Data Models/ReportPerformanceByReportTypeDM.xdm	1	2	980	629	629	6	6	6	3.89	3.69	3.68
/Custom/Audit/Data Models/ReportRunStatistics2DM.xdm	1	1	504	504	504	5	5	5	3.12	3.12	3.12
/Custom/Audit/Data Models/ReportRunStatisticsDM.xdm	1	3	8738	8053.67	7857	100	50	50	66.08	32.92	32.92
/Custom/Audit/Data Models2/ReportExecutionTimeMetricsDM.xdm	1	1	723	723	723	100	100	100	60.79	60.79	60.79
/Custom/Audit/Data Models2/ReportPerformanceByReportTypeDM.xdm	1	1	336	336	336	5	5	5	3.07	3.07	3.07
/Custom/Audit/Data Models2/ReportRunStatisticsDM.xdm	1	1	8993	8993	8993	50	50	50	24.73	24.73	24.73
/Custom/Audit/HourlyConcurrencyReport.xdo	1	8	4893	1973.88	1562	72	28	26	12.46	6.83	6.30
/Custom/Audit/ReportExecutionTimeMetrics.xdo	1	19	1459	677.21	703	192	152	0	153.05	113.87	2.06
/Custom/Audit/ReportPerformanceByReportType.xdo	1	9	1293	447	404	6	5	0	6.21	5.39	0.00
/Custom/Audit/ReportPerformanceByReportType2.xdo	1	1	570	570	570	5	5	5	5.45	5.45	5.45
/Custom/Audit/ReportRuntimeStatistics.xdo	1	10	9760	7985.7	8781.5	192	152	0	155.97	124.84	2.03
/Custom/Audit/ReportRuntimeStatistics2.xdo	1	6	3093	957	644	5	5	0	5.56	5.49	0.00
/Custom/Audit_latest/BIPCatalogObjectAuditTrail.xdo	1	1	344	344	344	25	25	25	7.92	7.92	7.92

APPENDIX

Audit table captures several Audit Events and attributes. Some common attributes are listed here:

Common Attributes

The below attributes are logged for all events (some restrictions apply).

ATTRIBUTE	DATABASE COLUMN	NOTE
Amount of free memory when the event is recorded	FREEMEMORY	
Event category (ex. report access, report execution, resource access)	IAU_EVENTCATEGORY	
Event recorded date/time	IAU_TSTZORIGINATING	
Event status (1 = success, 0= error)	IAU_EVENTSTATUS	
Event type (ex. report request start, scheduled job end, resource delete)	IAU_EVENTTYPE	
Report full path	IAU_RESOURCE	IAU_RESOURCE is not recorded for ReportJobPause, ReportJobResume, ReportJobDelete (user can find IAU_RESOURCE for these events by JobID)
Total amount of memory allocated to JVM when the event is recorded	TOTALMEMORY	
User name	IAU_INITIATOR	

In addition, there are "common" attributes also added and maintained by audit library, but not relevant for BI Publisher Audit Report.

There are different events, that needs to be looked at when creating these Audit Reports from scratch

1. Report Access Events
2. Report Execution Events
3. Report Job Events
4. Resource Access Events

Details on the above events adds to the complexity of retrieving the Audit Data and therefore, Sample Audit Reports will eliminate the need to deep dive into understanding the events and sequence of events.

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