

KPI Metrics Metadata Configuration Guide

An Open Source Asset for use with TIBCO® Data Virtualization

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Project Name	AS Assets KPI Metrics	
Document Location	This document is only valid on the day it was printed. The source of the document will be found in the ASAssets_KPI folder (https://github.com/TIBCOSoftware)	
Purpose	Self-paced instructional	



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Revision History

Version	Date	Author	Comments
1.0	Aug 30 2019	Mike Tinius	Initial revision
1.1	Nov 6 2019	Mike Tinius	Added reportResourceDatasourceLineage.
1.2	Dec 12 2019	Mike Tinius	Modified location and name of constant configuration file.
1.3	Jan 20 2020	Mike Tinius	Moved Published Resource info to "KPImetrics Data Dictionary v1.1.pdf"

Related Documents

Name	Version
How To Use Utilities.pdf	2019Q301
KPImetrics Configuration Guide v1.29.pdf	2020Q101
KPImetrics Overview.pdf	2020Q101
KPImetrics Data Dictionary v1.2.pdf	2020Q101
KPImetrics_Table_Relationship_Diagram.pptx	2020Q101
KPI Metrics Overview.pptx	2020Q101

Supported Versions

Name	Version
TIBCO® Data Virtualization	7.0.8 or later
AS Assets Utilities open source	2019Q301 or later

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1 Introduction

Purpose

The purpose of this document is to provide guidance on how configure and use the AS Assets KPI Metadata.

Audience

This document is intended to provide guidance for the following users:

- Data Virtualization Administrators provides a guide for installation.
- Architects provides the KPImetrics architecture.
- Data professionals provides background on the published views and usage.
- Operations users provides insight into triggers and procedures that are executed.
- Project Managers provides general information on KPImetrics.

References

Product references are shown below. Any references to CIS or DV refer to the current TIBCO® Data Virtualization.

- TIBCO® Data Virtualization was formerly known as
 - Cisco Data Virtualization (DV)
 - Composite Information Server (CIS)

Overview

Please review the document "KPImetrics Overview.pdf".

2 Requirements

The following requirements and pre-requisites must be met:

• See requirements section in KPImetrics Configuration Guide vx.yy.pdf.

3 Use Cases

Metadata Metrics – The following use cases are examples of design-time metrics. Design-time is different than KPI metrics run-time metrics.

- 1. How many views do not properly adhere to the layer rules? compliance with architecture.
 - a. Each layer should invoke the appropriate layer below it. Should never invoke source views.

reportMetadataNonCompliantLayers

2. Which connector/adapter is used by which views

reportMetadataDatasource

3. Source View is compliant with additional columns: source code, fetchtimestamp etc.

report Metadata Non Compliant Columns

4. # views by layers

reportNumResourcesByLayer

5. Owner of views. Who has modified.

vMetadataResource

6. # policy, roles, policy name, attributes, description

vMetadataPolicy

vMetadataPolicyAssignmnt

7. Metadata regarding access and authorization for a give resource associated with access groups.

vMetadataPrivilege

8. Report on what data sources are associated with a particular resource. For example, a user can view all of the published resources and their corresponding data source(s).

reportResourceDatasourceLineage

9. Report on what columns are associated with a particular resource and layer. For example, a user can view all of the published resources and their corresponding column(s).

reportResourceColumn

4 Configuration

Configure Metadata Constants

Background Information:

The procedure "10_pqInsert_Metadata_Tables_METADATA_Constants" is used to configure various constants for a given "project". A project has a base path which encompasses all of the layer folders and resources.

This procedure "DOES NOT" need to be executed manually. It will be executed each time the trigger "kpimetricsTrig_40_Cache_METADATA_TABLES" executes. The trigger executes Cache_METADATA_TABLES which in turn executes

"10_pqInsert_Metadata_Tables_METADATA_Constants". It does this so that all metadata is kept in synch with the same LOAD DATE across all of the tables.

Instructions:

- Configure the following /shared/ASAssets/KPImetrics/Customize/pqInsert METADATA Constants.
- Configure the section "INSERT METADATA CONST NAME ROWS"
 - Modify the concatenated string below as needed. Add a row for each "project" name to capture metadata for.
 - PROJECT_NAME: A unique name that will be assigned a unique ID.
 - EXECUTE FLAG: Y=execute this row. N=do not execute when triggered.
 - ARCHIVE FLAG: Y=archive rows before processing. N=do not archive.
 - ARCHIVE PURGE DAYS: The number of days to purge from the current date.
 - PROJECT DESC: A description of the project path.
 - Maintain the existing structure with double pipe separating the line and single pipe separating a column.

- Configure the section "INSERT METADATA CONST PATH ROWS"
 - Modify the concatenated string below as needed. Add a row for each base path within the "project" to capture metadata for.
 - Modify projectName, pathSH, pathDS.
 - o The variable "pathWS" is not currently supported for web services.
 - Modify the PROJECT_PATH and RESOURCE_TYPES as per your requirements.

- Maintain the existing structure with double pipe separating the line and single pipe separating a column.
- PROJECT_NAME: A foreign key reference to METADATA_CONST_NAME which provides a unique name that will be assigned a PROJECT_NAME_ID that is unique.
- PROJECT_PATH: A unique key for this table which drives all of the processing for Cache_METADATA_TABLES procedure to load data.
- RESOURCE TYPES: A comma-separated list of resource types to process.
 - When using pathSH for shared area then [TABLE,PROCEDURE]
 - When using pathDS for /services/databases then [LINK]
 - When using pathWS for /services/webservices then [LINK]
- NOTE: Web Services are not currently supported.

```
SET projectName = 'TestSpoke';
SET pathSH = '/shared/00_DataFederation/TestSpoke';
SET pathDS = '/services/databases/PWC/TestSpoke':
SET pathWS = ";
\dot{\text{SET METADATA\_CONST\_PATHS\_str}} = \text{METADATA\_CONST\_PATHS\_str} \parallel
                                    PROJECT_PATH
--PROJECT_NAME
                                                                                             RESOURCE TYPES
                                                                                             'TABLE.PROCEDURE'
'll'llproiectName
                                    pathSH
                                                                                                                          '||'||projectName
                                    pathDS
                      11771
                                                                 11771
                                                                                                                          ï
--'||'||projectName
                      11771
"; -- This is always the last line
```

- Configure the section "INSERT METADATA CONST_LAYERS ROWS"
 - Modify the concatenated string below as needed. Only modify the layer type and parent path after the standard project path.
 - Modify projectName, pathSH, pathDS.
 - The variable "pathWS" is not currently supported for web services.
 - Modify the PROJECT_PATH, LAYER_TYPE, PARENT_PATH and GENERATE LINEAGE as per your requirements.
 - Maintain the existing structure with double pipe separating the line and single pipe separating a column.
 - PROJECT_NAME: A foreign key reference to METADATA_CONST_NAME which provides a unique name that will be assigned a PROJECT_NAME_ID that is unique.
 - PROJECT PATH: Provides a foreign key back to META DRIVER table.
 - LAYER TYPE: A unique string describing the layer to acquire metadata for.
 - PARENT PATH: The actual path in DV which is associated with the LAYER_TYPE.
 - GENERATE_LINEAGE: Y=Generate lineage for this layer path. N=Do not generate lineage for this layer path.
 - EXCLUSION_LIST: A comma-separated list of paths or partial paths ending in a /
 that are to be excluded from the lineage generation. If a comma exists within a path
 then escape the comma with "_002C". e.g. /shared/my,path1/path2/ -->
 /shared/my_002Cpath1/path2/
 - Rules:
- A LAYER_TYPE that is a parent to a sub-folder is allowed and it will not cause duplication of resources. This concept will work in any layer including /shared and published /services/databases.
- The table METADATA CONST LAYERS is validated for duplicates.

- If a duplicate layer and PARENT_PATH is found an exception is thrown.
- Each LAYER_TYPE should have a unique name within a given PROJECT_NAME_ID.

For example,

SET projectName = 'TestSpoke';

1) Given the following layer type designations, there is a grandparent-parent-child folder relationship represented here:

Note: The number of levels/layers is NOT restricted.

```
LAYER TYPE:

Note: 01_SourceViewLayer is a parent to 01_SourceViewLayer_svThirdParty

01_SourceViewLayer

Note: 01_SourceViewLayer

Note: 01_SourceViewLayer

Note: 01_SourceViewLayer_svThirdParty

is a parent to 01_SourceViewLayer_svThirdParty_A and 01_SourceViewLayer_svThirdParty_B

01_SourceViewLayer_svThirdParty

01_SourceViewLayer_svThirdParty

01_SourceViewLayer_svThirdParty_A

01_SourceViewLayer_svThirdParty_A

01_SourceViewLayer_svThirdParty_B

01_SourceViewLayer_svThirdParty_A

01_SourceViewLayer_svThirdParty_B

01_SourceViewLayer_svThirdParty_A

01_SourceViewLayer_svThirdParty_B

01_SourceViewLayer_svThirdParty_B
```

2) Given the following resources, the layer type will be assigned from the child (lowest folder) up to the grandparent (highest) folder.

```
LAYER TYPE

RESOURCE PATH

01_SourceViewLayer_svThirdParty_A /shared/00_DataFederation/TestSpoke/01_SourceViewLayer/012_svThirdParty/012_svThirdParty_A/012_svThirdParty_A/012_svThirdParty_A/012_svThirdParty_A/012_svThirdParty_A/012_svThirdParty_A/012_svThirdParty_A/012_svThirdParty_A/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdParty_B/012_svThirdPa
```

The following demonstrates how to setup the constants.

```
SET pathSH = '/shared/00 DataFederation/TestSpoke';
SET pathDS = '/services/databases/PWC/TestSpoke';
SET pathWS = ";
SET METADATA_CONST_LAYERS_str = METADATA_CONST_LAYERS_str ||
  --PROJECT NAME
                                                                        PROJECT_PATH LAYER_TYPE
                                                                                                                                                                                                    PARENT PATH
                                                                                                                                                                                                                                                                                                             GENERATE LINEAGE
                     EXCLUSION LIST
'||'||projectName
                                                        ||T||
                                                                                           pathSH||'|'|| '00_DataSource'||'|'||
                                                                                                                                                                                                   pathSH||'/00_DataSource'||'|'||
                                                                                                                                                                                                                                                                                                                                               'N'|| '|'||
                                                                                           pathSH||'|'||
                                                                                                                                                                                                   ||'|'||pathSH||'/01 SourceViewLayer'
 '||'||projectName
                                                       11'1'11
                                                                                                                             '01 SourceViewLaver'
                                                                                                                                                                                                                                                                                                                                               'N'|| ||'||
                                                                                                                                                                                                                                                                                                                                                                                   "||
                                                                                                                             '02_ConformingViewLayer'||'|'||pathSH||'/02_ConformingViewLayer'||'|'|
'||'||projectName
                                                       11111
                                                                                          pathSH||'|'||
                                                                                                                             '031_CommonEntityModel'||'|'||pathSH||'/03_CommonModelLayer/031_CommonEntityModel'||'|'||N'|| '|'||
  '||'||projectName
                                                       11111
                                                                                          pathSH||'|'||
                                                                                                                             '032_CommonDimensionalModel'||'|'||pathSH||'/03_CommonModelLayer/032_CommonDimensionalModel'
'||'||projectName
                                                       11111
 ||'|' ||'N'||'||
'||'||projectName
                                                       11'1'11
                                                                                           "||
'||'||projectName
                                                       11'1'11
                                                                                           path SH \|''\| \quad '034\_CommonIntegration Model' \|''\| path SH \|''03\_CommonModel Layer / 034\_CommonIntegration Model' \|''\| N''\| \\
                     "]]
                                                                                           '||'||projectName
                                                       11111
                      "]]
'||'||projectName
                                                                                           pathSH||'||| \quad '042\_BusinessDemandView'||'|||pathSH||'/04\_BusinessDeliveryLayer/042\_BusinessDemandView'||'|||Y'|| \quad '|'|| \quad |'|'|| \quad |'|'|| \quad |'|'|| \quad |''|| \quad |''||
                     "]]
'||'||projectName
                                                                                          pathDS||'|'|| 'PublishedDS_tutorial'
                                                                                                                                                                                                                                                                                                            ||"||"||"||"||
                                                                                           pathWS||'|'| 'PublishedWS_tutorial'
  --'||'||projectName
                                                                                                                                                                                                                                                                                                            ||"||"||"||"||"||
"; -- This is always the last line
```

- Configure the section "INSERT METADATA_CONST_VALIDATE ROWS"
 - Modify the concatenated string below as needed.
 - Modify projectName, pathSH, pathDS.
 - The variable "pathWS" is not currently supported for web services.
 - Modify the PROJECT_PATH, LAYER_TYPE, RULE_TYPE and RULE DESC as per your requirements.
 - Maintain the existing structure with double pipe separating the line and single pipe separating a column.

• PROJECT_NAME: A foreign key reference to METADATA_CONST_NAME which provides a unique name that will be assigned a PROJECT_NAME_ID that is unique.

PROJECT_PATH: Provides a foreign key back to META_DRIVER table.

• LAYER_TYPE: A valid layer name found in the table METADATA_CONST_LAYERS.

• RULE_TYPE: Valid values=[ENFORCE_LAYER|ENFORCE_COLUMN]

• RULE_DESC: Enforce the rule type.

When RULE TYPE=ENFORCE COLUMN

 Enforces which columns must be present in all of the views for a given layer type. Comma-separated list of casesensative column names.

When RULE TYPE=ENFORCE LAYER

- Enforces which source layer resource can invoke which target layer resource. Comma-separated list of valid LAYER TYPES.
- b. If a resource can invoke another resource in the same layer then add its own layer to the list.

```
SET projectName = 'TestSpoke';
SET pathSH = '/shared/00 DataFederation/TestSpoke';
SET pathDS = '/services/databases/PWC/TestSpoke';
SET pathWS = ";
SET METADATA_CONST_VALIDATE_str = METADATA_CONST_VALIDATE_str ||
--PROJECT NAME PROJECT PATH
                                          LAYER TYPE
                                                                  RULE TYPE
                                                                                                     RULE DESC
                                                                 ||'||'||'ENFORCE_LAYER' ||'|'||
                                                                                                     '00 DataSource'll
'||'||projectName
                  ||'|'||pathSH ||'|'||
                                          '01 SourceViewLaver'
'||'||projectName
                  ||'|'||pathSH ||'|'||
                                          '01_SourceViewLayer' ||'||'|ENFORCE_COLUMN'||'|'||
                                                                                                     'fetchTimeStamp,systemSourceCode'||
'||'||projectName
                  ||'|'||pathSH ||'|'||
                                          '02_ConformingViewLayer'||'||'ENFORCE_LAYER'||'||
                                                                                                     '01_SourceViewLayer'||
                                          '031_CommonEntityModel'||'||'|ENFORCE_LAYER'||'||
'll'llproiectName
                  ||'|'||pathSH ||'|'||
                                                                                                     '02 ConformingViewLaver'll
'||'||projectName
                  ||'|'||pathSH ||'|'||
                                          '032_CommonDimensionalModel'||'|'||'ENFORCE_LAYER'||'|'|| '02_ConformingViewLayer'||
                  ||'|'||pathSH ||'|'||
'||'||projectName
                                          '033_CommonAnalyticalModel'||'|||ENFORCE_LAYER'||'||
                                                                                                     '02_ConformingViewLayer'||
'||'||projectName
                  ||'|'||pathSH ||'|'||
                                          '034_CommonIntegrationModel'||'|'|| 'ENFORCE_LAYER'||'|'|| '02_ConformingViewLayer'||
'Il'IlprojectName
                  ||'|'||pathSH ||'|'||
                                          '041_BusinessDemandModel'||'|||ENFORCE_LAYER'||'||
'031_CommonEntityModel,032_CommonDimensionalModel,034_CommonIntegrationModel,041_BusinessDemandModel'||
'||'||projectName
                  ||'|'||pathSH ||'|'||
                                          '042_BusinessDemandView'||'||'|ENFORCE_LAYER'||'||
                                                                                                     '041_BusinessDemandModel'||
'||'||projectName
                  ||'|'||pathDS ||'|'||
                                          'PublishedDS tutorial' ||'|'||ENFORCE LAYER' ||'|'|
                                                                                                     '042 BusinessDemandView'||
                                          'PublishedWS_tutorial' ||'|'||ENFORCE_LAYER' ||'|'|
--'||'||projectName ||'|'||pathWS ||'|'|
                                                                                                     '042 BusinessDemandView'||
": -- This is always the last line
```

Configure Trigger

Enabling triggers starts the processing of KPI metadata data. The trigger "kpimetricsTrig_40_Cache_METADATA_TABLES" is turned off by default. It must be turned on in order to begin the processing of

- Modify /shared/ASAssets/KPImetrics/Customize/defaultTriggersToEnable and change the trigger kpimetricsTrig_40_Cache_METADATA_TABLES from OFF to ON if you want to capture metadata.
- 2. When updateTriggers is executed, it will turn on and off the trigger automatically according to how the trigger is set in defaultTriggersToEnable.

5 KPImetrics Metadata Resources

Configuration Resources

This section outlines the resources that are used for configuration of KPImetrics Metadata.

Published Resources

This section outlines the resources that are published under the ASAssets virtual database to expose metrics data. Resources are organized under catalogs and schemas based upon their functionality.

Please review the document "*KPImetrics Data Dictionary vX.Y.pdf*" for details about published tables, procedures and columns.

Metadata Data Source Tables

The following provides a description for the database tables used by KPImetrics Metadata.

Metadata Data Source Tables and Procedures for KPI <database type>

Location: /shared/ASAssets/KPImetrics/Physical/Metadata/KPI_<database_type>

The KPImetrics module provides data source for all currently supported storage database platforms under /shared/ASAssets/KPImetrics/Physical/Metadata.

Currently the KPImetrics module includes the following KPImetrics data sources

- /shared/ASAssets/KPImetrics/Physical/Metadata/KPI oracle
- /shared/ASAssets/KPImetrics/Physical/Metadata/KPI_sqlserver

The following tables have been created in CIS_KPI schema to capture the required data. Each table has a corresponding archive table.

RULES:

- Only one load set of data is stored at any given point in time in the main metadata tables.
- When METADATA_CONST_NAME.ARCHIVE_FLAG=Y then each table is archived to its corresponding archive table.
- Each node in a cluster will contain its own set of metadata rows therefore, NODE_HOST and NODE_PORT are a part of every key. Even though the resource name will be the same, the RESOURCE_ID may be different on any given node. Be sure to do reporting based on a particular NODE_HOST and NODE_PORT.

Table Name	Description
METADATA_CONST_NAME	This table contains a unique base project path that drives all of the metadata capture for all of the tables. Only metadata is captured the project paths present in this table. The trigger

METADATA_CONST_NAME_ARCH	specified below along with the procedure it invokes is the only mechanism for capturing metadata for all of the metadata tables listed here.	
	LOAD_DATE: The timestamp of the latest metadata load.	
	PROJECT NAME ID: A unique sequence id for each project name.	
	PROJECT_NAME: A unique name that will be assigned a PROJECT_NAME_ID that is unique.	
	ENVIRONMENT_NAME: The environment nickname from commonValues.cisServerNickname.	
	EXECUTE_FLAG: Y=execute this row. N=do not execute when triggered.	
	ARCHIVE_FLAG: Y=archive rows before processing. N=do not archive. Note: all rows get deleted each time the trigger executes. Archive is the only way to maintain history.	
	ARCHIVE_PURGE_DAYS: The number of days to purge from the current date.	
	PROJECT_DESC: A description of the project path.	
	RESOURCE_TYPES: TABLE,PROCEDURE - A comma-separated list of resource types to process. Currently only TABLE and PROCEDURE are valid.	
	EXECUTE_STATUS: The status of the latest load. SUCCESS or EXCEPTION which includes the exception message.	
	NODE_HOST: Indicates which hostname/node the processing took place on. Multiple hosts/nodes in a cluster.	
	NODE_PORT: Indicates the port of the DV server in which the processing took place on.	
	TRIGGER:	
	/KPImetrics/Physical/Metadata/System/ClusterSafeTriggers/	
	kpimetricsTrig_40_Cache_METADATA_TABLES → Cache_METADATA_TABLES	
	KEY: LOAD_DATE, PROJECT_NAME_ID, PROJECT_NAME, NODE_HOST, NODE_PORT	
	This table contains a list of base project paths that drives all of the metadata capture for all of the tables. Only metadata is captured the project paths present in this table.	
METADATA_CONST_PATHS	PROJECT_PATH: A unique key for this table which drives all of the processing for Cache_METADATA_TABLES procedure to load data.	
METADATA_CONST_PATHS_ARCH	RESOURCE_TYPES: TABLE,PROCEDURE,LINK - A comma-separated list of resource types to process.	
	KEY: LOAD_DATE, PROJECT_NAME_ID, PROJECT_PATH, NODE_HOST, NODE_PORT	
	This table contains the valid layer types for each project path. A layer type has a corresponding parent path within the project path that it correlates to.	
METADATA_CONST_LAYERS	PROJECT_PATH: Provides a foreign key back to METADATA_CONST_NAME table.	
METADATA_CONST_LAYERS_ARCH	LAYER_TYPE: A unique string describing the layer to acquire metadata for.	
METADATA_CONST_LATERS_ARCH	PARENT_PATH: The actual path in DV which is associated with the LAYER_TYPE.	
	KEY: LOAD_DATE, PROJECT_NAME_ID, LAYER_TYPE, NODE_HOST, NODE_PORT	
	This table contains the layer validation rules. The rules provide for enforcing columns within views and which views can invoke views in specific layers.	
	PROJECT_PATH: Provides a foreign key back to METADATA_CONST_NAME table.	
METADATA_CONST_VALIDATE	LAYER_TYPE: A valid layer name found in the table METADATA_CONST_LAYERS.	
METADATA_CONST_VALIDATE_ARCH	RULE_TYPE: Valid values=[ENFORCE_LAYER ENFORCE_COLUMN]	
	RULE_DESC: Enforce the rule type.	
	When RULE_TYPE=ENFORCE_COLUMN Enforces which columns must be present in all of the views for a given layer type.	
	Comma-separated list of case-sensative column names.	

	When RULE_TYPE=ENFORCE_LAYER	
	Enforces which source layer resource can invoke which target layer resource. Comma-separated list of valid LAYER_TYPES.	
	If a resource can invoke another resource in the same layer then add its own layer to the list.	
	KEY: LOAD_DATE, PROJECT_NAME_ID, LAYER_TYPE, RULE_TYPE, NODE_HOST, NODE_PORT	
METADATA_RESOURCE	This is the core table which all other tables reference. This table contains a row for each TABLE and PROCEDURE resource found within the specified PROJECT_PATH in the	
METADATA_RESOURCE_ARCH	METADATA_CONST_NAME table. KEY: LOAD_DATE, PROJECT_NAME_ID, RESOURCE_ID, NODE_HOST, NODE_PORT	
METADATA_RESOURCE_COLUMN	This table contains all of the COLUMNS referenced by the RESOURCE_ID in METADATA_RESOURCE.	
METADATA_RESOURCE_COLUMN_ARCH	KEY: LOAD_DATE, PROJECT_NAME_ID, RESOURCE_ID, COLUMN_NAME, NODE_HOST, NODE_PORT	
METADATA_RESOURCE_LINEAGE	This table contains the lineage for each resource in each layer. This will be a very large table.	
METADATA_RESOURCE_LINEAGE_ARCH	KEY: LOAD_DATE, PROJECT_NAME_ID, RESOURCE_ID, LINEAGE_ORDER, LAYER_TYPE, NODE_HOST, NODE_PORT	
METADATA_DATASOURCE	This table contains the all of the datasource information for a given project path.	
METADATA_DATASOURCE_ARCH	KEY: LOAD_DATE, PROJECT_NAME_ID, DATASOURCE_ID, NODE_HOST, NODE_PORT	
METADATA_NON_COMPLIANT	This table contains information on column and layer compliancy based on the METADATA_CONST_VALIDATE rules tables.	
METADATA_NON_COMPLIANT_ARCH	KEY: LOAD_DATE, PROJECT_NAME_ID, RESOURCE_ID, LINEAGE_ORDER, NON_COMPLIANT_REASON, NODE_HOST, NODE_PORT	
METADATA_POLICY	This table contains RBS [rule-based security] and CBS [column-based security] rows for a given project path.	
METADATA_POLICY_ARCH	KEY: LOAD_DATE, PROJECT_NAME_ID, POLICY_ID, NODE_HOST, NODE_PORT	
METADATA_POLICY_ASSIGNMNT	This table contains the assignments for a policy.	
METADATA_POLICY_ASSIGNMNT_ARCH	KEY: LOAD_DATE, PROJECT_NAME_ID, RESOURCE_ID, POLICY_ID, NODE_HOST, NODE_PORT	
METADATA_PRIVILEGE	This table contains the assigned privileges for all of the resources in a given project path.	
METADATA_PRIVILEGE_ARCH	KEY: LOAD_DATE, PROJECT_NAME_ID, RESOURCE_ID, NAME, NAME_TYPE, DOMAIN_NAME, USER_NAME, NODE_HOST, NODE_PORT	

Metadata System Triggers and Load Scripts

Location: /shared/ASAssets/KPImetrics/Physical/Metadata/System

/ClusterSafeCache

/ClusterSafeTriggers

/Helpers

This section provides a quick summary of all triggers, their schedules and how they execute in a cluster.

Trigger Name	Trigger Schedule	Trigger Period	Cluster execution
kpimetricsTrig_40_Cache_METADATA_TABLES	2:00 AM	1 day	all nodes

This section lists all triggers and load scripts that have been defined to execute various KPImetrics procedures at regular intervals. The default execution frequencies are listed for each trigger. The load scripts have been created to load and aggregate raw data into processed KPImetrics metadata.

Trigger [schedule] → Script Name → View name	Description
Schedule: [1 day, 2:00 am] kpimetricsTrig_40_Cache_METADATA_TABLES → /shared/ASAssets/KPImetrics/Physical/Metadata/System/Cluste rSafeCache/Cache_METADATA_TABLES → /shared/ASAssets/KPImetrics/Customize/pqInsert_METADAT A_Constants	This trigger executes the Cache_METADATA_TABLES procedure. This procedure is used to capture all the metadata for all of the metadata tables. Exceptions: Emails will be sent if there are exceptions. Review the following view (table) for issues: /services/databases/ASAssets/KPImetrics/workflow/vCISWorkflowStatus