

# **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
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# **Related Documents**

Name	Version
How To Use Utilities.pdf	2019Q301

# **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 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/Physical/Metadata/DDL/Common/
   10 pqInsert Metadata Tables 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.
    - i. Modify projectName, pathSH, pathDS.
    - ii. 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.
  - i. When using pathSH for shared area then [TABLE,PROCEDURE]
  - ii. When using pathDS for /services/databases then [LINK]
  - iii. When using pathWS for /services/webservices then [LINK]
  - iv. NOTE: Web Services are not currently supported.

```
SET projectName = 'TestSpoke':
SET pathSH = '/shared/00_DataFederation/TestSpoke';
SET pathDS = '/services/databases/PWC/TestSpoke';
SET pathWS = "
SET METADATA_CONST_PATHS_str = METADATA_CONST_PATHS_str |
                                 PROJECT_PATH
--PROJECT NAME
                                                                                      RESOURCE TYPES
'||'||projectName
                                                                                       'TABLE.PROCEDURE'
'||'||projectName
                                 pathDS
                                                                                      'LINK'
--'Il'IlproiectName
                    11771
                                  pathWS
                                                                                      'LINK'
                                                                                                                Ш
"; -- 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.
    - ii. The variable "pathWS" is not currently supported for web services.
    - iii. 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.

```
SET projectName = 'TestSpoke';
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
'||'||projectName
                   11'1'11
                                pathSH||'|'|| '00_DataSource'||'|'||
                                                                      pathSH||'/00_DataSource'||'|'||
                                                                                                                        'N'||
                                                                      ||'|'||pathSH||'/01 SourceViewLayer'
'Il'IlproiectName
                                pathSHII'I'II '01 SourceViewLaver'
                                                                                                                        'N'II
                   11'1'11
                                pathSH||'|'|| '02_ConformingViewLayer'||'|||pathSH||'/02_ConformingViewLayer'||'||
                                                                                                                        'N'||
'||'||projectName
                   111111
'Il'IlproiectName
                                pathSH||'|'|| '031 CommonEntityModel'||'|'||pathSH||'/03 CommonModelLayer/031 CommonEntityModel'||'|'||N'||
```

'  '  projectName	11711	pathSH  '	'032_CommonDimension	nalModel'	' '  pathSH  '/03_Com	monModelLayer/032_Comr	monDimensionalModel'
' '  'N'							
'  '  projectName	11.1.11	pathSH  '	'033_CommonAnalytical	Model'  '	pathSH  '/03_Commo	nModelLayer/033_Commo	nAnalyticalModel'  ' '  'N'
'  '  projectName	11'1'11	pathSH  ' '	'034_CommonIntegration	nModel'  '	'  pathSH  '/03_Comm	onModelLayer/034_Commo	onIntegrationModel'  ' '  'N'
'  '  projectName	11'1'11	pathSH  ' '	'041_BusinessDemandM	1odel'  ' '  p	oathSH  '/04_Business	DeliveryLayer/041_Busines	ssDemandModel'  ' ' 'N'
'  '  projectName	HTH	pathSH  ' '	'042_BusinessDemandV	042_BusinessDemandView'  ' '  pathSH  '/04_BusinessDeliveryLayer/042_BusinessDemandView'  ' '  Y'			
'  '  projectName	HTH	pathDS  ' '	'PublishedDS_tutorial'	11'1'11	pathDS	' '  'Y'	
'  '  projectName	HTH	pathWS  ' '	'PublishedWS_tutorial'	11'1'11	pathDS	' '  'Y'	
"; This is always t	he last line						

- Configure the section "INSERT METADATA\_CONST\_VALIDATE ROWS"
  - Modify the concatenated string below as needed.
    - i. Modify projectName, pathSH, pathDS.
    - ii. The variable "pathWS" is not currently supported for web services.
    - iii. 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.
  - 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.
    - i. 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.
    - ii. When RULE TYPE=ENFORCE LAYER
      - Enforces which source layer resource can invoke which target layer resource. Comma-separated list of valid LAYER\_TYPES.
      - 2. 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
                                          '01_SourceViewLayer'
                                                                 ||'|'||ENFORCE_LAYER' ||'|'||
'||'||projectName
                 ||'|'||pathSH ||'|'||
                                                                                                     '00 DataSource'll
                                          '01_SourceViewLayer' ||'||'|ENFORCE_COLUMN'||'||
'll'llprojectName
                  ||'|'||pathSH ||'|'||
                                                                                                     'fetchTimeStamp,systemSourceCode'||
                                          '02_ConformingViewLayer'||'||'ENFORCE_LAYER'||'||
'||'||projectName
                  ||'|'||pathSH ||'|'||
                                                                                                     '01_SourceViewLayer'||
'||'||projectName
                  ||'|'||pathSH ||'|'||
                                          '031_CommonEntityModel'||'||'|ENFORCE_LAYER'||'||
                                                                                                     '02_ConformingViewLayer'||
'||'||projectName
                  ||'|'||pathSH ||'|'||
                                          '032_CommonDimensionalModel'||'|'||'ENFORCE_LAYER'||'|'|| '02_ConformingViewLayer'||
                                          '033_CommonAnalyticalModel'||'|'||'ENFORCE_LAYER'||'|'|
                                                                                                     '02 ConformingViewLaver'll
'||'||projectName
                  ||'|'||pathSH ||'|'||
                                          '034_CommonIntegrationModel'||'|'|| 'ENFORCE_LAYER'||'|'|| '02_ConformingViewLayer'||
'||'||projectName
                  ||'|'||pathSH ||'|'||
'||'||projectName
                  ||'|'||pathSH ||'|'||
                                          '041_BusinessDemandModel'||'|||ENFORCE_LAYER'||'||
'031_CommonEntityModel,032_CommonDimensionalModel,034_CommonIntegrationModel,041_BusinessDemandModel'||
                                          '042_BusinessDemandView'||'|||ENFORCE_LAYER'||'|'|
'||'||projectName
                  ||'|'||pathSH ||'|'||
                                                                                                     '041 BusinessDemandModel'II
                                          'PublishedDS_tutorial' ||'|'||'ENFORCE_LAYER' ||'|'||
'||'||projectName
                  ||'|'||pathDS ||'|'||
                                                                                                     '042 BusinessDemandView'll
                                                                                                     '042_BusinessDemandView'||
--'||'||projectName ||'|'||pathWS ||'|'|
                                          'PublishedWS_tutorial' ||'||'|ENFORCE_LAYER' ||'|'|
"; -- 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/Configuration/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.

# 4 KPImetrics Metatdata 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.

# **KPImetrics Catalog**

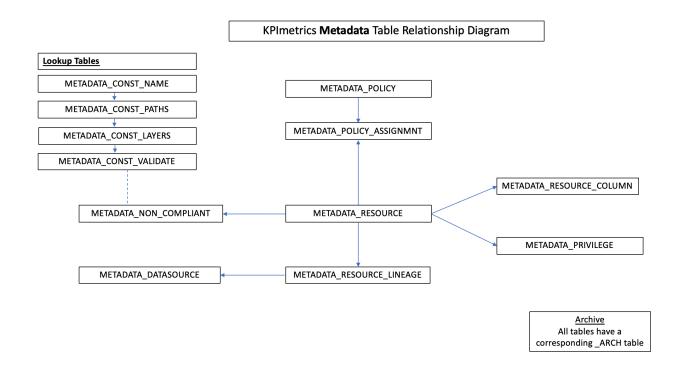
#### metadata schema

Resource (Resource Type)	Description
reportMetadataDatasource (TABLE)	Report on what datasource a view is using. Lineage from the view to the datasource. This can be joined with vMetadataDatasource to get additional datasource information. It may also be joined with vMetadataResource to get additional resource information.
reportMetadataNonCompliantColumns (TABLE)	Report of the non-compliant columns as configured by METADATA_CONST_VALIDATE.
reportMetadataNonCompliantLayers (TABLE)	Report of the non-compliant layers as configured by METADATA_CONST_VALIDATE.
reportNumResourcesByLayer (TABLE)	Report of the number of resources in each layer.
reportResourceColumns (TABLE)	Report of all the resources and their columns.
vMetadataConstName (TABLE)  vMetadataConstNameArch (ARCHIVE TABLE)	Provides a listing of all configured metadata constant name projects. This is the main driver table. It contains the project name, project name id, environment name, execute flag and archive flag.
vMetadataConstPaths (TABLE)  vMetadataConstPathsArch (ARCHIVE TABLE)	Provides a listing of all configured metadata constant name projects. This table controls the paths that are connected with the vMetadataConstName view.
vMetadataConstLayers (TABLE)  vvMetadataConstLayersArch (ARCHIVE TABLE)	Provides a listing of all of the metadata layer types for each project path.
vMetadataConstValidate (TABLE)	Provides a listing of all of the metadata layer validations for each project path.

vMetadataConstValidateArch (ARCHIVE TABLE)	
vMetadataResource (TABLE)  vMetadataResourceArch (ARCHIVE TABLE)	Provides a listing of all of the metadata resources for each project path. This is the core table that provides information about a resource.
vMetadataResourceColumn (TABLE)  vMetadataResourceColumnArch (ARCHIVE TABLE)	Provides a listing of all of the metadata resource columns for each resource and project path. This is the core table that provides information about columns and their position.
vMetadataResourceLineage (TABLE)  vMetadataResourceLineageArch (ARCHIVE TABLE)	Provides a listing of the lineage for each resource at each layer.  Lineage will be different based on which layer is referenced.  Each record also references the datasource that is used.
vMetadataDatasource (TABLE)  vMetadataDatasourceArch (ARCHIVE TABLE)	Provides a complete reference on the datasources that exist within the project paths referenced by vMetadataConstName.
vMetadataNonCompliant (TABLE)  vMetadataNonCompliantArch (ARCHIVE TABLE)	Provides information on all non-compliant resources for all layers.
vMetadataPolicy (TABLE) vMetadataPolicyArch (ARCHIVE TABLE)	Provides information on all policies for RBS [rule-based security] and CBS [column-based security] rows for a given project path.
vMetadataPolicyAssignmnt (TABLE)  vMetadataPolicyAssignmntArch (ARCHIVE TABLE)	Provides the policy assignments for each policy.
vMetadataPrivilege (TABLE)  vMetadataPrivilegeArch (ARCHIVE TABLE)	Provides a listing of all group and user privileges for each resource for a given project path.

# Metadata Table Relationship Diagram

The following provides a table relationship diagram for the database tables and procedures used by KPImetrics Metadata.



#### 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
	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 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.
METADATA_CONST_NAME  METADATA_CONST_NAME_ARCH	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.		
	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.		
	LAYER_TYPE: A valid layer name found in the table METADATA_CONST_LAYERS.		
	RULE_TYPE: Valid values=[ENFORCE_LAYER ENFORCE_COLUMN]		
METADATA_CONST_VALIDATE	RULE_DESC: Enforce the rule type.		
	When RULE_TYPE=ENFORCE_COLUMN  Enforces which solvenes must be account in all of the views for a given lever time.		
METADATA_CONST_VALIDATE_ARCH	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			
METADATA_RESOURCE_LINEAGE_ARCH	This table contains the lineage for each resource in each layer. This will be a very large table.		

	KEY: LOAD_DATE, PROJECT_NAME_ID, RESOURCE_ID, LAYER_TYPE, LINEAGE_ORDER, 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, 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 → pRebuildIndexesAdminInterface → /shared/ASAssets/KPImetrics/Physical/Metadata/System/Cluste rSafeCache/Cache_METADATA_TABLES	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