

# **KPI Metrics Data Dictionary**

# 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     | Jan 20 2020 | Mike Tinius | Initial revision   |
| 1.2     | Feb 18 2020 | Mike Tinius | Added views vJobDeleteCheck, vMetadataSysAllResources. Added annotation to vMetadataDatasource[Arch], vMetadataResource[Arch], vMetadataResourceColumns[Arch]. Added layertype to vMetadataPrivilege[Arch]. Added message to vPolicyAssignment[Arch] |

#### **Related Documents**

| Name                                     | Version  |
|--|----------|
| How To Use Utilities.pdf                 | 2019Q301 |
| KPImetrics Configuration Guide vX.Y.pdf  | 2020Q101 |
| KPImetadata Configuration Guide vX.Y.pdf | 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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| Release 2020Q100 [Jan 14 2020]              |     |
| Polosso 2020Q100 [Jail 14 2020]             |     |

### 1 Introduction

#### Purpose

The purpose of this document is to provide a data dictionary for AS Assets KPI Metrics.

#### 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)

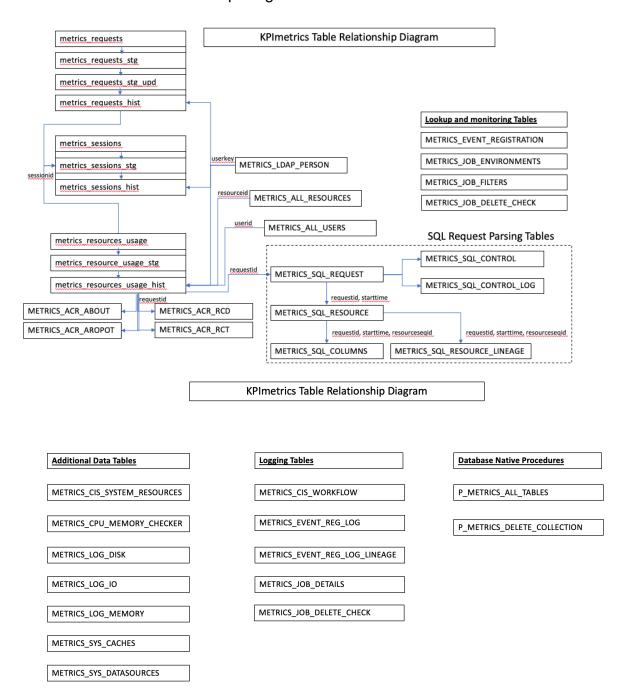
#### Overview

Please review the document "KPImetrics Overview.pdf".

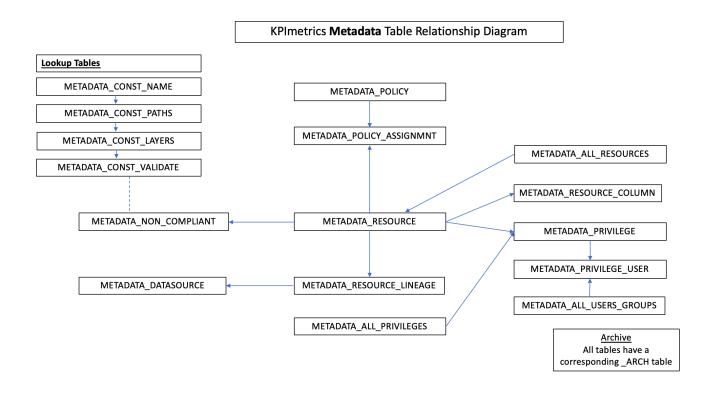
# 2 Table Relationship Diagrams

The following is the table relationship diagram for KPI metrics:

#### KPI Metrics Table Relationship Diagram



## KPI Metadata Table Relationship Diagram



## 3 KPImetrics Data Dictionary

#### **Table Definitions**

This section provides information on the table definitions. This section provides table information regarding the ASAssets published database and KPImetrics catalog which is found at this location: /services/databases/ASAssets/KPImetrics

#### Column Definitions

This section provides information on the column definitions. This section provides column information regarding the ASAssets published database and KPImetrics catalog which is found at this location: /services/databases/ASAssets/KPImetrics. Any column with the [k] designation indicates that the field is part of a key which makes a row in that table unique. Any column with the [fk] designation indicates that the field is a foreign key to another table.

#### metrics History Definitions

#### metrics\_requests\_hist (History) Table

Historical metrics requests table. Derived from metrics\_requests\_hist and metrics\_resources\_usage\_hist. Expanded with user information and resourcekind and dataservicename.

| Column Name    | Column Type   | Definition   |
|----------------|---------------|--|
| cluster        | VARCHAR(255)  | The name of the cluster or null if no cluster.   |
| nodehost [k]   | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]   | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |
| requestid [k]  | DECIMAL(19,0) | The unique request id that is the primary key of this table.   |
| parentid [fk]  | DECIMAL(19,0) | A foreign key back to the requestid within this table. Contains -1 when no parent reference.   |
| sessionid [fk] | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.  |
| requesttype    | VARCHAR(255)  | The type of request that is stored in the description field. "SQL"=select statement, "SQL Script"=call statement executed, "XSLT, Basic, or Streaming Transformation", "Java Procedure (built-in)", etc. |
| description    | CLOB          | The actual client request or internal DV request.  |
| starttime [k]  | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867  |
| endtime        | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899  |
| totalduration  | DECIMAL(19,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.  |
| serverduration | DECIMAL(19,0) | The duration of the request within the server measured in milli-seconds. Divide by 1000 to get minutes.  |
| rowsAffected   | DECIMAL(19,0) | The number of rows affected or returned. The value may be -1.  |
| maxmemory      | DECIMAL(19,0) | The maximum amount of memory used by the request.  |
| maxdisk        | DECIMAL(19,0) | The maximum amount of disk used by the request. It is not good for a request to used disk.   |
| message        | CLOB          | The exception message if a request was not successful.   |
| status         | VARCHAR(20)   | The status of the request [SUCCESS, FAILED].   |
| resourcekind   | VARCHAR(20)   | The type of resource that executed [system, user defined].   |

| dataservicename     | VARCHAR(255)  | The published data service name.   |
|---------------------|---------------|--|
| userid              | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.                          |
| user                | VARCHAR(255)  | The user name who connected for this session.                            |
| domain              | VARCHAR(255)  | The domain of the user who connected.                                    |
| group               | VARCHAR(255)  | The group of the user who connected.                                     |
| userkey [fk]        | VARCHAR(255)  | The normalized user key which is a foreign key to METRICS_LDAP_PERSON.   |
| domainkey [fk]      | VARCHAR(255)  | The normalized domain key which is a foreign key to METRICS_LDAP_PERSON. |
| fullname            | VARCHAR(255)  | The full name of the user who connected.                                 |
| lastname            | VARCHAR(255)  | The last name of the user who connected.                                 |
| firstname           | VARCHAR(255)  | The first name of the user who connected.                                |
| mail                | VARCHAR(255)  | The email of the user who connected.                                     |
| employeenumber      | VARCHAR(255)  | The employee number of the user who connected.                           |
| employeeid          | VARCHAR(255)  | The employee id of the user who connected.                               |
| telephonenumber     | VARCHAR(255)  | The primary telephone number of the user who connected.                  |
| friendlycountryname | VARCHAR(255)  | The friendly country name of the user who connected.                     |

## metrics\_resources\_usage\_hist (History) Table

Historical metrics resources usage table. Derived from metrics\_resources\_usage\_hist.

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| cluster          | VARCHAR(255)  | The name of the cluster or null if no cluster.  |
| nodehost [k]     | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]     | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| sessionid [fk]   | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.   |
| user             | VARCHAR(255)  | The user name who connected for this session.   |
| domain           | VARCHAR(255)  | The domain of the user who connected.   |
| group            | VARCHAR(255)  | The group of the user who connected.  |
| requestid [k]    | DECIMAL(19,0) | The unique request id that is the primary key of this table.  |
| parentid [fk]    | DECIMAL(19,0) | A foreign key back to the requestid within this table. Contains -1 when no parent reference.  |
| datasourcepath   | VARCHAR(255)  | The DV path to the published datasource/dataservice [/services/databases/ <name>, /services/webservices/<path name>]</path name></name> |
| datasourcetype   | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| resourceguid     | VARCHAR(40)   | The guid of the resource path. Eg. cff5fe78-c3c5-4a81-b134-d497cea5351e   |
| resourcekind     | VARCHAR(20)   | The type of resource that executed [system, user defined].  |
| starttime [k]    | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867   |
| endtime          | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899   |
| resourceorigin   | VARCHAR(30)   | The original DV system table in which the resource originated from.   |
|                  |               | [ALL_TABLES  ALL_PROCEDURES ALL_WSDL_OPERATIONS ALL_RESOURCES  ALL_COLUMNS ALL_PARAMETERS]  |
| resourceid       | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".  |
| dataservicename  | VARCHAR(255)  | The published data service name.  |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| parentname       | VARCHAR(255)  | The parent name of the resource. A.k.a. schema name if from published database.   |

| grandparentname     | VARCHAR(255)  | The grand-parent name of the resource. A.k.a. catalog name if from published database.  |
|---------------------|---------------|---|
| categoryname        | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                     |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                     |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                     |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                     |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                     |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                     |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                     |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                     |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|                     |               | ALL_RESOURCES: null   |
| parentpath          | VARCHAR(4000) | The parent path of the resource.  |
| userid              | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.   |
| userkey [fk]        | VARCHAR(255)  | The normalized user key which is a foreign key to METRICS_LDAP_PERSON.  |
| domainkey [fk]      | VARCHAR(255)  | The normalized domain key which is a foreign key to METRICS_LDAP_PERSON.  |
| fullname            | VARCHAR(255)  | The full name of the user who connected.  |
| lastname            | VARCHAR(255)  | The last name of the user who connected.  |
| firstname           | VARCHAR(255)  | The first name of the user who connected.   |
| mail                | VARCHAR(255)  | The email of the user who connected.  |
| employeenumber      | VARCHAR(255)  | The employee number of the user who connected.  |
| employeeid          | VARCHAR(255)  | The employee id of the user who connected.  |
| telephonenumber     | VARCHAR(255)  | The primary telephone number of the user who connected.   |
| friendlycountryname | VARCHAR(255)  | The friendly country name of the user who connected.  |

## metrics\_sessions\_hist (History) Table

Historical metrics sessions table. Derived from metrics\_sessions\_hist and metrics\_resources\_usage\_hist. Expanded with user information if found.

| Column Name   | Column Type   | Definition   |
|---------------|---------------|--|
| cluster       | VARCHAR(255)  | The name of the cluster or null if no cluster.   |
| nodehost [k]  | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                                 |
| nodeport [k]  | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.                  |
| sessionid [k] | DECIMAL(19,0) | A unique session id and primary identifier of this table.                                      |
| sessiontype   | VARCHAR(40)   | Designates the type session connection [JDBC, HTTP, TASK, etc.].                               |
| clienthost    | VARCHAR(255)  | Designates the client host name that connected to DV.  |
| type [k]      | VARCHAR(20)   | Indicates whether the session is of type 'begin' or 'end'.                                     |
| logintime [k] | TIMESTAMP     | The timestamp of when the session started.   |
| logouttime    | TIMESTAMP     | The timestamp of when the session ended  |
| status        | VARCHAR(20)   | The status of the session [ACTIVE, CLOSING].   |
| totalduration | DECIMAL(19,0) | The total session duration in milli-seconds. Only on row of type='end' where status='CLOSING'. |
| totalRequests | DECIMAL(19,0) | The total number of requests [metrics_requests_hist] executed for this session.                |
| bytestoclient | DECIMAL(19,0) | The total number of bytes sent to the client host during this session.                         |

| bytesfromclient     | DECIMAL(19,0) | The total number of bytes received from the client host during this session. |
|---------------------|---------------|--|
| userid              | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.                              |
| user                | VARCHAR(255)  | The user name who connected for this session.                                |
| domain              | VARCHAR(255)  | The domain of the user who connected.  |
| group               | VARCHAR(255)  | The group of the user who connected.   |
| userkey [fk]        | VARCHAR(255)  | The normalized user key which is a foreign key to METRICS_LDAP_PERSON.       |
| domainkey [fk]      | VARCHAR(255)  | The normalized domain key which is a foreign key to METRICS_LDAP_PERSON.     |
| fullname            | VARCHAR(255)  | The full name of the user who connected.                                     |
| lastname            | VARCHAR(255)  | The last name of the user who connected.                                     |
| firstname           | VARCHAR(255)  | The first name of the user who connected.                                    |
| mail                | VARCHAR(255)  | The email of the user who connected.   |
| employeenumber      | VARCHAR(255)  | The employee number of the user who connected.                               |
| employeeid          | VARCHAR(255)  | The employee id of the user who connected.                                   |
| telephonenumber     | VARCHAR(255)  | The primary telephone number of the user who connected.                      |
| friendlycountryname | VARCHAR(255)  | The friendly country name of the user who connected.                         |

## metrics history roll-up tables

| Resource (Resource Type)   | Description   |
|--|---|
| Metrics Roll-up Counts   |   |
| metrics_all_kpimetrics_table_counts (TABLE)  | Provides a rollup of all counts by nodehost and nodeport for all metrics tables.  |
| metrics_all_min_max_starttime_count (TABLE)  | Provides a rollup of the min/max starttime/logintime, min/max requestid/sessionid and the total count of rows for each of the 6 metrics collection and historical tables. |
| metrics_history_tables_row_distribution (TABLE)  | Provides a partition distribution for each partition month for each metrics history table.  |
| Metrics Requests History Roll-up   |   |
| metrics_requests_hist_groupby_date (TABLE)   | Provides a rollup row count of the metrics_requests_hist table grouped by date.   |
| metrics_requests_hist_groupby_date_month (TABLE)   | Provides a rollup row count of the metrics_requests_hist table grouped by month.  |
| metrics_requests_hist_groupby_date_month_n<br>odehost_nodeport (TABLE)                     | Provides a rollup row count of the metrics_requests_hist table grouped by month, nodehost and nodeport.   |
| metrics_requests_hist_groupby_date_nodehost<br>_nodeport (TABLE)                           | Provides a rollup row count of the metrics_requests_hist table grouped by date, nodehost and nodeport.  |
| metrics_requests_hist_groupby_date_user_do main (TABLE)                                    | Provides a rollup row count of the metrics_requests_hist table grouped by date, user and domain.  |
| metrics_requests_hist_groupby_date_user_do<br>main_resourcekind (TABLE)                    | Provides a rollup row count of the metrics_requests_hist table grouped by date, user, domain and resourcekind [system, user defined].                                     |
| metrics_requests_hist_groupby_date_user_do<br>main_resourcekind_dataservicename<br>(TABLE) | Provides a rollup row count of the metrics_requests_hist table grouped by date, user, domain and resourcekind [system, user defined] and dataservicename.                 |
| metrics_requests_hist_groupby_nodehost_nod eport (TABLE)                                   | Provides a rollup row count of the metrics_requests_hist table grouped by nodehost and nodeport.  |
| metrics_requests_hist_groupby_user_domain_<br>nodehost_nodeport (TABLE)                    | Provides a rollup row count of the metrics_requests_hist table grouped by user, domain, nodehost and nodeport.  |
| metrics_requests_hist_groupby_user_domain_<br>resourcekind_dataservicename (TABLE)         | Provides a rollup row count of the metrics_requests_hist table grouped by user, domain, resourcekind [system, user defined] and dataservicename.                          |

| metrics_requests_hist_groupby_user_domain_<br>resourcekind_dataservicename_nodehost_n<br>odeport (TABLE) | Provides a rollup row count of the metrics_requests_hist table grouped by user, domain, resourcekind [system, user defined], dataservicename, nodehost and nodeport. |
|--|--|
| Metrics Resources Usage History Roll-Up  |  |
| metrics_resources_usage_hist_groupby_date (TABLE)  | Provides a rollup row count of the metrics_resources_usage_hist table grouped by date.   |
| metrics_resources_usage_hist_groupby_date_<br>month (TABLE)  | Provides a rollup row count of the metrics_resources_usage_hist table grouped by month.  |
| metrics_resources_usage_hist_groupby_date_<br>month_nodehost_nodeport (TABLE)                            | Provides a rollup row count of the metrics_resources_usage_hist table grouped by month, nodehost and nodeport.   |
| metrics_resources_usage_hist_groupby_date_<br>nodehost_nodeport (TABLE)                                  | Provides a rollup row count of the metrics_resources_usage_hist table grouped by date, nodehost and nodeport.  |
| metrics_resources_usage_hist_groupby_date_<br>user_domain_resourcekind (TABLE)                           | Provides a rollup row count of the metrics_resources_usage_hist table grouped by date, user, domain and resourcekind [system, user defined].                         |
| metrics_resources_usage_hist_groupby_nodeh<br>ost_nodeport (TABLE)                                       | Provides a rollup row count of the metrics_resources_usage_hist table grouped by nodehost and nodeport.  |
| metrics_resources_usage_hist_groupby_user_<br>domain_resourcekind (TABLE)                                | Provides a rollup row count of the metrics_resources_usage_hist table grouped by user, domain and resourcekind [system, user defined].                               |
| metrics_resources_usage_hist_groupby_user_<br>domain_resourcekind_dataservicename                        | Provides a rollup row count of the metrics_resources_usage_hist table grouped by user, domain, resourcekind [system, user defined] and dataservicename.              |
| Metrics Sessions History Roll-up   |  |
| metrics_sessions_hist_groupby_clienthost_no<br>dehost_nodeport (TABLE)                                   | Provides a rollup row count of the metrics_sessions_hist table grouped by clienthost, nodehost and nodeport.   |
| metrics_sessions_hist_groupby_date (TABLE)   | Provides a rollup row count of the metrics_sessions_hist table grouped by date.  |
| metrics_sessions_hist_groupby_date_nodehost<br>_nodeport (TABLE)   | Provides a rollup row count of the metrics_sessions_hist table grouped by date, nodehost and nodeport.   |
| metrics_sessions_hist_groupby_date_type (TABLE)  | Provides a rollup row count of the metrics_sessions_hist table grouped by date and type='end'  |
| metrics_sessions_hist_groupby_month (TABLE)  | Provides a rollup row count of the metrics_sessions_hist table grouped by month.   |
| metrics_sessions_hist_groupby_month_nodeh<br>ost_nodeport (TABLE)  | Provides a rollup row count of the metrics_sessions_hist table grouped by month, nodehost and nodeport.  |
| metrics_sessions_hist_groupby_month_type (TABLE)   | Provides a rollup row count of the metrics_sessions_hist table grouped by month and type='end'   |
| metrics_sessions_hist_groupby_nodehost_nod<br>eport (TABLE)  | Provides a rollup row count of the metrics_sessions_hist table grouped by nodehost and nodeport.   |
| metrics_sessions_hist_groupby_sessiontype (TABLE)  | Provides a rollup row count of the metrics_sessions_hist table grouped by session type [TASK,INTERNAL,JDBC, etc].  |

#### metrics Collection Definitions

## metrics\_requests (Collection) Table

Native DV out-of-the-box metrics requests collection table. Derived from metrics\_requests.

| Column Name  | Column Type  | Definition  |
|--------------|--------------|---|
| cluster      | VARCHAR(255) | The name of the cluster or null if no cluster.                                |
| nodehost [k] | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k] | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

| requestid [k]  | DECIMAL(19,0) | The unique request id that is the primary key of this table.   |
|----------------|---------------|--|
| parentid [fk]  | DECIMAL(19,0) | A foreign key back to the requestid within this table. Contains -1 when no parent reference.   |
| sessionid [fk] | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions.   |
| requesttype    | VARCHAR(255)  | The type of request that is stored in the description field. "SQL"=select statement, "SQL Script"=call statement executed, "XSLT, Basic, or Streaming Transformation", "Java Procedure (built-in)", etc. |
| description    | CLOB          | The actual client request or internal DV request.  |
| starttime [k]  | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867  |
| endtime        | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899  |
| totalduration  | DECIMAL(19,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.  |
| serverduration | DECIMAL(19,0) | The duration of the request within the server measured in milli-seconds. Divide by 1000 to get minutes.  |
| rowsAffected   | DECIMAL(19,0) | The number of rows affected or returned. The value may be -1.  |
| maxmemory      | DECIMAL(19,0) | The maximum amount of memory used by the request.  |
| maxdisk        | DECIMAL(19,0) | The maximum amount of disk used by the request. It is not good for a request to used disk.   |
| message        | CLOB          | The exception message if a request was not successful.   |
| status         | VARCHAR(20)   | The status of the request [SUCCESS, FAILED].   |

#### metrics\_resources\_usage (Collection) Table

Native DV out-of-the-box metrics resources usage collection table. Derived from metrics resources usage.

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| cluster          | VARCHAR(255)  | The name of the cluster or null if no cluster.  |
| nodehost [k]     | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]     | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| sessionid [fk]   | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions.  |
| user             | VARCHAR(255)  | The user name who connected for this session.   |
| domain           | VARCHAR(255)  | The domain of the user who connected.   |
| group            | VARCHAR(255)  | The group of the user who connected.  |
| requestid [k]    | DECIMAL(19,0) | The unique request id that is the primary key of this table.  |
| parentid [fk]    | DECIMAL(19,0) | A foreign key back to the requestid within this table. Contains -1 when no parent reference.  |
| datasourcepath   | VARCHAR(255)  | The DV path to the published datasource/dataservice [/services/databases/ <name>, /services/webservices/<path name>]</path name></name> |
| datasourcetype   | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| resourceguid     | VARCHAR(40)   | The guid of the resource path. Eg. cff5fe78-c3c5-4a81-b134-d497cea5351e   |
| resourcekind     | VARCHAR(20)   | The type of resource that executed [system, user defined].  |
| starttime [k]    | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867   |
| endtime          | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899   |

## metrics\_sessions (Collection) Table

Native DV out-of-the-box metrics sessions collection table. Derived from metrics\_sessions.

| Column Name     | Column Type   | Definition  |
|-----------------|---------------|---|
| cluster         | VARCHAR(255)  | The name of the cluster or null if no cluster.  |
| nodehost [k]    | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]    | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| sessionid [k]   | DECIMAL(19,0) | A unique session id and primary identifier of this table.   |
| sessiontype     | VARCHAR(40)   | Designates the type session connection [JDBC, HTTP, TASK, INTERNAL, etc.].  |
| clienthost      | VARCHAR(255)  | Designates the client host name that connected to DV.   |
| type [k]        | VARCHAR(20)   | Indicates whether the session is of type 'begin' or 'end'.  |
| logintime [k]   | TIMESTAMP     | The timestamp of when the session started.  |
| logouttime      | TIMESTAMP     | The timestamp of when the session ended   |
| status          | VARCHAR(20)   | The status of the session [ACTIVE, CLOSING].  |
| totalduration   | DECIMAL(19,0) | The total session duration in milli-seconds. Only on row of type='end' where status='CLOSING'. Divide by 1000 to get minutes. |
| totalRequests   | DECIMAL(19,0) | The total number of requests [metrics_requests_hist] executed for this session.   |
| bytestoclient   | DECIMAL(19,0) | The total number of bytes sent to the client host during this session.  |
| bytesfromclient | DECIMAL(19,0) | The total number of bytes received from the client host during this session.  |

#### AllCustomReports Definitions

#### AccessByUserOvertime [RT] Table

AccessByUserOvertimeRT – real time

Cached report of the most active resources by a user over time. Sorted resource count, user and date. The algorithm for this report is shown below. The group by is the key to this report. The key grouping is on the user first and then the resource.

#### **SELECT**

"user", "domain", fullname, email, requestdate, resourcepath, resourcename, resourcetype, parentpath, resourcekind, datasourcetype, dataservicename, categoryname, nodehost, nodeport, COUNT(resourceid) countname,

CAST(ROUND(MONTHS\_BETWEEN(CURRENT\_DATE, requestdat),2) AS DECIMAL(19,2)) requestdatemonths,

CAST(DAYS\_BETWEEN(CURRENT\_DATE, requestdate) AS DECIMAL(19,0)) requestdatedays

#### **FROM**

/shared/ASAssets/KPImetrics/Business/Logical/resourceUsage/vResourceUsage GROUP BY "user", "domain", fullname, email, requestdate, resourceid, resourcepath, resourcename, resourcetype, parentpath, resourcekind, datasourcetype, dataservicename, categoryname, nodehost, nodeport

Derived from the following tables: vResourceCountUsersDate (group by clause)? vResourceUsage? metrics\_resources\_usage\_hist {pm}

| Column Name | Column Type  | Definition                                    |
|-------------|--------------|---|
| user        | VARCHAR(255) | The user name who connected for this session. |
| domain      | VARCHAR(255) | The domain of the user who connected.         |
| fullname    | VARCHAR(255) | The group of the user who connected.          |
| mail        | VARCHAR(255) | The email of the user who connected.          |

| resourceid        | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".  |
|-------------------|---------------|---|
| resourcepath [k]  | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k]  | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| resourcename      | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| parentpath        | VARCHAR(4000) | The parent path of the resource.  |
| dataservicename   | VARCHAR(255)  | The published data service name.  |
| categoryname      | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                   |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                   |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                   |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                   |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                   |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|                   |               | ALL_RESOURCES: null   |
| countname         | INTEGER       | The number of resources for a given resource name.  |
| requestdate       | DATE          | The date [YYYY-MM-DD] of the request.   |
| requestdatemonths | DECIMAL(19,2) | The number of months difference between the request date and the current date.  |
| requestdatedays   | DECIMAL(19,0) | The number of days difference between the request date and the current date.  |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

#### ActiveResourcesOverPeriodOfTime [RT] Table

ActiveResourcesOverPeriodOfTimeRT - real time

Cached report of the most active resources over time. Sorted by resource count and date. SELECT

requestdate, resourcepath, resourcename, resourcetype, parentpath, resourcekind, datasourcetype, dataservicename, categoryname, nodehost, nodeport,

COUNT(resourceid) countname,

CAST(ROUND(MONTHS\_BETWEEN(CURRENT\_DATE, requestdate),2) AS DECIMAL(19,2)) requestdatemonths,

CAST(DAYS\_BETWEEN(CURRENT\_DATE, requestdate) AS DECIMAL(19,0)) requestdatedays

FROM

/shared/ASAssets/KPImetrics/Business/Logical/resourceUsage/vResourceUsage
GROUP BY requestdate, resourceid, resourcepath, resourcename, resourcetype, parentpath,
resourcekind, datasourcetype, dataservicename, categoryname, nodehost, nodeport
Derived from the following tables: vResourceCountDate (group by clause) → vResourceUsage →
metrics resources usage hist {pm}

| Column Name | Column Type   | Definition   |
|-------------|---------------|--|
| resourceid  | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin". |

| resourcepath [k]  | VARCHAR(4000) | The DV path to the resource.  |
|-------------------|---------------|---|
| resourcename      | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcetype [k]  | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| parentpath        | VARCHAR(4000) | The parent path of the resource.  |
| dataservicename   | VARCHAR(255)  | The published data service name.  |
| categoryname      | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                   |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                   |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                   |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                   |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                   |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|                   |               | ALL_RESOURCES: null   |
| countname         | INTEGER       | The number of resources for a given resource name.  |
| requestdate       | DATE          | The date [YYYY-MM-DD] of the request.   |
| requestdatemonths | DECIMAL(19,2) | The number of months difference between the request date and the current date.  |
| requestdatedays   | DECIMAL(19,0) | The number of days difference between the request date and the current date.  |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

## ResourceAccessByUsers [RT] Table

 $Resource Access By Users RT-real\ time$ 

Cached report of the most used resources by a user with no time period. Derived from the following tables: vResourceCountUsers (group by clause)  $\rightarrow$  vResourceUsage  $\rightarrow$  metrics\_resources\_usage\_hist {pm}

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| resourceid       | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".                              |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| parentpath       | VARCHAR(4000) | The parent path of the resource.  |
| dataservicename  | VARCHAR(255)  | The published data service name.  |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name. |
|                  |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |

|                 |              | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name.  e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct ALL_RESOURCES: null |
|-----------------|--------------|--|
| user            | VARCHAR(255) | The user name who connected for this session.  |
| domain          | VARCHAR(255) | The domain of the user who connected.  |
| fullname        | VARCHAR(255) | The full name of the user who connected.   |
| totalusagecount | BIGINT       | The count of (resourceid) grouped by "user", "domain", fullname, mail, resourceid, resourcepath, resourcename, resourcetype, parentpath, resourcekind, datasourcetype, dataservicename, categoryname, nodehost, nodeport   |
| nodehost [k]    | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]    | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

## ResourceCount\_Details [RT] Table

 $ResourceCount\_DetailsRT-real\ time$ 

Cached detail report of resource count by date. Derived from the following tables: vResourceUsage → metrics\_resources\_usage\_hist {pm}

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| loaddate         | TIMESTAMP     | The timestamp of when the record was inserted or loaded.  |
| month            | VARCHAR(255)  | A month string indicating the month of the request.   |
| resourceid       | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".  |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| parentpath       | VARCHAR(4000) | The parent path of the resource.  |
| dataservicename  | VARCHAR(255)  | The published data service name.  |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                  |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                  |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                  |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                  |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|                  |               | ALL_RESOURCES: null   |
| countname        | INTEGER       | The number of resources for a given resource name.  |
| fromdate         | DATE          | The from date range.  |
| todate           | DATE          | The to date range.  |

| nodehost [k] | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
|--------------|--------------|---|
| nodeport [k] | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

#### ResourceCount\_Total [RT] Table

ResourceCount\_TotalRT – real time Cached roll-up report of resource count by month. Derived from the following tables: vResourceUsage → metrics resources usage hist {pm}

| Column Name   | Column Type  | Definition  |
|---------------|--------------|---|
| loaddate      | TIMESTAMP    | The timestamp of when the record was inserted or loaded.                      |
| month         | VARCHAR(255) | A month string indicating the month of the request.                           |
| fromdate      | DATE         | The from date range.  |
| todate        | DATE         | The to date range.  |
| resourcecount | INTEGER      | The total number of resources matching the criteria.                          |
| nodehost [k]  | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k]  | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

#### SystemCPUandMemoryStatus Table

Report of system CPU and memory utilization and DV memory over time. Derived from the following tables: vSystemResources → METRICS\_CIS\_SYSTEM\_RESOURCES{pm}

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| eventtime          | TIMESTAMP     | The timestamp of when the row was recorded in the metrics tables.  |
| avgmembytes        | DECIMAL(19,0) | The average amount of memory in bytes currently being used.  |
| avgmanagedmembytes | DECIMAL(19,0) | The average managed memory bytes currently in DV.  |
| avgmemmax          | DECIMAL(19,0) | The average maximum memory in bytes configured in DV.  |
| avgmanagedmemmax   | DECIMAL(19,0) | The average managed maximum memory in bytes configured in DV.  |
| cpuutilization     | DECIMAL(24,4) | The system CPU utilization (used) percent.   |
| sysavailablememory | DECIMAL(24,4) | The system memory used in MB. This will always be showing high since DV takes the configured amount of memory at startup time. This is only a good guage of potential other processes running on the same server as DV if a large fluctuation is detected. |
| sysusedmemory      | DECIMAL(24,4) | The system memory available in MB. Counterpart to the above statement.   |
| nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

#### vEventRequestSqlColumns Table

Report of the columns accessed by a SQL request query. Derived from the following tables: [METRICS\_SQL\_COLUMNS{pm}, METRICS\_SQL\_RESOURCE{pm}, RequestExpanded --> [metrics\_requests\_hist{pm}, metrics\_sessions\_hist{pm}]]

| Column Name       | Column Type   | Definition   |
|-------------------|---------------|--|
| requestid [k]     | DECIMAL(19,0) | The unique request id that is the primary key of this table.                   |
| starttime [k]     | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867    |
| requestdatemonths | DECIMAL(19,2) | The number of months difference between the request date and the current date. |
| requestdatedays   | DECIMAL(19,0) | The number of days difference between the request date and the current date.   |
| resourceseqid     | DECIMAL(19,0) | The resource sequence id is a foreign key back to vMetricsSqlResource.         |

| resourceorder      | DECIMAL(10,0) | The resource order.   |
|--------------------|---------------|---|
| columnposition     | NUMERIC(10,2) | The ordinal position of the column and derivied column. 1.0=1st column, 1.1=1st column of a derived field 1.2=2nd column of dervied field.                |
| columnorigtype     | VARCHAR(20)   | Column origination type determines the type of SQL the column came from. CALL, PRIMARY, COMPLEX, SUBQUERY   |
| columnalias        | VARCHAR(255)  | The logical column (alias) name from the SQL statement. If not present then "columnName" is the alias.  |
| columnname         | VARCHAR(255)  | The projected column name from the SQL statement. If * used, then same as actual column name  |
| columnactual       | VARCHAR(255)  | The physical/source column name from the metadata table.  |
| columntype         | VARCHAR(4000) | The type of column.   |
| columndirection    | VARCHAR(10)   | The direction of the column. For TABLE types it is always OUT. For PROCEDURE types it may be IN, OUT, INOUT, RESULT, RETURN.                              |
| columnderived      | VARCHAR(10)   | Determine whether this column is derived or not [true false].   |
| columnexpression   | CLOB          | The complete column expression.   |
| columnfunctionlist | VARCHAR(4000) | A list of functions and occurrences that are used in the column expression. UPPER[3] would indicate that UPPER was used 3 times in the column expression. |
| columnnamelist     | VARCHAR(4000) | A list of column names that make up the column expression   |
| nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

## vEventRequestSqlResources Table

Report of the resources accessed by a SQL request query. Derived from the following tables: [METRICS\_SQL\_REQUEST{pm}, METRICS\_SQL\_RESOURCE{pm}, RequestExpanded → [metrics\_requests\_hist{pm}, metrics\_sessions\_hist{pm}]]

| Column Name          | Column Type   | Definition  |
|----------------------|---------------|---|
| requestid [k]        | DECIMAL(19,0) | The unique request id that is the primary key of this table.                                    |
| starttime [k]        | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867                     |
| endtime              | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899                       |
| requestdatemonths    | DECIMAL(19,2) | The number of months difference between the request date and the current date.                  |
| requestdatedays      | DECIMAL(19,0) | The number of days difference between the request date and the current date.                    |
| totalduration        | DECIMAL(19,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.     |
| totaldurationdisplay | VARCHAR(25)   | The total duration formatted for display using the format 0 00:00:00.000.                       |
| status               | VARCHAR(25)   | The status of the request [SUCCESS, FAILED].  |
| message              | VARCHAR(4000) | The exception message if a request was not successful.  |
| kpistatus            | VARCHAR(25)   | The KPImetrics SQL request processing status [SUCCESS, FAIL]                                    |
| kpimessage           | VARCHAR(4000) | An exception message that could occur during the processing of the SQL or null if no exception. |
| user                 | VARCHAR(255)  | The user name who connected for this session.   |
| domain               | VARCHAR(255)  | The domain of the user who connected.   |
| fullname             | VARCHAR(255)  | The full name of the user who connected.  |
| mail                 | VARCHAR(255)  | The email of the user who connected.  |
| sessionid [fk]       | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.                                   |
| clienthost           | VARCHAR(255)  | Designates the client host name that connected to DV.   |
| bytesfromclient      | DECIMAL(19,0) | The total number of bytes received from the client host during this session.                    |

| bytestoclient     | DECIMAL(19,0) | The total number of bytes sent to the client host during this session.   |
|-------------------|---------------|--|
| rowsAffected      | DECIMAL(19,0) | The number of rows affected or returned. The value may be -1.  |
| sessiontype       | VARCHAR(40)   | Designates the type session connection [JDBC, HTTP, TASK, etc.].   |
| sqlinvocationtype | VARCHAR(20)   | The SQL invocation type indicates the type of request [SELECT, CALL, INSERT, UPDATE, DELETE, PROCEDURE, WITH]. |
| description       | CLOB          | The actual client request or internal DV request.  |
| resourceseqid     | DECIMAL(19,0) | The resource sequence id is a foreign key back to vMetricsSqlResource.   |
| resourceid        | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".                       |
| resourcepath [k]  | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype [k]  | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| frompath          | VARCHAR(4000) | The from path is the database URL such as catalog.schema.table.  |
| fromalias         | VARCHAR(255)  | The from path alias if applicable.   |
| dataservicename   | VARCHAR(255)  | The published data service name.   |
| catalogname       | VARCHAR(255)  | The name of the published catalog or null if not applicable.   |
| schemaname        | VARCHAR(255)  | The name of the published schema or null if not applicable.  |
| resourcename      | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.  |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.                                  |

## vResourceUsage Table

A raw report of all user defined resources. Derived from the following tables: metrics\_resources\_usage\_hist  $\{pm\}$ 

| Column Name       | Column Type   | Definition  |
|-------------------|---------------|---|
| cluster           | VARCHAR(255)  | The name of the cluster or null if no cluster.  |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| parentid [fk]     | DECIMAL(19,0) | A foreign key back to the requestid within this table. Contains -1 when no parent reference.  |
| requestid [k]     | DECIMAL(19,0) | The unique request id that is the primary key of this table.  |
| sessionid [fk]    | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.   |
| requestdate       | DATE          | The date [YYYY-MM-DD] of the request.   |
| starttime [k]     | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867   |
| endtime           | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899   |
| requestdatemonths | DECIMAL(19,2) | The number of months difference between the request date and the current date.  |
| requestdatedays   | DECIMAL(19,0) | The number of days difference between the request date and the current date.  |
| categoryname      | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                   |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                   |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                   |               | e.g. Legacy: /services/webservices/system/admin/ <b>resource</b> /operations/getUsedResources   |
|                   |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |

|                     |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|---------------------|---------------|---|
|                     |               | ALL_RESOURCES: null   |
| dataservicename     | VARCHAR(255)  | The published data service name.  |
| datasourcepath      | VARCHAR(255)  | The DV path to the published datasource/dataservice [/services/databases/ <name>, /services/webservices/<path name>]</path name></name> |
| datasourcetype      | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].   |
| resourcekind        | VARCHAR(20)   | The type of resource that executed [system, user defined].  |
| resourceguid        | VARCHAR(40)   | The guid of the resource path. Eg. cff5fe78-c3c5-4a81-b134-d497cea5351e   |
| resourceid          | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".  |
| resourcetype [k]    | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| resourcename        | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| parentname          | VARCHAR(255)  | The parent name of the resource. A.k.a. schema name if from published database.   |
| grandparentname     | VARCHAR(255)  | The grand-parent name of the resource. A.k.a. catalog name if from published database.  |
| resourcepath [k]    | VARCHAR(4000) | The DV path to the resource.  |
| parentpath          | VARCHAR(4000) | The parent path of the resource.  |
| userid              | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.   |
| user                | VARCHAR(255)  | The user name who connected for this session.   |
| domain              | VARCHAR(255)  | The domain of the user who connected.   |
| group               | VARCHAR(255)  | The group of the user who connected.  |
| fullname            | VARCHAR(255)  | The full name of the user who connected.  |
| lastname            | VARCHAR(255)  | The last name of the user who connected.  |
| firstname           | VARCHAR(255)  | The first name of the user who connected.   |
| mail                | VARCHAR(255)  | The email of the user who connected.  |
| employeenumber      | VARCHAR(255)  | The employee number of the user who connected.  |
| telephonenumber     | VARCHAR(255)  | The primary telephone number of the user who connected.   |
| friendlycountryname | VARCHAR(255)  | The friendly country name of the user who connected.  |

## vResourceUsagePublished Table

A raw report of published user defined resources accessed over time where the resourcekind='user defined' and resourcetype='LINK'. Derived from the following tables: vResourceUsage  $\rightarrow$  metrics\_resources\_usage\_hist {pm}

| Column Name      | Column Type   | Definition   |
|------------------|---------------|--|
| requestdate      | DATE          | The date [YYYY-MM-DD] of the request.  |
| starttime [k]    | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867                  |
| requestid [k]    | DECIMAL(19,0) | The unique request id that is the primary key of this table.                                 |
| parentid [fk]    | DECIMAL(19,0) | A foreign key back to the requestid within this table. Contains -1 when no parent reference. |
| userid           | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.  |
| user             | VARCHAR(255)  | The user name who connected for this session.  |
| domain           | VARCHAR(255)  | The domain of the user who connected.  |
| resourceid       | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".     |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.                                    |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.                                    |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.   |
| parentpath       | VARCHAR(4000) | The parent path of the resource.   |

| dataservicename | VARCHAR(255) | The published data service name.   |
|-----------------|--------------|--|
| categoryname    | VARCHAR(255) | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.  ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null  ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null  ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null |
|                 |              | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name.  |
|                 |              | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources   |
|                 |              | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct   |
|                 |              | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct  |
|                 |              | ALL_RESOURCES: null  |
| nodehost [k]    | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]    | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

#### cache Definitions

#### vCache Table

Report of the KPImetrics cache\_status table. Displays all records in the table. Derived from METRICS\_SYS\_CACHES  $\{pm\}$ .

| Column Name         | Column Type   | Definition   |
|---------------------|---------------|--|
| eventtime           | TIMESTAMP     | The timestamp of when the row was recorded in system.SYS_CACHE.                          |
| resourceid          | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin". |
| resourcename        | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.                                |
| resourcetype [k]    | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.                                |
| parentpath          | VARCHAR(4000) | The parent path of the resource.   |
| resourcepath [k]    | VARCHAR(4000) | The DV path to the resource.   |
| ownerid             | DECIMAL(19,0) | The resource owner unique id.  |
| owner               | VARCHAR(60)   | The resource owner name.   |
| status              | VARCHAR(24)   | The status of the SYS_CACHE [NOT LOADED, DISABLED, UP]                                   |
| variant             | VARCHAR(255)  | The variant provides values for a procedure cache.                                       |
| lastrefreshend      | TIMESTAMP     | The timestamp the cache was last refreshed.  |
| lastsuccessend      | TIMESTAMP     | The timestamp of the last successful refresh.  |
| lastfailend         | TIMESTAMP     | The timestamp of the last refresh failure.   |
| lastaccess          | TIMESTAMP     | The timestamp of the last cache access.  |
| lastsuccessduration | DECIMAL(19,0) | The duration of the last cache refresh.  |
| lastfailduration    | DECIMAL(19,0) | The duration of the last cache refresh failure.  |
| numsuccess          | DECIMAL(19,0) | The number of cache refresh successes.   |
| numfail             | DECIMAL(19,0) | The number of cache refresh failures.  |
| numaccess           | DECIMAL(19,0) | The number of accesses.  |
| storageused         | DECIMAL(19,0) | The amount of storage used in bytes.   |
| message             | CLOB          | The exception message if a request was not successful.                                   |

| initialtime         | TIMESTAMP     | The timestamp of the initial time the cache was refreshed.  |
|---------------------|---------------|---|
| nexttime            | TIMESTAMP     | The timestamp of the next time the cache will be refreshed. |
| frequency           | VARCHAR(255)  | The frequency of cache refresh such as [Every day at time]. |
| currentrefreshstart | TIMESTAMP     | The timestamp of the current refresh start.                 |
| currentduration     | DECIMAL(19,0) | The duration of the current refresh.                        |
| currentstorage      | DECIMAL(19,0) | The amount of storage in bytes of the current refresh.      |
| currentcause        | VARCHAR(20)   | The current cause/exception of the refresh.                 |

#### vCacheActive Table

Report of the KPImetrics cache\_status table. Displays all "active" records in the table no matter if the cache is up or down or has a configuration error. Derived from vCache → METRICS\_SYS\_CACHES {pm}.

| Column Name         | Column Type   | Definition   |
|---------------------|---------------|--|
| eventtime           | TIMESTAMP     | The timestamp of when the row was recorded in system.SYS_CACHE.                          |
| resourceid          | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin". |
| resourcename        | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.                                |
| resourcetype [k]    | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.                                |
| parentpath          | VARCHAR(4000) | The parent path of the resource.   |
| resourcepath [k]    | VARCHAR(4000) | The DV path to the resource.   |
| ownerid             | DECIMAL(19,0) | The resource owner unique id.  |
| owner               | VARCHAR(255)  | The resource owner name.   |
| status              | VARCHAR(24)   | The status of the SYS_CACHE [NOT LOADED, DISABLED, UP]                                   |
| variant             | VARCHAR(255)  | The variant provides values for a procedure cache.                                       |
| lastrefreshend      | TIMESTAMP     | The timestamp the cache was last refreshed.  |
| lastsuccessend      | TIMESTAMP     | The timestamp of the last successful refresh.  |
| lastfailend         | TIMESTAMP     | The timestamp of the last refresh failure.   |
| lastaccess          | TIMESTAMP     | The timestamp of the last cache access.  |
| lastsuccessduration | DECIMAL(19,0) | The duration of the last cache refresh.  |
| lastfailduration    | DECIMAL(19,0) | The duration of the last cache refresh failure.  |
| numsuccess          | DECIMAL(19,0) | The number of cache refresh successes.   |
| numfail             | DECIMAL(19,0) | The number of cache refresh failures.  |
| numaccess           | DECIMAL(19,0) | The number of accesses.  |
| storageused         | DECIMAL(19,0) | The amount of storage used in bytes.   |
| message             | CLOB          | The exception message if a request was not successful.                                   |
| initialtime         | TIMESTAMP     | The timestamp of the initial time the cache was refreshed.                               |
| nexttime            | TIMESTAMP     | The timestamp of the next time the cache will be refreshed.                              |
| frequency           | VARCHAR(255)  | The frequency of cache refresh such as [Every day at time].                              |
| currentrefreshstart | TIMESTAMP     | The timestamp of the current refresh start.  |
| currentduration     | DECIMAL(19,0) | The duration of the current refresh.   |
| currentstorage      | DECIMAL(19,0) | The amount of storage in bytes of the current refresh.                                   |
| currentcause        | VARCHAR(20)   | The current cause/exception of the refresh.  |

#### vCacheDisabled Table

Report of the KPImetrics cache\_status table. Displays all "disabled" records in the table. Derived from vCache \(\rightarrow\) METRICS\_SYS\_CACHES \(\rightarrow\).

| Column Name         | Column Type   | Definition   |
|---------------------|---------------|--|
| eventtime           | TIMESTAMP     | The timestamp of when the row was recorded in system.SYS_CACHE.                          |
| resourceid          | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin". |
| resourcename        | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.                                |
| resourcetype [k]    | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.                                |
| parentpath          | VARCHAR(4000) | The parent path of the resource.   |
| resourcepath [k]    | VARCHAR(4000) | The DV path to the resource.   |
| ownerid             | DECIMAL(19,0) | The resource owner unique id.  |
| owner               | VARCHAR(255)  | The resource owner name.   |
| status              | VARCHAR(24)   | The status of the SYS_CACHE [NOT LOADED, DISABLED, UP]                                   |
| variant             | VARCHAR(255)  | The variant provides values for a procedure cache.                                       |
| lastrefreshend      | TIMESTAMP     | The timestamp the cache was last refreshed.  |
| lastsuccessend      | TIMESTAMP     | The timestamp of the last successful refresh.  |
| lastfailend         | TIMESTAMP     | The timestamp of the last refresh failure.   |
| lastaccess          | TIMESTAMP     | The timestamp of the last cache access.  |
| lastsuccessduration | DECIMAL(19,0) | The duration of the last cache refresh.  |
| lastfailduration    | DECIMAL(19,0) | The duration of the last cache refresh failure.  |
| numsuccess          | DECIMAL(19,0) | The number of cache refresh successes.   |
| numfail             | DECIMAL(19,0) | The number of cache refresh failures.  |
| numaccess           | DECIMAL(19,0) | The number of accesses.  |
| storageused         | DECIMAL(19,0) | The amount of storage used in bytes.   |
| message             | CLOB          | The exception message if a request was not successful.                                   |
| initialtime         | TIMESTAMP     | The timestamp of the initial time the cache was refreshed.                               |
| nexttime            | TIMESTAMP     | The timestamp of the next time the cache will be refreshed.                              |
| frequency           | VARCHAR(255)  | The frequency of cache refresh such as [Every day at time].                              |
| currentrefreshstart | TIMESTAMP     | The timestamp of the current refresh start.  |
| currentduration     | DECIMAL(19,0) | The duration of the current refresh.   |
| currentstorage      | DECIMAL(19,0) | The amount of storage in bytes of the current refresh.                                   |
| currentcause        | VARCHAR(20)   | The current cause/exception of the refresh.  |

#### vCachelssues Table

Report of the KPImetrics cache\_status table. Displays all records with "**issues**" in the table that have an error state such as DOWN, CONFIG ERROR and NOT LOADED. Derived from vCache →METRICS\_SYS\_CACHES{pm}.

| Column Name      | Column Type   | Definition   |
|------------------|---------------|--|
| eventtime        | TIMESTAMP     | The timestamp of when the row was recorded in system.SYS_CACHE.                          |
| resourceid       | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin". |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.                                |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.                                |

| parentpath          | VARCHAR(4000) | The parent path of the resource.                            |
|---------------------|---------------|---|
| resourcepath [k]    | VARCHAR(4000) | The DV path to the resource.                                |
| ownerid             | DECIMAL(19,0) | The resource owner unique id.                               |
| owner               | VARCHAR(255)  | The resource owner name.                                    |
| status              | VARCHAR(24)   | The status of the SYS_CACHE [NOT LOADED, DISABLED, UP]      |
| variant             | VARCHAR(255)  | The variant provides values for a procedure cache.          |
| lastrefreshend      | TIMESTAMP     | The timestamp the cache was last refreshed.                 |
| lastsuccessend      | TIMESTAMP     | The timestamp of the last successful refresh.               |
| lastfailend         | TIMESTAMP     | The timestamp of the last refresh failure.                  |
| lastaccess          | TIMESTAMP     | The timestamp of the last cache access.                     |
| lastsuccessduration | DECIMAL(19,0) | The duration of the last cache refresh.                     |
| lastfailduration    | DECIMAL(19,0) | The duration of the last cache refresh failure.             |
| numsuccess          | DECIMAL(19,0) | The number of cache refresh successes.                      |
| numfail             | DECIMAL(19,0) | The number of cache refresh failures.                       |
| numaccess           | DECIMAL(19,0) | The number of accesses.                                     |
| storageused         | DECIMAL(19,0) | The amount of storage used in bytes.                        |
| message             | CLOB          | The exception message if a request was not successful.      |
| initialtime         | TIMESTAMP     | The timestamp of the initial time the cache was refreshed.  |
| nexttime            | TIMESTAMP     | The timestamp of the next time the cache will be refreshed. |
| frequency           | VARCHAR(255)  | The frequency of cache refresh such as [Every day at time]. |
| currentrefreshstart | TIMESTAMP     | The timestamp of the current refresh start.                 |
| currentduration     | DECIMAL(19,0) | The duration of the current refresh.                        |
| currentstorage      | DECIMAL(19,0) | The amount of storage in bytes of the current refresh.      |
| currentcause        | VARCHAR(20)   | The current cause/exception of the refresh.                 |

#### vCacheSchedule Table

Report of the KPImetrics cache\_status table. Displays all active records in the table with a cache schedule and potential cache schedule dependency. It is ordered by their next schedule refresh time and dependencies upon other cached resources. Derived from vCache

→METRICS\_SYS\_CACHES {pm}. Executes getCacheScheduleDependenciesProc() to get dependent cache resources and used cache resources.

| Column Name      | Column Type   | Definition   |
|------------------|---------------|--|
| frequency        | VARCHAR(255)  | The frequency of cache refresh such as [Every day at time].                              |
| nexttime         | TIMESTAMP     | The timestamp of the next time the cache will be refreshed.                              |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.                                |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.                                |
| resourceid       | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin". |
| ownerid          | DECIMAL(19,0) | The resource owner unique id.  |
| owner            | VARCHAR(255)  | The resource owner name.   |
| status           | VARCHAR(20)   | The status of the SYS_CACHE [NOT LOADED, DISABLED, UP]                                   |
| variant          | VARCHAR(255)  | The variant provides values for a procedure cache.                                       |
| lastrefreshend   | TIMESTAMP     | The timestamp the cache was last refreshed.  |

| lastsuccessend          | TIMESTAMP           | The timestamp of the last successful refresh.              |
|-------------------------|---------------------|--|
| lastfailend             | TIMESTAMP           | The timestamp of the last refresh failure.                 |
| lastaccess              | TIMESTAMP           | The timestamp of the last cache access.                    |
| lastsuccessduration     | DECIMAL(19,0)       | The duration of the last cache refresh.                    |
| lastfailduration        | DECIMAL(19,0)       | The duration of the last cache refresh failure.            |
| numsuccess              | DECIMAL(19,0)       | The number of cache refresh successes.                     |
| numfail                 | DECIMAL(19,0)       | The number of cache refresh failures.                      |
| numaccess               | DECIMAL(19,0)       | The number of accesses.                                    |
| storageused             | DECIMAL(19,0)       | The amount of storage used in bytes.                       |
| message                 | CLOB                | The exception message if a request was not successful.     |
| initialtime             | TIMESTAMP           | The timestamp of the initial time the cache was refreshed. |
| currentrefreshstart     | TIMESTAMP           | The timestamp of the current refresh start.                |
| currentduration         | DECIMAL(19,0)       | The duration of the current refresh.                       |
| currentstorage          | DECIMAL(19,0)       | The amount of storage in bytes of the current refresh.     |
| currentcause            | VARCHAR(20)         | The current cause/exception of the refresh.                |
| dependentcacheresources | VARCHAR(2147483647) | A list of dependent cache resources or null.               |
| usedcacheresources      | VARCHAR(2147483647) | A list of used cache resources or null.                    |

## configurations Definitions

## pMetricsEventRegistrationList Procedure

Provides the ability to list the subscriptions for the metrics event registration programmatically.

| Column Name        | Column Type   | Definition  |
|--------------------|---------------|---|
| debug              | CHAR(1)       | IN – Y=debug on. N=debug off.   |
| requesterEmail     | VARCHAR(255)  | IN – the requestor's email to use to search for event subscriptions.  |
| subscriberEmail    | VARCHAR(255)  | OUT - Subscriber email. The email alias where alerts will be sent.  |
| groupName          | VARCHAR(255)  | OUT - The CIS group name to monitor.  |
| environment        | VARCHAR(255)  | OUT - The CIS environment nickname to monitor.  |
| eventType          | VARCHAR(255)  | OUT - The KPImetrics event type to monitor.   |
| requesterEmail     | VARCHAR(255)  | OUT - Primary requester contact. The person requesting the subscription.  |
| requesterFirstName | VARCHAR(255)  | OUT - Primary requester contact first name.   |
| requesterLastName  | VARCHAR(255)  | OUT - Primary requester contact last name.  |
| excludeText        | VARCHAR(4000) | OUT - Pipe separated list of text phrases that would appear in the SYS_REQUESTS SQL description field and signify exclusion of this event. If the text is found in the SQL description. |

## pMetricsEventRegistrationSubscribe Procedure

Provides the ability to subscribe to a metrics event registration programmatically.

| Column Name     | Column Type  | Definition  |
|-----------------|--------------|---|
| debug           | CHAR(1)      | IN - Y=debug on, N=debug off  |
| requesterEmail  | VARCHAR(255) | IN - Primary requester contact. The person requesting the subscription. |
| subscriberEmail | VARCHAR(255) | IN - Subscriber email. The email alias where alerts will be sent.       |
| groupName       | VARCHAR(255) | IN - The CIS group name to monitor.                                     |

| environment | VARCHAR(255)  | IN - The CIS environment nickname to monitor.  |
|-------------|---------------|--|
| eventType   | VARCHAR(255)  | IN - The KPImetrics event type to monitor.   |
| excludeText | VARCHAR(4000) | IN - Pipe separated list of text phrases that would appear in the SYS_REQUESTS SQL description field and signify exclusion of this event. If the text is found in the SQL description. |

#### pMetricsEventRegistrationUnsubscribe Procedure

Provides the ability to unsubscribe to a metrics event registration programmatically.

| Column Name     | Column Type  | Definition  |
|-----------------|--------------|---|
| debug           | CHAR(1)      | IN - Y=debug on, N=debug off  |
| requesterEmail  | VARCHAR(255) | IN - Primary requester contact. The person requesting the subscription. |
| subscriberEmail | VARCHAR(255) | IN - Subscriber email. The email alias where alerts will be sent.       |
| groupName       | VARCHAR(255) | IN - The CIS group name to monitor.                                     |
| environment     | VARCHAR(255) | IN - The CIS environment nickname to monitor.                           |
| eventType       | VARCHAR(255) | IN - The KPImetrics event type to monitor.                              |

#### metadata Definitions

#### reportMetadataDatasource[Arch] 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.

| Column Name           | Column Type   | Definition   |
|-----------------------|---------------|--|
| loaddate [k]          | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| projectnameid [fk]    | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| projectname [k]       | VARCHAR(50)   | A unique project name.   |
| environmentname       | VARCHAR(255)  | The environment name from commonValues.cisServerNickname.  |
| layertype             | VARCHAR(50)   | A custom tag specifying the name of the layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.]                     |
| resourceid            | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| resourcetype [k]      | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| resourcepath [k]      | VARCHAR(4000) | The DV path to the resource.   |
| dataservicename       | VARCHAR(255)  | The published data service name.   |
| catalogname           | VARCHAR(255)  | The name of the published catalog or null if not applicable.   |
| schemaname            | VARCHAR(255)  | The name of the published schema or null if not applicable.  |
| datasourceid          | DECIMAL(19,0) | The unique datasource id which comes from system.ALL_RESOURCES.  |
| datasourceadaptertype | VARCHAR(50)   | The adapter type of the datasource such as Oracle, PostgresSQL, SqlServer, Composite, Rest, Wsdl, File, Netezza, MsExcel(POI), Ldap, MySql, XmlFile, Jdbc, DB2, etc. |
| datasourcepath        | VARCHAR(255)  | The DV path to the published datasource/dataservice [/services/databases/ <name>, /services/webservices/<path name>]</path name></name>                              |
| annotation            | CLOB          | The datasource annotation.   |

#### reportMetadataNonCompliantColumns[Arch] Table

Report of the non-compliant columns as configured by METADATA CONST VALIDATE.

| Column Name            | Column Type   | Definition   |
|------------------------|---------------|--|
| loaddate [k]           | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| projectnameid [fk]     | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| projectname [k]        | VARCHAR(50)   | A unique project name.   |
| environmentname        | VARCHAR(255)  | The environment name from commonValues.cisServerNickname.  |
| layertype              | VARCHAR(50)   | A custom tag specifying the name of the layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.] |
| resourceid             | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| resourcename           | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.  |
| resourcetype [k]       | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| resourcepath [k]       | VARCHAR(4000) | The DV path to the resource.   |
| noncompliantreason     | VARCHAR(50)   | The non-compliant reason such as [MISSING_COLUMN]  |
| noncompliantdesc       | VARCHAR(4000) | The non-compliant description such as the column name when MISSING_COLUMN.   |
| lastmodifieddate       | TIMESTAMP     | The last modified date (timestamp).  |
| lastmodifiedusername   | VARCHAR(50)   | The last modified user name.   |
| lastmodfieduserdomain  | VARCHAR(50)   | The last modified user domain.   |
| lastmdofieduserid [fk] | INTEGER       | The last modified user id which is a foreign key to system.ALL_USERS.  |
| nodehost [k]           | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]           | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

## $report Metadata Non Compliant Layers [Arch] \ Table$

Report of the non-compliant columns as configured by METADATA\_CONST\_VALIDATE.

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| loaddate [k]       | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| projectnameid [fk] | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| projectname [k]    | VARCHAR(50)   | A unique project name.   |
| environmentname    | VARCHAR(255)  | The environment name from commonValues.cisServerNickname.  |
| layertype          | VARCHAR(50)   | A custom tag specifying the name of the layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.] |
| resourceid         | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| lineageorder       | INTEGER       | The order from top to bottom in the layer hierarchy with respect to how the views traverse through the lineage.                                  |
| resourcename       | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.  |
| resourcetype [k]   | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| resourcepath [k]   | VARCHAR(4000) | The DV path to the resource.   |
| noncompliantreason | VARCHAR(50)   | The non-compliant reason such as [NON_COMPLIANT_PATH].   |
| noncompliantdesc   | VARCHAR(4000) | The non-compliant description such as the resource path if NON_COMPLIANT_PATH  |
|                    |               | FROM_LAYER_TYPE[Business_Business] DOES NOT INVOKE TO_LAYER_TYPE[Business_Business,Business_Logical]   |
|                    |               | ACTUAL TO_LAYER_TYPE=[Physical_Formatting] TO_RESOURCE_ID=[971661] TO_RESOURCE_TYPE:PATH=  |
|                    |               | [TABLE:/shared/labCommon/Physical/Formatting/ds_orders/tutorial/orderdetails]  |

| fromlayertype         | VARCHAR(50)   | A custom tag specifying the name of the "from" layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.]  |
|-----------------------|---------------|--|
| fromresourceid        | DECIMAL(19,0) | The unique "from" resource id which comes from the DV system tables listed in "resourceorigin".  |
| fromresourcepath      | VARCHAR(4000) | The "from" resource path.  |
| fromresourcetype      | VARCHAR(40)   | The "from" resource type.  |
| fromresourcesubtype   | VARCHAR(40)   | The DV resource subtype. The further qualifies the precise type of resource. E.g. NONE, SQL_TABLE (view), DATABASE_TABLE (datasource table), SQL_SCRIPT_PROCEDURE (DV procedure), OPERATION_PROCEDURE (web service procedure), plus many more. |
| tolayertype           | VARCHAR(50)   | A custom tag specifying the name of the "to" layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.]  |
| toresourceid          | DECIMAL(19,0) | The unique "to" resource id which comes from the DV system tables listed in "resourceorigin".  |
| toresourcepath        | VARCHAR(4000) | The "to" resource path.  |
| toresourcetype        | VARCHAR(40)   | The "to" resource type.  |
| toresourcesubtype     | VARCHAR(40)   | The DV resource subtype. The further qualifies the precise type of resource. E.g. NONE, SQL_TABLE (view), DATABASE_TABLE (datasource table), SQL_SCRIPT_PROCEDURE (DV procedure), OPERATION_PROCEDURE (web service procedure), plus many more. |
| lastmodifieddate      | TIMESTAMP     | The last modified date (timestamp).  |
| lastmodifiedusername  | VARCHAR(50)   | The last modified user name.   |
| lastmodfieduserdomain | VARCHAR(50)   | The last modified user domain.   |
| lastmdofieduserid     | INTEGER       | The last modified user id which is a foreign key to system.ALL_USERS.  |
| nodehost [k]          | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]          | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

## reportMetadataPrivilegeUsers[Arch] Table

Provides a listing of all group and user privileges for each resource for a given project path.

| Column Name         | Column Type   | Definition   |
|---------------------|---------------|--|
| loaddate [k]        | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| projectnameid [fk]  | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| layertype           | VARCHAR(50)   | A custom tag specifying the name of the layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.] |
| resourceid          | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| resourcepath [k]    | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype [k]    | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| nametype            | VARCHAR(5)    | The name type specified whether name is a USER or GROUP.   |
| nameid              | DECIMAL(19,0) | The id of the name or group.   |
| name                | VARCHAR(50)   | The name of the user or group for the privilege.   |
| domainname          | VARCHAR(50)   | The domain name specifies which domain the name belongs to.  |
| actualprivileges    | VARCHAR(60)   | The actual privileges [READ WRITE EXECUTE SELECT UPDATE INSERT DELETE GRANT]   |
| combinedprivileges  | VARCHAR(60)   | The combined privileges [READ WRITE EXECUTE SELECT UPDATE INSERT DELETE GRANT]   |
| inheritedprivileges | VARCHAR(60)   | The inherited privileges [READ WRITE EXECUTE SELECT UPDATE INSERT DELETE GRANT]  |

| userpk          | DECIMAL(19,0) | The unique sequence id  |
|-----------------|---------------|---|
| userid          | DECIMAL(19,0) | The user id from system.ALL_USERS   |
| username        | VARCHAR(255)  | The name of the user.   |
| userdomain      | VARCHAR(255)  | The domain of the user.   |
| explicitrights  | VARCHAR(255)  | The studio rights that the user has.  |
| effectiverights | VARCHAR(255)  | The effective rights are merged from effective and inherited.                 |
| inheritedrights | VARCHAR(255)  | The inherited rights that the user has based on membership in groups.         |
| annotation      | VARCHAR(1024) | The users annotation.   |
| islocked        | VARCHAR(10)   | Indicates whether the user is locked or not,                                  |
| nodehost [k]    | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k]    | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

# reportNumResourcesByLayer[Arch] Table

Report of the number of resources in each layer.

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| loaddate [k]       | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| projectnameid [fk] | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| projectname [k]    | VARCHAR(50)   | A unique project name.   |
| environmentname    | VARCHAR(255)  | The environment name from commonValues.cisServerNickname.  |
| layertype          | VARCHAR(50)   | A custom tag specifying the name of the layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.] |
| catalogname        | VARCHAR(255)  | The name of the published catalog or null if not applicable.   |
| schemaname         | VARCHAR(255)  | The name of the published schema or null if not applicable.  |
| resourcetype [k]   | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| resourceCount      | BIGINT        | The number of resources at the specified layer.  |

## reportResourceColumns[Arch] Table

Report of all the resources and their columns.

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| loaddate [k]       | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| projectnameid [fk] | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| projectname [k]    | VARCHAR(50)   | A unique project name.   |
| environmentname    | VARCHAR(255)  | The environment name from commonValues.cisServerNickname.  |
| layertype          | VARCHAR(50)   | A custom tag specifying the name of the layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.]   |
| resourceid         | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| resourcename       | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.  |
| resourcepath [k]   | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype [k]   | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| resourcesubtype    | VARCHAR(40)   | The DV resource subtype. The further qualifies the precise type of resource. E.g. NONE, SQL_TABLE (view), DATABASE_TABLE (datasource table), SQL_SCRIPT_PROCEDURE (DV procedure), OPERATION_PROCEDURE (web service procedure), plus many more. |

| dataservicename | VARCHAR(255) | The published data service name.   |
|-----------------|--------------|--|
| catalogname     | VARCHAR(255) | The name of the published catalog or null if not applicable.   |
| schemaname      | VARCHAR(255) | The name of the published schema or null if not applicable.  |
| columnname      | VARCHAR(255) | The projected column name from the SQL statement. If * used, then same as actual column name                                 |
| columntype      | VARCHAR(40)  | The type of column.  |
| columndirection | VARCHAR(10)  | The direction of the column. For TABLE types it is always OUT. For PROCEDURE types it may be IN, OUT, INOUT, RESULT, RETURN. |
| columnpos       | INTEGER      | The ordinal position of the column within the resource.  |
| annotation      | CLOB         | The column annotation.   |
| nodehost [k]    | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]    | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

## reportResourceDatasourceLineage[Arch] Table

Report of resources and their datasource lineage associations. A resource may have 0 or many data sources associated with it.

| Column Name            | Column Type   | Definition   |
|------------------------|---------------|--|
| loaddate [k]           | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| projectnameid [fk]     | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| layertype              | VARCHAR(50)   | A custom tag specifying the name of the layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.]   |
| resourceid             | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| resourcepath [k]       | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype [k]       | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| resourcesubtype        | VARCHAR(40)   | The DV resource subtype. The further qualifies the precise type of resource. E.g. NONE, SQL_TABLE (view), DATABASE_TABLE (datasource table), SQL_SCRIPT_PROCEDURE (DV procedure), OPERATION_PROCEDURE (web service procedure), plus many more. |
| resourcelinktype       | VARCHAR(40)   | The type of resource the published "LINK" is pointing to such as [TABLE, PROCEDURE].   |
| dataservicename        | VARCHAR(255)  | The published data service name.   |
| catalogname            | VARCHAR(255)  | The name of the published catalog or null if not applicable.   |
| schemaname             | VARCHAR(255)  | The name of the published schema or null if not applicable.  |
| resourcename           | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.  |
| datasourceid           | DECIMAL(19,0) | The unique datasource id which comes from system.ALL_RESOURCES.  |
| datasourcepath         | VARCHAR(255)  | The DV path to the published datasource/dataservice [/services/databases/ <name>, /services/webservices/<path name>]</path name></name>  |
| datasourcetype         | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].  |
| datasourcesubtype      | VARCHAR(40)   | The datasource subtype which further qualifies what type of datasource it is. E.g. RELATIONAL_DATA_SOURCE, XML_FILE_DATA_SOURCE.   |
| datasourceadaptertype  | VARCHAR(50)   | The adapter type of the datasource such as Oracle, PostgresSQL, SqlServer, Composite, Rest, Wsdl, File, Netezza, MsExcel(POI), Ldap, MySql, XmlFile, Jdbc, DB2, etc.   |
| datasourcehostname     | VARCHAR(255)  | The connection host name or ip address.  |
| datasourceport         | INTEGER       | The connection port.   |
| datasourcedatabasename | VARCHAR(100)  | The connection database name.  |
| datasourcelogin        | VARCHAR(255)  | The connection login name.   |
| datasourceurl          | VARCHAR(500)  | The connection URL. URL if relational.   |

| datasourcepatternstr | VARCHAR(500) | The connection URL pattern string.  |
|----------------------|--------------|---|
| datasourceroot       | VARCHAR(500) | The connection root. Root if file.  |
| nodehost [k]         | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k]         | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

#### vMetadataAllPrivileges Table

This view provides the latest cache of the DV system ALL\_PRIVILEGES. This view provides a performance enhancement to Cache\_METADATA\_TABLES which needs to access this information more than once during its processing. It is only refreshed when Cache METADATA TABLES is executed via the trigger or manually.

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| loaddate         | TIMESTAMP     | The timestamp of when the record was inserted or loaded.  |
| resourceid       | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".  |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK. Also maybe TABLE or PRODEDURE.  |
| nametype         | VARCHAR(5)    | The name type is either USER or GROUP and defines the type of privilege.  |
| nameid           | DECIMAL(19,0) | The name id which can be a user or group id.  |
| name             | VARCHAR(255)  | The name is either a user or group name.  |
| ownerdomain      | VARCHAR(255)  | The domain of the user or group name.   |
| privilege        | INTEGER       | A bitmask representation of the privilege. NONE=0, READ=1, WRITE=2, EXECUTE=4, SELECT=8, UPDATE=16, INSERT=32, DELETE=64 and GRANT=128. The value can be 0-255 which represents all combinations of privileges. |
| actualprivilege  | VARCHAR(255)  | The actual privilege from the privilege bitmask represented in format of [READ WRITE EXECUTE SELECT UPDATE INSERT DELETE GRANT]   |
| nodehost [k]     | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]     | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

#### vMetadataAllResources Table

This view provides the latest cache of the DV system ALL\_RESOURCES, ALL\_COLUMNS, ALL\_PROCEDURES, ALL\_WSDL\_OPERATIONS, ALL\_PARAMETERS and joined with ALL\_USERS. This view provides a performance enhancement to Cache\_METADATA\_TABLES which needs to access this information more than once during its processing. It is only refreshed when Cache\_METADATA\_TABLES is executed via the trigger or manually.

| Column Name      | Column Type   | Definition   |
|------------------|---------------|--|
| loaddate         | TIMESTAMP     | The timestamp of when the record was inserted or loaded.                                   |
| resourceorigin   | VARCHAR(30)   | The original DV system table in which the resource originated from.                        |
|                  |               | [ALL_TABLES  ALL_PROCEDURES ALL_WSDL_OPERATIONS ALL_RESOURCES  ALL_COLUMNS ALL_PARAMETERS] |
| resourceid       | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.                                  |
| parentpath       | VARCHAR(4000) | The parent path of the resource.   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.   |

| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK. Also maybe TABLE or PRODEDURE.   |
|------------------|---------------|--|
| resourcesubtype  | VARCHAR(40)   | The DV resource subtype. The further qualifies the precise type of resource. E.g. NONE, SQL_TABLE (view), DATABASE_TABLE (datasource table), SQL_SCRIPT_PROCEDURE (DV procedure), OPERATION_PROCEDURE (web service procedure), plus many more. |
| resourcelinktype | VARCHAR(40)   | The type of resource the published "LINK" is pointing to such as [TABLE, PROCEDURE].   |
| ownerid          | DECIMAL(19,0) | The resource owner unique id.  |
| ownername        | VARCHAR(60)   | The resource owner name.   |
| ownerdomain      | VARCHAR(255)  | The domain of the ownername  |
| guid             | VARCHAR(1024) | The guid of the resource path. Eg. cff5fe78-c3c5-4a81-b134-d497cea5351e  |
| datasourcetype   | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].  |
| dataservicename  | VARCHAR(255)  | The published data service name.   |
| catalogname      | VARCHAR(255)  | The name of the published catalog or null if not applicable.   |
| schemaname       | VARCHAR(255)  | The name of the published schema or null if not applicable.  |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.  |
|                  |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name.  |
|                  |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources   |
|                  |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct   |
|                  |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct  |
|                  |               | ALL_RESOURCES: null  |
| columnid         | DECIMAL(19,0) | The DV column unique resource id.  |
| columnname       | VARCHAR(255)  | The name of the column.  |
| columntype       | VARCHAR(255)  | The column type base such as varchar, numeric, decimal.  |
| columnsize       | DECIMAL(19,0) | The column type size such as 255 if varchar(255) or 19 if decimal(19,2).   |
| columnscale      | DECIMAL(19,0) | The column type scale such as 2 if decimal(19,2).  |
| columnorder      | DECIMAL(9,0)  | The order in which the column appears in the resource.   |
| columndirection  | DECIMAL(9,0)  | The column direction such [4=OUT [table or scalar procedure, 1=IN, 3=CURSOR OUT]   |
| annotation       | CLOB          | The resource annotation.   |
| nodehost [k]     | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]     | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

#### vMetadataAllUsersGroups Table

This view provides the latest cache of the DV system ALL\_DOMAINS joined with ALL\_USERS to provide a representation of user, groups and domains. This view is joined with vMetadataPrivilegeUser to associate a privilege with a user., This view provides a performance enhancement to Cache\_METADATA\_TABLES which needs to access this information more than once during its processing. It is only refreshed when Cache\_METADATA\_TABLES is executed via the trigger or manually.

| Column Name     | Column Type   | Definition  |
|-----------------|---------------|---|
| loaddate        | TIMESTAMP     | The timestamp of when the record was inserted or loaded.                      |
| userpk          | DECIMAL(19,0) | The unique sequence id  |
| userid          | DECIMAL(19,0) | The user id from system.ALL_USERS   |
| username        | VARCHAR(255)  | The name of the user.   |
| userdomain      | VARCHAR(255)  | The domain of the user.   |
| explicitrights  | VARCHAR(255)  | The studio rights that the user has.  |
| effectiverights | VARCHAR(255)  | The effective rights are merged from effective and inherited.                 |
| inheritedrights | VARCHAR(255)  | The inherited rights that the user has based on membership in groups.         |
| annotation      | VARCHAR(1024) | The users annotation.   |
| islocked        | VARCHAR(10)   | Indicates whether the user is locked or not,                                  |
| groupid         | DECIMAL(19,0) | The group id of the group that the user belongs to.                           |
| groupname       | VARCHAR(255)  | The name of the group that the user belongs to.                               |
| groupdomain     | VARCHAR(255)  | The domain of the group that he user belongs to.                              |
| nodehost [k]    | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k]    | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

## vMetadataConstLayers[Arch] Table

Provides a listing of all of the metadata layer types for each project path.

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| loaddate [k]       | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| projectnameid [fk] | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| projectname [k]    | VARCHAR(50)   | A unique project name.   |
| projectpath        | VARCHAR(4000) | The DV resource path for the project name.   |
| layertype          | VARCHAR(50)   | A custom tag specifying the name of the layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.]   |
| parentpath         | VARCHAR(4000) | The parent path of the resource.   |
| generatelineage    | CHAR(1)       | Y=Generate lineage for this layer path. N=Do not generate lineage for this layer path.   |
| exclusionlist      | CLOB          | 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/  |
| assignprivileges   | VARCHAR(25)   | <ul> <li>ASSIGN_PRVILEGES: Provides the rules for assigning privileges on a per layer basis.</li> <li>NO_PRIVILEGES - Do not assign any privileges for this layer</li> <li>ACTUAL_NO_USERS - Assign actual privileges but do not invoke the getResourcePrivileges() api to get COMBINED or INHERITED. Do not retrieve users associated with groups.</li> <li>ACTUAL_WITH_USERS - [DEFAULT] Assign actual privileges but do not invoke the getResourcePrivileges() api to get COMBINED or INHERITED. Retrieve all users associated with a GROUP privilege.</li> <li>COMBINED_NO_USERS - Invoke the getResourcePrivileges() api to get COMBINED and INHERITED privileges. Do not retrieve users associated with groups. Invoking the api will slow down the processing considerably.</li> <li>COMBINED_WITH_USERS - Invoke the getResourcePrivileges() api to get COMBINED and INHERITED privileges. Retrieve all users associated with a GROUP privilege. Invoking the api will slow down the processing considerably.</li> </ul> |
| Nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| Nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

## vMetadataConstName[Arch] 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.

| Column Name       | Column Type   | Definition   |
|-------------------|---------------|--|
| loaddate [k]      | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| Projectnameid [k] | DECIMAL(19,0) | A unique project name id.  |
| Projectname [k]   | VARCHAR(50)   | A unique project name.   |
| environmentname   | VARCHAR(255)  | The environment name from commonValues.cisServerNickname.  |
| executeflag       | CHAR(1)       | The execute flag indicates if this project gets executed. Y=execute this row. N=do not execute when triggered.       |
| Archiveflag       | CHAR(1)       | The archive flag indicates if this project gets archived or not. Y=archive rows before processing. N=do not archive. |
| Archivepurgedays  | INTEGER       | The number of days to purge from the current date.   |
| Projectdesc       | VARCHAR(255)  | A description of the project path.   |
| Executestatus     | VARCHAR(4000) | The execution status. [IN_PROGRESS, SUCCESS, exception message].   |
| Nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| Nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

#### vMetadataConstPaths[Arch] Table

Provides a listing of all configured metadata constant name projects. This table controls the paths that are connected with the vMetadataConstName view.

| Column Name        | Column Type   | Definition  |
|--------------------|---------------|---|
| loaddate [k]       | TIMESTAMP     | The timestamp date the when the table was loaded.                             |
| Projectnameid [fk] | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.         |
| Projectname [k]    | VARCHAR(50)   | A unique project name.  |
| projectpath        | VARCHAR(4000) | The DV resource path for the project name.                                    |
| resourcetype [k]   | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.                     |
| Nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| Nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

#### vMetadataConstValidate[Arch] Table

Provides a listing of all of the metadata layer validations for each project path.

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| loaddate [k]       | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| Projectnameid [fk] | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| Projectname [k]    | VARCHAR(50)   | A unique project name.   |
| projectpath        | VARCHAR(4000) | The DV resource path for the project name.   |
| layertype          | VARCHAR(50)   | A custom tag specifying the name of the layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.] |
| ruletype           | VARCHAR(50)   | Valid values=[ENFORCE_LAYER ENFORCE_COLUMN]  |
| ruledesc           | VARCHAR(4000) | 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. |
|--------------|--------------|---|
| Nodehost [k] | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| Nodeport [k] | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

# vMetadataDatasource[Arch] Table

Provides a complete reference on the datasources that exist within the project paths referenced by vMetadataConstName.

| Column Name            | Column Type   | Definition   |
|------------------------|---------------|--|
| loaddate [k]           | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| Projectnameid [fk]     | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| Datasourceid           | DECIMAL(19,0) | The unique datasource id which comes from system.ALL_RESOURCES.  |
| Datasourcepath         | VARCHAR(255)  | The DV path to the published datasource/dataservice [/services/databases/ <name>, /services/webservices/<path name>]</path name></name>                              |
| datasourcetype         | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].  |
| Datasourcesubtype      | VARCHAR(40)   | The datasource subtype which further qualifies what type of datasource it is. E.g. RELATIONAL_DATA_SOURCE, XML_FILE_DATA_SOURCE.                                     |
| Datasourceadaptertype  | VARCHAR(50)   | The adapter type of the datasource such as Oracle, PostgresSQL, SqlServer, Composite, Rest, Wsdl, File, Netezza, MsExcel(POI), Ldap, MySql, XmlFile, Jdbc, DB2, etc. |
| datasourcehostname     | VARCHAR(255)  | The connection host name or ip address.  |
| Datasourceport         | INTEGER       | The connection port.   |
| Datasourcedatabasename | VARCHAR(100)  | The connection database name.  |
| datasourcelogin        | VARCHAR(255)  | The connection login name.   |
| datasourceurl          | VARCHAR(500)  | The connection URL. URL if relational.   |
| Datasourcepatternstr   | VARCHAR(500)  | The connection URL pattern string.   |
| Datasourceroot         | VARCHAR(500)  | The connection root. Root if file.   |
| Ownername              | VARCHAR(50)   | The resource owner name.   |
| ownerdomain            | VARCHAR(50)   | The resource owner domain.   |
| Ownerid                | INTEGER       | The resource owner unique id.  |
| Creationdate           | TIMESTAMP     | The resource creation date (timestamp).  |
| Creatorusername        | VARCHAR(50)   | The resource creation user name.   |
| creatoruserdomain      | VARCHAR(50)   | The resource creation user domain.   |
| Creatoruserid          | INTEGER       | The resource creation user id which is a foreign key to system.ALL_USERS.  |
| Lastmodifieddate       | TIMESTAMP     | The last modified date (timestamp).  |
| Lastmodifiedusername   | VARCHAR(50)   | The last modified user name.   |
| lastmodfieduserdomain  | VARCHAR(50)   | The last modified user domain.   |
| Lastmdofieduserid      | INTEGER       | The last modified user id which is a foreign key to system.ALL_USERS.  |
| Annotation             | CLOB          | The datasource annotation.   |
| Nodehost [k]           | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| Nodeport [k]           | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

# vMetadataNonCompliant[Arch] Table

Provides information on all non-compliant resources for all layers.

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| loaddate [k]       | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| Projectnameid [fk] | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| Resourceid         | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".                             |
| Lineageorder       | INTEGER       | The order from top to bottom in the layer hierarchy with respect to how the views traverse through the lineage.      |
| Noncompliantreason | VARCHAR(50)   | The non-compliant reason such as [MISSING_COLUMN, NON_COMPLIANT_PATH].   |
| Noncompliantdesc   | VARCHAR(4000) | The non-compliant description such as the column name when MISSING_COLUMN or the resource path if NON_COMPLIANT_PATH |
|                    |               | FROM_LAYER_TYPE[Business_Business] DOES NOT INVOKE TO_LAYER_TYPE[Business_Business,Business_Logical]                 |
|                    |               | ACTUAL TO_LAYER_TYPE=[Physical_Formatting] TO_RESOURCE_ID=[971661]   |
|                    |               | TO_RESOURCE_TYPE:PATH=   |
|                    |               | [TABLE:/shared/labCommon/Physical/Formatting/ds_orders/tutorial/orderdetails]  |
| nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| Nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

# vMetadataPolicy[Arch] Table

Provides information on all policies for RBS [rule-based security] and CBS [column-based security] rows for a given project path.

| Column Name        | Column Type   | Definition  |
|--------------------|---------------|---|
| loaddate [k]       | TIMESTAMP     | The timestamp date the when the table was loaded.                             |
| Projectnameid [fk] | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.         |
| Policyid [k]       | DECIMAL(19,0) | The unique policy id.   |
| Resourcepath [k]   | VARCHAR(4000) | The DV path to the resource policy.   |
| Resourcetype [k]   | VARCHAR(40)   | The DV resource type. [PROCEDURE]   |
| resourcesubtype    | VARCHAR(40)   | The policy subtype. [cbs_policy, rbs_policy]                                  |
| enabled            | VARCHAR(5)    | The policy is enabled (true) or not enabled (false).                          |
| Form               | VARCHAR(50)   | Refers to the form if created with "free-form".                               |
| Defaultrulefilter  | VARCHAR(50)   | The default rule may be [No Rows, All Rows, Predicate, or Procedure].         |
| Defaultruledata    | VARCHAR(1000) | The default rule data may refer to the data or a path.                        |
| Nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| Nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

## vMetadataPolicyAssignmnt[Arch] Table

Provides the policy assignments for each policy.

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| loaddate [k]       | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| Projectnameid [fk] | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.                    |
| Resourceid         | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin". |

| Policyid     | DECIMAL(19,0) | The unique policy id.  |
|--------------|---------------|--|
| Columnname   | VARCHAR(255)  | The name of the column associated with the policy.   |
| Message      | VARCHAR(4000) | Provides a way of logging a message. For example, if the policy assignment path no longer exists, then a message would be logged here. |
| Nodehost [k] | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| Nodeport [k] | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

### vMetadataPrivilege[Arch] Table

Provides a listing of all privileges for each resource for a given project path. The privilege may be for a nametype=[GROUP|USER]. The privilege

| Column Name         | Column Type   | Definition   |
|---------------------|---------------|--|
| loaddate [k]        | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| Projectnameid [fk]  | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| privilegeid [k]     | DECIMAL(19,0) | The privilege id generated sequence.   |
| layertype           | VARCHAR(50)   | A custom tag specifying the name of the layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.] |
| resourceid [k]      | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| resourcepath        | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype        | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| nametype [k]        | VARCHAR(5)    | The name type specified whether name is a USER or GROUP.   |
| nameid              | DECIMAL(19,0) | The id of the name or group.   |
| name [k]            | VARCHAR(50)   | The name of the user or group for the privilege.   |
| domainname [k]      | VARCHAR(50)   | The domain name specifies which domain the name belongs to.  |
| actualprivileges    | VARCHAR(60)   | The actual privileges [READ WRITE EXECUTE SELECT UPDATE INSERT DELETE GRANT]   |
| combinedprivileges  | VARCHAR(60)   | The combined privileges [READ WRITE EXECUTE SELECT UPDATE INSERT DELETE GRANT]   |
| inheritedprivileges | VARCHAR(60)   | The inherited privileges [READ WRITE EXECUTE SELECT UPDATE INSERT DELETE GRANT]  |
| nodehost [k]        | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]        | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

### vMetadataPrivilegeUser[Arch] Table

This view provides a way to associate privileges with users. It is the many-to-many table that gets joined with vMetadataPrivilege and vMetadataAllUsersGroups.

| Column Name        | Column Type   | Definition  |
|--------------------|---------------|---|
| Loaddate [k]       | TIMESTAMP     | The timestamp of when the record was inserted or loaded.                      |
| projectnameid [fk] | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.         |
| Userpk [k]         | DECIMAL(19,0) | The user sequence primary key from vMetadataAllUsersGroups.                   |
| privilegeid [k]    | DECIMAL(19,0) | The privilege id from vMetadataPrivilege                                      |
| nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

# vMetadataResource[Arch] 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.

| Column Name           | Column Type   | Definition   |
|-----------------------|---------------|--|
| loaddate [k]          | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| projectnameid [fk]    | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| layertype             | VARCHAR(50)   | A custom tag specifying the name of the layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.]   |
| resourceid            | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| resourcename          | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.  |
| resourcepath [k]      | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype [k]      | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| resourcesubtype       | VARCHAR(40)   | The DV resource subtype. The further qualifies the precise type of resource. E.g. NONE, SQL_TABLE (view), DATABASE_TABLE (datasource table), SQL_SCRIPT_PROCEDURE (DV procedure), OPERATION_PROCEDURE (web service procedure), plus many more. |
| resourcelinktype      | VARCHAR(40)   | The type of resource the published "LINK" is pointing to such as [TABLE, PROCEDURE].   |
| dataservicename       | VARCHAR(255)  | The published data service name.   |
| catalogname           | VARCHAR(255)  | The name of the published catalog or null if not applicable.   |
| schemaname            | VARCHAR(255)  | The name of the published schema or null if not applicable.  |
| compliant             | SMALLINT      | The resource is compliant when it meets the layer and column validations. 1=compliant. 0=non-compliant.  |
| ownername             | VARCHAR(50)   | The resource owner name.   |
| ownerdomain           | VARCHAR(50)   | The resource owner domain.   |
| ownerid               | INTEGER       | The resource owner unique id.  |
| creationdate          | TIMESTAMP     | The resource creation date (timestamp).  |
| creatorusername       | VARCHAR(50)   | The resource creation user name.   |
| creatoruserdomain     | VARCHAR(50)   | The resource creation user domain.   |
| creatoruserid         | INTEGER       | The resource creation user id which is a foreign key to system.ALL_USERS.  |
| lastmodifieddate      | TIMESTAMP     | The last modified date (timestamp).  |
| lastmodifiedusername  | VARCHAR(50)   | The last modified user name.   |
| lastmodfieduserdomain | VARCHAR(50)   | The last modified user domain.   |
| lastmdofieduserid     | INTEGER       | The last modified user id which is a foreign key to system.ALL_USERS.  |
| annotation            | CLOB          | The resource annotation.   |
| nodeport [k]          | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

# vMetadataResourceColumn[Arch] 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.

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| loaddate [k]       | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| projectnameid [fk] | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.                    |
| resourceid         | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin". |
| columnname         | VARCHAR(255)  | The name of the column.  |

| columntype      | VARCHAR(40) | The type of column.   |
|-----------------|-------------|---|
| columndirection | VARCHAR(10) | The direction of the column. For TABLE types it is always OUT. For PROCEDURE types it |
|                 |             | may be IN, OUT, INOUT, RESULT, RETURN.  |
| columnpos       | INTEGER     | The ordinal position of the column within the resource.                               |
| annotation      | CLOB        | The column annotation.  |
| nodeport [k]    | INTEGER     | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.         |

# vMetadataResourceLineage[Arch] 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.

| Column Name         | Column Type   | Definition   |
|---------------------|---------------|--|
| loaddate [k]        | TIMESTAMP     | The timestamp date the when the table was loaded.  |
| projectnameid [fk]  | DECIMAL(19,0) | The project name id is a foreign key to the vMetadataConstName table.  |
| layertype           | VARCHAR(50)   | A custom tag specifying the name of the layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.]   |
| resourceid          | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| lineageorder        | INTEGER       | The order from top to bottom in the layer hierarchy with respect to how the views traverse through the lineage.  |
| resourcepath [k]    | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype [k]    | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| resourcesubtype     | VARCHAR(40)   | The DV resource subtype. The further qualifies the precise type of resource. E.g. NONE, SQL_TABLE (view), DATABASE_TABLE (datasource table), SQL_SCRIPT_PROCEDURE (DV procedure), OPERATION_PROCEDURE (web service procedure), plus many more. |
| resourcelinktype    | VARCHAR(40)   | The type of resource the published "LINK" is pointing to such as [TABLE, PROCEDURE].   |
| datasourceid        | DECIMAL(19,0) | The unique datasource id which comes from system.ALL_RESOURCES.  |
| fromlayertype       | VARCHAR(50)   | A custom tag specifying the name of the "from" layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.]  |
| fromresourceid      | DECIMAL(19,0) | The unique "from" resource id which comes from the DV system tables listed in "resourceorigin".  |
| fromresourcepath    | VARCHAR(4000) | The "from" resource path.  |
| fromresourcetype    | VARCHAR(40)   | The "from" resource type.  |
| fromresourcesubtype | VARCHAR(40)   | The DV resource subtype. The further qualifies the precise type of resource. E.g. NONE, SQL_TABLE (view), DATABASE_TABLE (datasource table), SQL_SCRIPT_PROCEDURE (DV procedure), OPERATION_PROCEDURE (web service procedure), plus many more. |
| tolayertype         | VARCHAR(50)   | A custom tag specifying the name of the "to" layer. [Published_DS, Application_views, Business_Logical, Physical_Formatting, Physical_Metadata, etc.]  |
| toresourceid        | DECIMAL(19,0) | The unique "to" resource id which comes from the DV system tables listed in "resourceorigin".  |
| toresourcepath      | VARCHAR(4000) | The "to" resource path.  |
| toresourcetype      | VARCHAR(40)   | The "to" resource type.  |
| toresourcesubtype   | VARCHAR(40)   | The DV resource subtype. The further qualifies the precise type of resource. E.g. NONE, SQL_TABLE (view), DATABASE_TABLE (datasource table), SQL_SCRIPT_PROCEDURE (DV procedure), OPERATION_PROCEDURE (web service procedure), plus many more. |
| message             | VARCHAR(4000) | The exception message if a request was not successful.   |

| nodehost [k] | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
|--------------|--------------|---|
| nodeport [k] | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

## requests Definitions

### vEventRegLog Table

Derived from METRICS\_EVENT\_REG\_LOG. Details about the events that have occurred and the emails that have been sent out. An event is only logged if an email is sent. Events are registered in the METRICS\_EVENT\_REGISRATION table and include: LONG\_RUNNING, EXCEEDED\_MEMORY, INACTIVITY, WORKFLOW\_FAILURE, DBMS\_SCHEDULER\_ERROR, and PURGE\_HISTORY.

| Column Name            | Column Type   | Definition   |
|------------------------|---------------|--|
| eventlogid [k]         | DECIMAL(19,0) | A generated unique sequence id for this nodehost and nodeport.   |
| eventtime              | TIMESTAMP     | The timestamp of when the the event occurred in DV and was recorded in METRICS_EVENT_REG_LOG.  |
| eventtype              | VARCHAR(255)  | The event type describes what type of event occurred:  |
|                        |               | LONG_RUNNING – A long running process was triggered but only if DV is configured for 'Request Run Time'.   |
|                        |               | EXCEEDED_MEMORY – A running process has exceeded the allowed memory setting as configured by the administrator. 'Available Managed Memory' and 'Maximum Memory per Request'                              |
|                        |               | INACTIVITY – No metrics table inserts have occurred consistently over a period of time.  |
|                        |               | WORKFLOW_FAILURE – A KPImetrics triggered process has thrown an exception.   |
|                        |               | DBMS_SCHEDULER_ERROR – A KPImetrics database-oriented process has thrown an exception.   |
|                        |               | PURGE_HISTORY – A KPImetrics purge history process has thrown an exception.  |
| requestid [k]          | DECIMAL(19,0) | The unique request id that is the primary key of this table.   |
| sessionid [fk]         | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.  |
| starttime [k]          | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867  |
| datasourceid           | DECIMAL(19,0) | The unique datasource id which comes from system.ALL_RESOURCES.  |
| datasourcename         | VARCHAR(255)  | The datasource name.   |
| totalduration          | DECIMAL(19,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.  |
| totaldurationformatted | VARCHAR(20)   | A formatted total duration for display purposes.   |
| maxmemory              | DECIMAL(19,0) | The maximum memory in bytes.   |
| maxusedmemory          | DECIMAL(19,0) | The maximum memory used by the request in bytes.   |
| currentmemory          | DECIMAL(19,0) | The current memory in bytes.   |
| currentusedmemory      | DECIMAL(19,0) | The current memory used by the request in bytes.   |
| requesttype            | VARCHAR(255)  | The type of request that is stored in the description field. "SQL"=select statement, "SQL Script"=call statement executed, "XSLT, Basic, or Streaming Transformation", "Java Procedure (built-in)", etc. |
| description            | CLOB          | The actual client request or internal DV request.  |
| ownerid                | DECIMAL(19,0) | The resource owner unique id.  |
| owner                  | VARCHAR(255)  | The resource owner name.   |
| ownerfirstname         | VARCHAR(255)  | The resource owner first name which comes from a METRICS_LDAP_PERSON lookup.   |
| ownerlastname          | VARCHAR(255)  | The resource owner last name which comes from a METRICS_LDAP_PERSON lookup.  |
| owneremail             | VARCHAR(255)  | The resource owner email which comes from a METRICS_LDAP_PERSON lookup.  |

| emailsendto  | VARCHAR(1000) | Derived from the email subscription or default configured sendto.             |
|--------------|---------------|---|
| emailsubject | VARCHAR(1000) | Concatenated value of server environment, hostname and port.                  |
| emailmessage | CLOB          | The email message that was sent to the event requestor.                       |
| nodehost [k] | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k] | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

#### vEventRegLogLineage Table

Derived from METRICS\_EVENT\_REG\_LOG\_LINEAGE. Details about the data source lineage for a SQL description (request) that results from an event registered by METRICS\_EVENT\_REGISTRATION. Events that log data source lineage include: LONG\_RUNNING and EXCEEDED\_MEMORY because they have an associated SQL description that gets parsed in order to determine the lineage.

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| eventlineageid [k] | DECIMAL(19,0) | A generated unique sequence id for this nodehost and nodeport.   |
| eventlogid [fk]    | DECIMAL(19,0) | A foreign key to the vEentRegLog view.   |
| resourcepath [k]   | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype [k]   | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| datasourcepath     | VARCHAR(255)  | The DV path to the published datasource/dataservice [/services/databases/ <name>, /services/webservices/<path name>]</path name></name>                        |
| datasourcetype     | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].  |
| datasourcesubtype  | VARCHAR(255)  | The datasource subtype which further qualifies what type of datasource it is. E.g. RELATIONAL_DATA_SOURCE, XML_FILE_DATA_SOURCE.                               |
| connhostname       | VARCHAR(4000) | The connection host name or ip address.  |
| connport           | INTEGER       | The connection port.   |
| connloginname      | VARCHAR(255)  | The connection login name.   |
| conndatabasename   | VARCHAR(255)  | The connection database name.  |
| conndatabasetype   | VARCHAR(255)  | The connection database type such as Oracle, PostgresSQL, SqlServer, Composite, Rest, Wsdl, File, Netezza, MsExcel(POI), Ldap, MySql, XmlFile, Jdbc, DB2, etc. |
| connurlorroot      | VARCHAR(4000) | The connection URL or root. URL if relational. Root if file.   |
| nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

### vEventRequestSqlColumns Table

Details about the column projection list from the metrics\_request description (SQL). These columns were parsed. Derived from the following tables: METRICS\_SQL\_REQUEST, METRICS\_SQL\_RESOURCE, METRICS\_SQL\_COLUMNS, metrics\_requests\_hist and metrics\_sessions\_hist

| Column Name       | Column Type   | Definition   |
|-------------------|---------------|--|
| requestid [k]     | DECIMAL(19,0) | The unique request id that is the primary key of this table.                   |
| starttime [k]     | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867    |
| requestdatemonths | DECIMAL(19,2) | The number of months difference between the request date and the current date. |
| requestdatedays   | DECIMAL(19,0) | The number of days difference between the request date and the current date.   |
| status            | VARCHAR(20)   | The status of the request [SUCCESS, FAILED].                                   |
| sqlmessage        | VARCHAR(4000) | Provides a general informational message originating from vMetricsSqlRequest.  |

|                            | gr op         |   |
|----------------------------|---------------|---|
| message                    | CLOB          | The exception message if a request was not successful.  |
| user                       | VARCHAR(255)  | The user name who connected for this session.   |
| domain                     | VARCHAR(255)  | The domain of the user who connected.   |
| clienthost                 | VARCHAR(255)  | Designates the client host name that connected to DV.   |
| type                       | VARCHAR(20)   | The type of request [begin, end, null].   |
| bytesfromclient            | DECIMAL(19,0) | The total number of bytes received from the client host during this session.  |
| bytestoclient              | DECIMAL(19,0) | The total number of bytes sent to the client host during this session.  |
| rowsAffected               | DECIMAL(19,0) | The number of rows affected or returned. The value may be -1.   |
| sessiontype                | VARCHAR(40)   | Designates the type session connection [JDBC, HTTP, TASK, etc.].  |
| sqlinvocationtype          | VARCHAR(20)   | The SQL invocation type indicates the type of request [SELECT, CALL, INSERT, UPDATE, DELETE, PROCEDURE, WITH].  |
| kpirequestidmatch          | DECIMAL(19,0) | The requestid of a match to a similar request templated so that the SQL template can be copied instead of processed from the start.   |
| kpidescriptiontemplate     | VARCHAR(4000) | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are 4000 characters or less which means that queries can be pushed down to the database. |
| kpidescriptiontemplateclob | CLOB          | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are greater than 4000 characters.  |
| description                | CLOB          | The actual client request or internal DV request.   |
| resourceseqid              | DECIMAL(19,0) | The resource sequence id is a foreign key back to vMetricsSqlResource.  |
| resourceorder              | DECIMAL(10,0) | The resource order.   |
| columnposition             | NUMERIC(10,2) | The ordinal position of the column and derivied column. 1.0=1st column, 1.1=1st column of a derived field 1.2=2nd column of dervied field.  |
| columnorigtype             | VARCHAR(20)   | Column origination type determines the type of SQL the column came from. CALL, PRIMARY, COMPLEX, SUBQUERY   |
| resourceid                 | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".  |
| resourcepath [k]           | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k]           | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| frompath                   | VARCHAR(4000) | The from path is the database URL such as catalog.schema.table.   |
| fromalias                  | VARCHAR(255)  | The from path alias if applicable.  |
| dataservicename            | VARCHAR(255)  | The published data service name.  |
| catalogname                | VARCHAR(255)  | The name of the published catalog or null if not applicable.  |
| schemaname                 | VARCHAR(255)  | The name of the published schema or null if not applicable.   |
| resourcename               | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| columnalias                | VARCHAR(255)  | The logical column (alias) name from the SQL statement. If not present then "columnName" is the alias.  |
| columnname                 | VARCHAR(255)  | The projected column name from the SQL statement. If * used, then same as actual column name  |
| columnactual               | VARCHAR(255)  | The physical/source column name from the metadata table.  |
| columntype                 | VARCHAR(4000) | The type of column.   |
| columndirection            | VARCHAR(10)   | The direction of the column. For TABLE types it is always OUT. For PROCEDURE types it may be IN, OUT, INOUT, RESULT, RETURN.  |
| columnderived              | VARCHAR(10)   | Determine whether this column is derived or not [true false].   |
| columnexpression           | CLOB          | The complete column expression.   |

| columnfunctionlist | VARCHAR(4000) | A list of functions and occurrences that are used in the column expression. UPPER[3] would indicate that UPPER was used 3 times in the column expression. |
|--------------------|---------------|---|
| columnnamelist     | VARCHAR(4000) | A list of column names that make up the column expression   |
| nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

## vEventRequestSqlResources Table

Details about the resources used from the metrics\_request description (SQL). These resources were parsed. Derived from the following tables: METRICS\_SQL\_REQUEST, METRICS\_SQL\_RESOURCE, metrics\_requests\_hist and metrics\_sessions\_hist

| Column Name            | Column Type   | Definition   |
|------------------------|---------------|--|
| requestid [k]          | DECIMAL(19,0) | The unique request id that is the primary key of this table.   |
| starttime [k]          | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867  |
| endtime                | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899  |
| requestdatemonths      | DECIMAL(19,2) | The number of months difference between the request date and the current date.   |
| requestdatedays        | DECIMAL(19,0) | The number of days difference between the request date and the current date.   |
| totalduration          | DECIMAL(19,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.  |
| totaldurationdisplay   | VARCHAR(25)   | The total duration formatted for display using the format 0 00:00:00.000.  |
| status                 | VARCHAR(20)   | The status of the request [SUCCESS, FAILED].   |
| message                | VARCHAR(4000) | The exception message if a request was not successful.   |
| kpistatus              | VARCHAR(25)   | The KPImetrics SQL request processing status [SUCCESS, FAIL]   |
| kpiprocesstime         | TIMESTAMP     | The time the SQL request processing started.   |
| kpidurationseconds     | DECIMAL(19,3) | The number of seconds and fraction of seconds [5.102] the processing took.   |
| kpidurationinterval    | VARCHAR(25)   | A formatted duration interval of how long the processing took [0 00:00:02].  |
| kpimessage             | VARCHAR(4000) | An exception message that could occur during the processing of the SQL or null if no exception.  |
| user                   | VARCHAR(255)  | The user name who connected for this session.  |
| domain                 | VARCHAR(255)  | The domain of the user who connected.  |
| fullname               | VARCHAR(255)  | The full name of the user who connected.   |
| mail                   | VARCHAR(255)  | The email of the user who connected.   |
| sessionid [fk]         | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.  |
| clienthost             | VARCHAR(255)  | Designates the client host name that connected to DV.  |
| type                   | VARCHAR(20)   | Indicates whether the session is of type 'begin' or 'end' or null.   |
| bytesfromclient        | DECIMAL(19,0) | The total number of bytes received from the client host during this session.   |
| bytestoclient          | DECIMAL(19,0) | The total number of bytes sent to the client host during this session.   |
| rowsAffected           | DECIMAL(19,0) | The number of rows affected or returned. The value may be -1.  |
| sessiontype            | VARCHAR(40)   | Designates the type session connection [JDBC, HTTP, TASK, etc.].   |
| sqlinvocationtype      | VARCHAR(20)   | The SQL invocation type indicates the type of request [SELECT, CALL, INSERT, UPDATE, DELETE, PROCEDURE, WITH].   |
| kpirequestidmatch      | DECIMAL(19,0) | The requestid of a match to a similar request templated so that the SQL template can be copied instead of processed from the start.  |
| kpidescriptiontemplate | VARCHAR(4000) | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other |

|                            |               | requests on a generic basis. The contents are 4000 characters or less which means that queries can be pushed down to the database.   |
|----------------------------|---------------|--|
| kpidescriptiontemplateclob | CLOB          | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are greater than 4000 characters. |
| description                | CLOB          | The actual client request or internal DV request.  |
| resourceseqid              | DECIMAL(19,0) | The resource sequence id is a foreign key back to vMetricsSqlResource.   |
| resourceid                 | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| resourcepath [k]           | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype [k]           | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| frompath                   | VARCHAR(4000) | The from path is the database URL such as catalog.schema.table.  |
| fromalias                  | VARCHAR(255)  | The from path alias if applicable.   |
| dataservicename            | VARCHAR(255)  | The published data service name.   |
| catalogname                | VARCHAR(255)  | The name of the published catalog or null if not applicable.   |
| schemaname                 | VARCHAR(255)  | The name of the published schema or null if not applicable.  |
| resourcename               | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.  |
| nodehost [k]               | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]               | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

## vEventRequestSqlResourcesAllErrors Table

Details about errors produced during parsing of the metrics\_request description (SQL). This can be used to improve the SQL Parser code implemented by KPImetrics. These resources were parsed. Derived from the following tables: METRICS\_SQL\_REQUEST, METRICS\_SQL\_RESOURCE, metrics\_requests\_hist and metrics\_sessions\_hist

| Column Name          | Column Type   | Definition  |
|----------------------|---------------|---|
| requestid [k]        | DECIMAL(19,0) | The unique request id that is the primary key of this table.                                    |
| starttime [k]        | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867                     |
| endtime              | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899                       |
| requestdatemonths    | DECIMAL(19,2) | The number of months difference between the request date and the current date.                  |
| requestdatedays      | DECIMAL(19,0) | The number of days difference between the request date and the current date.                    |
| totalduration        | DECIMAL(19,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.     |
| totaldurationdisplay | VARCHAR(25)   | The total duration formatted for display using the format 0 00:00:00.000.                       |
| status               | VARCHAR(20)   | The status of the request [SUCCESS, FAILED].  |
| message              | VARCHAR(4000) | The exception message if a request was not successful.  |
| kpistatus            | VARCHAR(25)   | The KPImetrics SQL request processing status [SUCCESS, FAIL]                                    |
| kpiprocesstime       | TIMESTAMP     | The time the SQL request processing started.  |
| kpidurationseconds   | DECIMAL(19,3) | The number of seconds and fraction of seconds [5.102] the processing took.                      |
| kpidurationinterval  | VARCHAR(25)   | A formatted duration interval of how long the processing took [0 00:00:02].                     |
| kpimessage           | VARCHAR(4000) | An exception message that could occur during the processing of the SQL or null if no exception. |
| user                 | VARCHAR(255)  | The user name who connected for this session.   |
| domain               | VARCHAR(255)  | The domain of the user who connected.   |
| fullname             | VARCHAR(255)  | The full name of the user who connected.  |

| mail                       | VARCHAR(255)  | The email of the user who connected.  |
|----------------------------|---------------|---|
| sessionid [fk]             | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.   |
| clienthost                 | VARCHAR(255)  | Designates the client host name that connected to DV.   |
| type                       | VARCHAR(20)   | Indicates whether the session is of type 'begin' or 'end' or null.  |
| bytesfromclient            | DECIMAL(19,0) | The total number of bytes received from the client host during this session.  |
| bytestoclient              | DECIMAL(19,0) | The total number of bytes sent to the client host during this session.  |
| rowsAffected               | DECIMAL(19,0) | The number of rows affected or returned. The value may be -1.   |
| sessiontype                | VARCHAR(40)   | Designates the type session connection [JDBC, HTTP, TASK, etc.].  |
| sqlinvocationtype          | VARCHAR(20)   | The SQL invocation type indicates the type of request [SELECT, CALL, INSERT, UPDATE, DELETE, PROCEDURE, WITH].  |
| kpirequestidmatch          | DECIMAL(19,0) | The requestid of a match to a similar request templated so that the SQL template can be copied instead of processed from the start.   |
| kpidescriptiontemplate     | VARCHAR(4000) | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are 4000 characters or less which means that queries can be pushed down to the database. |
| kpidescriptiontemplateclob | CLOB          | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are greater than 4000 characters.  |
| description                | CLOB          | The actual client request or internal DV request.   |
| resourceseqid              | DECIMAL(19,0) | The resource sequence id is a foreign key back to vMetricsSqlResource.  |
| resourceid                 | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".  |
| resourcepath [k]           | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k]           | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| frompath                   | VARCHAR(4000) | The from path is the database URL such as catalog.schema.table.   |
| fromalias                  | VARCHAR(255)  | The from path alias if applicable.  |
| dataservicename            | VARCHAR(255)  | The published data service name.  |
| catalogname                | VARCHAR(255)  | The name of the published catalog or null if not applicable.  |
| schemaname                 | VARCHAR(255)  | The name of the published schema or null if not applicable.   |
| resourcename               | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| nodehost [k]               | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]               | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

# vEventRequestSqlResourcesCount Table

Returns a count of the number of unique requestid rows parsed for each metrics\_request description (SQL). These resources were parsed. Derived from the following tables: METRICS\_SQL\_REQUEST, METRICS\_SQL\_RESOURCE, metrics\_requests\_hist and metrics\_sessions\_hist

| Column Name      | Column Type | Definition   |
|------------------|-------------|--|
| sqlresourcecount | BIGINT      | The total number of rows for the counttype.                                  |
| counttype        | VARCHAR(24) | The count type:  |
|                  |             | TOTAL ROWS – the total number of rows for all categories.                    |
|                  |             | NUM TEMPLATE 4K ROWS – the number of rows in the varchar(4000) column.       |
|                  |             | NUM TEMPLATE CLOB ROWS – the number of rows in the clob column.              |
|                  |             | BOTH TEMPLATES NULL ROWS – the number of rows where both templates are null. |

# vExceededMemoryPercentRequests Table

Details on exceede memory queries that are occurring at the time this resource is executed. Derived from the system catalog table SYS\_REQUESTS.

| Column Name             | Column Type    | Definition   |
|-------------------------|----------------|--|
| requestid [k]           | DECIMAL(19,0)  | The unique request id that is the primary key of this table.   |
| parentid [fk]           | DECIMAL(19,0)  | A foreign key back to the requestid within this table. Contains -1 when no parent reference.   |
| sessionid [fk]          | DECIMAL(19,0)  | A unique session id and foreign key to metrics_sessions_hist.  |
| transactionid           | BIGINT         | A reference to the DV transaction id.  |
| ownerid                 | DECIMAL(19,0)  | The resource owner unique id.  |
| owner                   | VARCHAR(255)   | The resource owner name.   |
| domainname              | VARCHAR(255)   | The owner domain.  |
| requesttype             | VARCHAR(255)   | The type of request that is stored in the description field. "SQL"=select statement, "SQL Script"=call statement executed, "XSLT, Basic, or Streaming Transformation", "Java Procedure (built-in)", etc. |
| status                  | VARCHAR(20)    | The status of the request [READY, RUNNING, STARTED].   |
| description             | CLOB           | The actual client request or internal DV request.  |
| starttime [k]           | TIMESTAMP      | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867  |
| endtime                 | TIMESTAMP      | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899  |
| totalduration           | BIGINT         | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.  |
| totaldurationformatted  | VARCHAR(20)    | A formatted total duration for display purposes.   |
| serverrduration         | BIGINT         | The server duration of the request measured in milli-seconds. Divide by 1000 to get minutes. How much time the request spent in the DV server being processed.   |
| rowsAffected            | BIGINT         | The number of rows affected or returned. The value may be -1.  |
| maxmemory               | BIGINT         | The maximum amount of memory used by the request.  |
| maxdisk                 | BIGINT         | The maximum amount of disk used by the request. It is not good for a request to used disk.   |
| currentmemory           | BIGINT         | The number of bytes of current memory used by the request.   |
| currentdisk             | BIGINT         | The number of bytes of disk used by the request.   |
| message                 | VARCHAR(65535) | The exception message if a request was not successful.   |
| maxusedmemory           | BIGINT         | The maximum number of memory bytes used by the request.  |
| currentusedmemory       | BIGINT         | The current number of memory bytes used by the request.  |
| cisattrmanagedmax       | BIGINT         | Comes from a server attribute defined by commonValues.cisAttrManagedMemoryMax  |
| cisattrequestquotapct   | DECIMAL(10,6)  | Comes from a server attribute defined by commonValues.cisAttrRequestQuotaPercent   |
| maxmemallowedperrequest | BIGINT         | The maximum memory in bytes allowed for a request as determined by a DV configuration parameter set by the admin.  |
| datasourceid            | INTEGER        | The unique datasource id which comes from system.ALL_RESOURCES.  |
| datasourcename          | VARCHAR(255)   | The datasource name.   |
| datasourceparentpath    | VARCHAR(4000)  | The datasource parent path.  |

### vGetSystemInformation Table

Returns nodehost and nodeport for a DV server. Derived from /System/Helpers/pGetSystemInformation() which in turn invokes /lib/util/GetProperty('SERVER HOSTNAME') and /lib/util/GetProperty('SERVER JDBC PORT')

| Column Name  | Column Type  | Definition  |
|--------------|--------------|---|
| nodehost [k] | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k] | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

## vLongRunningRequests Table

Details on long running queries that are occurring at the time this resource is executed. Derived from the system catalog table SYS\_REQUESTS.

| Column Name            | Column Type    | Definition   |
|------------------------|----------------|--|
| requestid [k]          | DECIMAL(19,0)  | The unique request id that is the primary key of this table.   |
| parentid [fk]          | DECIMAL(19,0)  | A foreign key back to the requestid within this table. Contains -1 when no parent reference.   |
| sessionid [fk]         | DECIMAL(19,0)  | A unique session id and foreign key to metrics_sessions_hist.  |
| transactionid          | BIGINT         | A reference to the DV transaction id.  |
| ownerid                | DECIMAL(19,0)  | The resource owner unique id.  |
| owner                  | VARCHAR(255)   | The resource owner name.   |
| domainname             | VARCHAR(255)   | The owner domain.  |
| requesttype            | VARCHAR(255)   | The type of request that is stored in the description field. "SQL"=select statement, "SQL Script"=call statement executed, "XSLT, Basic, or Streaming Transformation", "Java Procedure (built-in)", etc. |
| status                 | VARCHAR(20)    | The status of the request [READY, RUNNING, STARTED].   |
| description            | CLOB           | The actual client request or internal DV request.  |
| starttime [k]          | TIMESTAMP      | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867  |
| endtime                | TIMESTAMP      | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899  |
| totalduration          | DECIMAL(19,0)  | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.  |
| totaldurationformatted | VARCHAR(20)    | A formatted total duration for display purposes.   |
| serverrduration        | BIGINT         | The server duration of the request measured in milli-seconds. Divide by 1000 to get minutes. How much time the request spent in the DV server being processed.   |
| rowsAffected           | BIGINT         | The number of rows affected or returned. The value may be -1.  |
| maxmemory              | BIGINT         | The maximum amount of memory used by the request.  |
| maxdisk                | BIGINT         | The maximum amount of disk used by the request. It is not good for a request to used disk.   |
| currentmemory          | BIGINT         | The number of bytes of current memory used by the request.   |
| currentdisk            | BIGINT         | The number of bytes of disk used by the request.   |
| message                | VARCHAR(65535) | The exception message if a request was not successful.   |
| maxusedmemory          | BIGINT         | The maximum number of memory bytes used by the request.  |
| currentusedmemory      | BIGINT         | The current number of memory bytes used by the request.  |
| cisrequestrunminutes   | INTEGER        | The number of minutes the request has been running.  |
| datasourceid           | INTEGER        | The unique datasource id which comes from system.ALL_RESOURCES.  |
| datasourcename         | VARCHAR(255)   | The datasource name.   |
| datasourceparentpath   | VARCHAR(4000)  | The datasource parent path.  |

# vMetricsSqlColumns Table

Details of the parsed SQL columns for a user defined request. Derived from METRICS\_SQL\_COLUMNS with no other join.

| Column Name        | Column Type   | Definition  |
|--------------------|---------------|---|
| requestid [k]      | DECIMAL(19,0) | The unique request id that is the primary key of this table.  |
| starttime [k]      | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867   |
| resourceseqid      | DECIMAL(19,0) | The resource sequence id is a foreign key back to vMetricsSqlResource.  |
| resourceorder      | DECIMAL(10,0) | The order of the table or procedure resource within the context of the query.   |
| columnorigtype     | VARCHAR(20)   | Column origination type determines the type of SQL the column came from. CALL, PRIMARY, COMPLEX, SUBQUERY   |
| columnposition     | NUMERIC(10,2) | The ordinal position of the column and derivied column. 1.0=1st column, 1.1=1st column of a derived field 1.2=2nd column of dervied field.                |
| columnalias        | VARCHAR(255)  | The logical column (alias) name from the SQL statement. If not present then "columnName" is the alias.  |
| columnname         | VARCHAR(255)  | The projected column name from the SQL statement. If * used, then same as actual column name  |
| columnactual       | VARCHAR(255)  | The physical/source column name from the metadata table.  |
| columntype         | VARCHAR(4000) | The type of column.   |
| columndirection    | VARCHAR(10)   | The direction of the column. For TABLE types it is always OUT. For PROCEDURE types it may be IN, OUT, INOUT, RESULT, RETURN.                              |
| columnderived      | VARCHAR(10)   | Determine whether this column is derived or not [true false].   |
| columnexpression   | CLOB          | The complete column expression.   |
| columnfunctionlist | VARCHAR(4000) | A list of functions and occurrences that are used in the column expression. UPPER[3] would indicate that UPPER was used 3 times in the column expression. |
| columnnamelist     | VARCHAR(4000) | A list of column names that make up the column expression.  |
| nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

### vMetricsSqlRequest Table

Details of the parsed SQL for a user defined request. Derived from METRICS\_SQL\_REQUEST with no other join. Note the SQL Template is either stored in KPI\_DESCRIPTION\_TEMPLATE VARCHAR(4000) when the SQL statement is <=4000 characters or

KPI\_DESCRIPTION\_TEMPLATE\_CLOB [CLOB/TEXT] when it is greater than 4000. The vast majority of SQL will be less than 4000. Since the odds are in favor of smaller SQL statements, an index can be placed on KPI\_DESCRIPTION\_TEMPLATE allowing faster access. However, if it is determined that the application has both then the user interface must account for the CLOB field in its queries.

| Column Name          | Column Type   | Definition  |
|----------------------|---------------|---|
| requestid [k]        | DECIMAL(19,0) | The unique request id that is the primary key of this table.                                    |
| starttime [k]        | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867                     |
| endtime              | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899                       |
| totaldurationdisplay | VARCHAR(25)   | The total duration formatted for display using the format 0 00:00:00.000.                       |
| dataservicename      | VARCHAR(255)  | The published data service name.  |
| status               | VARCHAR(20)   | The status of the request [SUCCESS, FAILED].  |
| message              | VARCHAR(4000) | The exception message if a request was not successful.  |
| kpiprocesstime       | TIMESTAMP     | The time the SQL request processing started.  |
| kpistatus            | VARCHAR(25)   | The KPImetrics SQL request processing status [SUCCESS, FAIL]                                    |
| kpimessage           | VARCHAR(4000) | An exception message that could occur during the processing of the SQL or null if no exception. |

| kpidurationseconds         | DECIMAL(19,3) | The number of seconds and fraction of seconds [5.102] the processing took.  |
|----------------------------|---------------|---|
| kpidurationinterval        | VARCHAR(25)   | A formatted duration interval of how long the processing took [0 00:00:02].   |
| kpirequestidmatch          | DECIMAL(19,0) | The requestid of a match to a similar request templated so that the SQL template can be copied instead of processed from the start.   |
| kpisqlinvocationtype       | VARCHAR(20)   | The SQL invocation type indicates the type of request [SELECT, CALL, INSERT, UPDATE, DELETE, PROCEDURE, WITH].  |
| kpidescriptiontemplate     | VARCHAR(4000) | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are 4000 characters or less which means that queries can be pushed down to the database. |
| kpidescriptiontemplateclob | CLOB          | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are greater than 4000 characters.  |
| nodehost [k]               | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]               | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| processednodehost          | VARCHAR(255)  | The hostname (nodehost) of the DV server that is performing the processing. Due to locking issues [mainly] with SQL Server, the architecture dictates that only one node performs the processing for all the other nodes.   |
| processednodeport          | INTEGER       | The port (nodeport) of the DV server that is performing the processing.   |

# vMetricsSqlRequestLineage Table

Details of the parsed SQL for a user defined request with the addition of the data source resource lineage. A request may contain many published resources. Each published resource may result in many datas ource resources. Therefore, the result may contain 0 to many resources and 0 to many data source resources.

# $\texttt{REQUEST} \rightarrow \texttt{RESOURCES} \rightarrow \texttt{DATASOURCE LINEAGE}$

| Column Name                | Column Type   | Definition  |
|----------------------------|---------------|---|
| requestid [k]              | DECIMAL(19,0) | The unique request id that is the primary key of this table.  |
| starttime [k]              | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867   |
| dataservicename            | VARCHAR(255)  | The published data service name.  |
| kpidescriptiontemplate     | VARCHAR(4000) | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are 4000 characters or less which means that queries can be pushed down to the database. |
| kpidescriptiontemplateclob | CLOB          | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are greater than 4000 characters.  |
| resourceseqid [k]          | DECIMAL(19,0) | A generated unique id for this row.   |
| resourcename_pub           | VARCHAR(255)  | The published name for the resource associated with "resourcepath".   |
| resourcepath_pub           | VARCHAR(4000) | The published resource path for the resource associated with "resourcepath".  |
| resourcetype_pub           | VARCHAR(255)  | The published resource type for the resource associated with "resourcepath".  |
| catalogname                | VARCHAR(255)  | The name of the published catalog or null if not applicable.  |
| schemaname                 | VARCHAR(255)  | The name of the published schema or null if not applicable.   |
| id                         | DECIMAL(19,0) | The resource id of the published resource.  |
| resourcename               | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcetype [k]           | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |

| resourcesubtype   | VARCHAR(40)   | The DV resource subtype. The further qualifies the precise type of resource. E.g. NONE, SQL_TABLE (view), DATABASE_TABLE (datasource table), SQL_SCRIPT_PROCEDURE (DV procedure), OPERATION_PROCEDURE (web service procedure), plus many more. |
|-------------------|---------------|--|
| resourcepath [k]  | VARCHAR(4000) | The DV path to the resource.   |
| datasourcename    | VARCHAR(255)  | The datasource name.   |
| datasourcetype    | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].  |
| datasourcesubtype | VARCHAR(255)  | The datasource subtype which further qualifies what type of datasource it is. E.g. RELATIONAL_DATA_SOURCE, XML_FILE_DATA_SOURCE.   |
| datasourcepath    | VARCHAR(255)  | The DV path to the published datasource/dataservice [/services/databases/ <name>, /services/webservices/<path name>]</path name></name>  |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

#### vMetricsSqlRequestUniqueSqlTemplates Table

A unique grouping of parsed SQL templates derived from parsing the request "description". Since the description is stored as a VARCHAR(4000) field it allows push down on queries. Data is only stored in this field when <= 4000 characters. Derived from METRICS\_SQL\_REQUEST. KPI\_DESCRIPTION\_TEMPLATE.

| Column Name            | Column Type   | Definition  |
|------------------------|---------------|---|
| numDescriptions        | BIGINT        | The number of related varchar(4000) descriptions. Use this number to determine if searching kpidescriptiontemplate is required.   |
| dataservicename        | VARCHAR(255)  | The published data service name.  |
| kpisqlinvocationtype   | VARCHAR(20)   | The SQL invocation type indicates the type of request [SELECT, CALL, INSERT, UPDATE, DELETE, PROCEDURE, WITH].  |
| kpidescriptiontemplate | VARCHAR(4000) | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are 4000 characters or less which means that queries can be pushed down to the database. |
| nodehost [k]           | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]           | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

#### vMetricsSqlRequestUniqueSqlTemplatesByUser Table

A unique grouping of parsed SQL templates sorted by user and derived from parsing the request "description". Since the description is stored as a VARCHAR(4000) field it allows push down on queries. Data is only stored in this field when <= 4000 characters. Derived from METRICS\_SQL\_REQUEST. KPI\_DESCRIPTION\_TEMPLATE and metrics resources usage hist.

| Column Name     | Column Type  | Definition  |
|-----------------|--------------|---|
| numDescriptions | BIGINT       | The number of related varchar(4000) descriptions. Use this number to determine if searching kpidescriptiontemplate is required. |
| user            | VARCHAR(255) | The user name who connected for this session.   |
| domain          | VARCHAR(255) | The domain of the user who connected.   |
| dataservicename | VARCHAR(255) | The published data service name.  |

| kpisqlinvocationtype   | VARCHAR(20)   | The SQL invocation type indicates the type of request [SELECT, CALL, INSERT, UPDATE, DELETE, PROCEDURE, WITH].  |
|------------------------|---------------|---|
| kpidescriptiontemplate | VARCHAR(4000) | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are 4000 characters or less which means that queries can be pushed down to the database. |
| nodehost [k]           | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]           | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

#### vMetricsSqlRequestUniqueSqlTemplatesByUserByDate Table

A unique grouping of parsed SQL templates sorted by user and request date and derived from parsing the request "description". Since the description is stored as a VARCHAR(4000) field it allows push down on queries. Data is only stored in this field when <= 4000 characters. Derived from METRICS\_SQL\_REQUEST. KPI\_DESCRIPTION\_TEMPLATE and metrics\_resources\_usage\_hist.

| Column Name            | Column Type   | Definition  |
|------------------------|---------------|---|
| numDescriptions        | BIGINT        | The number of related varchar(4000) descriptions. Use this number to determine if searching kpidescriptiontemplate is required.   |
| user                   | VARCHAR(255)  | The user name who connected for this session.   |
| domain                 | VARCHAR(255)  | The domain of the user who connected.   |
| requestdate            | DATE          | The date [YYYY-MM-DD] of the request.   |
| requestdatemonths      | DECIMAL(19,2) | The number of months difference between the request date and the current date.  |
| requestdatedays        | DECIMAL(19,0) | The number of days difference between the request date and the current date.  |
| dataservicename        | VARCHAR(255)  | The published data service name.  |
| kpisqlinvocationtype   | VARCHAR(20)   | The SQL invocation type indicates the type of request [SELECT, CALL, INSERT, UPDATE, DELETE, PROCEDURE, WITH].  |
| kpidescriptiontemplate | VARCHAR(4000) | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are 4000 characters or less which means that queries can be pushed down to the database. |
| nodehost [k]           | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]           | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

#### vMetricsSqlRequestUniqueSqlTemplatesClob Table

A unique grouping of parsed SQL templates derived from parsing the request "description". Warning. Since the description is stored as a CLOB field and push down on CLOB is not supported, this may cause high memory usage in CIS. Derived from METRICS\_SQL\_REQUEST. KPI\_DESCRIPTION\_TEMPLATE\_CLOB.

| Column Name          | Column Type  | Definition  |
|----------------------|--------------|---|
| numDescriptions      | BIGINT       | The number of related varchar(4000) descriptions. Use this number to determine if searching kpidescriptiontemplate is required. |
| connected            | VARCHAR(255) | The published data service name.  |
| kpisqlinvocationtype | VARCHAR(20)  | The SQL invocation type indicates the type of request [SELECT, CALL, INSERT, UPDATE, DELETE, PROCEDURE, WITH].                  |

| kpidescriptiontemplateclob | CLOB         | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are greater than 4000 characters. |
|----------------------------|--------------|--|
| nodehost [k]               | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]               | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

#### vMetricsSqlRequestUniqueSqlTemplatesClobByUser Table

A unique grouping of parsed SQL templates sorted by user and derived from parsing the request "description". Warning. Since the description is stored as a CLOB field and push down on CLOB is not supported, this may cause high memory usage in CIS. Derived from METRICS\_SQL\_REQUEST. KPI\_DESCRIPTION\_TEMPLATE\_CLOB and metrics\_resources\_usage\_hist.

| Column Name                | Column Type  | Definition   |
|----------------------------|--------------|--|
| numDescriptions            | BIGINT       | The number of related varchar(4000) descriptions. Use this number to determine if searching kpidescriptiontemplate is required.  |
| user                       | VARCHAR(255) | The user name who connected for this session.  |
| domain                     | VARCHAR(255) | The domain of the user who connected.  |
| dataservicename            | VARCHAR(255) | The published data service name.   |
| kpisqlinvocationtype       | VARCHAR(20)  | The SQL invocation type indicates the type of request [SELECT, CALL, INSERT, UPDATE, DELETE, PROCEDURE, WITH].   |
| kpidescriptiontemplateclob | CLOB         | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are greater than 4000 characters. |
| Nodehost [k]               | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| Nodeport [k]               | INTEGER      | The http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

#### vMetricsSqlRequestUniqueSqlTemplatesClobByUserByDate Table

A unique grouping of parsed SQL templates sorted by user and request date and derived from parsing the request "description". Warning. Since the description is stored as a CLOB field and push down on CLOB is not supported, this may cause high memory usage in CIS. Derived from METRICS\_SQL\_REQUEST. KPI\_DESCRIPTION\_TEMPLATE\_CLOB and metrics resources usage hist.

| Column Name          | Column Type   | Definition  |
|----------------------|---------------|---|
| numDescriptions      | BIGINT        | The number of related varchar(4000) descriptions. Use this number to determine if searching kpidescriptiontemplate is required. |
| user                 | VARCHAR(255)  | The user name who connected for this session.   |
| domain               | VARCHAR(255)  | The domain of the user who connected.   |
| requestdate          | DATE          | The date [YYYY-MM-DD] of the request.   |
| requestdatemonths    | DECIMAL(19,2) | The number of months difference between the request date and the current date.  |
| requestdatedays      | DECIMAL(19,0) | The number of days difference between the request date and the current date.  |
| dataservicename      | VARCHAR(255)  | The published data service name.  |
| kpisqlinvocationtype | VARCHAR(20)   | The SQL invocation type indicates the type of request [SELECT, CALL, INSERT, UPDATE, DELETE, PROCEDURE, WITH].                  |

| kpidescriptiontemplateclob | CLOB         | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are greater than 4000 characters. |
|----------------------------|--------------|--|
| nodehost [k]               | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]               | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

### vMetricsSqlResource Table

Details of the parsed SQL resources for a user defined request. Derived from METRICS\_SQL\_RESOURCE with no other joins.

| Column Name       | Column Type   | Definition  |
|-------------------|---------------|---|
| requestid [k]     | DECIMAL(19,0) | The unique request id that is the primary key of this table.  |
| starttime [k]     | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867   |
| resourceseqid     | DECIMAL(19,0) | The resource sequence id.   |
| resourceid        | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".  |
| resourceorigin    | VARCHAR(30)   | The original DV system table in which the resource originated from.   |
|                   |               | [ALL_TABLES  ALL_PROCEDURES ALL_WSDL_OPERATIONS ALL_RESOURCES  ALL_COLUMNS ALL_PARAMETERS]  |
| resourcepath [k]  | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k]  | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| sqlinvocationtype | VARCHAR(255)  | The SQL invocation type indicates the type of request [SELECT, CALL, INSERT, UPDATE, DELETE, PROCEDURE, WITH].  |
| frompath          | VARCHAR(4000) | The from path is the database URL such as catalog.schema.table.   |
| fromalias         | VARCHAR(255)  | The from path alias if applicable.  |
| dataservicename   | VARCHAR(255)  | The published data service name.  |
| catalogname       | VARCHAR(255)  | The name of the published catalog or null if not applicable.  |
| schemaname        | VARCHAR(255)  | The name of the published schema or null if not applicable.   |
| resourcename      | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| messagetype       | VARCHAR(10)   | Typically null but if no lineage is found then [NO_LINEAGE].  |
| message           | VARCHAR(4000) | The informational message if no lineage was found such as [NO DATA SOURCE LINEAGE GENERATED].   |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| processednodehost | VARCHAR(255)  | The hostname (nodehost) of the DV server that is performing the processing. Due to locking issues [mainly] with SQL Server, the architecture dictates that only one node performs the processing for all the other nodes. |
| processednodeport | INTEGER       | The port (nodeport) of the DV server that is performing the processing.   |

# vMetricsSqlResourceLineage Table

Details of the parsed SQL resources data source lineage for a user defined request. Derived from METRICS\_SQL\_RESOURCE\_LINEAGE with no other joins.

| Column Name   | Column Type   | Definition  |
|---------------|---------------|---|
| id            | DECIMAL(19,0) | A unique generated sequence id.   |
| requestid [k] | DECIMAL(19,0) | The unique request id that is the primary key of this table.                |
| starttime [k] | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867 |

| resourceseqid     | DECIMAL(19,0) | This field gets selected from vMetricsSqlResource table.   |
|-------------------|---------------|--|
| status            | VARCHAR(20)   | C=copied from existing database records.   |
|                   |               | L=lineage generated from getResourceLineageDirectRecursive()   |
| resourceid        | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| resourcename      | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.  |
| resourcepath [k]  | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype [k]  | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| resourcesubtype   | VARCHAR(40)   | The DV resource subtype. The further qualifies the precise type of resource. E.g. NONE, SQL_TABLE (view), DATABASE_TABLE (datasource table), SQL_SCRIPT_PROCEDURE (DV procedure), OPERATION_PROCEDURE (web service procedure), plus many more. |
| datasourceid      | DECIMAL(19,0) | The unique datasource id which comes from system.ALL_RESOURCES.  |
| datasourcename    | VARCHAR(255)  | The datasource name.   |
| datasourcepath    | VARCHAR(255)  | The DV path to the published datasource/dataservice [/services/databases/ <name>, /services/webservices/<path name>]</path name></name>  |
| datasourcesubtype | VARCHAR(255)  | The datasource subtype which further qualifies what type of datasource it is. E.g. RELATIONAL_DATA_SOURCE, XML_FILE_DATA_SOURCE.   |
| datasourcetype    | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].  |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

#### vMetricsSqlResourceLineageCountReport Table

Provides a count of METRICS\_SQL\_RESOURCE and METRICS\_SQL\_RESOURCE\_LINEAGE tables under different scenarios:

TOTAL METRICS SQL RESOURCE COUNT

TOTAL METRICS\_SQL\_RESOURCE COUNT AVAILABLE TO PROCESS

 $TOTAL\ METRICS\_SQL\_RESOURCE\ NOT\ PROCESSED$ 

TOTAL METRICS SQL RESOURCE NOT PROCESSED BY NODE

TOTAL METRICS\_SQL\_RESOURCE\_LINEAGE PROCESSED

TOTAL METRICS SQL RESOURCE LINEAGE PROCESSED BY nodehost

TOTAL METRICS\_SQL\_RESOURCE\_LINEAGE PROCESSED BY STATUS=C=[C]opied lineage

TOTAL METRICS SQL RESOURCE LINEAGE PROCESSED BY STATUS=L=[L]ineage generated

TOTAL METRICS SQL RESOURCE LINEAGE PROCESSED BY nodehost, status=C=[C]opied lineage

 $TOTAL\ METRICS\_SQL\_RESOURCE\_LINEAGE\ PROCESSED\ BY\ nodehost,\ status=L=[L] in eage\ generated$ 

TOTAL METRICS\_SQL\_RESOURCE\_LINEAGE PROCESSED BY nodehost, starttime, status=C=[C]opied lineage

TOTAL METRICS\_SQL\_RESOURCE\_LINEAGE PROCESSED BY nodehost, starttime, status=L=[L]ineage generated

| Column Name   | Column Type  | Definition  |
|---------------|--------------|---|
| SECTION       | CHAR(3)      | A section label used for sorting purposes: 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2 etc. |
| nodehost [k]  | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').                    |
| nodeport [k]  | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.     |
| starttime [k] | TIMESTAMP    | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867       |
| statusdesc    | VARCHAR(310) | A description of the count.   |
| cnt           | BIGINT       | A count of rows.  |

# vPublishedResourcePerRequest Table

Details on published requests correlated with user information. Derived from metrics\_resources\_usage\_hist, metrics\_sessions\_hist, metrics\_requests\_hist.

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| requestid [k]    | DECIMAL(19,0) | The unique request id that is the primary key of this table.  |
| sessionid [fk]   | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.   |
| userid           | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.   |
| user             | VARCHAR(255)  | The user name who connected for this session.   |
| domain           | VARCHAR(255)  | The domain of the user who connected.   |
| fullname         | VARCHAR(255)  | The full name of the user who connected.  |
| mail             | VARCHAR(255)  | The email of the user who connected.  |
| type             | VARCHAR(20)   | Indicates whether the session is of type 'begin' or 'end' or null.  |
| description      | CLOB          | The actual client request or internal DV request.   |
| dataservicename  | VARCHAR(255)  | The published data service name.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                  |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                  |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                  |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                  |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|                  |               | ALL_RESOURCES: null   |
| rowsAffected     | DECIMAL(19,0) | The number of rows affected or returned. The value may be -1.   |
| bytesfromclient  | DECIMAL(19,0) | The total number of bytes received from the client host during this session.  |
| bytestoclient    | DECIMAL(19,0) | The total number of bytes sent to the client host during this session.  |
| starttime [k]    | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867   |
| endtime          | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899   |
| totalduration    | DECIMAL(19,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.   |
| serverduration   | DECIMAL(19,0) | The duration of the request within the server measured in milli-seconds. Divide by 1000 to get minutes.   |
| nodehost [k]     | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]     | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

# $v Request Duration Sql Templates\ Table$

| Column Name | Column Type | Definition |
|-------------|-------------|------------|
|-------------|-------------|------------|

| cluster                    | VARCHAR(255)  | The name of the cluster or null if no cluster.  |
|----------------------------|---------------|---|
| nodehost [k]               | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]               | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| requestid [k]              | DECIMAL(19,0) | The unique request id that is the primary key of this table.  |
| parentid [fk]              | DECIMAL(19,0) | A foreign key back to the requestid within this table. Contains -1 when no parent reference.  |
| sessionid [fk]             | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.   |
| requesttype                | VARCHAR(255)  | The type of request that is stored in the description field. "SQL"=select statement, "SQL Script"=call statement executed, "XSLT, Basic, or Streaming Transformation", "Java Procedure (built-in)", etc.  |
| starttime [k]              | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867   |
| endtime                    | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899   |
| totalduration              | DECIMAL(19,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.   |
| totaldurationStr           | VARCHAR(255)  | The total duration formatted string such as 0 01:02:4.032   |
| totaldurationDays          | DECIMAL(12,4) | The total duration number of days.  |
| totaldurationMinutes       | DECIMAL(12,4) | The total duration number of minutes.   |
| totaldurationHours         | DECIMAL(12,4) | The total duration number of hours.   |
| totaldurationSeconds       | DECIMAL(12,4) | The total duration number of seconds incluing fraction of a second such as 4.032.   |
| serverduration             | DECIMAL(19,0) | The duration of the request within the server measured in milli-seconds. Divide by 1000 to get minutes.   |
| rowsAffected               | DECIMAL(19,0) | The number of rows affected or returned. The value may be -1.   |
| maxmemory                  | DECIMAL(19,0) | The maximum amount of memory used by the request.   |
| maxdisk                    | DECIMAL(19,0) | The maximum amount of disk used by the request. It is not good for a request to used disk.  |
| message                    | CLOB          | The exception message if a request was not successful.  |
| status                     | VARCHAR(20)   | The status of the request [SUCCESS, FAILED].  |
| resourcekind               | VARCHAR(20)   | The type of resource that executed [system, user defined].  |
| dataservicename            | VARCHAR(255)  | The published data service name.  |
| description                | CLOB          | The actual client request or internal DV request.   |
| user                       | VARCHAR(255)  | The user name who connected for this session.   |
| domain                     | VARCHAR(255)  | The domain of the user who connected.   |
| fullname                   | VARCHAR(255)  | The full name of the user who connected.  |
| lastname                   | VARCHAR(255)  | The last name of the user who connected.  |
| firstname                  | VARCHAR(255)  | The first name of the user who connected.   |
| mail                       | VARCHAR(255)  | The email of the user who connected.  |
| kpistatus                  | VARCHAR(25)   | The KPImetrics SQL request processing status [SUCCESS, FAIL]  |
| kpidescriptiontemplate     | VARCHAR(4000) | The template of the actual client request or internal DV request. All literal values have been removed in order to normalize the SQL so it can be used to compare with other requests on a generic basis. The contents are 4000 characters or less which means that queries can be pushed down to the database. |
| numDescriptions            | BIGINT        | The number of related varchar(4000) descriptions. Use this number to determine if searching kpidescriptiontemplate is required.   |
| kpidescriptiontemplateclob | CLOB          | The processed SQL template where all literal values have been removed and the string is greater than 4000 characters. Does not allow for database push-down for searching. Strings are brought into DV for searching.   |

| numDescriptionsClob | BIGINT | The number of related CLOB descriptions. Use this number to determine if searching |
|---------------------|--------|--|
|                     |        | numDescriptionsClob is required.   |

# vRequestExpandedAll Table

Details of a request expanded with user information. All records are displayed. Derived from metrics\_requests\_hist and metrics\_sessions\_hist.

| Column Name         | Column Type   | Definition   |
|---------------------|---------------|--|
| cluster             | VARCHAR(255)  | The name of the cluster or null if no cluster.   |
| nodehost [k]        | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]        | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |
| requestid [k]       | DECIMAL(19,0) | The unique request id that is the primary key of this table.   |
| parentid [fk]       | DECIMAL(19,0) | A foreign key back to the requestid within this table. Contains -1 when no parent reference.   |
| status              | VARCHAR(20)   | The status of the request [SUCCESS, FAILED].   |
| dataservicename     | VARCHAR(255)  | The published data service name.   |
| resourcekind        | VARCHAR(20)   | The type of resource that executed [system, user defined].   |
| starttime [k]       | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867  |
| endtime             | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899  |
| totalduration       | DECIMAL(19,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.  |
| serverduration      | DECIMAL(19,0) | The duration of the request within the server measured in milli-seconds. Divide by 1000 to get minutes.  |
| maxmemory           | DECIMAL(19,0) | The maximum amount of memory used by the request.  |
| maxdisk             | DECIMAL(19,0) | The maximum amount of disk used by the request. It is not good for a request to used disk.   |
| message             | CLOB          | The exception message if a request was not successful.   |
| rowsAffected        | DECIMAL(19,0) | The number of rows affected or returned. The value may be -1.  |
| requesttype         | VARCHAR(255)  | The type of request that is stored in the description field. "SQL"=select statement, "SQL Script"=call statement executed, "XSLT, Basic, or Streaming Transformation", "Java Procedure (built-in)", etc. |
| description         | CLOB          | The actual client request or internal DV request.  |
| sessionid [fk]      | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.  |
| type [k]            | VARCHAR(20)   | Indicates whether the session is of type 'begin' or 'end'.   |
| clienthost          | VARCHAR(255)  | Designates the client host name that connected to DV.  |
| sessiontype         | VARCHAR(40)   | Designates the type session connection [JDBC, HTTP, TASK, etc.].   |
| bytesfromclient     | DECIMAL(19,0) | The total number of bytes received from the client host during this session.   |
| bytestoclient       | DECIMAL(19,0) | The total number of bytes sent to the client host during this session.   |
| userid              | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.  |
| user                | VARCHAR(255)  | The user name who connected for this session.  |
| domain              | VARCHAR(255)  | The domain of the user who connected.  |
| fullname            | VARCHAR(255)  | The full name of the user who connected.   |
| lastname            | VARCHAR(255)  | The last name of the user who connected.   |
| firstname           | VARCHAR(255)  | The first name of the user who connected.  |
| employeenumber      | VARCHAR(255)  | The employee number of the user who connected.   |
| mail                | VARCHAR(255)  | The email of the user who connected.   |
| telephonenumber     | VARCHAR(255)  | The primary telephone number of the user who connected.  |
| friendlycountryname | VARCHAR(255)  | The friendly country name of the user who connected.   |

# vRequestExpandedUD Table

Details of a request expanded with user information. Only records of resourcekind='user defined' are displayed. Derived from metrics\_requests\_hist\_and metrics\_sessions\_hist.

| Column Name         | Column Type   | Definition   |
|---------------------|---------------|--|
| cluster             | VARCHAR(255)  | The name of the cluster or null if no cluster.   |
| nodehost [k]        | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]        | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |
| requestid [k]       | DECIMAL(19,0) | The unique request id that is the primary key of this table.   |
| parentid [fk]       | DECIMAL(19,0) | A foreign key back to the requestid within this table. Contains -1 when no parent reference.   |
| status              | VARCHAR(20)   | The status of the request [SUCCESS, FAILED].   |
| dataservicename     | VARCHAR(255)  | The published data service name.   |
| resourcekind        | VARCHAR(20)   | The type of resource that executed [system, user defined].   |
| starttime [k]       | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867  |
| endtime             | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899  |
| requestdatemonths   | DECIMAL(19,2) | The number of months difference between the request date and the current date.   |
| requestdatedays     | DECIMAL(19,0) | The number of days difference between the request date and the current date.   |
| totalduration       | DECIMAL(19,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.  |
| serverduration      | DECIMAL(19,0) | The duration of the request within the server measured in milli-seconds. Divide by 1000 to get minutes.  |
| maxmemory           | DECIMAL(19,0) | The maximum amount of memory used by the request.  |
| maxdisk             | DECIMAL(19,0) | The maximum amount of disk used by the request. It is not good for a request to used disk.   |
| message             | CLOB          | The exception message if a request was not successful.   |
| rowsAffected        | DECIMAL(19,0) | The number of rows affected or returned. The value may be -1.  |
| requesttype         | VARCHAR(255)  | The type of request that is stored in the description field. "SQL"=select statement, "SQL Script"=call statement executed, "XSLT, Basic, or Streaming Transformation", "Java Procedure (built-in)", etc. |
| description         | CLOB          | The actual client request or internal DV request.  |
| sessionid [fk]      | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.  |
| type [k]            | VARCHAR(20)   | Indicates whether the session is of type 'begin' or 'end'.   |
| clienthost          | VARCHAR(255)  | Designates the client host name that connected to DV.  |
| sessiontype         | VARCHAR(40)   | Designates the type session connection [JDBC, HTTP, TASK, etc.].   |
| bytesfromclient     | DECIMAL(19,0) | The total number of bytes received from the client host during this session.   |
| bytestoclient       | DECIMAL(19,0) | The total number of bytes sent to the client host during this session.   |
| userid              | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.  |
| user                | VARCHAR(255)  | The user name who connected for this session.  |
| domain              | VARCHAR(255)  | The domain of the user who connected.  |
| fullname            | VARCHAR(255)  | The full name of the user who connected.   |
| lastname            | VARCHAR(255)  | The last name of the user who connected.   |
| firstname           | VARCHAR(255)  | The first name of the user who connected.  |
| employeenumber      | VARCHAR(255)  | The employee number of the user who connected.   |
| mail                | VARCHAR(255)  | The email of the user who connected.   |
| telephonenumber     | VARCHAR(255)  | The primary telephone number of the user who connected.  |
| friendlycountryname | VARCHAR(255)  | The friendly country name of the user who connected.   |

# vRequestDurationSqlTemplates Table

This view provides a way to view each request with additional information such as user, augmented LDAP user information, duration brokend down into a formatted string, days, minutes, hours, seconds and a SQL template that can be used to find other requests that are like this request. A SQL template is a normalized string of the actual requests with all literal values removed.

| Column Name          | Column Type   | Definition   |
|----------------------|---------------|--|
| cluster              | VARCHAR(255)  | The name of the cluster or null if no cluster.   |
| nodehost [k]         | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]         | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |
| requestid [k]        | DECIMAL(19,0) | The unique request id that is the primary key of this table.   |
| parentid [fk]        | DECIMAL(19,0) | A foreign key back to the requestid within this table. Contains -1 when no parent reference.   |
| sessionid [fk]       | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.  |
| requesttype          | VARCHAR(255)  | The type of request that is stored in the description field. "SQL"=select statement, "SQL Script"=call statement executed, "XSLT, Basic, or Streaming Transformation", "Java Procedure (built-in)", etc. |
| starttime [k]        | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867  |
| endtime              | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899  |
| totalduration        | DECIMAL(19,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.  |
| totaldurationStr     | VARCHAR(255)  | The total duration formatted string such as 0 01:02:4.032  |
| totaldurationDays    | DECIMAL(12,4) | The total duration number of days.   |
| totaldurationMinutes | DECIMAL(12,4) | The total duration number of minutes.  |
| totaldurationHours   | DECIMAL(12,4) | The total duration number of hours.  |
| totaldurationSeconds | DECIMAL(12,4) | The total duration number of seconds incluing fraction of a second such as 4.032.  |
| serverduration       | DECIMAL(19,0) | The duration of the request within the server measured in milli-seconds. Divide by 1000 to get minutes.  |
| rowsAffected         | DECIMAL(19,0) | The number of rows affected or returned. The value may be -1.  |
| maxmemory            | DECIMAL(19,0) | The maximum amount of memory used by the request.  |
| maxdisk              | DECIMAL(19,0) | The maximum amount of disk used by the request. It is not good for a request to used disk.   |
| message              | CLOB          | The exception message if a request was not successful.   |
| status               | VARCHAR(20)   | The status of the user requests [SUCCESS, FAILED].   |
| resourcekind         | VARCHAR(20)   | The type of resource that executed [system, user defined].   |
| dataservicename      | VARCHAR(255)  | The published data service name.   |
| description          | CLOB          | The actual client request or internal DV request.  |
| user                 | VARCHAR(255)  | The user name who connected for this session.  |
| domain               | VARCHAR(255)  | The domain of the user who connected.  |
| fullname             | VARCHAR(255)  | The full name of the user who connected.   |
| lastname             | VARCHAR(255)  | The last name of the user who connected.   |
| firstname            | VARCHAR(255)  | The first name of the user who connected.  |
| mail                 | VARCHAR(255)  | The email of the user who connected.   |
| kpistatus            | VARCHAR(25)   | The KPImetrics SQL request processing status [SUCCESS, FAIL]   |

| kpidescriptiontemplate     | VARCHAR(4000) | The processed SQL template where all literal values have been removed and the string is less than or equal to 4000 characters. Allows for database push-down for searching. This is more efficient than CLOB for searching. |
|----------------------------|---------------|---|
| numDescriptions            | BIGINT        | The number of related varchar(4000) descriptions. Use this number to determine if searching kpidescriptiontemplate is required.   |
| kpidescriptiontemplateclob | CLOB          | The processed SQL template where all literal values have been removed and the string is greater than 4000 characters. Does not allow for database push-down for searching. Strings are brought into DV for searching.       |
| numDescriptionsClob        | BIGINT        | The number of related CLOB descriptions. Use this number to determine if searching numDescriptionsClob is required.   |

# vRequestsCountsByUser Table

A count of requests by user and date along with the following per request: avg rows, avg bytes from client, avg bytes to client, min total duration, max total duration, min server duration and max server duration.

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| userid             | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.  |
| user               | VARCHAR(255)  | The user name who connected for this session.  |
| domain             | VARCHAR(255)  | The domain of the user who connected.  |
| fullname           | VARCHAR(255)  | The full name of the user who connected.   |
| mail               | VARCHAR(255)  | The email of the user who connected.   |
| dataservicename    | VARCHAR(255)  | The published data service name.   |
| requestdate        | DATE          | The date [YYYY-MM-DD] of the request.  |
| requestcount       | BIGINT        | The number of requests that match the group by criteria. GROUP BY userid, "user", "domain", fullname, mail, dataservicename, CAST(starttime AS DATE), nodehost, nodeport |
| avgrowsaffected    | DECIMAL(19,0) | The average number of rows affected or returned. The value may be -1.  |
| avgbytesfromclient | DECIMAL(19,0) | The average number of bytes received from the client host during this session.   |
| avgbytestoclient   | DECIMAL(19,0) | The average number of bytes sent to the client host during this session.   |
| mintotalduration   | DECIMAL(19,0) | The minimum total duration.  |
| maxtotalduration   | DECIMAL(19,0) | The maximum total duration.  |
| minServerDuration  | DECIMAL(19,0) | The minimum duration of the request within the server measured in milli-seconds. Divide by 1000 to get minutes.  |
| maxServerDuration  | DECIMAL(19,0) | The maximum duration of the request within the server measured in milli-seconds. Divide by 1000 to get minutes.  |
| nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

### vSessions Table

Details for user sessions. Equivalent to metrics\_sessions\_hist.

| Column Name    | Column Type   | Definition  |
|----------------|---------------|---|
| cluster        | VARCHAR(255)  | The name of the cluster or null if no cluster.                                |
| nodehost [k]   | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k]   | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |
| sessionid [fk] | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.                 |

| sessiontype         | VARCHAR(40)   | Designates the type session connection [JDBC, HTTP, TASK, etc.].                            |
|---------------------|---------------|---|
| clienthost          | VARCHAR(255)  | Designates the client host name that connected to DV.                                       |
| type [k]            | VARCHAR(20)   | Indicates whether the session is of type 'begin' or 'end'.                                  |
| logindate           | DATE          | The date [YYYY-MM-DD] of when the session began. Derived from logintime.                    |
| logoutdate          | DATE          | The date [YYYY-MM-DD] of when the session ended. Derived from logouttime.                   |
| logintime [k]       | TIMESTAMP     | The timestamp of when the session started.  |
| logouttime          | TIMESTAMP     | The timestamp of when the session ended   |
| status              | VARCHAR(20)   | The status of the session [ACTIVE, CLOSING].  |
| totalduration       | DECIMAL(19,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes. |
| totalRequests       | DECIMAL(19,0) | The total number of requests [metrics_requests_hist] executed for this session.             |
| bytestoclient       | DECIMAL(19,0) | The total number of bytes sent to the client host during this session.                      |
| bytesfromclient     | DECIMAL(19,0) | The total number of bytes received from the client host during this session.                |
| userid              | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.   |
| user                | VARCHAR(255)  | The user name who connected for this session.   |
| domain              | VARCHAR(255)  | The domain of the user who connected.   |
| fullname            | VARCHAR(255)  | The full name of the user who connected.  |
| lastname            | VARCHAR(255)  | The last name of the user who connected.  |
| firstname           | VARCHAR(255)  | The first name of the user who connected.   |
| mail                | VARCHAR(255)  | The email of the user who connected.  |
| employeenumber      | VARCHAR(255)  | The employee number of the user who connected.  |
| telephonenumber     | VARCHAR(255)  | The primary telephone number of the user who connected.                                     |
| friendlycountryname | VARCHAR(255)  | The friendly country name of the user who connected.  |

# vSessionvUserRequests Table

Details on requests generated by each user session.

| Column Name          | Column Type   | Definition  |
|----------------------|---------------|---|
| cluster              | VARCHAR(255)  | The name of the cluster or null if no cluster.  |
| nodehost [k]         | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]         | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| logindate            | DATE          | The date [YYYY-MM-DD] of when the session began. Derived from logintime.  |
| user                 | VARCHAR(255)  | The user name who connected for this session.   |
| domain               | VARCHAR(255)  | The domain of the user who connected.   |
| clienthost           | VARCHAR(255)  | Designates the client host name that connected to DV.   |
| sessiontype          | VARCHAR(40)   | Designates the type session connection [JDBC, HTTP, TASK, etc.].  |
| sessioncount         | BIGINT        | The count of (sessionid) from metrics_sessions_hist where type='end' and grouped by cluster, nodehost, nodeport, logintime, user, domain, clienthost, sessiontype, lastname, firstname, fullname, employeenumber, mail. |
| requestcount         | BIGINT        | The count of (requestid) from metrics_requests_hist where type='end' and grouped by cluster, nodehost, nodeport, logintime, user, domain, clienthost, sessiontype, lastname, firstname, fullname, employeenumber, mail. |
| totalduration        | DECIMAL(25,0) | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.   |
| totalbytestoclient   | DECIMAL(25,0) | The total number of bytes sent to the client host during this session.  |
| totalbytesfromclient | DECIMAL(25,0) | The total number of bytes received from the client host during this session.  |
| lastname             | VARCHAR(255)  | The full name of the user who connected.  |

| firstname      | VARCHAR(255) | The last name of the user who connected.       |
|----------------|--------------|--|
| fullname       | VARCHAR(255) | The first name of the user who connected.      |
| employeenumber | VARCHAR(255) | The employee number of the user who connected. |
| mail           | VARCHAR(255) | The email of the user who connected.           |

#### resource Definitions

# vAllResources\_GroupBy\_NodehostNodeport Table

Report that provides a count by nodehost and nodeport for the resources that exist in METRICS\_ALL\_RESOURCES

| Column Name | Column Type  | Definition  |
|-------------|--------------|---|
| nodehost    | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport    | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |
| ent         | BIGINT       | The row count for the nodehost and nodeport.                                  |

#### vAllResources Table

Report of all resources currently in the DV repository. Derived from METRICS\_ALL\_RESOURCES and is loaded full each time based on a trigger. The old copy is deleted.

| Column Name      | Column Type   | Definition   |
|------------------|---------------|--|
| loaddate         | TIMESTAMP     | The timestamp of when the record was inserted or loaded.   |
| resourceorigin   | VARCHAR(30)   | The original DV system table in which the resource originated from.  |
|                  |               | [ALL_TABLES  ALL_PROCEDURES ALL_WSDL_OPERATIONS ALL_RESOURCES  ALL_COLUMNS ALL_PARAMETERS]   |
| resourceid       | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.  |
| parentpath       | VARCHAR(4000) | The parent path of the resource.   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK. Also maybe TABLE or PRODEDURE.   |
| resourcesubtype  | VARCHAR(40)   | The DV resource subtype. The further qualifies the precise type of resource. E.g. NONE, SQL_TABLE (view), DATABASE_TABLE (datasource table), SQL_SCRIPT_PROCEDURE (DV procedure), OPERATION_PROCEDURE (web service procedure), plus many more. |
| resourcelinktype | VARCHAR(40)   | The type of resource the published "LINK" is pointing to such as [TABLE, PROCEDURE].   |
| ownerid          | DECIMAL(19,0) | The resource owner unique id.  |
| ownername        | VARCHAR(60)   | The resource owner name.   |
| ownerdomain      | VARCHAR(255)  | The domain of the ownername  |
| guid             | VARCHAR(1024) | The guid of the resource path. Eg. cff5fe78-c3c5-4a81-b134-d497cea5351e  |
| datasourcetype   | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].  |
| dataservicename  | VARCHAR(255)  | The published data service name.   |
| catalogname      | VARCHAR(255)  | The name of the published catalog or null if not applicable.   |
| schemaname       | VARCHAR(255)  | The name of the published schema or null if not applicable.  |

| aata aa w mama  | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent  |
|-----------------|---------------|---|
| categoryname    | VARCHAR(233)  | name or grand-parent name.  |
|                 |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                 |               | ALL COLUMNS: TABLE NAME or SCHEMA NAME if not null  |
|                 |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                 |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                 |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                 |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                 |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                 |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|                 |               | ALL_RESOURCES: null   |
| columnid        | DECIMAL(19,0) | The DV column unique resource id.   |
| columnname      | VARCHAR(255)  | The name of the column.   |
| columntype      | VARCHAR(255)  | The column type base such as varchar, numeric, decimal.   |
| columnsize      | DECIMAL(19,0) | The column type size such as 255 if varchar(255) or 19 if decimal(19,2).  |
| columnscale     | DECIMAL(19,0) | The column type scale such as 2 if decimal(19,2).   |
| columnorder     | DECIMAL(9,0)  | The order in which the column appears in the resource.  |
| columndirection | DECIMAL(9,0)  | The column direction such [4=OUT [table or scalar procedure, 1=IN, 3=CURSOR OUT]  |
| annotation      | CLOB          | The resource annotation.  |
| nodehost [k]    | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]    | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

#### vResourceCount Table

Report of the count of resources where resourcekind='user defined'. Derived from metrics\_resources\_usage\_hist.

| Column Name      | Column Type   | Definition   |
|------------------|---------------|--|
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.   |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| parentpath       | VARCHAR(4000) | The parent path of the resource.   |
| datasourcetype   | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].  |
| dataservicename  | VARCHAR(255)  | The published data service name.   |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.  ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null  ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null  ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null                               |
|                  |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name.  e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct |

|              |              | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct               |
|--------------|--------------|---|
|              |              | ALL_RESOURCES: null   |
| nodehost [k] | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k] | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |
| countname    | INTEGER      | The number of resources for a given resource name.                            |

#### vResourceCountDate Table

Report of the count of resources by date where resourcekind='user defined'. Derived from metrics\_resources\_usage\_hist.

| Column Name       | Column Type   | Definition  |
|-------------------|---------------|---|
| requestdate       | DATE          | The date [YYYY-MM-DD] of the request.   |
| resourceid        | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".  |
| resourcepath [k]  | VARCHAR(4000) | The DV path to the resource.  |
| resourcename      | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcetype [k]  | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| parentpath        | VARCHAR(4000) | The parent path of the resource.  |
| resourcekind      | VARCHAR(20)   | The type of resource that executed [system, user defined].  |
| datasourcetype    | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].   |
| dataservicename   | VARCHAR(255)  | The published data service name.  |
| categoryname      | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                   |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                   |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                   |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                   |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                   |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|                   |               | ALL_RESOURCES: null   |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| countname         | INTEGER       | The number of resources for a given resource name.  |
| requestdatemonths | DECIMAL(19,2) | The number of months difference between the request date and the current date.  |
| requestdatedays   | DECIMAL(19,0) | The number of days difference between the request date and the current date.  |

## vResourceCountUsers Table

Report of the count of resources by user where resourcekind='user defined'. Derived from metrics\_resources\_usage\_hist.

| Column Name | Column Type  | Definition                                    |
|-------------|--------------|---|
| user        | VARCHAR(255) | The user name who connected for this session. |

| domain           | VARCHAR(255)  | The domain of the user who connected.  |
|------------------|---------------|--|
| fullname         | VARCHAR(255)  | The full name of the user who connected.   |
| mail             | VARCHAR(255)  | The email of the user who connected.   |
| resourceid       | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.   |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| parentpath       | VARCHAR(4000) | The parent path of the resource.   |
| resourcekind     | VARCHAR(20)   | The type of resource that executed [system, user defined].   |
| datasourcetype   | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].  |
| dataservicename  | VARCHAR(255)  | The published data service name.   |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.  ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null  ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null  ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null  ALL_VSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is |
|                  |               | the parent folder name of the web service. If no parent folder name then it is the web service dataservice name.   |
|                  |               | e.g. Legacy: /services/webservices/system/admin/ <b>resource</b> /operations/getUsedResources  |
|                  |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct   |
|                  |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct  |
|                  |               | ALL_RESOURCES: null  |
| nodehost [k]     | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]     | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |
| countname        | INTEGER       | The number of resources for a given resource name.   |

### vResourceCountUsersDate Table

Report of the count of resources by user and date where resourcekind='user defined'. Derived from metrics\_resources\_usage\_hist.

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| user             | VARCHAR(255)  | The user name who connected for this session.   |
| domain           | VARCHAR(255)  | The domain of the user who connected.   |
| fullname         | VARCHAR(255)  | The full name of the user who connected.  |
| mail             | VARCHAR(255)  | The email of the user who connected.  |
| requestdate      | DATE          | The date [YYYY-MM-DD] of the request.   |
| resourceid       | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".  |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.                                 |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.                                 |
| parentpath       | VARCHAR(4000) | The parent path of the resource.  |
| resourcekind     | VARCHAR(20)   | The type of resource that executed [system, user defined].                                |
| datasourcetype   | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService]. |

| dataservicename   | VARCHAR(255)  | The published data service name.   |
|-------------------|---------------|--|
| categoryname      | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.  ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null  ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null  ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null  ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is |
|                   |               | the parent folder name of the web service. If no parent folder name then it is the web service dataservice name.  e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources   |
|                   |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct   |
|                   |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct  |
|                   |               | ALL_RESOURCES: null  |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |
| countname         | INTEGER       | The number of resources for a given resource name.   |
| requestdatemonths | DECIMAL(19,2) | The number of months difference between the request date and the current date.   |
| requestdatedays   | DECIMAL(19,0) | The number of days difference between the request date and the current date.   |

### vResourceDistinctPublishedDatabases Table

This table returns a list of all resources published under a database on the DV server derived from metrics\_resources\_usage\_hist.

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| datasourcetype   | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].   |
| dataservicename  | VARCHAR(255)  | The published data service name.  |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                  |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                  |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                  |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                  |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|                  |               | ALL_RESOURCES: null   |

#### vResourceDistinctPublishedResources Table

This table returns a list of all distinct resources published under a database on the DV server derived from metrics\_resources\_usage\_hist.

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| datasourcetype   | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].   |
| dataservicename  | VARCHAR(255)  | The published data service name.  |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                  |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                  |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                  |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                  |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|                  |               | ALL_RESOURCES: null   |

### vResourceDistinctPublishedWebServices Table

This table returns a list of all resources published as a web service operation on the DV server derived from metrics\_resources\_usage\_hist.

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| datasourcetype   | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].   |
| dataservicename  | VARCHAR(255)  | The published data service name.  |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                  |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                  |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                  |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                  |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |

| <br> |                     |
|------|---------------------|
|      | ALL_RESOURCES: null |

#### vResourceDistinctResources Table

This table returns a list of all distinct resources on the DV server derived from metrics\_resources\_usage\_hist.

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| datasourcetype   | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].   |
| dataservicename  | VARCHAR(255)  | The published data service name.  |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                  |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                  |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                  |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                  |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|                  |               | ALL_RESOURCES: null   |

#### vResourcesPublishedNotUsed Table

Report of all published resources present on the DV server that have not been used derived from METRICS\_ALL\_RESOURCES, metrics\_resources\_usage\_hist.

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| parentpath       | VARCHAR(4000) | The parent path of the resource.  |
| dataservicename  | VARCHAR(255)  | The published data service name.  |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                  |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                  |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |

| e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct |
|--|
| e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct                    |
| ALL_RESOURCES: null  |

# vResourceUsageAll Table

Report of all resources historically where resourcekind='user defined' and 'system'. Derived from METRICS\_ALL\_RESOURCES, metrics\_resources\_usage\_hist.

| Column Name       | Column Type   | Definition  |
|-------------------|---------------|---|
| cluster           | VARCHAR(255)  | The name of the cluster or null if no cluster.  |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| parentid [fk]     | DECIMAL(19,0) | A foreign key back to the requestid within this table. Contains -1 when no parent reference.  |
| requestid [k]     | DECIMAL(19,0) | The unique request id that is the primary key of this table.  |
| sessionid [fk]    | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.   |
| requestdate       | DATE          | The date [YYYY-MM-DD] of the request.   |
| starttime [k]     | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867   |
| endtime           | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899   |
| requestdatemonths | DECIMAL(19,2) | The number of months difference between the request date and the current date.  |
| requestdatedays   | DECIMAL(19,0) | The number of days difference between the request date and the current date.  |
| categoryname      | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                   |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                   |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                   |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                   |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                   |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                   |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|                   |               | ALL_RESOURCES: null   |
| dataservicename   | VARCHAR(255)  | The published data service name.  |
| datasourcepath    | VARCHAR(255)  | The DV path to the published datasource/dataservice [/services/databases/ <name>, /services/webservices/<path name>]</path name></name>   |
| datasourcetype    | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].   |
| resourcekind      | VARCHAR(20)   | The type of resource that executed [system, user defined].  |
| resourceguid      | VARCHAR(40)   | The guid of the resource path. Eg. cff5fe78-c3c5-4a81-b134-d497cea5351e   |
| resourceid        | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin".  |
| resourcetype [k]  | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| resourcename      | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| parentname        | VARCHAR(255)  | The parent name of the resource. A.k.a. schema name if from published database.   |
| grandparentname   | VARCHAR(255)  | The grand-parent name of the resource. A.k.a. catalog name if from published database.  |
| resourcepath [k]  | VARCHAR(4000) | The DV path to the resource.  |
| parentpath        | VARCHAR(4000) | The parent path of the resource.  |

| userid              | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.         |
|---------------------|---------------|---|
| user                | VARCHAR(255)  | The user name who connected for this session.           |
| domain              | VARCHAR(255)  | The domain of the user who connected.                   |
| group               | VARCHAR(255)  | The group of the user who connected.                    |
| fullname            | VARCHAR(255)  | The full name of the user who connected.                |
| lastname            | VARCHAR(255)  | The last name of the user who connected.                |
| firstname           | VARCHAR(255)  | The first name of the user who connected.               |
| mail                | VARCHAR(255)  | The email of the user who connected.                    |
| employeenumber      | VARCHAR(255)  | The employee number of the user who connected.          |
| telephonenumber     | VARCHAR(255)  | The primary telephone number of the user who connected. |
| friendlycountryname | VARCHAR(255)  | The friendly country name of the user who connected.    |

# vResourceUsageUD Table

Report of all resources where resourcekind='user defined'. Derived from metrics\_resources\_usage\_hist.

| Column Name       | Column Type   | Definition  |
|-------------------|---------------|---|
| cluster           | VARCHAR(255)  | The name of the cluster or null if no cluster.  |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| parentid [fk]     | DECIMAL(19,0) | A foreign key back to the requestid within this table. Contains -1 when no parent reference.  |
| requestid [k]     | DECIMAL(19,0) | The unique request id that is the primary key of this table.  |
| sessionid [fk]    | DECIMAL(19,0) | A unique session id and foreign key to metrics_sessions_hist.   |
| requestdate       | DATE          | The date [YYYY-MM-DD] of the request.   |
| starttime [k]     | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867   |
| endtime           | TIMESTAMP     | The timestamp of when the request completed. E.g. 2020-01-06 10:19:36.899   |
| requestdatemonths | DECIMAL(19,2) | The number of months difference between the request date and the current date.  |
| requestdatedays   | DECIMAL(19,0) | The number of days difference between the request date and the current date.  |
| categoryname      | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.  ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null  ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null  ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null  ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name.  e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct  ALL RESOURCES: null |
| dataservicename   | VARCHAR(255)  | The published data service name.  |
| datasourcepath    | VARCHAR(255)  | The DV path to the published datasource/dataservice [/services/databases/ <name>,     /services/webservices/<path name>]</path name></name>   |
| datasourcetype    | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].   |
| resourcekind      | VARCHAR(20)   | The type of resource that executed [system, user defined].  |

| resourceguid        | VARCHAR(40)   | The guid of the resource path. Eg. cff5fe78-c3c5-4a81-b134-d497cea5351e                  |
|---------------------|---------------|--|
| resourceid          | DECIMAL(19,0) | The unique resource id which comes from the DV system tables listed in "resourceorigin". |
| resourcetype [k]    | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.                                |
| resourcename        | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.                                |
| parentname          | VARCHAR(255)  | The parent name of the resource. A.k.a. schema name if from published database.          |
| grandparentname     | VARCHAR(255)  | The grand-parent name of the resource. A.k.a. catalog name if from published database.   |
| resourcepath [k]    | VARCHAR(4000) | The DV path to the resource.   |
| parentpath          | VARCHAR(4000) | The parent path of the resource.   |
| userid              | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.  |
| user                | VARCHAR(255)  | The user name who connected for this session.  |
| domain              | VARCHAR(255)  | The domain of the user who connected.  |
| group               | VARCHAR(255)  | The group of the user who connected.   |
| fullname            | VARCHAR(255)  | The full name of the user who connected.   |
| lastname            | VARCHAR(255)  | The last name of the user who connected.   |
| firstname           | VARCHAR(255)  | The first name of the user who connected.  |
| mail                | VARCHAR(255)  | The email of the user who connected.   |
| employeenumber      | VARCHAR(255)  | The employee number of the user who connected.   |
| telephonenumber     | VARCHAR(255)  | The primary telephone number of the user who connected.                                  |
| friendlycountryname | VARCHAR(255)  | The friendly country name of the user who connected.                                     |

# resourceDataCount Definitions

# getResourceDataCount Procedure

This procedure returns a list of the top N most frequently accessed resources for the specified data range. Each row includes a count of the number of rows of data each resource contains.

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| topN             | INTEGER       | IN – The top number of records to return.   |
| fromdate         | DATE          | IN - The from date range.   |
| todate           | DATE          | IN - The to date range.   |
| resourcepath [k] | VARCHAR(4000) | OUT - The DV path to the resource.  |
| resourcename     | VARCHAR(255)  | OUT - The name of the resource. A.k.a. table or procedure name.   |
| resourcetype [k] | VARCHAR(40)   | OUT - The DV resource type. If published, then it will be LINK.   |
| parentpath       | VARCHAR(4000) | OUT - The parent path of the resource.  |
| dataservicename  | VARCHAR(255)  | OUT - The published data service name.  |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                  |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                  |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |

|                    |        | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct |
|--------------------|--------|--|
|                    |        | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct                    |
|                    |        | ALL_RESOURCES: null  |
| resourceusagecount | BIGINT | OUT – The number of resources.   |
| datarowcount       | BIGINT | OUT – The data count for the resource.   |

# resourceMetadata Definitions

### vResourceListAllPublishedResources Table

This table returns a list of all published resources present on the DV server metadata catalog derived from the cached METRICS\_ALL\_RESOURCES.

| Column Name      | Column Type   | Definition  |
|------------------|---------------|---|
| resourcename     | VARCHAR(255)  | The name of the resource. A.k.a. table or procedure name.   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.  |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.   |
| publishedtype    | VARCHAR(11)   | The type of datasource that the published resource belongs to [DATABASE WEB_SERVICE]  |
| datasourcetype   | VARCHAR(255)  | The type of published datasource [VirtualRelational   VirtualWsdl   CompositeWebService].   |
| dataservicename  | VARCHAR(255)  | The published data service name.  |
| categoryname     | VARCHAR(255)  | The category name of the resource. A normalized name from either the resource name, parent name or grand-parent name.   |
|                  |               | ALL_TABLES: TABLE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_COLUMNS: TABLE_NAME or SCHEMA_NAME if not null  |
|                  |               | ALL_PROCEDURES: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_PARAMETERS: PROCEDURE_NAME or SCHEMA_NAME if not null   |
|                  |               | ALL_WSDL_OPERATIONS: If legacy web service then it is the service name otherwise it is the parent folder name of the web service. If no parent folder name then it is the web service dataservice name. |
|                  |               | e.g. Legacy: /services/webservices/system/admin/resource/operations/getUsedResources  |
|                  |               | e.g. Non-Legacy: /services/webservices/GrandParent/Parent/CustomerWS/LookupProduct  |
|                  |               | e.g. Non-Legacy: /services/webservices/CustomerWS/LookupProduct   |
|                  |               | ALL_RESOURCES: null   |

# systemUsage Definitions

### vCpuMemUtilization Table

Details on system CPU and memory utilization. Derived from METRICS\_CPU\_MEMORY\_CHECKER.

| Column Name      | Column Type   | Definition   |
|------------------|---------------|--|
| currenttimestamp | TIMESTAMP     | The current event timestamp.   |
| cpuusedpercent   | DECIMAL(10,2) | The system CPU utilization (used) percent.   |
| memoryusedmb     | DECIMAL(10,2) | The system memory used in MB. This will always be showing high since DV takes the configured amount of memory at startup time. This is only a good guage of potential other processes running on the same server as DV if a large fluctuation is detected. |
| memoryavailmb    | DECIMAL(10,2) | The system memory available in MB. Counterpart to the above statement.   |

| nodehost [k] | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
|--------------|--------------|---|
| nodeport [k] | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

## vDatasourceConnectionChanges Table

Details on data sources connection changes. Derived from METRICS\_SYS\_DATASOURCES which was cached from <code>/services/databases/system/SYS\_DATASOURCES</code>.

| Column Name            | Column Type   | Definition  |
|------------------------|---------------|---|
| historyid [pk]         | DECIMAL(19,0) | A unique generated id for this row.   |
| previoushistoryid [fk] | DECIMAL(19,0) | A foreign key back to the same table and the historyid which connects one record to another record ina sort of a lineage of history which allows the viewer to place the events in order.   |
| iscurrent              | INTEGER       | Indicates the current datasource history record. 1=current. 0=not current.  |
| isdeleted              | INTEGER       | Indicates whether the datasource has been deleted since the last time the Cache_SYS_DATASOURCES was executed. 1=deleted. 0=not deleted.   |
| eventtime              | TIMESTAMP     | The timestamp of when the row was recorded to the table.  |
| sourceid               | DECIMAL(19,0) | The unique DV datasource id.  |
| sourcename             | VARCHAR(255)  | The DV datasource name.   |
| sourcetype             | VARCHAR(60)   | The adapter type of the datasource such as Oracle, PostgresSQL, SqlServer, Composite, Rest, Wsdl, File, Netezza, MsExcel(POI), Ldap, MySql, XmlFile, Jdbc, DB2, etc.  |
| sourcecategory         | VARCHAR(60)   | The category of the datasource such as RELATIONAL, FILE, SERVICE, etc.  |
| ownerid                | DECIMAL(19,0) | The resource owner unique id.   |
| owner                  | VARCHAR(255)  | The resource owner name.  |
| parentpath             | VARCHAR(4000) | The parent path of the resource.  |
| resourcepath [k]       | VARCHAR(4000) | The DV path to the resource.  |
| status                 | VARCHAR(20)   | The status of the datasource [UP, DOWN, DISABLED].  |
| statuschangeflag       | DECIMAL(19,0) | The status change flag indicates if the datasource changed from the previous time. NULL if first entry. 0=no change, 1=changed since last record.   |
| connectionchangeflag   | DECIMAL(19,0) | The connection change flag indicates if the datasource connection information changed since the previous time. NULL if first entry. 0=no change. 1=changed since last record.   |
| connectionchangelist   | VARCHAR(255)  | The connection change list provides information on what changed.  STATUS_CHANGE - The status of the datasource has changed such as UP to DOWN.  CONN_HOST_NAME - The connection host name changed since the last record.  CONN_PORT - The connection port changed since the last record.  CONN_LOGIN_NAME - The connection login name changed since the last record.  CONN_LOGIN_VALUE - The connection login value changed since the last record.  CONN_DATABASE_NAME - The connection database name changed since the last record.  CONN_DATABASE_TYPE - The connection database type changed since the last record.  CONN_URL_OR_ROOT - The connection URL or root changed since the last record.  CONN_CACHE_STATUS - The connection cache status resource path changed since the last record.  CONN_CACHE_TRACKING - The connection cache tracking resource path changed since the last record.  CONN_CREATED_BY - The connection created by name changed since the last record.  CONN_CREATED_DATE - The connection created date changed since the last record.  CONN_MODIFIED_DATE - The connection modified date changed since the last record. |
| numrequests            | DECIMAL(19,0) | The numer of requests that have been executed during the datasource lifetime.   |

| activerequests    | DECIMAL(19,0) | The number of active requests being executed at this point in time (eventtime).  |
|-------------------|---------------|--|
| maxconn           | DECIMAL(19,0) | The maximum configured connections on the advanced tab.  |
| numcurrentconn    | DECIMAL(19,0) | The number of current connections at this point in time (eventtime).   |
| numinuseconn      | DECIMAL(19,0) | The number of "in use" connections at this point in time (eventtime).  |
| numlogins         | DECIMAL(19,0) | The number of logins during the datasource lifetime.   |
| numlogouts        | DECIMAL(19,0) | The number of logouts during the datasource lifetime.  |
| bytesto           | DECIMAL(19,0) | The number of estimated bytes sent into the datasource.  |
| bytesfrom         | DECIMAL(19,0) | The numer of estimated bytes sent from the datasource.   |
| message           | VARCHAR(4000) | The exception message if a request was not successful.   |
| connhostname      | VARCHAR(4000) | The connection host name or ip address.  |
| connport          | INTEGER       | The connection port.   |
| connloginname     | VARCHAR(255)  | The connection login name.   |
| connloginvalue    | VARCHAR(255)  | The connection login value.  |
| conndatabasename  | VARCHAR(255)  | The connection database name.  |
| conndatabasetype  | VARCHAR(255)  | The connection database type such as Oracle, PostgresSQL, SqlServer, Composite, Rest, Wsdl, File, Netezza, MsExcel(POI), Ldap, MySql, XmlFile, Jdbc, DB2, etc. |
| connurlorroot     | VARCHAR(4000) | The connection URL or root. URL if relational. Root if file.   |
| conncachestatus   | VARCHAR(4000) | The connection cache status table path or null if not applicable.  |
| conncachetracking | VARCHAR(4000) | The connection cache tracking table path or null if not applicable.  |
| conncreatedby     | VARCHAR(255)  | The connection created by user name.   |
| conncreateddate   | TIMESTAMP     | The connection created date (timestamp).   |
| connmodifiedby    | VARCHAR(255)  | The connection modified by user name.  |
| connmodifieddate  | TIMESTAMP     | The connection modified date (timestamp).  |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

# vDatasourceCurrentStatusChanges Table

Details on "current" data source status changes. Derived from METRICS\_SYS\_DATASOURCES WHERE ISCURRENT=1 which was cached from /services/databases/system/SYS\_DATASOURCES.

| Column Name            | Column Type   | Definition  |
|------------------------|---------------|---|
| iscurrent              | INTEGER       | Indicates the current datasource history record. 1=current. 0=not current.  |
| sourceid               | DECIMAL(19,0) | The unique DV datasource id.  |
| sourcename             | VARCHAR(255)  | The DV datasource name.   |
| resourcepath [k]       | VARCHAR(4000) | The DV path to the resource.  |
| historyid [pk]         | DECIMAL(19,0) | A unique generated id for this row.   |
| previoushistoryid [fk] | DECIMAL(19,0) | A foreign key back to the same table and the historyid which connects one record to another record ina sort of a lineage of history which allows the viewer to place the events in order. |
| new_status             | VARCHAR(20)   | The new status change of the datasource [UP, DOWN, DISABLED].   |
| previous_status        | VARCHAR(20)   | The previous status of the datasource [UP, DOWN, DISABLED].   |
| new_eventtime          | TIMESTAMP     | The new timestamp of when the row was recorded to the table.  |
| previous_eventtime     | TIMESTAMP     | The previous timestamp of when the row was recorded to the table.   |
| elapsed_time_minutes   | DECIMAL(18,2) | The elapsed time in minutes between the previous and new eventtime.   |

| status_change                 | SMALLINT      | The changed status of the datasource [UP, DOWN, DISABLED].  |
|-------------------------------|---------------|---|
| new_message                   | VARCHAR(4000) | The new exception message or null if not applicable.  |
| previous_message              | VARCHAR(4000) | The previous exception message or null if not applicable.   |
| connectionchangeflag          | DECIMAL(19,0) | The connection change flag indicates if the datasource connection information changed since the previous time. NULL if first entry. 0=no change. 1=changed since last record. |
| new_connectionchangelist      | VARCHAR(255)  | The "new" connection change list provides information on what changed.  |
|                               |               | STATUS_CHANGE - The status of the datasource has changed such as UP to DOWN.  |
|                               |               | CONN_HOST_NAME - The connection host name changed since the last record.  |
|                               |               | CONN_PORT - The connection port changed since the last record.  |
|                               |               | CONN_LOGIN_NAME - The connection login name changed since the last record.  |
|                               |               | CONN_LOGIN_VALUE - The connection login value changed since the last record.  |
|                               |               | CONN_DATABASE_NAME - The connection database name changed since the last record.  |
|                               |               | CONN_DATABASE_TYPE - The connection datasse type changed since the last record.   |
|                               |               | CONN_URL_OR_ROOT - The connection URL or root changed since the last record.  |
|                               |               | CONN_CACHE_STATUS - The connection cache status resource path changed since the last record.  |
|                               |               | CONN_CACHE_TRACKING - The connection cache tracking resource path changed since the last record.  |
|                               |               | CONN_CREATED_BY - The connection created by name changed since the last record.   |
|                               |               | CONN_CREATED_DATE - The connection created date changed since the last record.  |
|                               |               | CONN_MODIFIED_DATE - The connection modified date changed since the last record.  |
|                               |               | CONN_MODIFIED_BY - The connection modified by name changed since the last record.   |
| previous_connectionchangelist | VARCHAR(255)  | The "previous" connection change list provides information on what happened previously.   |
|                               |               | STATUS_CHANGE - The status of the datasource has changed such as UP to DOWN.  |
|                               |               | CONN_HOST_NAME - The connection host name changed since the last record.  |
|                               |               | CONN_PORT - The connection port changed since the last record.  |
|                               |               | CONN_LOGIN_NAME - The connection login name changed since the last record.  |
|                               |               | CONN_LOGIN_VALUE - The connection login value changed since the last record.  |
|                               |               | CONN_DATABASE_NAME - The connection database name changed since the last record.  |
|                               |               | CONN_DATABASE_TYPE - The connection datase type changed since the last record.  |
|                               |               | CONN_URL_OR_ROOT - The connection URL or root changed since the last record.  |
|                               |               | CONN_CACHE_STATUS - The connection cache status resource path changed since the last record.  |
|                               |               | CONN_CACHE_TRACKING - The connection cache tracking resource path changed since the last record.  |
|                               |               | CONN_CREATED_BY - The connection created by name changed since the last record.   |
|                               |               | CONN_CREATED_DATE - The connection created date changed since the last record.  |
|                               |               | CONN_MODIFIED_DATE - The connection modified date changed since the last record.  |
|                               |               | CONN_MODIFIED_BY - The connection modified by name changed since the last record.   |
|                               |               |   |

# vDatasourceStatusChanges Table

Details on "all" data source status changes. Derived from METRICS\_SYS\_DATASOURCES which was cached from /services/databases/system/SYS\_DATASOURCES.

| Column Name | Column Type   | Definition   |
|-------------|---------------|--|
| iscurrent   | INTEGER       | Indicates the current datasource history record. 1=current. 0=not current. |
| sourceid    | DECIMAL(19,0) | The unique DV datasource id.   |
| sourcename  | VARCHAR(255)  | The DV datasource name.  |

| resourcepath [k]              | VARCHAR(4000) | The DV path to the resource.  |
|-------------------------------|---------------|---|
| historyid [pk]                | DECIMAL(19,0) | A unique generated id for this row.   |
| previoushistoryid [fk]        | DECIMAL(19,0) | A foreign key back to the same table and the historyid which connects one record to another record ina sort of a lineage of history which allows the viewer to place the events in order. |
| new_status                    | VARCHAR(20)   | The "new" changed status of the datasource [UP, DOWN, DISABLED].  |
| previous_status               | VARCHAR(20)   | The "previous" changed status of the datasource [UP, DOWN, DISABLED].   |
| new_eventtime                 | TIMESTAMP     | The new timestamp of when the row was recorded to the table.  |
| previous_eventtime            | TIMESTAMP     | The previous timestamp of when the row was recorded to the table.   |
| elapsed_time_minutes          | DECIMAL(18,2) | The total elapsed time in minutes.  |
| status_change                 | SMALLINT      | The changed status of the datasource [UP, DOWN, DISABLED].  |
| new_message                   | VARCHAR(4000) | The new exception message or null if not applicable.  |
| previous_message              | VARCHAR(4000) | The previous exception message or null if not applicable.   |
| connectionchangeflag          | DECIMAL(19,0) | The connection change flag indicates if the datasource connection information changed since the previous time. NULL if first entry. 0=no change. 1=changed since last record.             |
| new_connectionchangelist      | VARCHAR(255)  | The "new" connection change list provides information on what changed.  |
|                               |               | STATUS_CHANGE - The status of the datasource has changed such as UP to DOWN.  |
|                               |               | CONN_HOST_NAME - The connection host name changed since the last record.  |
|                               |               | CONN_PORT - The connection port changed since the last record.  |
|                               |               | CONN_LOGIN_NAME - The connection login name changed since the last record.  |
|                               |               | CONN_LOGIN_VALUE - The connection login value changed since the last record.  |
|                               |               | CONN_DATABASE_NAME - The connection database name changed since the last record.  |
|                               |               | CONN_DATABASE_TYPE - The connection dataset ype changed since the last record.  |
|                               |               | CONN_URL_OR_ROOT - The connection URL or root changed since the last record.  CONN_CACHE_STATUS - The connection cache status resource path changed since the last record.                |
|                               |               | CONN_CACHE_TRACKING - The connection cache tracking resource path changed since the last record.  |
|                               |               | CONN_CREATED_BY - The connection created by name changed since the last record.   |
|                               |               | CONN_CREATED_DATE - The connection created date changed since the last record.  |
|                               |               | CONN_MODIFIED_DATE - The connection modified date changed since the last record.  |
|                               |               | CONN_MODIFIED_BY - The connection modified by name changed since the last record.   |
| previous_connectionchangelist | VARCHAR(255)  | The "previous" connection change list provides information on what happened previously.   |
|                               |               | STATUS_CHANGE - The status of the datasource has changed such as UP to DOWN.  |
|                               |               | CONN_HOST_NAME - The connection host name changed since the last record.  |
|                               |               | CONN_PORT - The connection port changed since the last record.  |
|                               |               | CONN_LOGIN_NAME - The connection login name changed since the last record.  |
|                               |               | CONN_LOGIN_VALUE - The connection login value changed since the last record.  |
|                               |               | CONN_DATABASE_NAME - The connection database name changed since the last record.  |
|                               |               | CONN_DATABASE_TYPE - The connection datasee type changed since the last record.   |
|                               |               | CONN_URL_OR_ROOT - The connection URL or root changed since the last record.  CONN_CACHE_STATUS - The connection cache status resource path changed since the last record.                |
|                               |               | CONN_CACHE_TRACKING - The connection cache tracking resource path changed since the last record.  |
|                               |               | CONN CREATED BY - The connection created by name changed since the last record.   |
|                               | 1             |   |
|                               |               | CONN_CREATED_DATE - The connection created date changed since the last record.  |

CONN\_MODIFIED\_BY - The connection modified by name changed since the last record.

# vDatasourceUsage Table

Details on data sources usage. Derived from METRICS\_SYS\_DATASOURCES which was cached from <code>/services/databases/system/SYS\_DATASOURCES</code>.

| Column Name            | Column Type   | Definition   |
|------------------------|---------------|--|
| historyid [pk]         | DECIMAL(19,0) | A unique generated id for this row.  |
| previoushistoryid [fk] | DECIMAL(19,0) | A foreign key back to the same table and the historyid which connects one record to another record ina sort of a lineage of history which allows the viewer to place the events in order.  |
| iscurrent              | INTEGER       | Indicates the current datasource history record. 1=current. 0=not current.   |
| isdeleted              | INTEGER       | Indicates whether the datasource has been deleted since the last time the Cache_SYS_DATASOURCES was executed. 1=deleted. 0=not deleted.  |
| eventtime              | TIMESTAMP     | The timestamp of when the row was recorded to the table.   |
| sourceid               | DECIMAL(19,0) | The unique DV datasource id.   |
| sourcename             | VARCHAR(255)  | The DV datasource name.  |
| sourcetype             | VARCHAR(60)   | The adapter type of the datasource such as Oracle, PostgresSQL, SqlServer, Composite, Rest, Wsdl, File, Netezza, MsExcel(POI), Ldap, MySql, XmlFile, Jdbc, DB2, etc.   |
| sourcecategory         | VARCHAR(60)   | The category of the datasource such as RELATIONAL, FILE, SERVICE, etc.   |
| ownerid                | DECIMAL(19,0) | The resource owner unique id.  |
| owner                  | VARCHAR(255)  | The resource owner name.   |
| parentpath             | VARCHAR(4000) | The parent path of the resource.   |
| resourcepath [k]       | VARCHAR(4000) | The DV path to the resource.   |
| status                 | VARCHAR(20)   | The status of the datasource [UP, DOWN, DISABLED].   |
| statuschangeflag       | DECIMAL(19,0) | The status change flag indicates if the datasource changed from the previous time. NULL if first entry. 0=no change, 1=changed since last record.  |
| connectionchangeflag   | DECIMAL(19,0) | The connection change flag indicates if the datasource connection information changed since the previous time. NULL if first entry. 0=no change. 1=changed since last record.  |
| connectionchangelist   | VARCHAR(255)  | The connection change list provides information on what changed.  STATUS_CHANGE - The status of the datasource has changed such as UP to DOWN.  CONN_HOST_NAME - The connection host name changed since the last record.  CONN_PORT - The connection port changed since the last record.  CONN_LOGIN_NAME - The connection login name changed since the last record.  CONN_LOGIN_VALUE - The connection login value changed since the last record.  CONN_DATABASE_NAME - The connection database name changed since the last record.  CONN_DATABASE_TYPE - The connection dataase type changed since the last record.  CONN_URL_OR_ROOT - The connection URL or root changed since the last record.  CONN_CACHE_STATUS - The connection cache status resource path changed since the last record.  CONN_CACHE_TRACKING - The connection cache tracking resource path changed since the last record.  CONN_CREATED_BY - The connection created by name changed since the last record.  CONN_CREATED_DATE - The connection created date changed since the last record.  CONN_MODIFIED_DATE - The connection modified date changed since the last record. |
| numrequests            | DECIMAL(19,0) | The numer of requests that have been executed during the datasource lifetime.  |
| activerequests         | DECIMAL(19,0) | The number of active requests being executed at this point in time (eventtime).  |
| maxconn                | DECIMAL(19,0) | The maximum configured connections on the advanced tab.  |
| numcurrentconn         | DECIMAL(19,0) | The number of current connections at this point in time (eventtime).   |

| numinuseconn      | DECIMAL(19,0) | The number of "in use" connections at this point in time (eventtime).  |
|-------------------|---------------|--|
| numlogins         | DECIMAL(19,0) | The number of logins during the datasource lifetime.   |
| numlogouts        | DECIMAL(19,0) | The number of logouts during the datasource lifetime.  |
| bytesto           | DECIMAL(19,0) | The number of estimated bytes sent into the datasource.  |
| bytesfrom         | DECIMAL(19,0) | The numer of estimated bytes sent from the datasource.   |
| message           | VARCHAR(4000) | The exception message if a request was not successful.   |
| connhostname      | VARCHAR(4000) | The connection host name or ip address.  |
| connport          | INTEGER       | The connection port.   |
| connloginname     | VARCHAR(255)  | The connection login name.   |
| connloginvalue    | VARCHAR(255)  | The connection login value.  |
| conndatabasename  | VARCHAR(255)  | The connection database name.  |
| conndatabasetype  | VARCHAR(255)  | The connection database type such as Oracle, PostgresSQL, SqlServer, Composite, Rest, Wsdl, File, Netezza, MsExcel(POI), Ldap, MySql, XmlFile, Jdbc, DB2, etc. |
| connurlorroot     | VARCHAR(4000) | The connection URL or root. URL if relational. Root if file.   |
| conncachestatus   | VARCHAR(4000) | The connection cache status table path or null if not applicable.  |
| conneachetracking | VARCHAR(4000) | The connection cache tracking table path or null if not applicable.  |
| conncreatedby     | VARCHAR(255)  | The connection created by user name.   |
| conncreateddate   | TIMESTAMP     | The connection created date (timestamp).   |
| connmodifiedby    | VARCHAR(255)  | The connection modified by user name.  |
| connmodifieddate  | TIMESTAMP     | The connection modified date (timestamp).  |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

# vDatasourceUsageCurrent Table

 $Details \ on \ current \ data \ sources \ usage. \ Derived \ from \ METRICS\_SYS\_DATASOURCES \ which \ was \ cached \ from \ /services/databases/system/SYS\_DATASOURCES$ 

| Column Name            | Column Type   | Definition  |
|------------------------|---------------|---|
| historyid [pk]         | DECIMAL(19,0) | A unique generated id for this row.   |
| previoushistoryid [fk] | DECIMAL(19,0) | A foreign key back to the same table and the historyid which connects one record to another record ina sort of a lineage of history which allows the viewer to place the events in order. |
| iscurrent              | INTEGER       | Indicates the current datasource history record. 1=current. 0=not current.  |
| isdeleted              | INTEGER       | Indicates whether the datasource has been deleted since the last time the Cache_SYS_DATASOURCES was executed. 1=deleted. 0=not deleted.   |
| eventtime              | TIMESTAMP     | The timestamp of when the row was recorded to the table.  |
| sourceid               | DECIMAL(19,0) | The unique DV datasource id.  |
| sourcename             | VARCHAR(255)  | The DV datasource name.   |
| sourcetype             | VARCHAR(60)   | The adapter type of the datasource such as Oracle, PostgresSQL, SqlServer, Composite, Rest, Wsdl, File, Netezza, MsExcel(POI), Ldap, MySql, XmlFile, Jdbc, DB2, etc.                      |
| sourcecategory         | VARCHAR(60)   | The category of the datasource such as RELATIONAL, FILE, SERVICE, etc.  |
| ownerid                | DECIMAL(19,0) | The resource owner unique id.   |
| owner                  | VARCHAR(255)  | The resource owner name.  |
| parentpath             | VARCHAR(4000) | The parent path of the resource.  |
| resourcepath [k]       | VARCHAR(4000) | The DV path to the resource.  |
| status                 | VARCHAR(20)   | The status of the datasource [UP, DOWN, DISABLED].  |

| first entry. 0=no change, 1=changed since last record.  connectionchangeflag DECIMAL(19,0) The connection change flag indicates if the datasource connection information change the previous time. NULL if first entry. 0=no change. 1=changed since last reconnectionchangelist VARCHAR(255) The connection change list provides information on what changed. | nged since    |
|--|---------------|
|  | ord           |
| The connection change has provided information on what changed.  | Joru.         |
| STATUS CHANGE - The status of the datasource has changed such as UP to DO  | WN            |
| CONN_HOST_NAME - The connection host name changed since the last record.   | ,,,,,         |
| CONN_PORT - The connection port changed since the last record.   |               |
| CONN LOGIN NAME - The connection login name changed since the last record  | d.            |
| CONN_LOGIN_VALUE - The connection login value changed since the last reco  |               |
| CONN DATABASE NAME - The connection database name changed since the l  |               |
| CONN_DATABASE_TYPE - The connection datasse type changed since the last  |               |
| CONN URL OR ROOT - The connection URL or root changed since the last rec   |               |
| CONN_CACHE_STATUS - The connection cache status resource path changed so record.   | ince the last |
| CONN CACHE TRACKING - The connection cache tracking resource path char   | iged since    |
| the last record.   | Ü             |
| CONN_CREATED_BY - The connection created by name changed since the last to   | ecord.        |
| CONN_CREATED_DATE - The connection created date changed since the last re  | cord.         |
| CONN_MODIFIED_DATE - The connection modified date changed since the last   | record.       |
| CONN_MODIFIED_BY - The connection modified by name changed since the la  | st record.    |
| numrequests DECIMAL(19,0) The numer of requests that have been executed during the datasource lifetime.  |               |
| active requests DECIMAL(19,0) The number of active requests being executed at this point in time (eventtime).  |               |
| maxconn DECIMAL(19,0) The maximum configured connections on the advanced tab.  |               |
| numcurrentconn DECIMAL(19,0) The number of current connections at this point in time (eventtime).  |               |
| numinuseconn DECIMAL(19,0) The number of "in use" connections at this point in time (eventtime).   |               |
| numlogins DECIMAL(19,0) The number of logins during the datasource lifetime.   |               |
| numlogouts DECIMAL(19,0) The number of logouts during the datasource lifetime.   |               |
| bytesto DECIMAL(19,0) The number of estimated bytes sent into the datasource.  |               |
| bytesfrom DECIMAL(19,0) The numer of estimated bytes sent from the datasource.   |               |
| message VARCHAR(4000) The exception message if a request was not successful.   |               |
| connhostname VARCHAR(4000) The connection host name or ip address.   |               |
| connport INTEGER The connection port.  |               |
| connloginname VARCHAR(255) The connection login name.  |               |
| connloginvalue VARCHAR(255) The connection login value.  |               |
| conndatabasename VARCHAR(255) The connection database name.  |               |
| conndatabasetype VARCHAR(255) The connection database type such as Oracle, PostgresSQL, SqlServer, Composite Wsdl, File, Netezza, MsExcel(POI), Ldap, MySql, XmlFile, Jdbc, DB2, etc.  | , Rest,       |
| connurlorroot VARCHAR(4000) The connection URL or root. URL if relational. Root if file.   |               |
| conncachestatus VARCHAR(4000) The connection cache status table path or null if not applicable.  |               |
| conncachetracking VARCHAR(4000) The connection cache tracking table path or null if not applicable.  |               |
| conncreatedby VARCHAR(255) The connection created by user name.  |               |
| conncreateddate TIMESTAMP The connection created date (timestamp).   |               |
| connmodifiedby VARCHAR(255) The connection modified by user name.  |               |
| connmodifieddate TIMESTAMP The connection modified date (timestamp).   |               |
| nodehost [k] VARCHAR(255) The host name which comes from GetProperty('SERVER_HOSTNAME').   |               |

| nodeport [k] | INTEGER | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |
|--------------|---------|---|

### vLogDisk Table

This table returns DV server disk events derived from the cached METRICS\_LOG\_DISK which was cached from /services/databases/system/LOG\_DISK. The information includes configured disk size/used, temporary disk size/used and log disk size/used.

| Column Name     | Column Type   | Definition  |
|-----------------|---------------|---|
| eventtime       | TIMESTAMP     | The timestamp of when the row was recorded in system.LOG_DISK.                |
| confdisksize    | DECIMAL(19,0) | The configured disk size on the DV server.                                    |
| confdiskused    | DECIMAL(19,0) | The configured disk used on the DV server.                                    |
| conffreepercent | DECIMAL(19,3) | The configured free percent on the DV server.                                 |
| tmpdisksize     | DECIMAL(19,0) | The temporary disk size on the DV server.                                     |
| tmpdiskused     | DECIMAL(19,0) | The temporary disk used on the DV server.                                     |
| tmpfreepercent  | DECIMAL(19,3) | The temporary free percent on the DV server.                                  |
| logdisksize     | DECIMAL(19,0) | The log disk size on the DV server.   |
| logdiskused     | DECIMAL(19,0) | The log disk used on the DV server.   |
| logfreepercent  | DECIMAL(19,3) | The log free percent on the DV server.  |
| nodehost [k]    | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k]    | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

### vLogIO Table

This table returns DV server disk events derived from the cached METRICS\_LOG\_IO which was cached from /services/databases/system/LOG\_IO. The information includes bytes from clients, bytes to clients, bytes from data sources and bytes to data sources.

| Column Name     | Column Type   | Definition  |
|-----------------|---------------|---|
| eventtime       | TIMESTAMP     | The timestamp of when the row was recorded in system.LOG_IO.                  |
| fromclients     | DECIMAL(19,0) | The number of bytes coming from clients into DV over the IO channel.          |
| toclients       | DECIMAL(19,0) | The number of bytes going to clients from DV over the IO channel.             |
| fromdatasources | DECIMAL(19,0) | The number of bytes coming from datasources to DV over the IO channel.        |
| todatasources   | DECIMAL(19,0) | The number of bytes going to datasources from DV over the IO channel.         |
| nodehost [k]    | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k]    | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

### vLogMemory Table

This table returns DV server disk events derived from the cached METRICS\_LOG\_MEMORY which was cached from /services/databases/system/LOG\_MEMORY. The information memory bytes, memory max, managed bytes and managed max which can also be found on the Studio tab and memory tab for a graphical display.

| Column Name | Column Type   | Definition   |
|-------------|---------------|--|
| eventtime   | TIMESTAMP     | The timestamp of when the row was recorded in system.LOG_MEMORY. |
| memorybytes | DECIMAL(19,0) | The amount of memory in bytes currently being used.              |
| memorymax   | DECIMAL(19,0) | The maximum memory in bytes configured in DV.                    |

| managedbytes | DECIMAL(19,0) | The managed memory bytes currently in DV.                                     |
|--------------|---------------|---|
| managedmax   | DECIMAL(19,0) | The managed maximum memory in bytes configured in DV.                         |
| nodehost [k] | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k] | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

## vSystemResources Table

Details on system resource usage. Derived from METRICS\_CIS\_SYSTEM\_RESOURCES. This table provides a correlation between vLogMemory, vLogDisk, vLogIO and vCpuMemUtilization.

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| eventtime          | TIMESTAMP     | The timestamp of when the row was recorded in the metrics tables.  |
| avgmembytes        | DECIMAL(19,0) | The average amount of memory in bytes currently being used.  |
| avgmemmax          | DECIMAL(19,0) | The average maximum memory in bytes configured in DV.  |
| avgmanagedmembytes | DECIMAL(19,0) | The average managed memory bytes currently in DV.  |
| avgmanagedmemmax   | DECIMAL(19,0) | The average managed maximum memory in bytes configured in DV.  |
| iofromclients      | DECIMAL(19,0) | The number of bytes coming from clients into DV over the IO channel.   |
| iotoclients        | DECIMAL(19,0) | The number of bytes going to clients from DV over the IO channel.  |
| iofromdatasources  | DECIMAL(19,0) | The number of bytes coming from datasources to DV over the IO channel.   |
| iotodatasources    | DECIMAL(19,0) | The number of bytes going to datasources from DV over the IO channel.  |
| confdisksize       | DECIMAL(19,0) | The configured disk size on the DV server.   |
| confdiskused       | DECIMAL(19,0) | The configured disk used on the DV server.   |
| tmpdisksize        | DECIMAL(19,0) | The temporary disk size on the DV server.  |
| tmpdiskused        | DECIMAL(19,0) | The temporary disk used on the DV server.  |
| logdisksize        | DECIMAL(19,0) | The log disk size on the DV server.  |
| logdiskused        | DECIMAL(19,0) | The log disk used on the DV server.  |
| cpuutilization     | DECIMAL(24,4) | The system CPU utilization (used) percent.   |
| sysavailablememory | DECIMAL(24,4) | The system memory used in MB. This will always be showing high since DV takes the configured amount of memory at startup time. This is only a good guage of potential other processes running on the same server as DV if a large fluctuation is detected. |
| sysusedmemory      | DECIMAL(24,4) | The system memory available in MB. Counterpart to the above statement.   |
| nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').   |
| nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.  |

# users Definitions

## vAllUsers Table

Details on all current users derived from METRICS\_ALL\_USERS. It is loaded fully each time based on the trigger. The old copy is deleted.

| Column Name | Column Type   | Definition   |
|-------------|---------------|--|
| loaddate    | TIMESTAMP     | The timestamp of when the record was inserted or loaded. |
| userid      | DECIMAL(19,0) | The DV userid from the system.ALL_USERS tables.          |
| user        | VARCHAR(255)  | The user name who connected for this session.            |
| domainid    | DECIMAL(19,0) | The unique domain id.                                    |
| domain      | VARCHAR(255)  | The domain of the user who connected.                    |

| annotation   | CLOB         | The annotation of the user.   |
|--------------|--------------|---|
| nodehost [k] | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k] | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

# vLdapPerson Table

Details regarding an LDAP user derived from METRICS\_LDAP\_PERSON. It is fully loaded each time based on the trigger. The old copy is deleted.

| Column Name                    | Column Type   | Definition  |
|--------------------------------|---------------|---|
| loaddate                       | TIMESTAMP     | The timestamp of when the record was inserted or loaded.  |
| basedn                         | VARCHAR(1024) | A base dn is the point from where a server will search for users. So I would try to simply use admin as a login name. If openca behaves like most ldap aware applications, this is what is going to happen: An ldap search for the user admin will be done by the server starting at the base dn (dc=example.dc=com). |
| relativedn                     | VARCHAR(1024) | a relativeDistinguishedName from https://tools.ietf.org/html/rfc4514.<br>type <b>RelativeDN</b> struct {. Attributes []*AttributeTypeAndValue. }.   |
| objectclass                    | VARCHAR(1024) | The object class.   |
| cn                             | VARCHAR(255)  | The common name. In some enviornments, this may be the username.  |
| uid                            | VARCHAR(255)  | The unique id.  |
| userkey [fk]x [mapped to DV]   | VARCHAR(255)  | The userkey which is a transformed value if required that matches the "user" column in metrics_resources_usage and metrics_resources_usage_hist.  |
| domainkey [fk] [mapped to DV]  | VARCHAR(255)  | The domainkey which is a transformed value if required that matches the "domain" column in metrics_resources_usage and metrics_resources_usage_hist.  |
| userpassword                   | VARCHAR(255)  | The user password but is generally null   |
| mail [mapped to DV]            | VARCHAR(255)  | The email of the user who connected.  |
| fullname [mapped to DV]        | VARCHAR(255)  | The full name of the user who connected.  |
| displayname                    | VARCHAR(255)  | The display name.   |
| lastname [mapped to DV]        | VARCHAR(255)  | The last name of the user who connected.  |
| firstname [mapped to DV]       | VARCHAR(255)  | The first name of the user who connected.   |
| middlename                     | VARCHAR(255)  | The middle name.  |
| initials                       | VARCHAR(255)  | The initials.   |
| distinguishedname              | VARCHAR(255)  | The distinguished name.   |
| description                    | CLOB          | The actual client request or internal DV request.   |
| title                          | VARCHAR(255)  | The title.  |
| persontitle                    | VARCHAR(255)  | The person's title.   |
| employeeid [mapped to DV]      | VARCHAR(255)  | The employee id   |
| employeenumber [mapped to DV]  | VARCHAR(255)  | The employee number of the user who connected.  |
| serialnumber                   | VARCHAR(255)  | The serial number.  |
| employeetype                   | VARCHAR(255)  | The employee type.  |
| telephonenumber [mapped to DV] | VARCHAR(255)  | The primary telephone number of the user who connected.   |
| seealso                        | VARCHAR(255)  | See also.   |
| mobile                         | VARCHAR(255)  | The mobile phone.   |
| ipPhone                        | VARCHAR(255)  | The IP phone.   |
| facsimiletelephonenumber       | VARCHAR(255)  | The fax telephone number.   |
| pager                          | VARCHAR(255)  | The pager number.   |

| personalpager                      | VARCHAR(255)  | The personal pager number.                           |
|------------------------------------|---------------|--|
| homephone                          | VARCHAR(255)  | The home phone number.                               |
| othertelephone                     | VARCHAR(255)  | The other phone number.                              |
| othermobile                        | VARCHAR(255)  | The other mobile number.                             |
| otheripphone                       | VARCHAR(255)  | The other IP phone number.                           |
| otherfacsimiletelephonenumber      | VARCHAR(255)  | The other fax telephone number.                      |
| otherpager                         | VARCHAR(255)  | The other pager number.                              |
| otherhomephone                     | VARCHAR(255)  | The other phone number.                              |
| primarytelexnumber                 | VARCHAR(255)  | The primary telex number.                            |
| primaryinternationalisdnnumber     | VARCHAR(255)  | The primary international ISDN number.               |
| telexnumber                        | VARCHAR(255)  | The telex number.                                    |
| teletexterminalidentifier          | VARCHAR(255)  | The telex terminal identifier.                       |
| countryname                        | VARCHAR(255)  | The country name.                                    |
| friendlycountryname [mapped to DV] | VARCHAR(255)  | The friendly country name of the user who connected. |
| countrycode                        | VARCHAR(255)  | The country code.                                    |
| city                               | VARCHAR(255)  | The city.  |
| state                              | VARCHAR(255)  | The state  |
| street                             | VARCHAR(1024) | The street address.                                  |
| organization                       | VARCHAR(1024) | The organization nae.                                |
| organizationunit                   | VARCHAR(1024) | The organization unit.                               |
| postaladdress                      | VARCHAR(1024) | The postal address.                                  |
| postalcode                         | VARCHAR(255)  | The postal code.                                     |
| postofficebox                      | VARCHAR(255)  | The post office box.                                 |
| physicaldeliveryofficename         | VARCHAR(1024) | The physical delivery office name.                   |
| preferreddeliverymethod            | VARCHAR(255)  | The preferred delivery method.                       |
| company                            | VARCHAR(255)  | The company name.                                    |
| department                         | VARCHAR(255)  | The department name.                                 |
| division                           | VARCHAR(255)  | The division name.                                   |
| manager                            | VARCHAR(255)  | The manager name.                                    |
| assistant                          | VARCHAR(255)  | The assistant name.                                  |
| telephoneassistant                 | VARCHAR(255)  | The assistant telephone number.                      |
| businessroles                      | VARCHAR(255)  | The business roles.                                  |
| houseidentifier                    | VARCHAR(1024) | The house identifier.                                |
| streetaddress                      | VARCHAR(1024) | The street address.                                  |
| homepostaladdress                  | VARCHAR(1024) | The home postal code.                                |
| othermailbox                       | VARCHAR(255)  | The other mail box.                                  |
| comment                            | VARCHAR(1024) | A comment.   |

# workflow Definitions

## vCISWorkflow Table

Report to view the status of the KPImetrics triggers derived from METRICS\_CIS\_WORKFLOW.

| Column Name | Column Type | Definition |
|-------------|-------------|------------|
|-------------|-------------|------------|

| workflowid [k]       | DECIMAL(19,0) | The unique id for this record.  |
|----------------------|---------------|---|
| workflowname         | VARCHAR(255)  | The workflow name.  |
| workflowstatus       | VARCHAR(10)   | The workflow status [S=success, F=fail, I=in progress].                       |
| workflowstarttime    | TIMESTAMP     | The workflow start time.  |
| workflowendtime      | TIMESTAMP     | The workflow end time.  |
| resourcename         | VARCHAR(255)  | The resource name that started the workflow.                                  |
| message              | VARCHAR(4000) | An informational message about the workflow status.                           |
| errormessage         | CLOB          | The exception message if a request was not successful                         |
| nodehost [k]         | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k]         | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |
| workflowstarttimestr | VARCHAR(30)   | The workflow start time in a string.  |

### vCISWorkflowStatus Table

Report to view the status of the KPImetrics triggers sort by workflowstatus ASC and derived from METRICS\_CIS\_WORKFLOW. Failure message come first. Workflowstatus=F, I, S. F=Fail, I=In process, S=Success. This view has an ORDER BY of workflowstatus ASC.

| Column Name          | Column Type   | Definition  |
|----------------------|---------------|---|
| workflowid [k]       | DECIMAL(19,0) | The unique id for this record.  |
| workflowname         | VARCHAR(255)  | The workflow name.  |
| workflowstatus       | VARCHAR(10)   | The workflow status [S=success, F=fail, I=in progress].                       |
| workflowstarttime    | TIMESTAMP     | The workflow start time.  |
| workflowendtime      | TIMESTAMP     | The workflow end time.  |
| resourcename         | VARCHAR(255)  | The resource name that started the workflow.                                  |
| message              | VARCHAR(4000) | An informational message about the workflow status.                           |
| errormessage         | CLOB          | The exception message if a request was not successful                         |
| nodehost [k]         | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k]         | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |
| workflowstarttimestr | VARCHAR(30)   | The workflow start time in a string.  |

## vEventRegistration Table

Report to view the list of email event registration subscriptions that are currently configured. Derived from METRICS\_EVENT\_REGISTRATION.

| Column Name        | Column Type   | Definition   |
|--------------------|---------------|--|
| subscriberemail    | VARCHAR(255)  | The email of the person subscribing to this event.   |
| groupname          | VARCHAR(255)  | The DV or LDAP group the person belongs to.  |
| environmenttype    | VARCHAR(255)  | The environment name from commonValues.cisServerNickname or ALL for all environments.  |
| envtype            | VARCHAR(255)  | The event type [LONG_RUNNING, EXCEEDED_MEMORY, INACTIVITY, WORKFLOW_FAILURE, DBMS_SCHEDULER_ERROR, PURGE_HISTORY]  |
| requesteremail     | VARCHAR(255)  | The emails of the person requesting this event.  |
| requesterfirstname | VARCHAR(255)  | The first name of the person requesting this event.  |
| requesterlastname  | VARCHAR(255)  | The last name of the person requesting this event.   |
| Excludetext        | VARCHAR(4000) | A comma separate list of text that when found will signal exclusion and the email will not be sent. This is a way of filtering out emails based on text. |

#### vJobDeleteCheck Table

Report to view the status of the METRICS\_JOB\_DELETE\_CHECK DBMS table. This table provides information about TDV metrics delete statement activity when trigger "kpimetricsTrig\_35\_DBMSDeleteCheck" is turned on. It will reveal when the delete statement was executed for each node and how many rows were deleted from the collection tables.

| Column Name   | Column Type   | Definition  |
|---------------|---------------|---|
| loaddate      | TIMESTAMP     | The timestamp of when the data was loaded.  |
| requestid [k] | DECIMAL(19,0) | The unique request id that is the primary key of this table.  |
| status        | VARCHAR(20)   | The status of the request (delete statement). E.g. SUCCESS, FAILED, TERMINATED  |
| requesttype   | VARCHAR(20)   | The request type is SQL.  |
| sqlcommand    | VARCHAR(20)   | The SQL command is DELETE.  |
| resourcename  | VARCHAR(255)  | The metrics collection table resource name being deleted. E.g. metrics_requests, metrics_resources_usage or metrics_sessions. |
| description   | CLOB          | The SQL delete statement.   |
| starttime     | TIMESTAMP     | The timestamp when the delete statement started.  |
| endtime       | TIMESTAMP     | The timestamp of when the delete statement ended.   |
| totalduration | INTEGER       | The total duration of the delete statement in milliseconds.   |
| rowsaffected  | INTEGER       | The number of rows deleted.   |
| nodehost [k]  | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]  | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |

#### vJobDetails Table

Report to view the status of the METRICS\_JOB\_DETAILS DBMS Scheduler table. Provides a sorted status by most recent rows first. The information informs the user of the status of the data transfer from the collection tables to the history tables for each of the 3 metrics tables.

| Column Name  | Column Type | Definition  |
|--------------|-------------|---|
| reqstartdate | TIMESTAMP   | The timestamp of when the request is started.   |
| reqenddate   | TIMESTAMP   | The timestamp of when the request ends.   |
| jobtablename | VARCHAR(40) | The job table name which identies the type of processing that is taking place.  |
|              |             | DBMS_SCHEDULER – An overall record that indicates processing for the metrics collection and history tables.   |
|              |             | metrics_sessions – process rows.  |
|              |             | metrics_resources_usage – process rows.   |
|              |             | metrics_requests – process rows.  |
|              |             | metrics_sessions_hist - process rows only if commonValues.partitionNumber=0.  |
|              |             | metrics_resources_usage_hist - process rows only if commonValues.partitionNumber=0.   |
|              |             | metrics_requests_hist - process rows only if commonValues.partitionNumber=0.  |
|              |             | DELETE_COLLECTION – An overall record that indicates processing for the metrics collection tables.  |
|              |             | metrics_resources_usage – delete rows.  |
|              |             | metrics_requests – delete rows.   |
|              |             | REBUILD_INDEXES – An overall record that indicates the various metrics tables indexes are being rebuilt or reorganized. This usually happens once a week. |

|                    |               | PARTITION_MANAGEMENT_ADD - An overall record indicating the status of the   |
|--------------------|---------------|---|
|                    |               | partition add command.  |
|                    |               | PARTITION_MANAGEMENT_DROP – An overall record indicating the status of the partition drop command.  |
| correlationid      | DECIMAL(19,0) | A generated unique sequence that correlates different records together in a batch.  |
| nodehost [k]       | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]       | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| processednodehost  | VARCHAR(255)  | The hostname (nodehost) of the DV server that is performing the processing. Due to locking issues [mainly] with SQL Server, the architecture dictates that only one node performs the processing for all the other nodes. |
| processednodeport  | INTEGER       | The port (nodeport) of the DV server that is performing the processing.   |
| processedstartdate | TIMESTAMP     | The timestamp of when the DV process started performing the processing. This timestamp will remain the same across all rows with the same correlationid.  |
| insertnumrows      | DECIMAL(19,0) | For DBMS_SCHEDULER, the number of rows inserted.  |
| deletenumrows      | DECIMAL(19,0) | For DBMS_SCHEDULER and DELETE_COLLECTION, the number of rows deleted.   |
| updatenumrows      | DECIMAL(19,0) | For DBMS_SCHEDULER, the number of rows updated.   |
| notinsertednumrows | DECIMAL(19,0) | For DBMS_SCHEDULER, the number of rows not inserted.  |
| maxstarttime       | TIMESTAMP     | The maximum starttime [metrics_requests, metrics_resources_usage] or logintime [metrics_sessions] found in the specified table being processed.   |
| maxid              | DECIMAL(19,0) | The maximum requestid [metrics_requests, metrics_resources_usage] or sessionid [metrics_sessions] found in the specified table being processed.   |
| status             | VARCHAR(100)  | The job details status [COMPLETE=the table record, NO RECORDS FOUND=table record, SUCCESS=the overall record, FAILURE=the overall record.]  |
|                    |               | Intermediate status for each stage in the workflow process:   |
|                    |               | DELETE COMPLETE   |
|                    |               | TABLE STATISTICS COMPLETE   |
|                    |               | DELETE STAGE COMPLETE   |
|                    |               | INSERT STAGE COMPLETE   |
|                    |               | UPDATE COMPLETE   |
|                    |               | INSERT HISTORY COMPLETE   |
|                    |               | UPDATE STAGE WITH LDAP COMPLETE   |
| currentoperation   | VARCHAR(150)  | The current operation being executed.   |
| insertduration     | VARCHAR(30)   | The duration of the insert.   |
| deleteduration     | VARCHAR(30)   | The duration of the delete.   |
| updateduration     | VARCHAR(30)   | The duration of the update.   |
| totalduration      | VARCHAR(30)   | The total duration of the request measured in milli-seconds. Divide by 1000 to get minutes.   |
| additionalinfo     | VARCHAR(4000) | The additional info provide informational message. For example, if batching is being used it might look like this:  |
|                    |               | [Total LDAP Update Batches(50000)=1] [Total resourcekind-user defined Update Batches(50000)=1] [Total resourcekind-system Update Batches(50000)=0] [Total Insert Batches(50000)=1] [Total Delete Batches(50000)=1]        |
| errormessage       | CLOB          | The exception message if a request was not successful   |

# vJobDetailsReport Table

Report to summarize the results of METRICS\_JOB\_DETAILS grouped by the job table name, node host and node port. It provides various averages, min and max of duration and number of rows. It provides summation of rows inserted, updated, deleted and not inserted.

| Column Name       | Column Type                 | Definition  |
|-------------------|-----------------------------|---|
| jobtablename      | VARCHAR(40)                 | The job table name which identies the type of processing that is taking place.  |
|                   |                             | DBMS_SCHEDULER – An overall record that indicates processing for the metrics collection and history tables.   |
|                   |                             | metrics_sessions – process rows.  |
|                   |                             | metrics_resources_usage – process rows.   |
|                   |                             | metrics_requests – process rows.  |
|                   |                             | metrics_sessions_hist - process rows only if commonValues.partitionNumber=0.  |
|                   |                             | metrics_resources_usage_hist - process rows only if commonValues.partitionNumber=0.   |
|                   |                             | metrics_requests_hist - process rows only if commonValues.partitionNumber=0.  |
|                   |                             | DELETE_COLLECTION – An overall record that indicates processing for the metrics collection tables.  |
|                   |                             | metrics_resources_usage - delete rows.  |
|                   |                             | metrics_requests – delete rows.   |
|                   |                             | REBUILD_INDEXES – An overall record that indicates the various metrics tables indexes are being rebuilt or reorganized. This usually happens once a week. |
|                   |                             | PARTITION_MANAGEMENT_ADD – An overall record indicating the status of the partition add command.  |
|                   |                             | PARTITION_MANAGEMENT_DROP – An overall record indicating the status of the partition drop command.  |
| nodehost [k]      | VARCHAR(255)                | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]      | INTEGER                     | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| insert avg        | INTERVAL DAY                | The average insert duration.  |
| 8                 | TO SECOND                   |   |
| delete_avg        | INTERVAL DAY                | The average delete duration.  |
|                   | TO SECOND                   |   |
| update_avg        | INTERVAL DAY                | The average update duration.  |
|                   | TO SECOND                   |   |
| total_avg         | INTERVAL DAY<br>TO SECOND   | The average total time.   |
| total_min         | INTERVAL DAY TO SECOND      | The minimum total minutes across all operatons.   |
| total_max         | INTERVAL DAY                | The maximum total minutes across all operatons.   |
| incartrows ava    | TO SECOND DECIMAL(19,0)     | The average number of rows inserted.  |
| insertrows_avg    |                             | The average number of rows deleted.  The average number of rows deleted.  |
| deleterows_avg    | DECIMAL(19,0) DECIMAL(19,0) |   |
| updaterows_avg    | ` ' '                       | The average number of rows updated.   |
| notinsertrows_avg | DECIMAL (25.0)              | The average number of rows not inserted.  The total number of rows inserted.  |
| insertrows_sum    | DECIMAL(25,0)               |   |
| deleterows_sum    | DECIMAL(25,0)               | The total number of rows deleted.   |
| updaterows_sum    | DECIMAL(25,0)               | The total number of rows updated.   |
| notinsertrows_sum | DECIMAL(25,0)               | The total number of rows not inserted.  |

# vJobDetailsStatusSummary Table

| Column Name  | Column Type | Definition   |
|--------------|-------------|--|
| jobtablename | VARCHAR(40) | The job table name which identies the type of processing that is taking place. |

|              | 1            |   |
|--------------|--------------|---|
|              |              | DBMS_SCHEDULER – An overall record that indicates processing for the metrics collection and history tables.   |
|              |              | metrics_sessions – process rows.  |
|              |              | metrics_resources_usage – process rows.   |
|              |              | metrics_requests – process rows.  |
|              |              | metrics_sessions_hist - process rows only if commonValues.partitionNumber=0.  |
|              |              | metrics_resources_usage_hist - process rows only if commonValues.partitionNumber=0.   |
|              |              | metrics_requests_hist - process rows only if commonValues.partitionNumber=0.  |
|              |              | DELETE_COLLECTION – An overall record that indicates processing for the metrics collection tables.  |
|              |              | metrics_resources_usage – delete rows.  |
|              |              | metrics_requests – delete rows.   |
|              |              | REBUILD_INDEXES – An overall record that indicates the various metrics tables indexes are being rebuilt or reorganized. This usually happens once a week. |
|              |              | PARTITION_MANAGEMENT_ADD – An overall record indicating the status of the partition add command.  |
|              |              | PARTITION_MANAGEMENT_DROP – An overall record indicating the status of the partition drop command.  |
| status       | VARCHAR(100) | The job details status [COMPLETE=the table record, NO RECORDS FOUND=table record, SUCCESS=the overall record, FAILURE=the overall record.]                |
|              |              | Intermediate status for each stage in the workflow process:   |
|              |              | DELETE COMPLETE   |
|              |              | TABLE STATISTICS COMPLETE   |
|              |              | DELETE STAGE COMPLETE   |
|              |              | INSERT STAGE COMPLETE   |
|              |              | UPDATE COMPLETE   |
|              |              | INSERT HISTORY COMPLETE   |
|              |              | UPDATE STAGE WITH LDAP COMPLETE   |
| nodehost [k] | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k] | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| cnt          | BIGINT       | The count of records grouped by the columns in this view.   |
|              | •            |   |

## vJobEnvironments Table

Report to view the list of valid environments derived from METRICS\_JOB\_ENVIRONMENTS

| Column Name | Column Type  | Definition   |
|-------------|--------------|--|
| envtype     | VARCHAR(255) | The environment type describes the type of environment such as DEV, UAT, TEST, PROD. |

## vJobFilters Table

Report to view the list of job filters that are currently configured derived METRICS\_JOB\_FILTERS.

| Column Name | Column Type  | Definition   |
|-------------|--------------|--|
| envtype     | VARCHAR(255) | The environment type describes the type of environment such as DEV, UAT, TEST, PROD. |
| tablename   | VARCHAR(255) | Currently always set to metrics_resources_usage.                                     |
| user        | VARCHAR(255) | The DV user to be filtered out.  |

| domain           | VARCHAR(255)  | The DV user domain that the user belongs to.   |
|------------------|---------------|--|
| resourcekind     | VARCHAR(20)   | The type of resource that executed [system, user defined].   |
| resourcepath [k] | VARCHAR(4000) | The DV path to the resource.   |
| resourcetype [k] | VARCHAR(40)   | The DV resource type. If published, then it will be LINK.  |
| pathtype         | VARCHAR(10)   | The pathtype is either FULL=full DV path or PARTIAL=partial wild card path (resourcepath must contain a % at the end of the path indicating a wild card) |

#### vSqlControl Table

Derived from METRICS\_SQL\_CONTROL. Normally has no rows unless Cache\_METRICS\_SQL\_REQUEST\_EXEC is executing. If it contains rows then they indicate that a particular node is performing the pre-processing for the METRICS\_SQL\_REQUEST table. Only only one node at a time can perform this processing due to the fact that any single node can process another nodes SQL requests in order to achieve parallel processing. This table acts as the control table to allow each node to select their requestids that they will process. This is why this part of the process is single-threaded and must be controlled.

| Column Name   | Column Type  | Definition  |
|---------------|--------------|---|
| starttime [k] | TIMESTAMP    | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867   |
| nodehost [k]  | VARCHAR(255) | The host name which comes from GetProperty('SERVER_HOSTNAME').                |
| nodeport [k]  | INTEGER      | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1. |

### vSqlControlLog Table

Derived from METRICS\_SQL\_CONTROL\_LOG. Contains a log of the Gatekeeper code block within Cache\_METRICS\_SQL\_REQUEST\_EXEC when debugGatekeeper = '1'. During normal operation, this will be turned off so that no rows are produced. It is only useful for debugging purposes to insure that in a clustered environment, the nodes are taking their turn initializing their own set of rows when doing parallel processing on one of the node's data.

| Column Name   | Column Type   | Definition  |
|---------------|---------------|---|
| controllogid  | DECIMAL(19,0) | A unique generated sequence.  |
| starttime [k] | TIMESTAMP     | The timestamp of when the request was started. E.g. 2020-01-06 10:19:36.867   |
| codeblock     | VARCHAR(255)  | The block of code being processed to be used for debug if needed.             |
|               |               | 1.00 Gatekeeper:[Rows exist to be processed.] Count=                          |
|               |               | 1.01 Gatekeeper:[Detect processing. Count=                                    |
|               |               | 1.02 Gatekeeper:[Successfully inserted control row.]                          |
|               |               | 1.03 Gatekeeper:[Waiting for access.]   |
|               |               | 1.04 Gatekeeper:[Construct the SQL statement.]                                |
|               |               | 1.05 Gatekeeper:[Perform pre-populate (insert rows).]                         |
|               |               | 1.06 Gatekeeper:[Replace ASCII Characaters > 255]:                            |
|               |               | 1.07 Gatekeeper:[Insert successful. Row=                                      |
|               |               | 1.08 Gatekeeper:[No insert was performed.] performInsert=                     |
|               |               | 1.09 Gatekeeper:[No insert was performed.] performInsert=                     |
|               |               | 1.10 Gatekeeper:[Total insert duration=                                       |
|               |               | 1.11 Gatekeeper:[No rows to process.]   |
|               |               | 1.12 Gatekeeper:[Delete control row]  |
|               |               | 1.13 Gatekeeper:[Pre-processing timeout: Waiting for another node to finish.] |

| trynum            | DECIMAL(9,0)  | The number of tries.  |
|-------------------|---------------|---|
| processtime       | TIMESTAMP     | The timestamp of when the processing started.   |
| requestid [k]     | DECIMAL(19,0) | The unique request id that is the primary key of this table.  |
| nodehost [k]      | VARCHAR(255)  | The host name which comes from GetProperty('SERVER_HOSTNAME').  |
| nodeport [k]      | INTEGER       | The Http port (e.g. 9400) which comes from GetProperty('SERVER_JDBC_PORT')-1.   |
| processednodehost | VARCHAR(255)  | The hostname (nodehost) of the DV server that is performing the processing. Due to locking issues [mainly] with SQL Server, the architecture dictates that only one node performs the processing for all the other nodes. |
| processednodeport | DECIMAL(9,0)  | The port (nodeport) of the DV server that is performing the processing.   |

## 4 Release Notes

This section provides information on what has changed in this release.

Added or Modified in this Release

This section provides bullet points on what has been added or changed in this release.

### Release 2020Q100 [Jan 14 2020]

Initial release of the KPImetrics Data Dictionary

#### Release 2020Q101 [Feb 18 2020]

- Added metadata.reportMetadataPrivilegeUsers[Arch]
- Added metadata.vMetadataAllPrivileges
- Added metadata.vMetadataAllResources
- Added metadata.vMetadataAllUsersGroups[Arch]
- Added metadata.vMetadataPrivilegeUser[Arch]
- Removed vAllResourcesMax
- Renamed vAllResourcesHist to vAllResources
  - $\circ \quad \text{Added resource} \\ \text{linktype, ownerdomain, annotation} \\$
  - o Renamed owner to ownername, loadtime to loaddate
  - Modified types for guid, resourcetype, resourcesubtype
- Removed vAllUsersMax
- Renamed vAllUsersHist to vAllUsers
- Change all references of loadtime to loaddate.
- vMetadataPrivilege[Arch]
  - Dropped username column
  - o Added privilegeid, layertype, nameid