

Oracle Identity Analytics 11gR1 Database Administrator's Guide

Copyright © 2010, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related software documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle America, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. UNIX is a registered trademark licensed through X/Open Company, Ltd.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Contents

Preface	9
1 GlobalUsers Module	11
Tables in the GlobalUsers Module	11
GLOBALUSERS Table	11
GLOBALUSER_ACCOUNTS TABLE	14
GLOBALUSER_ROLES Table	15
GLOBALUSERSTATUSES Table	17
2 Business Structure Module	19
Tables in the Business Structure Module	19
BUSINESSUNITS Table	19
BU_GLOBALUSERS Table	22
BU_ROLES Table	23
BU_POLICIES Table	24
BUHIERARCHY Table	25
BUSINESSUNITSTATUSES Table	26
3 Resource Types Metadata Module	27
Tables in the Resource Types Metadata Module	27
NAMESPACES Table	27
ATTRIBUTE_CATEGORIES Table	28
ATTRIBUTES Table	29
ATTRIBUTE_VALUES Table	32
ATTRIBUTE_VALUE_METADATA Table	33
ENDPOINTS Table	34
ENDPOINT_POLICIES Table	35

4	Accounts Module	37
	Tables in the Accounts Module	37
	ACCOUNTS Table	37
	ACCOUNT_TYPES Table	39
	ACCOUNT_ATTRIBUTES Table	40
	ARC_ACCOUNT_ATTRIBUTES Table	41
	ACCT_ATTR_HIER_NODES Table	42
5	Roles Module	45
	Tables in the Roles Module	45
	ROLES Table	45
	ROLEHIERARCHY Table	48
	ROLE_VERSIONS Table	49
	ROLESTATUSES Table	52
	ROLE_TYPES Table	53
	ROLE_OWNERS Table	54
	ROLE_EXCLUSIONROLES Table	55
	ROLE_POLICIES Table	56
6	Policies Module	57
	Tables in the Policies Module	57
	POLICIES Table	57
	POLICY_ATTR_HIER_NODES Table	59
	POLICY_VERSIONS Table	60
	POLICY_ATTRIBUTES Table	61
	POLICY_EXCLUSIONPOLICIES Table	63
	POLICY_OWNERS Table	64
7	Applications Module	65
	Tables in the Applications Module	65
	APPLICATIONS Table	65
	APPLICATION_ATTRIBUTES Table	66
	APPLICATION_ACCOUNTS Table	67
	APPLICATION_OWNERS Table	68

APPLICATIONSTATUSES Table	69
8 Import and Export Module	71
Tables in the Import Export Module	71
IMPORT_RUNS Table	71
IMPORT_RUN_STEPS Table	72
IMPORT_VALIDATION_EXCEPTIONS Table	74
EXPORT_RUNS Table	74
9 Event Listener Module	77
Tables in the Event Listener Module	77
EVENT_LISTENERS Table	77
EVENT_TRIGGER_DATA Table	78
OBJECT_MODIFICATIONS Table	79
10 Identity Certification Module	81
Tables in the Identity Certification Module	81
ID_CERTS Table	81
IDC_CONFIGURATIONS Table	83
IDC_USERS TABLE	84
ID_CERT_USERS Table	88
IDC_ACCOUNTS Table	89
IDC_ACCOUNT_ATTRIBUTES Table	90
IDC_ATTR_VALUES Table	91
IDC_USER_ACCOUNTS Table	92
IDC_USER_ACCT_ATTRS Table	93
ID_ATTR_VAL_USERS Table	95
ID_CERT_ATTR_VALUES Table	96
IDC_ROLES Table	98
ID_CERT_ROLES Table	100
IDC_USER_ROLES Table	102
IDC_POLICIES Table	103
IDC_POLICY_ATTRIBUTES Table	104
IDC_ROLE_POLICIES Table	105

IDC_ROLE_POLICY_ATTRS Table	106
REMEDIATION_CONFIG Table	108
11 Identity Audit Module	111
Tables in the Identity Audit Module	111
IDA_POLICIES Table	111
IDA_POLICY_VIOLATIONS Table	112
IDA_POLICY_VIOLATION_CAUSES Table	114
IDA_SCANS Table	115
IDA_POLICY_VIOLATIONS_TRAILS Table	117
IDA_POLICY_VIOLATION_PREVIEWS Table	118
IDA_VIOLATION_PREVIEW_CAUSES Table	119
12 Rule Engine Module	121
Tables in the Rule Engine Module	121
RULES Table	121
RULE_OWNERS Table	122
RULE_SETS Table	123
RULE_SET_RULES Table	125
RULE_TYPES Table	125
RULE_VERSIONS Table	126
ROLE_MEMBERSHIP_RULE Table	128
ROLE_MEMBERSHIP_RULE_DATA Table	129
ROLE_MEMBERSHIP_RULE_SCANS Table	130
RM_RULE_SCAN_RESULTS Table	131
USER_BU_RULE_SCANS Table	132
USER_BU_RULE_SCAN_RESULTS Table	133
USER_BU_RULE_EXTENDED_ATTRS Table	134
USER_APPLICATION_SCANS Table	135
USER_TRANSFERS Table	136
13 Workflow Module	137
Tables in the Workflow Module	137
OS_WFENTRY Table	137

OS_CURRENTSTEP Table	138
OS_HISTORYSTEP Table	139
OS_CURRENTSTEP_PREV Table	140
OS_HISTORYSTEP_PREV Table	141
OS_PROPERTYENTRY Table	142
APPROVAL_REQUESTS Table	144
APPROVAL_REQUEST_HISTORY Table	145
ROLE_MATCHING_ANALYSIS Table	146
14 Scheduling Module	147
Tables in the Workflow Module	147
OS_WFENTRY Table	147
OS_CURRENTSTEP Table	148
OS_HISTORYSTEP Table	149
OS_CURRENTSTEP_PREV Table	150
OS_HISTORYSTEP_PREV Table	151
OS_PROPERTYENTRY Table	152
APPROVAL_REQUESTS Table	154
APPROVAL_REQUEST_HISTORY Table	155
ROLE_MATCHING_ANALYSIS Table	156
15 Reporting Module	157
Tables in the Workflow Module	157
OS_WFENTRY Table	157
OS_CURRENTSTEP Table	158
OS_HISTORYSTEP Table	159
OS_CURRENTSTEP_PREV Table	160
OS_HISTORYSTEP_PREV Table	161
OS_PROPERTYENTRY Table	162
APPROVAL_REQUESTS Table	164
APPROVAL_REQUEST_HISTORY Table	165
ROLE_MATCHING_ANALYSIS Table	166

16 Security Module	167
Tables in the Security Module	167
RBX_USERS Table	167
PROXY_ASSIGNMENTS Table	168
PROXY_RBACXROLE Table	170
RBX_ROLES Table	171
PROXY_RBACXROLE Table	172
RBX_USER_RBX_ROLES Table	173
RBX_ROLE_ACEGI_ROLES Table	174
RBX_USER_RBX_ROLES_BU Table	175
RBX_AUTHORITIES Table	176
ACL_OBJECT_IDENTITY Table	177
ACL_PERMISSION Table	178
RBX_ACL_CLASS Table	179
RBX_ACL_ENTRY Table	180
RBX_ACL_OBJECT_IDENTITY Table	181
RBX_ACL_SID Table	182
RBX_AUDIT_ENTRIES Table	183
RBX_AUDIT_ENTRY_EXT_PROPS Table	184
17 Miscellaneous Tables	187
The Miscellaneous Tables	187
CONFIGURATIONS Table	187
EMAIL_TEMPLATES Table	188
PASSWORD_DICTIONARY Table	189
SEQUENCES Table	190
PARAMETERS Table	191

Preface

About This Guide

This guide describes the Oracle Identity Analytics 11gR1 database schema.

Who Should Read This Guide

The *Oracle Identity Analytics 11gR1 Database Administrator's Guide* is written for database administrators who are responsible for supporting the Oracle Identity Analytics software at the database level.

- For information about installing and readying your database server to support Oracle Identity Analytics, see the *Preparing to Install Oracle Identity Analytics* chapter in the *Oracle Identity Analytics 11gR1 Installation and Upgrade Guide*.
- For information about downloading JDBC™ drivers, as well as how to create the Oracle Identity Analytics schema on the database server, see the *Installing Oracle Identity Analytics* chapter in the *Oracle Identity Analytics 11gR1 Installation and Upgrade Guide*.

GlobalUsers Module

Tables in the GlobalUsers Module

This chapter describes the tables that make up the Oracle Identity Analytics GlobalUsers module.

GLOBALUSERS Table

Structure

	GLOBALUSERS
PK	GLOBALUSERKEY

	GLOBALUSERS
	USERNAME
	FIRSTNAME
	LASTNAME
	MIDDLENAME
	STREET
	CITY
	STATEORPROVINCE
	ZIPORPOSTALCODE
	COUNTRYORREGION
	FAX
	PHONE
	EXTENSION
	MOBILE
	PAGER
	TITLE
	PRIMARYEMAIL
	SECONDARYEMAIL
	OFFICENAME
	DESCRIPTION
	COMMENTS
	STATUSKEY
	SUSPENDEDDATE
	ENABLEDDATE
	DISABLEDDATE
	DELETEDATE
	USERDATA
	EMPLOYEEID
	CUSTOMPROPERTY1
	CUSTOMPROPERTY2

	GLOBALUSERS
	CUSTOMPROPERTY3
	CUSTOMPROPERTY4
	CUSTOMPROPERTY5
	CUSTOMPROPERTY6
	CUSTOMPROPERTY7
	CUSTOMPROPERTY8
	CUSTOMPROPERTY9
	CUSTOMPROPERTY10
	CUSTOMPROPERTY11
	CUSTOMPROPERTY12
	CUSTOMPROPERTY13
	CUSTOMPROPERTY14
	CUSTOMPROPERTY15
	CUSTOMPROPERTY16
	CUSTOMPROPERTY17
	CUSTOMPROPERTY18
	CUSTOMPROPERTY19
	CUSTOMPROPERTY20
	CREATEUSER
	UPDATEUSER
	CREATEDATE
	UPDATEDATE
	SRMCREATEDATE
	SRMUPDATEDATE
	EMPLOYEEETYPE
	SERVICEDESKTICKETNUMBER
	STARTDATE
	ENDDATE
	MANAGER
	BUSINESSAPPROVER
	TECHNICALAPPROVER
	DELEGATE
	LOCATION
	JOBCODES

Indexes

Index	PK	Unique	Keys
PK_GLOBALUSERS	✓	Yes	GLOBALUSERKEY
IX_GU_UNAME		No	USERNAME

Description

Users that are stored in the Oracle Identity Analytics Identity Warehouse are saved in the GLOBALUSERS table. Each user is known as a global user and identified by a unique GLOBALUSERKEY. This table stores basic information about every user in the USERNAME, FIRSTNAME, LASTNAME, and MIDDLENAME fields. There are also fields to save additional information about the user, including the user's address, email, phone, and various other custom fields. Because the user can be associated with a workflow, fields are provided to save the user's manager, business approver, and technical approver. A DELEGATE field is also present so that the user can specify a delegate. The STATUSKEY field contains the user's status. For audit purposes the table carries the account's creation date and update date, the user who created the account, and the name of the user who updated the account.

Primary Keys

PK_GLOBALUSERS - primary key on column GLOBALUSERKEY

Foreign Keys

None

Indexes

IX_GU_UNAME - non-unique index on column USERNAME

GLOBALUSER_ACCOUNTS TABLE

Structure

	GLOBALUSER_ACCOUNTS
PK	GLOBALUSERKEY
PK	ACCOUNTKEY

Indexes

Index	PK	Unique	Keys
PK_USER_ACCOUNTS	✓	Yes	GLOBALUSERKEY, ACCOUNTKEY
IX_GLOBALUSER_ACCOUNTS_ACCOUNT		Yes	ACCOUNTKEY
IX_GU_ACCTS_GUID		No	GLOBALUSERKEY

Description

A Global user in Oracle Identity Analytics is associated with an account by associating the GLOBALUSERS and ACCOUNTS tables with a derived table, GLOBALUSER_ACCOUNTS. This table carries the ACCOUNTKEY and GLOBALUSERKEY.

Primary Keys

PK_USER_ACCOUNTS - composite primary key on column GLOBALUSERKEY and ACCOUNTKEY

Foreign Keys

None

Indexes

IX_GU_ACCTS_GUID - non-unique index on column GLOBALUSERKEY

IX_GLOBALUSER_ACCOUNTS_ACCOUNT - unique constraint on column ACCOUNTKEY

GLOBALUSER_ROLES Table

Structure

	GLOBALUSER_ROLES
PK	ID

	GLOBALUSER_ROLES
	GLOBALUSERKEY
	ROLEKEY
	SERVICEDESKTICKETNUMBER
	STARTASSOCIATIONDATE
	ENDASSOCIATIONDATE
	START_REQUEST_ID
	END_REQUEST_ID
	STATUS_ID
	ROLE_VERSION_ID
	MODIFIED_BY
	MODIFIED_DATE
	MODIFICATION_GROUP_ID
	REQUESTED_MODIFICATION

Indexes

Index	PK	Unique	Keys
PK_GLOBALUSER_ROLES	✓	Yes	ID
IX_GU_ROLES_GUID		No	GLOBALUSERKEY
IX_GU_ROLES_RID		No	ROLEKEY
IX_GU_ROLES_RQSTART		No	START_REQUEST_ID
IX_GU_ROLES_RQEND		No	END_REQUEST_ID

Description

Each Global user can be associated with a role and this association is represented in a derived table, GLOBALUSER_ROLES. This table references tables GLOBALUSERS and ROLES using the GLOBALUSERKEY and ROLEKEY fields.

Primary Keys

PK_GLOBALUSER_ROLES - composite primary key on columns GLOBALUSERKEY and ROLEKEY

Foreign Keys

None

Indexes

IX_GU_ROLES_GUID - non-unique index on column GLOBALUSERKEY

IX_GU_ROLES_RID - non-unique index on column ROLEKEY

IX_GU_ROLES_RQSTART - non-unique index on column START_REQUEST_ID

IX_GU_ROLES_RQEND - non-unique index on column END_REQUEST_ID

GLOBALUSERSTATUSES Table

Structure

	GLOBALUSERSTATUSES
PK	STATUSKEY
	LABEL SORTORDER

Indexes

Index	PK	Unique	Keys
PK_GLOBALUSERSTATUSES	✓	Yes	STATUSKEY

Description

Similar to the Business Unit, each user has a status associated with it. The GLOBALUSERSTATUSES table saves the possible statuses that can be associated with the globalusers. The actual 'status' is represented in the STATUSKEY and LABEL fields.

Primary Keys

PK_GLOBALUSERSTATUSES - primary key on column STATUSKEY.

Foreign Keys

None

Indexes

None

Business Structure Module

Tables in the Business Structure Module

This chapter describes the tables that make up the Oracle Identity Analytics Business Structure module.

BUSINESSUNIT Table

Structure

	BUSINESSUNIT
PK	BUSINESSUNITKEY

	BUSINESSUNITS
	BUSINESSUNITNAME
	MAINPHONE
	OTHERPHONE
	FAX
	EMAIL
	WEBSITE
	STREET1
	STREET2
	STREET3
	CITY
	STATEORPROVINCE
	ZIPORPOSTALCODE
	COUNTRYORREGION
	DIVISION
	CREATEUSER
	UPDATEUSER
	CREATEDATE
	UPDATEDATE
	BUSINESSUNITTYPE
	BUSINESSUNITOWNER
	BUSINESSUNITADMINISTRATOR
	BUSINESSUNITCODE
	BUSINESSUNITDESCRIPTION
	MAILCODE
	SERVICEDESKTICKETNUMBER
	STATUSKEY
	BUSINESSUNITMANAGERS

Indexes

Index	PK	Unique	Keys
PK_BUSINESSUNITS	✓	Yes	BUSINESSUNITKEY

Description

The various departments in an organization are listed as Business Units in Oracle Identity Analytics. Each Business Unit has users associated with it, similar to users listed in a department. The BUSINESSUNITS table in Oracle Identity Analytics carries the information for the various departments in an organization. A unique BUSINESSUNITKEY identifies each business unit.

The various fields listed under the table provide more information on the business units such as the BUSINESSUNITNAME, PHONE, EMAIL, WEBSITE, CITY, STATE, and ZIP. For audit purposes, the Business Unit's creation time, the user who created the business unit, the update time, and the user who updated the Business unit are noted. Each Business unit is assigned an owner and this information is stored in the BUSINESSUNITOWNER field. In addition, there are various business unit managers who are assigned to each business unit and they are entered in the BUSINESSUNITMANAGERS field. These managers can be stored in a comma-separated format. If a Business Unit has an Administrator, the Administrator can be assigned in the BUSINESSUNITADMINISTRATOR field.

Primary Keys

PK_BUSINESSUNITS - primary key on column BUSINESSUNITKEY

Foreign Keys

None

Indexes

None

BU_GLOBALUSERS Table

Structure

	BU_GLOBALUSERS
PK	BUSINESSUNITKEY
PK	GLOBALUSERKEY

Indexes

Index	PK	Unique	Keys
PK_BU_GLOBALUSERS	✓	Yes	BUSINESSUNITKEY, GLOBALUSERKEY
IX_BU_GLOBALUSERS_BUID		No	BUSINESSUNITKEY
IX_BU_GLOBALUSERS_GUID		No	GLOBALUSERKEY

Description

The association between a user and Business Unit is shown in a derived table, BU_GLOBALUSERS. This table carries the BUSINESSUNITKEY and GLOBALUSERKEY.

Primary Keys

PK_BU_GLOBALUSERS - composite primary key on columns BUSINESSUNITKEY and GLOBALUSERKEY

Foreign Keys

None

Indexes

IX_BU_GLOBALUSERS_BUID - non-unique index on column BUSINESSUNITKEY

IX_BU_GLOBALUSERS_GUID - non-unique index on column GLOBALUSERKEY

BU_ROLES Table

Structure

	BU_ROLES
PK	BUSINESSUNITKEY
PK	ROLEKEY
PK	ROLE_VERSION_ID

Indexes

Index	PK	Unique	Keys
PK_BU_ROLES	✓	Yes	BUSINESSUNITKEY, ROLEKEY, ROLE_VERSION_ID

Description

The association between a role and the Business Unit is shown in a derived table, BU_ROLES. The fields BUSINESSUNITKEY and ROLEKEY are used to reference the BUSINESSUNITS and ROLES tables respectively.

Primary Keys

PK_BU_ROLES - composite primary key on columns BUSINESSUNITKEY and ROLEKEY

Foreign Keys

None

Indexes

None

BU_POLICIES Table

Structure

	BU_POLICIES
PK	BUSINESSUNITKEY
PK	POLICYKEY
PK	POLICY_VERSION_ID

Indexes

Index	PK	Unique	Keys
PK_BU_POLICIES	✓	Yes	BUSINESSUNITKEY, POLICYKEY, POLICY_VERSION_ID

Description

The association between a policy and the Business Unit is shown in a derived table, BU_POLICIES. The fields BUSINESSUNITKEY and POLICYKEY are used to reference the BUSINESSUNITS and POLICIES tables respectively.

Primary Keys

PK_BU_POLICIES - composite primary key on columns BUSINESSUNITKEY, POLICYKEY, and POLICY_VERSION_ID

Foreign Keys

None

Indexes

None

BUHIERARCHY Table

Structure

	BUHIERARCHY
PK	BUSINESSUNITKEY
PK	PARENTBUSINESSUNITKEY

Indexes

Index	PK	Unique	Keys
PK_BUHIERARCHY	✓	Yes	BUSINESSUNITKEY, PARENTBUSINESSUNITKEY

Description

The various Business Units in Oracle Identity Analytics can be represented in a hierarchical format and the hierarchy is represented in the BUHIERARCHY table. Each Business Unit has a Parent Business Unit associated with it and this is represented in the PARENTBUSINESSUNITKEY column.

Primary Keys

PK_BUHIERARCHY - composite primary key on columns BUSINESSUNITKEY and PARENTBUSINESSUNITKEY

Foreign Keys

None

Indexes

None

BUSINESSUNITSTATUSES Table

Structure

	BUSINESSUNITSTATUSES
PK	STATUSKEY
	LABEL

Indexes

Index	PK	Unique	Keys
PK_BUSINESSUNITSTATUSES	✓	Yes	STATUSKEY

Description

A Business Unit in Oracle Identity Analytics can be listed as Active / Inactive and these statuses are listed under the BUSINESSUNITSTATUSES table.

Primary Keys

PK_BUSINESSUNITSTATUSES - primary key on column STATUSKEY

Foreign Keys

None

Indexes

None

Resource Types Metadata Module

Tables in the Resource Types Metadata Module

This chapter describes the tables that make up the Oracle Identity Analytics Resource Types Metadata module.

NAMESPACES Table

Structure

	NAMESPACES
PK	NAMESPACEKEY
	NAMESPACENAME NAMESPACESHORTNAME NAMESPACECOMMENTS MULTIVALUE_DELIMITER TYPE_LDAP

Indexes

Index	PK	Unique	Keys
PK_NAMESPACES	✓	Yes	NAMESPACEKEY

Description

The NAMESPACES table lists resource types from the provisioning system that Oracle Identity Analytics connects to, or it lists the resource types that Oracle Identity Analytics connects to otherwise. Each resource type is identified by a unique key called NAMESPACEKEY. In addition, this table also stores its corresponding NAMESPACENAME, NAMESPACESHORTNAME, and NAMESPACECOMMENTS.

Primary Keys

PK_NAMESPACES on column NAMESPACEKEY

Foreign Keys

None

Indexes

None

ATTRIBUTEATEGORIES Table

Structure

	ATTRIBUTEATEGORIES
PK	ATTRIBUTECATEGORYKEY
PK	NAMESPACEKEY
	ATTRIBUTECATEGORYNAME ATTRIBUTECATEGORYORDER

Index

Index	PK	Unique	Keys
PK_ATTRIBUTEATEGORIES	✓	Yes	ATTRIBUTECATEGORYKEY, NAMESPACEKEY

Description

An account has various attributes defined that are clustered under a particular category. For example, in Active Directory a user's Exchange Attributes are grouped under the 'Exchange' category, and in Top Secret a user's TSO attributes are grouped under the 'TSO' category. Oracle

Identity Analytics stores and handles these different categories under the `ATTRIBUTE_CATEGORIES` table. The attribute categories are listed under their particular Resource Types by referencing the `NAMESPACES` table with the `NAMESPACEKEY`. The Attribute Category is also defined in a particular order to facilitate the import of accounts.

Primary Keys

`PK_ATTRIBUTE_CATEGORIES` - composite key on columns `ATTRIBUTE_CATEGORYKEY` and `NAMESPACEKEY`

Foreign Keys

None

Indexes

None

ATTRIBUTES Table

Structure

	ATTRIBUTES
PK	ATTRIBUTEKEY
PK	ATTRIBUTE_CATEGORYKEY

	ATTRIBUTES
	NAME DESCRIPTION MINVALUE MAXVALUE DEFAULTVALUE MINLENGTH MAXLENGTH EDITTYPE SPACEALLOWEDIN MULTIVALUE ATTRIBUTECASE ATTRIBUTEVALUES EXCLUDEDVALUES LABEL HIDDEN MANDATORY MANAGED ATTRIBUTEORDER ISAUDITABLE ISIMPORTABLE ISMINABLE ISENTITLEMENT_MINABLE ISCERTIFIABLE CLASSIFICATIONS

Index

Index	PK	Unique	Keys
PK_ATTRIBUTES	✓		ATTRIBUTECATEGORYKEY, ATTRIBUTEKEY

Description

The attributes for different Resource Types are listed under the ATTRIBUTES table. Each attribute is mapped to a particular attribute category by way of a reference to the ATTRIBUTECATEGORYKEY from the ATTRIBUTEATEGORIES table. Each attribute is defined by its name and other attribute values such as minimum value, maximum value, excluded value, and default value. The attribute can also be listed as hidden. An edit type lists the data type of the attribute and the label field specifies the attribute name that would be seen in different modules of Oracle Identity Analytics. In addition, a set of flags are assigned in this table to facilitate the handling of the attribute in Oracle Identity Analytics. The functions of these flags are listed below:

- **HIDDEN**-> The attribute is hidden on the Oracle Identity Analytics UI pages
- **MANAGED**-> This flag is selected when any operation is to be done on the attribute
- **MANDATORY**-> This flag specifies that all the operations are to be done on the attribute
- **ISIMPORTABLE** -> The attribute can be imported from a provisioning system
- **ISAUDITABLE** -> This flag specifies that auditing can be done on the attribute
- **ISMINABLE** -> This flag is selected when the attribute is defined for RoleEngineering
- **ISENTITLEMENT_MINABLE** -> This flag specifies that the attribute's entitlement are defined for Role Engineering
- **ISCERTIFIABLE** -> Select this flag when certification is to be carried out on the attribute

Primary Keys

PK_ATTRIBUTEATEGORIES - composite key on columns ATTRIBUTEKEY and ATTRIBUTECATEGORYKEY

Foreign Keys

None

Indexes

None

ATTRIBUTE_VALUES Table

Structure

	ATTRIBUTE_VALUES
PK	ID
	ATTRIBUTE_ID ATTRIBUTE_VALUE

Index

Index	PK	Unique	Keys
PK_ATTRIBUTE_VALUES	✓	Yes	ID
IX_ATTR_VALUES_AID		No	ATTRIBUTE_ID

Description

The ATTRIBUTE_VALUES table stores the actual values of all entitlements/attributes in Oracle Identity Analytics if they are present in the accounts. The ATTRIBUTE_VALUE field stores the value, and the ATTRIBUTE_ID field ties the table to the ID in the ATTRIBUTES table.

Primary Keys

PK_ATTRIBUTE_VALUES - primary key on column ID

Foreign Keys

None

Indexes

IX_ATTR_VALUES_AID - non-unique index on column ATTRIBUTE_ID

ATTRIBUTE_VALUE_METADATA Table

Structure

	ATTRIBUTE_VALUE_METADATA
PK	ATTRIBUTE_VALUE_ID
PK	ENDPOINT_ID
	HIGH_PRIVILEGED DATA_OWNER_ID DATA_OWNER_NAME CLASSIFICATION DEFINITION COMMENTS

Indexes

Index	PK	Unique	Keys
PK_ATTRIBUTE_VALUES_MET	✓	Yes	ATTRIBUTE_VALUE_ID, ENDPOINT_ID

Description

Attributes for various resources have values that are not always comprehensible to managers or end users. System Administrators can add comprehensible names for these attributes in Oracle Identity Analytics so that they are more easily understood. The table that defines the mapping between the attribute value and the attribute's comprehensible name is ATTRIBUTE_VALUE_METADATA table. Every entry in this table references the attribute_values and endpoints table by their respective IDs.

Primary Keys

PK_ATTRIBUTE_VALUES_MET - Composite primary key on columns ATTRIBUTE_VALUE_ID and ENDPOINT_ID

Foreign Keys

None

Indexes

None

ENDPOINTS Table

Structure

	ENDPOINTS
PK	ID
	NAMESPACE_ID ENDPOINT_NAME HOST_NAME HOST_IP DESCRIPTION COMMENTS CREATEUSER UPDATEUSER CREATEDATE UPDATEDATE SERVICEDESKTICKETNUMBER

Index

Index	PK	Unique	Keys
PK_ENDPOINTS	✓	Yes	ID

Description

The ENDPOINTS table contains all of the resource IDs that are tied to the different resource types. (Prior to Sun Role Manager 5.0, resources were called *endpoints*, and resource types were called *namespaces*.) A resource type can have multiple 'instances' and each instance has a corresponding resource. The NAMESPACE_ID field is used to reference the NAMESPACES table, and the field ID is unique.

Primary Keys

PK_ENDPOINTS - primary key on column ID

Foreign Keys

None

Indexes

None

ENDPOINT_POLICIES Table

Structure

	ENDPOINT_POLICIES
PK	ENDPOINT_ID
PK	POLICY_ID
PK	POLICY_VERSION_ID

Indexes

Index	PK	Unique	Keys
PK_ENDPOINT_POLICIES	✓	Yes	ENDPOINT_ID, POLICY_ID, POLICY_VERSION_ID

Description

Each policy can be associated with a resource (endpoint), and this is represented in a derived table, ENDPOINT_POLICIES. This table in turn references the tables ENDPOINTS and POLICIES through the respective primary keys.

Accounts Module

Tables in the Accounts Module

This chapter describes the tables that make up the Oracle Identity Analytics Accounts module.

ACCOUNTS Table

Structure

	ACCOUNTS
PK	ACCOUNTKEY
PK	NAMESPACEKEY

	ACCOUNTS
	NAME ID DESCRIPTION DOMAIN COMMENTS SUSPENDED LOCKED CREATEUSER UPDATEUSER CREATEDATE UPDATEDATE ATTR_VALUES_HASH ENDPOINT_ID ENDPOINT_NAME LAST_SYNCHRONIZED ACCOUNTTYPE_ID

Index

Index	PK	Unique	Keys
PK_ACCOUNTS	✓	Yes	ACCOUNTKEY, NAMESPACEKEY
IX_ACCOUNTS_ACCOUNTKEY		Yes	ACCOUNTKEY

Description

The ACCOUNTS table carries the accounts imported from the various Resource Types. Every account carries the Domain Name, Endpoint, and Status of the account. Also for audit purposes information about the account's Creation Date and Update Date, as well as the User who created the account and the user under which the account was updated is also saved in Oracle Identity Analytics. Each time the base accounts are updated, the ATTR_VALUES_HASH column is updated to keep track of the 'changed' accounts from the new feed. The account is also listed under its particular Resource Types by associating with the Namespace table using the NAMESPACEKEY as the reference.

Primary Keys

PK_ACCOUNTS - composite key on columns ACCOUNTKEY and NAMESPACEKEY

Foreign Keys

None

Indexes

IX_ACCOUNTS_ACCOUNTKEY - non unique index on column ACCOUNTKEY

ACCOUNT_TYPES Table

Structure

	ACCOUNT_TYPES
PK	ID
	LABEL DESCRIPTION

Indexes

Index	PK	Unique	Keys
PK_ACCOUNT_TYPES	✓	Yes	ID

Description

The different account types imported into Oracle Identity Analytics are listed under the 'ACCOUNT_TYPES' table. The following out-of-the-box account types are supported:

1. Provisioning account
2. High Privileged
3. Service Account
4. System Account

By default, all account types are set to 'Provisioning account' if not explicitly specified in the import process.

Primary Keys

PK_ACCOUNT_TYPES on column ID

Foreign Keys

None

Indexes

None

ACCOUNT_ATTRIBUTES Table

Structure

	ACCOUNT_ATTRIBUTES
PK	ID
	ACCOUNT_ID PARENT_ID ACCT_ATTR_HIER_ID UPDATE_DATE

Indexes

Index	PK	Unique	Keys
PK_ACCOUNT_ATTRIBUTES_T	✓	Yes	ID
IX_ACCOUNT_ATTRIBUTES_ACID		No	ACCOUNT_ID
IX_ACCOUNT_ATTRIBUTES_PID		No	PARENT_ID

Description

The ACCOUNTS table carries only the account name and the audit values for that particular account. The ACCOUNT_ATTRIBUTES table carries references to the various parent accounts, along with hierarchy information within an account. It references the ACCOUNTS and the ACCT_ATTR_HIER_NODES tables by using the columns ACCOUNT_ID and ACCT_ATTR_HIER_ID respectively. These references help pull up information from the accounts and reference them to a particular account parent-child relationship.

Primary Keys

PK_ACCOUNT_ATTRIBUTES_T - primary key on column ID

Foreign Keys

None

Indexes

IX_ACCOUNT_ATTRIBUTES_ACID - non-unique index on column ACCOUNT_ID

IX_ACCOUNT_ATTRIBUTES_PID - non-unique index on column PARENT_ID

ARC_ACCOUNT_ATTRIBUTES Table

Structure

	ARC_ACCOUNT_ATTRIBUTES
	ID
	ACCOUNT_ID
	PARENT_ID
	ACCT_ATTR_HIER_ID
	UPDATE_DATE
	ARCHIVE_DATE

Index

Index	PK	Unique	Keys
IX_ARC_ACCT_ATTRIBUTES_ACID		No	ACCOUNT_ID
IX_ARC_ACT_ATTRIBUTES_PID		No	PARENT_ID

Description

The ARC_ACCOUNT_ATTRIBUTES table archives 'old/changed' account_attribute data from the ACCOUNT_ATTRIBUTES table whenever an account is changed/updated.

Primary Keys

None

Foreign Keys

None

Indexes

IX_ARC_ACCT_ATTRIBUTES_ACID - non-unique index on column ACCOUNT_ID

IX_ARC_ACCT_ATTRIBUTES_PID - non-unique index on column PARENT_ID

ACCT_ATTR_HIER_NODES Table

Structure

	ACCT_ATTR_HIER_NODES
PK	ID
	ROOT_ID PARENT_ID ATTRIBUTE_VALUE_ID LFT RGT UPDATE_DATE

Index

Index	PK	Unique	Keys
PK_ACCT_ATTR_HIER_NODES	✓	Yes	ID
IX_ACT_ATT_HIER_AV_ID		No	ATTRIBUTE_VALUE_ID
IX_ACT_ATT_HIER RID		No	ROOT_ID
IX_ACT_ATT_HIER_PID		No	PARENT_ID

Description

The ACCT_ATTR_HIER_NODES maintains hierarchy information between attributes of an account. It has a unique ID, a ROOT_ID, and a PARENT_ID representing the root nodes and parent nodes respectively in the hierarchy. The ATTRIBUTE_VALUE_ID is a reference key to

the ATTRIBUTE_VALUES table that contains the actual values of the attributes in the accounts. UPDATE_DATE stores information in case of an account modification. The fields LFT and RGT are used to maintain hierarchy information as well.

Primary Keys

PK_ACCT_ATTR_HIER_NODES - primary key on column ID

Foreign Keys

None

Indexes

IX_ACT_ATT_HIER_AV_ID - non-unique index on column ATTRIBUTE_VALUE_ID

IX_ACT_ATTR_HIER_RID - non-unique index on column ROOT_ID

IX_ACT_ATTR_HIER_PID - non-unique index on column PARENT_ID

Roles Module

Tables in the Roles Module

This chapter describes the tables that make up the Oracle Identity Analytics Roles module.

ROLES Table

Structure

	ROLES
PK	ROLEKEY

	ROLES
	ROLENAME
	ROLEDESCRIPTION
	ROLECOMMENTS
	DEPARTMENT
	STARTDATE
	ENDDATE
	CUSTOMPROPERTY1
	CUSTOMPROPERTY2
	CUSTOMPROPERTY3
	CUSTOMPROPERTY4
	CUSTOMPROPERTY5
	CUSTOMPROPERTY6
	CUSTOMPROPERTY7
	CUSTOMPROPERTY8
	CUSTOMPROPERTY9
	CUSTOMPROPERTY10
	CREATEUSER
	UPDATEUSER
	CREATEDATE
	UPDATEDATE
	JOBCODE
	SERVICEDESKTICKETNUMBER
	STATUSKEY
	HIGHPRIVELEGED
	BUSINESSAPPROVER
	TECHNICALAPPROVER
	USERASSOCIATIONBUAPPROVER
	USERASSOCIATIONTECHAPPROVER
	TYPE_ID

	ROLES
	WORKFLOW_ID CURRENT_VERSION_ID VERSION_COUNT LAST_SYNCHRONIZED DELEGABLE

Indexes

Index	PK	Unique	Keys
PK_ROLES	✓		ROLEKEY

Description

The roles that are designed in Oracle Identity Analytics are similar to the job functions in an organization. Each user can be associated with a role and assigned access levels. Roles are defined in the ROLES table and a unique Rolekey identifies each role. A role is assigned a ROLENAME, a ROLEDESCRIPTION, and a ROLECOMMENTS property. In addition, you can specify the department that a role is assigned to by populating the DEPARTMENT field. There are also 10 custom fields that can be used to add additional information about a role. For audit purposes, a role's CREATEUSER, UPDATEUSER, CREATEDATE, and UPDATEDATE fields are provided. The BUSINESSAPPROVER, TECHNICALAPPROVER, USERASSOCIATIONBUAPPROVER, and USERASSOCIATIONTECHAPPROVER fields are provided for Role Life Cycle Management Workflow process.

Primary Keys

PK_ROLES - primary key on column ROLEKEY

Foreign Keys

None

Indexes

None

ROLEHIERARCHY Table

Structure

	ROLEHIERARCHY
PK	ROLEKEY
PK	PARENTROLEKEY
PK	ROLE_VERSION_ID

Indexes

Index	PK	Unique	Keys
PK_ROLEHIERARCHY	✓		ROLEKEY, PARENTROLEKEY, ROLE_VERSION_ID

Description

Similar to Business Units, a hierarchy can exist between roles and these can be represented using the ROLEHIERARCHY table in Oracle Identity Analytics. Each role is associated with its parent in the PARENTROLEKEY field. This field contains the rolekey of the parent role.

Primary Keys

PK_ROLEHIERARCHY - composite primary key on columns ROLEKEY, PARENTROLEKEY and ROLE_VERSION_ID

Foreign Keys

None

Indexes

None

ROLE_VERSIONS Table

Structure

	ROLE_VERSIONS
PK	ID

	ROLE_VERSIONS
	ROLE_ID
	VERSION_NUMBER
	ROLENAME
	ROLEDESCRIPTION
	ROLECOMMENTS
	DEPARTMENT
	STARTDATE
	END DATE
	CUSTOMPROPERTY1
	CUSTOMPROPERTY2
	CUSTOMPROPERTY3
	CUSTOMPROPERTY4
	CUSTOMPROPERTY5
	CUSTOMPROPERTY6
	CUSTOMPROPERTY7
	CUSTOMPROPERTY8
	CUSTOMPROPERTY9
	CUSTOMPROPERTY10
	CREATEUSER
	UPDATEUSER
	CREATEDATE
	UPDATEDATE
	JOBCODE
	SERVICEDESKTICKETNUMBER
	STATUSKEY
	HIGHPRIVILEGED
	BUSINESSAPPROVER
	TECHNICALAPPROVER
	USERASSOCIATIONBUAPPROVER
	USERASSOCIATIONTECHAPPROVER

	ROLE_VERSIONS
	TYPE_ID WORKFLOW_ID VERSION_STATUS_ID BASE_VERSION_ID VERSION_COUNT LAST_APPROVER LAST_APPROVAL_DATE LAST_APPROVER_COMMENTS LAST_SYNCHRONIZED

Indexes

Index	PK	Unique	Keys
PK_ROLE_VERSIONS	✓		ID
IX_ROLE_VERSIONS			ROLE_ID,VERSION_NUMBER

Description

When a policy is added to or removed from a role in Oracle Identity Analytics, a role approval process is initiated by the System. A snapshot of the existing role is captured and saved into the ROLE_VERSIONS table prior to the initiation of the role approval process. This maintains the role's history, which can be accessed to compare previous versions.

Note - A new version of a role is not created when changes are made to the membership of the role (for example, if users are added or removed from the role).

Primary Keys

PK_ROLE_VERSIONS - composite primary key on columns ID

Foreign Keys

None

Indexes

IX_ROLE_VERSIONS - non-unique index on column ROLE_ID, VERSION_NUMBER

ROLESTATUSES Table

Structure

	ROLESTATUSES
PK	STATUSKEY
	LABEL

Indexes

Index	PK	Unique	Keys
PK_ROLESTATUSES	✓		STATUSKEY

Description

Similar to the Business Units, each role has a status that is stored in the ROLESTATUSES table. In Oracle Identity Analytics a role can have the following statuses depending on its stage in the Role Life Cycle:

- Active
- Inactive
- Composing
- Pending Approval
- Decommissioned

The STATUSKEY field is used to reference the ROLES table and the LABEL describes the status of the role.

Primary Keys

PK_ROLESTATUSES - primary key on column STATUSKEY

Foreign Keys

None

Indexes

None

ROLE_TYPES Table

Structure

	ROLE_TYPES
PK	ID
	LABEL DESCRIPTION

Indexes

Index	PK	Unique	Keys
PK_ROLE_TYPES	✓		ID

Description

The ROLE_TYPES table is used to define a Role category. The available Role category or Role Types are -

- Provisioning Role
- Access Control Role
- Organizational Role

Primary Keys

PK_ROLE_TYPES - composite primary key on columns ID

Foreign Keys

None

Indexes

None

ROLE_OWNERS Table

Structure

	ROLE_OWNERS
PK	ID
PK	ROLE_VERSION_ID
	ROLE_ID OWNER_ID OWNER_TYPE

Indexes

Index	PK	Unique	Keys
PK_ROLE_OWNERS	✓		ID, ROLE_VERSION_ID

Description

This ROLE_OWNERS table defines the relationship between a role and its owner which can be either a Globaluser or a role in Oracle Identity Analytics. ROLE_ID refers to the role owned in the ROLES table, whereas OWNER_ID refers to the GLOBALUSERS table.

Primary Keys

PK_ROLE_OWNERS - composite primary key on columns ID and ROLE_VERSION_ID

Foreign Keys

None

Indexes

None

ROLE_EXCLUSIONROLES Table

Structure

	ROLE_EXCLUSIONROLES
PK	ROLEKEY
PK	EXCLUSIONROLEKEY
PK	ROLE_VERSION_ID
	EXCLUSIONCOMMENTS

Indexes

Index	PK	Unique	Keys
PK_ROLE_EXCLUSIONROLES	✓		ROLEKEY, EXCLUSIONROLEKEY, ROLE_VERSION_ID

Description

The ROLE_EXCLUSIONROLES table defines the segregation of duties (SOD) between roles. Each Role defined for SOD has its role key and the corresponding (SOD) role's rolekey defined in the EXCLUSIONROLEKEY column.

Primary Keys

PK_ROLE_EXCLUSIONROLES - composite primary key on columns ROLEKEY, EXCLUSIONROLEKEY and ROLE_VERSION_ID

Foreign Keys

None

ROLE_POLICIES Table

Structure

	ROLE_POLICIES
PK	ROLEKEY
PK	POLICYKEY
PK	ROLE_VERSION_ID
	REQUIRED POLICY_VERSION_ID

Indexes

Index	PK	Unique	Keys
PK_ROLE_POLICIES	✓	Yes	ROLEKEY, POLICYKEY, ROLE_VERSION_ID

Description

ROLE_POLICIES is the association table for roles and policies. The associations vary with the role and policy versions, thus the columns `role_version_id` and `policy_version_id` are also maintained in this table.

Primary Keys

PK_ROLE_POLICIES - composite primary key on columns `ROLEKEY`, `POLICYKEY`, `ROLE_VERSION_ID`

Foreign Keys

None

Indexes

None

Policies Module

Tables in the Policies Module

This chapter describes the tables that make up the Oracle Identity Analytics Policies module.

POLICIES Table

Structure

	POLICIES
PK	POLICYKEY
PK	NAMESPACEKEY

	POLICIES
	POLICYNAME POLICYCOMMENTS CREATEUSER UPDATEUSER CREATEDATE UPDATEDATE SERVICEDESKTICKETNUMBER TEMPLATE RISK_LEVEL CURRENT_VERSION_ID VERSION_COUNT STATUS_ID LAST_SYNCHRONIZED

Indexes

Index	PK	Unique	Keys
PK_POLICIES	✓	Yes	POLICYKEY, NAMESPACEKEY

Description

Each role is assigned one or more policies. The POLICIES table contains information about these policies, which are identified by a unique POLICYKEY and a POLICYNAME. Each policy is associated with its resource type from the NAMESPACE table using the NAMESPACEKEY as a reference. For auditing purposes CREATEUSER, UPDATEUSER, CREATEDATE, and UPDATEDATE data is populated on every policy in this table.

Primary Keys

PK_POLICIES - composite primary key on columns POLICYKEY and NAMESPACEKEY

Foreign Keys

None

Indexes

None

POLICY_ATTR_HIER_NODES Table

Structure

	POLICY_ATTR_HIER_NODES
PK	ID
	ROOT_ID PARENT_ID ATTRIBUTE_VALUE_ID LFT RGT UPDATE_DATE

Index

Index	PK	Unique	Keys
PK_POLICY_ATTR_HIER_NODES	✓	Yes	ID
IX_POL_ATTR_HIER_AVID		No	ATTRIBUTE_VALUE_ID
IX_POL_ATTR_HIER_RID		No	ROOT_ID
IX_POL_ATTR_HIER_PID		No	PARENT_ID

Description

The POLICY_ATTR_HIER_NODES table maintains policy attribute hierarchy information. It has a unique ID, a ROOT_ID, and a PARENT_ID representing the root nodes and parent nodes respectively in the hierarchy. The ATTRIBUTE_VALUE_ID is a reference key to the ATTRIBUTE_VALUES table that contains the actual values of the attributes. UPDATE_DATE stores information in case of a modification to the account. Fields LFT and RGT are used to maintain hierarchy information as well.

Primary Key

PK_ID- primary key on column ID

Foreign Key

None

Indexes

None

POLICY_VERSIONS Table

Structure

	POLICY_VERSIONS
PK	ID
PK	VERSION_NUMBER
PK	POLICY_ID
PK	NAMESPACEKEY
	STATUS_ID POLICYNAME POLICYCOMMENTS CREATEUSER UPDATEUSER CREATEDATE UPDATEDATE SERVICEDESKTICKETNUMBER TEMPLATE RISK_LEVEL WORKFLOW_ID VERSION_STATUS_ID BASE_VERSION_ID VERSION_COUNT LAST_APPROVER LAST_APPROVAL_DATE LAST_APPROVER_COMMENTS LAST_SYNCHRONIZED

Indexes

Index	PK	Unique	Keys
PK_POLICY_VERSIONS	✓	Yes	ID, POLICY_ID, NAMESPACEKEY, VERSION_NUMBER

Description

Any modifications made to policies within the Oracle Identity Analytics Identity Warehouse module results in the creation of a new policy version. This policy version undergoes a Policy Approval Process. A snapshot of the existing policy is captured and saved in the POLICY_VERSIONS table prior to the initiation of the Policy Approval process.

Primary Keys

PK_POLICY_VERSIONS - composite primary key on column POLICY_ID, NAMESPACEKEY and VERSION_NUMBER

Foreign Keys

None

Indexes

None

POLICY_ATTRIBUTES Table

Structure

	POLICY_ATTRIBUTES
PK	ID

	POLICY_ATTRIBUTES
	POLICY_ID PARENT_ID POLICY_ATTR_HIER_ID RISK_LEVEL REQUIRED UPDATE_DATE POLICY_VERSION_ID

Indexes

Index	PK	Unique	Keys
PK_POLICY_ATTRIBUTES_T	✓	Yes	ID
IX_POLICY_ATTRIBUTES_PID		No	POLICY_ID
IX_POLICY_ATTRIBUTES_PRID		No	PARENT_ID

Description

Each policy has multiple attributes defined in it. (This is similar to the relationship between accounts and attributes.) The relationship between policies and attributes is defined in the POLICY_ATTRIBUTES table. The POLICY_ATTR_HIER_ID field references the ID of the POLICY_ATTR_HIER_NODES table, which links to the ATTRIBUTE_VALUES table.

Primary Keys

PK_POLICY_ATTRIBUTES_T - primary key on column ID

Foreign Keys

None

Indexes

IX_POLICY_ATTRIBUTES_PID - non-unique index on column POLICY_ID

IX_POLICY_ATTRIBUTES_PRID - non-unique index on column PARENT_ID

POLICY_EXCLUSIONPOLICIES Table

Structure

	POLICY_EXCLUSIONPOLICIES
PK	POLICYKEY
PK	EXCLUSIONPOLICYKEY
PK	POLICY_VERSION_ID
	EXCLUSION COMMENTS

Indexes

Index	PK	Unique	Keys
PK_POLICY_EXCLUSIONPOLICIES	Yes	Yes	POLICYKEY, POLICY_VERSION_ID, EXCLUSIONPOLICYKEY

Description

The POLICY_EXCLUSIONPOLICIES table defines the segregation of duties (SoD) between policies. Each policy defined for SoD has the policy's POLICYKEY and the corresponding SoD policy's key defined in the EXCLUSIONPOLICYKEY column.

Primary Keys

PK_POLICY_EXCLUSIONPOLICIES - composite primary key on columns POLICYKEY, POLICY_VERSION_ID and EXCLUSIONPOLICYKEY

Foreign Keys

None

Indexes

None

POLICY_OWNERS Table

Structure

	POLICY_OWNERS
PK	ID
	POLICY_ID OWNER_ID OWNER_TYPE POLICY_VERSION_ID

Indexes

Index	PK	Unique	Keys
PK_POLICY_OWNERS	✓	Yes	ID

Description

This table defines the relationship between a policy that is owned by a global user or a policy in Oracle Identity Analytics. POLICY_ID refers to the policy owned in the POLICIES table, whereas OWNER_ID refers to the GLOBALUSERS table.

Primary Keys

PK_POLICY_OWNERS - primary key on column ID

Foreign Keys

None

Indexes

None

Applications Module

Tables in the Applications Module

This chapter describes the tables that make up the Oracle Identity Analytics Applications module.

APPLICATIONS Table

Structure

	APPLICATIONS
PK	ID
	APPLICATION_NAME APPLICATION_VERSION VENDOR ENVIRONMENT COMMENTS STATUS_ID DESCRIPTION UPDATE_DATE CREATE_DATE

Index

Index	PK	Unique	Keys
PK_APPLICATIONS	✓	Yes	ID

Description

The APPLICATIONS table contains general information about the applications in Oracle Identity Analytics.

Primary Keys

PK_APPLICATIONS - primary key on column ID

Foreign Keys

None

Indexes

None

APPLICATION_ATTRIBUTES Table

Structure

	APPLICATION_ATTRIBUTES
PK	APPLICATION_ID
PK	ENDPOINT_ID
PK	ATTRIBUTE_VALUE_ID

Index

Index	PK	Unique	Keys
PK_APP_ATTRIBUTES	✓	Yes	APPLICATION_ID, ENDPOINT_ID, ATTRIBUTE_VALUE_ID

Description

The APPLICATION_ATTRIBUTES table stores information about the endpoints (resources) and attribute values that define the conditions by which applications are linked to users. It references the ENDPOINTS table and the ATTRIBUTE_VALUES table by their respective IDs.

Primary Keys

PK_APP_ATTRIBUTES - composite primary key on columns APPLICATION_ID, ENDPOINT_ID, ATTRIBUTE_VALUE_ID

Foreign Keys

None

Indexes

None

APPLICATION_ACCOUNTS Table

Structure

	APPLICATION_ACCOUNTS
	APPLICATION_ID
	USER_ID
	ACCOUNT_ID

Index

None

Description

The APPLICATION_ACCOUNTS table saves information about user accounts, which is used to provide access to applications. This table references the APPLICATIONS, GLOBALUSERS, and ACCOUNTS tables by their corresponding IDs.

Primary Keys

None

Foreign Keys

None

Indexes

None

APPLICATION_OWNERS Table

Structure

	PK_APPLICATION_OWNERS
PK	ID
	APPLICATION_ID OWNER_ID OWNER_TYPE

Index

Index	PK	Unique	Keys
PK_APPLICATION_OWNERS	✓	Yes	ID

Description

The APPLICATION_OWNERS table contains information about the owner of every application. The OWNER_ID field contains the ID of the user (as found in the GLOBALUSERS table) who is the owner of the application. Every application-to-owner relationship is identified by a unique ID in this table.

Primary Keys

PK_APPLICATION_OWNERS - primary key on column ID

Foreign Keys

None

Indexes

None

APPLICATIONSTATUSES Table

Structure

	PK_APPLICATIONSTATUSES
PK	ID
	APPLICATION_ID OWNER_ID OWNER_TYPE

Index

Index	PK	Unique	Keys
PK_APPLICATIONSTATUSES	✓	Yes	ID

Description

The APPLICATIONSTATUSES table contains status labels of applications saved in the APPLICATIONS table.

Primary Keys

PK_APPLICATIONSTATUSES - primary key on column ID

Foreign Keys

None

Indexes

None

Import and Export Module

Tables in the Import Export Module

This chapter describes the tables that make up the Oracle Identity Analytics Import Export module.

IMPORT_RUNS Table

Structure

	IMPORT_RUNS
PK	IMPORT_ID
	SOURCE IMPORT_TYPE START_TIME END_TIME TOTAL_NUMBER_OF_RECORDS NUMBER_OF_RECORDS_IMPORTED NUMBER_OF_ERRORS DESCRIPTION IMPORTED_BY SUCCESS POST_IMPORT_TASKS

Index

Index	PK	Unique	Keys
PK_IMPORT_RUNS	✓		IMPORT_ID

Description

The IMPORT_RUNS table stores information about the Oracle Identity Analytics user interface while imports are taking place. It records the unique ID of the import and other valid details such as the SOURCE of the import, the IMPORT_TYPE, the START_TIME, the END_TIME, the number of records imported, and the number of accumulated errors.

Primary Keys

PK_IMPORT_RUNS - primary key on column IMPORT_ID

Foreign Keys

None

Indexes

None

IMPORT_RUN_STEPS Table

Structure

	IMPORT_RUN_STEPS
PK	ID

	IMPORT_RUN_STEPS
	IMPORT_RUN_ID NAME DESCRIPTION START_TIME END_TIME INPUT_NAME NUMBER_OF_INPUT_RECORDS OUTPUT_NAME NUMBER_OF_OUTPUT_RECORDS NUMBER_OF_ERRORS SUCCESS

Index

Index	PK	Unique	Keys
PK_IMPORT_RUN_STEPS	✓		ID

Description

Importing data into Oracle Identity Analytics may require several steps. Information about each import step is stored in the IMPORT_RUN_STEPS table, where the IMPORT_RUN_ID column refers to the IMPORT_ID column located in the IMPORT_RUNS table.

Primary Keys

PK_IMPORT_RUN_STEPS - primary key on column IMPORT_ID

Foreign Keys

None

Indexes

None

IMPORT_VALIDATION_EXCEPTIONS Table

Structure

	IMPORT_VALIDATION_EXCEPTIONS
	EXCEPTIONTYPE
	DESCRIPTION
	VALIDATIONDATE
	IMPORT_RUN_ID
	EXCEPTION_LEVEL
	IMPORT_RUN_STEP_ID

Description

Oracle Identity Analytics can connect to a provisioning system and import accounts from that system. Any exceptions that occur during this process are stored in the IMPORT_VALIDATION_EXCEPTIONS table. The type and description of the exception are also stored in the table.

Primary Keys

None

Foreign Keys

None

Indexes

None

EXPORT_RUNS Table

Structure

	EXPORT_RUNS
PK	ID

	EXPORT_RUNS
	TARGET EXPORT_TYPE START_TIME END_TIME TOTAL_NUMBER_OF_RECORDS TOTAL_NUMBER_OF_RECORDS_EXPORTED NUMBER_OF_ERRORS DESCRIPTION EXPORTED_BY SUCCESS

Index

Index	PK	Unique	Keys
PK_EXPORT_RUNS	✓		ID

Description

While exports are taking place, the EXPORT_RUNS table records information about the Oracle Identity Analytics User Interface. It records the unique ID of the export process and other valid details, such as the type of export, the start and end times, the number of records exported, and the number of accumulated errors.

Primary Key

PK_EXPORT_RUNS - primary key on column ID

Foreign Key

None

Indexes

None

Event Listener Module

Tables in the Event Listener Module

This chapter describes the tables that make up the Oracle Identity Analytics Event Listener module.

EVENT_LISTENERS Table

Structure

	REPORTS
PK	ID
	LISTENERNAME LISTENER_DESCRIPTION LISTENER_STATUS_ID LISTENER_CONDITION DATA_XML

Index

Index	PK	Unique	Keys
PK_EVENT_LISTENERS	✓	Yes	ID

Description

The EVENT_LISTENERS table is the primary table for the event listener module. It stores event listener data defined in Oracle Identity Analytics and identified by a unique ID. In addition, condition and action information is saved in the LISTENER_CONDITION and DATA_XML fields respectively.

Primary Keys

PK_EVENT_LISTENERS - primary key on column ID

Foreign Keys

None

Indexes

None

EVENT_TRIGGER_DATA Table

Structure

	REPORT_DEFINITIONS
PK	EVENTLISTENER_ID
PK	ACTION_TYPE
PK	OBJECTMODIFICATION_ID
PK	OBJECT_TYPE

Index

Index	PK	Unique	Keys
PK_EVENT_TRIGGER_DATA	✓	Yes	EVENTLISTENER_ID, ACTION_TYPE, OBJECTMODIFICATION_ID, OBJECT_TYPE

Description

The EVENT_TRIGGER_DATA table stores data about each action that is configured with a listener and defined in the EVENT_LISTENERS table. Details about the type of action and the object to be modified are stored in this table.

Primary Keys

PK_EVENT_TRIGGER_DATA - composite primary key on columns EVENTLISTENER_ID, ACTION_TYPE, OBJECTMODIFICATION_ID, OBJECT_TYPE

Foreign Keys

None

Indexes

None

OBJECT_MODIFICATIONS Table

Structure

	REPORT_DESIGNS
PK	ID
	OBJECT_ID OBJECT_TYPE DATA_XML

Index

Index	PK	Unique	Keys
PK_OBJECT_MODIFICATIONS	✓		ID

Description

The OBJECT_MODIFICATIONS table stores objects that have been modified in the system. Every object under modification is identified by a unique ID. Additional information about the object is stored in the DATA_XML column.

Primary Keys

PK_OBJECT_MODIFICATIONS - primary key on column ID

Foreign Keys

None

Indexes

None

Identity Certification Module

Tables in the Identity Certification Module

This chapter describes the tables that make up the Oracle Identity Analytics Identity Certification module.

ID_CERTS Table

Structure

	ID_CERTS
PK	ID

	ID_CERTS
	NAME
	PERIOD
	BUSINESSUNIT_ID
	STATE
	INCREMENTAL
	REPORT_ID
	CREATEUSER
	UPDATEUSER
	CREATEDATE
	UPDATEDATE
	TYPE
	END_DATE
	CERTIFIER_ID
	REMEDIATION_STATUS
	REMEDIATION_START_DATE
	REMEDIATION_END_DATE
	SUMMARY

Indexes

Index	PK	Unique	Keys
PK_ID_CERTS	✓	Yes	ID

Description

Each certification created in the Oracle Identity Analytics identity certification module is stored in the ID_CERTS table. A certification has a period of validity. The start date of the certification is saved in the PERIOD field, and the end date is stored in the END_DATE field. A business unit can also be associated with a certification and this information is saved in the table's BUSINESSUNIT_ID field. The remediation status of a supported certification can be tracked using the REMEDIATION_STATUS, REMEDIATION_START_DATE, and REMEDIATION_END_DATE fields. Finally, the following fields are provided for audit purposes: CREATEDATE, CREATEUSER, UPDATEDATE, and UPDATEUSER.

Primary Keys

PK_ID_CERTS - primary key on column ID

Foreign Keys

None

Indexes

None

IDC_CONFIGURATIONS Table

Structure

	IDC_CONFIGURATIONS
	IDC_ID
	CONFIGURATION_XML
	CREATEDATE
	CREATEUSER
	UPDATEDATE
	UPDATEUSER

Indexes

Index	PK	Unique	Keys
IX_IDC_ID		No	IDC_ID

Description

The IDC_CONFIGURATIONS table contains information about certification view configuration changes made by the administrator prior to launching the certification process. The CONFIGURATIONS_XML column holds each certification's configuration information in XML format. The CREATE_USER and CREATE_DATE fields store information about the user creating the certification and a timestamp marking when the certification was created.

Primary Keys

None

Foreign Keys

None

Indexes

IX_IDC_ID - non-unique index on column IDC_ID

IDC_USERS TABLE

Structure

	IDC_USERS
PK	ID

	IDC_USERS
	IAM_USER_ID
	USERNAME
	FIRSTNAME
	LASTNAME
	MIDDLENAME
	STREET
	CITY
	STATEORPROVINCE
	ZIPORPOSTALCODE
	COUNTRYORREGION
	FAX
	PHONE
	EXTENSION
	MOBILE
	PAGER
	TITLE
	PRIMARYEMAIL
	SECONDARYEMAIL
	OFFICENAME
	DESCRIPTION
	COMMENTS
	SUSPENDEDDATE
	ENABLEDDATE
	DISABLEDDATE
	DELETEDDATE
	USERDATA
	EMPLOYEEID
	CUSTOMPROPERTY1
	CUSTOMPROPERTY2
	CUSTOMPROPERTY3

	IDC_USERS
	CUSTOMPROPERTY4
	CUSTOMPROPERTY5
	CUSTOMPROPERTY6
	CUSTOMPROPERTY7
	CUSTOMPROPERTY8
	CUSTOMPROPERTY9
	CUSTOMPROPERTY10
	CUSTOMPROPERTY11
	CUSTOMPROPERTY12
	CUSTOMPROPERTY13
	CUSTOMPROPERTY14
	CUSTOMPROPERTY15
	CUSTOMPROPERTY16
	CUSTOMPROPERTY17
	CUSTOMPROPERTY18
	CUSTOMPROPERTY19
	CUSTOMPROPERTY20
	CREATEUSER
	UPDATEUSER
	CREATEDATE
	UPDATEDATE
	EMPLOYEEETYPE
	SERVICEDESKTICKETNUMBER
	STARTDATE
	ENDDATE
	MANAGER

	IDC_USERS
	BUSINESSAPPROVER
	TECHNICALAPPROVER
	DELEGATE
	LOCATION
	JOBCODES

Indexes

Index	PK	Unique	Keys
PK_IDC_USERS	✓	Yes	ID

Description

For entitlement certifications, users who require certification are defined in the IDC_USERS table. Each user record has a unique ID, a username, a firstname, a lastname, and a middlename. There are also fields that can store each user's street address, email address, and phone number. Custom fields are provided to capture special information. Because the user can be associated with a workflow, it is possible to save the user's manager, businessapprover, and technicalapprover. A delegate field is also present that a user can use to specify a delegated user. A statuskey specifies the user's status. For audit purposes the table includes fields for capturing the users's Creation Date and Update Date.

Primary Keys

PK_IDC_USERS - primary key on column ID

Foreign Keys

None

Indexes

None

ID_CERT_USERS Table

Structure

	ID_CERT_USERS
PK	CERT_ID
PK	USER_ID
	COMMENTS WORKS_FOR_ME REPORTS_TO CERTIFIED_BY

Indexes

Index	PK	Unique	Keys
PK_ID_CERT_USERS	✓	Yes	CERT_ID, USER_ID

Description

Every user who is certified in the certification process appears in the ID_CERT_USERS table. This table includes a CERT_ID column that maps to the ID field of the ID_CERTS table. A USER_ID is also assigned to the user. The REPORTS_TO field associates a user with the user's manager, and the CERTIFIED_BY field captures the username of the person updating the certification.

Primary Keys

PK_ID_CERT_USERS - composite primary key on columns CERT_ID and USER_ID

Foreign Keys

None

Indexes

None

IDC_ACCOUNTS Table

Structure

	IDC_ACCOUNTS
PK	ID
	IAM_ACCOUNT_ID NAMESPACEKEY NAME DESCRIPTION DOMAIN COMMENTS SUSPENDED LOCKED CREATEUSER UPDATEUSER CREATEDATE UPDATEDATE ENDPOINT_ID ENDPOINT_NAME ACCOUNTTYPE_ID

Index

Index	PK	Unique	Keys
PK_IDC_ACCOUNTS	✓	Yes	ID

Description

Each account for a user in the certification process is listed under the IDC_ACCOUNTS table. Each account is also associated with the IACCOUNTS and NAMESPACE tables by way of their respective reference keys. The table also stores the following information: account name, endpoint (resource), description, domain, and account status. ACCOUNTTYPE_ID correlates an account type with the certified account.

Primary Keys

PK_IDC_ACCOUNTS - primary key on column ID

Foreign Keys

None

Indexes

None

IDC_ACCOUNT_ATTRIBUTES Table

Structure

	IDC_ACCOUNT_ATTRIBUTES
PK	ID
	PARENT_ID ACCOUNT_ID ATTRIBUTE_ID ATTRIBUTE_VALUE HIGH_PRIVILEGED UPDATEDATE

Indexes

Index	PK	Unique	Keys
PK_IDC_ACCOUNT_ATTRIBUTES	✓		ID

Description

The IDC_ACCOUNT_ATTRIBUTES table saves information about the value of the attribute in a certification. Each account in Oracle Identity Analytics has a list of attributes that need to be certified. These attributes are referenced from the ATTRIBUTES table, and the accounts are referenced from the ACCOUNTS table. The attribute value is also stored in this table.

Primary Keys

PK_IDC_ACCOUNT_ATTRIBUTES - primary key on column ID

Foreign Keys

None

Indexes

None

IDC_ATTR_VALUES Table

Structure

	IDC_ATTR_VALUES TABLE
PK	ID
	NAMESPACE_ID ENDPOINT_ID ATTRIBUTE_ID VALUE IAM_ATTR_VAL_ID CREATUSER UPDATEUSER CREATEDATE UPDATEDATE

Indexes

Index	PK	Unique	Keys
PK_IDC_ATTR_VALUES	✓	Yes	ID

Description

For Data Owner certifications, a list of attribute values can be specified for the certifications that needs to be performed. These attribute values are defined in the IDC_ATTR_VALUES table. Each value has a unique ID field, along with an ATTRIBUTE_ID field, an ENDPOINT_ID field, and a NAMESPACE_ID field that refer to the respective tables in the Identity Warehouse. **Note** - In Oracle Identity Analytics, the terminology "Namespace" and "Resource Type" mean the same thing.

Primary Keys

PK_IDC_ATTR_VALUES - primary key on column ID

Foreign Keys

None

Indexes

None

IDC_USER_ACCOUNTS Table

Structure

	IDC_USER_ACCOUNTS
PK	CERT_ID
PK	USER_ID
PK	ACCOUNT_ID
	CERTIFIED COMMENTS CERTIFIED_BY CERTIFICATION_DATE STATUS_END_DATE REMEDIATION_STATUS REMEDIATION_DATE REMEDIATION_COMMENTS

Indexes

Index	PK	Unique	Keys
PK_IDC_USER_ACCOUNTS	✓	Yes	CERT_ID, USER_ID, ACCOUNT_ID

Description

The IDC_USER_ACCOUNTS table is a derived table that associates user accounts with users who are subject to certification. This table includes the CERT_ID, the USER_ID, and the ACCOUNT_ID fields that reference the IDC_CERT_USERS and IDC_ACCOUNTS tables. Also associated with the IDC_USER_ACCOUNTS table is a certified flag that tracks if the account has been certified, as well as a CERTIFICATION_DATE field that stores the date/time of the certification, thus allowing for updates. In addition, the CERTIFIED_BY field contains the username of the person performing updates on the certification, which is required for auditing purposes. Remediation details of the certification process can be tracked using the REMEDIATION_STATUS, REMEDIATION_DATE, and REMEDIATION_COMMENTS fields.

Primary Keys

PK_IDC_USER_ACCOUNTS - composite primary key on columns CERT_ID, USER_ID and ACCOUNT_ID

Foreign Keys

None

Indexes

None

IDC_USER_ACCT_ATTRS Table

Structure

	IDC_USER_ACCT_ATTRS
PK	CERT_ID
PK	USER_ID
PK	ACCOUNT_ID
PK	ACCOUNT_ATTRIBUTE_ID

	IDC_USER_ACCT_ATTRS
	CERTIFIED COMMENTS CERTIFIED_BY CHANGED_SINCE_LAST CERTIFICATION_DATE STATUS_END_DATE REMEDIATION_STATUS REMEDIATION_DATE REMEDIATION_COMMENTS

Indexes

Index	PK	Unique	Keys
PK_USER_IDC_ACCT_ATTRS	✓	Yes	CERT_ID, USER_ID, ACCOUNT_ID, ACCOUNT_ATTRIBUTE_ID

Description

The IDC_USER_ACCT_ATTRS table is a derived table that associates user account attributes with users in a certification. This table includes the CERT_ID, USER_ID, ACCOUNT_ID, and ACCOUNT_ATTRIBUTE_ID fields that reference the IDC_CERT_USERS, IDC_ACCOUNTS, and IDC_USER_ACCOUNTS tables. A certified flag tracks if accounts have been certified, and the CERTIFICATION_DATE field stores the date/time of the certification, thus allowing for updates. In addition, the CERTIFIED_BY field contains the username of the person that makes changes to the certification, which is required for auditing purposes. Remediation details of the certification process can be tracked using the REMEDIATION_STATUS, REMEDIATION_DATE, and REMEDIATION_COMMENTS fields.

Primary Keys

PK_USER_IDC_ACCT_ATTR - composite primary key on columns CERT_ID, USER_ID, ACCOUNT_ID, ACCOUNT_ATTRIBUTE_ID

Foreign Keys

None

Indexes

None

ID_ATTR_VAL_USERS Table

Structure

	ID_ATTR_VAL_USERS
PK	CERT_ID
PK	USER_ID
PK	ATTR_VALUE_ID
	NAMESPACE_ID ENDPOINT_ID ACCOUNT_ID ATTRIBUTE_ID CERTIFIED COMMENTS CERTIFIED_BY CERTIFICATION_DATE STATUS_END_DATE REMEDIATION_STATUS REMEDIATION_DATE REMEDIATION_COMMENTS ACCOUNT_NAME ENDPOINT_NAME NAMESPACE_NAME ATTRIBUTE_NAME

Indexes

Index	PK	Unique	Keys
PK_ID_ATTR_VAL_USERS	✓	Yes	CERT_ID, USER_ID, ATTR_VALUE_ID

Description

The ID_ATTR_VAL_USERS table is a derived table that associates users and attribute values with a certification. This table has CERT_ID, ATTR_VALUE_ID, and USER_ID fields that reference the ID_CERTS, IDC_ATTR_VALUES, and IDC_USERS tables. A certified flag records whether the association between the user and the attribute value has been certified, and the CERTIFICATION_DATE field stores the date/time of the certification, thus providing for updates. In addition, the CERTIFIED_BY field contains the username of the person who updated the certification, which is required for audit purposes. Remediation details of the certification process can be tracked using the REMEDIATION_STATUS, REMEDIATION_DATE, and REMEDIATION_COMMENTS fields.

Primary Keys

PK_ID_ATTR_VAL_USERS - composite primary key on columns CERT_ID, USER_ID, ATTR_VALUE_ID

Foreign Keys

None

Indexes

None

ID_CERT_ATTR_VALUES Table

Structure

	ID_CERT_ATTR_VALUES
PK	CERT_ID
PK	ATTR_VALUE_ID

	ID_CERT_ATTR_VALUES
	GLOSSARY_DEF COMMENTS TECH_DESCRIPTION HIGH_PRIVILEGED CERTIFIED BELONGS_TO_ME CERTIFIED_BY CERTIFICATION_DATE STATUS_END_DATE

Indexes

Index	PK	Unique	Keys
PK_ID_CERT_ATTR_VALUES	✓	Yes	CERT_ID, ATTR_VALUE_ID

Description

The ID_CERT_ATTR_VALUES table is a derived table that associates attribute values with a certification. This table has CERT_ID and ATTR_VALUE_ID fields that reference the ID_CERTS and IDC_ATTR_VALUES tables. A certified flag records if the association between the attribute value and the certification has been certified, and the CERTIFICATION_DATE field stores the date/time of the certification, thus providing for updates. In addition, the CERTIFIED_BY field contains the username of the person who updated the certification, which is required for audit purposes. Remediation details of the certification process can be tracked using the REMEDIATION_STATUS, REMEDIATION_DATE, and REMEDIATION_COMMENTS fields.

Primary Keys

PK_ID_CERT_ATTR_VALUES - composite primary key on columns CERT_ID, ATTR_VALUE_ID

Foreign Keys

None

Indexes

None

IDC_ROLES Table

Structure

	IDC_ROLES
PK	ID

	IDC_ROLES
	IAM_ROLE_ID
	ROLENAME
	ROLEDESCRIPTION
	ROLECOMMENTS
	DEPARTMENT
	STARTDATE
	ENDDATE
	CUSTOMPROPERTY1
	CUSTOMPROPERTY2
	CUSTOMPROPERTY3
	CUSTOMPROPERTY4
	CUSTOMPROPERTY5
	CUSTOMPROPERTY6
	CUSTOMPROPERTY7
	CUSTOMPROPERTY8
	CUSTOMPROPERTY9
	CUSTOMPROPERTY10
	HIGHPRIVELEGED
	JOBCODE
	SERVICEDESKTICKETNUMBER
	BUSINESSAPPROVER
	TECHNICALAPPROVER
	USERASSOCIATIONBUAPPROVER
	USERASSOCIATIONTECHAPPROVER
	CREATEUSER
	UPDATEUSER
	CREATEDATE
	UPDATEDATE

Indexes

Index	PK	Unique	Keys
PK_IDC_ROLES	✓	Yes	ID

Description

The IDC_ROLES table lists each role associated with the user in the certification process. Each role is associated with the ROLES table by way of the reference rolekey, and custom fields are provided to capture custom role information. For audit purposes, the table includes fields for capturing createuser and createtime information, and updateuser and updatetime information for a role. The BusinessApprover, TechnicalApprover, UserAssociationBusinessApprover, and UserAssociationTechnicalApprover fields are provided for the Workflow process. Each role is associated with an Identity Certificate through the ID field.

Primary Keys

PK_IDC_ROLES - primary key on column ID

Foreign Keys

None

Indexes

None

ID_CERT_ROLES Table

Structure

	ID_CERT_ROLES
PK	CERT_ID
PK	ROLE_ID

	ID_CERT_ROLES
	CERTIFIED COMMENTS CERTIFIED_BY CERTIFICATION_DATE REMEDIATION_STATUS REMEDIATION_DATE REMEDIATION_COMMENTS

Indexes

Index	PK	Unique	Keys
PK_ID_CERT_ROLES	✓	Yes	CERT_ID, ROLE_ID

Description

The ID_CERT_ROLES table records every role that is certified in the certification process. The certification ID maps to the ID field in the ID_CERTS table, and a ROLE_ID is assigned to capture the role ID. A CERTIFIED flag records if the roles have been certified, and the CERTIFICATION_DATE field stores the date/time of the certification, thus providing for updates. In addition, the CERTIFIED_BY field contains the username of the person updating the certification, which is required for auditing purposes. Remediation details of the certification process can be tracked using the REMEDIATION_STATUS, REMEDIATION_DATE, and REMEDIATION_COMMENTS fields.

Primary Keys

PK_ID_CERT_ROLES - composite primary key on column CERT ID, ROLE_ID

Foreign Keys

None

Indexes

None

IDC_USER_ROLES Table

Structure

	IDC_USER_ROLES
PK	CERT_ID
PK	USER_ID
PK	ROLE_ID
	CERTIFIED COMMENTS CERTIFIED_BY CERTIFICATION_DATE REMEDIATION_STATUS REMEDIATION_DATE REMEDIATION_COMMENTS

Indexes

Index	PK	Unique	Keys
PK_IDC_USER_ROLES	✓	Yes	CERT_ID, USER_ID, ROLE_ID

Description

The IDC_USER_ROLES table is a composite table that associates roles with user certifications. The USER_ID, ROLE_ID, and CERT_ID fields reference the IDC_CERT_USERS and IDC_ROLES tables. A CERTIFIED flag records if the account has been certified, and the CERTIFICATION_DATE field stores the date/time of the certification, thus providing for updates. In addition, the CERTIFIED_BY field contains the username of the person updating the certification, which is required for auditing purposes. Remediation details of the certification process can be tracked using the REMEDIATION_STATUS, REMEDIATION_DATE, and REMEDIATION_COMMENTS fields.

Primary Keys

PK_IDC_USER_ROLES - composite primary key on columns USER_ID, ROLE_ID and CERT_ID

Foreign Keys

None

Indexes

None

IDC_POLICIES Table

Structure

	IDC_POLICIES
PK	ID
	IAM_POLICIES_ID NAMESPACE_ID ENDPOINT_ID POLICY_NAME DESCRIPTION COMMENTS CREATE_USER UPDATE_USER CREATE_DATE UPDATE_DATE

Indexes

Index	PK	Unique	Keys
PK_IDC_POLICIES	✓	Yes	ID

Description

The IDC_POLICIES table saves the policy information of a certification with roles. A policy is assigned a POLICY_NAME, a DESCRIPTION, and COMMENTS. An association with a Namespace (Resource Type) and an Endpoint (Resource) is made by utilizing NAMESPACE_ID and ENDPOINT_ID respectively.

Primary Keys

PK_IDC_POLICIES - composite primary key on columns ID

Foreign Keys

None

Indexes

None

IDC_POLICY_ATTRIBUTES Table

Structure

	IDC_POLICY_ATTRIBUTES
PK	ID
	PARENT_ID POLICY_ID ATTRIBUTE_ID ATTRIBUTE_VALUE HIGH_PRIVILEGED UPDATE_DATE

Indexes

Index	PK	Unique	Keys
PK_IDC_POLICY_ATTRIBUTES	✓	Yes	ID

Description

A snapshot of various policy attributes are captured at the moment of certification and saved in the IDC_POLICY_ATTRIBUTES table. These attributes are similar to the account attributes defined. The ATTRIBUTE_VALUE field holds the actual value of the policies, whereas the POLICIES and ATTRIBUTES tables are referenced by way of the POLICY_ID and ATTRIBUTE_ID fields. The PARENT_ID field associates the policy with its parent.

Primary Keys

PK_IDC_POLICY_ATTRIBUTES - primary key on column ID

Foreign Keys

None

Indexes

None

IDC_ROLE_POLICIES Table

Structure

	IDC_ROLE_POLICIES
PK	CERT_ID
PK	ROLE_ID
PK	POLICY_ID
	CERTIFIED COMMENTS CERTIFICATION_DATE STATUS_END_DATE REMEDIATION_STATUS REMEDIATION_DATE REMEDIATION_COMMENTS

Indexes

Index	PK	Unique	Keys
PK_IDC_ROLE_POLICIES	✓	Yes	CERT_ID, ROLE_ID, POLICY_ID

Description

The IDC_ROLE_POLICIES table is a derived table that associates roles and policies with certifications. The CERT_ID, ROLE_ID, and POLICY_ID fields reference the IDC_POLICIES, IDC_ROLES, and ID_CERT_ROLES tables. A CERTIFIED flag records if the role to policy

association has been certified, and the CERTIFICATION_DATE field stores the date/time of the certification, thus providing for updates. In addition, the CERTIFIED_BY field contains the username of the person updating the certification, which is required for auditing purposes. Remediation details of the certification process can be tracked using the REMEDIATION_STATUS, REMEDIATION_DATE, and REMEDIATION_COMMENTS fields.

Primary Keys

PK_IDC_ROLE_POLICIES - composite primary key on column CERT_ID, ROLE_ID, POLICY_ID

Foreign Keys

None

Indexes

None

IDC_ROLE_POLICY_ATTRS Table

Structure

	IDC_ROLE_POLICY_ATTRS
PK	CERT_ID
PK	ROLE_ID
PK	POLICY_ID
PK	POLICY_ATTRIBUTE_ID

	IDC_ROLE_POLICY_ATTRS
	CERTIFIED COMMENTS CERTIFIED_BY CHANGED_SINCE_LAST CERTIFICATION_DATE STATUS_END_DATE REMEDIATION_STATUS REMEDIATION_DATE REMEDIATION_COMMENTS

Indexes

Index	PK	Unique	Keys
PK_IDC_ROLE_POLICY_ATTRS	✓	Yes	CERT_ID, ROLE_ID, POLICY_ID, POLICY_ATTRIBUTE_ID

Description

The IDC_ROLE_POLICY_ATTR table is a derived table that associates roles, policies, and role and policy attributes with certifications. The CERT_ID, ROLE_ID, POLICY_ID, and POLICY_ATTRIBUTE_ID fields reference the following tables: IDC_POLICIES, IDC_ROLES, IDC_ROLES_POLICIES and ID_CERT_ROLES. A CERTIFIED flag records if the association between roles, policies, and role and policy attributes have been certified, and the CERTIFICATION_DATE field stores the date/time of the certification, thus providing for updates. In addition, the CERTIFIED_BY field contains the username of the person updating the certification, which is required for auditing purposes. Remediation details of the certification process can be tracked using the REMEDIATION_STATUS, REMEDIATION_DATE, and REMEDIATION_COMMENTS fields.

Primary Keys

PK_IDC_ROLE_POLICIES - composite primary key on column CERT_ID, ROLE_ID, POLICY_ID, POLICY_ATTRIBUTE_ID

Foreign Keys

None

Indexes

None

REMEDIAITON_CONFIG Table

Structure

	REMEDIAITON_CONFIG
PK	ENDPOINT_ID
	REMEDIAITON_MODE REMEDIAITON_STEPS IAM_CONNECTION_ID CREATEUSER UPDATEUSER CREATEDATE UPDATEDATE

Indexes

Index	PK	Unique	Keys
PK_REMEDIAITON_CONFIG	✓	Yes	ENDPOINT_ID

Description

The REMEDIAITON_CONFIG table stores details that define how closed loop remediation of certification data should occur for each resource (endpoint). This process can happen either automatically or manually. Fields are provided to record the configured remediation mode (that is, auto or manual), the reference to the IAM connection (if the mode is auto), the textual description of the remediation steps (if the mode is manual), and the unique ID.

Primary Keys

PK_REMEDIAITON_CONFIG - primary key on column ENDPOINT_ID

Foreign Keys

None

Indexes

None

Identity Audit Module

Tables in the Identity Audit Module

This chapter describes the tables that make up the Identity Audit module.

IDA_POLICIES Table

Structure

	IDA_POLICIES
PK	ID
U1	RULESET_ID POLICY_NAME EXCEPTION_SEVERITY OWNER OWNER_ID REMIATOR REMIATOR_ID

Index

Index	PK	Unique	Keys
PK_IDA_POLICIES	✓	Yes	ID

Index	PK	Unique	Keys
IX_IDA_POLICY_NAMES		Yes	POLICY_NAME

Description

The Identity Audit (IDA) module identifies policy violations and the IDA_POLICES table stores a collection of rules defined by the RULE_SETS table. Every policy stored in this table has an OWNER and a REMEDIATOR.

Primary Keys

PK_IDA_POLICIES - primary key on column ID

Foreign Keys

None

Indexes

IX_IDA_POLICY_NAMES - unique index on column POLICY_NAME

IDA_POLICY_VIOLATIONS Table

Structure

	IDA_POLICY_VIOLATIONS
PK	ID

	IDA_POLICY_VIOLATIONS
	IDA_POLICY_ID USER_ID LASTDATE_DETECTED DETECTION_COUNT CLOSE_DATE MITIGATION_EXPIRATION_DATE COMMENTS POLICY_VIOLATION_STATE SEVERITY ASSIGNED_TO_DATE ASSIGNED_TO ASSIGNED_TO_ID CURRENT_TRAIL_ID CREATEUSER UPDATEUSER CREATEDATE UPDATEDATE REMINDER_COUNT LAST_REMINDER_DATE CREATE_SCAN_ID

Index

Index	PK	Unique	Keys
PK_IDA_POLICY_VIOLATIONS	✓	Yes	ID

Description

The IDA_POLICY_VIOLATIONS table holds information about policy violations detected by an identity audit scan. Each entry has a unique ID and the following fields: IDA_POLICY_ID, USER_ID, LASTDATE_DETECTED, DETECTION_COUNT, POLICY_VIOLATION_STATE, SEVERITY (1-High, 2-Medium, 3-Low), CREATEDATE, and

UPDATEDATE. The POLICY_VIOLATION_STATE stores the state of the violation in the form of an integer that can have the following values: 1-Open, 2-Closed, 3-Remediated, or 4-Mitigated.

Primary Keys

PK_IDA_POLICY_VIOLATIONS - primary key on column ID

Foreign Keys

None

Indexes

None

IDA_POLICY_VIOLATION_CAUSES Table

Structure

	IDA_POLICY_VIOLATION_CAUSES
PK	ID
	IDA_POLICY_VIOLATION_ID IDA_RULE_ID IDA_RULE_VERSION_ID RBACX_OBJECT_ID RBACX_OBJECT_TYPE DESCRIPTION STATUS

Index

Index	PK	Unique	Keys
PK_IDA_POLICY_VIOLATION_CAUSES	✓	Yes	ID

Description

The IDA_POLICY_VIOLATION_CAUSES table holds information about the causes behind policy violations as detected by an identity audit scan. Each entry has a unique ID. The IDA_POLICY_VIOLATION_ID field is derived from the IDA_POLICY_VIOLATION table. The IDA_RULE_ID and IDA_RULE_VERSION_ID fields contain information about the rule set that the policy was run against, whereas the RBACX_OBJECT_ID and RBACX_OBJECT_TYPE fields store information about the Oracle Identity Analytics object against which the policy violation was detected. Additional information, such as the DESCRIPTION of the policy violation cause and the policy violation STATUS are also stored in this table.

Primary Keys

PK_IDA_POLICY_VIOLATION_CAUSES - primary key on column ID

Foreign Keys

None

Indexes

None

IDA_SCANS Table

Structure

	IDA_SCANS
PK	ID

	IDA_SCANS
	NAME SCAN_TYPE STATUS_ID RESULT_APPLIED DESCRIPTION CREATE_USER CREATE_DATE UPDATE_DATE RUN_COMPLETE_DATE NEXT_RUN_DATE CRON_EXPRESSION USER_COUNT VIOLATION_COUNT CONFIGURATION_XML DATA_XML

Index

Index	PK	Unique	Keys
PK_IDA_SCANS	✓	Yes	ID

Description

The IDA_SCANS table saves information about the audit scans that are run in Oracle Identity Analytics. Every scan is identified by a unique ID from the IDA_SCANS table. This table also saves information like NAME, SCAN_TYPE, STATUS_ID, and DESCRIPTION. The RESULT_APPLIED field indicates if the scan was executed (run) or just previewed. When the scan is scheduled to run periodically, information is maintained in this table in the following fields: CREATE_USER, CREATE_DATE, UPDATE_DATE, RUN_COMPLETE_DATE, and NEXT_RUN_DATE. The USER_COUNT field contains the number of users that were scanned, whereas the VIOLATION_COUNT field contains the number of violations detected as a result of the scan run. The configuration information regarding each scan is saved as XML in the CONFIGURATION_XML field, and the scan data information is saved in the DATA_XML field.

Primary Key

PK_IDA_SCANS - primary key on column ID

Foreign Key

None

Indexes

None

IDA_POLICY_VIOLATIONS_TRAILS Table

Structure

	IDA_POLICY_VIOLATIONS_TRAILS
PK	ID
	IDA_POLICY_VIOLATIONS_ID COMMENTS POLICY_VIOLATION_STATE ASSIGNED_TO CREATEUSER CREATEDATE

Index

Index	PK	Unique	Keys
PK_IDA_POLICY_VIOLATIONS_TRAILS	✓	Yes	ID

Description

The IDA_POLICY_VIOLATIONS_TRAILS table stores the steps taken by an actor (that is, the Oracle Identity Analytics user) to resolve a policy violation detected during an identity audit scan.

Primary Keys

PK_IDA_POLICY_VIOLATIONS_TRAILS - primary key on column ID

Foreign Keys

None

Indexes

None

IDA_POLICY_VIOLATION_PREVIEWS Table

Structure

	IDA_POLICY_VIOLATION_PREVIEWS
PK	ID
	IDA_POLICY_VIOLATION_ID IDA_POLICY_ID USER_ID SEVERITY POLICY_VIOLATION_STATE CREATEDATE CREATE_SCAN_ID

Index

Index	PK	Unique	Keys
IDA_POLICY_VIOLATION_PREVIEWS	✓	Yes	ID

Description

The IDA_POLICY_VIOLATION_PREVIEWS table saves violation information that the user can preview without running the actual scan. Each entry has the following fields: IDA_POLICY_VIOLATION_ID, IDA_POLICY_ID, USER_ID, POLICY_VIOLATION_STATE, SEVERITY (1-High, 2-Medium, 3-Low), CREATEDATE, and CREATE_SCAN_ID. The POLICY_VIOLATION_STATE field stores the state of the violation in the form of an integer that can have the following values: 1-Open, 2-Closed, 3-Remediated, or 4-Mitigated.

Primary Keys

PK_IDA_VIOLATION_PREVIEWS - primary key on column ID

Foreign Keys

None

Indexes

None

IDA_VIOLATION_PREVIEW_CAUSES Table

Structure

	IDA_VIOLATION_PREVIEW_CAUSES
PK	ID
	IDA_POLICY_VIOLATION_ID IDA_RULE_ID IDA_RULE_VERSION_ID RBACX_OBJECT_ID RBACX_OBJECT_TYPE DESCRIPTION STATUS

Index

Index	PK	Unique	Keys
PK_IDA_VIOLATION_PREVIEW_CAUSES	✓	Yes	ID

Description

The IDA_VIOLATION_PREVIEW_CAUSES table saves information about the causes behind policy violations as detected during identity audit policy *previews*. Each entry has a unique ID. The IDA_POLICY_VIOLATION_ID field is derived from the IDA_POLICY_VIOLATION_PREVIEW table. The IDA_RULE_ID and

IDA_RULE_VERSION_ID fields contain information about the rule set that the policy was run against, whereas the RBACX_OBJECT_ID and RBACX_OBJECT_TYPE fields give information about the Oracle Identity Analytics object against which the policy violation was detected. Additional information, such as the DESCRIPTION of the policy violation cause and the STATUS of the policy violation, is also stored in this table.

Primary Keys

PK_IDA_VIOLATION_PREVIEW_CAUSES - primary key on column ID

Foreign Keys

None

Indexes

None

Rule Engine Module

Tables in the Rule Engine Module

This chapter describes the tables that make up the Rule Engine module.

RULES Table

Structure

	RULES
PK	RULE_ID
	RULENAME DESCRIPTION STATUS_ID TYPE_ID CURRENT_VERSION_ID VERSION_COUNT RULE_CONDITION CREATEUSER UPDATEUSER CREATEDATE UPDATEDATE

Index

Index	PK	Unique	Keys
PK_RULES	✓	Yes	RULE_ID

Description

Oracle Identity Analytics can create rules that, based on attributes, assign users and roles to different components in the warehouse. For example, Oracle Identity Analytics rules can assign users and roles to business units based on HR attributes. The RULES table stores information about the rules that are created in Oracle Identity Analytics. Each rule is identified by a unique RULE_ID. The RULE_CONDITION field saves the condition that is used to define the rule. The STATUS_ID and CURRENT_VERSION_ID columns save the status and the version of the rule respectively. The TYPE_ID column identifies whether the rule is a role membership rule or a user business structure rule. In addition, the VERSION_COUNT, CREATEUSER, UPDATEUSER, CREATEDATE, and UPDATEDATE fields are used for audit purposes.

Primary Keys

PK_RULES - column RULE_ID

Foreign Keys

None

Indexes

None

RULE_OWNERS Table

Structure

	RULE_OWNERS
PK	ID
	RULE_ID
	RULE_VERSION_ID
	OWNER_ID
	OWNER_TYPE

Indexes

Index	PK	Unique	Keys
PK_RULE_OWNERS	✓	Yes	ID

Description

The RULE_OWNERS table defines the relationship between a rule and its owner (which can be either a Globaluser or a role in Oracle Identity Analytics). The RULE_ID field refers to the rule in the RULES table, whereas the OWNER_ID field refers to either the GLOBALUSERS table or the ROLES table. The OWNER_TYPE field is used to define if the owner is a global user or a role in Oracle Identity Analytics.

Primary Keys

PK_RULE_OWNERS on column ID

Foreign Keys

None

Indexes

None

RULE_SETS Table

Structure

	RULE_SETS
PK	ID

	RULE_SETS
	STATUS_ID
	TYPE_ID
	RULESETNAME
	DESCRIPTION
	CREATEUSER
	UPDATEUSER
	CREATEDATE
	UPDATEDATE

Indexes

Index	PK	Unique	Keys
PK_RULE_SETS	✓	Yes	ID

Description

The RULE_SETS table contains grouping of rules. Every rule_set is identified by a unique ID. The RULESETNAME and DESCRIPTION fields give additional information about the rule set.

Primary Keys

PK_RULE_SETS - primary key on column ID

Foreign Keys

None

Indexes

None

RULE_SET_RULES Table

Structure

	RULE_SETS
	RULE_ID
	RULE_SET_ID

Indexes

None

Description

The RULE_SET_RULES table is a composite table that contains rule-sets-to-rule associations.

Primary Keys

None

Foreign Keys

None

Indexes

None

RULE_TYPES Table

Structure

	ARC_ACCOUNT_ATTRIBUTES
PK	ID
	LABEL
	DESCRIPTION

Index

Index	PK	Unique	Keys
PK_RULE_TYPES	✓	YES	ID

Description

The RULE_TYPES table is used to define a rule category. Two rule types are available:

- Role membership rule
- User BusinessStructure rule

Primary Keys

PK_RULE_TYPES on column ID

Foreign Keys

None

Indexes

None

RULE_VERSIONS Table

Structure

	RULE_VERSIONS
PK	VERSION_ID

	RULE_VERSIONS
	VERSION_STATUS_ID
	VERSION_NUMBER
	BASE_VERSION_ID
	WORKFLOW_ID
	RULE_ID
	RULENAME
	DESCRIPTION
	STATUS_ID
	TYPE_ID
	RULE_CONDITION
	CREATEUSER
	UPDATEUSER
	CREATEDATE
	UPDATEDATE
	LAST_APPROVER
	LAST_APPROVAL_DATE
	LAST_APPROVAL_COMMENTS

Index

Index	PK	Unique	Keys
PK_RULE_VERSIONS	✓	Yes	VERSION_ID

Description

When a condition is added or removed from a rule in Oracle Identity Analytics, a rule approval process is initiated by the system. A snapshot of the existing rule is captured and saved into the RULE_VERSIONS table prior to initiation of the rule approval process. This facilitates in maintaining a rule's history, which can be accessed to compare previous versions.

Primary Keys

PK_RULE_VERSIONS - primary key on column VERSION_ID

Foreign Keys

None

Indexes

None

ROLE_MEMBERSHIP_RULE Table

Structure

	ROLE_MEMBERSHIP_RULE
	ID
	NAME
	RULE_XML

Index

Index	PK	Unique	Keys
	✓		

Description

The ROLE_MEMBERSHIP_RULE table contains information about the rules generated to create associations between global users and roles. The RULE_XML field is a binary representation of the rule details.

Primary Keys

None

Foreign Keys

None

Indexes

None

ROLE_MEMBERSHIP_RULE_DATA Table

Structure

	ROLE_MEMBERSHIP_RULE_DATA
	RULE_ID
	RULE_VERSION_ID
	ROLE_ID
	REMOVAL_ACTION
	GRACE_PERIOD
	NOTIFICATION_TEMPLATE_ID

Index

None

Description

The ROLE_MEMBERSHIP_RULE_DATA stores information about which role to assign for a role provisioning rule.

Primary Keys

None

Foreign Keys

None

Indexes

None

ROLE_MEMBERSHIP_RULE_SCANS Table

Structure

	ROLE_MEMBERSHIP_RULE_SCANS
PK	SCAN_ID
	RULE_ID RULE_VERSION_ID STATUS_ID TYPE_ID RESULT_APPLIED JOB_NAME RULE_VERSION_PREVIEW ARCHIVAL_STATUS_ID ARCHIVAL_DATE DESCRIPTION CREATE_USER CREATE_DATE UPDATE_USER UPDATE_DATE DATA_XML

Index

Index	PK	Unique	Keys
PK_ROLE_MEMBERSHIP_RULE_SCANS	✓	YES	SCAN_ID

Description

The ROLE_MEMBERSHIP_RULE_SCANS tables saves information regarding the user set to be processed.

Primary Keys

PK_ROLE_MEMBERSHIP_RULE_SCANS - on column SCAN_ID

Foreign Keys

None

Indexes

None

RM_RULE_SCAN_RESULTS Table

Structure

	RM_RULE_SCAN_RESULTS
	RULE_SCAN_ID USERS_PROCESSED CREATE_DATE UPDATE_DATE DATA_XML

Index

None

Description

The RM_RULE_SCAN_RESULTS table stores information about the users to add or remove when a rule scan is processing users.

Primary Keys

None

Foreign Keys

None

Indexes

None

USER_BU_RULE_SCANS Table

Structure

	USER_BU_RULE_SCANS
PK	ID
	STATUS_ID JOB_NAME USER_SELECTION_CRITERIA_XML BUSINESSUNIT_IDS_XML USER_IDS_XML USER_FILTER_XML ARCHIVAL_STATUS_ID ARCHIVAL_DATE RESULT_APPLIED DESCRIPTION RULE_ID RULE_VERSION_ID CREATE_USER CREATE_DATE UPDATE_USER UPDATE_DATE SCAN_RESULT_ID TYPE_ID TOTAL_USERS

Index

Index	PK	Unique	Keys
PK_USER_BU_RULE_SCANS	✓	YES	ID

Description

The USER_BU_RULE_SCANS table stores information about the user set to be processed, the rule to be used during the scan, and the business unit that is associated with the user. In addition, it contains general information about the scan, such as a summary and the state of the scan.

Primary Keys

PK_USER_BU_RULE_SCANS - on column ID

Foreign Keys

None

Indexes

None

USER_BU_RULE_SCAN_RESULTS Table

Structure

	USER_BU_RULE_SCAN_RESULTS
PK	ID
	RULE_SCAN_ID CREATE_DATE ASSIGNED_USERS_MAP_XML UN_ASSIGNED_USERS_MAP_XML EXISTING_ASSIGNED_MAP_XML USERS_PROCESSED

Index

None

Description

The USER_BU_RULE_SCAN_RESULTS table stores information about the results of completed scans as defined in the USER_BU_RULE_SCAN_RESULTS table. This table stores information about users that are assigned and unassigned to business units as a result of the scan.

Primary Keys

PK_USER_BU_RULE_SCAN_RESULTS - on column ID

Foreign Keys

None

Indexes

None

USER_BU_RULE_EXTENDED_ATTSTable

Structure

	USER_BU_RULE_EXTENDED_ATTSTable
PK	ID
	REMOVAL_ACTION BUSINESS_UNIT_ID GRACE_PERIOD NOTIFICATION_TEMPLATE_ID

Index

Index	PK	Unique	Keys
PK_USER_BU_RULE_EXTENDED_ATTSTable	✓	YES	ID

Description

The USER_BU_RULE_EXTENDED_ATTSTable table stores additional information about the business-structure-to-user association rules.

Primary Keys

PK_USER_BU_RULE_SCAN_RESULTS - on column ID

Foreign Keys

None

Indexes

None

USER_APPLICATION_SCANS Table

Structure

	USER_APPLICATION_SCANS
PK	ID
	START_DATE END_DATE SUCCESS SCAN_TYPE MEMBERS_FOUND MEMBERS_REMOVED

Index

Index	PK	Unique	Keys
PK_AMES	✓	YES	ID

Description

The USER_APPLICATION_SCANS table stores information about application scans, such as the scan's start date and end date, members found and removed, and summary information.

Primary Keys

PK_AMES - on column ID

Foreign Keys

None

Indexes

None

USER_TRANSFERS Table

Structure

	USER_TRANSFERS
PK	ID
	GLOBALUSER_ID SRM_TRANSFER_DATE

Index

None

Description

The USER_TRANSFERS table holds users for which there is a change in some predefined property. Information stored in this table includes the unique ID of the globaluser and the transfer date.

Primary Keys

None

Foreign Keys

None

Indexes

None

Workflow Module

Tables in the Workflow Module

This chapter describes the tables that make up the Oracle Identity Analytics Workflow module.

OS_WFENTRY Table

Structure

	OS_WFENTRY
PK	ID
	NAME STATE CALLER START_DATE

Indexes

Index	PK	Unique	Keys
PK_WFENTRY	✓		ID

Description

The OS_WFENTRY table stores workflow instances, along with the NAME, STATE, CALLER, and START_DATE information for each instance.

Primary Keys

ID - primary key on column ID

Foreign Keys

None

Indexes

None

OS_CURRENTSTEP Table

Structure

	OS_CURRENTSTEP
PK	ID
FK	ENTRY_ID STEP_ID ACTION_ID OWNER START_DATE FINISH_DATE DUE_DATE STATUS CALLER

Indexes

Index	PK	Unique	Keys
PK_CRTSP	✓		ID
FK_CRTSP_WFNTR_ID			ENTRY_ID

Description

The OS_CURRENTSTEP table holds all of the steps for a workflow that is in progress. This table references the OS_WFENTRY table's ID column using ENTRY_ID as foreign key to establish the association.

Primary Keys

PK_CRTSP - primary key on column ID.

Foreign Keys

FK_CRTSP_WFNTR_ID - foreign key on column ENTRY_ID refers to ID column of OS_WFENTRY table.

Indexes

None

OS_HISTORYSTEP Table

Structure

	OS_HISTORYSTEP
PK	ID
FK1	ENTRY_ID STEP_ID ACTION_ID OWNER START_DATE FINISH_DATE DUE_DATE STATUS CALLER

Indexes

Index	PK	Unique	Keys
PK_HTRSP	✓		ID
FK_HSTSTP_FENTR_ID			ENTRY_ID

Description

The OS_HISTORYSTEP table saves the historical steps taken during a workflow instance. This table references the OS_WFENTRY table's ID column using ENTRY_ID as the foreign key to establish the association.

Primary Keys

PK_HTRSP - primary key on column ID.

Foreign Keys

FK_HSTSTP_FENTR_ID - foreign key on column ENTRY_ID refers to ID column of OS_WFENTRY table.

Indexes

None

OS_CURRENTSTEP_PREV Table

Structure

	OS_CURRENTSTEP_PREV
PK,FK1	ID
PK,FK2	PREVIOUS_ID

Indexes

Index	PK	Unique	Keys
PK_CRTSP_PRV	✓		ID, PREVIOUS_ID

Index	PK	Unique	Keys
FK_CRTSP_PRV_HTRSP_ID			PREVIOUS_ID

Description

The OS_CURRENTSTEP_PREV table saves the previous steps taken for a workflow instance that is in progress. It refers to both the OS_CURRENTSTEP and the OS_HISTORYSTEP tables via foreign keys.

Primary Keys

PK_CRTSP_PRV - composite primary key on column ID, PREVIOUS_ID

Foreign Keys

FK_CRSTP_PRV_CRTSP_ID - foreign key on column ID refers to ID column of OS_CURRENTSTEP table.

FK_CRSTP_PRV_HTRSP_ID - foreign key on column PREVIOUS_ID refers to ID column of OS_HISTORYSTEP table.

Indexes

None

OS_HISTORYSTEP_PREV Table

Structure

	OS_HISTORYSTEP_PREV
PK,FK1	ID
PK,FK2	PREVIOUS_ID

Indexes

Index	PK	Unique	Keys
PK_HTRSP_PREV	✓		ID, PREVIOUS_ID
FK_HTRSP_PREV_ID_HTRSP_ID			PREVIOUS_ID

Description

The OS_HISTORYSTEP_PREV table saves the previous steps trail that is recorded in the OS_HISTORYSTEPS table. It refers to the OS_HISTORYSTEP tables via foreign keys.

Primary Keys

PK_HTRSP_PREV - composite primary key on column ID, PREVIOUS_ID.

Foreign Keys

FK_HTRSP_PREV_HTRSP_ID - foreign key on column ID refers to ID column of OS_HISTORYSTEP table.

FK_HTRSP_PREV_ID_HTRSP_ID - foreign key on column PREVIOUS_ID refers to ID column of OS_HISTORYSTEP table.

Indexes

None

OS_PROPERTYENTRY Table

Structure

	OS_PROPERTYENTRY
PK	ITEM_KEY
PK	ENTITY_ID

	OS_PROPERTYENTRY
	ENTITY_NAME
	ITEM_TYPE
	STRING_VALUE
	DATE_VALUE
	DATA_VALUE
	FLOAT_VALUE
	NUMBER_VALUE
	INTEGER_VALUE
	LONG_VALUE
	BOOLEAN_VALUE
	OBJECT_VALUE

Indexes

Index	PK	Unique	Keys
PK_OS_PROPERTYENTRY	✓		ITEM_KEY, ENTITY_ID

Description

The Oracle Identity Analytics workflow engine stores values such as role ID and role version ID in the OS_PROPERTYENTRY table.

Primary Keys

PK_OS_PROPERTYENTRY - Composite primary key on column ITEM_KEY, ENTITY_ID.

Foreign Keys

None

Indexes

None

APPROVAL_REQUESTS Table

Structure

	APPROVAL_REQUESTS
PK	ID
	REQUESTED_BY REQUEST_DATE REQUEST_STATUS REQUEST_TYPE WORKFLOW_ID OBJECT_ID VERSION_ID VERSION_NUMBER OBJECT_NAME OBJECT_TYPE

Indexes

Index	PK	Unique	Keys
PK_APPROVAL_REQUESTS	✓		ID

Description

The APPROVAL_REQUESTS table holds information used during a role approval process. An approval process is initiated when a policy is either added to a role or removed from a role, or a user changes their role membership. An approval process is associated by a role versioning process that maintains a trail of modifications made to a role. The columns VERSION_ID and VERSION_NUMBER refer to the versioning of roles.

Primary Keys

PK_APPROVAL_REQUESTS - composite primary key on columns ID.

Foreign Keys

None

Indexes

None

APPROVAL_REQUEST_HISTORY Table

Structure

	APPROVAL_REQUEST_HISTORY
	REQUEST_ID
	STEP_ID
	OBJECT_ID
	OBJECT_NAME
	OBJECT_TYPE
	ACTION
	ACTION_DATE
	APPROVER
	APPROVER_COMMENTS

Indexes

Index	PK	Unique	Keys
IX_APPROVAL_REQUEST_HISTORY		No	REQUEST_ID

Description

The APPROVAL_REQUEST_HISTORY table maintains the history of actions taken during each step of the role versioning and membership approval processes.

Primary Keys

None

Foreign Keys

None

Indexes

IX_APPROVAL_REQUEST_HISTORY - non-unique index on column REQUEST_ID.

ROLE_MATCHING_ANALYSIS Table

Structure

	ROLE_MATCHING_ANALYSIS
PK	APPROVAL_REQUEST_ID
	RESULTXML

Indexes

Index	PK	Unique	Keys
PK_ROLE_MATCHING_ANALYSIS	✓		APPROVAL_REQUEST_ID

Description

When a role is modified in Oracle Identity Analytics, either because a policy was added or removed, or because there was a change in role membership, the modified role is compared with the existing roles in the system. The APPROVAL_REQUEST_ID column associates the ROLE_MATCHING_ANALYSIS table with the APPROVAL_REQUESTS table while the analysis result is saved in the resultXml column in XML format.

Primary Keys

PK_ROLE_MATCHING_ANALYSIS - primary key on columns APPROVAL_REQUEST_ID.

Foreign Keys

None

Indexes

None

Scheduling Module

Tables in the Workflow Module

This chapter describes the tables that make up the Oracle Identity Analytics Workflow module.

OS_WFENTRY Table

Structure

	OS_WFENTRY
PK	ID
	NAME STATE CALLER START_DATE

Indexes

Index	PK	Unique	Keys
PK_WFENTRY	✓		ID

Description

The OS_WFENTRY table stores workflow instances, along with the NAME, STATE, CALLER, and START_DATE information for each instance.

Primary Keys

ID - primary key on column ID

Foreign Keys

None

Indexes

None

OS_CURRENTSTEP Table

Structure

	OS_CURRENTSTEP
PK	ID
FK	ENTRY_ID STEP_ID ACTION_ID OWNER START_DATE FINISH_DATE DUE_DATE STATUS CALLER

Indexes

Index	PK	Unique	Keys
PK_CRTSP	✓		ID
FK_CRTSP_WFNTR_ID			ENTRY_ID

Description

The OS_CURRENTSTEP table holds all of the steps for a workflow that is in progress. This table references the OS_WFENTRY table's ID column using ENTRY_ID as foreign key to establish the association.

Primary Keys

PK_CRTSP - primary key on column ID.

Foreign Keys

FK_CRTSP_WFNTR_ID - foreign key on column ENTRY_ID refers to ID column of OS_WFENTRY table.

Indexes

None

OS_HISTORYSTEP Table

Structure

	OS_HISTORYSTEP
PK	ID
FK1	ENTRY_ID STEP_ID ACTION_ID OWNER START_DATE FINISH_DATE DUE_DATE STATUS CALLER

Indexes

Index	PK	Unique	Keys
PK_HTRSP	✓		ID
FK_HSTSTP_FENTR_ID			ENTRY_ID

Description

The OS_HISTORYSTEP table saves the historical steps taken during a workflow instance. This table references the OS_WFENTRY table's ID column using ENTRY_ID as the foreign key to establish the association.

Primary Keys

PK_HTRSP - primary key on column ID.

Foreign Keys

FK_HSTSTP_FENTR_ID - foreign key on column ENTRY_ID refers to ID column of OS_WFENTRY table.

Indexes

None

OS_CURRENTSTEP_PREV Table

Structure

	OS_CURRENTSTEP_PREV
PK,FK1	ID
PK,FK2	PREVIOUS_ID

Indexes

Index	PK	Unique	Keys
PK_CRTSP_PRV	✓		ID, PREVIOUS_ID

Index	PK	Unique	Keys
FK_CRTSP_PRV_HTRSP_ID			PREVIOUS_ID

Description

The OS_CURRENTSTEP_PREV table saves the previous steps taken for a workflow instance that is in progress. It refers to both the OS_CURRENTSTEP and the OS_HISTORYSTEP tables via foreign keys.

Primary Keys

PK_CRTSP_PRV - composite primary key on column ID, PREVIOUS_ID

Foreign Keys

FK_CRSTP_PRV_CRTSP_ID - foreign key on column ID refers to ID column of OS_CURRENTSTEP table.

FK_CRSTP_PRV_HTRSP_ID - foreign key on column PREVIOUS_ID refers to ID column of OS_HISTORYSTEP table.

Indexes

None

OS_HISTORYSTEP_PREV Table

Structure

	OS_HISTORYSTEP_PREV
PK,FK1	ID
PK,FK2	PREVIOUS_ID

Indexes

Index	PK	Unique	Keys
PK_HTRSP_PREV	✓		ID, PREVIOUS_ID
FK_HTRSP_PREV_ID_HTRSP_ID			PREVIOUS_ID

Description

The OS_HISTORYSTEP_PREV table saves the previous steps trail that is recorded in the OS_HISTORYSTEPS table. It refers to the OS_HISTORYSTEP tables via foreign keys.

Primary Keys

PK_HTRSP_PREV - composite primary key on column ID, PREVIOUS_ID.

Foreign Keys

FK_HTRSP_PREV_HTRSP_ID - foreign key on column ID refers to ID column of OS_HISTORYSTEP table.

FK_HTRSP_PREV_ID_HTRSP_ID - foreign key on column PREVIOUS_ID refers to ID column of OS_HISTORYSTEP table.

Indexes

None

OS_PROPERTYENTRY Table

Structure

	OS_PROPERTYENTRY
PK	ITEM_KEY
PK	ENTITY_ID

	OS_PROPERTYENTRY
	ENTITY_NAME
	ITEM_TYPE
	STRING_VALUE
	DATE_VALUE
	DATA_VALUE
	FLOAT_VALUE
	NUMBER_VALUE
	INTEGER_VALUE
	LONG_VALUE
	BOOLEAN_VALUE
	OBJECT_VALUE

Indexes

Index	PK	Unique	Keys
PK_OS_PROPERTYENTRY	✓		ITEM_KEY, ENTITY_ID

Description

The Oracle Identity Analytics workflow engine stores values such as role ID and role version ID in the OS_PROPERTYENTRY table.

Primary Keys

PK_OS_PROPERTYENTRY - Composite primary key on column ITEM_KEY, ENTITY_ID.

Foreign Keys

None

Indexes

None

APPROVAL_REQUESTS Table

Structure

	APPROVAL_REQUESTS
PK	ID
	REQUESTED_BY REQUEST_DATE REQUEST_STATUS REQUEST_TYPE WORKFLOW_ID OBJECT_ID VERSION_ID VERSION_NUMBER OBJECT_NAME OBJECT_TYPE

Indexes

Index	PK	Unique	Keys
PK_APPROVAL_REQUESTS	✓		ID

Description

The APPROVAL_REQUESTS table holds information used during a role approval process. An approval process is initiated when a policy is either added to a role or removed from a role, or a user changes their role membership. An approval process is associated by a role versioning process that maintains a trail of modifications made to a role. The columns VERSION_ID and VERSION_NUMBER refer to the versioning of roles.

Primary Keys

PK_APPROVAL_REQUESTS - composite primary key on columns ID.

Foreign Keys

None

Indexes

None

APPROVAL_REQUEST_HISTORY Table

Structure

	APPROVAL_REQUEST_HISTORY
	REQUEST_ID
	STEP_ID
	OBJECT_ID
	OBJECT_NAME
	OBJECT_TYPE
	ACTION
	ACTION_DATE
	APPROVER
	APPROVER_COMMENTS

Indexes

Index	PK	Unique	Keys
IX_APPROVAL_REQUEST_HISTORY		No	REQUEST_ID

Description

The APPROVAL_REQUEST_HISTORY table maintains the history of actions taken during each step of the role versioning and membership approval processes.

Primary Keys

None

Foreign Keys

None

Indexes

IX_APPROVAL_REQUEST_HISTORY - non-unique index on column REQUEST_ID.

ROLE_MATCHING_ANALYSIS Table

Structure

	ROLE_MATCHING_ANALYSIS
PK	APPROVAL_REQUEST_ID
	RESULTXML

Indexes

Index	PK	Unique	Keys
PK_ROLE_MATCHING_ANALYSIS	✓		APPROVAL_REQUEST_ID

Description

When a role is modified in Oracle Identity Analytics, either because a policy was added or removed, or because there was a change in role membership, the modified role is compared with the existing roles in the system. The APPROVAL_REQUEST_ID column associates the ROLE_MATCHING_ANALYSIS table with the APPROVAL_REQUESTS table while the analysis result is saved in the resultXml column in XML format.

Primary Keys

PK_ROLE_MATCHING_ANALYSIS - primary key on columns APPROVAL_REQUEST_ID.

Foreign Keys

None

Indexes

None

Reporting Module

Tables in the Workflow Module

This chapter describes the tables that make up the Oracle Identity Analytics Workflow module.

OS_WFENTRY Table

Structure

	OS_WFENTRY
PK	ID
	NAME STATE CALLER START_DATE

Indexes

Index	PK	Unique	Keys
PK_WFENTRY	✓		ID

Description

The OS_WFENTRY table stores workflow instances, along with the NAME, STATE, CALLER, and START_DATE information for each instance.

Primary Keys

ID - primary key on column ID

Foreign Keys

None

Indexes

None

OS_CURRENTSTEP Table

Structure

	OS_CURRENTSTEP
PK	ID
FK	ENTRY_ID STEP_ID ACTION_ID OWNER START_DATE FINISH_DATE DUE_DATE STATUS CALLER

Indexes

Index	PK	Unique	Keys
PK_CRTSP	✓		ID
FK_CRTSP_WFNTR_ID			ENTRY_ID

Description

The OS_CURRENTSTEP table holds all of the steps for a workflow that is in progress. This table references the OS_WFENTRY table's ID column using ENTRY_ID as foreign key to establish the association.

Primary Keys

PK_CRTSP - primary key on column ID.

Foreign Keys

FK_CRTSP_WFNTR_ID - foreign key on column ENTRY_ID refers to ID column of OS_WFENTRY table.

Indexes

None

OS_HISTORYSTEP Table

Structure

	OS_HISTORYSTEP
PK	ID
FK1	ENTRY_ID STEP_ID ACTION_ID OWNER START_DATE FINISH_DATE DUE_DATE STATUS CALLER

Indexes

Index	PK	Unique	Keys
PK_HTRSP	✓		ID
FK_HSTSTP_FENTR_ID			ENTRY_ID

Description

The OS_HISTORYSTEP table saves the historical steps taken during a workflow instance. This table references the OS_WFENTRY table's ID column using ENTRY_ID as the foreign key to establish the association.

Primary Keys

PK_HTRSP - primary key on column ID.

Foreign Keys

FK_HSTSTP_FENTR_ID - foreign key on column ENTRY_ID refers to ID column of OS_WFENTRY table.

Indexes

None

OS_CURRENTSTEP_PREV Table

Structure

	OS_CURRENTSTEP_PREV
PK,FK1	ID
PK,FK2	PREVIOUS_ID

Indexes

Index	PK	Unique	Keys
PK_CRTSP_PRV	✓		ID, PREVIOUS_ID

Index	PK	Unique	Keys
FK_CRTSP_PRV_HTRSP_ID			PREVIOUS_ID

Description

The OS_CURRENTSTEP_PREV table saves the previous steps taken for a workflow instance that is in progress. It refers to both the OS_CURRENTSTEP and the OS_HISTORYSTEP tables via foreign keys.

Primary Keys

PK_CRTSP_PRV - composite primary key on column ID, PREVIOUS_ID

Foreign Keys

FK_CRSTP_PRV_CRTSP_ID - foreign key on column ID refers to ID column of OS_CURRENTSTEP table.

FK_CRSTP_PRV_HTRSP_ID - foreign key on column PREVIOUS_ID refers to ID column of OS_HISTORYSTEP table.

Indexes

None

OS_HISTORYSTEP_PREV Table

Structure

	OS_HISTORYSTEP_PREV
PK,FK1	ID
PK,FK2	PREVIOUS_ID

Indexes

Index	PK	Unique	Keys
PK_HTRSP_PREV	✓		ID, PREVIOUS_ID
FK_HTRSP_PREV_ID_HTRSP_ID			PREVIOUS_ID

Description

The OS_HISTORYSTEP_PREV table saves the previous steps trail that is recorded in the OS_HISTORYSTEPS table. It refers to the OS_HISTORYSTEP tables via foreign keys.

Primary Keys

PK_HTRSP_PREV - composite primary key on column ID, PREVIOUS_ID.

Foreign Keys

FK_HTRSP_PREV_HTRSP_ID - foreign key on column ID refers to ID column of OS_HISTORYSTEP table.

FK_HTRSP_PREV_ID_HTRSP_ID - foreign key on column PREVIOUS_ID refers to ID column of OS_HISTORYSTEP table.

Indexes

None

OS_PROPERTYENTRY Table

Structure

	OS_PROPERTYENTRY
PK	ITEM_KEY
PK	ENTITY_ID

	OS_PROPERTYENTRY
	ENTITY_NAME
	ITEM_TYPE
	STRING_VALUE
	DATE_VALUE
	DATA_VALUE
	FLOAT_VALUE
	NUMBER_VALUE
	INTEGER_VALUE
	LONG_VALUE
	BOOLEAN_VALUE
	OBJECT_VALUE

Indexes

Index	PK	Unique	Keys
PK_OS_PROPERTYENTRY	✓		ITEM_KEY, ENTITY_ID

Description

The Oracle Identity Analytics workflow engine stores values such as role ID and role version ID in the OS_PROPERTYENTRY table.

Primary Keys

PK_OS_PROPERTYENTRY - Composite primary key on column ITEM_KEY, ENTITY_ID.

Foreign Keys

None

Indexes

None

APPROVAL_REQUESTS Table

Structure

	APPROVAL_REQUESTS
PK	ID
	REQUESTED_BY REQUEST_DATE REQUEST_STATUS REQUEST_TYPE WORKFLOW_ID OBJECT_ID VERSION_ID VERSION_NUMBER OBJECT_NAME OBJECT_TYPE

Indexes

Index	PK	Unique	Keys
PK_APPROVAL_REQUESTS	✓		ID

Description

The APPROVAL_REQUESTS table holds information used during a role approval process. An approval process is initiated when a policy is either added to a role or removed from a role, or a user changes their role membership. An approval process is associated by a role versioning process that maintains a trail of modifications made to a role. The columns VERSION_ID and VERSION_NUMBER refer to the versioning of roles.

Primary Keys

PK_APPROVAL_REQUESTS - composite primary key on columns ID.

Foreign Keys

None

Indexes

None

APPROVAL_REQUEST_HISTORY Table

Structure

	APPROVAL_REQUEST_HISTORY
II	REQUEST_ID STEP_ID OBJECT_ID OBJECT_NAME OBJECT_TYPE ACTION ACTION_DATE APPROVER APPROVER_COMMENTS

Indexes

Index	PK	Unique	Keys
IX_APPROVAL_REQUEST_HISTORY		No	REQUEST_ID

Description

The APPROVAL_REQUEST_HISTORY table maintains the history of actions taken during each step of the role versioning and membership approval processes.

Primary Keys

None

Foreign Keys

None

Indexes

IX_APPROVAL_REQUEST_HISTORY - non-unique index on column REQUEST_ID.

ROLE_MATCHING_ANALYSIS Table

Structure

	ROLE_MATCHING_ANALYSIS
PK	APPROVAL_REQUEST_ID
	RESULTXML

Indexes

Index	PK	Unique	Keys
PK_ROLE_MATCHING_ANALYSIS	✓		APPROVAL_REQUEST_ID

Description

When a role is modified in Oracle Identity Analytics, either because a policy was added or removed, or because there was a change in role membership, the modified role is compared with the existing roles in the system. The APPROVAL_REQUEST_ID column associates the ROLE_MATCHING_ANALYSIS table with the APPROVAL_REQUESTS table while the analysis result is saved in the resultXml column in XML format.

Primary Keys

PK_ROLE_MATCHING_ANALYSIS - primary key on columns APPROVAL_REQUEST_ID.

Foreign Keys

None

Indexes

None

16

Security Module

Tables in the Security Module

This chapter describes the tables that make up the Security module.

RBX_USERS Table

Structure

	RBX_USERS
PK	RBACXUSERKEY
	USERNAME PASSWORD ENABLED FIRSTNAME LASTNAME EMAIL LAST_PASSWORD_UPDATE USER_ID

Indexes

Index	PK	Unique	Keys
PK_RBACXUSER	✓	Yes	RBACXUSERKEY
IX_RBX_USERS		No	USER_ID

Description

A user who uses the Oracle Identity Analytics user interface may or may not be a part of a provisioning solution, therefore these users are defined in a different table, RBX_USERS. Each user is identified by unique entries in the RBACXUSERKEY and USERNAME columns, and an encrypted password in the PASSWORD column. The LAST_PASSWORD_UPDATE field saves the date that the password was last updated. In addition, details such as FIRSTNAME, LASTNAME, and EMAIL are stored in this table, while the ENABLED field represents the status of the user.

The USER_ID refers to the globaluserkey of the corresponding globaluser created where the user is part of a provisioning system. One such example is the case of automated RBX_USER creation on certificate generation.

Primary Keys

PK_RBACXUSER - primary key on column RBACXUSERKEY

Foreign Keys

None

Indexes

IX_RBX_USERS - non-unique index on column USER_ID

PROXY_ASSIGNMENTS Table

Structure

	PROXY_ASSIGNMENTS
PK	ID

	PROXY_ASSIGNMENTS
	ORIG_USER_ID PROXY_USER_ID START_DATE END_DATE NAME DESCRIPTION REQUEST_TYPE CREATEDATE UPDATEDATE CREATEUSER UPDATEUSER

Index

Index	PK	Unique	Keys
PK_PROXY_ASSIGNMENTS	✓	Yes	ID

Description

In Oracle Identity Analytics a designated proxy user can log in to the system and perform various operations on behalf of another user. This user association is based on the Global User ID field. The ORIG_USER_ID column contains the user ID of the original user, whereas the PROXY_USER_ID column contains the user ID of the assignee. Apart from defining the proxy user, the START_DATE, END_DATE, and REQUEST_TYPE columns in this table can be used to hold additional information for audit purposes.

Primary Keys

None

Foreign Keys

None

Indexes

None

PROXY_RBACXROLE Table

Structure

	PROXY_RBACXROLE
	PROXY_ID RBACXROLE_ID BUSINESSUNIT_ID

Index

Index	PK	Unique	Keys
PROXY_ID_RBACXROLE_IDX		Yes	PROXY_ID, RBACXROLE_ID, BUSINESSUNIT_ID
PROXY_ID_IDX		No	PROXY_ID
RBACXROLE_ID_IDX		No	RBACXROLE_ID
BUSINESSUNIT_ID_IDX		No	BUSINESSUNIT_ID

Description

The PROXY_RBACXROLE table saves information about the role that is granted to the proxy user as a result of the proxy assignment.

Primary Keys

None

Foreign Keys

None

Indexes

PROXY_ID_RBACXROLE_IDX - unique index on columns PROXY_ID, RBACXROLE_ID, BUSINESSUNIT_ID

PROXY_ID_IDX - non-unique index on column PROXY_ID

RBACXROLE_ID_IDX - non-unique index on column RBACXROLE_ID

BUSINESSUNIT_ID_IDX - non-unique index on column BUSINESSUNIT_ID

RBX_ROLES Table

Structure

	RBX_ROLES
PK	RBACXROLEKEY
I1	NAME
I2	DESCRIPTION
	SHORT_NAME
	PREDEFINED
	DELEGABLE

Indexes

Index	PK	Unique	Keys
PK_RBACXROLE	✓		RBACXROLEKEY
IX_RBX_ROLES_SHORT_NAME		Yes	SHORT_NAME
IX_RBX_ROLES_USER_PREDEF		No	PREDEFINED

Description

Roles are defined in the security module so that Oracle Identity Analytics can restrict access to the user interface based on access levels. These roles are stored in the RBX_ROLES table. Each role has a unique key defined in the RBACXROLEKEY column, and role details are stored in the NAME and DESCRIPTION fields. The SHORT_NAME and PREDEFINED fields are used in support of out-of-the-box RBX ROLES. The DELEGABLE field identifies whether the role can be delegated to another user.

Primary Keys

PK_RBACXROLE - primary key on column RBACXROLEKEY

Foreign Keys

None

Indexes

IX_RBX_ROLES_SHORT_NAME - unique index on column SHORT_NAME

IX_RBX_ROLES_USER_PREDEF - non-unique index on column PREDEFINED

PROXY_RBACXROLE Table

Structure

	PROXY_RBACXROLES
	PROXY_ID RBACXROLE_ID BUSINESSUNIT_ID

Indexes

Index	PK	Unique	Keys
PK_RBACXROLE	✓		RBACXROLEKEY
IX_RBX_ROLES_SHORT_NAME		Yes	SHORT_NAME
IX_RBX_ROLES_USER_PREDEF		No	PREDEFINED

Description

Primary Keys

PK_RBACXROLE - primary key on column RBACXROLEKEY

Foreign Keys

None

Indexes

IX_RBX_ROLES_SHORT_NAME - unique index on column SHORT_NAME

IX_RBX_ROLES_USER_PREDEF - non-unique index on column PREDEFINED

RBX_USER_RBX_ROLES Table

Structure

	RBX_USER_RBX_ROLES
PK	RBACXUSERRBACXROLEKEY
	RBACXUSERKEY RBACXROLEKEY

Indexes

Index	PK	Unique	Keys
PK_RBACXUSERRBACXROLES	✓	Yes	RBACXUSERRBACXROLEKEY

Description

A derived table, RBX_USER_RBX_ROLES, associates Oracle Identity Analytics users with their respective security roles. This table carries a unique key, RBACXUSERRBACXROLEKEY, and reference keys to the RBX_USERS and RBX_ROLES tables.

Primary Keys

PK_RBACXUSERRBACXROLES - primary key on column RBACXUSERRBACXROLEKEY

Foreign Keys

None

Indexes

None

RBX_ROLE_ACEGI_ROLES Table

Structure

	RBX_ROLE_ACEGI_ROLES
PK	RBACXROLEACEGIROLEKEY
	ACEGIROLENAME RBACXROLEKEY

Indexes

Index	PK	Unique	Keys
PK_RBACXROLEACEGIROLES	✓		RBACXROLEACEGIROLEKEY

Description

Each Oracle Identity Analytics security role is mapped to an internal role/privileges, which defines the internal job functions in the tool interface. This mapping is stored in the RBX_ROLE_ACEGI_ROLES table. This table has a unique RBACXROLEACEGIROLEKEY and it references the RBX_ROLES table using the RBACXROLEKEY field.

Primary Keys

PK_RBACXROLEACEGIROLES - primary key on column RBACXROLEACEGIROLEKEY

Foreign Keys

None

Indexes

None

RBX_USER_RBX_ROLES_BU Table

Structure

	RBX_USER_RBX_ROLES_BU
PK	ID
	RBACXUSERKEY RBACXROLEKEY BUSINESSUNITKEY

Indexes

Index	PK	Unique	Keys
PK_RBX_USER_RBX_ROLES_BU	✓	Yes	ID
IX_RBX_USER_RBX_ROLES_BU_BID		No	BUSINESSUNITKEY
IX_RBX_USER_RBX_ROLES_BU_UID		No	RBACXUSERKEY
IX_RBX_USER_RBX_ROLES_BU_RID		No	RBACXROLEKEY
IX_RBX_USER_RBX_ROLES_BU		No	RBACXUSERKEY, RBACXROLEKEY, BUSINESSUNITKEY

Description

The association between an Oracle Identity Analytics user, an Oracle Identity Analytics security role, and a business unit is described in the RBX_USER_RBX_ROLES_BU table. A unique identifier ID identifies all the unique entries in the tables. There are references defined to the RBX_USERS, BUSINESSUNITS, and the RBX_ROLES tables.

Primary Keys

PK_RBX_USER_RBX_ROLES_BU - primary key on column ID

Foreign Keys

None

Indexes

IX_RBX_USER_RBX_ROLES_BU - non-unique index on column BUSINESSUNITKEY

IX_RBX_USER_RBX_ROLES_BU_USER - non-unique index on column RBACXUSERKEY

IX_RBX_USER_RBX_ROLES_BU_ROLE - non-unique index on column RBACXROLEKEY

IX_RBX_USER_RBX_ROLES_BU - non-unique composite index on columns RBACXUSERKEY, RBACXROLEKEY and BUSINESSUNITKEY

RBX_AUTHORITIES Table

Structure

	RBX_AUTHORITIES
	USERNAME
	ROLENAME

Indexes

Index	PK	Unique	Keys
IX_RBX_AUTHORITIES		No	USERNAME, ROLENAME

Description

Oracle Identity Analytics uses a security framework where, on logon, the user account is verified for the user's access levels by checking the user's list of roles. The RBX_AUTHORITIES table handles this framework. A username and the user's role are listed in this table and, if a user has multiple roles, multiple values are stored in the table for a single user. When the user logs in to the Oracle Identity Analytics interface, the username-rolename association is looked up in this table and the user's access is granted.

Primary Keys

None

Foreign Keys

None

Indexes

IX_RBX_AUTHORITIES - non-unique composite index on columns USERNAME and ROLENAME

ACL_OBJECT_IDENTITY Table

Structure

	ACL_OBJECT_IDENTITY
PK	ID
	OBJECT_IDENTITY PARENT_OBJECT ACL_CLASS

Indexes

Index	PK	Unique	Keys
PK_ACL_OBJECT_IDENTITY	✓	Yes	ID

Description

The ACL_OBJECT_IDENTITY table defines the permissions assigned to each business unit or to the various components in Oracle Identity Analytics. The OBJECT_IDENTITY defines the permissions for a particular object. There can be a hierarchy associated in this table and this information is saved in the PARENT_OBJECT field.

Primary Keys

PK_ACL_OBJECT_IDENTITY - primary key on column ID

Foreign Keys

None

Indexes

None

ACL_PERMISSION Table

Structure

	ACL_PERMISSION
PK	ID
FK1,U1 U1	ACL_OBJECT_IDENTITY RECIPIENT MASK

Indexes

Index	PK	Unique	Keys
PK_ACL_PERMISSION	✓	Yes	ID
UNIQUE_RECIPIENT		Yes	ACL_OBJECT_IDENTITY, RECIPIENT

Description

The permissions on the objects defined in the previous tables are represented in the ACL_PERMISSION table. Each entry has a unique ID and an ACL_OBJECT_IDENTITY field reference to the ID field of the ACL_OBJECT_IDENTITY table. The RECIPIENT is the role or user for whom the permission is defined. The list of permissions are defined using integers where read/write access is defined using a certain number. Permissions are defined in much the same way that UNIX file permissions are defined.

Primary Keys

PK_ACL_PERMISSION - primary key on column ID

Foreign Keys

FK_ACL_PERMISSION_ACL_OBJ_ID - foreign key on column ACL_OBJECT_IDENTITY that references the ID field in the parent table ACL_OBJECT_IDENTITY. This foreign key is defined with CASCADE DELETE option.

Indexes

UNIQUE_RECIPIENT - composite unique constraint on columns ACL_OBJECT_IDENTITY and RECIPIENT

RBX_ACL_CLASS Table

Structure

	RBX_ACL_CLASS
PK	ID
U1	CLASS

Indexes

Index	PK	Unique	Keys
ACL_CLASS_PK	✓	Yes	ID
ACL_CLASS_UNIQUE_CLASS		Yes	CLASS

Description

The RBX_ACL_CLASS table is a part of the Oracle Identity Analytics security model. This table contains information related to the Java classes involved in defining security privileges within the system.

Primary Keys

ACL_CLASS_PK - primary key on column ID

Foreign Keys

None

Indexes

ACL_CLASS_UNIQUE_CLASS - unique index on column CLASS

RBX_ACL_ENTRY Table

Structure

	RBX_ACL_ENTRY
PK	ID
U1 , FK1	ACL_OBJECT_IDENTITY
U1	ACE_ORDER
FK2	SID
	MASK
	GRANTING
	AUDIT_SUCCESS
	AUDIT_FAILURE

Indexes

Index	PK	Unique	Keys
PK_RBX_ACL_ENTRY	✓	Yes	ID
ACL_ENTRY_UNIQUE_OID_ORDER		Yes	ACL_OBJECT_IDENTITY, ACE_ORDER
FK_ACL_ENTRY_AOI		No	ACL_OBJECT_IDENTITY
FK_ACL_ENTRY_ACL_SID		No	SID

Description

This table contains the Oracle Identity Analytics security objects as defined by the RBX_ACL_OBJECT_IDENTITY table. The RBX_ACL_ENTRY table is utilized in the creation of certification managers, enabling them to log in to the application in order to certify, revoke, or remediate a certificate.

Primary Keys

PK_RBX_ACL_ENTRY - primary key on column ID

Foreign Keys

FK_ACL_ENTRY_AOI - foreign key on column ACL_OBJECT_IDENTITY that references the ID field in the parent table RBX_ACL_OBJECT_IDENTITY.

FK_ACL_ENTRY_ACL_SID - foreign key on column SID that references the ID field in the parent table RBX_ACL_SID.

Indexes

ACL_ENTRY_UNIQUE_OID_ORDER - composite unique constraint on columns ACL_OBJECT_IDENTITY and ACE_ORDER.

RBX_ACL_OBJECT_IDENTITY Table

Structure

	RBX_ACL_OBJECT_IDENTITY
PK	ID
FK1,U1	OBJECT_ID_CLASS
U1	OBJECT_ID_IDENTITY
FK2	PARENT_OBJECT
FK3	OWNER_SID
	ENTRIES_INHERITING

Indexes

Index	PK	Unique	Keys
ACL_O_I_PK	✓	Yes	ID
ACL_O_I_UNIQUE_CLASS_OID		Yes	OBJECT_ID_CLASS, OBJECT_ID_IDENTITY
FK_AOI_PARENT_OBJECT		No	PARENT_OBJECT
FK_AOI_ACL_CLASS		No	ID
FK_AOI_ACL_SID		No	OWNER_SID

Description

The RBX_ACL_OBJECT_IDENTITY table defines the privileges for different security objects made available to a RBX USER. The OBJECT_ID_CLASS column indicates the Java class used for the security definition, while the OBJECT_ID_IDENTITY column consists of the ID of the security object with which privileges are being associated.

Primary Keys

ACL_O_I_PK - primary key on column ID

Foreign Keys

FK_AOI_ACL_CLASS - foreign key on column OBJECT_ID_CLASS that references the ID field in the parent table RBX_ACL_CLASS.

FK_AOI_PARENT_OBJECT - foreign key on column PARENT_OBJECT that references the ID field in the parent table RBX_ACL_OBJECT_IDENTITY. This foreign key is defined with CASCADE and DELETE option.

FK_AOI_ACL_SID - foreign key on column OWNER_SID that references the ID in the parent table RBX_ACL_SID. This foreign key is defined with CASCADE and DELETE option.

Indexes

ACL_O_I_UNIQUE_CLASS_OID - composite unique constraint on columns OBJECT_ID_CLASS and OBJECT_ID_IDENTITY.

RBX_ACL_SID Table

Structure

	RBX_ACL_SID
PK	ID
	PRINCIPAL SID

Indexes

Index	PK	Unique	Keys
PK_RBX_ACL_SID	✓	Yes	ID

Description

The RBX_ACL_SID table represents a user, a principal, or an owner of an Oracle Identity Analytics security user account with whom security privileges are associated. These security privileges define the ability to add, remove, or update security objects.

Primary Keys

PK_RBX_ACL_SID - primary key on column ID

Foreign Keys

None

Indexes

None

RBX_AUDIT_ENTRIES Table

Structure

	RBX_AUDIT_ENTRIES
PK	RBACXAUDITENTRYKEY
	OBJECT_NAME DESCRIPTION USERNAME EXECUTIONDATE SERVICE OBJECT OBJECTKEY ACTIONPERFORMED LOCAL_ADDR REMOTE_ADDR REMOTE_HOST SERVER_NAME

Indexes

Index	PK	Unique	Keys
PK_RBX_AUDIT_ENTRIES	✓	Yes	RBACXAUDITENTRYKEY

Description

Oracle Identity Analytics maintains an audit log of all transactions. Each audit entry is stored as a separate record in the RBX_AUDIT_ENTRIES table. Every audit entry is defined by a unique RBACXAUDITENTRYKEY. In addition, the USERNAME, EXECUTIONDATE, DESCRIPTION, OBJECT_NAME, LOCAL_ADDR, REMOTE_ADDR, REMOTE_HOST, and SERVER_NAME fields show the logged audit details. Various services are used in Oracle Identity Analytics and these are listed under the SERVICE field in the table. The ACTIONPERFORMED field shows the type of action performed by the user.

Primary Keys

PK_RBX_AUDIT_ENTRIES - primary key on column RBACXAUDITENTRYKEY

Foreign Keys

None

Indexes

None

RBX_AUDIT_ENTRY_EXT_PROPS Table

Structure

	RBX_AUDIT_ENTRY_EXT_PROPS
PK	RBACXAUDITEXTENDEDPROPERTYKEY
	ENTITY
	ENTITYID
	ACTIONPERFORMED
	RBACXAUDITENTRYKEY
	PROPERTYNAME
	OLDVALUE
	NEWVALUE
	DESCRIPTION
	USERNAME
	ENTITY_NAME

Indexes

Index	PK	Unique	Keys
PK_RBX_AUDIT_ENTRY_EXT_PROPS	✓		RBACXAUDITEXTENDEDPROPERTYKEY
IX_RBX_AUDIT_ENTRY_EXT_PROPS		No	RBACXAUDITENTRYKEY

Description

Each audit entry has extended properties related to it. These properties are defined in the RBX_AUDIT_ENTRY_EXT_PROPS table. Each extended property has its entity defined and is associated with the RBACX_AUDIT_ENTRIES table using the RBACXAUDITENTRYKEY.

Primary Keys

PK_RBX_AUDIT_ENTRY_EXT_PROPS - primary key on column RBACXAUDITEXTENDEDPROPERTYKEY

Foreign Keys

None

Indexes

IX_RBX_AUDIT_ENTRY_EXT_PROPS - non-unique index on column RBACXAUDITENTRYKEY

Miscellaneous Tables

The Miscellaneous Tables

This chapter describes the miscellaneous tables that are used in Oracle Identity Analytics.

CONFIGURATIONS Table

Structure

	CONFIGURATIONS
PK	CONFIGURATIONKEY
	CONFIGURATIONXML

Index

Index	PK	Unique	Keys
PK_CONFIGURATIONS	✓	Yes	CONFIGURATIONKEY

Description

Oracle Identity Analytics configuration details are defined in XML files, which are stored in the Oracle Identity Analytics database in the CONFIGURATIONS table. The CONFIGURATIONKEY column is a unique key that identifies the various configurations, while the CONFIGURATIONXML column points to the various configuration files that handle the connections to the provisioning system.

Primary Keys

PK_CONFIGURATIONS on column CONFIGURATIONKEY

Foreign Keys

None

Indexes

None

EMAIL_TEMPLATES Table

Structure

	EMAIL_TEMPLATES
PK	ID
	NAME DESCRIPTION SENDERNAME EMAILFROM EMAILTO EMAILCC EMAILBCC SUBJECT HTMLEENABLED BODY REPORTS_ALLOWED CREATEUSER UPDATEUSER CREATEDATE UPDATEDATE

Index

Index	PK	Unique	Keys
PK_EMAIL_TEMPLATES	✓	Yes	ID

Description

The EMAIL_TEMPLATES table is used to store the email definitions utilized by different Oracle Identity Analytics modules. Each template is identified by a distinct ID. The REPORTS_ALLOWED field specifies whether the email would have an Oracle Identity Analytics report as an attachment. Additional information such as CREATEUSER, UPDATEUSER, CREATEDATE, and UPDATEDATE are provided for audit purposes.

Primary Keys

PK_EMAIL_TEMPLATES on column ID

Foreign Keys

None

Indexes

None

PASSWORD_DICTIONARY Table

Structure

	PASSWORD_DICTIONARY
PK	WORD

Index

Index	PK	Unique	Keys
PK_PASSWORD_DICTIONARY	✓	Yes	WORD

Description

Oracle Identity Analytics security supports user password validation. If enabled, one option checks the PASSWORD_DICTIONARY table for a list of prohibited words and, if a match is found, the password is not allowed. This validation is not case sensitive.

Primary Keys

PK_PASSWORD_DICTIONARY on column WORD

Foreign Keys

None

Indexes

None

SEQUENCES Table

Structure

	SEQUENCES
PK	SEQUENCENAME
	CURRENTVALUE

Index

Index	PK	Unique	Keys
PK_SEQUENCES	✓	Yes	SEQUENCENAME

Description

The SEQUENCES table holds the last IDs used for domain objects in the Oracle Identity Analytics tables. These IDs are stored in the CURRENTVALUE field.

Primary Keys

PK_SEQUENCES on column SEQUENCENAME

Foreign Keys

None

Indexes

None

PARAMETERS Table

Structure

	PARAMETERS
	PARAMETER_NAME
	INTEGER_VALUE
	LONG_VALUE
	DATE_VALUE
	BOOLEAN_VALUE
	TEXT_VALUE

Index

None

Description

The PARAMETERS table stores parameters of different types that are used by Oracle Identity Analytics. This table is used to store miscellaneous data.

Primary Keys

None

Foreign Keys

None

Indexes

None

