# NetIQ Identity Governance ENUM Values

24.2 (v4.3)



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## Introduction

This technical reference provides description of the internal ENUM values from the database that *might* appear in the exported CSVs. Sections are in alphabetic order and sub-sections within each section are also arranged alphabetically.

## **Access Requests**

This section documents ENUMs associated with access requests, access request and approval policies, and change requests. A number of these ENUMs are used in other areas as well, but they are documented here as these are the primary place they are used.

## Access Request request status (ENUM: ResourceRequestStatus)

The status of the access request.

Database table reference: RESOURCE\_REQUEST.REQUEST\_STATUS

- REQUESTING Request is being processed
- APPROVING Request is in an approval queue
- APPROVING\_PSODV Approving potential SoD violation
- FULFILLING Request is being fulfilled
- COMPLETED Request is now complete
- CANCELED User has cancelled the request
- ERROR\_STARTING\_REQUEST Error occurred starting request
- ERROR\_STARTING\_APPROVAL Error occurred starting approval workflow
- ERROR\_STARTING\_PSODV\_APPROVAL Error occurred starting potential SoD violation approval

## Approval action in approval policy step (ENUM: ApprovalAction)

The types of actions that can be taken by certain events in an approval policy step – primarily if the approval policy step times out.

Database table reference: ACCESS\_APPROVAL\_STEP.TIMEOUT\_ACTION

- APPROVE Approve the item request
- DENY Deny the item request.

## Item requester type (ENUM: ItemRequesterType)

Type of entity allowed to request a resource.

Database table reference: ALLOWED\_ITEM\_REQUESTER.REQUESTER\_TYPE

- USER Allowed requester is a user.
- GROUP Allowed requester is a user group.
- BUSINESS ROLE Allowed requester is a business role.
- ALL USERS All users are allowed to request the item.

## Potential SoD violation approval task delete reason type (ENUM: PsodvTaskDeleteReason)

Reasons that potential Sod violation approval tasks are deleted.

Database table reference: PSODV APPROVAL TASK.DELETE REASON

- TASK COMPLETED Task completed.
- TASK\_PSODV\_CLEARED Task was cleared.
- SOD\_POLICY\_DELETED The SoD policy associated with the approval task was deleted.
- SOD POLICY DEACTIVATED The SoD policy associated with the approval task was deactivated.
- SOD\_POLICY\_CHANGED The SoD policy associated with the approval task changed.

## Request item status (ENUM: RequestItemStatus)

The status of an access request item.

Database table reference: RESOURCE\_REQUEST\_ITEM.ITEM\_APPROVAL\_STATUS,
PSODV\_APPROVAL\_TASK\_ITEM.DECISION, RESOURCE\_REQUEST\_ITEM\_STEP.ITEM\_APPROVAL\_STATUS

- ERROR\_STARTING\_PSODV\_APPROVAL Error occurred starting potential SoD violation approval task.
- WAITING\_PSODV\_APPROVAL Waiting for one or more potential SoD violation approvals.
- ERROR\_STARTING\_APPROVAL Error occurred starting approval workflow.
- ERROR\_STARTING\_REQUEST Error occurred starting a change set request.
- NO\_DECISION No decision has been made.
- TENTATIVE\_APPROVED Item has been approved, but decision is not yet final.
- TENTATIVE DENIED Item has been denied, but decision is not yet final.
- TENTATIVE\_RETRACTED Item has been marked as retracted. It will ultimately be changed to RETRACTED.
   We only use this state internally so that we know to create the necessary approval step records when the step is finished. Unlike the TENTATIVE APPROVED and TENTATIVE DENIED states, this state cannot be undone.
- APPROVED Item has been marked as approved. Decision is final.

- DENIED Item has been marked as denied. Decision is final.
- RETRACTED Item has been retracted.
- CLEARED Item has been cleared to move ahead to the next phase after all potential SoD violation approvals it
  is part of are completed. The next phase will be either approval or fulfillment phases.

## Request item value type (ENUM: DynamicParamDataType)

The data type for parameter values of a request item.

Database table reference: RESOURCE\_REQUEST\_ITEM\_VALUE.DATA\_TYPE

- EntitlementRef Parameter value is an entitlement.
- Integer Parameter is an integer.
- String Parameter is a string.
- Boolean Parameter is a Boolean.
- List Parameter is a list of values.

## User type in approval policy step (ENUM: UserType)

The type of user for approvers, reminder CCs, reminder BCCs, and escalators in an approval policy step.

Database table reference: ACCESS\_APPROVAL\_STEP.APPROVER\_TYPE,

ACCESS\_APPROVAL\_STEP.REMINDER\_CC\_TYPE, ACCESS\_APPROVAL\_STEP.REMINDER\_BCC\_TYPE,

ACCESS\_APPROVAL\_STEP.ESCALATOR\_TYPE.

- SELF User the resource is being requested for.
- SUPERVISOR Supervisor of user the resource is being requested for.
- ITEM\_OWNER Owner of the resource being requested.
- USERS\_AND\_GROUPS Specific users and/or groups.
- COVERAGE\_MAP Coverage map specifies the users.
- IDM\_WORKFLOW IDM workflow.

## Condition request type in approval policies (ENUM: ConditionRequestType)

The type of request that an approval condition, denial condition, or approval via business role authorization is to be applied to.

Database table reference: ACCESS\_REQ\_APPROVAL\_POLICY. APPROVAL\_CONDITION\_REQ,
ACCESS\_REQ\_APPROVAL\_POLICY.DENIAL\_CONDITION\_REQ, ACCESS\_REQ\_APPROVAL\_POLICY.

## AUTO\_APPROVE\_AUTH\_ITEMS\_REQ, ACCESS\_APPROVAL\_STEP.APPROVAL\_CONDITION\_REQ, ACCESS APPROVAL STEP.AUTO APPROV AUTH ITEMS REQ.

- NO\_REQUESTS Does not apply to ANY type of request.
- GRANT\_REQUESTS Applies only to grant requests requests to add permissions, technical roles, or applications.
- REVOKE\_REQUESTS Applies only to revoke requests requests to remove permissions, technical roles, or applications.
- ALL\_REQUESTS Applies to ALL requests.

## Resource Request Submission Status (ENUM: SubmitStatus)

The submission status of an access request to the workflow engine.

Database table reference: RESOURCE REQUEST.SUBMIT STATUS.

- PENDING Submit to workflow is in progress has not successfully submitted yet.
- SUCCEEDED Submission to workflow succeeded, waiting for message from workflow instructing to send approved items to fulfillment.
- FAILED Submission to workflow failed.

#### Approval Step Type (ENUM: ApprovalStepType)

The type of approval step in access request approval policies.

Database table reference: ACCESS\_APPROVAL\_STEP\_TYPE,

RESOURCE\_REQUEST\_APPROVAL\_STEP.STEP\_TYPE.

- APPROVAL This approval step is a regular approval step.
- PSODV\_CHECK This approval step is to do a PSODV check and if PSODVs are detected, start PSODV approval.

## **Applications**

This section documents ENUMs associated with applications.

## Application type (ENUM: ApplicationType)

License type for application.

Database table references: APP\_HIST.TYPE, APPLICATION.TYPE

• ENTERPRISE – Enterprise application.

- IDM IDM application.
- IDMPROV IDM provisioning application.

## **Cost type for application (ENUM: CostType)**

Cost type for application.

Database table references: APP\_CURATED.COST\_TYPE, APP\_HIST.COST\_TYPE, APPLICATION. COST\_TYPE, CAPPLICATION. COST\_TYPE

- YEARLY Yearly cost.
- MONTHLY Monthly cost.
- WEEKLY Weekly cost.
- DAILY Daily cost.
- ONE\_TIME One time cost.
- UNDEFINED Undefined cost type.

## **Currency type for application (ENUM: Currency)**

Currency type for application.

Database table references: APP\_CURATED.CURRENCY, APP\_HIST.CURRENCY, APPLICATION. CURRENCY, CAPPLICATION. CURRENCY

- USD US dollar.
- EUR European euro.
- GBP United Kingdom pound.
- JPY Japanese yen.
- BRL Brazil real.
- CNY China yuan renminbi.
- UNDEFINED Undefined.

## License type for application (ENUM: LicenseType)

License type for application.

Database table references: APP\_CURATED.LICENSE\_TYPE, APP\_HIST.LICENSE\_TYPE, APPLICATION.LICENSE\_TYPE, CAPPLICATION.LICENSE\_TYPE

• PERSONAL - Personal license.

- CORPORATE Corporate license.
- SITE Site license.
- PARTNER Partner license.
- SHARED Shared license.
- UNDEFINED License type not defined.

## **Attribute Definition**

This section documents ENUMs associated with attribute definitions.

## Attribute data type (ENUM: AttributeDataType)

Data type of an attribute definition.

Database table references: ATTRIBUTE\_DEFINITION.ATTRIBUTE\_DATA\_TYPE, ATTRIBUTE\_VALUE.TYPE, REVIEW\_ITEM\_ATTR\_VALUE.ATTR\_DATA\_TYPE

- STRING String
- LONG Long integer number
- DOUBLE Double precision floating point number
- BOOLEAN Boolean
- DATE Date
- LOCALE Locale
- COMPOSITE Composite

## **Attribute state (ENUM: AttributeState)**

State of an attribute definition.

Database table references:  ${\it ATTRIBUTE\_DEFINITION.ATTRIBUTE\_STATE}$ 

- ACTIVE Attribute definition is active.
- DELETED Attribute definition is deleted.
- INACTIVE Attribute definition is not active.

## Attribute type (ENUM: AttributeType)

Type of an attribute definition.

Database table references: ATTRIBUTE DEFINITION.ATTRIBUTE TYPE

- COLLECTED Attribute is populated by collection.
- DERIVED Attribute is derived, meaning it is collected and has a specific mapping, join rule that will be resolved
  after collection.
- ARC MANAGED Attribute can be determined at runtime by the IG server.
- CONFIGURED Attribute is used for configuration or preferences, but is never collected.
- INTERNAL Attribute is used internally.
- COMPOSITE Attribute is used to combine several attributes.
- TRANSIENT Attribute holds a calculated transient value that is not stored in the database.

## **Authorization**

This section documents ENUMs associated with authorization features.

## Authorization permission type (ENUM: AuthPermType)

Authorization permission types.

Database table references: **AUTH\_PERMISSION.AUTH\_PERM\_TYPE** NOTE: The values in these columns are the ordinal value of the enum, not the string value. The ordinal value is shown below with each enum.

- NAVIGATION\_AUTH\_PERMISSION (0) Navigation authorization permission.
- REST\_API\_AUTH\_PERMISSION (1) Rest API authorization permission.
- DATA\_AUTH\_PERMISSION (2) Data authorization permission.

## Authorization role type (ENUM: AuthRoleType)

Authorization role types.

Database table references: **AUTH\_ROLE.ROLE\_TYPE** NOTE: The values in these columns are the ordinal value of the enum, not the string value. The ordinal value is shown below with each enum.

- GLOBAL (0) Global authorization role can be assigned through UI.
- RUNTIME (1) Runtime authorization role assigned when user matches specified criteria.

## **Authorization roles (ENUM: AuthRole.Roles)**

#### Authorization roles

Database table references: AUTH\_ROLE.ROLE\_NAME

- ADM Global administrator.
- RA Review administrator.
- DA Data administrator.
- PA Provisioning administrator.
- SO Security officer.
- AU Auditor
- RT\_RO Review owner.
- RT\_RA Review auditor.
- RT\_RM Review monitor.
- RT\_RV Reviewer.
- RT\_ER Escalation reviewer.
- RT\_AA Application administrator.
- RT\_AO Application owner.
- RT\_ACF Application access change fulfiller.
- RT\_CIF Catalog item fulfiller.
- RT\_ROLE\_USER Logged in user (is mapped against published catalog user).
- RPTA Reporting administrator.
- RT\_HIST\_RO Historical review owner.
- RLA Technical roles administrator.
- RT\_RLO Technical role owner.
- SODA SoD policy administrator.
- RT\_SODO SoD policy owner.
- RT\_HRV Historic reviewer.
- RT\_CRF Exception change set fulfiller.
- RT\_HRA Historical review auditor.
- BRA Business role administrator.
- RT\_BRO Business role owner.

- RT\_BRAPRV Business role approver.
- RT\_BRM Business role manager.
- RT\_BRF Business role fulfiller.
- ARA Access request administrator.
- DQA Data query administrator.
- MA Maintenance administrator
- SOA SaaS OPS administrator
- TA Tenant (Customer) administrator
- RPTU Reporting user
- ABA Analytics bootstrap administrator

## Authorization scope type (ENUM: AuthScopeType)

Authorization scope types.

Database table references: **AUTH\_SCOPE\_SCOPE\_TYPE.** NOTE: The values in these columns are the ordinal value of the enum, not the string value. The ordinal value is shown below with each enum.

- ALL (0) Scope is everything.
- APPLICATION (1) Scoped by application.
- REVIEW\_INST (2) Scoped by review instance.
- REVIEW DEF (3) Scoped by review definition.
- NAV\_ITEM (4) Scoped by navigation item.
- REST\_API (5) Scoped by REST API.
- CHANGE\_REQUEST\_ITEM (6) Scoped by change request.
- SOD\_POLICY (7) Scoped by SoD policy.
- ROLE\_POLICY (8) Scoped by technical role policy.
- ADVISOR FEED (9) Scoped by advisor feed definition.
- BUSINESS\_ROLE (10) Scoped by business role.
- APPROVAL\_POLICY (11) Scoped by business role approval policy.
- RISK\_SCORE\_CFG (12) Scoped by risk score configuration.
- ENTITY\_CATEGORY (13) Scoped by entity category.
- ANALYTICS (14) Scoped by analytics fact.

- DATA\_POLICY (15) Scoped by data policy.
- CERTIFICATION\_POLICY (16) Scoped by certification policy.
- COVERAGE\_MAP (17) Scoped by coverage map.
- AUTH ROLE (18) Scoped by authorization role.

## **Auto Resolution Policies**

This section documents ENUMs associated with auto resolution policies.

## Resolution type (ENUM: ResolutionType)

Types of auto resolution that can be done.

Database table reference: AUTO RESOLUTION POLICY.RESOLUTION TYPE

- BUSINESS\_ROLE\_AUTO\_GRANT\_REVOKES Business role auto grants and revokes.
- UNFULFILLED GRANTS Unfulfilled grant requests.
- UNFULFILLED REVOKES Unfulfilled revoke requests.

## Check Potential SoD Violations (ENUM: CheckPsodvType)

Enum specifies the type of checking that should be done for potential SoD violations when resolving inconsistencies.

Database table reference: AUTO\_RESOLUTION\_POLICY.RES\_CHECK\_PSODVS

- ALL Check for ALL potential SoD violations. Do not send a request to resolve an inconsistency if it would result in ANY type of potential SoD violation.
- TOXIC Check only for toxic potential SoD violations. Do not send a request to resolve an inconsistency if it would result in a potential SoD violation of a toxic SoD policy.
- NONE Do not check for potential SoD violations.

## Change Request Group By (ENUM: ChangeRequestGroupBy)

Enum specifies out requests should be grouped into change sets when resolving inconsistencies.

Database table reference: AUTO\_RESOLUTION\_POLICY.RES\_CHANGE\_REQUEST\_GROUP\_BY

- BUSINESS\_ROLE Group change request items by business role. All auto-grant or auto-revoke requests coming from the same business role will be grouped into a change set.
- USER Group change request items by the user (recipient). All requests for the same user will be grouped into a change set.

RESOURCE – Group change request items by the resource. All requests for the same resource will be grouped
into a change set.

## **Business Roles and Business Role Approval Policies**

This section documents ENUMs associated with business role policies and business role approval policies.

## Business role approval policy type (ENUM: ApprovalPolicyType)

Type of business role approval policy.

Database table reference: APPROVAL\_POLICY.TYPE

- SYSTEM Factory shipped (system) approval policy.
- CUSTOM Custom approval policy.

## **Business role approval state (ENUM: ApprovalState)**

State of a business role.

Database table reference: BUSINESS ROLE.APPROVAL STATE

- DRAFT The assigned approval policy requires approval and the administrator has not submitted the changes for approval.
- REJECTED The approver denies approval of a business role.
- PENDING\_APPROVAL Pending changes are ready for approval by the approver specified in the approval policy.
- APPROVED The approver approved the business role, but the business role has not yet been published.
- PUBLISHED Business role is approved and the administrator has published the role.
- ARCHIVE Business role has been deleted or a newer version has been created.
- MINED The mining process created the business role and the administrators must promote it before they or
  others can approve (depending on the approval policy) and publish it.

#### Business role detection status (ENUM: BusinessRoleDetectionStatus)

Detection status for a business role.

Database table reference: BUSINESS\_ROLE.DETECT\_STATUS

• IN\_PROGRESS – The business role detection is in progress

- ERROR The business role detection failed
- COMPLETED The last business role detection completed
- CANCELED The last business role detection was canceled

## **Detection Trigger (ENUM: DetectionTrigger)**

Types of events that trigger a business role detection or a technical role detection or an SoD detection.

# Database table references: **BUSINESS\_ROLE\_DETECTION.DETECTION\_TRIGGERED\_BY**, **POLICY\_DETECTION.DETECTION\_TRIGGERED\_BY**

- IDENTITY PUBLICATION Detection triggered by publication of identities
- APPLICATION PUBLICATION Detection triggered by publication of application
- ATTR\_CURATION Detection triggered by curation of identity attributes
- RTC IDENTITIES Detection triggered by real-time collection of identities
- BUSINESS ROLE PUBLICATION Detection triggered by publication of business role
- BUSINESS\_ROLE\_DEACTIVATION Detection triggered by deactivation of business role
- BUSINESS ROLE DELETION Detection triggered by deletion of business role
- TECHNICAL ROLE CREATION Detection triggered by creation of technical role definition
- TECHNICAL\_ROLE\_UPDATE Detection triggered by updating of technical role definition
- TECHNICAL ROLE DELETION Detection triggered by deletion of technical role definition
- TECHNICAL ROLE DEACTIVATION Detection triggered by deactivation of a technical role
- TECHNICAL ROLE ASSIGNED Detection triggered by technical role being assigned to a user
- TECHNICAL\_ROLE\_UNASSIGNED Detection triggered by technical role being unassigned from a user
- SOD\_POLICY\_CREATION Detection triggered by creation of an SoD policy
- SOD\_POLICY\_UPDATE Detection triggered by update of an SoD policy
- SOD POLICY DELETION Detection triggered by deletion of an SoD policy
- TECHNICAL\_ROLE\_DETECTION\_CONFIG\_CHANGE Detection triggered by technical role detection configuration change
- USER\_CURATION Detection triggered by a user curation
- PERMISSION CURATION Detection triggered by a permission curation
- ACCOUNT\_CURATION Detection triggered by an account curation

## Resource type (ENUM: BusinessRoleItemType)

Types of resources that can be requested via access request or authorized via a business role.

Database table references: RESOURCE\_REQUEST\_ITEM.ITEM\_TYPE, ACCESS\_APPROVAL\_ITEM.ITEM\_TYPE,
ACCESS\_REQUEST\_ITEM.ITEM\_TYPE, AUTO\_CHANGE\_REQUEST.RESOURCE\_TYPE,
BR\_DETECT\_AUTH.RESOURCE\_TYPE, BR\_DETECT\_AUTO\_REQUEST.RESOURCE\_TYPE,
BUSINESS\_ROLE\_INCL\_ITEM.ITEM\_TYPE, USER\_RESOURCE.RESOURCE\_TYPE,
USER\_RESOURCE\_CHECK.RESOURCE\_TYPE

- TECHNICAL ROLE- Resource is a technical role
- PERMISSION Resource is a permission
- APPLICATION Resource is an application

## **Certification Policies and Data Policies**

This section documents ENUMs associated with data policies and certification policies

## **Certification policy status (ENUM: CertificationPolicyStatus)**

Certification policy statuses.

Database table reference: CERTIFICATION POLICY.STATUS

- NOT CERTIFIED Some entities covered by the certification policy are not reviewed.
- CERTIFIED All entities covered by the certification policy are completely reviewed.

## Certification policy violation status (ENUM: CertPolicyViolationStatus)

Certification policy violation statuses.

Database table reference: CERT\_POLICY\_VIOLATION.VIOLATION\_STATUS

- ACTIVE Violation exists.
- RESOLVED Violation has been resolved.

## Certification policy violation type (ENUM: CertPolicyViolationType)

Certification policy violation types

Database table reference: CERT\_POLICY\_VIOLATION.VIOLATION\_TYPE,
CERT POLICY VIOLATION COUNT.VIOLATION TYPE, REMEDIATION VIO TYPE.VIOLATION TYPE

• NO DECISION - Review is certified, review item does not have a final decision.

- NOT\_REVIEWED Review item is in the target criteria, but is not covered by any of the review instances.
- REVIEW\_IN\_PROGRESS Review is in the target criteria, but is not covered by any of the review instances
  and a review instance is in progress now.
- OVERDUE Review item is in an expired review.
- OVERDUE NO DECISION Review item is in expired review with no final decision.
- ANY\_DECISION Only used internally review item with ANY decision.
- NO\_DECISION\_REVIEW\_IN\_PROGRESS Review instance is in progress and the item was reviewed before with no final decision.
- OVERDUE\_REVIEW\_IN\_PROGRESS Review instance is in progress and the item is expired.
- OVERDUE\_NO\_DECISION\_REVIEW\_IN\_PROGRESS Review instance is in progress and the item is expired
  with no final decision.
- PARTIAL\_APPROVED Internal usage partial approved review item in running review.

## Data policy criteria type (ENUM: DataPolicyCriteriaType)

Types of data policy criterias.

Database table references: DATA POLICY.CRITERIA TYPE

- COUNT Count criteria.
- CRITERIA Simple criteria.
- ENTITY\_CHANGE Entity change criteria.
- VALUE\_CHANGE Value change criteria.
- ATTRIBUTE CHANGE Attribute change criteria.

#### Data policy type (ENUM: DataPolicyType)

Types of data policies.

Database table references: DATA\_POLICY\_TYPE

- COLLECTION Collection data policy.
- PUBLICATION Publication data policy.

## Data policy detection type (ENUM: DataPolicyDetectionType)

Types of data policy detections.

Database table references: DATA\_POLICY.DATA\_POLICY\_DETECTION\_TYPE

- VIOLATION Data policy results are Violations (violate something).
- EVENT Data policy results are Events (data changes).

## Remediation type (ENUM: RemediationType)

Remediation types.

Database table reference: CERTIFICATION\_POLICY.REMEDIATION\_TYPE,

CERT\_POLICY\_VIOLATION.REMEDIATION\_TYPE, DATA\_POLICY.REMEDIATION\_TYPE,

DATA\_POLICY\_VIOLATION.REMEDIATION\_TYPE

- EMAIL\_NOTIFICATION Send email notification.
- CHANGE\_REQUEST Generate a change request.
- MICRO\_CERTIFICATION Run a micro certification.
- WORKFLOW Generate workflow request.

## Trigger type (ENUM: TriggerType)

Policy trigger types.

Database table reference: DATA POLICY.TRIGGER TYPE

- EVENT Policy detection triggers by event.
- SCHEDULE Policy detection is scheduled.
- MANUAL Policy detection can be run manually.

## **Change Requests and Fulfillment**

This section documents ENUMs associated with change requests and fulfillment processes. Many of these are also used in access request processes.

## Change item action type (ENUM: ChangetItemActionType)

Actions taken on change requests.

Database table reference: CHANGE\_ITEM\_ACTION.ACTION

- PENDING pending fulfillment
- FULFILLED Request has been fulfilled

- REFUSED Fulfiller chose to not fulfill this request, instead left permission as is
- SKIPPED Skipped action.
- REASSIGNED Item is re-assigned
- TIMED\_OUT item timed out

### Change request item state (ENUM: ChangeRequestItemState)

Change request item state.

Database table reference: CHANGE\_ITEM\_ACTION.CHANGE\_ITEM\_STATUS

- INITIALIZED The change request item is created and provisioning has not been initiated
- IN PROGRESS Provisioning is in progress
- COMPLETED Provisioning has been successfully completed
- REFUSED Manual fulfiller has refused to provision the item
- PENDING Provisioning workflow has been invoked
- TIMED\_OUT Provisioning workflow timed out
- ERROR An error was encountered
- RETRY Change item is in retry state
- VERIFIED Provisioning changes in the application for the change item has been successfully verified
- NOT\_ VERIFIED Provisioning changes in the application for the change item has not been successfully verified
- VERIFICATION\_IGNORED Closed-loop verification for this change item is not done
- VERIFICATION\_TIMEOUT item timed out

## Change request type (ENUM: ChangeRequestType)

Change request types.

Database reference: AUTO\_CHANGE\_REQUEST\_TYPE, CHANGE\_REQUEST\_ITEM.CHANGE\_REQUEST\_TYPE

- REMOVE\_BUS\_ROLE\_ASSIGNMENT Remove user from business role.
- ADD\_USER\_TO\_ACCOUNT Add user to an account.
- REMOVE PERMISSION ASSIGNMENT Remove permission assignment from user.
- REMOVE\_ACCOUNT\_ASSIGNMENT Remove user-account assignment.

- MODIFY\_PERMISSION\_ASSIGNMENT Modify user-permission assignment.
- MODIFY\_ACCOUNT\_ASSIGNMENT Modify user-account assignment.
- MODIFY\_TECH\_ROLE\_ASSIGNMENT Modify user-technical role assignment.
- REMOVE\_ACCOUNT Remove account.
- ADD\_PERMISSION\_TO\_USER Assign a permission to a user.
- ADD\_APPLICATION\_TO\_USER Assign the user to an account in an application.
- REMOVE\_APPLICATION\_FROM\_USER Remove user from their accounts in an application.
- ADD\_TECH\_ROLE\_TO\_USER Assign a user a technical role.
- REMOVE\_ACCOUNT\_PERMISSION Remove permission assignment from an account.
- MODIFY\_ACCOUNT Modify account.
- MODIFY USER PROFILE Modify user profile.
- MODIFY\_USER\_SUPERVISOR Change user's supervisor.
- DATA\_VIOLATION\_USER Data violation for a user.
- DATA\_VIOLATION\_PERMISSION Data violation for permission.
- DATA\_VIOLATION\_ACCOUNT Data violation for account.
- CERTIFICATION\_POLICY\_VIOLATION Certification policy has been violated.
- MODIFY BUS ROLE DEFN Modify business role definition.
- REMOVE\_TECH\_ROLE\_ASSIGNMENT Remove a technical role assignment from a user.

#### Fulfillment process (ENUM: FulfillerProcess)

Types of fulfillment processes used to fulfill a change request.

Database table reference: CHANGE ITEM ACTION.FULFILLER PROCESS

- MANUAL Fulfilled manually
- DAAS Fulfilled by DaaS fulfillment target, examples are Service Now, BMC Remedy, edir or AD LDAP fulfillment, generic REST/SOAP
- IDENTITY\_MANAGER Fulfillment automatically via NetIQ Identity Manager
- EXTERNAL WORKFLOW Fulfilled by a NetlQ Identity Manager Provisioning Request workflow

## Fulfillment types (ENUM: FulfillmentType)

Fulfillment types.

Database table reference: FULFILLMENT\_INFO.TYPE

- MANUAL Fulfillment is done manually.
- IDMWF Fulfillment is done via IDM workflow.
- EXTERNAL Fulfillment is done via external IDM workflow.
- DAAS Fulfillment is done via DAAS.

## **Provisioning status (ENUM: ProvisioningStatus)**

Provisioning status.

Database table references: CHANGE SET.STATUS

- INITIALIZED Change set has been generated for the provisioning to start.
- PENDING Workflow process has been started and waiting for completion.
- PARTIAL Partial completion.
- COMPLETED Fulfillment is completed and provisioning workflow has completed.
- TIMED OUT Workflow has timed out.
- ERROR An error has occurred.

## **Provisioning type (ENUM: ProvisioningType)**

Provisioning fulfillment type for change requests.

Database reference: CHANGE\_REQUEST\_ITEM.PROVISIONING\_TYPE

- AUTO Auto provisioning only applicable for change requests on permissions assigned via IDM.
- MANUAL Manual provisioning is used for systems which require administrative intervention to complete change requests.
- EXTERNAL Custom provisioning via IDM workflow.
- DAAS DaaS provisioning via Daas fulfillment connector.

## **Collectors and Collector Templates**

This section documents ENUMs associated with collectors and collector templates.

## **Collector status (ENUM: CollectorStatus)**

Collector status.

Database table references: AUTO\_CURATOR.STATUS, DATA\_COLLECTOR.STATUS

- ACTIVE Collector is active and functional.
- INACTIVE Collector has been deactivated and collections cannot be run.
- DISABLED Collection has been disabled.

## Collector type (ENUM: CollectorType)

Collector types.

Database table references: DATA\_COLLECTION.COLLECTOR\_TYPE, DATA\_COLLECTOR.TYPE,
DATA\_TEST\_COLLECTION.COLLECTOR\_TYPE, ENTITY\_ATTRIBUTE\_JOIN.COLLECTOR\_TYPE,
ENTITY\_ATTRIBUTE\_JOIN\_HISTORY.COLLECTOR\_TYPE, TEMPLATE.COLLECTOR\_TYPE

- IDENTITY Identity collector.
- ACCOUNT Account collector.
- ROLE Role collector.
- APPLICATION Application collector.
- PERMISSION Permission collector.
- FULFILLMENT Fulfillment target.
- SYSTEM FULFILLMENT System fulfillment target.
- CURATION Pseudo-collector for curation records.
- GRAVEYARD Pseudo-collector for graveyard records.
- APP\_COLLECTOR Collector of application entities.
- HISTORY Pseudo-collector for history records.

## Template event type (ENUM: TemplateEventType)

Template event types.

Database table references: TEMPLATE.EVENT

- CREATED Template creation event.
- UPDATED Configuration update event.
- ACTIVATED Template activated event.
- DEACTIVATED Template deactivated event.
- DELETED Template deleted event.

## **Template state (ENUM: TemplateState)**

Template states

Database table references: TEMPLATE.STATE

- CREATED Template creation event.
- UPDATED Configuration update event.

## Template type (ENUM: TemplateType)

Template types.

Database table references: TEMPLATE.TYPE

- DEFAULT Factory shipped template.
- CUSTOM Custom template.

## **Data Producers and Data Productions**

This section documents ENUMs associated with data producers and data productions.

## **Collection publish state (ENUM: CollectionPublishState)**

Collection publish states.

Database table references: AUTO\_CURATION.PUBLISH\_STATE, DATA\_COLLECTION.PUBLISH\_STATE

- COLLECTED Collection has been collected, but not published yet.
- PUBLISHED Collection has been collected and published.
- DISCARDED Collection has been discarded not currently used.

## Data producer type (ENUM: DataProducerType)

Types of data producers.

Database table references: DATA PRODUCER.DATA PRODUCER TYPE,

## DATA\_PRODUCTION.DATA\_PRODUCER\_TYPE

- COLLECTOR Producer that does a collection.
- UNIFIER Producer does unification publication.
- RESOLVER Producer does application publication.
- CURATOR Producer does curation.
- AUTOCURATOR Producer does auto curation.

- PROVISIONING Producer does auto provisioning.
- VERIFICATION Producer does provisioning verification.
- START\_REVIEW Producer starts a review.
- SCHEDULER Producer starts or finishes a scheduled job.
- DATA\_SOURCE\_COLLECTORS Represents ALL collectors for a given data source.
- ADVISOR\_FEED Producer to generate CSV for bulk curation.
- ADVISOR\_FEED\_CURATION Producer does curation of CSVs for bulk curation.
- RISK SCORE CALCULATION Producer that does risk score calculation.
- BUSINESS\_ROLE\_MEMBERSHIP Producer that does business role detection.
- DATA\_SOURCE\_TEST\_COLLECTORS Represents ALL test collectors for a given data source.
- TEST COLLECTOR Producer that does a test collection.
- POLICY\_DETECTION Producer does technical role or SoD detection.
- CERT\_POLICY\_CALCULATION Producer does certification policy calculation.
- RTC\_EVENT\_INGESTION Producer does real time data collection.
- MORTICIAN Producer that is assigned to entities which are moved to the graveyard.
- DATA POLICY CALCULATION Producer that does data policy calculation.
- HISTORIAN Producer that is assigned to entities that are historical entities.

#### Data production error type (ENUM: DataProductionErrType)

Types of errors that can occur during collection or curation.

Database table references: COLLECTION ERROR.ERROR TYPE, CURATION ERROR.ERROR TYPE

- TRANSFORM\_BASE\_ENTITY\_ERROR Entity transformation failed in creating collected entity.
- TRANSFORM\_VALIDATION\_ERROR Entity transformation failed in validating the collected entity.
- TRANSFORM\_TRANSFORM\_ERROR Entity transformation failed in transforming the collected entity.
- TRANSFORM\_PERSISTENCE\_ERROR Entity transformation failed in saving the collected entity to the database.
- AUTO CURATION VALIDATION ERROR Error occurred during auto-curation processing.

## **Data production run state (ENUM: CollectionRunState)**

These are the various run states that might occur while a data production is running (status = RUNNING).

#### Database table reference: DATA\_PRODUCTION.RUN\_STATE

- PENDING Production is pending.
- READY\_PHASE\_1 Production is ready to run phase 1.
- RUN\_PHASE\_1 Production is scheduled to run phase 1.
- RUNNING\_PHASE\_1 Production is running phase 1.
- ERR\_PHASE\_1 Phase 1 ended in an error.
- DONE\_PHASE\_1 Phase 1 is completed.
- RUN\_PHASE\_2 Production is scheduled to run phase 2.
- RUNNING\_PHASE\_2 Production is running phase 2.
- ERR\_PHASE\_2 Phase 2 ended in an error.
- DONE PHASE 2 Phase 2 is completed.
- CANCEL\_EXECUTING Request has been made to cancel the production.
- CANCEL\_PHASE\_1 Request has been made to cancel phase 1.
- CANCELLING\_PHASE\_1 Phase 1 is in the process of cancelling.
- CANCEL\_PHASE\_2 Request has been made to cancel phase 2.
- CANCELLING\_PHASE\_2 Phase 2 is in the process of cancelling.
- COMPLETE Phases have completed successfully.
- STOPPED Production was stopped.
- CANCEL\_EXECUTION\_FAILED Cancel request failed.
- TERMINATE EXECUTING Production is terminating.
- TERMINATED Production terminated.
- TERMINATE\_FAILED Production termination failed.

## **Data production status (ENUM: CollectionStatus)**

Statuses for data productions.

# Database table reference: DATA\_PRODUCTION.STATUS, DATA\_COLLECTOR.LAST\_COLLECTION\_STATUS, DATA\_PRODUCTION\_SUMMARY.DPN\_STATUS

- RUNNING Production is running.
- CANCEL\_REQUESTED A request has been made to cancel the production.
- CANCEL\_PENDING Production is pending cancelation.

- TERMINATE\_PENDING Production is pending termination.
- CANCELLED Production was cancelled.
- FAILED Production failed.
- COMPLETED Production completed successfully.
- TERMINATED Production was terminated, did not complete.
- PENDING Production is pending not yet running.
- BULK\_DETECTION Production is part of a bulk production. This production is not yet running. It will be
  performed by another pending production.

## **Download**

## **Download type (ENUM: DownloadType)**

Download types and method to translated download type to user-friendly localized strings.

Database table reference: TEMP\_DATA.TYPE or a part of TEMP\_METADATA columns

- USER User.
- GROUP Group.
- ACCOUNT Account.
- ACCOUNT\_USER Account's user.
- PERMISSION Permission.
- PERMISSION TO HOLDERS Permissions based on permission to account or user.
- ASSIGN TEHCNICAL ROLE Assign users to technical roles.
- ATTRIBUTE\_DEFINITION Attribute definition.
- REVIEW DEFINITION Review definition.
- REVIEW INSTANCE Review instance.
- REVIEW\_ITEM Review item.
- REVIEWER\_ITEM Reviewer item
- REVIEWER Reviewer.
- ESTIMATED\_REVIEW\_ITEM Estimated review item.
- APPLICATION Application.
- IDENTITY SOURCE Identity source.
- IDENTITY\_SOURCE\_MERGE\_RULES Identity source merge rules.

- APPLICATION\_SOURCE Application source.
- DATA\_SOURCE Data source.
- TEST\_COLLECTION Emulation package.
- ROLE\_POLICY Technical role policy.
- SOD\_APPROVAL\_POLICY Separation of Duty approval policy.
- SOD\_POLICY Separation of Duty Policy.
- BUSINESS\_ROLE Business role.
- APPROVAL\_POLICY Approval policy.
- COVERAGE\_MAP Coverage map.
- RISK\_SCORE\_CFG Risk score configuration.
- ENTITY\_CATEGORY Entity category.
- ACCESS\_REQUEST\_POLICY Access request policy.
- ACCESS\_REQUEST\_APPROVAL\_POLICY Access request approval policy.
- DATA\_QUERY Data query.
- DATA\_POLICY Data policy.
- CERTIFICATION\_POLICY Certification policy.
- ANALYTICS\_FACT Analytics fact.
- FULFILLMENT\_TARGET Fulfillment target.
- FULFILLMENT\_SAMPLE Fulfillment sample.
- FORM Form
- DATA\_CENTER Data center (cloud agent).
- DATA\_CONN\_SOURCE Data source connection.
- DATA\_COLLECTOR Data collector.
- APPLICATION\_MAPPING\_LIST Application mapping list.
- ENTITY\_MAPPING\_LIST Entity mapping list.
- BULK\_UPDATE\_TEMPLATE Bulk update template.
- ACCOUNT\_CLASSIFICATION Account Categories
- DELEGATE\_MAPPING Delegation Mappings
- AUTH\_ROLE Global Authorization Assignment
- COLLECTION\_SCHEDULE Collection Schedule

- CERT\_POLICY\_SCHEDULE Cert Policy Schedule
- DATA\_POLICY\_SCHEDULE Data Policy Schedule
- MAINTENANCE\_SCHEDULE Maintenance Schedule
- METRICS\_DATA\_STORE Metrics Datastore
- REMEDIATION\_POLICY Remediation policy
- REVIEW\_SETTINGS Review Settings
- SETTINGS\_ADVANCED Advanced configuration settings
- SETTINGS\_ANALYTICS Analytics and Role mining configuration settings
- SETTINGS\_AUDIT Audit configuration settings
- SETTINGS\_DOWNLOAD Download configuration settings
- SETTINGS\_FULFILLMENT\_CONTEXT\_ATTRS Fulfillment context attribute configuration settings
- SETTINGS\_GENERA General configuration settings
- SETTINGS\_LOGGING Logging configuration settings
- TEMPLATE Template
- SYSTEM IG System
- AUTO\_RESOLUTION\_POLICY Auto resolution policies

## Identity and Application Publication/Resolution, Curation

This section documents ENUMs associated with identity and application publication/resolution and curation.

## **Curation execution type (ENUM: ExecutionType)**

Type of execution to perform for auto curation.

Database table references: AUTO CURATION.EXECUTION TYPE

- INLINE Execute curation inline with the thread that created the curation.
- BATCH Execute curation as a separate thread.

## Data change type (ENUM: DataChangeType)

Types of entity change records.

Database table references: ACCOUNT\_CHANGE.CHANGE\_TYPE, ENTITY\_CHANGE.CHANGE\_TYPE, PERMISSION CHANGE.CHANGE TYPE

- ADDED Entity was added.
- REMOVED Entity was removed.
- ALTERED Entity was altered.
- UNLINKED Entity's application was deleted or exportToIDM was set to false.
- LINKED Entity's application exportToIDM was set to true.

## **Error severity (ENUM: ErrorSeverity)**

Severity of errors that can occur during collection or curation.

Database table references: COLLECTION\_ERROR.SEVERITY, CURATION\_ERR\_ATTRIBUTE.SEVERITY, CURATION\_ERROR.SEVERITY, ERROR\_ATTRIBUTE.SEVERITY

- FATAL Fatal error, unable to continue.
- ERROR Error, trying to continue.
- WARNING Warning, able to continue.
- INFO Information

## Feed generation type (ENUM: FeedGenerationType)

Type of advisor feed generation.

Database table references: ADVISOR\_FEED.FEED\_GENERATION\_TYPE

- MANUAL Manual data feed template generation.
- PRODUCTION Production event data feed template generation.

## Resolution anomaly type (ENUM: ResolutionAnomalyType)

Types of resolution anomalies.

Database table references: RESOLUTION\_ANOMALY.TYPE

- NONMATCHING\_DRIVER\_ID The permission or account driver ID value does not match the driver ID of the
  collected provisioning application.
- NONMATCHING\_LOGICAL\_ID The permission or account driver ID value is valid, but the logical ID value does not match the logical ID of the collected provisioning application.

## Unification anomaly type (ENUM: UnificationAnomaly)

Types of unification anomalies.

Database table references: UNIFICATION ANOMALY.PROBLEM

- NONMATCHING\_UNIQUE\_ID Unification paired a collected user with an existing unique user ID to a
  published user with a different unique user ID. This means that the unification results were different than some
  previous unification.
- MULTIPLE\_MATCHES Unification paired a collected user with more than one published user.
- UNMATCHED\_BUT\_SAME\_UNIQUE\_ID Unification did NOT pair a collected user with a published user with the same unique user ID. This indicates that the collected user used to unify, but no longer does.

## **Unification behavior (ENUM: UnificationBehavior)**

Type of unification to do for an identity data source during identity publication.

Database table references: IDENTITY\_SOURCE.UNIFICATION\_BEHAVIOR

- MERGEABLE Identities can be merged with identities from other mergeable identity data sources as specified by join attributes.
- UNIQUE Identities will not be merged with identities from other identity data sources.
- IGNORED Identities from data source will not be published.

## **Maintenance**

This section documents ENUMs associated with maintenance activities - archiving, cleanup, etc.

## **Execution Mode (ENUM: ExecutionMode)**

Execution mode for the Identity Governance server.

Database table reference: *MAINTENANCE\_INFO.EXECUTION\_MODE*. NOTE: The value in this column is a numeric value, not the string representation of the enum. The numeric value is shown below with each enum

- NORMAL(0) Identity Governance server is operating in its normal mode.
- ENTERING\_MAINTENANCE(1) Identity Governance is in the process of entering maintenance to do archiving.
   It is idling all processes. Currently running background production processes will be allowed to finish, but new productions will not be allowed to start.
- MAINTENANCE\_COPY(2) Archival is in progress. All background processes, most REST requests, and most database updates are disallowed while in this mode.
- MAINTENANCE\_PURGE(3) Cleanup is in progress. Only items that have been archived first will be purged
  from the database. NOTE: All other Identity Governance processes are allowed to run while a cleanup is in
  progress.

- MAINTENANCE\_PURGE\_NO\_LOCKOUT(4) Cleanup is in progress. This cleanup mode does NOT require
  items to be archived before they can be purged. Any item can be purged, whether it has been archived or not. .
  NOTE: All other Identity Governance processes are allowed to run while a cleanup is in progress.
- MAINTENANCE\_COPY\_CONCURRENT(5) Archival is in progress. Unlike the MAINTENANCE\_COPY mode,
  IG background processes, REST requests, and database updates are NOT prevented. Archiving in this mode
  runs concurrently with the rest of Identity Governance.

## **Archival phase (ENUM: ArchivalPhase)**

Phase that a running archival process is currently in. This only applies when the archival task is a normal archival process.

Database table reference: ARCHIVAL.ARCHIVAL PHASE

- PAUSING\_BETWEEN\_ITERATIONS Archival is pausing between archive iterations.
- UPDATING\_STATISTICS Archival is updating database statistics.
- ESTIMATING\_WORK\_TODO Archival is estimating the amount of work to do.
- CLEARING ARCHIVE TABLES Archival is clearing or creating archive tables.
- ARCHIVING Archival is archiving data.
- WAITING ARCHIVAL READERS Archival is waiting for archive readers to finish.
- WAITING OPS TRANSACTIONS Archival is waiting for transactions in the OPS database to finish.
- RECONNECTING Archival is attempting to reconnect to the archive database after having lost its connection to the database.

#### Archive task (ENUM: ArchivalTask)

High level task that was performed by an archival process.

Database table references: ARCHIVAL.ARCHIVE TASK

- ARCHIVE Task was the normal archival process.
- DISABLE Task was to disable archiving.
- ENABLE Task was to enable archiving.

## Maintenance schedule types (ENUM: MaintScheduleType)

Types of maintenance schedules.

Database table reference: MAINTENANCE\_SCHEDULE.SCHEDULE\_TYPE

- ARCHIVE Archive only schedule.
- CLEANUP Cleanup only schedule.
- ARCHIVE\_AND\_CLEANUP Archive and cleanup schedule.

## Maintenance status (ENUM: MaintenanceStatus)

Status of archival or cleanup processes and sub-processes.

Database table references: ARCHIVAL.STATUS, ARCHIVAL\_TABLE.STATUS,
ARCHIVE\_DISABLE\_ENABLE.STATUS, ARCHIVE\_DISABLE\_ENABLE\_TABLE.STATUS, CLEANUP.STATUS,
CLEANUP\_ENTITY.STATUS, CLEANUP\_ENTITY\_INSTANCE.STATUS

- PENDING Process or sub-process is pending has not yet started.
- RUNNING Process or sub-process is currently running.
- COMPLETED Process or sub-process completed successfully.
- CANCELED Process or sub-process was canceled.
- CANCELING Process or sub-process is being canceled.
- FAILED Process or sub-processed failed with some kind of error.

## **Maintenance wait state (ENUM: MaintenanceWaitState)**

The wait state for maintenance after archiving or after cleanup.

Database table references: MAINTENANCE\_INFO.WAIT\_STATE

- WAIT CONTINUE OR EXIT Wait for the user to continue or exit.
- WAIT\_EXIT Wait for the user to exit.

## Purgeable type (ENUM: PurgeableType)

Types of data that can be purged (cleaned up).

Database table references: CLEANUP.CURR\_ENTITY\_TYPE, CLEANUP\_ENTITY\_ITEM.ENTITY\_TYPE

CLEANUP\_ENTITY\_ITEM.ENTITY\_TYPE

- REVIEW\_DEFINITION Review definitions
- REVIEW\_INSTANCE Review instances
- SOD\_POLICY SoD policies
- SOD\_CASE SoD cases

- ROLE\_POLICY Technical role policies
- SNAPSHOT Snapshots
- DATA\_SOURCE Identity data source or application data sources
- COLLECTION Identity or application collections
- ADVISOR\_FEED Bulk update data artifacts
- BUSINESS\_ROLE Business roles
- RISK\_SCORE\_STATUS Risk score statuses
- ENTITY\_CATEGORY Categories
- ACCESS\_REQUEST Access requests
- ACCESS\_REQUEST\_POLICY Access request policies
- ACCESS\_REQUEST\_APPROVAL\_POLICY Access request approval policies
- CERTIFICATION\_POLICY Certification policies
- ANALYTICS\_FACT Analytics facts
- UNREGISTERED\_FACT Unregistered facts
- DATA\_POLICY Data policies
- BUSINESS\_ROLE\_MEMBERS Business role member records created by business role detection.
- BUSINESS\_ROLE\_AUTHORIZATION Business role authorization records created by business role detection.
- RTC\_BATCH Real time collection batches
- AUTO\_FULFILLMENT\_REQUEST Auto fulfillment requests generated by business role detection
- APP\_HISTORY Application history records
- ROLE\_USER\_ASSIGNMENTS Technical role user assignments
- SOD\_DETECTION SoD violation records
- CERTIFICATION\_POLICY\_VIOLATION Certification policy violations
- DATA\_POLICY\_VIOLATION Data policy violations
- REMEDIATION\_RUN Remediation runs
- INCONSISTENCY\_DETECTION Inconsistency detections

## **Miscellaneous**

This section documents miscellaneous ENUMs that do not fit nicely in any other category.

#### Analytics type (ENUM: AnalyticsType)

Analytics type.

Database table references: PIVOT TABLE CONFIG.ANALYTICS TYPE

- ACCOUNT Account statistics.
- PERMISSION Permission statistics.

#### Assignment type (ENUM: AssignmentType)

Assignment types.

Database table references: *CPERMISSION\_HOLDER.ATYPE, REVIEW\_ITEM.ASSIGNMENT\_TYPE, SACCOUNT\_PERMISSION.ATYPE.* NOTE: The values in these columns are the ordinal value of the enum, not the string value. The ordinal value is shown below with each enum.

- DIRECT (0) Directly assigned.
- IMPLICIT (1) Implicitly assigned via membership in a group, container, provisioning role or other grouping.
- INHERITED (2) Inherited via permission hierarchy.
- UNKNOWN (3) Unknown

#### Coverage map type (ENUM: CoverageMapType)

Type of coverage map.

Database table references: COVERAGE MAP.TYPE

- REVIEW Review coverage map.
- REQUEST Request coverage map.

#### Data source type (ENUM: DataSourceType)

Types of data sources.

Database table references: ADVISOR\_FEED.SOURCE\_TYPE, DATA\_POLICY.DATA\_SOURCE\_TYPE, DATA\_SOURCE\_DATA\_SOURCE\_TYPE, SCHEDULE\_DATA\_SOURCE.DS\_TYPE

- APPLICATION Application data source.
- IDENTITY Identity data source.
- FULFILLMENT Fulfillment target.
- SYSTEM FULFILLMENT System fulfillment target.

APP\_COLLECTOR\_SOURCE – Application definition data source (CMDB).

## Entity type (ENUM: EntityType)

Entity types.

Database table reference: Many tables have an ENTITY\_TYPE column or something similar to specify an entity type.

- USER User.
- GROUP Group.
- ACCOUNT Account.
- ACCOUNT USER Account's user.
- PERMISSION Permission.
- PERMISSION\_TO\_HOLDERS Permissions based on permission to account or user.
- PERMISSIONS FROM HODLER Permission based on accounts or users to permissions.
- PERMISSION\_HIERARCHY\_TO\_CHILD Permission hierarchy based on parent to child.
- PERMISSION\_HIERARCHY\_TO\_PARENT Permission hierarchy based on child to parent.
- GROUPMEMBERSHIP Group membership (user) to be collected from JDBC systems.
- GROUPTOGROUP Group membership to be collected from JDBC systems.
- REVIEW\_DEFINITION Review definition.
- REVIEWINSTANCE Review instance.
- APPLICATION Application.
- IDENTITY\_SOURCE Identity source.
- IDMDRIVER Deprecated should now be CAPPLICATION.
- NAV\_ITEM Navigation item.
- REVIEW\_ACT\_ITEM Review item.
- ATTRIBUTE\_DEFINITION Attribute definition.
- DATA\_SOURCE Data source.
- ENTITY\_SCHEMA View schema.
- CHANGE REQUEST ITEM Change request item.
- TAG Tag.
- AUTH\_ROLE Authorization role.
- SCHEDULE Schedule

- ROLE\_POLICY Technical role policy.
- SOD\_POLICY SoD policy.
- ACCOUNT\_CATEGORY Account classification.
- SOD\_CASE Sod case.
- ADVISOR\_FEED Advisory feed.
- BUSINESS\_ROLE Business role.
- APPROVAL\_POLICY Approval policy.
- GOVERNANCE Governance organization.
- COVERAGE\_MAP Coverage map.
- RISK\_SCORE\_CFG Risk score configuration.
- ANALYTICS Analytics.
- ENTITY\_CATEGORY Entity category.
- AFFILIATED\_USER Affiliated user.
- SUPERVISING\_USER Supervising user.
- HOLDER\_USER Permission holder user.
- PERMISSION\_BOUND Permission bounded by permissions.
- SUB\_PERMISSION Sub permission for permission.
- SUBORDINATE\_APP Subordinate application.
- SUB\_GROUP Sub group for group.
- NOTIFICATION\_TEMPLATE IG notification template.
- ACCESS\_REQUEST\_POLICY Access request policy.
- ACCESS\_REQUEST\_APPROVAL\_POLICY Access request approval policy.
- LICENSE License.
- DATA\_POLICY Data policy.
- CERTIFICATION\_POLICY Certification policy.
- ANALYTICS\_FACT Analytics fact.
- ANALYTICS\_DASHBOARD Analytics dashboard.
- DECISION\_SUPPORT\_POLICY Decision support policy.
- TROUBLE\_SHOOT\_INFO Trouble shooting information.
- ARCHIVAL Archival information.

- MAINTENANCE Maintenance information.
- DATA\_QUERY Data query.
- ACCESS\_REQUEST\_ITEM Access request item.
- REVIEW\_ITEM Review item.
- FULFILLMENT\_ITEM Fulfillment item for data query.
- PERMISSION\_ASSIGNMENT Permission assignment.
- AUTHORIZATION Authorization.
- CERTIFICATION\_POLICY\_VIOLATION Certification policy violation.
- REMEDIATION Remedation
- SOD\_VIOLATION SoD policy violation.
- CAPPLICATION Collection application.
- FULFILLMENT\_TARGET Fulfillment target.
- FULFILLMENT\_SAMPLE Fulfillment sample.
- USER\_SOURCE User source.
- DATA\_CENTER Data center (cloud agent).
- DATA\_CONN\_SOURCE Data source connection.
- ACCESS\_REQUEST Access request.
- ACCESS\_REQUEST\_APPROVAL Access request approval.
- PSODV\_APPROVAL Potential SoD violation approval.
- FORM Form
- CUSER Collected user.
- REVIEW\_ITEM\_ACTION Review item action
- USERS\_AND\_GROUPS Users and groups
- DASHBOARD Dashboard
- SOD\_APPROVAL\_POLICY SoD approval policy
- SOD\_VIOLATION\_CASE SoD violation case
- DATA\_COLLECTOR Data collector
- DELEGATE\_MAPPING Delegate mapping
- MAU\_USAGE MAU usage
- APPLICATION\_SOURCE Application source

- APP\_COLLECTOR\_SOURCE Application definition source
- SERVICE\_ACCT Service account
- AUTO\_RESOLUTION\_POLICY Auto resolution policy
- SYSTEM IG System
- SETTINGS\_ADVANCED Advanced configuration settings
- SETTINGS\_ANALYTICS Analytics and Role mining configuration settings
- SETTINGS\_AUDIT Audit configuration settings
- SETTINGS DOWNLOAD Download configuration settings
- SETTINGS\_FULFILLMENT\_CONTEXT\_ATTRS Fulfillment context attribute configuration settings
- SETTINGS\_GENERAL General configuration settings
- SETTINGS\_LOGGING Logging configuration settings
- COLLECTION\_SCHEDULE Collection Schedule
- CERT\_POLICY\_SCHEDULE Certification policy Schedule
- DATA\_POLICY\_SCHEDULE Data policy Schedule
- RISK\_SCHEDULE Risk Schedule
- MAINTENANCE\_SCHEDULE Maintenance Schedule

#### **Group member type (ENUM: GroupMemberType)**

Types of group members.

Database table reference: **CGROUP\_USER.MEMBER\_TYPE** 

- USER Member is a user.
- GROUP Member is a group.
- USER\_OR\_GROUP Member can be a user or a group.

#### Job schedule kind (ENUM: JobSchedule.Kind)

Kinds of job schedules

Database table references: JOB\_SCHEDULE\_KIND

- COLLECTION Data collection.
- REVIEW Review.
- RISK\_SCORING Risk scoring.

- RTC\_EVENT\_INGESTION Real time collection.
- CERT\_POLICY\_CALCULATION Certification policy calculation.
- DATA\_POLICY\_CALCULATION Data policy calculation.

#### Job status (ENUM: JobStatus)

Status of a scheduled job.

Database table references: DATA\_SOURCE\_COLLECTION.JOB\_STATUS,
DATA\_SOURCE\_TEST\_COLLECTION.JOB\_STATUS, JOB\_END.JOB\_STATUS

- INITIALIZING Job has been created, but is not yet running still pending.
- STARTED Job has started.
- COMPLETE Job is completed.
- ERROR Some job steps failed, job may still be running.
- CANCELLED Job was cancelled.

# Owner type (ENUM: OwnerType)

Owner types.

Database table references: CAPPLICATION\_OWNER.OWNER\_TYPE,

COLLECTED\_ACCOUNT\_OWNER.OWNER\_TYPE, COLLECTED\_PERMISSION\_OWNER.OWNER\_TYPE

- USER Owner is a user.
- GROUP Owner is a group.
- ACCOUNT Owner is an account.

# Service status (ENUM: ArcServiceStatus)

Status of service instances.

Database table references: **SERVICE\_INSTANCE.STATUS** 

- INITIALIZED Service is initialized.
- RUNNING Service is running.
- STOPPED Service is stopped.

# **Snapshot status (ENUM: SnapshotStatus)**

Status of a snapshot.

Database table reference: SNAPSHOT.STATUS

- PENDING Snapshot has been created, but not unified.
- UNREALIZED Snapshot has been unified, but not realized.
- REALIZED Snapshot has been realized.

#### Snapshot type (ENUM: SnapshotType)

Status of a snapshot.

Database table reference: SNAPSHOT.TYPE

- IDENTITY UNIFICATION Identity unification snapshot.
- APPLICATION\_RESOLUTION Application publication/resolution snapshot.
- PUBLICATION Publication for catalog snapshot.
- POLICY DETECTION No longer used.

#### Time units (ENUM: TimeUnitType)

Time unit types.

Database table references: JOB TRIGGER.INTERVAL UNIT,

MAINTENANCE\_SCHEDULE.REPEAT\_INTERVAL\_UNIT, REMEDIATION.REVIEW\_DURATION\_UNIT,

REVIEW\_DEFINITION.DURATION\_UNIT, REVIEW\_DEFINITION.END\_REMINDER\_UNIT,

 $REVIEW\_DEFINITION. ESCALATION\_TIMEOUT\_UNIT, \ REVIEW\_DEFINITION. EXPIRATION\_EXTENSION\_UNIT,$ 

REVIEW DEFINITION.REPEAT UNIT, REVIEW DEFINITION.VALID FOR UNIT,

REVIEW\_NOTIFY\_INSTANCE.NOTIFY\_REPEAT\_UNIT, REVIEW\_NOTIFIFY\_INSTANCE.NOTIFY\_UNIT,

 $REVIEW\_NOTIFY\_SCHEDULE.NOTIFY\_UNIT, REVIEW\_RECUR\_NOTIFY\_SCHEDULE.END\_NOTIFY\_UNIT,$ 

REVIEW RECUR NOTIFY SCHEDULE.MIN PERIOD UNIT,

REVIEW\_RECUR\_NOTIFY\_SCHEDULE.START\_NOTIFY\_UNIT

- MILLIS Milliseconds
- SECONDS Seconds
- MINUTES Minutes
- HOURS Hours
- DAYS Days
- WEEKS Weeks

- MONTHS Months
- YEARS Years

# **Verification task state (ENUM: VerifyTaskState)**

State of verification task.

Database table references: VERIFICATION\_STATUS.STATE

- RUNNING Verification is in progress.
- FAILED Fatal error encountered during verification.
- COMPLETED\_SUCCESS Verification completed with no errors.
- COMPLETED\_FAILURE Verification completed with some errors.
- TIMED\_OUT Verification task took too long.

# **Notification Templates**

This section documents ENUMs associated with notification templates.

# Notification area type (ENUM: NotificationAreaType)

Functional type of a notification template.

Database table references: IG NOTIFICATION TEMPLATE.FUNCTIONAL TYPE

- REVIEW Review.
- SOD SoD policy.
- REQUEST Access request.
- BUSINESS\_ROLE\_APPROVAL Business role approval.
- FULFILLMENT Fulfillment.
- BULK DATA Bulk data curation.
- UNASSIGNED Unassigned type.
- REMEDIATION Remediation.
- COLLECTION Collection.
- PUBLICATION Publication.

# Notification content type (ENUM: NotificationContentType)

Types of content for a notification template.

Database table references: IG\_NOTIFICATION\_TEMPLATE.CONTENT\_TYPE

- ACTIVE Template is active.
- INACTIVE Template is inactive.
- DELETED Template is deleted.

#### Notification repeat type (ENUM: NotificationRepeatType)

Notification repeat type.

Database table references: REVIEW\_RECUR\_NOTIFY\_SCHEDULE.REPEAT\_TYPE

- EVENLY SPACED Repeat times are evenly spaced.
- NEVER Do not repeat.

## **Reviews**

This section documents ENUMs associated with review definitions and review instances.

# Account relation type (ENUM: AccountRelationType)

How accounts are related to users.

Database table reference: REVIEW\_ITEM.RELATION\_TO\_USER\_TYPE, SACCOUNT.RELATION\_TO\_USER\_TYPE

- UNMAPPED Account is not associated with a user.
- SINGULAR Account has one user.
- SHARED Account has multiple users.

#### Review expiration type (ENUM: ReviewExpirationType)

Review expiration policies. Defines what to do when a review expires.

Database table reference: REVIEW DEFINITION.EXPIRATION POLICY

- TERMINATE Terminate review upon expiration.
- EXTEND Extend review upon expiration.
- COMPLETE Complete review upon expiration.

- COMPLETE KEEP Complete review upon expiration and KEEP undecided items.
- COMPLETE REMOVE Complete review upon expiration and REMOVE undecided items.

# Review item final decision (ENUM: ReviewItemDecision)

This is the final decision made on the review item based on reviewer.

Database table reference: REVIEW ITEM.FINAL DECISION

- KEEP Keep item
- REMOVE remove item,
- ASSIGN USER assign user to account,
- MODIFY ACCESS modify access
- CANCELED item was cancelled. Set when review is terminated
- MODIFY ENTITY modify entity such as user profile
- MODIFY SUPERVISOR modify supervisor

# Review item status (ENUM: ReviewItemStatus)

Status of review item.

Database table reference: **REVIEW\_ITEM.ITEM\_STATUS** 

- IN\_REVIEW Item is under review
- NOT\_REVIEWABLE Item is placeholder and not under review
- AWAITING\_APPROVAL Reviewers have completed their tasks, awaiting owner approval
- APPROVED Item approved by review owner or admin
- APPROVAL\_PROCESSED Approval has been process by provisioning service. This can be a terminal state
- APPROVAL\_PROCESS\_ERROR There was an error processing the review item by the provisioning service.
   This can be a terminal state

## Review item type (ENUM: ReviewItemType)

Type of review item.

Database table reference: REVIEW ITEM.ITEM TYPE

- PERMISSION Permission
- ACCOUNT Account

- ROLE Technical role
- BUSINESS\_ROLE Business role
- USER User profile
- DIRECT REPORT Direct report

#### Review notification event (ENUM: ReviewNotificationEvent)

Review notification events. Defines review events which will cause notifications to be sent out.

Database table reference: REVIEW\_NOTIFY\_INSTANCE.REVIEW\_NOTIFY\_EVENT

- AFTER REVIEW START Send notification at start of review.
- BEFORE REVIEW EXPIRE Send notification before a review's end date.
- AFTER\_REVIEWER\_TASK\_START Send notification at start of reviewer task.
- BEFORE\_REVIEWER\_TASK\_EXPIRE Send notification before reviewer's task expiration date.
- AFTER REVIEWER TASK EXPIRE Send notification after reviewer's task expiration date.
- AT\_REVIEWER\_TASK\_REASSIGN Send notification when reviewer's task is reassigned.
- AFTER\_OWNER\_TASK\_START Send notification when starting owner's approval task.
- AFTER\_AUDITOR\_TASK\_START Send notification when starting auditor's task.
- BEFORE\_AUDITOR\_TASK\_EXPIRE Send notification when auditor's task expires.
- AT REVIEW END Send notification at the end of the review.
- AT REVIEW CHANGE Send notification when a review instance changes.
- AT\_AUTO\_PROVISIONING\_START\_ERROR Send notification when an auto provisioning start error occurs.
- AT EXTERNAL\_PROVISIONING\_START\_ERROR Send notification when an external provisioning error occurs.
- AT CERTIFICATION\_START\_ERROR Send notification when an error occurs at certification start.
- AT CHANGESET GENERATION ERROR Send notification when change set generation error occurs.

#### Review partial approval policy type (ENUM: ReviewPartialApprovalType)

Defines the partial approval policy used for the review.

Database table reference: REVIEW\_DEFINITION.PARTIAL\_APPROVAL\_POLICY

- NONE Partial approval not allowed
- ON\_DEMAND Review owner initiates partial approval on demand

AUTO - Partial approval is completed automatically when review item completes it's reviewer cycle

#### Review start type (ENUM: ReviewStartType)

Review start types. Indicates how a review was started.

Database table reference: REVIEW INSTANCE.START TYPE, REVIEW INSTANCE MONITOR.START TYPE

- ON\_DEMAND Review was started on demand by user.
- SCHEDULE Review was started by a job schedule as defined in the review definition.
- EXTERNAL Review was started by an external service/policy such as micro certification.

#### Review status (ENUM: ReviewStatus)

Status of review.

Database table reference: REVIEW\_INSTANCE.STATUS

- STARTING Review is in the process of being started to either a PREVIEW or RUNNING state, formerly INITIALIZED in 2.5 and below
- PREVIEW Review is in preview stage, emails have not been sent, visibility is limited to review administrator.
- PREVIEW\_STARTING This is the process of launching a review from PREVIEW to RUNNING.
- RUNNING WF process has started, emails sent and review is officially running and visible to review owner and reviewer(s).
- CERTIFYING Waiting on Review Owner for certification decisions. Review owner can override and resolve conflicts in this state.
- COMPLETE This is a temporal state used for completing a review as is, a review instance record in the DB will
  never have this status.
- PARTIAL\_APPROVE This is a temporal state used for partial completion of review items (and send to fulfillment), a review instance record in the DB will never have this status.
- AUDIT APPROVAL Waiting audit approval.
- NOT CERTIFIED Review was rejected by Auditor.
- CERTIFIED Review auditor or review owner has certified.
- CANCELED Canceled/Terminated.
- PREVIEW CANCELED Staged review in PREVIEW mode is Terminated.
- TIMED OUT Workflow timed out.
- ERROR Error occurred.

#### Review target data type (ENUM: ReviewTargetDataType)

Data types for review definition targets of various kinds.

Database table reference: REVIEW DEFN TARGET DATA.DATA TYPE

- CRITERIA SPEC Targets are specified with criteria. The criteria is specified as JSON.
- LINKED\_ENTITIES Targets are specified as a list of entities, using their unique ID or ID. The list is specified
  as JSON.

#### Review target type (ENUM: ReviewTargetType)

Review target types..

Database table reference: REVIEW\_DEFINITION.REVIEW\_TARGET\_TYPE

- PERMISSIONS Permissions are the main target of review.
- ACCOUNTS Accounts are the main target of review.
- ORPHAN\_ACCOUNTS Orphaned accounts are the main target of review.
- BUSINESS ROLES Business roles are the main target of review.
- ROLES Technical roles are the main target of review.

#### Review types (ENUM: ReviewType)

Defines the type of review.

Database table reference: REVIEW DEFINITION.REVIEW TYPE

- USER ACCESS User Access review
- ORPHAN Unmapped account review
- BROLE MEMB Business Role Membership reviews
- BROLE\_DEFN Business role definition review
- ACCOUNT Account review
- USER\_PROFILE User profile review
- DIRECT\_REPORT Direct report review

The following review types are used functionally to supercede a subset of settings defined in the originating review definition. They are referenced by a running review instance (review\_instance.staged\_review\_definition\_id). It is important that the original review definition settings are still used, these are only a subset allowed by feature function.

- STAGED Settings overriden while review is started in "preview" mode
- MICRO CERT Settings overriden by external policy to start a micro certification using normal target spec

 MICRO\_CERT\_DATA - Settings overriden by external policy to start a micro certification, with custom data linked to suser, saccount, spermission, etc.

#### Reviewer item action (ENUM: ReviewActionType)

The action the reviewer took on the item in their queue.

Database table reference: REVIEW ITEM ACTON.ACTION

- PENDING No decision has been made yet
- KEEP Keep item
- REMOVE Remove item
- ASSIGN\_USER Assign user to account
- CONFIRM KEEP Secondary reviewer confirms keep decision from initial reviewer
- CONFIRM REMOVE Secondary reviewer confirms keep decision from initial reviewer
- CONFIRM ASSIGN USER - Secondary reviewer confirms assigned user from initial reviewer
- REASSIGNED reviewer item reassigned
- TIMED OUT reviewer item timed out
- ESCALATE escalated to either next reviewer, escalation owner, or review owner
- MODIFY ACCESS Reviewer modified access
- CONFIRM MODIFY ACCESS secondary reviewer(s) confirmed access modification from intial reviewer
- MODIFY ENTITY modify entity applicable to user profile and business role definition review
- CONFIRM MODIFY ENTITY secondary reviewer(s) confirmed modify entity from intial reviewer
- MODIFY\_SUPERVISOR change the user's superivisor, applicable to user profile review
- CONFIRM\_MODIFY\_SUPERVISOR secondary reviewer(s) confirmed the change supervisor change from the initial reviewer
- SKIP\_KEEP secondary reviewer skipped because initial reviewer kept item, based on policy defined on review definition
- SKIP\_REMOVE- secondary reviewer skipped because initial reviewer removed item, based on policy defined on review definition

#### Reviewer item status (ENUM: ReviewTaskStatus)

The status of the reviewer item/task.

Database table reference: REVIEW\_ITEM\_ACTION.REVIEW\_ITEM\_STATUS

- PENDING Not in reviewer's queue yet. Only applicable for serial reviews
- IN\_PROGRESS in reviewer queue waiting for reviewer decision
- OVERRIDDEN reviewer item overridden by review owner or admin
- ESCALATED reviewer item was esclated to next reviewer because of time out
- CERTIFIED reviewer item was submitted by reviewer
- REASSIGNED reviewer item reassigned to a new reviewer
- CANCELED item cancelled, review terminated

## Reviewer type (ENUM: ReviewerType)

The type of the reviewer.

Database table references: *REVIEWER\_DEFINITION.TYPE*, *REVIEWER\_INSTANCE.TYPE*, *REVIEW\_ITEM\_ACTION.REVIEWER\_TYPE* 

- BUSINESS ROLE OWNER Business role owner
- USER User(s), these can be explicit, or part of group
- SUPERVISOR supevisor of user,
- APPLICATION OWNER application owner(s), only applicable for accounts and or permission items
- PERMISSION\_OWNER permission owner(s)
- · SELF self review,
- EO Escalation owner/reviewer
- RO review owner
- EXCEPTION REVIEWER Exception Reviewer, this is an item in RO or EO queue that was reassigned
- AUDITOR review auditor
- COVERAGE\_MAP coverage map
- ACCOUNT\_OWNER account owner
- BUSINESS ROLE business role members

#### Schedule review repeat (ENUM: ReviewRepeatAfterType)

Defines when the schedule to repeat a review begins. Only applicable to scheduled reviews.

Database table reference: **REVIEW\_DEFINITION.REPEAT\_AFTER** 

• START - After review starts

• END - After review ends

## Self review policy type (ENUM: SelfReviewPolicyType)

Defines the self review policy.

Database table reference: REVIEW\_DEFINITION.SELF\_REVIEW\_POLICY

- NOT\_ALLOWED Do not allow self review in any form. Self review violations will be escalated at start, or not allowed.
- ALLOWED\_ALL Allow self review in all stages of review.

LIMITED\_MULTI – Self reviewer can see items when they are part of a multiple reviewer queue. Otherwise violation will be escalated at review start, or not allowed.

## **Risk Calculation**

This section documents ENUMs associated with risk calculation processes.

# Risk factor operation (ENUM: RiskFactorOperation)

Risk factor operation.

Database table references: RISK\_FACTOR\_SCORE\_CFG.OPERATION

- AVG Average.
- MAX Maximum

#### Risk factor type (ENUM: RiskFactorType)

Risk factor types.

Database table references: RISK\_FACTOR.RISK\_FACTOR\_TYPE

- RISK Risk based factor type.
- COUNT Count based factor type.
- BASE Base value risk factor.
- AGE Age based risk factor.

#### Risk score status type (ENUM: RiskScoreStatusType)

Risk score calculation status types.

Database table references: RISK\_SCORE\_STATUS.RISK\_SCORE\_STATUS

- REQUESTED Risk score calculation requested.
- IN PROGRESS Risk score calculation in progress.
- ERROR Risk score calculation had an error.
- COMPLETED Risk score calculation completed.
- CANCELED Risk score calculation canceled.
- SKIPPED Risk score calculation skipped.

# Risk score type (ENUM: RiskScoreType)

Risk score types.

Database table references: RISK\_SCORE\_CFG.RISK\_SCORE\_TYPE

- UNINITIALIZED Not configured.
- MANUAL Collected or curated.
- CALCULATED Calculated based on risk score formula.

# **Scripting**

This section documents ENUMs associated with scripting processes.

#### Script State (ENUM: EntityState)

Script state. This indicates what state the script is in. Note we don't yet support an approval process to go from DRAFT to PUBLISHED, that is for a future release.

Database table references: **SCRIPT\_DEFINITION** 

- DRAFT Script is in draft node, not yet promoted to PUBLISHED.
- REJECTED Approver rejected the PENDING\_APPROVAL state change request (future release)
- PENDING\_APPROVAL User wishes for an approver to set the state APPROVED/REJECTED as they try to
  promote a script from DRAFT to PUBLISHED (future release)
- APPROVED approver has accepted the proposes change from DRAFT to PUBLISHED (future release)
- PUBLISHED script is now in production

• ARCHIVE – script is no longer being used

#### Script Language (ENUM: ScriptLanguage)

The language the script is written in. The Graal script engine (which is used in Changeset Modification Policy) is a polyglot interpreter, capable of interpreting many languages.

However note at present, we only support javascript.

Database table references: SCRIPT DESCRIPTION

• JAVASCRIPT - Script is written in javascript.

#### Script Type (ENUM: ScriptType)

Script type. The type of script. This value is stored in the script\_description table.

Note at present we only store fulfillment changeset policy scripts there.

Database table references: SCRIPT\_DESCRIPTION

FULFILLMENT\_CHANGESET\_POLICY – This script processeds changeset modifications.

#### **Technical Roles and SoD Policies**

This section documents ENUMs associated with technical role policies and SoD policies.

#### SoD case action type (ENUM: SodCaseActionType)

Types of actions user may take with respect to SoD cases.

Database table reference: **SOD\_CASE\_ACTION.ACTION** 

- APPROVAL Approve the SoD violation.
- RESOLVE Resolve the SoD violation.
- CLOSED SoD violation was closed, most likely because it no longer is a violation.

#### SoD case close reason (ENUM: SodCaseActionType)

Reason that a SoD case was closed.

Database table reference: SOD CASE ACTION.ACTION COMMENT

- POLICY DELETED SoD policy was deleted.
- CONDITIONS CHANGED SoD policy conditions changed.

- PERMS\_OR\_ROLES\_REMOVED Permissions or technical roles in the SoD policy were removed, either from the user or from the catalog.
- USER\_DELETED User in violation of the SoD policy was deleted.
- ACCOUNT\_DELETED Account in violation of the SoD policy was deleted.
- USER\_OUT\_OF\_SCOPE User no longer satisfies the user condition expression
- ACCOUNT\_OUT\_OF\_SCOPE Account no longer satisfies the account condition expression
- PERMS\_OR\_ROLES\_OUT\_OF\_SCOPE Permissions or technical roles in the SoD policy no longer satisfy the condition expressions.
- PERMS\_OR\_ROLES\_OUT\_OF\_SCOPE\_OR\_REMOVED Permissions or technical roles in the SoD policy were removed, either from the user or from the catalog or the no longer satisfy the condition expressions.

#### SoD case state (ENUM: SodCaseState)

Types of actions user may take with respect to SoD cases.

Database table reference: SOD\_CASE.PRE\_HOLD\_STATE, SOD\_CASE.STATE, SOD\_CASE\_INFO.STATE

- NOT REVIEWED SoD case not yet reviewed.
- APPROVED SoD case violation was approved.
- APPROVAL\_EXPIRED SoD case violation approval expired.
- RESOLVING SoD case violation is in the process of being resolved.
- ON HOLD SoD case is on hold because the SoD policy has been deactivated.
- CLOSED SoD case closed violation no longer exists.

#### SoD condition item type (ENUM: ConditionItemType)

Type of item in an SoD policy condition.

Database table reference: SOD\_CONDITION\_ITEM.TYPE, SOD\_REMOVAL\_ITEM.TYPE

- ROLE Item is a technical role.
- PERMISSION Item is a permission.
- BUSINESS ROLE Item is a business role.
- ROLE\_CRITERIA Item is a technical role expression
- PERMISSION CRITERIA Item is a permission expression.
- BUSINESS\_ROLE\_CRITERIA Item is a business role expression

# SoD condition type (ENUM: SodConditionType)

Types of SoD policy conditions.

Database table reference: SOD CONDITION.TYPE

- HAS\_ALL Condition is violated if user or account has all of the permissions or technical roles specified in the SoD condition.
- HAS\_ANY Condition is violated if user or account has any of the permissions or technical roles specified in the SoD condition.
- HAS\_MULTIPLE Condition is violated if user or account has two or more of the permissions or technical roles specified in the SoD condition.

# **Technical role and SoD detection status (ENUM: DetectionStatus)**

Detection status for technical roles and SoD policies.

Database table references: ROLE POLICY.DETECTION STATUS, SOD POLICY.DETECTION STATUS

- RUNNING The role or SoD detection is in progress.
- COMPLETED The detection completed successfully.
- INACTIVE The role or sod is not active and, no detections are performed.
- INVALID The role or sod is invalid and detection cannot be performed.
- FAILED The last role or SoD detection failed

#### Technical role approval state (ENUM: PolicyState)

State of a technical role.

Database table reference: ROLE POLICY.STATE

- ACTIVE Valid, meaning all included permissions are available in the catalog, and the role is included in the detection process.
- INACTIVE Valid; however, the role is excluded from the detection process.
- INVALID Invalid and excluded from detection process due to a detected error. Detection errors are usually the result of a deleted permission that is included in the technical role.
- MINED -- Technical role was created by role mining and must be promoted before it can be activated.

# Technical role assignment type (ENUM: TechRoleAssignmentType)

Technical role assignment type.

Database table reference: ROLE\_USER\_ASSIGNED.BY, ROLE\_USER\_ASSIGNED.UNASSIGNED\_BY

- BUSINESS\_ROLE\_AUTO\_GRANT Technical role assign came from business role auto grant.
- BUSINESS\_ROLE\_AUTO\_REVOKE Technical role unassign came from business role auto revoke.
- ACCESS\_REQUEST Technical role assign/unassign came from an access request.
- REVIEW\_REVOKE Technical role unassign came from a review.
- DETECTED\_TO\_ASSIGNED\_PROMOTION Promoted technical role.
- PUBLICATION Publication
- CSV\_FILE Technical role assignment was result of onboarding via a CSV file.
- IDENTITY\_QUERY - Technical role assignment was result of onboarding via an Identity Query.

#### Technical role risk mode (ENUM: RiskMode)

Methods to set the risk for a technical role.

Database table reference: ROLE\_POLICY.RISK\_MODE

- MAN Set the risk mode manually.
- AVE The risk is calculated from the average of the risk all permissions included in the technical role.
- MAX The risk is set to the maximum risk of the permissions included in the technical role.

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