IBM Security Identity Governance and Intelligence
Version 5.2.2.1

Database Schema Reference Topics

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Table list

Integration tables

This section documents the layout of the integration database tables. These tables are used by the Identity Governance and Intelligence integration interface to exchange information between Access Governance Core and external repositories that reside in target systems.

The integration interface uses the following tables to import to Access Governance Core data that pertains to users, organization units, and account and permission changes from external target systems:

USER_ERC
Imports user data.

ORGANIZATIONAL_UNIT_ERC (OU_ERC)
Imports data about organization units.

EVENT_TARGET
Imports data about changes on accounts and permissions.

The integration interface uses the **USER_EVENT_ERC** table to export to target systems data about authorization changes that are made in Access Governance Core.

The governance operations that are made in Access Governance Core and on the external systems are transmitted to each other as events and constitute the records of these tables. The **EVENT_OUT** and **EVENT_IN** event tables are not real interface tables. They are used by Access Governance Core to communicate to and from the interface.

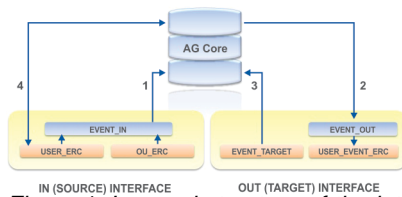The following figure shows a picture of the integration interface database structure.

Figure 1. Layered structure of the integration interface

For more information, see IBM® Security Identity Governance and Intelligence integration interface.

ORGANIZATION_UNIT_ERC

This table is used to import data about organization units from target systems. A number of columns can be personalized to be used in custom rules.

Table 1. ORGANIZATION_UNIT_ERC table

Column Name	Description	Data type
ID	The primary key. It is an opaque value without a specific meaning.	Numeric

Table 1. ORGANIZATION_UNIT_ERC table (continued)

Column Name	Description	Data type
PARENT	The code of the parent organizational unit	String
OU	The code of the organizational unit	String
NAME	The name of the organizational unit	String
DESCRIPTION	A description of the organizational unit	String
ATTR1	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR2	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR3	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR4	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR5	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR6	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR7	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR8	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR9	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR10	A spare attribute that can be used in custom rules to implement user-specific behaviors	String

Table 1. ORGANIZATION_UNIT_ERC table (continued)

Column Name	Description	Data type
ATTR11	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR12	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR13	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR14	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR15	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR16	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR17	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR18	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR19	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR20	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR21	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR22	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
ATTR23	A spare attribute that can be used in custom rules to implement user-specific behaviors	String

Table 1. ORGANIZATION_UNIT_ERC table (continued)

Column Name	Description	Data type
ATTR24	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
LAST_MOD_USER	The ID of the user who last updated the row	String
LAST_MOD_TIME	The timestamp of the latest modification in the row	Date
TIPO	A spare attribute that can be used in custom rules to implement user-specific behaviors	String
SCHEDULE	Determines whether the corresponding EVENT_IN event that is generated is `live` or `deferred`. A value of 1 triggers a `deferred` event. The default is 0.	Numeric

USER_ERC

This table is used to import data about users from target systems. A number of columns can be personalized to be used in custom rules.

The exchange between Access Governance Core and USER_ERC is bi-directional for the following reasons:

- Access Governance Core calculates some attributes and writes them back on the table, making them available to the targets.
- Some attributes are linked with the PERSON table in the Access Governance Core database and are automatically synchronized in both directions.

You can customize the USER_ERC table to fit your needs. Different targets might use different fields, which are then carried back to the USER_ERC table.

It is important to establish which attributes in USER_ERC are mapped to the attributes of the PERSON table in the Access Governance Core database. See the following diagram.
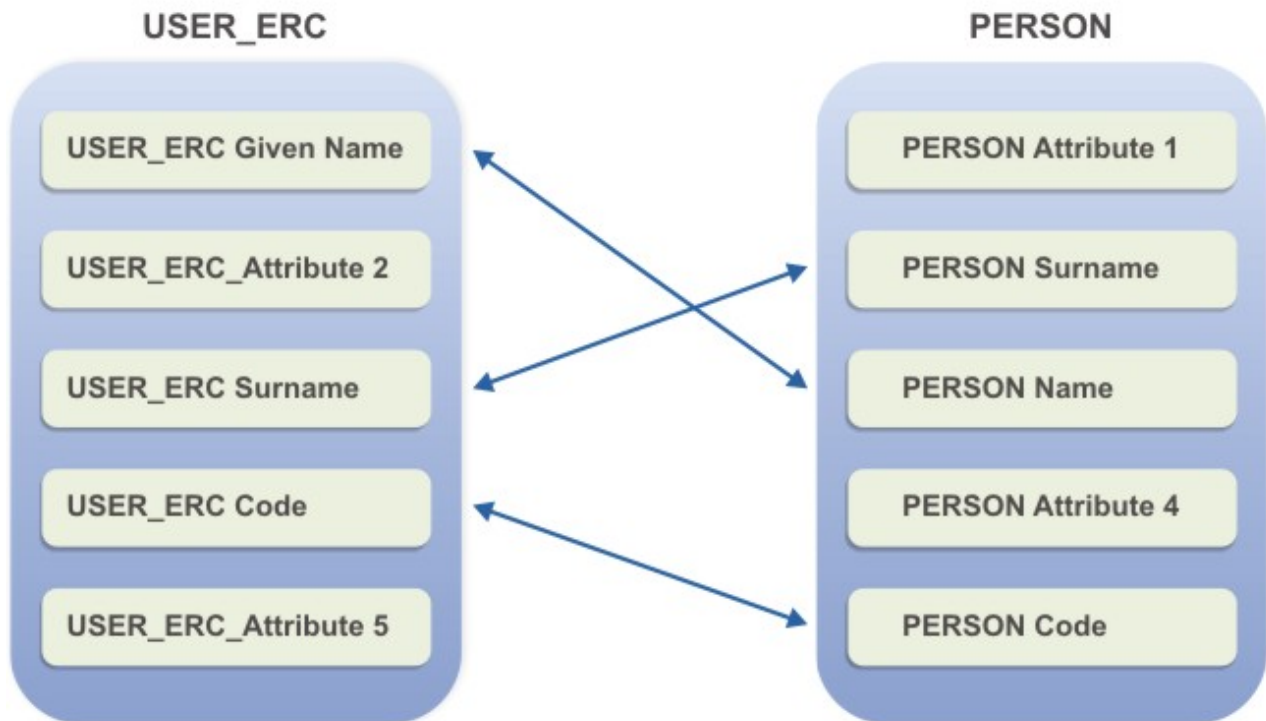
Figure 2. Virtualization of attributes in the PERSON table

In the diagram, the **USER_ERC Given Name** attribute in USER_ERC is mapped to **PERSON Name** in PERSON. PERSON is the table in Access Governance Core that contains the user's personal data.

When USER_ERC is modified by the external personal data system, the data that is contained in **USER_ERC Given Name** is copied to **PERSON Name**. The contrary is also true: changing **PERSON Name** automatically changes **USER_ERC Given Name** .

You can also map other attributes of USER_ERC, outside of the PERSON table, and visualize them as external data in the Data frame of a user in the Access Governance Core module.

Table 2. USER_ERC table

Column Name	Description	Data type
ID	The primary key. It is an opaque value without a specific meaning.	Numeric
PM_CODE	The personal code or User ID. It matches the CODE attribute of the PERSON table.	String
OU	The code of the organizational unit where the new user is to be placed. The value is also copied into EVENT_IN.EXT_ATTR2 every time a change occurs in the row.	String

Table 2. USER_ERC table (continued)

Column Name	Description	Data type
USER_TYPE	By default this attribute is mapped to PERSONTYPE_NAME in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	String
PROCESSED	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
LAST_MOD_USER	The ID of the user who last updated the row	String
LAST_MOD_TIME	The timestamp of the latest modification in the row	Date
POST_EVENT	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	Numeric
SKIP	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
ACTION_TYPE	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function. The value is also copied into EVENT_IN.EXT_ATTR3 every time a change occurs in the row.	String
ACTION_CAUSE	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function. The value is also copied into EVENT_IN.EXT_ATTR4 every time a change occurs in the row.	String
ACTION_TYPE_LAST	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
ACTION_CAUSE_LAST	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
GIVEN_NAME	By default this attribute is mapped to NAME in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	String

Table 2. USER_ERC table (continued)

Column Name	Description	Data type
SURNAME	By default this attribute is mapped to SURNAME in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	String
GENDER	By default this attribute is mapped to SEX in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	String
BIRTHDAY	By default this attribute is mapped to DATEOFBIRTH in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	Date
BIRTH_PLACE	By default this attribute is mapped to PLACEOFBIRTH in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	String
BIRTH_COUNTRY	By default this attribute is mapped to BIRTH_COUNTRY in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	String
ACCOUNT_EXPIRY_DATE	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	Date
IDENTIFICATION_NUMBER	By default this attribute is mapped to CODFISC in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	String
CURRENTOU	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
NATION	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String

Table 2. USER_ERC table (continued)

Column Name	Description	Data type
ZIPCODE	By default this attribute is mapped to ZIPCODE in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	String
COUNTRY	By default this attribute is mapped to COUNTRY in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	String
PHONE_NUMBER	By default this attribute is mapped to PHONENUMBER in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	String
DISABLED	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	Numeric
DELETED	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	Numeric
EXT_ATTR1	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR2	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR3	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR4	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR5	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR6	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String

Table 2. USER_ERC table (continued)

Column Name	Description	Data type
EXT_ATTR7	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR8	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR9	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR10	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR11	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR12	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR13	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR14	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
EXT_ATTR15	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String
SCHEDULE	The value can be 0 or 1. When the value is 1, the corresponding EVENT_IN element is generated as `deferred`. The default is 0.	Numeric
ADDRESS	By default this attribute is mapped to ADDRESS in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	String
CITY	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String

Table 2. USER_ERC table (continued)

Column Name	Description	Data type
EMAIL	By default this attribute is mapped to EMAIL in the PERSON table. You can use the Virtual Attribute mapping function to map it to a different attribute of PERSON.	String
AD_OU	You can map this spare attribute to any attribute in the PERSON table with the Virtual Attribute mapping function	String

EVENT_TARGET

Every record of this table describes an event that is related to an operation transmitted by a target system.

Table 3. EVENT_TARGET table

Column Name	Description	Data type
ID	Primary key. It is an opaque value without a specific meaning.	Numeric
CODE	Code of the account involved in the specific event (if required).	String
OPERATION	Operation represented by the event. Possible values are: 1: PERMISSION_ADD 2: PERMISSION_REMOVE 3: ACCOUNT_PWDCHANGE 6: ACCOUNT_DISABLE 7: ACCOUNT_ENABLE 8: ACCOUNT_UNMATCHED 9: ACCOUNT_MODIFY 10: ACCOUNT_CREATE 11: ACCOUNT_REMOVE 12: RIGHT_ADD 13: RIGHT_REMOVE 20: ROLE_CREATE 21: ROLE_REMOVE 22: ROLE_ADD_CHILD 23: ROLE_REMOVE_CHILD 25: EXTROLE_CREATE 26: EXTROLE_REMOVE 27: EXTROLE_ADD_CHILD 28: EXTROLE_REMOVE_CHILD	Numeric
STATE	State of the event. Possible values are: 1: Unprocessed 2: Processed with success 3: Processed with errors	Numeric
TRACE	Optional message related to the outcome of the event processing.	String

Table 3. EVENT_TARGET table (continued)

Column Name	Description	Data type
TARGET	Event marker (target) referred by the event.	String
FUNCTIONALITY	Name of the functionality (permission) involved in the specific event (if required).	String
FUNCTIONALITY_TYPE	Name of the functionality type (permission type) involved in the specific event (if required).	String
ATTR1	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR2	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR3	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR4	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR5	Spare attribute having different meanings for customization needs or for a specific operation.	String
DATE_EVENT	Timestamp of the event creation.	Date
DATE_PROCESS	Timestamp related to the creation of the event.	Date
OWNERSHIP	DB User owning the row.	String
LAST_MOD_USER	The user who made the last modification on the row.	String
LAST_MOD_TIME	Timestamp of the last modification of the row.	Date
APPLICATION	Name of the application involved in the specific event (if required).	String
PRIORITY	Priority of the event. Currently this property is not used.	Numeric
PROCESS_ID	Identifier of a process. Currently this property is not used.	String
EMAIL	Email address associated to the event.	String
DISPLAY_NAME	The name of the user as it is displayed on the target system	String
NAME	The first name of the user	String
SURNAME	The last name of the user	String
IDENTITY_UID	Attributes having different meanings according to specific operations.	String
DETAIL	Optional additional details about the outcome of the processing of the event	String

Table 3. EVENT_TARGET table (continued)

Column Name	Description	Data type
ATTR6	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR7	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR8	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR9	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR10	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR11	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR12	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR13	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR14	Spare attribute having different meanings for customization needs or for a specific operation	String
ATTR15	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR16	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR17	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR18	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR19	Spare attribute having different meanings for customization needs or for a specific operation.	String
ATTR20	Spare attribute having different meanings for customization needs or for a specific operation.	String
DISPATCHER_ID	Identifier of the dispatcher managing the event (internal usage).	Numeric

USER_EVENT_ERC

The records of this table point to operations that were run in Access Governance Core and that affect users in the remote target systems. The operations are changes in user's permission or accounts and are recorded in the form of events.

Table 4. USER_EVENT_ERC table

Column Name	Description	Data type
ID	The primary key. It is an opaque value without a specific meaning.	Numeric
USER_ERC	The key of the USER_ERC entity that is affected by the operation	Numeric
APPLICATION	The name of the application that is impacted by the operation associated with the event (if required)	String
COD_OPERATION	An identification of the internal originator of the event (for internal use)	String
OPERATION	The operation that is carried out with the event. Operations are represented by the following values: 1: PERMISSION_ADD 2: PERMISSION_REMOVE 6: ACCOUNT_DISABLE 7: ACCOUNT_ENABLE 8: ACCOUNT_CREATE 9: ACCOUNT_REMOVE 10: ACCOUNT_MODIFY 11: ACCOUNT_PWDCHANGE 12: RIGHT_ADD 13: RIGHT_REMOVE 14: RESOURCE_ADD 15: RESOURCE_REMOVE 16: USERROLE_ADD 17: USERROLE_REMOVE	Numeric
ATTR1	The value of this attribute depends on the operation associated with the event	String
ATTR2	The value of this attribute depends on the operation associated with the event	String
EVENT_OUT	The key of the EVENT_OUT event that propagated to the present event	Numeric
PROCESSED	The processing state of the event. It can be one of the following values: **0** Not processed **1** Processed with success **2** Processed with errors The default is 0.	String

Table 4. USER_EVENT_ERC table (continued)

Column Name	Description	Data type
ATTR3	The value of this attribute depends on the operation associated with the event	String
ATTR4	The value of this attribute depends on the operation associated with the event	String
TARGET	Event marker (target) referred by the event	String
STATUS	The event processing result. It can be one of the following values: **0** No result **1** Success **2** Error **9** Pending (waiting for asynchronous result)	Numeric
ATTR5	The value of this attribute depends on the operation associated with the event	String
DATE_EVENT	The timestamp of the generation of the event. The default is the system date.	Date
CONNECTOR_TYPE	Currently not used	String
TRACE	An optional message that relates the processing outcome of the event	String
USER_ID	The code or user ID of the account affected by the operation	String
SERVER_ID	The hostname of the server that picked up the event for processing	String
PICKUP_TIME	The time when the event was received	Date

EVENT_OUT

This table is not a proper integration table. It is used to convey data from Access Governance Core to the integration interface.

Table 5. EVENT_OUT table

Column Name	Description	Data type
ID	The primary key. It is an opaque value without a specific meaning.	Numeric
PERSON	The key of the PERSON entity that is affected by the operation	Numeric
USER_ERC	The key of the USER_ERC entity that is affected by the operation	Numeric
TARGET	Event marker (target) referred by the event	String

Table 5. EVENT_OUT table (continued)

Column Name	Description	Data type
COD_OPERATION	An identification of the internal originator of the event (for internal use)	String
OPERATION	The operation that is carried out with the event. Operations are represented by the following values: 1: PERMISSION_ADD 2: PERMISSION_REMOVE 4: DELEGATION_ADD 5: DELEGATION_REMOVE 6: ACCOUNT_DISABLE 7: ACCOUNT_ENABLE 8: ACCOUNT_CREATE 9: ACCOUNT_REMOVE 10: ACCOUNT_MODIFY 11: ACCOUNT_PWDCHANGE 12: RIGHT_ADD 13: RIGHT_REMOVE 14: RESOURCE_ADD 15: RESOURCE_REMOVE 16: USERROLE_ADD 17: USERROLE_REMOVE	Numeric
STATE	The processing state of the event. It can be one of the following values: **0** Not processed **1** Processed with success **2** Processed with errors The default is 0.	Numeric
DATE_EVENT	The timestamp of the generation of the event. The default is the system date.	Date
DATE_PROCESS	The timestamp of the event generation process. It is usually equal to the value of DATE_EVENT. The default is the system date.	Date
TRACE	An optional message that relates the processing outcome of the event	String
ATTR1	The value of this attribute depends on the operation associated with the event	String
ATTR2	The value of this attribute depends on the operation associated with the event	String
ATTR3	The value of this attribute depends on the operation associated with the event	String
ATTR4	The value of this attribute depends on the operation associated with the event	String

Table 5. EVENT_OUT table (continued)

Column Name	Description	Data type
ATTR5	The value of this attribute depends on the operation associated with the event	String
LAST_MOD_TIME	The timestamp of the latest modification in the row	Date
LAST_MOD_USER	The user who last updated the row	String
APPLICATION	The name of the application that is impacted by the operation associated with the event	String
PRIORITY	The priority of the event (currently not used).	Numeric
CONNECTOR	Currently not used	String
CONNECTOR_STATE	Currently not used	Numeric
PROCESS_ID	Currently not used	String
ERC_STATUS	The processing state of the event that is issued to the USER_EVENT_ERC table. It can be one of the following values: **0** Not processed **1** Processed with success **2** Processed with errors **3** Ignored The default is 0.	Numeric
USER_ID	The code or user ID of the account affected by the operation	String
DETAIL	Additional details about the event processing outcome (optional)	String
DISPATCHER_ID	An optional identifier of the dispatcher that manages the event (for internal use)	Numeric

EVENT_IN

This table is not a proper integration table. It is used to convey data from the integration interface to Access Governance Core.

Table 6. EVENT_IN table

Column Name	Description	Data type
ID	Primary key. It is an opaque value without a specific meaning.	Numeric
EXT_TABLE	Pointer to the corresponding row (identified through the primary key) of the tables: • USER_ERC • ORGANIZATIONAL_UNIT_ERC	Numeric

Table 6. EVENT_IN table (continued)

Column Name	Description	Data type
OPERATION	Operation represented by the event. Possible values are: 1: USER_ADD 2: USER_MODIFY 3: USER_REMOVE 9: ORGUNIT_ADD 10: USER_BEFORE 10: ORGUNIT_MODIFY 11: ORGUNIT_REMOVE 12: USER_MOVE 100: ORGUNIT_BEFORE For scheduled (deferred) events the operation codes can be obtained by adding a displacement number equal to 100.	Numeric
TRACE	Optional message related to the outcome of the event processing.	String
STATE	Processing state of the event. Possible values are: 0: Unprocessed 1: Processed with success 2: Processed with errors	Numeric
DATE_PROCESS	Timestamp of the event creation.	Date
LAST_MOD_USER	User which performed the last modification on the row.	String
LAST_MOD_TIME	Timestamp of the last modification of the row.	Date
EXT_ATTR1	Spare attribute having different meanings for customization needs or for specific operation.	String
EXT_ATTR2	Spare attribute having different meanings for customization needs or for specific operation.	String
EXT_ATTR3	Spare attribute having different meanings for customization needs or for specific operation.	String
EXT_ATTR4	Spare attribute having different meanings for customization needs or for specific operation.	String
EXT_ATTR5	Spare attribute having different meanings for customization needs or for specific operation.	String
EXT_ATTR6	Spare attribute having different meanings for customization needs or for specific operation.	String
EXT_ATTR7	Spare attribute having different meanings for customization needs or for specific operation.	String

Table 6. EVENT_IN table (continued)

Column Name	Description	Data type
EXT_ATTR8	Spare attribute having different meanings for customization needs or for specific operation.	String
EXT_ATTR9	Spare attribute having different meanings for customization needs or for specific operation.	String
EXT_ATTR10	Spare attribute having different meanings for customization needs or for specific operation.	String
OWNERSHIP	User owing the row.	String
DATE_EVENT	Timestamp of the event creation.	Date
ERC	Table originating the event. It could be USER_ERC or ORGANIZATIONAL_UNIT_ERC	String
PROCESS_ID	Not used	String
DETAIL	Optional further details of the event outcome.	String
DISPATCHER_ID	Identifier of the dispatcher managing the event (for internal usage).	Numeric

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