



Informatica™

Informatica® B2B Data Exchange
10.2.2 Hotfix 1

Operational Data Store Schema Reference

Informatica B2B Data Exchange Operational Data Store Schema Reference
10.2.2 Hotfix 1
February 2019

© Copyright Informatica LLC 2001, 2019

This software and documentation are provided only under a separate license agreement containing restrictions on use and disclosure. No part of this document may be reproduced or transmitted in any form, by any means (electronic, photocopying, recording or otherwise) without prior consent of Informatica LLC.

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation is subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License.

Informatica, the Informatica logo, Informatica Cloud, PowerCenter, PowerExchange, and Big Data Management are trademarks or registered trademarks of Informatica LLC in the United States and many jurisdictions throughout the world. A current list of Informatica trademarks is available on the web at <https://www.informatica.com/trademarks.html>. Other company and product names may be trade names or trademarks of their respective owners.

Portions of this software and/or documentation are subject to copyright held by third parties. Required third party notices are included with the product.

See patents at <https://www.informatica.com/legal/patents.html>.

DISCLAIMER: Informatica LLC provides this documentation "as is" without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of noninfringement, merchantability, or use for a particular purpose. Informatica LLC does not warrant that this software or documentation is error free. The information provided in this software or documentation may include technical inaccuracies or typographical errors. The information in this software and documentation is subject to change at any time without notice.

NOTICES

This Informatica product (the "Software") includes certain drivers (the "DataDirect Drivers") from DataDirect Technologies, an operating company of Progress Software Corporation ("DataDirect") which are subject to the following terms and conditions:

1. THE DATADIRECT DRIVERS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.
2. IN NO EVENT WILL DATADIRECT OR ITS THIRD PARTY SUPPLIERS BE LIABLE TO THE END-USER CUSTOMER FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES ARISING OUT OF THE USE OF THE ODBC DRIVERS, WHETHER OR NOT INFORMED OF THE POSSIBILITIES OF DAMAGES IN ADVANCE. THESE LIMITATIONS APPLY TO ALL CAUSES OF ACTION, INCLUDING, WITHOUT LIMITATION, BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY, MISREPRESENTATION AND OTHER TORTS.

The information in this documentation is subject to change without notice. If you find any problems in this documentation, report them to us at infa_documentation@informatica.com.

Informatica products are warranted according to the terms and conditions of the agreements under which they are provided. INFORMATICA PROVIDES THE INFORMATION IN THIS DOCUMENT "AS IS" WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT.

Publication Date: 2019-02-14

Table of Contents

Preface	4
Informatica Resources.	4
Informatica Network.	4
Informatica Knowledge Base.	4
Informatica Documentation.	4
Informatica Product Availability Matrices.	5
Informatica Velocity.	5
Informatica Marketplace.	5
Informatica Global Customer Support.	5
Chapter 1: Operational Data Store Schema Overview	6
Operational Data Store Schema Overview.	6
Operational Data Store Tables.	7
Operational Data Store Structure and Relationships.	8
Chapter 2: Fact Tables	10
Fact Tables Overview.	10
DX_ODS_EVENT_FACTS Table.	10
DX_ODS_CUSTOM_FACTS Table.	12
Chapter 3: Dimension Tables	14
Dimension Tables Overview.	14
DX_ODS_ACCOUNT Table.	14
DX_ODS_CUSTOM_FACTS_EAV Table.	15
DX_ODS_EVENT_STATUS Table.	16
DX_ODS_EVENT_TYPE Table.	17
DX_ODS_PARTNER Table.	18
DX_ODS_TIME_BREAKDOWN Table.	18
Chapter 4: User Access Tables	20
User Access Tables Overview.	20
DX_ODS_USER_ACCESS Table.	20
DX_ODS_USER_EVENT_TYPE Table.	21
DX_ODS_USER_SUPER Table.	21
Appendix A: Examples	22
SQL Query Examples.	22
Index	25

Preface

The *Operational Data Store Schema Reference* provides information about the structure and content of the tables in the operational data store. This reference is written for B2B Data Exchange developers who need to access the information in the database for creating custom reports in B2B Data Exchange or external reporting tools. It assumes that you have working knowledge of database management experience creating and maintaining reports for Dashboard applications.

Informatica Resources

Informatica provides you with a range of product resources through the Informatica Network and other online portals. Use the resources to get the most from your Informatica products and solutions and to learn from other Informatica users and subject matter experts.

Informatica Network

The Informatica Network is the gateway to many resources, including the Informatica Knowledge Base and Informatica Global Customer Support. To enter the Informatica Network, visit <https://network.informatica.com>.

As an Informatica Network member, you have the following options:

- Search the Knowledge Base for product resources.
- View product availability information.
- Create and review your support cases.
- Find your local Informatica User Group Network and collaborate with your peers.

Informatica Knowledge Base

Use the Informatica Knowledge Base to find product resources such as how-to articles, best practices, video tutorials, and answers to frequently asked questions.

To search the Knowledge Base, visit <https://search.informatica.com>. If you have questions, comments, or ideas about the Knowledge Base, contact the Informatica Knowledge Base team at KB_Feedback@informatica.com.

Informatica Documentation

Use the Informatica Documentation Portal to explore an extensive library of documentation for current and recent product releases. To explore the Documentation Portal, visit <https://docs.informatica.com>.

Informatica maintains documentation for many products on the Informatica Knowledge Base in addition to the Documentation Portal. If you cannot find documentation for your product or product version on the Documentation Portal, search the Knowledge Base at <https://search.informatica.com>.

If you have questions, comments, or ideas about the product documentation, contact the Informatica Documentation team at infa_documentation@informatica.com.

Informatica Product Availability Matrices

Product Availability Matrices (PAMs) indicate the versions of the operating systems, databases, and types of data sources and targets that a product release supports. You can browse the Informatica PAMs at <https://network.informatica.com/community/informatica-network/product-availability-matrices>.

Informatica Velocity

Informatica Velocity is a collection of tips and best practices developed by Informatica Professional Services and based on real-world experiences from hundreds of data management projects. Informatica Velocity represents the collective knowledge of Informatica consultants who work with organizations around the world to plan, develop, deploy, and maintain successful data management solutions.

You can find Informatica Velocity resources at <http://velocity.informatica.com>. If you have questions, comments, or ideas about Informatica Velocity, contact Informatica Professional Services at ips@informatica.com.

Informatica Marketplace

The Informatica Marketplace is a forum where you can find solutions that extend and enhance your Informatica implementations. Leverage any of the hundreds of solutions from Informatica developers and partners on the Marketplace to improve your productivity and speed up time to implementation on your projects. You can find the Informatica Marketplace at <https://marketplace.informatica.com>.

Informatica Global Customer Support

You can contact a Global Support Center by telephone or through the Informatica Network.

To find your local Informatica Global Customer Support telephone number, visit the Informatica website at the following link:

<https://www.informatica.com/services-and-training/customer-success-services/contact-us.html>.

To find online support resources on the Informatica Network, visit <https://network.informatica.com> and select the eSupport option.

CHAPTER 1

Operational Data Store Schema Overview

This chapter includes the following topics:

- [Operational Data Store Schema Overview, 6](#)
- [Operational Data Store Tables, 7](#)
- [Operational Data Store Structure and Relationships, 8](#)

Operational Data Store Schema Overview

The operational data store is a repository that contains aggregated information about events that B2B Data Exchange processes. B2B Data Exchange uses the information for business activity monitoring and Dashboard reports.

The operational data store schema is based on a star schema. The operational data store includes the following table types:

- **Fact tables.** Contain aggregated information that B2B Data Exchange collects about events. Fact tables store event information based on key performance indicators (KPIs). Default KPIs in B2B Data Exchange provide event processing information, such as number of events or processing time. Custom KPIs provide values for event attributes that you select to use in reports, such as sales figures or customer claim values.
- **Dimension tables.** Contain additional metadata that you can use to filter the information from the fact tables. Dimension tables store descriptive information about event properties, such as the related partner, account, or event type.
- **User access tables.** Contain information about B2B Data Exchange security restrictions for specific event dimensions. User access tables store user information according to the access role and the type of information that the users view.

B2B Data Exchange collects events from the run-time repository with the operational data store event loader. The operational data store event loader is a PowerCenter workflow that runs at predefined intervals and loads KPIs to the relevant tables.

Use the Operation Console to view the reports in the Dashboard. Use Logi Info Studio to enhance the default Dashboard panels or to create custom Dashboard panels with information from the operational data store. You can also create custom reports with an external tool directly from the operational data store according to the organization requirements.

For information about viewing reports in the Dashboard from the Operation Console, see the *B2B Data Exchange Operator Guide*. For information about enhancing and customizing the Dashboard with Logi Info Studio, see the *B2B Data Exchange Developer Guide*.

Operational Data Store Tables

The operational data store contains fact tables, dimension tables, and user access tables.

The following table describes the fact tables:

Table Name	Description
DX_ODS_EVENT_FACTS	Aggregated event information based on default KPIs. Default KPIs provide information about events according to the basic event properties, such as processing time or number of events.
DX_ODS_CUSTOM_FACTS	Aggregated event information based on custom KPIs. You create custom KPIs from event attributes that you define in the Operation Console. The attribute value may represent any numeric data that you want to aggregate, such as sales figures or the amount of insurance claims.

The following table describes the dimension tables:

Table Name	Description
DX_ODS_ACCOUNT	Names and identifiers of related accounts. This table also contains the parent partners for the accounts.
DX_ODS_CUSTOM_FACTS_EAV	Names and identifiers of event attributes that you select to use in reports.
DX_ODS_EVENT_STATUS	Names and identifiers of event statuses. This table also contains error and final status information.
DX_ODS_EVENT_TYPE	Names and identifiers of event types.
DX_ODS_PARTNER	Names and identifiers of related partners. This table does not contain account information.
DX_ODS_TIME_BREAKDOWN	Time frames and units for the event aggregation, such as the time and date on which event processing began.

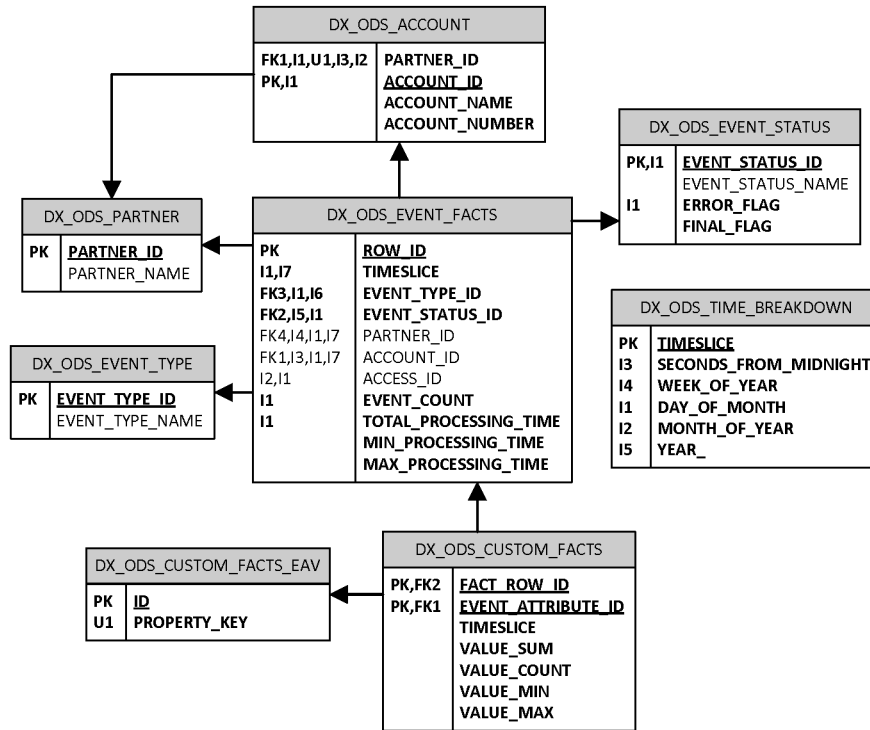
The following table describes the user access tables:

Table Name	Description
DX_ODS_USER_ACCESS	Identifiers for B2B Data Exchange users and access roles.
DX_ODS_USER_EVENT_TYPE	Identifiers for B2B Data Exchange users and the event types that the users can access.
DX_ODS_USER_SUPER	Identifiers for B2B Data Exchange users with no access restrictions.

Operational Data Store Structure and Relationships

The operational data store contains fact tables, dimension tables, and user access tables. The fact tables typically have primary-foreign key relationships with the dimension tables. The user access tables contain security restriction information according to the B2B Data Exchange user permissions.

The following figure shows the relationships between the fact tables and the dimension tables:



In the figure, each table displays the column names and key types. Columns that function as primary keys are underlined. The connectors indicate the primary-foreign key relationship between the tables.

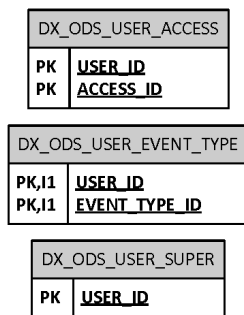
The following table describes the tables and relationships:

Table Name	Primary Key Name	Foreign Key Usage
DX_ODS_CUSTOM_FACTS	- <u>FACT_ROW_ID</u> - <u>EVENT_ATTRIBUTE_ID</u>	Not used.
DX_ODS_EVENT_FACTS	<u>ROW_ID</u>	Used as a foreign key in the following tables: - DX_ODS_EVENT_FACTS
DX_ODS_ACCOUNT	<u>ACCOUNT_ID</u>	Used as a foreign key in the following tables: - DX_ODS_EVENT_FACTS
DX_ODS_CUSTOM_FACTS_EAV	<u>ID</u>	Used as a foreign key in the following tables: - DX_ODS_CUSTOM_FACTS. The foreign key is named <u>FACT_ROW_ID</u> .

Table Name	Primary Key Name	Foreign Key Usage
DX_ODS_EVENT_STATUS	EVENT_STATUS_ID	Used as a foreign key in the following tables: - DX_ODS_EVENT_FACTS
DX_ODS_EVENT_TYPE	EVENT_TYPE_ID	Used as a foreign key in the following tables: - DX_ODS_EVENT_FACTS
DX_ODS_PARTNER	PARTNER_ID	Used as a foreign key in the following tables: - DX_ODS_ACCOUNT - DX_ODS_EVENT_FACTS
DX_ODS_TIME_BREAKDOWN	TIMESLICE	Not used.

In addition to the fact tables and dimension tables, the operational data store contains user access tables. There are no direct relationships between the user access tables and the other tables. You use the user access tables to restrict access to specific information in the operational data store.

The following figure shows the user access tables:



In the figure, each table displays the column names and key types. Columns that function as primary keys are underlined.

The operational data store schema contains the following user access tables:

- DX_ODS_USER_ACCESS table
- DX_ODS_USER_EVENT_TYPE table
- DX_ODS_USER_SUPER table

CHAPTER 2

Fact Tables

This chapter includes the following topics:

- [Fact Tables Overview, 10](#)
- [DX_ODS_EVENT_FACTS Table, 10](#)
- [DX_ODS_CUSTOM_FACTS Table, 12](#)

Fact Tables Overview

Fact tables contain aggregated event information based on default and custom KPIs. Default KPIs provide information about events according to the basic event properties, such as processing time or number of events. You create custom KPIs from event attributes that you define in the Operation Console. The attribute value may represent any numeric data that you want to aggregate, such as sales figures or the amount of insurance claims.

DX_ODS_EVENT_FACTS Table

The DX_ODS_EVENT_FACTS table contains aggregated information about events that B2B Data Exchange processes.

Oracle Server DX_ODS_EVENT_FACTS Table

The following table describes the columns and data types of the DX_ODS_EVENT_FACTS table in the Oracle server:

Column Name	data type	Description
ROW_ID*	NUMBERPS(38,0), NOT NULL	Numeric identifier for the row that contains aggregated information for the events.
TIMESLICE	CHAR(10), NOT NULL	Start date and time of the interval during which B2B Data Exchange processed events for each time frame.
EVENT_TYPE_ID	NUMBERPS(19,0), NOT NULL	Unique identifier for the event type.

Column Name	data type	Description
EVENT_STATUS_ID	NUMBERPS(19,0), NOT NULL	Unique identifier for the event status.
PARTNER_ID	NUMBERPS(19,0)	Unique identifier for the related partner.
ACCOUNT_ID	NUMBERPS(19,0)	Unique identifier for the related account.
ACCESS_ID*	NUMBERPS(19,0)	Unique identifier for the access role. The identifier is generated and does not represent the access role name in the Operation Console
EVENT_COUNT	NUMBERPS(19,0), NOT NULL	Number of events that B2B Data Exchange processed during the time frame.
TOTAL_PROCESSING_TIME	BINARY_DOUBLE, NOT NULL	Total time that it took for B2B Data Exchange to process all events during the time frame.
MIN_PROCESSING_TIME	BINARY_DOUBLE, NOT NULL	Shortest time in milliseconds that it took for B2B Data Exchange to process an event.
MAX_PROCESSING_TIME	BINARY_DOUBLE, NOT NULL	Longest time in milliseconds that it took for B2B Data Exchange to process an event during the time frame.
TOTAL_DELAYED_TIME	FLOAT(53), NOT NULL	Total delay time in milliseconds for the B2B Data Exchange to process an event during the time frame.
* Primary key.		

SQL Server DX_ODS_EVENT_FACTS Table

The following table describes the columns and data types of the DX_ODS_EVENT_FACTS table in the SQL server:

Column Name	data type	Description
ROW_ID*	NUMERIC (38,0), NOT NULL	Numeric identifier for the row that contains aggregated information for the events.
TIMESLICE	DATETIME2, NOT NULL	Start date and time of the interval during which B2B Data Exchange processed events for each time frame.
EVENT_TYPE_ID	NUMERIC(19,0), NOT NULL	Unique identifier for the event type.
EVENT_STATUS_ID	NUMERIC(19,0), NOT NULL	Unique identifier for the event status.
PARTNER_ID	NUMERIC(19,0)	Unique identifier for the related partner.
ACCOUNT_ID	NUMERIC(19,0)	Unique identifier for the related account.
ACCESS_ID*	NUMERIC(19,0)	Unique identifier for the access role. The identifier is generated and does not represent the access role name in the Operation Console

Column Name	data type	Description
EVENT_COUNT	NUMERIC(19,0), NOT NULL	Number of events that B2B Data Exchange processed during the time frame.
TOTAL_PROCESSING_TIME	FLOAT(53), NOT NULL	Total time that it took for B2B Data Exchange to process all events during the time frame.
MIN_PROCESSING_TIME	FLOAT(53), NOT NULL	Shortest time in milliseconds that it took for B2B Data Exchange to process an event.
MAX_PROCESSING_TIME	FLOAT(53), NOT NULL	Longest time in milliseconds that it took for B2B Data Exchange to process an event during the time frame.
TOTAL_DELAYED_TIME	FLOAT(53), NOT NULL	Total delay time in milliseconds for the B2B Data Exchange to process an event during the time frame.
* Primary key.		

DX_ODS_CUSTOM_FACTS Table

The DX_ODS_CUSTOM_FACTS table contains information about values of event attributes that you select from the Operation Console to use in reports. The attribute values may represent any numeric data that you want to aggregate and use in custom Dashboard panels.

Oracle Server DX_ODS_CUSTOM_FACTS Table

The following table describes the columns and data types of the DX_ODS_CUSTOM_FACTS table in the Oracle server:

Column Name	data type	Description
FACT_ROW_ID*	NUMBERPS(38,0), NOT NULL	Numeric identifier for the row that contains aggregated information for the custom event attribute.
EVENT_ATTRIBUTE_ID*	NUMBERPS(19,0), NOT NULL	Unique identifier for the event attribute to use in reports.
TIMESLICE	CHAR(10), NOT NULL	Start date and time of the interval during which B2B Data Exchange processed events for each time frame.
VALUE_SUM	NUMBER(8), NOT NULL	Total sum of the custom event attribute values that B2B Data Exchange processed during the time frame. For example, 2,000,000 is the total amount in dollars of insurance claims that B2B Data Exchange processed in one day.
VALUE_COUNT	NUMBER(8), NOT NULL	Total number of the custom event attribute values that B2B Data Exchange processed during the time frame. For example, B2B Data Exchange processed 10,000 insurance claims in one day.

Column Name	data type	Description
VALUE_MIN	NUMBER(8), NOT NULL	Lowest value that B2B Data Exchange processed during the time frame. For example, \$5,000 is the lowest insurance claim in dollars that B2B Data Exchange processed in one day.
VALUE_MAX	NUMBER(8), NOT NULL	Highest value that B2B Data Exchange processed during the time frame. For example, \$500,000 is the highest insurance claim in dollars that B2B Data Exchange processed in one day.
* Primary key.		

SQL Server DX_ODS_CUSTOM_FACTS Table

The following table describes the columns and data types of the DX_ODS_CUSTOM_FACTS table in the SQL server:

Column Name	data type	Description
FACT_ROW_ID*	NUMERIC(38,0), NOT NULL	Numeric identifier for the row that contains aggregated information for the custom event attribute.
EVENT_ATTRIBUTE_ID*	NUMERIC(19,0), NOT NULL	Unique identifier for the event attribute to use in reports.
TIMESLICE	DATETIME2, NOT NULL	Start date and time of the interval during which B2B Data Exchange processed events for each time frame.
VALUE_SUM	FLOAT, NOT NULL	Total sum of the custom event attribute values that B2B Data Exchange processed during the time frame. For example, 2,000,000 is the total amount in dollars of insurance claims that B2B Data Exchange processed in one day.
VALUE_COUNT	FLOAT, NOT NULL	Total number of the custom event attribute values that B2B Data Exchange processed during the time frame. For example, B2B Data Exchange processed 10,000 insurance claims in one day.
VALUE_MIN	FLOAT, NOT NULL	Lowest value that B2B Data Exchange processed during the time frame. For example, \$5,000 is the lowest insurance claim in dollars that B2B Data Exchange processed in one day.
VALUE_MAX	FLOAT, NOT NULL	Highest value that B2B Data Exchange processed during the time frame. For example, \$500,000 is the highest insurance claim in dollars that B2B Data Exchange processed in one day.
* Primary key.		

CHAPTER 3

Dimension Tables

This chapter includes the following topics:

- [Dimension Tables Overview, 14](#)
- [DX_ODS_ACCOUNT Table, 14](#)
- [DX_ODS_CUSTOM_FACTS_EAV Table, 15](#)
- [DX_ODS_EVENT_STATUS Table, 16](#)
- [DX_ODS_EVENT_TYPE Table, 17](#)
- [DX_ODS_PARTNER Table, 18](#)
- [DX_ODS_TIME_BREAKDOWN Table, 18](#)

Dimension Tables Overview

Dimension tables contain additional metadata that you can use to filter the information from the fact tables. Dimension tables store descriptive information about event properties, such as the related partner, account, or event type.

DX_ODS_ACCOUNT Table

The DX_ODS_ACCOUNT table contains information about accounts and the related partners in B2B Data Exchange.

Oracle Server DX_ODS_ACCOUNT Table

The following table describes the columns and data types of the DX_ODS_ACCOUNT table in the Oracle server:

Column Name	data type	Description
PARTNER_ID	NUMBERPS(19,0), NOT NULL	Unique identifier for the related partner.
ACCOUNT_ID*	NUMBERPS(19,0), NOT NULL	Unique identifier for the related account.
ACCOUNT_NAME	VARCHAR2(255), NOT NULL	Name of the account.

Column Name	data type	Description
ACCOUNT_NUMBER	VARCHAR2(255) NOT NULL	Number for the account.
* Primary key. Used in the DX_ODS_EVENT_FACTS table as a foreign key.		

SQL Server DX_ODS_ACCOUNT Table

The following table describes the columns and data types of the DX_ODS_ACCOUNT table in the SQL server:

Column Name	data type	Description
PARTNER_ID	NUMERIC(19,0), NOT NULL	Unique identifier for the related partner.
ACCOUNT_ID*	NUMERIC(19,0), NOT NULL	Unique identifier for the related account.
ACCOUNT_NAME	VARCHAR(255), NOT NULL	Name of the account.
ACCOUNT_NUMBER	VARCHAR(255) NOT NULL	Number for the account.
* Primary key. Used in the DX_ODS_EVENT_FACTS table as a foreign key.		

DX_ODS_CUSTOM_FACTS_EAV Table

The DX_ODS_CUSTOM_FACTS_EAV table contains information about custom event attributes that you select to use in reports.

Oracle Server DX_ODS_CUSTOM_FACTS_EAV Table

The following table describes the columns and data types of the DX_ODS_CUSTOM_FACTS table in the Oracle server:

Column Name	data type	Description
ID	NUMBERPS(19,0), NOT NULL	Unique identifier of the custom event attribute.
PROPERTY_KEY*	VARCHAR2(255), NOT NULL	Name of the custom event attribute.
* Primary key.		

SQL Server DX_ODS_CUSTOM_FACTS_EAV Table

The following table describes the columns and data types of the DX_ODS_CUSTOM_FACTS table in the SQL server:

Column Name	data type	Description
ID	NUMERIC(19,0), NOT NULL	Unique identifier of the custom event attribute.
PROPERTY_KEY*	VARCHAR(255), NOT NULL	Name of the custom event attribute.
* Primary key.		

DX_ODS_EVENT_STATUS Table

The DX_ODS_EVENT_STATUS table contains information about the status of events that B2B Data Exchange processes.

Oracle Server DX_ODS_EVENT_STATUS Table

The following table describes the columns and data types of the DX_ODS_EVENT_STATUS table in the Oracle server:

Column Name	data type	Description
EVENT_STATUS_ID*	NUMBERPS(19,0), NOT NULL	Unique identifier for the event status.
EVENT_STATUS_NAME	VARCHAR2(255)	Name of the event status.
ERROR_FLAG	NUMBERPS(1,0), NOT NULL	Indicates whether the event reached an error state.
FINAL_FLAG	NUMBERPS(1,0), NOT NULL	Indicates whether the event reached a final state.
* Primary key. Used in the DX_ODS_EVENT_FACTS table as a foreign key.		

SQL Server DX_ODS_EVENT_STATUS Table

The following table describes the columns and data types of the DX_ODS_EVENT_STATUS table in the SQL server:

Column Name	data type	Description
EVENT_STATUS_ID*	NUMERIC(19,0), NOT NULL	Unique identifier for the event status.
EVENT_STATUS_NAME	VARCHAR(255)	Name of the event status.
ERROR_FLAG	NUMERIC(1,0), NOT NULL	Indicates whether the event reached an error state.

Column Name	data type	Description
FINAL_FLAG	NUMERIC(1,0), NOT NULL	Indicates whether the event reached a final state.
* Primary key. Used in the DX_ODS_EVENT_FACTS table as a foreign key.		

DX_ODS_EVENT_TYPE Table

The DX_ODS_EVENT_TYPE table contains information about the type of events that B2B Data Exchange processes.

Oracle Server DX_ODS_EVENT_TYPE Table

The following table describes the columns and data types of the DX_ODS_EVENT_TYPE table in the Oracle server:

Column Name	data type	Description
EVENT_TYPE_ID*	NUMBERPS(19,0), NOT NULL	Unique identifier for the event type.
EVENT_TYPE_NAME	VARCHAR2(255)	Name of the event type.
* Primary key. Used in the DX_ODS_EVENT_FACTS table as a foreign key.		

SQL Server DX_ODS_EVENT_TYPE Table

The following table describes the columns and data types of the DX_ODS_EVENT_TYPE table in the SQL server:

Column Name	data type	Description
EVENT_TYPE_ID*	NUMERIC(19,0), NOT NULL	Unique identifier for the event type.
EVENT_TYPE_NAME	VARCHAR(255)	Name of the event type.
* Primary key. Used in the DX_ODS_EVENT_FACTS table as a foreign key.		

DX_ODS_PARTNER Table

The DX_ODS_PARTNER table contains information about the partners for which B2B Data Exchange processes events.

Oracle Server DX_ODS_PARTNER Table

The following table describes the columns and data types of the DX_ODS_PARTNER table in the Oracle server:

Column Name	data type	Description
PARTNER_ID*	NUMBERPS(19,0), NOT NULL	Unique identifier for the related partner.
PARTNER_NAME	VARCHAR2(255)	Name of the related partner.
* Primary key. Used in the DX_ODS_EVENT_FACTS table as a foreign key.		

SQL Server DX_ODS_PARTNER Table

The following table describes the columns and data types of the DX_ODS_PARTNER table in the SQL server:

Column Name	data type	Description
PARTNER_ID*	NUMERIC(19,0), NOT NULL	Unique identifier for the related partner.
PARTNER_NAME	VARCHAR(255)	Name of the related partner.
* Primary key. Used in the DX_ODS_EVENT_FACTS table as a foreign key.		

DX_ODS_TIME_BREAKDOWN Table

The DX_ODS_TIME_BREAKDOWN table contains information about the time frames during which B2B Data Exchange processes events.

Oracle Server DX_ODS_TIME_BREAKDOWN Table

The following table describes the columns and data types of the DX_ODS_TIME_BREAKDOWN table in the Oracle server:

Column Name	data type	Description
TIMESLICE*	CHAR(10), NOT NULL	Start date and time of the interval during which B2B Data Exchange processed events for each time frame.
SECONDS_FROM_MIDNIGHT	NUMBERPS(5,0), NOT NULL	Number of seconds from the beginning of the calendar day.

Column Name	data type	Description
WEEK_OF_YEAR	NUMBERPS(2,0), NOT NULL	Number of the week in the calendar year. For example, the first week of January is week 1.
DAY_OF_MONTH	NUMBERPS(2,0), NOT NULL	Calendar date of the day. For example, March 23rd is day 23.
MONTH_OF_YEAR	NUMBERPS(2,0), NOT NULL	Calendar month of the year. For example, June is month 6.
YEAR	NUMBERPS(5,0), NOT NULL	Calendar year, such as 2011.
* Primary key.		

SQL Server DX_ODS_TIME_BREAKDOWN Table

The following table describes the columns and data types of the DX_ODS_TIME_BREAKDOWN table in the SQL server:

Column Name	data type	Description
TIMESLICE*	DATETIME2(10), NOT NULL	Start date and time of the interval during which B2B Data Exchange processed events for each time frame.
SECONDS_FROM_MIDNIGHT	NUMERIC(5,0), NOT NULL	Number of seconds from the beginning of the calendar day.
WEEK_OF_YEAR	NUMERIC(2,0), NOT NULL	Number of the week in the calendar year. For example, the first week of January is week 1.
DAY_OF_MONTH	NUMERIC(2,0), NOT NULL	Calendar date of the day. For example, March 23rd is day 23.
MONTH_OF_YEAR	NUMERIC(2,0), NOT NULL	Calendar month of the year. For example, June is month 6.
YEAR_	NUMERIC(5,0), NOT NULL	Calendar year, such as 2011.
* Primary key.		

CHAPTER 4

User Access Tables

This chapter includes the following topics:

- [User Access Tables Overview, 20](#)
- [DX_ODS_USER_ACCESS Table, 20](#)
- [DX_ODS_USER_EVENT_TYPE Table, 21](#)
- [DX_ODS_USER_SUPER Table, 21](#)

User Access Tables Overview

User access tables contain information about B2B Data Exchange security restrictions for specific event dimensions. User access tables store user information according to the access role and the type of information that the users view.

DX_ODS_USER_ACCESS Table

The DX_ODS_USER_ACCESS table contains information about B2B Data Exchange users and the access level to events that the Dashboard panels display in the Operation Console.

The following table describes the columns and data types of the DX_ODS_USER_ACCESS table:

Column Name	data type	Description
USER_ID*	NUMBERPS(19,0), NOT NULL	Unique identifier for the Operation Console user that can view specific information from the operational data store in Dashboard panels. The identifier is generated and does not represent the login name for the user.
ACCESS_ID*	NUMBERPS(19,0), NOT NULL	Unique identifier for the Operation Console access role.
* Primary key.		

DX_ODS_USER_EVENT_TYPE Table

The DX_ODS_USER_EVENT_TYPE table contains information about B2B Data Exchange users and the event types that they can view in the Dashboard panels of the Operation Console.

The following table describes the columns and data types of the DX_ODS_USER_EVENT_TYPE table:

Column Name	data type	Description
USER_ID*	NUMBERPS(19,0), NOT NULL	Unique identifier for the Operation Console user that can view specific event types from the operational data store in Dashboard panels. The identifier is generated and does not represent the login name for the user.
EVENT_TYPE_ID*	NUMBERPS(19,0), NOT NULL	Unique identifier for the event type.
* Primary key.		

DX_ODS_USER_SUPER Table

The DX_ODS_USER_SUPER table contains information about V users that can access all of the information that the Dashboard panels display in the Operation Console.

The following table describes the columns and data types of the DX_ODS_USER_SUPER table:

Column Name	data type	Description
USER_ID*	NUMBERPS(19,0), NOT NULL	Unique identifier for the Operation Console user that can access all of the information in the operational data store. This user is typically the B2B Data Exchange administrator. The identifier is generated and does not represent the login name for the user.
* Primary key.		

APPENDIX A

Examples

This appendix includes the following topic:

- [SQL Query Examples, 22](#)

SQL Query Examples

You access and retrieve information from the operational data store with SQL queries according to the type of report or analysis that you want to perform. The following examples show SQL queries that run on the operational data store to retrieve information for different reports.

Number of Events by Partner

Gets the total number of events that B2B Data Exchange processed during a time frame and displays the results sorted by the related partner for the event.

```
select topData.PARTNER_ID, dp.PARTNER_NAME, topData.SUM_COUNT from
  (select facts.PARTNER_ID, sum(EVENT_COUNT) as SUM_COUNT
   from DX_ODS_EVENT_FACTS facts
   where to_timestamp('2012-01-01' || '00:00:00','YYYY-MM-DD HH24:MI:SS') <=
facts.TIMESLICE
   and facts.TIMESLICE <= to_timestamp('2012-06-01' || '00:00:00','YYYY-MM-
DD HH24:MI:SS')
  )
  group by facts.PARTNER_ID
  order by SUM_COUNT desc
) topData
join DX_ODS_PARTNER dp on topData.PARTNER_ID = dp.PARTNER_ID
order by topData.SUM_COUNT desc, dp.PARTNER_NAME asc
```

The query uses the `to_timestamp` parameter that defines the event processing start and end date and time.

The following table shows an example of the query results:

PARTNER_ID	PARTNER_NAME	SUM_COUNT
1000	My partner A	14781
1002	My partner C	12920
1001	My partner B	65044

Number of Events by Partner with Access Restrictions

Gets the total number of events that B2B Data Exchange processed during a time frame and displays the results sorted by the related partner for the event. This query also applies access restrictions by indicating which B2B Data Exchange users can view the results.

```
select topData.PARTNER_ID, dp.PARTNER_NAME, topData.SUM_COUNT from
  (select facts.PARTNER_ID, sum(EVENT_COUNT) as SUM_COUNT
   from DX_ODS_EVENT_FACTS facts
   where to_timestamp('2012-01-01' || '00:00:00','YYYY-MM-DD HH24:MI:SS') <=
   facts.TIMESLICE
   and facts.TIMESLICE <= to_timestamp('2012-06-01' || '00:00:00','YYYY-MM-
   DD HH24:MI:SS')
   and (exists (select ua.ACCESS_ID from DX_ODS_USER_ACCESS ua where
   ua.ACCESS_ID =
     facts.ACCESS_ID and ua.USER_ID = 999)
    or exists (select * from DX_ODS_USER_SUPER ua where ua.USER_ID = 999)
   )
   )
  group by facts.PARTNER_ID
  order by SUM_COUNT desc
 ) topData
join DX_ODS_PARTNER dp on topData.PARTNER_ID = dp.PARTNER_ID
order by topData.SUM_COUNT desc, dp.PARTNER_NAME asc
```

The query uses the following parameters:

- to_timestamp. Defines the event processing start and end date and time.
- USER_ID. Numeric identifier for the B2B Data Exchange user that can view the events. In this example, you define a single user that can view the events.

The following table shows an example of the query results:

PARTNER_ID	PARTNER_NAME	SUM_COUNT
1000	My partner A	14781
1002	My partner C	12920
1001	My partner B	65044

Custom KPI Query with Event Attribute Value

Gets the value of the ClaimValue event attribute and displays total claim value amount for the time frame grouped by the related partner for the event.

```
DEFINE fromDate = to_timestamp('01-03-2012 00.00.00.00', 'DD-MM-YYYY HH24.MI.SS.FF');
DEFINE toDate = to_timestamp('05-03-2012 23.59.59.00', 'DD-MM-YYYY HH24.MI.SS.FF');
DEFINE eventAtt = "'ClaimValue'";
SELECT p.PARTNER_ID,
       NVL(VALUE_SUM, 0) AS VALUE_SUM
FROM
  (SELECT p.PARTNER_ID,
         SUM(VALUE_SUM) AS VALUE_SUM
   FROM DX_ODS_CUSTOM_FACTS cf
   JOIN DX_ODS_EVENT_FACTS ef
   ON ef.ROW_ID = cf.FACT_ROW_ID
   JOIN DX_ODS_PARTNER p
   ON ef.PARTNER_ID = p.PARTNER_ID
   JOIN DX_ODS_CUSTOM_FACTS_EAV cfe
   ON cf.EVENT_ATTRIBUTE_ID = cfe.ID
   WHERE cf.TIMESLICE >= &fromDate
   AND cf.TIMESLICE < &toDate
   GROUP BY p.PARTNER_ID
  ) SUM_ATT
RIGHT JOIN DX_ODS_PARTNER p
ON SUM_ATT.PARTNER_ID = p.PARTNER_ID
```

The query uses the following parameters:

- fromDate. Defines the claim value processing start date and time.
- toDate. Defines the claim value processing end date and time.
- eventAtt. Name of the event attribute from which to get the value.

The following table shows an example of the query results:

PARTNER_ID	VALUE_SUM
1000	544
1002	1060
1001	865

INDEX

D

DX_ODS_ACCOUNT
description [14](#)
DX_ODS_CUSTOM_FACTS
description [12](#)
DX_ODS_CUSTOM_FACTS_EAV
description [15](#)
DX_ODS_EVENT_FACTS
description [10](#)
DX_ODS_EVENT_STATUS
description [16](#)
DX_ODS_EVENT_TYPE
description [17](#)
DX_ODS_PARTNER
description [18](#)
DX_ODS_TIME_BREAKDOWN
description [18](#)
DX_ODS_USER_ACCESS
description [20](#)

DX_ODS_USER_EVENT_TYPE
description [21](#)
DX_ODS_USER_SUPER
description [21](#)

E

examples
SQL queries [22](#)

O

operational data store schema
definition [6](#)
relationships [8](#)
structure [8](#)