



This PDF is generated from authoritative online content, and is provided for convenience only. This PDF cannot be used for legal purposes. For authoritative understanding of what is and is not supported, always use the online content. To copy code samples, always use the online content.

# iWD Data Mart Reference Guide

DATE\_TIME Dimension

5/11/2025

## DATE\_TIME Dimension

The DATE\_TIME dimension allows facts to be described by attributes of calendar date and 15-minute time interval. This is a static dimension.

**The DATE\_TIME Dimension**

Field	Data Type	Description
DATE_TIME_KEY	int	The primary key of this table. It is used to join a particular 15-minute interval in this table to the fact and aggregate tables. This field increases monotonically to facilitate the calculation of time interval ranges and is equal to the UTC-equivalent time at which the time interval started.
DATE_TIME_30MIN_KEY	int	The surrogate key that is used to join a particular 30-minute interval in this table to the fact and aggregate tables. Two rows in this table share the same value, which is the DATE_TIME_KEY that represents the start of the 30-minute interval.
DATE_TIME_HOUR_KEY	int	The surrogate key that is used to join a particular hour in this table to the fact and aggregate tables. Four rows in this table share the same value, which is the DATE_TIME_KEY that represents the start of the hour interval.
DATE_TIME_DAY_KEY	int	The surrogate key that is used to join a particular day in this table to the fact and aggregate tables. Ninety-six rows in this table share the same value, which is the DATE_TIME_KEY that represents the start of the day interval.
DATE_TIME_WEEK_KEY	int	The surrogate key that is used to join a particular week in this table to the fact and aggregate tables. Multiple rows in this table share the same value, which is the DATE_TIME_KEY that represents the start of the week interval.
DATE_TIME_MONTH_KEY	int	The surrogate key that is used to

Field	Data Type	Description
		join a particular month in this table to the fact and aggregate tables. Multiple rows in this table share the same value, which is the DATE_TIME_KEY that represents the start of the month interval.
DATE_TIME_QUARTER_KEY	int	The surrogate key that is used to join a particular quarter in this table to the fact and aggregate tables. Multiple rows in this table share the same value, which is the DATE_TIME_KEY that represents the start of the quarter interval.
DATE_TIME_YEAR_KEY	int	The surrogate key that is used to join a particular year in this table to the fact and aggregate tables. Multiple rows in this table share the same value, which is the DATE_TIME_KEY that represents the start of the year interval.
DATE_TIME_NEXT_KEY	int	Points to the next record of this table. This value is DATE_TIME_KEY+1.
DATE_TIME_NEXT_30MIN_KEY	int	Points to the DATE_TIME_30MIN_KEY record that represents the next 30-minute period.
DATE_TIME_NEXT_HOUR_KEY	int	Points to the DATE_TIME_HOUR_KEY record that represents the next hour.
DATE_TIME_NEXT_DAY_KEY	int	Points to the DATE_TIME_DAY_KEY record that represents the next calendar day.
DATE_TIME_NEXT_WEEK_KEY	int	Points to the DATE_TIME_WEEK_KEY record that represents the next calendar week.
DATE_TIME_NEXT_MONTH_KEY	int	Points to the DATE_TIME_MONTH_KEY record that represents the next calendar month.
DATE_TIME_NEXT_QUARTER_KEY	int	Points to the DATE_TIME_QUARTER_KEY record that represents the next calendar quarter.
DATE_TIME_NEXT_YEAR_KEY	int	Points to the DATE_TIME_YEAR_KEY record that represents the next year.

Field	Data Type	Description
CREATE_AUDIT_KEY	int	The surrogate key used to join to the <b>ETL_AUDIT System dimension</b> . Specifies the lineage for data creation. This value can be useful for aggregation, enterprise application integration (EAI), and ETL tools—that is, applications that need to identify newly added data.
UPDATE_AUDIT_KEY	int	The surrogate key used to join to the <b>ETL_AUDIT System dimension</b> . Specifies the lineage for data update. This value can be useful for aggregation, EAI, and ETL tools—that is, applications that need to identify recently modified data.
CAL_DATE	datetime	The date/time data type for a calendar date that is specific for this RDBMS.
CAL_DAY_NAME	varchar(32)	The calendar day name—for example, "Sunday".
CAL_MONTH_NAME	varchar(32)	The calendar month name—for example, "January".
CAL_DAY_NUM_IN_WEEK	smallint	The day number in a week. By default, the values start with 1 for Sunday and end with 7 for Saturday.
CAL_DAY_NUM_IN_MONTH	smallint	The day number in the calendar month, starting with 1 and ending with 28, 29, 30, or 31, depending on the month.
CAL_DAY_NUM_IN_YEAR	smallint	The day number in the calendar year, starting with 1 for January 1 and ending with 365 or 366 for December 31.
CAL_LAST_DAY_IN_WEEK	tinyint	The indicator for the last day of the calendar week: 0 = No, 1 = Yes. For example, this value may be 0 for Wednesday records and 1 for Saturday records.
CAL_LAST_DAY_IN_MONTH	tinyint	The indicator for the last day of the calendar month: 0 = No, 1 = Yes. For example, this value is set to 0 for January 16 and 1 for January 31.
CAL_WEEK_NUM_IN_YEAR	smallint	The week number in the calendar year, starting with 1 and ending with 53. The first week begins on the first day of the calendar year and may contain fewer than

Field	Data Type	Description
		seven days. Likewise, the last week, ending with the last day of the year, may contain fewer than seven days.
WEEK_YEAR	smallint	The year number for the week to which this day belongs.
CAL_WEEK_START_DATE	date	The start date of the calendar week to which this date belongs. All dates in the same calendar week share the same calendar week start date. For example, this value is March 6, 2011 for all dates between March 6, 2011 and March 12, 2011.
CAL_WEEK_END_DATE	date	The end date of the calendar week to which this date belongs. All dates in the same calendar week share the same calendar week end date. For example, this value is March 6, 2011 for all dates between March 6, 2011 and March 12, 2011.
CAL_MONTH_NUM_IN_YEAR	smallint	The month number in the calendar year, starting with 1 for January and ending with 12 for December.
CAL_QUARTER_NUM_IN_YEAR	smallint	The number of the quarter in the calendar year, starting with 1 for the first quarter (January 1 through March 31) and ending with 4 for the fourth quarter (October 1 through December 31).
CAL_HALF_NUM_IN_YEAR	smallint	The number of the half of the calendar year, starting with 1 for January 1 through June 30 and ending with 2 for July 1 through December 31.
CAL_YEAR_NUM	smallint	The Gregorian calendar year, expressed as a four-digit integer—for example, 2011.
CAL_HOUR_NUM_IN_DAY	smallint	The hour of the day, expressed as an integer from 1-12. This field is intended to be used in conjunction with the AMPM_INDICATOR field.
CAL_HOUR_24_NUM_IN_DAY	smallint	The hour of the day, as an integer from 00 to 23.
CAL_MINUTE_NUM_IN_HOUR	smallint	The 15-minute number of the hour. This value is one of the following:

Field	Data Type	Description
		0: for 0 <= min < 15 15: for 15 <= min < 30 30: for 30 <= min < 45 45: for 45 <= min < 60
CAL_30MINUTE_NUM_IN_HOUR	smallint	The 30-minute number of the hour. This value is one of the following:  0: for 0 <= min < 30 30: for 30 <= min < 60
LABEL_YYYY	varchar(32)	The current date expressed as a string in YYYY format, where YYYY represents a four-digit year. This field is useful when it is used as a label in report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011".
LABEL_YYYY_QQ	varchar(32)	The current date, expressed as a string in YYYY QQ format, where QQ represents the number of the quarter (1-4), followed by the letter "Q", which is not localizable. This field is useful when it is used as a label in report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011 1Q".
LABEL_YYYY_MM	varchar(32)	The current date, expressed as a string in YYYY-MM format, where MM represents the two-digit month. This field is useful when it is used as a label in report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011-01".
LABEL_YYYY_WE	varchar(32)	The current date, expressed as a string in YYYY-Www format, where Www represents the two-digit week number of the year, preceded by the letter "W". This field is useful when it is used as a label in report headers. For example, with simple week numbering, the label that this field stores for January 30, 2011, at 15:45 is "2011-W05" (January 30, 2011 fell in the fifth week of the year).
LABEL_YYYY_WE_D	varchar(32)	The current date expressed as a string in YYYY-Www-D format,

Field	Data Type	Description
		where Www represents the two-digit week number of the year, preceded by the letter "W", and "D" represents the day number in the week. This field is useful when used as a label in report headers. For example, with simple week numbering, the label that this field stores for January 30, 2011, at 15:45 is "2011-05-1" (January 30, 2011 fell in the fifth week of the year, and Sunday is the first day of the week).
LABEL_YYYY_MM_DD	varchar(32)	The current date, expressed as a string in YYYY-MM-DD format, where DD represents the two-digit day of the month. This field is useful when it is used as a label in report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011-01-30".
LABEL_YYYY_MM_DD_HH	varchar(32)	The current date, expressed as a string in YYYY-MM-DD HH format, where hour (HH) values range from 01 to 12. This field is useful when it is used as a label in report headers. For example, the label that this field stores for January 3, 2011, at 15:45 is "2011-01-30 03".
LABEL_YYYY_MM_DD_HH24	varchar(32)	The current date, expressed as a string in YYYY-MM-DD HH format where hour (HH) values range from 01 to 24. This field is useful when it is used as a label in report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011-01-30 15".
LABEL_YYYY_MM_DD_HH_30MI	varchar(32)	The current date, expressed as a string in YYYY-MM-DD HH:mm format, where hour (HH) values range from 01 to 12 and mm represents the closest 30-minute period that is less than or equal to the actual minute. This field is useful when it is used as a label in report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011-01-30 03:30".

Field	Data Type	Description
LABEL_YYYY_MM_DD_HH24_30MI	varchar(32)	The current date, expressed as a string in YYYY-MM-DD HH:mm format, where hour (HH) values range from 01 to 24 and mm represents the closest 30-minute period that is less than or equal to the actual minute. This field is useful when it is used as a label in report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011-01-30 15:30".
LABEL_YYYY_MM_DD_HH_MI	varchar(32)	The current date, expressed as a string in YYYY-MM-DD HH:mm format, where hour (HH) values range from 01 to 12 and mm represents the actual minute. This field is useful when it is used as a label for report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011-01-30 03:45".
LABEL_YYYY_MM_DD_HH24_MI	varchar(32)	The current date, expressed as a string in YYYY-MM-DD HH:mm format, where hour (HH) values range from 01 to 24 and mm represents the actual minute. This field is useful when it is used as a label for report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011-01-30 15:45".
LABEL_YYYY_MM_DD_HH_15INT	varchar(32)	The current date, expressed as a string in YYYY-MM-DD 15INT format, where 15INT represents the 15-minute interval within the day. Hour values range from 01 to 12. This field is useful when it is used as a label for report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011-01-30 03:45-04:00".
LABEL_YYYY_MM_DD_HH24_15INT	varchar(32)	The current date, expressed as a string in YYYY-MM-DD 15INT format, where 15INT represents the 15-minute interval within the day and includes the hour, in a range from 01 to 24. This field is useful when it is used as a label for report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011-01-30 15:45-16:00".

Field	Data Type	Description
LABEL_YYYY_MM_DD_HH_30INT	varchar(32)	The current date, expressed as a string in YYYY-MM-DD 30INT format, where 30INT represents the 30-minute interval within the day and includes the hour, in a range from 01 to 12. This field is useful when it is used as a label for report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011-01-30 03:30-04:00".
LABEL_YYYY_MM_DD_HH24_30INT	varchar(32)	The current date, expressed as a string in YYYY-MM-DD 30INT format, where 30INT represents the 30-minute interval within the day and includes the hour, in a range from 01 to 24. This field is useful when it is used as a label for report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "2011-01-30 15:30-16:00".
LABEL_QQ	varchar(32)	A string representation of the current date, expressed in QQ format, where QQ represents the number of the quarter (1-4), followed by the letter "Q", which is not localizable. This field is useful when it is used as a label for report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "1Q".
LABEL_MM	varchar(32)	A string representation of the current date, expressed in MM format, where MM represents the two-digit month. This field is useful when it is used as a label for report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "01".
LABEL_WE	varchar(32)	A string representation of the current date, expressed in Www format, where Www represents the two-digit week number of the year, preceded by the letter "W". This field is useful when it is used as a label for report headers. For example, with simple week numbering, the label that this field stores for January 30, 2011, at 15:45 is "W05". (January 30, 2011 falls in the fifth week of the

Field	Data Type	Description
		year.)
LABEL_DD	varchar(32)	A string representation of the current date, expressed in DD format, where DD represents the two-digit day of the month. This field is useful when it is used as a label for report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "30".
LABEL_HH	varchar(32)	A string representation of the current date, expressed in HH format, where hour (HH) values range from 01 to 12. This field is useful when it is used as a label for report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "03".
LABEL_HH24	varchar(32)	A string representation of the current date, expressed in HH format, where hour (HH) values range from 01 to 24. This field is useful when it is used as a label for report headers. For example, the label that this field stores for January 30, 2011, at 15:45 is "15".
LABEL_30MI	varchar(32)	A string representation of the current date, expressed in mm format, where mm represents the closest 30-minute period that is less than or equal to the actual minute. For example, the label that this field stores for January 30, 2011, at 15:45 is "30".
LABEL_MI	varchar(32)	A string representation of the current date, expressed in mm format, where mm represents the actual minute. For example, the label that this field stores for January 30, 2011, at 15:45 is "45".
LABEL_TZ	varchar(32)	A string representation of the time zone designator, as defined in ISO 8601 standard. For the time zone in which the UTC offset is equal zero, the letter "Z" is stored as the time zone designator. The zone designator for other time zones is specified by the offset from UTC in the format $\pm$ HH:<mm>, where HH

Field	Data Type	Description
		represents hours and mm represents minutes, if applicable. For example, if the time that is being described is one hour ahead of UTC, the stored value would be "+01".
AMPM_INDICATOR	varchar(4)	Indicates the period between midnight and noon ("AM") or between noon and midnight ("PM").
RUNNING_YEAR_NUM	int	The running year number, starting with 1 for the year that is populated as the first year in this calendar. By default, the calendar starts with the year that precedes the DATE_TIME table initialization. For example, if the iWD Data Mart is initiated in year 2011, this field stores the value of 2 for rows that are generated for 2011 dates.
RUNNING_QUARTER_NUM	int	The running quarter number, starting with 1 as the first quarter of the first year that is populated for this calendar. Running values do not reset at the beginning of each year, so that this value is 1-4, respectively, for the four quarters of the first populated year (for example, 2011); 5-8, respectively, for the four quarters of the second populated year (in this example, 2011); and so forth.
RUNNING_MONTH_NUM	int	The running month number, starting with 1 as the first month of the first year that is populated for this calendar. Running values do not reset at the beginning of each year, so that this value is 1-12, respectively, for the 12 months of the first populated year (for example, 2011); 13-24, respectively, for the 12 months of the second populated year (in this example, 2012); and so forth.
RUNNING_WEEK_NUM	int	The running week number, starting with 1 as the first week of the first year that is populated for this calendar. Running values do not reset at the beginning of

Field	Data Type	Description
		each year, so that, this value is 1-53, respectively, for the 53 weeks of the first populated year (for example, 2011); 54-107, respectively, for the 53 weeks of the second populated year (in this example, 2012); and so forth.
RUNNING_DAY_NUM	int	The running day number, starting with 1 as the first day of the first year that is populated for this calendar. Running values do not reset at the beginning of each year, so that this value is 1-365, respectively, for the 365 days of the first populated year (for example, 2011); 366-730, respectively, for the 365 days of the second populated year (in this example, 2012); and so forth.
RUNNING_HOUR_NUM	int	The running hour number, starting with 1 as the first hour of the first day of the first year that is populated for this calendar. Running hours do not reset at the beginning of each day, so that this value is 1-24, respectively, for the 24 hours of the first populated day (for example, 1/1/2011); 25-48, respectively, for the 24 hours of the second populated day (in this example, 1/2/2011); and so forth.
RUNNING_30MIN_NUM	int	The running 30-minute number, starting with 1 as the first 30-minute interval of the first hour of the first day of the first year that is populated for this calendar. Running 30-minute periods do not reset at the beginning of each hour, so that this value is 1-2, respectively, for the two 30-minute intervals of the first hour of 1/1/2011, if 2011 is the first year populated for this calendar; 3-4, respectively, for the two 30-minute intervals in the second hour of this day; and so forth.
EVENT_DATE_KEY	int	Key to the <b>EVENT_DATE</b> dimension, describing the date.
EVENT_TIME_KEY	int	Key to the <b>EVENT_TIME</b>

## DATE\_TIME Dimension

---

Field	Data Type	Description
		dimension, describing the time.