跟我学 HANA 系列之日期函数总结（SAP HANA Platform Core 2.0 SPS 00）

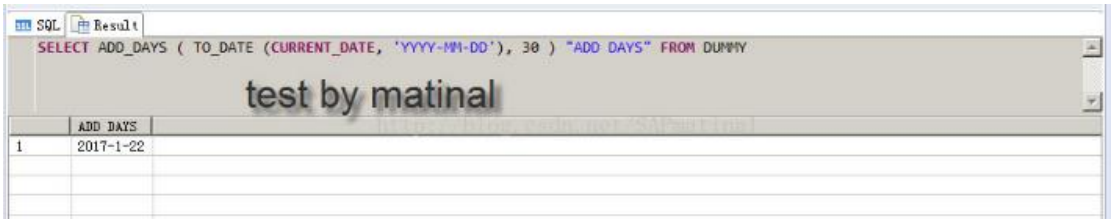
更多资料请加 SAP 群：455101474

1、 ADD_DAYS Function (Datetime)

计算指定日期加指定天数后的日期

语法：ADD_DAYS (<d>, <n>)

举例：计算当前日期加 30 天后的日期



2、 ADD_MONTHS Function (Datetime)

计算指定日期加指定月后的日期

语法：ADD_MONTHS (<d>, <n>)

参数：DATE、TIMESTAMP、SECONDDATE

举例：后面的例子就直接写 SQL 了，不再贴图

SELECT ADD_MONTHS (TO_DATE (CURRENT_DATE, 'YYYY-MM-DD'), 1) "add months" FROM DUMMY;

3、 ADD_MONTHS_LAST Function (Datetime)

计算指定的日期加上指定的月份数，如果输入日期是一个月的最后一天，则输出日期是该月份的最后一天，即使这两个日期不同。

语法：ADD_MONTHS_LAST (<d>, <n>)

参数：DATE、TIMESTAMP、SECONDDATE

举例：SELECT ADD_MONTHS_LAST (TO_DATE (CURRENT_DATE, 'YYYY-MM-DD'), 1) "add months last" FROM DUMMY;

4、 ADD_SECONDS Function (Datetime)

计算指定时间加指定的秒数。

语法：ADD_SECONDS (<t>, <n>)

举例：SELECT ADD_SECONDS (TO_TIMESTAMP ('2016-12-26 09:30:45'), 60*30) "add seconds" FROM DUMMY;

5、 ADD_WORKDAYS Function (Datetime)

通过添加多个工作日起始日期计算日期。

语法：ADD_WORKDAYS (<factory_calendar_id>, <start_date>, <workdays> [, <source_schema>])

TFACS bitfield	Day of the month	Reason for not working
0	1	Public Holiday
1	2	
1	3	
0	4	Weekend
0	5	Weekend

TFACS bitfield	Day of the month	Reason for not working
0	6	Public Holiday
1	7	
1	8	
1	9	
1	10	
0	11	Weekend
0	12	Weekend
1	13	
1	14	
1	15	
1	16	
1	17	
0	18	Weekend
0	19	Weekend
1	20	
1	21	
1	22	
1	23	
1	24	
0	25	Weekend
0	26	Weekend
1	27	
1	28	
1	29	
1	30	
1	31	

举例：SELECT ADD_WORKDAYS('01', CURRENT_DATE, 1, 'FCTEST') "result date" FROM DUMMY;

输出结果：10.01.2014

6、 ADD_YEARS Function (Datetime)

计算指定日期加指定年份。

语法：ADD_YEARS (<d>, <n>)

举例：SELECT ADD_YEARS (TO_DATE (CURRENT_DATE, 'YYYY-MM-DD'), 1) "add years" FROM DUMMY;

7、 CURRENT_DATE Function (Datetime)

返回当前本地系统日期。

语法：CURRENT_DATE

举例：SELECT CURRENT_DATE "current date" FROM DUMMY;

8、 CURRENT_TIME Function (Datetime)

返回本地系统时间。

语法：CURRENT_TIME

举例：SELECT CURRENT_TIME "current time" FROM DUMMY;

9、 CURRENT_TIMESTAMP Function (Datetime)

返回当前本地系统时间戳信息。

语法：CURRENT_TIMESTAMP

举例：SELECT CURRENT_TIMESTAMP "current timestamp" FROM DUMMY;

10、CURRENT_UTCDATE Function (Datetime)

返回当前的 UTC 日期。

语法：CURRENT_UTCDATE

举例：SELECT CURRENT_UTCDATE "Coordinated Universal Date" FROM DUMMY;

11、CURRENT_UTCTIME Function (Datetime)

返回当前 UTC 时间。

语法：CURRENT_UTCTIME

举例：SELECT CURRENT_UTCTIME "Coordinated Universal Time" FROM DUMMY;

12、CURRENT_UTCTIMESTAMP Function (Datetime)

返回当前 UTC 时间戳。

语法：CURRENT_UTCTIMESTAMP

举例：SELECT CURRENT_UTCTIMESTAMP "Coordinated Universal Timestamp" FROM DUMMY;

13、DAYNAME Function (Datetime)

返回指定日期的工作日。

语法：DAYNAME (<d>)

举例：SELECT DAYNAME ('2011-05-30') "dayname" FROM DUMMY;

14、DAYOFMONTH Function (Datetime)

返回指定日期的月份中的某一天。

语法：DAYOFMONTH (<d>)

举例：SELECT DAYOFMONTH ('2011-05-30') "dayofmonth" FROM DUMMY;

15、DAYOFYEAR Function (Datetime)

返回指定日期的年中某一天的整数表示形式。

语法：DAYOFYEAR (<d>)

举例：SELECT DAYOFYEAR ('2011-05-30') "dayofyear" FROM DUMMY;

16、DAYS_BETWEEN Function (Datetime)

计算 d1 和 d2 之间的天数。

语法：DAYS_BETWEEN (<d1>, <d2>)

举例：SELECT DAYS_BETWEEN (TO_DATE ('2009-12-05', 'YYYY-MM-DD'), TO_DATE('2010-01-05', 'YYYY-MM-DD')) "days between" FROM DUMMY;

17、EXTRACT Function (Datetime)

查找并返回指定日期的指定 datetime 字段的值。

语法：EXTRACT ({YEAR | MONTH | DAY | HOUR | MINUTE | SECOND} FROM <d>)

举例：SELECT EXTRACT (YEAR FROM TO_DATE ('2010-01-04', 'YYYY-MM-DD')) "extract" FROM DUMMY;

18、HOUR Function (Datetime)

返回指定时间的小时的整数表示形式。

语法：HOUR (<t>)

举例：SELECT HOUR ('12:34:56') "hour" FROM DUMMY;

19、ISOWEEK Function (Datetime)

返回指定日期的 ISO 年份和周数。

语法：ISOWEEK (<d>)

举例：SELECT ISOWEEK (TO_DATE('2011-05-30', 'YYYY-MM-DD')) "isoweek" FROM DUMMY;

20、LAST_DAY Function (Datetime)

返回包含指定日期的月份的最后一天的日期。

语法：LAST_DAY (<d>)

举例：SELECT LAST_DAY (TO_DATE('2010-01-04', 'YYYY-MM-DD')) "last day" FROM DUMMY;

21、LOCALTOUTC Function (Datetime)

保存 UTC 和本地时间之间的转换时间的时间戳参数。

语法：LOCALTOUTC (<t>, <timezone> [, <timezone_dataset>])

举例：SELECT LOCALTOUTC (TO_TIMESTAMP('2012-01-01 01:00:00', 'YYYY-MM-DD HH24:MI:SS'), 'EST') "localtoutc" FROM DUMMY;

22、MINUTE Function (Datetime)

返回指定时间的分钟的整数表示。

语法：MINUTE (<t>)

举例：SELECT MINUTE ('12:34:56') "minute" FROM DUMMY;

23、MONTH Function (Datetime)

返回指定日期的月份数。

语法：MONTH(<d>)

举例：SELECT MONTH ('2011-05-30') "month" FROM DUMMY;

24、MONTHNAME Function (Datetime)

返回指定日期的月份名称。

语法：MONTHNAME(<d>)

举例：SELECT MONTHNAME ('2011-05-30') "monthname" FROM DUMMY;

25、MONTHS_BETWEEN Function (Datetime)

计算两个日期之间的月数。

语法：MONTHs_BETWEEN (<d1>, <d2>)

举例：SELECT MONTHS_BETWEEN(TO_DATE ('2003-01-01'), TO_DATE('2003-03-14')) "months_between" FROM DUMMY;

26、NANO100_BETWEEN Function (Datetime)

计算两个日期之间的时间差。

语法：NANO100_BETWEEN (<d1>, <d2>)

举例：SELECT NANO100_BETWEEN ('2013-01-30', '2013-01-31') "nano100 between" FROM DUMMY;

27、NEXT_DAY Function (Datetime)

返回指定日期后的第二天的日期。

语法：NEXT_DAY (<d>)

举例：SELECT NEXT_DAY (TO_DATE ('2009-12-31', 'YYYY-MM-DD')) "next day" FROM DUMMY;

28、NOW Function (Datetime)

返回当前时间戳。

语法：NOW ()

举例：SELECT NOW () "now" FROM DUMMY;

29、QUARTER Function (Datetime)

语法：QUARTER (<d>, [, <start_month>])

举例：SELECT QUARTER (TO_DATE('2012-01-01', 'YYYY-MM-DD'), 2) "quarter" FROM DUMMY;

30、SECOND Function (Datetime)

返回给定时间的秒的值。

语法：SECOND (<t>)

举例：SELECT SECOND ('2014-03-25 12:34:56.789') "subseconds" FROM DUMMY;

31、SECONDS_BETWEEN Function (Datetime)

计算两个指定日期之间的秒数。

语法：SECONDS_BETWEEN (<d1>, <d2>)

举例：SELECT SECONDS_BETWEEN ('2009-12-05', '2010-01-05') "seconds between" FROM DUMMY;

32、UTCTOLOCAL Function (Datetime)

将 UTC 和本地时间之间的指定时间戳转换。

语法：UTCTOLOCAL (<t>, <timezone> [, <timezone_dataset>])

举例：SELECT UTCTOLOCAL (TO_TIMESTAMP('2012-01-01 01:00:00', 'YYYY-MM-DD HH24:MI:SS'), 'EST', 'sap') "utctolocal" FROM DUMMY;

33、WEEK Function (Datetime)

返回指定日期的星期编号。

语法：WEEK (<d>)

举例：SELECT WEEK (TO_DATE('2011-05-30', 'YYYY-MM-DD')) "week" FROM DUMMY;

34、WEEKDAY Function (Datetime)

返回指定日期的星期几。

语法：WEEKDAY (<d>)

举例：SELECT WEEKDAY (TO_DATE ('2010-12-31', 'YYYY-MM-DD')) "week day" FROM DUMMY;

35、WORKDAYS_BETWEEN Function (Datetime)

计算指定开始日期和指定结束日期之间的工作日数。

语法：WORKDAYS_BETWEEN (<factory_calendar_id>, <start_date>, <end_date> [, <source_schema>])

TFACS bitfield	Day of the month	Reason for not working
0	1	Public Holiday
1	2	

TFACS bitfield	Day of the month	Reason for not working
1	3	
0	4	Weekend
0	5	Weekend
0	6	Public Holiday
1	7	
1	8	
1	9	
1	10	
0	11	Weekend
0	12	Weekend
1	13	
1	14	
1	15	
1	16	
1	17	
0	18	Weekend
0	19	Weekend
1	20	
1	21	
1	22	
1	23	
1	24	
0	25	Weekend
0	26	Weekend
1	27	
1	28	
1	29	
1	30	
1	31	

举例：SELECT WORKDAYS_BETWEEN('01', '2014-01-09', '2014-01-10' , 'FCTEST') "workdays" FROM DUMMY;

36、YEAR Function (Datetime)

返回指定日期的年份。

语法：YEAR (<d>)

举例：SELECT YEAR (TO_DATE ('2011-05-30', 'YYYY-MM-DD')) "year" FROM DUMMY;

37、YEARS_BETWEEN Function (Datetime)

计算两个指定日期之间的年数。

语法：YEARS_BETWEEN (<d1>, <d2>)

举例：SELECT YEARS_BETWEEN(TO_DATE('2001-01-01'), TO_DATE('2003-03-14')) "years_between" FROM DUMMY;

SELECT YEARS_BETWEEN(TO_DATE('2003-10-03'), TO_DATE('2001-01-14')) "years_between" FROM DUMMY;

SELECT YEARS_BETWEEN(TO_DATE('2001-10-15'), TO_DATE('2003-01-14')) "years_between" FROM DUMMY;

SELECT YEARS_BETWEEN(TO_DATE('2001-10-13'), TO_DATE('2003-01-14')) "years_between" FROM DUMMY;