

Don McMunn's FREEWARE
Date Dimension Kit
Denormalized Day-level table
Table name: dim_day

Contains all days between Jan 1, 1900
and Dec 31, 2499

Don McMunn's FREEWARE
Date Dimension Kit
Normalized Time Hierarchy tables

Contains all days between Jan 1, 1900
and Dec 31, 2499

dim_day
date_key: int
date_type: varchar(20)
full_date: datetime
day_num_of_week: int
day_num_of_month: int
day_num_of_quarter: int
day_num_of_year: int
day_num_absolute: int
day_of_week_name: varchar(10)
day_of_week_abbreviation: varchar(3)
julian_day_num_of_year: int
julian_day_num_absolute: decimal(18,0)
is_weekday: char(1)
is_US_civil_holiday: char(1)
is_last_day_of_week: char(1)
is_last_day_of_month: char(1)
is_last_day_of_quarter: char(1)
is_last_day_of_year: char(1)
is_last_day_of_fiscal_month: char(1)
is_last_day_of_fiscal_quarter: char(1)
is_last_day_of_fiscal_year: char(1)
prev_day_date: datetime
prev_day_date_key: int
same_weekday_year_ago_date: datetime
same_weekday_year_ago_date_key: int
week_of_year_begin_date_key: int
week_of_year_end_date: datetime
week_of_year_end_date_key: int
week_of_month_begin_date: datetime
week_of_month_begin_date_key: int
week_of_month_end_date: datetime
week_of_month_end_date_key: int
week_of_quarter_begin_date: datetime
week_of_quarter_begin_date_key: int
week_of_quarter_end_date: datetime
week_of_quarter_end_date_key: int
week_num_of_month: int
week_num_of_quarter: int
week_num_of_year: int
week_num_overall: int
month_num_of_year: int
month_num_overall: int
month_name: varchar(10)
month_name_abbreviation: varchar(3)
month_begin_date: datetime
month_begin_date_key: int
month_end_date: datetime
month_end_date_key: int
quarter_num_of_year: int
quarter_num_overall: int
quarter_begin_date: datetime
quarter_begin_date_key: int
quarter_end_date: datetime
quarter_end_date_key: int
year_num: int
year_begin_date: datetime
year_begin_date_key: int
year_end_date: datetime
year_end_date_key: int
YYYYMM: varchar(6)
YYYYMMDD: varchar(8)
DDMMYY: varchar(7)
DDMMYYYY: varchar(9)
fiscal_week_num_of_year: int
fiscal_week_num_overall: int
fiscal_week_begin_date: datetime
fiscal_week_end_date: datetime
fiscal_month_num_of_year: int
fiscal_month_num_overall: int
fiscal_month_begin_date: datetime
fiscal_month_end_date: datetime
fiscal_quarter_num_of_year: int
fiscal_quarter_num_overall: int
fiscal_quarter_begin_date: datetime
fiscal_quarter_end_date: datetime
fiscal_year_num: int
fiscal_year_begin_date: datetime
fiscal_year_end_date: datetime
fiscal_year_end_date_key: int

dim_year
year_key: int
year_num: int
year_begin_date: datetime
year_end_date: datetime
year_end_date_key: int

dim_week_of_year
week_of_year_key: int
week_num_of_year: int
week_of_year_begin_date: datetime
week_of_year_end_date: datetime
week_of_year_end_date_key: int
year_key: int

dim_date
date_key: int
date_type: varchar(20)
full_date: datetime
day_num_of_week: int
day_num_of_month: int
day_num_of_quarter: int
day_num_of_year: int
day_num_absolute: int
day_of_week_name: varchar(10)
day_of_week_abbreviation: varchar(3)
julian_day_num_of_year: int
julian_day_num_absolute: decimal(18,0)
is_weekday: char(1)
is_US_civil_holiday: char(1)
is_last_day_of_week: char(1)
is_last_day_of_month: char(1)
is_last_day_of_quarter: char(1)
is_last_day_of_fiscal_month: char(1)
is_last_day_of_fiscal_quarter: char(1)
is_last_day_of_fiscal_year: char(1)
prev_day_date: datetime
prev_day_date_key: int
same_weekday_year_ago_date: datetime
same_weekday_year_ago_date_key: int
YYYYMMDD: varchar(8)
DDMMYY: varchar(7)
DDMMYYYY: varchar(9)
week_of_month_key: int
week_of_year_key: int
fiscal_week_of_year_key: int

dim_holiday
holiday_key: int
year_num: datetime
new_years_day: datetime
mlk_day: datetime
ground_hog_day: datetime
lincolns_birthday: datetime
valentines_day: datetime
washingtons_birthday: datetime
presidents_day: datetime
st_patricks_day: datetime
april_fools_day: datetime
good_friday: datetime
easter: datetime
mothers_day: datetime
memorial_day: datetime
fathers_day: datetime
us_independence_day: datetime
parents_day: datetime
labor_day: datetime
grandparents_day: datetime
columbus_day: datetime
halloween: datetime
veterans_day: datetime
thanksgiving_day: datetime
christmas_day: datetime
effective_date: datetime
expiration_date: datetime
is_current: char(1)

dim_holiday_3NF
holiday_key: char(18)
holiday_name: char(18)
year_num: datetime
holiday_date: datetime
effective_date: datetime
expiration_date: datetime
is_current: char(1)

"is_current" should be a "computed" column cast to be char(1); the computation should be based on expiration_date = cast('2599-12-31' as datetime) or some equally distant date beyond the maximum date domain in the dataset;

dim_quarter
quarter_key: int
quarter_num_of_year: int
quarter_num_overall: int
quarter_begin_date: datetime
quarter_end_date: datetime
quarter_end_date_key: int
year_key: int

dim_week_of_quarter
week_of_quarter_key: int
week_num_of_quarter: int
week_of_quarter_begin_date: datetime
week_of_quarter_end_date: datetime
week_of_quarter_end_date_key: int
quarter_key: int

dim_month
month_num_of_year_key: int
month_num_of_year: int
month_num_overall: int
month_name: varchar(10)
month_name_abbreviation: varchar(3)
month_begin_date: datetime
month_end_date: datetime
month_end_date_key: int
YYYYMM: varchar(6)
quarter_key: int

dim_week_of_month
week_of_month_key: int
week_num_of_month: int
week_of_month_begin_date: datetime
week_of_month_end_date: datetime
week_of_month_end_date_key: int
month_num_of_year_key: int

dim_fiscal_quarter_of_year
fiscal_quarter_of_year_key: int
fiscal_quarter_num_of_year: int
fiscal_quarter_num_overall: int
fiscal_quarter_begin_date: datetime
fiscal_quarter_end_date: datetime
fiscal_quarter_end_date_key: int
fiscal_year_key: int

dim_fiscal_month_of_year
fiscal_month_of_year_key: int
fiscal_month_num_of_year: int
fiscal_month_num_overall: int
fiscal_month_begin_date: datetime
fiscal_month_end_date: datetime
fiscal_month_end_date_key: int
fiscal_quarter_of_year_key: int

dim_fiscal_week_of_year
fiscal_week_of_year_key: int
fiscal_month_of_year_key: int
fiscal_week_num_of_year: int
fiscal_week_num_overall: int
fiscal_week_begin_date: datetime
fiscal_week_end_date: datetime
fiscal_week_end_date_key: int

dim_fiscal_year
fiscal_year_key: int
fiscal_year_num: int
fiscal_year_begin_date: datetime
fiscal_year_end_date: datetime
fiscal_year_end_date_key: int

A view may be constructed containing left outer joins to pivot the data into rows with a new "holiday_name" attribute being coded into the view, but preferably represented as a materialized view or just handled in the ETL process to produce something a data structure as shown in dim_holiday_3NF that will be easier to join to the dim_day table.