Name Types

Overview

Name Types are variables that represent date and time settings. They can be used individually or combined together with static text and other **Variables**. When a **Name Type** is used, it is enclosed in curly braces, e.g., *{DD}*.

Type List

The following table contains the list of types provided.

Name Type	Description	Default unit
DATIM	date and time in local format	Hours
datim	date/time in universal format YYYY-MM-DD HH:mm:ss	Hours
DATE	date in local format	Days
date	date in universal format YYYY-MM-DD	Days
TIME	time in local format	Minutes
time	time in universal format HH:mm:ss	Minutes
WYR0	week of year (0 to 52, Sunday first)	Weeks
WYR1	week of year (1 to 53 Sunday first)	Weeks
WYR2	week of year (1 to 53, Monday first)	Weeks
WDAY	day of week (1 to 7, 1=Sunday)	Days
YDAY	day of year (1 - 366, 1=Jan 1)	Days
YYYY	year (4 digit)	Years
MMMM	month (January – December)	Months
DDDD	day of week (Monday – Sunday)	Days
MMM	month (Jan - Dec)	Months
DDD	day of week (Mon – Sun)	Days
YY	year (2 digit)	Years
MM	month (1 – 12)	Months
DD	day of month (1 – 31)	Days
hh	hour (0 - 23)	Hours
mm	minute (0 - 59)	Minutes
ss	second (0 - 59)	Seconds
dM	day offset of month (0 - #days)	Days
hM	hour offset of month (0 – #hours)	Hours
mM	minute offset of month (0 – #mins)	Minutes
mW	minute offset of week (0 – 10079)	Minutes
hW	hour offset of week (0 – 167)	Hours
dW	day offset of week (0 to 6, Sunday first)	Days
hD	hour offset of day (0 – 23)	Hours
mD	minute offset of day(0 – 1439)	Minutes
dY	day offset of year (0 - 365)	Days
MY	month offset of year (0 - 11)	Months

Name Type Calculation

Name Types can be used in calculations expressed in the following format:

{**Name Type** *operator_1* **value_1** [*unit_1*]}

operator_1 can be one of the following:

- + (plus)
- - (minus)
- @ (at)

For the + or – operators, *unit_1* can be one of the following

- s (seconds)
- m (minutes)
- h (hours)
- D (days)
- W (weeks)
- M (months)

For the @ operator, *unit_1* can be one of the following

- D (day of the month)
- d (day of the week)

If *unit_1* is not specified for the + and - operators, then the default unit is used from the table in the **Name Type List** section above. If *unit_1* is not specified for the @ operator then the default unit is D (days/day of the month).

For example, for the date and time 11 July 2020, 15:21:00,

Name Type	Result	
{TIME-3h}	12:21:00	
{TIME-3}	15:18:00 (since the default unit for TIME is minutes).	
{DATIM-1D}	10 July 2020, 15:21:00	
{DATIM-1M}	11 June 2020, 15:21:00	
{DATIM@1D}	1 July 2020, 15:21:00	when the day=1 in July)
{DATIM@31D}	31 July 2020, 15:21:00	when the day=31 in July, defaults to the last day for months that have less than 31 days
{DATIM@1d}	5 July 2020, 15:21:00	the day of week=1 (Sunday) for the week 5 July.
{DATIM@7d}	11 July 2020, 15:21:00	the day of week=7 (Saturday) for the week 5 July.

Extended Name Type Calculation

For the + or – operators, the format of the **Name Type** can be extended as follows:

{**Name Type** *operator_1* **value_1** [*unit_1*][@ **value2** *unit_2*]}

unit_2 follows the same rule as *unit_1* for the @ operator described above.

For example, suppose the date and time is 11 July 2020, 15:21:00,

Name Type	Result	
{DATE-2W@1D}	I June, 2020	back 2 weeks and fix on the first of the month
{DATE-2W@2d}	22 June, 2020	back 2 weeks on the day of the week=2 (Monday)

Name Type Scaling

The following **Name Types** can also be scaled arithmetically.

- dM
- hM
- mM
- mW
- hW
- dW
- hD
- mD
- dY
- MY

The format for scaling:

$$\{\textbf{Name Type } operator\_2 \textbf{ value\_2}\}$$
$$\{\textbf{Name Type } operator\_1 \textbf{ value\_1 } [units] \, operator\_2 \textbf{ value\_2}\}$$

Only non-decimal values of **value_2** are supported.

operator_1 can be one of the following:

- + (plus)
- - (minus)

operator_2 can be one of the following:

- * (multiplication)
- / (division)
- : (equivalent to / plus 1 to the result)

For example, for the date and time 11 July 2020, 15:21:00,

Name Type	Result
{dM-2D/2}	4
{mD/15}	61 (time given is in the 61st, 15 minute interval).
{mD-7h/15}	33
{hD:8}	2 (hD/8 + 1)

Report Date and Scheduled Date

The value of a **Name Type** is based on the report date or the scheduled date, which in most cases are the same but there are occasions when they can be different. For example, if we produce the report for 10th September, 2019on 2nd January 2020 then the report date is 10th September, 2019 and the scheduled date is 2nd January 2020.

By default, **Name Types** are evaluated on the report date. By prefixing them with a dollar sign ($), they will be evaluated on the scheduled date.

For example, *{DATE}* is calculated on the report date whereas *{$DATE}* is calculated on the current date.

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