## Crystal Report Formulas for calculating dates in week(s)

## Application Note

Applies to: Crystal Reports Version 10.0 (MET/CAL Version 7.1X and later)
Level of difficulty: Moderate
Overview: Use Date/Time and Date Ranges functions in Crystal Reports to determine specific date or date ranges based on the week selected.

Have you ever wanted to know what items are due for calibration or maintenance next week? How about this week? What about week number 14 of this year? Here are some formulas for dealing with dates in weeks on your reports.

All formulas in this application note use Monday as the starting day of the week. To change the starting day to another day, change "crMonday" to another day (for example, "crTuesday").


| What is the Date of the start of <br> your current work week? | / / starting day (date) of current week (Monday) <br> (CurrentDate + 1) - DayOfWeek (CurrentDate, crMonday) <br> Note: Change the "crMonday" to the starting day of the your week |
| :--- | :--- |
| What is the Date of the last day <br> of your current work week? | // Last Day (Date) of current week (Sunday) <br> CurrentDate $+(7-$ DayOfWeek (CurrentDate, crMonday)) <br> Note: Change the "crMonday" to the starting day of the your week |
| What is the Date of the start of <br> your next work week? | // starting day (date) of current week (Monday) <br> (CurrentDate +1$)$ - DayOfWeek (CurrentDate, crMonday) + 7 <br> Note: Change the "crMonday" to the starting day of the your week |


| What is the Date of the last day of your next work week? | // Last Day (Date) of current week (Sunday) CurrentDate + (7-DayOfWeek(CurrentDate,crMonday)) + 7 <br> Note: Change the "crMonday" to the starting day of the your week |
| :---: | :---: |
| What is the Date of the first work day of the first full week of the current year? | ```// First Day (Monday) of First Full Week of Current Year If DayOfWeek(DATESERIAL (YEAR (CurrentDate),1,1),crMonday) = 1 Then DATESERIAL (YEAR (CurrentDate),1,1) Else DATESERIAL(YEAR (CurrentDate),1,1) - (DayOfWeek(DATESERIAL (YEAR (CurrentDate),1,1),crMonday) - 8) Note: Change the 'crMonday' to the starting day of your week.``` |
| What is the Date of the last work day of the first full week of the current year? | // Last Day (where Monday is first day) of First Full Week of Current Year <br> If <br> DayOfWeek (DATESERIAL (YEAR (CurrentDate), 1,1), crMonday) = 1 <br> Then <br> DATESERIAL (YEAR (CurrentDate) 1,1 ) +6 <br> Else <br> DATESERIAL (YEAR (CurrentDate), 1,1) - <br> (DayOfWeek (DATESERIAL (YEAR (CurrentDate), 1,1), crMonday) - 8) + 6 <br> Note: Change the 'crMonday' to the starting day of your week. |
| What is the Date of the first work day of the last week of the current year? | ```// First Day (Monday) of the Last Week of Current Year If DayOfWeek(DATESERIAL (YEAR (CurrentDate),12,31),crMonday) = 1 Then DATESERIAL (YEAR (CurrentDate),12,31) Else DATESERIAL (YEAR (CurrentDate),12,31) + (1 - DayOfWeek (DATESERIAL (YEAR (CurrentDate),12,31), crMonday)) Note: Change the 'crMonday' to the starting day of your week.``` |
| What is the Date of the last work day of the last week of the current year? | ```// Last Day (starting on Monday) of Last Week of Current Year If DayOfWeek (DATESERIAL (YEAR (CurrentDate),12,31),crMonday) = 1 Then DATESERIAL(YEAR (CurrentDate),12,31) + 6 Else DATESERIAL(YEAR (CurrentDate),12,31) + 6 + (1 - DayOfWeek (DATESERIAL (YEAR (CurrentDate),12,31), crMonday)) Note: Change the 'crMonday' to the starting day of your week.``` |
| What is the Date of the first work day of the XX week of the current year? | This requires two formulas. One is a Parameter Field, and the other is a Formula Field Create a Parameter field named XX Week. Set the default values to range limited to between 1 and 53 (since an actual year has 52 full weeks and some portion of another week). Then use the Parameter field "XX Week" in the formula for the week wanted. <br> // First Day (Monday) of Xx Week of Current Year If <br> DayOfWeek (DATESERIAL (YEAR (CurrentDate), 1,1), crMonday) = 1 Then <br> DATESERIAL (YEAR (CurrentDate), 1,1) + (7 * (\{?XX_Week\}-1)) <br> Else <br> DATESERIAL (YEAR (CurrentDate), 1,1) - <br> (DayOfWeek (DATESERIAL (YEAR (CurrentDate), 1,1), crMonday) - 8) + (7 * ( $\{$ ? XX_Week\}-1) ) <br> Note: Change the 'crMonday' to the starting day of your week. |

What is the Date of the last work day of the XX week of the current year?

Two part answer also. Use the same Parameter field as formula above (?XX_Week).
// Last Day (where Monday is first day) of XX Week of Current Year If
DayOfWeek (DATESERIAL (YEAR (CurrentDate), 1,1), crMonday) = 1
Then
DATESERIAL (YEAR (CurrentDate), 1,1) + (7 * \{?XX_Week\}) - 1
Else
DATESERIAL (YEAR (CurrentDate), 1,1) - (DayOfWeek (DATESERIAL (YEAR
(CurrentDate), 1,1),crMonday) - 8) + (7 * \{?XX_Week\}) - 1
Note: Change the 'crMonday' to the starting day of your week.

## Summary

You can use the power of Crystal Reports Formulas to determine any week of interest and apply it to your selection criteria to obtain the information from the correct time period.

Fluke Calibration. Precision, performance, confidence.rm

| Electrical | RF | Temperature | Pressure | Flow | Software |
| :--- | :--- | :--- | :--- | :--- | :--- |

Fluke Calibration
PO Box 9090,
Everett, WA 98206 U.S.A.

Fluke Europe B.V. PO Box 1186, 5602 BD Eindhoven, The Netherlands

For more information call:
In the U.S.A. (877) 355-3225 or Fax (425) 446-51 16
In Europe/M-East/Africa +31 (0) 402675200 or Fax +31 (0) 402675222
In Canada (800)-36-FLUKE or Fax (905) 890-6866
From other countries +1 (425) 446-5500 or Fax +1 (425) 446-5116
Web access: http://www.flukecal.com
C 2008-2013 Fluke Calibration. Specifications subject to change without notice. Printed in U.S.A. 6/2013 3358517B_EN Pub ID: 11459-eng Rev 02

Modification of this document is not permitted without written permission from Fluke Calibration.

