Dynamic Mapping Expressions

Operators

All operators should start with an equal "=" sign.

=sum (x, y, ...) Add multiple values (substitution can be done for any x, y, ...)

=subtract(x,y, ...) Subtract from x (substitution can be done for any x, y, ...)

=multiply(x, y, ...) Multiply multiple values (substitution can be done for any x, y, ...)

=divide (x, y) Divide y from x (substitution can be done for any x, y)

=if(<condition>, w, z)

> IF condition is met when w is executed or else z is executed. A user can substitute can be done for any x, y, w, z) w and z can be any function without "=" predicate. x and y cannot be execution functions. Conditional can be one or a combination of == (equality), ! = (not equality), > (greater than), < (less than), >= (greater than or equality), <= (less than or equality)

Simple tests

Canned Functions Simple Tests

1) =sum(2,${PUBVAL})

2) =subtract(${PUBVAL},1)

3) =multiply(${PUBVAL},2)

4) =divide(${PUBVAL},.5)

5) =divide(${PUBVAL},0) Failed. Resulted in empty file. Expected behavior should have something in that column such as #Div/0! (like Excel), #ERR, or #NA.

6) =if(${PUBVAL}=1.3567,1,2)

7) =Today()

Concatenate

Concatenate allows a user to join multiple strings of text into one string.

```
=concatenate("Hello","bye")
```
> output:
>> Hellobye

```
=concatenate("NG","_", "2007")  output:
```
>> NG 2007

Average

Average allows a user to average constants and published values.

```
=average(2,3,1)
```
> output:
>> 2

```
=average(${PUBVAL},${PUBVAL},3.33)
```
> output:
>> CAD,Rate,1.3567,2.014466666666667

Substitution

Replaces existing text with new text in a text string

```
=substitute(${PUBFEED}, "Fx", "ForeignExch")
```
> output:
>> in the publisher feed name, replace "Fx" with "ForeignExch".

IF-THEN-ELSE statements
```
=if(<condition>,<true action>, <fail action>)
 =if(date(${PUBDATE}) < 08/01/2013, 1,  0)
```

> output:
>> If the published date is before 8/1/2013 a value of 1 will be shown in the output. If the   published date is after 8/1/2013 a 0 will be shown.

```
=if(date(${PUBDATE}) < 08/01/2013, "Old", "New") Success
```

output:
   If the published date is before 8/1/2013 the word "Old" will be shown in the output. If the   published
date is after 8/1/2013 the word "New" will be shown.

Regular expression substitution

```
=re_substitute(input_string, match_pattern, result_pattern)
```

Example:
```
 =re_substitute("N7_2009F", "([A-Z0-9])_[0-
9][09][09]([09])([FGHJK])", "$1$3$2")
```

Received expected result of N7F9.

Date Addition

Add either day (d), business day (bd), month (m), year (y), or quarter (q) to the current provided date.

Below will add 1 day to the MCD delivery end date:

```
=dateadd("d", 1, Date(${MCD_DeliveryEndDate}))
```

Below will add 7 business days to current published date:

```
=dateadd("bd", 7, Date(${PUBDATE}))
```

Below will add 6 months to current published date:

```
=dateadd("m", 6, Date(${PUBDATE}))
```

Date Difference

Find the difference in days (d), months (m), and years (y) between 2 dates. Below example: difference in days between PUBDATE and expiration date, in days

```
=datediff(${PUBDATE},${mcd_expirationdate},"d")
```

Date Format

Takes the standard published date and converts it to a string value in the specified configuration format, otherwise the same output format will be used.

```
=format({KEY},"format style")

=format(${mcd_deliverystartdate},"yyyy-MM-dd")

=format(dateadd("d", 6, Date(${PUBDATE})), "yyyy-dd-MM")
```
Supported formats:

```
"yyyy-MM-dd'T'HH:mm:ssZ",
"yyyy-MM-dd'T'HH:mm:ss.SSSZ",
"yyyy-MM-dd",
"MM/dd/yyyy",   "yyyyMMdd"

=timezone({mcd_deliverystartdate},"America/Chicago")
```
        This will change the timezone of a specified column. The underlying data/column must be in ISO format, for example "2017-05-01T04:55:00+0000"

Vlookup

'Vlookup' in Marketplace works similar to vlookup in Microsoft Excel. Specify a column in the table and 'vlookup' will provide the information for all the subsequent columns. For example, Column 1 contains all the Marketplace Keys. Column 2 contains the alternative values for each Marketplace key.

```
=vlookup(${Keys},"Mapping File Name")
```

getKey getKey allows a user to retrieve the key name.

```
=getKey("string keyname")

=getKey("Currency") => "JPY"   =getKey("code_id") =>
1352
```

Calendar

Determine if the date is a weekday, weekend, or holiday. This function will dynamically populate a field with one of the three options ("Weekend", "Weekday", "Holiday") based on the PUBDATE. If a given day is both a weekday/weekend and a holiday, the output will display "Holiday". As a default, the holiday calendar is currently using NERC holidays.

```
=calendar(<date string>)

=calendar(${PUBDATE})
```