



University of Colorado

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OnBase Guide - Workflow - Commonly Used Expressions

Goal: To use common, standard expressions to set property/keyword values efficiently in Workflow.

Complexity Level: Departmental Workflow Developers

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Background

Expressions allow for complex logic within a single rule (*Evaluate Expression*) or action (*Set Property to Expression*). These rule and action types have a variety of built-in functions that can be used to maximize the processing done in one step and reduce the number of rules/actions required to process the item accurately.

The *Evaluate Expression* rule will evaluate to true or false so you can then proceed with the appropriate processing. The *Set Property to Expression* action will set a property value that you can then copy to a keyword value or use in a variety of other ways. For more details, refer to the [Workflow MRG](#).

These commonly used expressions are shared so that you can use them as-is or modify to suit the needs of your process.

Please keep in mind:

- Keyword types or property names may need to be substituted.
- Ensure the appropriate property bag is used where applicable.
- Other validation may be needed before and/or after using these expressions. For example, if you're setting Term/Year from Term Code, Term Code will need to have a valid value.
- Copying and pasting from this document into Studio may cause formatting problems.
 - Make sure to use the "Validate" feature on the rule/action in Studio.
 - Pasting into Notepad first may help highlight any character/formatting issues.
 - Carefully check that the expression matches exactly.

As always, these should be configured and tested in a non-production environment before migration to production.

These are specifically workflow expressions; these cannot be used in Unity forms. For information on performing validation in Unity forms that is not possible with default custom actions or calculated fields, refer to:

- [Unity Form - Validating Field Values with RegEx](#)
- [Unity Form - String Functions Script](#)



Set Property to Expression - Action

Calculate Term Code

Calculate based on Term/Year keyword value:

```
Iif(NOT isNull(%K00147) AND  
IsMatch(%K00147;"[SPRING|SUMMER|FALL]\s\d{4}$";true);  
("2" + Right(%K00147;2) +  
Iif(IsMatch(%K00147;"SPRING";true);"1";  
Iif(IsMatch(%K00147;"SUMMER";true);"4";  
Iif(IsMatch(%K00147;"FALL";true);"7";""))));""
```

Calculate Term/Year

Calculate based on Term Code keyword value:

```
Iif(NOT isnull(%K00221) AND IsMatch(%K00221;"^\d{3}[1|4|7]$";true);  
Iif(Right(%K00221;1)="1";"SPRING";  
Iif(Right(%K00221;1)="4";"SUMMER";  
Iif(Right(%K00221;1)="7";"FALL";""))  
+ Iif(Left(%K00221;1)="2";" 20";" 19") +  
Left(Right(%K00221;3);2);""
```

Calculate Aid Year/Academic Year

Calculate based on Term/Year keyword value:

```
Iif(NOT isNull(%K00147) AND  
IsMatch(%K00147;"[SPRING|SUMMER|FALL]\s\d{4}$";true);  
Iif(IsMatch(%K00147;"SPRING";true) OR  
IsMatch(%K00147;"SUMMER";true);Right(%K00147;4);  
Iif(IsMatch(%K00147;"FALL";true);CStr((CInt(Right(%K00147;4))+1));  
""));""
```

Calculate based on Term Code keyword value:

```
Iif(NOT isnull(%K00221) AND IsMatch(%K00221;"^\d{3}[1|4|7]$";true);  
"20" + Iif(  
((Right(%K00221;1)="1") OR (Right(%K00221;1)="4")) ;  
Left(Right(%K00221;3);2);  
CStr(CInt(Left(Right(%K00221;3);2))+1)  
);""
```

Calculate Fiscal Year

Calculate based on docdate property value:

```
Iif(Month(%Vdocdate) <= 6; Year(%Vdocdate); Year(%Vdocdate) +1)
```

Format Date for File Export

Replace all disallowed filename characters in time stamp (ex. /) with underscore:

```
Replace(CStr(%VpropTimeStamp);"\D+";"_";true)
```

Format current date as four-digit year - two-digit month - two-digit date:

```
FormatDateTime(now();"yyyy-MM-dd")
```

Update User Account Realname to First/Last Name

Gets portion of user's "real name" prior to the CU naming convention, to get first and last name without the campus and department information.

First, you will need to set the propCurrentUser property value.

The screenshot shows a configuration window for setting a property value. The 'Action Type' is 'Set Property Value'. The 'Property Name' is 'propCurrentUser'. The 'Property Value' section has 'Keyword' selected. The 'Target' is 'Current Item'. The 'Work item property' section is empty. The 'Current user name' section has 'Use real name' checked.

```
Replace(%VpropCurrentUser;ConvWildcardToRegex(" - CU*");"";true)
```



Extract Values from Opermap Web Service Response

Contact UIS_DM_Support@cu.edu for assistance using the Opermap web service; this requires account credentials known by our team.

CS ID

```
Match(Replace(%VWSResponse;DQuote;"";true);  
"(?<=cemplid:)\d{9}(?=?,)"; false)
```

HR ID

```
Match(Replace(%VWSResponse;DQuote;"";true);  
"(?<=hremplid:)\d{6}(?=?,)"; false)
```

Oper ID

```
Match(Replace(%VWSResponse;DQuote;"";true);  
"(?<=oprid:)\w{4}\d{6}(?=?,)"; false)
```

Evaluate Expression - Rule

Check that value is a valid email address

```
IsMatch(%K00529;  
"^[a-zA-Z0-9_-\.\ ]+@([a-zA-Z0-9_-\.\ ]+)\.([a-zA-Z]{2,5})$";  
true)
```

Check if value is null or contains “Invalid Value”

```
IsNull(%K00###) OR (InStr(%K00###;"Invalid Value")>=0)
```

Check if Aid Year value is an “even” year

```
CInt(Year(%VpropInput)) % 2 = 0
```

Check if year is a leap year

```
CInt(Year(%VpropInput)) % 4 = 0
```

