The analyses you create are typically filtered to a specific time frame. You hard-code that value into the filter when you create it. You might have created an analysis in September that looked at Financials transactions that occurred in August, or a Student analysis that looks at last term. Since then, you've been editing the analysis every month or term so that the filter was for the previous month or term. Wouldn't it be great if the filter could just sort of do that on its own?

It can!

By using variables, you can modify filters one time in an analysis so that the report always displays updated information for the current period or the previous period, information pertinent to the logged-in user's department, or some other data relative to external information. And you won't have to edit the filters each month. The key is finding the correct variable.

Where Can I Find the Variables?

All of the variables available for use in Analytics can be found on a dashboard. In Analytics, navigate to **Dashboards > UAccess Analytics > Variables**. There you'll find a single-page dashboard listing all of the available variables. At the top of that dashboard page, you can see that these are all **Repository Variables**. Here are some examples of what you'll find on the Variables dashboard:

Repository Variables

Variable	Definition	Currently Returns
UA_HRTL_CUR_PAYBDT	Current Pay Period Begin Date	TIMESTAMP '2015-01-19 00:00:00'
UA_HRTL_CUR_PAYEDT	Current Pay Period End Date	TIMESTAMP '2015-02-01 00:00:00'
UA_HRTL_PREV_PAYBDT	Previous Pay Period Begin Date	TIMESTAMP '2015-01-05 00:00:00'
UA_HRTL_PREV_PAYEDT	Previous Pay Period End Date	TIMESTAMP '2015-01-18 00:00:00'
UA_HRTL_NEXT_PAYEDT	Next Pay Period End Date	TIMESTAMP '2015-02-01 00:00:00'
UA_PREV_TERM	Previous Term	Winter 2014
UA_CUR_TERM_CD	Current Term Code	2151
UA_CUR_TERM	Current Term	Spring 2015
UA_FUT_TERM	Next Term	Summer 2015
UA_PREV_TERM_41	Previous Fall or Spring Term	Fall 2014
UA_CURPREV_TERM_41	Current or Previous Fall or Spring Term	Spring 2015
UA_CURFUT_TERM_41	Current or Future Fall or Spring Term	Spring 2015
UA_FUT_TERM_41	Future Fall or Spring Term	Fall 2015
CURR_FISCALYEAR	Current Fiscal Year	2015
CURR_FISCALYEAR_ST_DT	Current Fiscal Year Start Date	TIMESTAMP '2014-07-01 00:00:00'
CURR_FISCALYEAR_END_DT	Current Fiscal Year End Date	TIMESTAMP '2015-06-30 00:00:00'
FSTDAY_FISCALYEAR	First Day of the Current Fiscal Year	TIMESTAMP '2014-07-01 00:00:00'

The key to using variables is understanding that you're going to use a variable to replace a hard-coded value in a filter or a dashboard prompt.

How Do I Use Variables in an Analysis?

In our example, assume that we have a Student-based analysis. That report has a filter for Term, and the value we have in that filter today – January 28, 2015 – is **Fall 2014**. That was the last major term, not counting Winter or Summer terms.

1. **Understand your filter.**
   Now that you know you wish to replace the hard-coded value with a variable, you have to find the right one. To do that, you have to understand that you always want to look backwards at the previous major term, skipping Winter or Summer terms.
2. **Find possible variables to replace the hard-coded filter value.**
   When trying to identify variables that might be used to replace the hard-coded value, the syntax of the variable must be the same as the value you're replacing.
   In this instance, you're trying to replace Fall 2014. Any variable you select has to have that same syntax in any value it will return. The syntax is "term name" and "calendar year."
   Looking at the list above, you can see that there are a number of variables whose syntax matches the value we're trying to replace. Those variables have been extracted below. The variables that might be used to replace the hard-coded value in the filter are highlighted in bold. The syntax of those bolded variables matches the syntax in **Fall 2014**. The variable in the gray bar does *not* have the same syntax. That's a term code.

UA_PREV_TERM	**Previous Term**	**Winter 2014**
UA_CUR_TERM_CD	Current Term Code	2151
UA_CUR_TERM	**Current Term**	**Spring 2015**
UA_FUT_TERM	**Next Term**	**Summer 2015**
UA_PREV_TERM_41	**Previous Fall or Spring Term**	**Fall 2014**
UA_CURPREV_TERM_41	**Current or Previous Fall or Spring Term**	**Spring 2015**
UA_CURFUT_TERM_41	**Current or Future Fall or Spring Term**	**Spring 2015**
UA_FUT_TERM_41	**Future Fall or Spring Term**	**Fall 2015**

3. **Select the specific variable you need.**
   Remember, your current filter looks back from the current term – Spring 2015 – to the previous major term. The variable that will return the value you're looking for is the one with the arrow pointing to it. The definition in the middle column verifies that the variable will always return values for the **Previous Fall or Spring Term**, as you can see from the value in the third column. The variable itself is in the first column – **UA_PREV_TERM_41**.
   You can highlight that variable with your mouse, then right-click and copy the variable to make the next steps easier.

4. **Open your analysis and edit the filter**

   Now you can return to your analysis to replace the hard-coded filter value with the variable you just copied. Locate the specific filter on the Criteria tab of your analysis and hover your mouse over the filter. Click the pencil (edit filter) button.

5. **Delete the existing value and add a field for a Repository Variable.**
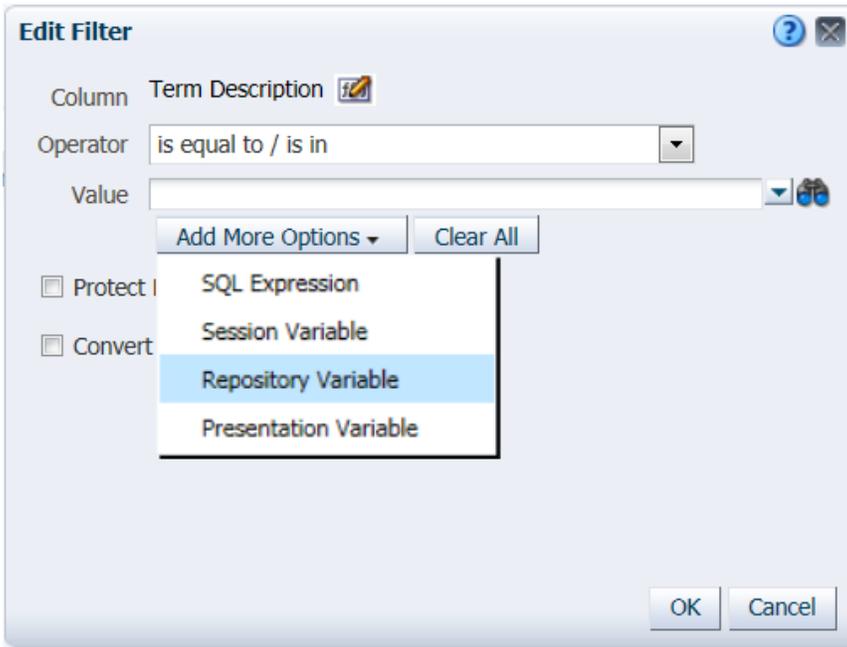
6. **Paste your copied variable into the Repository Variable field and click OK.**

3
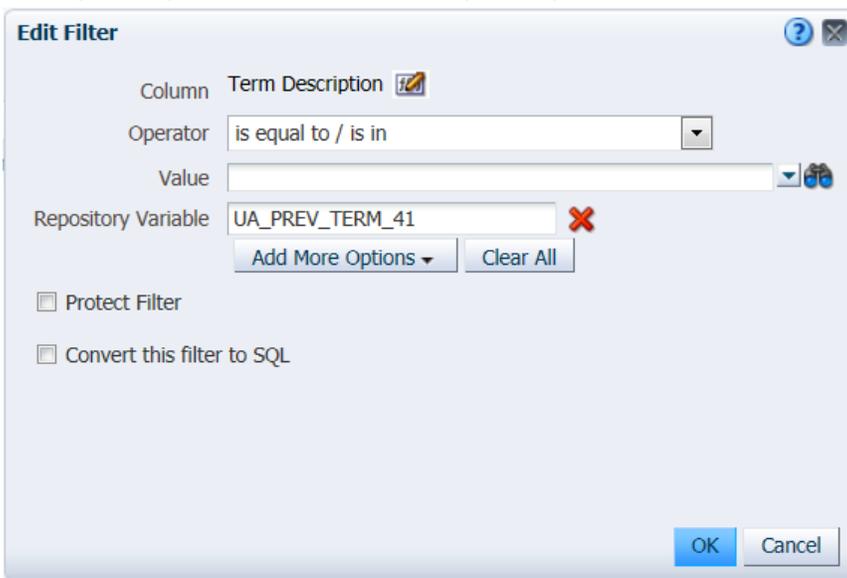
7. **Review your filter.**

    This is what your filter looks like now:

    ⛛ Term Description **is equal to / is in @{UA_PREV_TERM_41}**

    Some extra coding – the "at" symbol and the curly brackets – have been added by the system. Those are supposed to be there, and you have nothing to worry about.

8. **Run the analysis and verify the data and the filter.**

    Once the analysis has run, scan through the data to make sure you're getting what you expect. Of course, you'll also want to look at the Filters view to make sure it's filtering to the correct term:

    Term Description is equal to / is in **Fall 2014**

From this point forward, any time you run the analysis, the filter will always look at the previous Fall or Spring term. You'll never have to edit that filter again! Congratulations!

How Do I Use Variables in a Dashboard Prompt?

The biggest difference between using a variable in an analysis filter or in a dashboard prompt is that you tell the prompt that you're using a **Server Variable**, rather than a Repository Variable. There are many other differences between filters in an analysis and a dashboard prompt, but for using variables, that's the main difference.