

# Working with Agents: Delivering Data to Your Desktop



---

# COPYRIGHT & TRADEMARKS

Copyright © 2019, Arizona Board of Regents

Record of Changes		
Date	Version #	Description
04/16/2010	1.00	Original
06/16/2012	2.00	Name changed to Working with Agents with advent of new software version
10/22/2012	2.10	Updated content to reflect reality of updated software
03/14/2013	2.20	Updated content in the General Tab and Schedule Tab sections
07/19/2013	2.21	Updated Mosaic Community to UAccess Community on pg iv; clarified recipient requirements on pg 7.
08/20/2015	3.00	Updated to include a better way to begin creating agents, information about sending agents to other employees, information about the UAIR policy, and other additions
08/31/2016	3.10	Updated the UAccess Community information on page iv; made very minor adjustments, corrections, and additions in other areas.
04/27/2018	4.00	Updated the booklet to include information about saving agents in shared folders. Updated images to those from the latest version of the Analytics software.
08/15/2019	5.00	Added the cover graphic; updated branding to UAIR; added language regarding requirements for contact information for agents sent to persons other than the agent owner.

## Table of Contents

<i>About this Booklet</i> .....	iv
<i>Access to Analytics Data</i> .....	iv
<i>UAccess Community</i> .....	iv
<i>Analytics Office Hours</i> .....	iv
<b>Working with Agents</b> .....	<b>1</b>
What is an Agent? .....	1
What are Alerts? .....	1
Premise .....	1
Requirements for Agents Delivered to Multiple Recipients .....	2
<b>Creating an Agent</b> .....	<b>3</b>
Accessing the Agent Editor .....	3
General Tab .....	5
Schedule Tab .....	5
Condition Tab .....	6
Delivery Content Tab .....	7
Recipients Tab .....	8
Destinations Tab .....	9
Actions Tab .....	9
Saving an Agent .....	9
<b>Deactivating an Agent</b> .....	<b>10</b>
<b>Editing an Agent</b> .....	<b>10</b>
<b>Deleting an Agent</b> .....	<b>11</b>
<b>Accessing Analytics Alerts</b> .....	<b>11</b>
<b>Troubleshooting Agents</b> .....	<b>12</b>
What Should I Check? .....	12

### *About this Booklet*

This UAccess Analytics booklet is designed to help you become familiar with agents. For more extensive and specific information, please refer to the Delivering Content section of the UAccess Analytics online Help documentation at

**[https://analytics.uaccess.arizona.edu/analytics/olh/l\\_en/biee0133.htm](https://analytics.uaccess.arizona.edu/analytics/olh/l_en/biee0133.htm).**

This booklet is generic by necessity, but will provide you with the information you need to build and maintain your own cadre of basic agents.

For information on workshops in which you can learn how to build analyses and dashboards, as well as other brown bag demonstrations, please go to the Workshops and Training Team website at <http://workshops.arizona.edu>.

### *Access to Analytics Data*

Request for Individual access to UAccess Analytics can be submitted to  
**<https://request.uaccess.arizona.edu>.**

### *UAccess Community*

The UAccess Community is an online networking resource available to everyone on campus who use UAccess Systems.

If you have an official UA email address, you can establish membership in the UAccess Community. Just go to **<http://community.uaccess.arizona.edu>** and click the Join the conversation link on the left side of the screen.

Once you've established your membership, you'll have access to valuable information about all of the various aspects of UAccess Systems. You'll want to join one or more of the Forums within the Community, because that's where the value comes in.

Please take advantage of the opportunity and become a member of the UAccess Community.

### *Analytics Office Hours*

Schedule some time with an instructor for help with analysis and dashboard creation or other questions. Register for Analytics Office Hours sessions through UAccess Learning. From the Find Learning screen, click the One-on-One link in the left menu bar.

## Working with Agents

### What is an Agent?

An agent is a combination of a scheduling tool and a delivery tool.

You can create agents that will deliver an analysis to you or others on a regular schedule or when a report meets certain conditions. Agents can even deliver information to different people under different circumstances.

For example, an agent could deliver an analysis to you half an hour before your regularly-scheduled monthly meeting on the first Monday of every month.

Alternatively, an agent could deliver an analysis to you only if the monthly balance on your departmental PCard reaches a specific amount, say 75% of the card limit.

Agents deliver this information to you via Alerts.

### What are Alerts?

An alert is a notification generated by an agent.

You can see the alerts that have been delivered to you throughout Analytics

- In the **Alerts** section of the Home page.
- In the Alerts dialog displayed from the **Alerts!** button in the global header.
- In specified delivery devices, such as email.
- On the first page of **My Dashboard**.
- On a dashboard page, if the content designer adds an Alerts section to the page.

### Premise

For the purposes of this booklet, we will assume that you have created the analysis you wish to use as the delivered content for the agent. You will also have the agent deliver the analysis to yourself and no one else.

## Requirements for Agents Delivered to Multiple Recipients

It is possible for an agent owner to create an agent that will deliver an analysis to more than one recipient. For any agent that is designed in such a manner, UAIR has a policy that requires that either the agent-generated email or the analysis itself contains specific information, as follows:

This email was generated by an Agent running in UAccess Analytics. The Agent Owner is (agent owner name). Please contact (agent owner name) at (phone number or email address) with any questions or to be removed from this agent's email list.

See **the Procedure to Add Direct Agent Recipients** on page 8 for proper procedures. In addition, please review the important **Note** on that page regarding the issues inherent in adding email recipients.

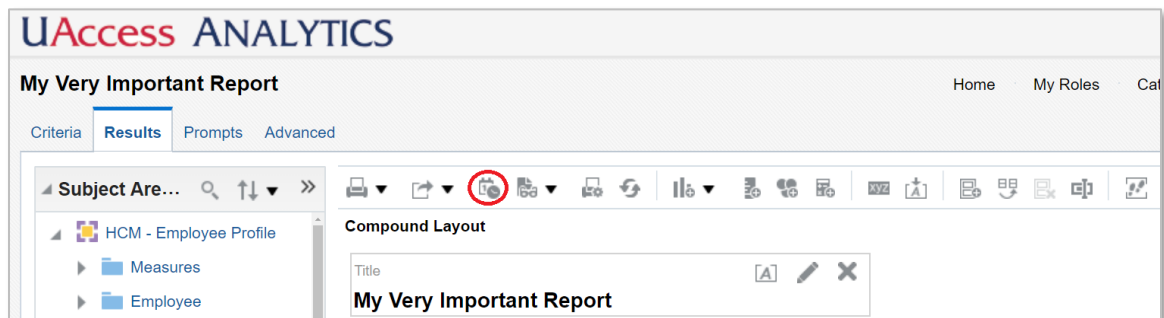
## Creating an Agent

### Accessing the Agent Editor

The agent editor is where you begin the process of creating your agent. There are two ways to access the Agent Editor; the Better way and the Other way.

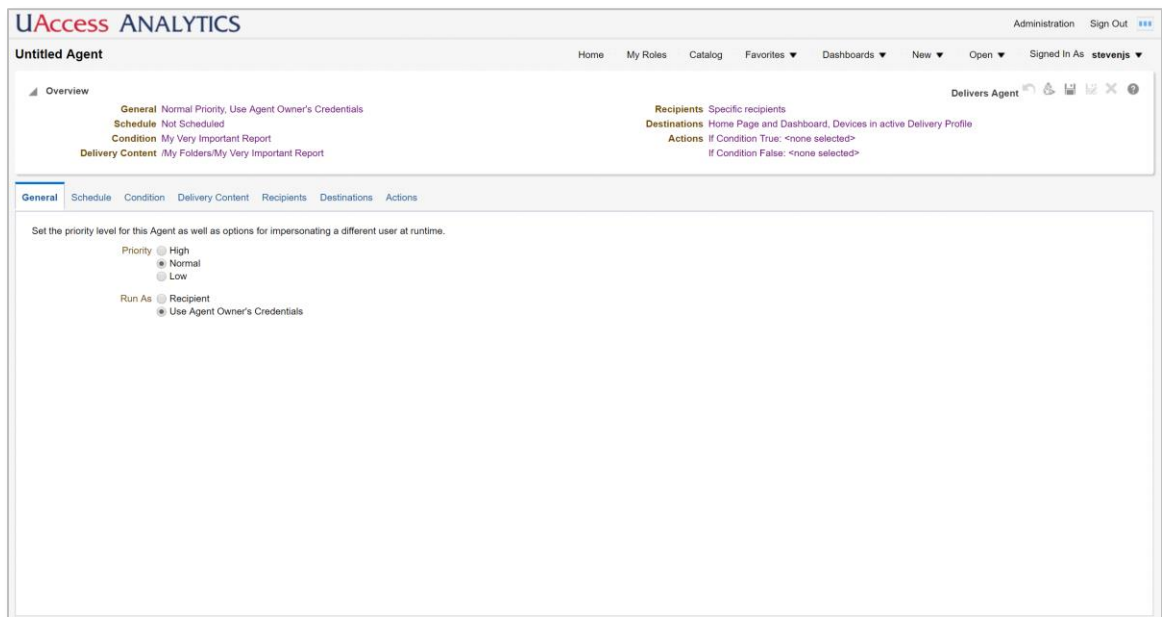
#### Better Procedure

The easiest path for creating an agent is to start with the analysis you want delivered on your screen in Edit mode. You should be on the **Results** tab of that analysis.



1. Click the **Schedule** button on the button bar above the Compound Layout pane.

The screen changes to show you a new, untitled agent. There are seven tabs to work with as you create an agent, and you are on the **General** tab.



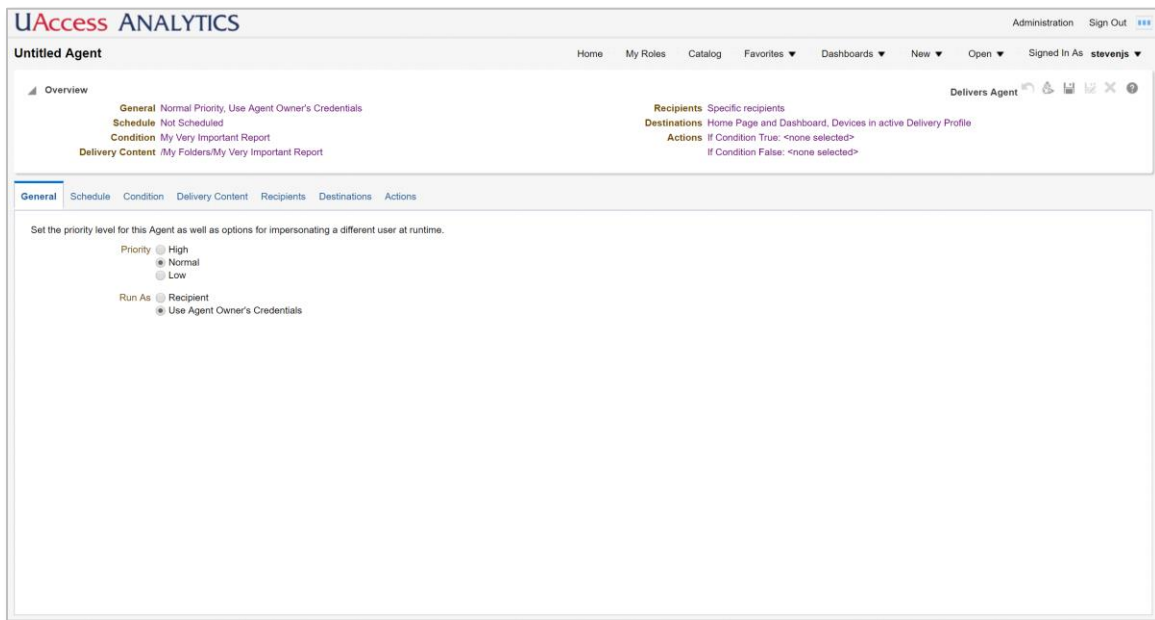
Because you started the agent from within the analysis, some of the tabs have been populated with information from that analysis.

### Other Procedure

The other way to begin creating an agent is to start like you would with any other Analytics content or tools.

1. Click the **New** link on the Global Header.
2. Click the **Agent** link on the menu.

The screen changes to show you a new, untitled agent. All of the seven tabs are completely empty.



From this point forward we'll assume the agent was started using the Better procedure, by clicking the Schedule button on the Results tab of the analysis you want delivered.



## General Tab

Use the General tab to set the priority level for the agent, as well as indicating whether this agent is delivering data to one person, or to several people.

### Procedure

1. Set the **Priority** level for this agent. You can typically leave this at Normal, unless you want the email flagged as a high priority item.
2. Set the **Run As** radio button to
  - a. **Use Agent Owner's Credentials** if you are the only person receiving the content. Select this option for this scenario.
  - b. **Recipient** if several people are going to receive the delivered content. Please refer to the Requirements on page 2 of this document for additional important information.

## Schedule Tab

Use the Schedule tab to set the delivery schedule for this agent.

### Procedure

1. Check the **Enabled** box to activate the agent.
2. Set the **Frequency** at which this agent will run.

You may want to take a moment to think about how the delivered report is going to run, and what the best schedule would be. Monthly Financial reports, for example, might best be run on the 7<sup>th</sup> or 8<sup>th</sup> day of the following month. Other reports might be delivered daily, weekly, or on some other schedule.

- a. For some conditional agents – those where the report might be triggered at any time – you could set the frequency to **Daily**. Set the time at which you wish the agent to run.
  - b. For other agents, set this field to the desired frequency.
    - For **Weekly**, select the number of weeks and which days of the week you want the agent to run.
    - For **Monthly**, select the day or date and the specific months during which you wish the agent to run.
3. Set the **Start** date and time for this agent.

The start time is more important than the date. Click the **Select Date and Time** button to set the time for delivery. Also be sure to set the time zone to Arizona time.

4. You can elect to **Re-run Agent Every X** number of minutes, **until** a specified time. This option is rarely used except in specific circumstances.
5. You can select an **End** date if you wish, at which point the agent will no longer run. This option is rarely used.

## Condition Tab

Use the Condition tab to specify the condition under which the agent will generate an alert.

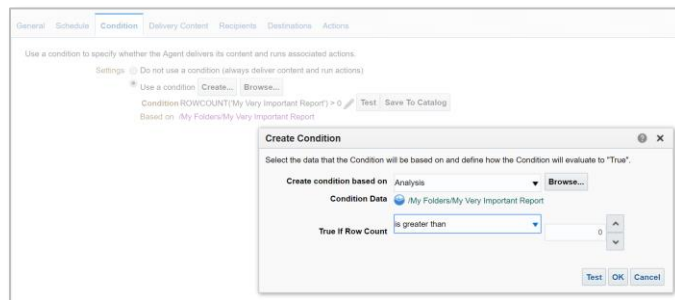
**Note:** If you started creating this agent by using the *Schedule* button in the analysis, this tab is already populated for you. You shouldn't need to make any edits. Move on to the **Delivery Content** tab.

The default condition is that the selected analysis has one or more rows of data available when the agent runs. The only thing you can change about the condition is the number of rows of data required to trigger delivery. The default number of rows is set to "greater than zero."

If you wish to populate this Condition tab yourself, you can create your own condition.

## Procedure

1. Click the **Use a condition** radio button, then click the **Create** button.
2. Click the **Browse** button on the **Create Condition** pop-up window.
3. Browse to and select your already-created analysis.



If the analysis has prompted filters, you will be required to review and/or change the parameters for those prompted filters at this point.

4. For the **True If Row Count** fields, select the desired **operator** and the appropriate **number of rows**. The default is "is greater than 0."
5. Use the **Test** button to be sure the condition is working as desired. The test will evaluate the condition to either **True** (an alert would be triggered) or **False** (an alert will not be triggered).

## Delivery Content Tab

Use the Delivery Content tab to specify the content which will be delivered when the agent is triggered.

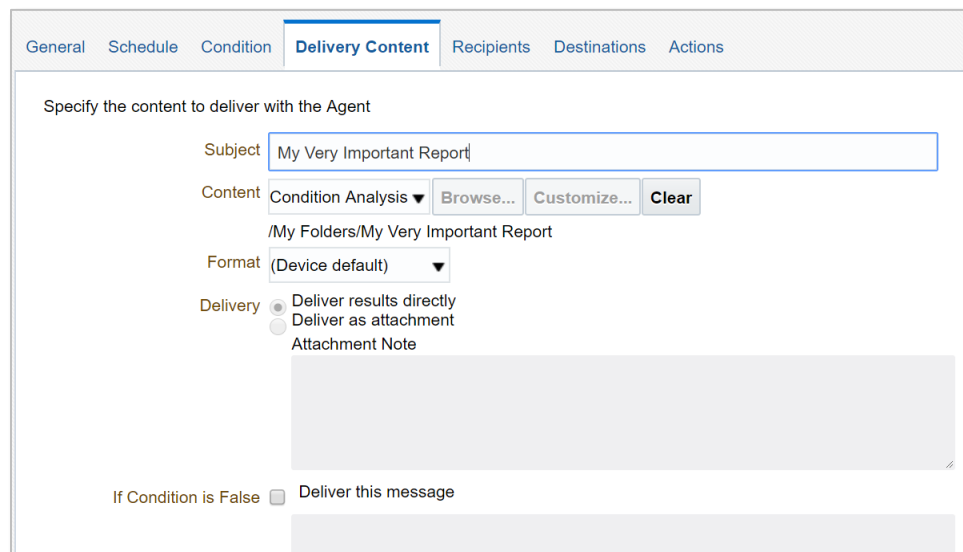
**Note:** If you started creating this agent by using the Schedule button in the analysis, some information on this tab is already populated for you.

### Procedure

1. Enter the **Subject** for the agent. The subject will be the name of the alert and the subject line of any email generated for the alert.
2. Select the **Content** for the agent. A typical entry for this field is **Analysis**. See **Note** above. The content will be set to **Condition Analysis**.
3. Click the **Browse** button and browse to and select the desired analysis. See **Note** above. The analysis has been selected for you.
4. Set the desired **Format**.

If you leave this field set to **(Device default)**, the agent will deliver the content directly in an email in HTML format, which is the same as that seen within Analytics. PDF is a popular alternative.

5. If you selected a **Format** other than (Device default), the **Deliver as attachment** option will be selected for you. You can add an **Attachment Note** if you wish. If this agent is delivering an analysis to multiple people, you could add the required agent-owner information here. See Requirements on page 2 of this document.
6. If you are creating a conditional agent (see **Note** above), you have the option of creating a message to be delivered **If Condition is False**.



The screenshot shows the 'Delivery Content' tab of an agent configuration window. The tabs at the top are General, Schedule, Condition, Delivery Content (active), Recipients, Destinations, and Actions. The main area is titled 'Specify the content to deliver with the Agent'. It contains the following fields and options:

- Subject:** A text input field containing 'My Very Important Report'.
- Content:** A dropdown menu showing 'Condition Analysis', with 'Browse...', 'Customize...', and 'Clear' buttons to its right.
- Path:** A text field showing '/My Folders/My Very Important Report'.
- Format:** A dropdown menu showing '(Device default)'.
- Delivery:** Two radio buttons: 'Deliver results directly' (selected) and 'Deliver as attachment'. Below these is a text area labeled 'Attachment Note'.
- If Condition is False:** A checkbox labeled 'Deliver this message'.

## Recipients Tab

Use the Recipients tab to specify to whom the content will be delivered when the agent is triggered. By default, your name and NetID are already identified in the **Direct Agent Recipients** section of the Recipients tab. You can move on to the **Destinations** tab.

If, however, you want this agent to deliver the analysis to someone other than or in addition to yourself, several conditions must be met.

1. The analysis being delivered by this agent must have been saved in a Shared folder such as a college or department folder.
2. The others receiving information via this agent must have access to the folder where the report was saved.
3. The others receiving information via this agent must have been provisioned to receive the type of data being delivered. You can verify the potential recipient's role on the **Dashboards > Security > Security > Person Roles** dashboard.

### Procedure to Add Direct Agent Recipients

1. Click the **Add Recipient** (grey plus sign (+)) button to begin adding new recipients. When recipients are added through this function, Analytics verifies that the recipients have the correct roles assigned authorizing them to receive and view the type of data being delivered by the agent.
2. Enter the **NetID** of the desired recipient in the **Name** field on the Select User screen.
3. Set the **List** box to **Users**.
4. Click **Search**.
5. Move the listed user to the **Selected Members** list by using the arrow buttons in the center of the screen.

If your agent will be delivering data to recipients other than yourself, you must include the paragraph outlined in the Requirements section of this document. See page 2 for that information.

**Note:** Avoid using the **Add Email Recipients** button, when possible. When recipients are added through this function, the agent owner takes responsibility for making sure recipients have the correct roles authorizing receipt and viewing of the type of data being delivered by the agent. If Student data, for example, were to be delivered to someone without the proper authorization to receive or view that type of data, FERPA rules, regulations, and penalties would come into play.

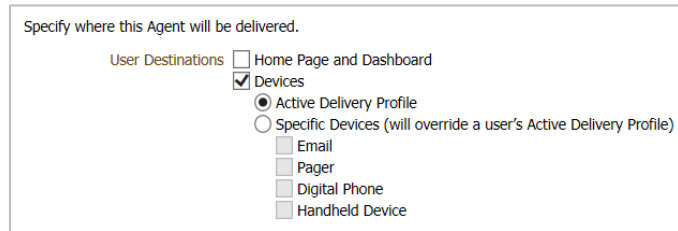
## Destinations Tab

Use the Destinations tab to specify where you wish the content to be delivered when the agent is triggered. The default destinations will send an alert to your Analytics Home Page, to your own personal dashboard, and to your email inbox.

### Procedure

1. Select or deselect **User Destination** options.

A typical configuration would be to de-select Home Page and Dashboard, meaning that the analysis will be delivered just to your email inbox.



Specify where this Agent will be delivered.

User Destinations ☐ Home Page and Dashboard

☒ Devices

☒ Active Delivery Profile

☐ Specific Devices (will override a user's Active Delivery Profile)

☐ Email

☐ Pager

☐ Digital Phone

☐ Handheld Device

No other settings on this page are necessary if you wish the agent to deliver the analysis to your email.

## Actions Tab

The Actions tab allows users to chain agents. This tab will not be covered further in this booklet.

## Saving an Agent

Once you have created the agent you should save it, then test it. If you are the only recipient, you would probably save the agent itself in your own personal My Folders folder or a subfolder. If the agent is delivering data to colleagues in your department or college, you may save the agent in a shared folder at the appropriate level.

### Procedure

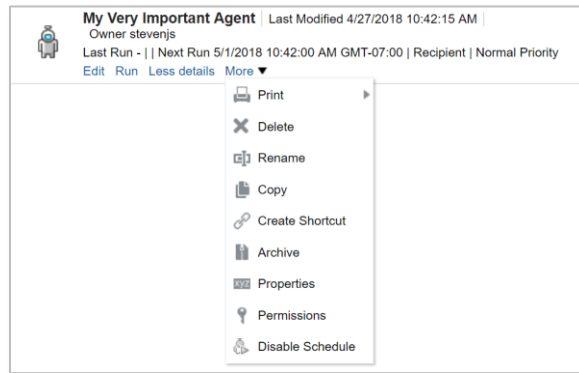
1. Click the **Save** button in the upper-right corner of the screen.
2. Name the agent and click **OK**. The process of saving the new agent may take up to three minutes. Let the system do its thing. There's no need to click Save again, and there's no reason for concern.
3. Test the agent with the **Try Agent Now** button.

## Deactivating an Agent

Once you've created an agent, there may come a point at which you wish to temporarily or permanently turn off the agent without deleting it.

### Procedure

1. Click the **Catalog** link on the Global Header section of the Analytics screen.
2. Navigate to the proper folder and locate the agent you wish to deactivate.
3. Click the **More** link below the agent's name.
4. Select the **Disable Schedule** menu option
5. When you need to reactivate the agent, follow the same procedure and select **Enable Schedule**.



## Editing an Agent

Once you've created an agent, there may come a point at which you wish to change or edit that agent.

### Procedure

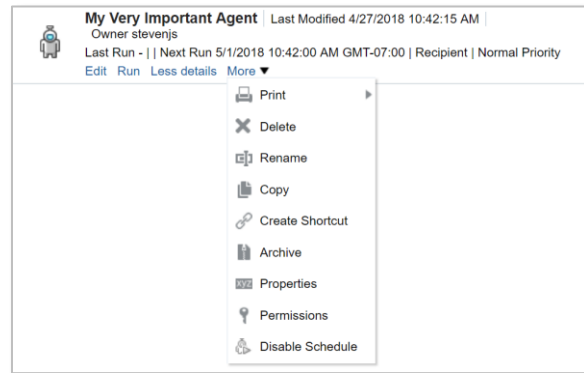
6. Click the **Catalog** link on the Global Header section of the Analytics screen.
7. Navigate to the proper folder and locate the agent you wish to edit.
8. Click the **Edit** link below the agent's name.
9. Make the necessary or desired changes.
10. **Save** the modified agent.

## Deleting an Agent

Once you've created an agent, there may come a point at which that agent is no longer needed or wanted. You can delete an agent, if you wish.

### Procedure

1. Click the **Catalog** link on the Global Header section of the Analytics screen.
2. Navigate to the proper folder and locate the agent you wish to deactivate.
3. Click the **More** link below the agent's name.
4. Select the **Delete** menu option.
5. Click OK to confirm deletion.



## Accessing Analytics Alerts

Analytics Alerts appear by default on the Home page, on the Global Header, on your personal dashboard, and you may also receive an email which contains the desired analysis.

To view the alert from the Home page, click the View link for the displayed alert.

When Analytics Delivers is enabled, you can add an Alerts section to any dashboard page. When alerts are present, the **Alerts!** link appears at the top of each Analytics page.

### Procedure

1. Click the **View** link for the displayed alert
  - a. Clear the link using the **Clear** button on the pop-up window
2. Other options are available through the **More** link for the displayed alert

## Troubleshooting Agents

Agents are wonderful Analytics tools, able to deliver reports to you and your colleagues on a set schedule or when a particular event occurs.

Occasionally, however, things can go wrong. You'll likely first hear about it when someone tells you they didn't get their report from Analytics in their email. That's when you should go into troubleshooting mode. Once you've done an initial check, you might be able to resolve the issue. If you're not able to fix things, it might be time to raise the alarm.

### What Should I Check?

There are a few standard things to check to make sure the agent is functioning properly. As you go through the list, step by step, you might find something wrong. Go ahead and fix the issue before moving to the next step.

### The Agent - Procedure

1. **Identify where the agent is saved.** From the **Home** page in Analytics, click the **My Agents** link in the Browse/Manage section on the left. Locate the agent. The agent should be saved in your personal folder even if it's set up to send reports to multiple people.
2. **Identify when the agent last ran.** Now that you've located the agent in the Catalog, click the **More Details** link for the agent. The system will show you the last time the agent ran and whether or not it was successful. It will also show you the next time it is scheduled to run, whether or not you're a recipient, and the priority level.

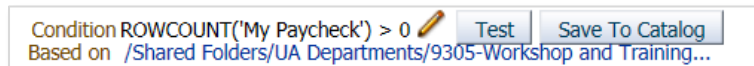
Analytics Performance - Daily Data Load Completion | Last Modified 2/24/2015 7:26:00 AM | Owner Singkofer, Steve - (stevenjs)  
Last Run 8/27/2015 7:08:01 AM | Agent Successful | Next Run 8/28/2015 7:08:00 AM | Recipient | Normal Priority

3. **Make sure the agent is enabled.** Despite what the details show you, you should still do your own checking. Click the **Edit** link to open the agent. Check the **Schedule** tab and make sure the Enabled box is checked.
4. **Review the Conditions under which a Notification will be delivered.** Click the **Condition** tab. If no condition is set, go to the next step. If there is a condition, click the **Test** button to run the analysis in the background.





- a. While the analysis is running in the background, try to estimate the time it takes to run. If it's less than three minutes, you should be okay. If it's longer than three minutes, there might be a problem.
- b. Once the analysis has run, the system will respond. If "The condition evaluates to False," there may not have been an email. If "The condition evaluates to True," there should have been an email.
- c. Make note of the folder location of the Condition analysis. The intended recipient must have access to that shared folder. You'll check that shortly.



- d. Click the link to actually run the analysis on a separate tab. Once the analysis has run, click the Edit link, then navigate to the Criteria tab. Note the name of the subject area and the type of data contained in the subject area. You'll need this later.
5. **Review what's being delivered.** Open the **Delivery Content** tab and make sure it's filled out properly. Check the **Content** field, the delivery **Format** and **Delivery** options, and whether or not the **If Condition is False** box is checked. Note the folder location of the Delivery Content. It, too, must be accessible by the intended recipient.
  6. Make sure the recipient is listed. Check the **Recipients** tab and make sure the recipient is actually listed in the **Select Recipients** section.
    - a. If they're not specifically listed, the **Use Analysis** box to the right should be checked, forcing Analytics to "read" the analysis and send the notification to those listed in the analysis. In this case, return to the Condition tab and click the link in the Condition screen to open and run the analysis in a new tab. The person should be listed in the report.
    - b. If others were listed on the Recipients tab, or are identified in the analysis, check with them to see if they received the notification. If others did receive the notification, continue to the next step. If others were listed yet did not get the notification, then something might, indeed, have gone amiss.
  7. **Did the recipient want to get email notification?** Check the **Destinations** tab and make sure the appropriate items are checked. In order to receive an email, the **Devices** box must be checked and **Active Delivery Profile** selected.

### The Person - Procedure

You've now checked everything you can about the agent. It's time to check out the intended recipient. You can check a few things in Analytics.

1. **Check the intended recipient's Analytics Roles.** Go to **Dashboards > Security > Security > Person Roles**. Enter the recipient's information in the prompt and run the dashboard.

In the report, you should be able to see that the intended recipient has been granted the appropriate **UAccess Analytics > Dashboard Access > Technical Roles**. One of the roles assigned here, if any, should match the folder in which the analysis was saved (from step 4.c. above).

You'll also check the **UAccess Analytics > Role > Technical Roles**. This section refers to the type data in the subject area and analysis. One of the roles assigned here should allow access to the contents of the analysis (from step 4.d. above). If not, this must be settled before they can receive the notifications.

Once you've verified all of the information above, and resolved any discrepancies, try testing the agent. From the Home page, click the My Agents link again. In the Catalog, locate the problematic agent, then click the Run link.

Provided all of the issues have been reviewed, addressed, and/or modified, the agent should run properly. If the agent still doesn't work, it's time to contact UAIR. You can best do this by posting the issue on the Analytics Forum on the UAccess Community.

