

**git\_comments:**

1. menu item should exist matching appbuilder\_mitem
2. menu link should also have a link matching the name of the package.
3. view should have a menu item matching category of v\_appbuilder\_package

**git\_commits:**

1. **summary:** [AIRFLOW-2744] Allow RBAC to accept plugins for views and links. (#4036)  
**message:** [AIRFLOW-2744] Allow RBAC to accept plugins for views and links. (#4036) Airflow Users that wish to create plugins for the new www\_rbac UI can not add plugin views or links. This PR fixes that by letting a user specify their plugins for www\_rbac and maintains backwards compatibility with the existing plugins system.

**github\_issues:****github\_issues\_comments:****github\_pulls:**

1. **title:** [AIRFLOW-2744] Allow RBAC to accept plugins for views and links.  
**body:** ### Description Airflow Users that wish to create plugins for the new www\_rbac UI can not add plugin views or links. This PR fixes that by letting a user specify their plugins for www\_rbac and maintains backwards compatibility with the existing plugins system. Adds two additional members of an AirflowPlugin class to cover role based views and role based menu items. Specifies that the user can create a dictionary which has the metadata necessary to create a FlaskAppBuilder BaseView or MenuItem. This lets the plugins manager extend to the new www\_rbac GUI. ### Tests Adds unit tests under the plugins manager to test that the www\_rbac views and menu links get added successfully. ### Documentation Demonstrates in the plugins page how a user would create plugins for the new UI with an example.

**github\_pulls\_comments:**

1. # [Codecov](https://codecov.io/gh/apache/incubator-airflow/pull/4036?src=pr&el=h1) Report > Merging [#4036](https://codecov.io/gh/apache/incubator-airflow/pull/4036?src=pr&el=desc) into [master](https://codecov.io/gh/apache/incubator-airflow/commit/7df4405aa5a0c99e51722321caa7af660d35794b?src=pr&el=desc) will **\*\*increase\*\*** coverage by `0.02%`. > The diff coverage is `100%`.  
 [[Impacted file tree graph](https://codecov.io/gh/apache/incubator-airflow/pull/4036/graphs/tree.svg?width=650&token=WdLKlKHOUAU&height=150&src=pr)](https://codecov.io/gh/apache/incubator-airflow/pull/4036?src=pr&el=tree) ``diff @@ Coverage Diff @@ ## master #4036 +/- ## ===== + Coverage 77.9% 77.93% +0.02%  
 ===== Files 199 199 Lines 15957 15974 +17  
 ===== + Hits 12431 12449 +18 + Misses 3526 3525 -1 `` | [Impacted Files]  
 (https://codecov.io/gh/apache/incubator-airflow/pull/4036?src=pr&el=tree) | Coverage Δ | | |---|---| | [airflow/plugins\\_manager.py]  
 (https://codecov.io/gh/apache/incubator-airflow/pull/4036/diff?src=pr&el=tree#diff-YWlyZmxvdY9wbHVnaW5zX21hbmFnZXIucHk=) | `91.95%  
 <100%> (+0.59%)` | :arrow\\_up: | | [airflow/www\\_rbac/app.py](https://codecov.io/gh/apache/incubator-airflow/pull/4036/diff?src=pr&el=tree#diff-YWlyZmxvdY93d3dfcmJhYy9hcHAucHk=) | `97.05% <100%> (+0.35%)` | :arrow\\_up: | | [airflow/configuration.py]  
 (https://codecov.io/gh/apache/incubator-airflow/pull/4036/diff?src=pr&el=tree#diff-YWlyZmxvdY9jb25maWd1cmF0aW9uLnB5) | `88.84% <0%> (+0.35%)` | :arrow\\_up: | :----- [Continue to review full report at Codecov](https://codecov.io/gh/apache/incubator-airflow/pull/4036?src=pr&el=continue). > **\*\*Legend\*\*** - [Click here to learn more](https://docs.codecov.io/docs/codecov-delta) > `Δ` = absolute <relative> (impact)`, `∅` = not affected`, `?` = missing data` > Powered by [Codecov](https://codecov.io/gh/apache/incubator-airflow/pull/4036?src=pr&el=footer). Last update [7df4405...3d6ba68](https://codecov.io/gh/apache/incubator-airflow/pull/4036?src=pr&el=lastupdated). Read the [comment docs] (https://docs.codecov.io/docs/pull-request-comments).  
 2. not sure why the code coverage has changed so drastically, I added some test cases but it looks like the hits and misses are changing abnormally? Did I miss something?  
 3. @oliviersm199 It could be that you've worked from an old master.  
 4. @jgao54 Any thoughts on this? :)  
 5. Yes merging in master helped fix the code coverage report! Thank you @Fokko.  
 6. Hello have the core committers had time to look at this? I know @Fokko requested input from @jgao54, let me know if you need anything from me.  
 7. hey guys, is there any ETA for this PR? Btw, could you also update the documentation and release notes for 1.10 to clarify that plugins are not supported at this moment on the new RBAC UI? I put some effort on the migration to 1.10 only to rollback because of the lack of support for plugins.  
 8. Made the requested changes.  
 9. Tests failed due to flake8 style violation: > ./tests/plugins/test\_plugin.py:96:33: E261 at least two spaces before inline comment  
 10. @ashb would it be possible to backport this PR into 1.10.x? It would be ideal for us.  
 11. @c4milo yeah it will be in 1.10.1 - check the "Fix Version" on a Jira to see what will be back-ported https://issues.apache.org/jira/browse/AIRFLOW-2744  
 12. @oliviersm199 , it seems that PluginRBACTest fails(currently it is disabled) if re-enable. Do you think you have time to fix the test?  
 13. We also need to fix the example in the documentation (https://airflow.apache.org/plugins.html#example). It is currently broken: import fails, wrong method name in the view and missing path for templates. I made a sample project to make this plugin integration work:  
 https://github.com/felipegasparini/airflow\_plugin\_rbac\_test/blob/dbaa049a9996df275b1d90f74b93ffbf206bb1d5/airflow/plugins/test\_plugin/test\_plugin.py  
 I will submit a PR to fix the doc later, but just posting it here since it may be useful for others.

**github\_pulls\_reviews:**

1. Lets call these `appbuilder\_views` etc. The "role" is just the reason we switched to FAB.
2. Changed it to use appbuilder\_views etc.
3. Style nit: please remove un-related changes like this from the PR.
4. Style nit: please remove un-related changes like this from the PR.
5. Remove empty lines.
6. Please say here what the fields are.
7. The `-----` should match the length of the line above otherwise RST will complain at us.
8. This one still needs doing I think?
9. Hey I thought I changed it but must have made a mistake with git. Please check again :)
10. This double space is required by flake8.

**jira\_issues:**

1. **summary:** RBAC app doesn't integrate plugins (blueprints etc)

**description:** In the current 1.10.0rc tag, the new RBAC app doesn't integrate any plugins created by a user extending Airflow. In the old `www/app.py` you had the `[integrate_plugins](https://github.com/apache/incubator-airflow/blob/f1083cbada337731ed0b7e27b09eee7a26c8189a/airflow/www/app.py#L126)` function. But currently the `[www_rbac/app.py](https://github.com/apache/incubator-airflow/blob/f1083cbada337731ed0b7e27b09eee7a26c8189a/airflow/www_rbac/app.py)` doesn't pull in any plugins from the `plugin_manager`. So nothing you do to extend Airflow's webapp will work. I think adding the code for registering the blueprints and menu links is a pretty simple fix. I'm not sure how the FAB system is handling the same functionality as Flask-Admin views though.

#### jira\_issues\_comments:

1. I created a fix in a forked private repo which will allow you to create plugins for the `www_rbac` UI if you define your plugin views using the `flask_appbuilder` `BaseView` or some subclass. It also supports links. However, I feel it doesn't tie the old and new plugins system well together. How should we design this so that both the old plugins and new plugins work? Or should we drop support for the old plugins all together? I would love to work on this and submit a pull request back to the old project since this is very important for me to get working. However, I'm new to the Airflow project and would like someone to let me know what's the best way to precede with my fix. Should I just make A PR even though I know it's not a perfect solution yet and get some feedback early?
2. Yes, I'd suggest to submit the PR, you may mark it as "WIP". Please also note the (short) discussion on the dev mailing list, I don't know if Ian is also already working on it. If possible please also comment there (I can also do if you are not subscribed).  
<https://lists.apache.org/thread.html/30b9f524ab72743f72c397ea7ee2a8f22e263cbbf4d6c048f4079124@%3Cdev.airflow.apache.org%3E>
3. oliviersm199 opened a new pull request #4036: [AIRFLOW-2744] Allow RBAC to accept plugins for views and links. URL: <https://github.com/apache/incubator-airflow/pull/4036> ### Description Airflow Users that wish to create plugins for the new `www_rbac` UI can not add plugin views or links. This PR fixes that by letting a user specify their plugins for `www_rbac` and maintains backwards compatibility with the existing plugins system. Adds two additional members of an `AirflowPlugin` class to cover role based views and role based menu items. Specifies that the user can create a dictionary which has the metadata necessary to create a `FlaskAppBuilder` `BaseView` or `MenuItem`. This lets the plugins manager extend to the new `www_rbac` GUI. ### Tests Adds unit tests under the plugins manager to test that the `www_rbac` views and menu links get added successfully. ### Documentation Demonstrates in the plugins page how a user would create plugins for the new UI with an example. ----- This is an automated message from the Apache Git Service. To respond to the message, please log on GitHub and use the URL above to go to the specific comment. For queries about this service, please contact Infrastructure at: [users@infra.apache.org](mailto:users@infra.apache.org)
4. ashb closed pull request #4036: [AIRFLOW-2744] Allow RBAC to accept plugins for views and links. URL: <https://github.com/apache/incubator-airflow/pull/4036> This is a PR merged from a forked repository. As GitHub hides the original diff on merge, it is displayed below for the sake of provenance: As this is a foreign pull request (from a fork), the diff is supplied below (as it won't show otherwise due to GitHub magic):  
diff --git a/airflow/plugins\_manager.py b/airflow/plugins\_manager.py index ad630701de..c589e9b5a9 100644 --- a/airflow/plugins\_manager.py +++ b/airflow/plugins\_manager.py @@ -49,6 +49,8 @@ class AirflowPlugin(object): admin\_views = [] flask\_blueprints = [] menu\_links = [] + appbuilder\_views = [] + appbuilder\_menu\_items = [] @classmethod def validate(cls): @@ -120,6 +122,8 @@ def make\_module(name, objects): admin\_views = [] flask\_blueprints = [] menu\_links = [] + flask\_appbuilder\_views = [] + flask\_appbuilder\_menu\_links = [] for p in plugins: operators\_modules.append( @@ -135,3 +139,5 @@ def make\_module(name, objects): admin\_views.extend(p.admin\_views) flask\_blueprints.extend(p.flask\_blueprints) menu\_links.extend(p.menu\_links) + flask\_appbuilder\_views.extend(p.appbuilder\_views) + flask\_appbuilder\_menu\_links.extend(p.appbuilder\_menu\_items) diff --git a/airflow/www\_rbac/app.py b/airflow/www\_rbac/app.py index 392dce1b31..e7f5a1e976 100644 --- a/airflow/www\_rbac/app.py +++ b/airflow/www\_rbac/app.py @@ -17,6 +17,7 @@ # specific language governing permissions and limitations # under the License. # +import logging import socket import six @@ -37,6 +38,7 @@ appbuilder = None csrf = CSRFProtect() +log = logging.getLogger(\_\_name\_\_) def create\_app(config=None, session=None, testing=False, app\_name="Airflow"): global app, appbuilder @@ -135,6 +137,7 @@ def init\_views(appbuilder): category='About', category\_icon='fa-th') + def integrate\_plugins(): + """Integrate plugins to the context""" + from airflow.plugins\_manager import ( + flask\_appbuilder\_views, flask\_appbuilder\_menu\_links) + + for v in flask\_appbuilder\_views: + log.debug("Adding view %s", v["name"]) + appbuilder.add\_view(v["view"], + v["name"], + category=v["category"]) + for ml in sorted(flask\_appbuilder\_menu\_links, key=lambda x: x["name"]): + log.debug("Adding menu link %s", ml["name"]) + appbuilder.add\_link(ml["name"], + href=ml["href"], + category=ml["category"], + category\_icon=ml["category\_icon"]) + + integrate\_plugins() # Garbage collect old permissions/views after they have been modified. # Otherwise, when the name of a view or menu is changed, the framework # will add the new Views and Menus names to the backend, but will not diff --git a/docs/plugins.rst b/docs/plugins.rst index 3f1f7ee804..eb44247950 100644 --- a/docs/plugins.rst +++ b/docs/plugins.rst @@ -72,10 +72,15 @@ looks like: # A list of objects created from a class derived # from flask\_admin.BaseView admin\_views = [] - # A list of Blueprint object created from flask.Blueprint + # A list of Blueprint object created from flask.Blueprint + # A list of menu links (flask\_admin.base.MenuLink) + # A list of menu links (flask\_admin.base.MenuLink). For use with the flask\_admin based GUI menu\_links = [] + # A list of dictionaries containing FlaskAppBuilder BaseView object and some metadata. See example below + appbuilder\_views = [] + # A list of dictionaries containing FlaskAppBuilder BaseView object and some metadata. See example below + appbuilder\_menu\_items = [] + You can derive it by inheritance (please refer to the example below). @@ -159,6 +164,22 @@ definitions in Airflow. name="Test Menu Link", url="https://airflow.incubator.apache.org/") + # Creating a flask appbuilder BaseView + class TestAppBuilderBaseView(AppBuilderBaseView): + @expose("/") + def test(self): + return self.render("test\_plugin/test.html", content="Hello galaxy!") + v\_appbuilder\_view = TestAppBuilderBaseView() + v\_appbuilder\_package = {"name": "Test View", "category": "Test Plugin", "view": v\_appbuilder\_view} + + # Creating a flask appbuilder Menu Item + appbuilder\_mitem = {"name": "Google", "category": "Search", "category\_icon": "fa-th", "href": "https://www.google.com"} + # Defining the plugin class class AirflowTestPlugin(AirflowPlugin): name = "test\_plugin" @@ -170,3 +191,13 @@ definitions in Airflow. admin\_views = [v] flask\_blueprints = [bp] menu\_links = [ml] + appbuilder\_views = [v\_appbuilder\_package] + appbuilder\_menu\_items = [appbuilder\_mitem] + + Note on role based views ----- + Airflow 1.10 introduced role based views using FlaskAppBuilder. You can configure which UI is used by setting +rbac = True. To support plugin views and links for both versions of the UI and maintain backwards compatibility, +the fields appbuilder\_views and appbuilder\_menu\_items were added to the AirflowTestPlugin class. diff --git a/tests/plugins/test\_plugin.py b/tests/plugins/test\_plugin.py index 7b8bc4f61c..aaf1796e68 100644 --- a/tests/plugins/test\_plugin.py +++ b/tests/plugins/test\_plugin.py @@ -23,6 +23,7 @@ from flask import Blueprint from flask\_admin import MenuLink, MenuView +from flask\_admin import BaseView, expose from flask\_admin.base import MenuLink +from flask\_appbuilder import AppBuilderBaseView # Importing base classes that we need to derive from airflow.hooks.base\_hook import BaseHook @@ -67,6 +68,28 @@ def test(self): v = TestView(category="Test Plugin", name="Test View") + + Creating a flask appbuilder BaseView +class TestAppBuilderBaseView(AppBuilderBaseView): + default\_view = "test" + @expose("/") + def test(self): + return self.render("test\_plugin/test.html", content="Hello galaxy!") + + v\_appbuilder\_view = TestAppBuilderBaseView() + v\_appbuilder\_package = {"name": "Test View", "category": "Test Plugin", "view": v\_appbuilder\_view} + + Creating a flask appbuilder Menu Item + appbuilder\_mitem = {"name": "Google", "category": "Search", "category\_icon": "fa-th", "href": "https://www.google.com"} + + Creating a flask blueprint to intergrate the templates and static folder bp = Blueprint( "test\_plugin", \_\_name\_\_, @@ -74,10 +97,11 @@ def test(self): static\_folder='static', static\_url\_path='/static/test\_plugin') + ml = MenuLink( category='Test Plugin', - name='Test Menu Link', - url='https://airflow.incubator.apache.org') + name='Test Menu Link', + url='https://airflow.incubator.apache.org') # Defining the plugin class @@ -91,3 +115,5 @@ class AirflowTestPlugin(AirflowPlugin): admin\_views = [v] flask\_blueprints = [bp] menu\_links = [ml] + appbuilder\_views = [v\_appbuilder\_package] + appbuilder\_menu\_items = [appbuilder\_mitem] diff --git a/tests/plugins\_manager.py b/tests/plugins\_manager.py index 9f939c37a0..eeb6494100 100644 --- a/tests/plugins\_manager.py +++ b/tests/plugins\_manager.py @@ -27,11 +27,13 @@ from flask.blueprints import Blueprint from flask\_admin.menu import MenuLink, MenuView +from airflow.configuration import conf from airflow.hooks.base\_hook import BaseHook from airflow.models import BaseOperator from airflow.sensors.base\_sensor\_operator import BaseSensorOperator from airflow.executors.base\_executor import BaseExecutor from airflow.www.app import cached\_app +from airflow.www\_rbac import app as application class PluginsTestRBAC(unittest.TestCase): + def setUp(self): + conf.load\_test\_config() + self.app, self.appbuilder = application.create\_app(testing=True) + def test\_flaskappbuilder\_views(self): + from tests.plugins.test\_plugin import v\_appbuilder\_package + appbuilder\_class\_name = str(v\_appbuilder\_package['view'].\_\_class\_\_.\_\_name\_\_) + plugin\_views = [view for view in self.appbuilder.baseviews + if view.blueprint.name == appbuilder\_class\_name] + self.assertEqual(len(plugin\_views) == 1) + + # view should have a menu item matching category of

```
v_appbuilder_package + links = [menu_item for menu_item in self.appbuilder.menu.menu + if menu_item.name == v_appbuilder_package['category']] +
+ self.assertTrue(len(links) == 1) + + # menu link should also have a link matching the name of the package. + link = links[0] +
self.assertEqual(link.name, v_appbuilder_package['category']) + self.assertEqual(link.childs[0].name, v_appbuilder_package['name']) + + def
test_flaskappbuilder_menu_links(self): + from tests.plugins.test_plugin import appbuilder_mitem + + # menu item should exist matching
appbuilder_mitem + links = [menu_item for menu_item in self.appbuilder.menu.menu + if menu_item.name == appbuilder_mitem['category']] + +
self.assertTrue(len(links) == 1) + + # menu link should also have a link matching the name of the package. + link = links[0] + self.assertEqual(link.name,
appbuilder_mitem['category']) + self.assertEqual(link.childs[0].name, appbuilder_mitem['name']) -----
This is an automated message from the Apache Git Service. To respond to the message, please log on GitHub and use the URL above to go to the specific
comment. For queries about this service, please contact Infrastructure at: users@infra.apache.org
```

5. Moving to ui component as part of component refactor. Webapp component will be removed.