Guidelines for VMware REST module development

The Ansible VMware REST collection (on Galaxy, source code repository) is maintained by Red Hat and the community.

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Contribution process

The modules of the vmware_rest collection are autogenerated by another tool called <code>vmware_rest_code_generator</code> https://github.com/ansible-collections/vmware_rest_code_generator.

If you would like to contribute a change, we would appreciate if you:

- submit a Github Pull Request (PR) against the vmware_rest_code_generator project
- but also ensure the generated modules are compliant with our quality criteria.

Requirements

You will need:

- Python 3.6 or greater
- the tox <https://tox.readthedocs.io/en/latest/install.html> command

vmware_rest_code_generator

Your contribution should follow the coding style of Black https://github.com/psf/black. To run the code formatter, just run:

```
tox -e black
```

To regenerate the vmware_rest collection, you can use the following commands:

```
tox -e refresh_modules -- --target-dir ~/.ansible/collections/ansible_collections/vmware/vmware_rest
```

If you also want to update the EXAMPLE section of the modules, run:

```
tox -e refresh_examples -- --target-dir ~/.ansible/collections/ansible_collections/vmware/vmware_rest
```

Testing with ansible-test

All the modules are covered by a functional test. The tests are located in the 'file' tests/integration/targets/'.

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\ansible-devel\docs\docsite\rst\dev_guide\platforms\[ansible-devel] [docs] [docsite] [rst] [dev_guide] [platforms] vmware_rest_guidelines.rst, line 56); backlink
Unknown interpreted text role "file".
```

To run the tests, you will need a vcenter instance and an ESXi.

black code formatter

We follow the coding style of Black https://github.com/psf/black. You can run the code formatter with the following command.

```
tox -e black
```

sanity tests

Here we use Python 3.8, the minimal version is 3.6.

```
tox -e black ansible-test sanity --debug --requirements --local --skip-test future-import-boilerplate --skip-test metaclass-boilerplate
```

integration tests

These tests should be run against your test environment.

..warning:: The test suite will delete all the existing DC from your test environment.

First, prepare a configuration file, we call it :file: 'tmp/inventory-vmware_rest' in this example:

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\ansible-devel\docs\docsite\rst\dev_guide\platforms\[ansible-devel] [docs] [docsite] [rst] [dev_guide] [platforms] vmware_rest_guidelines.rst, line 89); backlink
Unknown interpreted text role "file".
```

```
[vmware_rest]
localhost ansible_connection=local ansible_python_interpreter=python

[vmware_rest:vars]
vcenter hostname=vcenter.test
vcenter username=administrator@vsphere.local
vcenter_password=kIRy|FXwZSHXW0w?Q:sO
esxil_hostname=esxil.test
esxil_username=zuul
esxil_password=f6QYNi65k05kv8m56
```

To run the tests, use the following command. You may want to adjust the Python version.

 $ansible-test\ network-integration\ --diff\ --no-temp-workdir\ --python\ 3.8\ --inventory\ /tmp/inventory-vmware_rest\ zuul/$