How to collect information about your environment

Introduction

This section shows you how to utilize Ansible to collect information about your environment. This information is useful for the other tutorials.

Scenario requirements

In this scenario we've got a vCenter with an ESXi host.

Our environment is pre-initialized with the following elements:

- A datacenter called `my_dc`
- A cluster called `my_cluster`
- An ESXi host called `esxi1` is in the cluster
- Two datastores on the ESXi: `rw_datastore` and `ro_datastore`
- A dvswitch based guest network

Finally, we use the environment variables to authenticate ourselves as explained in :ref:`vmware_rest_authentication`.

> **System Message: ERROR/3** (`D:\onboarding-resources\sample-onboarding-resources\ansible-devel\docs\docsite\rst\scenario_guides\vmware_rest_scenarios\(ansible-devel)(docs)(docsite)(rst)(scenario_guides)(vmware_rest_scenarios)collect_information.rst`, **line 30);** *backlink*
>
> Unknown interpreted text role "ref".

How to collect information

In these examples, we use the `vcenter_*_info` module to collect information about the associated resources.

All these modules return a `value` key. Depending on the context, this `value` key will be either a list or a dictionary.

Datacenter

Here we use the `vcenter_datacenter_info` module to list all the datacenters:

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>
> Unknown directive type "literalinclude".
>
> ```
>    .. literalinclude:: task_outputs/collect_a_list_of_the_datacenters.task.yaml
> ```

Result

As expected, the `value` key of the output is a list.

> **System Message: ERROR/3** (`D:\onboarding-resources\sample-onboarding-resources\ansible-devel\docs\docsite\rst\scenario_guides\vmware_rest_scenarios\(ansible-devel)(docs)(docsite)(rst)(scenario_guides)(vmware_rest_scenarios)collect_information.rst`, **line 51)**
>
> Unknown directive type "literalinclude".
>
> ```
>    .. literalinclude:: task_outputs/collect_a_list_of_the_datacenters.result.json
> ```

Cluster

Here we do the same with `vcenter_cluster_info`:

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Unknown directive type "literalinclude".

```
.. literalinclude:: task_outputs/Build_a_list_of_all_the_clusters.task.yaml
```

Result

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\ansible-devel\docs\docsite\rst\scenario_guides\vmware_rest_scenarios\(ansible-devel)(docs)(docsite)(rst)(scenario_guides)(vmware_rest_scenarios)collect_information.rst, **line 63**)

Unknown directive type "literalinclude".

```
.. literalinclude:: task_outputs/Build_a_list_of_all_the_clusters.result.json
```

And we can also fetch the details about a specific cluster, with the `cluster` parameter:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\ansible-devel\docs\docsite\rst\scenario_guides\vmware_rest_scenarios\(ansible-devel)(docs)(docsite)(rst)(scenario_guides)(vmware_rest_scenarios)collect_information.rst, **line 67**)

Unknown directive type "literalinclude".

```
.. literalinclude:: task_outputs/Retrieve_details_about_the_first_cluster.task.yaml
```

Result

And the `value` key of the output is this time a dictionary.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\ansible-devel\docs\docsite\rst\scenario_guides\vmware_rest_scenarios\(ansible-devel)(docs)(docsite)(rst)(scenario_guides)(vmware_rest_scenarios)collect_information.rst, **line 75**)

Unknown directive type "literalinclude".

```
.. literalinclude:: task_outputs/Retrieve_details_about_the_first_cluster.result.json
```

Datastore

Here we use `vcenter_datastore_info` to get a list of all the datastores:

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Unknown directive type "literalinclude".

```
.. literalinclude:: task_outputs/Retrieve_a_list_of_all_the_datastores.task.yaml
```

Result

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\ansible-devel\docs\docsite\rst\scenario_guides\vmware_rest_scenarios\(ansible-devel)(docs)(docsite)(rst)(scenario_guides)(vmware_rest_scenarios)collect_information.rst, **line 87**)

Unknown directive type "literalinclude".

```
.. literalinclude:: task_outputs/Retrieve_a_list_of_all_the_datastores.result.json
```

Folder

And here again, you use the `vcenter_folder_info` module to retrieve a list of all the folders.

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Unknown directive type "literalinclude".

```
.. literalinclude:: task_outputs/Build_a_list_of_all_the_folders.task.yaml
```

Result

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\ansible-devel\docs\docsite\rst\scenario_guides\vmware_rest_scenarios\(ansible-devel)(docs)(docsite)(rst)(scenario_guides)(vmware_rest_scenarios)collect_information.rst, **line 99**)

Unknown directive type "literalinclude".

```
.. literalinclude:: task_outputs/Build_a_list_of_all_the_folders.result.json
```

Most of the time, you will just want one type of folder. In this case we can use filters to reduce the amount to collect. Most of the `_info` modules come with similar filters.

Result