

# Ansible 4 Porting Guide

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We suggest you read this page along with the [Ansible 4 Changelog](#) to understand what updates you may need to make.

## Playbook

- The `jinja2_native` setting now does not affect the template module which implicitly returns strings. For the template lookup there is a new argument `jinja2_native` (off by default) to control that functionality. The rest of the Jinja2 expressions still operate based on the `jinja2_native` setting.

## Command Line

- The `ansible-galaxy login` command has been removed, as the underlying API it used for GitHub auth has been shut down. Publishing roles or collections to Galaxy with `ansible-galaxy` now requires that a Galaxy API token be passed to the CLI using a token file (default location `~/.ansible/galaxy_token`) or (insecurely) with the `--token` argument to `ansible-galaxy`.

## Deprecated

The constant `ansible.module_utils.basic.CHECK_ARGUMENT_TYPES_DISPATCHER` is deprecated. Use `const:'ansible.module_utils.common.parameters.DEFAULT_TYPE_VALIDATORS'` instead.

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## Breaking Changes

### Changes to `AnsibleModule`

With the move to `:class:'ArgumentSpecValidator <ansible.module_utils.common.arg_spec.ArgumentSpecValidator>'` for performing argument spec validation, the following private methods in `:class:'AnsibleModule <ansible.module_utils.basic.AnsibleModule>'` have been removed:

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- `_check_argument_types()`
- `_check_argument_values()`
- `_check_arguments()`
- `_check_mutually_exclusive()` --> `:func:'ansible.module_utils.common.validation.check_mutually_exclusive'`

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- `_check_required_arguments()` --> `:func:'ansible.module_utils.common.validation.check_required_arguments'`

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- `_check_required_by()` --> `:func:'ansible.module_utils.common.validation.check_required_by'`

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- `_check_required_if()` --> `:func:`ansible.module_utils.common.validation.check_required_if``

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- `_check_required_one_of()` --> `:func:`ansible.module_utils.common.validation.check_required_one_of``

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- `_check_required_together()` --> `:func:`ansible.module_utils.common.validation.check_required_together``

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- `_check_type_bits()` --> `:func:`ansible.module_utils.common.validation.check_type_bits``

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- `_check_type_bool()` --> `:func:`ansible.module_utils.common.validation.check_type_bool``

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- `_check_type_bytes()` --> `:func:`ansible.module_utils.common.validation.check_type_bytes``

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- `_check_type_dict()` --> `:func:`ansible.module_utils.common.validation.check_type_dict``

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- `_check_type_float()` --> `:func:`ansible.module_utils.common.validation.check_type_float``

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- `_check_type_int()` --> `:func:`ansible.module_utils.common.validation.check_type_int``

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- `_check_type_jsonarg()` --> `:func:`ansible.module_utils.common.validation.check_type_jsonarg``

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- `_check_type_list()` --> `:func:`ansible.module_utils.common.validation.check_type_list``

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- `_check_type_path()` --> `:func:`ansible.module_utils.common.validation.check_type_path``

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- `_check_type_raw()` --> `:func:`ansible.module_utils.common.validation.check_type_raw``

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- `_check_type_str()` --> `:func:`ansible.module_utils.common.validation.check_type_str``

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- `_count_terms()` --> `:func:`ansible.module_utils.common.validation.count_terms``

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- `_get_wanted_type()`
- `_handle_aliases()`
- `_handle_no_log_values()`
- `_handle_options()`
- `_set_defaults()`
- `_set_fallbacks()`

Modules or plugins using these private methods should use the public functions in `mod:`ansible.module_utils.common.validation`` or `meth:`ArgumentSpecValidator.validate()`` <`ansible.module_utils.common.arg_spec.ArgumentSpecValidator.validate``> if no public function was listed above.

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## Changes to :mod:`ansible.module\_utils.common.parameters`

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The following functions in :mod:`ansible.module\_utils.common.parameters` are now private and should not be used directly. Use :meth:`ArgumentSpecValidator.validate() <ansible.module\_utils.common.arg\_spec.ArgumentSpecValidator.validate>` instead.

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- `list_no_log_values`
- `list_deprecations`
- `handle_aliases`

## Other

- **Upgrading:** If upgrading from `ansible < 2.10` or from `ansible-base` and using `pip`, you must `pip uninstall ansible` or `pip uninstall ansible-base` before installing `ansible-core` to avoid conflicts.
- Python 3.8 on the controller node is a soft requirement for this release. `ansible-core 2.11` still works with the same versions of Python that `ansible-base 2.10` worked with, however 2.11 emits a warning when running on a controller node with a Python version less than 3.8. This warning can be disabled by setting `ANSIBLE_CONTROLLER_PYTHON_WARNING=False` in your environment. `ansible-core 2.12` will require Python 3.8 or greater.
- The configuration system now validates the `choices` field, so any settings that violate it and were ignored in 2.10 cause an error in 2.11. For example, `ANSIBLE_COLLECTIONS_ON_ANSIBLE_VERSION_MISMATCH=0` now causes an error (valid choices are `ignore`, `warn` or `error`).
- The `ansible-galaxy` command now uses `resolvelib` for resolving dependencies. In most cases this should not make a user-facing difference beyond being more performant, but we note it here for posterity and completeness.
- If you import `Pythonmodule_utils` into any modules you maintain, you may now mark the import as optional during the module payload build by wrapping the `import` statement in a `try` or `if` block. This allows modules to use `module_utils` that may not be present in all versions of Ansible or a collection, and to perform arbitrary recovery or fallback actions during module runtime.

## Modules

- The `apt_key` module has explicitly defined `file` as mutually exclusive with `data`, `keyserver` and `url`. They cannot be used together anymore.
- The `meta` module now supports tags for user-defined tasks. Set the task's tags to `'always'` to maintain the previous behavior. Internal `meta` tasks continue to always run.

## Modules removed

The following modules no longer exist:

- No notable changes

## Deprecation notices

No notable changes

## Noteworthy module changes

- facts - On NetBSD, `ansible_virtualization_type` now tries to report a more accurate result than `xen` when virtualized and not running on Xen.
- facts - Virtualization facts now include `virtualization_tech_guest` and `virtualization_tech_host` keys. These are lists of virtualization technologies that a guest is a part of, or that a host provides, respectively. As an example, if you set up a host to provide both KVM and VirtualBox, both values are included in `virtualization_tech_host`. Similarly, a podman container running on a VM powered by KVM has a `virtualization_tech_guest` of `["kvm", "podman", "container"]`.
- The parameter `filter` type is changed from `string` to `list` in the `ref:setup <setup_module>` module in order to use more than one filter. Previous behavior (using a `string`) still remains and works as a single filter.

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## Plugins

- inventory plugins - `CachePluginAdjudicator.flush()` now calls the underlying cache plugin's `flush()` instead of only deleting keys that it knows about. Inventory plugins should use `delete()` to remove any specific keys. As a user, this means that when an inventory plugin calls its `clear_cache()` method, facts could also be flushed from the cache. To work around this, users can configure inventory plugins to use a cache backend that is independent of the facts cache.
- callback plugins - meta task execution is now sent to `v2_playbook_on_task_start` like any other task. By default, only explicit meta tasks are sent there. Callback plugins can opt-in to receiving internal, implicitly created tasks to act on those as well, as noted in the plugin development documentation.
- The `choices` are now validated, so plugins that were using incorrect or incomplete choices issue an error in 2.11 if the value provided does not match. This has a simple fix: update the entries in `choices` to match reality.

## Porting custom scripts

No notable changes

## Porting Guide for v4.10.0

### Major Changes

#### containers.podman

- Add `podman_tag` module
- Add secrets driver and driver opts support

### Deprecated Features

#### cisco.nxos

- Deprecated `nxos_snmp_community` module.
- Deprecated `nxos_snmp_contact` module.
- Deprecated `nxos_snmp_host` module.
- Deprecated `nxos_snmp_location` module.
- Deprecated `nxos_snmp_traps` module.
- Deprecated `nxos_snmp_user` module.

#### junipernetworks.junos

- 'router\_id' options is deprecated from `junos_ospf_interfaces`, `junos_ospfv2` and `junos_ospfv3` resource module.

## Porting Guide for v4.9.0

### Known Issues

#### **purestorage.flashblade**

- `purefb_lag` - The `mac_address` field in the response is not populated. This will be fixed in a future FlashBlade update.

### Major Changes

#### **fortinet.fortios**

- Add real-world use cases in the example section for some configuration modules.
- Collect the current configurations of the modules and convert them into playbooks.
- Support FortiOS 7.0.1.
- Support member operation (delete/add extra members) on an object that has a list of members in it.
- Support selectors feature in `fortios_monitor_fact` and `fortios_log_fact`.

## Porting Guide for v4.8.0

### Breaking Changes

#### **community.zabbix**

- all roles now reference other roles and modules via their fully qualified collection names, which makes Ansible 2.10 minimum supported version for roles (See <https://github.com/ansible-collections/community.zabbix/pull/477>).

### Deprecated Features

#### **community.azure**

- All `community.azure.azure_rm_<resource>_facts` modules are deprecated. Use `azure.azcollection.azure_rm_<resource>_info` modules instead (<https://github.com/ansible-collections/community.azure/pull/24>).
- All `community.azure.azure_rm_<resource>_info` modules are deprecated. Use `azure.azcollection.azure_rm_<resource>_info` modules instead (<https://github.com/ansible-collections/community.azure/pull/24>).
- `community.azure.azure_rm_managed_disk` and `community.azure.azure_rm_manageddisk` are deprecated. Use `azure.azcollection.azure_rm_manageddisk` instead (<https://github.com/ansible-collections/community.azure/pull/24>).
- `community.azure.azure_rm_virtualmachine_extension` and `community.azure.azure_rm_virtualmachineextension` are deprecated. Use `azure.azcollection.azure_rm_virtualmachineextension` instead (<https://github.com/ansible-collections/community.azure/pull/24>).
- `community.azure.azure_rm_virtualmachine_scaleset` and `community.azure.azure_rm_virtualmachinescaleset` are deprecated. Use `azure.azcollection.azure_rm_virtualmachinescaleset` instead (<https://github.com/ansible-collections/community.azure/pull/24>).

#### **community.hashi\_vault**

- `lookup hashi_vault` - the `[lookup_hashi_vault]` section in the `ansible.cfg` file is deprecated and will be removed in collection version 3.0.0. Instead, the section `[hashi_vault_collection]` can be used, which will apply to all plugins in the collection going forward ([https://github.com/ansible-collections/community.hashi\\_vault/pull/144](https://github.com/ansible-collections/community.hashi_vault/pull/144)).

## Porting Guide for v4.7.0

### Major Changes

#### **openvswitch.openvswitch**

- By mistake we tagged the repo to 2.0.0 and as it wasn't intended and cannot be reverted we're releasing 2.0.1 to make the community aware of the major version update.

### Deprecated Features

#### **cisco.ios**

- Deprecated `ios_ntp` modules.

#### **cisco.nxos**



- Deprecated `nxos_ntp`, `nxos_ntp_options`, `nxos_ntp_auth` modules.

#### **community.vmware**

- `vmware_guest_vnc` - Sphere 7.0 removed the built-in VNC server (<https://docs.vmware.com/en/VMware-vSphere/7.0/m/vsphere-esxi-vcenter-server-70-release-notes.html#productsupport>).

#### **junipernetworks.junos**

- Deprecated `router_id` from `ospfv2` resource module.

## **Porting Guide for v4.6.0**

### **Major Changes**

#### **containers.podman**

- Add `systemd` generation for pods
- Generate `systemd` service files for containers

#### **gluster.gluster**

- enable `client.ssl`, `server.ssl` before starting the gluster volume (<https://github.com/gluster/gluster-ansible-collection/pull/19>)

### **Deprecated Features**

#### **community.grafana**

- `grafana_dashboard` lookup - Providing a mangled version of the API key is no longer preferred.

## **Porting Guide for v4.5.0**

### **Major Changes**

#### **hetzner.hcloud**

- Introduction of placement groups

#### **ovirt.ovirt**

- `remove_stale_lun` - Add role for removing stale LUN (<https://bugzilla.redhat.com/1966873>).

### **Deprecated Features**

#### **ansible.netcommon**

- `network_cli` - The `paramiko_ssh` setting `look_for_keys` was set automatically based on the values of the `password` and `private_key_file` options passed to `network_cli`. This option can now be set explicitly, and the automatic setting of `look_for_keys` will be removed after 2024-01-01 (<https://github.com/ansible-collections/ansible.netcommon/pull/271>).

#### **cisco.ios**

- Deprecated `ios_bgp` in favor of `ios_bgp_global` and `ios_bgp_address_family`.
- Remove testing with provider for `ansible-test` integration jobs. This helps prepare us to move to `network-ee` integration tests.

#### **junipernetworks.junos**

- Deprecated `router_id` from `ospfv3` resource module.

## **Porting Guide for v4.4.0**

### **Known Issues**

#### **dellemc.openmanage**

- `idrac_user` - Issue(192043) Module may error out with the message `unable to perform the import or export operation because there are pending attribute changes or a configuration job is in progress.` Wait for the job to complete and run the task again.

#### **Deprecated Features**



## Deprecated Features

### cisco.iosxr

- The `iosxr_logging` module has been deprecated in favor of the new `iosxr_logging_global` resource module and will be removed in a release after '2023-08-01'.

### cisco.nxos

- The `nxos_logging` module has been deprecated in favor of the new `nxos_logging_global` resource module and will be removed in a release after '2023-08-01'.

### community.docker

- `docker_container` - the new `command_handling`'s default value, `compatibility`, is deprecated and will change to `correct` in `community.docker` 3.0.0. A deprecation warning is emitted by the module in cases where the behavior will change. Please note that `ansible-core` will output a deprecation warning only once, so if it is shown for an earlier task, there could be more tasks with this warning where it is not shown (<https://github.com/ansible-collections/community.docker/pull/186>).

### junipernetworks.junos

- The `junos_logging` module has been deprecated in favor of the new `junos_logging_global` resource module and will be removed in a release after '2023-08-01'.

### vyos.vyos

- The `vyos_logging` module has been deprecated in favor of the new `vyos_logging_global` resource module and will be removed in a release after '2023-08-01'.

## Porting Guide for v4.3.0

### Major Changes

#### netapp.cloudmanager

- Adding stage environment to all modules in `cloudmanager`

## Deprecated Features

### community.hashi\_vault

- `hashi_vault` collection - support for Python 3.5 will be dropped in version 2.0.0 of `community.hashi_vault` ([https://github.com/ansible-collections/community.hashi\\_vault/issues/81](https://github.com/ansible-collections/community.hashi_vault/issues/81)).

## Porting Guide for v4.2.0

### Known Issues

#### dellemc.openmanage

- `idrac_user` - Issue(192043) Module may error out with the message `unable to perform the import or export operation because there are pending attribute changes or a configuration job is in progress`. Wait for the job to complete and run the task again.
- `ome_smart_fabric_uplink` - Issue(186024) `ome_smart_fabric_uplink` module does not allow the creation of multiple uplinks of the same name even though this is supported by OpenManage Enterprise Modular. If an uplink is created using the same name as an existing uplink, the existing uplink is modified.

### Major Changes

#### community.vmware

- `vmware_object_custom_attributes_info` - added a new module to gather custom attributes of an object (<https://github.com/ansible-collections/community.vmware/pull/851>).

#### dellemc.openmanage

- `idrac_server_config_profile` - Added support for exporting and importing Server Configuration Profile through HTTP/HTTPS share.
- `ome_device_group` - Added support for adding devices to a group using the IP addresses of the devices and group ID.

#### **fortinet.fortios**

- New module `fortios_monitor_fact`.
- Support Fortios 7.0.
- Support Log APIs.

### **Deprecated Features**

- The `community.kubernetes` collection is being renamed to `kubernetes.core`. In Ansible 5, `community.kubernetes` will be replaced by an empty collection which has deprecated redirects for all the current content to `kubernetes.core`. If you are using FQCNs starting with `community.kubernetes.`, please update them to `kubernetes.core.` now. Note that `kubernetes.core` has been included in Ansible since Ansible 3.0.0 (<https://github.com/ansible-community/community-topics/issues/22>).

#### **ansible.windows**

- `win_updates` - Deprecated the `filtered_reason` return value for each filtered up in favour of `filtered_reasons`. This has been done to show all the reasons why an update was filtered and not just the first reason.
- `win_updates` - Deprecated the `use_scheduled_task` option as it is no longer used.
- `win_updates` - Deprecated the `whitelist` and `blacklist` options in favour of `accept_list` and `reject_list` respectively to conform to the new standards used in Ansible for these types of options.

#### **community.general**

- `ali_instance_info` - marked removal version of deprecated parameters `availability_zone` and `instance_names` (<https://github.com/ansible-collections/community.general/issues/2429>).
- `serverless` - deprecating parameter `functions` because it was not used in the code (<https://github.com/ansible-collections/community.general/pull/2845>).

#### **community.hashi\_vault**

- `hashi_vault` collection - support for Python 2 will be dropped in version 2.0.0 of `community.hashi_vault` ([https://github.com/ansible-collections/community.hashi\\_vault/issues/81](https://github.com/ansible-collections/community.hashi_vault/issues/81)).

## **Porting Guide for v4.1.0**

### **Known Issues**

#### **dellemc.openmanage**

- `idrac_user` - Issue(192043) Module may error out with the message `unable to perform the import or export operation because there are pending attribute changes or a configuration job is in progress`. Wait for the job to complete and run the task again.
- `ome_smart_fabric_uplink` - Issue(186024) `ome_smart_fabric_uplink` module does not allow the creation of multiple uplinks of the same name even though this is supported by OpenManage Enterprise Modular. If an uplink is created using the same name as an existing uplink, the existing uplink is modified.

### **Major Changes**

#### **cloudscale\_ch.cloud**

- Add `custom_image` module

#### **community.postgresql**

- `postgresql_query` - the default value of the `as_single_query` option will be changed to `yes` in `community.postgresql` 2.0.0 (<https://github.com/ansible-collections/community.postgresql/issues/85>).

#### **dellemc.openmanage**

- `ome_firmware_baseline` - Module supports check mode, and allows the modification and deletion of firmware baselines.
- `ome_firmware_catalog` - Module supports check mode, and allows the modification and deletion of firmware catalogs.

#### **fortinet.fortios**

- Improve `fortios_configuration_fact` to use multiple selectors concurrently.
- Support `check_mode` in all configuration API-based modules.
- Support filtering for fact gathering modules `fortios_configuration_fact` and `fortios_monitor_fact`.
- Support moving policy in `firewall_central_snat_map`.
- Unify schemas for monitor API.

## netbox.netbox

- packages is now a required Python package and gets installed via Ansible 2.10+.

## Removed Features

### ansible.windows

- win\_reboot - Removed `shutdown_timeout` and `shutdown_timeout_sec` which has not done anything since Ansible 2.5.

## Deprecated Features

### ansible.windows

- win\_reboot - Unreachable hosts can be ignored with `ignore_errors: True`, this ability will be removed in a future version. Use `ignore_unreachable: True` to ignore unreachable hosts instead. - <https://github.com/ansible-collections/ansible.windows/issues/62>

### community.docker

- `docker_*` modules and plugins, except `docker_swarm` connection plugin and `docker_compose` and `docker_stack*` modules - the current default `localhost` for `tls_hostname` is deprecated. In `community.docker 2.0.0` it will be computed from `docker_host` instead (<https://github.com/ansible-collections/community.docker/pull/134>).

### community.general

- All inventory and vault scripts will be removed from `community.general` in version 4.0.0. If you are referencing them, please update your references to the new [contrib-scripts GitHub repository](https://github.com/ansible-collections/community.general/pull/2697) so your workflow will not break once `community.general 4.0.0` is released (<https://github.com/ansible-collections/community.general/pull/2697>).
- The `nios`, `nios_next_ip`, `nios_next_network` lookup plugins, the `nios` documentation fragment, and the `nios_host_record`, `nios_ptr_record`, `nios_mx_record`, `nios_fixed_address`, `nios_zone`, `nios_member`, `nios_a_record`, `nios_aaaa_record`, `nios_network`, `nios_dns_view`, `nios_txt_record`, `nios_naptr_record`, `nios_srv_record`, `nios_cname_record`, `nios_nsgroup`, and `nios_network_view` module have been deprecated and will be removed from `community.general 5.0.0`. Please install the [infoblox.nios\\_modules](https://github.com/ansible-collections/community.general/pull/2458) collection instead and use its plugins and modules (<https://github.com/ansible-collections/community.general/pull/2458>).
- The vendored copy of `ipaddress` will be removed in `community.general 4.0.0`. Please switch to `ipaddress` from the Python 3 standard library, or `from pypi`, if your code relies on the vendored version of `ipaddress` (<https://github.com/ansible-collections/community.general/pull/2459>).
- `linode` - parameter `backupsenabled` is deprecated and will be removed in `community.general 5.0.0` (<https://github.com/ansible-collections/community.general/pull/2410>).
- `kxd` inventory plugin - the plugin will require `ipaddress` installed when used with Python 2 from `community.general 4.0.0` on. `ipaddress` is part of the Python 3 standard library, but can be installed for Python 2 from `pypi` (<https://github.com/ansible-collections/community.general/pull/2459>).
- `scaleway_security_group_rule` - the module will require `ipaddress` installed when used with Python 2 from `community.general 4.0.0` on. `ipaddress` is part of the Python 3 standard library, but can be installed for Python 2 from `pypi` (<https://github.com/ansible-collections/community.general/pull/2459>).

### inspur.sm

- `add_ad_group` - This feature will be removed in `inspur.sm.add_ad_group 3.0.0`. replaced with `inspur.sm.ad_group`.
- `add_ldap_group` - This feature will be removed in `inspur.sm.add_ldap_group 3.0.0`. replaced with `inspur.sm.ldap_group`.
- `add_user` - This feature will be removed in `inspur.sm.add_user 3.0.0`. replaced with `inspur.sm.user`.
- `add_user_group` - This feature will be removed in `inspur.sm.add_user_group 3.0.0`. replaced with `inspur.sm.user_group`.
- `del_ad_group` - This feature will be removed in `inspur.sm.del_ad_group 3.0.0`. replaced with `inspur.sm.ad_group`.
- `del_ldap_group` - This feature will be removed in `inspur.sm.del_ldap_group 3.0.0`. replaced with `inspur.sm.ldap_group`.
- `del_user` - This feature will be removed in `inspur.sm.del_user 3.0.0`. replaced with `inspur.sm.user`.
- `del_user_group` - This feature will be removed in `inspur.sm.del_user_group 3.0.0`. replaced with `inspur.sm.user_group`.
- `edit_ad_group` - This feature will be removed in `inspur.sm.edit_ad_group 3.0.0`. replaced with `inspur.sm.ad_group`.
- `edit_ldap_group` - This feature will be removed in `inspur.sm.edit_ldap_group 3.0.0`. replaced with `inspur.sm.ldap_group`.
- `edit_user` - This feature will be removed in `inspur.sm.edit_user 3.0.0`. replaced with `inspur.sm.user`.
- `edit_user_group` - This feature will be removed in `inspur.sm.edit_user_group 3.0.0`. replaced with `inspur.sm.user_group`.

## Porting Guide for v4.0.0

## Known Issues

### Ansible-core

- `ansible-test` - The `pylint` sanity test no longer correctly detects "bad" variable names for non-constants. See <https://github.com/PyCQA/pylint/issues/3701> for additional details.

#### **dellemc.openmanage**

- `idrac_user` - Issue(192043) Module may error out with the message `unable to perform the import or export operation because there are pending attribute changes or a configuration job is in progress. Wait for the job to complete and run the task again.`
- `ome_configuration_compliance_info` - Issue(195592) Module may error out with the message `unable to process the request because an error occurred. If the issue persists, report it to the system administrator.`
- `ome_smart_fabric` - Issue(185322) Only three design types are supported by OpenManage Enterprise Modular but the module successfully creates a fabric when the design type is not supported.
- `ome_smart_fabric_uplink` - Issue(186024) `ome_smart_fabric_uplink` module does not allow the creation of multiple uplinks of the same name even though this is supported by OpenManage Enterprise Modular. If an uplink is created using the same name as an existing uplink, the existing uplink is modified.

#### **fortinet.fortios**

- Modules for monitor API are not versioned yet.

### **Breaking Changes**

#### **Ansible-core**

- Made SCM collections be reinstalled regardless of `--force` being present.
- NetBSD virtualization facts (specifically `ansible_virtualization_type`) now returns a more accurate value by checking the value of the `machdep.hypervisor sysctl` key. This change is breaking because in some cases previously, we would erroneously report `xen` even when the target is not running on Xen. This prevents that behavior in most cases. (<https://github.com/ansible/ansible/issues/69352>)
- Replaced the in-tree dependency resolver with an external implementation that `pip >= 20.3` uses now by default `resolvelib`. (<https://github.com/ansible/ansible/issues/71784>)
- The `meta` module now supports tags for user-defined tasks. Internal `meta` tasks continue to always run. (<https://github.com/ansible/ansible/issues/64558>)
- `ansible-galaxy login` command has been removed (see <https://github.com/ansible/ansible/issues/71560>)

#### **ansible.netcommon**

- Removed vendored `ipaddress` package from collection. If you use `ansible_collections.ansible.netcommon.plugins.module_utils.compat.ipaddress` in your collection, you will need to change this to import `ipaddress` instead. If your content using `ipaddress` supports Python 2.7, you will additionally need to make sure that the user has the `ipaddress` package installed. Please refer to [https://docs.ansible.com/ansible/latest/dev\\_guide/developing\\_modules\\_best\\_practices.html#importing-and-using-shared-code](https://docs.ansible.com/ansible/latest/dev_guide/developing_modules_best_practices.html#importing-and-using-shared-code) to see how to safely import external packages that may be missing from the user's system A backport of `ipaddress` for Python 2.7 is available at <https://pypi.org/project/ipaddress/>

#### **community.docker**

- `docker_swarm` - if `join_token` is specified, a returned join token with the same value will be replaced by `VALUE_SPECIFIED_IN_NO_LOG_PARAMETER`. Make sure that you do not blindly use the join tokens from the return value of this module when the module is invoked with `join_token` specified! This breaking change appears in a minor release since it is necessary to fix a security issue (<https://github.com/ansible-collections/community.docker/pull/103>).

#### **community.general**

- If you use Ansible 2.9 and these plugins or modules from this collection, `community.general 3.0.0` results in errors when trying to use the DellEMC content by FQCN, like `community.general.idrac_firmware`. Since Ansible 2.9 is not able to use redirections, you will have to adjust your playbooks and roles manually to use the new FQCNs (`dellemc.openmanage.idrac_firmware` for the previous example) and to make sure that you have `dellemc.openmanage` installed.

If you use `ansible-base 2.10` or newer and did not install Ansible 4.0.0, but installed (and/or upgraded) `community.general` manually, you need to make sure to also install the `dellemc.openmanage` collection if you are using any of these plugins or modules. While `ansible-base 2.10` or newer can use the redirects that `community.general 3.0.0` adds, the collection they point to (such as `dellemc.openmanage`) must be installed for them to work.

- `gitlab_deploy_key` - if for an already existing key title a different public key was given as parameter nothing happened, now this changed so that the public key is updated to the new value (<https://github.com/ansible-collections/community.general/pull/1661>).
- `java_keystore` - instead of failing, now overwrites keystore if the alias (name) is changed. This was originally the intended

behavior, but did not work due to a logic error. Make sure that your playbooks and roles do not depend on the old behavior of failing instead of overwriting (<https://github.com/ansible-collections/community.general/issues/1671>).

- `java_keystore` - instead of failing, now overwrites keystore if the passphrase is changed. Make sure that your playbooks and roles do not depend on the old behavior of failing instead of overwriting (<https://github.com/ansible-collections/community.general/issues/1671>).
- `one_image` - use `pyone` instead of `python-oca` (<https://github.com/ansible-collections/community.general/pull/2032>).
- `utm_proxy_auth_profile` - the `frontend_cookie_secret` return value now contains a placeholder string instead of the module's `frontend_cookie_secret` parameter (<https://github.com/ansible-collections/community.general/pull/1736>).

#### **fortinet.fortios**

- Generic FortiOS Module - FOS module to issue generic request with Ansible.
- Support for FOS Monitor API - several modules are new for monitor API.
- Unified Collection - The fortios collection itself will be adapting any FOS platforms.

#### **servicenow.servicenow**

- `auth` field now required for anything other than Basic authentication

#### **theforeman.foreman**

- All role variables are now prefixed with `foreman_` to avoid clashes with similarly named variables from roles outside this collection.

## **Major Changes**

### **Ansible-core**

- A collection can be reinstalled with new version requirements without using the `--force` flag. The collection's dependencies will also be updated if necessary with the new requirements. Use `--upgrade` to force transitive dependency updates.
- `AnsibleModule` - use `ArgumentSpecValidator` class for validating argument spec and remove private methods related to argument spec validation. Any modules using private methods should now use the `ArgumentSpecValidator` class or the appropriate validation function.
- Declared `resolvelib >= 0.5.3, < 0.6.0` a direct dependency of `ansible-core`. Refs: - <https://github.com/sarugaku/resolvelib> - <https://pypi.org/p/resolvelib> - <https://pradyunsg.me/blog/2020/03/27/pip-resolver-testing>
- It became possible to install Ansible Collections from local folders and namespaces folder similar to SCM structure with multiple collections.
- It became possible to upgrade Ansible collections from Galaxy servers using the `--upgrade` option with `ansible-galaxy collection install`.
- Support for role argument specification validation at role execution time. When a role contains an argument spec, an implicit validation task is inserted at the start of role execution.
- add `ArgumentSpecValidator` class for validating parameters against an argument spec outside of `AnsibleModule` (<https://github.com/ansible/ansible/pull/73335>)
- `ansible-test` - Tests run with the `centos6` and `default` test containers now use a PyPI proxy container to access PyPI when Python 2.6 is used. This allows tests running under Python 2.6 to continue functioning even though PyPI is discontinuing support for non-SNI capable clients.

### **ansible.netcommon**

- Remove deprecated connection arguments from `netconf_config`

### **arista.eos**

- Requires `ansible.netcommon v2.0.0+` to support `ansible_network_single_user_mode` and `ansible_network_import_modules` - Please refer to `ansible.netcommon` [changelog](#) for more details.

### **cisco.asa**

- Please refer to `ansible.netcommon` [changelog <https://github.com/ansible-collections/ansible.netcommon/blob/main/changelogs/CHANGELOG.rst#ansible-netcommon-collection-release-notes>](https://github.com/ansible-collections/ansible.netcommon/blob/main/changelogs/CHANGELOG.rst#ansible-netcommon-collection-release-notes) for more details.
- Requires `ansible.netcommon v2.0.0+` to support `ansible_network_single_user_mode` and `ansible_network_import_modules`.

### **cisco.ios**

- Please refer to `ansible.netcommon` [changelog](#) for more details.

- Requires ansible.netcommon v2.0.0+ to support *ansible\_network\_single\_user\_mode* and *ansible\_network\_import\_modules*.

#### cisco.iosxr

- Please refer to ansible.netcommon [changelog](#) for more details.
- Requires ansible.netcommon v2.0.0+ to support *ansible\_network\_single\_user\_mode* and *ansible\_network\_import\_modules*.
- ipaddress is no longer in ansible.netcommon. For Python versions without ipaddress (< 3.0), the ipaddress package is now required.

#### cisco.nxos

- Please refer to ansible.netcommon [changelog](#) for more details.
- Requires ansible.netcommon v2.0.0+ to support *ansible\_network\_single\_user\_mode* and *ansible\_network\_import\_modules*.

#### community.grafana

- introduce "skip\_version\_check" parameter in grafana\_teams and grafana\_folder modules (#147)

#### community.mysql

- mysql\_replication - add deprecation warning that the Is\_Slave and Is\_Master return values will be replaced with Is\_Primary and Is\_Replica in community.mysql 3.0.0 (<https://github.com/ansible-collections/community.mysql/pull/147>).
- mysql\_replication - the choices of the state option containing master will be finally replaced with the alternative primary choices in community.mysql 3.0.0, add deprecation warnings (<https://github.com/ansible-collections/community.mysql/pull/150>).
- mysql\_replication - the mode options values getslave, startslave, stopslave, resetslave, resetslaveall` and the master\_use\_gtid option ``slave\_pos are deprecated (see the alternative values) and will be removed in community.mysql 3.0.0 (<https://github.com/ansible-collections/community.mysql/pull/97>).
- mysql\_replication - the return value Is\_Slave and Is\_Master will be replaced with Is\_Replica and Is\_Primary in community.mysql 3.0.0 (<https://github.com/ansible-collections/community.mysql/issues/145>).
- mysql\_replication - the word SLAVE in messages returned by the module will be changed to REPLICA in community.mysql 2.0.0 (<https://github.com/ansible-collections/community.mysql/issues/98>).
- mysql\_replication - the word master in messages returned by the module will be replaced with primary in community.mysql 3.0.0 (<https://github.com/ansible-collections/community.mysql/issues/145>).
- mysql\_replication - the word slave in messages returned by the module replaced with replica (<https://github.com/ansible-collections/community.mysql/issues/98>).
- mysql\_user - the REQUIRESSL is an alias for the ssl key in the tls\_requires option in community.mysql 2.0.0 and support will be dropped altogether in community.mysql 3.0.0 (<https://github.com/ansible-collections/community.mysql/issues/121>).

#### fortinet.fortios

- New module fortios\_configuration\_fact
- New module fortios\_json\_generic
- New module fortios\_monitor
- New module fortios\_monitor\_fact

#### junipernetworks.junos

- Please refer to ansible.netcommon [changelog](#) for more details.
- Requires ansible.netcommon v2.0.0+ to support *ansible\_network\_single\_user\_mode* and *ansible\_network\_import\_modules*.

#### netapp.ontap

- na\_ontap\_autosupport - Added REST support to the module.

#### openvswitch.openvswitch

- There is no major changes for this particular release and it was tagged by mistake and cannot be reverted.

#### servicenow.servicenow

- refactored client to inherit from AnsibleModule
- supports OpenID Connect authentication protocol
- supports bearer tokens for authentication



## vyos.vyos

- Please refer to [ansible.netcommon changelog](#) for more details.
- Requires `ansible.netcommon v2.0.0+` to support `ansible_network_single_user_mode` and `ansible_network_import_modules`
- `ipaddress` is no longer in `ansible.netcommon`. For Python versions without `ipaddress` (< 3.0), the `ipaddress` package is now required.

## Removed Features

### Ansible-core

- Removed `SharedPluginLoaderObj` class from `ansible.plugins.strategy`. It was deprecated in favor of using the standard plugin loader.
- Removed `_get_item()` alias from callback plugin base class which had been deprecated in favor of `_get_item_label()`.
- The "user" parameter was previously deprecated and is now removed in favor of "scope"
- The deprecated `ansible.constants.BECOME_METHODS` has been removed.
- The deprecated `ansible.constants.get_config()` has been removed.
- The deprecated `ansible.constants.mk_boolean()` has been removed.
- `with_*` loops are no longer optimized for modules whose `name` parameters can take lists (mostly package managers). Use `name` instead of looping over individual names with `with_items` and friends.

### community.general

- The `ome_device_info`, `idrac_firmware` and `idrac_server_config_profile` modules have now been migrated from `community.general` to the [dellemc.openmanage](#) Ansible collection. If you use `ansible-base 2.10` or newer, redirections have been provided.

If you use Ansible 2.9 and installed this collection, you need to adjust the FQCNs (`community.general.idrac_firmware` → `dellemc.openmanage.idrac_firmware`) and make sure to install the `dellemc.openmanage` collection.

- The deprecated `ali_instance_facts` module has been removed. Use `ali_instance_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `gluster_heal_info` module has been removed. Use `gluster.gluster.gluster_heal_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `gluster_peer` module has been removed. Use `gluster.gluster.gluster_peer` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `gluster_volume` module has been removed. Use `gluster.gluster.gluster_volume` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `helm` module has been removed. Use `community.kubernetes.helm` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `hpilo_facts` module has been removed. Use `hpilo_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `idrac_redfish_facts` module has been removed. Use `idrac_redfish_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `jenkins_job_facts` module has been removed. Use `jenkins_job_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ldap_attr` module has been removed. Use `ldap_attrs` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `memset_memstore_facts` module has been removed. Use `memset_memstore_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `memset_server_facts` module has been removed. Use `memset_server_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `na_ontap_gather_facts` module has been removed. Use `netapp.ontap.na_ontap_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `nginx_status_facts` module has been removed. Use `nginx_status_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `one_image_facts` module has been removed. Use `one_image_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `onpassword_facts` module has been removed. Use `onpassword_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `oneview_datacenter_facts` module has been removed. Use `oneview_datacenter_info` instead



(<https://github.com/ansible-collections/community.general/pull/1924>).

- The deprecated `oneview_enclosure_facts` module has been removed. Use `oneview_enclosure_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `oneview_ethernet_network_facts` module has been removed. Use `oneview_ethernet_network_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `oneview_fc_network_facts` module has been removed. Use `oneview_fc_network_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `oneview_fcoe_network_facts` module has been removed. Use `oneview_fcoe_network_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `oneview_logical_interconnect_group_facts` module has been removed. Use `oneview_logical_interconnect_group_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `oneview_network_set_facts` module has been removed. Use `oneview_network_set_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `oneview_san_manager_facts` module has been removed. Use `oneview_san_manager_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `online_server_facts` module has been removed. Use `online_server_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `online_user_facts` module has been removed. Use `online_user_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt` module has been removed. Use `ovirt.ovirt.ovirt_vm` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_affinity_label_facts` module has been removed. Use `ovirt.ovirt.ovirt_affinity_label_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_api_facts` module has been removed. Use `ovirt.ovirt.ovirt_api_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_cluster_facts` module has been removed. Use `ovirt.ovirt.ovirt_cluster_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_datacenter_facts` module has been removed. Use `ovirt.ovirt.ovirt_datacenter_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_disk_facts` module has been removed. Use `ovirt.ovirt.ovirt_disk_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_event_facts` module has been removed. Use `ovirt.ovirt.ovirt_event_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_external_provider_facts` module has been removed. Use `ovirt.ovirt.ovirt_external_provider_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_group_facts` module has been removed. Use `ovirt.ovirt.ovirt_group_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_host_facts` module has been removed. Use `ovirt.ovirt.ovirt_host_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_host_storage_facts` module has been removed. Use `ovirt.ovirt.ovirt_host_storage_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_network_facts` module has been removed. Use `ovirt.ovirt.ovirt_network_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_nic_facts` module has been removed. Use `ovirt.ovirt.ovirt_nic_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_permission_facts` module has been removed. Use `ovirt.ovirt.ovirt_permission_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_quota_facts` module has been removed. Use `ovirt.ovirt.ovirt_quota_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_scheduling_policy_facts` module has been removed. Use `ovirt.ovirt.ovirt_scheduling_policy_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_snapshot_facts` module has been removed. Use `ovirt.ovirt.ovirt_snapshot_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_storage_domain_facts` module has been removed. Use `ovirt.ovirt.ovirt_storage_domain_info` instead

(<https://github.com/ansible-collections/community.general/pull/1924>).

- The deprecated `ovirt_storage_template_facts` module has been removed. Use `ovirt.ovirt.ovirt_storage_template_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_storage_vm_facts` module has been removed. Use `ovirt.ovirt.ovirt_storage_vm_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_tag_facts` module has been removed. Use `ovirt.ovirt.ovirt_tag_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_template_facts` module has been removed. Use `ovirt.ovirt.ovirt_template_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_user_facts` module has been removed. Use `ovirt.ovirt.ovirt_user_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_vm_facts` module has been removed. Use `ovirt.ovirt.ovirt_vm_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `ovirt_vmpool_facts` module has been removed. Use `ovirt.ovirt.ovirt_vmpool_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `purefa_facts` module has been removed. Use `purestorage.flasharray.purefa_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `purefb_facts` module has been removed. Use `purestorage.flasharray.purefb_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `python_requirements_facts` module has been removed. Use `python_requirements_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `redfish_facts` module has been removed. Use `redfish_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `scaleway_image_facts` module has been removed. Use `scaleway_image_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `scaleway_ip_facts` module has been removed. Use `scaleway_ip_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `scaleway_organization_facts` module has been removed. Use `scaleway_organization_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `scaleway_security_group_facts` module has been removed. Use `scaleway_security_group_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `scaleway_server_facts` module has been removed. Use `scaleway_server_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `scaleway_snapshot_facts` module has been removed. Use `scaleway_snapshot_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `scaleway_volume_facts` module has been removed. Use `scaleway_volume_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `smartos_image_facts` module has been removed. Use `smartos_image_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `vertica_facts` module has been removed. Use `vertica_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The deprecated `xenserver_guest_facts` module has been removed. Use `xenserver_guest_info` instead (<https://github.com/ansible-collections/community.general/pull/1924>).
- The `ovirt_facts` docs fragment has been removed (<https://github.com/ansible-collections/community.general/pull/1924>).
- `airbrake_deployment` - removed deprecated `token` parameter. Use `project_id` and `project_key` instead (<https://github.com/ansible-collections/community.general/pull/1926>).
- `bigpanda` - the alias `message` has been removed. Use `deployment_message` instead (<https://github.com/ansible-collections/community.general/pull/1926>).
- `cisco_spark`, `cisco_webex` - the alias `message` has been removed. Use `msg` instead (<https://github.com/ansible-collections/community.general/pull/1926>).
- `clc_aa_policy` - the `wait` parameter has been removed. It did not have any effect (<https://github.com/ansible-collections/community.general/pull/1926>).
- `datadog_monitor` - the alias `message` has been removed. Use `notification_message` instead (<https://github.com/ansible-collections/community.general/pull/1926>).

- `django_manage` - the parameter `liveserver` has been removed (<https://github.com/ansible-collections/community.general/pull/1926>).
- `idrac_redfish_config` - the parameters `manager_attribute_name` and `manager_attribute_value` have been removed. Use `manager_attributes` instead (<https://github.com/ansible-collections/community.general/pull/1926>).
- `iso_extract` - the alias `thirsty` has been removed. Use `force` instead (<https://github.com/ansible-collections/community.general/pull/1926>).
- `ldap_entry` - the `params` parameter is now completely removed. Using it already triggered an error since `community.general` 0.1.2 (<https://github.com/ansible-collections/community.general/pull/2257>).
- `pulp_repo` - the `feed_client_cert` parameter no longer defaults to the value of the `client_cert` parameter (<https://github.com/ansible-collections/community.general/pull/1926>).
- `pulp_repo` - the `feed_client_key` parameter no longer defaults to the value of the `client_key` parameter (<https://github.com/ansible-collections/community.general/pull/1926>).
- `pulp_repo` - the alias `ca_cert` has been removed. Use `feed_ca_cert` instead (<https://github.com/ansible-collections/community.general/pull/1926>).
- `rax` - unused parameter `service` removed (<https://github.com/ansible-collections/community.general/pull/2020>).
- `redfish` modules - issuing a data modification command without specifying the ID of the target System, Chassis or Manager resource when there is more than one is no longer allowed. Use the `resource_id` option to specify the target ID (<https://github.com/ansible-collections/community.general/pull/1926>).
- `redfish_config` - the parameters `bios_attribute_name` and `bios_attribute_value` have been removed. Use `bios_attributes` instead (<https://github.com/ansible-collections/community.general/pull/1926>).
- `syspatch` - the `apply` parameter has been removed. This is the default mode, so simply removing it will not change the behavior (<https://github.com/ansible-collections/community.general/pull/1926>).
- `xbps` - the `force` parameter has been removed. It did not have any effect (<https://github.com/ansible-collections/community.general/pull/1926>).

#### community.network

- The deprecated `community.network.ce_sflow` parameters: `rate_limit`, `rate_limit_slot`, and `forward_enp_slot` have been removed (<https://github.com/ansible-collections/community.network/pull/255>).
- The deprecated `community.network.sros` netconf plugin has been removed. Use `nokia.sros.md` instead (<https://github.com/ansible-collections/community.network/pull/255>).

#### f5networks.f5\_modules

- Removed TMOS v11 support for `bigip_gtm_pool` and `bigip_gtm_wide_ip` modules
- Removed `quorum` and `monitor_type` parameters in `bigip_node` module. See porting guides section at <https://clouddocs.f5.com/products/orchestration/ansible/devel/usage/porting-guides.html>
- Removed `syslog_settings` and `pool_settings` parameters in `bigip_log_destination` module. See porting guides section at <https://clouddocs.f5.com/products/orchestration/ansible/devel/usage/porting-guides.html>

#### fortinet.fortios

- Removed module `fortios_facts`
- Removed module `fortios_registration_forticare`
- Removed module `fortios_registration_vdom`
- Removed module `fortios_system_config_backup_restore`
- Removed module `fortios_system_vmlicense`

## Deprecated Features

#### Ansible-core

- Starting in 2.14, `shell` and `command` modules will no longer have the option to warn and suggest modules in lieu of commands. The `warn` parameter to these modules is now deprecated and defaults to `False`. Similarly, the `COMMAND_WARNINGS` configuration option is also deprecated and defaults to `False`. These will be removed and their presence will become an error in 2.14.
- `apt_key` - the parameter `key` does not have any effect, has been deprecated and will be removed in `ansible-core` version 2.14 (<https://github.com/ansible/ansible/pull/70319>).
- `psrp` - Set the minimum version of `pypsrp` to 0.4.0.

#### ansible.netcommon

- Deprecate `cli_parse` module and `textfsm`, `ttp`, `xml`, `json` parser plugins as they are moved to `ansible.utils` collection

#### cisco.nxos

- Deprecated `nxos_bgp_af` in favour of `nxos_bgp_address_family` resource module.
- Deprecated `nxos_bgp_neighbor_af` in favour of `nxos_bgp_neighbor_address_family` resource module.

#### cloudscale\_ch.cloud

- The aliases `server_uuids` and `server_uuid` of the `servers` parameter in the `volume` module will be removed in version 3.0.0.

#### community.aws

- `ec2_eip` - formally deprecate the `instance_id` alias for `device_id` (<https://github.com/ansible-collections/community.aws/pull/349>).
- `ec2_vpc_endpoint` - deprecate the `policy_file` option and recommend using `policy` with a lookup (<https://github.com/ansible-collections/community.aws/pull/366>).
- `ec2_vpc_endpoint_info` - the `query` option has been deprecated and will be removed after 2022-12-01 (<https://github.com/ansible-collections/community.aws/pull/346>). The `ec2_vpc_endpoint_info` now defaults to listing information about endpoints. The ability to search for information about available services has been moved to the dedicated module `ec2_vpc_endpoint_service_info`.

#### community.crypto

- `acme_module_utils` - the `acme_module_utils` (`ansible_collections.community.crypto.plugins.module_utils.acme`) is deprecated and will be removed in `community.crypto` 2.0.0. Use the new Python modules in the `acme` package instead (`ansible_collections.community.crypto.plugins.module_utils.acme.xxx`) (<https://github.com/ansible-collections/community.crypto/pull/184>).
- `acme_account_info` - when `retrieve_orders=url_list`, `orders` will no longer be returned in `community.crypto` 2.0.0. Use `order_uris` instead (<https://github.com/ansible-collections/community.crypto/pull/178>).

#### community.general

- `apt_rpm` - deprecated invalid parameter alias `update-cache`, will be removed in 5.0.0 (<https://github.com/ansible-collections/community.general/pull/1927>).
- `composer` - deprecated invalid parameter aliases `working-dir`, `global-command`, `prefer-source`, `prefer-dist`, `no-dev`, `no-scripts`, `no-plugins`, `optimize-autoloader`, `classmap-authoritative`, `apcu-autoloader`, `ignore-platform-reqs`, will be removed in 5.0.0 (<https://github.com/ansible-collections/community.general/pull/1927>).
- `cpanm` - parameter `system_lib` deprecated in favor of using `become` (<https://github.com/ansible-collections/community.general/pull/2218>).
- `github_deploy_key` - deprecated invalid parameter alias `2fa_token`, will be removed in 5.0.0 (<https://github.com/ansible-collections/community.general/pull/1927>).
- `grove` - the option `message` will be removed in `community.general` 4.0.0. Use the new option `message_content` instead (<https://github.com/ansible-collections/community.general/pull/1929>).
- `homebrew` - deprecated invalid parameter alias `update-brew`, will be removed in 5.0.0 (<https://github.com/ansible-collections/community.general/pull/1927>).
- `homebrew_cask` - deprecated invalid parameter alias `update-brew`, will be removed in 5.0.0 (<https://github.com/ansible-collections/community.general/pull/1927>).
- `opkg` - deprecated invalid parameter alias `update-cache`, will be removed in 5.0.0 (<https://github.com/ansible-collections/community.general/pull/1927>).
- `pacman` - deprecated invalid parameter alias `update-cache`, will be removed in 5.0.0 (<https://github.com/ansible-collections/community.general/pull/1927>).
- `puppet` - deprecated undocumented parameter `show_diff`, will be removed in 7.0.0. (<https://github.com/ansible-collections/community.general/pull/1927>).
- `runit` - unused parameter `dist` marked for deprecation (<https://github.com/ansible-collections/community.general/pull/1830>).
- `slackpkg` - deprecated invalid parameter alias `update-cache`, will be removed in 5.0.0 (<https://github.com/ansible-collections/community.general/pull/1927>).
- `urpmi` - deprecated invalid parameter aliases `update-cache` and `no-recommends`, will be removed in 5.0.0 (<https://github.com/ansible-collections/community.general/pull/1927>).
- `xbps` - deprecated invalid parameter alias `update-cache`, will be removed in 5.0.0 (<https://github.com/ansible-collections/community.general/pull/1927>).
- `xfconf` - returning output as facts is deprecated, this will be removed in `community.general` 4.0.0. Please register the task output in a variable and use it instead. You can already switch to the new behavior now by using the new `disable_facts` option (<https://github.com/ansible-collections/community.general/pull/1747>).

#### community.vmware

- `vmware_vmkernel_ip_config` - deprecate in favor of `vmware_vmkernel` (<https://github.com/ansible-collections/community.vmware/pull/667>).

#### **f5networks.f5\_modules**

- Support for Python versions earlier than 3.5 is being deprecated