

Ansible 5 Porting Guide

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Ansible 5 is based on Ansible-core 2.12.

We suggest you read this page along with the [Ansible 5 Changelog](#) to understand what updates you may need to make.

Playbook

- When calling tasks and setting `async`, setting `ANSIBLE_ASYNC_DIR` under `environment:` is no longer valid. Instead, use the shell configuration variable `async_dir`, for example by setting `ansible_async_dir`:

```
tasks:
- dnf:
    name: '*'
    state: latest
    async: 300
    poll: 5
    vars:
        ansible_async_dir: /path/to/my/custom/dir
```

- The `undef()` function is added to the templating environment for creating undefined variables directly in a template. Optionally, a hint may be provided for variables which are intended to be overridden.

```
vars:
    old: "{{ undef }}"
```

```
new: "{{ undef() }}"
new_with_hint: "{{ undef(hint='You must override this variable') }}"
```

Python Interpreter Discovery

The default value of `INTERPRETER_PYTHON_FALLBACK` changed to `auto`. The list of Python interpreters in `INTERPRETER_PYTHON_FALLBACK` changed to prefer Python 3 over Python 2. The combination of these two changes means the new default behavior is to quietly prefer Python 3 over Python 2 on remote hosts. Previously a deprecation warning was issued in situations where interpreter discovery would have used Python 3 but the interpreter was set to `/usr/bin/python`.

`INTERPRETER_PYTHON_FALLBACK` can be changed from the default list of interpreters by setting the `ansible_interpreter_python_fallback` variable.

See [ref: interpreter discovery documentation <interpreter_discovery>](#) for more details.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\ansible-devel\docs\docsite\rst\porting_guides\[ansible-devel][docs][docsite][rst][porting_guides]porting_guide_5.rst, line 53); [backlink](#)

Unknown interpreted text role "ref".

Command Line

- Python 3.8 on the controller node is a hard requirement for this release. The command line scripts will not function with a lower Python version.
- `ansible-vault` no longer supports `PyCrypto` and requires `cryptography`.

Deprecated

- Python 2.6 on the target node is deprecated in this release. `ansible-core 2.13` will remove support for Python 2.6.
- Bare variables in conditionals: when conditionals no longer automatically parse string booleans such as `"true"` and `"false"` into actual booleans. Any variable containing a non-empty string is considered true. This was previously configurable with the `CONDITIONAL_BARE_VARS` configuration option (and the `ANSIBLE_CONDITIONAL_BARE_VARS` environment variable). This setting no longer has any effect. Users can work around the issue by using the `|bool` filter:

```
vars:
  teardown: 'false'

tasks:
  - include_tasks: teardown.yml
    when: teardown | bool

  - include_tasks: provision.yml
    when: not teardown | bool
```

- The `_remote_checksum()` method in `ActionBase` is deprecated. Any action plugin using this method should use `_execute_remote_stat()` instead.

Modules

- `cron` now requires `name` to be specified in all cases.
- `cron` no longer allows a `reboot` parameter. Use `special_time: reboot` instead.
- `hostname` - On FreeBSD, the `before` result will no longer be `"temporarystub"` if permanent `hostname` file does not exist. It will instead be `""` (empty string) for consistency with other systems.
- `hostname` - On OpenRC and Solaris based systems, the `before` result will no longer be `"UNKNOWN"` if the permanent `hostname` file does not exist. It will instead be `""` (empty string) for consistency with other systems.
- `pip` now uses the `pip` Python module installed for the Ansible module's Python interpreter, if available, unless `executable` or `virtualenv` were specified.

Modules removed

The following modules no longer exist:

- No notable changes

Deprecation notices

No notable changes

Noteworthy module changes

No notable changes

Plugins

- `unique` filter with Jinja2 < 2.10 is case-sensitive and now raise coherently an error if `case_sensitive=False` instead of when `case_sensitive=True`.
- Set theory filters (`intersect`, `difference`, `symmetric_difference` and `union`) are now case-sensitive. Explicitly use `case_sensitive=False` to keep previous behavior. Note: with Jinja2 < 2.10, the filters were already case-sensitive by default.
- `password_hash`` now uses `passlib` defaults when an option is unspecified, e.g. `bcrypt_sha256` now default to the "2b" format and if the "2a" format is required it must be specified.

Porting custom scripts

No notable changes

Networking

No notable changes

Porting Guide for v5.6.0

Added Collections

- `community.sap` (version 1.0.0)

Deprecated Features

`cisco.ios`

- Deprecates `lldp` module.

Porting Guide for v5.5.0

Known Issues

`community.general`

- `pacman` - `update_cache` cannot differentiate between up to date and outdated package lists and will report `changed` in both situations (<https://github.com/ansible-collections/community.general/pull/4318>).
- `pacman` - binaries specified in the `executable` parameter must support `--print-format` in order to be used by this module. In particular, AUR helper `yay` is known not to currently support it (<https://github.com/ansible-collections/community.general/pull/4312>).

Deprecated Features

`community.general`

- `pacman` - from `community.general` 5.0.0 on, the `changed` status of `update_cache` will no longer be ignored if `name` or `upgrade` is specified. To keep the old behavior, add something like `register: result` and `changed_when: result.packages | length > 0` to your task (<https://github.com/ansible-collections/community.general/pull/4329>).

Porting Guide for v5.4.0

Major Changes

`chocolatey.chocolatey`

- `win_chocolatey` - Added `choco_args` option to pass additional arguments directly to Chocolatey.

`vyos.vyos`

- Add `'pool'` as value to `server` key in `ntp_global`.

Deprecated Features

cisco.ios

- `ios_acls` - Deprecated fragment attribute added boolean alternate as `enable_fragment`.

Porting Guide for v5.3.0

Major Changes

f5networks.f5_modules

- `bigip_device_info` - pagination logic has also been added to help with api stability.
- `bigip_device_info` - the module no longer gathers information from all partitions on device. This change will stabilize the module by gathering resources only from the given partition and prevent the module from gathering way too much information that might result in crashing.

Deprecated Features

community.general

- mail callback plugin - not specifying `sender` is deprecated and will be disallowed in `community.general` 6.0.0 (<https://github.com/ansible-collections/community.general/pull/4140>).

Porting Guide for v5.2.0

Known Issues

dellemc.openmanage

- `idrac_user` - Issue(192043) The 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_application_alerts_smtp` - Issue(212310) - The module does not provide a proper error message if the `destination_address` is more than 255 characters.
- `ome_application_alerts_syslog` - Issue(215374) - The module does not provide a proper error message if the `destination_address` is more than 255 characters.
- `ome_device_local_access_configuration` - Issue(215035) - The module reports `Successfully updated the local access setting` if an unsupported value is provided for the parameter `timeout_limit`. However, this value is not actually applied on OpenManage Enterprise Modular.
- `ome_device_local_access_configuration` - Issue(217865) - The module does not display a proper error message if an unsupported value is provided for the `user_defined` and `lcd_language` parameters.
- `ome_device_network_services` - Issue(212681) - The module does not provide a proper error message if unsupported values are provided for the parameters- `port_number`, `community_name`, `max_sessions`, `max_auth_retries`, and `idle_timeout`.
- `ome_device_power_settings` - Issue(212679) - The module errors out with the following message if the value provided for the parameter `power_cap` is not within the supported range of 0 to 32767, `Unable to complete the request because PowerCap does not exist or is not applicable for the resource URI.`
- `ome_smart_fabric_uplink` - Issue(186024) - The module does not allow the creation of multiple uplinks of the same name even though it is supported by OpenManage Enterprise Modular. If an uplink is created using the same name as an existing uplink, the existing uplink is modified.

purestorage.flasharray

- `purefa_admin` - Once `max_login` and `lockout` have been set there is currently no way to reset these to zero except through the FlashArray GUI

Major Changes

cisco.meraki

- `meraki_mr_radio` - New module

Deprecated Features

purestorage.flasharray

- `purefa_sso` - Deprecated in favor of `M(purefa_admin)`. Will be removed in Collection 2.0

Porting Guide for v5.1.0

Known Issues

dellemc.openmanage

- `idrac_user` - Issue(192043) The 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_application_alerts_smtp` - Issue(212310) - The module does not provide a proper error message if the `destination_address` is more than 255 characters.
- `ome_application_alerts_syslog` - Issue(215374) - The module does not provide a proper error message if the `destination_address` is more than 255 characters.
- `ome_device_network_services` - Issue(212681) - The module does not provide a proper error message if unsupported values are provided for the parameters- `port_number`, `community_name`, `max_sessions`, `max_auth_retries`, and `idle_timeout`.
- `ome_device_power_settings` - Issue(212679) - The module errors out with the following message if the value provided for the parameter `power_cap` is not within the supported range of 0 to 32767, `Unable to complete the request because PowerCap does not exist or is not applicable for the resource URI.`
- `ome_smart_fabric_uplink` - Issue(186024) - The module does not allow the creation of multiple uplinks of the same name even though it 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

containers.podman

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

Removed Features

community.hashi_vault

- the "legacy" integration test setup has been removed; this does not affect end users and is only relevant to contributors (https://github.com/ansible-collections/community.hashi_vault/pull/191).

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.

community.general

- `module_helper` module utils - deprecated the attribute `ModuleHelper.VarDict` (<https://github.com/ansible-collections/community.general/pull/3801>).

community.hashi_vault

- Support for Ansible 2.9 and ansible-base 2.10 is deprecated, and will be removed in the next major release (community.hashi_vault 3.0.0) next spring (<https://github.com/ansible-community/community-topics/issues/50>, https://github.com/ansible-collections/community.hashi_vault/issues/189).
- `aws_iam_login` auth method - the `aws_iam_login` method has been renamed to `aws_iam`. The old name will be removed in collection version 3.0.0. Until then both names will work, and a warning will be displayed when using the old name (https://github.com/ansible-collections/community.hashi_vault/pull/193).

junipernetworks.junos

- 'router_id' options is deprecated from `junos_ospf_interfaces`, `junos_ospfv2` and `junos_ospfv3` resource module.

Porting Guide for v5.0.1

Major Changes

- Raised python requirement of the ansible package from `>=2.7` to `>=3.8` to match ansible-core

Porting Guide for v5.0.0

Added Collections

- cisco.ise (version 1.2.1)
- cloud.common (version 2.1.0)
- community.ciscosmb (version 1.0.4)
- community.dns (version 2.0.3)
- infoblox.nios_modules (version 1.1.2)
- netapp.storagegrid (version 21.7.0)

Known Issues

Ansible-core

- ansible-test - Tab completion anywhere other than the end of the command with the new composite options will provide incorrect results. See <https://github.com/kislyuk/argcomplete/issues/351> 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_device_power_settings - Issue(212679) The ome_device_power_settings module errors out with the following message if the value provided for the parameter power_cap is not within the supported range of 0 to 32767, Unable to complete the request because PowerCap does not exist or is not applicable for the resource URI.
- 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 it is supported by OpenManage Enterprise Modular. If an uplink is created using the same name as an existing uplink, the existing uplink is modified.
- 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.

purestorage.flashblade

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

Breaking Changes

Ansible-core

- Action, module, and group names in module_defaults must be static values. Their values can still be templates.
- Fully qualified 'ansible.legacy' plugin names are not included implicitly in action_groups.
- Unresolvable groups, action plugins, and modules in module_defaults are an error.
- ansible-test - Automatic installation of requirements for "cloud" test plugins no longer occurs. The affected test plugins are aws, azure, cs, hcloud, nios, opennebula, openshift and vcenter. Collections should instead use one of the supported integration test requirements files, such as the tests/integration/requirements.txt file.
- ansible-test - The HTTP Tester is no longer available with the ansible-test shell command. Only the integration and windows-integration commands provide HTTP Tester.
- ansible-test - The --disable-httptester option is no longer available. The HTTP Tester is no longer optional for tests that specify it.
- ansible-test - The --httptester option is no longer available. To override the container used for HTTP Tester tests, set the ANSIBLE_HTTP_TEST_CONTAINER environment variable instead.
- ansible-test - Unit tests for modules and module_utils are now limited to importing only ansible.module_utils from the ansible module.
- conditionals - when conditionals no longer automatically parse string booleans such as "true" and "false" into actual booleans. Any non-empty string is now considered true. The CONDITIONAL_BARE_VARS configuration variable no longer has any effect.
- hostname - Drops any remaining support for Python 2.4 by using with open() to simplify exception handling code which leaked file handles in several spots
- hostname - On FreeBSD, the string temporarystub no longer gets written to the hostname file in the get methods (and in check_mode). As a result, the default hostname will now appear as '' (empty string) instead of temporarystub for consistency with other strategies. This means the before result will be different.
- hostname - On OpenRC systems and Solaris, the before value will now be '' (empty string) if the permanent hostname file does not exist, for consistency with other strategies.
- intersect, difference, symmetric_difference, union filters - the default behavior is now to be case-sensitive (<https://github.com/ansible/ansible/issues/74255>)

- unique filter - the default behavior is now to fail if Jinja2's filter fails and explicit `case_sensitive=False` as the Ansible's fallback is case-sensitive (<https://github.com/ansible/ansible/pull/74256>)

amazon.aws

- `ec2_instance` - instance wait for state behaviour has changed. If plays require the old behavior of waiting for the instance monitoring status to become `OK` when launching a new instance, the action will need to specify `state: started` (<https://github.com/ansible-collections/amazon.aws/pull/481>).
- `ec2_snapshot` - support for waiting indefinitely has been dropped, new default is 10 minutes (<https://github.com/ansible-collections/amazon.aws/pull/356>).
- `ec2_vol_info` - `return_attachment_set` is now a list of attachments with Multi-Attach support on disk. (<https://github.com/ansible-collections/amazon.aws/pull/362>).
- `ec2_vpc_dhcp_option` - The module has been refactored to use boto3. Keys and value types returned by the module are now consistent, which is a change from the previous behaviour. A `purge_tags` option has been added, which defaults to `True`. (<https://github.com/ansible-collections/amazon.aws/pull/252>)
- `ec2_vpc_dhcp_option_info` - Now preserves case for tag keys in return value. (<https://github.com/ansible-collections/amazon.aws/pull/252>)
- `module_utils.core` - The boto3 switch has been removed from the region parameter (<https://github.com/ansible-collections/amazon.aws/pull/287>).
- `module_utils/compat` - vendored copy of `ipaddress` removed (<https://github.com/ansible-collections/amazon.aws/pull/461>).
- `module_utils/core` - updated the `scrub_none_parameters` function so that `descend_into_lists` is set to `True` by default (<https://github.com/ansible-collections/amazon.aws/pull/297>).

arista.eos

- Arista released train 4.23.X and newer and along with it replaced and deprecated lots of commands. This PR adds support for syntax changes in release train 4.23 and after. Going forward the eos modules will not support eos sw version < 4.23.

community.aws

- `ec2_instance` - The module has been migrated to the `amazon.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_instance`.
- `ec2_instance_info` - The module has been migrated to the `amazon.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_instance_info`.
- `ec2_vpc_endpoint` - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_endpoint`.
- `ec2_vpc_endpoint_facts` - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_endpoint_info`.
- `ec2_vpc_endpoint_info` - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_endpoint_info`.
- `ec2_vpc_endpoint_service_info` - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_endpoint_service_info`.
- `ec2_vpc_igw` - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_igw`.
- `ec2_vpc_igw_facts` - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_igw_info`.
- `ec2_vpc_igw_info` - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_igw_info`.
- `ec2_vpc_nat_gateway` - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_nat_gateway`.
- `ec2_vpc_nat_gateway_facts` - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_nat_gateway_info`.
- `ec2_vpc_nat_gateway_info` - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_nat_gateway_info`.
- `kms_info` - key details are now returned in the `kms_keys` attribute rather than the `keys` attribute (<https://github.com/ansible-collections/community.aws/pull/648>).

community.crypto

- Adjust `dirName` text parsing and to text converting code to conform to [Sections 2 and 3 of RFC 4514](https://github.com/ansible-collections/community.crypto/pull/274). This is similar to how [cryptography handles this](https://github.com/ansible-collections/community.crypto/pull/274) (<https://github.com/ansible-collections/community.crypto/pull/274>).
- `acme` module utils - removing compatibility code (<https://github.com/ansible-collections/community.crypto/pull/290>).
- `acme_*` modules - removed vendored copy of the Python library `ipaddress`. If you are using Python 2.x, please make sure to install the library (<https://github.com/ansible-collections/community.crypto/pull/287>).
- `compatibility` module utils - removed vendored copy of the Python library `ipaddress` (<https://github.com/ansible-collections/community.crypto/pull/287>).

- `crypto` module utils - removing compatibility code (<https://github.com/ansible-collections/community.crypto/pull/290>).
- `get_certificate`, `openssl_csr_info`, `x509_certificate_info` - depending on the `cryptography` version used, the modules might not return the ASN.1 value for an extension as contained in the certificate respectively CSR, but a re-encoded version of it. This should usually be identical to the value contained in the source file, unless the value was malformed. For extensions not handled by C(cryptography) the value contained in the source file is always returned unaltered (<https://github.com/ansible-collections/community.crypto/pull/318>).
- `module_utils` - removed various PyOpenSSL support functions and default backend values that are not needed for the `openssl_pkcs12` module (<https://github.com/ansible-collections/community.crypto/pull/273>).
- `openssl_csr`, `openssl_csr_pipe`, `x509_crl` - the `subject` respectively `issuer` fields no longer ignore empty values, but instead fail when encountering them (<https://github.com/ansible-collections/community.crypto/pull/316>).
- `openssl_privatekey_info` - by default consistency checks are not run; they need to be explicitly requested by passing `check_consistency=true` (<https://github.com/ansible-collections/community.crypto/pull/309>).
- `x509_crl` - for idempotency checks, the `issuer` order is ignored. If order is important, use the new `issuer_ordered` option (<https://github.com/ansible-collections/community.crypto/pull/316>).

community.dns

- All Hetzner modules and plugins which handle DNS records now work with unquoted TXT values by default. The old behavior can be obtained by setting `txt_transformation=api` (<https://github.com/ansible-collections/community.dns/issues/48>, <https://github.com/ansible-collections/community.dns/pull/57>, <https://github.com/ansible-collections/community.dns/pull/60>).
- Hosttech API creation - now requires a `ModuleOptionProvider` object instead of an `AnsibleModule` object. Alternatively an `Ansible` plugin instance can be passed (<https://github.com/ansible-collections/community.dns/pull/37>).
- The `hetzner_dns_record_info` and `hosttech_dns_record_info` modules have been renamed to `hetzner_dns_record_set_info` and `hosttech_dns_record_set_info`, respectively (<https://github.com/ansible-collections/community.dns/pull/54>).
- The `hosttech_dns_record` module has been renamed to `hosttech_dns_record_set` (<https://github.com/ansible-collections/community.dns/pull/31>).
- The internal bulk record updating helper (`bulk_apply_changes`) now also returns the records that were deleted, created or updated (<https://github.com/ansible-collections/community.dns/pull/63>).
- The internal record API no longer allows to manage comments explicitly (<https://github.com/ansible-collections/community.dns/pull/63>).
- When using the internal modules API, now a zone ID type and a provider information object must be passed (<https://github.com/ansible-collections/community.dns/pull/27>).
- `hetzner_dns_record*` modules - implement correct handling of default TTL. The value `none` is now accepted and returned in this case (<https://github.com/ansible-collections/community.dns/pull/52>, <https://github.com/ansible-collections/community.dns/issues/50>).
- `hetzner_dns_record`, `hetzner_dns_record_set`, `hetzner_dns_record_sets` - the default TTL is now 300 and no longer 3600, which equals the default in the web console (<https://github.com/ansible-collections/community.dns/pull/43>).
- `hosttech_*` `module_utils` - completely rewrite and refactor to support new JSON API and allow to re-use provider-independent module logic (<https://github.com/ansible-collections/community.dns/pull/4>).
- `hosttech_dns_record_set` - the option `overwrite` was replaced by a new option `on_existing`. Specifying `overwrite=true` is equivalent to `on_existing=replace` (the new default). Specifying `overwrite=false` with `state=present` is equivalent to `on_existing=keep_and_fail`, and specifying `overwrite=false` with `state=absent` is equivalent to `on_existing=keep` (<https://github.com/ansible-collections/community.dns/pull/31>).

community.docker

- `docker_compose` - fixed `timeout` defaulting behavior so that `stop_grace_period`, if defined in the compose file, will be used if `timeout` is not specified (<https://github.com/ansible-collections/community.docker/pull/163>).

community.general

- `archive` - adding idempotency checks for changes to file names and content within the `destination` file (<https://github.com/ansible-collections/community.general/pull/3075>).
- `lxd` inventory plugin - when used with Python 2, the plugin now needs `ipaddress` installed from pypi (<https://github.com/ansible-collections/community.general/pull/2441>).
- `scaleway_security_group_rule` - when used with Python 2, the module now needs `ipaddress` installed from pypi (<https://github.com/ansible-collections/community.general/pull/2441>).

community.hashi_vault

- connection options - there is no longer a default value for the `url` option (the Vault address), so a value must be supplied (https://github.com/ansible-collections/community.hashi_vault/issues/83).

community.okd

- drop python 2 support (<https://github.com/openshift/community.okd/pull/93>).

community.routeros

- `api` - due to a programming error, the module never failed on errors. This has now been fixed. If you are relying on the module not failing in case of idempotent commands (resulting in errors like `failure: already have such address`), you need to adjust your roles/playbooks. We suggest to use `failed_when` to accept failure in specific circumstances, for example `failed_when: "'failure: already have ' in result.msg[0]'"` (<https://github.com/ansible-collections/community.routeros/pull/39>).
- `api` - splitting commands no longer uses a naive split by whitespace, but a more RouterOS CLI compatible splitting algorithm (<https://github.com/ansible-collections/community.routeros/pull/45>).
- `command` - the module now always indicates that a change happens. If this is not correct, please use `changed_when` to determine the correct changed status for a task (<https://github.com/ansible-collections/community.routeros/pull/50>).

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>).

kubernetes.core

- Drop python 2 support (<https://github.com/ansible-collections/kubernetes.core/pull/86>).
- `helm` plugin - remove unused `release_namespace` parameter (<https://github.com/ansible-collections/kubernetes.core/pull/85>).
- `helm` plugin `info` - remove unused `release_namespace` parameter (<https://github.com/ansible-collections/kubernetes.core/pull/85>).
- `k8s_cluster_info` - returned apis as list to avoid being overwritten in case of multiple version (<https://github.com/ansible-collections/kubernetes.core/pull/41>).
- `k8s_facts` - remove the deprecated alias from `k8s_facts` to `k8s_info` (<https://github.com/ansible-collections/kubernetes.core/pull/125>).

netapp.storagegrid

- This version introduces a breaking change. All modules have been renamed from `nac_sg_*` to `na_sg_*`. Playbooks and Roles must be updated to match.

Major Changes

Ansible-core

- Python Controller Requirement - Python 3.8 or newer is required for the control node (the machine that runs Ansible) (<https://github.com/ansible/ansible/pull/74013>)
- `ansible-test` - All "cloud" plugins which use containers can now be used with all POSIX and Windows hosts. Previously the plugins did not work with Windows at all, and support for hosts created with the `--remote` option was inconsistent.
- `ansible-test` - Collections can now specify controller and target specific integration test requirements and constraints. If provided, they take precedence over the previously available requirements and constraints files.
- `ansible-test` - Integration tests run with the `integration` command can now be executed on two separate hosts instead of always running on the controller. The target host can be one provided by `ansible-test` or by the user, as long as it is accessible using SSH.
- `ansible-test` - Most container features are now supported under Podman. Previously a symbolic link for `docker` pointing to `podman` was required.
- `ansible-test` - New `--controller` and `--target` / `--target-python` options have been added to allow more control over test environments.
- `ansible-test` - Python 3.8 - 3.10 are now required to run `ansible-test`, thus matching the Ansible controller Python requirements. Older Python versions (2.6 - 2.7 and 3.5 - 3.10) can still be the target for relevant tests.
- `ansible-test` - SSH port forwarding and redirection is now used exclusively to make container ports available on non-container hosts. When testing on POSIX systems this requires SSH login as root. Previously SSH port forwarding was combined with firewall rules or other port redirection methods, with some platforms being unsupported.
- `ansible-test` - Sanity tests always run in isolated Python virtual environments specific to the requirements of each test. The environments are cached.
- `ansible-test` - Sanity tests are now separated into two categories, controller and target. All tests except `import` and `compile` are controller tests. The controller tests always run using the same Python version used to run `ansible-test`. The target tests use the Python version(s) specified by the user, or all available Python versions.
- `ansible-test` - Sanity tests now use fully pinned requirements that are independent of each other and other test types.
- `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-test` - The `future-import-boilerplate` and `metaclass-boilerplate` sanity tests are limited to remote-only code. Additionally, they are skipped for collections which declare no support for Python 2.x.
- `ansible-test` - The `import` and `compile` sanity tests limit remote-only Python version checks to remote-only code.

- ansible-test - Unit tests for controller-only code now require Python 3.8 or later.
- ansible-test - Version neutral sanity tests now require Python 3.8 or later.
- junit callback - The `junit_xml` and `ordereddict` Python modules are no longer required to use the `junit` callback plugin.

amazon.aws

- amazon.aws collection - Due to the AWS SDKs announcing the end of support for Python less than 3.6 (<https://boto3.amazonaws.com/v1/documentation/api/1.17.64/guide/migrationpy3.html>) this collection now requires Python 3.6+ (<https://github.com/ansible-collections/amazon.aws/pull/298>).
- amazon.aws collection - The amazon.aws collection has dropped support for `botocore`<1.18.0 and `boto3`<1.15.0. Most modules will continue to work with older versions of the AWS SDK, however compatability with older versions of the SDK is not guaranteed and will not be tested. When using older versions of the SDK a warning will be emitted by Ansible (<https://github.com/ansible-collections/amazon.aws/pull/502>).
- ec2_instance - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_instance`.
- ec2_instance_info - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_instance_info`.
- ec2_vpc_endpoint - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_endpoint`.
- ec2_vpc_endpoint_facts - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_endpoint_info`.
- ec2_vpc_endpoint_info - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_endpoint_info`.
- ec2_vpc_endpoint_service_info - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_endpoint_service_info`.
- ec2_vpc_igw - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_igw`.
- ec2_vpc_igw_facts - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_igw_facts`.
- ec2_vpc_igw_info - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_igw_info`.
- ec2_vpc_nat_gateway - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_nat_gateway`.
- ec2_vpc_nat_gateway_facts - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_nat_gateway_info`.
- ec2_vpc_nat_gateway_info - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_nat_gateway_info`.
- ec2_vpc_route_table - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_route_table`.
- ec2_vpc_route_table_facts - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_route_table_facts`.
- ec2_vpc_route_table_info - The module has been migrated from the `community.aws` collection. Playbooks using the Fully Qualified Collection Name for this module should be updated to use `amazon.aws.ec2_vpc_route_table_info`.

cisco.ise

- Adds `ise_uses_api_gateway` to module options.
- Adds a 'aws_deployment' role that allows the deployment of an arbitrary large ISE cluster to AWS.
- Adds `ise_responses` to return values of info modules.
- Adds `ise_update_response` to return values of non-info modules.
- Fixes inner logic of modules that have no get by name and have not working filter.
- Renamed module `device_administration_authorization_exception_rules` to `device_administration_local_exception_rules`.
- Renamed module `device_administration_authorization_global_exception_rules` to `device_administration_global_exception_rules`.
- Renamed module `network_access_authorization_exception_rules` to `network_access_local_exception_rules`.
- Renamed module `network_access_authorization_global_exception_rules` to `network_access_global_exception_rules`.
- Updates options required for modules.
- Updates `sdk` parameters for previous modules
- `device_administration_authorization_exception_rules` - removed module.
- `device_administration_authorization_exception_rules_info` - removed module.
- `device_administration_authorization_global_exception_rules` - removed module.
- `device_administration_authorization_global_exception_rules_info` - removed module.
- `guest_user_reinstante` - removed module.
- `import_trust_cert` - removed module.
- `network_access_authorization_exception_rules` - removed module.

- `network_access_authorization_exception_rules_info` - removed module.
- `network_access_authorization_global_exception_rules` - removed module.
- `network_access_authorization_global_exception_rules_info` - removed module.
- `personas_check_standalone` - Adds module for the deployment of personas to existing nodes in an ISE cluster.
- `personas_export_certs` - Adds module for the deployment of personas to existing nodes in an ISE cluster.
- `personas_promote_primary` - Adds module for the deployment of personas to existing nodes in an ISE cluster.
- `personas_update_roles` - Adds module for the deployment of personas to existing nodes in an ISE cluster.
- `service_info` - removed module.
- `system_certificate_export` - removed module.
- `telemetry_info_info` - removed module.

cloud.common

- `turbo` - enable turbo mode for lookup plugins

cloudscale_ch.cloud

- Add `custom_image` module

community.aws

- `community.aws` collection - The `community.aws` collection has dropped support for `boto3<1.18.0` and `boto3<1.15.0` (<https://github.com/ansible-collections/community.aws/pull/711>). Most modules will continue to work with older versions of the AWS SDK, however compatability with older versions of the SDK is not guaranteed and will not be tested. When using older versions of the SDK a warning will be emitted by Ansible (<https://github.com/ansible-collections/amazon.aws/pull/442>).

community.ciscosmb

- Python 2.6, 2.7, 3.5 is required
- add CBS350 support
- add antsibull-changelog support
- add `ciscosmb_command`
- added facts subset "interfaces"
- `ciscosmb_facts` with default subset and unit tests
- interface name canonicalization
- transform collection `qaxi.ciscosmb` to `community.ciscosmb`
- transform `community.ciscosmb.ciscosmb_command` to `community.ciscosmb.command`
- transform `community.ciscosmb.ciscosmb_facts` to `community.ciscosmb.facts`
- unit tests for CBS350

community.dns

- `hosttech_*` modules - support the new JSON API at <https://api.ns1.hosttech.eu/api/documentation/> (<https://github.com/ansible-collections/community.dns/pull/4>).

community.general

- `bitbucket_*` modules - `client_id` is no longer marked as `no_log=true`. If you relied on its value not showing up in logs and output, please mark the whole tasks with `no_log: true` (<https://github.com/ansible-collections/community.general/pull/2045>).

community.kubernetes

- redirect everything from `community.kubernetes` to `kubernetes.core` (<https://github.com/ansible-collections/community.kubernetes/pull/425>).

community.okd

- update to use `kubernetes.core 2.0` (<https://github.com/openshift/community.okd/pull/93>).

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>).

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>).

containers.podman

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

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.
- `ome_firmware` - Added option to stage the firmware update and support for selecting components and devices for baseline-based firmware update.
- `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

- 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.
- Improve `fortios_configuration_fact` to use multiple selectors concurrently.
- New module `fortios_monitor_fact`.
- Support FortiOS 7.0.1.
- Support Fortios 7.0.
- Support Log APIs.
- Support `check_mode` in all configuration API-based modules.
- Support filtering for fact gathering modules `fortios_configuration_fact` and `fortios_monitor_fact`.
- Support member operation (delete/add extra members) on an object that has a list of members in it.
- Support moving policy in `firewall_central_snat_map`.
- Support selectors feature in `fortios_monitor_fact` and `fortios_log_fact`.
- Unify schemas for monitor API.

gluster.gluster

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

hetzner.hcloud

- Introduction of placement groups

kubernetes.core

- k8s - deprecate `merge_type=json`. The JSON patch functionality has never worked (<https://github.com/ansible-collections/kubernetes.core/pull/99>).
- k8s `json_patch` - split JSON patch functionality out into a separate module (<https://github.com/ansible-collections/kubernetes.core/pull/99>).
- replaces the openshift client with the official kubernetes client (<https://github.com/ansible-collections/kubernetes.core/issues/34>).

netapp.cloudmanager

- Adding stage environment to all modules in cloudmanager

netbox.netbox

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

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.

ovirt.ovirt

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

Removed Features

Ansible-core

- The built-in module `ansible.module_utils.common.removed` was previously deprecated and has been removed.
- `connections`, removed password check stubs that had been moved to become plugins.
- `task`, inline parameters being auto coerced into variables has been removed.

ansible.windows

- win_reboot - Removed `shutdown_timeout` and `shutdown_timeout_sec` which has not done anything since Ansible 2.5.

community.crypto

- acme_* modules - the `acme_directory` option is now required (<https://github.com/ansible-collections/community.crypto/pull/290>).
- acme_* modules - the `acme_version` option is now required (<https://github.com/ansible-collections/community.crypto/pull/290>).
- acme_account_facts - the deprecated redirect has been removed. Use `community.crypto.acme_account_info` instead (<https://github.com/ansible-collections/community.crypto/pull/290>).
- acme_account_info - `retrieve_orders=url_list` no longer returns the return value `orders`. Use the `order_uris` return value instead (<https://github.com/ansible-collections/community.crypto/pull/290>).
- crypto.info module utils - the deprecated redirect has been removed. Use `crypto.pem` instead (<https://github.com/ansible-collections/community.crypto/pull/290>).
- get_certificate - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- openssl_certificate - the deprecated redirect has been removed. Use `community.crypto.x509_certificate` instead (<https://github.com/ansible-collections/community.crypto/pull/290>).
- openssl_certificate_info - the deprecated redirect has been removed. Use `community.crypto.x509_certificate_info` instead (<https://github.com/ansible-collections/community.crypto/pull/290>).
- openssl_csr - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- openssl_csr and openssl_csr_pipe - `version` now only accepts the (default) value 1 (<https://github.com/ansible-collections/community.crypto/pull/290>).
- openssl_csr_info - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- openssl_csr_pipe - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- openssl_privatekey - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- openssl_privatekey_info - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- openssl_privatekey_pipe - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- openssl_publickey - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- openssl_publickey_info - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- openssl_signature - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- openssl_signature_info - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- x509_certificate - remove `assertonly` provider (<https://github.com/ansible-collections/community.crypto/pull/289>).
- x509_certificate - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- x509_certificate_info - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).
- x509_certificate_pipe - removed the `pyopenssl` backend (<https://github.com/ansible-collections/community.crypto/pull/273>).

community.docker

- docker_container - the default value of `container_default_behavior` changed to `no_defaults` (<https://github.com/ansible-collections/community.docker/pull/210>).
- docker_container - the default value of `network_mode` is now the name of the first network specified in `networks` if such are specified and `networks_cli_compatible=true` (<https://github.com/ansible-collections/community.docker/pull/210>).
- docker_container - the special value `all` can no longer be used in `published_ports` next to other values. Please use `publish_all_ports=true` instead (<https://github.com/ansible-collections/community.docker/pull/210>).
- docker_login - removed the `email` option (<https://github.com/ansible-collections/community.docker/pull/210>).

community.general

- All inventory and vault scripts contained in `community.general` were moved to the `contrib-scripts` GitHub repository (<https://github.com/ansible-collections/community.general/pull/2696>).
- ModuleHelper module utils - remove fallback when value could not be determined for a parameter (<https://github.com/ansible-collections/community.general/pull/3461>).
- Removed deprecated `netapp` module utils and doc fragments (<https://github.com/ansible-collections/community.general/pull/3197>).
- The `nios`, `nios_next_ip`, `nios_next_network` lookup plugins, the `nios` documentation fragment, and the `nios_host_record`, `nios_ptr_record`, `nios_nx_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 removed from `community.general` 4.0.0 and were replaced by redirects to the `infoblox.nios_modules` collection. Please install the `infoblox.nios_modules` collection to continue using these plugins and modules, and update your FQCNs (<https://github.com/ansible-collections/community.general/pull/3592>).
- The vendored copy of `ipaddress` has been removed. Please use `ipaddress` from the Python 3 standard library, or from `pypi`. (<https://github.com/ansible-collections/community.general/pull/2441>).

- `cpanm` - removed the deprecated `system_lib` option. Use Ansible's privilege escalation mechanism instead; the option basically used `sudo` (<https://github.com/ansible-collections/community.general/pull/3461>).
- `grove` - removed the deprecated `alias` message of the `message_content` option (<https://github.com/ansible-collections/community.general/pull/3461>).
- `proxmox` - default value of `proxmox_default_behavior` changed to `no_defaults` (<https://github.com/ansible-collections/community.general/pull/3461>).
- `proxmox_kvm` - default value of `proxmox_default_behavior` changed to `no_defaults` (<https://github.com/ansible-collections/community.general/pull/3461>).
- `runit` - removed the deprecated `dist` option which was not used by the module (<https://github.com/ansible-collections/community.general/pull/3461>).
- `telegram` - removed the deprecated `msg`, `msg_format` and `chat_id` options (<https://github.com/ansible-collections/community.general/pull/3461>).
- `xfconf` - the default value of `disable_facts` changed to `true`, and the value `false` is no longer allowed. Register the module results instead (<https://github.com/ansible-collections/community.general/pull/3461>).

community.hashi_vault

- drop support for Python 2 and Python 3.5 (https://github.com/ansible-collections/community.hashi_vault/issues/81).
- support for the following deprecated environment variables has been removed: `VAULT_AUTH_METHOD`, `VAULT_TOKEN_PATH`, `VAULT_TOKEN_FILE`, `VAULT_ROLE_ID`, `VAULT_SECRET_ID` (https://github.com/ansible-collections/community.hashi_vault/pull/173).

Deprecated Features

Ansible-core

- `ansible-test` - The `--docker-no-pull` option is deprecated and has no effect.
- `ansible-test` - The `--no-pip-check` option is deprecated and has no effect.
- `include` action is deprecated in favor of `include_tasks`, `import_tasks` and `import_playbook`.
- `module_utils`' `FileLock` is scheduled to be removed, it is not used due to its unreliable nature.

amazon.aws

- `ec2` - the boto based `ec2` module has been deprecated in favour of the boto3 based `ec2_instance` module. The `ec2` module will be removed in release 4.0.0 (<https://github.com/ansible-collections/amazon.aws/pull/424>).
- `ec2_classic_lb` - setting of the `ec2_elb` fact has been deprecated and will be removed in release 4.0.0 of the collection. The module now returns `elb` which can be accessed using the `register` keyword (<https://github.com/ansible-collections/amazon.aws/pull/552>).
- `ec2_vpc_dhcp_option` - The `new_config` return key has been deprecated and will be removed in a future release. It will be replaced by `dhcp_config`. Both values are returned in the interim (<https://github.com/ansible-collections/amazon.aws/pull/252>).

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>).

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>
- `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.

arista.eos

- Remove testing with provider for `ansible-test` integration jobs. This helps prepare us to move to `network-ee` integration tests.

cisco.ios

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

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

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

- `dynamodb_table` - DynamoDB does not support specifying non-key-attributes when creating an ALL index. Passing `includes` for such indexes is currently ignored but will result in failures after version 3.0.0 (<https://github.com/ansible-collections/community.aws/pull/726>).
- `dynamodb_table` - DynamoDB does not support updating the primary indexes on a table. Attempts to make such changes are currently ignored but will result in failures after version 3.0.0 (<https://github.com/ansible-collections/community.aws/pull/726>).
- `ec2_elb` - the `ec2_elb` module has been removed and redirected to the `elb_instance` module which functions identically. The original `ec2_elb` name is now deprecated and will be removed in release 3.0.0 (<https://github.com/ansible-collections/community.aws/pull/586>).
- `ec2_elb_info` - the boto based `ec2_elb_info` module has been deprecated in favour of the boto3 based `elb_classic_lb_info` module. The `ec2_elb_info` module will be removed in release 3.0.0 (<https://github.com/ansible-collections/community.aws/pull/586>).
- `elb_classic_lb` - the `elb_classic_lb` module has been removed and redirected to the `amazon.aws.ec2_elb_lb` module which functions identically.
- `elb_instance` - setting of the `ec2_elb` fact has been deprecated and will be removed in release 4.0.0 of the collection. See the module documentation for an alternative example using the `register` keyword (<https://github.com/ansible-collections/community.aws/pull/773>).
- `iam` - the boto based `iam` module has been deprecated in favour of the boto3 based `iam_user`, `iam_group` and `iam_role` modules. The `iam` module will be removed in release 3.0.0 (<https://github.com/ansible-collections/community.aws/pull/664>).
- `iam_cert` - the `iam_cert` module has been renamed to `iam_server_certificate` for consistency with the companion `iam_server_certificate_info` module. The usage of the module has not changed. The `iam_cert` alias will be removed in version 4.0.0 (<https://github.com/ansible-collections/community.aws/pull/728>).
- `iam_server_certificate` - Passing file names to the `cert`, `chain_cert` and `key` parameters has been deprecated. We recommend using a lookup plugin to read the files instead, see the documentation for an example (<https://github.com/ansible-collections/community.aws/pull/735>).
- `iam_server_certificate` - the default value for the `dup_ok` parameter is currently `false`, in version 4.0.0 this will be updated to `true`. To preserve the current behaviour explicitly set the `dup_ok` parameter to `false` (<https://github.com/ansible-collections/community.aws/pull/737>).
- `rds` - the boto based `rds` module has been deprecated in favour of the boto3 based `rds_instance` module. The `rds` module will be removed in release 3.0.0 (<https://github.com/ansible-collections/community.aws/pull/663>).
- `rds_snapshot` - the `rds_snapshot` module has been renamed to `rds_instance_snapshot`. The usage of the module has not changed. The `rds_snapshot` alias will be removed in version 4.0.0 (<https://github.com/ansible-collections/community.aws/pull/783>).
- `script_inventory_ec2` - The `ec2.py` inventory script is being moved to a new repository. The script can now be downloaded from <https://github.com/ansible-community/contrib-scripts/blob/main/inventory/ec2.py> and will be removed from this collection in the 3.0 release. We recommend migrating from the script to the `amazon.aws.ec2` inventory plugin.

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.crypto

- `acme_*` modules - ACME version 1 is now deprecated and support for it will be removed in `community.crypto` 2.0.0 (<https://github.com/ansible-collections/community.crypto/pull/288>).

community.dns

- The `hosttech_dns_records` module has been renamed to `hosttech_dns_record_sets`. The old name will stop working in `community.dns 3.0.0` (<https://github.com/ansible-collections/community.dns/pull/31>).

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>).
- `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>).
- `docker_container` - using the special value `all` in `published_ports` has been deprecated. Use `publish_all_ports=true` instead (<https://github.com/ansible-collections/community.docker/pull/210>).

community.general

- Support for Ansible 2.9 and `ansible-base 2.10` is deprecated, and will be removed in the next major release (`community.general 5.0.0`) next spring. While most content will probably still work with `ansible-base 2.10`, we will remove symbolic links for modules and action plugins, which will make it impossible to use them with Ansible 2.9 anymore. Please use `community.general 4.x.y` with Ansible 2.9 and `ansible-base 2.10`, as these releases will continue to support Ansible 2.9 and `ansible-base 2.10` even after they are End of Life (<https://github.com/ansible-community/community-topics/issues/50>, <https://github.com/ansible-collections/community.general/pull/3723>).
- `ali_instance_info` - marked removal version of deprecated parameters `availability_zone` and `instance_names` (<https://github.com/ansible-collections/community.general/issues/2429>).
- `bitbucket_*` modules - `username` options have been deprecated in favor of `workspace` and will be removed in `community.general 6.0.0` (<https://github.com/ansible-collections/community.general/pull/2045>).
- `dnssimple` - `python-dnssimple < 2.0.0` is deprecated and support for it will be removed in `community.general 5.0.0` (https://github.com/ansible-collections/community.general/pull/2946#discussion_r667624693).
- `gitlab_group_members` - setting `gitlab_group` to `name` or `path` is deprecated. Use `full_path` instead (<https://github.com/ansible-collections/community.general/pull/3451>).
- `keycloak_authentication` - the return value `flow` is now deprecated and will be removed in `community.general 6.0.0`; use `end_state` instead (<https://github.com/ansible-collections/community.general/pull/3280>).
- `keycloak_group` - the return value `group` is now deprecated and will be removed in `community.general 6.0.0`; use `end_state` instead (<https://github.com/ansible-collections/community.general/pull/3280>).
- `linode` - parameter `backupsenabled` is deprecated and will be removed in `community.general 5.0.0` (<https://github.com/ansible-collections/community.general/pull/2410>).
- `lxd_container` - the current default value `true` of `ignore_volatile_options` is deprecated and will change to `false` in `community.general 6.0.0` (<https://github.com/ansible-collections/community.general/pull/3429>).
- `serverless` - deprecating parameter `functions` because it was not used in the code (<https://github.com/ansible-collections/community.general/pull/2845>).
- `xfconf` - deprecate the `get` state. The new module `xfconf_info` should be used instead (<https://github.com/ansible-collections/community.general/pull/3049>).

community.grafana

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

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).
- `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).
- `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).

community.kubernetes

- The `community.kubernetes` collection is being renamed to `kubernetes.core`. All content in the collection has been replaced by deprecated redirects to `kubernetes.core`. If you are using FQCNs starting with `community.kubernetes`, please update them to `kubernetes.core` (<https://github.com/ansible-collections/community.kubernetes/pull/439>).

community.vmware

- `vmware_guest_vnc` - Sphere 7.0 removed the built-in VNC server (<https://docs.vmware.com/en/VMware->

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`.

junipernetworks.junos

- Deprecate `router_id` from `ospfv2` resource module.
- Deprecate `router_id` from `ospfv3` resource module.
- 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'.