

# import

Ansible allows unchecked imports of some libraries from specific directories, listed at the bottom of this section. Import all other Python libraries in a try/except ImportError block to support sanity tests such as `validate-modules` and to allow Ansible to give better error messages to the user. To import a library in a try/except ImportError block:

1. In modules:

```
# Instead of 'import another_library', do:

import traceback

try:
    import another_library
except ImportError:
    HAS_ANOTHER_LIBRARY = False
    ANOTHER_LIBRARY_IMPORT_ERROR = traceback.format_exc()
else:
    HAS_ANOTHER_LIBRARY = True

# Later in module code:

module = AnsibleModule(...)

if not HAS_ANOTHER_LIBRARY:
    # Needs: from ansible.module_utils.basic import missing_required_lib
    module.fail_json(
        msg=missing_required_lib('another_library'),
        exception=ANOTHER_LIBRARY_IMPORT_ERROR)
```

2. In plugins:

```
# Instead of 'import another_library', do:

from ansible.module_utils.six import raise_from

try:
    import another_library
except ImportError as imp_exc:
    ANOTHER_LIBRARY_IMPORT_ERROR = imp_exc
else:
    ANOTHER_LIBRARY_IMPORT_ERROR = None

# Later in plugin code, for example in __init__ of the plugin:

if ANOTHER_LIBRARY_IMPORT_ERROR:
    raise_from(
        AnsibleError('another_library must be installed to use this plugin'),
        ANOTHER_LIBRARY_IMPORT_ERROR)
# If you target only newer Python 3 versions, you can also use the
# 'raise ... from ...' syntax.
```

Ansible allows the following unchecked imports from these specific directories:

- **ansible-core:**
  - For `lib/ansible/modules/` and `lib/ansible/module_utils/`, unchecked imports are only allowed from the Python standard library;
  - For `lib/ansible/plugins/`, unchecked imports are only allowed from the Python standard library, from public dependencies of `ansible-core`, and from `ansible-core` itself;
- **collections:**
  - For `plugins/modules/` and `plugins/module_utils/`, unchecked imports are only allowed from the Python standard library;
  - For other directories in `plugins/` (see [the community collection requirements](#) for a list), unchecked imports are only allowed from the Python standard library, from public dependencies of `ansible-core`, and from `ansible-core` itself.

Public dependencies of `ansible-core` are:

- Jinja2
- PyYAML
- MarkupSafe (as a dependency of Jinja2)