Working with network connection options

Network modules can support multiple connection protocols, such as `ansible.netcommon.network_cli`, `ansible.netcommon.netconf`, and `ansible.netcommon.httpapi`. These connections include some common options you can set to control how the connection to your network device behaves.

Common options are:

- `become` and `become_method` as described in :ref:`privilege_escalation`.

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- `network_os` - set to match your network platform you are communicating with. See the :ref:`platform-specific <platform_options>` pages.

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- `remote_user` as described in :ref:`connection_set_user`.

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- Timeout options - `persistent_command_timeout`, `persistent_connect_timeout`, and `timeout`.

Setting timeout options

When communicating with a remote device, you have control over how long Ansible maintains the connection to that device, as well as how long Ansible waits for a command to complete on that device. Each of these options can be set as variables in your playbook files, environment variables, or settings in your :ref:`ansible.cfg file <ansible_configuration_settings>`.

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For example, the three options for controlling the connection timeout are as follows.

Using vars (per task):

```
- name: save running-config
  cisco.ios.ios_command:
    commands: copy running-config startup-config
    vars:
      ansible_command_timeout: 30
```

Using the environment variable:

```
$export ANSIBLE_PERSISTENT_COMMAND_TIMEOUT=30
```

Using the global configuration (in :file:`ansible.cfg`)

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```
[persistent_connection ]
command_timeout = 30
```

See :ref:`ansible_variable_precedence` for details on the relative precedence of each of these variables. See the individual connection type to understand each option.