JBoss Ansible Playbook Information

Playbook location:

https://subversion/devops/ansible/playbooks/jws-playbook/

Ansible Documentation:

http://docs.ansible.com/ansible/latest/index.html

How it works:

This playbook can only be run on the Ansible Tower server (mklemc001p).

All work should be done as the mwabd1sp user. Do not locally modify the playbook, it is controlled in SVN.

To run the playbook you need to know:

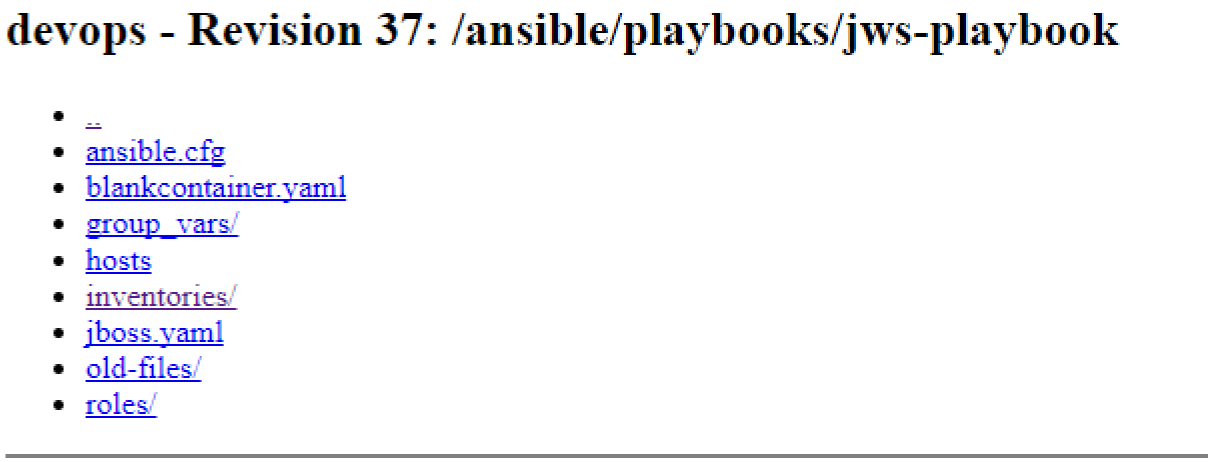
- The main .yaml file, jboss.yaml in this case
- The inventory files
    - inventories/<environment>/hosts
- The application name. (this is case specific. Need to match up with what is defined as the role)
- The host-group (or host list) to run against.
    - This can be found inside the hosts file listed above.

Command to run a playbook from the Ansible server:

```
ansible-playbook -i <path to>/<inventory file> -l <host-group/host list> --extra-vars "application=<application>" <path to>/jboss.yaml
```

Playbook Structure:

Within the playbook root you see this structure:



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- ..
- ansible.cfg
- blankcontainer.yaml
- group_vars/
- hosts
- inventories/
- jboss.yaml
- old-files/
- roles/

- ansible.cfg
    - This file should not be modified. It is the ansible configuration necessary to run properly based on the Tower configuration
- blankcontainer.yaml
    - One off master file create to create blank containers without app settings/configuration to use during code migration for Infosys testing within our environment.
- group_vars/
    - Default directory for variable files.
- hosts
    - Default inventory file. This should not be used other than for testing purposes.
- inventories/
    - Location for our inventory files and application specific group_vars files.
    - Broken down per environment as a way to organize our environment specific files.
- jboss.yaml
    - Main .yaml file
- roles/
    - Location for the roles within the playbook.

Inventories:

- Organized into environment directories.
- Each environment directory has two pieces, the inventory file (hosts) and the group_vars directory.
    - The hosts file includes only the hosts specific to this environment.
    - Within the group_vars directory will be the specific variables files for this environment.

Roles:

- permissions:
    - This role is designed to set/reset the permissions on the file structure.
- jboss-tomcat:
    - This role is designed to create the container directory structure and install the jboss and java packages.
    - Includes environment specific keystores, tomcat vault configuration and prime certificates.
- <application>:
    - This installs and configures the application within the container
    - Uses templates for configuration. These can be and are parameterized to use parameters set in the variables files.
    - This role will download the war, properties and primelib/serverlib files from Nexus and deploy to the container.
        - Note: This needs to be modified to accept external parameters. It will accept the versions as parameters but need the deploy jobs to pass them in.
    - There are tags built into this role to stop/start, push new setenv.sh file and re-set the permissions.
        - Click_Here to go to the page that describes how to use this feature.

group_vars/parameters:

- There are multiple ways we are defining parameters. The following is the order of precedence:

    a. --extra-vars
        - Mainly used for {{ application }} parameter but also used for overrides.
        - Changes everything you're running against

    b. inventory group_vars
        - Used for application environment specific parameters
        - Only the application on the environment

    c. group_vars/all.yaml
        - Used for parameters used by the entire playbook
        - Changes on everything

    d. inventory/hosts
        - used to define parameters per host.
        - Changes only on that host or host group

    e. role defaults/main.yaml
        - These are used for role/application specific parameters
        - Only changes for specific role/application