
OpenStack-Ansible Documentation: lxc_container_create role

Release 18.1.0.dev200

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Dec 28, 2022

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Ansible role for creating LXC containers. This role creates several directories on the LXC host for use in bind-mounted storage within the container.

To clone or view the source code for this repository, visit the role repository for [lxc_container_create](#).

DEFAULT VARIABLES

```
## Verbosity Options
debug: False

## Parameters provided to the wait_for_connection module after a container
## reboot is triggered by the role
lxc_container_wait_params:
  # Wait 3 seconds before attempting the first connection
  delay: 3
  # Wait 60 seconds for the container to respond
  timeout: 60

lxc_container_config: /etc/lxc/lxc-openstack.conf
lxc_container_config_list: []
lxc_container_commands: ""
lxc_container_extra_commands: "{{ _lxc_container_extra_commands | default(
  ↪'echo noop') }}"

# A list of bind mounts to configure for the container, for example:
# lxc_container_bind_mounts:
#   - host_directory: "/openstack/{{ inventory_hostname }}/mydirectory"
#     container_directory: "/opt/mydirectory"
lxc_container_bind_mounts: []

lxc_container_default_bind_mounts:
  - host_directory: "/openstack/backup/{{ inventory_hostname }}"
    container_directory: "/var/backup"

# When using a base container to snapshot from for the overlays or LVM
# copy-on-write backing stored, the base container prefix/name can be set.
lxc_container_base_name_prefix: ''
lxc_container_base_name: "{{ lxc_container_base_name_prefix }}{{ lxc_
  ↪container_map.distro }}-{{ lxc_container_map.release }}-{{ lxc_container_
  ↪map.arch }}"

# Mappings from Ansible reported architecture to distro release architecture
lxc_architecture_mapping:
  x86_64: amd64
  ppc64le: ppc64el
```

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```
s390x: s390x
armv7l: armhf
aarch64: arm64

# lxc container rootfs directory and cache path
lxc_container_directory: "/var/lib/lxc"
lxc_container_cache_path: "/var/cache/lxc"
lxc_container_log_path: "/var/log/lxc"
lxc_container_rootfs_directory: "{{ lxc_container_directory }}/{{ container_
→name }}/rootfs"

# container_fs.* is only used with building on an LVM backend
lxc_container_fs_size: 5G
lxc_container_fs_type: ext4

# The container creation process now allows `copy-on-write` to be set as
# the `lxc_container_backing_method` when the
# `lxc_container_backing_store` is set to `lvm`. When this is set it
# will use a snapshot of the base container to build the containers.
lxc_container_backing_method: null

# The container backing store can be set to 'overlayfs' to use overlayfs
# This should only be done for production use with a linux kernel > 3.14
# which is when overlayfs was merged into the mainline kernel.
# lxc_container_backing_store: overlayfs
# Other store options are: ["machinectl", "btrfs", "dir", "zfs", "lvm"].
lxc_container_backing_store: dir

# If the container backing store is LVM, the automatic detection will
# require the presence of the lxc_container_vg_name volume group. If
# this is not found then the automatic detection will fail back to
# using the directory backing.
lxc_container_vg_name: lxc

# Scripts allowing the configuration of pre/post-up/down scripts.
# These are run as one shot services before or after networking is available.
lxc_container_default_preup: []
lxc_container_default_postup: []
lxc_container_default_predown: []
lxc_container_default_postdown: []

lxc_container_default_mtu: "1500"

lxc_container_domain: "openstack.local"

# LXC image server
lxc_image_cache_server: images.linuxcontainers.org

## Default download template options
```

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```

## This can be customized to use a local build server and options.
## By default these options will be fulfilled by the distro specific
## variable files found in vars/
# lxc_container_download_template_options: >
#   --dist NAME_OF_DISTRO
#   --release DISTRO_RELEASE
#   --arch CONTAINER_ARCH
#   --force-cache
#   --server SERVER_TO_GET_IMAGES_FROM
lxc_container_template: download
lxc_container_variant: default
lxc_container_download_template_extra_options: ""
lxc_container_download_template_options: >-
  --dist {{ lxc_container_map.distro }}
  --release {{ lxc_container_map.release }}
  --arch {{ lxc_container_map.arch }}
  --force-cache
  --server {{ lxc_image_cache_server }}
  --variant={{ properties['lxc_container_variant'] | default(lxc_container_
↪variant) }}
  {{ lxc_container_download_template_extra_options }}

## Default machinectl template options
## This can be customized to use a local build server and options.
## By default these options will be fulfilled by the distro specific
## variable files found in vars/
# lxc_container_download_template_options: >
#   --dist NAME_OF_DISTRO
#   --release DISTRO_RELEASE
#   --arch CONTAINER_ARCH
lxc_container_machinectl_template_options: >-
  --dist {{ lxc_container_map.distro }}
  --release {{ lxc_container_map.release }}
  --arch {{ lxc_container_map.arch }}
  --variant={{ properties['lxc_container_variant'] | default(lxc_container_
↪variant) }}
  {{ lxc_container_download_template_extra_options }}

# Toggle the restart of containers via the handler.
lxc_container_allow_restarts: yes

lxc_container_network_veth_pair_prefix: "{{ inventory_hostname[-8:].replace('-'
↪', '_').replace('_', '') }}"
lxc_container_network_veth_pair: "{{ lxc_container_network_veth_pair_prefix }}
↪_{{ item.value.interface }}"
# In order to use "with_indexed_items" we need a specific var to reference_
↪item.1.interface
# This is for the container-interface.ini.j2 template only.
lxc_container_network_veth_pair_indexed: "{{ lxc_container_network_veth_pair_
↪prefix }}_{{ item.1.interface }}"

```

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```
# A default set of container networks used within the LXC containers.
lxc_container_networks:
  lxcbr0_address:
    bridge: lxcbr0
    interface: eth0
    type: veth

# Enable destroying then recreating containers
lxc_container_recreate: false

# Enable running the veth wiring script
lxc_container_veth_wiring: false

# Enable systemd-resolved
lxc_container_enable_resolved: true

# User defined variable pointing to a specific variable file used when setting
# up the base container image. Deployers can use the provided container_
↪variable
# files by simply inputting the file name
# "{{ ansible_facts['distribution'] }}-{{ ansible_facts['distribution_version'] }}
↪}-container.yml"
# or by providing the full path to a local file containing all of the_
↪variables
# needed to prepare a container.
#lxc_user_defined_container: null

# Dictionary of settings for containers
properties: {}

# Set "/var/log/journal/{{ machine_id }}" to be a bind mount to the physical
# host. This option will link the container journal and the physical host
# journals making it possible to log stream from the container on the physical
# host.
lxc_container_journal_link: true

# Enable or Disable the BTRFS quota system, which is used for the
# "/var/lib/machines" mount point (for the machinectl backing store), or for
# any containers with a btrfs backing store. More information on the BTRFS
# quota system can be found here:
# * https://btrfs.wiki.kernel.org/index.php/Quota\_support
lxc_host_btrfs_quota_disabled: false

# Set the default qgroup limits used for btrfs file system quotas. The default
# is "none". See the following documentation for more information:
# * https://btrfs.wiki.kernel.org/index.php/Manpage/btrfs-qgroup
lxc_host_btrfs_qgroup_space_limit: none
lxc_host_btrfs_qgroup_compression_limit: none
```

REQUIRED VARIABLES

None

2.1 Example playbook

```
- name: Create container(s)
  hosts: all_containers
  gather_facts: false
  user: root
  roles:
    - { role: "lxc_container_create" }
```