

LXC inside of LXD Different than Just LXC

On your host system, either install LXC or install LXD. Though LXD setups an LXC subsystem, If found that the packages are different.

This is a fresh ubuntu system with LXD already installed,

```
# show version,
lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description: Ubuntu 16.04.2 LTS
Release: 16.04
Codename: xenial

# confirm LXD insalled,
sudo apt-get install lxd
Reading package lists... Done
Building dependency tree
Reading state information... Done
lxd is already the newest version (2.0.10-0ubuntu1~16.04.1).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
```

Now simulate LXC install and notice all these **extra packages** and configuration files,

```
sudo apt-get install --dry-run lxc
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  busybox-static cloud-image-utils debootstrap distro-info genisoimage
  libaio1 libasn1-8-heimdal libboost-iostreams1.58.0
  libboost-random1.58.0 libboost-system1.58.0 libboost-thread1.58.0
  libcurl3-gnutls libglib2.0-0 libglib2.0-data libgssapi3-heimdal
  libhcrypto4-heimdal libheimbase1-heimdal libheimntlm0-heimdal
  libhx509-5-heimdal libiscsi2 libkrb5-26-heimdal libldap-2.4-2
  libnspr4 libnss3 libnss3-nssdb libpam-cgfs librados2 librbd1
  libroken18-heimdal librtmp1 libssl2-2 libssl2-modules
  libssl2-modules-db libwind0-heimdal lxc-templates lxc1 python3-lxc
  qemu-block-extra qemu-utils shared-mime-info sharutils
  uuid-runtime xdg-user-dirs
Suggested packages:
  cloud-utils-euca shunit2 wodim cdrkit-doc libssl2-modules-otp
  libssl2-modules-ldap libssl2-modules-sql
  libssl2-modules-gssapi-mit | libssl2-modules-gssapi-heimdal
  qemu-user-static btrfs-tools lxcctl bsd-mailx | mailx
The following NEW packages will be installed:
  busybox-static cloud-image-utils debootstrap distro-info genisoimage
  libaio1 libasn1-8-heimdal libboost-iostreams1.58.0
  libboost-random1.58.0 libboost-system1.58.0 libboost-thread1.58.0
  libcurl3-gnutls libglib2.0-0 libglib2.0-data libgssapi3-heimdal
  libhcrypto4-heimdal libheimbase1-heimdal libheimntlm0-heimdal
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libhx509-5-heimdal libiscsi2 libkrb5-26-heimdal libldap-2.4-2
  libnspr4 libnss3 libnss3-nssdb libpam-cgfs librados2 librbd1
libroken18-heimdal librtmp1 libssl2-2 libssl2-modules
  libssl2-modules-db libwind0-heimdal lxc lxc-templates lxc1 python3-lxc
qemu-block-extra qemu-utils shared-mime-info sharutils
  uuid-runtime xdg-user-dirs
0 upgraded, 44 newly installed, 0 to remove and 0 not upgraded.
Inst uuid-runtime (2.27.1-6ubuntu3.3 Ubuntu:16.04/xenial-updates [amd64])
Inst libiscsi2 (1.12.0-2 Ubuntu:16.04/xenial [amd64])
Inst busybox-static (1:1.22.0-15ubuntu1 Ubuntu:16.04/xenial [amd64])
Inst libroken18-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])
Inst libasn1-8-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])
Inst libhcrypto4-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])
Inst libheimbase1-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])
Inst libwind0-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])
Inst libhx509-5-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])
Inst libkrb5-26-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])
Inst libheimntlm0-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])
Inst libgssapi3-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])
Inst libssl2-modules-db (2.1.26.dfsg1-14build1 Ubuntu:16.04/xenial
[amd64])
Inst libssl2-2 (2.1.26.dfsg1-14build1 Ubuntu:16.04/xenial [amd64])
Inst libldap-2.4-2 (2.4.42+dfsg-2ubuntu3.2 Ubuntu:16.04/xenial-updates,
Ubuntu:16.04/xenial-security [amd64])
Inst librtmp1 (2.4+20151223.gitfa8646d-1ubuntu0.1
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])
Inst libcurl3-gnutls (7.47.0-1ubuntu2.2 Ubuntu:16.04/xenial-updates,
Ubuntu:16.04/xenial-security [amd64])
Inst libglb2.0-0 (2.48.2-0ubuntu1 Ubuntu:16.04/xenial-updates [amd64])
Inst libglb2.0-data (2.48.2-0ubuntu1 Ubuntu:16.04/xenial-updates [all])
Inst libssl2-modules (2.1.26.dfsg1-14build1 Ubuntu:16.04/xenial [amd64])
Inst shared-mime-info (1.5-2ubuntu0.1 Ubuntu:16.04/xenial-updates [amd64])
Inst xdg-user-dirs (0.15-2ubuntu6 Ubuntu:16.04/xenial [amd64])
Inst distro-info (0.14build1 Ubuntu:16.04/xenial [amd64])
Inst genisoimage (9:1.1.11-3ubuntu1 Ubuntu:16.04/xenial [amd64])
Inst libaio1 (0.3.110-2 Ubuntu:16.04/xenial [amd64])
Inst libboost-iostreams1.58.0 (1.58.0+dfsg-5ubuntu3.1
Ubuntu:16.04/xenial-updates [amd64])
Inst libboost-system1.58.0 (1.58.0+dfsg-5ubuntu3.1
Ubuntu:16.04/xenial-updates [amd64])
Inst libboost-random1.58.0 (1.58.0+dfsg-5ubuntu3.1
Ubuntu:16.04/xenial-updates [amd64])
Inst libboost-thread1.58.0 (1.58.0+dfsg-5ubuntu3.1
Ubuntu:16.04/xenial-updates [amd64])

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Inst libnspr4 (2:4.13.1-0ubuntu0.16.04.1 Ubuntu:16.04/xenial-updates,  
Ubuntu:16.04/xenial-security [amd64])  
Inst libnss3-nssdb (2:3.28.4-0ubuntu0.16.04.2 Ubuntu:16.04/xenial-updates,  
Ubuntu:16.04/xenial-security [all]) []  
Inst libnss3 (2:3.28.4-0ubuntu0.16.04.2 Ubuntu:16.04/xenial-updates,  
Ubuntu:16.04/xenial-security [amd64])  
Inst libpam-cgfs (2.0.7-0ubuntu1~16.04.2 Ubuntu:16.04/xenial-updates  
[amd64])  
Inst librados2 (10.2.7-0ubuntu0.16.04.1 Ubuntu:16.04/xenial-updates  
[amd64])  
Inst librbd1 (10.2.7-0ubuntu0.16.04.1 Ubuntu:16.04/xenial-updates [amd64])  
Inst python3-lxc (2.0.8-0ubuntu1~16.04.2 Ubuntu:16.04/xenial-updates  
[amd64])  
Inst lxc1 (2.0.8-0ubuntu1~16.04.2 Ubuntu:16.04/xenial-updates [amd64])  
Inst lxc (2.0.8-0ubuntu1~16.04.2 Ubuntu:16.04/xenial-updates [all])  
Inst lxc-templates (2.0.8-0ubuntu1~16.04.2 Ubuntu:16.04/xenial-updates  
[amd64])  
Inst qemu-block-extra (1:2.5+dfsg-5ubuntu10.14 Ubuntu:16.04/xenial-updates,  
Ubuntu:16.04/xenial-security [amd64])  
Inst qemu-utils (1:2.5+dfsg-5ubuntu10.14 Ubuntu:16.04/xenial-updates,  
Ubuntu:16.04/xenial-security [amd64])  
Inst sharutils (1:4.15.2-1 Ubuntu:16.04/xenial [amd64])  
Inst cloud-image-utils (0.27-0ubuntu24 Ubuntu:16.04/xenial [all])  
Inst debootstrap (1.0.78+nmu1ubuntu1.4 Ubuntu:16.04/xenial-updates [all])  
Conf uuid-runtime (2.27.1-6ubuntu3.3 Ubuntu:16.04/xenial-updates [amd64])  
Conf libiscsi2 (1.12.0-2 Ubuntu:16.04/xenial [amd64])  
Conf busybox-static (1:1.22.0-15ubuntu1 Ubuntu:16.04/xenial [amd64])  
Conf libroken18-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1  
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])  
Conf libasn1-8-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1  
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])  
Conf libhcrypto4-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1  
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])  
Conf libheimbase1-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1  
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])  
Conf libwind0-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1  
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])  
Conf libhx509-5-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1  
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])  
Conf libkrb5-26-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1  
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])  
Conf libheimntlm0-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1  
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])  
Conf libgssapi3-heimdal (1.7~git20150920+dfsg-4ubuntu1.16.04.1  
Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])  
Conf libsasl2-modules-db (2.1.26.dfsg1-14build1 Ubuntu:16.04/xenial  
[amd64])  
Conf libsasl2-2 (2.1.26.dfsg1-14build1 Ubuntu:16.04/xenial [amd64])  
Conf libldap-2.4-2 (2.4.42+dfsg-2ubuntu3.2 Ubuntu:16.04/xenial-updates,  
Ubuntu:16.04/xenial-security [amd64])  
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Ubuntu:16.04/xenial-updates, Ubuntu:16.04/xenial-security [amd64])  
Conf libcurl3-gnutls (7.47.0-1ubuntu2.2 Ubuntu:16.04/xenial-updates,
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Ubuntu:16.04/xenial-security [amd64])
Conf libglib2.0-0 (2.48.2-0ubuntu1 Ubuntu:16.04/xenial-updates [amd64])
Conf libglib2.0-data (2.48.2-0ubuntu1 Ubuntu:16.04/xenial-updates [all])
Conf libsasl2-modules (2.1.26.dfsg1-14build1 Ubuntu:16.04/xenial [amd64])
Conf shared-mime-info (1.5-2ubuntu0.1 Ubuntu:16.04/xenial-updates [amd64])
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Ubuntu:16.04/xenial-updates [amd64])
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Ubuntu:16.04/xenial-updates [amd64])
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Ubuntu:16.04/xenial-security [amd64])
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[amd64])
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[amd64])
Conf librbld1 (10.2.7-0ubuntu0.16.04.1 Ubuntu:16.04/xenial-updates [amd64])
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[amd64])
Conf lxc1 (2.0.8-0ubuntu1~16.04.2 Ubuntu:16.04/xenial-updates [amd64])
Conf lxc (2.0.8-0ubuntu1~16.04.2 Ubuntu:16.04/xenial-updates [all])
Conf lxc-templates (2.0.8-0ubuntu1~16.04.2 Ubuntu:16.04/xenial-updates
[amd64])
Conf qemu-block-extra (1:2.5+dfsg-5ubuntu10.14 Ubuntu:16.04/xenial-updates,
Ubuntu:16.04/xenial-security [amd64])
Conf qemu-utils (1:2.5+dfsg-5ubuntu10.14 Ubuntu:16.04/xenial-updates,
Ubuntu:16.04/xenial-security [amd64])
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Conf sharutils (1:4.15.2-1 Ubuntu:16.04/xenial [amd64])  
Conf cloud-image-utils (0.27-0ubuntu24 Ubuntu:16.04/xenial [all])  
Conf debootstrap (1.0.78+nmu1ubuntu1.4 Ubuntu:16.04/xenial-updates [all])
```

Though it might be fine, I think it's a bad idea to try and run LXC and LXD together. Also, because I like my host system to be as clean as possible, I will make sure to [start with a clean install](#) of the host and then chose either LXD or LXC.