

## DPDK安装:

(1)

```
1 yum update
2 yum install libpcap-devel kernel*
```

为确保DPDK安装成功，程序正常编译使用，安装前应执行如下命令，安装程序依赖

```
1 Xshell for Xmanager Enterprise (Build N/A)
2 Copyright (c) 2002-2016 NetSarang Computer, Inc. All rights reserved.
3
4 Type `help' to learn how to use Xshell prompt.
5 [c:\~]$
6
7 Connecting to 10.2.1.221:22...
8 Connection established.
9 To escape to local shell, press 'Ctrl+Alt+]'.
10
11 Last login: Mon Jul 15 17:06:03 2019 from 10.2.2.51
12 [root@localhost ~]# yum update
13 Loaded plugins: fastestmirror
14 Repodata is over 2 weeks old. Install yum-cron? Or run: yum makecache fast
15 file:///mnt/repodata/repomd.xml: [Errno 14] curl#37 - "Couldn't open file /mnt/
16 Trying other mirror.
17 Loading mirror speeds from cached hostfile
18 No packages marked for update
19 [root@localhost ~]# wget https://dpdk.org/rel/dpdk-17.11.2.tar.xz
20 -bash: wget: command not found
21 [root@localhost ~]# yum install libpcap-devel kernel*
22 Loaded plugins: fastestmirror
23 Repodata is over 2 weeks old. Install yum-cron? Or run: yum makecache fast
24 file:///mnt/repodata/repomd.xml: [Errno 14] curl#37 - "Couldn't open file /mnt/
25 Trying other mirror.
26 Loading mirror speeds from cached hostfile
27 No package libpcap-devel available.
28 Package kernel-headers-3.10.0-514.el7.x86_64 already installed and latest versi
```

```

29 Package kernel-3.10.0-514.el7.x86_64 already installed and latest version
30 Package kernel-tools-libs-3.10.0-514.el7.x86_64 already installed and latest ve
31 Package kernel-devel-3.10.0-514.el7.x86_64 already installed and latest version
32 Package kernel-tools-3.10.0-514.el7.x86_64 already installed and latest version
33 Resolving Dependencies
34 --> Running transaction check
35 ---> Package kernel-abi-whitelists.noarch 0:3.10.0-514.el7 will be installed
36 ---> Package kernel-debug-devel.x86_64 0:3.10.0-514.el7 will be installed
37 --> Finished Dependency Resolution
38
39 Dependencies Resolved
40
41 =====
42 Package                                Arch
43 =====
44 Installing:
45 kernel-abi-whitelists                  noarch
46 kernel-debug-devel                     x86_64
47
48 Transaction Summary
49 =====
50 Install 2 Packages
51
52 Total download size: 17 M
53 Installed size: 35 M
54 Is this ok [y/d/N]:
55

```

## 2) 安装编译:

需要先修改文件:

(1)修改 dpdk-stable-17.11.2/config/common\_linuxapp文件

CONFIG\_RTE\_EAL\_NUMA\_AWARE\_HUGE\_PAGES=y改为

CONFIG\_RTE\_EAL\_NUMA\_AWARE\_HUGE\_PAGES=n

CONFIG\_RTE\_LIBRTE\_VHOST\_NUMA=y改为

CONFIG\_RTE\_LIBRTE\_VHOST\_NUMA=n

CONFIG\_RTE\_KNI\_KMOD=y改为 CONFIG\_RTE\_KNI\_KMOD=n

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JavaScript L1 (default) ...

```
1 #include "common_base"
2
3 CONFIG_RTE_EXEC_ENV="linuxapp"
4 CONFIG_RTE_EXEC_ENV_LINUXAPP=y
5
6 CONFIG_RTE_EAL_NUMA_AWARE_HUGEPAGES=n
7 CONFIG_RTE_EAL_IGB_UIO=y
8 CONFIG_RTE_EAL_VFIO=y
9 CONFIG_RTE_KNI_KMOD=n
10 CONFIG_RTE_LIBRTE_KNI=y
11 CONFIG_RTE_LIBRTE_PMD_KNI=y
12 CONFIG_RTE_LIBRTE_VHOST=y
13 CONFIG_RTE_LIBRTE_VHOST_NUMA=n
14 CONFIG_RTE_LIBRTE_PMD_VHOST=y
15 CONFIG_RTE_LIBRTE_PMD_AF_PACKET=y
16 CONFIG_RTE_LIBRTE_PMD_TAP=y
17 CONFIG_RTE_LIBRTE_AVP_PMD=y
18 CONFIG_RTE_LIBRTE_NFP_PMD=y
19 CONFIG_RTE_LIBRTE_POWER=y
20 CONFIG_RTE_VIRTIO_USER=y
21 CONFIG_RTE_PROC_INFO=y
```

(2)修改dpdk-stable-17.11.2/lib/librte\_eal/linuxapp/igb\_uio/igb\_uio.c文件

if (pci\_intx\_mask\_supported(udev->pdev))改为 if (pci\_intx\_mask\_supported(udev->pdev)  
|| 1)(在文件279行)

```
1 #endif
2     /* fall back to INTX */
3     case RTE_INTR_MODE_LEGACY:
4         if (pci_intx_mask_supported(udev->pdev)||1) {
5             dev_dbg(&udev->pdev->dev, "using INTX");
```

```
6         udev->info.irq_flags = IRQF_SHARED | IRQF_NO_THREAD;
7         udev->info.irq = udev->pdev->irq;
8         udev->mode = RTE_INTR_MODE_LEGACY;
9         break;
10    }
11    dev_notice(&udev->pdev->dev, "PCI INTX mask not supported\n");
12    /* fall back to no IRQ */
13    case RTE_INTR_MODE_NONE:
14        udev->mode = RTE_INTR_MODE_NONE;
15        udev->info.irq = UIO_IRQ_NONE;
16        break;
17
18    default:
19        dev_err(&udev->pdev->dev, "invalid IRQ mode %u",
```

使用安装脚本配置：

```
1 cd dpdk-stable-17.11.2/usertools
2 ./dpdk-setup.sh
```

```
-----
[26] Run test application ($RTE_TARGET/app/test)
[27] Run testpmd application in interactive mode ($RTE_TARGET/app/test)
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Step 4: Other tools
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[28] List hugepage info from /proc/meminfo
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Step 5: Uninstall and system cleanup
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[29] Unbind devices from IGB UIO or VFIO driver
[30] Remove IGB UIO module
[31] Remove VFIO module
[32] Remove KNI module
[33] Remove hugepage mappings

[34] Exit Script

Option: 14

Configuration done using x86_64-native-linuxapp-gcc
== Build lib
```

选择14 x86\_64-native-linuxapp-gcc