[PATCH] scsi: xen-scsifront: add error handling for xenbus_printf
15 messages

Zhouyang Jia <jiazhouyang09@gmail.com>   Mon, Jun 11, 2018 at 11:42 PM
Cc: Zhouyang Jia <jiazhouyang09@gmail.com>, Juergen Gross <jgross@suse.com>, Boris Ostrovsky <boris.ostrovsky@oracle.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

When xenbus_printf fails, the lack of error-handling code may
cause unexpected results.

This patch adds error-handling code after calling xenbus_printf.

Signed-off-by: Zhouyang Jia <jiazhouyang09@gmail.com>
---
 drivers/scsi/xen-scsifront.c | 31 +++++++++++++++++++++++++-------
 1 file changed, 24 insertions(+), 7 deletions(-)

diff --git a/drivers/scsi/xen-scsifront.c b/drivers/scsi/xen-scsifront.c
index 36f59a1..3d858ac 100644
--- a/drivers/scsi/xen-scsifront.c
+++ b/drivers/scsi/xen-scsifront.c
@@ -654,10 +654,17 @@ static int scsifront_dev_reset_handler(struct scsi_cmnd *sc)
 static int scsifront_sdev_configure(struct scsi_device *sdev)
 {
      struct vscsifrnt_info *info = shost_priv(sdev->host);
+   struct xenbus_device *dev = info->dev;
+   int err;

-     if (info && current == info->curr)
-          xenbus_printf(XBT_NIL, info->dev->nodename,
+   if (info && current == info->curr) {
+   err = xenbus_printf(XBT_NIL, info->dev->nodename,
+   info->dev_state_path, "%d", XenbusStateConnected);
+   if (err) {
+   dev_err(&dev->dev, "writing dev_state_path\n");
+   return err;
+   }
+   }

      return 0;
}
@@ -665,10 +672,15 @@ static int scsifront_sdev_configure(struct scsi_device *sdev)
 static void scsifront_sdev_destroy(struct scsi_device *sdev)
 {
      struct vscsifrnt_info *info = shost_priv(sdev->host);
+   struct xenbus_device *dev = info->dev;
+   int err;

-     if (info && current == info->curr)
-          xenbus_printf(XBT_NIL, info->dev->nodename,
+   if (info && current == info->curr) {
+   err = xenbus_printf(XBT_NIL, info->dev->nodename,
+   info->dev_state_path, "%d", XenbusStateClosed);
+   if (err)
+   dev_err(&dev->dev, "writing dev_state_path\n");
+   }
}

 static struct scsi_host_template scsifront_sht = {
@@ -1003,9 +1015,11 @@ static void scsifront_do_lun_hotplug(struct vscsifrnt_info *info, int op)

               if (scsi_add_device(info->host, chn, tgt, lun)) {
                    dev_err(&dev->dev, "scsi_add_device\n");
-                    xenbus_printf(XBT_NIL, dev->nodename,
+   err = xenbus_printf(XBT_NIL, dev->nodename,
+   info->dev_state_path,
+   "%d", XenbusStateClosed);
+   if (err)
+   dev_err(&dev->dev, "writing dev_state_path\n");
               }
               break;
          case VSCSIFRONT_OP_DEL_LUN:
@@ -1019,10 +1033,13 @@ static void scsifront_do_lun_hotplug(struct vscsifrnt_info *info, int op)
               break;
          case VSCSIFRONT_OP_READD_LUN:
-               if (device_state == XenbusStateConnected)
-                    xenbus_printf(XBT_NIL, dev->nodename,
+   if (device_state == XenbusStateConnected) {
+   err = xenbus_printf(XBT_NIL, dev->nodename,
+   info->dev_state_path,
+   "%d", XenbusStateConnected);
+   if (err)
+   dev_err(&dev->dev, "writing dev_state_path\n");
+   }
               break;
          default:
               break;
--
2.7.4

Finn Thain <fthain@telegraphics.com.au>   Wed, Jun 13, 2018 at 6:09 AM
To: Zhouyang Jia <jiazhouyang09@gmail.com>
Cc: Juergen Gross <jgross@suse.com>, Boris Ostrovsky <boris.ostrovsky@oracle.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

On Tue, 12 Jun 2018, Zhouyang Jia wrote:

> When xenbus_printf fails, the lack of error-handling code may
> cause unexpected results.
>
> This patch adds error-handling code after calling xenbus_printf.
>
> Signed-off-by: Zhouyang Jia <jiazhouyang09@gmail.com>
> ---
> drivers/scsi/xen-scsifront.c | 31 +++++++++++++++++++++++++-------
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>
> diff --git a/drivers/scsi/xen-scsifront.c b/drivers/scsi/xen-scsifront.c
> index 36f59a1..3d858ac 100644
> --- a/drivers/scsi/xen-scsifront.c
> +++ b/drivers/scsi/xen-scsifront.c
> @@ -654,10 +654,17 @@ static int scsifront_dev_reset_handler(struct scsi_cmnd *sc)
> static int scsifront_sdev_configure(struct scsi_device *sdev)
> {
>   struct vscsifrnt_info *info = shost_priv(sdev->host);
> +   struct xenbus_device *dev = info->dev;
> +   int err;
>
> -   if (info && current == info->curr)
> -   xenbus_printf(XBT_NIL, info->dev->nodename,
> +   if (info && current == info->curr) {
> +   err = xenbus_printf(XBT_NIL, info->dev->nodename,
>   info->dev_state_path, "%d", XenbusStateConnected);

The existing code checks whether 'info' is NULL before dereferencing it.
But your patch checks for NULL after dereferencing.

> +   if (err) {
> +   dev_err(&dev->dev, "writing dev_state_path\n");
> +   return err;
> +   }
> +   }
>
>   return 0;
> }
> @@ -665,10 +672,15 @@ static int scsifront_sdev_configure(struct scsi_device *sdev)
> static void scsifront_sdev_destroy(struct scsi_device *sdev)
> {
>   struct vscsifrnt_info *info = shost_priv(sdev->host);
> +   struct xenbus_device *dev = info->dev;
> +   int err;
>
> -   if (info && current == info->curr)
> -   xenbus_printf(XBT_NIL, info->dev->nodename,
> +   if (info && current == info->curr) {
> +   err = xenbus_printf(XBT_NIL, info->dev->nodename,
>   info->dev_state_path, "%d", XenbusStateClosed);

Same here.

> +   if (err)
> +   dev_err(&dev->dev, "writing dev_state_path\n");
> +   }
> }
>
> static struct scsi_host_template scsifront_sht = {

--

Zhouyang Jia <jiazhouyang09@gmail.com>   Thu, Jun 14, 2018 at 4:13 AM
To: Finn Thain <fthain@telegraphics.com.au>
Cc: Juergen Gross <jgross@suse.com>, Boris Ostrovsky <boris.ostrovsky@oracle.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, Linux Kernel Mailing List <linux-kernel@vger.kernel.org>

Hi,

Sorry for the mistakes, I'll fix this in v2.

Best,
Zhouyang
[Quoted text hidden]

Zhouyang Jia <jiazhouyang09@gmail.com>   Thu, Jun 14, 2018 at 12:08 PM
Cc: Zhouyang Jia <jiazhouyang09@gmail.com>, Juergen Gross <jgross@suse.com>, Boris Ostrovsky <boris.ostrovsky@oracle.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

When xenbus_printf fails, the lack of error-handling code may
cause unexpected results.

This patch adds error-handling code after calling xenbus_printf.

Signed-off-by: Zhouyang Jia <jiazhouyang09@gmail.com>
---
v1->v2:
- Fix dereferencing before checking
---
 drivers/scsi/xen-scsifront.c | 29 +++++++++++++++++++++-------
 1 file changed, 22 insertions(+), 7 deletions(-)

diff --git a/drivers/scsi/xen-scsifront.c b/drivers/scsi/xen-scsifront.c
index 36f59a1..a7f6111 100644
--- a/drivers/scsi/xen-scsifront.c
+++ b/drivers/scsi/xen-scsifront.c
@@ -654,10 +654,16 @@ static int scsifront_dev_reset_handler(struct scsi_cmnd *sc)
 static int scsifront_sdev_configure(struct scsi_device *sdev)
 {
        struct vscsifrnt_info *info = shost_priv(sdev->host);
+   int err;

-       if (info && current == info->curr)
-               xenbus_printf(XBT_NIL, info->dev->nodename,
+   if (info && current == info->curr) {
+   err = xenbus_printf(XBT_NIL, info->dev->nodename,
+   info->dev_state_path, "%d", XenbusStateConnected);
+   if (err) {
+   dev_err(&info->dev->dev, "writing dev_state_path\n");
+   return err;
+   }
+   }

        return 0;
}
@@ -665,10 +671,14 @@ static int scsifront_sdev_configure(struct scsi_device *sdev)
 static void scsifront_sdev_destroy(struct scsi_device *sdev)
 {
        struct vscsifrnt_info *info = shost_priv(sdev->host);
+   int err;

-       if (info && current == info->curr)
-               xenbus_printf(XBT_NIL, info->dev->nodename,
+   if (info && current == info->curr) {
+   err = xenbus_printf(XBT_NIL, info->dev->nodename,
+   info->dev_state_path, "%d", XenbusStateClosed);
+   if (err)
+   dev_err(&info->dev->dev, "writing dev_state_path\n");
+   }
}

 static struct scsi_host_template scsifront_sht = {
@@ -1003,9 +1013,11 @@ static void scsifront_do_lun_hotplug(struct vscsifrnt_info *info, int op)

                        if (scsi_add_device(info->host, chn, tgt, lun)) {
                                dev_err(&dev->dev, "scsi_add_device\n");
-                               xenbus_printf(XBT_NIL, dev->nodename,
+   err = xenbus_printf(XBT_NIL, dev->nodename,
+   info->dev_state_path,
+   "%d", XenbusStateClosed);
+   if (err)
+   dev_err(&dev->dev, "writing dev_state_path\n");
                        }
                        break;
                case VSCSIFRONT_OP_DEL_LUN:
@@ -1019,10 +1031,13 @@ static void scsifront_do_lun_hotplug(struct vscsifrnt_info *info, int op)
[Quoted text hidden]

Boris Ostrovsky <boris.ostrovsky@oracle.com>   Thu, Jun 14, 2018 at 5:54 PM
To: Zhouyang Jia <jiazhouyang09@gmail.com>
Cc: Juergen Gross <jgross@suse.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

[Quoted text hidden]
These errors should be reported using xenbus_dev_error().

And the second patch too.

-boris

Zhouyang Jia <jiazhouyang09@gmail.com>   Thu, Jun 14, 2018 at 6:59 PM
Cc: Zhouyang Jia <jiazhouyang09@gmail.com>, Juergen Gross <jgross@suse.com>, Boris Ostrovsky <boris.ostrovsky@oracle.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

When xenbus_printf fails, the lack of error-handling code may
cause unexpected results.

This patch adds error-handling code after calling xenbus_printf.

Signed-off-by: Zhouyang Jia <jiazhouyang09@gmail.com>
---
v1->v2:
- Fix dereferencing before checking
v2->v3:
- Use xenbus_dev_error to report errors.
---
 drivers/scsi/xen-scsifront.c | 33 +++++++++++++++++++++++++-------
 1 file changed, 26 insertions(+), 7 deletions(-)

diff --git a/drivers/scsi/xen-scsifront.c b/drivers/scsi/xen-scsifront.c
index 36f59a1..644d1ce 100644
--- a/drivers/scsi/xen-scsifront.c
+++ b/drivers/scsi/xen-scsifront.c
@@ -654,10 +654,17 @@ static int scsifront_dev_reset_handler(struct scsi_cmnd *sc)
 static int scsifront_sdev_configure(struct scsi_device *sdev)
 {
        struct vscsifrnt_info *info = shost_priv(sdev->host);
+   int err;

-       if (info && current == info->curr)
-               xenbus_printf(XBT_NIL, info->dev->nodename,
+   if (info && current == info->curr) {
+   err = xenbus_printf(XBT_NIL, info->dev->nodename,
+   info->dev_state_path, "%d", XenbusStateConnected);
+   if (err) {
+   xenbus_dev_error(&info->dev->dev, err,
+   "%s: writing dev_state_path", __func__);
+   return err;
+   }
+   }

        return 0;
}
@@ -665,10 +672,15 @@ static int scsifront_sdev_configure(struct scsi_device *sdev)
 static void scsifront_sdev_destroy(struct scsi_device *sdev)
 {
        struct vscsifrnt_info *info = shost_priv(sdev->host);
+   int err;

-       if (info && current == info->curr)
-               xenbus_printf(XBT_NIL, info->dev->nodename,
+   if (info && current == info->curr) {
+   err = xenbus_printf(XBT_NIL, info->dev->nodename,
+   info->dev_state_path, "%d", XenbusStateClosed);
+   if (err)
+   xenbus_dev_error(&info->dev->dev, err,
+   "%s: writing dev_state_path", __func__);
+   }
}

```
@@ -1003,9 +1015,12 @@ static void scsifront_do_lun_hotplug(struct vscsifrnt_info *info, int op)

                 if (scsi_add_device(info->host, chn, tgt, lun)) {
                         dev_err(&dev->dev, "scsi_add_device\n");
-                        xenbus_printf(XBT_NIL, dev->nodename,
+                        err = xenbus_printf(XBT_NIL, dev->nodename,
                                         info->dev_state_path,
                                         "%d", XenbusStateClosed);
+                        if (err)
+                                xenbus_dev_error(&dev->dev, err,
+                                        "%s: writing dev_state_path", __func__);
                 }
                 break;
         case VSCSIFRONT_OP_DEL_LUN:
@@ -1019,10 +1034,14 @@ static void scsifront_do_lun_hotplug(struct vscsifrnt_info *info, int op)
                 }
                 break;
         case VSCSIFRONT_OP_READD_LUN:
-                if (device_state == XenbusStateConnected)
-                        xenbus_printf(XBT_NIL, dev->nodename,
+                if (device_state == XenbusStateConnected) {
+                        err = xenbus_printf(XBT_NIL, dev->nodename,
                                         info->dev_state_path,
                                         "%d", XenbusStateConnected);
+                        if (err)
+                                xenbus_dev_error(&dev->dev, err,
+                                        "%s: writing dev_state_path", __func__);
```
[Quoted text hidden]

---

kbuild test robot <lkp@intel.com>   Thu, Jun 14, 2018 at 7:50 PM
To: linux-scsi-owner@vger.kernel.org
Cc: kbuild-all@01.org, Zhouyang Jia <jiazhouyang09@gmail.com>, Juergen Gross <jgross@suse.com>, Boris Ostrovsky <boris.ostrovsky@oracle.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

Hi,

Thank you for the patch! Yet something to improve:

[auto build test ERROR on xen-tip/linux-next]
[also build test ERROR on v4.17 next-20180614]
[if your patch is applied to the wrong git tree, please drop us a note to help improve the system]

url: https://github.com/0day-ci/linux/commits/linux-scsi-owner-vger-kernel-org/scsi-xen-scsifront-add-error-handling-for-xenbus_printf/20180615-070404
base: https://git.kernel.org/pub/scm/linux/kernel/git/xen/tip.git linux-next
config: i386-randconfig-x010-201823 (attached as .config)
compiler: gcc-7 (Debian 7.3.0-16) 7.3.0
reproduce:
        # save the attached .config to linux build tree
        make ARCH=i386

All errors (new ones prefixed by >>):

   drivers/scsi/xen-scsifront.c: In function 'scsifront_sdev_configure':
>> drivers/scsi/xen-scsifront.c:663:21: error: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type [-Werror=incompatible-pointer-types]
        xenbus_dev_error(&info->dev->dev, err,
                         ^
   In file included from drivers/scsi/xen-scsifront.c:50:0:
   include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct device *'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
         ^~~~~~~~~~~~~~~~
   drivers/scsi/xen-scsifront.c: In function 'scsifront_sdev_destroy':
   drivers/scsi/xen-scsifront.c:681:21: error: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type [-Werror=incompatible-pointer-types]
        xenbus_dev_error(&info->dev->dev, err,
                         ^
   In file included from drivers/scsi/xen-scsifront.c:50:0:
   include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct device *'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
         ^~~~~~~~~~~~~~~~
   drivers/scsi/xen-scsifront.c: In function 'scsifront_do_lun_hotplug':
   drivers/scsi/xen-scsifront.c:1022:23: error: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type [-Werror=incompatible-pointer-types]
        xenbus_dev_error(&dev->dev, err,
                         ^
   In file included from drivers/scsi/xen-scsifront.c:50:0:
   include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct device *'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
         ^~~~~~~~~~~~~~~~
   drivers/scsi/xen-scsifront.c:1042:23: error: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type [-Werror=incompatible-pointer-types]
        xenbus_dev_error(&dev->dev, err,
                         ^
   In file included from drivers/scsi/xen-scsifront.c:50:0:
   include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct device *'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
         ^~~~~~~~~~~~~~~~
   cc1: some warnings being treated as errors

vim +/xenbus_dev_error +663 drivers/scsi/xen-scsifront.c

   653
   654 static int scsifront_sdev_configure(struct scsi_device *sdev)
   655 {
   656   struct vscsifrnt_info *info = shost_priv(sdev->host);
   657   int err;
   658
   659   if (info && current == info->curr) {
   660   err = xenbus_printf(XBT_NIL, info->dev->nodename,
   661   info->dev_state_path, "%d", XenbusStateConnected);
   662   if (err) {
 > 663   xenbus_dev_error(&info->dev->dev, err,
   664   "%s: writing dev_state_path", __func__);
   665   return err;
   666   }
   667   }
   668
   669   return 0;
   670 }
   671

0-DAY kernel test infrastructure   Open Source Technology Center
https://lists.01.org/pipermail/kbuild-all   Intel Corporation

---

Zhouyang Jia <jiazhouyang09@gmail.com>   Thu, Jun 14, 2018 at 9:48 PM
Cc: Zhouyang Jia <jiazhouyang09@gmail.com>, Boris Ostrovsky <boris.ostrovsky@oracle.com>, Juergen Gross <jgross@suse.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

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Signed-off-by: Zhouyang Jia <jiazhouyang09@gmail.com>
---
v1->v2:
- Fix dereferencing before checking.
v2->v3:
- Use xenbus_dev_error to report errors.
v3->v4:
- Fix compilation errors.
---
 drivers/scsi/xen-scsifront.c | 33 +++++++++++++++++++++++++++-------
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+++ b/drivers/scsi/xen-scsifront.c
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 static int scsifront_sdev_configure(struct scsi_device *sdev)
 {
         struct vscsifrnt_info *info = shost_priv(sdev->host);
+   int err;

-        if (info && current == info->curr)
-                xenbus_printf(XBT_NIL, info->dev->nodename,
+   if (info && current == info->curr) {
+   err = xenbus_printf(XBT_NIL, info->dev->nodename,
+   info->dev_state_path, "%d", XenbusStateConnected);
+   if (err) {
+   xenbus_dev_error(&info->dev, err,
+   "%s: writing dev_state_path", __func__);
+   return err;
+   }
+   }

         return 0;
 }
@@ -665,10 +672,15 @@ static int scsifront_sdev_configure(struct scsi_device *sdev)
 static void scsifront_sdev_destroy(struct scsi_device *sdev)
 {
```

```
           struct vscsifrnt_info *info = shost_priv(sdev->host);
+   int err;

-          if (info && current == info->curr)
-              xenbus_printf(XBT_NIL, info->dev->nodename,
+   if (info && current == info->curr) {
+   err = xenbus_printf(XBT_NIL, info->dev->nodename,
                       info->dev_state_path, "%d", XenbusStateClosed);
+   if (err)
+   xenbus_dev_error(&info->dev, err,
+   "%s: writing dev_state_path", __func__);
+   }
  }

  static struct scsi_host_template scsifront_sht = {
@@ -1003,9 +1015,12 @@ static void scsifront_do_lun_hotplug(struct vscsifrnt_info *info, int op)

              if (scsi_add_device(info->host, chn, tgt, lun)) {
                  dev_err(&dev->dev, "scsi_add_device\n");
-                  xenbus_printf(XBT_NIL, dev->nodename,
+   err = xenbus_printf(XBT_NIL, dev->nodename,
                       info->dev_state_path,
                       "%d", XenbusStateClosed);
+   if (err)
+   xenbus_dev_error(dev, err,
+   "%s: writing dev_state_path", __func__);
              }
              break;
          case VSCSIFRONT_OP_DEL_LUN:
@@ -1019,10 +1034,14 @@ static void scsifront_do_lun_hotplug(struct vscsifrnt_info *info, int op)
              }
              break;
          case VSCSIFRONT_OP_READD_LUN:
-              if (device_state == XenbusStateConnected)
-                  xenbus_printf(XBT_NIL, dev->nodename,
+   if (device_state == XenbusStateConnected) {
+   err = xenbus_printf(XBT_NIL, dev->nodename,
                       info->dev_state_path,
                       "%d", XenbusStateConnected);
+   if (err)
+   xenbus_dev_error(dev, err,
+   "%s: writing dev_state_path", __func__);
```
[Quoted text hidden]

---

**kbuild test robot** <lkp@intel.com>                                                                      Thu, Jun 14, 2018 at 10:32 PM
To: linux-scsi-owner@vger.kernel.org
Cc: kbuild-all@01.org, Zhouyang Jia <jiazhouyang09@gmail.com>, Juergen Gross <jgross@suse.com>, Boris Ostrovsky <boris.ostrovsky@oracle.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

Hi,

Thank you for the patch! Perhaps something to improve:

[auto build test WARNING on xen-tip/linux-next]
[also build test WARNING on v4.17 next-20180614]
[if your patch is applied to the wrong git tree, please drop us a note to help improve the system]

url:    https://github.com/0day-ci/linux/commits/linux-scsi-owner-vger-kernel-org/scsi-xen-scsifront-add-error-handling-for-xenbus_printf/20180615-070404
base:   https://git.kernel.org/pub/scm/linux/kernel/git/xen/tip.git linux-next
config: i386-randconfig-sb0-06140922 (attached as .config)
compiler: gcc-4.9 (Debian 4.9.4-2) 4.9.4
reproduce:
        # save the attached .config to linux build tree
        make ARCH=i386

All warnings (new ones prefixed by >>):

   drivers//scsi/xen-scsifront.c: In function 'scsifront_sdev_configure':
>> drivers//scsi/xen-scsifront.c:663:21: warning: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type
         xenbus_dev_error(&info->dev, err,
         ^

   In file included from drivers//scsi/xen-scsifront.c:50:0:
   include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct device *'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
         ^

   drivers//scsi/xen-scsifront.c: In function 'scsifront_sdev_destroy':
   drivers//scsi/xen-scsifront.c:681:21: warning: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type
         xenbus_dev_error(&info->dev, err,
         ^

   In file included from drivers//scsi/xen-scsifront.c:50:0:
   include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct device *'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
         ^

   drivers//scsi/xen-scsifront.c: In function 'scsifront_do_lun_hotplug':
   drivers//scsi/xen-scsifront.c:1022:23: warning: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type
         xenbus_dev_error(&dev->dev, err,
         ^

   In file included from drivers//scsi/xen-scsifront.c:50:0:
   include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct device *'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
         ^

   drivers//scsi/xen-scsifront.c:1042:23: warning: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type
         xenbus_dev_error(&dev->dev, err,
         ^

   In file included from drivers//scsi/xen-scsifront.c:50:0:
   include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct device *'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
         ^

vim +/xenbus_dev_error +663 drivers//scsi/xen-scsifront.c
[Quoted text hidden]

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📎 **.config.gz**
    32K

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**kbuild test robot** <lkp@intel.com>                                                                        Fri, Jun 15, 2018 at 1:44 AM
To: linux-scsi-owner@vger.kernel.org
Cc: kbuild-all@01.org, Zhouyang Jia <jiazhouyang09@gmail.com>, Juergen Gross <jgross@suse.com>, Boris Ostrovsky <boris.ostrovsky@oracle.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

Hi,

Thank you for the patch! Perhaps something to improve:

[auto build test WARNING on xen-tip/linux-next]
[also build test WARNING on v4.17 next-20180614]
[if your patch is applied to the wrong git tree, please drop us a note to help improve the system]

url:    https://github.com/0day-ci/linux/commits/linux-scsi-owner-vger-kernel-org/scsi-xen-scsifront-add-error-handling-for-xenbus_printf/20180615-070404
base:   https://git.kernel.org/pub/scm/linux/kernel/git/xen/tip.git linux-next
reproduce:
        # apt-get install sparse
        make ARCH=x86_64 allmodconfig
        make C=1 CF=-D__CHECK_ENDIAN__


sparse warnings: (new ones prefixed by >>)

   drivers/scsi/xen-scsifront.c:267:21: sparse: expression using sizeof(void)
   drivers/scsi/xen-scsifront.c:440:33: sparse: expression using sizeof(void)
   drivers/scsi/xen-scsifront.c:440:33: sparse: expression using sizeof(void)
   drivers/scsi/xen-scsifront.c:473:33: sparse: expression using sizeof(void)
   drivers/scsi/xen-scsifront.c:473:33: sparse: expression using sizeof(void)
   drivers/scsi/xen-scsifront.c:474:33: sparse: expression using sizeof(void)
   drivers/scsi/xen-scsifront.c:474:33: sparse: expression using sizeof(void)
>> drivers/scsi/xen-scsifront.c:663:47: sparse: incorrect type in argument 1 (different base types) @@    expected struct xenbus_device *dev @@    got xenbus_device *dev @@
   drivers/scsi/xen-scsifront.c:663:47:    expected struct xenbus_device *dev
   drivers/scsi/xen-scsifront.c:663:47:    got struct device *<noident>
   drivers/scsi/xen-scsifront.c:681:47: sparse: incorrect type in argument 1 (different base types) @@    expected struct xenbus_device *dev @@    got xenbus_device *dev @@
   drivers/scsi/xen-scsifront.c:681:47:    expected struct xenbus_device *dev
   drivers/scsi/xen-scsifront.c:681:47:    got struct device *<noident>
   drivers/scsi/xen-scsifront.c:1022:59: sparse: incorrect type in argument 1 (different base types) @@    expected struct xenbus_device *dev @@    got xenbus_device *dev @@
   drivers/scsi/xen-scsifront.c:1022:59:    expected struct xenbus_device *dev
   drivers/scsi/xen-scsifront.c:1022:59:    got struct device *<noident>
   drivers/scsi/xen-scsifront.c:1042:59: sparse: incorrect type in argument 1 (different base types) @@    expected struct xenbus_device *dev @@    got xenbus_device *dev @@
   drivers/scsi/xen-scsifront.c:1042:59:    expected struct xenbus_device *dev
   drivers/scsi/xen-scsifront.c:1042:59:    got struct device *<noident>
   drivers/scsi/xen-scsifront.c:1063:19: sparse: expression using sizeof(void)
   drivers/scsi/xen-scsifront.c:1064:19: sparse: expression using sizeof(void)
   drivers/scsi/xen-scsifront.c:1065:19: sparse: expression using sizeof(void)
   drivers/scsi/xen-scsifront.c: In function 'scsifront_sdev_configure':
   drivers/scsi/xen-scsifront.c:663:21: error: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type [-Werror=incompatible-pointer-types]
         xenbus_dev_error(&info->dev, err,
         ^~~~~~~~~~~~~~~~

   In file included from drivers/scsi/xen-scsifront.c:50:0:
   include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct device *'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
         ^~~~~~~~~~~~~~~~
   drivers/scsi/xen-scsifront.c: In function 'scsifront_sdev_destroy':
   drivers/scsi/xen-scsifront.c:681:21: error: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type [-Werror=incompatible-pointer-types]
         xenbus_dev_error(&info->dev, err,
         ^~~~~~~~~~~~~~~~

   In file included from drivers/scsi/xen-scsifront.c:50:0:
```

include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct device *'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
        ^~~~~~~~~~~~~~~
  drivers/scsi/xen-scsifront.c: In function 'scsifront_do_lun_hotplug':
  drivers/scsi/xen-scsifront.c:1022:23: error: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type [-Werror=incompatible-pointer-types]
        xenbus_dev_error(&dev->dev, err,
                        ^

  In file included from drivers/scsi/xen-scsifront.c:50:0:
  include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct device *'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
        ^~~~~~~~~~~~~~~

  drivers/scsi/xen-scsifront.c:1042:23: error: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type [-Werror=incompatible-pointer-types]
        xenbus_dev_error(&dev->dev, err,
                        ^

  In file included from drivers/scsi/xen-scsifront.c:50:0:
  include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct device *'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
        ^~~~~~~~~~~~~~~
  cc1: some warnings being treated as errors

  vim +663 drivers/scsi/xen-scsifront.c
  [Quoted text hidden]

---

kbuild test robot <lkp@intel.com>   Fri, Jun 15, 2018 at 2:04 AM
To: linux-kernel-owner@vger.kernel.org
Cc: kbuild-all@01.org, Zhouyang Jia <jiazhouyang09@gmail.com>, Boris Ostrovsky <boris.ostrovsky@oracle.com>, Juergen Gross <jgross@suse.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

  Hi,

  Thank you for the patch! Perhaps something to improve:

  [auto build test WARNING on xen-tip/linux-next]
  [also build test WARNING on v4.17 next-20180614]
  [if your patch is applied to the wrong git tree, please drop us a note to help improve the system]

  url: https://github.com/0day-ci/linux/commits/linux-kernel-owner-vger-kernel-org/scsi-xen-scsifront-add-error-handling-for-xenbus_printf/20180615-094919
  base: https://git.kernel.org/pub/scm/linux/kernel/git/xen/tip.git linux-next
  reproduce:
        # apt-get install sparse
        make ARCH=x86_64 allmodconfig
        make C=1 CF=-D__CHECK_ENDIAN__

  sparse warnings: (new ones prefixed by >>)

    drivers/scsi/xen-scsifront.c:267:21: sparse: expression using sizeof(void)
    drivers/scsi/xen-scsifront.c:440:33: sparse: expression using sizeof(void)
    drivers/scsi/xen-scsifront.c:440:33: sparse: expression using sizeof(void)
    drivers/scsi/xen-scsifront.c:473:33: sparse: expression using sizeof(void)
    drivers/scsi/xen-scsifront.c:473:33: sparse: expression using sizeof(void)
    drivers/scsi/xen-scsifront.c:474:33: sparse: expression using sizeof(void)
    drivers/scsi/xen-scsifront.c:474:33: sparse: expression using sizeof(void)
  >> drivers/scsi/xen-scsifront.c:663:43: sparse: incorrect type in argument 1 (different base types) @@   expected struct xenbus_device *dev @@   got sstruct xenbus_device *dev @@
    drivers/scsi/xen-scsifront.c:663:43:   expected struct xenbus_device *dev
    drivers/scsi/xen-scsifront.c:663:43:   got struct xenbus_device **<noident>
    drivers/scsi/xen-scsifront.c:681:43: sparse: incorrect type in argument 1 (different base types) @@   expected struct xenbus_device *dev @@   got sstruct xenbus_device *dev @@
    drivers/scsi/xen-scsifront.c:681:43:   expected struct xenbus_device *dev
    drivers/scsi/xen-scsifront.c:681:43:   got struct xenbus_device **<noident>
    drivers/scsi/xen-scsifront.c:1063:19: sparse: expression using sizeof(void)
    drivers/scsi/xen-scsifront.c:1064:19: sparse: expression using sizeof(void)
    drivers/scsi/xen-scsifront.c:1065:19: sparse: expression using sizeof(void)
    drivers/scsi/xen-scsifront.c: In function 'scsifront_sdev_configure':
    drivers/scsi/xen-scsifront.c:663:21: error: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type [-Werror=incompatible-pointer-types]
        xenbus_dev_error(&info->dev, err,
                        ^

  In file included from drivers/scsi/xen-scsifront.c:50:0:
  include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct xenbus_device **'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
        ^~~~~~~~~~~~~~~

    drivers/scsi/xen-scsifront.c: In function 'scsifront_sdev_destroy':
    drivers/scsi/xen-scsifront.c:681:21: error: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type [-Werror=incompatible-pointer-types]
        xenbus_dev_error(&info->dev, err,
                        ^

  In file included from drivers/scsi/xen-scsifront.c:50:0:
  include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct xenbus_device **'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
        ^~~~~~~~~~~~~~~
  cc1: some warnings being treated as errors

  vim +663 drivers/scsi/xen-scsifront.c

    653
    654 static int scsifront_sdev_configure(struct scsi_device *sdev)
    655 {
    656   struct vscsifrnt_info *info = shost_priv(sdev->host);
    657   int err;
    658
    659   if (info && current == info->curr) {
    660   err = xenbus_printf(XBT_NIL, info->dev->nodename,
    661   info->dev_state_path, "%d", XenbusStateConnected);
    662   if (err) {
  > 663   xenbus_dev_error(&info->dev, err,
  [Quoted text hidden]

---

kbuild test robot <lkp@intel.com>   Fri, Jun 15, 2018 at 7:59 AM
To: linux-kernel-owner@vger.kernel.org
Cc: kbuild-all@01.org, Zhouyang Jia <jiazhouyang09@gmail.com>, Boris Ostrovsky <boris.ostrovsky@oracle.com>, Juergen Gross <jgross@suse.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

  Hi,

  Thank you for the patch! Yet something to improve:

  [auto build test ERROR on xen-tip/linux-next]
  [also build test ERROR on v4.17 next-20180615]
  [if your patch is applied to the wrong git tree, please drop us a note to help improve the system]

  url: https://github.com/0day-ci/linux/commits/linux-kernel-owner-vger-kernel-org/scsi-xen-scsifront-add-error-handling-for-xenbus_printf/20180615-094919
  base: https://git.kernel.org/pub/scm/linux/kernel/git/xen/tip.git linux-next
  config: x86_64-fedora-25 (attached as .config)
  compiler: gcc-7 (Debian 7.3.0-16) 7.3.0
  reproduce:
        # save the attached .config to linux build tree
        make ARCH=x86_64

  All errors (new ones prefixed by >>):

    drivers/scsi/xen-scsifront.c: In function 'scsifront_sdev_configure':
  >> drivers/scsi/xen-scsifront.c:663:21: error: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type [-Werror=incompatible-pointer-types]
        xenbus_dev_error(&info->dev, err,
                        ^

  In file included from drivers//scsi/xen-scsifront.c:50:0:
  include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct xenbus_device **'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
        ^~~~~~~~~~~~~~~
    drivers//scsi/xen-scsifront.c: In function 'scsifront_sdev_destroy':
    drivers//scsi/xen-scsifront.c:681:21: error: passing argument 1 of 'xenbus_dev_error' from incompatible pointer type [-Werror=incompatible-pointer-types]
        xenbus_dev_error(&info->dev, err,
                        ^

  In file included from drivers//scsi/xen-scsifront.c:50:0:
  include/xen/xenbus.h:224:6: note: expected 'struct xenbus_device *' but argument is of type 'struct xenbus_device **'
    void xenbus_dev_error(struct xenbus_device *dev, int err, const char *fmt, ...);
        ^~~~~~~~~~~~~~~
  cc1: some warnings being treated as errors

  vim +/xenbus_dev_error +663 drivers//scsi/xen-scsifront.c

    653
  [Quoted text hidden]

  📎 **.config.gz**
      47K

Zhouyang Jia <jiazhouyang09@gmail.com>   Fri, Jun 15, 2018 at 1:05 PM
Cc: Zhouyang Jia <jiazhouyang09@gmail.com>, Juergen Gross <jgross@suse.com>, Boris Ostrovsky <boris.ostrovsky@oracle.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

  When xenbus_printf fails, the lack of error-handling code may
  cause unexpected results.

  This patch adds error-handling code after calling xenbus_printf.

  Signed-off-by: Zhouyang Jia <jiazhouyang09@gmail.com>
  v1->v2:
  - Fix dereferencing before checking.
  v2->v3:
  - Use xenbus_dev_error to report errors.
  v3->v4:
  - Fix compilation errors.
  v4->v5:
  - Fix compilation errors.

```
 ---
  drivers/scsi/xen-scsifront.c | 33 +++++++++++++++++++++++++++-------
  1 file changed, 26 insertions(+), 7 deletions(-)

diff --git a/drivers/scsi/xen-scsifront.c b/drivers/scsi/xen-scsifront.c
index 36f59a1..61389bd 100644
--- a/drivers/scsi/xen-scsifront.c
+++ b/drivers/scsi/xen-scsifront.c
@@ -654,10 +654,17 @@ static int scsifront_dev_reset_handler(struct scsi_cmnd *sc)
 static int scsifront_sdev_configure(struct scsi_device *sdev)
 {
        struct vscsifrnt_info *info = shost_priv(sdev->host);
+       int err;

-       if (info && current == info->curr)
-               xenbus_printf(XBT_NIL, info->dev->nodename,
+       if (info && current == info->curr) {
+               err = xenbus_printf(XBT_NIL, info->dev->nodename,
+                               info->dev_state_path, "%d", XenbusStateConnected);
+               if (err) {
+                       xenbus_dev_error(info->dev, err,
+                               "%s: writing dev_state_path", __func__);
+                       return err;
+               }
+       }

        return 0;
 }
@@ -665,10 +672,15 @@ static int scsifront_sdev_configure(struct scsi_device *sdev)
 static void scsifront_sdev_destroy(struct scsi_device *sdev)
 {
        struct vscsifrnt_info *info = shost_priv(sdev->host);
+       int err;

-       if (info && current == info->curr)
-               xenbus_printf(XBT_NIL, info->dev->nodename,
+       if (info && current == info->curr) {
+               err = xenbus_printf(XBT_NIL, info->dev->nodename,
+                               info->dev_state_path, "%d", XenbusStateClosed);
+               if (err)
+                       xenbus_dev_error(info->dev, err,
+                               "%s: writing dev_state_path", __func__);
+       }
 }

 static struct scsi_host_template scsifront_sht = {
@@ -1003,9 +1015,12 @@ static void scsifront_do_lun_hotplug(struct vscsifrnt_info *info, int op)

                if (scsi_add_device(info->host, chn, tgt, lun)) {
                        dev_err(&dev->dev, "scsi_add_device\n");
-                       xenbus_printf(XBT_NIL, dev->nodename,
+                       err = xenbus_printf(XBT_NIL, dev->nodename,
+                               info->dev_state_path,
+                               "%d", XenbusStateClosed);
+                       if (err)
+                               xenbus_dev_error(dev, err,
+                                       "%s: writing dev_state_path", __func__);
                }
                break;
        case VSCSIFRONT_OP_DEL_LUN:
@@ -1019,10 +1034,14 @@ static void scsifront_do_lun_hotplug(struct vscsifrnt_info *info, int op)
                }
                break;
        case VSCSIFRONT_OP_READD_LUN:
-               if (device_state == XenbusStateConnected)
-                       xenbus_printf(XBT_NIL, dev->nodename,
+               if (device_state == XenbusStateConnected) {
+                       err = xenbus_printf(XBT_NIL, dev->nodename,
+                               info->dev_state_path,
+                               "%d", XenbusStateConnected);
+                       if (err)
+                               xenbus_dev_error(dev, err,
+                                       "%s: writing dev_state_path", __func__);
```
[Quoted text hidden]

Juergen Gross <jgross@suse.com>   Tue, Jun 19, 2018 at 8:53 AM
To: Zhouyang Jia <jiazhouyang09@gmail.com>
Cc: Boris Ostrovsky <boris.ostrovsky@oracle.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

On 15/06/18 19:05, Zhouyang Jia wrote:
> When xenbus_printf fails, the lack of error-handling code may
> cause unexpected results.
>
> This patch adds error-handling code after calling xenbus_printf.
>
> Signed-off-by: Zhouyang Jia <jiazhouyang09@gmail.com>

Reviewed-by: Juergen Gross <jgross@suse.com>

Juergen

Juergen Gross <jgross@suse.com>   Tue, Jun 19, 2018 at 9:02 AM
To: Zhouyang Jia <jiazhouyang09@gmail.com>
Cc: Boris Ostrovsky <boris.ostrovsky@oracle.com>, "James E.J. Bottomley" <jejb@linux.vnet.ibm.com>, "Martin K. Petersen" <martin.petersen@oracle.com>, xen-devel@lists.xenproject.org, linux-scsi@vger.kernel.org, linux-kernel@vger.kernel.org

On 15/06/18 19:05, Zhouyang Jia wrote:
> When xenbus_printf fails, the lack of error-handling code may
> cause unexpected results.
>
> This patch adds error-handling code after calling xenbus_printf.
>
> Signed-off-by: Zhouyang Jia <jiazhouyang09@gmail.com>

Pushed to xen/tip.git for-linus-4.18

Juergen