

Knowledge Base

vmware®

Knowledge Base

Fault Tolerant virtual machines rapidly switch between ESX hosts when being powered on

Symptoms

- Virtual machines that have Fault Tolerance enabled rapidly switch between ESX hosts when they are being powered on.
- The `vmware.log` files contain the errors:

```
Jul 09 17:32:00.202: vmx| DISK: Cannot open disk "/vmfs/volumes
/4a1ee084-98d80a72-4e14-00221954202b/abc/abc.vmdk": Could not open/create
change tracking file (2108).
Jul 09 17:32:00.202: vmx| Msg_Post: Error
Jul 09 17:32:00.202: vmx| [msg.disk.noBackEnd] Cannot open the disk '/vmfs
/volumes/4a1ee084-98d80a72-4e14-00221954202b/abc/abc.vmdk' or one of the
snapshot disks it depends on.
Jul 09 17:32:00.202: vmx| [msg.disk.configureDiskError] Reason: Could not
open/create change tracking file.-----
Jul 09 17:32:00.209: vmx| Checkpoint error 0, couldn't continue after
checkpoint
Jul 09 17:32:02.924: vmx| Backtrace:
```

Resolution

Fault Tolerant virtual machines have a change tracking resource (CTK) listed in the virtual machine configuration (`.vmtx`) file. This resource gets added to a virtual machine configuration file if:

- You try to back up the virtual machine configured with Fault Tolerance using the snapshot feature.
- The virtual machine is backed up using the snapshot feature prior to being configured for Fault Tolerance.

Virtual machines cannot be backed up using snapshots. For more information, see *Fault Tolerance*

Interoperability in the [vSphere Availability Guide](http://www.vmware.com/pdf/vsphere4/r40/vsp_40_availability.pdf) (http://www.vmware.com/pdf/vsphere4/r40/vsp_40_availability.pdf).

To resolve this issue, you must remove the CTK variables from the virtual machine configuration (.vmx) file.

To remove CTK variables from the .vmx file:

1. Log into to the ESX service console.
2. Power off the virtual machine.
3. Unregister the virtual machine from the vCenter Server Inventory by right-clicking the virtual machine and clicking **Remove from Inventory**.
4. Open the .vmx file in a text editor.
5. Locate variables similar to the following and delete the entire line:

```
scsi0:0.ctkEnabled = "true"
```

```
ctkEnabled = "true"
```

Notes:

- If there is more than one virtual disk, there are additional `scsi#:#.ctkEnabled` entries. These must be removed as well.
- You may also find `ide#:#.ctkEnabled` entries. These must be removed as well.

7. To guarantee that change block tracking cannot be enabled, add the following line to the configuration file:

```
ctkDisallowed="true"
```

8. Open the datastore browser and change to the directory where the .vmx file is located
9. Right-click the .vmx file and click **Add to Inventory**.
10. Save and close the file.
11. Reboot the virtual machine to apply the changes.

Request a Product Feature

To request a new product feature or to provide feedback on a VMware product, please visit the [Request a Product Feature](http://www.vmware.com/contact/contactus.html?department=prod_request) (http://www.vmware.com/contact/contactus.html?department=prod_request) page.

Permalink to: [Fault Tolerant virtual machines rapidly switch between ESX hosts when being powered on](http://kb.vmware.com/kb/1013400) (<http://kb.vmware.com/kb/1013400>)

- KB Article: **1013400**

- Updated: **Apr 7, 2010**
 - **Products:**
 - VMware ESX
 - VMware ESXi
 - VMware vCenter Server
 - **Product Versions:**
 - VMware ESX 4.0.x
 - VMware ESXi 4.0.x Embedded
 - VMware ESXi 4.0.x Installable
 - VMware vCenter Server 4.0.x
-

Download Products

- [Visit Download Center \(http://www.vmware.com/download/\)](http://www.vmware.com/download/)
- [Download SDKs & APIs \(http://communities.vmware.com/community/developer/\)](http://communities.vmware.com/community/developer/)
 - [Download Patches \(http://www.vmware.com/mysupport/download\)](http://www.vmware.com/mysupport/download)
- [Sign Up for Patch Alerts \(http://www.vmware.com/mysupport/subscription/\)](http://www.vmware.com/mysupport/subscription/)
 - [Read Downloads Help Guide \(http://kb.vmware.com/kb/1012245\)](http://kb.vmware.com/kb/1012245)

Purchase Support

- [Review VMware Support Options \(http://www.vmware.com/support/services/\)](http://www.vmware.com/support/services/)
 - [Request Renewal/Upgrade Quote \(http://www.vmware.com/go/renew\)](http://www.vmware.com/go/renew)
 - [Contact VMware Sales \(http://www.vmware.com/contact/contact_sales.html\)](http://www.vmware.com/contact/contact_sales.html)
 - [Locate a VMware Reseller \(http://www.vmware.com/partner-locator/\)](http://www.vmware.com/partner-locator/)
 - [View Support Policies \(http://www.vmware.com/support/policies/\)](http://www.vmware.com/support/policies/)

Connect with Experts

- [Visit Community Forums \(http://communities.vmware.com\)](http://communities.vmware.com)
- [Join VMware User Groups \(http://www.vmware.com/company/events/usergroups_events.html\)](http://www.vmware.com/company/events/usergroups_events.html)
 - [Visit VMworld \(http://www.vmworld.com/\)](http://www.vmworld.com/)
 - [Browse Training \(http://www.vmware.com/services/education-r.html\)](http://www.vmware.com/services/education-r.html)
- [Register for Support Days \(http://www.vmware.com/support/customer_days.html\)](http://www.vmware.com/support/customer_days.html)

Find Answers

- [Visit Product Support Centers \(http://www.vmware.com/support/product-support/\)](http://www.vmware.com/support/product-support/)

- [Read Product Documentation](http://www.vmware.com/r/documentation.html) (<http://www.vmware.com/r/documentation.html>)
 - [Search the Knowledge Base](http://kb.vmware.com) (<http://kb.vmware.com>)
 - [Login to Your Account](http://www.vmware.com/accounts/) (<http://www.vmware.com/accounts/>)
- [Find Support Help Documents](http://www.vmware.com/support/policies/howto_policies.html) (http://www.vmware.com/support/policies/howto_policies.html)

Copyright © 2010 VMware, Inc. All rights reserved.