

VDCF - Virtual Datacenter Control Framework for the Solaris™ Operating System

Veritas (VXVM) Dataset Guide

Version 2.0
11. May 2009

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1 Introduction

This documentation describes the Veritas (VXVM) Dataset Feature of the Virtual Datacenter Control Framework (VDCF) for the Solaris Operating System, Version 2.0 and explains how to use this feature.

See:

VDCF – Base and vServer Administration for detailed information about this product, the commands and arguments.

1.1 Overview

The VDCF Base Framework supports the two Datasets-Types DISKSET and ZPOOL, which are based on the Solaris Features “Solaris Volume Manager (SVM)” and “Zettabyte Filesystem (ZFS)”.

This Veritas (VXVM) Dataset Feature additionally supports the “Veritas Volume Manager (VXVM) and the Veritas Filesystem (VXFS)”. The Veritas Storage Foundation Software must be installed and licensed separately.

1.2 Installation

The JSvdcf-vxvm package requires the JSvdcf-base and JSvdcf-vserver packages 2.0.0 or later to be installed on the Management Server.

a) sparc platform

```
cd </cdrom/cdrom0>/vdcf/sparc  
pkgadd -d ./JSvdcf-vxvm_<version>_sparc.pkg
```

b) i386 platform

```
cd </cdrom/cdrom0>/vdcf/i386  
pkgadd -d ./JSvdcf-vxvm_<version>_i386.pkg
```

2 Veritas Installation and Configuration

2.1 Overview

Currently the Veritas Foundation Software must be installed manually on a Node, which was previously installed using the VDCF framework. Check the VDCF Administration Guide about how to install a Node using the VDCF framework.

2.2 Requirements / Patches

VDCF currently supports Veritas Versions 4.1 and 5.0.

For Version 4.1 the following Patches (or later) are required:

sparc: 119302-04 VRTSvxfs 4.1 MP2: Maintenance Patch for File System 4.1
x86: 120111-02 VRTSvxfs 4.1 MP1_x86: Maintenance Patch for File System 4.1

2.3 Veritas Configuration

The Veritas Volume Manager must be properly configured using `vxinstall`, before you create/commit VDCF Veritas Datasets.

3 VDCF Veritas (VXVM) Dataset - Configuration

3.1 Default DATASET Type

After the installation of the JSvdcf-vxvm package the VXVM Dataset is the default Dataset type, when creating new Datasets using `dataset -c create`. You may override this default configuration by using the `type` argument of the `dataset -c create` operation or by adding your preferred Dataset type (DISKSET or ZPOOL) to the VDCF configuration file:
`/var/opt/jomasoft/vdcf/conf/customize.cfg`

example for DISKSET (Solaris Volume Manager)

```
export DATASET_DEFAULT_TYPE=DISKSET
```

3.2 Default Filesystem Type

The default Filesystem type for Veritas (VXVM) Datasets is the "Veritas Filesystem (vxfs)". You may override this setting (to use ufs) by configure the following values in the VDCF configuration file:
`/var/opt/jomasoft/vdcf/conf/customize.cfg`

```
export DATASET_FILESYS="DISKSET:ufs ZPOOL:zfs VXVM:ufs"
```

3.3 Disk default method

The default disk access method may be changed as well. If you are using DMP this has to be configured in `/var/opt/jomasoft/vdcf/conf/customize.cfg` :

```
export DISKS_DEFAULT_METHODS="DMP"
```

4 VDCF Veritas (VXVM) Dataset - Usage

VXVM Datasets may be created on Disks of types MPXIO, ISCSI or DMP. Do not mix MPXIO and DMP types of Disks when registering Disks using `diskadm -c register`, because you would register the same disk multiple times.

For details about VDCF Dataset's consult the dataset manpage and the VDCF Administration Guide Chapter 8 (Disk Management) and 9 (Virtual Server Management).

5 Open Issues / Restrictions

- None known