Recovery Assurance
with Cristie Recovery Software

cristie software
TBMR
for TSM

Cristie Bare Machine Recovery

Installation And Licensing Guide

For Linux

December 2016

Version 8.1.1

Contents

1   Document Conventions

The following typographical conventions are used throughout this guide:

`/etc/passwd`	represents command-line commands, options, parameters, directory names and filenames
Next >	used to signify clickable buttons on a GUI dialogue
Note:	describes something of importance related to the current topic

2   Introduction

TBMR for Linux can only be installed on a x86_64 Linux machine.

> *TBMR requires that TSM BA client version 5.5 or later is already installed.*

A minimum memory of 3Gb RAM is required for booting the recovery environment and running a recovery.

TBMR Version 8.1.1 supports the following Linux platforms:

- RedHat Enterprise 4.x to 7.2.
- SUSE 10.x to SUSE11 SP4
- SLES12
- CENTOS 7.3

- Ubuntu 16.04.1 LTS 64bit
- Ubuntu 14.04.4 LTS 64bit
- Ubuntu 14.04.5 LTS 64bit
-

At the time of release the TSM Client versions supported are 5.5.0.6 to 8.1.0.0 inclusive.

At the time of release the TSM Server versions supported are 5.5.x.x to 7.1.7 inclusive.

TBMR for Linux (Intel) supports backup and recovery of Docker Containers.

Visit http://forum.cristie.com/t/using-tbmr-8-1-1-for-linux-intel-and-later-to-backup-and-recover-docker-containers/148 to find out more.

Before TBMR can be used it must also be correctly licensed. Cristie provides a 30 day trial license with the product.

3 TBMR Installation and Removal

The TBMR distribution media is provided for only x86_64

Note: TBMR must be installed and run by a user that has **root** access privileges.

3.1 Install TBMR

The required onstallation files can be downloaded as follows:

Trial Version:
A Trial Version of the software can be obtained by completeing a form on the Cristie website.

http://www.cristie.com/request-a-trial/

Existing Customers:
The software can be downloaded after logging into the Cristie licensing portal

https://portal.cristie.com/LicMgr/

The installation files can be found in the download package in the path `linux/install/` on the TBMR installation CD or ISO.

Installation Process:

Log in as: `root`

Open a terminal and create a mount point for the CD-ROM with

```
[root@TBMR /]#
[root@TBMR /]# mkdir /mnt/cdrom
```

Mount the installation CD by typing:

```
[root@TBMR /]#
[root@TBMR /]# mount /dev/cdrom /mnt/cdrom
```

To install from an rpm package enter:

```
[root@TBMR /]# cd /mnt/cdrom/linux/install
[root@TBMR install]#
```

Followed by: `rpm -ivh tbmr-xxx.xxx.rpm`

```
[root@TBMR install]#
[root@TBMR install]# rpm -ivh tbmr-8.1-1.x86_64.rpm
```

To install from an deb package enter:

```
[root@TBMR /]# cd /mnt/cdrom/linux/install
[root@TBMR install]#
```

Followed by: `dpkg -i tbmr-xxx.xxx.deb`

```
[root@TBMR install]#
[root@TBMR install]# dpkg -i tbmr-8.1-1_amd64.deb
```

To install TBMR tar based installations:

Copy the installation files from the installation CD to the temporary directory: `cp tbmr-8.1-1.linux.xxx.tar.gz /tmp`

```
[root@TBMR install]#
[root@TBMR install]# cp tbmr-8.1-1.linux.x86_64.tar.gz /tmp
```

Navigate to the temporary directory: `cd /tmp`

```
[root@TBMR install]#
[root@TBMR install]# cd /tmp
```

Extract the tar file with the following command: `tar xvzf tbmr-8.1-1.linux.xxx.tar.gz`

```
[root@TBMR tmp]#
[root@TBMR tmp]# tar xvzf tbmr-8.1-1.linux.x86_64.tar.gz
```

To install TBMR enter: `./install`

```
[root@TBMR tbmr]#
[root@TBMR tbmr]# ./install
```

This will install all the relevant files and licenses.

TBMR is installed with a 30 day trial license. To extend this license, contact Cristie at support@cristie.com.

3.1.1 Upgrade Install

It is possible to upgrade an existing version of TBMR (6.x.x) to Version 8.1.1

To upgrade. first mount the installation CD by typing `mount /dev/cdrom /mnt/cdrom`

```
[root@TBMR /]#
[root@TBMR /]# mount /dev/cdrom /mnt/cdrom
```

Upgrading RPM installations

Enter `rpm -U tbmr-8.1.1.xxx.rpm`

```
[root@TBMR install]#
[root@TBMR install]# rpm -U tbmr-8.1.1.x86_64.rpm
```

Upgrading DEB installations

Enter: `dpkg -i tbmr-8.1.1.xxx.pkg`

```
[root@TBMR install]#
```

```
[root@TBMR install]# dpkg -1 tbmr-8.1.1_amd64.deb
```

Upgrading tar file installations

To upgrade previous TBMR tar based installations, copy the installation files from the installation CD to the temporary directory: `cp tbmr-8.1.1.linux.xxx.tar.gz /tmp`

```
[root@TBMR install]#
[root@TBMR install]# cp tbmr-8.1.1.linux.x86_64.tar.gz /tmp
```

Navigate to the temporary directory: `cd /tmp`

```
[root@TBMR install]#
[root@TBMR install]# cd /tmp
```

Extract the tar file with the following command: `tar xvzf tbmr-8.1.1.linux.xxx.tar.gz`

```
[root@TBMR tmp]#
[root@TBMR tmp]# cd /tbmr
```

To install TBMR enter: `./install`

```
[root@TBMR tbmr]#
[root@TBMR tbmr]# ./install
```

When prompted, confirm that is is OK to overwrite files.

> *Note: A new license will always be required when upgrading from TBMR 6.x.x*

3.1.2   Existing Installations of other Cristie BMR products

TBMR cannot be installed alongside any other Cristie BMR product.

3.2 Remove TBMR

Uninstall RPM installations

To uninstall the RPM package, use:

```
[root@TBMR install]#
[root@TBMR install]# rpm -e tbmr
```

Uninstall DEB installations

To uninstall the RPM package, use:

```
[root@TBMR install]#
[root@TBMR install]# dpkg -P tbmr
```

Uninstall tar file installations

To uninstall the package, navigate to the directory where TBMR was installed and run the install script with the *-u option.*

```
[root@TBMR install]# cd /tmp/tbmr
[root@TBMR install]# ./install -u
```

4   Product Licensing

When first installed, TBMR may be used for a trial period of 30 days. During that period TBMR is fully functional. If the software is subsequently un-installed and later re-installed on the same system, the 30 day period continues from the date of the first installation.

If you wish to use the software beyond the trial period, you must register and purchase a license from Cristie Software Ltd.. Alternatively, and in special circumstances, Cristie Software Ltd. may extend the license period if you wish to trial the software beyond that period.

If you purchase the product, then contract and license activation codes will be available on the Cristie Licensing Portal. Together these codes will enable you to fully activate the product.

The following sections discuss this in more detail.

4.1   Trial License

A 30-day trial license commences from the date of installation. The TBMR configuration file generator tbmrcfg will not run after this period expires.

You may use the Cristie License Manager to add or inspect license details at any time. This is acheived by opening a terminal and entering:

```
[root@TBMR ~]#
[root@TBMR ~]# licmgr -p tbmr
```

Entering this command, will display the Cristie License Manager, that shows Machine attributes, Contract ID. the installed host System signature, the current product (TBMR in this case), the product version, the trial end date and the license Status.

```
root@TBMR:~#
root@TBMR:~# licmgr -p tbmr
================================================================================
                        Cristie License Manager Version
                                      8.1
                    Copyright (C) 2012-2016 Cristie Software Limited
================================================================================
    Machine attributes : {virtual, server}
            Contract ID : 0
              Signature : CYLSZ7DZ-VSDKUPB9-BJCXYKDN-MXLHAHCB
                Product : Bare Machine Recovery for Tivoli TSM (TBMR)
                Version : 8.1
          Trial ends on : 2016-11-26

                 Status : Trial licence
root@TBMR:~# _
```

The TBMR configuration file generator will become active again as as a full license has been purchased from Cristie Software Ltd. and the new contract and activation code entered via the Cristie License Manager

4.2 Full License

A Full license entitles the Customer to product support and upgrades for the duration of the license period.

To upgrade from the trial license to a full license, you need to apply for a full license activation code either via the Cristie Licensing Portal website or via the product Cristie License Manager. In either case you will need to first register an account on the Cristie Licensing Portal (located at https://portal.cristie.com/login). A Contract ID will be created and provided to you when you purchase a license.

These are the various codes used in the Cristie licensing process:

Contract ID: A 4-digit number supplied by Cristie Software Ltd. Sales during the license purchase process.
Agreement Number: Same as *Contract ID* at the moment.
Contract Code: 35-character contract code obtained from the Cristie Licensing Portal
Activation Code: 35-character support activation code obtained from the Cristie Licensing Portal

In special circumstances a 'bulk license' may be issued by Cristie Software Ltd. for customers that order a significant number of product licenses. Please contact your Cristie sales representative if you wish to discuss this service.

> *Note this discussion assumes that TBMR is already installed on a Customer production machine.*

4.2.1 Setting up a Cristie Licensing Portal account

To setup a new account on the Cristie Licensing Portal follow the following steps. To do this you will need your 4-digit Contract ID and contract setup password. These will be provided by email from Cristie Software Ltd. when you purchase a product license.

> *Note: Your Contract ID may have been supplied to you as your contract Agreement Number. In that case please use your Agreement number in place of the Contract ID throughout.*

1. On a machine that has Internet access run a suitable browser such as Mozilla Firefox and navigate to the Cristie Licensing Portal web page at https://portal.cristie.com/login.
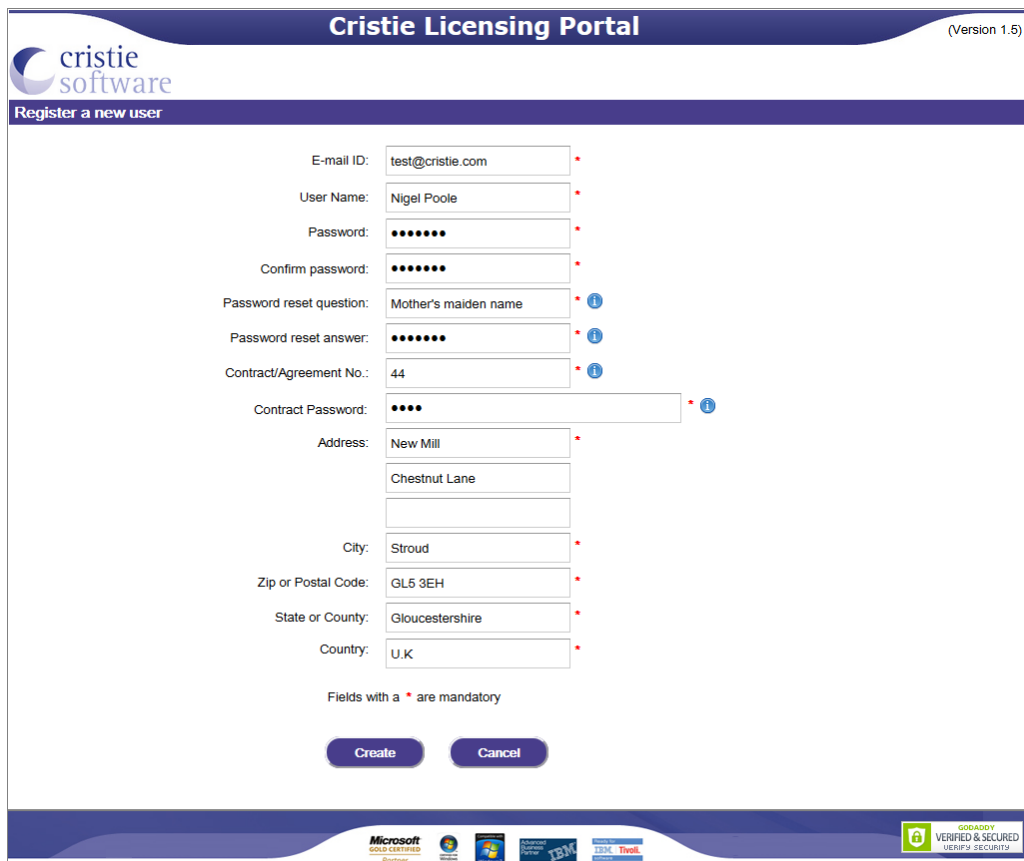
Select Register to create a new account. Enter your new account details (note this is an example):
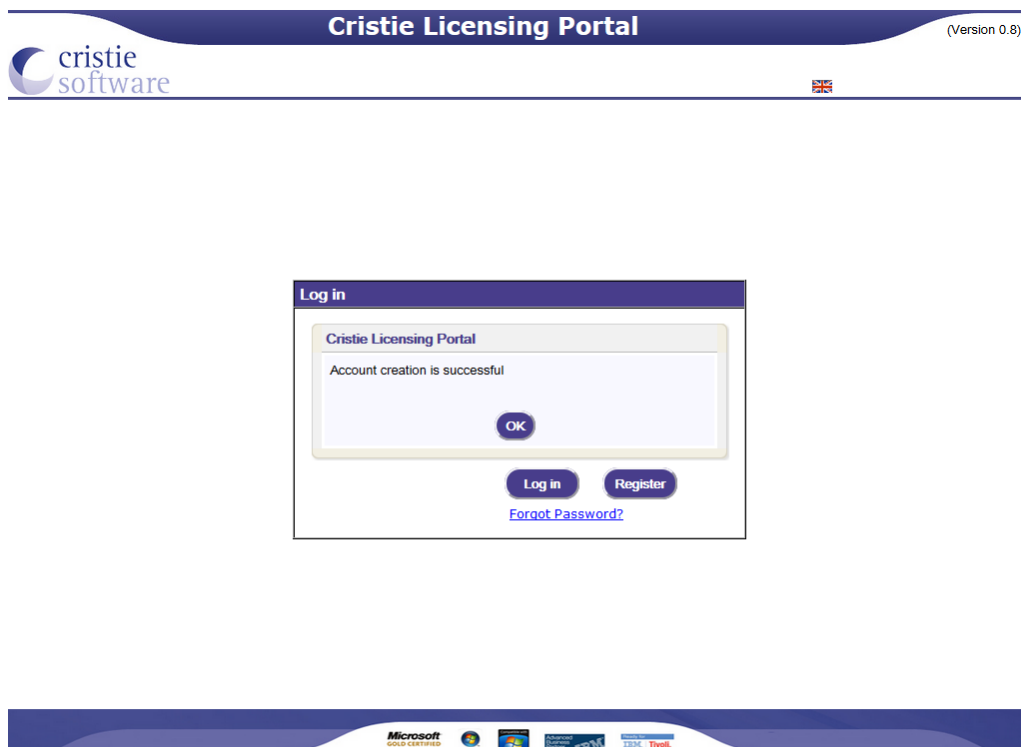
Then click Create. If successful the following is shown.

At this point you may now log in to the Cristie Licensing Portal using the E-mail ID and password

setup in the previous steps.

4.2.2   Online activation

The steps involved in activating the product automatically using the Cristie License Manager are summarised below. This discussion assumes your contract is already setup on the Cristie Licensing Portal and you have access to both Contract and Activation codes.

1. Assign your Contract code on the TBMR host machine by opening up a terminal and entering:

```
[root@TBMR~]#
[root@TBMR~]# licmgr -p tbmr --cid xxxxxxxx-xxxxxxxx-xxxxxxxx-xxxxxxxx
```

(where xxxxxxxx-xxxxxxxx-xxxxxxxx-xxxxxxxx is your Contract code)

```
================================================================================
                    Cristie License Manager Version
                                  8.1
              Copyright (C) 2012-2016 Cristie Software Limited
================================================================================
Successfully set the contract ID.
  Machine attributes : {virtual, server}
         Contract ID : 3
           Signature : CYLSZ7DZ-VSDKUPB9-BJCXYKDN-MXLHAHCB
             Product : Bare Machine Recovery for Tivoli TSM (TBMR)
             Version : 8.1
       Trial ends on : 2016-11-26

              Status : Trial licence
root@TBMR:/#
```

```
2. Then license TBMR by entering the command:
```

```
[root@TBMR~]#
[root@TBMR~]# licmgr -p tbmr --cred user@example.com,password
```

```
================================================================
                   Cristie License Manager Version
                                  8.1
              Copyright (C) 2012-2016 Cristie Software Limited
================================================================
Connecting with:                              and
Licensing machine: 'CYLSZ7DZ-VSDKUPB9-BJCXYKDN-MXLHAHCB'
Details: 'TBMR' on '10.10.22.79' (Virtual)

Activating using code: FMSFDSTK-MLE83AQL-7DSUCW6B-WNYH99U7
Success

   Machine attributes : {virtual, server}
           Contract ID : 3
             Signature : CYLSZ7DZ-VSDKUPB9-BJCXYKDN-MXLHAHCB
               Product : Bare Machine Recovery for Tivoli TSM (TBMR)
               Version : 8.1
   Maintenance ends on : 2016-12-31

       Activation code : FMSFDSTK-MLE83AQL-7DSUCW6B-WNYH99U7
       Activation type : Product activation
   Maintenance ends on : 2016-12-31
            Attributes : {virtual, server}

                Status : Full licence
root@TBMR:~#
```

(The required email and password are the ones you use to sign into the Cristie Licensing Portal)

The Cristie License Manager will be refreshed showing your Contract ID, the new activation code abd your contract support end date.

Note: Internet access on the host machine is required to run the online activation process from Cristie License Manager directly.

4.2.3 Manual activation

The step involved is activating using the Cristie Licensing Portal IS as follows. This discussion assumes your contract is already setup on the Cristie Licensing Portal

```
1. license TBMR by entering the command:

[root@TBMR~]#
[root@TBMR~]# licmgr -p tbmr --act xxxxxxxx-xxxxxxxx-xxxxxxxx-xxxxxxxx
```

(where xxxxxxxx-xxxxxxxx-xxxxxxxx-xxxxxxxx is your Activation code, which can be obtained by signing into the Cristie Licensing Portal)

```
The Cristie License Manager will be refreshed showing your Contract ID, the new Activation code
```

```
===============================================================================
                          Cristie License Manager Version
                                      8.1
               Copyright (C) 2012-2016 Cristie Software Limited
===============================================================================
Successfully applied the activation code.
  Machine attributes : {virtual, server}
        Contract ID : 1234
          Signature : CYLSZ7DZ-VSDKUPB9-BJCXYKDN-MXLHAHCB
            Product : Bare Machine Recovery for Tivoli TSM (TBMR)
            Version : 8.1
 Maintenance ends on : 2017-10-17


    Activation code : DBMKCB44-XHMMFKBL-7G4EK68C-45NCZ4K9
    Activation type : Product activation
 Maintenance ends on : 2017-10-17
         Attributes : {virtual, server}


             Status : Full licence
root@TBMR:~#
```

5   Cristie Technical Support

If you have any queries or problems concerning your Cristie Bare Machine Recovery product, please contact **Cristie Technical Support**. To assist us in helping with your enquiry, make sure you have the following information available for the person dealing with your call:

- TBMR Version Number

- Installed OS type and version

- Any error message information (if appropriate)

- Description of when the error occurs

- All Cristie log files relating to the source or recovery machine. This is very important to help us provide a quick diagnosis of your problem

Contact Numbers - Cristie Software (UK) Limited

Technical Support	+44 (0) 1453 847 009
Toll-Free US Number	1-866-TEC-CBMR (1-866-832-2267)
Sales Enquiries	+44 (0) 1453 847 000
Email	support@cristie.com
Web	www.cristie.com

Support Hours

05:00 to 17:00 Eastern Standard Time (EST) Monday to Friday

Out-of-Hours support available to customers with a valid Support Agreement - Severity 1 issues* only

UK Bank Holidays** classed as Out-of-Hours - Severity 1 issues only.

Severity 1 issues are defined as: a production server failure, cannot perform recovery or actual loss of data occurring.

For details on dates of UK Bank Holidays, please see **www.cristie.com/support/

Cristie Software Limited are continually expanding their product range in line with the latest technologies. Please contact the **Cristie Sales Office** for the latest product range. Should you have specific requirements for data storage and backup devices, then Cristie's product specialists can provide expert advice for a solution to suit your needs.