



Recovery Assurance

with Cristie Recovery Software



Cristie Bare Machine Recovery

Installation And Licensing Guide

For Linux

October 2015

Version 7.2.4

Cristie Software Ltd.
New Mill
Chestnut Lane
Stroud GL5 3EH
United Kingdom
Tel: +44(0)1453 847000
Fax: +44(0)1453 847001
cbmr@cristie.com

Cristie Data Products GmbH
Nordring 53-55

63843 Niedernberg
Germany
Tel: +49 (0) 60 28/97 95-0
Fax: +49 (0) 60 28/97 95 7-99
cbmr@cristie.de

Cristie Nordic AB
Knarrarnäsgatan 7
164 40 Kista
Sweden
Tel: +46(0)8 718 43 30
cbmr@cristie.se

**Copyright © 2008-2015 Cristie Software Ltd.
All rights reserved.**

The software contains proprietary information of Cristie Software Ltd.; it is provided under a license agreement containing restrictions on use and disclosure and is also protected by copyright law. Reverse engineering of the software is prohibited.

Due to continued product development this information may change without notice. The information and intellectual property contained herein is confidential between Cristie Software Ltd. and the client and remains the exclusive property of Cristie Software Ltd. If you find any problems in the documentation, please report them to us in writing. Cristie Software Ltd. does not warrant that this document is error-free.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of Cristie Software Ltd.

IBM Tivoli Storage Manager (TSM), AIX and TIVOLI are trademarks of the IBM Corporation.

IBM Virtual I/O Server (VIOS) is a trademark of the IBM Corporation.

NetWorker and Avamar are trademarks of the EMC Corporation.

Simpana is a trademark of CommVault Inc.

vSphere, vCenter and vCloud are trademarks of VMware Inc.

Hyper-V is a trademark of Microsoft Corporation.

Azure is a trademark of Microsoft Corporation.

Amazon Web Services (AWS) and Amazon Elastic Compute Cloud (EC2) are trademarks of Amazon.com, Inc.

CloneManager® is a registered trademark of Cristie Software Ltd..

Cristie Management Console (CMC), PC-BaX, UBax, Cristie Connect, Cristie Storage Manager (CSM), SDB, ABMR (Bare Machine Recovery for EMC Avamar), NBMR (Bare Machine Recovery for EMC NetWorker), SBMR (Bare Machine Recovery for CommVault Simpana), TBMR (Bare Machine Recovery for TSM), CBMR (Cristie Bare Machine Recovery), Recovery Console (RC) and CRISP (Cristie Recovery ISO Producer) are all trademarks of Cristie Software Ltd.

Cristie Software Ltd
New Mill
Chestnut Lane
Stroud
GL5 3EH
UK

Tel: +44 (0) 1453 847000
Email: support@cristie.com
Website: <http://www.cristie.com>

Contents

1	Document Conventions	4
2	Introduction	5
3	TBMR Installation and Removal	6
3.1	Install TBMR	6
3.1.1	Upgrade Install	7
3.1.2	Existing Installations of other Cristie BMR products	9
3.2	Remove TBMR	10
4	Product Licensing	11
4.1	Trial License	11
4.2	Full License	12
4.2.1	Setting up a Cristie Licensing Portal account	12
4.2.2	Online activation	15
4.2.3	Manual activation	16
5	Cristie Technical Support	17

1 Document Conventions

The following typographical conventions are used throughout this guide:

<code>/etc/passwd</code>	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 be installed on a x86, x86_64 or PPCLinux machine.

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

A minimum memory of 2GB RAM is required for booting the recovery environment and running a recovery.

TBMR Version 7.2.4 supports the following Linux platforms:

- RedHat Enterprise 4.x to 7.1.
- SUSE 10.x to SUSE 11 SP4.

At the time of release the TSM Client versions supported are 5.5.0.6 to 7.1.3.0 inclusive.

At the time of release the TSM Server versions supported are 5.5.x.x to 7.1.3 inclusive.

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 x86, 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 completing 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/main` 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
```

If the system supports RedHat Package Manager (RPM), this is the simplest way to install TBMR.

To install from an RPM package enter:

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

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

```
[root@TBMR main]#  
[root@TBMR main]# rpm -i tbmr-7.2-4.x86_64.rpm
```

If RPM is not available,

To upgrade previous TBMR tar based installations, copy the installation files from the installation CD to the temporary directory: `cp tbmr-7.2-4.linux.xxx.tar.gz /tmp`

```
[root@TBMR main]#  
[root@TBMR main]# cp tbmr-7.2-4.linux.x86_64.tar.gz /tmp
```

Navigate to the temporary directory: `cd /tmp`

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

Extract the tar file with the following command: `tar xvzf tbmr-7.2-4.linux.xxx.tar.gz`

```
[root@TBMR tmp]#  
[root@TBMR tmp]# tar xvzf tbmr-7.2-4.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 7.2.4

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-7.2-4.xxx.rpm`

```
[root@TBMR main]#  
[root@TBMR main]# rpm -U tbmr-7.2-4.x86_64.rpm
```

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-7.2-4.linux.xxx.tar.gz /tmp`

```
[root@TBMR main]#  
[root@TBMR main]# cp tbmr-7.2-4.linux.x86_64.tar.gz /tmp
```

Navigate to the temporary directory: `cd /tmp`

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

Extract the tar file with the following command: `tar xvzf tbmr-7.2-4.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 main]#  
[root@TBMR main]# rpm -e 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 main]# cd /tmp/tbmr  
[root@TBMR main]# ./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 achieved 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 ~]# licmgr -p tbmr  
=====
```

Cristie Licence Manager Version	
3.2	
Copyright (C) 2012-2015 Cristie Software Limited	

```
=====
```

Machine attributes	: {virtual, server}
Contract ID	: 0
Signature	: UR6RXBWX-498XRQ3K-X6FZMRLT-C84AUYCR
Product	: Bare Machine Recovery for Tivoli TSM (TBMR)
Version	: 7.2
Trial ends on	: 2015-05-16

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

The TBMR configuration file generator will become active again 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>.

Cristie Licensing Portal (Version 1.5)

 

Log in

User E-mail:

Password:

[Log in](#) [Register](#)

[Forgot Password?](#)

   

Select [Register](#) to create a new account. Enter your new account details (note this is an example):

Cristie Licensing Portal (Version 1.5)

Register a new user

E-mail ID: test@cristie.com *

User Name: Nigel Poole *

Password: ***** *

Confirm password: ***** *

Password reset question: Mother's maiden name ?

Password reset answer: ***** ?

Contract/Agreement No.: 44 ?

Contract Password: **** *

Address: New Mill *

Chestnut Lane

City: Stroud *

Zip or Postal Code: GL5 3EH *

State or County: Gloucestershire *

Country: U.K. *

Fields with a * are mandatory

[Create](#) [Cancel](#)

Microsoft GOLD CERTIFIED Partner, IBM, Tivoli, GODADDY VERIFIED & SECURED VERIFY SECURITY

Then click [Create](#). If successful the following is shown.

Cristie Licensing Portal (Version 0.8)

Account creation is successful

[OK](#)

[Log in](#) [Register](#)

[Forgot Password?](#)

Microsoft GOLD CERTIFIED Partner, IBM, Tivoli

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-xxxxxxx-xxxxxxx-xxxxxxx
```

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

2. Then license TBMR by entering the command:

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

```
Connecting with: XXXXXXXXXXXXXXXXXXXXXXXXXXXX and  
Licensing machine: 'UR6RXBWX-498XRQ3K-X6FZMRLT-C84AUYCR'  
Details: 'TBMR' on '10.10.22.66' (Virtual)  
  
Activating using code: WCRW6M6P-GL9N2M8T-YJSXUW6P-SYU9J8R6  
Success  
  
Machine attributes : {virtual, server}  
Contract ID : 3  
Signature : UR6RXBWX-498XRQ3K-X6FZMRLT-C84AUYCR  
Product : Bare Machine Recovery for Tivoli TSM (TBMR)  
Version : 7.2  
Maintenance ends on : 2015-12-31  
  
Activation code : WCRW6M6P-GL9N2M8T-YJSXUW6P-SYU9J8R6  
Activation type : Product activation  
Maintenance ends on : 2015-12-31  
Attributes : {virtual, server}  
Features :  
  
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 and 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 steps involved in activating using the Cristie Licensing Portal are as follows. This discussion assumes your contract is already setup on the Cristie Licensing Portal

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-xxxxxxx-xxxxxxx-xxxxxxx
```

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

2. Then license TBMR by entering the command:

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

(where xxxxxxxx-xxxxxxx-xxxxxxx-xxxxxxx 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 Licence Manager Version
                              3.2
                Copyright (C) 2012-2015 Cristie Software Limited
=====
Successfully applied the activation code.
  Machine attributes : {virtual, server}
    Contract ID : 3
      Signature : UR6RXBWX-498XRQ3K-X6FZMRLT-C84AUYCR
      Product : Bare Machine Recovery for Tivoli TSM (TBMR)
      Version : 7.2
  Maintenance ends on : 2015-12-31

  Activation code : WCRW6M6P-GL9N2M8T-YJSXUW6P-SYU9J8R6
  Activation type : Product activation
  Maintenance ends on : 2015-12-31
    Attributes : {virtual, server}
      Features :

  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.