



TBMR For Windows

Bare Machine Recovery for IBM Spectrum Protect

Installation and Licensing Guide

Version 9.5.1 released March 2023

Copyright © 2008-2023 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 Spectrum Protect is a trademark of the IBM Corporation.*
- *IBM Virtual I/O Server (VIOS) is a trademark of the IBM Corporation.*
- *NetWorker and Avamar are trademarks of the Dell EMC Corporation.*
- *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.*
- *Cohesity DataProtect is a trademark of Cohesity Inc.*
- *Rubrik is a trademark of Rubrik Inc.*
- *CloneManager® is a registered trademark of Cristie Software Ltd.*

PC-BaX, UBax, Cristie P4VM (Protect for VMs), Cristie Storage Manager (CSM), SDB, ABMR (Bare Machine Recovery for EMC Avamar), NBMR (Bare Machine Recovery for EMC NetWorker), TBMR (Bare Machine Recovery for Spectrum Protect/TSM), CBMR (Cristie Bare Machine Recovery), CoBMR (Bare Machine Recovery for Cohesity DataProtect), RBMR (Bare Machine Recovery for Rubrik) and CRISP (Cristie Recovery ISO Producer) are all trademarks of Cristie Software Ltd..

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

Tel: +44 (0) 1453 847009
Email: support@cristie.com
Website: <https://www.cristie.com>



Contents

1	Overview	4
	1.1 Document conventions	4
2	TBMR Installation and Removal	5
	2.1 Install the TBMR components	5
	2.1.1 Install TBMR	6
	2.1.2 Install CRISP and the TBMR fileset	8
	2.1.3 Silent Install	10
	2.2 Uninstalling TBMR components	11
	2.2.1 Uninstall all components	11
	2.2.2 Uninstalling selected components	12
	2.2.3 Silent Uninstall	13
3	Product Licensing	15
	3.1 Trial License	15
	3.2 Full License	16
	3.2.1 Setting up a Cristie Licensing Portal account	17
	3.2.2 Manual activation	18
4	Cristie Technical Support	24



1 Overview

This document describes the Installation and Licensing of the Bare Machine Recovery for IBM Spectrum Protect (TBMR) product.

TBMR installation uses the standard Microsoft Windows Installer MSIEXEC so enabling TBMR to be installed, re-configured or removed from any supported Windows platform.

Please refer to this web page <https://www.cristie.com/support/matrix/> to determine the latest OS and IBM Spectrum Protect client/server support for TBMR Version 9.5.1.

Important note regarding Windows Service Pack level:

For correct operation the TBMR product components requires the Microsoft VC++ 2015-2022 redistributable to be installed on the host system. This component is installed automatically by the suite installer.

TBMR installation is available in English only.

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

1.1 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
<code>Next ></code>	used to signify clickable buttons on a GUI dialogue
Note:	describes something of importance related to the current topic



2 TBMR Installation and Removal

The Windows setup program allows all components of TBMR to be selectively installed or un-installed. This group of components is referred to here as the **TBMR Suite**.

It is possible to install individual components using dedicated setup programs. For example this may be required at a later date to update individual suite components. However, in normal practice, it is recommended to use the suite installer as discussed in the following sections.

The Windows installation suite consists of the following components:

- **TBMR (Bare Machine Recovery for IBM Spectrum Protect)** - Install on the machine to be protected by TBMR.
- **CRISP (Cristie Recovery ISO Producer)** - Install on any suitable host machine. A tool used to create a bootable WinPE5 or WinPE10 based Disaster Recovery environment in conjunction with the appropriate TBMR fileset below.
- **CRISP WinPE5 or WinPE10 Fileset for Disaster Recovery**- Install on the same machine as CRISP above. Used in conjunction with CRISP to create the Disaster Recovery ISO/USB flash drive. Boot this ISO/USB flash drive on Windows recovery targets. Unfortunately Cristie Software Ltd. is unable to provide the Disaster Recovery ISO directly to Customers because of Microsoft WinPE5 or WinPE10 Licensing restrictions.

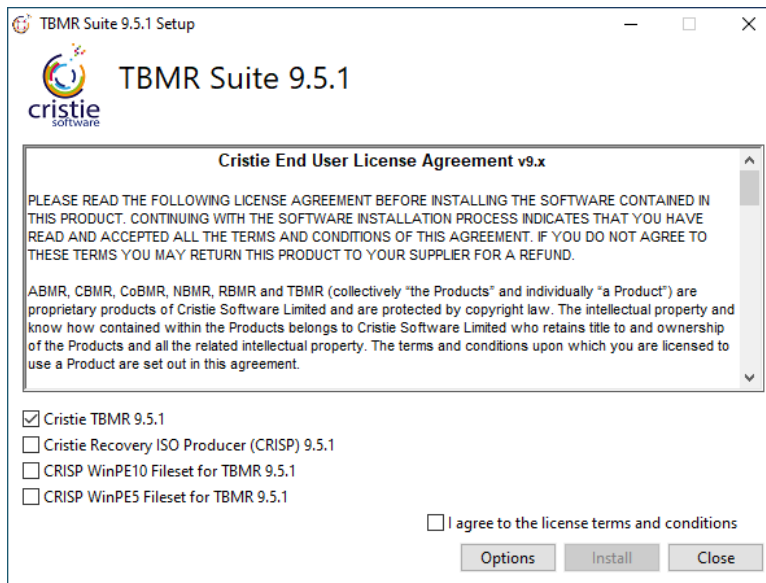
2.1 Install the TBMR components

Prior to attempting an installation of TBMR, Cristie recommends that the TBMRCFG.EXE program is added to the Windows Defender/Antivirus exclusion list. This executable program file will be found in the TBMR install folder - normally C:\Program Files\Cristie\TBMR unless changed. This will significantly speed up the installation of TBMR.

To install TBMR components run the suite setup program `SetupTBMRSuite951.exe` from the command line or click on the setup program from within Windows Explorer. This will then display the opening dialogue of the installation sequence.

Note: The TBMR installation requires that the User login account running the installation has Administrator privilege.





You will then be offered a selection of suite components to install as shown. So now select one or more components to install. These options are now discussed in more detail.

2.1.1 Install TBMR

TBMR requires the IBM Spectrum Protect BA client to be installed prior to running the installation. The installation operation will be disabled if the IBM Spectrum Protect BA client is not detected on the system. A warning message will be displayed in this case.

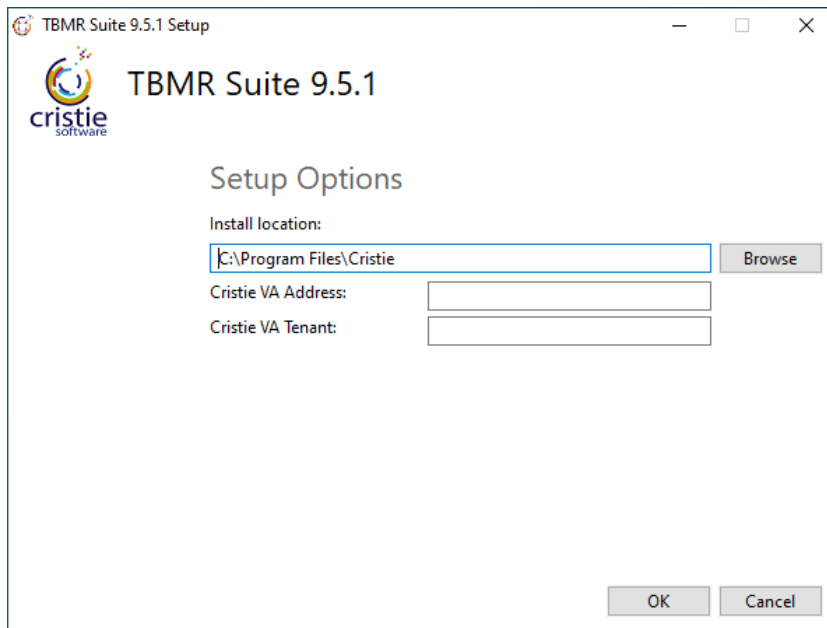
There are a few options that can be configured prior to the installation. Click [Options](#) to open the options dialogue. You may then select a different installation folder.

Note: Cristie Software Ltd. recommends the default folder locations are used. It is a requirement that any non-default folder(s) selected must always be on the same partition as the Windows folder.

Note: TBMR can only be installed on the same partition as the Windows OS itself.

If you intend to manage this installation of TBMR with the Cristie Virtual Appliance (Cristie VA) then enter its IP address and Tenant; otherwise leave these entries blank.

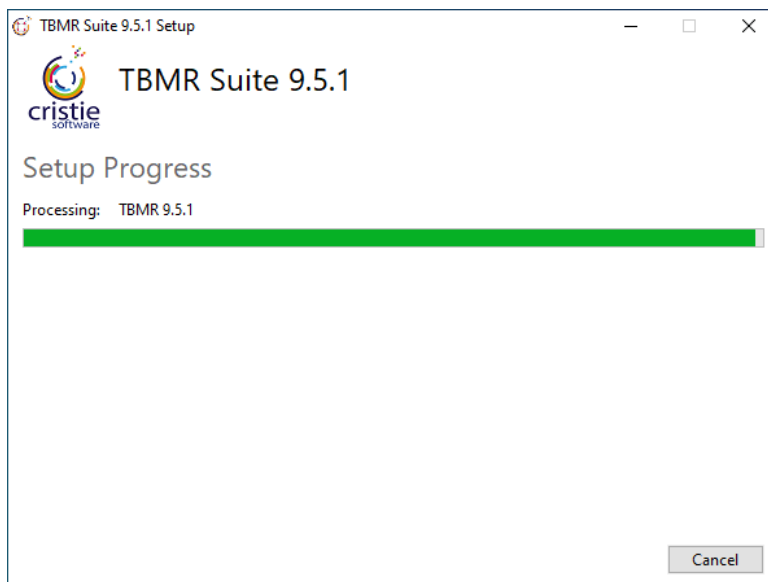




Click **OK** to save your changes.

Select the **Cristie TBMR Version 9.5.1** tick-box option. If you are happy to accept the terms and conditions in the license agreement, also select **I agree the terms to the license terms and conditions** and then click **Install**. Note if an earlier version of the product is already installed then the TBMR agent component will be upgraded.

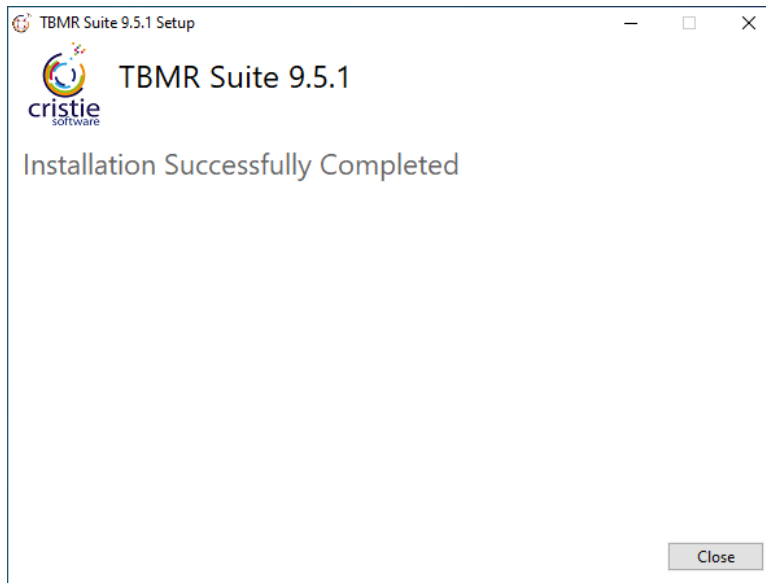
If not already installed the Microsoft VC++ 2015-2022 redistributable will be installed prior to the TBMR component.



Note: The final phase of the TBMR installation is to capture the system configuration of the host machine and this could take a considerable amount of time. During this activity the SystemState files and file hard-links are captured and stored. This process requires traversing the Windows file system and could take perhaps 30 minutes or more. Note that if this process takes longer than 1 hour it will be cancelled to allow the installation to complete. In this case the configuration should be run post-install either manually using the Start menu option or by script when convenient.



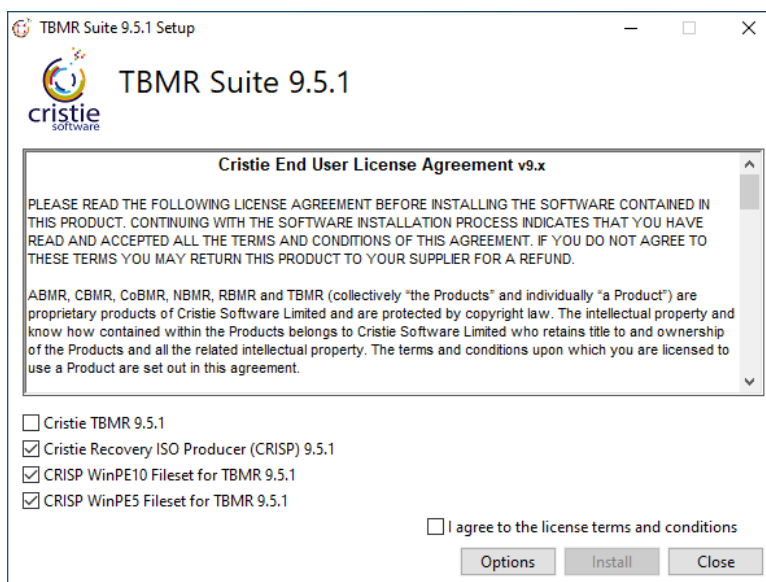
Successful completion is confirmed by the following dialogue. Select [Close](#) to exit.



Note: Please take careful note of the post installation instructions.

2.1.2 Install CRISP and the TBMR fileset

First select the CRISP WinPE filesets you want to install. WinPE5 and/or WinPE10 can be selected. Note the installer allows any combination to be installed. You may also choose to deselect both filesets in which case only CRISP will be installed.



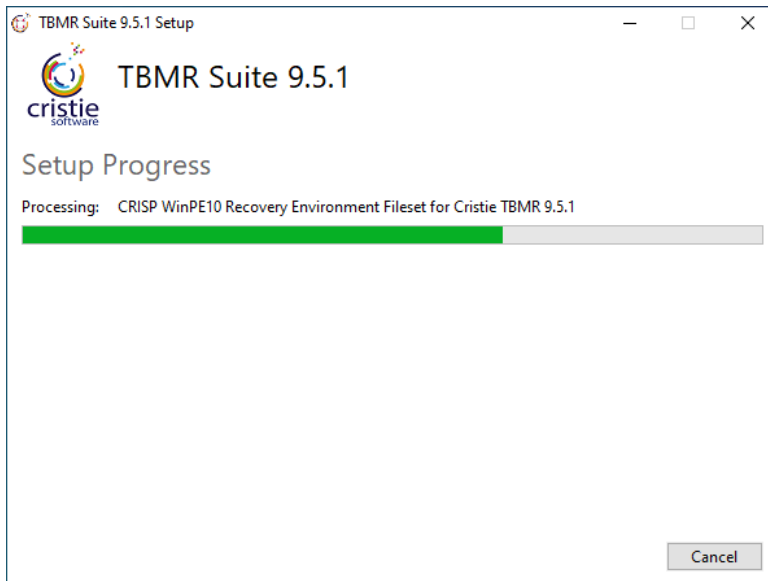
There is one option that can be configured prior to the installation. Click [Options](#) to open the options dialogue. You may then select a different installation folder. The VA fields are not relevant for the Install of CRISP and the fileset options.

Note: Cristie Software Ltd. strongly recommends the default folder location is used.

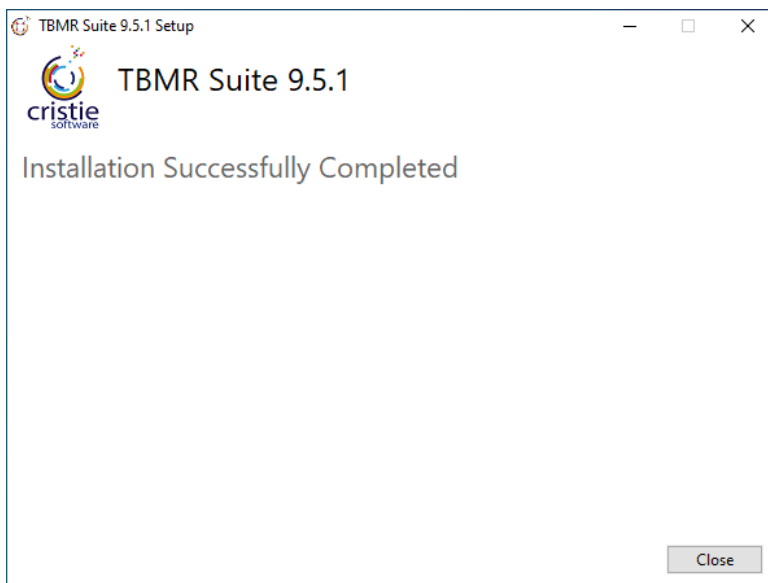
If you are happy to accept the terms and conditions in the license agreement, select **I**



agree the terms to the license terms and conditions and then click [Install](#). Note if an earlier version of the product is already installed then the CRISP and/or fileset component (s) will be upgraded.



Successful completion is confirmed by the following dialogue. Select [Close](#) to exit.



Note: If you wish to build a recovery ISO/USB flash drive for Windows 2016 or later support, please use the WinPE10 based fileset in conjunction with CRISP. Although the WinPE5 version of the fileset can be used it does not provide dissimilar hardware drivers for recovery to vSphere. The WinPE10 version does.

Refer to the [CRISP User Guide](#) for more detailed information.



2.1.3 Silent Install

If you need to install TBMR repeatedly with the same options, you can install it from the command line without operator interaction.

There are 2 approaches to this. Either run the suite installer silently (the recommended method) or extract the stand-alone component installers and run those individually and silently.

In both cases ensure you have the correct IBM Spectrum Protect BA client installed prior to running the installation. Otherwise the silent install will fail - silently!

Running the Suite Installer Silently

This is the recommended method because it ensures the components are installed in the correct sequence with the correct options. The syntax for running the suite setup silently is:

```
C:\SetupTBMRSuite951.exe /quiet /log "C:\Temp" SuiteInstallDir="C:\Program Files\Cristie" VAADDRESS="xxx.xxx.xxx.xxx" VATENANCY="root"
```

This installs all the TBMR agent components to the standard folder **C:\Program Files\Cristie** and creates an installation log in the **C:\Temp** folder. Obviously you may change the installation and/or folder as required. **Note the parameter names shown above are case sensitive.**

The **VAADDRESS** parameter allows the product to be silently installed when a remote Cristie VA is in use. Please specify the IPv4 address in this case. Similarly the **VATENANCY** option allows a VA tenant to be supplied. These are optional parameters and can be omitted when a VA is not in use.

Running the Component Installers Silently

You should only choose this method of installing TBMR when running the suite installer silently is, for example, incompatible with any deployment software in use.

To prepare for this each component's stand-alone setup program SetupTBMRx64.msi must be first be obtained from Cristie Software Ltd.. This will usually be sourced from where you downloaded the suite installer.

Note: 32-bit agent installations are not supported.

Run the silent setup on the command line, for example:

```
C:\temp\SetupTBMRx64.msi /quiet
```

The command will select all of the default values that have been specified for the installation. You may change some of the default values by adding parameters to the command line. For example,

```
C:\SetupTBMRx64.msi /quiet INSTALLLOCATION="%systemdrive%\Cristie\TBMR" /log C:\Temp\Install.log
```

The INSTALLLOCATION property in the above example is overridden from its default value and an install log will be created in C:\Temp. **Note the parameter names shown above are case sensitive.**

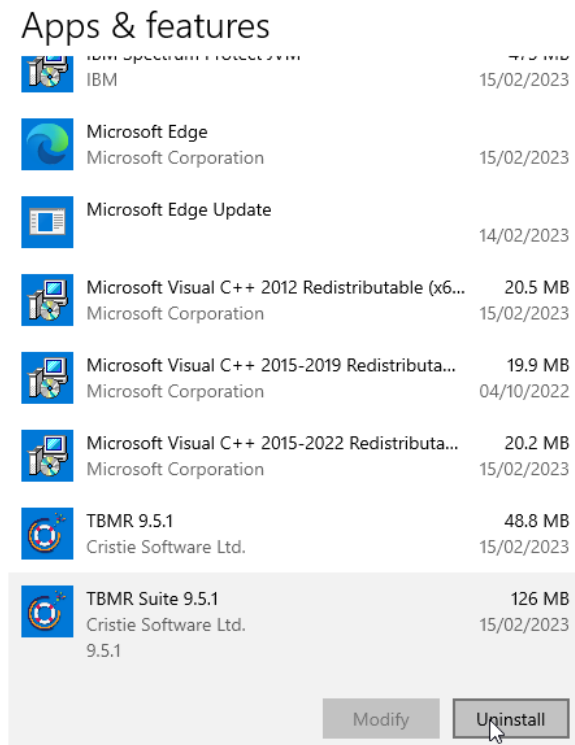


2.2 Uninstalling TBMR components

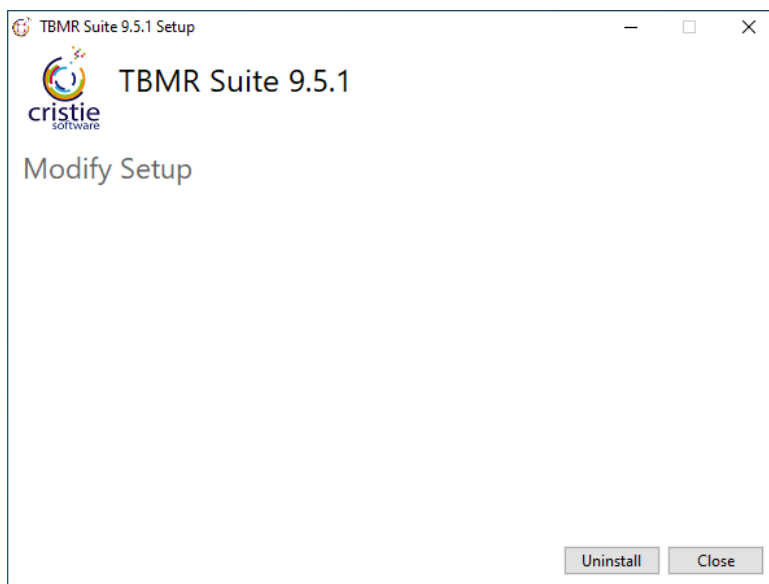
There are two options available for uninstalling TBMR. You can choose to either uninstall all or selected components.

2.2.1 Uninstall all components

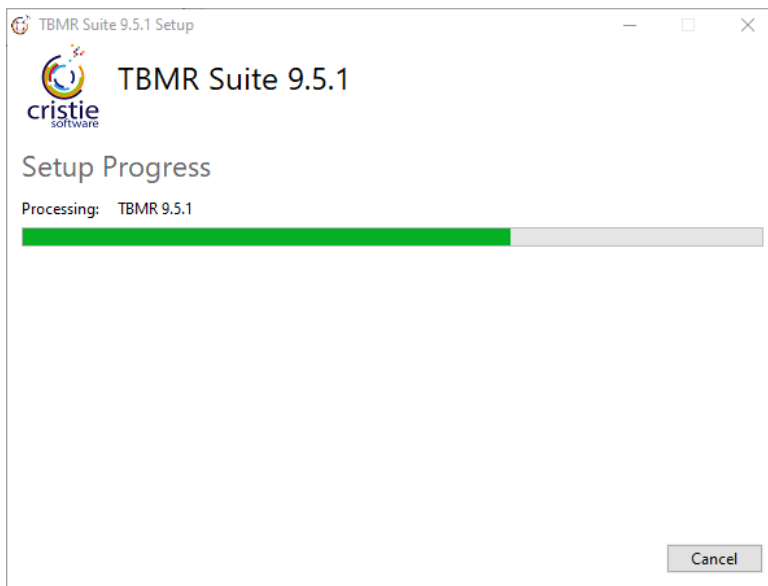
To remove all installed components select TBMR from the Windows **Control Panel -> Programs and Features** (or **Apps and Features** on Windows 10/Windows 2019 or later) option.



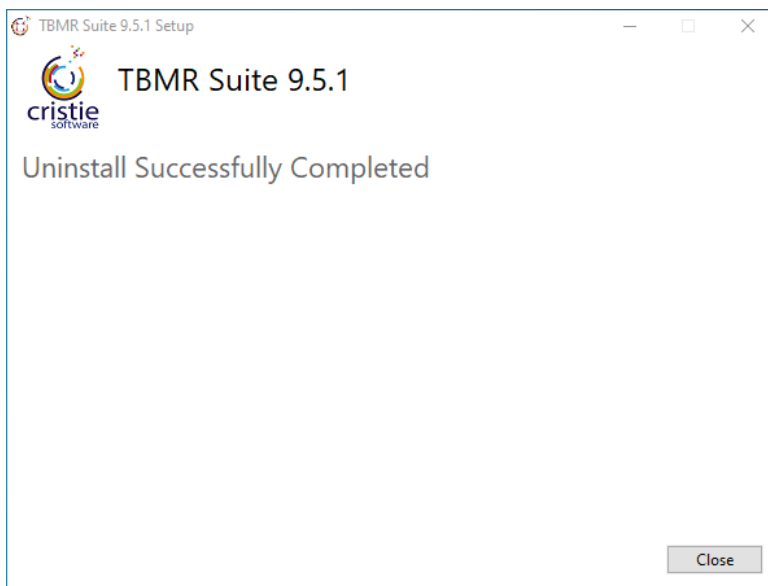
Then select **Uninstall** as shown.



Select **Uninstall** and all installed components will be uninstalled.



Successful removal is signified with this dialogue.



Press **Close** to exit.

2.2.2 Uninstalling selected components







To remove a selected component only choose the required item from the list of installed programs in the Windows **Control Panel -> Programs and Features** (or **Apps and Features** on Windows 10/Windows 2019 or later).

Note: This method is not recommended. Please use the ['Uninstall all components'](#) option where possible.

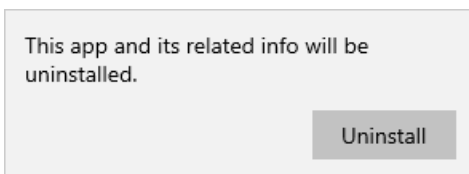
In the following example the TBMR agent is going to be uninstalled but all other product components will be left installed.



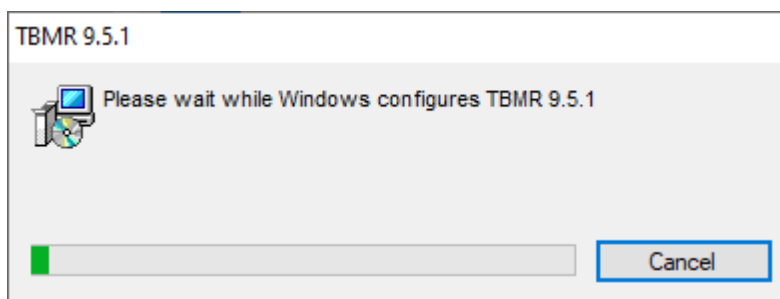
Apps & features

	Microsoft Corporation	15/02/2023
	Microsoft Visual C++ 2015-2019 Redistributa... Microsoft Corporation	19.9 MB 04/10/2022
	Microsoft Visual C++ 2015-2022 Redistributa... Microsoft Corporation	20.2 MB 15/02/2023
	TBMR 9.5.1 Cristie Software Ltd. 9.5.1	48.8 MB 15/02/2023
		Modify Uninstall
	TBMR Suite 9.5.1 Cristie Software Ltd.	126 MB 15/02/2023
	VMware Tools VMware, Inc.	97.7 MB 04/10/2022

Click [Uninstall](#) and a confirmation message will be displayed.



Select [Uninstall](#) to begin the uninstall process.



2.2.3 Silent Uninstall

If you need to uninstall TBMR repeatedly with the same options, you can uninstall it from the command line without operator interaction.

As for silent install there are 2 approaches to this. Either run the suite installer silently (the recommended method) or extract the stand-alone component installers and run those individually and silently.

Running the Suite Uninstaller Silently

This is the recommended method because it ensures the components are uninstalled in the correct sequence and with the correct options. The syntax for running the suite setup silently in uninstall mode is:



```
C:\SetupTBMRSuite951.exe /quiet /uninstall /log "C:\temp\uninstall.log"
```

This uninstalls all the TBMR agent components and creates an uninstall log in the **C:\temp** folder. The installation must have been previously performed by the suite.

Running the Component Uninstallers Silently

This is currently not supported.



3 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 the 30-day period has already expired then the software will no longer function.

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 a license activation code will be made available on the Cristie Licensing Portal. This code will enable you to fully activate the product.

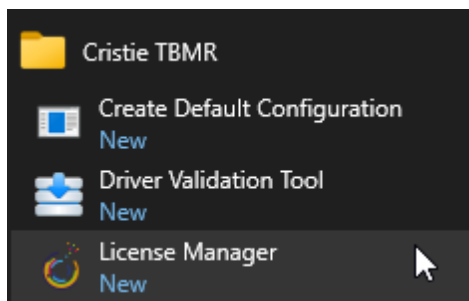
TBMR can also be activated with a **Rental** license code. This allows the software to run normally up to a pre-configured expiration date whereupon it will cease to function.

The following sections discuss this in more detail.

3.1 Trial License

A 30-day trial license commences from the date of installation. The TBMR configuration file generator (**TBMRCfg.exe** - referred to as the **plugin** in the following discussion) will not run after this period expires.

You may use the **License Manager** to add or inspect license details at any time. Select this from the **Start** menu shortcut:



Clicking the shortcut will display the **License Manager**. This shows the current Cristie product (**TBMR** in this case), the installed host System signature, system attributes, the product version, the trial end date, license type and a list of current activation codes (if any).



TBMR License found						
Contract ID	Please register before trial expiry date					
Signature	WVLLUVE-GA8LUDE6-AVESFTL4-YUBWNHFJ					
Attributes	Server					
Version	9.5					
End date	17 March 2023					
Type	Normal					
Activation codes						

Activation code information:

Type	
End date	
Attributes	

Manual Activation...

Site License... Exit

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

3.2 Full License

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

Note: The software will continue to function beyond the maintenance expiry date, but the Customer will not be eligible for support and upgrades.

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 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 'site 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.

The product can be activated either **manually** (direct Internet access not required) or by using the Cristie Virtual Appliance (Cristie VA) if you have one. Manual activation requires a Cristie Licensing Portal account.


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

3.2.1 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 Microsoft Edge and then navigate to the Cristie Licensing Portal web page at <https://portal.cristie.com/login>.




Email

Password

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





Register

Username

Email

New Password

Confirm New Password

Password Reset Question


Password Reset Answer

Contract/Agreement No

Contract Password

[Register](#) [Cancel](#)

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



Register

✓ Registration successful

[Back To Login](#)

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

3.2.2 Manual activation

Manual activation allows you to activate your license using your 35-digit **License Activation Code** only. This code is obtained from your Cristie Licensing Portal account, but indirectly from the TBMR host by using a second system with access the portal. Use this activation method if your TBMR host does not have Internet access.

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. Run the License Manager on the installed host machine first and make a note of the system signature code. This code uniquely identifies the host machine.




2. On a machine that has Internet access run a suitable browser such as Microsoft Edge and navigate to the Cristie Licensing Portal web page at <https://portal.cristie.com/login>. Use your existing Login credentials or create a new account. The following is the Login web page.

Once logged in select the **Activate License** menu option and enter the following details:

- select the correct **Contract ID** - this will automatically select the correct product, but please check. This ID may have been supplied to you as the contract 'Agreement Number' - please use this instead as the Contract ID.
- select the correct **Machine Type** - i.e. physical or virtual and then server or desktop.
- select the correct Operating System (**OS**) - Windows in this case
- enter the system **Signature** as obtained from the License Manager (see above)
- we recommend you enter your system's **IP address** and **hostname**
- add any comments you feel are relevant





Visit our [news page](#) for updates on product releases, what we're up to and more!

Manage Licenses

[View Licenses](#)
[Activate Licenses](#)
[Surrender Licenses](#)
[Offline Surrender](#)
[Request Tokens](#)
[Activity Log](#)

Activate Licenses

Contract/Agreement No [Refresh](#)

Product TBMR [Download Area](#)

[Show Customer Info](#)

Available Activations:

Physical Server	482
Virtual Server	922
Desktop	0

Machine Type

IP Address *

Hostname *

Platform *

Signature *

(Should be in the format xxxxxxxx-xxxxxxx-xxxxxxxx-xxxxxxx)

[Activate License](#)

Then click [Activate License](#). A pop-up dialogue will be shown providing the License Activation code:

Successfully Activated License

- NP-Win2022
 - Activation Code: TGU64BKL-4GZBHAN2-GJEDMX89-JU4GHRH2 [copy](#)
 - IP Address: 10.10.11.80

There is no need to remember this code (unless perhaps you are activating the host system at the same time). This and any other code can be retrieved at a later time by reselecting [View Licenses](#) to show your contract code. Select your **Contract ID** and then click [View Activations](#) to see a list of all product activations for that contract.

Contract
3 (TBMR)

Contract Code
YD75ERUA-B4P454ZM-KK2GQJB6-UZT6H95L

Maintenance Start Date
31 December 2012

Maintenance End Date
31 December 2024

Product
TBMR

Show Customer Info

View Licenses
Activate Licenses
Surrender Licenses
Offline Surrender
Request Tokens
Activity Log
My Account
Downloads
Log Out

Activation Details

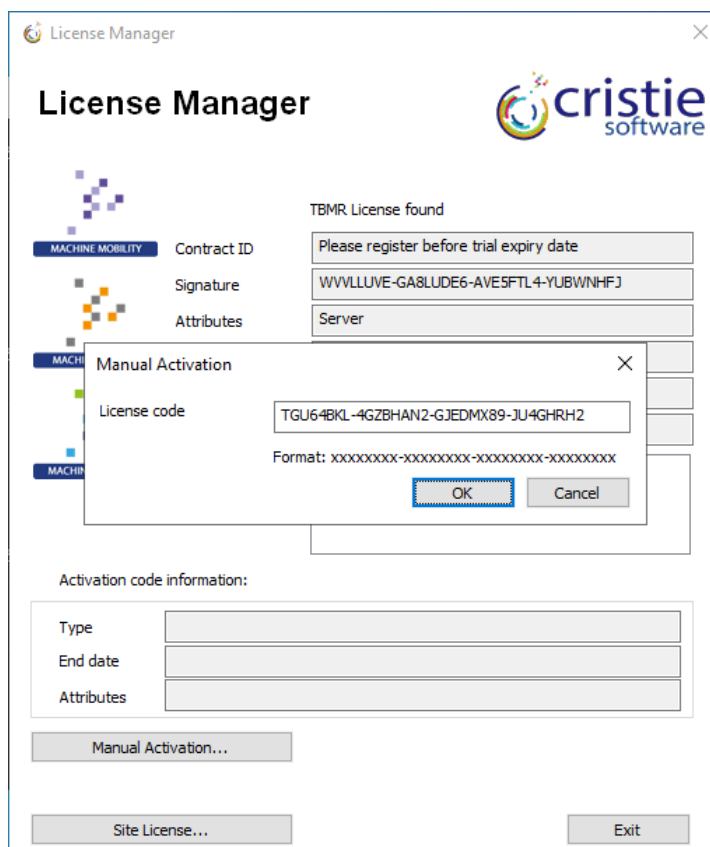
Your active licenses are shown here. Surrendered licenses will not be shown. [export activations](#)

Filter activations

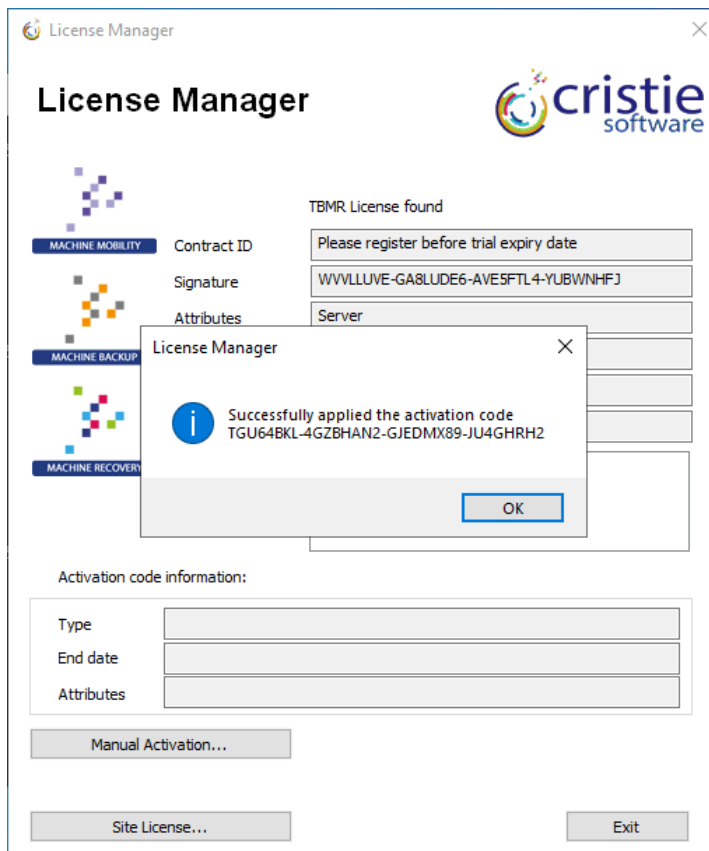
Hostname	Type	Activation code	Comment	Timestamp
NP-Win2022	Virtual Activation	TGU64BKL-4GZBHAN2-GJEDMX89-JU4GHRH2	Obtained by Nigel VIA the Licensing Portal	15 February 2023
10.10.12.196	10 tokens	G7NGJSLQ-VRN55WHV-EZKMY8U8-ZYS7ZBK2	Obtained VIA Virtual Appliance (10.10.12.196) by user - Administrator.	06 February 2023
10.10.12.196	3 tokens	SPV4AXZV-4P8VKWAH-3GRZ54BL-VGDY8TQ6	Obtained VIA Virtual Appliance (10.10.12.196) by user - Administrator.	06 February 2023

You will need to make a note of the new **Activation Code** corresponding to your machine activation. See the highlighted codes above for an example.


- Using the License Manager on the TBMR host system click [Manual Activation...](#) and enter the above activation code using the displayed dialogue. You may copy and paste the code using the standard Windows mouse shortcuts or right-click features to do this if you wish. Add the **License Activation Code**.





Now click **OK** to activate the license.




At this point your TBMR product is fully licensed and activated with a contract maintenance end date.

 License Manager







License Manager



MACHINE MOBILITY



MACHINE BACKUP



MACHINE RECOVERY

Contract ID

Signature

Attributes

Version

End date

Type

Activation codes

TBMR License found

3

WVLLUVE-GA8LUDE6-AVE5FTL4-YUBWNHFJ

Server

9.5

31 December 2024

Normal

TGU64BKL-4GZBHAN2-GJEDMX89-JU4GHRH2

Activation code information:

Type

End date

Attributes

Product activation

31 December 2024

Server - Virtual

Manual Activation...

Site License...

Exit

Copyright © 2008-2023 Cristie Software Ltd.

4 Cristie Technical Support

If you have any queries or problems concerning your Bare Machine Recovery for IBM Spectrum Protect 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)
Knowledgebase	kb.cristie.com
Forum	forum.cristie.com
Sales Enquiries	sales@cristie.com
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 Ltd. are continually expanding their product range in line with the latest technologies. Please contact the Cristie Sales Office for the latest product range.

