Bare Machine Recovery for TSM

Installation and Licensing Guide

For Windows

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Version 7.2.2

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1 Overview

This document describes the Installation and Licensing of the Bare Machine Recovery for TSM (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. This version 7.2.2 supports the following platforms:

- XP 32/64-bit
- 2003 32/64-bit
- Vista SP2 32/64-bit
- Windows 7 SP1 32/64-bit
- Windows 8 32/64-bit
- Windows 8.1 32/64-bit
- 2008 SP2 32/64-bit (including Core)
- 2008 R2 SP1 (including Core)
- 2012 (including Core)
- 2012 R2 (including Core)

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:

`/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 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 TSM**) - *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 WinPE 2 or WinPE 5 based Disaster Recovery environment in conjunction with the appropriate TBMR fileset below.*
- **CRISP WinPE 2 or WinPE 5 Fileset for Disaster Recovery**. *Install on the same machine as CRISP above. Used in conjunction with CRISP to create the Disaster Recovery ISO. Boot this ISO on Windows clone targets. Unfortunately Cristie Software Ltd. is unable to provide the Disaster Recovery ISO directly because of Microsoft WindowsPE 2 and WindowsPE 5 Licensing restrictions.*

2.1 Install the TBMR components

To install TBMR components run the suite setup program `SetupTBMRSuite722.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.***

Click on Show Installation Guide to display a guide describing installation and product licensing. Click Show Readme to display product release notes and installation requirements specific to this release.

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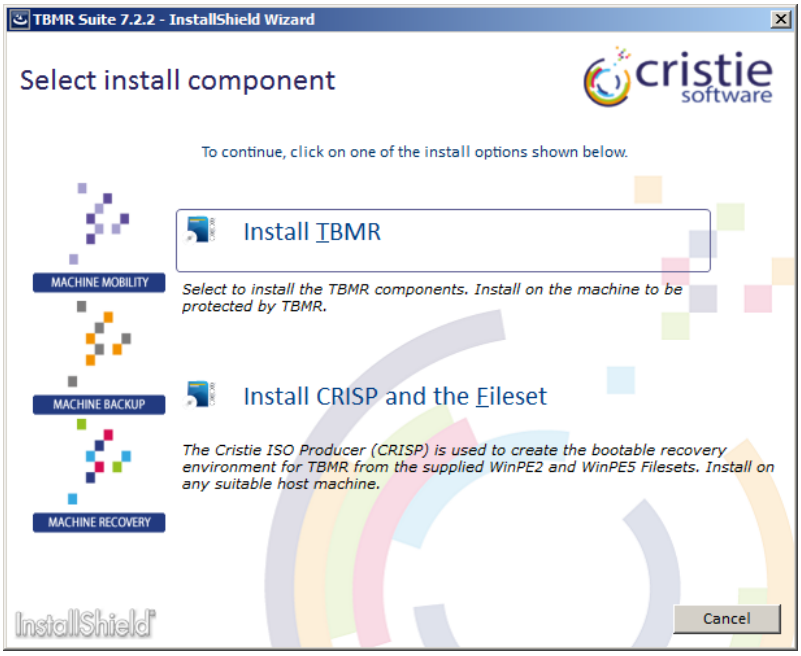
Click on the Install TBMR Suite to commence the product installation. The License Agreement will then be displayed.

If you are happy to accept the terms and conditions in the license agreement, select **I accept the terms in the license agreement** and then Next >. You will then be prompted to choose which major component of the suite to install - TBMR or CRISP and the TBMR Fileset.

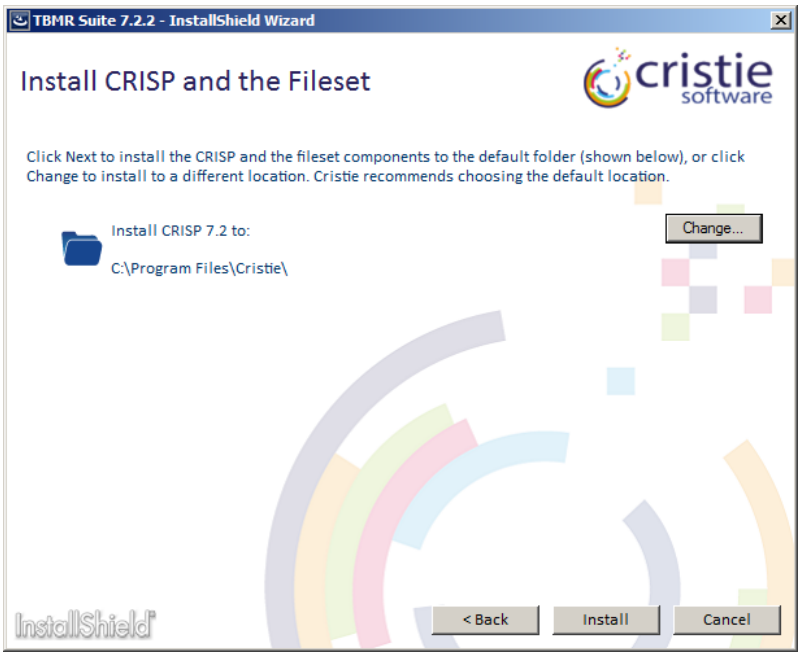
Note: You may also print the license if you wish and have a suitable printer available.



These install options are now discussed in more detail.

2.1.1 Install CRISP and the TBMR fileset

Selecting Install CRISP and the Fileset results in the following dialogue being displayed:



> ***Note: WinPE 2 builds require a 32-bit host OS and the Microsoft Windows Automated Installation Kit (WAIK) version 1.1.0.0 for Vista/Win2008 to be installed. WinPE 5 builds require a 64-bit host OS and the Microsoft Windows Assessment and Deployment Kit (WADK) version 8.1 for Win8.1/Win2012R2 to be pre-installed.***

The CRISP installation will examine whether the host OS is 32 or 64-bit. If 32-bit is detected then CRISP and the WinPE 2 Fileset will be installed. If 64-bit is detected then CRISP and the WinPE 5 Fileset will be installed.

Enter the root folder for the CRISP and fileset installation. Use the Change... button to create or choose a different installation folder.

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

Finally click Install to begin the installation of the CRISP and the Fileset components.

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Successful completion is confirmed by the following dialogue. Select Finish to exit.

Refer to the CRISP User Guide for more detailed information.

2.1.2 Install TBMR

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

Selecting Install TBMR results in the following dialogue being displayed:

Enter the root folder for the TBMR installation. Use the Change... button to create or choose 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. On foreign language installations of Windows Vista or later the default installation folder is always "Program Files" (and not say "Programme" on German OS's). On Windows XP and 2003 the default installation folder will be the localised folder, for example "Programme" on a German OS.***
>
> ***Note: TBMR can only be installed on the same partition as the Windows OS itself.***

Finally click Install to begin the installation of the TBMR components.

> ***Note: The final phase of the TBMR installation is to capture the system configuration of the host machine. This could take a considerable amount of time on certain systems***

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(mainly Microsoft Vista and newer OS's). During this time 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.

Successful completion is confirmed by the following dialogue. Select Finish to exit.

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

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 Tivoli 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:\SetupTBMRSuite722.exe /silent /ISFeatureInstall:TBMR722 /SuiteInstallDir="C:
\Program Files\Cristie" /debuglog"C:\setup.log"
```

This installs all the TBMR agent components to the folder **C:\Program Files\Cristie** and creates an installation log in the specified folder. Obviously you may change the installation folder as required.

Note: All the command-line switches must be specified (except for the /debuglog switch which is optional) exactly as stated or the silent install will fail. Beware that the switches (e.g ISFeatureInstall) are case sensitive.

Running the Component Installers Silently

You should only choose this method of installing TBMR when running the suite installer silently is, for example, not compatible with any deployment software in use.

There are 2 stand-alone components that must be first extracted and then installed in the correct sequence. These are the TBMR agent and the Cristie Deployment Service (CDS).

To prepare for this each component's stand-alone setup program SetupTBMR7-x86.exe and SetupCDS4-x86.exe must be first extracted from the suite installer. Only the relevant bit version for your operating system will be extracted. Note the following discussion shows a 32-bit example and the GUIDs shown are only examples. The 64-bit equivalent will have been extracted if running on x64 systems. If you are not confident in doing this please consult Cristie Support who will be able to supply the files directly.

After copying `SetupTBMRSuite722.exe` to a suitable location (C:\ in this example) extract all the setup files from the suite installer by running this command (on the command line or from Start/ Run):

```
C:\SetupTBMRSuite722.exe /silent /stage_only ISRootStagePath="c:\temp"
```

where `c:\temp` is the folder to where you want to extract the setup programs. This will place all the setups available into separate folders under `c:\temp` in their own different GUID folder. Look for the folders containing the setup files SetupTBMR7-x86.exe and SetupCDS4-x86.exe.

Now run each of the silent setups in turn on the command line, for example:

```
C:\temp\{B726EBBB-99C1-4173-9330-ECEEF7A8B832}\SetupTBMR7-x86.exe /s /v"/qn /l*v
c:\setup.log ALLUSERS=1"
```

followed by:

```
C:\temp\{F090EFAF-D508-49FA-948B-C32055A2F6EF}\SetupCDS4-x86.exe /s /v"/qn /l*v c:
\setup.log ALLUSERS=1"
```

The example above will install and create a log of the installations in `c:\setup.log`.

> ***Note: It is very important that the stand-alone installations illustrated above are installed in the sequence shown - i.e. Agent before CDS.***

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:\temp\{B726EBBB-99C1-4173-9330-ECEEF7A8B832}\SetupTBMR7-x86.exe /s /v"/qn
ADDLOCAL=TBMR INSTALLDIR="%systemdrive%\Cristie\TBMR"
```

The ADDLOCAL and INSTALLDIR properties in the above example are overridden from their default values. Note that the ADDLOCAL setting in the above example installs the main TBMR program only. It does not install any optional components.

Please refer to the **Microsoft Windows Installer (MSIEXEC) Property Reference** for a full listing of the properties and switches that can be applied to the stand-alone installation.

2.1.4 Upgrades

If earlier versions of TBMR, CRISP or TBMR WinPE2 or WinPE5 Fileset are detected then a prompt will be displayed asking the User to allow the upgrade.

If the TBMR WinPE2 or WinPE5 Fileset is upgraded then re-run CRISP to re-create the TBMR WinPE 2 or WinPE 5 recovery ISO.

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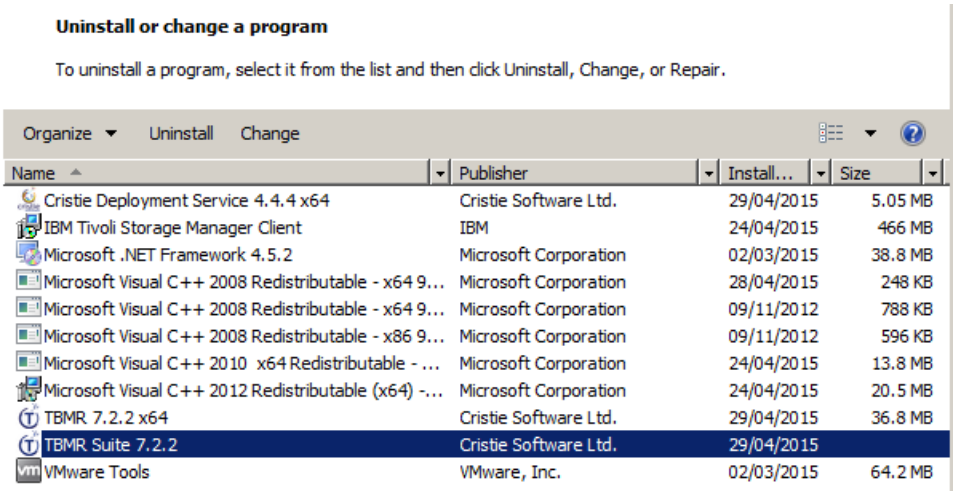
2.2 Uninstalling TBMR components

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** option.



Then select Uninstall as shown.

Select Remove and all installed components will be uninstalled.

Successful removal is signified with this dialogue.

Press Finish to exit.

> *Note: On Windows 2003 use the Add/Remove Program option in the Control Panel to achieve the same effect.*

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

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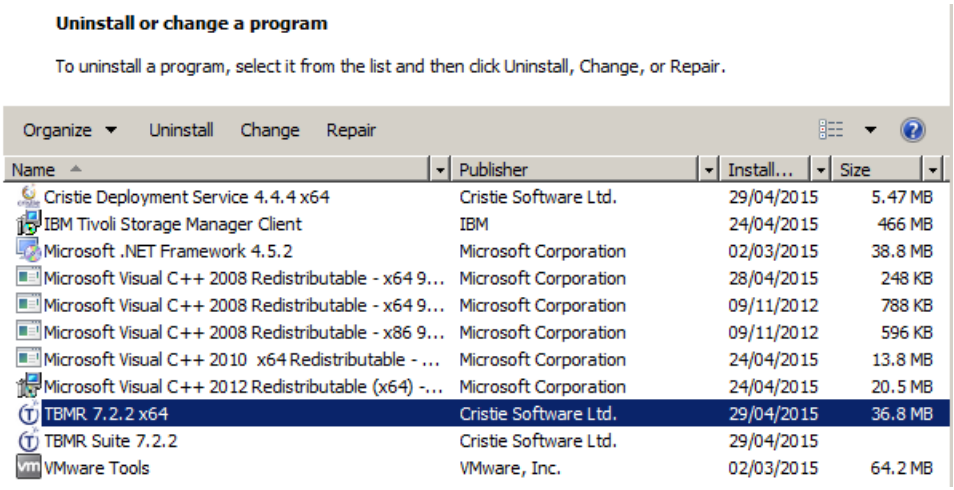
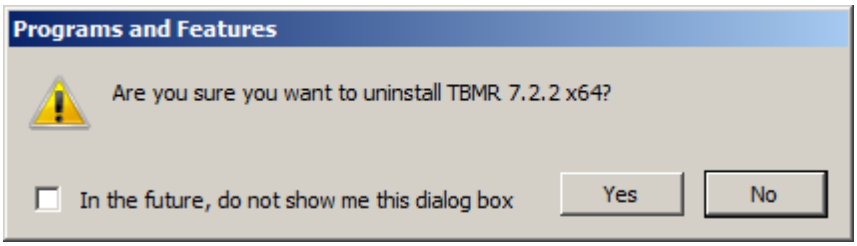
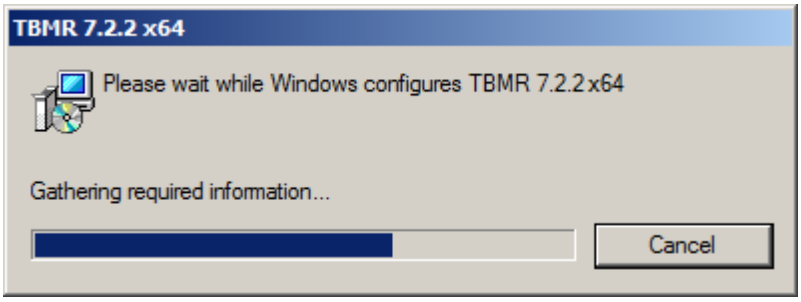


Click Uninstall and a confirmation message will be displayed.



Select Yes to begin the uninstall process.



Note: On Windows 2003 use the Add/Remove Program option in the Control Panel to achieve the same effect.

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:\SetupTBMRSuite722.exe /silent /ISFeatureRemove:TBMR722 /debuglog"C:\uninstall.
log"
```

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

> *Note: All the command-line switches must be specified (except for the /debuglog switch which is optional) exactly as stated or the silent uninstall will fail. Beware that the switches (e.g ISFeatureRemove) are case sensitive.*

Running the Component Uninstallers Silently

To silently uninstall an existing TBMR 7.2.2 installation from the command line (assuming the component setup files have already been extracted - see section Silent Install), enter the following command, for example:

To manually uninstall each component separately when the they have not been installed via the suite run:

```
C:\temp\{B726EBBB-99C1-4173-9330-ECEEF7A8B832}\SetupTBMR7-x86.exe /s /v"/qn /l*v
C:\uninstall.log REMOVE=ALL"
```

followed by:

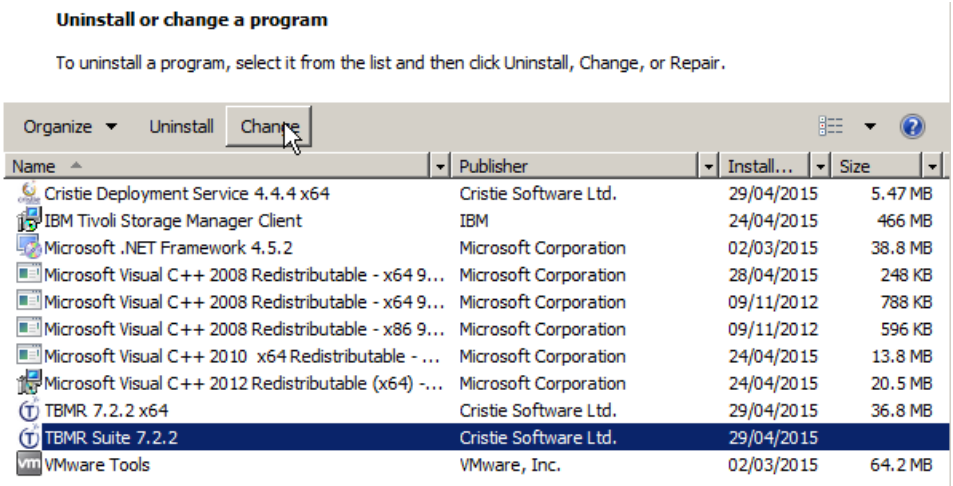
```
C:\temp\{F090EFAF-D508-49FA-948B-C32055A2F6EF}\SetupCDS4-x86.exe /s /v"/qn /l*v C:
\uninstall.log REMOVE=ALL"
```

This uninstalls all the TBMR agent components and creates an uninstall log in the specified folder.

> *Note: It is very important that the stand-alone installations illustrated above are uninstalled in the sequence shown - i.e. Agent before CDS.*

2.3 Modify the installed TBMR components

To modify installed components select TBMR suite installer from the Windows **Control Panel -> Programs and Features** option.



Then select Change as shown. This will then display the setup maintenance menu.

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

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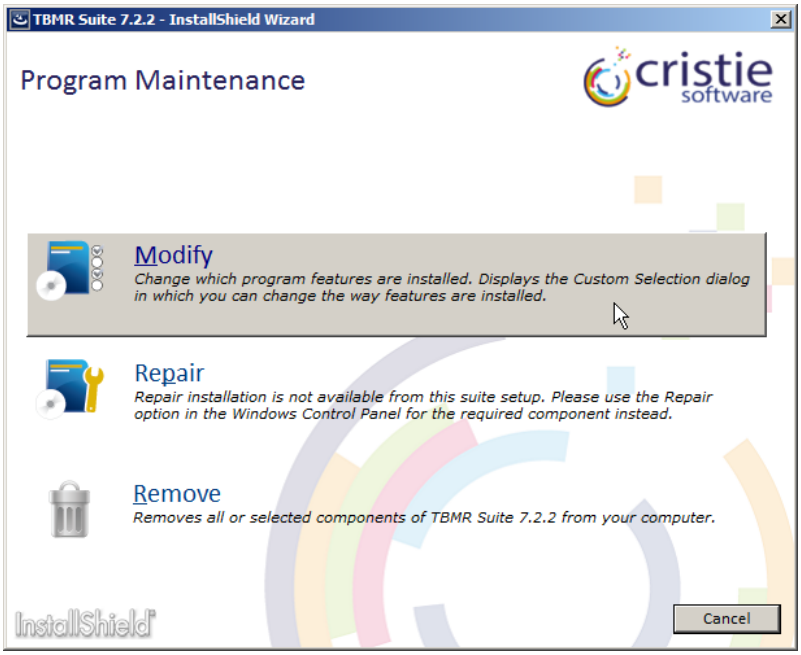
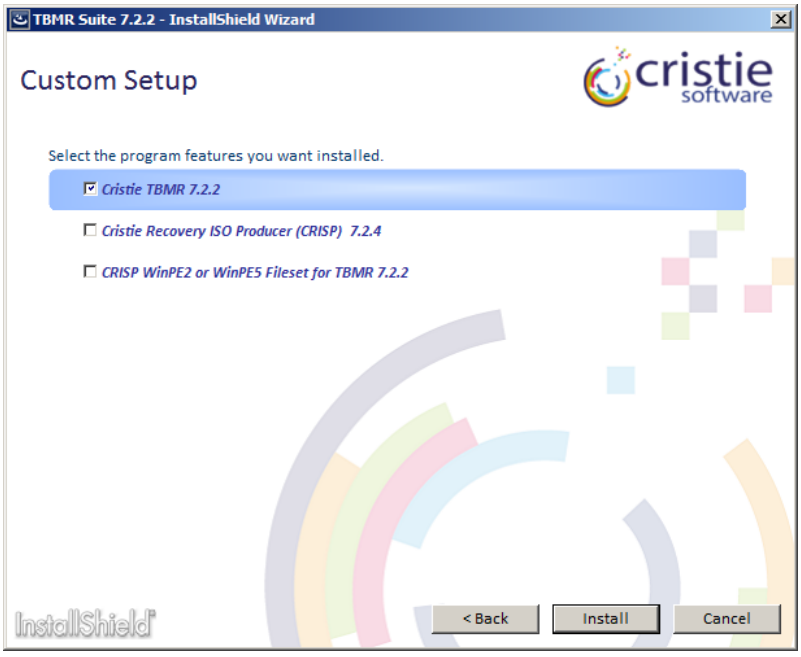
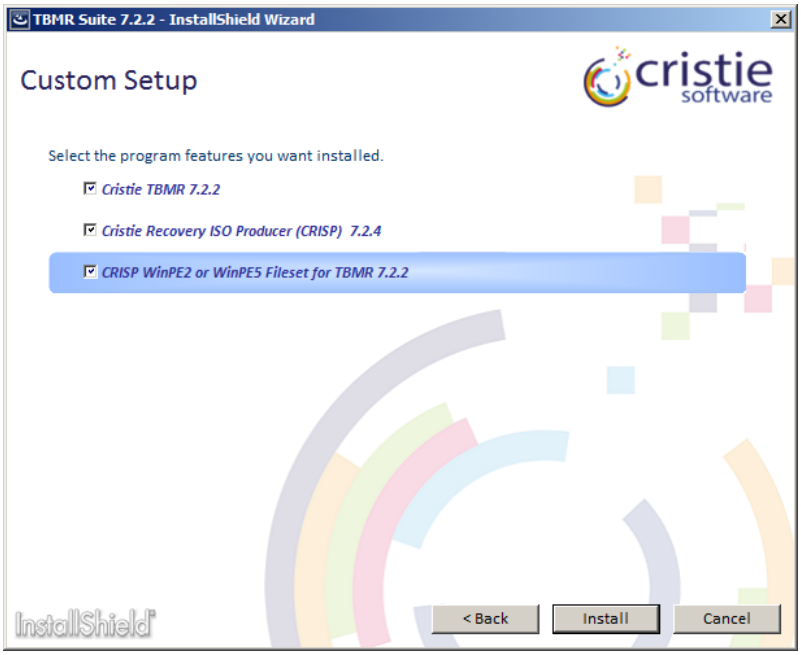


Select Modify to display the **Custom Setup** dialogue with the list of components. The ticked items represent the currently installed components. Unticked items represent items not installed. In this example the TBMR is already installed.



Tick the new items that you wish to install (CRISP and the TBMR fileset in this example) and select Install.



This will begin the installation of the new components.

Note: You may also untick items already installed. In which case the corresponding components will be uninstalled.

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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 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.

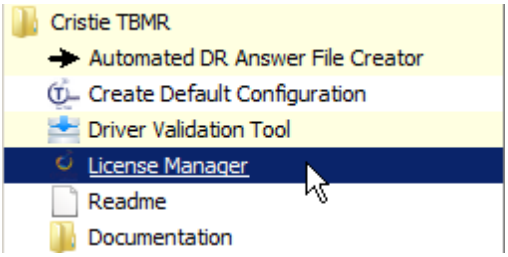
If you purchase the product, then contract and license activation codes will be available on the Cristie Licensing Portal. Together these codes will enable you to fully activate the product.

The following sections discuss this in more detail.

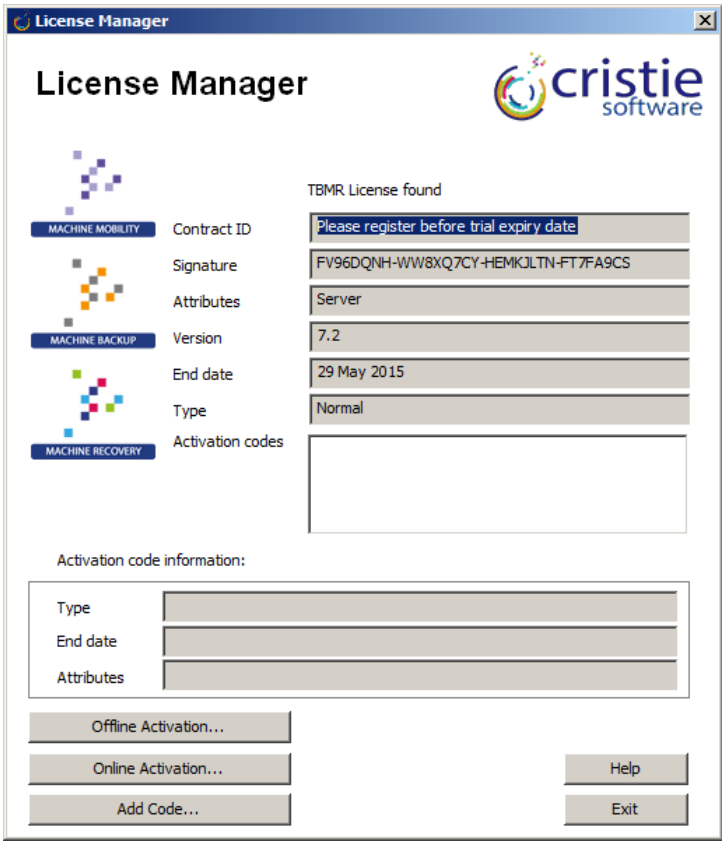
3.1 Trial License

A 30-day trial license commences from the date of installation. The TBMR configuration file generator (**TBMRCfg.exe**) 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).



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 contract and activation codes 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 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 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.

> ***Note: The Add Code... button on the License Manager is a generic option used to enter both Contract ID's and Activation Codes.***

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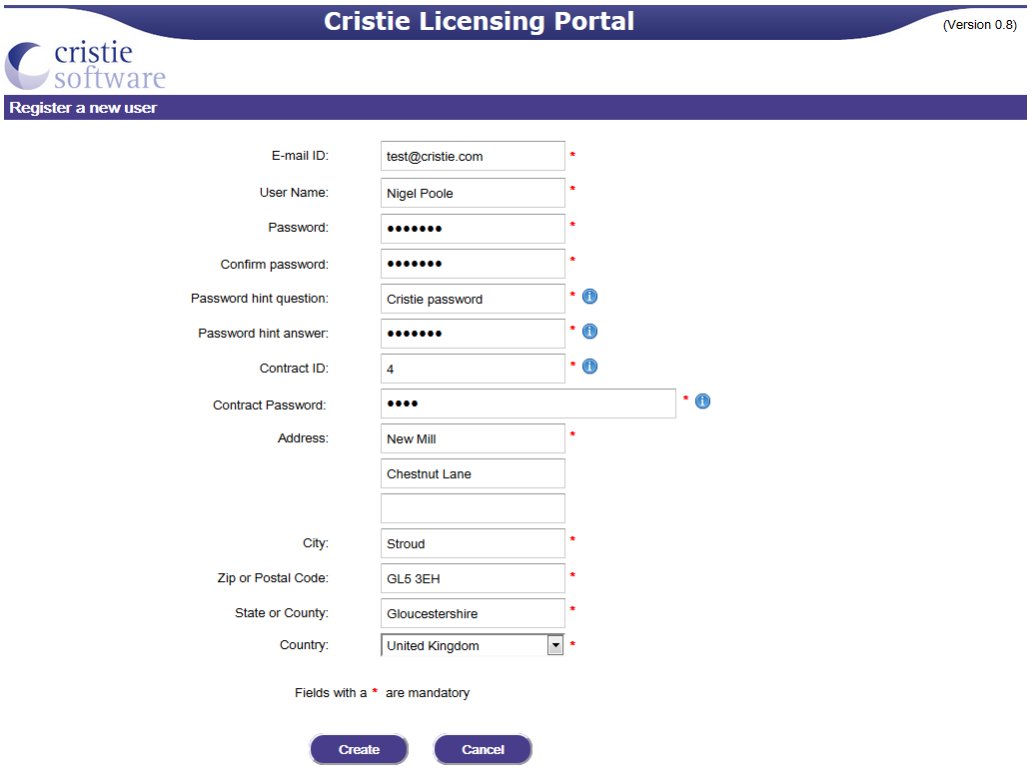
3.2.1 Setting up a Cristie Licensing Portal account

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.

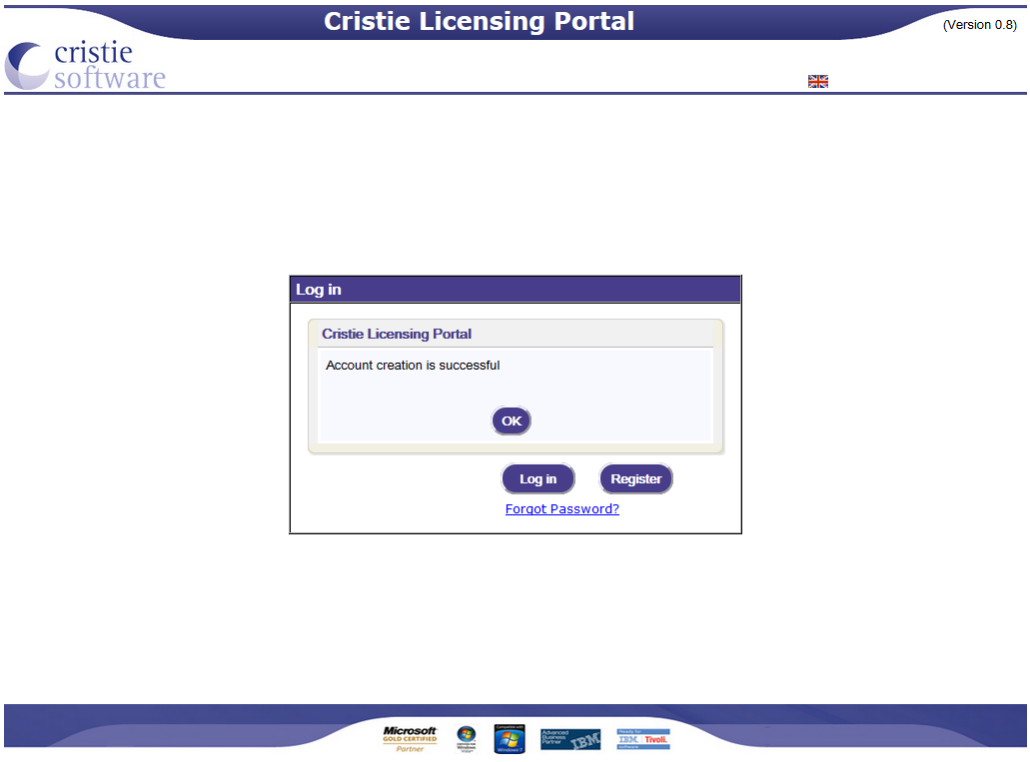
> ***Note: Your Contract ID may have been supplied to you as your contract Agreement Number. In that case please use your Agreement number in place of the Contract ID throughout.***

1. On a machine that has Internet access run a suitable browser such as Microsoft Internet Explorer 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 step.

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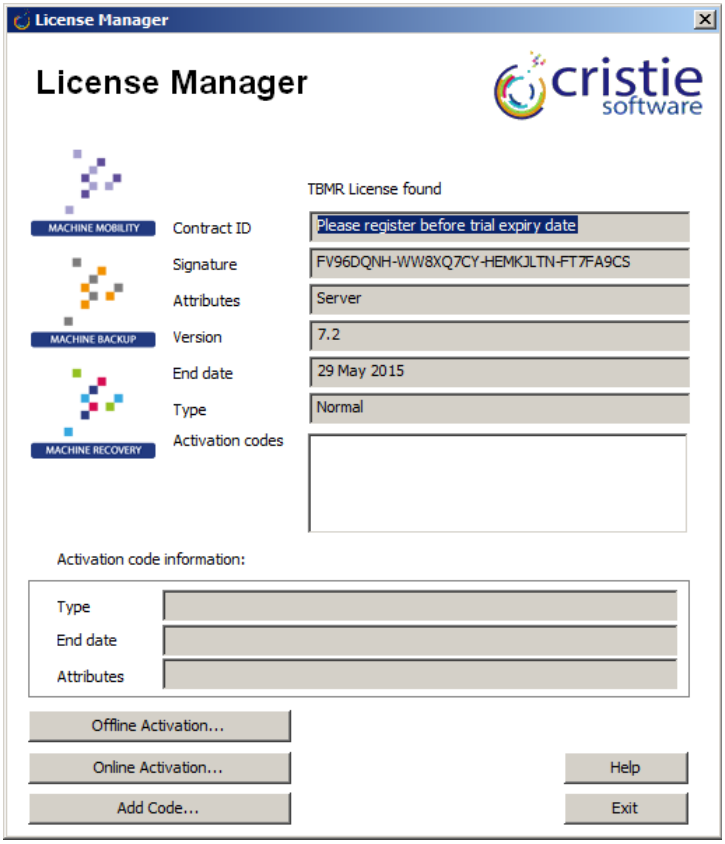
3.2.2 Online activation

The steps involved in activating the product automatically using the 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. On the TBMR host machine select License Manager from the Start menu shortcut.



Note the product is shown as running in Trial mode by default immediately after a clean installation.

2. Select the Online Activation button. You will then be prompted for your Cristie Licensing Portal login credentials and your 35-character Contract Code (unless already entered) obtained from the Cristie Licensing Portal.

   The system **Signature**, **hostname** and **host IP address** will be obtained directly from the host system and added automatically. Add any comments you feel are relevant. This information will then be recorded in the license activation record on the Cristie Licensing Portal together with date/ time of activation and the User name.

3. Click OK and within a few seconds the License contract and activation codes will be automatically entered.

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

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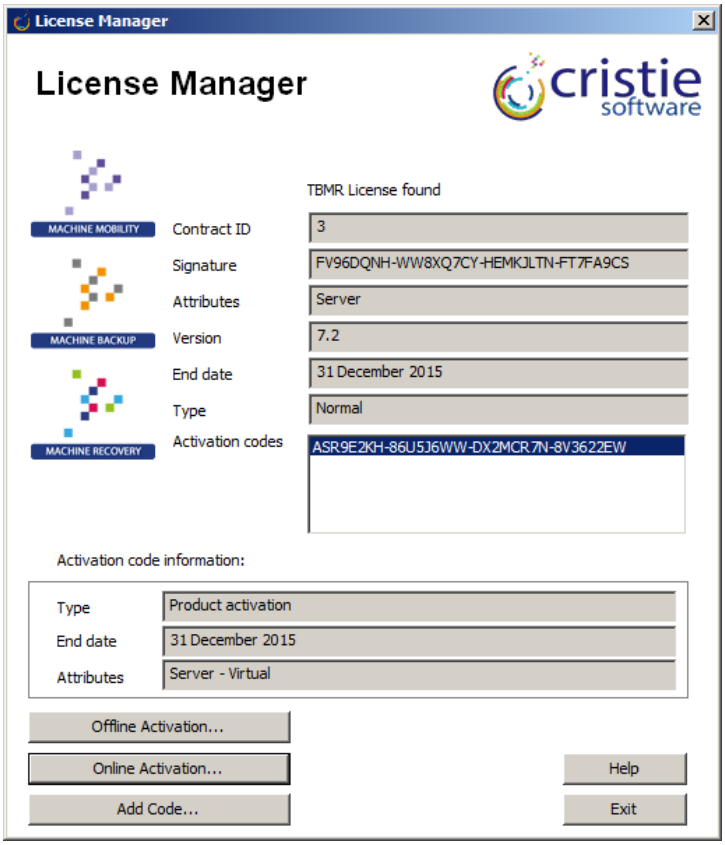
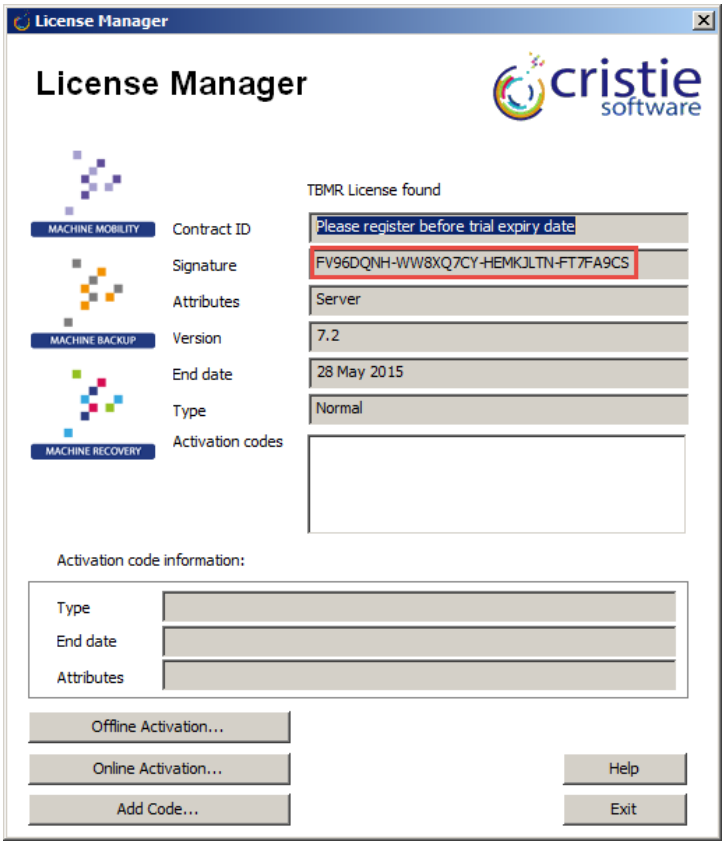


Note: Internet access on the host machine is required to run the online activation process from the License Manager directly.

3.2.3 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. 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 Internet Explorer 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.

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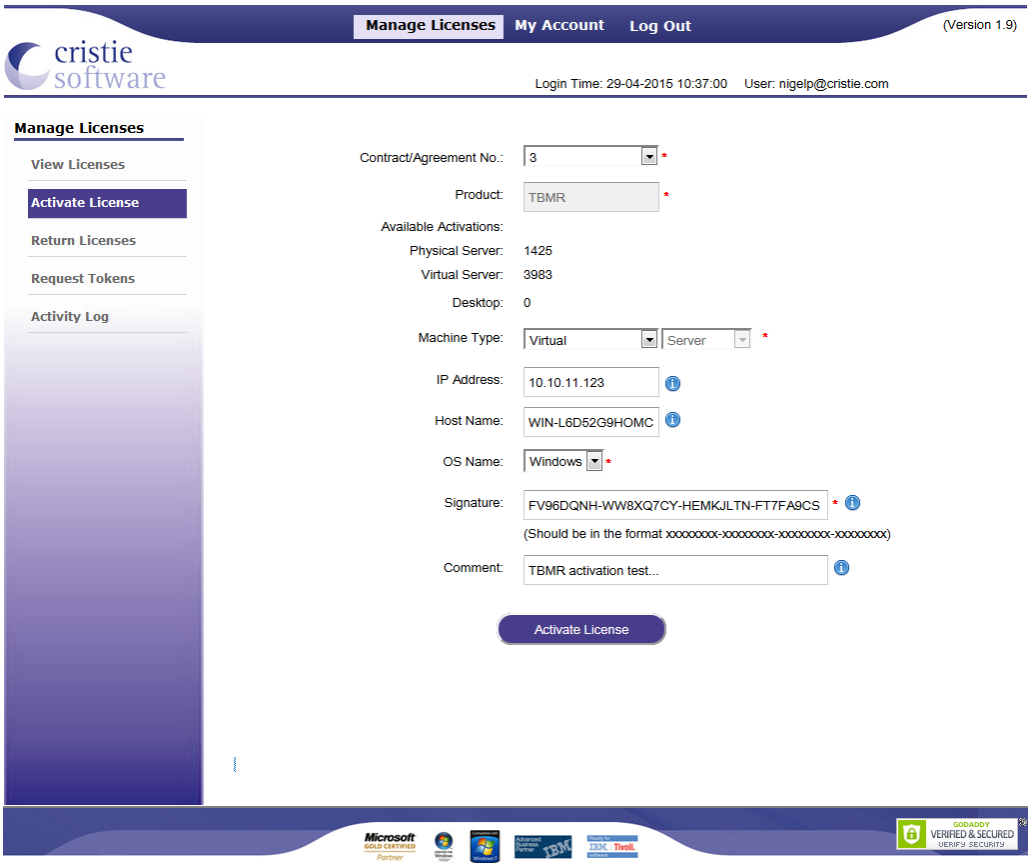
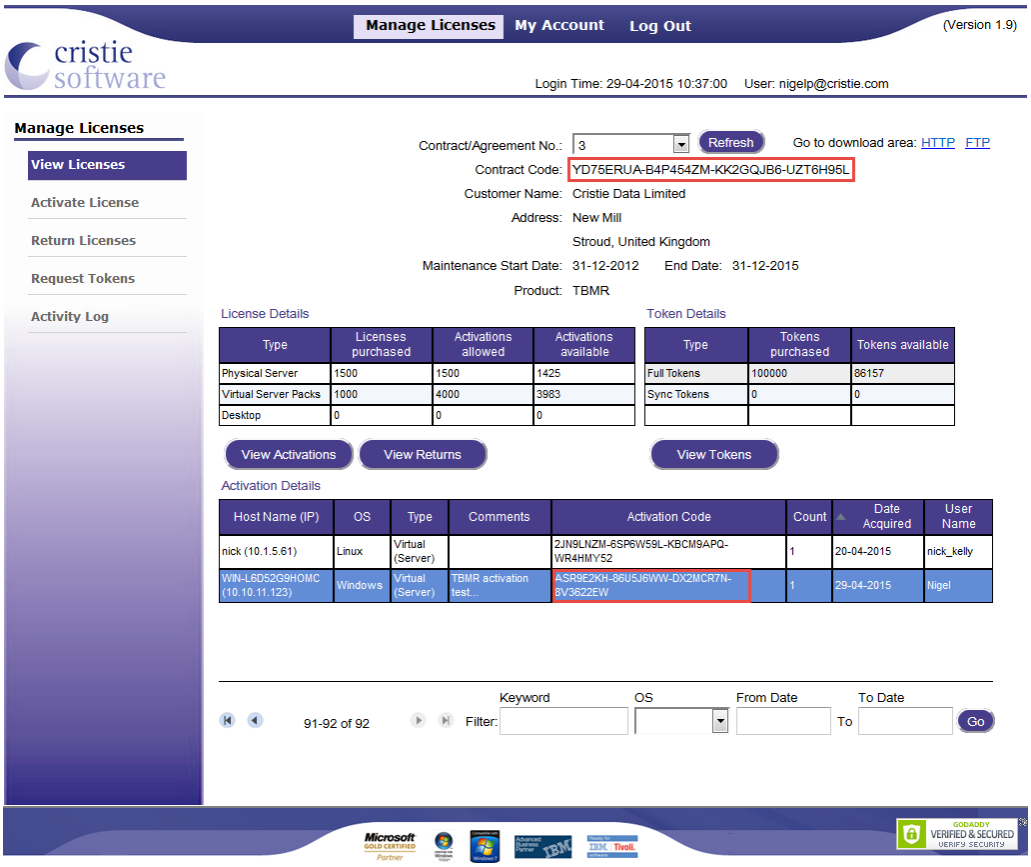
Once logged in select the **Activate License** menu option and enter the following details:

*- 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 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



Then click Activate License. After you have completed the full registration of the product, return to **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.



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

3. Using the License Manager on the TBMR host system enter the above contract and activation codes using the displayed dialogue. You may copy and paste the codes using the standard Windows mouse shortcuts or right-click features to do this if you wish. Add the **Contract Code** and the **License Code**. Both are added at the same time.

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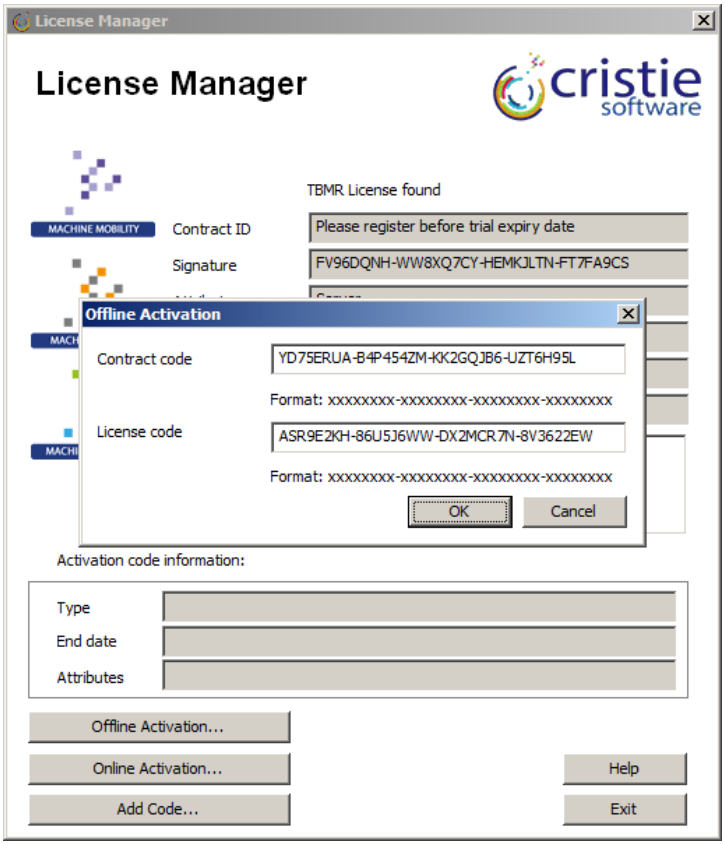
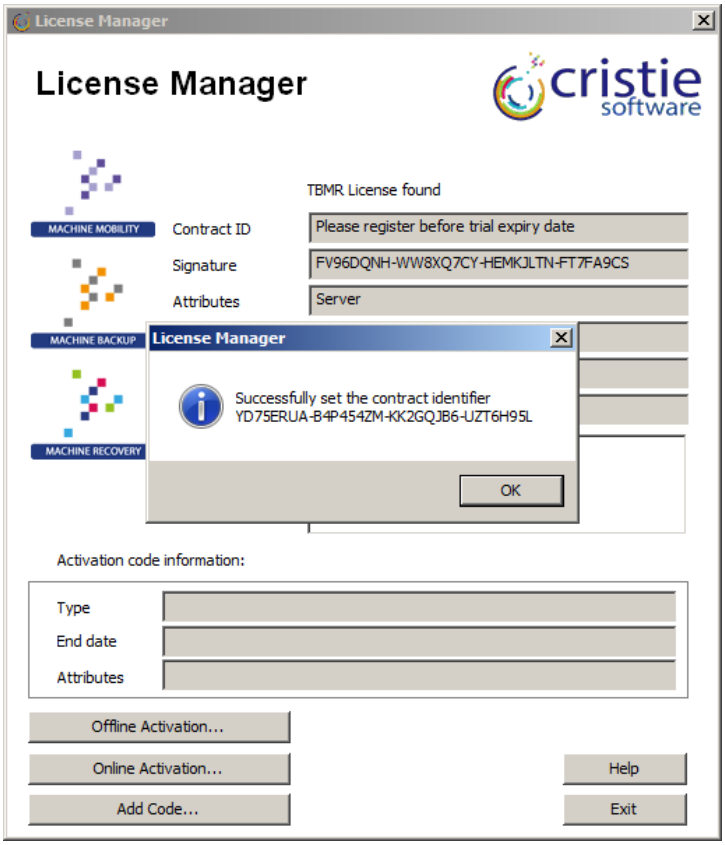
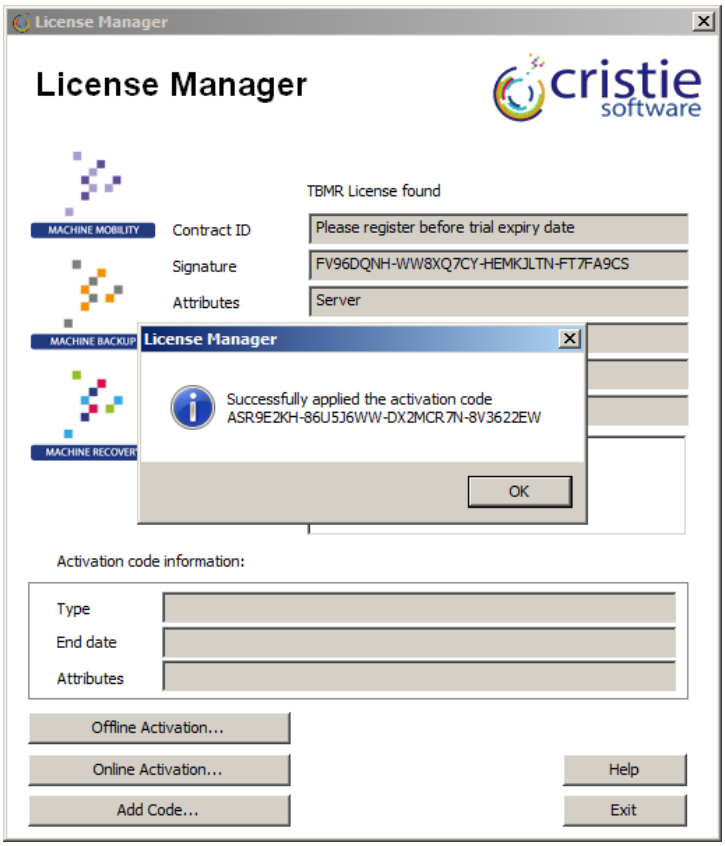


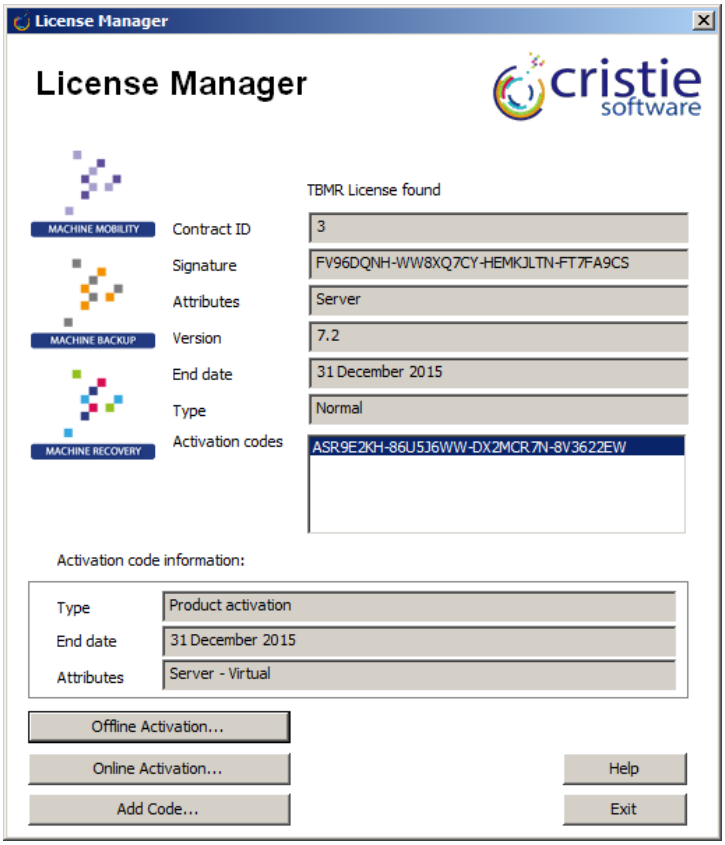
Click OK to add both codes. First the Contract code will be acknowledged.



Then the Activation code.



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



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4 Cristie Technical Support

If you have any queries or problems concerning your Bare Machine Recovery for TSM 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
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 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.