



Ultrasound Solutions



TankTest Reporter USER MANUAL

Version 5 - 2022

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1 Prerequisites

1.1 SDT device

A SDT270 device with the enabled TankTest option and its compatible TankTest sensors is required. You can verify this on the first screen of the System Info on your device. The level should be equal to or start with SDT270TT

or

A SDT340 device and its compatible sensor, you can check this information from the first screen of the "Settings >> System info >> Database" menu.

The compatibility should be "TankTestReporter".

Please also check that the TankTest mode is enabled in "Settings >> System info >> License".

Licence Info	
Level:	SDT270TT
Option:	
Eval:	None
Credit:	0 min.

Version SQLite	3.8.7.1
TankTestReport...	11
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Device	SDT340
Mode	TankTest

1.2 Microsoft Word®

The SDT TankTest software generates reports in the Microsoft Word format.

Although the documents can be opened with other text processing software, we encourage using Microsoft Word, version 2007 or higher. Other software may not be able to properly display the graphs. In addition, the input controls (textboxes, dropdown menus and checkboxes) might not be supported.

1.3 SDT TankTest Reporter software

An installed version of the software with an activated license must be install on your computer.

1.4 Recommended computer specifications

1.4.1 Operating system

The software has been designed for and tested on Windows XP, Windows Vista and Windows 7, Windows 8, Windows 10 and Windows 11 is also supported. Microsoft .NET framework version 3.5 is installed.

1.4.2 Hardware

- ✓ 1 GHz (orfaster) 32 or 64 bit processor
- ✓ >50 MB available hard disk space for the software.
 - For the data downloads and generated reports additional space is required, especially if the data includes audio files.
- ✓ 512 MB RAM or more
- ✓ USB port 1.1 or faster
- ✓ Audio card and speakers or headphones (only required for playing audio files).

2 Downloading data from your SDT device

Follow these steps to download data from your SDT device:

- ✓ Power on your SDT device and connect it to your computer with the provided USB cable. Note that The SDT device needs to be fully started before you can initiate the communication
- ✓ Click the menu button **Download device data**.



- ✓ The Download form is opened:

 A screenshot of a dialog box titled "SDT Download device data". The dialog has a close button (X) in the top right corner. Below the title bar, it says "SDT2xx device is ready.". There are two radio buttons: "USB" (selected) and "Ethernet". Next to "Ethernet" is an "IP address:" label and a text input field containing "192.168.200.1". Below these is a checkbox labeled "Clear device data after successful download". A "Transfer" button is on the right side. At the bottom left, there is a "Status" label.

- ✓ Click the **Transfer** button. The TankTest Reporter software will import the measurements from the device and show them in the main form.

 A screenshot of the "SDT - TankTest Reporter" software interface. The window title is "SDT - TankTest Reporter". The interface is divided into several sections:

- Actions:** A toolbar with icons for "Download device data", "Clear device data", "Open previous download", "Open previous report", "Options", "Update SDT device", and "Update software".
- Enter site details and operator:** A section with input fields for "Site name" (containing "Test site"), "Operator" (containing "Murat ONAL"), and "Site address" (containing "Boulevard de l'Humanité 415, 1190 Brussels, Belgium").
- Select measurements:** A table with columns for "Report", "Tree node", and "Last entry". It shows a tree view for "Tank8" (2022-05-31 17:13) which is expanded to show "References" and "Measurements".

References						
Report	Sensor	Created on	Rms	Length		
<input checked="" type="checkbox"/>		2022-05-31 17:11	-4.0	6s	recording28.wav	
<input checked="" type="checkbox"/>		2022-05-31 17:10	2.2	6s	recording27.wav	

Measurements						
Report	Sensor	Created on	Rms	MaxRms	Length	
<input checked="" type="checkbox"/>		2022-05-31 17:13	-4.0	-3.1	1m 0s	recording30.wav
<input checked="" type="checkbox"/>		2022-05-31 17:12	0.8	1.4	1m 0s	recording29.wav
- Report template:** A dropdown menu showing "SDT - EN.docx" and a "Generate report" button.

3 TankTest reports

3.1 How to customize report templates

3.1.1 Introductory notes

3.1.1.1 Document format

The SDT TankTest software generates reports in the Microsoft Word **docx** format.

Although the documents can be opened with other text processing software, we encourage to use **Microsoft Word, version 2007 or higher**. Other software may not be able to properly display the graphs. In addition, the input controls (textboxes, dropdowns and checkboxes) might not be supported.

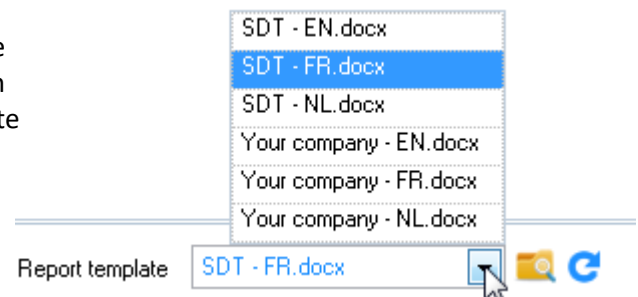
3.1.1.2 Template usage

When generating a report, the SDT TankTest software makes a copy of the selected template and then populates the content with the provided information and measurements.

Templates can be freely duplicated and customized.


If you modify a template and remove a content placeholder that is populated by the software (e.g. the site address), the report generation will keep functioning. That information will obviously no longer appear in the generated document.

Before you generate a report, you can choose which the template to use. Click on the report template dropdown and select the template. By default, the last used template will be selected.

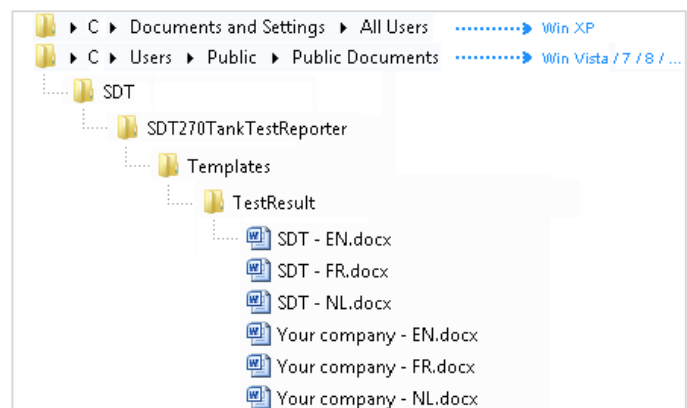


3.1.1.3 Folder structure

The **templates folder** is created the first time you start the SDT TankTest software. It contains a **subfolder** containing the default templates in English, Dutch, Italian and French.

You can easily browse to this folder by clicking the  icon next to the dropdown. The location of this folder depends on your computer's operating system.

The following screenshot shows the default location of the template folder and its structure.



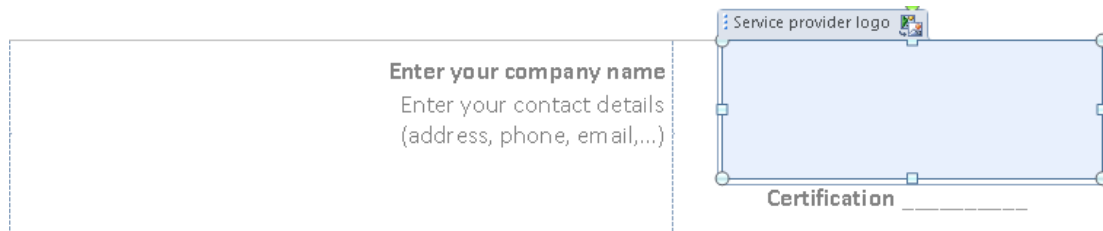
With the first release of the SDTTankTest software only one **document type** is available, i.e., the test result document. The templates for this document type are stored in the subfolder **TestResult**.

3.1.2 How to customize a template

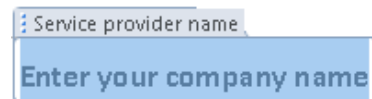
3.1.2.1 Complete the default SDT templates

For each document type, SDT provides a default template in one or more **languages**. These template files are named **SDT_<language_code>.docx**.

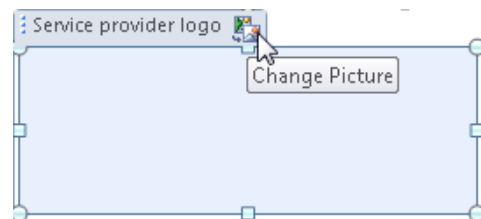
Before generating your first report, you should enter **your company information** in the top right section of these default templates.



Click on one of the placeholders. The placeholder text will be highlighted. Just start typing to enter your company's information.



To add your company logo, click the logo placeholder and then click the Change Picture icon at the top. In the resulting file dialog, select the image to use.



If you want, you can also add a default signature at the bottom right. Just choose Change Picture on that placeholder.



After filling out all your information, save the file.

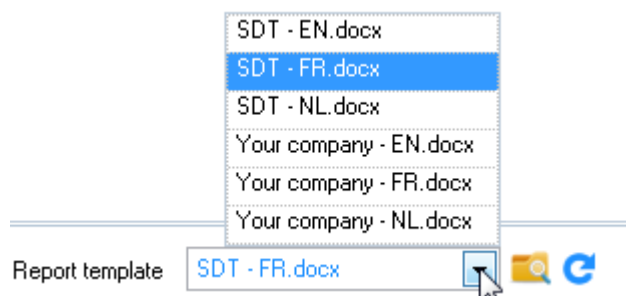


If you have modified a default template and want to undo your changes (in case something went wrong), you can delete the file. If a default template file is missing, it will be automatically recreated at the start of the SDT TankTest software.

3.1.2.2 Custom templates

You can easily create your own templates. Just make a copy of an existing one and adjust it to your liking.

The new template will automatically appear in the template dropdown of the SDT TankTest software.



You have to click the G icon if the software was running as you created the template

3.2 Generating a TankTest report

3.2.1 Enter site details and operator

Enter the name and address of the site where the measurements were taken. Additionally, enter the name of the operator.

Enter site details and operator	
Site name	<input type="text"/>
Operator	<input type="text"/>
Site address	<input type="text"/>



The last entered operator is saved into memory. The next time you open the software, it will already be filled in.

3.2.2 Select measurements

Select the tree nodes and measurements you want to include in the report by checking the appropriate checkboxes.

- ✓ For each selected tree node, a separate TankTest report document with the underlying selected measurements is generated.

- ✓ Each report document normally contains, at least:
 - one red reference
 - one black reference
 - one red measurement
 - one black measurement.

Report	Tree node	Last entry				
<input type="checkbox"/>	Test 27	2014-04-01 09:58				
<input type="checkbox"/>	Test 26	2014-04-01 09:45				
<input checked="" type="checkbox"/>	Test 25	2014-04-01 09:36				

Report	Sensor	Created on	Rms	Length		
<input checked="" type="checkbox"/>		2014-04-01 09:13	2.5	10s		
<input checked="" type="checkbox"/>		2014-04-01 08:58	-3.0	10s		

Report	Sensor	Created on	Rms	MaxRms	Length	
<input checked="" type="checkbox"/>		2014-04-01 09:36	-1.5	-1.5	10s	recording55.wav
<input checked="" type="checkbox"/>		2014-04-01 09:34	3.8	7.8	10s	recording54.wav
<input checked="" type="checkbox"/>		2014-04-01 09:33	8.4	9.7	1m 0s	
<input checked="" type="checkbox"/>		2014-04-01 09:31	4.6	7.5	1m 0s	
<input type="checkbox"/>		2014-04-01 09:29	7.6	9.7	1m 0s	
<input checked="" type="checkbox"/>		2014-04-01 09:01	-3.0	-2.9	10s	recording49.wav

Report	Tree node	Last entry				
<input type="checkbox"/>	Test 28	2014-04-01 09:14				
<input type="checkbox"/>	Test 23	2014-04-01 08:55				
<input type="checkbox"/>	Test 22	2014-04-01 08:54				

A report document may contain less items than this (e.g., only one red reference and measurement), but a larger selection is not allowed.



You can drag measurements to another tree node, in case you have misplaced them.

3.2.3 Select report template

At the bottom of the form, select a template to use for the report.

Report template	<div style="border: 1px solid gray; padding: 2px;"> SDT - EN.docx SDT - FR.docx SDT - IT.docx SDT - NL.docx </div> SDT - EN.docx
-----------------	---



You can add or customize these templates. For more information, refer to the related document.

3.2.4 Generate the report

Click the **Generate report** button.



The software will create a document for each selected tree node.

Generated on 2022-05-31 18:04 Document No. 781204315-00094.01 Page 1/1

Report of ultrasonic inspection

Tightness control of a tank and its associated piping

Please enter your company name
Enter your company details
Telephone, address, e-mail,...

your logo here

<p>Site</p> <p>Customer name Test site Address Boulevard de l'Humanité 415, 1190 Brussels, Belgium</p>	<p style="text-align: center;">Test results</p> <p>Phase LIQUID — Measurements - - - Reference - - - Safety limit</p> <p style="font-size: x-small;">SDT340 284180033 Sensor 114190018 Ref. created on 2022-05-31 17:11 Measured on 2022-05-31 17:13</p>										
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Tank</td> <td style="width: 50%;">Compartment</td> </tr> <tr> <td>Identification _____</td> <td>Identification _____</td> </tr> <tr> <td>Total capacity <u> </u> m³</td> <td>Capacity <u> </u> m³</td> </tr> <tr> <td>Manufacturing date _____</td> <td>Stored product _____</td> </tr> <tr> <td>Manufacturer _____</td> <td></td> </tr> </table>	Tank	Compartment	Identification _____	Identification _____	Total capacity <u> </u> m ³	Capacity <u> </u> m ³	Manufacturing date _____	Stored product _____	Manufacturer _____		<p>Phase Gaseous — Measurements - - - Reference - - - Safety limit</p> <p style="font-size: x-small;">SDT340 284180033 Sensor 14130001 Ref. created on 2022-05-31 17:10 Measured on 2022-05-31 17:12</p>
Tank	Compartment										
Identification _____	Identification _____										
Total capacity <u> </u> m ³	Capacity <u> </u> m ³										
Manufacturing date _____	Stored product _____										
Manufacturer _____											
<p>Summary</p> <p>Tank identification Tank8 Leak simulator <input checked="" type="checkbox"/></p> <p>Tank diameter (before) 2500 mm Tank diameter (after) 2500 mm Liquid height (before) 100 mm Liquid height (after) 100 mm Water height (before) 0 mm Water height (after) 0 mm Depression (before) -258 mbar Depression (after) -238 mbar</p> <p>Calibration date of SDT340 /</p>											
<p>Remarks</p> <p>_____</p> <p>_____</p> <p>_____</p>											
<p>Operator Signature Murat ÜNAL </p>											

3.2.4.1 Report number and report document number

Each document is uniquely numbered and consists of three elements.

Let us take **987654321-00028.01** as an example:

- ✓ The first part (**987654321**) represents your SDT TankTest Reporter license serial number.
- ✓ The second part consists of two elements separated by a dot:
 - The first element (**00028**) is a number incremented per report. Each time you click the Generate report button, this number will be augmented with 1.
 - The last element (**01**) is a number incremented per document for the current report. If you select 3 tree nodes and generate the report, the software will create 3 documents (e.g. **987654321-00028.01**, **987654321-00028.02** and **987654321-00028.03**).



The middle part of the report document number is derived based on the report history. This history is stored in the TankTest host database. For more information, refer to chapter 8.

When you move to a different computer, it may be useful to set the next report number yourself. This is explained in section [6.2 Next report number](#).

3.2.5 Complete the report documents

3.2.5.1 Document parts automatically filled out

The software automatically fills out the following information:

- ✓ Verification date and timestamp
- ✓ Report document number
- ✓ Site name
- ✓ Site address
- ✓ Operator name
- ✓ Test result (for red and black channel):
 - Graph with reference, measurements, and safety limit
 - S/N of the used SDT device
 - S/N of the used sensor
 - Date and timestamp of the reference
 - Date and timestamp of the measurement
- ✓ Summary (only with the SDT340 device)

3.2.5.2 Document parts to be completed manually

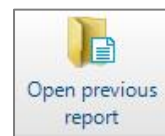
Depending on the selected report template, you can complete the remaining content controls. For example:

- ✓ Tank/compartiment information: Identification, Capacity, Stored product, Tank type
- ✓ Piping information: Type, Material, Tight (yes/no), Remarks, Signature (can also be set in the template)

3.3 Opening a previous TankTest report

Click the **Open previous report** button to browse the folder containing the TankTest reports already created.

For more information, please refer to section [8.2.3 Reports folder](#).



4 Clearing the memory of your SDT device

The memory of your SDT device is limited and therefore, it needs to be regularly cleared to get the most of your instrument.

Follow these steps to clear data stored on your SDT device:

- ✓ Power on your SDT device and when it is fully started and connect it to your computer.
 - Click the action **Clear device data** in the main menu.

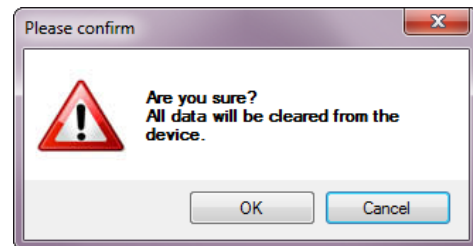


→ The Clear data form is opened:

- ✓ Click the **Clear device data** button. The TankTest Reporter software will clear all measurements and wave files from the device.



- ✓ This action is irreversible, so please make sure you did not forget to download data from the device. As a safety measure, the software will ask your explicit confirmation before erasing the memory



5 Opening a previous SDT device download

You can reopen previously downloaded SDT device data, for example if you accidentally closed the software without having generated a report.

- ✓ In the main menu, click the button **Open previous download**.



- ✓ The form with the download history is now opened:

- ✓ Each download history line indicates:

- the SDT device equipment number
- the download date and time
- the date and time of the last entry in the downloaded data
- a summary of the generated reports (report number and site name)

- ✓ Activate one of the downloads and click the **Open** button.

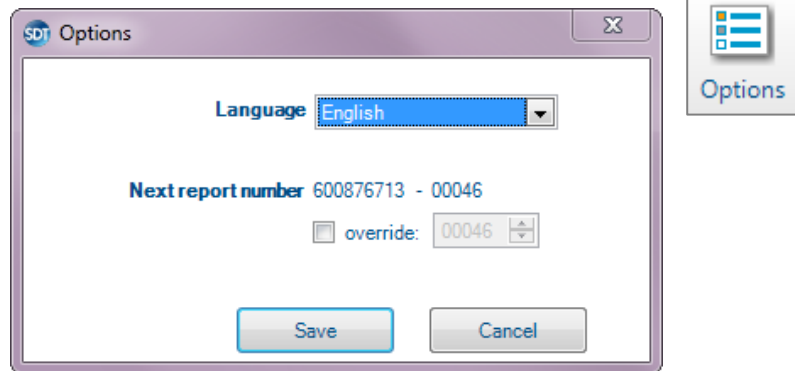
The data will be reopened, and you can generate a report with it.

SDT	Downloaded on	Last entry	Reports
273130034	2014-03-14 16:39	2014-03-14 16:29	
273130034	2014-03-14 16:39	2014-03-14 16:29	
270110322	2014-03-13 17:28	2014-03-13 17:26	343469213-00017 test site3
273130034	2014-03-13 16:07	2014-03-13 15:43	343469213-00016 test site3
273130034	2014-03-12 18:02	2014-03-12 18:03	343469213-00015 test site3
270110322	2014-03-12 13:54	2014-03-12 13:52	343469213-00014 Test Site 2
270110322	2014-03-12 12:20	2014-03-12 12:06	343469213-00013 Test Site1
270090035	2013-11-26 16:20	2013-11-26 17:13	343469213-00012 total
270090035	2013-11-26 16:10	2013-11-26 17:13	
270090035	2013-11-26 16:07	2013-11-26 17:10	
270090035	2013-11-26 16:00	2013-11-26 17:03	
270110322	2013-11-08 18:55	2013-11-08 19:56	343469213-00007 TEST 343469213-00009 test
270110322	2013-11-08 18:54	2013-11-08 19:55	
270110322	2013-11-08 18:53		
270090035	2013-10-31 14:26	2013-10-31 15:18	343469213-00008 TEST
270110322	2013-10-28 15:41	2013-10-28 16:41	343469213-00005 zob
270110322	2013-10-28 15:36	2013-10-28 16:35	
270110322	2013-10-28 15:30		
270090035	2013-10-28 15:09	2013-10-28 16:09	343469213-00004 SDT2 343469213-00006 zob 343469213-00010 aze 343469213-00011 aze
270090035	2013-10-28 14:49	2013-10-28 15:46	
270100030	2013-09-03 15:18	2013-09-02 16:54	343469213-00001 First test 343469213-00002 Test 343469213-00003 SDT

6 Changing the TankTest Reporter options

To access the **Options**, click the corresponding button in the main menu.

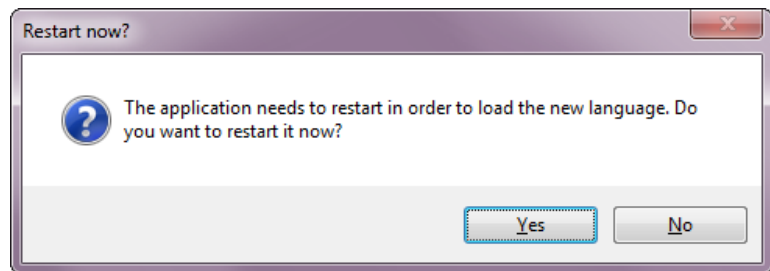
The following form is



6.1 Language

To change the software's language, select the language of your choice in the dropdown and click the **Save** button.

You will be asked if you want to restart the application. If you click **No**, then the language will be changed the next time you start TankTest Reporter.



6.2 Next report number

You can review and change the number of the next report that will be generated.

This setting may be useful when you move to a different computer. Cf. section [8.3](#).



You should not reuse an existing report number, as they are supposed to be unique. Therefore, the input box will not allow you to choose a lower number than the last used one.

For more information about the report number, please refer to section [3.2.4.1](#).

7 Updating the software and SDT device



The following features require an internet connection and FTP access.

7.1 Updating your SDT device

- ✓ Make sure the SDT device is connected to the computer and has been fully started.

- ✓ Click **Update SDT device** button in the main r 

- ✓ The Update form is opened:

- ✓ Click the **Update** button. Your device's current version is checked and SDT's update servers are contacted. If **Force update** is checked, the last version is installed regardless of the current version.



- ✓ If an update is available, it will be automatically downloaded and installed on the device.

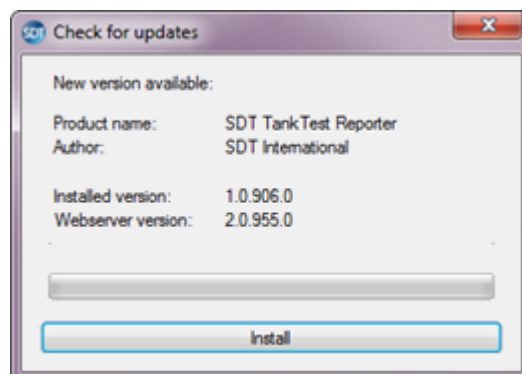
7.2 Updating your TankTest Reporter software

If TankTest Reporter has access to the internet, it will **automatically** look for software updates at startup. The **Update software** button is used to manually force an update check.



If a software update is available, the following window will pop up:

Click the **Install** button to download then install the new version.



8 Software repository

The TankTest Reporter software stores several files in a repository on your computer.

8.1 Location

The repository's **base directory** depends on the computer's operation system version:

- ✓ on Windows Vista or newer: %PUBLIC% (typically C:\Users\Public)
- ✓ on Windows XP: %ALLUSERSPROFILE% (typically C:\Documents and Settings\All Users)

From there, navigate to **Documents** → **SDT** → **SDTTankTestReporter**

8.2 Important folders

8.2.1 Help folder

The **Help** folder contains helpful documents such as this user's manual. They are subdivided into language specific folders.

8.2.2 Data folder

The **Data** folder contains:

- ✓ the **TankTestHost.db** file, which is the main database file.

This file stores:

- device data download history
- report history
- user options

- ✓ a subfolder **per device data download**.

Each subfolder contains the downloaded:

- device database
- audio (wave) files of dynamic measurements

The subfolder names correspond to the timestamp of the download.

8.2.3 Reports folder

The Reports folder contains a subfolder per generated report with all corresponding documents.

The subfolder names are constructed like this:

- ✓ report number
- ✓ site name
- ✓ report generation timestamp

8.2.4 Templates folder

It contains a subfolder with templates for each document type the software can generate.



You can add or customize these templates. For more information, refer to the related document.

8.3 Migrating to a different computer

If you are planning to use a different computer and you want to continue using TankTest Reporter, there are two scenarios.

8.3.1 Migrate existing repository

If you do not want to lose previous downloads and reports, you have to copy the entire repository to the new computer. Refer to section [8.1](#) to locate your TankTest repository.

You have to do this before you start using the software on the new computer, else you will lose any information that you started to store there.

8.3.2 Do not migrate existing repository

If you do not want to retain the existing history (or if your computer crashed and you do not have a backup) then you only must ensure that the reports you are going to generate have a unique number.

You can modify this through the Options form. More about this in section [6.2 Next report number](#).

05	MUN-1/6/22	Document updated with SDT340 compatibility	CMA
Revision	Writer-date	Nature of modification	Approved