

# **IRS LTT MesVis**

Documentation



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# 1. About

**IRS LTT MesVis** is a graphical user interface for visualizing recorded measurements of life time testers (LTT).

An LTT tests one or more devices under test (so called DUT's) by executing a certain test sequence. In such a testplan multiple DUT signals are read and compared to a limit. Those limit tests can be recorded into a database.

## 2. Prerequisites

In order to be able to run **IRS LTT MesVis** you need to have MDBS installed. Read the **IRS MDBS Documentation** for more details about that.

## 3. First Start

When starting MesVis for the first time this dialog will appear.



You need to select a database. Attention: if you want to read measurements of <u>old IRS LTT GUI 1</u>, skip this dialog by pressing "Cancel" and continue reading chapter 0.

There can be more than one database. The database name schema is *LttMeas\_[hostname]\_[project name]*. The project name is the one you specified in LTT GUI's ltt\_main\_config.xml.

<lttmainconfig></lttmainconfig>
<flags></flags>
<autoupdatetestplan>false</autoupdatetestplan>
<autoloadtestplan>false</autoloadtestplan>
<testsequencefile></testsequencefile>
<autostarttestplan><b>false</b></autostarttestplan>
<showerrorstatuscolors>true</showerrorstatuscolors>
<autosaveoverview>false</autosaveoverview>
<autosaveoverviewcooldowntime>10&lt;</autosaveoverviewcooldowntime>
<usebatchpergroup>true</usebatchpergroup>
<specialmode>false</specialmode>
<stationruntimecontrolledbytestpl< td=""></stationruntimecontrolledbytestpl<>
<deleteunusedduterrors>true</deleteunusedduterrors>
<allowduplicateexternalerrornumbe< td=""></allowduplicateexternalerrornumbe<>
<lttsettings></lttsettings>
<version>2.4.0</version>
<projectname>Dummy</projectname>
<pre><lttnumber>I</lttnumber></pre>
<messyversion>2</messyversion>



# 4. Usage

#### 4.1 Measurement data selection

When you start MesVis you are asked to select a database first (see chapter 3). Once you have selected a database you need to further choose (in that order):

Selection	5	ņ
Selection	Options	
Test C 2019/TE NOTSET	Drder IST1 /TEST1	
DUT		
DUT1 DUT2 DUT3 DUT4		
Measu	urement	
ID	Name	Count ^
1000	I_KI_15 @ default	0
1010	U_24V @ default	0
1020	U_BATT_CMM @ default	0
1030	U_BATT_FUSED @ default	0
1040	U_KI_15 @ default	0
1050	U_KI_30 @ default	0
1060	U_UBATT @ default	0
8000	float signal 1	20
8001	float signal 2	20 🗸
Filter		Deselect
16.01.2 0,57	pan   0 - 13:51:14   The second secon	Show (F5)

- a project / test order
- one or more DUT's
- one or more measurements

You can also optionally narrow down the timespan of the data you want to see.

Once you have selected the data you want to see click on the **"Show"** button or press **F5**.

The data will be visualized on the right side of the window.

If you check the **"Auto Show"** option, the selected measurement(s) are automatically drawn once you have clicked on them. You can use the arrow keys to switch between the measurements (the control needs to have keyboard focus, though).

#### 4.2 Measurement visualization options

#### 4.2.1 Multi Y axis mode

By default, all selected measurements are visualized with a single Y axis. You can switch to **"multiple Y axis mode"** by pressing the corresponding button.

Measurements Data		<b>~</b>
	ର୍ ଗ୍ରୁଷ୍	Legend Top Right 👻

#### 4.2.2 Show DUT supply voltage and ambient climatic chamber temperature

You can also show the **DUT supply voltage** and **climatic chamber temperature** by enabling the corresponding options.

Measurements Data	<b>•</b>
	Legend Top Right 👻

#### 4.2.3 Show limit

You can also show the **min and max limits** of a single measurement.



Measurements Data		<b>▼</b>
	Q QQ 🛛	Legend Top Right 👻

Attention: currently it is only possible to show the limit if only a single measurement (from one DUT) is selected.

#### 4.2.4 Zooming

You can zoom with the mouse scroll wheel when the mouse cursor is over the graph. By default, only the Y axis is zoomed. You can switch the zoom mode to **"X only"**, **"Y only"** or **"X and Y"**.

Measurements Data	•
	Legend Top Right 👻

You can also zoom the X axis by using the so called "range control", which is below the main chart area.

I	30.06.	2015

To do so click and drag those "handles" available on the left and on the right.

#### 4.3 Measurement data export / import

You can export the selected data into the following formats:

- CSV
- Excel
- DB
- MDF



The **DB export** is meant to be used as a possibility to transfer the data from an LTT to another laptop for further analysis. You need to have MDBS/MesVis installed on that Laptop, then you can **import** the DB.zip file you get with the export function.

Attention: please note that currently the <u>DB export/import function does not work with legacy DB</u>.



# 5. Reading legacy database recordings

If you want to read measurements recorded by an old **IRS LTT GUI 1** you need to select DB (legacy) in the main window.

ITT Measurement Visualizer Version 2.3.5.0	_				
DB			ີ 🔓 Save Image 🛛	1	
DB CSV	Д	Measur	ements Data		
DB(legacy) ons				ହହ	ρ
DUT					

You will get a database selection dialog, which should show only a single entry: Idsa

🚥 Select Database	_		×
ldsa			
	Ca	ncel	ОК

# 6. FAQ

#### 6.1 Where can I find MesVis?

MesVis usually gets installed together with the IRS LTT GUI. In that case you will find the MesVis executable here:

#### [LTT install location]\50\_LTT\_SW\LTT GUI\



← → → ↑ <mark> </mark> → This PC → Data (D:) :	→ LTT → 50_LTT_SW →	LTT GUI	
Name	Date modified	Туре	Size
🔄 📊 de	23.01.2020 08:23	File folder	
IRS.LTT.DB.Tool.exe	08.01.2020 08:02	Application	737 KB
IRS.LTT.GUI.exe	10.01.2020 10:54	Application	4.191 KB
ITT IRS.LTT.MesVis.exe	10.01.2020 10:55	Application	4.243 KB
IRS.LTT.TS.Tool.exe	08.01.2020 08:02	Application	1.484 KB
🌆 WinSCP.exe	27.03.2019 09:24	Application	19.432 KB
🧃 CsvHelper.dll	28.01.2019 22:44	Application exten	143 KB
Dev Fundades Charter (10.2 Court all)	21.05.2010.11.00	A	740 1/0

For non LTT devices a standalone installation together with MDBS is available. In that case case you will find the MesVis executable here:

← → • ↑ <mark> </mark> → ⊺	This PC $\rightarrow$ OS (C:)	$\rightarrow$ MDBS $\rightarrow$ irs $\rightarrow$ mesv	vis		
Name		Date modified	Туре	Size	
🔄 config		28.11.2019 09:33	File folder		
de		28.11.2019 09:33	File folder		
📅 IRS.LTT.MesVis.exe		19.09.2019 09:12	Application	4.243 KB	
🚳 CsvHelper.dll		28.01.2019 22:44	Application exten	143 KB	
DevExpress.Charts.v1	8.2.Core.dll	21.05.2019 11:09	Application exten	740 KB	

#### [MDBS install location]\irs\mesvis\

#### 6.2 Where can I find MesVis logfiles?

Depending on the installation method (see 6.1) you find the logfiles

- 1. [LTT install location]\40\_LTT\_Sys\_Logs\ (in case of LTT GUI installation)
- 2. [MDBS install location]\irs\mesvis\logs\ (in case of MDBS installation)

#### 6.3 Where can I find the recorded measurements?

Short answer: [MDBS install location]\core\mysql\data\

You can also open MDBS.exe and click on "Data Folder"





Inside the data folder you will find one or more subfolders named "LttMeas\_xxxx\_yyyyy". Those are the databases where your measurements are stored inside. There's one database (folder) per LTT project. See chapter 3 for mor information.

Inside such a database folder there are several files.

← → ▾  📙 > This PC > OS (C:) > MDBS > core > mysql > data > LttMeas_LT101_Dummy			
Name	Date modified	Туре	Size
2019@0040TEST1@0040Type1@0040DUT1.frm	16.01.2020 13:51	FRM File	9 KB
2019@0040TEST1@0040Type1@0040DUT1.MYD	16.01.2020 13:51	MYD File	25 KB
2019@0040TEST1@0040Type1@0040DUT1.MYI	17.01.2020 11:09	MYI File	19 KB
2019@0040TEST1@0040Type1@0040DUT2.frm	16.01.2020 13:51	FRM File	9 KB
2019@0040TEST1@0040Type1@0040DUT2.MYD	16.01.2020 13:51	MYD File	25 KB
2019@0040TEST1@0040Type1@0040DUT2.MYI	17.01.2020 11:09	MYI File	19 KB
2019@0040TEST1@0040Type2@0040DUT3.frm	16.01.2020 13:51	FRM File	9 KB
2019@0040TEST1@0040Type2@0040DUT3.MYD	16.01.2020 13:51	MYD File	25 KB
2019@0040TEST1@0040Type2@0040DUT3.MYI	17.01.2020 11:09	MYI File	19 KB
2019@0040TEST1@0040Type2@0040DUT4.frm	16.01.2020 13:51	FRM File	9 KB
2019@0040TEST1@0040Type2@0040DUT4.MYD	16.01.2020 13:51	MYD File	25 KB
2019@0040TEST1@0040Type2@0040DUT4.MYI	17.01.2020 11:09	MYI File	19 KB
📄 db.opt	16.01.2020 13:49	OPT File	1 KB
NOTSET@0040TEST1@0040Type1@0040DUT1.frm	16.01.2020 13:49	FRM File	9 KB
NOTSET@0040TEST1@0040Type1@0040DUT1.MYD	16.01.2020 13:49	MYD File	0 KB
NOTSET@0040TEST1@0040Type1@0040DUT1.MYI	16.01.2020 13:49	MYI File	1 KB

The measurements are organized in "tables". A table is a set of 3 files:

- \*.frm
- \*.myd
- \*.myi

There is a table per test order (as configured in LTT GUI) and per DUT.



The naming schema of those measurement tables is:

#### [Project ID]@0040[Test Order ID]@0040[DUT Type]@0040[DUT name]

All name parts are provided by the IRS LTT GUI F11 configuration. @0040 is used as a separator.

Attention: The database does not allow certain characters in table names, such as Umlaute 'ä', 'ö' and 'ü' or even '-'. The database will replace those characters with corresponding escape sequences @xxxx, where xxxx is the 4-digit Unicode of that replaced character.