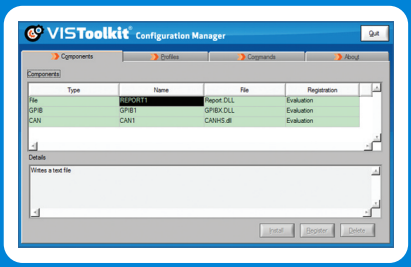
# VISToolkit®

**your real virtual instrument solution**

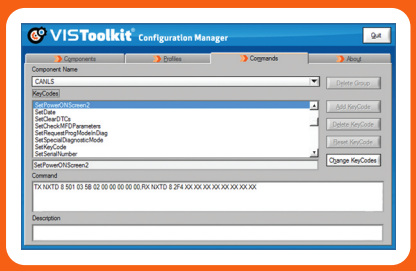
## 3 STEPS to Virtual Instrumentation

### STEP 1 — INSTALL
**the virtual instrumentation**




- GPIB
- EXCEL
- DMM
- DATALOGGER
- CAN
- PRINTER
- I/O
- TRACEABILITY
- LIN
- AUDIO
- FPGA
- RS-232
- TCP/IP
- ANALYSER
- VISION
- DSA
- REPORT
- RF GENERATOR
- DISPLAY
- DMM

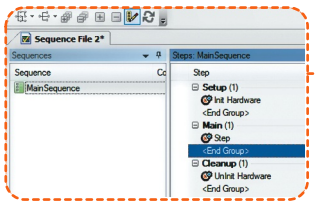
### STEP 2 — CONFIGURE
**the commands**




- Edit the predefined...
- Use and edit the pre-defined commands and parameters.
- Add new commands and its parameters to fulfill your needs
- Configure your virtual instruments

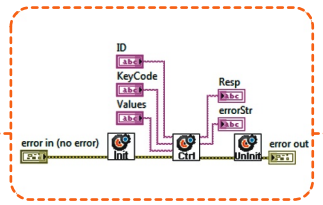
### STEP 3 — USE IT
**on TestStand, LabVIEW or LabWindowsCVI**

NATIONAL INSTRUMENTS
**TestStand™**



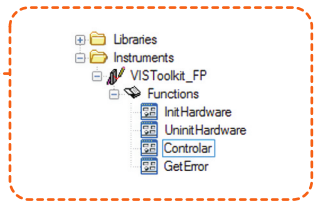

- Use the VISToolkit pre-configured Steps on TestStand
- Use all the TestStand Power and Flexibility
- Configure each Step with simple Forms

NATIONAL INSTRUMENTS
**LabVIEW™**



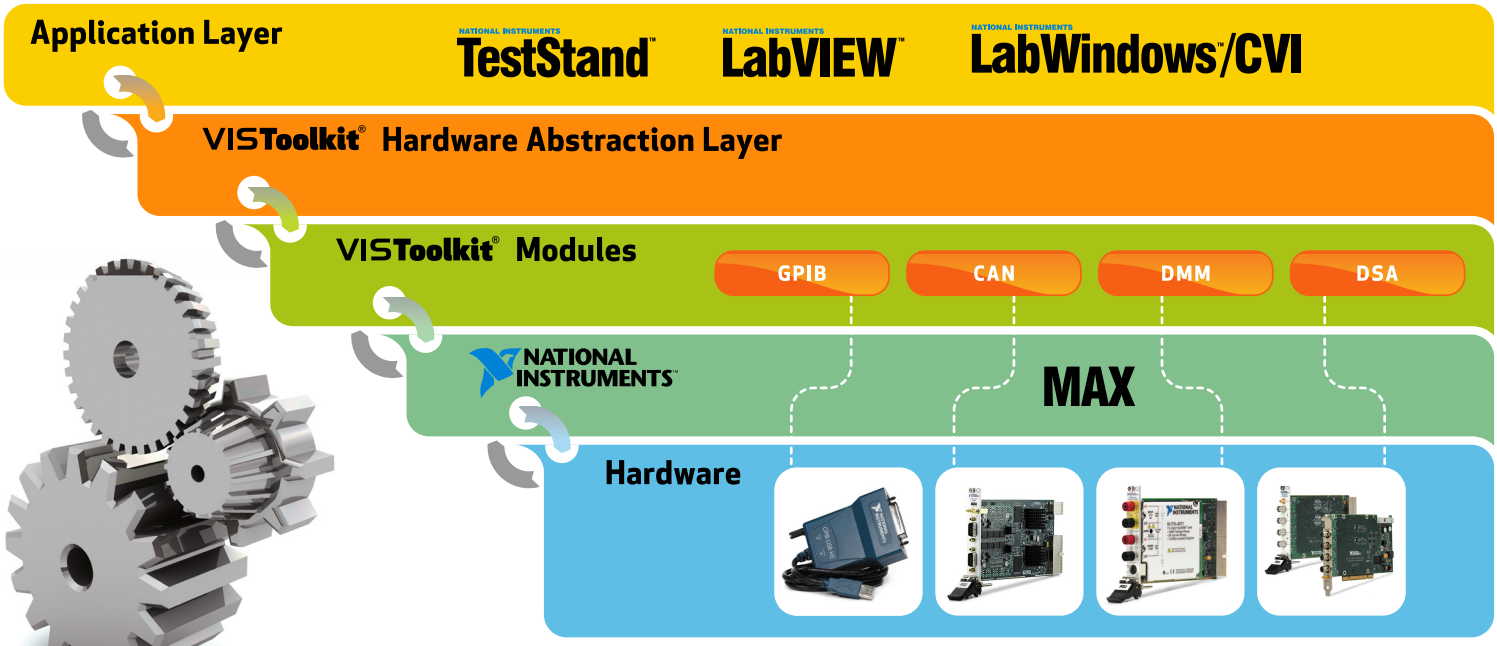

- Drag&Drop the VISToolkit VI on LabVIEW
- Don't need to control the individual inicialization of each device that you will need, just Drag&Drop the VISToolkit Init VI
- Use the Output of the VISToolkit VI as you need

NATIONAL INSTRUMENTS
**LabWindows™/CVI**




- Use The VISToolkit Library to program in C

# VISToolkit **Layer's Structure**




# Modules' **Gallery**

| | |
|---|---|
| **Audio** | **Analyser:** Perform the most used audio analysis functions with the possibility of using different kind of filters and choosing different sampling rates: Vrms, Peak, frequency, THD, THD+N, SINAD, among other. \| **Generation:** two independent channels audio generation with different waves possibilities. \| **Prerequisites:** PXI/PCI-446X, PXI/PCI-447X,... |
| **DMM** | **Acquisition:** Measures AC and DC voltages with high speed and accuracy. Allows range and digit precision selection. \| **Prerequisites:** PCI-4065, PCI-4070,... |
| **GPIB** | **Communication:** This 30 year old bus communication is done by simple write and read commands that send and receive data from the GPIB bus. The commands are flexible in order to accept different argument values. \| **Prerequisites:** NI PCI-GPIB (IEEE 488),... |
| **CAN** | **Communication:** Interface ideal for automotive test systems, diagnostics and measurements. The hardware is easily configured when it comes to High Speed and Low Speed Baud Rates. The CAN frames aren't hardcoded, thus, new CAN frames may be added easily and quickly. \| **Prerequisites:** NI USB-8472, NI USB-8473, NI PXI/PCI 85XX,... |
| **LIN** | **Communication:** Interface ideal for automotive test systems. The hardware is easily configured and LIN frames may be added quickly. \| **Prerequisites:** NI USB-8476,... |
| **RS-232** | **Communication:** The standard for serial communication is done by simple write and read commands that send and receive data from the serial bus. \| **Prerequisites:** RS-232 Serial Port, NI USB-232, NI PXI-8430,... |
| **Printer** | **Communication:** Based on the RS-232 protocol, the Printer sends hexadecimal based commands to a ticket printer and prints a ticket with the desired text. In the end, a cutting command may be sent to automatically cut the ticket. Very useful when information is required to be placed on a product. \| **Prerequisites:** STAR TicketPrinter or equivalent, RS-232 Serial Port,... |
| **Report** | **Utility:** A text based file that stores information. The data is separated using semicolons to import to MS Excel or to OpenOffice Calc. |
| **Excel** | **Utility:** Automatically display data in an Excel Spread Sheet and create data charts and graphs. \| **Prerequisites:** MS Excel |
| **Display** | **Utility:** Display a graphic or a chart from a data source and manage the graph and chart appearance as desired. |
| **DataLogger** | **Utility:** Saves acquired values to a file and repeats the values to be managed with TestStand or LabVIEW. |

## COMING SOON

| | |
|---|---|
| **Vision** | A tool able to make shape inspection, pattern comparison, position/angle detection, text reading and Optical Character Recognition (OCR). |
| **MOST** | An interface for the standard on multimedia and infotainment networking in the automotive industry. |
| **FlexRay** | An interface for the standard on multimedia and infotainment networking in the automotive industry. |
| **RFLight** | **Generation:** Basic Modulations like AM, FM, FM-Stereo, RDS \| **Prerequisites:** PXI-567X |
| **RFPrimium** | **Generation:** AM, FM, FM-Stereo, RDS, DAB, GPS Simulation, HD Radio, SIRIUS, DVB-T \| **Prerequisites:** PXI-567X |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LabVIEW Certified Associate Developer

LabVIEW Certified Developer