

Form, Fit and Function replacements for obsolete instruments and life extension of legacy ATE without TPS changes.



Tuesday, November 8, 2005
4:30 PM

Presented by: Ehud Shany



WinSoft[®]

www.winsoft.com

Company Background

- Established - 1994
- Test & Measurement, Data Acquisition
- Custom Software and Hardware Engineering
- PXI Solutions & Embedded Systems Design
- LabVIEW/CVI/C++ Programming & Automated Test Software
- Real Time, Digital & Analog Design
- RF, Microwave Systems Design
- Built-To-Print, Cables, ITA

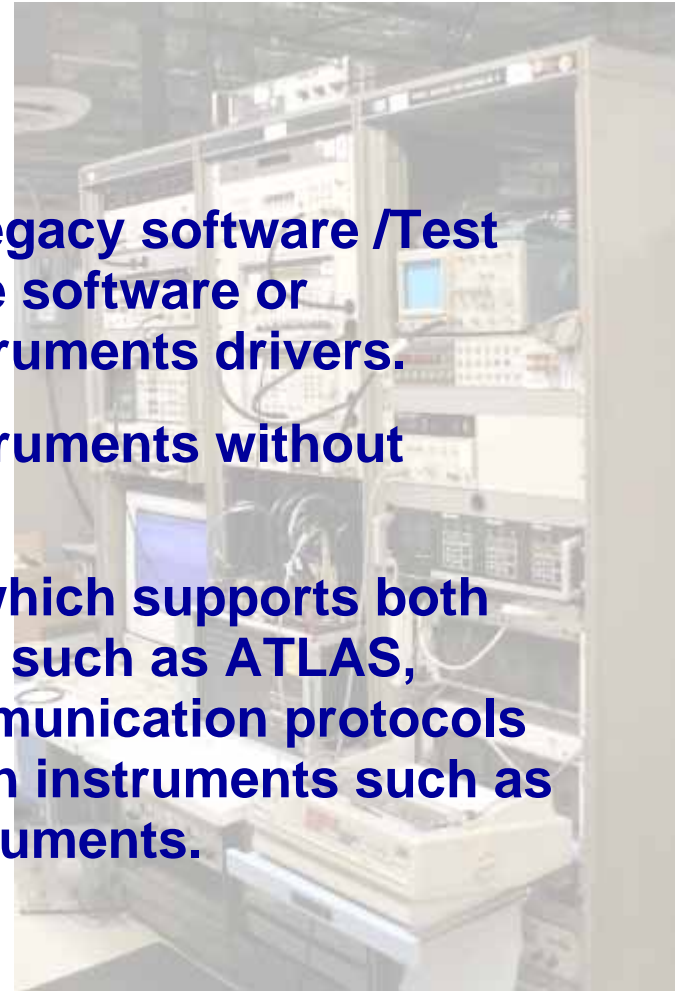


WinSoft[®]

www.winsoft.com

Technology Background

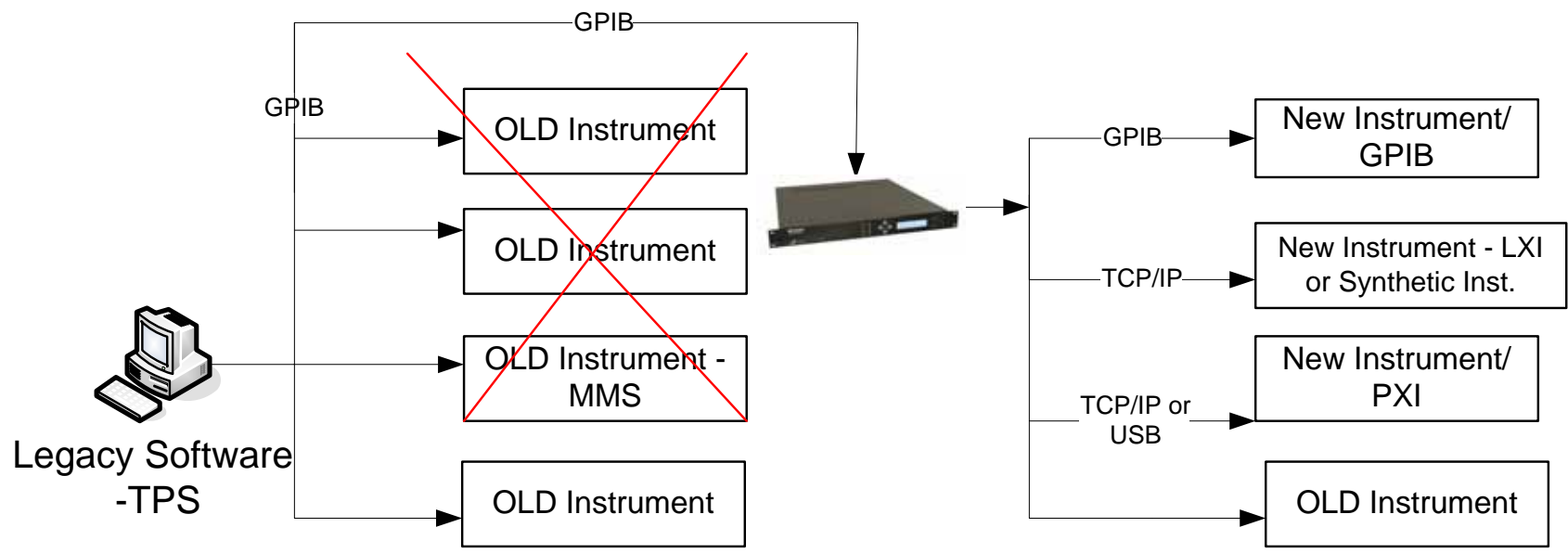
- **Next Generation Testers cannot re-use legacy software /Test Program Set (TPS) - without rewriting the software or changing a portion of it, such as the instruments drivers.**
- **Legacy system need replacement of instruments without changes in the software**
- **There is a need for a technical solution which supports both new and legacy programming languages such as ATLAS, HP-BASIC and FORTRAN, common communication protocols such as GPIB, USB and LXI, and common instruments such as Rack-mount, VXI, PXI and Synthetic Instruments.**



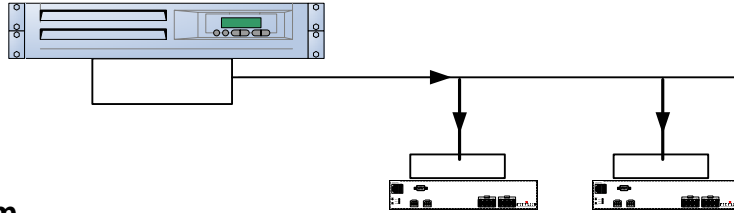
Technology Highlights

- Allows **incremental** replacement of obsolete instruments, **without** changes to the software (TPS). It provides **form, fit and function** replacements for **legacy** systems.
- Reuse of TPS (Test Program Sets) on **next generation** testers without software changes or source code availability.
- **Generic solution** for **common** instruments, **any** programming language and **common** communication protocol.
- A Built-in **Web server** enables remote commands upgrades, instrument upgrade and worldwide support.
- COTS hardware ensures ongoing support for years to come.

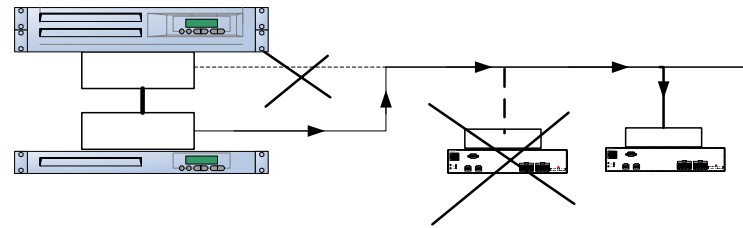
Technology Concept



Technology brief

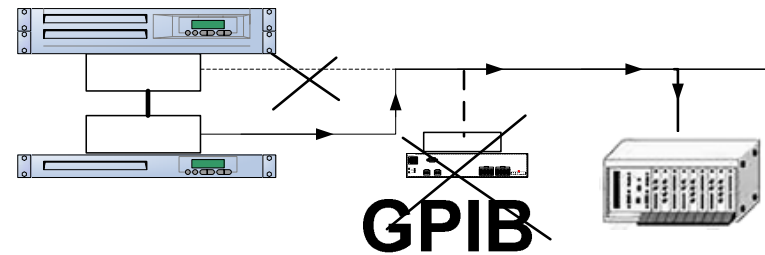


Legacy system



Option 1

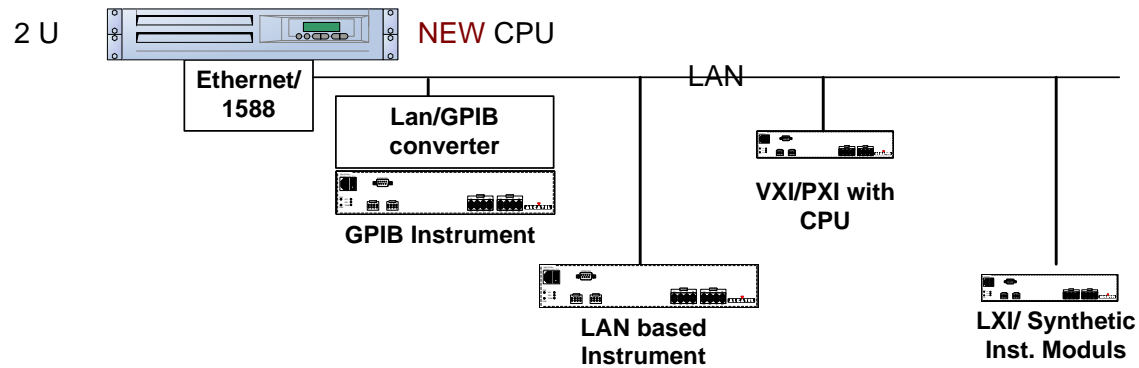
2 U



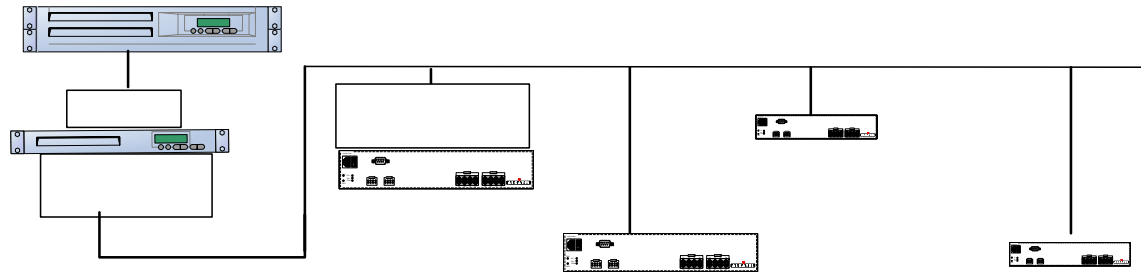
Option 2

Technology brief (Cont.)

Future system



Option 1

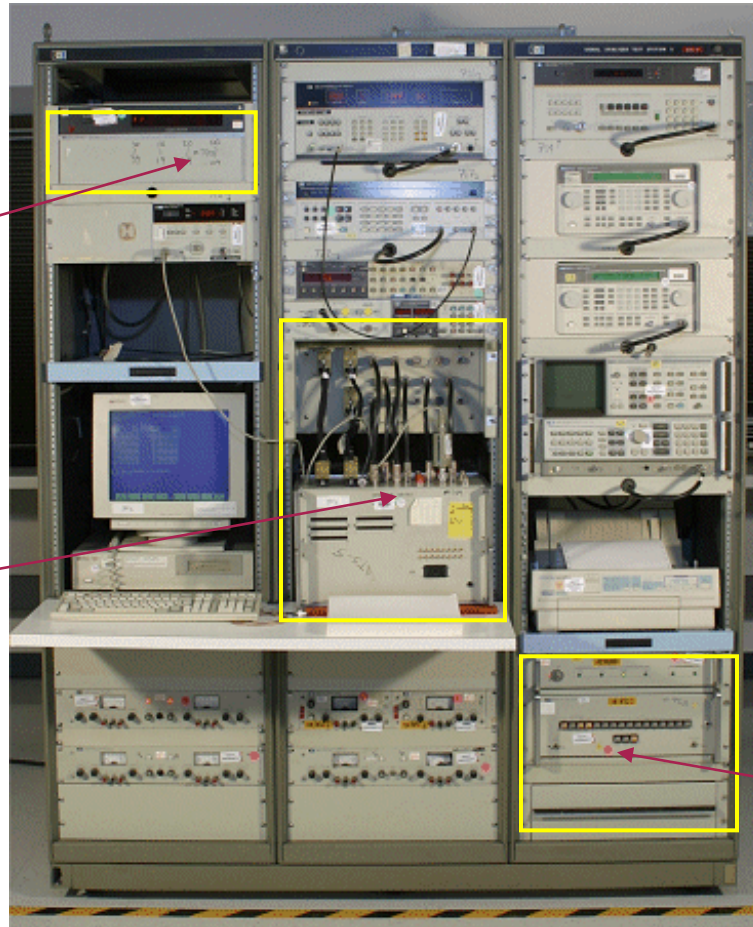


Technology sample

Old Instrument
Replacement 1
Scanner

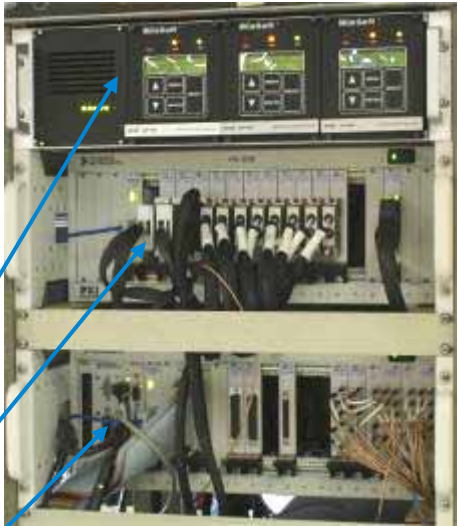
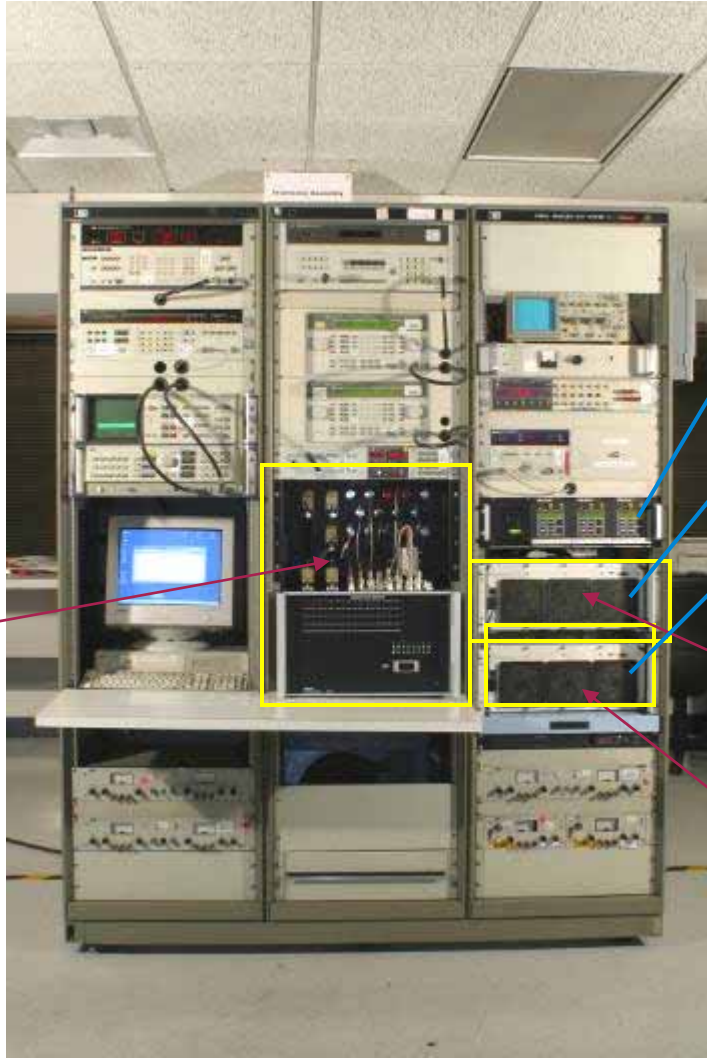
Custom
Provided unit
Replacement 2
(RF matrix ITA)

Old Instrument
Replacement 3
**Multi-
Programmer**



Technology sample

PXI - Based replacement

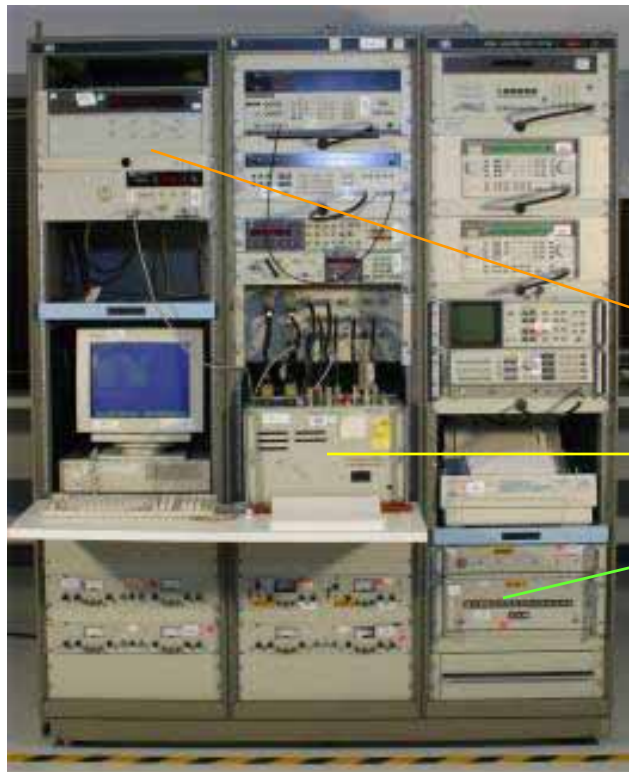


Custom
Provided unit
Replacement 2 -
ITA

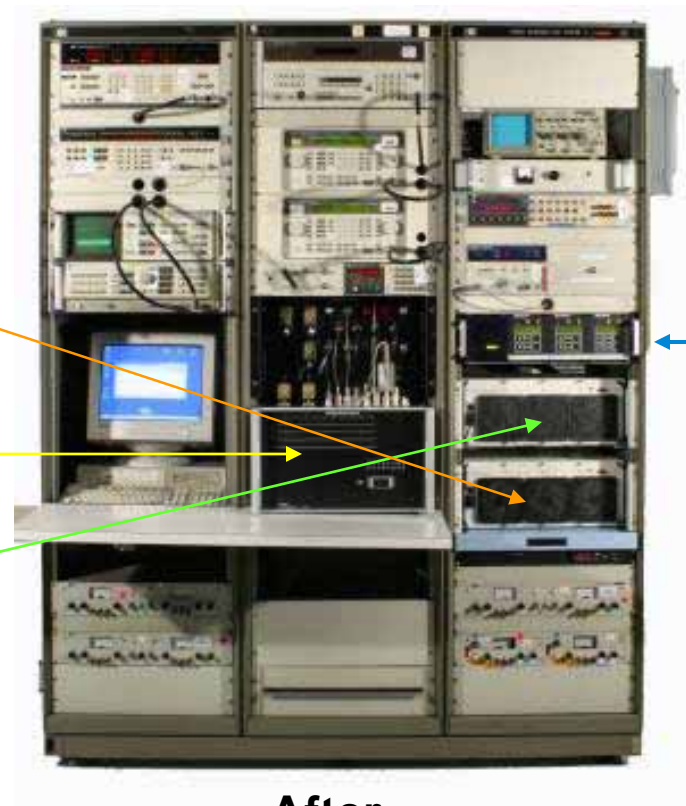
New Instrument
Replacement 1
Scanner

New Instrument
Replacement 3
**Multi-
Programmer**

Technology sample



Before



After

WISE x 3

Technologies comparison

Description	Traditional Technology	WISE™ Technology
Preservation of Software (Test Executive, Drivers, TPSs)	NO	YES
Elimination of Software Re-Validation process	NO	YES
Capability to run New TPSs alongside old TPS on the existing T&M system	NO	YES
Seamless migration from existing computer to a regular PC (Currently supported: HP 1000 & PDP -11)	NO	YES
Robust Firmware (Available for 15-20 years)	NO	YES
Average cost for a <i>COMPLETE</i> Test station upgrade	\$300K-\$4M per system	\$50K – \$250K per system
Schedule	8-10 months	2-3 months

Sample of Upgraded of instruments

Old Instrument	New Instrument
Racal DMM 6000S4599	Agilent 3458A / NI 4070 PXI - DMM
HP 8160 Pulse Generator	Agilent 81104A
Racal Counter 9035-11A/ HP 5335	Agilent 53132A with 3GHz Channel (Option 030)/ Ztec PXI counter
HP 8663 Signal Generator	Agilent 8648C with the following Options: - Hi-Output Power Option - Modulation Generator Option - High-Stability Option - Pulse modulation Option
HP 8662 Sig. Gen.	Rohde & Schwarz SMV03
HP 8568 Spectrum Analyzer	Agilent E4402 /IFR 2395
HP1000 Computer	WinSoft - COBRA 1000 System



WinSoft®

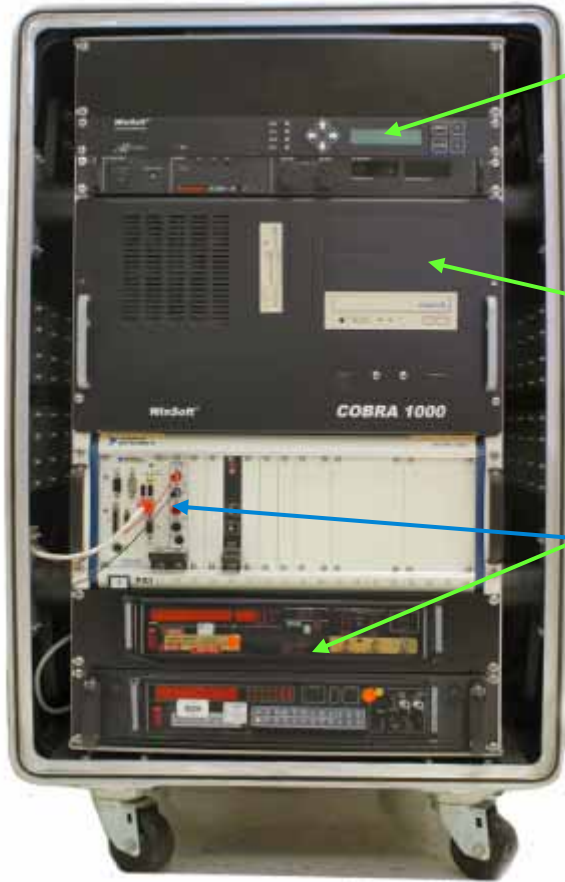
www.winsoft.com

Line of products

3U – Rack-mount Chassis with a backplane– Support of 4 GPIB lines



Multi WISE



- Up to 14 instruments in **1U unit** (limited by GPIB addressing only);
- Backward compatible with WISE G2-100 & GT-100 (Cassette Module)
- Replacement of HP1000 and PDP-11 with regular PC
- Replacement of Racal Dana (Counter and DMM) with PXI-based instruments



Conclusion

- **Now you can use old TPS in Next Generation Testers**
- **Now you can use old TPS in an extended Legacy Tester**
- **Mixture of PXI, Rack Mount, LXI, Synthetic is supported**
- **NO software changes are required**