Analysis, Integration & Design, Inc.

AIDI is an agile, multi-talented, experienced team providing hardware and software engineering, system design, integration and test. AIDI specializes in automated test systems, simulations, data acquisition and control and communications systems. AIDI provides complete system development, produces software application, facilitates integration, and provides deployment support. We integrate with customer needs and requirements to provide entire solutions or work within existing processes to reinforce teams and efforts already underway.

AIDI was founded in 2005 with a vision of supporting Commercial companies, Government Prime Contractors and Government entities directly. Since our founding, AIDI has performed the core technical work on multiple SBIRs and CTMA programs. AIDI has provided consulting and technical support for DoD including contracts and programs with the United States Air Force, Army, Navy and Marines.



Analysis, Integration & Design, Inc. A Software and Technology Integration Company

AIDI is located in Melbourne, Florida. Currently we support over 7000 Sq. Ft of office and laboratory space with significant room for expansion available. AIDI has hosted Marine TETS and VIPER/T test stations as well as an AF B1B ADTS test station in our laboratory facility. AIDI has accomplished maintenance, obsolescence mitigation, test program development and migration as well as test product development for various DoD and commercial customers.



ISO 9001-2008 Management Processes



AIDI Hardware and Software Engineering Services:

TPS Development Specialists

- Commercial Environments
- ATLAS Experts
- Digital Simulation
- .NET
- Migration

Test Environment Integrators (System Engineering)

- ATLAS System Integrators
- ATS Platforms
- Data Acquisition Systems
- Simulation Systems
- Communication Systems
- Calibration Procedures
- Self Test Development

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HURA

Historical Usage & Requirement Analyzer



Historical Usage & Requirement Analyzer

Software Description



AIDI's Historical Usage & Requirement Analyzer (HURA) provides comprehensive test system instrument usage analysis computed using test program simulation techniques and induction of historical maintenance records. HURA provides users with intuitive user interfaces for navigating instrument usage results and user friendly reports. Reports can be generated based on user specified test definition envelopes, allowing users to accurately review instrument usage over a wide range of test definitions.

cted Simulation Results Simulation Envelope (8-	94-3318 13-25-22)	
ge Viewer Report Viewer Simulation Envelope Re	100	
Test Definition Selection	Instrument Usage	Switch Instrument Usage
· (B) (E) (-)	Olgital Multimeter	Coast Switch 1
2 Test Definition 1	Ogital Mutimeter,Resource 1	Court Switch 2
	Digital Multimeter, Resource 1, AC Voltage Measurement	Court Switch 3
	Digital Multimater, Resource 1, AC Current Measurement	C LF Switch 1
	Digital Multimeter, Resource 1, BC Voltage Measurement	C LF Switch 2
	Digital Multimeter,Resource 1,DC Current Measurement	Power Switch
	Oglat Multimeter_Resource 1_Resistence Measurement	
	400 0	
	Low Frequency Calibrator	
	O I I I I I I I I I I	

Features

- Automated complex test requirement analysis using runtime simulation techniques
- Induction and analysis of real world maintenance
 action usage information
- Provides comprehensive reporting mechanisms
- Provides test definition applicability analysis for new target platforms
- Identify complex resource applicability scenarios using:
 - Determination of resource usage concurrency
 - Determination of parametric values via runtime variable analysis
 - Identification of unused instruments
 - Identification of unused instrument functions
 - Identification of exercised instrument functions
 - Identification of tests actually utilized during maintenance actions
 - Identification of resources utilized during maintenance actions

Usage Viewer Report Viewer Simulation Envelop	e Renalts						
Simulation Report List	(III) H 4			Find 1	Net		
· (a) (i		Power Meter 1 : Resourc	e 1				
		Instrument Function Name	Employed By	MA Usage	MA Usage Count	Total MA Count	
Simulation Envelope Report (8-24-2018 13-21-48	8 (m)	AC Power Measurement	Test Definition 1	100%	8	8	
		Instrument Power Ran 44 dBm	pe vs. TR Expected and MA (Observed Power U	sage Ranges	_	
		Lover Plange	-30 to 0 dBm	-25 to -18,5 dBm			

Easily view, print or export various simulation reports within HURA's user friendly report viewer.

ected Simulation Result O Simulation Envelope (8-24-2018 13-25-22)	Simulation Validation Simulation Validation
oge Viewer Report Viewer Simulation Envelope Results	
st Definition : Test Definition 1	Maintenance Action Usage for Digital Multimeter (DMM) : DMM-VDC : DC Veltage Measurement
· (a) (b)	Show Legend
Digital Multimeter (DAM) : 100%	DC Voltage Measurement History
LF Switch 1 : 100%	24
Power Meter 1 (HIPM1): 100%	28-
Power Switch : 100%	§22-
elected Instrument : Digital Multimeter (DMM)	argy 122-24
Resource Identifier : DMM-RES : 100%	
Resistance Measurement : 100% Show Usage	22- 0 0
Resource Identifier : DMM-VDC : 75%	2-
DC Voltage Measurement : 75% Show Usage	24 October 2017
	Maintenance Action Date

Analyze instrument usage statistics through HURA's intuitive usage viewer.