



## DAQtron<sup>™</sup> - Simulation Data Acquisition and Recording

KaTron's DAQtron<sup>™</sup> is a next-generation Simulation Data Acquisition and Recording Database software that provides a complete modular solution for all kinds of simulator applications. DAQtron<sup>™</sup> acquires and records HLA, DIS and ARINC Communications, and video and audio channels during a simulator exercise or a simulation run.

### DAQtron<sup>™</sup> Features

- + Controlled through IOS or GUI
- + Can record any number of any kind of data
- + All recorders can be deployed on any machine on the network
- + Configurable to automatically record any HLA federation or DIS exercise when created
- + Any kind of data can be recorded by creating a recorder plugin
- + HLA Recorder:
  - + Fully HLA compatible, supports all of the core RTI services
  - + Can connect to any 1.3 or 1516 federation
  - + Natively works with standard FOM's and maps to any FOM with minimal effort through FOM-Mapping
  - + Allows WAN exercises and distant federates to join (Satellite links can be used)
  - + Filters interactions and objects while recording
  - + Supports stop-and-go recording on the same record
  - + Requires MAK RTI and MAK Data Logger

The screenshot displays the DAQtron software interface. It features a menu bar (File, View, Layouts, Control, Tools, Help) and a toolbar. On the left, there are panels for 'Recorder List' and 'Task List'. The main area shows three recorder instances: 'Audio Recorder', 'Video Recorder', and 'Hla Recorder', each with 'Start', 'Pause', and 'Stop' buttons and a 'Properties' icon. Below each recorder is a 'Statistics' section with a table and a graph. The 'Session Info' panel at the bottom shows a table of session details.

Property	Value
Filesize	45068

  

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Filesize	45068

  

Session Name	Start	End	Duration
session_01	16:40:20:104	16:41:36:932	00:01:06:740
Part 1	16:40:28:184	16:41:16:698	00:00:48:514
Part 2	16:41:18:510	16:41:36:932	00:00:17



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- + DIS Recorder
  - + Fully HLA compatible, supports all of the core RTI services
  - + Allows WAN exercises and distant components to join (Satellite links can be used)
  - + Filters PDU's while recording
  - + Supports stop-and-go recording on the same record
- + ARINC Recorder
  - + Captures ARINC 424 messaging spread from simulators and agents
  - + Will support ARINC 661 communication in the future
  - + Supports stop-and-go recording
- + Video & Audio Recorder
  - + Captures and encodes multi-audio channels on the fly in any bit-rate and quality
  - + Captures multi-video channels on the fly in 30 fps D1 resolution
  - + Encodes all captured video channels to Mpeg4 or WMV compressed formats
  - + Supports stop-and-go recording
- + TCP/IP & UDP Recorder
  - + Records arbitrary TCP/IP or UDP communication
  - + Selection and conversion of arbitrary data to DAQtron™ format through use of Graph Editor
  - + Can write captured data to binary compressed or ASCII format

The screenshot displays the DAQtron software interface with the following sections:

- Active Simulator Information:** A table showing flight details for 'TUS'.

Attribute	Value
Flight Name:	testrecord
Flight Note:	This is a test record
Flight Date:	2007-03-23
Flight Time:	11:54:34
Flight Duration:	00:00:05
Departure:	Istanbul
Arrival:	Ankara
Debriefed Before:	false
Pilot:	John Doe
Flight Secure:	false
Flight Authentication:	1
Flight Training Tone:	1
- Channel Selection:** A tree view showing selected recording channels: videorecorder2 (CockpitViewVideo), audiorecorder2 (Microphone1), networkrecorder (NetworkChannel), annotationrecorder (Annotation), and hlarecorder (HLAChannel).
- System Controls and Information:** Displays station name, CPU usage (7% for Record Interface Station, 25% for S70A#2), network utilization (0%), and status (Shuttdow).
- Settings:** A tree view of recorders and tasks, with a property table for the selected KtHlaRecorder.

Property	Value
Name	Hla Recorder
Base Filename	Hla_\$\$
Record File Path	\$\$session/hla
Active	True
Federation Name	WRLink
Federate Name	KtHlaRecorder
FOM Name	WRLink.xml