



## 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' button. Below each recorder is a 'Statistics' section with a table and a graph. The 'Hla Recorder' statistics table shows 'Filesize' with a value of 45068. The 'Session Info' panel at the bottom shows a table with session details.

Property	Value
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



## DAQtron™ - Simulation Data Acquisition and Recording

- + 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. The top panel, 'Active Simulator Information', shows a table for 'TUS' with fields like 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), and Flight Training Tone (1). Below this are buttons for Start Recording, Pause Recording, and Stop Recording. The 'Channel Selection' panel on the right lists various recorders with checkboxes: videorecorder2 (checked), audiorecorder2 (checked), networkrecorder (checked), annotationrecorder (checked), and hlarecorder (checked). The 'System Controls and Information' panel shows Station Name (Record Interface Station), CPU Usage (7%), Network Utilization (0%), and Status (Shutdoor). The 'Settings' panel shows a tree view of recorders and tasks, with a table for the selected 'KtHlaRecorder' showing properties like Name (Hla Recorder), Base Filename (Hla\_\$\$), Record File Path (\$sessionid/hla), Active (True), Federation Name (WRLink), Federate Name (KtHlaRecorder), and FOM Name (WRLink.xml).