



Release Notes Version 6.3

Release Date: May 2009

The 6.3 release primarily consists of updates within the RtStation areas of the product with some additional upgrades and bug fixes to the IAP processors. The IAP processors were upgraded to support extended Blob concatenation and finer control over latent and “bursty” data. New features for the RtStation release includes streaming Chapter10 UDP support and the option to use embedded time for the Lumistar decom. Also featured in this release is the ability to use TMATS file as instrumentation setup files. Major fixes include a very large IENA bug fix and a fix for video file closure problems. Also, a change was made in the sync-lock mechanism to allow less minor frame drops on loss of PCM lock. All of the IADS products include several important bug fixes.

Iads Client and General Release Notes

1. Due to privacy issues, all aircraft models have been removed from the general IADS installation package. Don't be alarmed if you suddenly notice that a majority (if not all) of the aircraft models are missing in the Display Builder (i.e. ? icon). Individual models can be downloaded from each user's FTP site as noted in your owner's manual; otherwise please email us for specific login information.
2. To accommodate a growing list of options, the iadsread function interface has changed. This may warrant some changes in your existing Matlab code. There are now Matlab style “optional arguments” appended to the end of the function vs. the existing “fixed field” style as used in the “DecimationFactor” argument. The latest beta of this new style interface is available in the IADS Google group files section (IadsreadBeta.zip). Please refer to the included HowTo.m file for specifics.
3. Due to an 256 column limitation in Excel versions earlier than 2007, exports of Data Groups with more 256 parameters will be clamped.
4. Corrected the following expressions when used in derived equations where all the inputs are constants: XIf, IfThen, Switch, Choose, GetConst, GetMissionAttribute, Interpolate1DFunction, Interpolate2DFunction, XYZtoLat, XYZtoLon, XYZtoAlt, LoadLimit2D, PercentDistance2D, RandomUniform, RandomNormal, ParmEU, Latch, MaxN and MinN.

5. Aperiodic derived parameters must be defined as “IAP” type parameters only. In addition, these parameters must be Order Arrival IAP types defined by adding the SetTriggerParam function in the derived equation. An aperiodic derived parameter is defined as a parameter that contains only aperiodic input parameters in the derived equation. Defining aperiodic derived parameters as “Derived” type parameters will produce incorrect results.
6. Under Windows Vista there is a new User Account Control feature that will block installs, even as administrator; this feature needs to be disabled. Also, the Vista default *Border Padding* setting causes popup hints in IADS to get abbreviated or occluded; reduce this setting to 1.
7. Due to a limitation in derived parameter engine, the SetEquationUpdateRate function must be called with values greater than or equal to 0.2. The system will clamp the value to 0.2 if a lesser value is entered (with the exception of an entered value of zero). See below for more information regarding the use of 0.0 in a SetEquationUpdateRate function.

Caching Data Server (CDS) Release Notes

1. Support of Logical Front End (LFE) designations other than LFE A on L3 System 550 projects will require an upgrade of the IADS Setup software on the System Server (Unix based setup machine). This only applies to systems using the L3 System550 as the data source connection to the CDS.
2. On systems using an L3 System550 data source, IADS supports only one active LFE when multiple LFEs are defined within a single 550 project.

RtStation Release Notes

1. IadsStartWizard now makes it clear that only the "raw data file" output format type of kFlashCardXid is supported for Acra CF data sources and not other types of kFlashCardXid output formats.
2. Compact Flash processing within RtStation now waits until the entire image is processed before the data is displayed. Previously the Client would display data as it was being processed and this created a great deal of confusion; this new method seems preferable among the users.
3. RTStation has limited support for TMATS. Derived parameters must be of type DCT=DER. Support for this will expand in following releases.
4. Presently, Acra Video from the VID103 module as displayed in an IADS Video player is only supported via the 2004 ffdshow-20041012.exe video codec package (not the newer versions). Newer versions of the codec have been known to crash or cause unexpected results within the IADS client during times of sync loss or corrupted data. We will look into this issue in a future release.
5. Starting at version 6.1, the choice of extracting “ALL” events from a Compact Flash image has been removed. At this point in time, you will be restricted to extracting data from an individual “event”. In a future release, we will be looking into the possibility of extracting all

events into one contiguous Iads archive, while providing time breaks/jumps between the events.

6. Due to performance and “ease of use” issues, kQuick no longer creates or archives Iads data files. The kQuick playback and IADS Data Viewer options have been removed from the installation and are no longer available from the Start menu.
7. Only one GTSDEC card will be used if multiples are present in a PC.

IAP Release Notes (Derived Parameter and Order Arrival Servers)

1. The Derived Parameter Server (DPS) and the Order Arrival (OA) Derived Parameter Server are specialized IADS Auxiliary Processes (IAPs) designed to process derived parameters independent of any clients. By default, the Operator Console is configured to launch these servers on the Caching Data Server (CDS) PC upon DataGather start. If an IADS client is not installed on the CDS PC, an error will occur at this time. If you are unable to install a client on the CDS PC, or you feel that you don’t have enough processing overhead for this operation, you can either disable the IAPs completely, or choose an alternative launch PC where the client is installed. The bottom line is that the client must be installed wherever the DPS or OA servers are designated to run.
2. The 6.3 version of the IAPs (DPS and OA) contained within Iads.exe require the 6.3 version of the CDS executable. The communication protocol between the CDS and the IAPs was upgraded, preventing backwards compatibility. If you intend to upgrade your CDS.exe in the control room, you will also need to upgrade the IAP installations. Since both are run on the CDS PC by default, this should not be a large issue.
3. Presently, an OA IAP parameter can’t be used as a trigger for another OA parameter. Since, the OA engine computes equations in the order that they are defined in the ParameterDefaults table (top to bottom), the current work-around is to use the identical trigger, but define the parameter at a later point (below) the equation within the table.
4. An OA IAP equation (i.e. one containing SetTriggerParam) can only consist of “TPP” type parameters or other OA parameters. An equation error will occur if an OA attempts to access a DPS parameter (IAP parameter without a SetTriggerParam function). Since an order arrival calculation is heavily based on data arrival timing from the data source, there are no plans to make this option available in the future. A work-around would be to convert all needed DPS equations into an appropriate order arrival equation.
5. IParameter creation is not allowed in any custom COM function run in the Order Arrival server. At this point, there is no plan to make this option available.
6. OA / DPS parameters can now re-interpret the sample rate by adding SetEquationUpdateRate to the equation.
7. OA / DPS parameters can now convert from aperiodic parameters to periodic and vice versa through the use of the SetEquationUpdateRate function. Setting a periodic equation to 0.0 will convert that parameter to aperiodic. Setting an aperiodic parameter to anything other than 0.0 will convert that parameter to periodic.

8. IAPs not controlled by the Operator Console or CDS must be shutdown and restarted if the CDS is re-launched.
9. An OA IAP parameter can only be computed in the real time environment (a DPS parameter can be re-computed in post test). Please contact IADS for more information.

NEW FEATURES	
CDS	
7651	Added support for LFE designations other than A on Sys500
7898	IAPs now process Ascii type data
Client	
6696	Nyquist Plot right-click menu "dB" option for Gain Margin
6820	Stop Watch control now supports days: DDD:HH:MM:SS.sss
7127	Frequency Response Plot and Frequency Plot: Dominant Mode Indicator now works with logarithmic scales
7264	Data Group Export "Header Rows" property bag setting for Excel and CSV
7393	Stripchart "Digital Drawing Area" right-click menu option
7522	Added Situational Awareness (SA) properties NumberOfShadows, ShadowSpacing, ShowShadows, ShowFlighPath, and FlightPathLength for each aircraft; increased performance
7528	Stripchart label color changes to white when black or a very dark background color is selected
7621	Dynamics wizard has the ability to run an external file for the Interpolate 1D function
7684	Added Title Bar to Event Monitor Display
7827	Option to set a filter on every parameter in a defined data group before export
7846	Override the Test Point "Auto" Increment feature by holding down the Ctrl key while clicking the Start Test Point button
8000	New IADS Data Export wizard
8018	Tab displays now have a right-click menu to "Show icon on Active Tab"
RtStation	
7518	IAP support via CDS for Acra Compact Flash
7568	Lumistar: Ability to use embedded time
7659	TMATS instrumentation setup files are supported for parameter import and PCM setup information
7660	Streaming (UDP) Chapter 10 support for PCM and ARINC data. ARINC bus definitions must exist in TMATS files; one PCM stream must be defined as well
BUG FIXES	
2048	Tab Display tab order now saves and loads properly
3041	Data now updates in the Stripchart when TM is down regardless of cursor location
4662	Running RMS value resets correctly after data drop-out
5093	Corrected error in Layers Dialog

6120	ICAW control now handles decom_status parameters from multiple front ends
6274	Dashboard now resizes appropriately on a resolution change
6404	Dynamic Autoscaling now works correctly in Frequency Response Plot
6471	Frequency Response Plot "N" key updates both the response and excitation parameters
6698	Corrected Gain Margin on vertical axis in Nyquist and Frequency Response Plots when the gain units are not in dB
6701	Data Export: Matlab "Time" column/vector format displays correctly
6756	Exporting a parameter that has 'GetValue' in the derived equation now functions correctly
6777	Corrected problem transferring configuration file
7106	Configuration Tool imports hex code to colors properly
7125	Corrected timer rate on ActiveX models with rotors
7196	Configuration Tool no longer flashes when resizing the window
7208	Multi-graph updates correctly when you flip the scales
7228	Turning off Tree View in Configuration Tool no longer distorts the Analysis Window when the size is changed
7384	Improved overall functionality of Property Dialog table in Operator Console Start Wizard; removed add/remove buttons from the IAP and Client set-up wizard pages
7399	Corrected FlapColor property on 737 model and Right/Left LeadingEdge property on F18 model
7411	IADS Client now installed during a CDS installation
7423	Input Objects: "shift drag" operation functions correctly
7430	Fixed bug with user not able to delete ActiveX controls on Analysis Windows with parenthesis in the name
7431	ADI control upgrades: Added properties FixHorizonScale and SymbolSize; added a zero beside the wing level ticks
7435	Very large exports to Matlab no longer end unexpectedly
7437	SetTriggerParameter functions update sample rate correctly in the Parameter Defaults Table
7445	Parameter Selection Dialog entries no longer sort alphabetically
7453	Exporting only 1 parameter to Matlab now functions correctly
7456	Fixed potential lockup in CDS when processing OA IAP parameters
7463	ParameterDefaults Import Equations does import last line if it doesn't have a carriage return
7478	Corrected issue with Smart Import where quotes existed in equations
7480	Horizontal Stripchart – Show Pen > "Standard Recessed" and "Carat Recessed" options available
7502	Increased GetTestPointActive function query rate to 10/Sec
7506	The Configuration Tool TMATS import dialog now handles derived equations
7512	Stripchart Time Display functions correctly when the Interval entry is 0
7519	Fixed problems with ampersand representation in display labels and text objects
7522	IADS SA fixes: Earth texture map now displays correctly; fixed terrain panning function

7536	Data Export: Matlab data group export vector now sanitizes variable name before it creates vector
7538	Smart Import error correction with double quoted items that contain a comma
7580	Moving Map Display: Aircraft maintain correct map location when the display is resized
7582	OA parameters are now allowed in a Derived Parameter Server IAP equation
7597	Time based functions (i.e., CurrentTimeOfYear, CurrentTime) will now return a correct value within an Order Arrival based equation
7599	Matlab export now functions properly in all cases
7601	Configuration file no longer gets into un-editable state during certain user interface options
7603	Configuration file: Using the mouse wheel in a cell with a drop down now scrolls through the drop down properties
7618	Frequency Plot functions correctly on parameter re-drop after its Stripchart is deleted
7628	Data Group Export: If there are duplicate entries in the table, only the first entry with that name will be exported
7630	Queries set on any table via the Configuration Tool that have ‘ ’ in the query, no longer cause a validation error on startup
7661	Alphanumeric and Alphanumeric Table now show unsigned long values properly
7689	GetMissionAttribute: All types specified in MissionAttributes table now produce valid values
7690	CDS: Data requests from empty aperiodic data buffers produce no errors
7731	Dynamics Wizard now shows correct values for enumerated property translations
7732	Standard Gauge now draws color ring correctly in all circumstances
7736	Displays now accept pipes in parameter Short Name
7738	Get Test Point Active value returns the correct value
7740	Large Zball configuration files are now obtained correctly by the CDS and PTDS
7762	IADS no longer ends unexpectedly when Analysis Windows that have Video Players running are minimized during a “Change Desktop”
7763	Displays no longer migrate off the bottom of the Tab Displays that have the folder title turned off
7765	Configuration Tool “Save Private”: Saves changes temporarily to the current configuration and pushes changes to displays (at your workstation only) until you click a permanent save option or save at log off
7770	Corrected issues with Secondary envelopes on Cross Plots
7771	Action Object: Updates now save to the Test Point Table by default
7789	IadsEquationEngine: Constant Expressions are now evaluated properly
7791	ICAW display now functions without PageNumber column in header
7800	PTDS: CSV file import ignores min/max scale settings if a bad float is set
7810	Corrected issues with IAP Processing/Startup
7840	Op Console no longer locks up during long missions when the computer is

	locked
7842	Warning added in IADS if the sample rate or data type for an existing IAP parameter is changed
7848	Corrected label “&” issues on all displays
7849	ICAW display no longer tries to evaluate a non-existent decom status parameter
7854	Corrected double quotes issue after IADS CSV import
7864	Custom .Net controls now save and load properly
7867	Events with the same argument now filter properly in the Event Monitor
7869	PTDS: Import code modified to handle different types of data in the import file
7873	Disabled rope zoom when Analysis Window streaming in real time
7874	Configuration file startup error corrected
7877	Event Monitor with large number of rows no longer affects the update rate of the Analysis Window
7882	Label Type, User Defined Label, Filtering Properties and Show Units Property Dialog changes now save properly
7887	Stopwatch control functions correctly if you have more than 16 on a single desktop
7889	Derived Engine: Avg function now returns the correct result for Npts > 1000
7893	Data Export: Matlab export of Ascii type parameter no longer exits IADS unexpectedly
7901	Moving map clamps extreme lat/long values
7912	Event Monitor: No longer fires events during a loss of sync
7914	Cross Plot now functions correctly on low sample rate parameters
7916	Spinbox control now increments correctly on values beyond 999
7917	CDS: No longer a problem importing Euro decimal characters from 550 parameter info file
7929	Envelope names are now visible in the Analysis Window if the upper corner of the envelope is outside the visible region
7933	Stripchart: Corrected Issues with rubber band zoom and changing chart speed while zoomed
7935	Derived Engine: First/SecondDerivative functions no longer error during scroll back
7941	Derived Engine: Avg function no longer throwing spikes every 10 seconds when all button hit
7966	PTDS: Recalculating Archive times processes in timely manner
7967	Derived Engine: RMS function no longer returns incorrect values when All button is hit
RtStation	
7462	IENA: Error displayed if no packets are received
7474	IadsTpp: Changed the IENA message to be more informative
7537	If IadsTpp is not shutdown properly it no longer corrupts the video file
7560	Fixed video shutdown across all sources
7658	Fixed problem with IENA package definitions that had uneven parameter occurrences
7758	IADS only updates/overwrites the desktop to “Basic Checkout” if building a

	new config
7795	Fixed bug in data 6.2 release regarding chance for incorrect decommutation of data when taking many TM hits
7804	gQuick no longer fails to start because the system is setting valid ready state before it actually is
7840	IENA: Error displayed if XidML has mismatched packet sizes
7842	IENA no longer exits unexpectedly if XidML packets have the same key
7844	CF: Configuration files that contain errors now display error message
7850	Fixed DOY initialization problem
7952	Start Wizard verifies the selected destination directory for validity. An error message is displayed if an invalid destination directory is entered.
7960	GTSDEC does support RNRZ-L-23 as a proper PCM code