TYX CORPORATION

Productivity Enhancement Systems

PAWS Studio Release Notes

Version 1.37.2

March 4, 2009

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1 Paws Developer's Studio

Version 1.37.2
Release date: March 4, 2009

1.1 Critical Items

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1.3.1 1641 Compile Line changes

Enhancement was made to consider all xml files under directory "**C:\IEEE1641\TSFLibs**" as part of the standard TSF Model library files available to the project at the time of compilation.

1.4 Problem Reports

2 Run Time System

Version 1.37.2
Release date: March 4, 2009

2.1 Critical Items

2.2 Known Limitations

2.3 Enhancements

2.3.1 Improved DataLogger logging for Multiple Analog Measurements

Multiple analog measurements made in a single ATLAS [FETCH/MEASURE] Statement are now logged correctly in the DataLogger.

```
C     FETCH statement has two Measurements Characteristics: FREQ and VOLTAGE     $
      40 FETCH, (FREQ INTO 'A', VOLTAGE INTO 'B'), AC SIGNAL,
             VOLTAGE RANGE 0 mV TO 20000 mV,
             FREQ RANGE 0.010 KHZ TO 0.500 KHZ,
             MAX-TIME 1.0 SEC,
             CNX HI J2-1 LO J2-2                                                 $
          OUTPUT, C'ATLAS: FREQ = ', 'A', C' VOLT = ', 'B'                       $
```

Figure above shows a typical ATLAS with two measurements characteristics.

Figure below shows the DataLogger segment for the above ATLAS statement. As seen below "Sec Measurement" is the second measurement VOLTAGE made in the above ATLAS statement example.

Tps Measurement

Time :	February 20,2009:15:45:02:978
Category :	ANALOG
Block Id :	1
Stack[Mod,Stm,Ln] :	[atlas, 10040, 16]
Verb :	FTH
Noun :	ACS
MChar :	FREQ
Dimension :	HZ
Measurement :	(RTYPE).112300000000000E+01
Sec Measurement :	(RTYPE).246800000000000E+01
Dimension (Sec) :	Unknown

Simultaneously, with this enhancement, these values also get to the EHF DataLogger and are recorded correctly in the "Production.EHF" file. Running the ATLAS back in simulation mode with data collected in the Production run now shows up correctly.

2.3.2 Improved DataLogger logging for BUS protocol

The "EXC" verb has been added to the set of verbs recognized for "BUS" logging. DO EXCHANGE statements written for CASS/RT subsets are now supported for logging.

Tps Bus

Time :	February 20,2009:14:59:47:536
Category :	BUS
Block Id :	1
Stack[Mod,Stm,Ln] :	[a33001, 18820, 35] [a33001, 100002, 44]
Verb :	DO
Noun :	EXC
Data :	(DTYPE)AB (DTYPE)AC (DTYPE)AD (DTYPE)AE (DTYPE)AF (DTYPE)B0 (DTYPE)B1 (DTYPE)B2 (DTYPE)B3 (DTYPE)B4
Status :	(DTYPE)7778797A

Simultaneously, with this enhancement, these values also get to the EHF DataLogger and are recorded correctly in the "Production.EHF" file. Running the ATLAS back in simulation mode with data collected in the Production run now shows up correctly.

2.3.3 Improved DataLogger logging for VERIFY Statements

In ATLAS VERIFY statements where dimensions for UL(Upper Limit) and LL(Lower Limit) are different than SI(System International) unit for the measured characteristic, the (old) logged information by the DataLogger did not correctly specify this. This has now been improved by logging the dimension in which the LL and UL are displayed.

ATLAS below shows a TIME measurement where the dimensions for Time is "Seconds", however the UL and LL have been specified in mSec (milli-seconds).

```
80 VERIFY, (TIME INTO 'MEASUREMENT'), TIME INTERVAL,
        NOM 200 MSEC UL 1000 MSEC LL 20 MSEC,
        TIME RANGE 20 MSEC TO 1000 MSEC,
        FROM 'EV-GT-4' TO 'EV-LT-3.5',
        MAX-TIME 5000 MSEC $
```

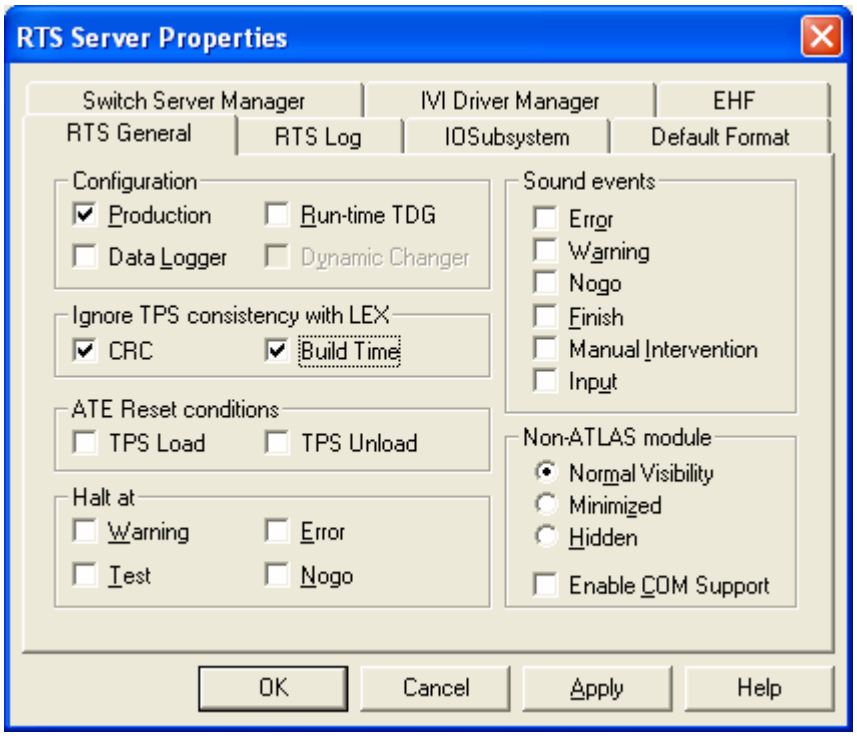
Figure below shows associated DataLogger snapshot where "Dimension (Limit)" is also logged.

Tps Test

Time :	February 20,2009:15:56:46:723
Category :	ANALOG
Block Id :	3
Stack[Mod,Stm,Ln] :	[Rtdg, 300080, 124]
Verb :	VER
Noun :	TMI
MChar :	TIME
Dimension (Limit) :	mSEC
Dimension :	SEC
Measurement :	(RTYPE).112233445500000E+00
LowerLimit :	(RTYPE).200000000000000E+02
UpperLimit :	(RTYPE).100000000000000E+04
Operation :	ULLL
Result :	PASS

2.3.4 Ability to ignore TPS consistency with LEX

With RTS Release 1.35.7, before loading TPS files for execution, the Run Time System enforced a CRC consistency with the respective LEXDB.lex file. This capability of TPS file execution is highly recommended for a user. However, due to unforeseen circumstances this may always not be practical to the TPS user at site. In this case the TPS user may choose to relax this check during loading/execution of the TPS. To do so the TPS user may configure the RTS accordingly--



From the RTS menu choose "Control"➔"Options". Click button "RTS Property Pages". On the "RTS General" page user may choose to ignore the "CRC" and "Build Time" consistency check with the LEX files.

2.4 Problem Reports

2.4.1 PR09003

This has been fixed with enhancement **Improved DataLogger logging for BUS protocol** described above.