



NORTH AMERICA

EADS North America Test and Services

PAWS Studio Release Notes

Version 1.40.1

Aug 31, 2013

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1 Paws Developer's Studio



Version 1.40.1

Release date: August 31, 2013

1.1 Critical Items

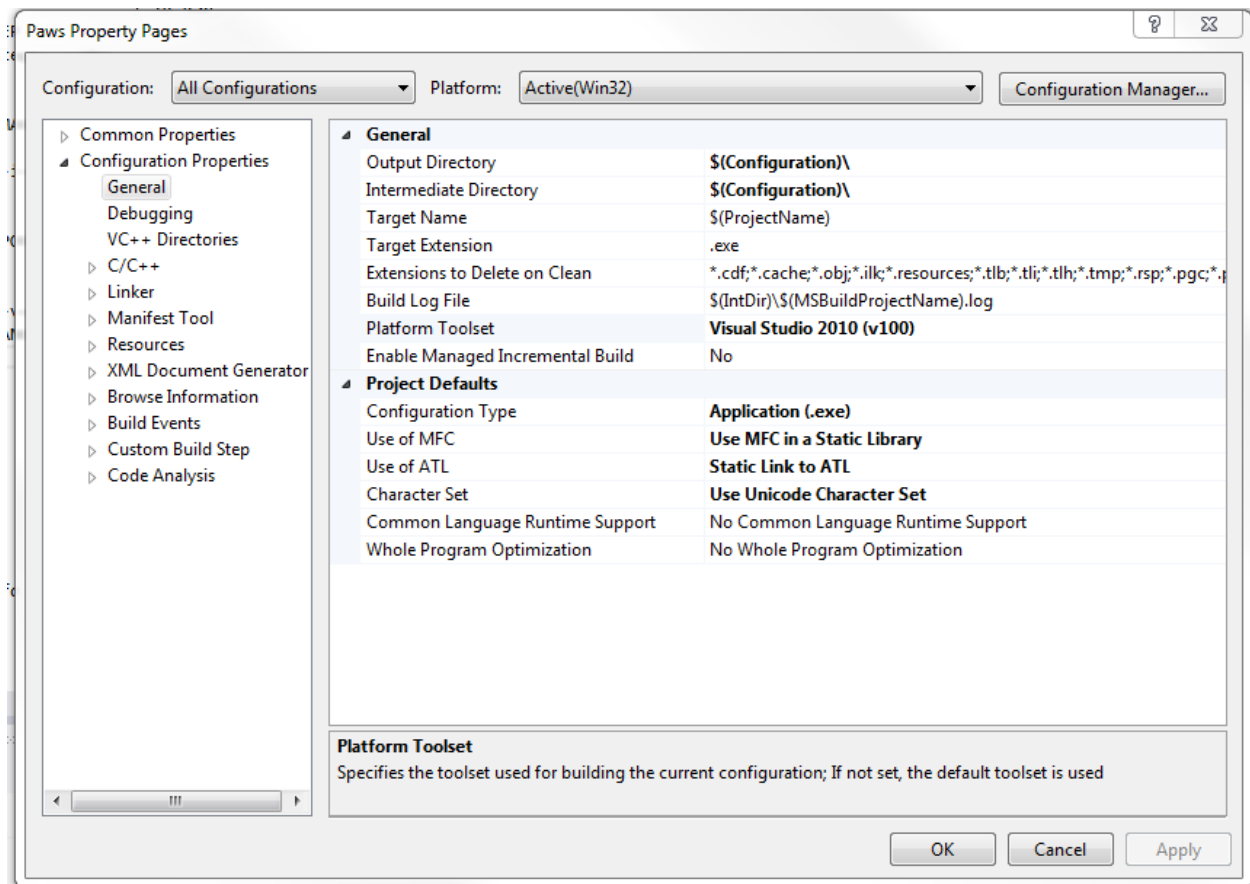
1.1.1 Default Encoding of Text Files Changed from CP 1252 to UTF-8

When the OS has not set up a Multi Byte Code Page, Paws Studio expects and encodes its text files with UTF-8. For the previous versions of Paws Studio, in the same conditions, the default encoding was CP 1252. When the atlas code of older projects contains non-English embedded text (as arguments of the OUTPUT statements, or commented information for example), the encoding of these files has to be changed from ANSI CP 1252 to UTF-8 before user's Paws Project is rebuilt, otherwise the non-English characters will not be displayed properly in Paws Studio editors, RTS Station Display or Ansi Display ActiveX control.

This action does not apply to source files that only contain ASCII English characters. Their binary representation is identical under these encodings.

1.1.2 Paws Studio and RTS Package Built in Visual Studio 2012, Configured With v100 Platform Toolset

Choosing Visual Studio 2010 compilers for all our 1.40.0 or newer binary files assures their portability on Windows XP Operating Systems.



However, the code has been adjusted to successfully resolve the incompatibilities between Visual Studio 2008 compilers (the compilers that built our software up to version 1.39.14) and those belonging to Visual Studio 2010.

All our .NET Portable Executable (including our Interop Assemblies) are built to use .NET Framework 2.0, like our 1.39.x branch.

Our customers are encouraged to report any difference of behavior of new software (1.40.0 or newer) versus old software (1.39.14 or older).

1.2 Known Limitations

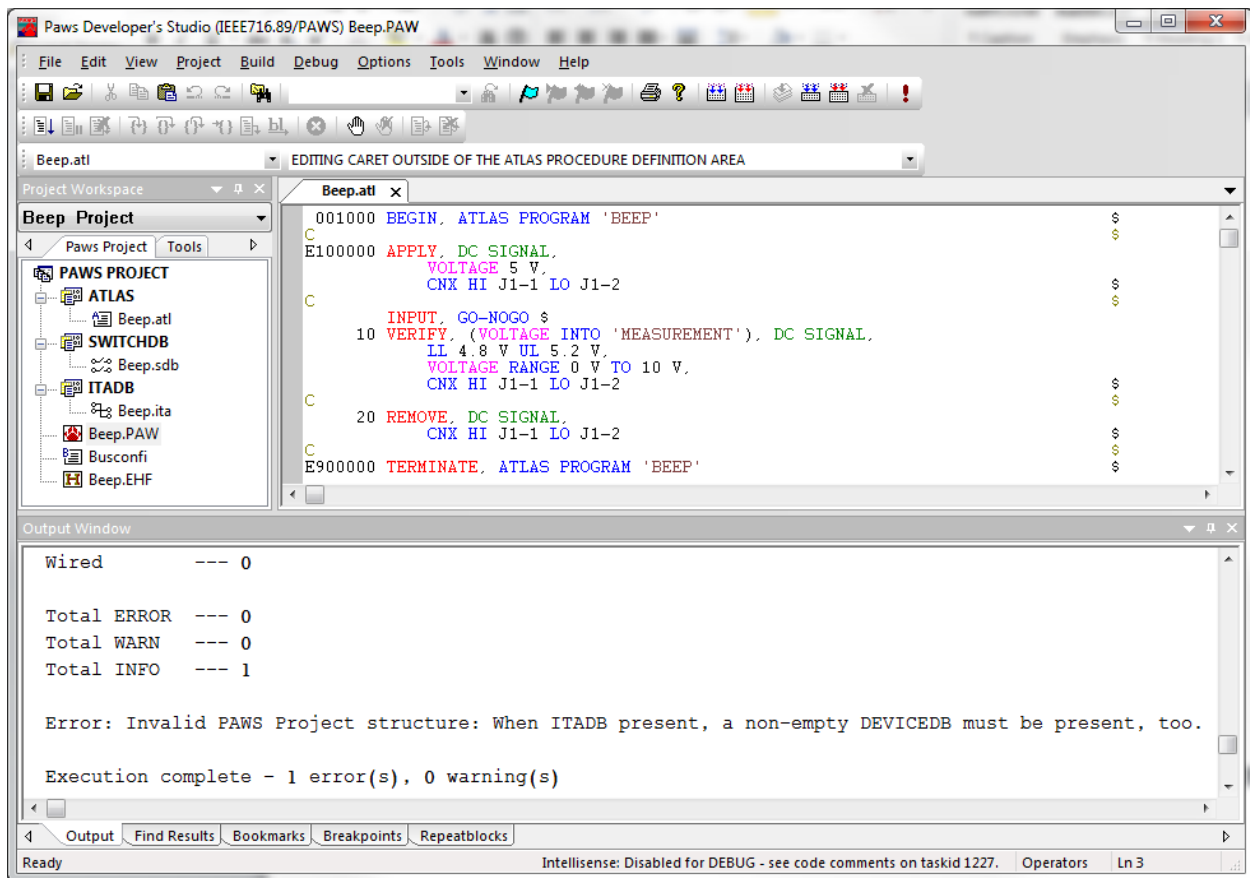
1.3 Enhancements

1.3.1 Paws Studio Enforces the Presence of DeviceDB Module When ItaDB Module Is Present (ID 1275)

Before, when a Paws Project lacked a DeviceDB module, the output files were generated by the atlas compiler, without an explicit allocation. The addition of the ITA module to the project did not change this behavior, although its general meaning was to make available the switch information to the allocation process.

This version of Paws Studio flags this context (Paws Project with Atlas and ITA modules and without DeviceDB module) as an invalid configuration.

The main benefit of this change is that, a complete Paws project, with Atlas, DeviceDB, SwitchDB, and ITA modules, does not expose its drivers to a random allocation dictated by the atlas compiler alone, after an accidental deletion of its DeviceDB module followed by a Rebuild All action. This is how the new error is shown:



1.4 Problem Reports

1.4.1 Paws Studio crashed when Intellisense combo controls are opened and the project contains no atlas files (TASKID 1247)

When trying to navigate through the atlas modules or atlas procedures by expanding the combo controls present in the main menu, Paws Studio crashed if its loaded project did not contain any atlas files.

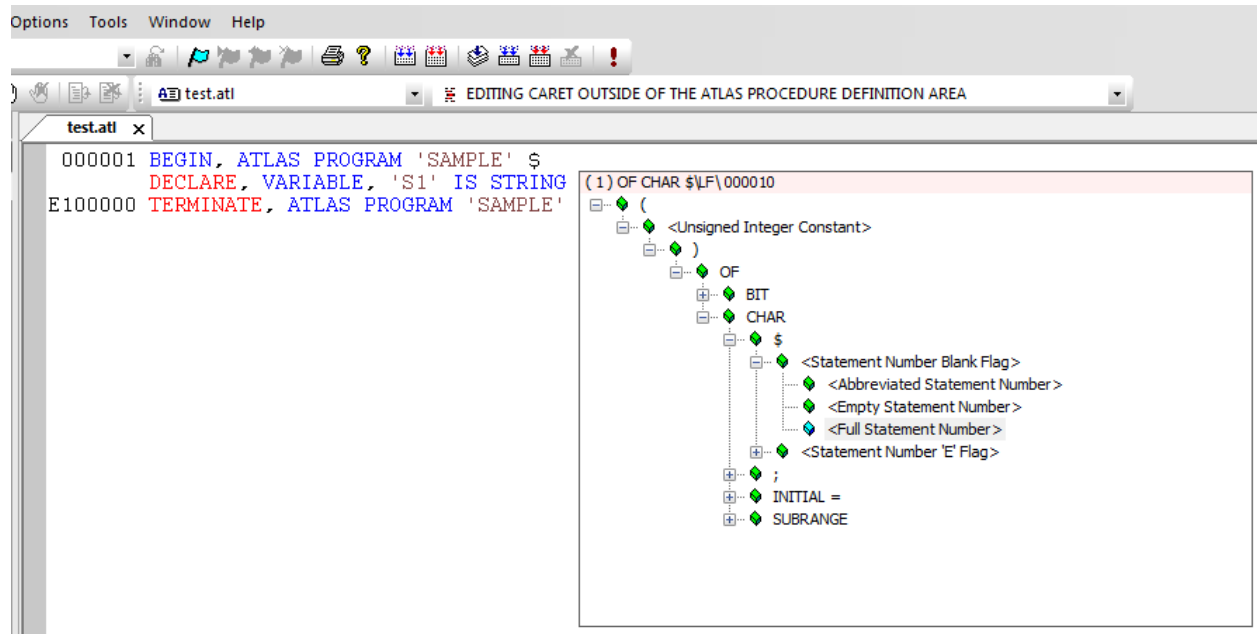
Only our Paws Studio 1.40.0 exhibited this bug. It looks like the MFC library of VS2010 has been changed and became backward incompatible with the previous MFC library released with VS2008.

This problem has been resolved through code changes.

1.4.2 Intellisense Module Failed to Provide Correct Token (TASKID 1255)

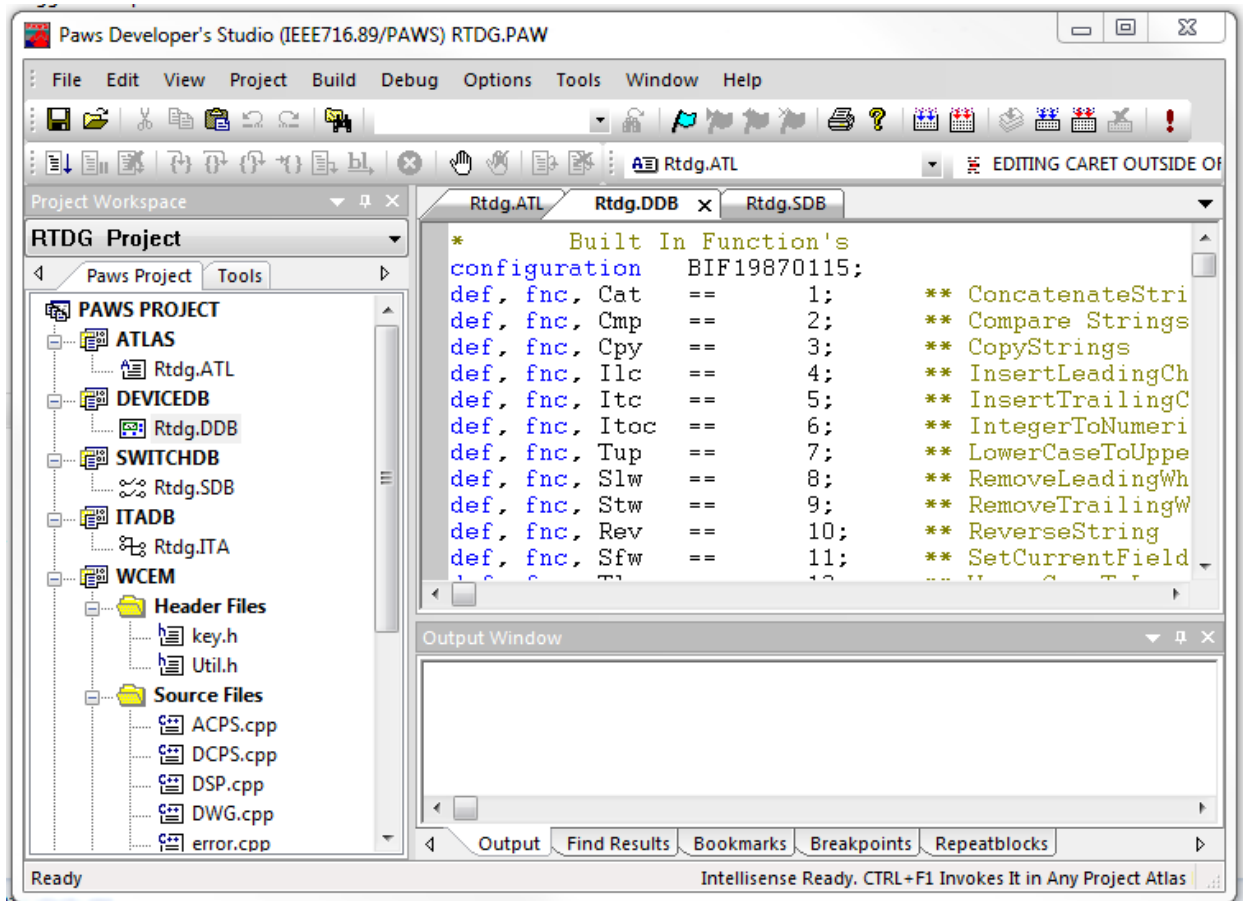
In our IEEE716.95\PAWS station, our previous Paws Studio failed to suggest <Unsigned Integer Constant> as a valid token, in between the parentheses of a DECLARE VARIABLE IS STRING OF CHAR statement.

This error is now fixed:



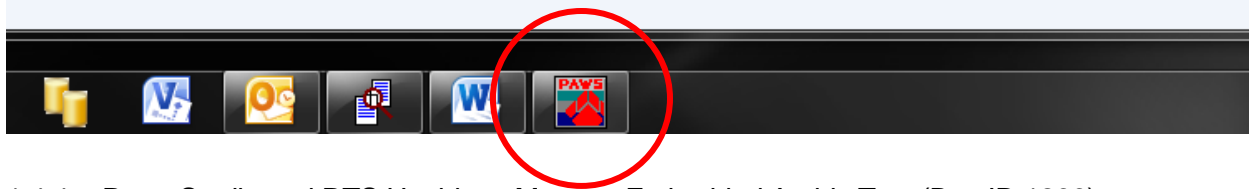
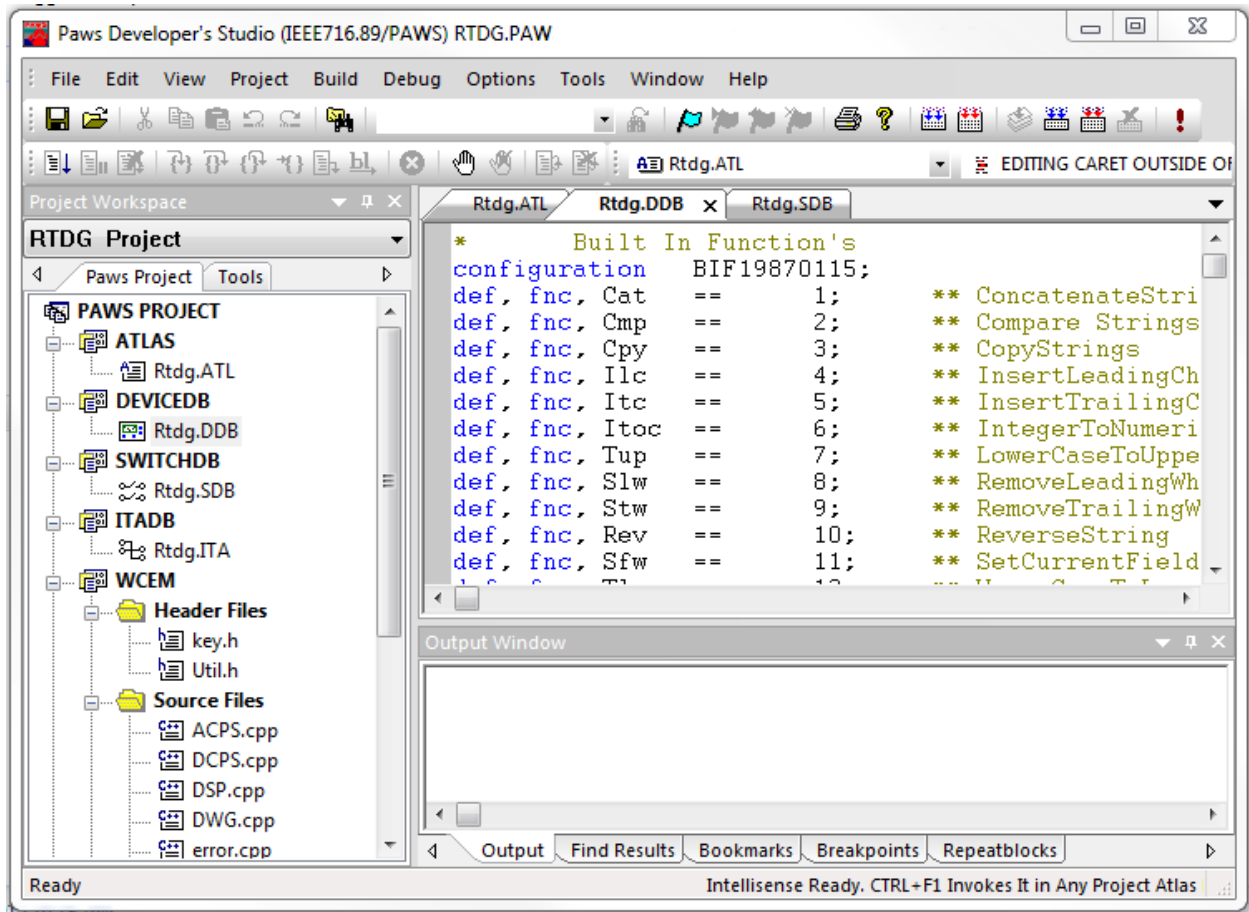
1.4.3 Paws Studio Wrongly Enables Its Child Windows Thumbnails in Windows 7 Taskbar (TASKID 1226)

Our Studio version 1.40.0 reported its child documents through distinctive thumbnails in Windows 7 Taskbar. This is the default implementation of any MFC Multi-Document-Interface application built with Visual Studio 2010 or 2012. The effect is visible in the picture below: Paws Studio opens three child documents, and their representations are all sent to the Windows 7 taskbar:



This behavior is confusing for users who open many child documents, that eventually clog up the taskbar. This behavior is also inconsistent with how Microsoft Visual Studio 2008, 2010, and 2012 act when installed and run on Windows 7 Operating Systems.

This issue was fixed. In the picture below, only one thumbnail is displayed for the whole Paws Studio process, regardless of how many child documents the main frame of Paws Studio opened.



1.4.4 Paws Studio and RTS Unable to Manage Embedded Arabic Text (Bug ID 1266)

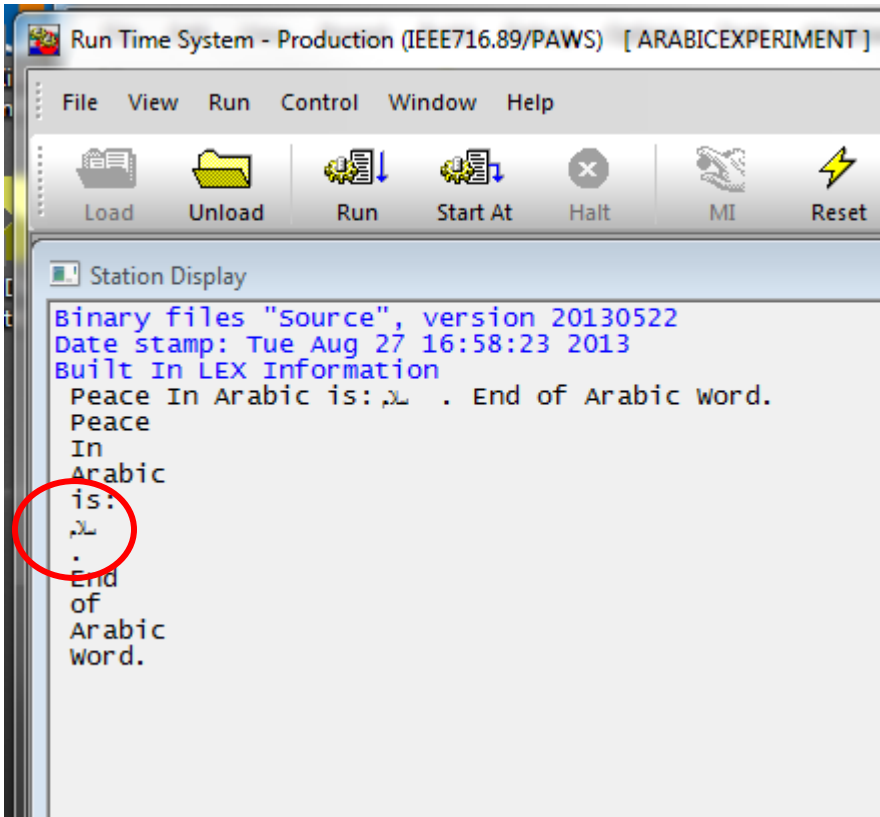
In order to resolve this problem, Paws Studio expects its text files to be encoded with UTF-8, unless a different default Multi Byte Code Page is retrieved from the Operating System, through `_getmbcp()`. The encoding of Paws Studio text files will be the default Multi Byte Code Page if this value is different than zero. A default Multi Byte Code Page may be set up indirectly, when the user adjusts the Region and Language of Control Panel, by changing the “Current language for non-Unicode programs” feature. For example, a Multi Byte Code Page of value 950 gets set up and will be returned by `_getmbcs()`, if the user selects “Chinese (Traditional, Hong Kong S.A.R.)” as System Locale.

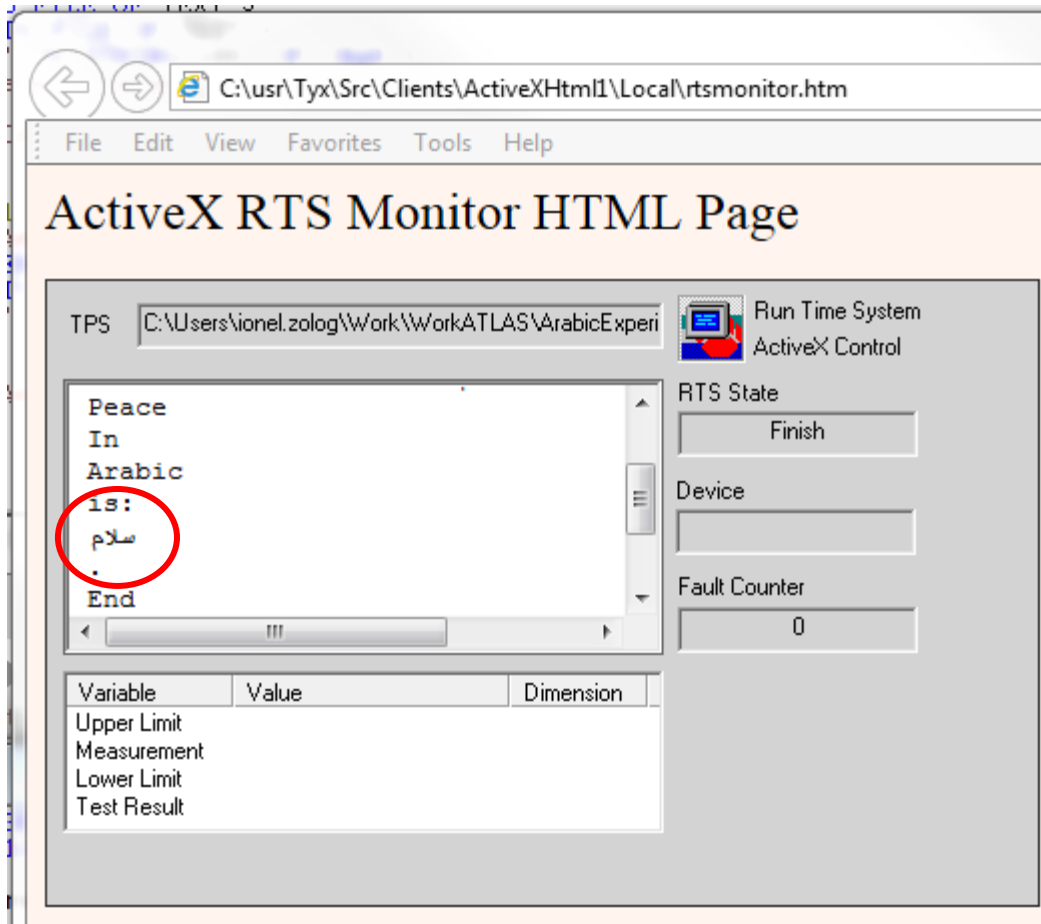
When the OS has not set up a Multi Byte Code Page, Paws Studio expects and encodes its text files with UTF-8. For the previous versions of Paws Studio, in the same conditions, the default encoding was CP 1252. When the atlas code of older projects contains non-English embedded text (as arguments of the OUTPUT statements, or commented information for example), the encoding of these files has to be changed from ANSI CP 1252 to UTF-8 before user’s Paws Project is rebuilt, otherwise the non-English characters will not be displayed properly in Paws Studio editors, RTS Station Display or Ansi Display ActiveX control.

This action does not apply to source files that only contain ASCII English characters. Their binary representation is identical under these encodings.

With this release, all our Paws Studio Software is able to display properly sequences of Arabic text embedded in source files encoded with UTF-8:

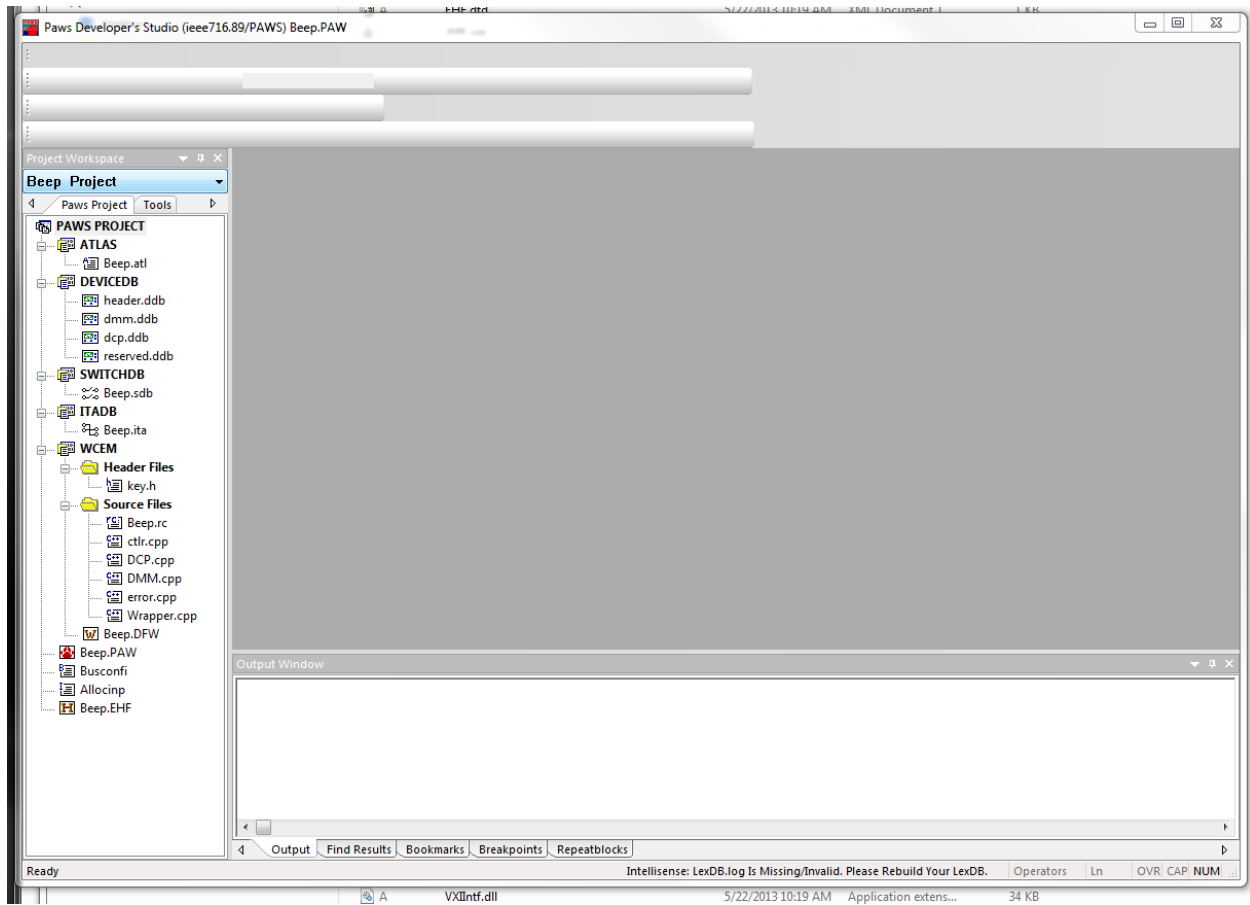
```
Source.atl x
001000 BEGIN, ATLAS PROGRAM 'ARABIC_SAMPLE' $
      20 DECLARE, VARIABLE, 'OUT' IS FILE OF TEXT $
      25 DECLARE, VARIABLE, 'FILE' IS FILE OF TEXT $
      35 DECLARE, VARIABLE, 'STRING' IS STRING(100) OF CHAR $
E090000 OUTPUT, TO 'DISPLAY', C'Peace In Arabic is: سلام . End of Arabic Word.' $
C Write a file in Arabic $
100000 ENABLE, OUTPUT TO NEW C'FILESAMPLE', VIA 'FILE' $
      10 OUTPUT, TO 'FILE', C'Peace In Arabic is: سلام . End of Arabic Word.' $
      15 DISABLE, 'FILE' $
C Read a file with Arabic and English words $
200020 ENABLE, INPUT FROM C'FILESAMPLE', VIA 'FILE' $
      30 WHILE, NOT EOF('FILE'), THEN $
      35     INPUT, FROM 'FILE', INTO 'STRING' $
      40     OUTPUT, TO 'DISPLAY', 'STRING' $
      45 END, WHILE $
      50 DISABLE, 'FILE' $
      55 TERMINATE, ATLAS PROGRAM 'ARABIC_SAMPLE' $
```





1.4.5 Paws Studio Unable to Load a Default Configuration from Registry (Bug ID 1277)

This bug has risen in Studio version 1.40.0, since we have built our software in the new Visual Studio 2012 environment. When Studio is forced to create a new configuration in registry, after a second opening it fails to load its toolbars and menus. Its GUI looks like below.



This issue has been fixed.

2 Run Time System



Version 1.40.1

Release date: August 31, 2013

2.1 Critical Items

2.2 Known Limitations

2.3 Enhancements

2.3.1 TYX.ComNam.Interop.dll Available For COMNAMs Written in C# or VB.NET(TFSID 1254)

This version distributes TYX.ComNam.Interop.dll as a Signed Interop Assembly, in GAC and <usr>\tyx\dotnet. This assembly exposes our standard c:\usr\tyx\com\ComNam.dll to .NET Framework, so our customers can develop COM Non-Atlas-Modules written in C# or VB.NET, easier.

2.3.2 Adjustment of xsl Namespace in Our Dlog_old.xsl (TFSID 1253 – Part1)

A namespace adjustment has been done in our <usr>\tyx\datalog\Dlog_old.xsl. This file may replace our <usr>\tyx\datalog\Dlog.xsl. It translates the XML file that the default RTS Datalogger creates into html that is displayed in IE browser.

This adjustment prepared our Dlog_old.xsl for a correct generation of html for IE8 browsers and newer. It also makes Dlog_old.xsl consistent with our other .xsl files.

2.3.3 Adjustments On Our Dlog.xsl For Datalogger XML View With IE10 (TFSID 1253 – Part2)

This release adjusts XSLT code in c:\usr\tyx\datalog\Dlog.xsl to have the output html of a general datalogger XML document displayed properly on IE10. The XML document must be generated with our default datalogger, whose ProgID is **DataLogger.XmlDlogRecorder**, configured in RTS | Control | Options | RTS Property Page | Data Logger Advanced | Recorder ProgID. If the Data Logger Advanced Tab is not visible, the user has to enable the RTS data logger in advance, through the following commands: RTS | Control | Options | RTS Property Page | Check Data Logger Checkbox | Close All Dialogs With OK.

Views like below have been corrected.

Data Logger

Collapse All Expand All

Tps : July 23,2013:13:39:14:023
Tps : C:\Users\ionel.zolog\Work\WorkATLAS\Rtdg\RTDG.PAW
Recorder : PAWS XML Data Logger Recorder

Tps Start
Time : July 23,2013:13:39:16:406
Stack[Mod,Stm,Ln] : [Rtdg, -, 57]

Tps Input
Time : July 23,2013:13:39:18:234
Stack[Mod,Stm,Ln] : [Rtdg, 100060, 80]
Verb : VER
Noun : ACS
MChar : VOLT
Block Id : 1
Message : 12

Tps Fail
Time : July 23,2013:13:39:16:534
Category : ANALOG
Block Id : 1
Stack[Mod,Stm,Ln] : [Rtdg, 100060, 80]
Verb : VER
Noun : ACS
MChar : VOLT
Dimension (Limit) : V
Dimension : V
LowerLimit : (RTYPE).210000000000000E+02
UpperLimit : (RTYPE).230000000000000E+02
Operation : ULLL
Measurement : (RTYPE).120000000000000E+02
Result : LOW

Tps Fail
Time : July 23,2013:13:39:18:240
Category : ANALOG
Block Id : 1
Stack[Mod,Stm,Ln] : [Rtdg, 100065, 87]
Verb : VER

```

Tps Finish
Time : July 23,2013:13:39:18:854
Stack[Mod,Stm,Ln] : [ Rtdg, 700000, 269 ]

Verb : TRM
Block Id : 7
Faults : 3

Block : Rtdg-100000
Time begin : July 23,2013:13:39:16:408
Time end : July 23,2013:13:39:18:260
Stack[Mod,Stm,Ln] : [ Rtdg, 100000, 57 ]
State : FAILED
Faults : 2

Block : Rtdg-200000
Time begin : July 23,2013:13:39:18:260
Time end : July 23,2013:13:39:18:473
Stack[Mod,Stm,Ln] : [ Rtdg, 200000, 98 ]
State : PASSED
Faults : 0

Block : Rtdg-300000
Time begin : July 23,2013:13:39:18:473
Time end : July 23,2013:13:39:18:537
Stack[Mod,Stm,Ln] : [ Rtdg, 300000, 105 ]
State : PASSED
Faults : 0

Block : Rtdg-400000
Time begin : July 23,2013:13:39:18:537
Time end : July 23,2013:13:39:18:703
Stack[Mod,Stm,Ln] : [ Rtdg, 400000, 147 ]
State : FAILED
Faults : 1

Block : Rtdg-500000
Time begin : July 23,2013:13:39:18:703
Time end : July 23,2013:13:39:18:802
Stack[Mod,Stm,Ln] : [ Rtdg, 500000, 217 ]
State : PASSED
Faults : 0

Block : Rtdg-600000
Time begin : July 23,2013:13:39:18:802
Time end : July 23,2013:13:39:18:852
Stack[Mod,Stm,Ln] : [ Rtdg, 600000, 244 ]
State : PASSED
Faults : 0

Block : Rtdg-700000
Time begin : July 23,2013:13:39:18:852
Time end : July 23,2013:13:39:18:854
Stack[Mod,Stm,Ln] : [ Rtdg, 700000, 269 ]
State : PASSED
Faults : 0

 SUMMARY:
 UUT :

```

2.3.4 RTS Sends Extra Information to Record Oriented File Resource (TFSID 1230)

In CASS context, the RTS sends its Record Oriented File Resource at resource opening time, the following information:

- File Organization of REQUIRE statement: Either Sequential or Relative;
- File Form of REQUIRE statement: Either Formatted or Unformatted;
- File Access of ENABLE statement: Either Direct or Sequential.

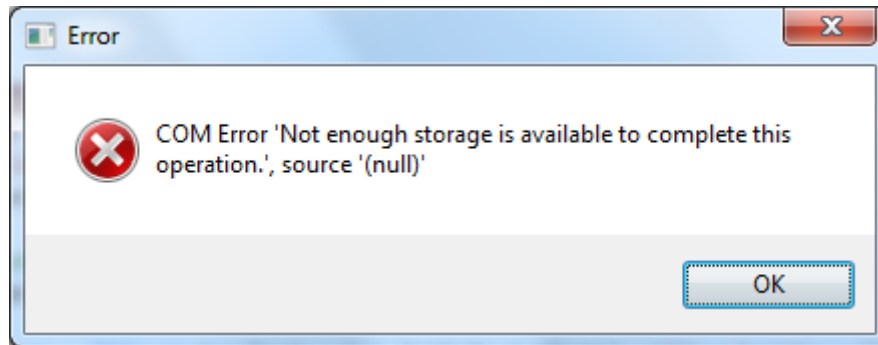
Our standard Record Oriented File Resource contains the code that demonstrates how to retrieve these pieces of information.

When Text is input from Atlas with no format, and the File Form in REQUIRE is Unformatted, the Input method increments the record number upon completion.

2.4 Problem Reports

2.4.1 RTS Error Reporting Enhanced to Identify the Root of “Not Enough Storage” Error (Bug ID 1188)

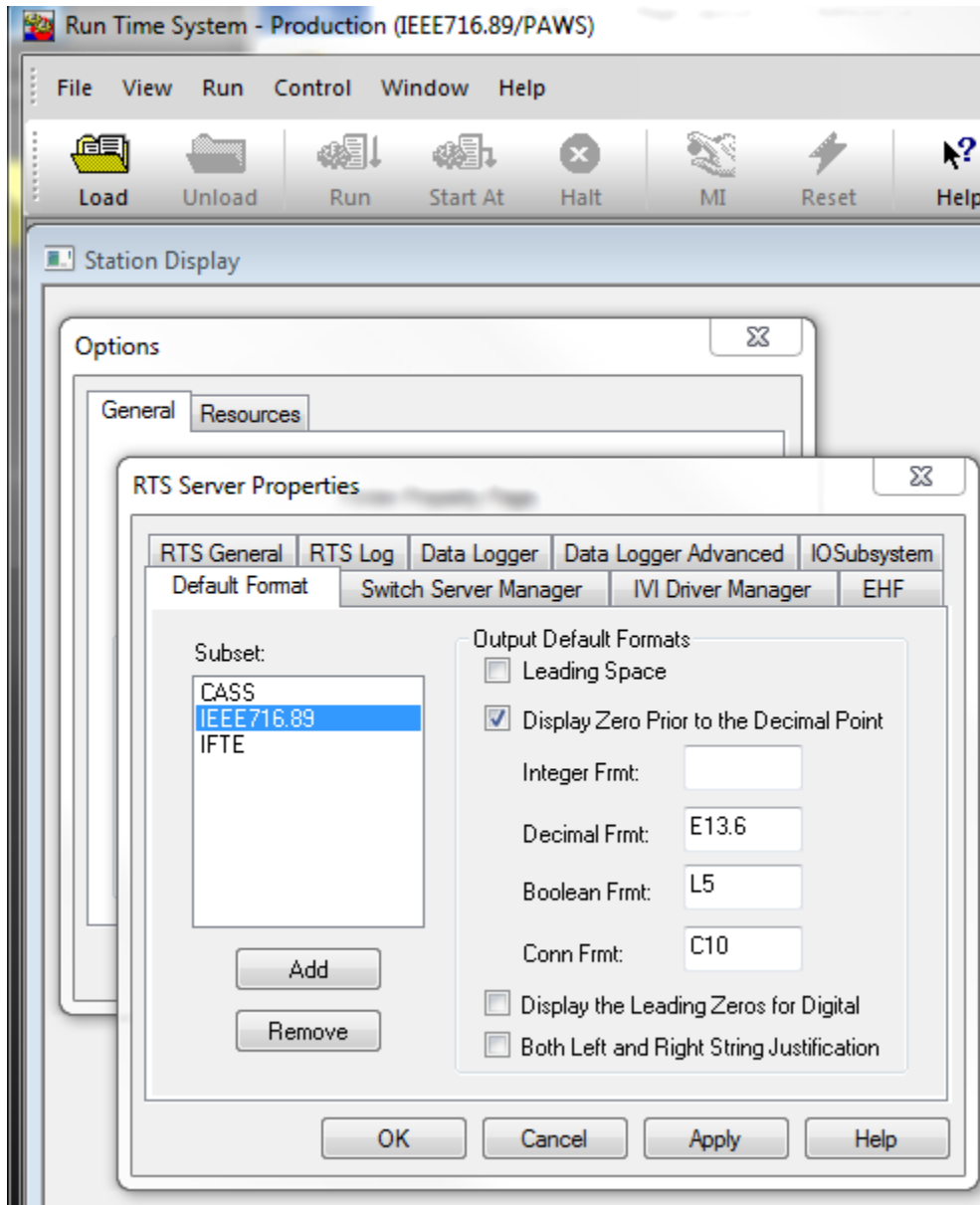
Under unknown circumstances, RTS reports the following error at start up:



The only known solution to this problem is a reset of its configuration. This version of software implements enhanced error messages that we hope will identify the origin of this problem.

2.4.2 RTS Crashed When User Inputs Empty Default Format Strings in (Bug ID 1241)

RTS version 1.30.0 crashed when the user emptied a default format field (like Integer Frmt) in the Default Format Tab:



This version of RTS has this issue fixed.

2.4.3 RTS Created Its LOG File With Deny Share mode (Bug ID 1276)

When RTS was configured to generate a log file through the Control | Options | RTS Property Pages | RTS Log Tab, this file could not be opened outside of Wrts.exe process until the RTS unloaded the project.

By having the RTS open this file in a shared mode with Deny Write option, this file is now accessible in a read-only mode, outside of Wrts.exe process, while the RTS writes to it in TPS execution mode.

3 Paws Compilers All Subsets Except CASS



Version 1.40.1

Release date: August 31, 2013

3.1 Critical Items

3.1.1 ToBeSpecified

ToBeSpecified

3.2 Known Limitations

3.2.1 ToBeSpecified

ToBeSpecified

3.3 Enhancements

3.3.1 ToBeSpecified

ToBeSpecified

3.4 Problem Reports

3.4.1 ToBeSpecified

ToBeSpecified

4 Paws Compilers CASS Subset



Version 1.40.1

Release date: August 31, 2013

4.1 Critical Items

4.1.1 ToBeSpecified

ToBeSpecified

4.2 Known Limitations

4.2.1 ToBeSpecified

ToBeSpecified

4.3 Enhancements

4.3.1 ToBeSpecified

ToBeSpecified

4.4 Problem Reports

4.4.1 ToBeSpecified

ToBeSpecified