TYX CORPORATION

Productivity Enhancement Systems

PAWS Studio
Release Notes

Version 1.39.0
December 23, 2010

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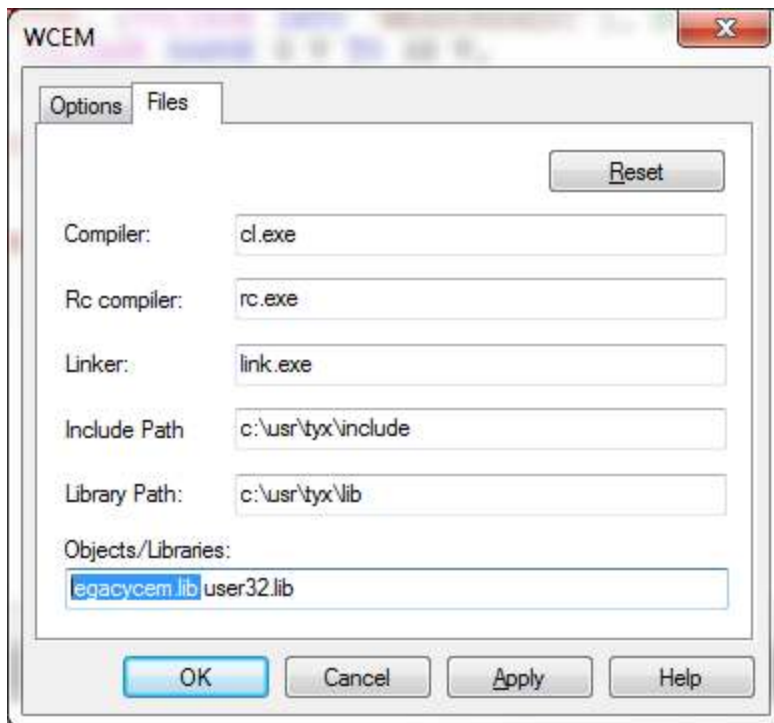
1   Paws Developer's Studio

Version 1.39.0
Release date: December 23, 2010

1.1   Critical Items

1.1.1   CEM.lib, Nam.lib, UBif.lib built to support the multithread version of the C Run-Time Library functions

All these static libraries are located in c:\usr\tyx\lib folder. If building a customer's CEM, classic Nam or User BIF raises unexpected warnings or errors, the legacy static libraries are saved and available in the same place. Their names are LegacyCem.lib, LegacyNam.lib and LegacyUbif.lib. For a CEM module, this has to occur on the Files tab of a CEM module settings property sheet.


1.2   Known Limitations

1.3   Enhancements

1.3.1   Building LexDB tab in the Project Workspace

As an improved productivity measure a new "**Paws Subsets**" tab has been added to the Project Workspace area in PAWS Developer Studio. Using the capability of the friendly PAWS Studio environment, users can now:

- Edit existing PAWS Subset/Station LEX files (to add new - nouns, verbs, modifiers, dimensions etc…)
- Drag/Drop or use "Settings" context option to order existing LEX files for builds.
- Build/Rebuild/Clean and generate fresh LEX files for a given SUBSET/STATION combination.
- Add new SUBSET/STATION combinations and generate LEX files.
- Use an integrated source control solution (Like Visual Source Safe [VSS]) from within the PAWS Studio development environment to maintain history archive of LEX changes.
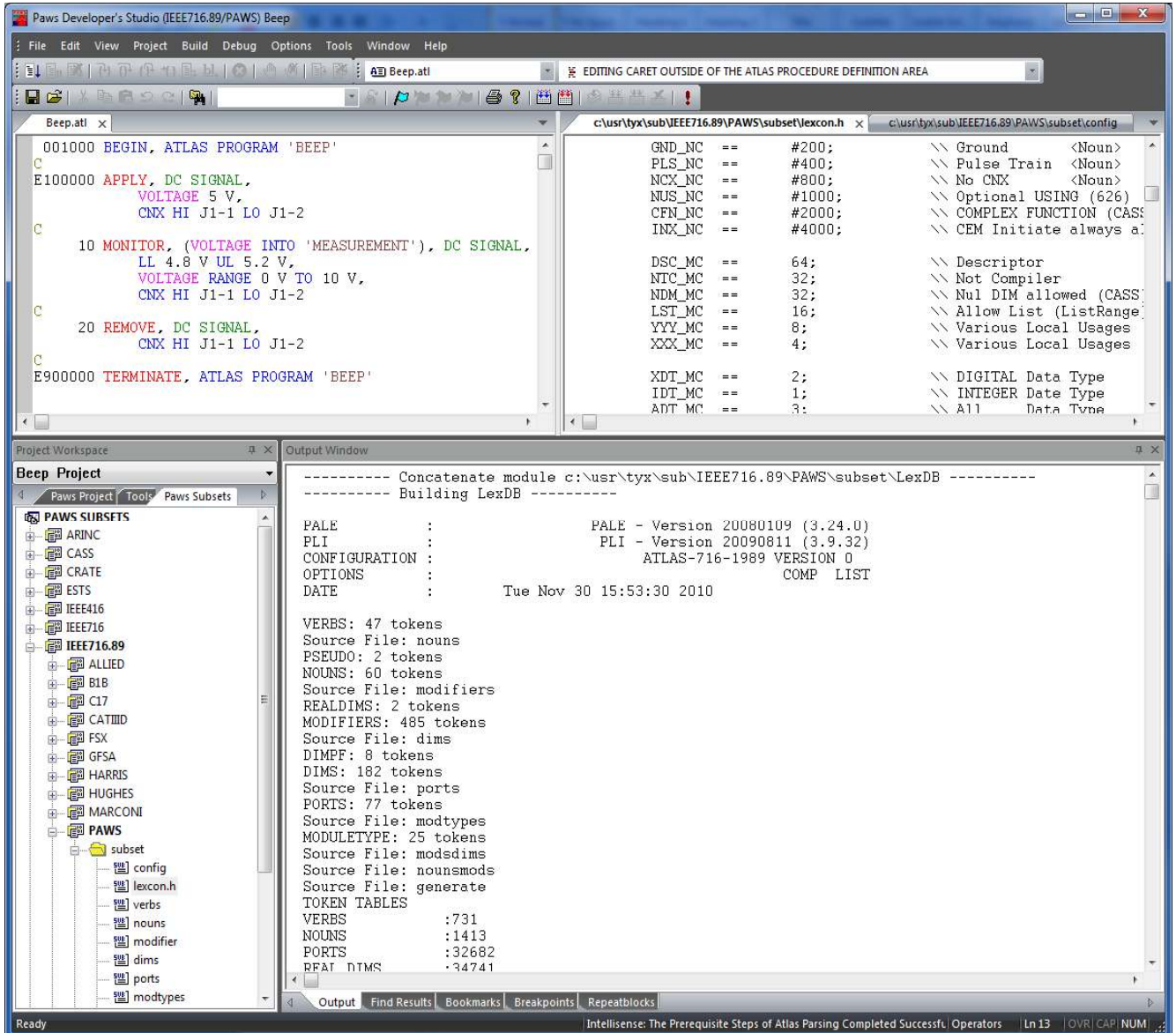
The "**PAWS Subsets**" tab tree will be populated with all the SUBSET/STATION combinations found in the default SUBSET/STATION directory of PAWS Studio installation [namely: <usr>\tyx\sub].

Each node in the "**PAWS Subsets**" tab tree will support its own set of "Context Menu" options.
"Build/Rebuild/Clean Module" performed on a SUBSET node will perform the action for all child STATION modules under it. To "Build/Rebuild/Clean Module" on a specific SUBSET/STATION use the context menu associated with the required STATION.
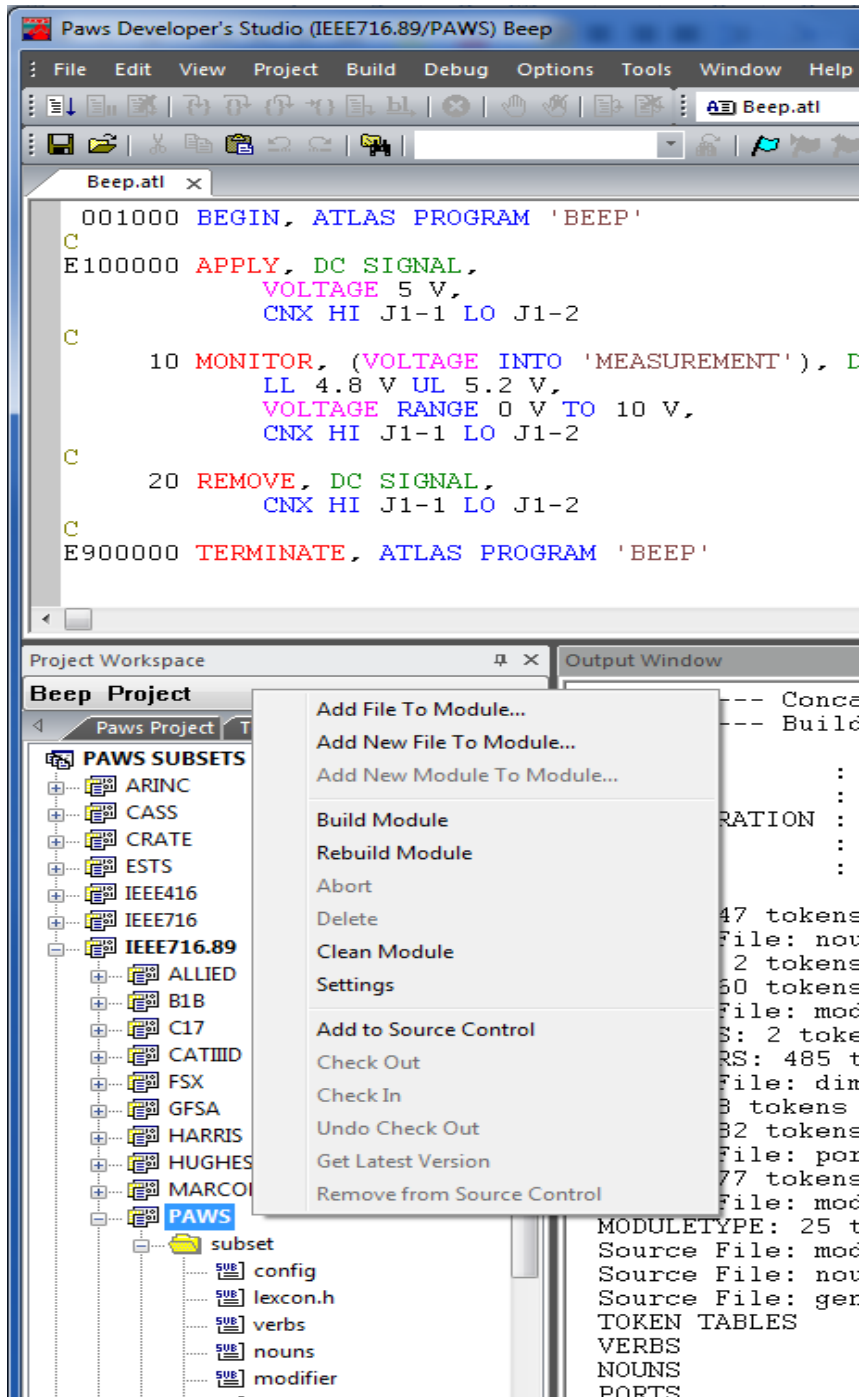
NOTE:

Initially the "Paws Subsets" tab in the Project Workspace area is hidden from view of regular TPS developers. Advanced users who may want to use this feature may enable the "Paws Subsets" tab using the PAWS Studio menu item "Options"→"Studio…" (as shown in figure below)
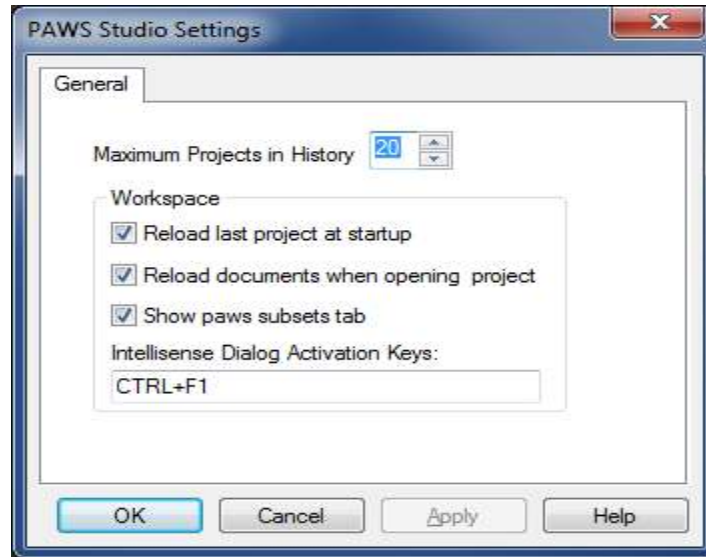
Figures below are property pages that are displayed when the "Settings" context menu for the "Paws" STATION under the IEEE716.89 SUBSET is invoked. All stations can be configured to generate additional details in the log file during a build/rebuild of the LEX files. These additional details are used by the "Intellisense engine" in PAWS Studio (if it is enabled for the SUBSET/STATION). The PAWS Seq tab allows for an alternate way (apart from drag/drop) to order the LEX files for build.
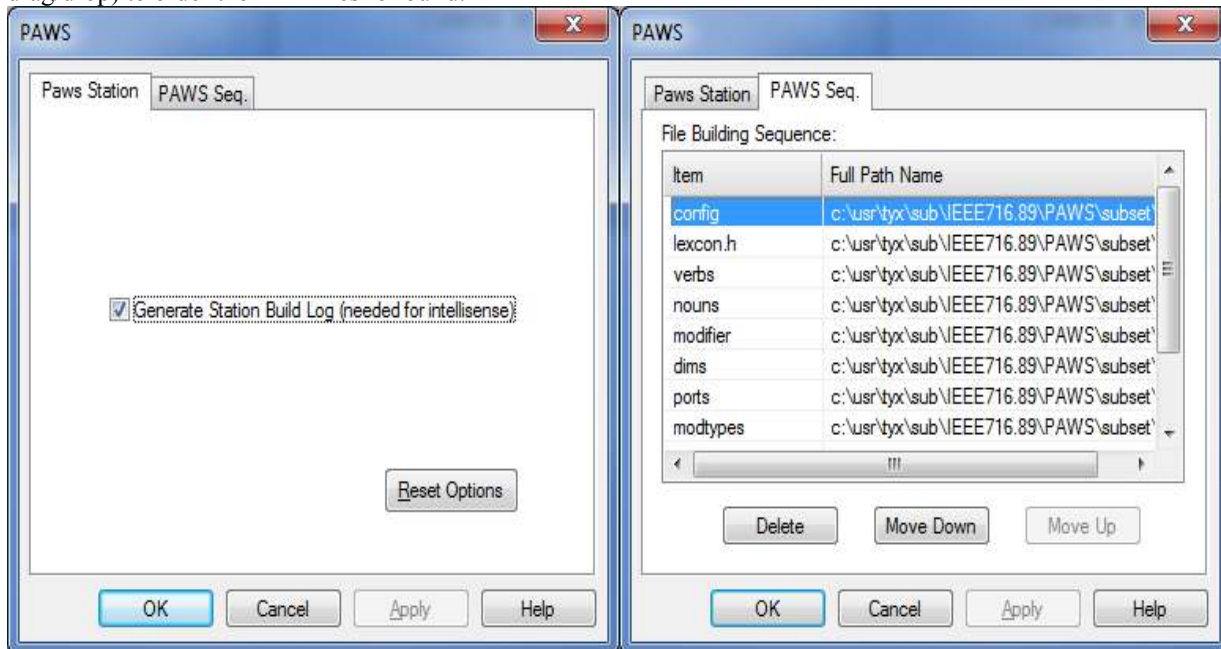
The Debug toolbar buttons "Build Module" and "Rebuild Module" will support dual functionality. If the "Paws Project" tab is the active selected tab – these buttons will build/rebuild the PAWS Project files. If the "Paws Subsets" tab is the active selected tab – these buttons will build/rebuild the active SUBSET/STATION files of the PAWS Project (denoted as BOLD font) in the "Paws Subsets" tree to generate a LEX.
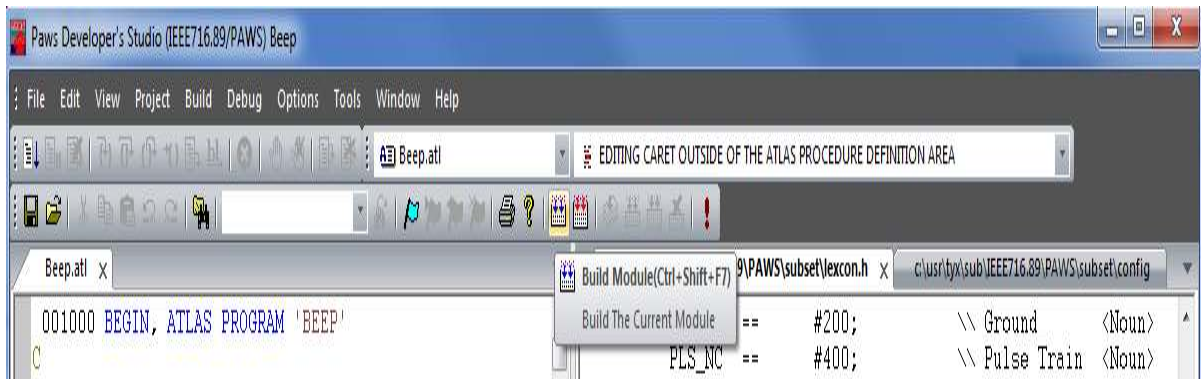
Figure below shows the ARINC\616 connected to a local Visual source safe database (note the highlighted icon showing "Checked Out" files). We encourage users to use this feature to archive their LEX file changes. The process to connect and "Add/Check In/Check Out/Get Latest Version/View Differences" is similar to regular ATLAS project files.
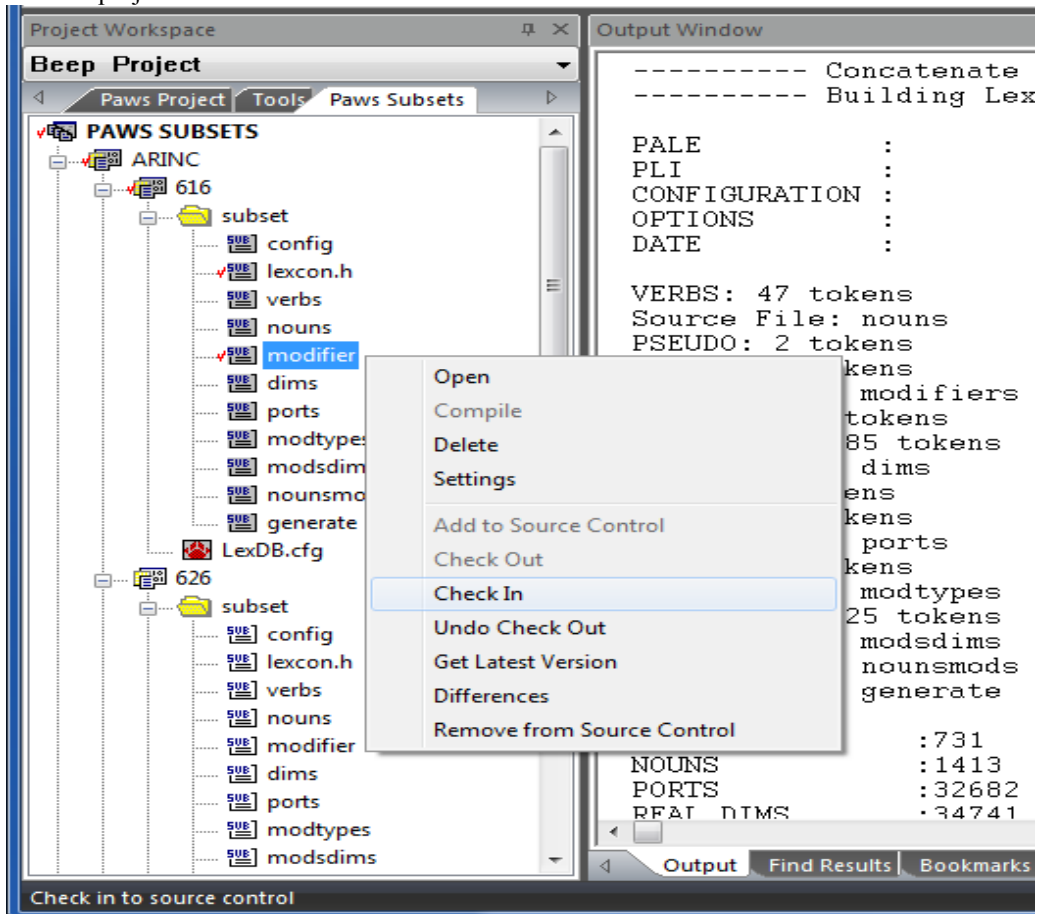
1.3.2 New features have been implemented in the 1641 carrier language and TPL translator into atlas

The following features have been made available in the current c:\usr\tyx\bin\1641CLCEx.exe:

- There is no default IDENTIFY, EVENT '_dig_timeout_ref_' AS (OCCURRENCE), TIME INTERVAL… statement in atlas – this simplifies the minimum device db description;

- There is no default DECLARE, TYPE, '_connection_type_' IS CONNECTION (_gnd_default_... statement in atlas – this simplifies the minimum switch\ita db description;

- The declarations of most NAMs are written in atlas (the INCLUDE NAM statements) if only they are invoked in the code;

- The version of the carrier language translator is specified in the atlas prologue;

- Our carrier language translator implements the comma, pre/post ++ and - - operators, and the *continue* instruction;

- Our carrier language translator accepts round and curly brackets around all physical attribute values;

- Our carrier language translator has the TPL error 012 message enhanced to display a missing entry in a 1641 configuration file as TSF|BSCName+Type; (like: *TPL error 012: The '{STDBSC}InstantaneousResistance TSF model definition or TSF model | BSC 1641 configuration entry cannot be found*);

- Our carrier language translator prefixes the atlas signal ports with *ATLAS-SGN-P-* (instead of …*CNX HI J1*… we have …*CNX ATLAS-SGN-P-HI J1*…)

1.4   Problem Reports

1.4.1   PR 10035: Compatibility issues of the CEM module in Paws Studio with the usage of the modern static libraries

Some C\C++ errors and warnings were noticed when our cem.lib was used to build in debug mode CEM libraries with the C\C++ compilers provided by the Microsoft Visual Studio 6.0. In order to make the building of these DLLs possible with no warnings or errors, TYX decided to make available in c:\usr\tyx\lib the legacy static libraries for building CEMs, classic NAMs or UserBIFs DLLs.

2   Run Time System

Version 1.38.3
Release date: December 23, 2010

2.1   Critical Items

2.2   Known Limitations

2.3   Enhancements

2.4   Problem Reports