

Release Notes
ATLAS Compiler
Version 03.23.13 (20051216)
16 December 2005

1 Overview

The following describes an overview of changes included within version 20051202 (3.23.12) of the following ATLAS compiler(s)

ESTS / PAWS
IFTE / PAWS

and version 20051216 (3.23.13) of the following ATLAS support tools:

ATLAS Compiler Linker

1.1 Enhancements

1.2 Problem Reports

05-999, 05-998

2.0 Detailed Description

2.1 Enhancements

2.2 Problem Reports

2.2.1 05-999 '__STATIONINIT' (ESTS / PAWS)

Previous releases of the ESTS / PAWS Atlas compiler and Atlas linker implemented the '__STATIONINIT' invocation with the expectation that the procedure would always be defined as a **GLOBAL** procedure. If present then activation of the WRTS Reset control, when executing any part of a TPS would invoke that single **GLOBAL** procedure.

This release of the ESTS / PAWS Atlas compiler and Atlas linker allows each *module* to have a '__STATIONINIT' procedure, either local, **GLOBAL** or **EXTERNAL** or have none.

When a *module* is entered, if there is a '__STATIONINIT' procedure defined then that procedure will be *attached* to the WRTS Reset control. If the Reset control is activated while executing that *module* then the '__STATIONINIT' that is defined in that *module* will be invoked.

When a *module* is entered, that does not include a '__STATIONINIT' definition then any procedure that was *attached* to the Reset control is

detached. If the Reset control is activated while executing that *module* then no procedure will be invoked.

When control returns from a *module* then the state of the Reset control, regarding *attach* or *detach* of a '__STATIONINIT' procedure, will be restored to that which existed prior to passing control to the invoked *module*.

2.2.2 05-998 Carrier Noise Test Set - SPUR-LIST, STATUS Modifiers (ESTS / PAWS)

The modifier fields SPUR-LIST and STATUS that appear in a MEASURE or READ statement using the Carrier Noise Test Set do not have the semantics of a modifier value but that of an additional Measured Characteristic, i.e. the associated values are not sent to the device driver as a part of the 'Setup' action but the driver will receive a 'Fetch' action request for each of the modifiers.

Previous releases of the subject compiler did not implement those semantics but processed them as any other modifier.

This release of the subject compiler processes them as additional Measured Characteristics by issuing a 'Fetch' action request. In addition 'Setup' action values are provided which represent the number of values that will be requested by the subsequent 'Fetch' actions.

The implementation has been made in a general purpose manner to allow any other modifiers, with the additional Measured Characteristic property, to be controlled from the Lexical database definition. Those modifiers should be flagged with the property FTH_MC as shown in the following example.

File: nounsmod

```
begin NOUNS AC SIGNAL;
  MODIFIERS :
  AM-FREQ;
  AM-MOD-SOURCE;
  ...
  (ADT_MC ++ LST_MC ++ FTH_MC) STATUS;
  ...
  (IDT_MC ++LST_MC ++ FTH_MC) SPUR-LIST;
  ...
end_unit;
```

3.0 Notes

3.1 ATLAS Compiler Linker

The ATLAS Compiler Linker was released as a result of the '__STATIONINIT' implementation changes. Those changes were the

removal of the initial implementation of the '__STATIONINIT' made in version 20050828 (3.23.7) where the expectation was that there would only be a single **GLOBAL** procedure.