

**Release Notes
ATLAS Compiler
Version 3.23.10 (20051103)
4 November 2005**

1 Overview

The following describes an overview of changes included within version 20051103 (3.23.10) of the following ATLAS compiler(s)

CRATE / CAT + RADCOM
ESTS / PAWS
IFTE / PAWS

and version 20051103 (3.23.10) of the following ATLAS support tools:

ATLAS Compiler Linker

1.1 Enhancements

1.1.1 Increase Maximum List Length (ESTS / PAWS)

1.2 Problem Reports

05-031, 05-999, 05-998, 05-997, 05-996, 05-995, 05-994

2.0 Detailed Description

2.1 Enhancements

2.1.1 Increase Maximum List Length (ESTS / PAWS)

The maximum *list* length for all IEEE716 / 1985 based compilers was limited to 65,535 since the symbol table entry for variables maintained the *list* length as an unsigned short (16bit) integer. In order to support ESTS TPS's it was necessary to allow a maximum list length of 65,536. This release of the ESTS / PAWS compiler allows that maximum list length. The changes were implemented in such a way to ensure backwards compatibility and to allow further growth for other IEEE716 / 1985 subsets.

2.2 Problem Reports

2.2.1 05-031 Infinite *Fetch* Loop in RESP-MATCH (CRATE / CAT + RADCOM)

Previous versions of the subject compiler generated AIL code that

consisted of an infinite loop if a *match* was not detected in a DO, DIGITAL TEST, RESP-MATCH statement.

This release of the subject compiler corrects the problem.

2.2.2 05-999 SMUX LO Side Connections (ESTS / PAWS)

Previous versions of the subject compilers in a CLOSE, 'SMUX' statement generated two Connect *actions*, one for the COM-HI / CHANNEL-HI pinset and a second for the COM-LO / CHANNEL-LO pinset when present. At customer request this version of the subject compiler does not generate a Connect *action* for the optional COM-LO / CHANNEL-LO pinset.

2.2.3 05-998 Connection Variable containing a <PinRange> (ESTS / PAWS)

Previous versions of the subject compiler and WRTS could not find some or all of the paths for all elements of a <PinRange> when the <PinRange> was the value of a connection variable.

This version of the subject compiler and version 1.33.1 of the WRTS corrects this problem.

2.2.4 05-997 Length FILL Statements (ESTS / PAWS)

Previous versions of the subject compiler when encountering that used greater-than 32767 lines would cause any any subsequent entry point (E-Flag) to be considered the main entry for the program.

This version of the subject compiler corrects this problem

2.2.5 05-996 '__STATIONINIT' Procedure (ESTS / PAWS)

Previous versions of the ATLAS Linker attached the '__STATIONINIT' procedure to the UsrCmd-1 control, Trap - 33.

To better emulate the legacy system this version of the ATLAS Linker attaches the '__STATIONINIT' procedure to Trap - 35. In addition version 1.33.1 of the WRTS generates Trap - 35 when the ResetStation control is activated.

2.2.6 05-995 OUTPUT, (GRAPHICS), ... Ordinates (ESTS / PAWS)

Previous versions of the subject compiler issued WARNING messages if a specified an X ordinate was out of the bounds 0 - 639 or a Y ordinate was out of the bounds 0 - 479.

This version of the subject uses 0 - 640 as legitimate X ordinate bounds and 0 - 480 as legitimate Y ordinate bounds.

2.2.7 05-994 FIELD / LINE -START-LEVEL (ESTS / PAWS Lexical Database)

Previous versions of the subject component treated the modifiers FIELD-START-LEVEL and LINE-START-LEVEL as default type DECIMAL.

This version of the subject component process both of those modifiers as type INTEGER, in accordance with the legacy ATLAS Language specification.