ACATS Modification List for ACATS 4.1

Version 4.1E
August 9, 2017

What is this?

This is the ACATS modification list for ACATS 4.1. This document includes test corrections, test removals, and new tests for ACATS 4.1. ACATS 4.1 is the current test suite for Ada, covering the third edition of Ada, ISO/IEC 8652:2012 (usually known as "Ada 2012").

ACATS Modification List version 3.1Q for ACATS 3.1 is the current list for that test suite. ACATS 3.1 should be used for testing implementations that support Amendment 1 (ISO/IEC 8652:1995/AMD 1:2007, often known as "Ada 2005"), and will continue to be maintained as necessary for the foreseeable future.

ACATS Modification List version 2.6F for ACATS 2.6 is the current list for that test suite. ACATS 2.6 should be used for testing implementations of the second edition of Ada, ISO/IEC 8652:1995 (usually known as "Ada 95"); it also will continue to be maintained as necessary for the foreseeable future.

Changes from the last list:

A number of tests changed status on July 1st; see the lists for the details.

Test CDE0002 was modified to use Storage_Size, an aspect that does not have to be a static expression. If the aspect requires a static expression, the second sentence of 13.14(7.2/3) necessarily applies, so X is illegal as it is frozen before it is fully defined.

Test CC3601C was modified to move the declaration of "=" for type Rec directly after the type. Otherwise, it violates 4.5.2(9.8/4) by being declared after the type is frozen.

New tests posted between July 1, 2017 and September 30, 2017 will become required for conformity assessments on April 1, 2018. New tests posted between April 1, 2017 and June 30, 2017 will become required for conformity assessments on January 1, 2018. New tests posted between January 1, 2017 and March 31, 2017 will become required for conformity assessments on October 1, 2017. New tests posted before January 1, 2017 are required for conformity assessments. The effective dates of tests are marked in the lists.

Questions about this document? Contact the ACAA Technical Agent at agent@ada-auth.org.

ACATS 4.1 includes optional Test Grading tools

ACATS 4.1 introduces new test grading tools.

When the ACATS was designed (as the ACVC in the early 1980s), the intention always was that running it would give a simple and clear Pass or Fail result. However, grading of tests (particularly of B and L Tests) is somewhat subjective and very time-consuming. (Test grading typically involved poring over compiler listings of the entire ACATS with a large highlighter.) The subjectivity was acceptable in the days of common formal testing, as the formal testers would enforce a common grading standard (even if no one could describe what that was), but in an age of self-testing, it reduces the value of the ACATS.

As such, we're introducing a long-overdue set of automated grading tools. These tools are intended to:
- Greatly reduce the effort to grade an ACATS test run (and, hopefully to reduce the cost of formal testing to make it a more practical option);
- Ensure that all users of the ACATS grade tests in the same way, thus making it more valid to compare ACATS results between different implementations and different testers;
- Give implementers certainty as to whether a particular test result is passing (whether the location of an error is "close enough" to the canonical position);

- Be able to detect process errors (especially errors of omission) – that is, tests improperly run (for instance, files compiled in the wrong order where the ACATS requires an order), or not run at all (if one is checking off lines in a listing, it's hard to notice that some test or portion of a test is missing).

The tools also will optionally give feedback to implementers about quality of error message positioning and of error cascades (does one error generate multiple messages?). (Since "goodness of an implementation" is not something that the ACATS tests for, this is not an official goal for the tools.)

This is an ambitious set of goals. It's unlikely that they'll be completely met by the initial versions of the tools. As such, their use will be completely optional (but encouraged!) for ACATS 4.1. The tools will be updated periodically by the normal process for updating the ACATS – an ACATS Modification List like this one.

Details on the operation of the tools can be found in the ACATS 4.1 documentation (that documentation can be found at http://www.ada-auth.org/acats-files/4.1/docs/UG-6.HTM). As always, if you have questions, contact the ACAA Technical Agent at agent@ada-auth.org.

Notice:

The ACAA has created and maintains the Ada Conformity Assessment Test Suite for the purpose of conformity assessments conducted in accordance with the International Standard ISO/IEC 18009 - Ada: Conformity assessment of a language processor. This test suite should not be used to make claims of conformance unless used in accordance with ISO/IEC 18009 and any applicable ACAA procedures.

List explanation:

Test numbers given are for the basic test. Categories are "Withdrawn" (the test should not be processed for Ada conformity assessments); "Allowed Modification" (either the original test or the modified one should be processed for Ada conformity assessments); "Modified" (the modified test must be processed for Ada conformity assessments); "Pending New" (the test does not need to be processed for Ada conformity assessments, but will be added in the future); "New" (the test is processed for Ada conformity assessments).

ACATS version labels are provided with all new and modified tests. Use this label to retrieve the test from the ACATS VCS. See "How to get new and modified tests".

In citations, line numbers are given relative to the start of a test file in the format of '@<line#,line#,...>'; if a test program comprises more than one file, then the particular file will be indicated by "fn", where "n" is the test-program name's file-designator numeral. E.g., "B38103E : @f1-31, ... " denotes test file b38103e1.ada. In cases where there are two or more rationales for different errors in a test program, these different rationales with their respective line citations are listed on separate lines. References to the Ada standards are given in the format:

<section|chapter>.<clause>[.<subclause>]:<paragraph>

These references are to the consolidated Ada standard as available at http://www.ada-auth.org/standards/rm12_w_tc1/html/RM-TOC.html.

Main list:

===== Core Language =====

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Name      Category  Version label  (effective date; old version label)
      Short description.
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C350001 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01
        Check that the object form of the Image attribute is implemented.

C352001 [Modified] VCS Label: A4_1D
        Corrected Failed message @267 to reflect intended result.

B354002 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01
        Test basic requirements for the Mod attribute.

C354004 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01
        Test basic operation of the Mod attribute.

B35A001 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01
        Check Legality Rules are enforced when Small is specified by an
        aspect specification.

C35A001 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01
        Check that Small can be specified by an aspect specification.

B38003D [Modified] VCS Label: A4_1A
        Corrected error tags @70,76,82,88 so "optional" and "error" are
        on the same line, as required by the test standards.

C3A0030 [New] VCS Label: A4_1A
        Check that an access discriminant is only null excluding if it
        includes a null exclusion.

B3A1001 [Modified] VCS Label: A4_1A
        Split Pack6 so possible error sets don't intersect; fixed
        overlong lines.

B3A1002 [Modified] VCS Label: A4_1A
        Split Pack6 so possible error sets don't intersect; fixed
        overlong lines.

C452002 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01
        Check that overloading resolution of Ada 2012 membership
        operations works as intended.

C453001 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01
        Check that modular adding operators wrap around rather than
        raising Constraint_Error.

B455002 [Modified] VCS Label: A4_1A
        Corrected casing of error tags and fixed overlong lines.

C460014 [Pending New] New VCS Label: A4_1C
                    Required after 2017-10-01
        Check that Constraint_Error is raised appropriately when
        converting access-to-classwide to another access type.

C460015 [Pending New] New VCS Label: A4_1C
         Required after 2017-10-01
     Check that Constraint_Error is raised appropriately when
     converting access-to-limited-classwide to another access type.

B470001 [Pending New] New VCS Label: A4_1D
         Required after 2017-10-01
     Check that qualified expressions are a constant view of the
     expression, even if the expression is a variable object.

C470001 [Pending New] New VCS Label: A4_1D
         Required after 2017-10-01
     Check that qualified expressions are a name, and thus can be used
     as a prefix and other places a name is required.

C480001 [New] VCS Label: A4_1D
     [VCS Label A4_1A] Check that an initialized allocator for a
     class-wide type does an accessibility check on the tag of the
     initializing object.
     [VCS Label A4_1D] Changed mode to "in" (instead of "in out") @103
     & 144 as those parameters are used in functions, making that an
     Ada 2012 feature, and this is an Ada 2005 test.

C52101A [Modified] VCS Label: A4_1A
     Corrected comment @49 not to have the form of an error tag.

B611001 [New] VCS Label: A4_1A
     Check that Pre and Post are only allowed on
     subprograms and entries (and not on subprogram instances).

B611002 [New] VCS Label: A4_1C
     [VCS Label A4_1A] Check that Pre and Post are not allowed on
     subprograms acting as completions.
     [VCS Label A4_1C] Corrected several error location codes.

B611003 [New] VCS Label: A4_1A
     Check that Pre'Class and Post'Class are only allowed on primitive
     subprograms of tagged types. (Normal tagged types and interfaces.)

B611004 [New] VCS Label: A4_1A
     Check that Pre'Class and Post'Class are not
     allowed on subprograms acting as completions.

B611005 [New] VCS Label: A4_1A
     Check that Pre and Post are not allowed on
     abstract subprograms and null procedures.

B611006 [New] VCS Label: A4_1C
     [VCS Label A4_1A] Check that the restrictions on Pre'Class and
     Post'Class expressions added by AI12-0113-1 are enforced.
     [VCS Label A4_1C] Clarified error @208; changed error @233 & @247
     to OK (as the inherited Proc4 routine is abstract and thus is not
     subject to the new rule).

B611007 [New] VCS Label: A4_1A
     Check that Pre'Class and Post'Class are not allowed on entries
     and protected subprograms of untagged task and protected types.

B611008 [New] VCS Label: A4_1A
      Check various rules about the use of the Result attribute.

B611009 [New] VCS Label: A4_1A
      Check that F'Result is not allowed in the body of F.

B611010 [New] VCS Label: A4_1A
      Check that the Old attribute is not allowed in a subprogram or
      entry body, or in an accept statement.

B611011 [New] VCS Label: A4_1A
      Check the Old attribute cannot be used within a precondition
      expression nor in a generic specification outside of a
      postcondition expression.

B611012 [New] VCS Label: A4_1A
      Check that the prefix of an Old attribute cannot contain the
      Result attribute, another Old attribute, nor the index of a
      quantified expression.

B611013 [New] VCS Label: A4_1A
      For a discrete X, check that X'Old has the nominal subtype of X.

B611014 [Pending New] New VCS Label: A4_1C
                  Required after 2017-10-01
      [VCS Label A4_1B] If an Old attribute reference occurs in at a
      place where it is potentially unevaluated, check that the prefix
      must statically denote an object.
      [VCS Label A4_1C] Corrected error location codes @240 and @252.

B611015 [New] VCS Label: A4_1B
      Check that the prefix of an Old attribute cannot have a limited
      type.

B611016 [New] VCS Label: A4_1B
      Check that tagged task and tagged protected types do not allow
      Pre'Class and Post'Class, nor are they allowed on operations of
      those types.

B611017 [Pending New] New VCS Label: A4_1C
                  Required after 2017-10-01
      [VCS Label A4_1B] Check that Pre'Class cannot be specified for
      an overriding of a subprogram that does not specify Pre'Class.
      [VCS Label A4_1C] Declaration of New_Proc @358 is not overriding
      and thus not subject to the rule. The declaration of Shine @149
      never overrides primitives of the actual type by 12.3(18), thus
      this rule does not apply to instances of Gen2. Added an example
      using a generic derived type.

B611018 [Pending New] New VCS Label: A4_1C
                  Required after 2017-10-01
      [VCS Label A4_1B] Check 6.1.1(10-16/3).
      [VCS Label A4_1C] Type T08 @230 and @241 needs to be declared
      abstract.

B611019 [Pending New] New VCS Label: A4_1C
                  Required after 2017-10-01

[VCS Label A4_1B] Check 6.1.1(17/3).
        [VCS Label A4_1C] The declaration of Get_Count @112
        never overrides primitives of the actual type by 12.3(18), thus
        this rule does not apply to instances of Gen2. Added examples
        using generic derived types.

C611A01 [New] VCS Label: A4_1A
        Check that preconditions and postconditions where both specific
        and class-wide contracts apply are checked properly.

C611A02 [New] VCS Label: A4_1C
        [VCS Label A4_1A] Check that the correct expressions are evaluated
        for specific preconditions and postconditions, and that they are
        evaluated at the correct point.
        [VCS Label A4_1C] The main subprogram name was corrected to follow
        the rules of the ACATS User's Guide, clause 4.3.3.

C611A03 [New] VCS Label: A4_1C
        [VCS Label A4_1A] Check that the correct expressions are evaluated
        for class-wide preconditions and postconditions, and that they are
        evaluated at the correct point.
        [VCS Label A4_1C] The main subprogram name was corrected to follow
        the rules of the ACATS User's Guide, clause 4.3.3.

C611A04 [Pending New] New VCS Label: A4_1D
                     Required after 2017-10-01
        [VCS Label A4_1C] Check that the correct expressions are evaluated
        for class-wide preconditions and postconditions of an interface
        type, and that they are evaluated at the correct point.
        [VCS Label A4_1D] Fixed too long lines.

C611B01 [New] VCS Label: A4_1C
        [VCS Label A4_1A] Check that X'Old has the tag of X and not the
        tag of the nominal subtype of X (for Post).
        [VCS Label A4_1C] The main subprogram name was corrected to follow
        the rules of the ACATS User's Guide, clause 4.3.3.

C611B02 [New] VCS Label: A4_1C
        [VCS Label A4_1A] Check that X'Old has the tag of X and not the
        tag of the nominal subtype of X (for Post'Class).
        [VCS Label A4_1C] The main subprogram name was corrected to follow
        the rules of the ACATS User's Guide, clause 4.3.3.

C611B03 [Pending New] New VCS Label: A4_1D
                     Required after 2017-10-01
        [VCS Label A4_1C] Check that X'Old has the tag of X and not the
        tag of the nominal subtype of X (for Post'Class of an interface
        type).
        [VCS Label A4_1D] Fixed too long lines.

B62001C [Modified] VCS Label: A4_1A
        Changed error @35 to be optional, as the syntax error @33 is
        required (and the comment that only one error need be detected is
        bogus).

B62001D [Modified] VCS Label: A4_1A
        Changed error @41 to be optional, as the syntax error @33 is
        required (and the comment that only one error need be detected is

bogus).

B65005A [Modified] VCS Label: A4_1D
        Added additional error locations to directly support common error
        reporting strategies.

B65005B [Modified] VCS Label: A4_1D
        Added additional error locations to directly support common error
        reporting strategies.

C650B04 [New] VCS Label: A4_1A
        Check that the result of a function that returns a class-wide
        tagged type does an accessibility check on the tag of the result
        object when the result expression is class-wide.

B651001 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01
        Check that a return statement cannot apply to a nonreturning
        procedure, and that a renames-as-body of a nonreturning procedure
        has to be a nonreturning procedure (pragma No_Return version).

C651001 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01
        Check that a nonreturning procedure can raise an exception and
        raises Program_Error otherwise (pragma No_Return version).

B651002 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01
        Check that a return statement cannot apply to a nonreturning
        procedure, and that a renames-as-body of a nonreturning procedure
        has to be a nonreturning procedure (aspect No_Return version).

C651002 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01
        Check that a nonreturning procedure can raise an exception and
        raises Program_Error otherwise (aspect No_Return version).

B651003 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01
        Check that an aspect No_Return can only be given on a procedure or
        generic procedure, that the expression has to be nonstatic, and
        that the aspect is not given on an instance or null procedure.

B730006 [Modified] VCS Label: A4_1C
        Corrected format of error tags; added location indicators.

B730011 [Pending New] New VCS Label: A4_1C
                    Required after 2017-10-01
        Test various rules about completions of private types and
        extensions; replaces test B74001A.

B730012 [Pending New] New VCS Label: A4_1C
                    Required after 2017-10-01
        Test various rules about completions of private types and
        extensions in generic units; replaces test B74001B.

B730013 [Pending New] New VCS Label: A4_1D
                    Required after 2017-10-01

Test operations available for a private type; replaces test
        B74203E.

B73001A [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error
        reporting strategies.

B73001B [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error
        reporting strategies.

B73001C [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error
        reporting strategies.

B73001D [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error
        reporting strategies.

B73001E [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error
        reporting strategies.

B73001F [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error
        reporting strategies.

B73001G [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error
        reporting strategies.

B73001H [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error
        reporting strategies.

B740003 [Modified] VCS Label: A4_1A
        Modified criteria @75 so that it doesn't look like an error tag to
        the grading tools; also fixed an overlong line.

B74001A [Withdrawn] VCS Label: A4_1C
        Replaced by B730011.

B74001B [Withdrawn] VCS Label: A4_1C
        Replaced by B730012.

B74203E [Withdrawn] VCS Label: A4_1D
        Replaced by B730013.

B750A07 [New] VCS Label: A4_1A
        Check that only legal expressions are allowed
        in the return expression of an expression function that returns a
        limited type.

B83F02C [Modified] VCS Label: A4_1A
        Updated many optional error markers to match ACATS standards.

B91003A [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error

reporting strategies.

B91003B [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error
        reporting strategies.

B91003C [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error
        reporting strategies.

B91003D [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error
        reporting strategies.

B940003 [Modified] VCS Label: A4_1C
        Added additional error locations to directly support common error
        reporting strategies.

B940004 [Modified] VCS Label: A4_1C
        Split into 8 files; added location indicators.

B95007B [Modified] VCS Label: A4_1A
        Fixed error markers @62,66,70 to match ACATS standards.

BA21005 [Pending New] New VCS Label: A4_1D
                        Required after 2017-10-01
        Test that Pure and Preelaborate aspects cannot be specified late,
        with a nonstatic expression, or an expression of a type other than
        Boolean.

BB42001 [New] VCS Label: A4_1C
        [VCS Label A4_1A] Check that the arguments of a pragma Assert
        have to have the correct types.
        [VCS Label A4_1C] Corrected two incorrect error location codes.

CB42001 [New] VCS Label: A4_1A
        Check the usual operation of pragma Assert, including the optional
        message.

BB42002 [New] New VCS Label: A4_1A
        Check that the arguments of a pragma Assert cannot be reordered
        even if named notation is used.

CB42002 [New] New VCS Label: A4_1A
        Check that if the assertion policy is Ignore, none of the
        expressions of a pragma Assert are evaluated and no exception is
        raised by the pragma.

BB42003 [New] VCS Label: A4_1A
        Check that a pragma Assertion_Policy is illegal
        if the policy is not recognized.

CB42003 [New] VCS Label: A4_1A
        Check that procedure Ada.Assertions.Assert evaluates its arguments
        and raises Assertion_Error regardless of the assertion policy.

CC3601C [Allowed Modification] New VCS Label: A4_1E Org VCS Label: A4_1
                        Required after 2018-01-01

Moved "=" for type Rec in order that it not violate 4.5.2(9.8/4).

CD1009A [Withdrawn] VCS Label: A4_1D
    Has one of the objectives of, and thus redundant with, test
    CD2A31C (now CD30012).

CD1009B [Withdrawn] VCS Label: A4_1D
    Has one of the objectives of, and thus redundant with, test
    CD2A21C (now CD30011).

CD1009L [Withdrawn] VCS Label: A4_1D
    Virtually identical to, and thus redundant with, test CD2D13A.

CD1009M [Withdrawn] VCS Label: A4_1D
    Virtually identical to, and thus redundant with, test CD3014C.

CD11001 [New] VCS Label: A4_1A
    Check that appropriate entities are visible in an aspect
    specification.

CD2A21C [Withdrawn] VCS Label: A4_1D
    Replaced by CD30011.

CD2A31C [Withdrawn] VCS Label: A4_1D
    Replaced by CD30012.

BD30001 [Pending New] New VCS Label: A4_1D
                Required after 2017-10-01
    Check Legality Rules are enforced when Size is specified by an
    aspect specification for a type.

BD30002 [Pending New] New VCS Label: A4_1D
                Required after 2017-10-01
    Check Legality Rules are enforced when Alignment is specified by
    an aspect specification for a type.

BD30003 [Pending New] New VCS Label: A4_1D
                Required after 2017-10-01
    Check Legality Rules are enforced when Component_Size is specified
    by an aspect specification.

CD30010 [Pending New] New VCS Label: A4_1D
                Required after 2017-10-01
    Check that Component_Size can be specified via an aspect
    specification.

CD30011 [Pending New] New VCS Label: A4_1D
                Required after 2017-10-01
    Merges legacy tests CD1009B and CD2A21C to eliminate duplication
    (CD1009B has the same objective as one of the objectives of
    CD2A21C) while adding modern formatting and applicability
    criteria.

CD30012 [Pending New] New VCS Label: A4_1D
                Required after 2017-10-01
    Merges legacy tests CD1009A and CD2A31C to eliminate duplication
    (CD1009A has the same objective as one of the objectives of
    CD2A31C) while adding modern formatting and applicability

criteria.

BD4003A [Modified] VCS Label: A4_1A
        Moved error marker from @66 to @67 so it is on the incorrect
        construct.

CDE0002 [Allowed Modification] New VCS Label: A4_1E Org VCS Label: A4_1
                Required after 2018-01-01
        Changed to use Storage_Size rather than Size so that the static
        expression rule of 13.14(7.2/3) is not triggered.

CXAC009 [Pending New] New VCS Label: A4_1D
                Required after 2017-10-01
        Check that Stream_IO.File_Type has Preelaborable_Initialization.

CXB3023 [New] VCS Label: A4_1A
        Check that a value of an unchecked union type (defined with
        pragma Unchecked_Union) can be passed to a C function.

CXB3024 [New] VCS Label: A4_1A
        Check that a value of an unchecked union type (defined with
        aspect Unchecked_Union) can be passed to a C function.

===== Annex C =====

[None.]

===== Annex D =====

CXD2007 [Modified] VCS Label: A4_1C
        Added missing N/A => Error tag.

LXD7001 [Modified] VCS Label: A4_1C
        Added missing error tag.

LXD7003 [Modified] VCS Label: A4_1C
        Added missing error tag.

LXD7004 [Modified] VCS Label: A4_1C
        Added missing error tag.

LXD7005 [Modified] VCS Label: A4_1C
        Added missing error tag.

LXD7006 [Modified] VCS Label: A4_1C
        Added missing error tag.

LXD7007 [Modified] VCS Label: A4_1C
        Added missing error tag.

LXD7008 [Modified] VCS Label: A4_1C
        Added missing error tag.

LXD7009 [Modified] VCS Label: A4_1C
        Added location indicators.

CXDB001 [Modified] VCS Label: A4_1C

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        Added missing N/A => Error tag.

CXDB002 [Modified] VCS Label: A4_1C
        Added missing N/A => Error tag.

CXDB003 [Modified] VCS Label: A4_1C
        Added missing N/A => Error tag.

CXDB004 [Modified] VCS Label: A4_1C
        Added missing N/A => Error tag.

===== Annex E =====

[None.]

===== Annex F =====

[None.]

===== Annex G =====

[None.]

===== Annex H =====

LXH4001 [Modified] VCS Label: A4_1C
        Corrected format of error tag; added location indicators.

LXH4003 [Modified] VCS Label: A4_1C
        Corrected format of error tag; added location indicators.

LXH4006 [Modified] VCS Label: A4_1C
        Added missing error tags.

LXH4009 [Modified] VCS Label: A4_1C
        Added missing error tags.

LXH4013 [Modified] VCS Label: A4_1C
        Added missing error tags.

LXH4014 [Modified] VCS Label: A4_1C
        Added missing error tags.

===== Support =====

F611A00 [New] VCS Label: A4_1A
        [VCS Label A4_1A] Foundation for tests C611A01, C611A02, and
        C611A03.
        [VCS Label A4_1C] Added additional data for test C611A04. The
        changes are only needed for that test.

F611B00 [New] VCS Label: A4_1A
        Foundation for tests C611B01, C611B02, and C611B03.

GRADE.A [Modified] VCS Label: A4_1D
        [VCS Label A4_1C] Allowed manual grading for tests that are
        missing execution or linking (with no earlier errors). Corrected
        the result for binder crashes. Added category totals to the
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        summary.
        [VCS Label A4_1D] Corrected so that Annex C RQMT failures are
        properly counted in their own category.

GRD_DATA.A [Modified] VCS Label: A4_1D
        Increased table sizes as the new tests have caused grading the
        entire ACATS to exceed the old limits.

SPECIAL.A [Modified] VCS Label: A4_1C
        Added test BA21005 to the list of optional main subprograms.

SUMMARY.A [Modified] VCS Label: A4_1C
        Corrected identification of main subprograms in modern tests.
        Changed the unit name for subunits to be the full expanded name
        including the parent name.
```

How to get new and modified tests:

The official home of the ACATS test suite is the ACAA web site. The site can be accessed at www.ada-auth.org.

The complete set of official new and modified tests are available in the Mod_4_1E.Zip and Tar files on the ACAA web site. As always, when a multi-file test is modified, we provide all of the files, including the unmodified files.

Individual new and modified tests can be retrieved from the ACATS VCS. Simply navigate to the appropriate directory (folder), and select the test you want. Select the revision you want (usually the most recent) and it will be retrieved for you. Tests are stored in directories that correspond to the test's prefix. For instance, the test CD92001.A will be found in the CD directory. You can also browse the differences between versions of a test. [In case of a conflict, the files in the ACATS VCS should be considered the 'official' versions.]

If you cannot get the files from the official site or you cannot get the files in a format appropriate for your processor, please contact your ACAL.

The baseline ACATS 4.1 is available in various formats on the ACAA web site.

Summary lists:

Withdrawn Tests

(Refer to the main list for details)

```
B74001A
B74001B
B74203E
CD1009A
CD1009B
CD1009L
CD1009M
CD2A21C
CD2A31C
```

Allowed Modification Tests

(Refer to the main list for details)

```
CC3601C      2018-01-01
CDE0002      2018-01-01
```

Modified Tests

(Refer to the main list for details)

```
B38003D
B3A1001
B3A1002
B455002
B62001C
B62001D
B63005A
B65005B
B730006
B73001A
B73001B
B73001C
B73001D
B73001E
B73001F
B73001G
B73001H
B732C02
B740003
B83F02C
B95007B
B91003A
B91003B
B91003C
B91003D
B940003
B940004
BB42001
BD4003A
C352001
C52101A
CXD2007
CXDB001
CXDB002
CXDB003
CXDB004
LXD7001
LXD7003
LXD7004
LXD7005
LXD7006
LXD7007
LXD7008
LXD7009
```

```
LXH4001
LXH4003
LXH4006
LXH4009
LXH4013
LXH4014
GRADE
GRD_DATA
SPECIAL
SUMMARY
```

New Tests

(Refer to the main list for details)

```
B611001
B611002
B611003
B611004
B611005
B611006
B611007
B611008
B611009
B611010
B611011
B611012
B611013
B611015
B611016
B750A07
BB42001
BB42002
BB42003
C3A0030
C480001
C611A01
C611A02
C611A03
C611B01
C611B02
C650B04
CB42001
CB42002
CB42003
CD11001
F611A00
F611B00
```

Pending New Tests

(Refer to the main list for details)

```
B354002     2017-10-01
B35A001     2017-10-01
B611014     2017-10-01
B611017     2017-10-01
B611018     2017-10-01
B611019     2017-10-01
B651001     2017-10-01
B651002     2017-10-01
B651003     2017-10-01
B730011     2017-10-01
B730012     2017-10-01
B730013     2017-10-01
BA21005     2017-10-01
BD30001     2017-10-01
BD30002     2017-10-01
BD30003     2017-10-01
C350001     2017-10-01
C354004     2017-10-01
C452002     2017-10-01
C453001     2017-10-01
C460014     2017-10-01
C460015     2017-10-01
C470001     2017-10-01
C611A04     2017-10-01
C611B03     2017-10-01
C651001     2017-10-01
C651002     2017-10-01
CD30010     2017-10-01
CD30011     2017-10-01
CD30012     2017-10-01
CXAC009     2017-10-01
```