# ACATS Modification List for ACATS 4.0

Version 4.0G June 22, 2015

#### What is this?

This is the ACATS modification list for ACATS 4.0. This document includes test corrections, test removals, and new tests for ACATS 4.0. ACATS 4.0 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 3.1H 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 2.6D 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:**

BC60002, BC60003, BC60004, and CC66001 test various rules for formal abstract subprograms.

New tests posted between April 1, 2015 and June 30, 2015 will become required for conformity assessments on January 1, 2016. New tests posted between January 1, 2015 and March 31, 2015 will become required for conformity assessments on October 1, 2015. New tests posted between October 1, 2014 and December 31, 2014 will become required for conformity assessments on July 1, 2015. New tests posted before September 30, 2014 are now required for conformity assessments. All tests posted to modification lists for other versions of the ACATS are included in ACATS 4.0 if appropriate and thus are required for conformity assessment using ACATS 4.0 The effective dates of tests are marked in the lists.

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

# 2015 Corrigendum:

Beginning with ACATS Modification List 4.0B, we have included tests for corrections (including new features) in the upcoming 2015 Corrigendum. Most of these corrections have already been approved by WG 9, and those that haven't been are expected to be approved at their next meeting. All of these changes are technically corrections to Ada 2012; as such we will assume all such corrections are implemented for Ada 2012 compilers.

Implementers can request grading modifications for any tests containing 2015 Corrigendum changes until the Corrigendum is approved as a whole by WG 9 (expected at their late June 2015 meeting). Note that all such tests will not be required until after that meeting anyway, as new tests have a six month review period before being required.

#### **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 Ada standard as available at <a href="http://www.adaic.org/resources/add-contentstandards/12rm/html/RM-TOC.html">http://www.adaic.org/resources/add-contentstandards/12rm/html/RM-TOC.html</a>.

#### Main list:

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==== Core Language =====
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Name Category Version label (effective date; old version label) Short description.

C324001 [Allowed Modification] New VCS Label: A4\_0E Org VCS Label: A4\_0 Required after 2015-07-01 Eliminated overlong lines.

C324002 [Allowed Modification] New VCS Label: A4\_0F Org VCS Label: A4\_0 Required after 2015-10-01

[VCS Label A4 OE] Eliminated overlong lines.

[VCS Label A4\_OF] Replaced last test case (qualified expressions), as that check is required by the Corrigendum.

C324003 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

Check that predicates are checked in the correct order and that the specified exception is raised.

C324004 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check predicate checks are not performed for static and dynamic subtype predicates when the assertion policy is Ignore, but memberships, the Valid attribute, and for loops continue to use the predicates -- case A: global assertion policy pragmas

C324005 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check predicate checks are not performed for static and dynamic subtype predicates when the assertion policy is Ignore, but

memberships, the Valid attribute, and for loops continue to use the predicates -- case B: specific assertion policy pragmas

B393011 [Pending New] New VCS Label: A4\_0D Required after 2015-10-01

Check that an abstract routine of an abstract partial view overridden by a non-abstract routine in the private part requires overriding when it is inherited if the private part is not visible where it is inherited.

C391003 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0D] Check that a type extension can be declared in a more nested scope than its parent type, and that overridden subprograms of that extension can be dispatched to.
[VCS Label A4 0E] Eliminate an overlong line.

C3A1003 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0D] Check that a dereference of an access-to-tagged-incomplete type can be passed as a parameter. [VCS Label A4 0E] Eliminated overlong lines.

C3A1004 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4 $\_$ 0D] Check that a parameter of a tagged incomplete type can be passed as a parameter. [VCS Label A4 0E] Eliminated overlong lines.

B3A1008 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0D] Check that a dereference of an access-to-incomplete type cannot be used as a prefix. [VCS Label A4\_0E] Eliminated overlong lines.

B3A1009 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0D] Check that a dereference of an access-to-incomplete view cannot be used as a prefix. Check that a parameter of an incomplete view cannot be used as a prefix. [VCS Label A4 0E] Eliminated overlong lines.

B3A1010 [Pending New] New VCS Label: A4\_0D Required after 2015-10-01

Check that a dereference of an access-to-formal incomplete type cannot be used as a prefix. Check that a parameter of a tagged formal incomplete type cannot be used as a prefix.

C3A2004 [Pending New] New VCS Label: A4\_0C Required after 2015-07-01

Check that the type of the prefix of 'Access is used to resolve the expected type of the use of the attribute.

B3A2017 [Pending New] New VCS Label: A4\_0C Required after 2015-07-01

[VCS Label A4\_0C] Check P'Access is not allowed in a generic body if P is declared in the generic (including in the parent of a child or in a formal package) and the access type is a formal type or outside of the generic.
[VCS Label A4 0E] Eliminated overlong lines.

B415001 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check various rules associated with the specification of aspect  $\ensuremath{\mathsf{Implicit}}$   $\ensuremath{\mathsf{Dereference}}$  .

B415002 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check that the object denoted by a generalized reference cannot be used as a variable if the discriminant has an access-to-constant type.

C415001 [Allowed Modification] New VCS Label: A4\_0F Org VCS Label: A4\_0 Required after 2015-10-01

Expression @155-6 violates 6.4.1(6.17/3).

B416002 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check that a generalized indexing is illegal in a variable context if no Variable\_Indexing is specified and Constant\_Indexing specifies a function returning an ordinary object.

B416A01 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

When both Constant\_Indexing and Variable\_Indexing are specified, check that a generalized indexing is illegal if it is called in variable contexts when the prefix is a constant and Constant\_Indexing specifies a function returning an ordinary object.

C416A01 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check that the name specified for a Constant\_Indexing or Variable\_Indexing aspect can refer to a set of overloaded functions, with two or more parameters, and that all of those functions can be used in a generalized indexing.

C416A02 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check that the overloaded routines can be added to an inherited indexing aspect and the new routines can be used in a generalized indexing.

C431002 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4 $\_$ 0B] Check that a component association of others => <> in a record or extension aggregate may have any number of associated components, including none. (Case 2: Null records and extensions.)

[VCS Label A4 $\_$ 0E] Eliminated overlong line.

B431005 [Pending New] New VCS Label: A4\_0B Required after 2015-07-01

Check that a component association with an expression in a record or extension aggregate that have more than one associated component is illegal if the expression is illegal for any one of the associated components.

B431006 [Pending New] New VCS Label: A4\_0C Required after 2015-07-01

Check that if a variant part is not nested in an unselected variant, the value of the governing discriminant of a variant in

a record aggregate cannot be non-static.

C433002 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0B] Check that no array components can be outside of the index subtype for an array aggregate, even when the components are specified by <>.

[VCS Label A4 OE] Eliminated overlong lines.

B433003 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check that an others choice is not allowed in an array aggregate that is used as the return expression of an expression function or the expression of a return statement if the result subtype of the function is unconstrained.

C433003 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0B] Check that for each association with a box in an array aggregate, the component is initialized by default (scalar types with Default\_Values).

[VCS Label A4\_0E] Eliminated overlong lines.

C433004 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0B] Check that for each association with a box in an array aggregate, the component is initialized by default (array types with Default\_Component\_Values).
[VCS Label A4\_0E] Object 06 @136 expects the wrong result. Eliminated overlong lines.

C433005 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0B] Check that the constraint of the constrained array subtype of a function return is used to determine the bounds of an array aggregate with an others choice in the expression of a return statement.
[VCS Label A4 0E] Eliminated overlong lines.

C433006 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check that the constraint of the constrained array subtype of a function return is used to determine the bounds of an array aggregate with an others choice in the return expression of an expression function.

B457002 [Pending New] New VCS Label: A4 $_{
m OD}$  Required after 2015-10-01

Check that 'others' must be last and alone in a case expression.

B457003 [Pending New] New VCS Label: A4\_0D Required after 2015-10-01

Check that 'else' cannot be omitted for an if expression if the type of the expression is not a boolean type.

B457004 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4 $\_$ 0D] Check that case choice coverage and stationess are enforced for case expressions. [VCS Label A4 0E] Eliminated overlong lines.

B457005 [Pending New] New VCS Label: A4\_0D Required after 2015-10-01

Check that all or none of the dependent expressions of a conditional expression can be dynamically tagged if the type of the expression is a specific tagged type.

B480002 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0D] Check that an initialized allocator for an access type with a class-wide designated type does not create an object whose type is more local than the access type.
[VCS Label A4 0E] Eliminated overlong lines and tab characters.

B480003 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_OD] Check that an uninitialized allocator for an access type with a class-wide designated type does not create an object whose type is more local than the access type.
[VCS Label A4 OE] Eliminated overlong lines and tab characters.

- C540002 [Allowed Modification] New VCS Label: A4\_0E Org VCS Label: A4\_0 Required after 2015-07-01 Eliminated overlong lines.
- C550001 [Pending New] New VCS Label: A4\_0E
  Required after 2015-10-01
  [VCS Label A4\_0C] Check that for loops iterate properly over subtypes with static predicates.
  [VCS Label A4 0E] Eliminated overlong lines.
- B551001 [Pending New] New VCS Label: A4\_0E
  Required after 2015-10-01
  Check legality rules for aspect Default Iterator.
- B551002 [Pending New] New VCS Label: A4\_0E
  Required after 2015-10-01
  Check legality rules for aspect Iterator Element.
- B552001 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01 Check legality rules for array component iterators from the 2015 Corrigendum.
- C552001 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01 Check correct operation of array component iterators.
- C552002 [Pending New] New VCS Label:  $A4_0E$  Required after 2015-10-01 Check correct operation of array component iterators where the array has convention Fortran.
- C552A01 [Allowed Modification] New VCS Label: A4\_0E Org VCS Label: A4\_0 Required after 2015-07-01 Eliminated violations of ACATS lexical rules.
- C552A02 [Allowed Modification] New VCS Label: A4\_0E Org VCS Label: A4\_0
  Required after 2015-07-01
  Eliminated violations of ACATS lexical rules.
- B552A04 [Pending New] New VCS Label: A4\_0E

Required after 2015-10-01

Check legality rules for container element iterators (most of the checked rules are from the 2015 Corrigendum).

B552A05 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

Check legality rules for generalized iterators from the 2015  $\operatorname{Corrigendum}$ ).

B640001 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4 $\_$ 0C] Check that abstract nondispatching operations do not participate in resolution.

[VCS Label A4 $\_$ 0E] Eliminated overlong lines and tab characters.

C640002 [Pending New] New VCS Label:  $A4_0E$  Required after 2015-10-01

[VCS Label A4\_0C] Check that an abstract nondispatching operator provides a way to eliminate an unwanted predefined operator. [VCS Label A4 0E] Eliminate overlong lines.

B650005 [Pending New] New VCS Label: A4\_0C Required after 2015-07-01

Check that the accessibility level of the return subtype indication of an extended return statement cannot be statically deeper that that of the function result if that result is class-wide.

B650006 [Pending New] New VCS Label: A4\_0C Required after 2015-07-01

Check that an extended return statement with a constant return object cannot omit the initializing expression.

B730009 [Allowed Modification] New VCS Label: A4\_0E Org VCS Label: A4\_0 Required after 2015-07-01 Completion of Priv12 @131 violates 7.3(10.1/3).

B730010 [Pending New] New VCS Label:  $A4_0E$  Required after 2015-10-01 Check 7.3(10.1/3).

B732001 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4 $\_$ 0D] Check various resolution and legality rules for aspect Type Invariant.

[VCS Label  $\overline{A4}$ \_0E] Length @80 should have return type Natural. Changed Is\_Valid to Is\_Clean @95, 97, 146 so that the inherited routine doesn't come into play.

C732001 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4 $\_$ 0D] Check that assertion checks are made after assignments to and calls with actuals of appropriate view conversions.

[VCS Label A4 0E] Eliminated overlong lines.

C732002 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check some differences between specific and class-wide type invariants.

C732A01 [Pending New] New VCS Label:  $A4_0E$  Required after 2015-10-01

[VCS Label A4\_0D] Check that the failure of a Type\_Invariant check raises Assertion\_Error (constrained array).
[VCS Label A4 0E] Eliminated overlong lines.

C732A02 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check that the failure of a Type\_Invariant check raises Assertion Error (part of unconstrained array).

C732B01 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check that the failure of a Type\_Invariant check raises Assertion Error (discriminated record).

C732B02 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check that the failure of a Type\_Invariant check raises Assertion Error (access-to-record).

B732C01 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0D] Check that the aspect Type\_Invariant can only be specified on private types, private extensions, and full types that complete one of the others.
[VCS Label A4 0E] Eliminate overlong lines.

C732C01 [Pending New] New VCS Label: A4\_0D

Required after  $2015-\overline{10}-01$  [VCS Label A4\_0D] Check that the failure of a Type\_Invariant check raises Assertion Error (tagged record).

[VCS Label A4 0E] Eliminated overlong lines.

B732C02 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4 $\_$ 0D] Check that the aspect Type $\_$ Invariant'Class can only be specified on private types, private extensions, and interfaces.

[VCS Label A4 0E] Eliminate overlong lines.

C760014 [Pending New] New VCS Label: A4\_0A Required after 2015-04-01

Check that Ada. Finalization is declared pure.

C760015 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0D] Check that a controlled type can be declared within a subprogram.
[VCS Label A4 0E] Eliminate overlong lines.

C831001 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check that overriding indicators do not change the dynamic effect of calls.

B831004 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check that overriding indicators are properly enforced for types derived from a generic formal type. (Nested generic specification cases.)

B831005 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check that overriding indicators are properly enforced for types derived from a generic formal type. (Library unit and body cases.)

B840002 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check a package use clause cannot denote a limited view or a non-package.

B840003 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01

Check a use all type clause does not make non-primitives or class-wide operations that aren't directly declare where a primitive operation would be visible.

BA12017 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0C] Check that a limited with clause is not allowed on a descendant of the named package.
[VCS Label A4 0E] Eliminated overlong line.

BA15003 [Pending New] New VCS Label: A4\_0C Required after 2015-07-01

Check that a library unit pragma must apply to a library unit.

CA21002 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

Check that Pure and Preelaborate aspects can be specified with an object declared in another package.

CB30001 [Pending New] New VCS Label: A4\_0B Required after 2015-07-01

Check that the optional message parameter is supported in a raise statement, and that the message can be retrieved with Exception Message.

CB30002 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0B] Check that the optional message parameter is supported in a raise expression, and that the message can be retrieved with Exception\_Message.

[VCS Label A4 $\_$ 0E] Eliminated overlong lines and tab characters.

CC30003 [Allowed Modification] New VCS Label: A4\_0E Org VCS Label: A4\_0 Required after 2015-07-01 Eliminated overlong lines.

CC30004 [Allowed Modification] New VCS Label: A4\_0E Org VCS Label: A4\_0 Required after 2015-07-01 Eliminated overlong lines and tab characters.

CC51010 [Pending New] New VCS Label: A4\_0D Required after 2015-10-01

[VCS Label A4\_0D] Check that a generic unit with a tagged incomplete formal type can be instantiated with an incomplete view of a type from a limited withed package, and that operations in the instance can be used normally when the full view of the type is visible.

[VCS Label A4 0E] Added constructor function to generic, as

Elem'Unchecked\_Access is illegal when Elem is incomplete. Moved body of  $CC51010_2$  so it compiles after another package on which it depends.

BC60001 [Pending New] New VCS Label: A4\_0C Required after 2015-07-01

Test rules associated with formal subprogram defaults of null.

CC60001 [Pending New] New VCS Label: A4\_0G Required after 2016-01-01

Check that calls on a formal abstract subprogram are dispatching.

BC60002 [Pending New] New VCS Label: A4\_0G Required after 2016-01-01

Test rules associated with the controlling type of a formal abstract subprogram.

BC60003 [Pending New] New VCS Label: A4\_0G Required after 2016-01-01

Check that the actual subprogram for a formal abstract subprogram must be a dispatching operation of the controlling type.

BC60004 [Pending New] New VCS Label: A4\_0G Required after 2016-01-01

Check that a call on a formal abstract subprogram must be dispatching.

CD30006 [Allowed Modification] New VCS Label: A4\_0E Org VCS Label: A4\_0 Required after 2015-07-01 Eliminated overlong lines and tab characters.

CD30007 [Allowed Modification] New VCS Label: A4\_0E Org VCS Label: A4\_0 Required after 2015-07-01 Eliminated overlong lines.

BDB3A01 [Pending New] New VCS Label:  $A4_0E$  Required after 2015-10-01

[VCS Label A4\_0B] Test resolution and legality rules for pragma and aspect Default\_Storage\_Pool.
[VCS Label A4\_0E] Declaration of Pool @53 is missing the TC\_Id discriminant.

CDB3A01 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0B] Test that aspect Default\_Storage\_Pool changes the default storage pool for a generic instantiation.
[VCS Label A4 0E] Eliminated overlong line.

BDD2004 [Allowed Modification] New VCS Label: A4\_0E Org VCS Label: A4\_0 Required after 2015-07-01

[VCS Label A4\_0B] Error @229 is legal by AI12-0121-1. [VCS Label A4\_0E] Eliminated overlong lines.

BDD2005 [Allowed Modification] New VCS Label: A4\_0E Org VCS Label: A4\_0 Required after 2015-07-01

[VCS Label A4 $\_$ 0B] Replaced test cases waiting on AI12-0106-1 (now approved) and made changes required by AI12-0121-1. [VCS Label A4 0E] Eliminated overlong lines.

CXA4037 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01 Check Ada.Strings.Fixed.Find\_Token against rule from 2001 Corrigendum.

CXA5016 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0C] Check operation of attribute Machine\_Rounding. [VCS Label A4\_0E] Eliminated overlong lines.

CXAA021 [Pending New] New VCS Label: A4 $\_$ 0C Required after 2015-07-01 Check file operations of Text IO.Bounded IO.

CXAA022 [Pending New] New VCS Label: A4 $\_$ 0C Required after 2015-07-01 Check file operations of Text IO.Unbounded IO.

CXAB002 [Pending New] New VCS Label: A4\_0C
Required after 2015-07-01
Check file operations of Wide Text IO.Wide Bounded IO.

CXAB003 [Pending New] New VCS Label: A4\_0C
Required after 2015-07-01
Check file operations of Wide\_Wide\_Text\_IO.Wide\_Wide\_Bounded\_IO.

CXAB004 [Pending New] New VCS Label: A4 0C Required after 2015-07-01 Check file operations of Wide Text IO.Wide Unbounded IO.

CXAB005 [Pending New] New VCS Label: A4\_0C Required after 2015-07-01 Check file operations of Wide Wide Text IO.Wide Wide Unbounded IO.

CXAC008 [Pending New] New VCS Label: A4\_0E
Required after 2015-10-01
[VCS Label A4\_0C] Check that Stream\_IO files opened with mode
Out\_File are not truncated by Close or Reset.
[VCS Label A4\_0D] Corrected required file size in subtest 8, and various failure messages.
[VCS Label A4\_0E] Eliminated overlong lines.

CXAG001 [Pending New] New VCS Label:  $A4_0E$  Required after 2015-10-01 Check that Ada.Directories can be used to create and delete directories.

CXAG002 [Pending New] New VCS Label: A4\_0E
Required after 2015-10-01
Check that Ada.Directories.Hierarchical\_File\_Names exists and works as expected.

CXAH001 [Pending New] New VCS Label: A4\_0E
Required after 2015-10-01
[VCS Label A4\_0D] Test that package Environment\_Variables can be used to read environment variables.
[VCS Label A4 0E] Added missing Applicability Criteria.

CXAH002 [Pending New] New VCS Label: A4\_0E
Required after 2015-10-01
[VCS Label A4\_0D] Test that package Environment\_Variables can be used to modify environment variables.
[VCS Label A4 0E] Added missing Applicability Criteria.

CXAH003 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4 $\_$ 0D] Test the two parameter Value in package Environment Variables.

[VCS Label A4 0E] Added missing Applicability Criteria.

BXAI001 [Pending New] New VCS Label: A4\_0B Required after 2015-07-01

Test that package Hashed Maps does not allow reverse iterators.

BXAI002 [Pending New] New VCS Label:  $A4_0B$  Required after 2015-07-01

Test that package Hashed\_Sets does not allow reverse iterators.

BXAI003 [Pending New] New VCS Label: A4\_0B Required after 2015-07-01

Test that package Bounded\_Hashed\_Maps does not allow reverse iterators.

BXAI004 [Pending New] New VCS Label: A4\_0B Required after 2015-07-01

Test that package Bounded\_Hashed\_Sets does not allow reverse iterators.

BXAI005 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0B] Test that package Hashed\_Sets does not allow direct writing of set lements.
[VCS Label A4 0E] Eliminated overlong lines.

BXAI006 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0B] Test that package Ordered\_Sets does not allow direct writing of set elements.
[VCS Label A4 0E] Eliminated overlong lines.

BXAI007 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0B] Test that package Bounded\_Hashed\_Sets does not allow direct writing of set elements.
[VCS Label A4 0E] Eliminated overlong lines.

BXAI008 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

[VCS Label A4\_0B] Test that package Bounded\_Ordered\_Sets does not allow direct writing of set elements.
[VCS Label A4 0E] Eliminated overlong lines.

BXAIA01 [Pending New] New VCS Label: A4\_0B Required after 2015-07-01

Test that package  $Indefinite\_Hashed\_Maps$  does not allow reverse iterators.

BXAIA02 [Pending New] New VCS Label:  $A4_0B$  Required after 2015-07-01

Test that package Indefinite\_Hashed\_Set does not allow reverse iterators.

BXAIA03 [Pending New] New VCS Label: A4\_0E Required after 2015-10-01

```
[VCS Label A4_0B] Test that package Indefinite_Hashed_Sets does not allow direct writing of set elements.
[VCS Label A4 0E] Eliminated overlong lines.
```

BXAIA04 [Pending New] New VCS Label: A4\_0E
Required after 2015-10-01
[VCS Label A4\_0B] Test that package Indefinite\_Ordered\_Sets does not allow direct writing of set elements.
[VCS Label A4 0E] Eliminated overlong lines.

CXAI027 [Modified] VCS Label: A4\_0B

Corrected the name of the package that is reported as being tested.

BXB3001 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01 Check B.3.3(8/2).

BXB3002 [Pending New] New VCS Label:  $A4_0F$  Required after 2016-01-01 Check B.3.3(9/3).

BXB3003 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01 Check B.3.3(11/2).

BXB3004 [Pending New] New VCS Label: A4\_0F
Required after 2016-01-01
Check that rules for the application of aspect Unchecked\_Union are enforced.

CXB3019 [Pending New] New VCS Label:  $A4_0F$ Required after 2016-01-01 Check B.3.3(23/2).

CXB3020 [Pending New] New VCS Label: A4\_0F Required after 2016-01-01 Check B.3.3(24/2).

CXB3021 [Pending New] New VCS Label:  $A4_0F$ Required after 2016-01-01 Check B.3.3(25/2).

CXB3022 [Pending New] New VCS Label:  $A4_0F$ Required after 2016-01-01 Check B.3.3(26/2).

==== Annex C =====
[None.]
==== Annex D =====
[None.]
==== Annex E =====
[None.]

==== Annex F =====

```
[None.]
==== Annex G =====
[None.]
==== Annex H =====
[None.]
==== Support =====
F416A00 [Pending New] New VCS Label: A4 OF
                  Required after 2016-0\overline{1}-01
      Foundation for tests B416A01, C416A01, and C416A02.
F732A00 [Pending New] New VCS Label: A4 0E
                  Required after 2015-10-01
      [VCS Label A4 OD] Foundation for test C732A01.
      [VCS Label A4 0E] Eliminated overlong lines.
F732A00 [Allowed Modification] New VCS Label: A4 OF Org VCS Label: A4 OE
                  Required after 2016-01-01
      [VCS Label A4 OF] Added types and operations to support test
      C732A02. They are only needed for that test.
F732B00 [Pending New] New VCS Label: A4 OF
                  Required after 2016-0\overline{1}-01
      Foundation for tests C732B01 and C732B02.
F732C00 [Pending New] New VCS Label: A4 0E
                  Required after 2015-10-01
      [VCS Label A4 0D] Foundation for tests B732C01, B732C02, and
      [VCS Label A4 OE] Eliminated overlong lines.
FDB3A00 [Pending New] New VCS Label: A4 0E
                  Required after 2015-10-01
      [VCS Label A4 0B] Foundation for test BDB3A01 and CDB3A01.
      [VCS Label A4 0E] Eliminated overlong line.
IMPDEF [Allowed Modification] New VCS Label: A4 0E Org VCS Label: A4 0
                  Required after 2015-07-01
      [VCS Label A4 0D] Added constants for the names of environment
     variables used by tests CXAH001, CXAH002, and CXAH003. Also
      removed obsolete .AW file constants (these are not used as test
      source has been provided in UTF-8 format since the release of
     ACATS 3.0). The change is only needed for those tests, it has no
     effect on any other tests.
      [VCS Label A4 0E] Added a constant and function used by tests
     CXAG001 and CXAG002. The change is only needed for those tests,
      it has no effect on any other 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\_0G.Zip and Tar files on the ACAA web site.

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 4.0 is available in various formats on the ACAA web site.

## **Summary lists:**

#### Withdrawn Tests

(Refer to the main list for details)

B43102A

## **Allowed Modification Tests**

(Refer to the main list for details)

```
2015-07-01
B730009
BDD2004
            2015-07-01
BDD2005
            2015-07-01
            2015-07-01
C324001
            2015-10-01
C324002
            2015-10-01
C415001
            2015-07-01
CC30003
            2015-07-01
CC30004
CD30006
            2015-07-01
            2015-07-01
CD30007
            2015-07-01 [Only needed for new tests CXAG001, CXAG0002,
IMPDEF
                        CXAH001, CXAH002, and CXAH003]
```

# **Modified Tests**

(Refer to the main list for details)

CXAI027

## **New Tests**

None.

# **Pending New Tests**

(Refer to the main list for details)

B393011 B3A1008 B3A1009 B3A1010 B3A2017 B415001 B415002 B416002	2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2016-01-01 2016-01-01
B416A01 B431005 B431006 B433003 B457002 B457003 B457004 B457005 B480002	2016-01-01 2015-07-01 2015-07-01 2016-01-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01
B480003	2015-10-01
B551001	2015-10-01
B551002	2015-10-01
B552001	2015-10-01
B552A04	2015-10-01
B552A05	2015-07-01
B640001	2015-07-01
B650005	2015-07-01
B650006	2015-07-01
B730010	2015-10-01
B732001 B732C01 B732C02 B831004 B831005 B840002 B840003 BA12017 BA15003	2015-10-01 2015-10-01 2015-10-01 2016-01-01 2016-01-01 2016-01-01 2016-01-01 2015-10-01
BC60001	2015-07-01
BC60002	2015-07-01
BC60003	2016-01-01
BC60004	2016-01-01
BDB3A01	2015-10-01
BXAI001	2015-07-01
BXAI002	2015-07-01
BXAI003	2015-07-01
BXAI004	2015-07-01
BXAI005	2015-07-01
BXAI006	2015-10-01
BXAI007	2015-10-01
BXAI008	2015-10-01

BXAIA01 BXAIA02 BXAIA03 BXAIA04 BXB3001 BXB3002 BXB3003 BXB3004 C324003 C324004 C324005 C3A1003 C3A1004 C3A2004 C416A01 C416A02	2015-07-01 2015-07-01 2015-10-01 2015-10-01 2016-01-01 2016-01-01 2016-01-01 2016-01-01 2016-01-01 2015-10-01 2015-10-01 2015-10-01 2015-01-01
C431002 C433003 C433003 C433004 C433005 C433006 C550001 C552002 C640002 C732001 C732002 C732A01 C732A02 C732B01 C732B02 C732B01 C732B02 C732B01 C760014 C760015 C831001 CA21002 CB30001 CB30002 CC51010 CC60001 CDB3A01 CXA4037 CXA5016 CXAA021 CXAA022 CXAB003 CXAB004 CXAB005 CXAC008 CXAG001 CXAG002 CXAH001 CXAH002 CXAH001 CXAH002 CXAH001 CXAH002 CXAH001 CXAH002 CXAH001 CXAH002 CXAH003 CXB3019 CXB3020	2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2016-01-01 2016-01-01 2015-10-01 2016-01-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-07-01
CXB3020 CXB3021 CXB3022 F416A00	2016-01-01 2016-01-01 2016-01-01 2016-01-01

F732A00	2015-10-01
F732B00	2016-01-01
F732C00	2015-10-01
FDB3A00	2015-10-01