ACATS Modification List for ACATS 4.0

Version 4.0F May 15, 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 3.1G 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:

Since this is the first list of a new quarter, one modified test (CXAI027) changed status; the modification is now a required part of conformity assessment.

Replaced the qualified expression case in C324002, as AI12-0100-1 (part of the upcoming Corrigendum) makes it clear that the check is performed. New tests C324004 and C324005 check that ignoring predicates works as expected.

New tests B415001 and B415002 test various legality rules associated with aspect Implicit_Dereference.

Corrected C415001 to eliminate a violation of the anti-aliasing rules (6.4.1(6.17/3)).

New tests B416002, B416A01, C416A01, and C416A02 check various rules associated with generalized indexing.

New test B433003 checks that an aggregate in the return expression of an expression function or the expression of a return statement cannot have an **others** choice if the function result subtype is unconstrained. New test C433006 checks that the return expression of an expression function can provide an applicable index constraint.

New tests C732002, C732A02, C732B01, and C732B02 test additional cases for type invariants.

New tests B831004 and B831005 check that overriding indicators are properly enforced for primitive subprograms of types derived from generic formal types.

New test C831001 checks that the operation of calls are not changed by overriding indicators.

New test B840002 checks usage of package use clauses. New test B840003 checks that use all type clauses don't make too much visible.

New test CXA4037 checks an old correction to Ada.Strings.Fixed.Find Token.

New tests BXB3001, BXB3002, BXB3003, BXB3004, CXB3001, CXB3002, CXB3003, and CXB3004 test aspect Unchecked Union.

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 http://www.adaic.org/resources/add-contentstandards/12rm/html/RM-TOC.html.

Main list:

==== Core Language =====

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 0E] Eliminated overlong lines.

[VCS Label $A4_0F$] 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 $_{
m OE}$ 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_OD] Check that a dereference of an access-to-incomplete type cannot be used as a prefix. [VCS Label A4 OE] Eliminated overlong lines.

B3A1009 [Pending New] New VCS Label: A4_0E Required after 2015-10-01

[VCS Label A4_OD] 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 OE] 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 $\operatorname{Implicit_Dereference}$.

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 $_{0}$ B] 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_0E] 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 O6 @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_0D 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 staticness 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_0D] 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 0E] 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 $2015-1\overline{0}-01$

[VCS Label A4 OC] 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 2015-10-01Check 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 2015-10-01Check 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 $2015-1\overline{0}-01$

> Check legality rules for generalized iterators from the 2015 Corrigendum).

B640001 [Pending New] New VCS Label: A4 0E Required after $2015-1\overline{0}-01$

[VCS Label A4 OC] 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 2015-07-01Check 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 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 OE] Eliminate overlong lines.

C732C01 [Pending New] New VCS Label: A4_0D Required after 2015-10-01

[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 OE] 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_OC] Check that a limited with clause is not allowed on a descendant of the named package.
[VCS Label A4 OE] 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.

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 $\overline{A4}_{0E}$] 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 OF
                  Required after 2016-0\overline{1}-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 0F] 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 0E] 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 C $\overline{\text{X}}$ AG002. The change is only needed for those tests, it has no effect on any other tests.

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_0F.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)

B730009	2015-07-01
BDD2004	2015-07-01
BDD2005	2015-07-01
C324001	2015-07-01
C324002	2015-10-01
C415001	2015-10-01
CC30003	2015-07-01
CC30004	2015-07-01

CD30006	2015-07-01			
CD30007	2015-07-01			
IMPDEF	2015-07-01	[Only needed for new tests CXAG001, CXAG0002,		
CXAH001, CXAH002, and CXAH0031				

Modified Tests

(Refer to the main list for details)

CXAI027

New Tests

(Refer to the main list for details)

None.

Pending New Tests

(Refer to the main list for details)

В393011	2015-10-01
B3A1008	2015-10-01
B3A1009	2015-10-01
B3A1010	2015-10-01
B3A2017	2015-10-01
B415001	2016-01-01
B415002	2016-01-01
B416002	2016-01-01
B416A01	2016-01-01
B431005	2015-07-01
B431006	2015-07-01
B433003	2016-01-01
B457002	2015-10-01
B457003	2015-10-01
B457004	2015-10-01
B457005	2015-10-01
B480002	2015-10-01
B480003	2015-10-01
B551001	2015-10-01
B551002	2015-10-01
B552001	2015-10-01
B552A04	2015-10-01
B552A05	2015-10-01
B640001	2015-07-01
B650005	2015-07-01
B650006	2015-07-01
В730010	2015-10-01
B732001	2015-10-01
B732C01	2015-10-01
B732C02	2015-10-01
B831004	2016-01-01

C732A01 2015-10-01 C732A02 2016-01-01 C732B01 2016-01-01 C732B02 2016-01-01 C732C01 2015-10-01 C760014 2015-04-01 C760015 2015-10-01 C831001 2016-01-01 CA21002 2015-10-01	B831005 B840002 B840003 BA12017 BA15003 BC60001 BDB3A01 BXA1001 BXA1002 BXA1003 BXA1004 BXA1005 BXA1006 BXA1007 BXA1008 BXA1A01 BXA1A02 BXA1A03 BXA1A01 BXA1A02 BXA1A03 C324003 C324004 C324005 C3A1003 C324004 C324005 C3A1003 C3A1004 C322001 C552001 C552001 C552001 C552001 C552001 C552002 C640002 C732001	2016-01-01 2016-01-01 2016-01-01 2015-10-01 2015-07-01 2015-07-01 2015-07-01 2015-07-01 2015-07-01 2015-07-01 2015-07-01 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 2016-01-01 2015-10-01
CB30001 2015-07-01 CB30002 2015-10-01	C433005 C433006 C550001 C552001 C552002 C640002 C732001 C732002 C732A01 C732A02 C732B01 C732B02 C732C01 C760014 C760015 C831001	2015-10-01 2016-01-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2016-01-01 2016-01-01 2016-01-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01 2015-10-01