Linux Standard Base C++ Specification for AMD64 3.1

Linux Standard Base C++ Specification for AMD64 3.1

Copyright © 2004, 2005, 2006 Free Standards Group

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.1; with no Invariant Sections, with no Front-Cover Texts, and with no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".

Portions of the text are copyrighted by the following parties:

- The Regents of the University of California
- Free Software Foundation
- · Ian F. Darwin
- · Paul Vixie
- BSDI (now Wind River)
- · Andrew G Morgan
- · Jean-loup Gailly and Mark Adler
- · Massachusetts Institute of Technology

These excerpts are being used in accordance with their respective licenses.

Linux is the registered trademark of Linus Torvalds in the U.S. and other countries.

UNIX is a registered trademark of The Open Group.

LSB is a trademark of the Free Standards Group in the United States and other countries.

AMD is a trademark of Advanced Micro Devices, Inc.

Intel and Itanium are registered trademarks and Intel386 is a trademark of Intel Corporation.

PowerPC is a registered trademark and PowerPC Architecture is a trademark of the IBM Corporation.

S/390 is a registered trademark of the IBM Corporation.

OpenGL is a registered trademark of Silicon Graphics, Inc.

Contents

I Introductory Elements	1
1 Scope	1
1.1 General	
1.2 Module Specific Scope	1
2 Normative References	2
3 Requirements	3
3.1 Relevant Libraries	3
3.2 LSB Implementation Conformance	3
3.3 LSB Application Conformance	4
4 Definitions	5
5 Terminology	6
6 Documentation Conventions	8
II Base Libraries	9
7 Libraries	10
7.1 Interfaces for libstdcxx	10
7.2 Interface Definitions for libstdcxx	142
A GNU Free Documentation License (Informative)	143
A.1 PREAMBLE	143
A.2 APPLICABILITY AND DEFINITIONS	143
A.3 VERBATIM COPYING	144
A.4 COPYING IN QUANTITY	
A.5 MODIFICATIONS	145
A.6 COMBINING DOCUMENTS	146
A.7 COLLECTIONS OF DOCUMENTS	147
A.8 AGGREGATION WITH INDEPENDENT WORKS	147
A.9 TRANSLATION	147
A.10 TERMINATION	
A.11 FUTURE REVISIONS OF THIS LICENSE	148
A.12 How to use this License for your documents	148

List of Tables

2-1 Normative References	
3-1 Standard Library Names	
7-1 libstdcxx Definition	
7-2 libstdcxx - C++ Runtime Support Function Interfaces	
7-3 Primary vtable for type_info11	
7-4 typeinfo for type_info11	
7-5 Primary vtable forcxxabiv1::enum_type_info11	
7-6 typeinfo forcxxabiv1::enum_type_info12	
7-7 Primary vtable forcxxabiv1::_array_type_info12	
7-8 typeinfo forcxxabiv1::array_type_info	
7-9 Primary vtable forcxxabiv1::class_type_info13	
7-10 typeinfo forcxxabiv1::class_type_info14	
7-11 libstdcxx - Classcxxabiv1::class_type_info Function Interfaces14	
7-12 Primary vtable forcxxabiv1::pbase_type_info14	
7-13 typeinfo forcxxabiv1::pbase_type_info	
7-15 type into forcxxabiv1::poase_type_info	
7-14 Fillinary vtable forcxxabiv1::pointer_type_info	
7-16 Primary vtable forcxxabiv1::function_type_info	
7-17 typeinfo forcxxabiv1::function_type_info	
7-18 Primary vtable forcxxabiv1::si_class_type_info	
7-19 typeinfo forcxxabiv1::si_class_type_info18	
7-20 libstdcxx - Classcxxabiv1::si_class_type_info Function Interfaces18	
7-21 Primary vtable forcxxabiv1::vmi_class_type_info18	
7-22 typeinfo forcxxabiv1::vmi_class_type_info19	
7-23 libstdcxx - Classcxxabiv1::vmi_class_type_info Function Interfaces20	
7-24 Primary vtable forcxxabiv1::fundamental_type_info20	
7-25 typeinfo forcxxabiv1::fundamental_type_info20	
7-26 Primary vtable forcxxabiv1::_pointer_to_member_type_info21	
7-27 typeinfo forcxxabiv1::pointer_to_member_type_info21	
7-28 Primary vtable forgnu_cxx::stdio_sync_filebuf <char, char_traits<char="">>22</char,>	
7-29 Primary vtable forgnu_cxx::stdio_sync_filebuf <wchar_t,< td=""><td></td></wchar_t,<>	
char_traits <wchar_t>>23</wchar_t>	
7-30 libstdcxx - Classgnu_cxx::_pool_alloc_base Function Interfaces24	
7-31 Primary vtable for exception	
7-32 typeinfo for exception	
7-32 typenno for exception 25 7-33 Primary vtable for bad_typeid 25	
- 71	
7-35 Primary vtable for logic_error	
7-36 typeinfo for logic_error	
7-37 Primary vtable for range_error	
7-38 typeinfo for range_error	
7-39 Primary vtable for domain_error	
7-40 typeinfo for domain_error	
7-41 Primary vtable for length_error27	
7-42 typeinfo for length_error	
7-43 Primary vtable for out_of_range	
7-44 typeinfo for out_of_range	
7-45 Primary vtable for bad_exception	
7-46 typeinfo for bad_exception	
7-47 Primary vtable for runtime error	
7-47 Primary vtable for runtime_error	

7-49	Primary vtable for overflow_error	.30
7-50	typeinfo for overflow_error	.30
7-51	Primary vtable for underflow_error	.30
7-52	typeinfo for underflow_error	.30
7-53	Primary vtable for invalid_argument	.31
7-54	typeinfo for invalid_argument	.31
7-55	Primary vtable for bad_cast	.31
7-56	typeinfo for bad_cast	.32
7-57	Primary vtable for bad_alloc	.32
7-58	typeinfo for bad_alloc	.32
7-59	typeinfo for ctype_base	.35
	Primary vtable forctype_abstract_base <char></char>	
	Primary vtable forctype_abstract_base <wchar_t></wchar_t>	
	Primary vtable for ctype <char></char>	
	libstdcxx - Class ctype <char> Function Interfaces</char>	
	Primary vtable for ctype <wchar_t></wchar_t>	
	typeinfo for ctype <wchar_t></wchar_t>	
	libstdcxx - Class ctype <wchar_t> Function Interfaces</wchar_t>	
	Primary vtable for ctype_byname <char></char>	
	typeinfo for ctype_byname <char></char>	
	libstdcxx - Class ctype_byname <char> Function Interfaces</char>	
	libstdcxx - Class ctype_byname <wchar_t> Function Interfaces</wchar_t>	.40
7-71	libstdcxx - Class basic_string <char, char_traits<char="">, allocator<char> ></char></char,>	
	Function Interfaces	.41
7-72	libstdcxx - Class basic_string <wchar_t, char_traits<wchar_t="">,</wchar_t,>	
	-	.45
7-73	Primary vtable for basic_stringstream <char, char_traits<char="">,</char,>	
	allocator <char>></char>	.50
7-74	Secondary vtable for basic_stringstream <char, char_traits<char="">,</char,>	
	allocator <char>></char>	.50
7-75	Secondary vtable for basic_stringstream <char, char_traits<char="">,</char,>	
	allocator <char>></char>	.51
	VTT for basic_stringstream <char, char_traits<char="">, allocator<char>></char></char,>	.51
7-77	libstdcxx - Class basic_stringstream <char, char_traits<char="">,</char,>	
		.51
7-78	Primary vtable for basic_stringstream <wchar_t, char_traits<wchar_t="">,</wchar_t,>	
	allocator <wchar_t>></wchar_t>	
7-79	Secondary vtable for basic_stringstream <wchar_t, char_traits<wchar_t="">,</wchar_t,>	
		.52
7-80	Secondary vtable for basic_stringstream <wchar_t, char_traits<wchar_t="">,</wchar_t,>	
- 04	allocator <wchar_t>></wchar_t>	.53
7-81	VTT for basic_stringstream <wchar_t, char_traits<wchar_t="">,</wchar_t,>	
	allocator <wchar_t>></wchar_t>	.53
7-82	libstdcxx - Class basic_stringstream <wchar_t, char_traits<wchar_t="">,</wchar_t,>	
7 00	allocator <wchar_t> > Function Interfaces</wchar_t>	.53
7-83	Primary vtable for basic_istringstream <char, char_traits<char="">,</char,>	_ 4
7.04	allocator <char>></char>	.54
7-84	Secondary vtable for basic_istringstream <char, char_traits<char="">,</char,>	
7.05	allocator <char>></char>	
	VTT for basic_istringstream <char, char_traits<char="">, allocator<char>></char></char,>	.54
7-86	libstdcxx - Class basic_istringstream <char, char_traits<char="">,</char,>	
7.05	allocator <char> > Function Interfaces</char>	.55
7-87	Primary vtable for basic_istringstream <wchar_t, char_traits<wchar_t="">,</wchar_t,>	
	allocator <wchar_t>></wchar_t>	.55

7-88 Secondary vtable for basic_istringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t>></wchar_t></wchar_t,>	
7-89 VTT for basic_istringstream <wchar_t, char_traits<wchar_t="">,</wchar_t,>	
e e e e e e e e e e e e e e e e e e e	.56
7-90 libstdcxx - Class basic_istringstream <wchar_t, char_traits<wchar_t="">,</wchar_t,>	.00
•	.56
7-91 Primary vtable for basic_ostringstream <char, char_traits<char="">,</char,>	.50
	.56
7-92 Secondary vtable for basic_ostringstream <char, char_traits<char="">,</char,>	.50
, o	.57
7-93 VTT for basic_ostringstream <char, char_traits<char="">, allocator<char>></char></char,>	
e e e e e e e e e e e e e e e e e e e	.57
7-94 libstdcxx - Class basic_ostringstream <char, char_traits<char="">, allocator<char> > Function Interfaces</char></char,>	.57
	.37
7-95 Primary vtable for basic_ostringstream <wchar_t, char_traits<wchar_t="">,</wchar_t,>	Ε0
-	.58
7-96 Secondary vtable for basic_ostringstream <wchar_t, char_traits<wchar_t=""></wchar_t,>	
-	.58
7-97 VTT for basic_ostringstream <wchar_t, char_traits<wchar_t="">,</wchar_t,>	-0
-	.59
7-98 libstdcxx - Class basic_ostringstream <wchar_t, char_traits<wchar_t="">,</wchar_t,>	
-	.59
7-99 Primary vtable for basic_stringbuf <char, char_traits<char="">,</char,>	
* *	.59
7-100 typeinfo for basic_stringbuf <char, char_traits<char="">, allocator<char>>.</char></char,>	
7-101 libstdcxx - Class basic_stringbuf <char, char_traits<char="">, allocator<char< td=""><td></td></char<></char,>	
> Function Interfaces	.61
7-102 Primary vtable for basic_stringbuf <wchar_t, char_traits<wchar_t="">,</wchar_t,>	
allocator <wchar_t>></wchar_t>	.61
7-103 typeinfo for basic_stringbuf <wchar_t, char_traits<wchar_t="">,</wchar_t,>	
allocator <wchar_t>></wchar_t>	.62
7-104 libstdcxx - Class basic_stringbuf <wchar_t, char_traits<wchar_t="">,</wchar_t,>	
allocator <wchar_t> > Function Interfaces</wchar_t>	
7-105 Primary vtable for basic_iostream <char, char_traits<char="">></char,>	
7-106 Secondary vtable for basic_iostream <char, char_traits<char="">></char,>	
7-107 Secondary vtable for basic_iostream <char, char_traits<char="">></char,>	
7-108 VTT for basic_iostream <char, char_traits<char="">></char,>	.64
7-109 libstdcxx - Class basic_iostream <char, char_traits<char=""> > Function</char,>	
Interfaces	
7-110 Primary vtable for basic_iostream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-111 Secondary vtable for basic_iostream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-112 Secondary vtable for basic_iostream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-113 VTT for basic_iostream <wchar_t, char_traits<wchar_t="">></wchar_t,>	.65
7-114 libstdcxx - Class basic_iostream <wchar_t, char_traits<wchar_t=""> ></wchar_t,>	
Function Interfaces	
7-115 Primary vtable for basic_istream <char, char_traits<char=""> ></char,>	
7-116 Secondary vtable for basic_istream <char, char_traits<char="">></char,>	
7-117 VTT for basic_istream <char, char_traits<char="">></char,>	.67
7-118 libstdcxx - Class basic_istream <char, char_traits<char=""> > Function</char,>	
Interfaces	
7-119 Primary vtable for basic_istream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-120 Secondary vtable for basic_istream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-121 VTT for basic_istream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-122 libstdcxx - Class basic_istream <wchar_t, char_traits<wchar_t=""> > Function</wchar_t,>	
Interfaces	.68

7-123 Primary vtable for basic_ostream <char, char_traits<char="">></char,>	69
7-124 Secondary vtable for basic_ostream <char, char_traits<char="">></char,>	70
7-125 VTT for basic_ostream <char, char_traits<char="">></char,>	70
7-126 libstdcxx - Class basic_ostream <char, char_traits<char=""> > Function</char,>	
Interfaces	70
7-127 Primary vtable for basic_ostream <wchar_t, char_traits<wchar_t="">></wchar_t,>	71
7-128 Secondary vtable for basic_ostream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-129 VTT for basic_ostream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-130 libstdcxx - Class basic_ostream <wchar_t, char_traits<wchar_t=""> > Funct</wchar_t,>	
Interfaces	
7-131 Primary vtable for basic_fstream <char, char_traits<char="">></char,>	
7-132 Secondary vtable for basic_fstream <char, char_traits<char="">></char,>	
7-133 Secondary vtable for basic_fstream <char, char_traits<char="">></char,>	
7-134 VTT for basic_fstream <char, char_traits<char="">></char,>	
7-135 libstdcxx - Class basic_fstream <char, char_traits<char=""> > Function</char,>	,
Interfaces	73
7-136 Primary vtable for basic_fstream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-137 Secondary vtable for basic_fstream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-138 Secondary vtable for basic_fstream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-139 VTT for basic_fstream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-140 libstdcxx - Class basic_fstream <wchar_t, char_traits<wchar_t=""> > Functi</wchar_t,>	
Interfaces	
7-141 Primary vtable for basic_ifstream <char, char_traits<char="">></char,>	
7-141 Fillinary viable for basic_listream <char, char_traits<char="">></char,>	
7-143 VTT for basic_ifstream <char, char_traits<char="">></char,>	/6
7-144 libstdcxx - Class basic_ifstream <char, char_traits<char=""> > Function</char,>	70
Interfaces	
7-145 Primary vtable for basic_ifstream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-146 Secondary vtable for basic_ifstream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-147 VTT for basic_ifstream <wchar_t, char_traits<wchar_t="">></wchar_t,>	77
7-148 libstdcxx - Class basic_ifstream <wchar_t, char_traits<wchar_t=""> ></wchar_t,>	
Function Interfaces	
7-149 Primary vtable for basic_ofstream <char, char_traits<char="">></char,>	
7-150 Secondary vtable for basic_ofstream <char, char_traits<char="">></char,>	
7-151 VTT for basic_ofstream <char, char_traits<char="">></char,>	78
7-152 libstdcxx - Class basic_ofstream <char, char_traits<char=""> > Function</char,>	
Interfaces	
7-153 Primary vtable for basic_ofstream <wchar_t, char_traits<wchar_t="">></wchar_t,>	
7-154 Secondary vtable for basic_ofstream <wchar_t, char_traits<wchar_t="">>.</wchar_t,>	
7-155 VTT for basic_ofstream <wchar_t, char_traits<wchar_t="">></wchar_t,>	79
7-156 libstdcxx - Class basic_ofstream <wchar_t, char_traits<wchar_t=""> ></wchar_t,>	
Function Interfaces	
7-157 Primary vtable for basic_streambuf <char, char_traits<char="">></char,>	
7-158 typeinfo for basic_streambuf <char, char_traits<char="">></char,>	81
7-159 libstdcxx - Class basic_streambuf <char, char_traits<char=""> > Function</char,>	
Interfaces	81
7-160 Primary vtable for basic_streambuf <wchar_t, char_traits<wchar_t="">></wchar_t,>	82
7-161 typeinfo for basic_streambuf <wchar_t, char_traits<wchar_t="">></wchar_t,>	83
7-162 libstdcxx - Class basic_streambuf <wchar_t, char_traits<wchar_t=""> ></wchar_t,>	
Function Interfaces	83
7-163 Primary vtable for basic_filebuf <char, char_traits<char="">></char,>	
7-164 typeinfo for basic_filebuf <char, char_traits<char="">></char,>	
7-165 libstdcxx - Class basic_filebuf <char, char_traits<char=""> > Function</char,>	
Interfaces	85

7-166 Primary vtable for basic_filebuf <wchar_t, char_traits<wchar_t="">></wchar_t,>	85
7-167 typeinfo for basic_filebuf <wchar_t, char_traits<wchar_t="">></wchar_t,>	87
7-168 libstdcxx - Class basic_filebuf <wchar_t, char_traits<wchar_t=""> > Function</wchar_t,>	
Interfaces	
7-169 typeinfo for ios_base	
7-170 Primary vtable for basic_ios <char, char_traits<char="">></char,>	
7-171 Primary vtable for ios_base::failure	
7-172 typeinfo for ios_base::failure	
7-172 typenho for los_base.namer 7-173 Primary vtable fortimepunct <char></char>	
7-174 typeinfo fortimepunct <char></char>	
7-174 typehilo fortinepurit<\char> Function Interfaces	
7-176 Primary vtable fortimepunct <wchar_t></wchar_t>	
7-176 Filinary viable fortimepunct <wchar_t></wchar_t>	
7-178 libstdcxx - Classtimepunct <wchar_t> Function Interfaces</wchar_t>	
7-179 typeinfo for messages_base	
7-180 Primary vtable for messages <char></char>	
7-181 libstdcxx - Class messages <char> Function Interfaces</char>	
7-182 Primary vtable for messages <wchar_t></wchar_t>	
7-183 libstdcxx - Class messages <wchar_t> Function Interfaces</wchar_t>	
7-184 Primary vtable for messages_byname <char></char>	
7-185 typeinfo for messages_byname <char></char>	
7-186 libstdcxx - Class messages_byname <char> Function Interfaces</char>	
7-187 Primary vtable for messages_byname <wchar_t></wchar_t>	94
7-188 typeinfo for messages_byname <wchar_t></wchar_t>	94
7-189 libstdcxx - Class messages_byname <wchar_t> Function Interfaces</wchar_t>	95
7-190 Primary vtable for numpunct <char></char>	95
7-191 typeinfo for numpunct <char></char>	95
7-192 libstdcxx - Class numpunct <char> Function Interfaces</char>	
7-193 Primary vtable for numpunct <wchar_t></wchar_t>	
7-194 typeinfo for numpunct wchar_t>	
7-195 libstdcxx - Class numpunct <wchar_t> Function Interfaces</wchar_t>	
7-196 Primary vtable for numpunct_byname <char></char>	
7-197 typeinfo for numpunct_byname <char></char>	
7-198 libstdcxx - Class numpunct_byname <char> Function Interfaces</char>	
7-199 Primary vtable for numpunct_byname <wchar_t></wchar_t>	
7-200 typeinfo for numpunct_byname <wchar_t></wchar_t>	
7-201 libstdcxx - Class numpunct_byname <wchar_t> Function Interfaces</wchar_t>	
7-202 Primary vtable forcodecvt_abstract_base <wchar_t, char,mbstate_<="" td=""><td></td></wchar_t,>	
7-203 typeinfo for codecvt_base	
7-204 Primary vtable for codecvt <char, char,mbstate_t=""></char,>	
7-205 typeinfo for codecvt <a "<="" href="char, char,mbstate_t>" td=""><td></td>	
7-206 Primary vtable forcodecvt_abstract_base <char, char,mbstate_t=""></char,>	
7-200 l'Illiary viable loicodecvt_abstract_base <criat, citat,illiostate_t=""> 7-207 libstdcxx - Class codecvt<char, char,mbstate_t=""> Function Interfaces</char,></criat,>	
7-208 Primary vtable for codecvt <wchar_t, char,mbstate_t=""></wchar_t,>	
7-209 typeinfo for codecvt <wchar_t, char,mbstate_t=""></wchar_t,>	
7-210 libstdcxx - Class codecvt <wchar_t, char,mbstate_t=""> Function Interface</wchar_t,>	
7-211 Primary vtable for codecvt_byname <char, char,mbstate_t=""></char,>	
7-212 typeinfo for codecvt_byname <char, char,mbstate_t=""></char,>	105
7-213 libstdcxx - Class codecvt_byname <char, char,mbstate_t=""> Function</char,>	4.05
Interfaces	
7-214 Primary vtable for codecvt_byname <wchar_t, char,mbstate_t=""></wchar_t,>	
7-215 typeinfo for codecvt_byname <wchar_t, char,mbstate_t=""></wchar_t,>	
7-216 Primary vtable for collate_byname <wchar_t></wchar_t>	
7-217 typeinfo for collate hypame <wchar t=""></wchar>	107

7-218 libstdcxx - Class codecvt_byname <wchar_t, char,mbstate_t=""> Fun</wchar_t,>	ction
Interfaces	107
7-219 Primary vtable for collate <char></char>	
7-220 typeinfo for collate <char></char>	
7-221 libstdcxx - Class collate <char> Function Interfaces</char>	108
7-222 Primary vtable for collate <wchar_t></wchar_t>	108
7-223 typeinfo for collate <wchar_t></wchar_t>	109
7-224 libstdcxx - Class collate <wchar_t> Function Interfaces</wchar_t>	109
7-225 Primary vtable for collate_byname <char></char>	109
7-226 typeinfo for collate_byname <char></char>	110
7-227 libstdcxx - Class collate_byname <char> Function Interfaces</char>	
7-228 typeinfo for time_base	
7-229 Primary vtable for time_get_byname <char, istreambuf_iterator<cha<="" td=""><td></td></char,>	
char_traits <char>>></char>	111
7-230 typeinfo for time_get_byname <char, istreambuf_iterator<char,<="" td=""><td></td></char,>	
char_traits <char>>></char>	112
7-231 libstdcxx - Class time_get_byname <char, istreambuf_iterator<char,<="" td=""><td></td></char,>	
char_traits <char> > Function Interfaces</char>	112
7-232 Primary vtable for time_get_byname <wchar_t,< td=""><td></td></wchar_t,<>	
istreambuf_iterator <wchar_t, char_traits<wchar_t="">>></wchar_t,>	
7-233 typeinfo for time_get_byname <wchar_t, istreambuf_iterator<wchar<="" td=""><td></td></wchar_t,>	
char_traits <wchar_t>>></wchar_t>	114
7-234 libstdcxx - Class time_get_byname <wchar_t,< td=""><td></td></wchar_t,<>	
istreambuf_iterator <wchar_t, char_traits<wchar_t=""> > Function</wchar_t,>	
Interfaces	
7-235 Primary vtable for time_put_byname <char, ostreambuf_iterator<ch<="" td=""><td></td></char,>	
char_traits <char>>></char>	115
7-236 typeinfo for time_put_byname <char, ostreambuf_iterator<char,<="" td=""><td></td></char,>	
char_traits <char>>></char>	
7-237 libstdcxx - Class time_put_byname <char, ostreambuf_iterator<char,<="" td=""><td></td></char,>	
char_traits <char> >> Function Interfaces</char>	116
7-238 Primary vtable for time_put_byname <wchar_t,< td=""><td>11.0</td></wchar_t,<>	11.0
ostreambuf_iterator <wchar_t, char_traits<wchar_t="">>></wchar_t,>	
7-239 typeinfo for time_put_byname <wchar_t, ostreambuf_iterator<wchar_to.com<="" td=""><td></td></wchar_t,>	
char_traits <wchar_t>>></wchar_t>	117
7-240 libstdcxx - Class time_put_byname <wchar_t,< td=""><td></td></wchar_t,<>	
ostreambuf_iterator <wchar_t, char_traits<wchar_t="">>> Function</wchar_t,>	110
Interfaces	11/
7-241 Primary vtable for time_get <char, istreambuf_iterator<char,<="" td=""><td>117</td></char,>	117
char_traits <char>>></char>	11/
7-242 libstdcxx - Class time_get <char, istreambuf_iterator<char,<="" td=""><td>110</td></char,>	110
char_traits <char> >> Function Interfaces</char>	
7-243 Primary vtable for time_get <wchar_t, istreambuf_iterator<wchar_t,<="" td=""><td></td></wchar_t,>	
char_traits <wchar_t>>></wchar_t>	119
7-244 libstdcxx - Class time_get <wchar_t, istreambuf_iterator<wchar_t,<="" td=""><td>101</td></wchar_t,>	101
char_traits <wchar_t> > Function Interfaces</wchar_t>	121
±	101
char_traits <char> > Function Interfaces</char>	121
7-246 libstdcxx - Class time_put <wchar_t, ostreambuf_iterator<wchar_t,<="" td=""><td>101</td></wchar_t,>	101
char_traits <wchar_t>>> Function Interfaces</wchar_t>	
7-247 Primary vtable for moneypunct <char, false=""></char,>	
7-248 libstdcxx - Class moneypunct <char, false=""> Function Interfaces</char,>	
7-249 Primary vtable for moneypunct <char, true=""></char,>	
7-250 libstdcxx - Class moneypunct <char, true=""> Function Interfaces</char,>	124

7-251 Primary vtable for moneypunct <wchar_t, false=""></wchar_t,>	
7-252 libstdcxx - Class moneypunct <wchar_t, false=""> Function Interfaces</wchar_t,>	
7-253 Primary vtable for moneypunct <wchar_t, true=""></wchar_t,>	
7-254 libstdcxx - Class moneypunct <wchar_t, true=""> Function Interfaces</wchar_t,>	
7-255 Primary vtable for moneypunct_byname <char, false=""></char,>	
7-256 typeinfo for moneypunct_byname <char, false=""></char,>	
7-257 libstdcxx - Class moneypunct_byname <char, false=""> Function Interface</char,>	
7-258 Primary vtable for moneypunct_byname <char, true=""></char,>	
7-259 typeinfo for moneypunct_byname <char, true=""></char,>	
7-260 libstdcxx - Class moneypunct_byname <char, true=""> Function Interfac</char,>	es 129
7-261 Primary vtable for moneypunct_byname <wchar_t, false=""></wchar_t,>	129
7-262 typeinfo for moneypunct_byname <wchar_t, false=""></wchar_t,>	130
7-263 libstdcxx - Class moneypunct_byname <wchar_t, false=""> Function</wchar_t,>	
Interfaces	130
7-264 Primary vtable for moneypunct_byname <wchar_t, true=""></wchar_t,>	130
7-265 typeinfo for moneypunct_byname <wchar_t, true=""></wchar_t,>	131
7-266 libstdcxx - Class moneypunct_byname <wchar_t, true=""> Function Inte</wchar_t,>	rfaces131
7-267 typeinfo for money_base	
7-268 Primary vtable for money_get <char, istreambuf_iterator<char,<="" td=""><td></td></char,>	
char_traits <char>>></char>	132
7-269 typeinfo for money_get <char, char_traits<<="" istreambuf_iterator<char,="" td=""><td>char></td></char,>	char>
>>	
7-270 libstdcxx - Class money_get <char, istreambuf_iterator<char,<="" td=""><td></td></char,>	
char_traits <char> > Function Interfaces</char>	133
7-271 Primary vtable for money_get <wchar_t, istreambuf_iterator<wchar_<="" td=""><td>_t,</td></wchar_t,>	_t,
char_traits <wchar_t>>></wchar_t>	
7-272 typeinfo for money_get <wchar_t, istreambuf_iterator<wchar_t,<="" td=""><td></td></wchar_t,>	
char_traits <wchar_t>>></wchar_t>	134
7-273 libstdcxx - Class money_get <wchar_t, istreambuf_iterator<wchar_t,<="" td=""><td></td></wchar_t,>	
char_traits <wchar_t> > Function Interfaces</wchar_t>	135
7-274 Primary vtable for money_put <char, ostreambuf_iterator<char,<="" td=""><td></td></char,>	
char_traits <char>>></char>	135
7-275 typeinfo for money_put <char, ostreambuf_iterator<char,<="" td=""><td></td></char,>	
char_traits <char>>></char>	136
7-276 libstdcxx - Class money_put <char, ostreambuf_iterator<char,<="" td=""><td></td></char,>	
char_traits <char> >> Function Interfaces</char>	136
7-277 Primary vtable for money_put <wchar_t, ostreambuf_iterator<wchar<="" td=""><td></td></wchar_t,>	
char_traits <wchar_t>>></wchar_t>	
7-278 typeinfo for money_put <wchar_t, ostreambuf_iterator<wchar_t,<="" td=""><td></td></wchar_t,>	
char_traits <wchar_t>>></wchar_t>	137
7-279 libstdcxx - Class money_put <wchar_t, ostreambuf_iterator<wchar_t<="" td=""><td>,</td></wchar_t,>	,
char_traits <wchar_t> >> Function Interfaces</wchar_t>	
7-280 libstdcxx - Class locale Function Interfaces	
7-281 Primary vtable for locale::facet	
7-282 typeinfo for locale::facet	
7-283	
7-284 libstdcxx - Class num_get <char, istreambuf_iterator<char,<="" td=""><td></td></char,>	
char_traits <char>>> Function Interfaces</char>	139
7-285 libstdcxx - Class num_get <wchar_t, istreambuf_iterator<wchar_t,<="" td=""><td></td></wchar_t,>	
char_traits <wchar_t> >> Function Interfaces</wchar_t>	139
7-286 libstdcxx - Class num_put <char, ostreambuf_iterator<char,<="" td=""><td></td></char,>	
char_traits <char> >> Function Interfaces</char>	140
7-287 libstdcxx - Class num_put <wchar_t, ostreambuf_iterator<wchar_t,<="" td=""><td></td></wchar_t,>	
char_traits <wchar_t> >> Function Interfaces</wchar_t>	140

7-288 libstdcxx - Class gslice Function Interfaces	141
7-289 libstdcxx - Classbasic_file <char> Function Interfaces</char>	
7-290 libstdcxx - Class valarray <unsigned int=""> Function Interfaces</unsigned>	

Foreword

This is version 3.1 of the Linux Standard Base C++ Specification for AMD64. This specification is part of a family of specifications under the general title "Linux Standard Base". Developers of applications or implementations interested in using the LSB trademark should see the Free Standards Group Certification Policy for details.

Introduction

The LSB defines a binary interface for application programs that are compiled and packaged for LSB-conforming implementations on many different hardware architectures. Since a binary specification shall include information specific to the computer processor architecture for which it is intended, it is not possible for a single document to specify the interface for all possible LSB-conforming implementations. Therefore, the LSB is a family of specifications, rather than a single one.

This document should be used in conjunction with the documents it references. This document enumerates the system components it includes, but descriptions of those components may be included entirely or partly in this document, partly in other documents, or entirely in other reference documents. For example, the section that describes system service routines includes a list of the system routines supported in this interface, formal declarations of the data structures they use that are visible to applications, and a pointer to the underlying referenced specification for information about the syntax and semantics of each call. Only those routines not described in standards referenced by this document, or extensions to those standards, are described in the detail. Information referenced in this way is as much a part of this document as is the information explicitly included here.

The specification carries a version number of either the form x.y or x.y.z. This version number carries the following meaning:

- The first number (x) is the major version number. All versions with the same major version number should share binary compatibility. Any addition or deletion of a new library results in a new version number. Interfaces marked as deprecated may be removed from the specification at a major version change.
- The second number (y) is the minor version number. Individual interfaces may be added if all certified implementations already had that (previously undocumented) interface. Interfaces may be marked as deprecated at a minor version change. Other minor changes may be permitted at the discretion of the LSB workgroup.
- The third number (z), if present, is the editorial level. Only editorial changes should be included in such versions.

Since this specification is a descriptive Application Binary Interface, and not a source level API specification, it is not possible to make a guarantee of 100% backward compatibility between major releases. However, it is the intent that those parts of the binary interface that are visible in the source level API will remain backward compatible from version to version, except where a feature marked as "Deprecated" in one release may be removed from a future release.

Implementors are strongly encouraged to make use of symbol versioning to permit simultaneous support of applications conforming to different releases of this specification.

I Introductory Elements

1 Scope

1.1 General

The Linux Standard Base (LSB) defines a system interface for compiled applications and a minimal environment for support of installation scripts. Its purpose is to enable a uniform industry standard environment for high-volume applications conforming to the LSB.

These specifications are composed of two basic parts: A common specification ("LSB-generic" or "generic LSB"), ISO/IEC 23360 Part 1, describing those parts of the interface that remain constant across all implementations of the LSB, and an architecture-specific part ("LSB-arch" or "archLSB") describing the parts of the interface that vary by processor architecture. Together, the LSB-generic and the relevant architecture-specific part of ISO/IEC 23360 for a single hardware architecture provide a complete interface specification for compiled application programs on systems that share a common hardware architecture.

ISO/IEC 23360 Part 1, the LSB-generic document, should be used in conjunction with an architecture-specific part. Whenever a section of the LSB-generic specification is supplemented by architecture-specific information, the LSB-generic document includes a reference to the architecture part. Architecture-specific parts of ISO/IEC 23360 may also contain additional information that is not referenced in the LSB-generic document.

The LSB contains both a set of Application Program Interfaces (APIs) and Application Binary Interfaces (ABIs). APIs may appear in the source code of portable applications, while the compiled binary of that application may use the larger set of ABIs. A conforming implementation provides all of the ABIs listed here. The compilation system may replace (e.g. by macro definition) certain APIs with calls to one or more of the underlying binary interfaces, and may insert calls to binary interfaces as needed.

The LSB is primarily a binary interface definition. Not all of the source level APIs available to applications may be contained in this specification.

1.2 Module Specific Scope

This is the C++ module of the Linux Standards Base (LSB). This module supplements the core interfaces by providing system interfaces, libraries, and a runtime environment for applications built using the C++ programming language. These interfaces provide low-level support for the core constructs of the language, and implement the standard base C++ libraries.

Interfaces described in this module are presented in terms of C++; the binary interfaces will use encoded or mangled versions of the names.

2 Normative References

The specifications listed below are referenced in whole or in part by this module of the Linux Standard Base. In this specification, where only a particular section of one of these references is identified, then the normative reference is to that section alone, and the rest of the referenced document is informative.

Table 2-1 Normative References

Name	Title	URL
ISO/IEC 23360 Part 1	ISO/IEC 23360:2005 Linux Standard Base - Part 1 Generic Specification	http://www.linuxbase. org/spec/
ISO C (1999)	ISO/IEC 9899: 1999, Programming LanguagesC	
ISO POSIX (2003)	ISO/IEC 9945-1:2003 Information technology Portable Operating System Interface (POSIX) Part 1: Base Definitions ISO/IEC 9945-2:2003 Information technology Portable Operating System Interface (POSIX) Part 2: System Interfaces ISO/IEC 9945-3:2003 Information technology Portable Operating System Interface (POSIX) Part 3: Shell and Utilities ISO/IEC 9945-4:2003 Information technology Portable Operating System Interface (POSIX) Part 3: Shell and Utilities ISO/IEC 9945-4:2003 Information technology Portable Operating System Interface (POSIX) Part 4: Rationale Including Technical Cor. 1: 2004	http://www.unix.org/version3/
ISO/IEC 14882: 2003 C++ Language	ISO/IEC 14882: 2003 Programming languagesC++	
Itanium™ C++ ABI	Itanium™ C++ ABI (Revision 1.83)	http://refspecs.freestan dards.org/cxxabi- 1.83.html

3 Requirements

3.1 Relevant Libraries

The libraries listed in Table 3-1 shall be available on a Linux Standard Base system, with the specified runtime names.

Table 3-1 Standard Library Names

Library	Runtime Name
libstdcxx	libstdc++.so.6

These libraries will be in an implementation-defined directory which the dynamic linker shall search by default.

3.2 LSB Implementation Conformance

An implementation shall satisfy the following requirements:

- The implementation shall implement fully the architecture described in the hardware manual for the target processor architecture.
- The implementation shall be capable of executing compiled applications having the format and using the system interfaces described in this document.
- The implementation shall provide libraries containing the interfaces specified by this document, and shall provide a dynamic linking mechanism that allows these interfaces to be attached to applications at runtime. All the interfaces shall behave as specified in this document.
- The map of virtual memory provided by the implementation shall conform to the requirements of this document.
- The implementation's low-level behavior with respect to function call linkage, system traps, signals, and other such activities shall conform to the formats described in this document.
- The implementation shall provide all of the mandatory interfaces in their entirety.
- The implementation may provide one or more of the optional interfaces. Each optional interface that is provided shall be provided in its entirety. The product documentation shall state which optional interfaces are provided.
- The implementation shall provide all files and utilities specified as part of this
 document in the format defined here and in other referenced documents. All
 commands and utilities shall behave as required by this document. The
 implementation shall also provide all mandatory components of an
 application's runtime environment that are included or referenced in this
 document.
- The implementation, when provided with standard data formats and values at a named interface, shall provide the behavior defined for those values and data formats at that interface. However, a conforming implementation may consist of components which are separately packaged and/or sold. For example, a vendor of a conforming implementation might sell the hardware, operating system, and windowing system as separately packaged items.

• The implementation may provide additional interfaces with different names. It may also provide additional behavior corresponding to data values outside the standard ranges, for standard named interfaces.

3.3 LSB Application Conformance

An application shall satisfy the following requirements:

- Its executable files are either shell scripts or object files in the format defined for the Object File Format system interface.
- Its object files participate in dynamic linking as defined in the Program Loading and Linking System interface.
- It employs only the instructions, traps, and other low-level facilities defined in the Low-Level System interface as being for use by applications.
- If it requires any optional interface defined in this document in order to be installed or to execute successfully, the requirement for that optional interface is stated in the application's documentation.
- It does not use any interface or data format that is not required to be provided by a conforming implementation, unless:
 - If such an interface or data format is supplied by another application through direct invocation of that application during execution, that application is in turn an LSB conforming application.
 - The use of that interface or data format, as well as its source, is identified in the documentation of the application.
- It shall not use any values for a named interface that are reserved for vendor extensions.

A strictly conforming application does not require or use any interface, facility, or implementation-defined extension that is not defined in this document in order to be installed or to execute successfully.

4 Definitions

For the purposes of this document, the following definitions, as specified in the *ISO/IEC Directives, Part 2*, 2001, 4th Edition, apply:

can

be able to; there is a possibility of; it is possible to

cannot

be unable to; there is no possibilty of; it is not possible to

may

is permitted; is allowed; is permissible

need not

it is not required that; no...is required

shall

is to; is required to; it is required that; has to; only...is permitted; it is necessary

shall not

is not allowed [permitted] [acceptable] [permissible]; is required to be not; is required that...be not; is not to be

should

it is recommended that; ought to

should not

it is not recommended that; ought not to

5 Terminology

For the purposes of this document, the following terms apply:

archLSB

The architectural part of the LSB Specification which describes the specific parts of the interface that are platform specific. The archLSB is complementary to the gLSB.

Binary Standard

The total set of interfaces that are available to be used in the compiled binary code of a conforming application.

gLSB

The common part of the LSB Specification that describes those parts of the interface that remain constant across all hardware implementations of the LSB

implementation-defined

Describes a value or behavior that is not defined by this document but is selected by an implementor. The value or behavior may vary among implementations that conform to this document. An application should not rely on the existence of the value or behavior. An application that relies on such a value or behavior cannot be assured to be portable across conforming implementations. The implementor shall document such a value or behavior so that it can be used correctly by an application.

Shell Script

A file that is read by an interpreter (e.g., awk). The first line of the shell script includes a reference to its interpreter binary.

Source Standard

The set of interfaces that are available to be used in the source code of a conforming application.

undefined

Describes the nature of a value or behavior not defined by this document which results from use of an invalid program construct or invalid data input. The value or behavior may vary among implementations that conform to this document. An application should not rely on the existence or validity of the value or behavior. An application that relies on any particular value or behavior cannot be assured to be portable across conforming implementations.

unspecified

Describes the nature of a value or behavior not specified by this document which results from use of a valid program construct or valid data input. The value or behavior may vary among implementations that conform to this document. An application should not rely on the existence or validity of the value or behavior. An application that relies on any particular value or behavior cannot be assured to be portable across conforming implementations.

Other terms and definitions used in this document shall have the same meaning as defined in Chapter 3 of the Base Definitions volume of ISO POSIX (2003).

6 Documentation Conventions

Throughout this document, the following typographic conventions are used:

function()

the name of a function

command

the name of a command or utility

CONSTANT

a constant value

parameter

a parameter

variable

a variable

Throughout this specification, several tables of interfaces are presented. Each entry in these tables has the following format:

name

the name of the interface

(symver)

An optional symbol version identifier, if required.

[refno]

A reference number indexing the table of referenced specifications that follows this table.

For example,

forkpty(GLIBC_2.0) [SUSv3]

refers to the interface named <code>forkpty()</code> with symbol version <code>GLIBC_2.0</code> that is defined in the <code>SUSv3</code> reference.

Note: Symbol versions are defined in the architecture specific parts of ISO/IEC 23360 only.

II Base Libraries

7 Libraries

An LSB-conforming implementation shall support some base libraries which provide interfaces for accessing the operating system, processor and other hardware in the system.

Interfaces that are unique to the AMD64 platform are defined here. This section should be used in conjunction with the corresponding section in the Linux Standard Base Specification.

7.1 Interfaces for libstdcxx

Table 7-1 defines the library name and shared object name for the libstdcxx library

Table 7-1 libstdcxx Definition

Library:	libstdcxx
SONAME:	libstdc++.so.6

The behavior of the interfaces in this library is specified by the following specifications:

[CXXABI] Itanium™ C++ ABI [ISOCXX] ISO/IEC 14882: 2003 C++ Language [LSB] ISO/IEC 23360 Part 1

7.1.1 C++ Runtime Support

7.1.1.1 Interfaces for C++ Runtime Support

An LSB conforming implementation shall provide the architecture specific methods for C++ Runtime Support specified in Table 7-2, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-2 libstdcxx - C++ Runtime Support Function Interfaces

operator new[](unsigned long)(GLIBCXX_3.4) [ISOCXX]	
operator new[](unsigned long, nothrow_t const&)(GLIBCXX_3.4) [ISOCXX]	
operator new(unsigned long)(GLIBCXX_3.4) [ISOCXX]	
operator new(unsigned long, nothrow_t const&)(GLIBCXX_3.4) [ISOCXX]	

7.1.2 C++ type descriptors for built-in types

7.1.2.1 Interfaces for C++ type descriptors for built-in types

No external methods are defined for libstdcxx - C++ type descriptors for built-in types in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.3 C++ _Rb_tree

7.1.3.1 Interfaces for C++ _Rb_tree

No external methods are defined for libstdcxx - C++ _Rb_tree in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.4 Class type_info

7.1.4.1 Class data for type_info

The virtual table for the std::type_info class is described by Table 7-3

Table 7-3 Primary vtable for type_info

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for type_info
vfunc[0]:	type_info::~type_info()
vfunc[1]:	type_info::~type_info()
vfunc[2]:	type_info::is_pointer_p() const
vfunc[3]:	type_info::is_function_p() const
vfunc[4]:	type_info::do_catch(type_info const*, void**, unsigned int) const
vfunc[5]:	type_info::do_upcast(cxxabiv1::_ _class_type_info const*, void**) const

The Run Time Type Information for the std::type_info class is described by Table 7-4

Table 7-4 typeinfo for type_info

Base Vtable	vtable forcxxabiv1::class_type_info
Name	typeinfo name for type_info

7.1.4.2 Interfaces for Class type_info

No external methods are defined for libstdcxx - Class std::type_info in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.5 Class __cxxabiv1::__enum_type_info

7.1.5.1 Class data for __cxxabiv1::__enum_type_info

The virtual table for the __cxxabiv1::__enum_type_info class is described by Table 7-5

Table 7-5 Primary vtable for __cxxabiv1::__enum_type_info

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo forcxxabiv1::enum_type_info
vfunc[0]:	cxxabiv1::enum_type_info::~e num_type_info()
vfunc[1]:	cxxabiv1::enum_type_info::~e

	num_type_info()
vfunc[2]:	type_info::is_pointer_p() const
vfunc[3]:	type_info::is_function_p() const
vfunc[4]:	type_info::do_catch(type_info const*, void**, unsigned int) const
vfunc[5]:	type_info::do_upcast(cxxabiv1::_ _class_type_info const*, void**) const

The Run Time Type Information for the __cxxabiv1::__enum_type_info class is described by Table 7-6

Table 7-6 typeinfo for __cxxabiv1::__enum_type_info

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name forcxxabiv1::enum_type_info

7.1.5.2 Interfaces for Class __cxxabiv1::__enum_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::__enum_type_info in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.6 Class __cxxabiv1::__array_type_info

7.1.6.1 Class data for __cxxabiv1::__array_type_info

The virtual table for the __cxxabiv1::__array_type_info class is described by Table 7-7

Table 7-7 Primary vtable for __cxxabiv1::_array_type_info

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo forcxxabiv1::array_type_info
vfunc[0]:	cxxabiv1::array_type_info::~array_type_info()
vfunc[1]:	cxxabiv1::array_type_info::~array_type_info()
vfunc[2]:	type_info::is_pointer_p() const
vfunc[3]:	type_info::is_function_p() const
vfunc[4]:	type_info::do_catch(type_info const*, void**, unsigned int) const
vfunc[5]:	type_info::do_upcast(cxxabiv1::_ _class_type_info const*, void**) const

The Run Time Type Information for the __cxxabiv1::__array_type_info class is described by Table 7-8

Table 7-8 typeinfo for __cxxabiv1::_array_type_info

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name forcxxabiv1::array_type_info

7.1.6.2 Interfaces for Class __cxxabiv1::__array_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::_array_type_info in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.7 Class __cxxabiv1::__class_type_info

7.1.7.1 Class data for __cxxabiv1::__class_type_info

The virtual table for the __cxxabiv1::__class_type_info class is described by Table 7-9

Table 7-9 Primary vtable for __cxxabiv1::__class_type_info

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo forcxxabiv1::class_type_info
vfunc[0]:	cxxabiv1::class_type_info::~class_type_info()
vfunc[1]:	cxxabiv1::class_type_info::~cla ss_type_info()
vfunc[2]:	type_info::is_pointer_p() const
vfunc[3]:	type_info::is_function_p() const
vfunc[4]:	cxxabiv1::class_type_info::do_ catch(type_info const*, void**, unsigned int) const
vfunc[5]:	cxxabiv1::class_type_info::do_ upcast(cxxabiv1::class_type_info const*, void**) const
vfunc[6]:	cxxabiv1::class_type_info::do_ upcast(cxxabiv1::class_type_info const*, void const*, cxxabiv1::class_type_info::upc ast_result&) const
vfunc[7]:	cxxabiv1::class_type_info::do_ dyncast(long, cxxabiv1::class_type_info::sub _kind,cxxabiv1::class_type_info

	const*, void const*,cxxabiv1::class_type_info const*, void const*,cxxabiv1::class_type_info::dyn cast_result&) const
vfunc[8]:	cxxabiv1::class_type_info::do_ find_public_src(long, void const*, cxxabiv1::class_type_info const*, void const*) const

The Run Time Type Information for the __cxxabiv1::__class_type_info class is described by Table 7-10

Table 7-10 typeinfo for __cxxabiv1::__class_type_info

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name forcxxabiv1::class_type_info

7.1.7.2 Interfaces for Class __cxxabiv1::__class_type_info

An LSB conforming implementation shall provide the architecture specific methods for Class __cxxabiv1::__class_type_info specified in Table 7-11, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-11 libstdcxx - Class __cxxabiv1::__class_type_info Function Interfaces

```
__cxxabiv1::_class_type_info::_do_dyncast(long,
__cxxabiv1::_class_type_info::_sub_kind, __cxxabiv1::_class_type_info
const*, void const*, __cxxabiv1::_class_type_info const*, void const*,
__cxxabiv1::_class_type_info::_dyncast_result&) const(CXXABI_1.3)
[CXXABI]

__cxxabiv1::_class_type_info::_do_find_public_src(long, void const*,
__cxxabiv1::_class_type_info const*, void const*) const(CXXABI_1.3)
[CXXABI]
```

7.1.8 Class __cxxabiv1::__pbase_type_info

7.1.8.1 Class data for __cxxabiv1::__pbase_type_info

The virtual table for the __cxxabiv1::__pbase_type_info class is described by Table 7-12

Table 7-12 Primary vtable for __cxxabiv1::__pbase_type_info

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo forcxxabiv1::pbase_type_info
vfunc[0]:	cxxabiv1::pbase_type_info::~p base_type_info()

vfunc[1]:	cxxabiv1::pbase_type_info::~p base_type_info()
vfunc[2]:	type_info::is_pointer_p() const
vfunc[3]:	type_info::is_function_p() const
vfunc[4]:	cxxabiv1::pbase_type_info::do _catch(type_info const*, void**, unsigned int) const
vfunc[5]:	type_info::do_upcast(cxxabiv1::_ _class_type_info const*, void**) const
vfunc[6]:	cxxabiv1::pbase_type_info::poi nter_catch(cxxabiv1::pbase_type _info const*, void**, unsigned int) const

The Run Time Type Information for the __cxxabiv1::__pbase_type_info class is described by Table 7-13

Table 7-13 typeinfo for __cxxabiv1::__pbase_type_info

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name forcxxabiv1::pbase_type_info

7.1.8.2 Interfaces for Class __cxxabiv1::__pbase_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::_pbase_type_info in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.9 Class __cxxabiv1::__pointer_type_info

7.1.9.1 Class data for __cxxabiv1::__pointer_type_info

The virtual table for the __cxxabiv1::__pointer_type_info class is described by Table 7-14

Table 7-14 Primary vtable for __cxxabiv1::__pointer_type_info

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo forcxxabiv1::pointer_type_info
vfunc[0]:	cxxabiv1::pointer_type_info::~ pointer_type_info()
vfunc[1]:	cxxabiv1::pointer_type_info::~ pointer_type_info()
vfunc[2]:	cxxabiv1::pointer_type_info::is _pointer_p() const

vfunc[3]:	type_info::is_function_p() const
vfunc[4]:	cxxabiv1::pbase_type_info::do _catch(type_info const*, void**, unsigned int) const
vfunc[5]:	type_info::do_upcast(cxxabiv1::_ _class_type_info const*, void**) const
vfunc[6]:	cxxabiv1::pointer_type_info::p ointer_catch(cxxabiv1::pbase_ty pe_info const*, void**, unsigned int) const

The Run Time Type Information for the __cxxabiv1::__pointer_type_info class is described by Table 7-15

Table 7-15 typeinfo for __cxxabiv1::__pointer_type_info

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name forcxxabiv1::pointer_type_info

7.1.9.2 Interfaces for Class __cxxabiv1::__pointer_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::_pointer_type_info in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.10 Class __cxxabiv1::__function_type_info

7.1.10.1 Class data for __cxxabiv1::__function_type_info

The virtual table for the __cxxabiv1::__function_type_info class is described by Table 7-16

Table 7-16 Primary vtable for __cxxabiv1::__function_type_info

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo forcxxabiv1::function_type_info
vfunc[0]:	cxxabiv1::function_type_info::~_ _function_type_info()
vfunc[1]:	cxxabiv1::function_type_info::~_ _function_type_info()
vfunc[2]:	type_info::is_pointer_p() const
vfunc[3]:	cxxabiv1::function_type_info::i s_function_p() const
vfunc[4]:	type_info::do_catch(type_info const*, void**, unsigned int) const

vfunc[5]:	type_info::do_upcast(cxxabiv1::_
	_class_type_info const*, void**) const

The Run Time Type Information for the __cxxabiv1::__function_type_info class is described by Table 7-17

Table 7-17 typeinfo for __cxxabiv1::__function_type_info

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name forcxxabiv1::function_type_info

7.1.10.2 Interfaces for Class __cxxabiv1::__function_type_info

No external methods are defined for libstdcxx - Class _cxxabiv1::_function_type_info in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.11 Class __cxxabiv1::_si_class_type_info

7.1.11.1 Class data for __cxxabiv1::__si_class_type_info

The virtual table for the $_cxxabiv1::_si_class_type_info$ class is described by Table 7-18

Table 7-18 Primary vtable for __cxxabiv1::_si_class_type_info

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo forcxxabiv1::si_class_type_info
vfunc[0]:	cxxabiv1::_si_class_type_info::~ si_class_type_info()
vfunc[1]:	cxxabiv1::si_class_type_info::~ si_class_type_info()
vfunc[2]:	type_info::is_pointer_p() const
vfunc[3]:	type_info::is_function_p() const
vfunc[4]:	cxxabiv1::class_type_info::do_ catch(type_info const*, void**, unsigned int) const
vfunc[5]:	cxxabiv1::class_type_info::do_ upcast(cxxabiv1::class_type_info const*, void**) const
vfunc[6]:	cxxabiv1::_si_class_type_info::_d o_upcast(cxxabiv1::class_type_in fo const*, void const*,cxxabiv1::class_type_info::upc ast_result&) const

vfunc[7]:	cxxabiv1::_si_class_type_info::_d o_dyncast(long, _cxxabiv1::_class_type_info::_sub _kind, _cxxabiv1::_class_type_info const*, void const*, _cxxabiv1::_class_type_info const*, void const*, _cxxabiv1::_class_type_info::_dyn cast_result&) const
vfunc[8]:	cxxabiv1::si_class_type_info::d o_find_public_src(long, void const*, cxxabiv1::class_type_info const*, void const*) const

The Run Time Type Information for the __cxxabiv1::_si_class_type_info class is described by Table 7-19

Table 7-19 typeinfo for __cxxabiv1::_si_class_type_info

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name forcxxabiv1::si_class_type_info

7.1.11.2 Interfaces for Class __cxxabiv1::__si_class_type_info

An LSB conforming implementation shall provide the architecture specific methods for Class __cxxabiv1::__si_class_type_info specified in Table 7-20, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-20 libstdcxx - Class __cxxabiv1::_si_class_type_info Function Interfaces

```
__cxxabiv1::__si_class_type_info::__do_dyncast(long,
__cxxabiv1::__class_type_info::__sub_kind, __cxxabiv1::__class_type_info
const*, void const*, __cxxabiv1::__class_type_info const*, void const*,
__cxxabiv1::__class_type_info::__dyncast_result&) const(CXXABI_1.3)
[CXXABI]

__cxxabiv1::__si_class_type_info::__do_find_public_src(long, void const*,
__cxxabiv1::__class_type_info const*, void const*) const(CXXABI_1.3)
[CXXABI]
```

7.1.12 Class __cxxabiv1::__vmi_class_type_info

7.1.12.1 Class data for cxxabiv1:: vmi class type info

The virtual table for the __cxxabiv1::__vmi_class_type_info class is described by Table 7-21

Table 7-21 Primary vtable for __cxxabiv1::__vmi_class_type_info

Base Offset	0
Virtual Base Offset	0

RTTI	typeinfo forcxxabiv1::vmi_class_type_info
vfunc[0]:	cxxabiv1::vmi_class_type_info::~ vmi_class_type_info()
vfunc[1]:	cxxabiv1::vmi_class_type_info::~ vmi_class_type_info()
vfunc[2]:	type_info::is_pointer_p() const
vfunc[3]:	type_info::is_function_p() const
vfunc[4]:	cxxabiv1::class_type_info::do_ catch(type_info const*, void**, unsigned int) const
vfunc[5]:	cxxabiv1::class_type_info::do_ upcast(cxxabiv1::class_type_info const*, void**) const
vfunc[6]:	cxxabiv1::vmi_class_type_info::_ _do_upcast(cxxabiv1::class_type _info const*, void const*, cxxabiv1::class_type_info::upc ast_result&) const
vfunc[7]:	cxxabiv1::vmi_class_type_info::do_dyncast(long,cxxabiv1::class_type_info::sub _kind,cxxabiv1::class_type_info const*, void const*,cxxabiv1::class_type_info const*, void const*,cxxabiv1::class_type_info::dyn cast_result&) const
vfunc[8]:	cxxabiv1::vmi_class_type_info::_ _do_find_public_src(long, void const*,cxxabiv1::class_type_info const*, void const*) const

The Run Time Type Information for the __cxxabiv1::__vmi_class_type_info class is described by Table 7-22

Table 7-22 typeinfo for __cxxabiv1::__vmi_class_type_info

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name forcxxabiv1::vmi_class_type_info

7.1.12.2 Interfaces for Class __cxxabiv1::__vmi_class_type_info

An LSB conforming implementation shall provide the architecture specific methods for Class __cxxabiv1::_vmi_class_type_info specified in Table 7-23, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-23 libstdcxx - Class __cxxabiv1::_vmi_class_type_info Function Interfaces

```
__cxxabiv1::_vmi_class_type_info::_do_dyncast(long,
__cxxabiv1::_class_type_info::_sub_kind, __cxxabiv1::_class_type_info
const*, void const*, __cxxabiv1::_class_type_info const*, void const*,
__cxxabiv1::_class_type_info::_dyncast_result&) const(CXXABI_1.3)
[CXXABI]

__cxxabiv1::_vmi_class_type_info::_do_find_public_src(long, void const*,
__cxxabiv1::_class_type_info const*, void const*) const(CXXABI_1.3)
[CXXABI]
```

7.1.13 Class __cxxabiv1::__fundamental_type_info

7.1.13.1 Class data for __cxxabiv1::__fundamental_type_info

The virtual table for the __cxxabiv1::__fundamental_type_info class is described by Table 7-24

Table 7-24 Primary vtable for __cxxabiv1::_fundamental_type_info

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo forcxxabiv1::fundamental_type_inf o
vfunc[0]:	cxxabiv1::fundamental_type_inf o::~fundamental_type_info()
vfunc[1]:	cxxabiv1::fundamental_type_inf o::~fundamental_type_info()
vfunc[2]:	type_info::is_pointer_p() const
vfunc[3]:	type_info::is_function_p() const
vfunc[4]:	type_info::do_catch(type_info const*, void**, unsigned int) const
vfunc[5]:	type_info::do_upcast(cxxabiv1::_ _class_type_info const*, void**) const

The Run Time Type Information for the __cxxabiv1::__fundamental_type_info class is described by Table 7-25

Table 7-25 typeinfo for __cxxabiv1::__fundamental_type_info

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name forcxxabiv1::fundamental_type_inf o

7.1.13.2 Interfaces for Class __cxxabiv1::__fundamental_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::__fundamental_type_info in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.14 Class __cxxabiv1::__pointer_to_member_type_info

7.1.14.1 Class data for __cxxabiv1::__pointer_to_member_type_info

The virtual table for the __cxxabiv1::__pointer_to_member_type_info class is described by Table 7-26

Table 7-26 Primary vtable for __cxxabiv1::__pointer_to_member_type_info

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo forcxxabiv1::pointer_to_member_ty pe_info
vfunc[0]:	cxxabiv1::pointer_to_member_ty pe_info::~pointer_to_member_typ e_info()
vfunc[1]:	cxxabiv1::pointer_to_member_ty pe_info::~pointer_to_member_typ e_info()
vfunc[2]:	type_info::is_pointer_p() const
vfunc[3]:	type_info::is_function_p() const
vfunc[4]:	cxxabiv1::pbase_type_info::do _catch(type_info const*, void**, unsigned int) const
vfunc[5]:	type_info::do_upcast(cxxabiv1::_ _class_type_info const*, void**) const
vfunc[6]:	cxxabiv1::pointer_to_member_ty pe_info::pointer_catch(cxxabiv1:: pbase_type_info const*, void**, unsigned int) const

The Run Time Type Information for the __cxxabiv1::__pointer_to_member_type_info class is described by Table 7-27

Table 7-27 typeinfo for __cxxabiv1::__pointer_to_member_type_info

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name forcxxabiv1::pointer_to_member_ty pe_info

7.1.14.2 Interfaces for Class

__cxxabiv1::__pointer_to_member_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::__pointer_to_member_type_info in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.15 Class __gnu_cxx::stdio_filebuf<char, char_traits<char>

7.1.15.1 Class data for __gnu_cxx::stdio_filebuf<char, char_traits<char> >

The virtual table for the __gnu_cxx::stdio_filebuf<char, std::char_traits<char> > class is described by Table 7-28

Table 7-28 Primary vtable for __gnu_cxx::stdio_sync_filebuf<char, char_traits<char>>

Base Offset	0
Virtual Base Offset	0
RTTI	<pre>typeinfo forgnu_cxx::stdio_sync_filebuf<char, char_traits<char=""> ></char,></pre>
vfunc[0]:	Unspecified
vfunc[1]:	Unspecified
vfunc[2]:	basic_streambuf <char, char_traits<char>>::imbue(locale const&)</char></char,
vfunc[3]:	<pre>basic_streambuf<char, char_traits<char="">>::setbuf(char*, long)</char,></pre>
vfunc[4]:	Unspecified
vfunc[5]:	Unspecified
vfunc[6]:	Unspecified
vfunc[7]:	basic_streambuf <char, char_traits<char> >::showmanyc()</char></char,
vfunc[8]:	Unspecified
vfunc[9]:	Unspecified
vfunc[10]:	Unspecified
vfunc[11]:	Unspecified
vfunc[12]:	Unspecified
vfunc[13]:	Unspecified

7.1.15.2 Interfaces for Class __gnu_cxx::stdio_filebuf<char, char_traits<char> >

No external methods are defined for libstdcxx - Class __gnu_cxx::stdio_filebuf<char, std::char_traits<char> > in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.16 Class __gnu_cxx::stdio_filebuf<wchar_t, char_traits<wchar_t> >

7.1.16.1 Class data for __gnu_cxx::stdio_filebuf<wchar_t, char_traits<wchar_t> >

The virtual table for the __gnu_cxx::stdio_filebuf<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-29

Table 7-29 Primary vtable for __gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t>>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo forgnu_cxx::stdio_sync_filebuf <wcha char_traits<wchar_t="" r_t,="">></wcha>
vfunc[0]:	Unspecified
vfunc[1]:	Unspecified
vfunc[2]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t="">>::imbue(locale const&)</wchar_t,></pre>
vfunc[3]:	basic_streambuf <wchar_t, char_traits<wchar_t=""> >::setbuf(wchar_t*, long)</wchar_t,>
vfunc[4]:	Unspecified
vfunc[5]:	Unspecified
vfunc[6]:	Unspecified
vfunc[7]:	basic_streambuf <wchar_t, char_traits<wchar_t=""> >::showmanyc()</wchar_t,>
vfunc[8]:	Unspecified
vfunc[9]:	Unspecified
vfunc[10]:	Unspecified
vfunc[11]:	Unspecified
vfunc[12]:	Unspecified
vfunc[13]:	Unspecified

7.1.16.2 Interfaces for Class __gnu_cxx::stdio_filebuf<wchar_t, char_traits<wchar_t> >

No external methods are defined for libstdcxx - Class __gnu_cxx::stdio_filebuf<wchar_t, std::char_traits<wchar_t>> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.17 Class __gnu_cxx::__pool_alloc_base

7.1.17.1 Interfaces for Class __gnu_cxx::__pool_alloc_base

An LSB conforming implementation shall provide the architecture specific methods for Class __gnu_cxx::__pool_alloc_base specified in Table 7-30, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-30 libstdcxx - Class __gnu_cxx::_pool_alloc_base Function Interfaces

__gnu_cxx::__pool_alloc_base::_M_get_free_list(unsigned long)(GLIBCXX_3.4.2) [LSB]
__gnu_cxx::__pool_alloc_base::_M_refill(unsigned long)(GLIBCXX_3.4.2) [LSB]

7.1.18 Class __gnu_cxx::stdio_sync_filebuf<char, char traits<char>>

7.1.18.1 Interfaces for Class __gnu_cxx::stdio_sync_filebuf<char, char traits<char>>

No external methods are defined for libstdcxx - Class __gnu_cxx::stdio_sync_filebuf<char, std::char_traits<char> > in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.19 Class __gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t>>

7.1.19.1 Interfaces for Class

gnu cxx::stdio sync filebuf<wchar t, char traits<wchar t>>

No external methods are defined for libstdcxx - Class __gnu_cxx::stdio_sync_filebuf<wchar_t, std::char_traits<wchar_t> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.20 Class exception

7.1.20.1 Class data for exception

The virtual table for the std::exception class is described by Table 7-31

Table 7-31 Primary vtable for exception

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for exception
vfunc[0]:	exception::~exception()

vfunc[1]:	exception::~exception()
vfunc[2]:	exception::what() const

The Run Time Type Information for the std::exception class is described by Table 7-32

Table 7-32 typeinfo for exception

Base Vtable	vtable for cxxabiv1::class_type_info
Name	typeinfo name for exception

7.1.20.2 Interfaces for Class exception

No external methods are defined for libstdcxx - Class std::exception in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.21 Class bad_typeid

7.1.21.1 Class data for bad typeid

The virtual table for the std::bad_typeid class is described by Table 7-33

Table 7-33 Primary vtable for bad_typeid

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for bad_typeid
vfunc[0]:	bad_typeid::~bad_typeid()
vfunc[1]:	bad_typeid::~bad_typeid()
vfunc[2]:	exception::what() const

The Run Time Type Information for the std::bad_typeid class is described by Table 7-34

Table 7-34 typeinfo for bad_typeid

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for bad_typeid

7.1.21.2 Interfaces for Class bad_typeid

No external methods are defined for libstdcxx - Class std::bad_typeid in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.22 Class logic_error

7.1.22.1 Class data for logic_error

The virtual table for the std::logic_error class is described by Table 7-35

Table 7-35 Primary vtable for logic_error

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for logic_error
vfunc[0]:	logic_error::~logic_error()
vfunc[1]:	logic_error::~logic_error()
vfunc[2]:	logic_error::what() const

The Run Time Type Information for the std::logic_error class is described by Table 7-36

Table 7-36 typeinfo for logic_error

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for logic_error

7.1.22.2 Interfaces for Class logic_error

No external methods are defined for libstdcxx - Class std::logic_error in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.23 Class range_error

7.1.23.1 Class data for range_error

The virtual table for the std::range_error class is described by Table 7-37

Table 7-37 Primary vtable for range_error

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for range_error
vfunc[0]:	range_error::~range_error()
vfunc[1]:	range_error::~range_error()
vfunc[2]:	runtime_error::what() const

The Run Time Type Information for the std::range_error class is described by Table 7-38

Table 7-38 typeinfo for range_error

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for range_error

7.1.23.2 Interfaces for Class range_error

No external methods are defined for libstdcxx - Class std::range_error in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.24 Class domain error

7.1.24.1 Class data for domain_error

The virtual table for the std::domain_error class is described by Table 7-39

 $Table \ 7\text{-}39 \ Primary \ vtable \ for \ domain_error$

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for domain_error
vfunc[0]:	domain_error::~domain_error()
vfunc[1]:	domain_error::~domain_error()
vfunc[2]:	logic_error::what() const

The Run Time Type Information for the std::domain_error class is described by Table 7-40

Table 7-40 typeinfo for domain_error

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for domain_error

7.1.24.2 Interfaces for Class domain_error

No external methods are defined for libstdcxx - Class std::domain_error in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1

7.1.25 Class length_error

7.1.25.1 Class data for length_error

The virtual table for the std::length_error class is described by Table 7-41

Table 7-41 Primary vtable for length_error

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for length_error
vfunc[0]:	length_error::~length_error()
vfunc[1]:	length_error::~length_error()
vfunc[2]:	logic_error::what() const

The Run Time Type Information for the std::length_error class is described by Table 7-42

Table 7-42 typeinfo for length_error

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for length_error

7.1.25.2 Interfaces for Class length_error

No external methods are defined for libstdcxx - Class std::length_error in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.26 Class out_of_range

7.1.26.1 Class data for out_of_range

The virtual table for the std::out_of_range class is described by Table 7-43

Table 7-43 Primary vtable for out_of_range

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for out_of_range
vfunc[0]:	out_of_range::~out_of_range()
vfunc[1]:	out_of_range::~out_of_range()
vfunc[2]:	logic_error::what() const

The Run Time Type Information for the std::out_of_range class is described by Table 7-44

Table 7-44 typeinfo for out_of_range

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for out_of_range

7.1.26.2 Interfaces for Class out_of_range

No external methods are defined for libstdcxx - Class std::out_of_range in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.27 Class bad_exception

7.1.27.1 Class data for bad_exception

The virtual table for the std::bad_exception class is described by Table 7-45

Table 7-45 Primary vtable for bad_exception

Base Offset	0
-------------	---

Virtual Base Offset	0
RTTI	typeinfo for bad_exception
vfunc[0]:	bad_exception::~bad_exception()
vfunc[1]:	bad_exception::~bad_exception()
vfunc[2]:	exception::what() const

The Run Time Type Information for the std::bad_exception class is described by Table 7-46

Table 7-46 typeinfo for bad_exception

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for bad_exception

7.1.27.2 Interfaces for Class bad_exception

No external methods are defined for libstdcxx - Class std::bad_exception in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.28 Class runtime_error

7.1.28.1 Class data for runtime_error

The virtual table for the std::runtime_error class is described by Table 7-47

Table 7-47 Primary vtable for runtime_error

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for runtime_error
vfunc[0]:	runtime_error::~runtime_error()
vfunc[1]:	runtime_error::~runtime_error()
vfunc[2]:	runtime_error::what() const

The Run Time Type Information for the std::runtime_error class is described by Table 7-48

Table 7-48 typeinfo for runtime_error

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for runtime_error

7.1.28.2 Interfaces for Class runtime error

No external methods are defined for libstdcxx - Class std::runtime_error in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.29 Class overflow_error

7.1.29.1 Class data for overflow_error

The virtual table for the std::overflow_error class is described by Table 7-49

Table 7-49 Primary vtable for overflow_error

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for overflow_error
vfunc[0]:	overflow_error::~overflow_error()
vfunc[1]:	overflow_error::~overflow_error()
vfunc[2]:	runtime_error::what() const

The Run Time Type Information for the std::overflow_error class is described by Table 7-50 $\,$

Table 7-50 typeinfo for overflow_error

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for overflow_error

7.1.29.2 Interfaces for Class overflow error

No external methods are defined for libstdcxx - Class std::overflow_error in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1

7.1.30 Class underflow_error

7.1.30.1 Class data for underflow_error

The virtual table for the std::underflow_error class is described by Table 7-51

Table 7-51 Primary vtable for underflow_error

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for underflow_error
vfunc[0]:	underflow_error::~underflow_error()
vfunc[1]:	underflow_error::~underflow_error()
vfunc[2]:	runtime_error::what() const

The Run Time Type Information for the std::underflow_error class is described by Table 7-52

Table 7-52 typeinfo for underflow_error

Base Vtable	vtable for	
-------------	------------	--

	cxxabiv1::si_class_type_info
Name	typeinfo name for underflow_error

7.1.30.2 Interfaces for Class underflow_error

No external methods are defined for libstdcxx - Class std::underflow_error in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.31 Class invalid_argument

7.1.31.1 Class data for invalid_argument

The virtual table for the std::invalid_argument class is described by Table 7-53

Table 7-53 Primary vtable for invalid_argument

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for invalid_argument
vfunc[0]:	invalid_argument::~invalid_argume nt()
vfunc[1]:	invalid_argument::~invalid_argume nt()
vfunc[2]:	logic_error::what() const

The Run Time Type Information for the std::invalid_argument class is described by Table 7-54

Table 7-54 typeinfo for invalid_argument

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for invalid_argument

7.1.31.2 Interfaces for Class invalid argument

No external methods are defined for libstdcxx - Class std::invalid_argument in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.32 Class bad_cast

7.1.32.1 Class data for bad cast

The virtual table for the std::bad_cast class is described by Table 7-55

Table 7-55 Primary vtable for bad_cast

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for bad_cast

vfunc[0]:	bad_cast::~bad_cast()
vfunc[1]:	bad_cast::~bad_cast()
vfunc[2]:	exception::what() const

The Run Time Type Information for the std::bad_cast class is described by Table 7-56

Table 7-56 typeinfo for bad_cast

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for bad_cast

7.1.32.2 Interfaces for Class bad_cast

No external methods are defined for libstdcxx - Class std::bad_cast in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.33 Class bad_alloc

7.1.33.1 Class data for bad_alloc

The virtual table for the std::bad_alloc class is described by Table 7-57

Table 7-57 Primary vtable for bad_alloc

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for bad_alloc
vfunc[0]:	bad_alloc::~bad_alloc()
vfunc[1]:	bad_alloc::~bad_alloc()
vfunc[2]:	exception::what() const

The Run Time Type Information for the std::bad_alloc class is described by Table 7-58

Table 7-58 typeinfo for bad_alloc

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for bad_alloc

7.1.33.2 Interfaces for Class bad_alloc

No external methods are defined for libstdcxx - Class std::bad_alloc in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.34 struct numeric limits base

7.1.34.1 Interfaces for struct __numeric_limits_base

No external methods are defined for libstdcxx - struct __numeric_limits_base in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.35 struct numeric_limits<long double>

7.1.35.1 Interfaces for struct numeric_limits<long double>

No external methods are defined for libstdcxx - struct numeric_limits<long double> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.36 struct numeric_limits<long long>

7.1.36.1 Interfaces for struct numeric_limits<long long>

No external methods are defined for libstdcxx - struct numeric_limits<long long> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.37 struct numeric_limits<unsigned long long>

7.1.37.1 Interfaces for struct numeric_limits<unsigned long long>

No external methods are defined for libstdcxx - struct numeric_limits<unsigned long long> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.38 struct numeric_limits<float>

7.1.38.1 Interfaces for struct numeric_limits<float>

No external methods are defined for libstdcxx - struct numeric_limits<float> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.39 struct numeric limits<double>

7.1.39.1 Interfaces for struct numeric limits<double>

No external methods are defined for libstdcxx - struct numeric_limits<double> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.40 struct numeric limits<short>

7.1.40.1 Interfaces for struct numeric limits<short>

No external methods are defined for libstdcxx - struct numeric_limits<short> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.41 struct numeric_limits<unsigned short>

7.1.41.1 Interfaces for struct numeric_limits<unsigned short>

No external methods are defined for libstdcxx - struct numeric_limits<unsigned short> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.42 struct numeric limits<int>

7.1.42.1 Interfaces for struct numeric_limits<int>

No external methods are defined for libstdcxx - struct numeric_limits<int> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.43 struct numeric_limits<unsigned int>

7.1.43.1 Interfaces for struct numeric_limits<unsigned int>

No external methods are defined for libstdcxx - struct numeric_limits<unsigned int> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.44 struct numeric_limits<long>

7.1.44.1 Interfaces for struct numeric_limits<long>

No external methods are defined for libstdcxx - struct numeric_limits<long> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.45 struct numeric_limits<unsigned long>

7.1.45.1 Interfaces for struct numeric_limits<unsigned long>

No external methods are defined for libstdcxx - struct numeric_limits<unsigned long> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.46 struct numeric_limits<wchar_t>

7.1.46.1 Interfaces for struct numeric limits<wchar t>

No external methods are defined for libstdcxx - struct numeric_limits<wchar_t> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.47 struct numeric limits<unsigned char>

7.1.47.1 Interfaces for struct numeric_limits<unsigned char>

No external methods are defined for libstdcxx - struct numeric_limits<unsigned char> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.48 struct numeric limits<signed char>

7.1.48.1 Interfaces for struct numeric_limits<signed char>

No external methods are defined for libstdcxx - struct numeric_limits<signed char> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.49 struct numeric limits<char>

7.1.49.1 Interfaces for struct numeric_limits<char>

No external methods are defined for libstdcxx - struct numeric_limits<char> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.50 struct numeric_limits<bool>

7.1.50.1 Interfaces for struct numeric_limits<bool>

No external methods are defined for libstdcxx - struct numeric_limits

bool> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.51 Class ctype_base

7.1.51.1 Class data for ctype_base

The Run Time Type Information for the std::ctype_base class is described by Table 7-59

Table 7-59 typeinfo for ctype_base

Base Vtable	vtable forcxxabiv1::class_type_info
Name	typeinfo name for ctype_base

7.1.51.2 Interfaces for Class ctype_base

No external methods are defined for libstdcxx - Class std::ctype_base in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.52 Class __ctype_abstract_base<char>

7.1.52.1 Class data for __ctype_abstract_base<char>

The virtual table for the std::__ctype_abstract_base<char> class is described by Table 7-60

Table 7-60 Primary vtable for __ctype_abstract_base<char>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo forctype_abstract_base <char></char>
vfunc[0]:	

vfunc[1]:	
vfunc[2]:	cxa_pure_virtual
vfunc[3]:	cxa_pure_virtual
vfunc[4]:	cxa_pure_virtual
vfunc[5]:	cxa_pure_virtual
vfunc[6]:	cxa_pure_virtual
vfunc[7]:	cxa_pure_virtual
vfunc[8]:	cxa_pure_virtual
vfunc[9]:	cxa_pure_virtual
vfunc[10]:	cxa_pure_virtual
vfunc[11]:	cxa_pure_virtual
vfunc[12]:	cxa_pure_virtual
vfunc[13]:	cxa_pure_virtual

7.1.52.2 Interfaces for Class __ctype_abstract_base<char>

No external methods are defined for libstdcxx - Class std::__ctype_abstract_base<char> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.53 Class __ctype_abstract_base<wchar_t>

7.1.53.1 Class data for __ctype_abstract_base<wchar_t>

The virtual table for the std::__ctype_abstract_base<wchar_t> class is described by Table 7-61

Table 7-61 Primary vtable for __ctype_abstract_base<wchar_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo forctype_abstract_base <wchar_t></wchar_t>
vfunc[0]:	
vfunc[1]:	
vfunc[2]:	cxa_pure_virtual
vfunc[3]:	cxa_pure_virtual
vfunc[4]:	cxa_pure_virtual
vfunc[5]:	cxa_pure_virtual
vfunc[6]:	cxa_pure_virtual
vfunc[7]:	cxa_pure_virtual
vfunc[8]:	cxa_pure_virtual

vfunc[9]:	cxa_pure_virtual
vfunc[10]:	cxa_pure_virtual
vfunc[11]:	cxa_pure_virtual
vfunc[12]:	cxa_pure_virtual
vfunc[13]:	cxa_pure_virtual

7.1.53.2 Interfaces for Class __ctype_abstract_base<wchar_t>

No external methods are defined for libstdcxx - Class std::__ctype_abstract_base<wchar_t> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.54 Class ctype<char>

7.1.54.1 Class data for ctype<char>

The virtual table for the std::ctype<char> class is described by Table 7-62

Table 7-62 Primary vtable for ctype<char>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for ctype <char></char>
vfunc[0]:	ctype <char>::~ctype()</char>
vfunc[1]:	ctype <char>::~ctype()</char>
vfunc[2]:	ctype <char>:::do_toupper(char) const</char>
vfunc[3]:	ctype <char>::do_toupper(char*, char const*) const</char>
vfunc[4]:	ctype <char>::do_tolower(char) const</char>
vfunc[5]:	ctype <char>::do_tolower(char*, char const*) const</char>
vfunc[6]:	ctype <char>::do_widen(char) const</char>
vfunc[7]:	ctype <char>::do_widen(char const*, char const*, char*) const</char>
vfunc[8]:	ctype <char>::do_narrow(char, char) const</char>
vfunc[9]:	ctype <char>:::do_narrow(char const*, char const*, char, char*) const</char>

7.1.54.2 Interfaces for Class ctype<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::ctype<char> specified in Table 7-63, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-63 libstdcxx - Class ctype<char> Function Interfaces

ctype<char>::ctype(__locale_struct*, unsigned short const*, bool, unsigned long)(GLIBCXX_3.4) [ISOCXX]

ctype<char>::ctype(unsigned short const*, bool, unsigned long)(GLIBCXX_3.4) [ISOCXX]

ctype<char>::ctype(__locale_struct*, unsigned short const*, bool, unsigned long)(GLIBCXX_3.4) [ISOCXX]

ctype<char>::ctype(unsigned short const*, bool, unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.55 Class ctype<wchar_t>

7.1.55.1 Class data for ctype<wchar_t>

The virtual table for the std::ctype<wchar_t> class is described by Table 7-64

Table 7-64 Primary vtable for ctype<wchar_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for ctype <wchar_t></wchar_t>
vfunc[0]:	ctype <wchar_t>::~ctype()</wchar_t>
vfunc[1]:	ctype <wchar_t>::~ctype()</wchar_t>
vfunc[2]:	ctype <wchar_t>::do_is(unsigned short, wchar_t) const</wchar_t>
vfunc[3]:	ctype <wchar_t>::do_is(wchar_t const*, wchar_t const*, unsigned short*) const</wchar_t>
vfunc[4]:	ctype <wchar_t>::do_scan_is(unsigne d short, wchar_t const*, wchar_t const*)</wchar_t>
vfunc[5]:	ctype <wchar_t>::do_scan_not(unsign ed short, wchar_t const*, wchar_t const*)</wchar_t>
vfunc[6]:	ctype <wchar_t>::do_toupper(wchar_t) const</wchar_t>
vfunc[7]:	ctype <wchar_t>::do_toupper(wchar_ t*, wchar_t const*) const</wchar_t>
vfunc[8]:	ctype <wchar_t>::do_tolower(wchar_t) const</wchar_t>
vfunc[9]:	ctype <wchar_t>::do_tolower(wchar_ t*, wchar_t const*) const</wchar_t>
vfunc[10]:	ctype <wchar_t>::do_widen(char) const</wchar_t>
vfunc[11]:	ctype <wchar_t>::do_widen(char</wchar_t>

	const*, char const*, wchar_t*) const
vfunc[12]:	ctype <wchar_t>::do_narrow(wchar_t , char) const</wchar_t>
vfunc[13]:	ctype <wchar_t>::do_narrow(wchar_t const*, wchar_t const*, char, char*) const</wchar_t>

The Run Time Type Information for the std::ctype<wchar_t> class is described by Table 7-65

Table 7-65 typeinfo for ctype<wchar_t>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for ctype <wchar_t></wchar_t>

7.1.55.2 Interfaces for Class ctype<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::ctype<wchar_t> specified in Table 7-66, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-66 libstdcxx - Class ctype<wchar_t> Function Interfaces

ctype <wchar_t>::ctype(locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>	
ctype <wchar_t>::ctype(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>	
ctype <wchar_t>::ctype(locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>	
ctype <wchar_t>::ctype(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>	

7.1.56 Class ctype_byname<char>

7.1.56.1 Class data for ctype_byname<char>

The virtual table for the std::ctype_byname<char> class is described by Table 7-67

Table 7-67 Primary vtable for ctype_byname<char>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for ctype_byname <char></char>
vfunc[0]:	ctype_byname <char>::~ctype_byna me()</char>
vfunc[1]:	ctype_byname <char>::~ctype_byna me()</char>
vfunc[2]:	ctype <char>::do_toupper(char) const</char>
vfunc[3]:	ctype <char>::do_toupper(char*, char</char>

	const*) const
vfunc[4]:	ctype <char>::do_tolower(char) const</char>
vfunc[5]:	ctype <char>::do_tolower(char*, char const*) const</char>
vfunc[6]:	ctype <char>::do_widen(char) const</char>
vfunc[7]:	ctype <char>::do_widen(char const*, char const*, char*) const</char>
vfunc[8]:	ctype <char>::do_narrow(char, char) const</char>
vfunc[9]:	ctype <char>::do_narrow(char const*, char const*, char, char*) const</char>

The Run Time Type Information for the std::ctype_byname<char> class is described by Table 7-68

Table 7-68 typeinfo for ctype_byname<char>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for ctype_byname <char></char>

7.1.56.2 Interfaces for Class ctype_byname<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::ctype_byname<char> specified in Table 7-69, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-69 libstdcxx - Class ctype_byname<char> Function Interfaces

e <char>::ctype_byname(char const*, unsigned (X_3.4) [ISOCXX]</char>
e <char>::ctype_byname(char const*, unsigned (X_3.4) [ISOCXX]</char>

7.1.57 Class ctype_byname<wchar_t>

7.1.57.1 Interfaces for Class ctype_byname<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::ctype_byname<wchar_t> specified in Table 7-70, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-70 libstdcxx - Class ctype_byname<wchar_t> Function Interfaces

ctype_byname <wchar_t>::ctype_byname(char const*, unsigned long)(GLIBCXX_3.4) [CXXABI]</wchar_t>
ctype_byname <wchar_t>::ctype_byname(char const*, unsigned long)(GLIBCXX_3.4) [CXXABI]</wchar_t>

7.1.58 Class basic_string<char, char_traits<char>, allocator<char> >

7.1.58.1 Interfaces for Class basic_string<char, char_traits<char>, allocator<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_string<char, std::char_traits<char>, std::allocator<char> > specified in Table 7-71, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-71 libstdcxx - Class basic_string<char, char_traits<char>, allocator<char> > Function Interfaces

basic_string<char, char_traits<char>, allocator<char> >::find_last_of(char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::find_last_of(char const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::find_last_of(basic_string<char, char_traits<char>, allocator<char>>
const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::find_last_of(char, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::find_first_of(char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::find_first_of(char const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::find_first_of(basic_string<char, char_traits<char>, allocator<char> >
const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::find_first_of(char, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::find_last_not_of(char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::find_last_not_of(char const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::find_last_not_of(basic_string<char, char_traits<char>, allocator<char> >
const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::find_last_not_of(char, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::find_first_not_of(char const*, unsigned long) const(GLIBCXX_3.4)
[ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::find_first_not_of(char const*, unsigned long, unsigned long)
const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::find_first_not_of(basic_string<char, char_traits<char>, allocator<char>>
const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::find_first_not_of(char, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::at(unsigned long)
const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::copy(char*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::find(char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::find(char const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::find(basic_string<char, char_traits<char>, allocator<char> > const&,
unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::find(char, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::rfind(char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::rfind(char const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::rfind(basic_string<char, char_traits<char>, allocator<char> > const&,
unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::rfind(char, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::substr(unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::compare(unsigned long, unsigned long, char const*) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::compare(unsigned long, unsigned long, char const*, unsigned long) const(GLIBCXX_3.4)
[ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::compare(unsigned long, unsigned long, basic_string<char, char_traits<char>, allocator<char> > const&) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::compare(unsigned long, unsigned long, basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::_M_check(unsigned long, char const*) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::_M_limit(unsigned

long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::operator[](unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::_S_construct(unsigned long, char, allocator<char> const&)(GLIBCXX_3.4)
[ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::_M_replace_aux(unsigned long, unsigned long, unsigned long, char)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::_M_replace_safe(unsigned long, unsigned long, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::at(unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::_Rep::_M_clone(allocator<char> const&, unsigned long)(GLIBCXX_3.4)
[ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::_Rep::_S_create(unsigned long, unsigned long, allocator<char>
const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::erase(unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::append(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::append(basic_string<char, char_traits<char>, allocator<char> > const&,
unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::append(unsigned long, char)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::assign(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::assign(basic_string<char, char_traits<char>, allocator<char> > const&,
unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::assign(unsigned long, char)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::insert(__gnu_cxx::__normal_iterator<char*, basic_string<char,
char_traits<char>, allocator<char> >>, unsigned long, char)(GLIBCXX_3.4)
[ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::insert(unsigned long, char const*)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::insert(unsigned long, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::insert(unsigned long, basic_string<char, char_traits<char>, allocator<char> > const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::insert(unsigned long, basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::insert(unsigned long, unsigned long, char)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::resize(unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::resize(unsigned long, char)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::replace(__gnu_cxx::__normal_iterator<char*, basic_string<char,
char_traits<char>, allocator<char>>>, __gnu_cxx::__normal_iterator<char*,
basic_string<char, char_traits<char>, allocator<char>>>, char const*,
unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::replace(__gnu_cxx::__normal_iterator<char*, basic_string<char,
char_traits<char>, allocator<char>>>, __gnu_cxx::__normal_iterator<char*,
basic_string<char, char_traits<char>, allocator<char>>>, unsigned long,
char)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::replace(unsigned long, unsigned long, char const*)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::replace(unsigned long, unsigned long, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::replace(unsigned long, unsigned long, basic_string<char, char_traits<char>, allocator<char>> const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::replace(unsigned long, unsigned long, basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::replace(unsigned long, unsigned long, char)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::reserve(unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::_M_mutate(unsigned long, unsigned long, unsigned long)(GLIBCXX_3.4)
[ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::basic_string(char const*, unsigned long, allocator<char> const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::basic_string(basic_string<char, char_traits<char>, allocator<char>>
const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>

>::basic_string(basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long, allocator<char> const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::basic_string(unsigned long, char, allocator<char> const&)(GLIBCXX_3.4)
[ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::basic_string(char const*, unsigned long, allocator<char> const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::basic_string(basic_string<char, char_traits<char>, allocator<char>>
const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>
>::basic_string(basic_string<char, char_traits<char>, allocator<char> >
const&, unsigned long, unsigned long, allocator<char>
const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<char, char_traits<char>, allocator<char>>::basic_string(unsigned long, char, allocator<char> const&)(GLIBCXX_3.4)
[ISOCXX]

basic_string<char, char_traits<char>, allocator<char> >::operator[](unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.59 Class basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

7.1.59.1 Interfaces for Class basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_string<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > specified in Table 7-72, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-72 libstdcxx - Class basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > Function Interfaces

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_last_of(wchar_t const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_last_of(wchar_t const*, unsigned long, unsigned long)
const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_last_of(basic_string<wchar_t, char_traits<wchar_t>,
allocator<wchar_t> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_last_of(wchar_t, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_first_of(wchar_t const*, unsigned long) const(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>

>::find_first_of(wchar_t const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_first_of(basic_string<wchar_t, char_traits<wchar_t>,
allocator<wchar_t> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_first_of(wchar_t, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_last_not_of(wchar_t const*, unsigned long) const(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_last_not_of(wchar_t const*, unsigned long, unsigned long)
const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_last_not_of(basic_string<wchar_t, char_traits<wchar_t>,
allocator<wchar_t> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_last_not_of(wchar_t, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_first_not_of(wchar_t const*, unsigned long) const(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_first_not_of(wchar_t const*, unsigned long, unsigned long)
const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_first_not_of(basic_string<wchar_t, char_traits<wchar_t>,
allocator<wchar_t> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find_first_not_of(wchar_t, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::at(unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::copy(wchar_t*, unsigned long, unsigned long) const(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find(wchar_t const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find(wchar_t const*, unsigned long, unsigned long) const(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >
const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::find(wchar_t, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::rfind(wchar_t const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::rfind(wchar_t const*, unsigned long, unsigned long) const(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::rfind(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >
const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::rfind(wchar_t, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::substr(unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::compare(unsigned long, unsigned long, wchar_t const*)
const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::compare(unsigned long, unsigned long, wchar_t const*, unsigned long)
const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::compare(unsigned long, unsigned long, basic_string<wchar_t,
char_traits<wchar_t>, allocator<wchar_t> > const&) const(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::compare(unsigned long, unsigned long, basic_string<wchar_t,
char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long, unsigned
long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::_M_check(unsigned long, char const*) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::_M_limit(unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::operator[](unsigned long) const(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::_S_construct(unsigned long, wchar_t, allocator<wchar_t>
const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_M_replace_aux(unsigned long, unsigned long, unsigned long, wchar_t)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::_M_replace_safe(unsigned long, unsigned long, wchar_t const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::at(unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::_Rep::_M_clone(allocator<wchar_t> const&, unsigned long)(GLIBCXX_3.4)

[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::_Rep::_S_create(unsigned long, unsigned long, allocator<wchar_t>
const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::erase(unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::append(wchar_t const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::append(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >
const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::append(unsigned long, wchar_t)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::assign(wchar_t const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::assign(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>
const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::assign(unsigned long, wchar_t)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::insert(__gnu_cxx::__normal_iterator<wchar_t*, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >>, unsigned long, wchar_t)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::insert(unsigned long, wchar_t const*)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::insert(unsigned long, wchar_t const*, unsigned long)(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::insert(unsigned long, basic_string<wchar_t, char_traits<wchar_t>,
allocator<wchar_t> > const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::insert(unsigned long, basic_string<wchar_t, char_traits<wchar_t>,
allocator<wchar_t> > const&, unsigned long, unsigned long)(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::insert(unsigned long, unsigned long, wchar_t)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::resize(unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::resize(unsigned long, wchar_t)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::replace(__gnu_cxx::__normal_iterator<wchar_t*, basic_string<wchar_t,</pre>

char_traits<wchar_t>, allocator<wchar_t> >>,
__gnu_cxx::__normal_iterator<wchar_t*, basic_string<wchar_t,
char_traits<wchar_t>, allocator<wchar_t> >>, wchar_t const*, unsigned
long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::replace(__gnu_cxx::__normal_iterator<wchar_t*, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >>,
 __gnu_cxx::__normal_iterator<wchar_t*, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >>, unsigned long, wchar_t)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::replace(unsigned long, unsigned long, wchar_t const*)(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::replace(unsigned long, unsigned long, wchar_t const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::replace(unsigned long, unsigned long, basic_string<wchar_t,
char_traits<wchar_t>, allocator<wchar_t> > const&)(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::replace(unsigned long, unsigned long, basic_string<wchar_t,
char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long, unsigned
long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::replace(unsigned long, unsigned long, unsigned long,
wchar_t)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::reserve(unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::_M_mutate(unsigned long, unsigned long, unsigned long)(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::basic_string(wchar_t const*, unsigned long, allocator<wchar_t>
const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::basic_string(basic_string<wchar_t, char_traits<wchar_t>,
allocator<wchar_t> > const&, unsigned long, unsigned long)(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::basic_string(basic_string<wchar_t, char_traits<wchar_t>,
allocator<wchar_t> > const&, unsigned long, unsigned long,
allocator<wchar_t> const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::basic_string(unsigned long, wchar_t, allocator<wchar_t>
const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>

>::basic_string(wchar_t const*, unsigned long, allocator<wchar_t> const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::basic_string(basic_string<wchar_t, char_traits<wchar_t>,
allocator<wchar_t> > const&, unsigned long, unsigned long)(GLIBCXX_3.4)
[ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::basic_string(basic_string<wchar_t, char_traits<wchar_t>,
allocator<wchar_t> > const&, unsigned long, unsigned long,
allocator<wchar_t> const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::basic_string(unsigned long, wchar_t, allocator<wchar_t>
const&)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::operator[](unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.60 Class basic_stringstream<char, char_traits<char>, allocator<char> >

7.1.60.1 Class data for basic_stringstream<char, char_traits<char>, allocator<char> >

The virtual table for the std::basic_stringstream<char, std::char_traits<char>, std::allocator<char> > class is described by Table 7-73

Table 7-73 Primary vtable for basic_stringstream<char, char_traits<char>, allocator<char>>

Base Offset	0
Virtual Base Offset	104
RTTI	typeinfo for basic_stringstream <char, char_traits<char="">, allocator<char>></char></char,>
vfunc[0]:	basic_stringstream <char, char_traits<char>, allocator<char> >::~basic_stringstream()</char></char></char,
vfunc[1]:	basic_stringstream <char, char_traits<char="">, allocator<char> >::~basic_stringstream()</char></char,>

Table 7-74 Secondary vtable for basic_stringstream<char, char_traits<char>, allocator<char>>

Base Offset	-16
Virtual Base Offset	88
RTTI	<pre>typeinfo for basic_stringstream<char, char_traits<char="">, allocator<char>></char></char,></pre>
vfunc[0]:	non-virtual thunk to basic_stringstream <char, char_traits<char>, allocator<char></char></char></char,

	>::~basic_stringstream()
vfunc[1]:	non-virtual thunk to basic_stringstream <char, char_traits<char="">, allocator<char> >::~basic_stringstream()</char></char,>

Table 7-75 Secondary vtable for basic_stringstream<char, char_traits<char>, allocator<char>>

Base Offset	-104
Virtual Base Offset	-104
RTTI	typeinfo for basic_stringstream <char, char_traits<char="">, allocator<char>></char></char,>
vfunc[0]:	virtual thunk to basic_stringstream <char, char_traits<char="">, allocator<char> >::~basic_stringstream()</char></char,>
vfunc[1]:	virtual thunk to basic_stringstream <char, char_traits<char="">, allocator<char> >::~basic_stringstream()</char></char,>

The VTT for the std::basic_stringstream<char, std::char_traits<char>, std::allocator<char> > class is described by Table 7-76

Table 7-76 VTT for basic_stringstream<char, char_traits<char>, allocator<char>>

VTT Name	_ZTTSt18basic_stringstreamIcSt11ch ar_traitsIcESaIcEE
Number of Entries	10

7.1.60.2 Interfaces for Class basic_stringstream<char, char_traits<char>, allocator<char>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_stringstream<char, std::char_traits<char>, std::allocator<char> > specified in Table 7-77, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-77 libstdcxx - Class basic_stringstream<char, char_traits<char>, allocator<char> > Function Interfaces

non-virtual thunk to basic_stringstream <char, char_traits<char="">, allocator<char> >::~basic_stringstream()(GLIBCXX_3.4) [CXXABI]</char></char,>	
non-virtual thunk to basic_stringstream <char, char_traits<char="">, allocator<char> >::-basic_stringstream()(GLIBCXX_3.4) [CXXABI]</char></char,>	
virtual thunk to basic_stringstream <char, char_traits<char="">, allocator<char>>::~basic_stringstream()(GLIBCXX_3.4) [CXXABI]</char></char,>	
virtual thunk to basic_stringstream <char, char_traits<char="">, allocator<char></char></char,>	

>::~basic_stringstream()(GLIBCXX_3.4) [CXXABI]

7.1.61 Class basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

7.1.61.1 Class data for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

The virtual table for the std::basic_stringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 7-78

Table 7-78 Primary vtable for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

Base Offset	0
Virtual Base Offset	104
RTTI	<pre>typeinfo for basic_stringstream<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> ></wchar_t></wchar_t,></pre>
vfunc[0]:	basic_stringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_stringstream()</wchar_t></wchar_t,>
vfunc[1]:	basic_stringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_stringstream()</wchar_t></wchar_t,>

Table 7-79 Secondary vtable for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

Base Offset	-16
Virtual Base Offset	88
RTTI	typeinfo for basic_stringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> ></wchar_t></wchar_t,>
vfunc[0]:	non-virtual thunk to basic_stringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_stringstream()</wchar_t></wchar_t,>
vfunc[1]:	non-virtual thunk to basic_stringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_stringstream()</wchar_t></wchar_t,>

Table 7-80 Secondary vtable for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

Base Offset	-104
Virtual Base Offset	-104
RTTI	<pre>typeinfo for basic_stringstream<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> ></wchar_t></wchar_t,></pre>
vfunc[0]:	virtual thunk to basic_stringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_stringstream()</wchar_t></wchar_t,>
vfunc[1]:	virtual thunk to basic_stringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_stringstream()</wchar_t></wchar_t,>

The VTT for the std::basic_stringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 7-81

Table 7-81 VTT for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

VTT Name	_ZTTSt18basic_stringstreamIwSt11ch ar_traitsIwESaIwEE
Number of Entries	10

7.1.61.2 Interfaces for Class basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_stringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > specified in Table 7-82, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-82 libstdcxx - Class basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > Function Interfaces

non-virtual thunk to basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>::~basic_stringstream()(GLIBCXX_3.4) [CXXABI]

non-virtual thunk to basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>::~basic_stringstream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>::~basic_stringstream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>::~basic_stringstream()(GLIBCXX_3.4) [CXXABI]

7.1.62 Class basic_istringstream<char, char_traits<char>, allocator<char> >

7.1.62.1 Class data for basic_istringstream<char, char_traits<char>, allocator<char> >

The virtual table for the std::basic_istringstream<char, std::char_traits<char>, std::allocator<char> > class is described by Table 7-83

Table 7-83 Primary vtable for basic_istringstream<char, char_traits<char>, allocator<char>>

Base Offset	0
Virtual Base Offset	96
RTTI	<pre>typeinfo for basic_istringstream<char, char_traits<char="">, allocator<char>></char></char,></pre>
vfunc[0]:	basic_istringstream <char, char_traits<char>, allocator<char> >::~basic_istringstream()</char></char></char,
vfunc[1]:	basic_istringstream <char, char_traits<char>, allocator<char> >::~basic_istringstream()</char></char></char,

Table 7-84 Secondary vtable for basic_istringstream<char, char_traits<char>, allocator<char>>

Base Offset	-96
Virtual Base Offset	-96
RTTI	typeinfo for basic_istringstream <char, char_traits<char="">, allocator<char>></char></char,>
vfunc[0]:	virtual thunk to basic_istringstream <char, char_traits<char>, allocator<char> >::~basic_istringstream()</char></char></char,
vfunc[1]:	virtual thunk to basic_istringstream <char, char_traits<char>, allocator<char> >::~basic_istringstream()</char></char></char,

The VTT for the std::basic_istringstream<char, std::char_traits<char>, std::allocator<char> > class is described by Table 7-85

Table 7-85 VTT for basic_istringstream<char, char_traits<char>, allocator<char>>

VTT Name	_ZTTSt19basic_istringstreamIcSt11ch ar_traitsIcESaIcEE
Number of Entries	4

7.1.62.2 Interfaces for Class basic_istringstream<char, char_traits<char>, allocator<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_istringstream<char, std::char_traits<char>, std::allocator<char> > specified in Table 7-86, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-86 libstdcxx - Class basic_istringstream<char, char_traits<char>, allocator<char> > Function Interfaces

virtual thunk to basic_istringstream<char, char_traits<char>, allocator<char>>::~basic_istringstream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_istringstream<char, char_traits<char>, allocator<char>:::~basic_istringstream()(GLIBCXX_3.4) [CXXABI]

7.1.63 Class basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

7.1.63.1 Class data for basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

The virtual table for the std::basic_istringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 7-87

Table 7-87 Primary vtable for basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

Base Offset	0
Virtual Base Offset	96
RTTI	<pre>typeinfo for basic_istringstream<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> ></wchar_t></wchar_t,></pre>
vfunc[0]:	basic_istringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_istringstream()</wchar_t></wchar_t,>
vfunc[1]:	basic_istringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_istringstream()</wchar_t></wchar_t,>

Table 7-88 Secondary vtable for basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

Base Offset	-96
Virtual Base Offset	-96
RTTI	typeinfo for basic_istringstream <wchar_t, char_traits<wchar_t="">,</wchar_t,>

	allocator <wchar_t>></wchar_t>
vfunc[0]:	virtual thunk to basic_istringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_istringstream()</wchar_t></wchar_t,>
vfunc[1]:	virtual thunk to basic_istringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_istringstream()</wchar_t></wchar_t,>

The VTT for the std::basic_istringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 7-89

Table 7-89 VTT for basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

VTT Name	_ZTTSt19basic_istringstreamIwSt11c har_traitsIwESaIwEE
Number of Entries	4

7.1.63.2 Interfaces for Class basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_istringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > specified in Table 7-90, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-90 libstdcxx - Class basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > Function Interfaces

virtual thunk to basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>::~basic_istringstream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>::~basic_istringstream()(GLIBCXX_3.4) [CXXABI]

7.1.64 Class basic_ostringstream<char, char_traits<char>, allocator<char> >

7.1.64.1 Class data for basic_ostringstream<char, char_traits<char>, allocator<char> >

The virtual table for the std::basic_ostringstream<char, std::char_traits<char>, std::allocator<char> > class is described by Table 7-91

Table 7-91 Primary vtable for basic_ostringstream<char, char_traits<char>, allocator<char>>

Base Offset	0
Virtual Base Offset	88
RTTI	typeinfo for

	basic_ostringstream <char, char_traits<char>, allocator<char>></char></char></char,
vfunc[0]:	basic_ostringstream <char, char_traits<char>, allocator<char> >::~basic_ostringstream()</char></char></char,
vfunc[1]:	basic_ostringstream <char, char_traits<char>, allocator<char> >::~basic_ostringstream()</char></char></char,

Table 7-92 Secondary vtable for basic_ostringstream<char, char_traits<char>, allocator<char>>

Base Offset	-88
Virtual Base Offset	-88
RTTI	typeinfo for basic_ostringstream <char, char_traits<char="">, allocator<char>></char></char,>
vfunc[0]:	virtual thunk to basic_ostringstream <char, char_traits<char="">, allocator<char> >::~basic_ostringstream()</char></char,>
vfunc[1]:	virtual thunk to basic_ostringstream <char, char_traits<char="">, allocator<char> >::~basic_ostringstream()</char></char,>

The VTT for the std::basic_ostringstream<char, std::char_traits<char>, std::allocator<char> > class is described by Table 7-93

Table 7-93 VTT for basic_ostringstream<char, char_traits<char>, allocator<char>>

VTT Name	_ZTTSt19basic_ostringstreamIcSt11c har_traitsIcESaIcEE
Number of Entries	4

7.1.64.2 Interfaces for Class basic_ostringstream<char, char traits<char>, allocator<char>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ostringstream<char, std::char_traits<char>, std::allocator<char> > specified in Table 7-94, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-94 libstdcxx - Class basic_ostringstream<char, char_traits<char>, allocator<char> > Function Interfaces

virtual thunk to basic_ostringstream<char, char_traits<char>, allocator<char> :::~basic_ostringstream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_ostringstream<char, char_traits<char>, allocator<char>:::~basic_ostringstream()(GLIBCXX_3.4) [CXXABI]

7.1.65 Class basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

7.1.65.1 Class data for basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

The virtual table for the std::basic_ostringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 7-95

Table 7-95 Primary vtable for basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

Base Offset	0
Virtual Base Offset	88
RTTI	typeinfo for basic_ostringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> ></wchar_t></wchar_t,>
vfunc[0]:	basic_ostringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_ostringstream()</wchar_t></wchar_t,>
vfunc[1]:	basic_ostringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_ostringstream()</wchar_t></wchar_t,>

Table 7-96 Secondary vtable for basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

Base Offset	-88
Virtual Base Offset	-88
RTTI	typeinfo for basic_ostringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> ></wchar_t></wchar_t,>
vfunc[0]:	virtual thunk to basic_ostringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_ostringstream()</wchar_t></wchar_t,>
vfunc[1]:	virtual thunk to basic_ostringstream <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_ostringstream()</wchar_t></wchar_t,>

The VTT for the std::basic_ostringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 7-97

Table 7-97 VTT for basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

VTT Name	_ZTTSt19basic_ostringstreamIwSt11c har_traitsIwESaIwEE
Number of Entries	4

7.1.65.2 Interfaces for Class basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ostringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > specified in Table 7-98, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-98 libstdcxx - Class basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > Function Interfaces

virtual thunk to basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_ostringstream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_ostringstream()(GLIBCXX_3.4) [CXXABI]

7.1.66 Class basic_stringbuf<char, char_traits<char>, allocator<char> >

7.1.66.1 Class data for basic_stringbuf<char, char_traits<char>, allocator<char> >

The virtual table for the std::basic_stringbuf<char, std::char_traits<char>, std::allocator<char> > class is described by Table 7-99

Table 7-99 Primary vtable for basic_stringbuf<char, char_traits<char>, allocator<char>>

Base Offset	0
Virtual Base Offset	0
RTTI	<pre>typeinfo for basic_stringbuf<char, char_traits<char="">, allocator<char>></char></char,></pre>
vfunc[0]:	basic_stringbuf <char, char_traits<char>, allocator<char> >::~basic_stringbuf()</char></char></char,
vfunc[1]:	basic_stringbuf <char, char_traits<char>, allocator<char> >::~basic_stringbuf()</char></char></char,
vfunc[2]:	basic_streambuf <char, char_traits<char> >::imbue(locale const&)</char></char,
vfunc[3]:	basic_stringbuf <char, char_traits<char>, allocator<char> >::setbuf(char*, long)</char></char></char,

vfunc[4]:	basic_stringbuf <char, char_traits<char>, allocator<char> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)</char></char></char,
vfunc[5]:	basic_stringbuf <char, char_traits<char>, allocator<char> >::seekpos(fpos<mbstate_t>, _Ios_Openmode)</mbstate_t></char></char></char,
vfunc[6]:	basic_streambuf <char, char_traits<char>>::sync()</char></char,
vfunc[7]:	basic_streambuf <char, char_traits<char> >::showmanyc()</char></char,
vfunc[8]:	basic_streambuf <char, char_traits<char> >::xsgetn(char*, long)</char></char,
vfunc[9]:	basic_stringbuf <char, char_traits<char>, allocator<char> >::underflow()</char></char></char,
vfunc[10]:	basic_streambuf <char, char_traits<char>>::uflow()</char></char,
vfunc[11]:	basic_stringbuf <char, char_traits<char>, allocator<char> >::pbackfail(int)</char></char></char,
vfunc[12]:	basic_streambuf <char, char_traits<char> >::xsputn(char const*, long)</char></char,
vfunc[13]:	basic_stringbuf <char, char_traits<char>, allocator<char> >::overflow(int)</char></char></char,

The Run Time Type Information for the std::basic_stringbuf<char, std::char_traits<char>, std::allocator<char> > class is described by Table 7-100

Table 7-100 typeinfo for basic_stringbuf<char, char_traits<char>, allocator<char>>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for basic_stringbuf <char, char_traits<char="">, allocator<char>></char></char,>

7.1.66.2 Interfaces for Class basic_stringbuf<char, char_traits<char>, allocator<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_stringbuf<char, std::char_traits<char>, std::allocator<char> > specified in Table 7-101, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-101 libstdcxx - Class basic_stringbuf<char, char_traits<char>, allocator<char> > Function Interfaces

basic_stringbuf<char, char_traits<char>, allocator<char> >::setbuf(char*, long)(GLIBCXX_3.4) [ISOCXX]

basic_stringbuf<char, char_traits<char>, allocator<char> >::_M_sync(char*, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_stringbuf<char, char_traits<char>, allocator<char>>::seekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]

7.1.67 Class basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

7.1.67.1 Class data for basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

The virtual table for the std::basic_stringbuf<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 7-102

Table 7-102 Primary vtable for basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

Base Offset	0
Virtual Base Offset	0
RTTI	<pre>typeinfo for basic_stringbuf<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> ></wchar_t></wchar_t,></pre>
vfunc[0]:	<pre>basic_stringbuf<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_stringbuf()</wchar_t></wchar_t,></pre>
vfunc[1]:	<pre>basic_stringbuf<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::~basic_stringbuf()</wchar_t></wchar_t,></pre>
vfunc[2]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t="">>::imbue(locale const&)</wchar_t,></pre>
vfunc[3]:	<pre>basic_stringbuf<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::setbuf(wchar_t*, long)</wchar_t></wchar_t,></pre>
vfunc[4]:	<pre>basic_stringbuf<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)</wchar_t></wchar_t,></pre>
vfunc[5]:	<pre>basic_stringbuf<wchar_t, char_traits<wchar_t="">,</wchar_t,></pre>

	allocator <wchar_t> >::seekpos(fpos<mbstate_t>, _Ios_Openmode)</mbstate_t></wchar_t>
vfunc[6]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t="">>::sync()</wchar_t,></pre>
vfunc[7]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t=""> >::showmanyc()</wchar_t,></pre>
vfunc[8]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t=""> >::xsgetn(wchar_t*, long)</wchar_t,></pre>
vfunc[9]:	<pre>basic_stringbuf<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::underflow()</wchar_t></wchar_t,></pre>
vfunc[10]:	basic_streambuf <wchar_t, char_traits<wchar_t=""> >::uflow()</wchar_t,>
vfunc[11]:	basic_stringbuf <wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::pbackfail(unsigned int)</wchar_t></wchar_t,>
vfunc[12]:	basic_streambuf <wchar_t, char_traits<wchar_t=""> >::xsputn(wchar_t const*, long)</wchar_t,>
vfunc[13]:	<pre>basic_stringbuf<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> >::overflow(unsigned int)</wchar_t></wchar_t,></pre>

The Run Time Type Information for the std::basic_stringbuf<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 7-103

Table 7-103 typeinfo for basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t>>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	<pre>typeinfo name for basic_stringbuf<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> ></wchar_t></wchar_t,></pre>

7.1.67.2 Interfaces for Class basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_stringbuf<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > specified in Table 7-104, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-104 libstdcxx - Class basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > Function Interfaces

basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::setbuf(wchar_t*, long)(GLIBCXX_3.4) [ISOCXX]

basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::_M_sync(wchar_t*, unsigned long, unsigned long)(GLIBCXX_3.4)
[ISOCXX]

basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t>
>::seekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]

7.1.68 Class basic_iostream<char, char_traits<char> >

7.1.68.1 Class data for basic_iostream<char, char_traits<char> >

The virtual table for the std::basic_iostream<char, std::char_traits<char> > class is described by Table 7-105

Table 7-105 Primary vtable for basic_iostream<char, char_traits<char>>

Base Offset	0
Virtual Base Offset	24
RTTI	typeinfo for basic_iostream <char, char_traits<char="">></char,>
vfunc[0]:	basic_iostream <char, char_traits<char> >::~basic_iostream()</char></char,
vfunc[1]:	basic_iostream <char, char_traits<char> >::~basic_iostream()</char></char,

Table 7-106 Secondary vtable for basic_iostream<char, char_traits<char>>

Base Offset	-16
Virtual Base Offset	8
RTTI	typeinfo for basic_iostream <char, char_traits<char="">></char,>
vfunc[0]:	non-virtual thunk to basic_iostream <char, char_traits<char> >::~basic_iostream()</char></char,
vfunc[1]:	non-virtual thunk to basic_iostream <char, char_traits<char=""> >::~basic_iostream()</char,>

Table 7-107 Secondary vtable for basic_iostream<char, char_traits<char>>

Base Offset	-24
-------------	-----

Virtual Base Offset	-24
RTTI	typeinfo for basic_iostream <char, char_traits<char="">></char,>
vfunc[0]:	virtual thunk to basic_iostream <char, char_traits<char=""> >::~basic_iostream()</char,>
vfunc[1]:	virtual thunk to basic_iostream <char, char_traits<char=""> >::~basic_iostream()</char,>

The VTT for the std::basic_iostream<char, std::char_traits<char> > class is described by Table 7-108

Table 7-108 VTT for basic_iostream<char, char_traits<char>>

VTT Name	_ZTTSd
Number of Entries	7

7.1.68.2 Interfaces for Class basic_iostream<char, char_traits<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_iostream<char, std::char_traits<char> > specified in Table 7-109, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-109 libstdcxx - Class basic_iostream<char, char_traits<char> > Function Interfaces

non-virtual thunk to basic_iostream <char, char_traits<char=""> >::~basic_iostream()(GLIBCXX_3.4) [CXXABI]</char,>
non-virtual thunk to basic_iostream <char, char_traits<char=""> >::~basic_iostream()(GLIBCXX_3.4) [CXXABI]</char,>
virtual thunk to basic_iostream <char, char_traits<char=""> >::~basic_iostream()(GLIBCXX_3.4) [CXXABI]</char,>
virtual thunk to basic_iostream <char, char_traits<char=""> >::~basic_iostream()(GLIBCXX_3.4) [CXXABI]</char,>

7.1.69 Class basic_iostream<wchar_t, char_traits<wchar_t> >

7.1.69.1 Class data for basic_iostream<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_iostream<wchar_t, std::char_traits<wchar_t> class is described by Table 7-110

Table 7-110 Primary vtable for basic_iostream<wchar_t, char_traits<wchar_t> >

Base Offset	0
Virtual Base Offset	24

RTTI	<pre>typeinfo for basic_iostream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	<pre>basic_iostream<wchar_t, char_traits<wchar_t=""> >::~basic_iostream()</wchar_t,></pre>
vfunc[1]:	basic_iostream <wchar_t, char_traits<wchar_t=""> >::~basic_iostream()</wchar_t,>

Table 7-111 Secondary vtable for basic_iostream<wchar_t, char_traits<wchar_t>>

Base Offset	-16
Virtual Base Offset	8
RTTI	<pre>typeinfo for basic_iostream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	non-virtual thunk to basic_iostream <wchar_t, char_traits<wchar_t=""> >::~basic_iostream()</wchar_t,>
vfunc[1]:	non-virtual thunk to basic_iostream <wchar_t, char_traits<wchar_t=""> >::~basic_iostream()</wchar_t,>

Table 7-112 Secondary vtable for basic_iostream<wchar_t, char_traits<wchar_t>>

Base Offset	-24
Virtual Base Offset	-24
RTTI	<pre>typeinfo for basic_iostream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	virtual thunk to basic_iostream <wchar_t, char_traits<wchar_t=""> >::~basic_iostream()</wchar_t,>
vfunc[1]:	virtual thunk to basic_iostream <wchar_t, char_traits<wchar_t=""> >::~basic_iostream()</wchar_t,>

The VTT for the std::basic_iostream<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-113

Table 7-113 VTT for basic_iostream<wchar_t, char_traits<wchar_t>>

VTT Name	_ZTTSt14basic_iostreamIwSt11char_t
	raitsIwEE

Number of Entries	7
-------------------	---

7.1.69.2 Interfaces for Class basic_iostream<wchar_t, char_traits<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_iostream<wchar_t, std::char_traits<wchar_t> > specified in Table 7-114, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-114 libstdcxx - Class basic_iostream<wchar_t, char_traits<wchar_t> > Function Interfaces

non-virtual thunk to basic_iostream<wchar_t, char_traits<wchar_t>
>::~basic_iostream()(GLIBCXX_3.4) [CXXABI]

non-virtual thunk to basic_iostream<wchar_t, char_traits<wchar_t>
>::~basic_iostream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_iostream<wchar_t, char_traits<wchar_t>
>::~basic_iostream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_iostream<wchar_t, char_traits<wchar_t>
>::~basic_iostream()(GLIBCXX_3.4) [CXXABI]

7.1.70 Class basic_istream<char, char_traits<char> >

7.1.70.1 Class data for basic_istream<char, char_traits<char> >

The virtual table for the std::basic_istream<char, std::char_traits<char> > class is described by Table 7-115

Table 7-115 Primary vtable for basic_istream<char, char_traits<char>>

Base Offset	0
Virtual Base Offset	16
RTTI	typeinfo for basic_istream <char, char_traits<char="">></char,>
vfunc[0]:	basic_istream <char, char_traits<char>>::~basic_istream()</char></char,
vfunc[1]:	basic_istream <char, char_traits<char>>::~basic_istream()</char></char,

Table 7-116 Secondary vtable for basic_istream<char, char_traits<char>>

Base Offset	-16
Virtual Base Offset	-16
RTTI	typeinfo for basic_istream <char, char_traits<char="">></char,>
vfunc[0]:	<pre>virtual thunk to basic_istream<char, char_traits<char="">>::~basic_istream()</char,></pre>
vfunc[1]:	virtual thunk to basic_istream <char,< td=""></char,<>

	char_traits <char> >::~basic_istream()</char>
--	--

The VTT for the std::basic_istream<char, std::char_traits<char> > class is described by Table 7-117

Table 7-117 VTT for basic_istream<char, char_traits<char>>

VTT Name	_ZTTSi
Number of Entries	2

7.1.70.2 Interfaces for Class basic_istream<char, char_traits<char>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_istream<char, std::char_traits<char> > specified in Table 7-118, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-118 libstdcxx - Class basic_istream<char, char_traits<char> > Function Interfaces

basic_istream <char, char_traits<char="">>::get(char*, long)(GLIBCXX_3.4) [ISOCXX]</char,>
basic_istream <char, char_traits<char="">>::get(char*, long, char)(GLIBCXX_3.4) [ISOCXX]</char,>
basic_istream <char, char_traits<char="">>::read(char*, long)(GLIBCXX_3.4) [ISOCXX]</char,>
basic_istream <char, char_traits<char=""> >::seekg(long, _Ios_Seekdir)(GLIBCXX_3.4) [ISOCXX]</char,>
basic_istream <char, char_traits<char=""> >::ignore(long, int)(GLIBCXX_3.4) [ISOCXX]</char,>
basic_istream <char, char_traits<char=""> >::getline(char*, long)(GLIBCXX_3.4) [ISOCXX]</char,>
basic_istream <char, char_traits<char=""> >::getline(char*, long, char)(GLIBCXX_3.4) [ISOCXX]</char,>
basic_istream <char, char_traits<char="">>::readsome(char*, long)(GLIBCXX_3.4) [ISOCXX]</char,>
virtual thunk to basic_istream <char, char_traits<char=""> >::~basic_istream()(GLIBCXX_3.4) [CXXABI]</char,>
virtual thunk to basic_istream <char, char_traits<char=""> >::~basic_istream()(GLIBCXX_3.4) [CXXABI]</char,>

7.1.71 Class basic_istream<wchar_t, char_traits<wchar_t> >

7.1.71.1 Class data for basic_istream<wchar_t, char traits<wchar t>>

The virtual table for the std::basic_istream<wchar_t, std::char_traits<wchar_t>> class is described by Table 7-119

Table 7-119 Primary vtable for basic_istream<wchar_t, char_traits<wchar_t>>

Base Offset	0
Virtual Base Offset	16
RTTI	<pre>typeinfo for basic_istream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	basic_istream <wchar_t, char_traits<wchar_t=""> >::~basic_istream()</wchar_t,>
vfunc[1]:	basic_istream <wchar_t, char_traits<wchar_t=""> >::~basic_istream()</wchar_t,>

Table 7-120 Secondary vtable for basic_istream<wchar_t, char_traits<wchar_t>>

Base Offset	-16
Virtual Base Offset	-16
RTTI	<pre>typeinfo for basic_istream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	virtual thunk to basic_istream <wchar_t, char_traits<wchar_t=""> >::~basic_istream()</wchar_t,>
vfunc[1]:	virtual thunk to basic_istream <wchar_t, char_traits<wchar_t=""> >::~basic_istream()</wchar_t,>

The VTT for the std::basic_istream<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-121

Table 7-121 VTT for basic_istream<wchar_t, char_traits<wchar_t>>

VTT Name	_ZTTSt13basic_istreamIwSt11char_tr aitsIwEE
Number of Entries	2

7.1.71.2 Interfaces for Class basic_istream<wchar_t, char_traits<wchar_t>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_istream<wchar_t, std::char_traits<wchar_t> > specified in Table 7-122, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-122 libstdcxx - Class basic_istream<wchar_t, char_traits<wchar_t> > Function Interfaces

basic_istream<wchar_t, char_traits<wchar_t> >::get(wchar_t*,
long)(GLIBCXX_3.4) [ISOCXX]

basic_istream<wchar_t, char_traits<wchar_t> >::get(wchar_t*, long, wchar_t)(GLIBCXX_3.4) [ISOCXX]

basic_istream<wchar_t, char_traits<wchar_t> >::read(wchar_t*,
long)(GLIBCXX_3.4) [ISOCXX]

basic_istream<wchar_t, char_traits<wchar_t> >::seekg(long,
_Ios_Seekdir)(GLIBCXX_3.4) [ISOCXX]

basic_istream<wchar_t, char_traits<wchar_t> >::ignore(long, unsigned int)(GLIBCXX_3.4) [ISOCXX]

basic_istream<wchar_t, char_traits<wchar_t> >::getline(wchar_t*,
long)(GLIBCXX_3.4) [ISOCXX]

basic_istream<wchar_t, char_traits<wchar_t> >::getline(wchar_t*, long, wchar_t)(GLIBCXX_3.4) [ISOCXX]

basic_istream<wchar_t, char_traits<wchar_t> >::readsome(wchar_t*,
long)(GLIBCXX_3.4) [ISOCXX]

virtual thunk to basic_istream<wchar_t, char_traits<wchar_t>
>::~basic_istream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_istream<wchar_t, char_traits<wchar_t>
>::~basic_istream()(GLIBCXX_3.4) [CXXABI]

7.1.72 Class istreambuf_iterator<wchar_t, char_traits<wchar_t> >

7.1.72.1 Interfaces for Class istreambuf_iterator<wchar_t, char traits<wchar t>>

No external methods are defined for libstdcxx - Class std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.73 Class istreambuf_iterator<char, char_traits<char> >

7.1.73.1 Interfaces for Class istreambuf_iterator<char, char_traits<char> >

No external methods are defined for libstdcxx - Class std::istreambuf_iterator<char, std::char_traits<char> > in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.74 Class basic ostream<char, char traits<char>>

7.1.74.1 Class data for basic_ostream<char, char_traits<char> >

The virtual table for the std::basic_ostream<char, std::char_traits<char> > class is described by Table 7-123

Table 7-123 Primary vtable for basic_ostream<char, char_traits<char>>

Base Offset	0
Virtual Base Offset	8
RTTI	typeinfo for basic_ostream <char,< td=""></char,<>

	char_traits <char>></char>
vfunc[0]:	basic_ostream <char, char_traits<char> >::~basic_ostream()</char></char,
vfunc[1]:	basic_ostream <char, char_traits<char> >::~basic_ostream()</char></char,

Table 7-124 Secondary vtable for basic_ostream<char, char_traits<char>>

Base Offset	-8
Virtual Base Offset	-8
RTTI	typeinfo for basic_ostream <char, char_traits<char="">></char,>
vfunc[0]:	virtual thunk to basic_ostream <char, char_traits<char=""> >::~basic_ostream()</char,>
vfunc[1]:	virtual thunk to basic_ostream <char, char_traits<char=""> >::~basic_ostream()</char,>

The VTT for the std::basic_ostream<char, std::char_traits<char> > class is described by Table 7-125

Table 7-125 VTT for basic_ostream<char, char_traits<char>>

VTT Name	_ZTTSo
Number of Entries	2

7.1.74.2 Interfaces for Class basic_ostream<char, char_traits<char>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ostream<char, std::char_traits<char> > specified in Table 7-126, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-126 libstdcxx - Class basic_ostream<char, char_traits<char> > Function Interfaces

basic_ostream <char, char_traits<char=""> >::seekp(long,Ios_Seekdir)(GLIBCXX_3.4) [ISOCXX]</char,>
basic_ostream <char, char_traits<char=""> >::write(char const*, long)(GLIBCXX_3.4) [ISOCXX]</char,>
basic_ostream <char, char_traits<char="">>::_M_write(char const*, long)(GLIBCXX_3.4) [ISOCXX]</char,>
virtual thunk to basic_ostream <char, char_traits<char=""> >::~basic_ostream()(GLIBCXX_3.4) [CXXABI]</char,>
virtual thunk to basic_ostream <char, char_traits<char=""></char,>

>::~basic_ostream()(GLIBCXX_3.4) [CXXABI]

7.1.75 Class basic_ostream<wchar_t, char_traits<wchar_t> >

7.1.75.1 Class data for basic_ostream<wchar_t, char_traits<wchar_t>>

The virtual table for the std::basic_ostream<wchar_t, std::char_traits<wchar_t> class is described by Table 7-127

Table 7-127 Primary vtable for basic_ostream<wchar_t, char_traits<wchar_t>

Base Offset	0
Virtual Base Offset	8
RTTI	<pre>typeinfo for basic_ostream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	basic_ostream <wchar_t, char_traits<wchar_t=""> >::~basic_ostream()</wchar_t,>
vfunc[1]:	basic_ostream <wchar_t, char_traits<wchar_t=""> >::~basic_ostream()</wchar_t,>

Table 7-128 Secondary vtable for basic_ostream<wchar_t, char_traits<wchar_t>>

Base Offset	-8
Virtual Base Offset	-8
RTTI	<pre>typeinfo for basic_ostream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	virtual thunk to basic_ostream <wchar_t, char_traits<wchar_t=""> >::~basic_ostream()</wchar_t,>
vfunc[1]:	virtual thunk to basic_ostream <wchar_t, char_traits<wchar_t=""> >::~basic_ostream()</wchar_t,>

The VTT for the std::basic_ostream<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-129

Table 7-129 VTT for basic_ostream<wchar_t, char_traits<wchar_t>>

VTT Name	_ZTTSt13basic_ostreamIwSt11char_t raitsIwEE
Number of Entries	2

7.1.75.2 Interfaces for Class basic_ostream<wchar_t, char_traits<wchar_t>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ostream<wchar_t, std::char_traits<wchar_t> > specified in Table 7-130, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-130 libstdcxx - Class basic_ostream<wchar_t, char_traits<wchar_t> > Function Interfaces

basic_ostream<wchar_t, char_traits<wchar_t>>::seekp(long,
_Ios_Seekdir)(GLIBCXX_3.4) [ISOCXX]

basic_ostream<wchar_t, char_traits<wchar_t>>::write(wchar_t const*,
long)(GLIBCXX_3.4) [ISOCXX]

virtual thunk to basic_ostream<wchar_t, char_traits<wchar_t>
>::~basic_ostream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_ostream<wchar_t, char_traits<wchar_t>
>::~basic_ostream()(GLIBCXX_3.4) [CXXABI]

7.1.76 Class basic_fstream<char, char_traits<char> >

7.1.76.1 Class data for basic_fstream<char, char_traits<char>>

The virtual table for the std::basic_fstream<char, std::char_traits<char> > class is described by Table 7-131

Table 7-131 Primary vtable for basic_fstream<char, char_traits<char>>

Base Offset	0
Virtual Base Offset	264
RTTI	typeinfo for basic_fstream <char, char_traits<char="">></char,>
vfunc[0]:	basic_fstream <char, char_traits<char>>::~basic_fstream()</char></char,
vfunc[1]:	basic_fstream <char, char_traits<char>>::~basic_fstream()</char></char,

Table 7-132 Secondary vtable for basic_fstream<char, char_traits<char>>

Base Offset	-16
Virtual Base Offset	248
RTTI	<pre>typeinfo for basic_fstream<char, char_traits<char="">></char,></pre>
vfunc[0]:	<pre>non-virtual thunk to basic_fstream<char, char_traits<char="">>::~basic_fstream()</char,></pre>
vfunc[1]:	non-virtual thunk to basic_fstream <char, char_traits<char="">>::~basic_fstream()</char,>

Table 7-133 Secondary vtable for basic_fstream<char, char_traits<char>>

Base Offset	-264
Virtual Base Offset	-264
RTTI	typeinfo for basic_fstream <char, char_traits<char="">></char,>
vfunc[0]:	<pre>virtual thunk to basic_fstream<char, char_traits<char="">>::~basic_fstream()</char,></pre>
vfunc[1]:	virtual thunk to basic_fstream <char, char_traits<char=""> >::~basic_fstream()</char,>

The VTT for the std::basic_fstream<char, std::char_traits<char> > class is described by Table 7-134

Table 7-134 VTT for basic_fstream<char, char_traits<char>>

VTT Name	_ZTTSt13basic_fstreamIcSt11char_tra itsIcEE
Number of Entries	10

7.1.76.2 Interfaces for Class basic_fstream<char, char_traits<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_fstream<char, std::char_traits<char> > specified in Table 7-135, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-135 libstdcxx - Class basic_fstream<char, char_traits<char> > Function Interfaces

non-virtual thunk to basic_fstream <char, char_traits<char=""> >::~basic_fstream()(GLIBCXX_3.4) [CXXABI]</char,>	
non-virtual thunk to basic_fstream <char, char_traits<char=""> >::~basic_fstream()(GLIBCXX_3.4) [CXXABI]</char,>	
virtual thunk to basic_fstream <char, char_traits<char=""> >::~basic_fstream()(GLIBCXX_3.4) [CXXABI]</char,>	
virtual thunk to basic_fstream <char, char_traits<char=""> >::~basic_fstream()(GLIBCXX_3.4) [CXXABI]</char,>	

7.1.77 Class basic_fstream<wchar_t, char_traits<wchar_t> >

7.1.77.1 Class data for basic_fstream<wchar_t, char_traits<wchar_t>>

The virtual table for the std::basic_fstream<wchar_t, std::char_traits<wchar_t>> class is described by Table 7-136

Table 7-136 Primary vtable for basic_fstream<wchar_t, char_traits<wchar_t>>

Base Offset	0
-------------	---

Virtual Base Offset	264
RTTI	<pre>typeinfo for basic_fstream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	basic_fstream <wchar_t, char_traits<wchar_t=""> >::~basic_fstream()</wchar_t,>
vfunc[1]:	basic_fstream <wchar_t, char_traits<wchar_t=""> >::~basic_fstream()</wchar_t,>

Table 7-137 Secondary vtable for basic_fstream<wchar_t, char_traits<wchar_t>>

Base Offset	-16
Virtual Base Offset	248
RTTI	<pre>typeinfo for basic_fstream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	non-virtual thunk to basic_fstream <wchar_t, char_traits<wchar_t=""> >::~basic_fstream()</wchar_t,>
vfunc[1]:	non-virtual thunk to basic_fstream <wchar_t, char_traits<wchar_t=""> >::~basic_fstream()</wchar_t,>

Table 7-138 Secondary vtable for basic_fstream<wchar_t, char_traits<wchar_t> >

Base Offset	-264
Virtual Base Offset	-264
RTTI	<pre>typeinfo for basic_fstream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	virtual thunk to basic_fstream <wchar_t, char_traits<wchar_t=""> >::~basic_fstream()</wchar_t,>
vfunc[1]:	virtual thunk to basic_fstream <wchar_t, char_traits<wchar_t=""> >::~basic_fstream()</wchar_t,>

The VTT for the std::basic_fstream<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-139

Table 7-139 VTT for basic_fstream<wchar_t, char_traits<wchar_t>>

VTT Name	_ZTTSt13basic_fstreamIwSt11char_tr
----------	------------------------------------

	aitsIwEE
Number of Entries	10

7.1.77.2 Interfaces for Class basic_fstream<wchar_t, char_traits<wchar_t>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_fstream<wchar_t, std::char_traits<wchar_t> > specified in Table 7-140, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-140 libstdcxx - Class basic_fstream<wchar_t, char_traits<wchar_t> > Function Interfaces

non-virtual thunk to basic_fstream <wchar_t, char_traits<wchar_t=""> >::~basic_fstream()(GLIBCXX_3.4) [CXXABI]</wchar_t,>	
non-virtual thunk to basic_fstream <wchar_t, char_traits<wchar_t=""> >::~basic_fstream()(GLIBCXX_3.4) [CXXABI]</wchar_t,>	
<pre>virtual thunk to basic_fstream<wchar_t, char_traits<wchar_t=""> >::~basic_fstream()(GLIBCXX_3.4) [CXXABI]</wchar_t,></pre>	

7.1.78 Class basic_ifstream<char, char_traits<char> >

7.1.78.1 Class data for basic_ifstream<char, char_traits<char> >

The virtual table for the std::basic_ifstream<char, std::char_traits<char> > class is described by Table 7-141

Table 7-141 Primary vtable for basic_ifstream<char, char_traits<char>>

Base Offset	0
Virtual Base Offset	256
RTTI	typeinfo for basic_ifstream <char, char_traits<char="">></char,>
vfunc[0]:	basic_ifstream <char, char_traits<char> >::~basic_ifstream()</char></char,
vfunc[1]:	basic_ifstream <char, char_traits<char> >::~basic_ifstream()</char></char,

Table 7-142 Secondary vtable for basic_ifstream<char, char_traits<char>>

Base Offset	-256
Virtual Base Offset	-256
RTTI	typeinfo for basic_ifstream <char, char_traits<char="">></char,>
vfunc[0]:	virtual thunk to basic_ifstream <char, char_traits<char=""> >::~basic_ifstream()</char,>

 virtual thunk to basic_ifstream <char, char_traits<char=""></char,>
>::~basic_ifstream()

The VTT for the std::basic_ifstream<char, std::char_traits<char> > class is described by Table 7-143

Table 7-143 VTT for basic_ifstream<char, char_traits<char>>

VTT Name	_ZTTSt14basic_ifstreamIcSt11char_tr aitsIcEE
Number of Entries	4

7.1.78.2 Interfaces for Class basic_ifstream<char, char_traits<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ifstream<char, std::char_traits<char> > specified in Table 7-144, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-144 libstdcxx - Class basic_ifstream<char, char_traits<char> > Function Interfaces

virtual thunk to basic_ifstream<char, char_traits<char>
>::~basic_ifstream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_ifstream<char, char_traits<char>
>::~basic_ifstream()(GLIBCXX_3.4) [CXXABI]

7.1.79 Class basic_ifstream<wchar_t, char_traits<wchar_t>>

7.1.79.1 Class data for basic_ifstream<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_ifstream<wchar_t, std::char_traits<wchar_t> class is described by Table 7-145

Table 7-145 Primary vtable for basic_ifstream<wchar_t, char_traits<wchar_t>

Base Offset	0
Virtual Base Offset	256
RTTI	<pre>typeinfo for basic_ifstream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	basic_ifstream <wchar_t, char_traits<wchar_t=""> >::~basic_ifstream()</wchar_t,>
vfunc[1]:	basic_ifstream <wchar_t, char_traits<wchar_t=""> >::~basic_ifstream()</wchar_t,>

Table 7-146 Secondary vtable for basic_ifstream<wchar_t, char_traits<wchar_t>>

Base Offset	-256
Virtual Base Offset	-256
RTTI	<pre>typeinfo for basic_ifstream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	virtual thunk to basic_ifstream <wchar_t, char_traits<wchar_t=""> >::~basic_ifstream()</wchar_t,>
vfunc[1]:	virtual thunk to basic_ifstream <wchar_t, char_traits<wchar_t=""> >::~basic_ifstream()</wchar_t,>

The VTT for the std::basic_ifstream<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-147

Table 7-147 VTT for basic_ifstream<wchar_t, char_traits<wchar_t>>

VTT Name	_ZTTSt14basic_ifstreamIwSt11char_t raitsIwEE
Number of Entries	4

7.1.79.2 Interfaces for Class basic_ifstream<wchar_t, char_traits<wchar_t>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ifstream<wchar_t, std::char_traits<wchar_t> > specified in Table 7-148, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-148 libstdcxx - Class basic_ifstream<wchar_t, char_traits<wchar_t> > Function Interfaces

virtual thunk to basic_ifstream<wchar_t, char_traits<wchar_t>
>::~basic_ifstream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_ifstream<wchar_t, char_traits<wchar_t>
>::~basic_ifstream()(GLIBCXX_3.4) [CXXABI]

7.1.80 Class basic_ofstream<char, char_traits<char> >

7.1.80.1 Class data for basic_ofstream<char, char_traits<char> >

The virtual table for the std::basic_ofstream<char, std::char_traits<char> > class is described by Table 7-149

Table 7-149 Primary vtable for basic_ofstream<char, char_traits<char>>

Base Offset	0
Virtual Base Offset	248

RTTI	typeinfo for basic_ofstream <char, char_traits<char=""> ></char,>
vfunc[0]:	basic_ofstream <char, char_traits<char> >::~basic_ofstream()</char></char,
vfunc[1]:	basic_ofstream <char, char_traits<char> >::~basic_ofstream()</char></char,

Table 7-150 Secondary vtable for basic_ofstream<char, char_traits<char>>

Base Offset	-248
Virtual Base Offset	-248
RTTI	typeinfo for basic_ofstream <char, char_traits<char="">></char,>
vfunc[0]:	virtual thunk to basic_ofstream <char, char_traits<char=""> >::~basic_ofstream()</char,>
vfunc[1]:	virtual thunk to basic_ofstream <char, char_traits<char=""> >::~basic_ofstream()</char,>

The VTT for the std::basic_ofstream<char, std::char_traits<char> > class is described by Table 7-151

Table 7-151 VTT for basic_ofstream<char, char_traits<char>>

VTT Name	_ZTTSt14basic_ofstreamIcSt11char_tr aitsIcEE
Number of Entries	4

7.1.80.2 Interfaces for Class basic_ofstream<char, char_traits<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ofstream<char, std::char_traits<char> > specified in Table 7-152, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-152 libstdcxx - Class basic_ofstream<char, char_traits<char> > Function Interfaces

virtual thunk to basic_ofstream <char, char_traits<char=""> >::~basic_ofstream()(GLIBCXX_3.4) [CXXABI]</char,>	
virtual thunk to basic_ofstream <char, char_traits<char=""> >::~basic_ofstream()(GLIBCXX_3.4) [CXXABI]</char,>	

7.1.81 Class basic_ofstream<wchar_t, char_traits<wchar_t>>

7.1.81.1 Class data for basic_ofstream<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_ofstream<wchar_t, std::char_traits<wchar_t> class is described by Table 7-153

Table 7-153 Primary vtable for basic_ofstream<wchar_t, char_traits<wchar_t>

Base Offset	0
Virtual Base Offset	248
RTTI	<pre>typeinfo for basic_ofstream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	basic_ofstream <wchar_t, char_traits<wchar_t=""> >::~basic_ofstream()</wchar_t,>
vfunc[1]:	basic_ofstream <wchar_t, char_traits<wchar_t=""> >::~basic_ofstream()</wchar_t,>

Table 7-154 Secondary vtable for basic_ofstream<wchar_t, char_traits<wchar_t>>

Base Offset	-248
Virtual Base Offset	-248
RTTI	<pre>typeinfo for basic_ofstream<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>
vfunc[0]:	virtual thunk to basic_ofstream <wchar_t, char_traits<wchar_t=""> >::~basic_ofstream()</wchar_t,>
vfunc[1]:	virtual thunk to basic_ofstream <wchar_t, char_traits<wchar_t=""> >::~basic_ofstream()</wchar_t,>

The VTT for the std::basic_ofstream<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-155

Table 7-155 VTT for basic_ofstream<wchar_t, char_traits<wchar_t>>

VTT Name	_ZTTSt14basic_ofstreamIwSt11char_t raitsIwEE
Number of Entries	4

7.1.81.2 Interfaces for Class basic_ofstream<wchar_t, char_traits<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ofstream<wchar_t, std::char_traits<wchar_t> > specified in Table 7-156, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-156 libstdcxx - Class basic_ofstream<wchar_t, char_traits<wchar_t> > Function Interfaces

virtual thunk to basic_ofstream<wchar_t, char_traits<wchar_t>
>::~basic_ofstream()(GLIBCXX_3.4) [CXXABI]

virtual thunk to basic_ofstream<wchar_t, char_traits<wchar_t>
>::~basic_ofstream()(GLIBCXX_3.4) [CXXABI]

7.1.82 Class basic_streambuf<char, char_traits<char> >

7.1.82.1 Class data for basic_streambuf<char, char_traits<char>>

The virtual table for the std::basic_streambuf<char, std::char_traits<char> > class is described by Table 7-157

Table 7-157 Primary vtable for basic_streambuf<char, char_traits<char>>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for basic_streambuf <char, char_traits<char="">></char,>
vfunc[0]:	basic_streambuf <char, char_traits<char> >::~basic_streambuf()</char></char,
vfunc[1]:	basic_streambuf <char, char_traits<char> >::~basic_streambuf()</char></char,
vfunc[2]:	basic_streambuf <char, char_traits<char>>::imbue(locale const&)</char></char,
vfunc[3]:	basic_streambuf <char, char_traits<char>>::setbuf(char*, long)</char></char,
vfunc[4]:	basic_streambuf <char, char_traits<char> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)</char></char,
vfunc[5]:	<pre>basic_streambuf<char, char_traits<char=""> >::seekpos(fpos<mbstate_t>, _Ios_Openmode)</mbstate_t></char,></pre>
vfunc[6]:	basic_streambuf <char, char_traits<char> >::sync()</char></char,

vfunc[7]:	basic_streambuf <char, char_traits<char>>::showmanyc()</char></char,
vfunc[8]:	basic_streambuf <char, char_traits<char>>::xsgetn(char*, long)</char></char,
vfunc[9]:	<pre>basic_streambuf<char, char_traits<char=""> >::underflow()</char,></pre>
vfunc[10]:	<pre>basic_streambuf<char, char_traits<char="">>::uflow()</char,></pre>
vfunc[11]:	basic_streambuf <char, char_traits<char> >::pbackfail(int)</char></char,
vfunc[12]:	basic_streambuf <char, char_traits<char> >::xsputn(char const*, long)</char></char,
vfunc[13]:	basic_streambuf <char, char_traits<char> >::overflow(int)</char></char,

The Run Time Type Information for the std::basic_streambuf<char, std::char_traits<char> > class is described by Table 7-158

Table 7-158 typeinfo for basic_streambuf<char, char_traits<char>>

Base Vtable	vtable forcxxabiv1::class_type_info
Name	typeinfo name for basic_streambuf <char, char_traits<char="">></char,>

7.1.82.2 Interfaces for Class basic_streambuf<char, char_traits<char>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_streambuf<char, std::char_traits<char> > specified in Table 7-159, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-159 libstdcxx - Class basic_streambuf<char, char_traits<char> > Function Interfaces

basic_streambuf <char, char_traits<char=""> >::pubseekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]</char,>	
basic_streambuf <char, char_traits<char=""> >::sgetn(char*, long)(GLIBCXX_3.4) [ISOCXX]</char,>	
basic_streambuf <char, char_traits<char=""> >::sputn(char const*, long)(GLIBCXX_3.4) [ISOCXX]</char,>	
basic_streambuf <char, char_traits<char=""> >::setbuf(char*, long)(GLIBCXX_3.4) [ISOCXX]</char,>	
basic_streambuf <char, char_traits<char=""> >::xsgetn(char*, long)(GLIBCXX_3.4) [ISOCXX]</char,>	

basic_streambuf<char, char_traits<char> >::xsputn(char const*,
long)(GLIBCXX_3.4) [ISOCXX]

basic_streambuf<char, char_traits<char> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]

basic_streambuf<char, char_traits<char> >::pubsetbuf(char*, long)(GLIBCXX_3.4) [ISOCXX]

7.1.83 Class basic_streambuf<wchar_t, char_traits<wchar_t>

7.1.83.1 Class data for basic_streambuf<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_streambuf<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-160

Table 7-160 Primary vtable for basic_streambuf<wchar_t, char_traits<wchar_t>>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for basic_streambuf <wchar_t, char_traits<wchar_t="">></wchar_t,>
vfunc[0]:	basic_streambuf <wchar_t, char_traits<wchar_t=""> >::~basic_streambuf()</wchar_t,>
vfunc[1]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t=""> >::~basic_streambuf()</wchar_t,></pre>
vfunc[2]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t="">>::imbue(locale const&)</wchar_t,></pre>
vfunc[3]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t=""> >::setbuf(wchar_t*, long)</wchar_t,></pre>
vfunc[4]:	basic_streambuf <wchar_t, char_traits<wchar_t="">>::seekoff(long, _Ios_Seekdir,_Ios_Openmode)</wchar_t,>
vfunc[5]:	basic_streambuf <wchar_t, char_traits<wchar_t=""> >::seekpos(fpos<mbstate_t>, _Ios_Openmode)</mbstate_t></wchar_t,>
vfunc[6]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t="">>::sync()</wchar_t,></pre>
vfunc[7]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t=""> >::showmanyc()</wchar_t,></pre>

vfunc[8]:	basic_streambuf <wchar_t, char_traits<wchar_t=""> >::xsgetn(wchar_t*, long)</wchar_t,>
vfunc[9]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t="">>::underflow()</wchar_t,></pre>
vfunc[10]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t="">>::uflow()</wchar_t,></pre>
vfunc[11]:	basic_streambuf <wchar_t, char_traits<wchar_t=""> >::pbackfail(unsigned int)</wchar_t,>
vfunc[12]:	basic_streambuf <wchar_t, char_traits<wchar_t=""> >::xsputn(wchar_t const*, long)</wchar_t,>
vfunc[13]:	basic_streambuf <wchar_t, char_traits<wchar_t=""> >::overflow(unsigned int)</wchar_t,>

The Run Time Type Information for the std::basic_streambuf<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-161

Table 7-161 typeinfo for basic_streambuf<wchar_t, char_traits<wchar_t>>

Base Vtable	vtable forcxxabiv1::class_type_info
Name	<pre>typeinfo name for basic_streambuf<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>

7.1.83.2 Interfaces for Class basic_streambuf<wchar_t, char_traits<wchar_t>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_streambuf<wchar_t, std::char_traits<wchar_t> > specified in Table 7-162, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-162 libstdcxx - Class basic_streambuf<wchar_t, char_traits<wchar_t> Function Interfaces

basic_streambuf <wchar_t, char_traits<wchar_t=""> >::pubseekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	
basic_streambuf <wchar_t, char_traits<wchar_t=""> >::sgetn(wchar_t*, long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	
basic_streambuf <wchar_t, char_traits<wchar_t=""> >::sputn(wchar_t const*, long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	
basic_streambuf <wchar_t, char_traits<wchar_t=""> >::setbuf(wchar_t*, long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	
basic_streambuf <wchar_t, char_traits<wchar_t=""> >::xsgetn(wchar_t*, long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	

basic_streambuf<wchar_t, char_traits<wchar_t> >::xsputn(wchar_t const*,
long)(GLIBCXX_3.4) [ISOCXX]

basic_streambuf<wchar_t, char_traits<wchar_t> >::seekoff(long,
 _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]

basic_streambuf<wchar_t, char_traits<wchar_t> >::pubsetbuf(wchar_t*,
long)(GLIBCXX_3.4) [ISOCXX]

7.1.84 Class basic_filebuf<char, char_traits<char> >

7.1.84.1 Class data for basic_filebuf<char, char_traits<char> >

The virtual table for the std::basic_filebuf<char, std::char_traits<char> > class is described by Table 7-163

Table 7-163 Primary vtable for basic_filebuf<char, char_traits<char>>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for basic_filebuf <char, char_traits<char="">></char,>
vfunc[0]:	basic_filebuf <char, char_traits<char=""> >::~basic_filebuf()</char,>
vfunc[1]:	basic_filebuf <char, char_traits<char=""> >::~basic_filebuf()</char,>
vfunc[2]:	basic_filebuf <char, char_traits<char=""> >::imbue(locale const&)</char,>
vfunc[3]:	basic_filebuf <char, char_traits<char=""> >::setbuf(char*, long)</char,>
vfunc[4]:	basic_filebuf <char, char_traits<char=""> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)</char,>
vfunc[5]:	basic_filebuf <char, char_traits<char=""> >::seekpos(fpos<mbstate_t>, _Ios_Openmode)</mbstate_t></char,>
vfunc[6]:	basic_filebuf <char, char_traits<char=""> >::sync()</char,>
vfunc[7]:	basic_filebuf <char, char_traits<char=""> >::showmanyc()</char,>
vfunc[8]:	basic_filebuf <char, char_traits<char=""> >::xsgetn(char*, long)</char,>
vfunc[9]:	basic_filebuf <char, char_traits<char=""> >::underflow()</char,>
vfunc[10]:	<pre>basic_streambuf<char, char_traits<char="">>::uflow()</char,></pre>
vfunc[11]:	basic_filebuf <char, char_traits<char=""> >::pbackfail(int)</char,>

vfunc[12]:	basic_filebuf <char, char_traits<char=""> >::xsputn(char const*, long)</char,>
vfunc[13]:	<pre>basic_filebuf<char, char_traits<char=""> >::overflow(int)</char,></pre>

The Run Time Type Information for the std::basic_filebuf<char, std::char_traits<char> > class is described by Table 7-164

Table 7-164 typeinfo for basic_filebuf<char, char_traits<char>>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for basic_filebuf <char, char_traits<char=""> ></char,>

7.1.84.2 Interfaces for Class basic_filebuf<char, char_traits<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_filebuf<char, std::char_traits<char> > specified in Table 7-165, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-165 libstdcxx - Class basic_filebuf<char, char_traits<char> > Function Interfaces

basic_filebuf <char, char_traits<char=""> >::_M_set_buffer(long)(GLIBCXX_3.4) [ISOCXX]</char,>	
basic_filebuf <char, char_traits<char=""> >::_M_convert_to_external(char*, long)(GLIBCXX_3.4) [ISOCXX]</char,>	
basic_filebuf <char, char_traits<char=""> >::setbuf(char*, long)(GLIBCXX_3.4) [ISOCXX]</char,>	
basic_filebuf <char, char_traits<char="">>::xsgetn(char*, long)(GLIBCXX_3.4) [ISOCXX]</char,>	
basic_filebuf <char, char_traits<char=""> >::xsputn(char const*, long)(GLIBCXX_3.4) [ISOCXX]</char,>	
basic_filebuf <char, char_traits<char=""> >::_M_seek(long, _Ios_Seekdir,mbstate_t)(GLIBCXX_3.4) [ISOCXX]</char,>	
basic_filebuf <char, char_traits<char=""> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]</char,>	

7.1.85 Class basic_filebuf<wchar_t, char_traits<wchar_t> >

7.1.85.1 Class data for basic_filebuf<wchar_t, char_traits<wchar_t>

The virtual table for the std::basic_filebuf<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-166

Table 7-166 Primary vtable for basic_filebuf<wchar_t, char_traits<wchar_t>>

Base Offset	0
-------------	---

Virtual Base Offset	0
RTTI	typeinfo for basic_filebuf <wchar_t, char_traits<wchar_t="">></wchar_t,>
vfunc[0]:	<pre>basic_filebuf<wchar_t, char_traits<wchar_t=""> >::~basic_filebuf()</wchar_t,></pre>
vfunc[1]:	<pre>basic_filebuf<wchar_t, char_traits<wchar_t=""> >::~basic_filebuf()</wchar_t,></pre>
vfunc[2]:	<pre>basic_filebuf<wchar_t, char_traits<wchar_t="">>::imbue(locale const&)</wchar_t,></pre>
vfunc[3]:	<pre>basic_filebuf<wchar_t, char_traits<wchar_t=""> >::setbuf(wchar_t*, long)</wchar_t,></pre>
vfunc[4]:	<pre>basic_filebuf<wchar_t, char_traits<wchar_t="">>::seekoff(long, _Ios_Seekdir, _Ios_Openmode)</wchar_t,></pre>
vfunc[5]:	<pre>basic_filebuf<wchar_t, char_traits<wchar_t=""> >::seekpos(fpos<mbstate_t>, _Ios_Openmode)</mbstate_t></wchar_t,></pre>
vfunc[6]:	<pre>basic_filebuf<wchar_t, char_traits<wchar_t=""> >::sync()</wchar_t,></pre>
vfunc[7]:	<pre>basic_filebuf<wchar_t, char_traits<wchar_t=""> >::showmanyc()</wchar_t,></pre>
vfunc[8]:	<pre>basic_filebuf<wchar_t, char_traits<wchar_t=""> >::xsgetn(wchar_t*, long)</wchar_t,></pre>
vfunc[9]:	<pre>basic_filebuf<wchar_t, char_traits<wchar_t="">>::underflow()</wchar_t,></pre>
vfunc[10]:	<pre>basic_streambuf<wchar_t, char_traits<wchar_t="">>::uflow()</wchar_t,></pre>
vfunc[11]:	basic_filebuf <wchar_t, char_traits<wchar_t=""> >::pbackfail(unsigned int)</wchar_t,>
vfunc[12]:	<pre>basic_filebuf<wchar_t, char_traits<wchar_t=""> >::xsputn(wchar_t const*, long)</wchar_t,></pre>
vfunc[13]:	<pre>basic_filebuf<wchar_t, char_traits<wchar_t=""> >::overflow(unsigned int)</wchar_t,></pre>

The Run Time Type Information for the std::basic_filebuf<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-167

Table 7-167 typeinfo for basic_filebuf<wchar_t, char_traits<wchar_t>>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	<pre>typeinfo name for basic_filebuf<wchar_t, char_traits<wchar_t="">></wchar_t,></pre>

7.1.85.2 Interfaces for Class basic_filebuf<wchar_t, char_traits<wchar_t>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_filebuf<wchar_t, std::char_traits<wchar_t> > specified in Table 7-168, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-168 libstdcxx - Class basic_filebuf<wchar_t, char_traits<wchar_t> > Function Interfaces

basic_filebuf <wchar_t, char_traits<wchar_t=""> >::_M_set_buffer(long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
basic_filebuf <wchar_t, char_traits<wchar_t=""> >::_M_convert_to_external(wchar_t*, long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
basic_filebuf <wchar_t, char_traits<wchar_t=""> >::setbuf(wchar_t*, long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
basic_filebuf <wchar_t, char_traits<wchar_t=""> >::xsgetn(wchar_t*, long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
basic_filebuf <wchar_t, char_traits<wchar_t=""> >::xsputn(wchar_t const*, long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
basic_filebuf <wchar_t, char_traits<wchar_t=""> >::_M_seek(long, _Ios_Seekdir,mbstate_t)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
basic_filebuf <wchar_t, char_traits<wchar_t=""> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
basic_ostream <wchar_t, char_traits<wchar_t="">>::_M_write(wchar_t const*, long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
<pre>virtual thunk to basic_fstream<wchar_t, char_traits<wchar_t=""> >::~basic_fstream()(GLIBCXX_3.4) [CXXABI]</wchar_t,></pre>

7.1.86 Class ios_base

7.1.86.1 Class data for ios_base

The Run Time Type Information for the std::ios_base class is described by Table 7-169

Table 7-169 typeinfo for ios_base

Base Vtable	vtable for
-------------	------------

	cxxabiv1::class_type_info
Name	typeinfo name for ios_base

7.1.86.2 Interfaces for Class ios_base

No external methods are defined for libstdcxx - Class std::ios_base in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.87 Class basic ios<char, char traits<char>>

7.1.87.1 Class data for basic_ios<char, char_traits<char> >

The virtual table for the std::basic_ios<char, std::char_traits<char> > class is described by Table 7-170

Table 7-170 Primary vtable for basic_ios<char, char_traits<char>>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for basic_ios <char, char_traits<char="">></char,>
vfunc[0]:	basic_ios <char, char_traits<char=""> >::~basic_ios()</char,>
vfunc[1]:	basic_ios <char, char_traits<char=""> >::~basic_ios()</char,>

7.1.87.2 Interfaces for Class basic ios<char, char traits<char>>

No external methods are defined for libstdcxx - Class std::basic_ios<char, std::char_traits<char> > in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.88 Class basic_ios<wchar_t, char_traits<wchar_t>>

7.1.88.1 Interfaces for Class basic_ios<wchar_t, char_traits<wchar_t>>

No external methods are defined for libstdcxx - Class std::basic_ios<wchar_t, std::char_traits<wchar_t> > in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.89 Class ios_base::failure

7.1.89.1 Class data for ios base::failure

The virtual table for the std::ios_base::failure class is described by Table 7-171

Table 7-171 Primary vtable for ios_base::failure

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for ios_base::failure
vfunc[0]:	ios_base::failure::~failure()

vfunc[1]:	ios_base::failure::~failure()
vfunc[2]:	ios_base::failure::what() const

The Run Time Type Information for the std::ios_base::failure class is described by Table 7-172

Table 7-172 typeinfo for ios_base::failure

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for ios_base::failure

7.1.89.2 Interfaces for Class ios_base::failure

No external methods are defined for libstdcxx - Class std::ios_base::failure in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.90 Class __timepunct<char>

7.1.90.1 Class data for __timepunct<char>

The virtual table for the std::__timepunct<char> class is described by Table 7-173

Table 7-173 Primary vtable for __timepunct<char>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo fortimepunct <char></char>
vfunc[0]:	timepunct <char>::~timepunct()</char>
vfunc[1]:	timepunct <char>::~timepunct()</char>

The Run Time Type Information for the std::_timepunct<char> class is described by Table 7-174

Table 7-174 typeinfo for __timepunct<char>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name fortimepunct <char></char>

7.1.90.2 Interfaces for Class __timepunct<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::__timepunct<char> specified in Table 7-175, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-175 libstdcxx - Class __timepunct<char> Function Interfaces

__timepunct<char>::_M_put(char*, unsigned long, char const*, tm const*) const(GLIBCXX_3.4) [ISOCXX]

timepunct <char>::timepunct(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>
timepunct <char>::timepunct(timepunct_cache<char>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char></char>
timepunct <char>::timepunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>
timepunct <char>::timepunct(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>
timepunct <char>::timepunct(timepunct_cache<char>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char></char>
timepunct <char>::timepunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>

7.1.91 Class __timepunct<wchar_t>

7.1.91.1 Class data for __timepunct<wchar_t>

The virtual table for the std::__timepunct<wchar_t> class is described by Table 7-176

Table 7-176 Primary vtable for __timepunct<wchar_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo fortimepunct <wchar_t></wchar_t>
vfunc[0]:	timepunct <wchar_t>::~timepunc t()</wchar_t>
vfunc[1]:	timepunct <wchar_t>::~timepunc t()</wchar_t>

The Run Time Type Information for the std::__timepunct<wchar_t> class is described by Table 7-177

Table 7-177 typeinfo for __timepunct<wchar_t>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name fortimepunct <wchar_t></wchar_t>

7.1.91.2 Interfaces for Class __timepunct<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::_timepunct<wchar_t> specified in Table 7-178, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-178 libstdcxx - Class __timepunct<wchar_t> Function Interfaces

timepunct <wchar_t>::_M_put(wchar_t*, unsigned long, wchar_t const*, tm const*) const(GLIBCXX_3.4) [ISOCXX]</wchar_t>	
timepunct <wchar_t>::timepunct(locale_struct*, char const*, unsigned</wchar_t>	

long)(GLIBCXX_3.4) [ISOCXX]
timepunct <wchar_t>::timepunct(timepunct_cache<wchar_t>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t></wchar_t>
timepunct <wchar_t>::timepunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>
timepunct <wchar_t>::timepunct(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>
timepunct <wchar_t>::timepunct(timepunct_cache<wchar_t>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t></wchar_t>
timepunct <wchar_t>::timepunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>

7.1.92 Class messages_base

7.1.92.1 Class data for messages_base

The Run Time Type Information for the std:: $messages_base\ class\ is\ described\ by\ Table\ 7-179$

Table 7-179 typeinfo for messages_base

Base Vtable	vtable forcxxabiv1::class_type_info
Name	typeinfo name for messages_base

7.1.92.2 Interfaces for Class messages_base

No external methods are defined for libstdcxx - Class std::messages_base in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1

7.1.93 Class messages<char>

7.1.93.1 Class data for messages<char>

The virtual table for the std::messages<char> class is described by Table 7-180

Table 7-180 Primary vtable for messages<char>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for messages <char></char>
vfunc[0]:	messages <char>::~messages()</char>
vfunc[1]:	messages <char>::~messages()</char>
vfunc[2]:	messages <char>::do_open(basic_stri ng<char, char_traits<char="">, allocator<char> > const&, locale const&) const</char></char,></char>
vfunc[3]:	messages <char>::do_get(int, int, int, basic_string<char, char_traits<char="">,</char,></char>

	allocator <char> > const&) const</char>
vfunc[4]:	messages <char>::do_close(int) const</char>

7.1.93.2 Interfaces for Class messages<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::messages<char> specified in Table 7-181, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-181 libstdcxx - Class messages<char> Function Interfaces

messages <char>::messages(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>	
messages <char>::messages(unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>	
messages <char>::messages(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>	
messages <char>::messages(unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>	

7.1.94 Class messages<wchar_t>

7.1.94.1 Class data for messages<wchar_t>

The virtual table for the std::messages<wchar_t> class is described by Table 7-182

Table 7-182 Primary vtable for messages<wchar_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for messages <wchar_t></wchar_t>
vfunc[0]:	messages <wchar_t>::~messages()</wchar_t>
vfunc[1]:	messages <wchar_t>::~messages()</wchar_t>
vfunc[2]:	messages <wchar_t>::do_open(basic_ string<char, char_traits<char="">, allocator<char> > const&, locale const&) const</char></char,></wchar_t>
vfunc[3]:	messages <wchar_t>::do_get(int, int, int, basic_string<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> > const&) const</wchar_t></wchar_t,></wchar_t>
vfunc[4]:	messages <wchar_t>::do_close(int) const</wchar_t>

7.1.94.2 Interfaces for Class messages<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::messages<wchar_t> specified in Table 7-183, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-183 libstdcxx - Class messages<wchar_t> Function Interfaces

messages <wchar_t>::messages(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>	
messages <wchar_t>::messages(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>	
messages <wchar_t>::messages(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>	
messages <wchar_t>::messages(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>	

7.1.95 Class messages_byname<char>

7.1.95.1 Class data for messages_byname<char>

The virtual table for the std::messages_byname<char> class is described by Table 7-184

Table 7-184 Primary vtable for messages_byname<char>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for messages_byname <char></char>
vfunc[0]:	messages_byname <char>::~messages _byname()</char>
vfunc[1]:	messages_byname <char>::~messages _byname()</char>
vfunc[2]:	messages <char>::do_open(basic_stri ng<char, char_traits<char="">, allocator<char> > const&, locale const&) const</char></char,></char>
vfunc[3]:	messages <char>::do_get(int, int, int, basic_string<char, char_traits<char="">, allocator<char> > const&) const</char></char,></char>
vfunc[4]:	messages <char>::do_close(int) const</char>

The Run Time Type Information for the std::messages_byname<char> class is described by Table 7-185

Table 7-185 typeinfo for messages_byname<char>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for messages_byname <char></char>

7.1.95.2 Interfaces for Class messages_byname<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::messages_byname<char> specified in Table 7-186, with

the full mandatory functionality as described in the referenced underlying specification.

Table 7-186 libstdcxx - Class messages_byname<char> Function Interfaces

messages_byname<char>::messages_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

messages_byname<char>::messages_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.96 Class messages_byname<wchar_t>

7.1.96.1 Class data for messages_byname<wchar_t>

The virtual table for the std::messages_byname<wchar_t> class is described by Table 7-187

Table 7-187 Primary vtable for messages_byname<wchar_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for messages_byname <wchar_t></wchar_t>
vfunc[0]:	messages_byname <wchar_t>::~mess ages_byname()</wchar_t>
vfunc[1]:	messages_byname <wchar_t>::~mess ages_byname()</wchar_t>
vfunc[2]:	messages <wchar_t>::do_open(basic_ string<char, char_traits<char="">, allocator<char> > const&, locale const&) const</char></char,></wchar_t>
vfunc[3]:	messages <wchar_t>::do_get(int, int, int, basic_string<wchar_t, char_traits<wchar_t="">, allocator<wchar_t> > const&) const</wchar_t></wchar_t,></wchar_t>
vfunc[4]:	messages <wchar_t>::do_close(int) const</wchar_t>

The Run Time Type Information for the std::messages_byname<wchar_t> class is described by Table 7-188

Table 7-188 typeinfo for messages_byname<wchar_t>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for messages_byname <wchar_t></wchar_t>

7.1.96.2 Interfaces for Class messages_byname<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::messages_byname<wchar_t> specified in Table 7-189, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-189 libstdcxx - Class messages_byname<wchar_t> Function Interfaces

messages_byname<wchar_t>::messages_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

messages_byname<wchar_t>::messages_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.97 Class numpunct<char>

7.1.97.1 Class data for numpunct<char>

The virtual table for the std::numpunct<char> class is described by Table 7-190

Table 7-190 Primary vtable for numpunct<char>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for numpunct <char></char>
vfunc[0]:	numpunct <char>::~numpunct()</char>
vfunc[1]:	numpunct <char>::~numpunct()</char>
vfunc[2]:	<pre>numpunct<char>::do_decimal_point() const</char></pre>
vfunc[3]:	numpunct <char>::do_thousands_sep () const</char>
vfunc[4]:	numpunct <char>::do_grouping() const</char>
vfunc[5]:	numpunct <char>::do_truename() const</char>
vfunc[6]:	numpunct <char>::do_falsename() const</char>

The Run Time Type Information for the std::numpunct<char> class is described by Table 7-191

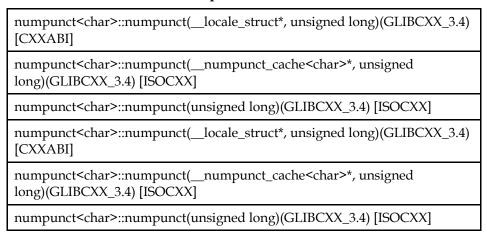
Table 7-191 typeinfo for numpunct<char>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for numpunct <char></char>

7.1.97.2 Interfaces for Class numpunct<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::numpunct<char> specified in Table 7-192, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-192 libstdcxx - Class numpunct<char> Function Interfaces



7.1.98 Class numpunct<wchar_t>

7.1.98.1 Class data for numpunct<wchar t>

The virtual table for the std::numpunct<wchar_t> class is described by Table 7-193

Table 7-193 Primary vtable for numpunct<wchar_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for numpunct <wchar_t></wchar_t>
vfunc[0]:	numpunct <wchar_t>::~numpunct()</wchar_t>
vfunc[1]:	numpunct <wchar_t>::~numpunct()</wchar_t>
vfunc[2]:	numpunct <wchar_t>::do_decimal_p oint() const</wchar_t>
vfunc[3]:	numpunct <wchar_t>::do_thousands _sep() const</wchar_t>
vfunc[4]:	numpunct <wchar_t>::do_grouping() const</wchar_t>
vfunc[5]:	numpunct <wchar_t>::do_truename() const</wchar_t>
vfunc[6]:	numpunct <wchar_t>::do_falsename() const</wchar_t>

The Run Time Type Information for the std::numpunct<wchar_t> class is described by Table 7-194

Table 7-194 typeinfo for numpunct<wchar_t>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for numpunct <wchar_t></wchar_t>

7.1.98.2 Interfaces for Class numpunct<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::numpunct<wchar_t> specified in Table 7-195, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-195 libstdcxx - Class numpunct<wchar_t> Function Interfaces

numpunct <wchar_t>::numpunct(locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>	
numpunct <wchar_t>::numpunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>	
numpunct <wchar_t>::numpunct(locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>	
numpunct <wchar_t>::numpunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>	

7.1.99 Class numpunct_byname<char>

7.1.99.1 Class data for numpunct_byname<char>

The virtual table for the std::numpunct_byname<char> class is described by Table 7-196

Table 7-196 Primary vtable for numpunct_byname<char>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for numpunct_byname <char></char>
vfunc[0]:	numpunct_byname <char>::~numpu nct_byname()</char>
vfunc[1]:	numpunct_byname <char>::~numpu nct_byname()</char>
vfunc[2]:	numpunct <char>::do_decimal_point() const</char>
vfunc[3]:	numpunct <char>::do_thousands_sep () const</char>
vfunc[4]:	numpunct <char>::do_grouping() const</char>
vfunc[5]:	numpunct <char>::do_truename() const</char>
vfunc[6]:	numpunct <char>::do_falsename()</char>

const

The Run Time Type Information for the std::numpunct_byname<char> class is described by Table 7-197

Table 7-197 typeinfo for numpunct_byname<char>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for numpunct_byname <char></char>

7.1.99.2 Interfaces for Class numpunct_byname<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::numpunct_byname<char> specified in Table 7-198, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-198 libstdcxx - Class numpunct_byname<char> Function Interfaces

numpunct_byname <char>::numpunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>
numpunct_byname <char>::numpunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>

7.1.100 Class numpunct_byname<wchar_t>

7.1.100.1 Class data for numpunct_byname<wchar_t>

The virtual table for the std::numpunct_byname<wchar_t> class is described by Table 7-199

Table 7-199 Primary vtable for numpunct_byname<wchar_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for numpunct_byname <wchar_t></wchar_t>
vfunc[0]:	numpunct_byname <wchar_t>::~num punct_byname()</wchar_t>
vfunc[1]:	numpunct_byname <wchar_t>::~num punct_byname()</wchar_t>
vfunc[2]:	numpunct <wchar_t>::do_decimal_p oint() const</wchar_t>
vfunc[3]:	numpunct <wchar_t>::do_thousands _sep() const</wchar_t>
vfunc[4]:	numpunct <wchar_t>::do_grouping() const</wchar_t>
vfunc[5]:	numpunct <wchar_t>::do_truename()</wchar_t>

	const
vfunc[6]:	numpunct <wchar_t>::do_falsename() const</wchar_t>

The Run Time Type Information for the std::numpunct_byname<wchar_t> class is described by Table 7-200

Table 7-200 typeinfo for numpunct_byname<wchar_t>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for numpunct_byname <wchar_t></wchar_t>

7.1.100.2 Interfaces for Class numpunct byname<wchar t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::numpunct_byname<wchar_t> specified in Table 7-201, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-201 libstdcxx - Class numpunct_byname<wchar_t> Function Interfaces

numpunct_byname<wchar_t>::numpunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

numpunct_byname<wchar_t>::numpunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.101 Class __codecvt_abstract_base<char, char, __mbstate_t>

7.1.101.1 Interfaces for Class __codecvt_abstract_base<char, char, __mbstate_t>

No external methods are defined for libstdcxx - Class std::_codecvt_abstract_base<char, char, __mbstate_t> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.102 Class __codecvt_abstract_base<wchar_t, char, __mbstate_t>

7.1.102.1 Class data for __codecvt_abstract_base<wchar_t, char, __mbstate_t>

The virtual table for the std::_codecvt_abstract_base<wchar_t, char, __mbstate_t> class is described by Table 7-202

Table 7-202 Primary vtable for __codecvt_abstract_base<wchar_t, char, __mbstate_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for

	codecvt_abstract_base <wchar_t, char,mbstate_t=""></wchar_t,>
vfunc[0]:	
vfunc[1]:	
vfunc[2]:	cxa_pure_virtual
vfunc[3]:	cxa_pure_virtual
vfunc[4]:	cxa_pure_virtual
vfunc[5]:	cxa_pure_virtual
vfunc[6]:	cxa_pure_virtual
vfunc[7]:	cxa_pure_virtual
vfunc[8]:	cxa_pure_virtual

7.1.102.2 Interfaces for Class __codecvt_abstract_base<wchar_t, char, __mbstate_t>

No external methods are defined for libstdcxx - Class std::_codecvt_abstract_base<wchar_t, char, __mbstate_t> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.103 Class codecvt_base

7.1.103.1 Class data for codecvt_base

The Run Time Type Information for the std::codecvt_base class is described by Table 7-203

Table 7-203 typeinfo for codecvt_base

Base Vtable	vtable forcxxabiv1::class_type_info
Name	typeinfo name for codecvt_base

7.1.103.2 Interfaces for Class codecvt_base

No external methods are defined for libstdcxx - Class std::codecvt_base in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.104 Class codecvt<char, char, __mbstate_t>

7.1.104.1 Class data for codecvt<char, char, __mbstate_t>

The virtual table for the std::codecvt<char, char, __mbstate_t> class is described by Table 7-204

Table 7-204 Primary vtable for codecvt<char, char, __mbstate_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for codecvt <char, char,<="" td=""></char,>

	mbstate_t>
vfunc[0]:	codecvt <char, char,<br="">mbstate_t>::~codecvt()</char,>
vfunc[1]:	codecvt <char, char,<br="">mbstate_t>::~codecvt()</char,>
vfunc[2]:	codecvt <char, char,<br="">mbstate_t>::do_out(mbstate_t&, char const*, char const*, char const*&, char*, char*&) const</char,>
vfunc[3]:	codecvt <char, char,mbstate_t="">::do_unshift(mbstate_ t&, char*, char*, char*&) const</char,>
vfunc[4]:	codecvt <char, char,<br="">mbstate_t>::do_in(mbstate_t&, char const*, char const*, char const*&, char*, char*&) const</char,>
vfunc[5]:	codecvt <char, char,<br="">mbstate_t>::do_encoding() const</char,>
vfunc[6]:	codecvt <char, char,<br="">mbstate_t>::do_always_noconv() const</char,>
vfunc[7]:	codecvt <char, char,mbstate_t="">::do_length(mbstate_t &, char const*, char const*, unsigned long) const</char,>
vfunc[8]:	codecvt <char, char,<br="">mbstate_t>::do_max_length() const</char,>

The Run Time Type Information for the std::codecvt<char, char, __mbstate_t> class is described by Table 7-205

Table 7-205 typeinfo for codecvt<char, char, __mbstate_t>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for codecvt <char, char,mbstate_t=""></char,>

7.1.104.2 Class data for __codecvt_abstract_base<char, char, __mbstate_t>

The virtual table for the std::_codecvt_abstract_base<char, char, __mbstate_t> class is described by Table 7-206

Table 7-206 Primary vtable for __codecvt_abstract_base<char, char, __mbstate_t>

Base Offset	0
Virtual Base Offset	0

RTTI	typeinfo forcodecvt_abstract_base <char, char,mbstate_t=""></char,>
vfunc[0]:	
vfunc[1]:	
vfunc[2]:	cxa_pure_virtual
vfunc[3]:	cxa_pure_virtual
vfunc[4]:	cxa_pure_virtual
vfunc[5]:	cxa_pure_virtual
vfunc[6]:	cxa_pure_virtual
vfunc[7]:	cxa_pure_virtual
vfunc[8]:	cxa_pure_virtual

7.1.104.3 Interfaces for Class codecvt<char, char, __mbstate_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::codecvt<char, char, __mbstate_t> specified in Table 7-207, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-207 libstdcxx - Class codecvt<char, char, __mbstate_t> Function Interfaces

codecvt <char, char,mbstate_t="">::do_length(mbstate_t&, char const*, char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]</char,>	
codecvt <char, char,mbstate_t="">::codecvt(locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char,>	
codecvt <char, char,mbstate_t="">::codecvt(unsigned long)(GLIBCXX_3.4) [ISOCXX]</char,>	
codecvt <char, char,mbstate_t="">::codecvt(locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char,>	
codecvt <char, char,mbstate_t="">::codecvt(unsigned long)(GLIBCXX_3.4) [ISOCXX]</char,>	

7.1.105 Class codecvt<wchar_t, char, __mbstate_t>

7.1.105.1 Class data for codecvt<wchar_t, char, __mbstate_t>

The virtual table for the std::codecvt<wchar_t, char, __mbstate_t> class is described by Table 7-208

Table 7-208 Primary vtable for codecvt<wchar_t, char, __mbstate_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for codecvt <wchar_t, char,mbstate_t=""></wchar_t,>

vfunc[0]:	codecvt <wchar_t, char,<br="">mbstate_t>::~codecvt()</wchar_t,>
vfunc[1]:	codecvt <wchar_t, char,<br="">mbstate_t>::~codecvt()</wchar_t,>
vfunc[2]:	codecvt <wchar_t, char,mbstate_t="">::do_out(mbstate_t&, wchar_t const*, wchar_t const*, wchar_t const*&, char*, char*, char*&) const</wchar_t,>
vfunc[3]:	codecvt <wchar_t, char,mbstate_t="">::do_unshift(mbstate_ t&, char*, char*, char*&) const</wchar_t,>
vfunc[4]:	codecvt <wchar_t, char,mbstate_t="">::do_in(mbstate_t&, char const*, char const*, char const*&, wchar_t*, wchar_t*, wchar_t*&) const</wchar_t,>
vfunc[5]:	codecvt <wchar_t, char,<br="">mbstate_t>::do_encoding() const</wchar_t,>
vfunc[6]:	codecvt <wchar_t, char,mbstate_t="">::do_always_noconv() const</wchar_t,>
vfunc[7]:	codecvt <wchar_t, char,mbstate_t="">::do_length(mbstate_t &, char const*, char const*, unsigned long) const</wchar_t,>
vfunc[8]:	codecvt <wchar_t, char,mbstate_t="">::do_max_length() const</wchar_t,>

The Run Time Type Information for the std::codecvt<wchar_t, char, __mbstate_t> class is described by Table 7-209

Table 7-209 typeinfo for codecvt<wchar_t, char, __mbstate_t>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for codecvt <wchar_t, char,mbstate_t=""></wchar_t,>

7.1.105.2 Interfaces for Class codecvt<wchar_t, char, __mbstate_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::codecvt<wchar_t, char, __mbstate_t> specified in Table 7-210, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-210 libstdcxx - Class codecvt<wchar_t, char, __mbstate_t> Function Interfaces

and acrety washam to aham	mbatata tanda lamath/	mbatata tl- abay sanat*
i codecvi≤wcnar t, cnar,	mostate t>::go length(mbstate_t&, char const*,

char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
codecvt <wchar_t, char,mbstate_t="">::codecvt(locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
codecvt <wchar_t, char,mbstate_t="">::codecvt(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
codecvt <wchar_t, char,mbstate_t="">::codecvt(locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
codecvt <wchar_t, char,mbstate_t="">::codecvt(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>

7.1.106 Class codecvt_byname<char, char, __mbstate_t>

7.1.106.1 Class data for codecvt_byname<char, char, __mbstate_t>

The virtual table for the std::codecvt_byname<char, char, __mbstate_t> class is described by Table 7-211

Table 7-211 Primary vtable for codecvt_byname<char, char, __mbstate_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for codecvt_byname <char, char,mbstate_t=""></char,>
vfunc[0]:	codecvt_byname <char, char,<br="">mbstate_t>::~codecvt_byname()</char,>
vfunc[1]:	codecvt_byname <char, char,<br="">mbstate_t>::~codecvt_byname()</char,>
vfunc[2]:	codecvt <char, char,<br="">_mbstate_t>::do_out(mbstate_t&, char const*, char const*, char const*&, char*, char*&) const</char,>
vfunc[3]:	codecvt <char, char,mbstate_t="">::do_unshift(mbstate_ t&, char*, char*, char*&) const</char,>
vfunc[4]:	codecvt <char, char,<br="">mbstate_t>::do_in(mbstate_t&, char const*, char const*, char const*&, char*, char*&) const</char,>
vfunc[5]:	codecvt <char, char,<br="">mbstate_t>::do_encoding() const</char,>
vfunc[6]:	codecvt <char, char,mbstate_t="">::do_always_noconv() const</char,>
vfunc[7]:	codecvt <char, char,<br="">mbstate_t>::do_length(mbstate_t &, char const*, char const*, unsigned long) const</char,>

vfunc[8]:	codecvt <char, char,<="" th=""></char,>
	mbstate_t>::do_max_length() const

The Run Time Type Information for the std::codecvt_byname<char, char, __mbstate_t> class is described by Table 7-212

Table 7-212 typeinfo for codecvt_byname<char, char, __mbstate_t>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for codecvt_byname <char, char,mbstate_t=""></char,>

7.1.106.2 Interfaces for Class codecvt_byname<char, char, __mbstate_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::codecvt_byname<char, char, __mbstate_t> specified in Table 7-213, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-213 libstdcxx - Class codecvt_byname<char, char, __mbstate_t> Function Interfaces

codecvt_byname<char, char, __mbstate_t>::codecvt_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

codecvt_byname<char, char, __mbstate_t>::codecvt_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.107 Class codecvt_byname<wchar_t, char, __mbstate_t>

7.1.107.1 Class data for codecvt_byname<wchar_t, char, __mbstate_t>

The virtual table for the std::codecvt_byname<wchar_t, char, __mbstate_t> class is described by Table 7-214

Table 7-214 Primary vtable for codecvt_byname<wchar_t, char, __mbstate_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for codecvt_byname <wchar_t, char,mbstate_t=""></wchar_t,>
vfunc[0]:	codecvt_byname <wchar_t, char,<br="">mbstate_t>::~codecvt_byname()</wchar_t,>
vfunc[1]:	codecvt_byname <wchar_t, char,<br="">mbstate_t>::~codecvt_byname()</wchar_t,>
vfunc[2]:	codecvt <wchar_t, char,<br="">mbstate_t>::do_out(mbstate_t&, wchar_t const*, wchar_t const*,</wchar_t,>

	wchar_t const*&, char*, char*, char*&) const
vfunc[3]:	codecvt <wchar_t, char,mbstate_t="">::do_unshift(mbstate_ t&, char*, char*&) const</wchar_t,>
vfunc[4]:	codecvt <wchar_t, char,mbstate_t="">::do_in(mbstate_t&, char const*, char const*, char const*&, wchar_t*, wchar_t*, wchar_t*&) const</wchar_t,>
vfunc[5]:	codecvt <wchar_t, char,<br="">mbstate_t>::do_encoding() const</wchar_t,>
vfunc[6]:	codecvt <wchar_t, char,mbstate_t="">::do_always_noconv() const</wchar_t,>
vfunc[7]:	codecvt <wchar_t, char,mbstate_t="">::do_length(mbstate_t &, char const*, char const*, unsigned long) const</wchar_t,>
vfunc[8]:	codecvt <wchar_t, char,<br="">mbstate_t>::do_max_length() const</wchar_t,>

The Run Time Type Information for the std::codecvt_byname<wchar_t, char, __mbstate_t> class is described by Table 7-215

Table 7-215 typeinfo for codecvt_byname<wchar_t, char, __mbstate_t>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for codecvt_byname <wchar_t, char,mbstate_t=""></wchar_t,>

7.1.107.2 Class data for collate_byname<wchar_t>

The virtual table for the std::collate_byname<wchar_t> class is described by Table 7-216

Table 7-216 Primary vtable for collate_byname<wchar_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for collate_byname <wchar_t></wchar_t>
vfunc[0]:	collate_byname <wchar_t>::~collate_ byname()</wchar_t>
vfunc[1]:	collate_byname <wchar_t>::~collate_ byname()</wchar_t>

vfunc[2]:	collate <wchar_t>::do_compare(wcha r_t const*, wchar_t const*, wchar_t const*, wchar_t const*) const</wchar_t>
vfunc[3]:	collate <wchar_t>::do_transform(wch ar_t const*, wchar_t const*) const</wchar_t>
vfunc[4]:	collate <wchar_t>::do_hash(wchar_t const*, wchar_t const*) const</wchar_t>

The Run Time Type Information for the std::collate_byname<wchar_t> class is described by Table 7-217

Table 7-217 typeinfo for collate_byname<wchar_t>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for collate_byname <wchar_t></wchar_t>

7.1.107.3 Interfaces for Class codecvt_byname<wchar_t, char, __mbstate_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::codecvt_byname<wchar_t, char, __mbstate_t> specified in Table 7-218, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-218 libstdcxx - Class codecvt_byname<wchar_t, char, __mbstate_t> Function Interfaces

codecvt_byname <wchar_t, char,mbstate_t="">::codecvt_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
codecvt_byname <wchar_t, char,mbstate_t="">::codecvt_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>
collate_byname <wchar_t>::collate_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>
collate_byname <wchar_t>::collate_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>

7.1.108 Class collate<char>

7.1.108.1 Class data for collate<char>

The virtual table for the std::collate<char> class is described by Table 7-219

Table 7-219 Primary vtable for collate<char>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for collate <char></char>
vfunc[0]:	collate <char>::~collate()</char>

vfunc[1]:	collate <char>::~collate()</char>
vfunc[2]:	collate <char>::do_compare(char const*, char const*, char const*, char const*)</char>
vfunc[3]:	collate <char>::do_transform(char const*, char const*) const</char>
vfunc[4]:	collate <char>:::do_hash(char const*, char const*) const</char>

The Run Time Type Information for the std::collate<char> class is described by Table 7-220

Table 7-220 typeinfo for collate<char>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for collate <char></char>

7.1.108.2 Interfaces for Class collate<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::collate<char> specified in Table 7-221, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-221 libstdcxx - Class collate < char > Function Interfaces

collate <char>::_M_transform(char*, char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]</char>
collate <char>::collate(locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>
collate <char>::collate(unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>
collate <char>::collate(locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>
collate <char>::collate(unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>

7.1.109 Class collate<wchar_t>

7.1.109.1 Class data for collate<wchar_t>

The virtual table for the std::collate<wchar_t> class is described by Table 7-222

Table 7-222 Primary vtable for collate<wchar_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for collate <wchar_t></wchar_t>
vfunc[0]:	collate <wchar_t>::~collate()</wchar_t>
vfunc[1]:	collate <wchar_t>::~collate()</wchar_t>
vfunc[2]:	collate <wchar_t>::do_compare(wcha</wchar_t>

	r_t const*, wchar_t const*, wchar_t const*, wchar_t const*)
vfunc[3]:	collate <wchar_t>::do_transform(wch ar_t const*, wchar_t const*) const</wchar_t>
vfunc[4]:	collate <wchar_t>::do_hash(wchar_t const*, wchar_t const*) const</wchar_t>

The Run Time Type Information for the std::collate<wchar_t> class is described by Table 7-223

Table 7-223 typeinfo for collate<wchar_t>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for collate <wchar_t></wchar_t>

7.1.109.2 Interfaces for Class collate<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::collate<wchar_t> specified in Table 7-224, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-224 libstdcxx - Class collate<wchar_t> Function Interfaces

collate <wchar_t>::_M_transform(wchar_t*, wchar_t const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]</wchar_t>
collate <wchar_t>::collate(locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>
collate <wchar_t>::collate(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>
collate <wchar_t>::collate(locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>
collate <wchar_t>::collate(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t>

7.1.110 Class collate_byname<char>

7.1.110.1 Class data for collate_byname<char>

The virtual table for the std::collate_byname<char> class is described by Table 7-225

Table 7-225 Primary vtable for collate_byname<char>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for collate_byname <char></char>
vfunc[0]:	collate_byname <char>::~collate_byname()</char>
vfunc[1]:	collate_byname <char>::~collate_byname()</char>

vfunc[2]:	collate <char>:::do_compare(char const*, char const*, char const*, char const*)</char>
vfunc[3]:	collate <char>::do_transform(char const*, char const*) const</char>
vfunc[4]:	collate <char>:::do_hash(char const*, char const*) const</char>

The Run Time Type Information for the std::collate_byname<char> class is described by Table 7-226

Table 7-226 typeinfo for collate_byname<char>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for collate_byname <char></char>

7.1.110.2 Interfaces for Class collate_byname<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::collate_byname<char> specified in Table 7-227, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-227 libstdcxx - Class collate_byname<char> Function Interfaces

collate_byname <char>::collate_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>
collate_byname <char>::collate_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char>

7.1.111 Class collate_byname<wchar_t>

7.1.111.1 Interfaces for Class collate_byname<wchar_t>

No external methods are defined for libstdcxx - Class std::collate_byname<wchar_t> in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.112 Class time_base

7.1.112.1 Class data for time_base

The Run Time Type Information for the std::time_base class is described by Table 7-228

Table 7-228 typeinfo for time_base

Base Vtable	vtable for cxxabiv1::class_type_info
Name	typeinfo name for time_base

7.1.112.2 Interfaces for Class time_base

No external methods are defined for libstdcxx - Class std::time_base in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.113 Class time_get_byname<char, istreambuf_iterator<char, char_traits<char>>>

7.1.113.1 Class data for time_get_byname<char, istreambuf_iterator<char, char_traits<char> >>

The virtual table for the std::time_get_byname<char, std::istreambuf_iterator<char, std::char_traits<char> > class is described by Table 7-229

Table 7-229 Primary vtable for time_get_byname<char, istreambuf_iterator<char, char_traits<char>>>

Base Offset	0
Virtual Base Offset	0
RTTI	<pre>typeinfo for time_get_byname<char, char_traits<char="" istreambuf_iterator<char,="">>></char,></pre>
vfunc[0]:	<pre>time_get_byname<char, char_traits<char="" istreambuf_iterator<char,="">> >::~time_get_byname()</char,></pre>
vfunc[1]:	<pre>time_get_byname<char, char_traits<char="" istreambuf_iterator<char,="">> >::~time_get_byname()</char,></pre>
vfunc[2]:	time_get <char, char_traits<char="" istreambuf_iterator<char,="">> >::do_date_order() const</char,>
vfunc[3]:	time_get <char, char_traits<char="" istreambuf_iterator<char,="">> >::do_get_time(istreambuf_iterator<c char_traits<char="" har,="">>, istreambuf_iterator<char, char_traits<char="">>, ios_base&, _los_lostate&, tm*) const</char,></c></char,>
vfunc[4]:	time_get <char, char_traits<char="" istreambuf_iterator<char,="">> >::do_get_date(istreambuf_iterator<c char_traits<char="" har,="">>, istreambuf_iterator<char, char_traits<char="">>, ios_base&, _Ios_Iostate&, tm*) const</char,></c></char,>

vfunc[5]:	time_get <char, char_traits<char="" istreambuf_iterator<char,=""> > ::do_get_weekday(istreambuf_iterat or<char, char_traits<char=""> >, istreambuf_iterator<char, char_traits<char=""> >, ios_base&, _Ios_Iostate&, tm*) const</char,></char,></char,>
vfunc[6]:	time_get <char, char_traits<char="" istreambuf_iterator<char,="">> >::do_get_monthname(istreambuf_it erator<char, char_traits<char="">>, istreambuf_iterator<char, char_traits<char="">>, ios_base&, _Ios_Iostate&, tm*) const</char,></char,></char,>
vfunc[7]:	time_get <char, char_traits<char="" istreambuf_iterator<char,=""> > ::do_get_year(istreambuf_iterator<c char_traits<char="" har,=""> >, istreambuf_iterator<char, char_traits<char=""> >, ios_base&, _Ios_Iostate&, tm*) const</char,></c></char,>

The Run Time Type Information for the std::time_get_byname<char, std::istreambuf_iterator<char, std::char_traits<char> > class is described by Table 7-230

Table 7-230 typeinfo for time_get_byname<char, istreambuf_iterator<char, char_traits<char>>>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	<pre>typeinfo name for time_get_byname<char, char_traits<char="" istreambuf_iterator<char,="">>></char,></pre>

7.1.113.2 Interfaces for Class time_get_byname<char, istreambuf_iterator<char, char_traits<char>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_get_byname<char, std::istreambuf_iterator<char, std::char_traits<char> > specified in Table 7-231, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-231 libstdcxx - Class time_get_byname<char, istreambuf_iterator<char, char_traits<char> >> Function Interfaces

time_get_byname<char, istreambuf_iterator<char, char_traits<char>>
>::time_get_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

time_get_byname<char, istreambuf_iterator<char, char_traits<char>>

>::time_get_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.114 Class time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

7.1.114.1 Class data for time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

The virtual table for the std::time_get_byname<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-232

Table 7-232 Primary vtable for time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

Base Offset	0
Virtual Base Offset	0
RTTI	<pre>typeinfo for time_get_byname<wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">>></wchar_t,></pre>
vfunc[0]:	time_get_byname <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">> >::~time_get_byname()</wchar_t,>
vfunc[1]:	time_get_byname <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,=""> > >::~time_get_byname()</wchar_t,>
vfunc[2]:	time_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">> >::do_date_order() const</wchar_t,>
vfunc[3]:	time_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,=""> > >::do_get_time(istreambuf_iterator< wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t=""> >, ios_base&, _Ios_Iostate&, tm*) const</wchar_t,></wchar_t></wchar_t,>
vfunc[4]:	time_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,=""> > >::do_get_date(istreambuf_iterator< wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t=""> >, ios_base&, _Ios_Iostate&, tm*) const</wchar_t,></wchar_t></wchar_t,>
vfunc[5]:	time_get <wchar_t,< td=""></wchar_t,<>

	<pre>istreambuf_iterator<wchar_t, char_traits<wchar_t=""> > >::do_get_weekday(istreambuf_iterat or<wchar_t, char_traits<wchar_t=""> >, istreambuf_iterator<wchar_t, char_traits<wchar_t=""> >, ios_base&, _Ios_Iostate&, tm*) const</wchar_t,></wchar_t,></wchar_t,></pre>
vfunc[6]:	time_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,=""> > >::do_get_monthname(istreambuf_it erator<wchar_t, char_traits<wchar_t=""> >, istreambuf_iterator<wchar_t, char_traits<wchar_t=""> >, ios_base&, _Ios_Iostate&, tm*) const</wchar_t,></wchar_t,></wchar_t,>
vfunc[7]:	time_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,=""> > >::do_get_year(istreambuf_iterator< wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t=""> >, ios_base&, _Ios_Iostate&, tm*) const</wchar_t,></wchar_t></wchar_t,>

The Run Time Type Information for the std::time_get_byname<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-233

Table 7-233 typeinfo for time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	<pre>typeinfo name for time_get_byname<wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">>></wchar_t,></pre>

7.1.114.2 Interfaces for Class time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_get_byname<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > specified in Table 7-234, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-234 libstdcxx - Class time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>> Function Interfaces

time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > ::time_get_byname(char const*, unsigned

long)(GLIBCXX_3.4) [ISOCXX]

time_get_byname<wchar_t, istreambuf_iterator<wchar_t,
char_traits<wchar_t> > ::time_get_byname(char const*, unsigned
long)(GLIBCXX_3.4) [ISOCXX]

7.1.115 Class time_put_byname<char, ostreambuf iterator<char, char traits<char>>>

7.1.115.1 Class data for time_put_byname<char, ostreambuf_iterator<char, char_traits<char>>>

The virtual table for the std::time_put_byname<char, std::ostreambuf_iterator<char, std::char_traits<char> >> class is described by Table 7-235

Table 7-235 Primary vtable for time_put_byname<char, ostreambuf_iterator<char, char_traits<char>>>

Base Offset	0
Virtual Base Offset	0
RTTI	<pre>typeinfo for time_put_byname<char, char_traits<char="" ostreambuf_iterator<char,="">>></char,></pre>
vfunc[0]:	time_put_byname <char, char_traits<char="" ostreambuf_iterator<char,="">> >::~time_put_byname()</char,>
vfunc[1]:	time_put_byname <char, char_traits<char="" ostreambuf_iterator<char,="">> >::~time_put_byname()</char,>
vfunc[2]:	time_put <char, char_traits<char="" ostreambuf_iterator<char,="">> >::do_put(ostreambuf_iterator<char, char_traits<char="">>, ios_base&, char, tm const*, char, char) const</char,></char,>

The Run Time Type Information for the std::time_put_byname<char, std::ostreambuf_iterator<char, std::char_traits<char> >> class is described by Table 7-236

Table 7-236 typeinfo for time_put_byname<char, ostreambuf_iterator<char, char_traits<char>>>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	<pre>typeinfo name for time_put_byname<char, char_traits<char="" ostreambuf_iterator<char,="">>></char,></pre>

7.1.115.2 Interfaces for Class time_put_byname<char, ostreambuf_iterator<char, char_traits<char> >>

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_put_byname<char, std::ostreambuf_iterator<char, std::char_traits<char> > specified in Table 7-237, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-237 libstdcxx - Class time_put_byname<char, ostreambuf_iterator<char, char_traits<char> >> Function Interfaces

time_put_byname<char, ostreambuf_iterator<char, char_traits<char>>
>::time_put_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

time_put_byname<char, ostreambuf_iterator<char, char_traits<char>>
>::time_put_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.116 Class time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

7.1.116.1 Class data for time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

The virtual table for the std::time_put_byname<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-238

Table 7-238 Primary vtable for time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

Base Offset	0
Virtual Base Offset	0
RTTI	<pre>typeinfo for time_put_byname<wchar_t, char_traits<wchar_t="" ostreambuf_iterator<wchar_t,="">>></wchar_t,></pre>
vfunc[0]:	time_put_byname <wchar_t, char_traits<wchar_t="" ostreambuf_iterator<wchar_t,="">> >::~time_put_byname()</wchar_t,>
vfunc[1]:	time_put_byname <wchar_t, char_traits<wchar_t="" ostreambuf_iterator<wchar_t,="">> >::~time_put_byname()</wchar_t,>
vfunc[2]:	time_put <wchar_t, char_traits<wchar_t="" ostreambuf_iterator<wchar_t,="">> >::do_put(ostreambuf_iterator<wcha char_traits<wchar_t="" r_t,="">>, ios_base&, wchar_t, tm const*, char, char) const</wcha></wchar_t,>

The Run Time Type Information for the std::time_put_byname<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-239

Table 7-239 typeinfo for time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	<pre>typeinfo name for time_put_byname<wchar_t, char_traits<wchar_t="" ostreambuf_iterator<wchar_t,="">>></wchar_t,></pre>

7.1.116.2 Interfaces for Class time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_put_byname<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > specified in Table 7-240, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-240 libstdcxx - Class time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>> Function Interfaces

time_put_byname<wchar_t, ostreambuf_iterator<wchar_t,
char_traits<wchar_t>>>::time_put_byname(char const*, unsigned
long)(GLIBCXX_3.4) [ISOCXX]

time_put_byname<wchar_t, ostreambuf_iterator<wchar_t,

char_traits<wchar_t, ostreambut_iterator<wchar_t, char_traits<wchar_t> >::time_put_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.117 Class time_get<char, istreambuf_iterator<char, char_traits<char> > >

7.1.117.1 Class data for time_get<char, istreambuf_iterator<char, char_traits<char> >>

The virtual table for the std::time_get<char, std::istreambuf_iterator<char, std::char_traits<char> >> class is described by Table 7-241

Table 7-241 Primary vtable for time_get<char, istreambuf_iterator<char, char traits<char>>>

Base Offset	0
Virtual Base Offset	0
RTTI	<pre>typeinfo for time_get<char, char_traits<char="" istreambuf_iterator<char,="">>></char,></pre>
vfunc[0]:	time_get <char, char_traits<char="" istreambuf_iterator<char,="">>>::~time_get()</char,>

vfunc[1]:	time_get <char, char_traits<char="" istreambuf_iterator<char,="">>>::~time_get()</char,>
vfunc[2]:	time_get <char, char_traits<char="" istreambuf_iterator<char,="">> >::do_date_order() const</char,>
vfunc[3]:	time_get <char, char_traits<char="" istreambuf_iterator<char,=""> > ::do_get_time(istreambuf_iterator<c char_traits<char="" har,=""> >, istreambuf_iterator<char, char_traits<char=""> >, ios_base&, _Ios_Iostate&, tm*) const</char,></c></char,>
vfunc[4]:	time_get <char, char_traits<char="" istreambuf_iterator<char,=""> > ::do_get_date(istreambuf_iterator<c char_traits<char="" har,=""> >, istreambuf_iterator<char, char_traits<char=""> >, ios_base&, _Ios_Iostate&, tm*) const</char,></c></char,>
vfunc[5]:	time_get <char, char_traits<char="" istreambuf_iterator<char,=""> > ::do_get_weekday(istreambuf_iterat or<char, char_traits<char=""> >, istreambuf_iterator<char, char_traits<char=""> >, ios_base&, _Ios_Iostate&, tm*) const</char,></char,></char,>
vfunc[6]:	time_get <char, char_traits<char="" istreambuf_iterator<char,=""> > >::do_get_monthname(istreambuf_it erator<char, char_traits<char=""> >, istreambuf_iterator<char, char_traits<char=""> >, ios_base&, _Ios_Iostate&, tm*) const</char,></char,></char,>
vfunc[7]:	time_get <char, char_traits<char="" istreambuf_iterator<char,=""> > ::do_get_year(istreambuf_iterator<c char_traits<char="" har,=""> >, istreambuf_iterator<char, char_traits<char=""> >, ios_base&, _los_lostate&, tm*) const</char,></c></char,>

7.1.117.2 Interfaces for Class time_get<char, istreambuf_iterator<char, char_traits<char>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_get<char, std::istreambuf_iterator<char, std::char_traits<char> > specified in Table 7-242, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-242 libstdcxx - Class time_get<char, istreambuf_iterator<char, char_traits<char>>> Function Interfaces

time_get<char, istreambuf_iterator<char, char_traits<char> >
::_M_extract_num(istreambuf_iterator<char, char_traits<char> >,
istreambuf_iterator<char, char_traits<char> >, int&, int, int, unsigned long,
ios_base&, _Ios_Iostate&) const(GLIBCXX_3.4) [ISOCXX]

time_get<char, istreambuf_iterator<char, char_traits<char>>
::_M_extract_name(istreambuf_iterator<char, char_traits<char>>,
istreambuf_iterator<char, char_traits<char>>, int&, char const**, unsigned
long, ios_base&, _Ios_Iostate&) const(GLIBCXX_3.4) [ISOCXX]

time_get<char, istreambuf_iterator<char, char_traits<char>>
::time_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

time_get<char, istreambuf_iterator<char, char_traits<char>>
::time_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.118 Class time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

7.1.118.1 Class data for time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

The virtual table for the std::time_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-243

Table 7-243 Primary vtable for time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

Base Offset	0
Virtual Base Offset	0
RTTI	<pre>typeinfo for time_get<wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">>></wchar_t,></pre>
vfunc[0]:	<pre>time_get<wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">> >::~time_get()</wchar_t,></pre>
vfunc[1]:	time_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">> >::~time_get()</wchar_t,>
vfunc[2]:	time_get <wchar_t, istreambuf_iterator<wchar_t,<="" td=""></wchar_t,>

	char_traits <wchar_t>> >::do_date_order() const</wchar_t>
vfunc[3]:	time_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,=""> > >::do_get_time(istreambuf_iterator< wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t=""> >, ios_base&, _Ios_Iostate&, tm*) const</wchar_t,></wchar_t></wchar_t,>
vfunc[4]:	time_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,=""> > >::do_get_date(istreambuf_iterator< wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t+="" char_traits<wchar_t+,="">, ios_base&, _Ios_Iostate&, tm*) const</wchar_t,></wchar_t></wchar_t,>
vfunc[5]:	time_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">> >::do_get_weekday(istreambuf_iterat or<wchar_t, char_traits<wchar_t="">>, istreambuf_iterator<wchar_t, char_traits<wchar_t="">>, ios_base&, _Ios_Iostate&, tm*) const</wchar_t,></wchar_t,></wchar_t,>
vfunc[6]:	time_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,=""> > >::do_get_monthname(istreambuf_it erator<wchar_t, char_traits<wchar_t=""> >, istreambuf_iterator<wchar_t, char_traits<wchar_t=""> >, ios_base&, _Ios_Iostate&, tm*) const</wchar_t,></wchar_t,></wchar_t,>
vfunc[7]:	time_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,=""> > >::do_get_year(istreambuf_iterator< wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t="" char_traits<wchar_t,=""> >, ios_base&, _Ios_Iostate&, tm*) const</wchar_t,></wchar_t></wchar_t,>

7.1.118.2 Interfaces for Class time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > specified in Table 7-244, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-244 libstdcxx - Class time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>> Function Interfaces

time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>
>::_M_extract_num(istreambuf_iterator<wchar_t, char_traits<wchar_t>>,
istreambuf_iterator<wchar_t, char_traits<wchar_t>>, int&, int, int, unsigned
long, ios_base&, _Ios_Iostate&) const(GLIBCXX_3.4) [ISOCXX]

time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > ::_M_extract_name(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, int&, wchar_t const**, unsigned long, ios_base&, _Ios_Iostate&) const(GLIBCXX_3.4) [ISOCXX]

time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> >
::time_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> >
::time_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.119 Class time_put<char, ostreambuf_iterator<char, char traits<char>>>

7.1.119.1 Interfaces for Class time_put<char, ostreambuf_iterator<char, char_traits<char>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > specified in Table 7-245, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-245 libstdcxx - Class time_put<char, ostreambuf_iterator<char, char_traits<char>>> Function Interfaces

time_put<char, ostreambuf_iterator<char, char_traits<char>>
>::time_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

time_put<char, ostreambuf_iterator<char, char_traits<char>>
::time_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.120 Class time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

7.1.120.1 Interfaces for Class time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > specified in Table 7-246, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-246 libstdcxx - Class time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> >> Function Interfaces

time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>
>::time_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> >
::time_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.121 Class moneypunct<char, false>

7.1.121.1 Class data for moneypunct<char, false>

The virtual table for the std::moneypunct<char, false> class is described by Table 7-247

Table 7-247 Primary vtable for moneypunct<char, false>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for moneypunct <char, false=""></char,>
vfunc[0]:	moneypunct <char, false>::~moneypunct()</char,
vfunc[1]:	moneypunct <char, false>::~moneypunct()</char,
vfunc[2]:	moneypunct <char, false>::do_decimal_point() const</char,
vfunc[3]:	moneypunct <char, false>::do_thousands_sep() const</char,
vfunc[4]:	moneypunct <char, false>::do_grouping() const</char,
vfunc[5]:	moneypunct <char, false>::do_curr_symbol() const</char,
vfunc[6]:	moneypunct <char, false>::do_positive_sign() const</char,
vfunc[7]:	moneypunct <char, false>::do_negative_sign() const</char,
vfunc[8]:	moneypunct <char, false>::do_frac_digits() const</char,
vfunc[9]:	moneypunct <char, false>::do_pos_format() const</char,
vfunc[10]:	moneypunct <char, false>::do_neg_format() const</char,

7.1.121.2 Interfaces for Class moneypunct<char, false>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct<char, false> specified in Table 7-248, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-248 libstdcxx - Class moneypunct<char, false> Function Interfaces

moneypunct <char, false="">::moneypunct(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char,>	
moneypunct <char, false="">::moneypunct(moneypunct_cache<char, false="">*,</char,></char,>	

unsigned long)(GLIBCXX_3.4) [ISOCXX]	
moneypunct <char, false="">::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]</char,>	
moneypunct <char, false="">::moneypunct(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char,>	
moneypunct <char, false="">::moneypunct(moneypunct_cache<char, false="">*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</char,></char,>	
moneypunct <char, false="">::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]</char,>	

7.1.122 Class moneypunct<char, true>

7.1.122.1 Class data for moneypunct<char, true>

The virtual table for the std::moneypunct<char, true> class is described by Table 7-249

Table 7-249 Primary vtable for moneypunct<char, true>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for moneypunct <char, true=""></char,>
vfunc[0]:	moneypunct <char, true>::~moneypunct()</char,
vfunc[1]:	moneypunct <char, true>::~moneypunct()</char,
vfunc[2]:	moneypunct <char, true>::do_decimal_point() const</char,
vfunc[3]:	moneypunct <char, true>::do_thousands_sep() const</char,
vfunc[4]:	moneypunct <char, true>::do_grouping() const</char,
vfunc[5]:	moneypunct <char, true>::do_curr_symbol() const</char,
vfunc[6]:	moneypunct <char, true>::do_positive_sign() const</char,
vfunc[7]:	moneypunct <char, true>::do_negative_sign() const</char,
vfunc[8]:	moneypunct <char, true>::do_frac_digits() const</char,
vfunc[9]:	moneypunct <char, true>::do_pos_format() const</char,
vfunc[10]:	moneypunct <char, true>::do_neg_format() const</char,

7.1.122.2 Interfaces for Class moneypunct<char, true>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct<char, true> specified in Table 7-250, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-250 libstdcxx - Class moneypunct<char, true> Function Interfaces

moneypunct<char, true>::moneypunct(_locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

moneypunct<char, true>::moneypunct(_moneypunct_cache<char, true>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

moneypunct<char, true>::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]

moneypunct<char, true>::moneypunct(_locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

moneypunct<char, true>::moneypunct(_moneypunct_cache<char, true>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

moneypunct<char, true>::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.123 Class moneypunct<wchar_t, false>

7.1.123.1 Class data for moneypunct<wchar_t, false>

The virtual table for the std::moneypunct<wchar_t, false> class is described by Table 7-251

Table 7-251 Primary vtable for moneypunct<wchar_t, false>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for moneypunct <wchar_t, false=""></wchar_t,>
vfunc[0]:	moneypunct <wchar_t, false>::~moneypunct()</wchar_t,
vfunc[1]:	moneypunct <wchar_t, false>::~moneypunct()</wchar_t,
vfunc[2]:	moneypunct <wchar_t, false>::do_decimal_point() const</wchar_t,
vfunc[3]:	moneypunct <wchar_t, false>::do_thousands_sep() const</wchar_t,
vfunc[4]:	moneypunct <wchar_t, false="">::do_grouping() const</wchar_t,>
vfunc[5]:	moneypunct <wchar_t, false="">::do_curr_symbol() const</wchar_t,>
vfunc[6]:	moneypunct <wchar_t,< td=""></wchar_t,<>

	false>::do_positive_sign() const
vfunc[7]:	moneypunct <wchar_t, false="">::do_negative_sign() const</wchar_t,>
vfunc[8]:	moneypunct <wchar_t, false>::do_frac_digits() const</wchar_t,
vfunc[9]:	moneypunct <wchar_t, false>::do_pos_format() const</wchar_t,
vfunc[10]:	moneypunct <wchar_t, false>::do_neg_format() const</wchar_t,

7.1.123.2 Interfaces for Class moneypunct<wchar_t, false>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct<wchar_t, false> specified in Table 7-252, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-252 libstdcxx - Class moneypunct<wchar_t, false> Function Interfaces

moneypunct <wchar_t, false="">::moneypunct(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	
moneypunct <wchar_t, false="">::moneypunct(moneypunct_cache<wchar_t, false="">*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,></wchar_t,>	
moneypunct <wchar_t, false="">::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	
moneypunct <wchar_t, false="">::moneypunct(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	
moneypunct <wchar_t, false="">::moneypunct(moneypunct_cache<wchar_t, false="">*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,></wchar_t,>	
moneypunct <wchar_t, false="">::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	

7.1.124 Class moneypunct<wchar_t, true>

7.1.124.1 Class data for moneypunct<wchar_t, true>

The virtual table for the std::moneypunct<wchar_t, true> class is described by Table 7-253

Table 7-253 Primary vtable for moneypunct<wchar_t, true>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for moneypunct <wchar_t, true=""></wchar_t,>
vfunc[0]:	moneypunct <wchar_t, true>::~moneypunct()</wchar_t,
vfunc[1]:	moneypunct <wchar_t,< td=""></wchar_t,<>

	true>::~moneypunct()
vfunc[2]:	moneypunct <wchar_t, true="">::do_decimal_point() const</wchar_t,>
vfunc[3]:	moneypunct <wchar_t, true>::do_thousands_sep() const</wchar_t,
vfunc[4]:	moneypunct <wchar_t, true>::do_grouping() const</wchar_t,
vfunc[5]:	moneypunct <wchar_t, true>::do_curr_symbol() const</wchar_t,
vfunc[6]:	moneypunct <wchar_t, true>::do_positive_sign() const</wchar_t,
vfunc[7]:	moneypunct <wchar_t, true="">::do_negative_sign() const</wchar_t,>
vfunc[8]:	moneypunct <wchar_t, true>::do_frac_digits() const</wchar_t,
vfunc[9]:	moneypunct <wchar_t, true>::do_pos_format() const</wchar_t,
vfunc[10]:	moneypunct <wchar_t, true>::do_neg_format() const</wchar_t,

7.1.124.2 Interfaces for Class moneypunct<wchar_t, true>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct<wchar_t, true> specified in Table 7-254, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-254 libstdcxx - Class moneypunct<wchar_t, true> Function Interfaces

moneypunct <wchar_t, true="">::moneypunct(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	
moneypunct <wchar_t, true="">::moneypunct(moneypunct_cache<wchar_t, true="">*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,></wchar_t,>	
moneypunct <wchar_t, true="">::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	
moneypunct <wchar_t, true="">::moneypunct(locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	
moneypunct <wchar_t, true="">::moneypunct(moneypunct_cache<wchar_t, true="">*, unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,></wchar_t,>	
moneypunct <wchar_t, true="">::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]</wchar_t,>	

7.1.125 Class moneypunct_byname<char, false>

7.1.125.1 Class data for moneypunct_byname<char, false>

The virtual table for the std::moneypunct_byname<char, false> class is described by Table 7-255

Table 7-255 Primary vtable for moneypunct_byname<char, false>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for moneypunct_byname <char, false=""></char,>
vfunc[0]:	moneypunct_byname <char, false>::~moneypunct_byname()</char,
vfunc[1]:	moneypunct_byname <char, false>::~moneypunct_byname()</char,
vfunc[2]:	moneypunct <char, false>::do_decimal_point() const</char,
vfunc[3]:	moneypunct <char, false>::do_thousands_sep() const</char,
vfunc[4]:	moneypunct <char, false>::do_grouping() const</char,
vfunc[5]:	moneypunct <char, false>::do_curr_symbol() const</char,
vfunc[6]:	moneypunct <char, false>::do_positive_sign() const</char,
vfunc[7]:	moneypunct <char, false>::do_negative_sign() const</char,
vfunc[8]:	moneypunct <char, false>::do_frac_digits() const</char,
vfunc[9]:	moneypunct <char, false>::do_pos_format() const</char,
vfunc[10]:	moneypunct <char, false>::do_neg_format() const</char,

The Run Time Type Information for the std::moneypunct_byname<char, false> class is described by Table 7-256

Table 7-256 typeinfo for moneypunct_byname<char, false>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for moneypunct_byname <char, false=""></char,>

7.1.125.2 Interfaces for Class moneypunct_byname<char, false>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct_byname<char, false> specified in Table 7-257, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-257 libstdcxx - Class moneypunct_byname<char, false> Function Interfaces

moneypunct_byname<char, false>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

moneypunct_byname<char, false>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.126 Class moneypunct_byname<char, true>

7.1.126.1 Class data for moneypunct_byname<char, true>

The virtual table for the std::moneypunct_byname<char, true> class is described by Table 7-258

Table 7-258 Primary vtable for moneypunct_byname<char, true>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for moneypunct_byname <char, true=""></char,>
vfunc[0]:	moneypunct_byname <char, true>::~moneypunct_byname()</char,
vfunc[1]:	moneypunct_byname <char, true>::~moneypunct_byname()</char,
vfunc[2]:	moneypunct <char, true>::do_decimal_point() const</char,
vfunc[3]:	moneypunct <char, true>::do_thousands_sep() const</char,
vfunc[4]:	moneypunct <char, true>::do_grouping() const</char,
vfunc[5]:	moneypunct <char, true>::do_curr_symbol() const</char,
vfunc[6]:	moneypunct <char, true>::do_positive_sign() const</char,
vfunc[7]:	moneypunct <char, true>::do_negative_sign() const</char,
vfunc[8]:	moneypunct <char, true>::do_frac_digits() const</char,
vfunc[9]:	moneypunct <char, true>::do_pos_format() const</char,
vfunc[10]:	moneypunct <char, true>::do_neg_format() const</char,

The Run Time Type Information for the std::moneypunct_byname<char, true> class is described by Table 7-259

Table 7-259 typeinfo for moneypunct_byname<char, true>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for moneypunct_byname <char, true=""></char,>

7.1.126.2 Interfaces for Class moneypunct_byname<char, true>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct_byname<char, true> specified in Table 7-260, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-260 libstdcxx - Class moneypunct_byname<char, true> Function Interfaces

moneypunct_byname<char, true>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

moneypunct_byname<char, true>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.127 Class moneypunct_byname<wchar_t, false>

7.1.127.1 Class data for moneypunct_byname<wchar_t, false>

The virtual table for the std::moneypunct_byname<wchar_t, false> class is described by Table 7-261

Table 7-261 Primary vtable for moneypunct_byname<wchar_t, false>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for moneypunct_byname <wchar_t, false=""></wchar_t,>
vfunc[0]:	moneypunct_byname <wchar_t, false="">::~moneypunct_byname()</wchar_t,>
vfunc[1]:	moneypunct_byname <wchar_t, false="">::~moneypunct_byname()</wchar_t,>
vfunc[2]:	moneypunct <wchar_t, false="">::do_decimal_point() const</wchar_t,>
vfunc[3]:	moneypunct <wchar_t, false="">::do_thousands_sep() const</wchar_t,>
vfunc[4]:	moneypunct <wchar_t, false="">::do_grouping() const</wchar_t,>
vfunc[5]:	moneypunct <wchar_t, false="">::do_curr_symbol() const</wchar_t,>
vfunc[6]:	moneypunct <wchar_t, false="">::do_positive_sign() const</wchar_t,>

vfunc[7]:	moneypunct <wchar_t, false="">::do_negative_sign() const</wchar_t,>
vfunc[8]:	moneypunct <wchar_t, false="">::do_frac_digits() const</wchar_t,>
vfunc[9]:	moneypunct <wchar_t, false="">::do_pos_format() const</wchar_t,>
vfunc[10]:	moneypunct <wchar_t, false="">::do_neg_format() const</wchar_t,>

The Run Time Type Information for the std::moneypunct_byname<wchar_t, false> class is described by Table 7-262

Table 7-262 typeinfo for moneypunct_byname<wchar_t, false>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for moneypunct_byname <wchar_t, false=""></wchar_t,>

7.1.127.2 Interfaces for Class moneypunct_byname<wchar_t, false>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct_byname<wchar_t, false> specified in Table 7-263, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-263 libstdcxx - Class moneypunct_byname<wchar_t, false> Function Interfaces

moneypunct_byname<wchar_t, false>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

moneypunct_byname<wchar_t, false>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.128 Class moneypunct_byname<wchar_t, true>

7.1.128.1 Class data for moneypunct_byname<wchar_t, true>

The virtual table for the std::moneypunct_byname<wchar_t, true> class is described by Table 7-264

Table 7-264 Primary vtable for moneypunct_byname<wchar_t, true>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for moneypunct_byname <wchar_t, true=""></wchar_t,>
vfunc[0]:	moneypunct_byname <wchar_t, true>::~moneypunct_byname()</wchar_t,

vfunc[1]:	moneypunct_byname <wchar_t, true="">::~moneypunct_byname()</wchar_t,>
vfunc[2]:	moneypunct <wchar_t, true="">::do_decimal_point() const</wchar_t,>
vfunc[3]:	moneypunct <wchar_t, true>::do_thousands_sep() const</wchar_t,
vfunc[4]:	moneypunct <wchar_t, true>::do_grouping() const</wchar_t,
vfunc[5]:	moneypunct <wchar_t, true>::do_curr_symbol() const</wchar_t,
vfunc[6]:	moneypunct <wchar_t, true>::do_positive_sign() const</wchar_t,
vfunc[7]:	moneypunct <wchar_t, true="">::do_negative_sign() const</wchar_t,>
vfunc[8]:	moneypunct <wchar_t, true>::do_frac_digits() const</wchar_t,
vfunc[9]:	moneypunct <wchar_t, true>::do_pos_format() const</wchar_t,
vfunc[10]:	moneypunct <wchar_t, true>::do_neg_format() const</wchar_t,

The Run Time Type Information for the std::moneypunct_byname<wchar_t, true> class is described by Table 7-265

Table 7-265 typeinfo for moneypunct_byname<wchar_t, true>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	typeinfo name for moneypunct_byname <wchar_t, true=""></wchar_t,>

7.1.128.2 Interfaces for Class moneypunct_byname<wchar_t, true>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct_byname<wchar_t, true> specified in Table 7-266, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-266 libstdcxx - Class moneypunct_byname<wchar_t, true> Function Interfaces

moneypunct_byname<wchar_t, true>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

moneypunct_byname<wchar_t, true>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.129 Class money_base

7.1.129.1 Class data for money_base

The Run Time Type Information for the std::money_base class is described by Table 7-267

Table 7-267 typeinfo for money_base

Base Vtable	vtable forcxxabiv1::class_type_info
Name	typeinfo name for money_base

7.1.129.2 Interfaces for Class money_base

No external methods are defined for libstdcxx - Class std::money_base in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.130 Class money_get<char, istreambuf_iterator<char, char_traits<char>>>

7.1.130.1 Class data for money_get<char, istreambuf_iterator<char, char_traits<char>>>

The virtual table for the std::money_get<char, std::istreambuf_iterator<char, std::char_traits<char> >> class is described by Table 7-268

Table 7-268 Primary vtable for money_get<char, istreambuf_iterator<char, char_traits<char>>>

Base Offset	0
Virtual Base Offset	0
RTTI	<pre>typeinfo for money_get<char, char_traits<char="" istreambuf_iterator<char,="">>></char,></pre>
vfunc[0]:	money_get <char, istreambuf_iterator<char, char_traits<char>>>::~money_get()</char></char, </char,
vfunc[1]:	money_get <char, char_traits<char="" istreambuf_iterator<char,="">>>::~money_get()</char,>
vfunc[2]:	money_get <char, char_traits<char="" istreambuf_iterator<char,="">> >::do_get(istreambuf_iterator<char, char_traits<char="">>, istreambuf_iterator<char, char_traits<char="">>, bool, ios_base&, _Ios_Iostate&, long double&) const</char,></char,></char,>
vfunc[3]:	money_get <char, char_traits<char="" istreambuf_iterator<char,="">></char,>

>::do_get(istreambuf_iterator <char, char_traits<char>>, istreambuf_iterator<char, char_traits<char>>, bool, ios_base&, _Ios_Iostate&, basic_string<char, char_traits<char>, allocator<char></char></char></char, </char></char, </char></char,
>&) const

The Run Time Type Information for the std::money_get<char, std::istreambuf_iterator<char, std::char_traits<char> >> class is described by Table 7-269

Table 7-269 typeinfo for money_get<char, istreambuf_iterator<char, char_traits<char>>>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	<pre>typeinfo name for money_get<char, char_traits<char="" istreambuf_iterator<char,="">>></char,></pre>

7.1.130.2 Interfaces for Class money_get<char, istreambuf_iterator<char, char_traits<char>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::money_get<char, std::istreambuf_iterator<char, std::char_traits<char> > specified in Table 7-270, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-270 libstdcxx - Class money_get<char, istreambuf_iterator<char, char_traits<char>>> Function Interfaces

<pre>money_get<char, char_traits<char="" istreambuf_iterator<char,="">> >::money_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]</char,></pre>	
money_get <char, char_traits<char="" istreambuf_iterator<char,="">> >::money_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]</char,>	

7.1.131 Class money_get<wchar_t, istreambuf iterator<wchar t, char traits<wchar t>>>

7.1.131.1 Class data for money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

The virtual table for the std::money_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-271

Table 7-271 Primary vtable for money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for money_get <wchar_t, istreambuf_iterator<wchar_t,<="" td=""></wchar_t,>

	char_traits <wchar_t>>></wchar_t>
vfunc[0]:	money_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">> >::~money_get()</wchar_t,>
vfunc[1]:	money_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">> >::~money_get()</wchar_t,>
vfunc[2]:	money_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">> >::do_get(istreambuf_iterator<wchar _t,="" char_traits<wchar_t="">>, istreambuf_iterator<wchar_t, char_traits<wchar_t="">>, bool, ios_base&, _Ios_Iostate&, long double&) const</wchar_t,></wchar></wchar_t,>
vfunc[3]:	money_get <wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">> >::do_get(istreambuf_iterator<wchar _t,="" char_traits<wchar_t="">>, istreambuf_iterator<wchar_t, char_traits<wchar_t="">>, bool, ios_base&,_Ios_Iostate&, basic_string<wchar_t, char_traits<wchar_t="">, allocator<wchar_t>>&) const</wchar_t></wchar_t,></wchar_t,></wchar></wchar_t,>

The Run Time Type Information for the std::money_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-272

Table 7-272 typeinfo for money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	<pre>typeinfo name for money_get<wchar_t, char_traits<wchar_t="" istreambuf_iterator<wchar_t,="">>></wchar_t,></pre>

7.1.131.2 Interfaces for Class money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::money_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > specified in Table 7-273, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-273 libstdcxx - Class money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>> Function Interfaces

money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>
>::money_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>
>::money_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.132 Class money_put<char, ostreambuf_iterator<char, char_traits<char> > >

7.1.132.1 Class data for money_put<char, ostreambuf_iterator<char, char_traits<char>>>

The virtual table for the std::money_put<char, std::ostreambuf_iterator<char, std::char_traits<char> >> class is described by Table 7-274

Table 7-274 Primary vtable for money_put<char, ostreambuf_iterator<char, char_traits<char>>>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for money_put <char, char_traits<char="" ostreambuf_iterator<char,="">>></char,>
vfunc[0]:	money_put <char, ostreambuf_iterator<char, char_traits<char>>>::~money_put()</char></char, </char,
vfunc[1]:	money_put <char, ostreambuf_iterator<char, char_traits<char>>>::~money_put()</char></char, </char,
vfunc[2]:	money_put <char, char_traits<char="" ostreambuf_iterator<char,="">> >::do_put(ostreambuf_iterator<char, char_traits<char="">>, bool, ios_base&, char, long double) const</char,></char,>
vfunc[3]:	money_put <char, char_traits<char="" ostreambuf_iterator<char,="">> >::do_put(ostreambuf_iterator<char, char_traits<char="">>, bool, ios_base&, char, basic_string<char, char_traits<char="">, allocator<char>> const&) const</char></char,></char,></char,>

The Run Time Type Information for the std::money_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > class is described by Table 7-275

Table 7-275 typeinfo for money_put<char, ostreambuf_iterator<char, char traits<char>>>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	<pre>typeinfo name for money_put<char, char_traits<char="" ostreambuf_iterator<char,="">>></char,></pre>

7.1.132.2 Interfaces for Class money_put<char, ostreambuf_iterator<char, char_traits<char>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::money_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > specified in Table 7-276, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-276 libstdcxx - Class money_put<char, ostreambuf_iterator<char, char_traits<char>>> Function Interfaces

money_put<char, ostreambuf_iterator<char, char_traits<char>>
>::money_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

money_put<char, ostreambuf_iterator<char, char_traits<char>>
>::money_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.133 Class money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

7.1.133.1 Class data for money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

The virtual table for the std::money_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-277

Table 7-277 Primary vtable for money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

Base Offset	0
Virtual Base Offset	0
RTTI	<pre>typeinfo for money_put<wchar_t, char_traits<wchar_t="" ostreambuf_iterator<wchar_t,="">>></wchar_t,></pre>
vfunc[0]:	money_put <wchar_t, char_traits<wchar_t="" ostreambuf_iterator<wchar_t,="">> >::~money_put()</wchar_t,>
vfunc[1]:	money_put <wchar_t, char_traits<wchar_t="" ostreambuf_iterator<wchar_t,="">> >::~money_put()</wchar_t,>
vfunc[2]:	money_put <wchar_t,< td=""></wchar_t,<>

	ostreambuf_iterator <wchar_t, char_traits<wchar_t="">> >::do_put(ostreambuf_iterator<wcha char_traits<wchar_t="" r_t,="">>, bool, ios_base&, wchar_t, long double) const</wcha></wchar_t,>
vfunc[3]:	money_put <wchar_t, char_traits<wchar_t="" ostreambuf_iterator<wchar_t,="">> >::do_put(ostreambuf_iterator<wcha char_traits<wchar_t="" r_t,="">>, bool, ios_base&, wchar_t, basic_string<wchar_t, char_traits<wchar_t="">, allocator<wchar_t>> const&) const</wchar_t></wchar_t,></wcha></wchar_t,>

The Run Time Type Information for the std::money_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > class is described by Table 7-278

Table 7-278 typeinfo for money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

Base Vtable	vtable forcxxabiv1::si_class_type_info
Name	<pre>typeinfo name for money_put<wchar_t, char_traits<wchar_t="" ostreambuf_iterator<wchar_t,="">>></wchar_t,></pre>

7.1.133.2 Interfaces for Class money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::money_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > specified in Table 7-279, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-279 libstdcxx - Class money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>> Function Interfaces

money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> >
:::money_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> >
::money_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.134 Class locale

7.1.134.1 Interfaces for Class locale

An LSB conforming implementation shall provide the architecture specific methods for Class std::locale specified in Table 7-280, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-280 libstdcxx - Class locale Function Interfaces

locale::_Impl::_Impl(char const*, unsigned long)(GLIBCXX_3.4) [LSB]
locale::_Impl::_Impl(locale::_Impl const&, unsigned long)(GLIBCXX_3.4) [LSB]
locale::_Impl::_Impl(unsigned long)(GLIBCXX_3.4) [LSB]
locale::_Impl::_Impl(char const*, unsigned long)(GLIBCXX_3.4) [LSB]
locale::_Impl::_Impl(locale::_Impl const&, unsigned long)(GLIBCXX_3.4) [LSB]
locale::_Impl::_Impl(unsigned long)(GLIBCXX_3.4) [LSB]

7.1.135 Class locale::facet

7.1.135.1 Class data for locale::facet

The virtual table for the std::locale::facet class is described by Table 7-281

Table 7-281 Primary vtable for locale::facet

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for locale::facet
vfunc[0]:	locale::facet::~facet()
vfunc[1]:	locale::facet::~facet()

The Run Time Type Information for the std::locale::facet class is described by Table 7-282

Table 7-282 typeinfo for locale::facet

Base Vtable	vtable forcxxabiv1::class_type_info
Name	typeinfo name for locale::facet

7.1.135.2 Interfaces for Class locale::facet

No external methods are defined for libstdcxx - Class std::locale::facet in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.136 facet functions

7.1.136.1 Interfaces for facet functions

No external methods are defined for libstdcxx - facet functions in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.137 Class __num_base

7.1.137.1 Class data for __num_base

The Run Time Type Information for the std::__num_base class is described by Table 7-283

Table 7-283

Base Vtable	vtable forcxxabiv1::class_type_info
Name	typeinfo name fornum_base

7.1.137.2 Interfaces for Class __num_base

No external methods are defined for libstdcxx - Class std::__num_base in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.138 Class num_get<char, istreambuf_iterator<char, char traits<char> >>

7.1.138.1 Interfaces for Class num_get<char, istreambuf_iterator<char, char_traits<char>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::num_get<char, std::istreambuf_iterator<char, std::char_traits<char> > specified in Table 7-284, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-284 libstdcxx - Class num_get<char, istreambuf_iterator<char, char traits<char>>> Function Interfaces

```
num_get<char, istreambuf_iterator<char, char_traits<char>>
>::num_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

num_get<char, istreambuf_iterator<char, char_traits<char>>
>::num_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]
```

7.1.139 Class num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

7.1.139.1 Interfaces for Class num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::num_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > specified in Table 7-285, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-285 libstdcxx - Class num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t>>> Function Interfaces

num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> >
::num_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> >
::num_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.140 Class num_put<char, ostreambuf_iterator<char, char_traits<char>>>

7.1.140.1 Interfaces for Class num_put<char, ostreambuf_iterator<char, char_traits<char>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::num_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > specified in Table 7-286, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-286 libstdcxx - Class num_put<char, ostreambuf_iterator<char, char_traits<char>>> Function Interfaces

num_put<char, ostreambuf_iterator<char, char_traits<char>>
>::_M_group_int(char const*, unsigned long, char, ios_base&, char*, char*, int&) const(GLIBCXX_3.4) [ISOCXX]

num_put<char, ostreambuf_iterator<char, char_traits<char>>
>::_M_group_float(char const*, unsigned long, char, char const*, char*, int&) const(GLIBCXX_3.4) [ISOCXX]

num_put<char, ostreambuf_iterator<char, char_traits<char>>
>::_M_pad(char, long, ios_base&, char*, char const*, int&)
const(GLIBCXX_3.4) [ISOCXX]

num_put<char, ostreambuf_iterator<char, char_traits<char>>
>::num_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

num_put<char, ostreambuf_iterator<char, char_traits<char>>
>::num_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.141 Class num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>>

7.1.141.1 Interfaces for Class num_put<wchar_t, ostreambuf iterator<wchar t, char traits<wchar t>>>

An LSB conforming implementation shall provide the architecture specific methods for Class std::num_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > specified in Table 7-287, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-287 libstdcxx - Class num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>> Function Interfaces

num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> >
::_M_group_int(char const*, unsigned long, wchar_t, ios_base&, wchar_t*,
wchar_t*, int&) const(GLIBCXX_3.4) [ISOCXX]

num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > ::_M_group_float(char const*, unsigned long, wchar_t, wchar_t const*, wchar_t*, wchar_t*, int&) const(GLIBCXX_3.4) [ISOCXX]

num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> >
::_M_pad(wchar_t, long, ios_base&, wchar_t*, wchar_t const*, int&)
const(GLIBCXX_3.4) [ISOCXX]

num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t>>

>::num_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> >
::num_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.1.142 Class gslice

7.1.142.1 Class data for gslice

7.1.142.2 Interfaces for Class gslice

An LSB conforming implementation shall provide the architecture specific methods for Class std::gslice specified in Table 7-288, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-288 libstdcxx - Class gslice Function Interfaces

gslice::_Indexer::_Indexer(unsigned long, valarray<unsigned long> const&, valarray<unsigned long> const&)(GLIBCXX_3.4) [ISOCXX]

gslice::_Indexer::_Indexer(unsigned long, valarray<unsigned long> const&, valarray<unsigned long> const&)(GLIBCXX_3.4) [ISOCXX]

7.1.143 Class __basic_file<char>

7.1.143.1 Class data for __basic_file<char>

7.1.143.2 Interfaces for Class __basic_file<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::_basic_file<char> specified in Table 7-289, with the full mandatory functionality as described in the referenced underlying specification.

Table 7-289 libstdcxx - Class __basic_file<char> Function Interfaces

__basic_file<char>::xsgetn(char*, long)(GLIBCXX_3.4) [ISOCXX]

_basic_file<char>::xsputn(char const*, long)(GLIBCXX_3.4) [ISOCXX]

_basic_file<char>::seekoff(long, _Ios_Seekdir)(GLIBCXX_3.4) [ISOCXX]

__basic_file<char>::xsputn_2(char const*, long, char const*, long)(GLIBCXX_3.4) [ISOCXX]

7.1.144 Class _List_node_base

7.1.144.1 Interfaces for Class List node base

No external methods are defined for libstdcxx - Class std::_List_node_base in this part of the specification. See also the generic specification, ISO/IEC 23360 Part 1.

7.1.145 Class valarray<unsigned int>

7.1.145.1 Class data for valarray<unsigned int>

7.1.145.2 Interfaces for Class valarray<unsigned int>

An LSB conforming implementation shall provide the architecture specific methods for Class std::valarray<unsigned int> specified in Table 7-290, with the

full mandatory functionality as described in the referenced underlying specification.

Table 7-290 libstdcxx - Class valarray<unsigned int> Function Interfaces

valarray<unsigned long>::size() const(GLIBCXX_3.4) [ISOCXX] valarray<unsigned long>::valarray(valarray<unsigned long>

const&)(GLIBCXX_3.4) [ISOCXX]

valarray<unsigned long>::valarray(unsigned long)(GLIBCXX_3.4) [ISOCXX]

valarray<unsigned long>::valarray(valarray<unsigned long>
const&)(GLIBCXX_3.4) [ISOCXX]

valarray<unsigned long>::valarray(unsigned long)(GLIBCXX_3.4) [ISOCXX]

valarray<unsigned long>::~valarray()(GLIBCXX_3.4) [ISOCXX]

valarray<unsigned long>::~valarray()(GLIBCXX_3.4) [ISOCXX]

valarray<unsigned long>::operator[](unsigned long)(GLIBCXX_3.4) [ISOCXX]

7.2 Interface Definitions for libstdcxx

The interfaces defined on the following pages are included in libstdcxx and are defined by this specification. Unless otherwise noted, these interfaces shall be included in the source standard.

Other interfaces listed in Section 7.1 shall behave as described in the referenced base document.

Annex A GNU Free Documentation License (Informative)

This specification is published under the terms of the GNU Free Documentation License, Version 1.1, March 2000

Copyright (C) 2000 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

A.1 PREAMBLE

The purpose of this License is to make a manual, textbook, or other written document "free" in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially. Secondarily, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of "copyleft", which means that derivative works of the document must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft license designed for free software.

We have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

A.2 APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. The "Document", below, refers to any such manual or work. Any member of the public is a licensee, and is addressed as "you".

A "Modified Version" of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A "Secondary Section" is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (For example, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The "Invariant Sections" are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License.

The "Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License.

A "Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, whose contents can be viewed and edited directly and straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup has been designed to thwart or discourage subsequent modification by readers is not Transparent. A copy that is not "Transparent" is called "Opaque".

Examples of suitable formats for Transparent copies include plain ASCII without markup, Texinfo input format, LaTeX input format, SGML or XML using a publicly available DTD, and standard-conforming simple HTML designed for human modification. Opaque formats include PostScript, PDF, proprietary formats that can be read and edited only by proprietary word processors, SGML or XML for which the DTD and/or processing tools are not generally available, and the machine-generated HTML produced by some word processors for output purposes only.

The "Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, "Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

A.3 VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

A.4 COPYING IN QUANTITY

If you publish printed copies of the Document numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible. You may add other material on the covers in addition. Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a publicly-accessible computer-network location containing a complete Transparent copy of the Document, free of added material, which the general network-using public has access to download anonymously at no charge using public-standard network protocols. If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

A.5 MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

- A. Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.
- B. List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has less than five).
- C. State on the Title page the name of the publisher of the Modified Version, as the publisher.
- D. Preserve all the copyright notices of the Document.
- E. Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.
- F. Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.
- G. Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.
- H. Include an unaltered copy of this License.
- I. Preserve the section entitled "History", and its title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section entitled "History" in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.

- J. Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the "History" section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.
- K. In any section entitled "Acknowledgements" or "Dedications", preserve the section's title, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.
- L. Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.
- M. Delete any section entitled "Endorsements". Such a section may not be included in the Modified Version.
- N. Do not retitle any existing section as "Endorsements" or to conflict in title with any Invariant Section.

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section entitled "Endorsements", provided it contains nothing but endorsements of your Modified Version by various parties--for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

A.6 COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the

name of the original author or publisher of that section if known, or else a unique number. Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections entitled "History" in the various original documents, forming one section entitled "History"; likewise combine any sections entitled "Acknowledgements", and any sections entitled "Dedications". You must delete all sections entitled "Endorsements."

A.7 COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.

A.8 AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, does not as a whole count as a Modified Version of the Document, provided no compilation copyright is claimed for the compilation. Such a compilation is called an "aggregate", and this License does not apply to the other self-contained works thus compiled with the Document, on account of their being thus compiled, if they are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one quarter of the entire aggregate, the Document's Cover Texts may be placed on covers that surround only the Document within the aggregate. Otherwise they must appear on covers around the whole aggregate.

A.9 TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License provided that you also include the original English version of this License. In case of a disagreement between the translation and the original English version of this License, the original English version will prevail.

A.10 TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided for under this License. Any other attempt to copy, modify, sublicense or distribute the Document is void, and will automatically terminate your rights under this License. However, parties who have received copies, or

rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

A.11 FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. See http://www.gnu.org/copyleft/.

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation.

A.12 How to use this License for your documents

To use this License in a document you have written, include a copy of the License in the document and put the following copyright and license notices just after the title page:

Copyright (c) YEAR YOUR NAME. Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.1 or any later version published by the Free Software Foundation; with the Invariant Sections being LIST THEIR TITLES, with the Front-Cover Texts being LIST, and with the Back-Cover Texts being LIST. A copy of the license is included in the section entitled "GNU Free Documentation License".

If you have no Invariant Sections, write "with no Invariant Sections" instead of saying which ones are invariant. If you have no Front-Cover Texts, write "no Front-Cover Texts" instead of "Front-Cover Texts being LIST"; likewise for Back-Cover Texts.

If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License, to permit their use in free software.