

# COMMONWEALTH OF VIRGINIA



**Information Technology Resource Management (ITRM)**

**ENTERPRISE TECHNICAL ARCHITECTURE**

**IT ACCESSIBILITY TOPIC REPORT**

**IN THE**

**APPLICATION DOMAIN**

**Virginia Information Technologies Agency (VITA)**

## Acknowledgements

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## Reviews

- This publication was reviewed and approved by the Enterprise Architecture (EA) Division.
- Online review was provided for agencies and other interested parties via the VITA Online Review and Comment Application (ORCA).

## Publication Version Control

Questions related to this publication should be directed to the VITA's Enterprise Architecture Division. EA notifies Agency Information Technology Resources (AITRs) at all state agencies, institutions and other interested parties of proposed revisions to this document.

This following table contains a history of revisions to this publication.

Version	Date	Revision Description
Original	11/04/2005	Base Document (GOV103-00)
01	02/01/2017	This update is necessitated by changes in the Code of Virginia and organizational changes in Vita. Also, the standard is reformatted to align it with current policy, standard and guideline formats without changing the requirements.
02	00/00/2017	<i>GOV103-02 is a complete rewrite of the GOV103-01 document to align it with the U.S. Access Board's update of Section 508 (accessibility) and inclusion of Section 255 (telecommunications)</i>

## Identifying Changes in This Document

- See the latest entry in the revision table above.
- Vertical lines in the left margin indicate the paragraph has changes or additions. Specific changes in wording are noted using italics and underlines; with italics only indicating new/added language and italics that are underlined indicating language that has changed.

The following examples demonstrate how the reader may identify requirement and recommend practice updates and changes:

**ITA-R-01 Example with No Change** – The text is the same. The text is the same. The text is the same.

**ITA-R-02 Example with Revision** – The text is the same. *A wording change, update or clarification is made in this text.*

**ITA-R-03 Example of New Text** – *This language is new.*

~~**ITA-R-03 Technology Standard Example of Deleted Standard** – This standard was rescinded on mm/dd/yyyy.~~

# Preface

## Publication Designation

IT Accessibility Standard (GOV103-02)

## Subject

Information and Communication Technology (ICT)

## Effective Date

00/00/2017

## Compliance Date

00/00/2017

## Scheduled Review:

One (1) year from the effective date, then every two years thereafter.

## Authority

[Code of Virginia, § 2.2-2007](#)

(Powers of the CIO)

[Code of Virginia, § 2.2-2009](#)

(Additional Powers of the CIO relating to security)

[Code of Virginia, § 2.2-2012](#)

(Procurement of Information Technology and Telecommunications Goods and Services)

## Scope

This standard is applicable to all Executive Branch state agencies and institutions of higher education (hereinafter collectively referred to as "agencies") that are responsible for the management, development, purchase and use of information technology resources in the Commonwealth of Virginia. This standard does not apply to research projects, research initiatives or instructional programs at public institutions of higher education.

## Purpose

This standard establishes direction and technical requirements which govern the acquisition, use and management of information technology resources by executive branch agencies with respect to IT accessibility.

## General Responsibilities

*(Italics indicate quote from the Code of Virginia requirements)*

## Chief Information Officer of the Commonwealth (CIO)

Develops and approves statewide technical and data policies, standards and guidelines for information technology and related systems.

## Chief Information Security Officer

The Chief Information Officer (CIO) has designated the Chief Information Security Officer (CISO) to develop Information Security policies, procedures, and standards to protect the confidentiality, integrity, and availability of the Commonwealth of Virginia's information technology systems and data.

## Virginia Information Technologies Agency (VITA)

At the direction of the CIO, Vita leads efforts that draft, review and update technical and data policies, standards, and guidelines for information technology and related systems. Vita uses requirements in IT technical and data related policies and standards when establishing contracts, reviewing procurement requests, agency IT projects, budget requests and strategic plans, and when developing and managing IT related services.

## Information Technology Advisory Council (ITAC)

Advises the CIO and Secretary of Technology on the development, adoption and update of statewide technical and data policies, standards and guidelines for information technology and related systems.

## Executive Branch Agencies

Provide input and review during the development, adoption and update of statewide technical and data policies, standards and guidelines for information technology and related systems. Comply with the requirements established by COV policies and standards. Apply for exceptions to requirements when necessary.

## Relationship Management and Governance Directorate

In accordance with the [Code of Virginia § 2.2-2010](#) the CIO has assigned the Relationship Management and Governance (RMG) Directorate the following duties: Develop and adopt policies, standards, and guidelines for managing information technology by state agencies and institutions."

## Definitions

Definitions are found in the single comprehensive glossary that supports Commonwealth Information Technology Resource Management (ITRM) documents ([COV ITRM Glossary](#)).

## Related ITRM Policies, Standards, and Guidelines

Enterprise Technical Architecture (ETA)  
Application Domain Report  
Enterprise Architecture Standard (EA225- series)

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# 1 Introduction

## 2 Background

3 This report addresses the Information Technology Accessibility (ITA) topic of the Enterprise  
4 Technical Architecture (ETA) *Application Domain Report*. This report describes technical  
5 topics such as access to functionality, functional performance criteria, electronic content,  
6 hardware, software, support documentation and services. As a topic of the Application  
7 Domain, this report expands on the principles, requirements and recommended practices  
8 presented in the domain report. Requirements and technology product standards  
9 introduced in this topic report will be incorporated into the COV Information Technology  
10 Resource Management (ITRM) Enterprise Architecture Standard.

11 In the case of technology procurement and pursuant to *Code of Virginia, § 2.2-2012*  
12 (Procurement of Information Technology and Telecommunications Goods and Services), this  
13 topic report applies only to those products directly relevant to the contract and its  
14 deliverables. Procurement of technology shall not exceed the requirements of the  
15 regulations that implement the information and communication technology (ICT)  
16 accessibility reports of the Rehabilitation Act of 1973 ([29 U.S.C. 794 d](#)) as amended by the  
17 *Workforce Investment Act* of 1998 (P.L. 105-220), August 7, 1998).

18 The U.S. Access Board's revised 508 Standards and 255 Guidelines replace the current  
19 product-based regulatory approach with an approach based on ICT functions. The revised  
20 technical requirements, which are organized along the lines of ICT functionality, provide  
21 requirements to ensure that covered hardware, software, electronic content, and support  
22 documentation and services are accessible to people with disabilities. In addition, the  
23 revised requirements include functional performance criteria, which are outcome-based  
24 provisions that apply in two limited instances: when the technical requirements do not  
25 address one or more features of ICT or when evaluation of an alternative design or  
26 technology is needed under equivalent facilitation.

## 27 Definition of EA Key Terms

28 This document presents architecture direction for agencies when planning or making  
29 changes or additions to their information technology through:

- 30 • Requirements – statements that provide mandatory Enterprise Architecture direction.

## 31 Glossary

32 As appropriate, terms and definitions used in this document can be found in the COV ITRM  
33 IT Glossary. The COV ITRM IT Glossary may be referenced on the ITRM Policies, Standards  
34 and Guidelines web page at <http://www.vita.virginia.gov/library/default.aspx?id=537>.

## 35 Agency Exception Requests

36 Agencies that want to deviate from the requirements and/or technology standards specified  
37 in COV ITRM Standards may request an exception using the *Enterprise Architecture*  
38 *Change/Exception Request Form*. All exceptions must be approved prior to the agency  
39 pursuing procurements, deployments, or development activities related to technologies that

40 are not compliant with the standard. The instructions for completing and submitting an  
41 exception request are contained in the current version of *COV ITRM Enterprise Architecture*  
42 *Policy*. The Policy and exception request form is on the ITRM Policies, Standards and  
43 Guidelines web page at <http://www.vita.virginia.gov/library/default.aspx?id=537>.

44 To request an exception to all Security related ITRM Standards please refer to the *Process*  
45 *for Requesting Exceptions* section of the Information Security Policy - COV ITRM Policy  
46 SEC519 on the ITRM Policies, Standards and Guidelines web page at  
47 <http://www.vita.virginia.gov/library/default.aspx?id=537>.

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## 48 **Executive Summary**

49 On January 18, 2017 the U.S. Access Board (Board) published the final rule updating its  
50 existing *Electronic and Information Technology Accessibility Standards* under section 508 of  
51 the *Rehabilitation Act of 1973*, ("508 Standards"), as well as the *Telecommunications Act*  
52 *Accessibility Guidelines* under Section 255 of the Communications Act of 1934 ("255  
53 Guidelines").

54 Given the passage of nearly two decades since their issuance, the existing 508 Standards and  
55 255 Guidelines were in need of a "refresh" in several important respects. This final rule is  
56 intended to, among other things, address advances in information and communication  
57 technology that have occurred since the guidelines and standards were issued in 1998 and  
58 2000 respectively, harmonize with accessibility standards developed by standards  
59 organizations worldwide in recent years, and ensure consistency with the Board's regulations  
60 that have been promulgated since the late 1990s.

61 In a single rulemaking, the Board revised and updated its standards for electronic and  
62 information technology developed, procured, maintained, or used by Federal agencies covered  
63 by section 508 of the Rehabilitation Act of 1973, as well as its guidelines for  
64 telecommunications equipment and customer premises equipment covered by Section 255 of  
65 the Communications Act of 1934. The revisions and updates to the section 508 standards and  
66 section 255 guidelines are intended to ensure that information and communication technology  
67 covered by the respective statutes is accessible to and usable by individuals with disabilities.

68 Also, the Board notes that the WCAG 2.0 Level A and AA Success Criteria are more explicit  
69 than the previous 508-based standards. Careful attention has been given to ensure that the  
70 Success Criteria are written as objectively testable requirements. In addition, unlike the  
71 existing 508 Standards, WCAG 2.0 is written in a way that is technology neutral and is  
72 therefore directly applicable to a wide range of content types and formats.

73 Furthermore, the revised 508 standards and 255 guidelines support the access needs of  
74 individuals with disabilities, while also taking into account the costs of providing accessible  
75 information and communication technology to Federal agencies, as well as manufacturers of  
76 telecommunications equipment and customer premises equipment.

77



78 **ITRM IT Accessibility Requirements**

79 ***Revised Section 508 Standards and Section 255 Guidelines –***  
80 ***incorporated herein by reference***

81 As noted earlier, the *IT Accessibility Topic Report* (GOV103-01) is a complete rewrite of  
82 COV103-00 to align it with the U.S. Access Board’s update of section 508 (accessibility) and  
83 inclusion of section 255 (telecommunications) pursuant to the *Code of Virginia, § 2.2-2012*.

84

85 GOV103-01 replaces previous versions of this document.

86

87 GOV103-01 incorporates the following topic-specific requirements by reference:

88

89 **ITA-R-01** **Appendix A to Part 1194 – Section 508 of the Rehabilitation**  
90 **Act: Application and Scoping Requirements** – are incorporated  
91 by reference into the IT Accessibility Topic Report and are accessed  
92 at: [https://www.access-board.gov/guidelines-and-](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/iii-major-issues-5)  
93 [standards/communications-and-it/about-the-ict-refresh/final-](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/iii-major-issues-5)  
94 [rule/iii-major-issues-5](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/iii-major-issues-5)

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109

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110

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111

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112

113

114

**ITA-R-02** **Appendix B to Part 1194 – Section 255 of the**  
115 **Communications Act: Application and Scoping Requirements**  
116 - are incorporated by reference into the IT Accessibility Topic Report  
117 and are accessed at: [https://www.access-board.gov/guidelines-and-](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/iii-major-issues-5)  
118 [standards/communications-and-it/about-the-ict-refresh/final-](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/iii-major-issues-5)  
119 [rule/iii-major-issues-5](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/iii-major-issues-5)

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133 C205 Software  
134 C206 Support Documentation and Services

135  
136 **ITA-R-03 Appendix C to Part 1194 – Functional Performance Criteria**  
137 **and Technical Requirements** – are incorporated by reference into  
138 the IT Accessibility Topic Report and are accessed at:  
139 [https://www.access-board.gov/guidelines-and-](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/iii-major-issues-5)  
140 [standards/communications-and-it/about-the-ict-refresh/final-](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/iii-major-issues-5)  
141 [rule/iii-major-issues-5](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-rule/iii-major-issues-5)

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160 414 Audio Description Processing Technologies  
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165 503 Applications  
166 504 Authoring Tools  
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169 602 Support Documentation  
170 603 Support Services

171  
172  
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**Chapter 7: Referenced Standards**

701 General

702 Incorporation by Reference

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175 ***Agency Implementation Plan***

176 An Agency Implementation Plan documents the results of the agency's analysis of its  
177 website for compliance with the requirements identified in this document and as needed,  
178 how the agency plans to bring the current information on its website into compliance with  
179 those requirements and how the agency shall ensure that future content is also compliant.  
180

181 **ITA-R-04: Agency Implementation Plan** – Each agency shall develop a plan  
182 describing how and when it intends to meet the website related (all  
183 “ITA-R-*nn*” labeled requirements, where “*nn*” is the specific requirement  
184 number) requirements identified in this document and update the plan  
185 when there is a subsequent material change to the plan.  
186

187 The agency plan shall contain an analysis of the website for compliance  
188 with the related requirements identified in this document, identify by  
189 requirement number all current non-compliant items, identify agency  
190 plans and schedules for correcting all non-compliant pages, and identify  
191 the agency's process and procedures for ensuring future Web content is  
192 compliant. (Note – Appendix A of the current Website Topic Report  
193 provides additional guidance in developing agency implementation  
194 plans)  
195

196 **ITA-R-05: Agency Implementation Plan** – Each agency shall provide an electronic  
197 copy of its current agency implementation plan (initial and revised) to the  
198 VITA's Enterprise Architecture Division. Electronic copies should be  
199 submitted to: [EA@vita.virginia.gov](mailto:EA@vita.virginia.gov)  
200  
201  
202

203 ***Appendix A: Example of an agency implementation plan***

204 **Implementation Plan Questions**

205  
206 **(a) Plan Strategy**

207  
208 Describe how the agency addresses each of the following:

209  
210 (i) The agency's overall effort:

- 211
- 212 • Who will lead the compliance effort? (name, title, phone & e-mail);
  - 213
  - 214 • Who will lead the Web conversion or clean-up effort? (name, title, phone & e-mail);
  - 215
  - 216 • To whom does that person report? (name, title & email);
  - 217
  - 218 • Who will educate the agency on the need to comply with the Website Topic Report?
  - 219

220 (ii) The agency's plans for producing new, compliant pages.

- 221
- 222 • Who has development access rights to the Web servers and websites or the number
  - 223 with such access?
  - 224
  - 225 • How will you avoid adding non-compliant pages to the website?
  - 226

227 (iii) The agency's plans for checking existing pages for compliance problems.

- 228
- 229 • How will the agency check for non-compliant pages?
  - 230
  - 231 • Who will do the compliancy checking?
  - 232
  - 233 • How will the agency prioritize its Web work? Possible options to consider:
  - 234
  - 235 ○ the entire site at once,
  - 236 ○ the most popular (highest hit) pages,
  - 237 ○ pages that are of most interest to your disabled audience,
  - 238 ○ by folder or feature,
  - 239 ○ by a specific number of levels deep from your main home page,
  - 240 ○ by file type (HTML, PDF, other), or
  - 241 ○ a combination of the above
  - 242

243 (iv) The agency's plans for converting non-compliant pages.

- 244
- 245 • How will the agency prioritize your work?
  - 246
  - 247 • How will staff be allocated to this phase? (Will they be assigned specific areas of the
  - 248 website? Will they be given production quotas? )
  - 249
  - 250

251  
252  
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257

**(b) Plan Milestones**

Provide information in a table with a column for *Milestones* and a column for *Target Dates*, as illustrated in the example below:

Milestone	Target Date

258  
259  
260  
261  
262  
263  
264  
265

**(c) Existing Web Page Count**

- (i) Provide the number of Web pages/files on the agency's website(s) and Web based-applications.
- (ii) Explain how and when the agency will obtain the number.

266  
267  
268  
269  
270  
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273

**(d) Staff Resources**

Show the amount of staff resources to be assigned to the agency's site modifications in any of the following manners.

- (i) Number of staff times the average number of hours each will work per month.
- (ii) Number of FTE's to be assigned to the modification effort.

274  
275  
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**(e) Future Staff**

Indicate any substantial changes to staff resources anticipated over time, and how your plan will manage the changes.

280  
281  
282  
283  
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285

**(f) Signature**

The plan must be signed and dated by the agency head or equivalent. Please print the individual's title. Plans must be submitted by e-mail to [EA@vita.virginia.gov](mailto:EA@vita.virginia.gov).

286 **Appendix B: References and Links**

287 ***Federal Site/Document References:***

288 See [ITA-R-01 – ITA-R-03](#) above.

289 ICT Background:

290 [https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/background)  
291 [the-ict-refresh/background](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/background)

292  
293 ICT Resources:

294 [https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/other-resources)  
295 [the-ict-refresh/other-resources](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/other-resources)

296  
297 Comparison Table of WCAG 2.0 to former 508 Standards:

298 [https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/background/comparison-table-of-wcag2-to-existing-508-standards)  
299 [the-ict-refresh/background/comparison-table-of-wcag2-to-existing-508-standards](https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/background/comparison-table-of-wcag2-to-existing-508-standards)

300

