

EPVB Accessibility Conformance Report

Revised Section 508 Edition

VPAT® Version 2.2 – July 2018

Name of Product/Version:

EuPathDB websites, January 2019, Build 41

Product Description:

This VPAT refers to the current EuPathDB.org websites (AmoebaDB, CryptoDB, EuPathDB, FungiDB, GiardiaDB, HostDB, MicrosporidiaDB, OrthoMCL, PiroplasmaDB, PlasmoDB, ToxoDB, TrichDB and TriTrypDB), which share one software infrastructure. It also refers to our intentions to be accessible in the future EPVB websites which will integrate EuPathDB and VectorBase current and planned features. In all cases, the user interacts with the websites to mine scientific data and run analyses on the data. The websites provide a “user workspace” where users are able to store their results. The accessibility requirements listed in this template apply to the user interface to mine, analyze and manage user data in all the websites.

Date: January 10th, 2019

Contact information: help@eupathdb.org

Notes:

Because our products are websites (“web” products), conformant to Section 508:

- Section 508 Chapter 4 Hardware has been removed.
- Section 508 Chapter 5 Software has been removed.
- WCAG Level AAA table has been removed because the product is not being evaluated for this level at this time.

We are currently transitioning our software infrastructure into a modern client-side react-based architecture and open REST API backend. This fact plus our future work towards the EuPathDB / VectorBase integration are an ideal opportunity to review and improve the accessibility of our sites during the next few months. The new BRC EPVB will empower users with interoperability with third party websites, such as Galaxy, Apollo and Cyverse; we will be collaborating with these third-party tools to ensure our users a fully accessible experience. Many exceptions on the tables below correspond to third party visualization software “GBrowse”. We are transitioning to a more modern and accessible genomic browser “JBrowse”.

“Voluntary Product Accessibility Template” and “VPAT” are registered service marks of the Information Technology Industry Council (ITI)

Evaluation Methods Used:

Our testing for accessibility includes:

- Algorithmic automated tests such as: The WebAIM Web Accessibility Evaluation Tool (WAVE) (<https://wave.webaim.org>),
- Human judgement tests (visual inspection and manual operation): using the site using a keyboard and turning off css and images.
- Testing with assistive technology by people with and without disabilities, such as VoiceOver and ChromeVox.

Applicable Standards/Guidelines

This report covers the degree of conformance for the following accessibility standard/guidelines:

Standard/Guideline	Included In Report
Web Content Accessibility Guidelines 2.0, at http://www.w3.org/TR/2008/REC-WCAG20-20081211/	Level A - Yes Level AA - Yes Level AAA - No
Revised Section 508 standards as published by the U.S. Access Board in the Federal Register on January 18, 2017 Corrections to the ICT Final Rule as published by the US Access Board in the Federal Register on January 22, 2018	Yes

Terms

The terms used in the Conformance Level information are defined as follows:

- **Supports:** The functionality of the product has at least one method that meets the criterion without known defects or meets with equivalent facilitation.
- **Partially Supports:** Some functionality of the product does not meet the criterion.
- **Does Not Support:** The majority of product functionality does not meet the criterion.
- **Not Applicable:** The criterion is not relevant to the product.

WCAG 2.0 Report

Tables 1 and 2 also document conformance with:

- Chapter 5 – 501.1 Scope, 504.2 Content Creation or Editing
- Chapter 6 – 602.3 Electronic Support Documentation

Note: When reporting on conformance with the WCAG 2.0 Success Criteria, they are scoped for full pages, complete processes, and accessibility-supported ways of using technology as documented in the [WCAG 2.0 Conformance Requirements](#).

Table 1: Success Criteria, Level A

Notes:

Criteria	Conformance Level	Remarks and Explanations
<u>1.1.1 Non-text Content</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Partially Supports	<p>Some images are missing alternative text (even if alt=""), some icons are missing title attribute, some form fields have no labels, or have multiple labels.</p> <p>Some elements of third party software "GBrowse" are not fully accessible due to lack of description.</p> <p>We are transitioning to a more modern and flexible genome browser "JBrowse".</p> <p>We intend to fully support, including not only web pages but also the PDF files provided as tutorials.</p>
<u>1.2.1 Audio-only and Video-only (Prerecorded)</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Supports	We do not provide this feature.
<u>1.2.2 Captions (Prerecorded)</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Supports	All video tutorials are externally linked to YouTube, which provides captions.
<u>1.2.3 Audio Description or Media Alternative (Prerecorded)</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Partially Supports	<p>Our tutorials are YouTube videos. We develop these tutorials such that the tutor's voice is an adequate audio description of the tutorial.</p> <p>We intend to fully support.</p>

Criteria	Conformance Level	Remarks and Explanations
<u>1.3.1 Info and Relationships</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Partially Supports	This is important for a good screen reader experience. We have some pages missing proper heading elements, some tables missing headers, some list items are empty. We intend to fully support.
<u>1.3.2 Meaningful Sequence</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Supports	A part of our review process is to ensure the sequence of content.
<u>1.3.3 Sensory Characteristics</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Supports	The User Experience group reviews new content before it is published, including user instruction.
<u>1.4.1 Use of Color</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Partially Supports	Some third party tools (such as GBrowse) use color to convey information. We are in transition to use JBrowse instead and intend to fully support.
<u>1.4.2 Audio Control</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Supports	We do not have any automatically playing audio.
<u>2.1.1 Keyboard</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) 	Partially Supports	Some advanced widgets (such as collapsible trees and hierarchical menus) are currently not keyboard accessible. We need to review tabindex use to ensure fully conformance.

Criteria	Conformance Level	Remarks and Explanations
<ul style="list-style-type: none"> 602.3 (Support Docs) 		<p>Additionally, some third-party tools (such as GBrowse) are not fully conformant.</p> <p>We intend to fully support.</p>
<p><u>2.1.2 No Keyboard Trap</u> (Level A)</p> <p>Also applies to: Revised Section 508</p> <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	All dialog elements can be closed using either the ESC key, or by tabbing to a “close” button.
<p><u>2.2.1 Timing Adjustable</u> (Level A)</p> <p>Also applies to: Revised Section 508</p> <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	We do not use time-controlled content.
<p><u>2.2.2 Pause, Stop, Hide</u> (Level A)</p> <p>Also applies to:</p> <ul style="list-style-type: none"> Revised Section 508 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	We do not use moving content.
<p><u>2.3.1 Three Flashes or Below Threshold</u> (Level A)</p> <p>Also applies to: Revised Section 508</p> <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	We do not use flashing content.
<p><u>2.4.1 Bypass Blocks</u> (Level A)</p> <p>Also applies to: Revised Section 508</p> <ul style="list-style-type: none"> 501 (Web)(Software) – Does not apply to non-web software 	Does Not Support	<p>We need to add skip links on headers and long lists and menus.</p> <p>We plan to support in the future.</p>

Criteria	Conformance Level	Remarks and Explanations
<ul style="list-style-type: none"> 504.2 (Authoring Tool) 602.3 (Support Docs) – Does not apply to non-web docs 		
<u>2.4.2 Page Titled</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	Each page is given a descriptive title.
<u>2.4.3 Focus Order</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Partially Supports	Focus order typically follows the order elements appear on screen, but some elements are not keyboard/screen reader accessible (menus).
<u>2.4.4 Link Purpose (In Context)</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	We strive to make clear links.
<u>3.1.1 Language of Page</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	The language is set on all pages.
<u>3.2.1 On Focus</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	The context of the page does not change based on focus. Focus never jumps to another element automatically.
<u>3.2.2 On Input</u> (Level A) Also applies to:	Supports	Forms are not automatically submitted on input changes.

Criteria	Conformance Level	Remarks and Explanations
Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 		
<u>3.3.1 Error Identification</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Partially Supports	Error messages might not be accessible to screen reader. We need to add Aria labels to programmatically connect error messages with their corresponding form elements.
<u>3.3.2 Labels or Instructions</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	Form fields include labels or instructions. We currently support based on proximity.
<u>4.1.1 Parsing</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Partially Supports	A few pages have elements with duplicate identifiers. This is being addressed as our technology is modernized during the next 6 months. We intend to fully support. Our client-side rendering library enforces HTML syntactical correctness.
<u>4.1.2 Name, Role, Value</u> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Partially Supports	Some advanced widgets do not fully conform. For example, the checkbox tree widgets do not include expansion information. This is being addressed as our technology is modernized during the next 6 months. We intend to fully support.

Table 2: Success Criteria, Level AA

Notes:

Criteria	Conformance Level	Remarks and Explanations
<u>1.2.4 Captions (Live)</u> (Level AA) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Supports	We do not stream live video.
<u>1.2.5 Audio Description (Prerecorded)</u> (Level AA) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Partially Supports	Our tutorials are YouTube videos. We develop these tutorials such that the tutor's voice is an adequate audio description of the tutorial. We intend to fully support.
<u>1.4.3 Contrast (Minimum)</u> (Level AA) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Partially Supports	We provide sufficient color contrast in most elements in our pages. We intend to fully support.
<u>1.4.4 Resize text</u> (Level AA) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Partially Supports	Some areas such as the strategy panel get distorted when enlarging the font in the browser. We intend to fully support.
<u>1.4.5 Images of Text</u> (Level AA) Also applies to: Revised Section 508 <ul style="list-style-type: none"> • 501 (Web)(Software) • 504.2 (Authoring Tool) • 602.3 (Support Docs) 	Supports	We do not provide images of text other than the brand logos.
<u>2.4.5 Multiple Ways</u> (Level AA) Also applies to: Revised Section 508	Supports	We provide multiple ways for users to find our main website's pages.

Criteria	Conformance Level	Remarks and Explanations
<ul style="list-style-type: none"> 501 (Web)(Software) – Does not apply to non-web software 504.2 (Authoring Tool) 602.3 (Support Docs) – Does not apply to non-web docs 		
<u>2.4.6 Headings and Labels</u> (Level AA) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Partially Supports	We are missing labels in some form elements, and headings on record pages. We intend to fully support.
<u>2.4.7 Focus Visible</u> (Level AA) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	We rely on the native browser css to indicate focus. Link text has been styled to change in visual appearance when the mouse hovers or tabs over them. For instance, on mouse hover, links are underlined.
<u>3.1.2 Language of Parts</u> (Level AA) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	We do not use languages other than English.
<u>3.2.3 Consistent Navigation</u> (Level AA) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) – Does not apply to non-web software 504.2 (Authoring Tool) 602.3 (Support Docs) – Does not apply to non-web docs 	Supports	We check for consistent use of space in all pages. The navigation menus are always in the same location in all pages.
<u>3.2.4 Consistent Identification</u> (Level AA) Also applies to: Revised Section 508	Supports	Elements with the same function are labelled and appear consistent across our website such as links and buttons. For example, all links are underlined upon hovering.

Criteria	Conformance Level	Remarks and Explanations
<ul style="list-style-type: none"> 501 (Web)(Software) – Does not apply to non-web software 504.2 (Authoring Tool) 602.3 (Support Docs) – Does not apply to non-web docs 		
<u>3.3.3 Error Suggestion</u> (Level AA) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	Our forms help the user understand the fields. For example: when a user submits a form we indicate when a field is missing.
<u>3.3.4 Error Prevention (Legal, Financial, Data)</u> (Level AA) Also applies to: Revised Section 508 <ul style="list-style-type: none"> 501 (Web)(Software) 504.2 (Authoring Tool) 602.3 (Support Docs) 	Supports	When a user requests a deletion, we show a confirm request.

Revised Section 508 Report

Notes: Our product is a “web” product.

Chapter 3: Functional Performance Criteria (FPC)

Notes:

Criteria	Conformance Level	Remarks and Explanations
302.1 Without Vision	Partially Supports	The goal is to work with screen readers and other assistive technologies, and navigate to control elements using a keyboard. Exceptions: <ul style="list-style-type: none"> Working towards all images and graphical elements have a description on alternative text. Working towards having always an element in focus and having all control elements visible to a screen reader.
302.2 With Limited Vision	Partially Supports	In addition to enable screen readers to fully access the site, here the goal is to provide sufficient color contrast, and enable larger fonts and screen magnifiers to modify the UI without affecting the website functionality.

Criteria	Conformance Level	Remarks and Explanations
		Exceptions: • Checking on color contrast . The strategy panel: as we transition to our new frontend we will ensure the graphical view adapts to larger fonts.
302.3 Without Perception of Color	Partially Supports	Our product does not rely on color solely to convey information. Exceptions: • Some graphical elements rely on color. We will be providing textual description.
302.4 Without Hearing	Supports	Our product does not make use of sound. We use third party (YouTube) for tutorials where captions are provided.
302.5 With Limited Hearing	Supports	Our product does not make use of sound. We use third party (YouTube) for tutorials where captions are provided.
302.6 Without Speech	Supports	Our product does not make use of speech.
302.7 With Limited Manipulation	Partially Supports	The product aims to be keyboard accessible, so a mouse is not needed. Other means to access the site need to be tested. Exceptions: • Some elements are not visible to the keyboard
302.8 With Limited Reach and Strength	Partially Supports	The product aims to be keyboard accessible, so a mouse is not needed. Other means to access the site need to be tested. Exceptions: • Some elements are not visible to the keyboard
302.9 With Limited Language, Cognitive, and Learning Abilities	Partially Supports	Some fonts such as sans-serif are easier for some individuals, we will be working towards eliminating serif fonts. We intend to make our pages better structured, less busy and skip to content links.

Chapter 6: Support Documentation and Services

Notes:

Criteria	Conformance Level	Remarks and Explanations
601.1 Scope	Heading cell – no response required	Heading cell – no response required
602 Support Documentation	Heading cell – no response required	Heading cell – no response required
602.2 Accessibility and Compatibility Features	Supports	We do not provide additional accessibility features that require documentation.
602.3 Electronic Support Documentation	See WCAG 2.0 section	See information in WCAG section

Criteria	Conformance Level	Remarks and Explanations
602.4 Alternate Formats for Non-Electronic Support Documentation	Supports	We do not provide support documentation in non-electronic formats.
603 Support Services	Heading cell – no response required	Heading cell – no response required
603.2 Information on Accessibility and Compatibility Features	Supports	We provide several support service options for end-users with disabilities, including email, telephone and instant messaging.
603.3 Accommodation of Communication Needs	Supports	We provide several support service options for end-users with disabilities, including email, telephone and instant messaging.

Legal Disclaimer (EuPathDB / VectorBase)

The information above describes this product's ability to support the applicable Standards/Guidelines, subject to our interpretation of those standards and the remarks in this document. This document is provided for information purposes only and the contents are subject to change without notice. We do not warrant that this document is error free. For more information regarding the accessibility status of this product contact: help@eupathdb.org.