# Web Accessibility – can WCAG be an Automation Sensation?

## Abstract

To what extent can web accessibility testing be automated or done by a non-expert? The W3C Automated WCAG Monitoring Community Group (auto-WCAG) – has been hard at work analysing that very question. The results may surprise you!

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One of the biggest challenges of integrating accessibility into large-scale testing and research for web-based content is lack of consistent, documented and reliable testing methodology; one which can be applied by a combination of automated tests and tests involving a non-expert human tester.

It is clear that expertise is needed for certain accessibility challenges, and accessibility experts are needed to provide consultation and solutions for complex accessibility issues, but there are opportunities for improvements when it comes to automated and semi-automated accessibility testing.

In fact, better automation and non-expert testing is, without a doubt, the key to making accessibility part of the mainstream website development rather than a separate discipline. Clearly documented testing methodologies and assumptions can also help harmonize the interpretation and testing of WCAG Success Criteria and remove some of the subjectivity that occasionally makes the discipline look inconsistent to outsiders.

IN the summer of 2014, the W3C auto-WCAG W3C community group was formd to explore these questions in more detail.

The group´s mission statement best sums up its purpose:

„The objective of this community is to create and maintain tests that can be implemented in large scale monitoring tools for web accessibility. These tests will be either automated, or semi-automated, in which tools assist non-expert users to evaluate web accessibility. By comparing the test results with results from expert accessibility evaluators, we aim to track the accuracy of the tests we've developed. This allows for an iterative improvement and adjustment of the tests as web development practices change and evolve. It also provides the statistical bases on which large scale accessibility monitoring and benchmarking can be built.” [1]

The auto-WCAG group consists of accessibility experts from all over the world with strong technical skills and significant involvement in the accessibility sector. Its job is to review every WCAG 2.0 A and AA success criterion and determine to what extent software applications can carry out fully automated testing, and where software could be used to locate potential violations and ask a non-expert human tester a series of questions to determine if these potential violations translate into actual violations.

All the testing algorithms will be published along with the underlying assumptions, thus making sure the tests are transparent for everybody who wishes to incorporate them into their software development or Q&A testing processes. This approach also opens up paths to future improvements and additions based on experience and community feedback.

The idea behind this set up is to harness the power of the community and to gamify accessibility evaluation, allowing people with disabilities or those with passion for making the web a more accessible place to actively participate and contribute.

Its goal is to help provide accurate and valuable feedback to website developers, website owners and managers, web accessibility software tool vendors, and policy makers in the area of Information and Communication Technology. The idea is inspired by drafted European regulations making their way through the European Council of Ministers that would require regular large-scale accessibility monitorring of public websites. But the tests and techniques created by the auto-WCAG group, which will be made public and available to anyone, can help improve accessibility testing in all situations.

In this presentation I will go over the process used by the group, the successes and obsticles encountered, and share its experience and lessons learnt along the way.

1: http://www.w3.org/community/auto-wcag/