

# Case Study:



SUNY

THE STATE UNIVERSITY of NEW YORK

## State University of New York (SUNY) Builds a Holistic Web Accessibility Program

### QUICK FACTS

#### Customer

State University of  
New York system  
(SUNY)

NYS Forum

#### Industry

Higher Education

State and Local  
Government

#### Application

Web Accessibility

#### Solutions

Online Validation Tool

AccRepair®

### Background

As educational institutions rely more on Web-based technologies they must implement strategies to assure all users can fully access Web content. For many, making accessible Web development a standard practice can seem daunting. The The Research Foundation of the State University of New York (SUNY) and the NYS Forum built a holistic Web accessibility program that includes standards, training, technical resources, and automated testing tools that streamline testing and remediation.

### The Business Problem

SUNY has been a strong partner in sharing information on the importance of accessible information to people with disabilities and in developing strategies to disseminate information to Web developers on college campuses statewide.

While there is no state law governing the accessibility of state Web content, SUNY was the sole organization not governed by New York's accessibility policies and standards. Despite this SUNY chose to embrace them recognizing that it was the right thing to do.

However, without a clear understanding of semantic Web design and proper tools to help check against the various standards, the task of implementing Web accessibility testing seemed daunting. In order to combat this, a joint development partnership of The Research Foundation of the State University of New York and The NYS Forum was undertaken on behalf of all New York State government entities, including SUNY and all of its campuses. The goal was to build a Web accessibility program from the ground up - from consulting on the creation of standards for accessibility, providing implementation training, selecting and funding a testing solution tailored to New York's unique set of standards, to implementing an automated solution to make accessible Web development a standard practice state and university-wide.

### SUNY's Methodology for Finding a Solution

New York State's Web accessibility policy was modified in 2004 to require compliance with

14 custom standards, taken from both the Worldwide Web Consortium's (W3C) Web Content Accessibility Guidelines (WCAG) and U.S. Section 508. Additionally, some of the selected guidelines had been modified slightly. Due to the unique hybrid nature of New York's standards and the custom modifications there was no single tool that could test against New York's accessibility standard. This situation significantly hampered compliance as few Web developers understood the standards well enough to identify which tests were relevant and which were not.

The NYS Forum's Webmasters' Guild and the Forum's IT Accessibility Committee co-sponsored a survey of Web developers across NYS government and Higher Educational facilities. The survey generated two significant products: a white paper entitled *Mastering the Web Revolution in New York State Agencies*, and a set of recommendations to advance both Web development and Web accessibility.

One of the recommendations from the white paper included creating a validation tool that specifically tested for New York's standards. The Committees convened a multi-agency group to establish requirements for an automated tool to assess and where possible remediate accessibility problems with State agency Web sites against the NYS standards. Shortly thereafter work began to develop an RFP for selecting a contractor to develop the recommended NYS-specific tool.

The validation tool proposal called for the development and/or customization of a desktop-based tool to test intranets and content behind firewalls, with some automated remediation capabilities, and an online-based tool that could be used to check published content. In addition, the proposal required reporting and maintenance capabilities.

Proposals from multiple vendors were evaluated by a team of volunteers including Web developers from NYS agencies, SUNY representatives and agency managers. Ultimately, HiSoftware was selected to build the NYS-specific tools using their AccRepair® product, with customized reports testing specifically to New York's standards for the desktop component.

Gregory Benson, Jr., executive director of The NYS Forum, underscored the importance of the compliance testing tool, "As more state and local government information and services migrate to the Internet, equitable access for all is essential," said Benson. "Viewing this as a priority, The NYS Forum has worked in partnership with the NYS Office for Technology and Office of the State CIO to create state standards that address Web accessibility and usability for the disabled. We are pleased to be working with HiSoftware and the best of New York State's government Web development staff on the creation of this compliance testing tool. We are confident it will contribute to the efficiency of those who create the thousands of state and local government Web pages for public access."

### **The Bottom Line**

The application resulting from this project is the NYS Forum Validation Tool powered by HiSoftware. The tool is comprised of two separate components. One component is the online tool that checks published content for agency Web developers and contractors working on agency Web content. The second component is the desktop-based solution, AccRepair, which can be used for testing published or local content (e.g. testing applications in development behind a firewall, content on intranets, etc.).

The online tool, while limited to public sites, is very easy to use and economical. Both applications provide summary reporting capabilities. Each agency has an agency administrator who approves access to the tool for agency employees and contractors working on web content for the agency. Agency administrators can use the online tool administrator's interface to generate reports on validation activities and results. The NYS Forum Validation Tool Administrators can access aggregate information on which areas yield the most errors, in order to target their training efforts. Individual agency information is not accessible to the Forum administrators.

Both applications can also test to full versions of the two de facto standards for accessibility: the W3C's WCAG and U.S. Section 508. The ability to test for Section 508 compliance is especially useful for those agencies or campuses administering federally-funded programs. Both versions of the tools can also test pages in batch mode. The desktop application includes some capabilities for automated remediation, and both tools can check links.

The applications also provide a checklist for those items that require human judgment (e.g. whether the text provided for an image's alt attribute is accurate and meaningful, etc.), along with links to accessories such as a tool that evaluates the "fog index" of Web content, the W3C's HTML/XHTML code validator and the W3C's CSS validator.

Michelle Cryan, Web Communications manager for SUNY Cortland, said, "I want to begin by telling you how much I love the NYS Forum Validation Tool. It has made my life a lot easier. No more validating for Section 508 and WCAG then comparing the results against a paper print out of S04-001."

About 1,500 scans covering more than 30,000 pages occurred the first six weeks the NYS Forum Validation Tool was available, and nearly 250,000 pages checked in the initial six months. Each check represents the explicit analysis of more than 75 checkpoints. On average, without the tool, Web site developers would have a choice of checking each page and checkpoint by hand, or running multiple checks and sorting through the results for the tests pertinent to the NYS standards. The onerous checking required in the past led many developers to bypass validation entirely.

Benson said, "We've had a tremendous response to the Validation tool since it was made available. Over 64 New York state agencies are using the desktop validation tool. In addition, 66 agencies, totaling 324 individual New York state web developers, are registered users of the online tool. We are extremely pleased with the extraordinary results of this successful development effort with HiSoftware."

As part of the campus-wide roll-out of the Accessibility program, SUNY Campus administrators, appointed by their CIOs, are responsible for approving both desktop licenses and contractor access to the online tool. They also provide reports to agency managers on usage and results. Additionally, the Forum's statewide initiative includes unlimited State agency access to an online validation tool, and a limited number of copies of HiSoftware's commercial offering AccRepair, with components to assist with NYS specific standards reporting: NYS MTS and Usability.

Learn more about the NYS Forum Online Validation Tool at <http://nysf.hisoftware.com>.



### **THE AMERICAS**

Corporate Headquarters

9 Trafalgar Square

Nashua, NH 03063, USA

**Tel** 888.272.2484 (U.S. & Canada)

+1.603.578.1870

**Fax** +1.603.578.1876

**Email** [info@hisoftware.com](mailto:info@hisoftware.com)

Washington, DC, USA

**Tel** +1.202.223.5110

**Email** [info@hisoftware.com](mailto:info@hisoftware.com)

15600 Redmond Way, Suite 201

Redmond, WA 98052, USA

**Tel** +1.425.636.4567

**Email** [info@hisoftware.com](mailto:info@hisoftware.com)

### **EMEA**

69 Griston Road

Watton, Norfolk

IP25 6DN, UK

**Tel** +44.1953.880024

**Email** [info@hisoftware.com](mailto:info@hisoftware.com)

**[www.hisoftware.com](http://www.hisoftware.com)**

© Copyright 2008 by HiSoftware Inc. All rights reserved. AccMonitor, AccRepair, AccVerify and HiSoftware are registered trademarks of HiSoftware Inc. Any and all other product and company names mentioned herein are the trademarks or service marks of their respective owners.