# MAKING TECHNOLOGY ACCESSIBLE

Infosys
topaz

Infosys®
Navigate your next

## Introduction

Digital accessibility and inclusivity are the need of the hour. According to the **World Health Organization,** about 16% of the world's population has some form of disability. This means that over one billion people face challenges of various kinds when using digital media. To make digital media more accessible to people with disabilities, the World Wide Web Consortium (W3C) developed the Web Content Accessibility Guidelines (WCAG 2) in 2008. **However, a 2023 study by Web Accessibility** in Mind found that 96.3% of the top one million home pages had WCAG 2 conformance failures. In simpler terms, this means that it is difficult for people with disabilities to use wide swaths of the Internet. Digital inclusivity goes a step forward by avoiding bias and discrimination, enhancing brand reputation and audience reach.

To address this challenge, Infosys has developed the Infosys Accessibility Platform (erstwhile iATT). This is an AI powered end-to-end accessibility and inclusivity solution covering all the life cycle stages and digital formats matching international standards and guidelines. The solution is feature rich with early awareness campaigns, design principles, audit, test, and remediation applicable for web, mobile, pdfs and media.

## The Infosys Solution

Infosys Accessibility Platform, housed under **Infosys Topaz** is an AI powered and cloud ready solution with enterprise deployment capabilities and built in intelligence automation.  It helps organizations to  be aware, adopt, assess, and remediate accessibility issues on various digital platforms. It is designed to provide a 360° accessibility solution, covering all aspects of the application lifecycle. The solution provides a variety of features to help stakeholders ensure their digital products are accessible and inclusive to all users, including those with disabilities.
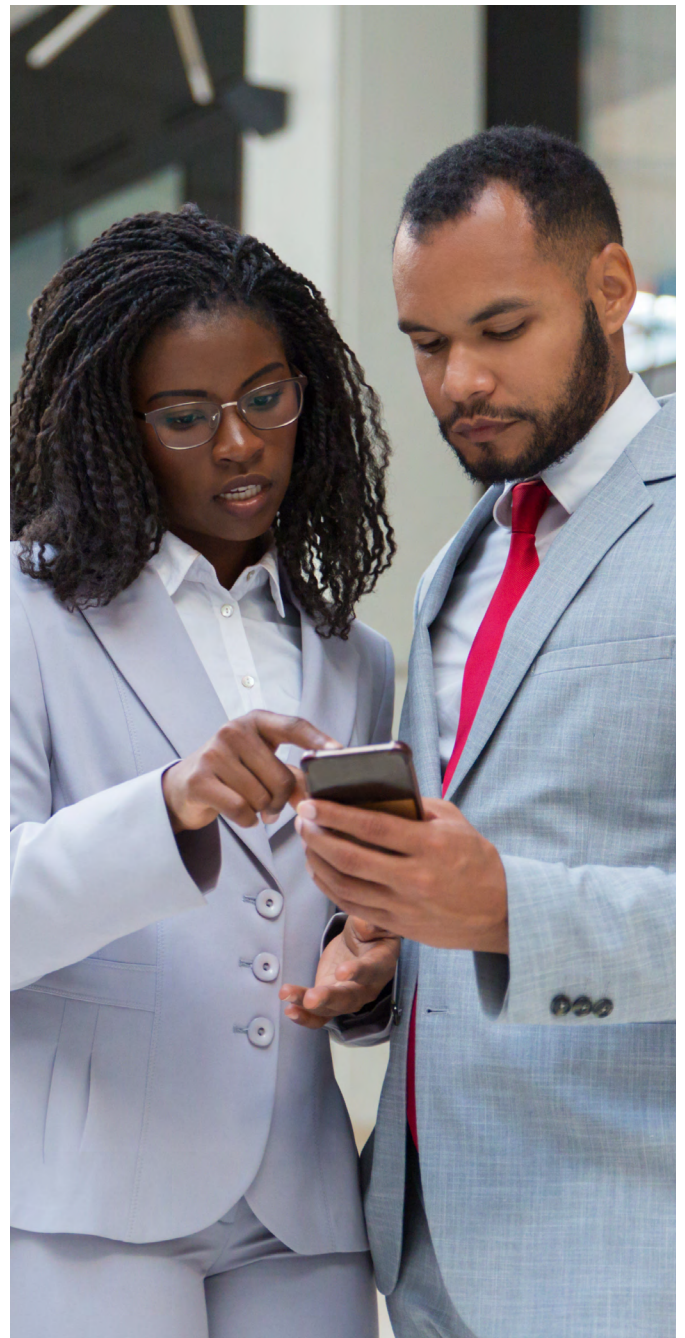
Infosys Accessibility Platform offers comprehensive web, mobile, and PDF accessibility analysis, as well as precise recommendations for remediation, thereby helping organizations save time, money, and effort in the process of fixing accessibility issues. The platform includes plugins, audit tool, Jira integrator, AI powered content sensitivity and remediation utility and color contrast checker.

**Key Components:**

**Web accessibility audit component** of the platform enables enterprises to assess accessibility of their web applications and remediate the anomalies seamlessly with more than 60% coverage of WCAG guidelines. The tool supports interactive, scheduled, depth based and authenticated page scans.

**Mobile accessibility component** scans the page on device and makes suggestions. It checks usage of accessibility tags against WCAG recommendations for Android/iOS applications. Features include checks for vision impaired, checks for size, color contrasts and dexterity.

**PDF accessibility checker component** performs automatic validation of WCAG compliance with its various techniques. It can be integrated to check PDFs from web application or from standalone repository. It has the capability to tag untagged pdfs using **Adobe Auto Tag API** for improved accessibility. Features include batch processing of multiple pdfs resulting in effort reduction and quick and flexible scan option for few selected pages with remediation suggestions.
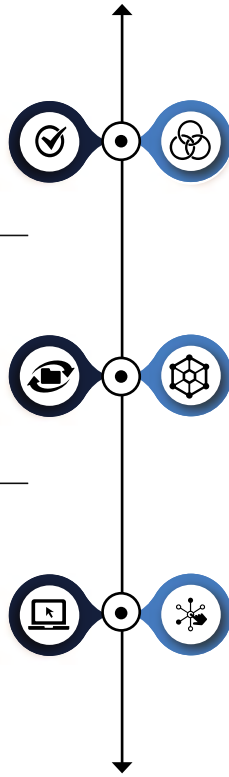
**End to End Accessibility Solution**

- Above 60% WCAG guideline coverage
- Web content analysis
- PDF content analysis
- Mobile content analysis

**Accessibility by design**

- Accessibility by design guidelines
- Accessible UI using VSCode IDE accessibility plugin
- Browser plug-in for single-click scan

**Powered by AI**

- Web content checker using Gen AI
- Color contrast checker
- Color blindness
- Speaker diarization

**DevOps integration**

- CI/CD plug-in for continuous compliance check
- REST APIs work with any third-party tool/script
- Jira integration for quick remediation

**Insightful reporting**

- Reporting defects with code reference and recommendation
- Dashboard and summary reports
- Overlay reports
- Excel and PDF reports

**Advanced scans**

- Webpage and source code scan
- Interactive automation flow
- Scheduled scan
- Depth and authenticated page scan

Figure 1: Features of Infosys Accessibility Platform

## Platform Differentiators

### Accessibility by design

IDE Plug-in and extensions for several browsers enable developers to identify and follow best practices for accessibility right from the design phase

### Accessibility audit

Accessibility audit to ensure conformance to WCAG 2.1, WCAG 2.0, STQC Guideline, Section 508, ADA, DDA Australia, DDA UK, and BITV Germany

### Sophisticated rules engine

An in-built rules engine that provides more than 60% coverage of WCAG success criteria

### Multi-channel support

Accessibility compliance check on web, mobile, and PDF documents

### Remediation

Provides remediations with overlay reports to enable developer to accurately fix issue

### Cloud-deployable architecture

Scalable architecture that caters to enterprise and is ready for cloud deployment

### Works well in CI/CD

In-built CI/CD plug-in for Jenkins platform. Fully equipped with easily consumable REST APIs and SDK to work with any CI/CD tool and automation tool

### Intuitive reports

Reports for various stakeholders in the form of PDFs, spreadsheets, and overlay and summary reports. The tool also drafts the VPAT report, combining automated as well as manual validations results

### Multiple scan options

Online scan for live URL and offline scan for HTML file upload. Authenticated page scan for secure websites. Functional flow scan for interactive pages

## Benefits

**1** Helps formulate accessibility and inclusivity strategy for organizations

**2** Aids early adoption, validation, and remediation with the help of feature rich platform capabilities

**3** Supports ease of extending platform capabilities with third party tool integrations

**4** Provides greater reliability in test results compared to manual testing

**5** Ensures 100% accuracy in validating accessibility standards

**6** Reduces effort by 75% in accessibility regression testing

**7** Saves effort by 50% in overall accessibility testing of customer-facing pages

**8** Reduces time, cost, effort, and errors in assessing and fixing accessibility issues

## Why Infosys?

Infosys has deep expertise in user experience, connected devices, and accessibility testing. With extensive experience across industries and geographies, we help enterprises design and implement successful accessibility and inclusive  strategies to meet their specific needs. Our highly skilled resources provide feature-rich and customized solutions that help organizations accelerate digital transformation and make their products and services more accessible.

**Success stories**

- A public transport company increased their testing efficiency by 60% by implementing the Accessibility for Ontarians with Disabilities Act (AODA) guidelines using the audit tool.  The AODA guidelines are a set of accessibility standards laid down to ensure that websites and other digital products are accessible to people with disabilities. The Infosys team followed these guidelines to test more than 41,000 web pages and 8,300 PDFs on the company's website across desktop and mobile devices in a span of 3 months. We were able to identify and fix accessibility issues in the website, enabling people with disabilities to use it with greater convenience. The increased testing efficiency resulted in a number of benefits for the company, including reduced time and cost of testing, improved compliance with accessibility regulations, and increased customer satisfaction.

- Infosys helped a large American financial institution automate ADA compliance validation of UI accessibility using Infosys accessibility solution. The client made use of IDE plugin utility for early detection of ADA issues during development. The solution helped the team in reducing overall effort by 50 percentage while achieving 100% accuracy. It also resulted in reduction of regression testing time by 75% and financial savings of 83K USD per release.

**Infosys Topaz** is an AI-first set of services, solutions and platforms using generative AI technologies. It amplifies the potential of humans, enterprises and communities to create value. With 12,000+ AI use cases, 150+ pre-trained AI models, 10+ AI platforms steered by AI-first specialists and data strategists, and a 'responsible by design' approach, Infosys Topaz helps enterprises accelerate growth, unlock efficiencies at scale and build connected ecosystems. Connect with us at infosystopaz@infosys.com.

## Infosys®
### Navigate your next

For more information, contact askus@infosys.com

Infosys.com | NYSE: INFY

Stay Connected