

# 2011 Boston Unconference on Accessibility

**top accessibility issues and how to resolve**

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# agenda

- > introduction to CA Technologies and its accessibility program
- > top accessibility issues and how to address
  - > text alternatives for images
  - > color coding
  - > skip nav links

# about CA Technologies and TPG

- CA Technologies [www.ca.com](http://www.ca.com)
  - 5<sup>th</sup> largest Independent Software Vendor (ISV) in the world
  - 100's of products
- TPG [www.paciellogroup.com](http://www.paciellogroup.com)
  - Global accessibility consultancy with internationally recognized expertise
  - Work with software companies to achieve compliance
  - With CA TPG reviews and approves all VPATs

# Federal Certification Program Office

- > Standards
- > Processes and methodologies
- > Policies and Procedures
- > Help with building product roadmaps
- > Training
- > Help Desk services
- > Product certification review and support

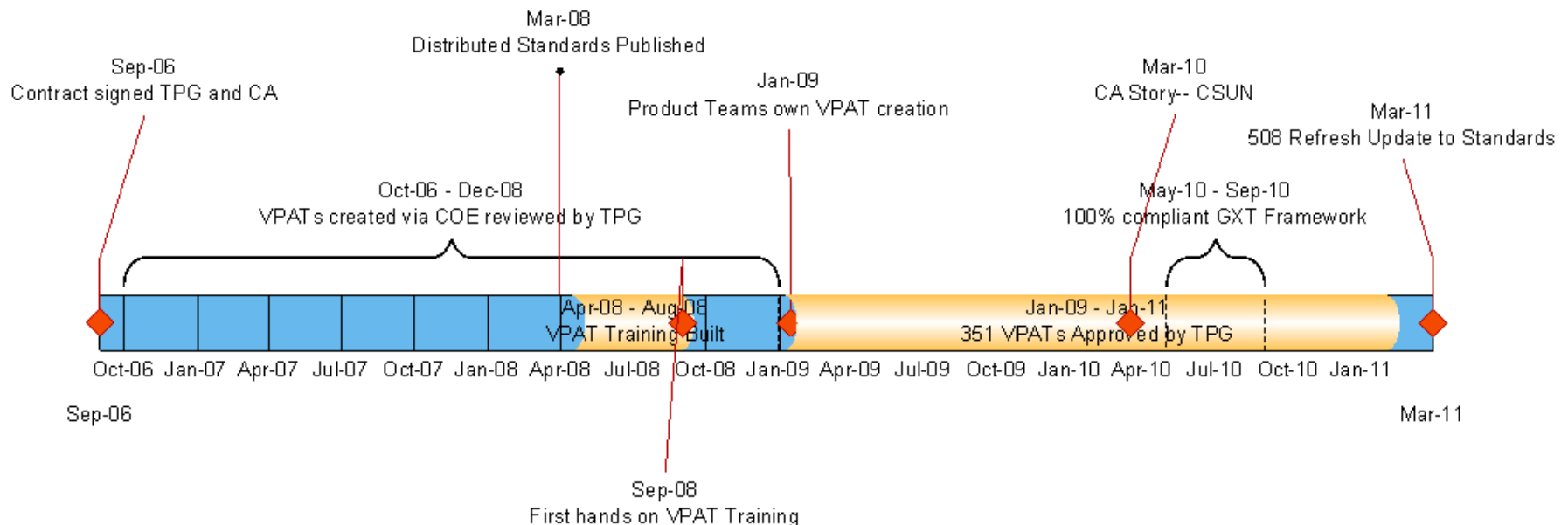
# project overview

- CA's Accessibility Program and how TPG is helping CA achieve its goals
  - Achieve 508 compliance (current and upcoming standards)
  - Challenges
    - Huge range of products
    - Huge, distributed teams in development and Q/A
    - Many new acquisitions with different levels of compliance
    - How to achieve compliance with a lasting effect for each product and each new release
    - How to achieve pervasive accessibility in an enterprise

# project overview

## — Solution

- CA engaged TPG in 2006
- Partner with CA to achieve pervasive accessibility
  - Multi-year project



# why does CA care?

- Litigation risk
- Competitors make their VPATs available on their websites
- Public Sector requirement
  - US Government annual spending on software ~ **\$34B**
  - Accessibility compliance is required
    - Voluntary Product Accessibility Template (VPAT)
  - CA is being asked for commitment statements
  - Directly impacts our competitiveness in Public Sector opportunities
- Growing Private Sector / Customer requirements
  - Applies beyond Section 508 of the US Rehabilitation Act
  - Private sector starting to adopt some 508 standards
  - Changes to the way ADA is applied to more sectors.

# CA's accessibility program goal

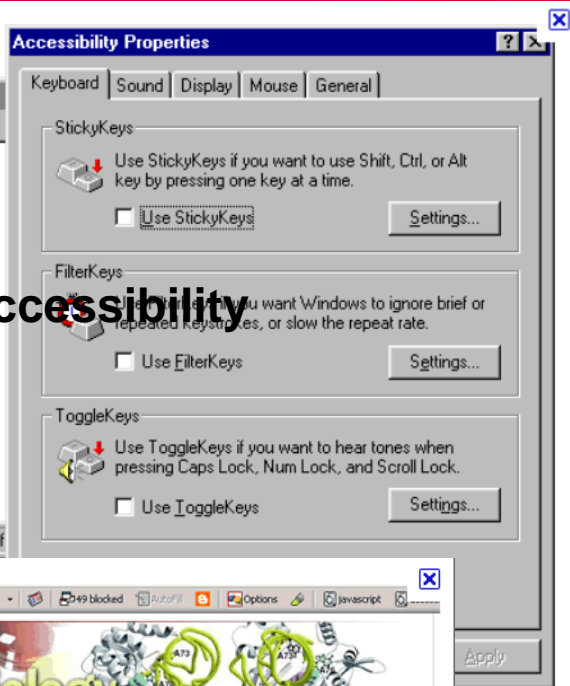
- To go beyond legal requirements and encourage the creation of efficient, easy-to-use solutions for all users.
- The Accessibility Program will:
  - Support CA's global commitment to provide products and services that are accessible to all users, not just compliant.
  - Make CA a recognized industry leader in advancing the cause of universal access.

# 508 compliance mandate

- CA has mandated 508 compliance as an ultimate goal for our products
  - 508 compliance for all new and growth products
  - Roadmap for renewals based on business case
- Creation of VPAT before GA--2010
  - All released products now have a validated VPAT
- Now focused on getting projects compliant and moving towards new version of 508 and WCAG2 conformance
  - 1 compliant product as of 2010
  - Should have over six by early 2012
  - 25+ within a release of achieving compliance

# today's topic, top accessibility issues

## Keyboard Accessibility



## Form control labeling

### Create an Account

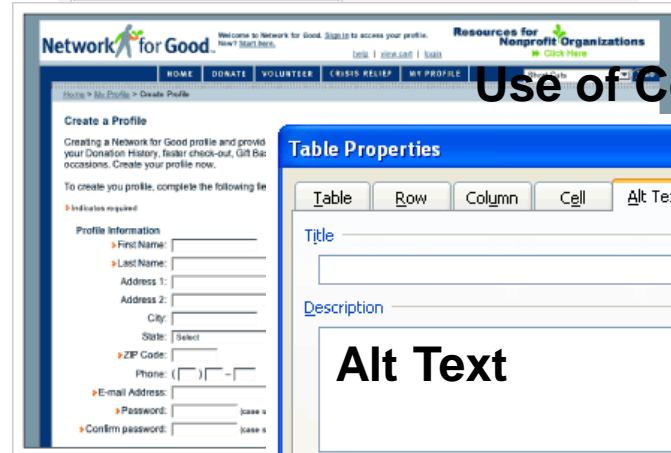
Email **REQUIRED**  Confirm Email **REQUIRED**

I don't mind the occasional email about Mint and official Pepper

Password **REQUIRED**  Confirm Password **REQUIRED**

Full Name or Organization **REQUIRED**  (Not displayed publicly, used only for correspondence)

## Use of Color



### Table Properties

Table	Row	Column	Cell	Alt Text
Title <input type="text"/>				
Description <input type="text"/>				

**Alt Text**

Alternative Text  
Web browsers display alternative text while tables are loading or if they are missing. Web search engines use the alternative text to help find Web pages. Alternative Text is also used to assist disabilities.

## Skip Nav Links



# today's talk—three of the top 5 accessibility issues

- **Alt Text**
- Form control labeling
- **Use of Color**
- **Skip Nav Links**
- Keyboard Accessibility

# text alternatives for images

# text alternatives

- To determine appropriate text alternatives it is important to think about why an image is being included in a page. What is its purpose?
- Every image has a reason for being on a page, because it provides useful information, performs a function, or enhances aesthetics. Therefore, knowing what the image is for, makes writing appropriate text alternatives easier.

## good text alternatives must...

- Explain purpose rather than appearance and convey information in an accurate, concise and equivalent manner
- Linked images: describe the target
- Icons: describe function
- If image contains functional text, use it
- Decorative images do not belong in document structure. Use CSS! If this is not possible, include empty alt attribute

```

```

## Explain purpose rather than appearance



```

```

If the logo is being used to represent the entity, e.g. as a page heading, the alt attribute should contain the name of the entity being represented by the logo.

## Linked images: describe the target



```
<a href="ca.com">  
  
</a>
```

When an a element that is a hyperlink, or a button element, has no text content but contains one or more images, the alt attributes should contain text that together convey the purpose of the link or button.

# text alternatives

## Linked images: describe the target

Link content with link text



```
<a href="ca.com"> CA home</a>
```

In some cases, an image is supplemental to text conveying the same meaning. In those cases, an empty alt attribute should be provided.

## Icons: describe function

Example 1 icon information **is not** in text

 Your session is about to expire.

```

```

Example 2 icon information **is** in text

 **Warning!** Your session is about to expire.

```

```

Using CSS

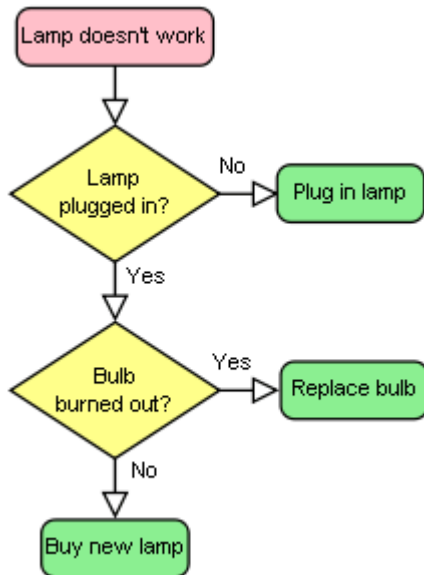
```
#warning:before { content:url(warning.gif);}
```

```
<span id="warning"> Warning! Your session is about to expire.</span>
```

## Graphical representations: charts, diagrams, graphs, maps, illustrations

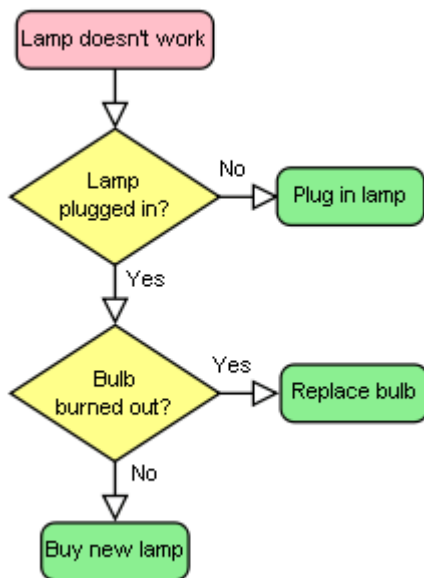
The full text alternative *MAY* be provided in the alt attribute, or a shorter text alternative *MAY* be provided in the alt attribute or in an associated element, and a longer associated text alternative provided in the same document or in a linked document.

## Flow chart example text alternative provided in the alt attribute:



``

**Flow chart example a short text alternative provided in the alt attribute and a longer text alternative provided as structured text:**



``

If the lamp doesn't work:

`<ol>`

`<li>Check if it's plugged in, if not, plug it in.</li>`

`<li>If it still doesn't work; check if the bulb is burned out. If it is, replace the bulb.</li>`

`<li>If it still doesn't work; buy a new lamp.</li>`

`</ol>`

# empty alternate text

## –For decorative images:

- Decorative images are images that provide no useful information in regards to the use of the interface.
- These images must have an empty alt attribute.
- `<img alt="">`

## –For layout images

- Layout images are generally invisible to the user and serve to help position visible interface elements.
- These images must have an empty alt attribute.
- ``

# text alternatives - compliance

## – WCAG 2.0

### – 1.1.1 Non-Text Content (Level A)

- All non-text content must have a text alternative that serves the same purpose. For images, ensure the alt attribute is an equivalent if the image is not presented.

## –Section 1194.21 Software Applications and Operating Systems

- (d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology.

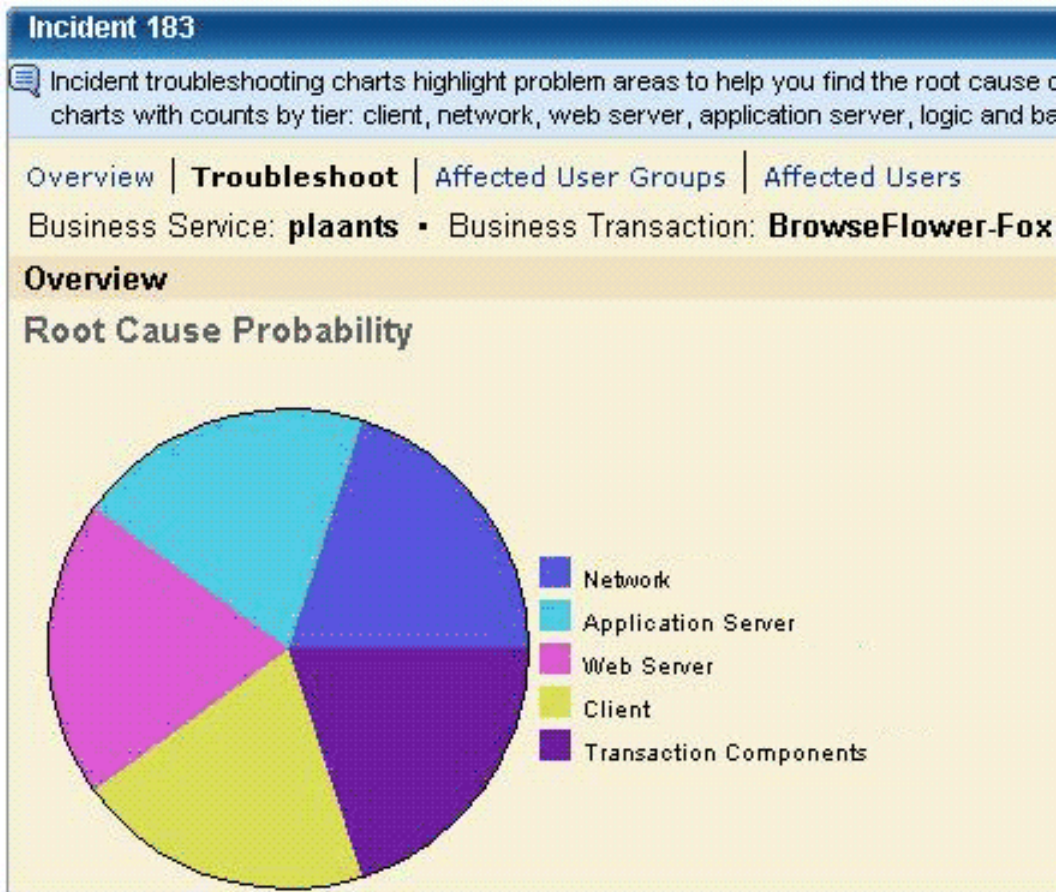
## –Section 1194.22 Web-based intranet and internet information and applications

- (a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).

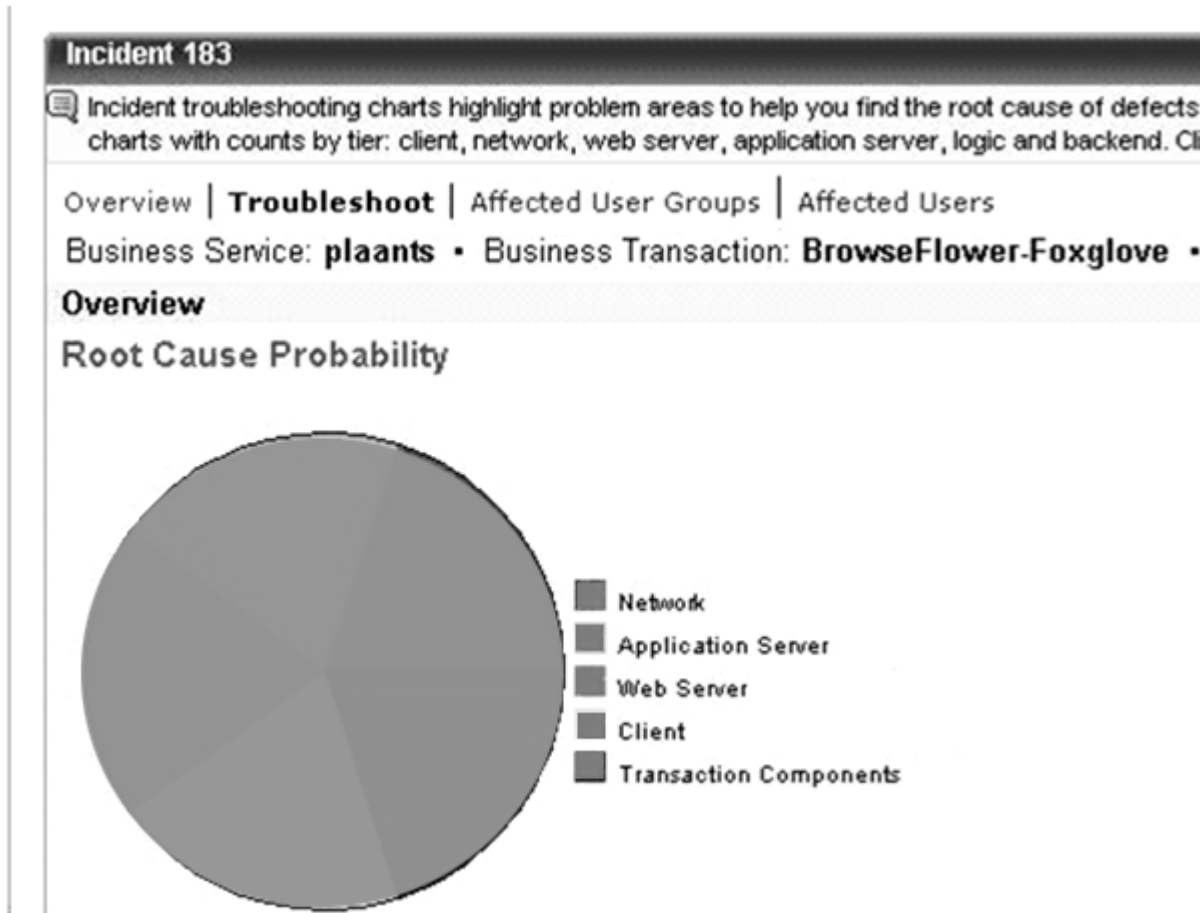
- **HTML5: Techniques for providing useful text alternatives**
- <http://dev.w3.org/html5/alt-techniques/>

# color coding

Color alone is used to differentiate root causes pie chart:



When color information is removed it is very difficult to differentiate causes:



Providing information in text is one solution:

## Incident 183

Incident troubleshooting charts highlight problem areas to help you find the root cause of defects. Defect distribution data includes charts with counts by tier: client, network, web server, application server, logic and backend. Click any link to view details.

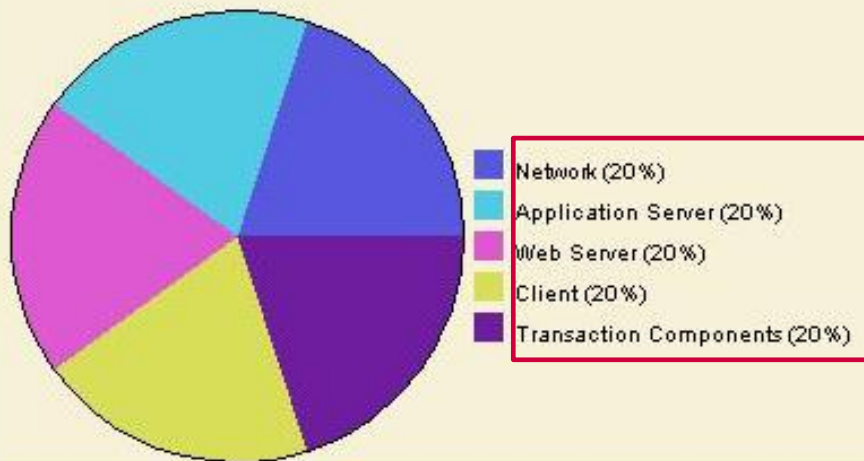
Overview | **Troubleshoot** | Affected User Groups | Affected Users

Business Service: **plaants** • Business Transaction: **BrowseFlower-Foxglove** • Defect Name: **Small S**

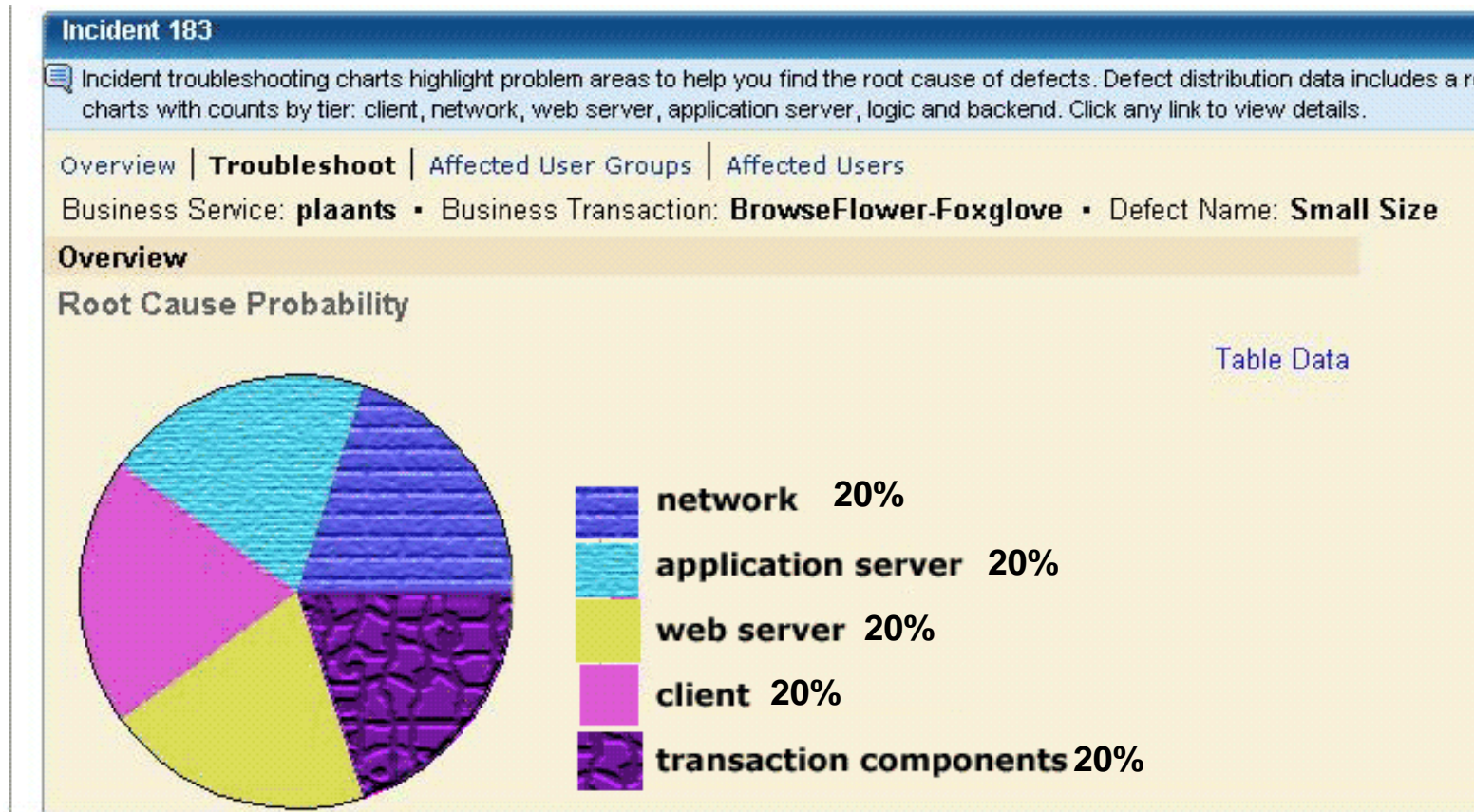
### Overview

#### Root Cause Probability

[Table Data](#)



Using patterns for differentiation is another solution:



Using patterns results in users being able to differentiate slices of the pie when color information is removed:

## Incident 183

Incident troubleshooting charts highlight problem areas to help you find the root cause of defects. Defect distribution data includes charts with counts by tier: client, network, web server, application server, logic and backend. Click any link to view details.

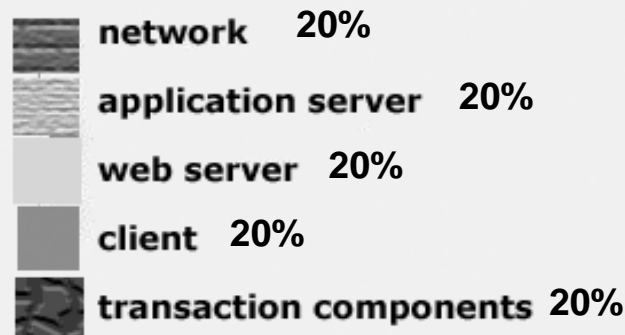
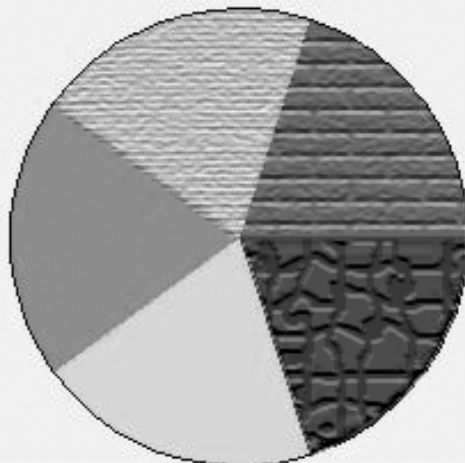
Overview | **Troubleshoot** | Affected User Groups | Affected Users

Business Service: **plaants** • Business Transaction: **BrowseFlower-Foxglove** • Defect Name: **Small S**

### Overview

#### Root Cause Probability

[Table Data](#)



- [WCAG 2.0 1.4.1](#) **Use of Color:** Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. (Level A)
- [Section 508 1194.21\(i\)](#) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.
- [Section 508 1194.22](#) (c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.

# skip navigation: techniques for skipping repetitive navigation links

## What do skip nav links do?

Allow people who navigate sequentially through content more direct access to the primary content of the Web page. Web pages and applications often have content that appears on other pages or screens.

Examples of repeated blocks of content include but are not limited to:

- navigation links, e.g., tabs
- menu bars
- heading graphics
- advertising frames

# skip nav links: HSBC bank website

## HSBC global navigation links:

The screenshot displays the HSBC website's navigation structure. At the top left is the HSBC logo with the tagline "The world's local bank". To the right are links for "Site map", "Contact us", and "HSBC Group". Below this is a secondary navigation bar with "Personal" and "Business" tabs, and a dropdown menu for "HSBC United Kingdom" with a "Search" button. A main horizontal menu lists various services: "Financial Planning", "Investments", "HSBC Premier", "HSBC Advance", "Current accounts", "Savings", "Credit Cards", "Loans", "Mortgages", "Insurance", and "International".

The main content area features a large banner for "Introducing our award-winning stocks and shares ISA" with a red egg-shaped award. Below the banner are three promotional boxes:

- Save time do more online Internet Banking**
  - Manage Direct Debits
  - Set up standing orders
  - Transfer money
- Tax-free savings Cash e-ISA**
  - Take advantage of a Cash e-ISA with a variable rate of up to 2.75% AER
  - Apply online today
- Earn up to 3.3% AER/gross Fixed Rate Saver**
  - Secure your savings with our 2 year fixed bond

At the bottom left, there is a section for "Get up to £500 of benefits" featuring a woman's portrait and a list of services: "Worldwide Travel Insurance, including airspace closures", "Life cover", "Roadside Breakdown Assistance", and "ID Theft Assistance". Next to it is a "Switch your current account to HSBC Advance" section.

On the right side, a sidebar titled "Welcome to Internet Banking" contains sections for "Personal" and "Business" with "Log on" buttons and links for "Register", "Activate", and "Support". Below this is a "Latest news" section with links to "My Accounts updates", "Mobile View", "Investments", "Global Investment Perspective", "Online security at HSBC", and "Payment Protection Insurance". Further down are sections for "Tools to manage your finances", "Help and getting in touch", and "Secure Key". At the bottom right, there is a news item titled "UK riots" with the text "Repayment holidays available for SME businesses affected by the riots" and the HSBC logo.

# skip nav links HSBC bank website

## Adding a link to skip the menu:

The screenshot shows the HSBC website header with the logo and tagline 'The world's local bank'. A 'Skip menu' link is highlighted with a red dashed box. A blue arrow points from this link to the navigation menu. The navigation menu includes links for Personal, Business, Financial Planning, Investments, HSBC Premier, HSBC Advance, Current accounts, Savings, Credit Cards, Loans, Mortgages, Insurance, and International. Below the navigation menu is a large banner for 'Including: eISA, Fixed Rate Saver, Regular Saver' with a 'Find out more' button. To the right is a 'Welcome to Internet Banking' section with 'Personal' and 'Business' login options, each with 'Log on' and 'Register', 'Activate', 'Support' links. Below this is a 'Latest news' section with links for 'My Accounts updates', 'Mobile View', 'Investments', 'Global Investment Perspective', 'Online security at HSBC', and 'Payment Protection Insurance'. Further down are sections for 'Tools to manage your finances', 'Help and getting in touch', and 'Secure Key'. At the bottom, there are three promotional boxes: 'Save time do more online Internet Banking', 'Tax-free savings Cash e-ISA', and 'Earn up to 3.3% AER/gross Fixed Rate Saver'. A fourth box on the left shows a woman's face and 'Get up to £500 of benefits'. A fifth box on the right shows 'UK riots Repayment holidays available for SME'.

# skip nav links sample

Add a visible skip nav link at the top of the page:



## HTML:

```
<a href="#content" class="skipnav">skip menu</a>
```

# skip nav links – compliance and resources

- [WCAG 2.0 2.4.1](#) Bypass Blocks: A mechanism is available to bypass blocks of content that are repeated on multiple Web pages. (Level A)
- [Section 508 1194.22](#) (o) A method shall be provided that permits users to skip repetitive navigation links.
- [Skip Navigation Links](#)– The basic idea, by Jim Thatcher

thanks!  
any questions?

# Contact Us

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