



The National Archives

Preserving the content and the network: An innovative approach to web archiving

Amanda Spencer, Web Continuity Manager, The National Archives, Sept 2008



Introduction

- Since the early 1990s the Government has been using websites to present information: official reports, papers, transcripts of speeches, guidance, announcements, press statements, regulations and advice.
- Benefits offered by new technologies means that services are increasingly delivered online.
- Majority of all interaction between government and the public now happens online.
- Web links cited in everything from Hansard through to academic research and PR campaigns
- Government web estate, just like the rest of the web, vulnerable to technological problems
- Broken Web links are increasingly common – and frustrating for us all



Web continuity matters

- Integrity of Web links crucial to the business of government.
Without it:
- Public – impaired access
- Westminster village – impaired access
- The Press – impaired access
- Academics – impaired analysis
- Parliament – impaired scrutiny
- Impacts on reputation of government – public and abroad



Government is taking action

- April 2007 - Raised as a serious issue by Jack Straw, as Leader of the House of Commons
- May 2007 – Hilary Armstrong commits government to a package of measures that will provide a long-lasting solution to the problem
- Working Group established in May 2007 to investigate the problem and come up with a solution

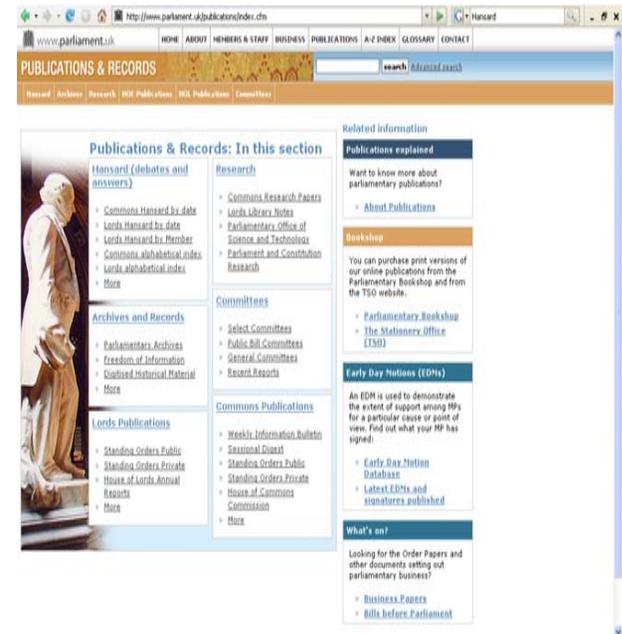


What the working group found...

- A longitudinal survey of URLs cited in response to Parliamentary Questions and recorded in Hansard revealed that 60% of URLs, cited in Hansard between 1997-2006 are broken
- Disconnect between those who view government websites as ephemeral and those who expected important information to be available in perpetuity
- Prevalence of e-only publication; issues with legal deposit in the electronic world
- Varied practice - PDF vs HTML
- Devolved system of web publication
- Concerns also about the impact of 'Website Rationalisation'

Agreement

- Working group agreed that all web-based information should be treated as an important contribution to the body of government information
- Online information which has been cited elsewhere should remain available and accessible in its original form





Options

- Improvements to existing practices
- Encourage government departments to take more responsibility
- Use Digital Object Identifiers
- All of the above?





The National Archives and the Web Continuity solution – issues to address

1. How to capture significant levels of important Government information from possibly thousands of distributed, heterogeneous websites (including websites closing as part of the Website Rationalisation Programme);
2. How to ensure not only a greater capture of content, but also increase exposure of this content to the web harvesting crawler, from sites that vary hugely in nature;
3. How to ensure that links persist so that users will always find the last available version of the page, whether it is on a live site, or in the web archive.

Web Continuity – capture I

- Comprehensive - Whole of UK central government
- Incorporating Transformational Government Website Rationalisation Programme
- SQL Server Government Website Database developed as a single source of information for central government websites
 - allows tight control over web estate
 - gives responsibility to government





Web Continuity – capture II

- Automated seeding of crawls and capture of preservation copies via two workflows:
- Harvesting workflow, crawls are seeded, and progress of harvesting and QA processes are recorded in the database through the exchange of a series of XML messages via FTP between TNA and the European Archive, who carry out web archiving under contract
- Preservation workflow, enables ARC files to be ingested into The National Archives Digital Object Store, once harvesting process is complete

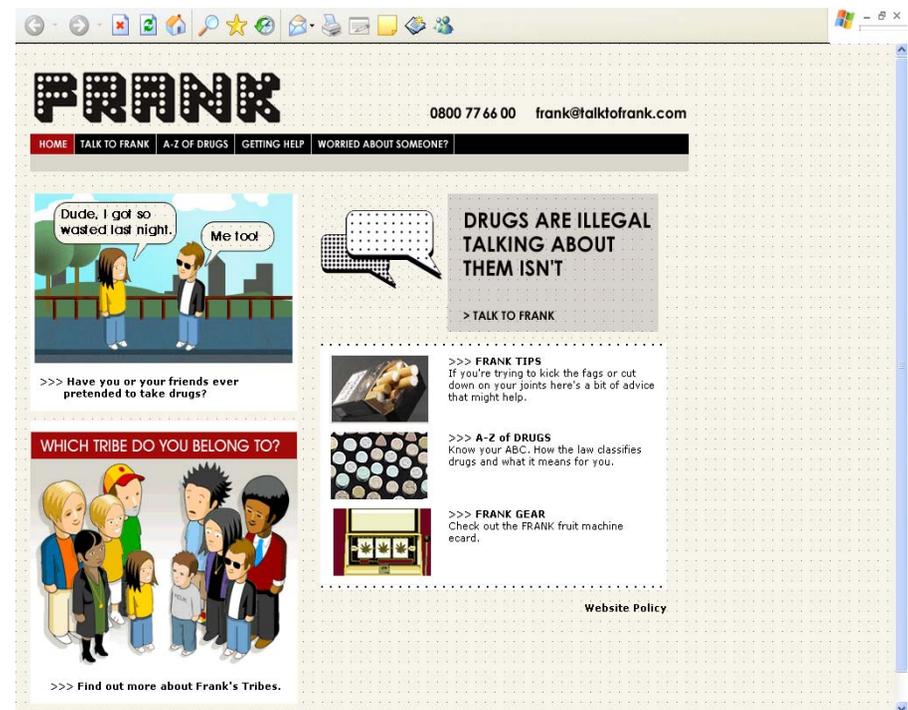


Web Continuity – capture II

- Promoting use of XML sitemaps
- Benefits live website users as well as helping the archiving process; ministerial backing
- Training in partnership with Third Party provider
- Guidance provided
- Installation of sitemap generation software on government web servers – requires support from senior government
- Practical implementation – will be used to augment the initial gather rather than to drive the crawl

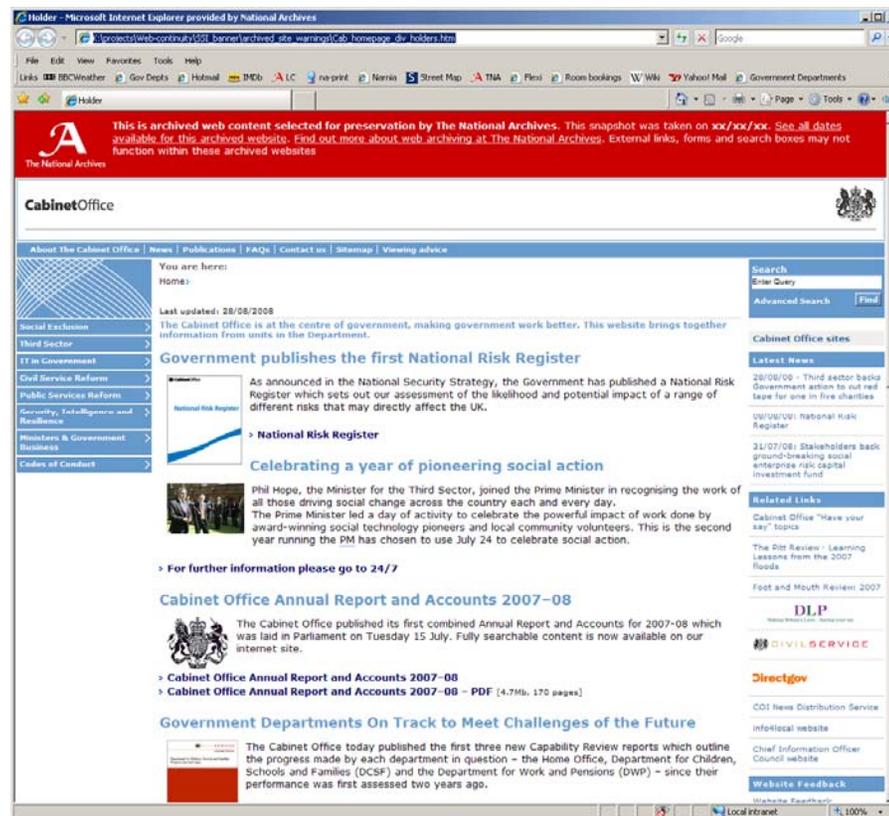
Web Continuity – links persistence

- Configuration of open source software
- Apache and Microsoft IIS Web Servers
- Enables users to be redirected to web archive instead of receiving a 404 Page Not Found error; does not replace existing redirects on live websites
- Will need to be installed on government web servers



Web Continuity – links persistence - implications

- Brings together different audiences
- Archived websites have:
 - historical value
 - current value
 - value in preserving integrity of network as a whole
- Introduces temporal dimension – brings longevity to the web, but also needs to be clearly signposted – new presentation and branding, including a TNA URL





Web Continuity – Presentation issues

- Several attempts at producing a banner:

Using Iframes:

This is archived web content selected for preservation by the National Archives. (Click here to see all dates available for this archived website.) External links, forms and search boxes may not function within these archived websites. (Click here to find out more about web archiving at the National Archives.)

Cabinet Office

You are here:
Home

Last updated: 04/03/2008

The Cabinet Office is at the centre of government, making government work better. This website brings together information from units in the Department.

Cabinet Office sites

- Lab 41 News
- Facts
- 04/03/08: Knighthoods for Judge David George Maddison and Richard Owen Plender Eq. QC
- 20/02/08: New guidance for professional charity fundraisers
- 06/02/08: Strategy Unit sets out the challenges that lie ahead

Related Links

- Cabinet Office "Have your say" topics
- The Pitt Review - Learning Lessons from the 2007 floods
- Fact and Mouth Review: 2007
- Draft Legislative Programme

New guidance for professional charity fundraisers

The Cabinet Office has announced the release of draft guidance to help professional fundraisers and retailers who raise money for charity through sales to comply with new laws, the announcement was made by Phil Hope MP who is Minister for the Third Sector.

News release: New guidance for professional charity fundraisers

Using CSS overlay:

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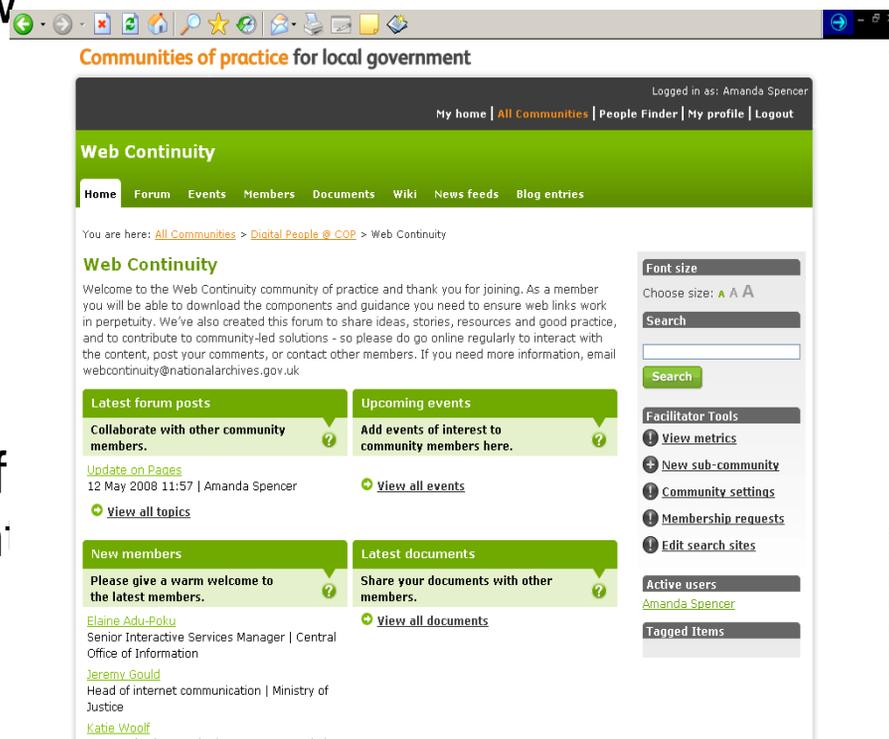
Strategy Unit sets out the challenges that lie ahead

The Strategy Unit has published an assessment of the future strategic challenges for Britain. Drawing on an analysis of trends and drivers of change, future projections and scenarios from inside and outside government and a detailed analysis of Britain's strengths and weaknesses, the resulting assessment provides a comprehensive review of the long term challenges and



Practical Implementation

- Implementation across government has required new approach to sharing information and different technical support model
- Collaborative platform established
- Guidance for web and e-comms communities – part of Transformational Government Web standards
- Regular monitoring
- Different groups of stakeholders involved at The National Archives





Timelines

- **November 2007 – April 2008** Feasibility studies
- **May – November 2008** Development work at The National Archives, website archiving programme scaled up
- **November 2008** Solution delivered to government, software and guidance available, monitoring in place



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Any Questions?



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