

Perma and Citation at the Modern Law Firm

By Clare Stanton

The legal profession relies on authoritative citation. Traditionally, anything that would need to be cited, such as caselaw, treatises, or law review articles, would have a standardized and straightforward way of being referenced. The information needed never changes. A volume number, page, year, and edition would guarantee that your reader can find your reference later. In the internet era, however, it's more complicated.

Websites also have a unique way of being found. It's called a URL, and it's what most of us would call a "link" to a specific web page. If everything is working well, a link brings a reader to that unique web page, and all that is needed for basic citation is that URL. Unfortunately, the internet is ever-evolving. Website content is frequently updated, changed, and often times fully removed. Legal professionals citing web-based materials don't have any assurance that their readers will find the same content at a URL a year later. Even worse, they have no assurances that there will be anything at that address at all except a "404 Error." This problem is known as "link rot."

In 2014, professors at the Harvard Law School conducted a study to scope and address the prevalence of link rot in the legal field.¹ It is a problem many of us have experienced, and its close cousin, reference rot, is even more prevalent, though less obvious to the naked eye. "Reference rot" refers to the fact that sometimes a website isn't completely gone, just changed; copy may have been altered, a policy may have been updated, or an author may have left a company, prompting the removal of that author's content. For an internet user, these occurrences are a nuisance, but in the context of the law, they can have major consequences. The 2014 study examined link rot in two of the law's major outlets: Harvard academic journals and United States Supreme Court

opinions. Both link and reference rot were found to be rampant in the samples examined by researchers. Of all the links ever cited in a United States Supreme Court opinion, 50 percent of them no longer pointed to the intended content. You can see a particularly spectacular example of a citation by Justice Samuel Alito at <http://www.ssnat.com/>.² The rate was even higher for the scholarly journals published at Harvard: 70 percent of those links cited had changed or disappeared over the course of 14 years.³

The problem

The premise of the study rested on the understanding that the law profession, as well as any form of scholarship, relies on the persistence of references and citation. It is obviously essential that journal articles and court opinions accurately reference sources. Of course, the problem is not limited to those areas of the law. Law firms use web references in everything from marketing materials to briefs. Any time a web resource is used, there is a risk of it rotting.

Traditionally, institutions such as libraries, archives, and courts have collected and housed physical items for reference. These organizations have missions to preserve materials for the long term. Books, journals, newspapers, and government documents, among other things, were gathered and stored as centrally as possible. However, as

the world (and inevitably aspects of the law) migrates online, the gatekeepers to information have become more dispersed. The internet is a powerful tool, giving users and authors more autonomy over their information, but it is much more fragile than many might think. The reality now is that authors, lawyers, and scholars all need to be far more responsible for their own references, lest they disappear from the web.

There are many causes for link rot. They include new internet protocols, domains being purchased, page owners lapsing on maintenance, or intentional removal of pages. For example, it has become common practice for law firms whose attorneys produce blog content to remove that content once the attorney has moved on to another job. On the surface, this seems like a logical step taken by the employer, but the ripple effect of removing that post could be bigger than considered. Any person who referred to that blog post in their own work or relied on it for information will no longer have access.

The ramifications of this can be felt both as a hindrance to scholarship and as a problem for marketing. How many marketing departments want to hear that their website is riddled with dead links? Visitors are met with a frustrating "404: Error" page, often with no way to know the next step to take to find what they're looking for. Plus, search engines often take into account broken links when optimizing results, which

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has a negative impact on internet presence. As clients flock online to make decisions about representation, having a good web presence is essential. Dead links make for an unprofessional website.

One solution is to simply never cite content from the web. But as legal blogs become more and more important to a firm's marketing practices, and briefs inevitably must refer to activity on the ever-present internet, a better solution should be sought than simply trying to avoid web references altogether.

A better solution for legal citation

A direct result of this study in 2014, Perma.cc is a project that was developed at the Harvard Law School. A group of coders, lawyers, and librarians at the Library Innovation Lab⁴ have created it as a service that allows users to take internet preservation into their own hands in an accessible way. Perma preserves the integrity of citations and links to digital sources by converting your unreliable traditional links into unbreakable Perma Links.⁵ Essentially, a Perma.cc user logs into the web interface with a username and password and pastes in a URL; Perma returns a new link. This new link, also known as a "Perma Link," points to a record of the website that has been captured and stored as part of our permanent collection at Harvard. The new link is short, easily used in citations, and will always point to the user's record containing the web content and information about time of capture. It is different from simply capturing a screenshot or using a service like the Internet Archive's Archive-It button in several ways:

- A Perma record is a "high fidelity" web capture; when you look at a Perma Link, you're able to interact with the site like the original. You can click through images, see animations, and scroll down with the content.
- You don't have to worry about hosting or storing the archived web page yourself; it becomes part of the Harvard collection and is accessible to anyone who has the link.
- You have control over privacy of your records, making them invisible to the public until you'd like them to be available.

At its core, Perma.cc comes from a library looking to extend its services into the digital age. Libraries are about preserving information and making it accessible to all. As the internet creates more autonomous content creators and readers, the goal is to empower authors to protect their own work. Perma.cc is a solution for a piece of the internet-health puzzle. For lawyers, firms, and information professionals concerned with producing good, solid arguments, it can be an invaluable tool—plus, it's recommended by the Bluebook⁶ and *The Chicago Manual of Style*.⁷

So far, more than 250 academic libraries have joined the Perma.cc community and administer accounts to their students and professors. The Library of Congress and the United States Department of Justice are both using Perma for their work. Michigan's Supreme Court and Court of Appeals were early adoptors of Perma Links, using them in opinions before any of their peers.⁸ Now, dozens more courts have followed their lead.⁹ This very journal has also decided to join the Perma.cc network, creating links to web citations in its articles and columns.

Harvard Law School uses the online legal research services of Westlaw, and specific to this product, Perma.cc links pop up frequently in cases, briefs, and secondary sources.¹⁰ Of the nearly 1,000 cases on Westlaw (as of March 2019) that have Perma Link citations, 76 of them are from Michigan. Of the nearly 750 briefs available on Westlaw that have Perma.cc citations, 54 are from Michigan.

As more and more young lawyers graduate from law school having used Perma.cc, they are seeking to continue its use outside the academic and court contexts. In response, the service has expanded beyond the initial bounds of academia, now offering commercial availability to law firms¹¹ and non-academically-affiliated individuals.¹² Organizational subscriptions allow attorneys, paralegals, or entire teams to create Perma records on a collaborative platform. Individual users can also access Perma via a paid account or do a test run for free at www.Perma.cc. The Perma team is actively seeking feedback and information about how lawyers and legal professionals use the web in their work and how they think about the long-term survival of their citations.

Anyone with feedback or questions is invited to reach out at info@perma.cc. ■



Clare Stanton works with the Perma.cc team at Harvard Law School's Library Innovation Lab. Her primary role is to conduct outreach and user research for nonacademic applications of Perma.cc's web archiving tools. Her background is in the arts, education, and library science. Before LIL, she worked as a program coordinator for Clayton Christensen's Forum for Growth and Innovation at the Harvard Business School.

ENDNOTES

1. Zittrain, Albert & Lessig, *Perma: Scoping and Addressing the Problem of Link and Reference Rot in Legal Citations*, 127 *Harvard L Rev* 176, 177–178 (February 2014) <<https://harvardlawreview.org/2014/03/perma-scoping-and-addressing-the-problem-of-link-and-reference-rot-in-legal-citations/>> [<https://perma.cc/D29D-MV4L>]. All websites cited in this article were accessed May 12, 2019.
2. Justice Alito's original citation is found at *Brown v Entertainment Merchants Ass'n*, 564 US 786, 818, n 14; 131 S Ct 2729; 180 L Ed 2d 708 (2011). The website referenced is preserved at [<https://perma.cc/KC43-MGCN>].
3. *Perma: Scoping and Addressing*.
4. Library Innovation Lab, Langdell Hall, Harvard University <<https://lil.law.harvard.edu/>>.
5. Perma.cc <<https://perma.cc/>>.
6. Kribble, *20th edition of the Bluebook: including Perma.cc!*, Et Seq. Blog, Harvard Law School Library (June 2015) <<http://etseq.law.harvard.edu/2015/06/20th-edition-of-the-bluebook-including-perma-cc/>> [<https://perma.cc/5CFL-YBF2>].
7. Johnson, *The Chicago Manual of Style, now with Perma.cc!*, Perma.cc Blog, Perma.cc (April 2018) <<https://blogs.harvard.edu/perma/2018/04/26/17th-ed-of-the-chicago-manual-of-style-including-perma-cc/>> [<https://perma.cc/LEQ2-LQXE>].
8. Perma.cc records show that the Department of Justice joined in 2016, the Library of Congress joined in 2015, and the Michigan Reporter of Decisions joined in 2013.
9. As of May 15, 2019, per Perma.cc records, 30 courts or court reporters have registered with active Perma.cc accounts.
10. I can't speak to the use of Perma.cc within LexisNexis, but assume the results are comparable.
11. *Perma.cc for Law Firms*, Perma.CC <<https://perma.cc/sign-up/firms>> [<https://perma.cc/4W99-95WR>].
12. Stanton, *Introducing Individual Account Subscription Tiers for Perma*, Perma.cc Blog, Perma.cc (January 2019) <<https://blogs.harvard.edu/perma/?s=individuals>> [<https://perma.cc/LH8A-TDNM>].