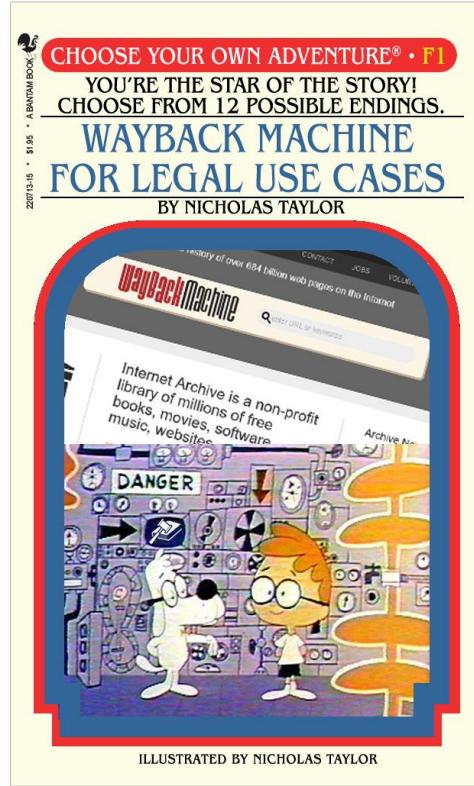


Wayback Machine for Legal Use Cases

Nicholas Taylor

American Association of Law Libraries
Annual Meeting & Conference

18 July 2022



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What can you do w/ IAWM?

- find public, historical web content that's gone
- establish when information may have been publicly available on the web
 - when first published
 - when updated
 - when absent
- examples:
 - patent disclosures
 - use of marks or copyrighted materials
 - terms of service
 - advertised claims regarding products or services
 - business relationships



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Internet Archive

- non-profit digital library
- “universal access to all knowledge”
- provides free public access to collections of all types of digital materials

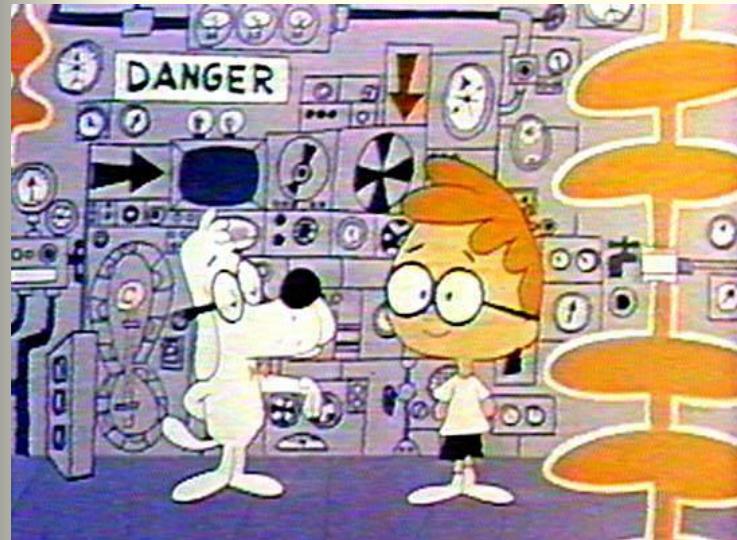


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IAWM

- free, open archive of websites 1996 – present
- web content is both culturally significant + ephemeral
- IAWM referenced in:
 - [a 2002 patent application](#)
 - [a 2003 PTAB proceeding](#)
 - [a 2004 U.S. federal court case](#)



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IAWM archival coverage

- “best effort” archive
- popular + more recent content is better archived
- content of interest to cultural heritage orgs is increasingly better archived



"Irregular paving" by [Stephen Edmonds](#) under [CC BY-SA 2.0](#)



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Scaling web archiving

- more web archiving since IAWM launch
- web archiving tools have also improved
- web archiving is more curated
- more dynamic + more private web



"\$72M Expansion" by [tsaproject](#) under [CC BY 2.0](#)

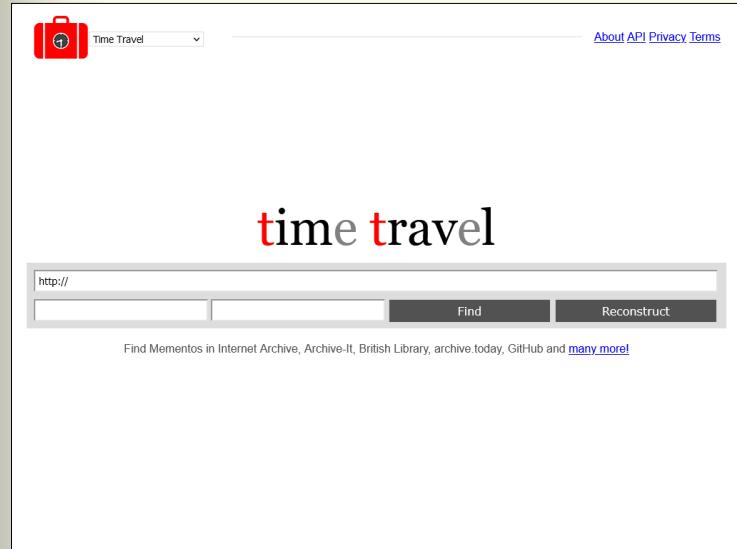


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Other web archives + aggregators

- IA is not the only web archiving org
- also governments + universities, w/ circumscribed scope:
 - national domains
 - topical collections
 - institutional self-archiving
- search across many web archives via the [Time Travel](#) service



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The journey continues...

The speaking figure pauses, as if waiting for you. The screen at the front of the room changes. You sense the possibilities open up before you...



"[You are here:](#)" by [Paul Thompson](#) under [CC BY-ND 2.0](#)



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What path shall we take?

- [IAWM interface](#)
- [full-text search](#)
- [other IAWM features](#)
- [IAWM in the legal context](#)
- [IAWM temporal dynamics](#)



"You are here." by Paul Thompson under CC BY-ND 2.0



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What path shall we take?

- IAWM interface
 - calendar + resource pages
 - IAWM banner
 - IAWM web address
- full-text search
 - native full-text search
 - Collections tool + Archive-It full-text search
 - crawl index API + local full-text search
- other IAWM features
 - Changes tool
 - “editing” IAWM contents
- IAWM in the legal context
 - authentication + admissibility
 - patents + IAWM
- IAWM temporal dynamics
 - timestamping content changes
 - temporal (in)coherence

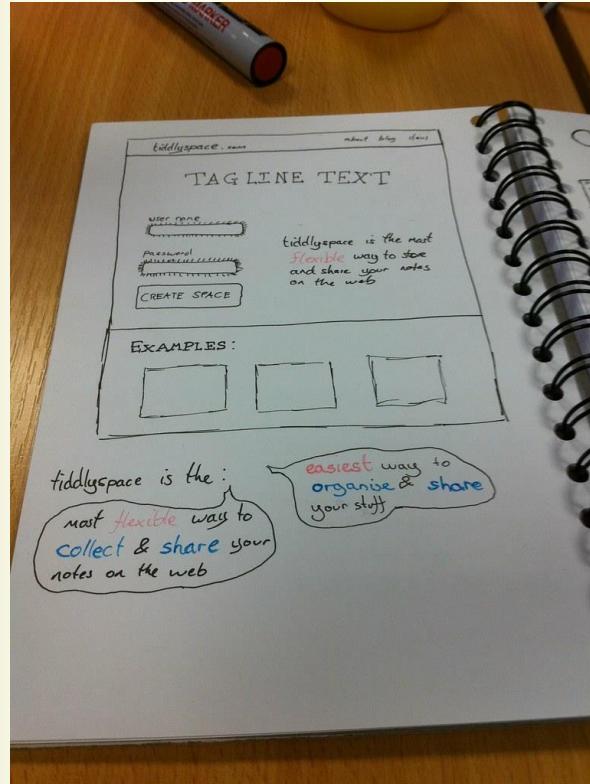


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IAWM interface

- calendar + resource pages
- IAWM banner
- IAWM web address



"Simple Mockup" by Colm Britton under CC BY 2.0



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Calendar + resource pages



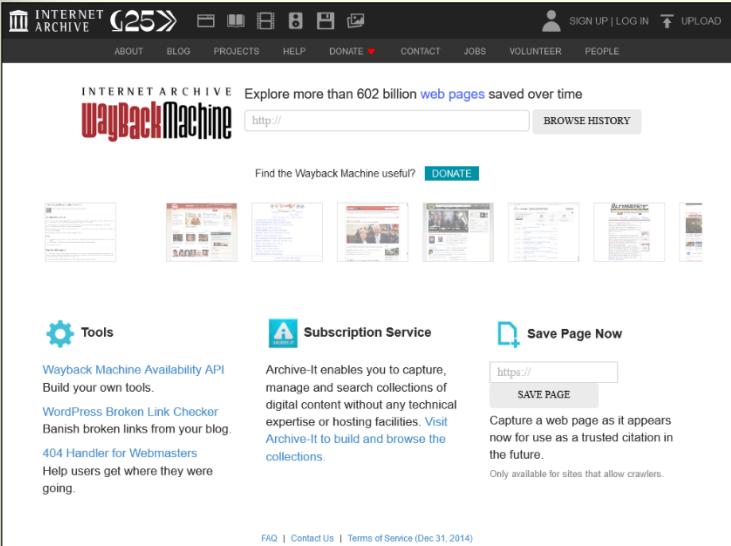
["Calendar"](#) by Droid Gingerbread under [CC BY 2.0](#)



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IAWM home



The screenshot shows the Internet Archive Wayback Machine homepage. At the top, there's a navigation bar with links for ABOUT, BLOG, PROJECTS, HELP, DONATE, CONTACT, JOBS, VOLUNTEER, and PEOPLE. The main header features the Internet Archive logo and a '25' anniversary banner. Below the header, a search bar asks "Explore more than 602 billion web pages saved over time" with a placeholder "http://". There are buttons for "BROWSE HISTORY" and "DONATE". A section titled "Find the Wayback Machine useful?" includes a "DONATE" button. Below this, there are several thumbnail previews of archived web pages from different years. On the left, a "Tools" section lists "Wayback Machine Availability API", "Build your own tools.", "WordPress Broken Link Checker", "Banish broken links from your blog.", "404 Handler for Webmasters", and "Help users get where they were going.". On the right, a "Subscription Service" section for "Archive-It" is shown, along with a "Save Page Now" feature for capturing web pages.

[Internet Archive: "Wayback Machine"](#)



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IAWM home: search box

The screenshot shows the Internet Archive Wayback Machine website. At the top, there's a navigation bar with links for ABOUT, BLOG, PROJECTS, HELP, DONATE, CONTACT, JOBS, VOLUNTEER, and PEOPLE. On the far right, there are links for SIGN UP | LOG IN and UPLOAD. Below the navigation, the Internet Archive logo and a 'G25' graphic are visible. A banner reads "Explore more than 602 billion web pages saved over time". A search bar contains the URL "www.supremecourt.gov". To the right of the search bar are links for "BROWSE HISTORY" and "DONATE". Below the banner, there's a section titled "Find the Wayback Machine useful?" with a "DONATE" button. Further down, there are sections for "Tools" (Wayback Machine Availability API, WordPress Broken Link Checker, 404 Handler for Webmasters), "Subscription Service" (Archive-It), and "Save Page Now" (with a form for entering a URL and a "SAVE PAGE" button). A note at the bottom right says "Only available for sites that allow crawlers." At the very bottom, there are links for FAQ, Contact Us, and Terms of Service (Dec 31, 2014).

[Internet Archive: "Wayback Machine"](#)

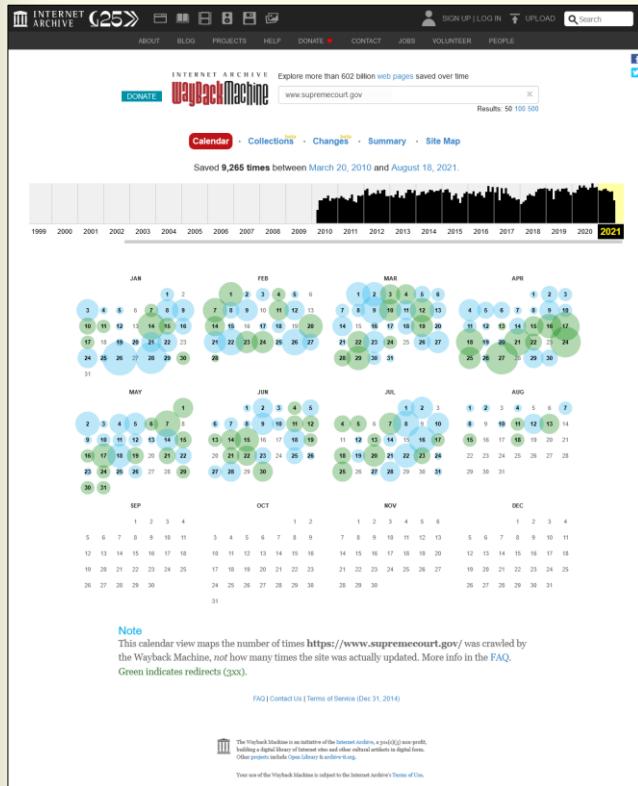


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IAWM calendar page

- landing page presents archival coverage for specified web address for year selected in timeline
- bubble size indicates relative number of captures for that date
- bubble color indicates status code provided by the web server to the IA archiving agent
 - blue means [a successful retrieval](#), with no errors
 - green means [a redirect was encountered](#)



Internet Archive: "Wayback Machine"

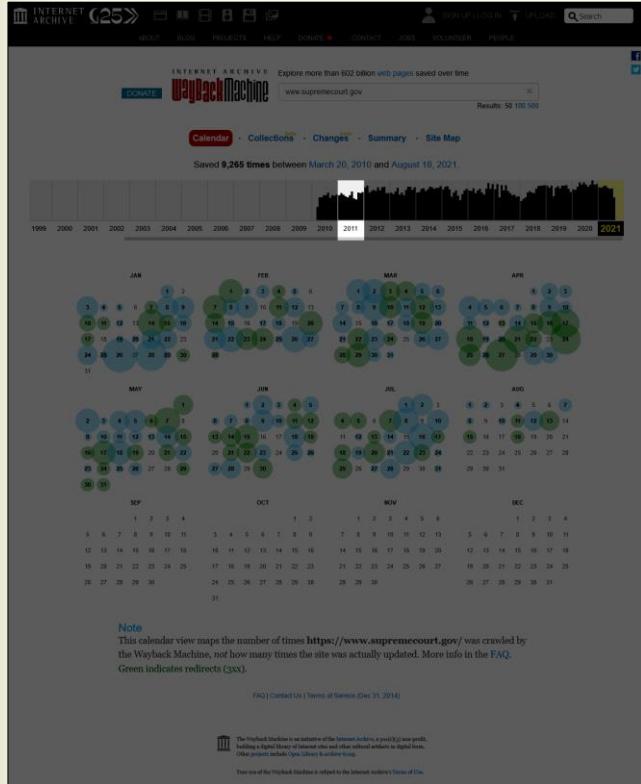


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IAWM calendar page

- click to another year in the timeline to change the calendar view below
- let's click to 2011



Internet Archive: "Wayback Machine"

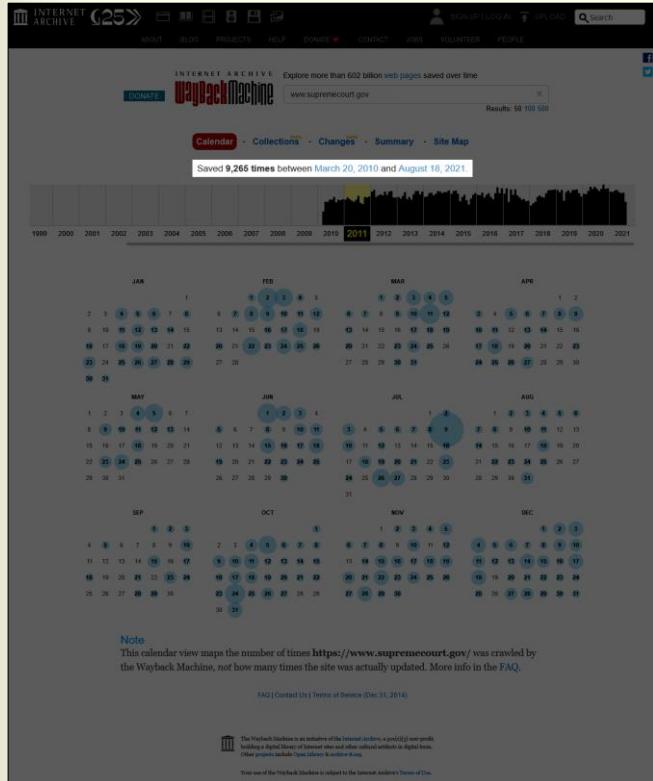


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IAWM calendar page: captures range

- number of captures for the specified web address + their date range is displayed at the top
- links are provided to the first + last captures in the date range



[Internet Archive: "Wayback Machine"](#)

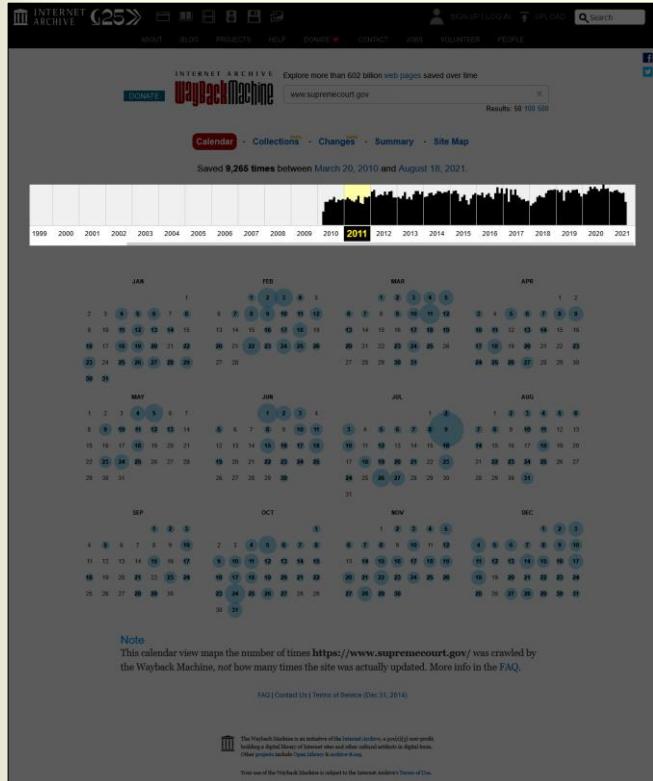


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IAWM calendar page: timeline histogram

- the timeline histogram provides a visual summary of the relative number of captures over time
- each year segment has 12 columns – one for each month
- the year displayed in detail below is highlighted in yellow in the timeline

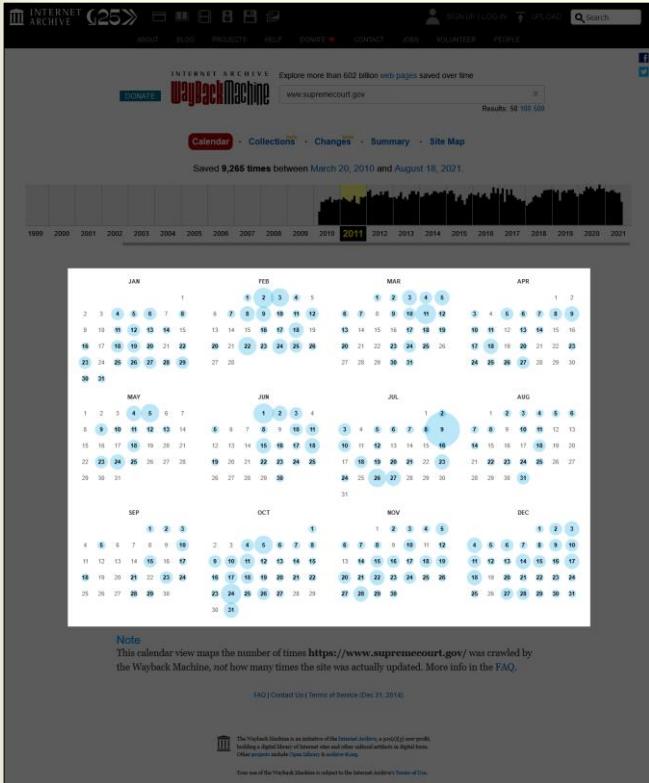


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IAWM calendar page: calendar

- archival coverage for every day of the year selected in the timeline
- this is the 2011 calendar



[Internet Archive: "Wayback Machine"](#)

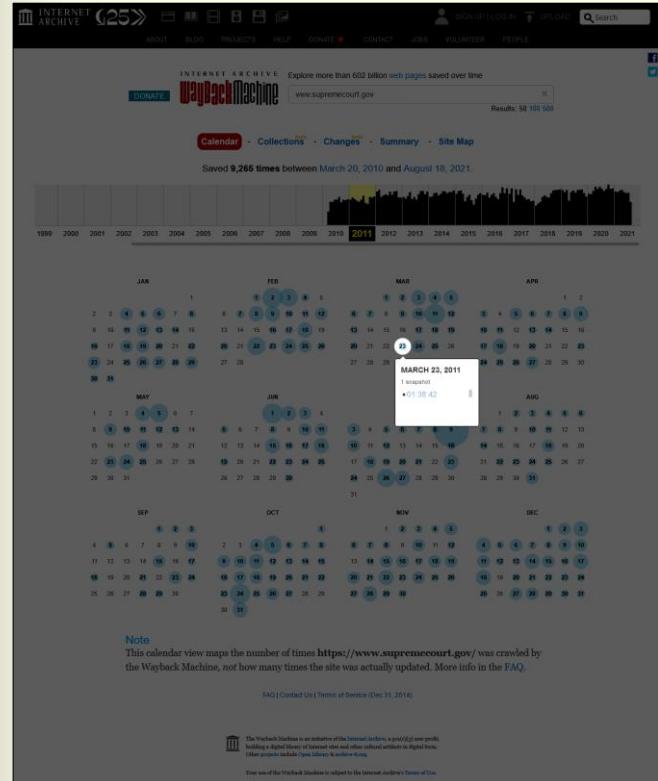


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IAWM calendar page: 23 March 2011 capture

- hovering over a date for which there is at least one capture presents the number of captures + capture time(s)
- clicking on a capture time takes you to the re-presentation of the resource captured on that date at that time
- let's click through



[Internet Archive: "Wayback Machine"](#)



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IAWM resource page

- IAWM resource page for www.supremecourt.gov for the 23 March 2011 capture
- note that archived webpages have a top-justified IAWM overlay banner to:
 - remind the user they're within the IAWM context
 - facilitate navigation
 - provide additional info about the current capture + other captures of the resource located at the same web address
- let's look at the IAWM banner

The screenshot shows the official website of the Supreme Court of the United States. At the top, there is a red banner with white text that reads "INTERNET ARCHIVE" and "Wayback Machine". Below the banner, the Supreme Court logo is displayed. The main content area features a sidebar on the left with links to "Supreme Court Documents" (Docket, Oral Arguments, Merits Briefs, Bar Admissions, Court Rules, Case Handling Guides, Opinions, Orders and Journals) and "Supreme Court Information" (About the Supreme Court, Visiting the Court, Public Information, Jobs, Links). The central part of the page displays a calendar for March 2011, indicating "Argument Days" (red), "Non-argument Days" (blue), "Conference Days" (green), and "Holiday" (yellow). Below the calendar, a section titled "List of cases for argument on 3/22/2011" lists several cases. At the bottom of the page, there is a "What's New" section and a footer with links to "Home", "Help", "Site Map", "Contact Us", "About Us", "FAQ", "Webpage Policies and Notices", "Privacy Policy", and "USA.GOV". The footer also includes the text "Supreme Court of the United States".

[Internet Archive: "Wayback Machine"](#)



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The path forks...

As the story reaches a turning point, the speaking figure again quiets. The screen at the front of the room abruptly changes once more. You feel a sense of déjà vu...



"You are here." by Paul Thompson under CC BY-ND 2.0

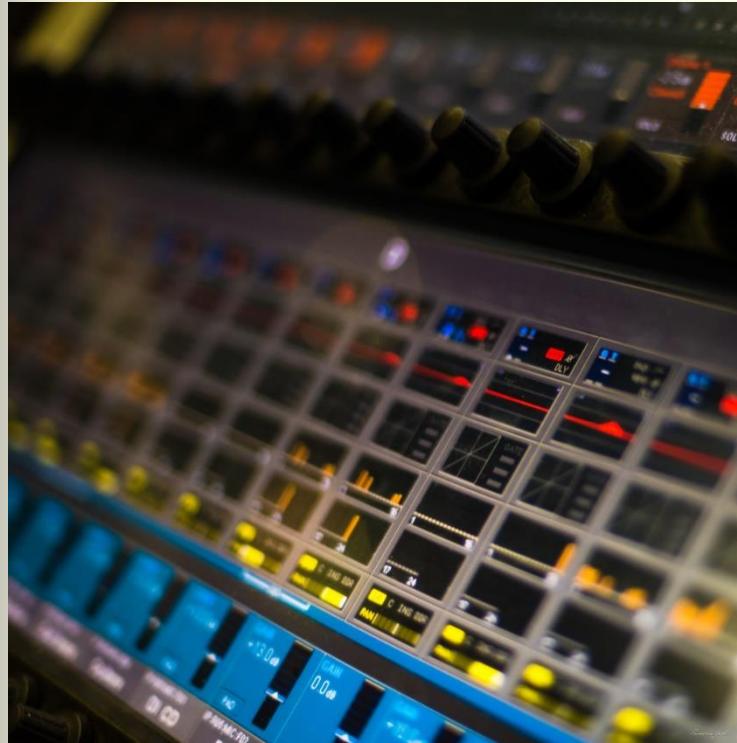
questions



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IAWM banner



"Console de mixage" by [Billy Elliot](#) under [CC0 1.0](#)



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IAWM banner

- IAWM overlay banner for the resource page for the 23 March 2011 capture of www.supremecourt.gov
- let's look at each of the interface elements



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IAWM banner: IAWM logo + home link

- clicking on the IAWM logo returns you to [IAWM home](#)



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IAWM banner: search box

- search box displays the web address of the web resource currently accessed in IAWM
- enter keywords to search archived home pages
- enter a web address to navigate to the calendar page showing archival coverage



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IAWM banner: captures range

- total number of captures of the resource currently accessed in IAWM is displayed
- click the link to return to the calendar page, showing archival coverage
- the dates of the first + last captures are displayed below the number of captures



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IAWM banner: timeline histogram

- the timeline histogram displays the relative number of captures over time
- each segment represents a year
- each black bar represents a month
- the red line corresponds to the month of the currently accessed capture



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IAWM banner: timeline histogram

- yellow highlighted date is the capture date of the currently accessed web resource
- to the left and right are temporal navigation links for different intervals – from top to bottom:
 - one month ago / one month ahead
 - last preceding capture / next successive capture
 - one year ago / one year ahead
- for less-frequently captured web resources, intervals may be longer than a month or year



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IAWM banner: sign in, help, hide banner, social media

- ➊ sign in button for IA user account
 - in IAWM context, provides additional features related to [Save Page Now](#)
- ➋ link to help documentation
- ➌ button to hide the toolbar
- ➍ social media sharing buttons
 - *About this capture* shows datetime offsets of embedded resources (to be reviewed later)



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As the story reaches a turning point, the speaking figure again quiets. The screen at the front of the room abruptly changes once more. You feel a sense of déjà vu...



"You are here." by Paul Thompson under CC BY-ND 2.0

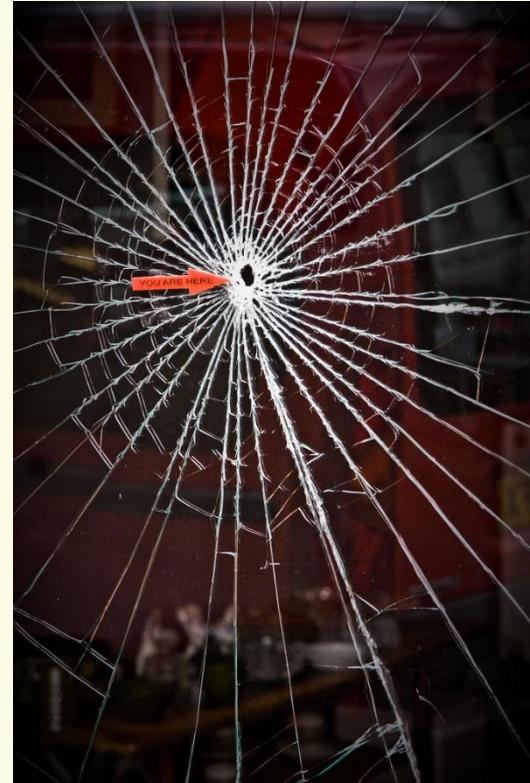
questions



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IAWM web address



"You Are Here" by Garry Knight under [CC BY 2.0](#)



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IAWM resource page

- let's take a look at the IAWM web address for the first capture for supremecourtus.gov, from 20 May 2000

The screenshot shows a Wayback Machine interface with the URL <http://supremecourtus.gov/> in the address bar. The date is set to MAY 20 2000. The page title is "Supreme Court of the United States". On the left, there is a search bar with "Search" and "Help" buttons. On the right, there is a large image of the Supreme Court building and a sidebar with links: ABOUT THE SUPREME COURT, DOCKET, CALENDAR AND SCHEDULES, BAR ADMISSIONS, COURT RULES, CASE HANDLING GUIDES, OPINIONS, ORDERS, VISITING THE COURT, PUBLIC INFORMATION, and RELATED WEBSITES. At the bottom, there are links for Site Map and Proprietary and Security Notice.

Internet Archive: "Supreme Court of the United States"



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IAWM web address structure

- **web.archive.org** – base web address of the IAWM software application

web.archive.org/web/20000520031109/supremecourtus.gov/



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IAWM web address structure

web.archive.org/web/20000520031109/supremecourtus.gov/

- **web.archive.org** – base web address of the IAWM software application
- **web** – the web content collection index or context
 - in IAWM, the “web” index includes all publicly accessible archived content, but other orgs’ Wayback access points may be configured differently



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IAWM web address structure

web.archive.org/web/20000520031109/supremecourtus.gov/

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- **web** – the web content collection index or context
 - in IAWM, the “web” index includes all publicly accessible archived content, but other orgs’ Wayback access points may be configured differently
- **20050520031109** – an [ISO 8601](#)-conformant datetime string, in format YYYYMMDDhhmmss (UTC), reflecting the precise date + time of capture of an individual web resource



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IAWM web address structure

web.archive.org/web/20000520031109/supremecourtus.gov/

- **web.archive.org** – base web address of the IAWM software application
- **web** – the web content collection index or context
 - in IAWM, the “web” index includes all publicly accessible archived content, but other orgs’ Wayback access points may be configured differently
- **20050520031109** – an ISO 8601-conformant datetime string, in format YYYYMMDDhhmmss (UTC), reflecting the precise date + time of capture of an individual web resource
- **supremecourtus.gov** – original web address of the archived resource



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The path forks...

As the story reaches a turning point, the speaking figure again quiets. The screen at the front of the room abruptly changes once more. You feel a sense of déjà vu...



"You are here." by Paul Thompson under CC BY-ND 2.0

questions



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Full-text search

- [native full-text search](#)
- [Collections tool + Archive-It full-text search](#)
- [crawl index API + local full-text search](#)



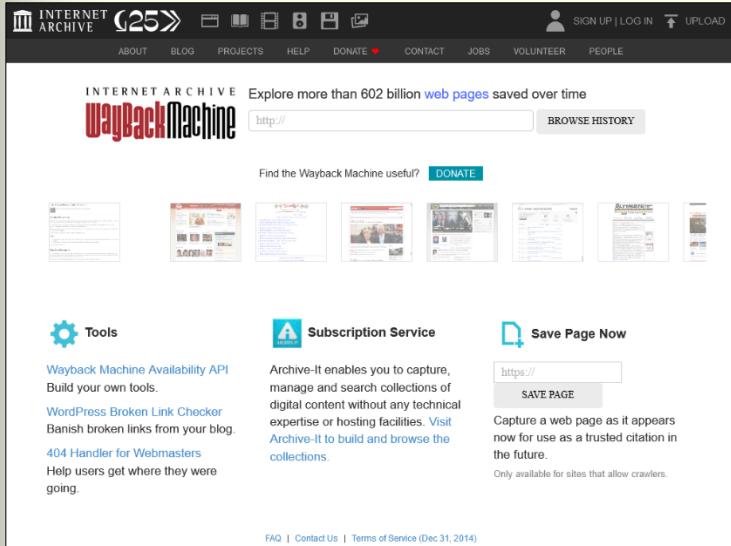
"Letters" by Susanne Nilsson under CC BY-SA 2.0



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Native full-text search



The screenshot shows the Internet Archive Wayback Machine homepage. At the top, there's a navigation bar with links for ABOUT, BLOG, PROJECTS, HELP, DONATE, CONTACT, JOBS, VOLUNTEER, and PEOPLE. On the far right, there are links for SIGN UP | LOG IN and UPLOAD. Below the navigation, the Internet Archive logo and a '25' icon are visible. The main heading is 'INTERNET ARCHIVE Explore more than 602 billion web pages saved over time' followed by the 'Wayback Machine' logo. A search bar with the placeholder 'http://...' and a 'BROWSE HISTORY' button are present. A message 'Find the Wayback Machine useful?' with a 'DONATE' button follows. Below this, there's a grid of thumbnail images showing various archived web pages. On the left, there's a section titled 'Tools' with links to 'Wayback Machine Availability API', 'Build your own tools.', 'WordPress Broken Link Checker', 'Banish broken links from your blog.', '404 Handler for Webmasters', and 'Help users get where they were going.' On the right, there's a section titled 'Subscription Service' with a link to 'Archive-It enables you to capture, manage and search collections of digital content without any technical expertise or hosting facilities. Visit Archive-It to build and browse the collections.' At the bottom, there's a 'Save Page Now' section with a link to 'https://...', a 'SAVE PAGE' button, and a note about capturing web pages for citation. The footer includes links for FAQ, Contact Us, and Terms of Service (Dec 31, 2014).

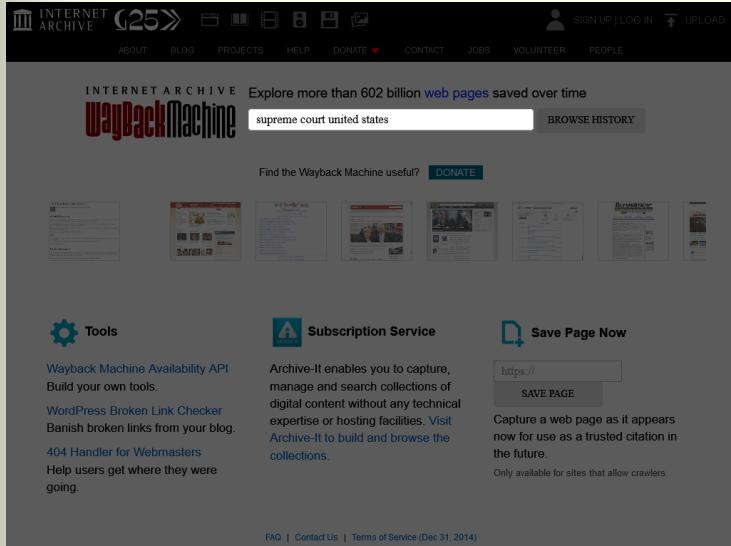
[Internet Archive: "Wayback Machine"](#)



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Native full-text search



The screenshot shows the Internet Archive Wayback Machine homepage. At the top, there's a navigation bar with links for ABOUT, BLOG, PROJECTS, HELP, DONATE, CONTACT, JOBS, VOLUNTEER, and PEOPLE. On the right, there are buttons for SIGN UP | LOG IN, UPLOAD, and a user profile icon. Below the navigation, the "INTERNET ARCHIVE" logo and a "25" anniversary banner are visible. A search bar contains the query "supreme court united states". To the right of the search bar are links for EXPLORE, BROWSE HISTORY, and DONATE. Below the search bar, a section titled "Explore more than 602 billion web pages saved over time" features the "Wayback Machine" logo. A grid of thumbnail images shows various archived web pages from the Supreme Court website. Further down, sections for "Tools" (Availability API, Broken Link Checker, 404 Handler), "Subscription Service" (Archive-It), and "Save Page Now" (with a URL input field and "SAVE PAGE" button) are displayed. At the bottom, there are links for FAQ, Contact Us, and Terms of Service (Dec 31, 2014).

[Internet Archive: "Wayback Machine"](#)



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Native full-text search: search results

The screenshot shows the Internet Archive Wayback Machine interface. At the top, there's a navigation bar with links for ABOUT, BLOG, PROJECTS, HELP, DONATE, CONTACT, JOBS, VOLUNTEER, and PEOPLE. A search bar contains the query "supreme court united states". Below the search bar, a "DONATE" button and the "Wayback Machine" logo are visible. The main content area displays search results for various URLs related to the Supreme Court:

- http://supremecourtus.gov/**
supreme court
16,448 captures from 2000 to 2015 | Site stats
- http://supremecourt.gov/**
u.s. supreme court
12,141 captures from 2010 to 2016 | Site stats
- http://scotusblog.com/**
scotusblog
103,093 captures from 2004 to 2016 | Site stats
- http://united-states-supreme-court.skyairline.net/**
united-states-supreme-court.skyairline.net
1 captures from 2005 to 2005 | Site stats
- http://scotuswiki.com/**
scotuswiki
1,606 captures from 2007 to 2016 | Site stats
- http://the-united-states-supreme-court-and-decisions-on-sex.penisencyclopedia.com/**
the united states supreme court and decisions on sex
1 captures from 2007 to 2008 | Site stats
- http://uscourts.gov/**
U.S.C. Internet Archive: "Wayback Machine"
114,791 captures from 2000 to 2016 | Site stats



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Native full-text search: top two results

The screenshot shows the Internet Archive Wayback Machine interface. At the top, there's a navigation bar with links for ABOUT, BLOG, PROJECTS, HELP, DONATE, CONTACT, JOBS, VOLUNTEER, and PEOPLE. The Wayback Machine logo is prominently displayed. A search bar at the top right contains the query "supreme court united states". Below the search bar, it says "Explore more than 603 billion web pages saved over time". The search results are listed in a grid format:

- http://supremecourtus.gov/**
supreme court
15,448 captures from 2000 to 2015 | Site stats
- http://supremecourt.gov/**
u.s. supreme court
12,141 captures from 2010 to 2016 | Site stats
- http://scotusblog.com/**
scotusblog
103,093 captures from 2004 to 2016 | Site stats
- http://united-states-supreme-court.skyairline.net/**
united-states-supreme-court.skyairline.net
1 captures from 2005 to 2005 | Site stats
- http://scotuswiki.com/**
scotuswiki
1,606 captures from 2007 to 2016 | Site stats
- http://the-united-states-supreme-court-and-decisions-on-sex.penisencyclopedia.com/**
the united states supreme court and decisions on sex
1 captures from 2007 to 2008 | Site stats
- http://uscourts.gov/**
u.s. courts
114,791 captures from 2000 to 2016 | Site stats

A blue box highlights the last result: "http://uscourts.gov/ u.s. courts 114,791 captures from 2000 to 2016 | Site stats".



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Native full-text search: top two results

The screenshot shows the Internet Archive Wayback Machine interface. At the top, there's a navigation bar with links for ABOUT, BLOG, PROJECTS, HELP, DONATE, CONTACT, JOBS, VOLUNTEER, and PEOPLE. There are also icons for SIGN UP, LOG IN, UPLOAD, and a search bar. The main search bar contains the query "supreme court united states". Below the search bar, it says "Explore more than 603 billion web pages saved over time". The search results are listed in a grid format:

- http://supremecourtus.gov/**
supreme court
16,448 captures from 2000 to 2015 | Site stats
- http://supremecourt.gov/**
u.s. supreme court
12,141 captures from 2010 to 2016 | Site stats
- http://scotusblog.com/**
scotusblog
103,093 captures from 2004 to 2016 | Site stats
- http://united-states-supreme-court.skyairline.net/**
united-states-supreme-court.skyairline.net
1 captures from 2005 to 2005 | Site stats
- http://scotuswiki.com/**
scotuswiki
1,606 captures from 2007 to 2016 | Site stats
- http://the-united-states-supreme-court-and-decisions-on-sex.penisencyclopedia.com/**
the united states supreme court and decisions on sex
1 captures from 2007 to 2008 | Site stats
- http://uscourts.gov/**
U.S.
114,791 captures from 2001 to 2016 | Site stats

At the bottom right of the search results, there's a link: "Internet Archive: 'Wayback Machine'".

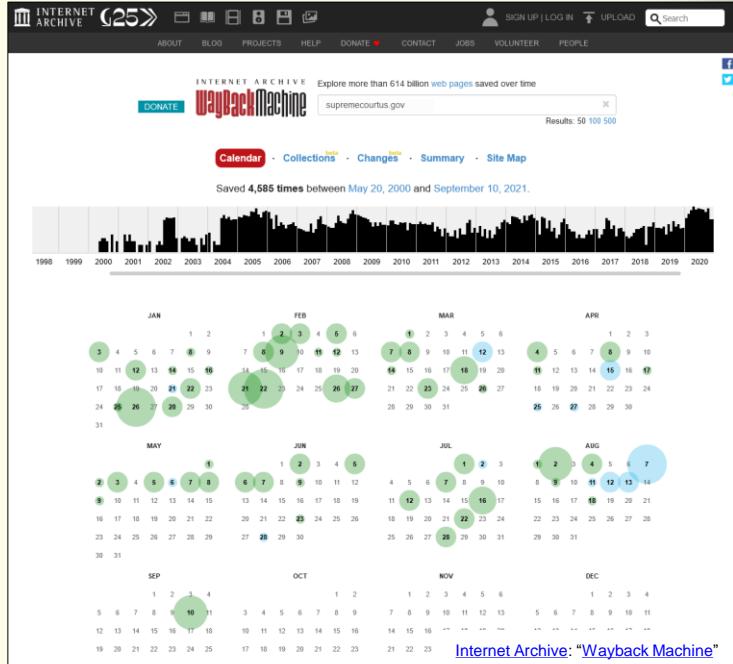


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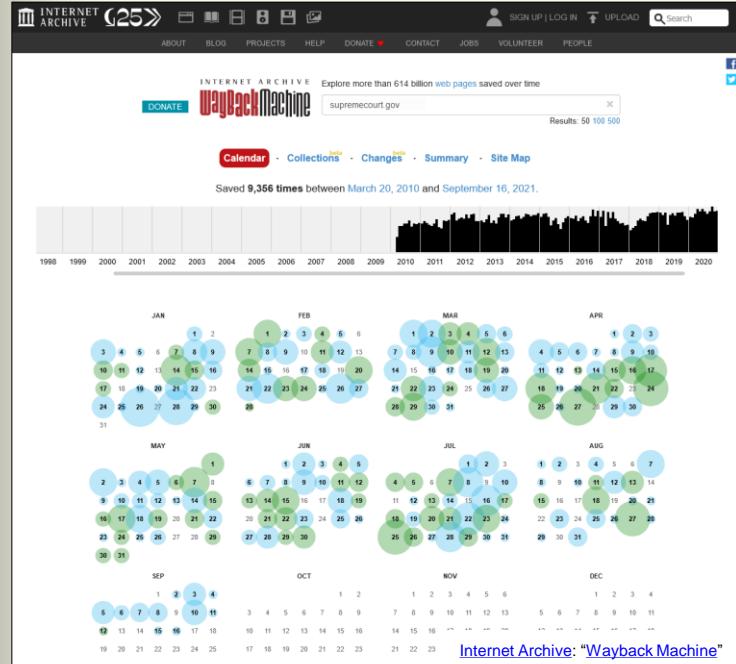
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IAWM calendar pages

supremecourtus.gov



supremecourt.gov

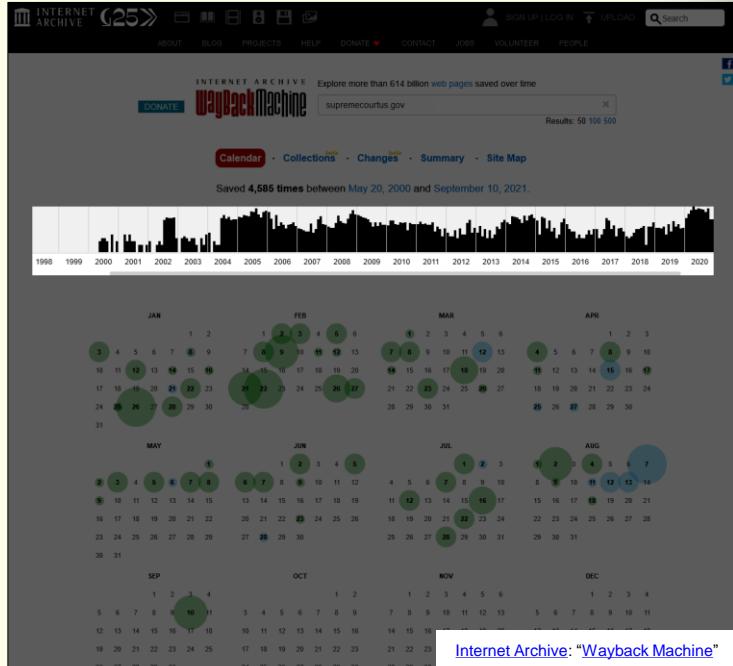


#AALL22

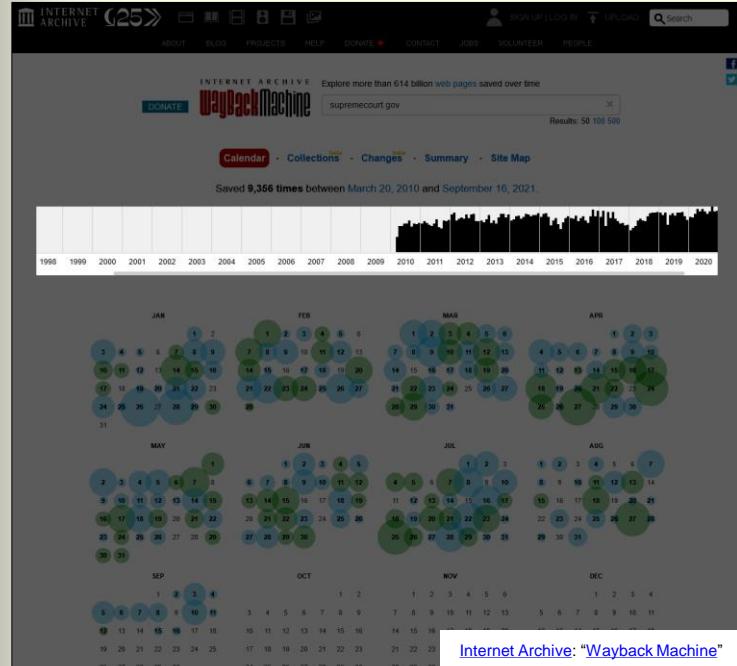
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IAWM calendar pages

supremecourtus.gov



supremecourt.gov



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IAWM resource page

- this is the first capture for supremecourtus.gov, from 20 May 2000

http://supremecourtus.gov/ Go APR MAY JUN
20 1999 2000 2001 About this capture

4,585 captures
20 May 2000 - 10 Sep 2021

Supreme Court of the United States



Search for: Search Help



- ABOUT THE SUPREME COURT
- DOCKET
- CALENDAR AND SCHEDULES
- BAR ADMISSIONS
- COURT RULES
- CASE HANDLING GUIDES
- OPINIONS
- ORDERS
- VISITING THE COURT
- PUBLIC INFORMATION
- RELATED WEBSITES

[Site Map](#)
[Proprietary and Security Notice](#)

Internet Archive: "Supreme Court of the United States"



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The path forks...

As the story reaches a turning point, the speaking figure again quiets. The screen at the front of the room abruptly changes once more. You feel a sense of déjà vu...



"You are here." by Paul Thompson under CC BY-ND 2.0

questions



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Collections tool + Archive-It full-text search



>littleyiye<

"sealed seeds" by >littleyiye< under [CC BY 2.0](#)



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Collections tool

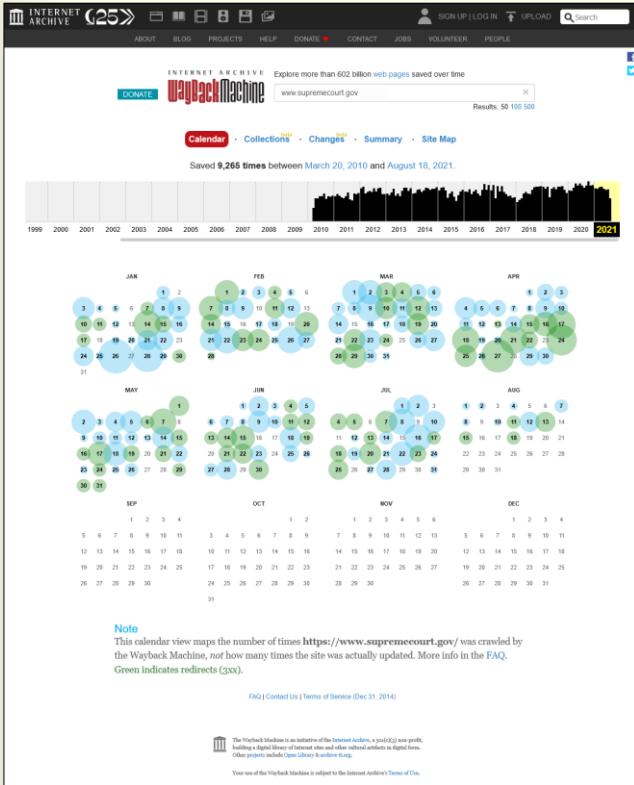
- IAWM captures have diverse provenance
 - [web-wide crawls](#)
 - [contract crawls](#)
 - [Archive-It crawls](#)
 - [Alexa donations](#)
 - [ArchiveTeam crawls](#)
 - [Save Page Now](#)
- Collections tool shows sources of captures
- why does provenance matter?
 - some sources have more focused crawls, indicating quality
 - some sources offer additional search + discovery options



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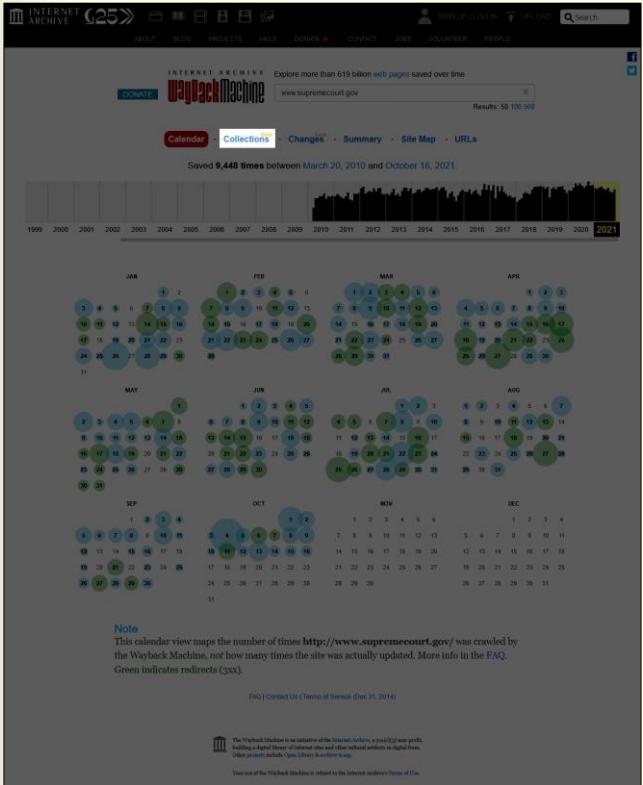
IAWM calendar page



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IAWM calendar page



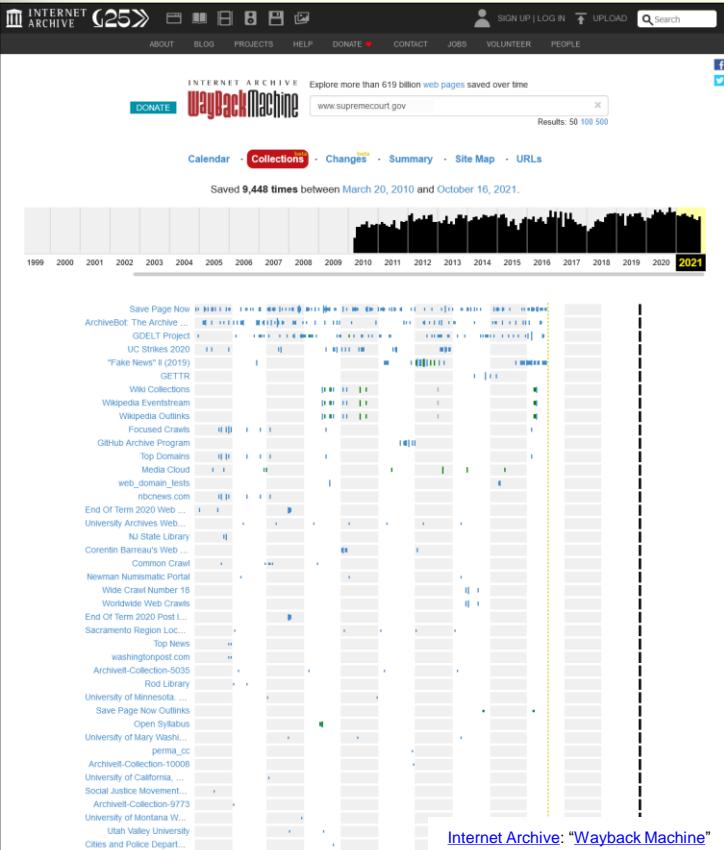
Internet Archive: "Wayback Machine"



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Collections tool

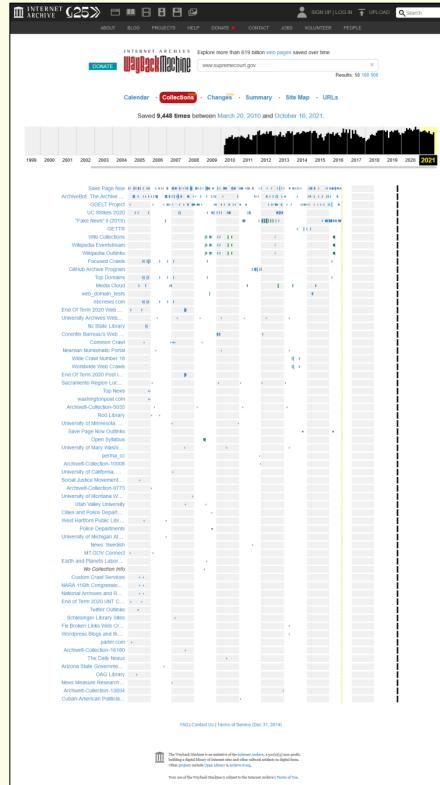


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Collections tool

- hover over individual collection names
- look for string in link target web address: *ArchiveIt-Collection*
- Archive-It is IA's subscription web archiving service
- used by 100s of orgs to run selective web crawls + curate topical collections
- has its own discovery portal w/ full-text search



Internet Archive: "Wayback Machine"



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Archive-It full-text search

The screenshot shows the Archive-It website's search interface. At the top, there is a navigation bar with links for HOME, EXPLORE, LEARN MORE, and CONTACT US. To the right of the navigation bar is a logo for "The Internet Archive" and social media links for Facebook, Twitter, and LinkedIn. A "Login" button is also present.

The main content area is titled "Explore All Archives". It features a search bar with placeholder text "Enter search terms here" and a "Search" button. Below the search bar are several search filters:

- "Contains all of:" with a text input field.
- "Exact phrase:" with a text input field.
- "Not containing:" with a text input field.
- "From the Host:" with a text input field and example "ex. www.archive-it.org".
- "Results per host:" with a dropdown menu set to "1 (default)".
- "File format:" with a dropdown menu set to "All formats".
- "Capture date range:" with dropdown menus for "From:" and "To:".

At the bottom of the search form are two buttons: "Advanced Search" and "Help with Search".

The footer of the page includes the Archive-It logo, the text "Built at the Internet Archive", and a brief description of the service. It also features links for "Home", "Learn More", "Contact Us", and social media icons for Facebook, Twitter, and LinkedIn.

[Archive-It: "Explore Archived Content"](#)



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Archive-It full-text search

The screenshot shows the "Explore All Archives" page of the Archive-It website. At the top, there's a navigation bar with links for HOME, EXPLORE, LEARN MORE, and CONTACT US. To the right of the navigation is a logo for "The leading web archiving service for collecting and accessing cultural heritage on the web. Built at the Internet Archive". Below the navigation, there's a search bar labeled "Enter search terms here" with a "Search" button and a "Clear" link. A section titled "Advanced Search" contains various search filters: "Contains all of:" (with a field containing "press release"), "Exact phrase" (with a field containing "press release"), "Not containing:" (with an empty field), "From the Host" (with a field containing "www.supremecourt.gov"), and dropdown menus for "Results per host" (set to "Unlimited"), "File format" (set to "All formats"), and "Capture date range" (with dropdowns for "From" and "To"). There's also a "Advanced Search" button and a "Help with Search" link. The bottom of the page features a footer with the Archive-It logo, a brief description of the service, and links for "Home", "Learn More", "Contact Us", and social media icons.

[Archive-It: "Explore Archived Content"](#)



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Archive-It full-text search



HOME EXPLORE LEARN MORE CONTACT US

The leading web archiving service
for collecting and accessing
cultural heritage on the web
Built at the Internet Archive

Explore All Archives

Enter a search term on the right to search the text within the archived pages. Or for more search options, use the Advanced Search options below.

Enter search terms here

Advanced Search

Contains all of:

Exact phrase:

Not containing:

From the Host:

Results per host:

File format:

Capture date range: From: To:

[Help with Search](#)

Page 1 of 12 (231 Total Results) [Next Page ▶](#)

Home - Supreme Court of the United States
Collection: California Political Blogs By University of California Libraries
URL: <http://www.supremecourt.gov/>
This text was captured on Apr 21, 2013 [Show All Captures](#)
Press release regarding the DOMA and Prop 8 arguments audio and transcript release
Content: application/xhtml+xml Size: 78 KB

Press Release 04/29/13
Collection: Georgetown Law Center By Georgetown Law Library
URL: <http://www.supremecourt.gov/crules/2013revisedrules.pdf>
This text was captured on May 02, 2013 [Show All Captures](#)
FOR IMMEDIATE RELEASE For Further Information Contact: April 29, 2013 Kathy Arberg at (202) 479-3211 The Supreme Court of the United States has adopted a revised version of the Rules of the Court.
Content: application/pdf Size: 145 KB

Home - Supreme Court of the United States
Collection: California Political Blogs By University of California Libraries
URL: <http://www.supremecourt.gov/default.aspx>
This text was captured on Mar 22, 2013 [Show All Captures](#)
Peikley, Robert (12-32) What's New Press release regarding the DOMA and Prop 8 arguments audio and transcript release
Content: application/xhtml+xml Size: 82 KB

Press Releases - 10/25/04 - Supreme Court of the United States
Collection: 2013 Supreme Court Hearings on DOMA/Prop 8 By Internet Archive Global Events
URL: http://www.supremecourt.gov/publicinfo/press/viewpressreleases.aspx?fileName=pr_10-25-04.html
This text was captured on Apr 14, 2013 [Show All Captures](#)
Untitled Document For Immediate Release For Further Information Contact: October 25, 2004 Kathleen L. Arberg Phone: (202) 479-3211 Press Release Regarding Chief Justice William H.
Content: application/xhtml+xml Size: 49 KB

The Supreme Court Fellows Program - Press Release - Stephanie Tai - Supreme Court of the United States

[Archive-It: "https://archive-it.org/explore/?show=ArchivedPages..."](#)



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"You are here." by Paul Thompson under CC BY-ND 2.0

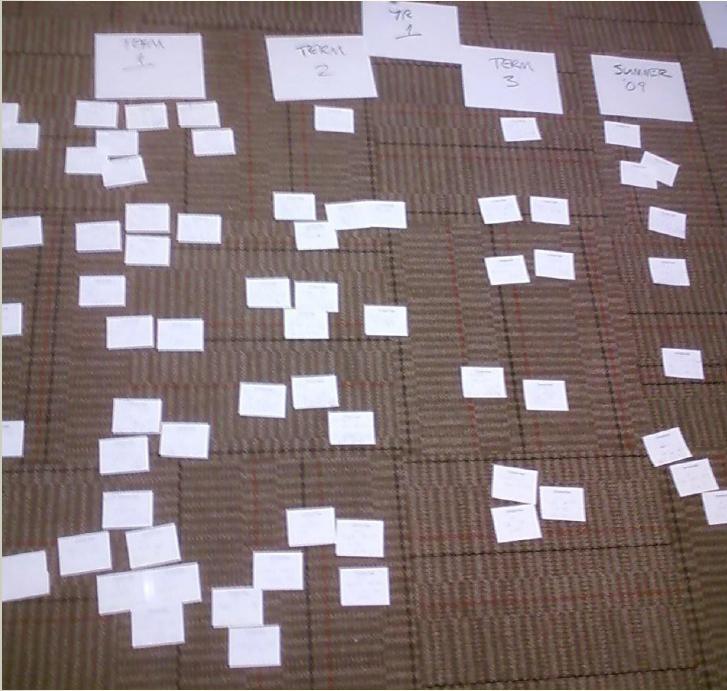
questions



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Crawl index API + local full-text search



"External Memory - Analog saved me" by [Christmas w/a K](#) under [CC BY-SA 2.0](#)



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IAWM resource page

- let's pick up again w/ the 20 May 2000 capture of supremecourtus.gov

http://supremecourtus.gov/ Go APR MAY JUN
20 1999 2000 2001 About this capture

4,585 captures
20 May 2000 - 10 Sep 2021

Supreme Court of the United States



Search for: Search Help



- ABOUT THE SUPREME COURT
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- CALENDAR AND SCHEDULES
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[Site Map](#)
[Proprietary and Security Notice](#)

Internet Archive: "Supreme Court of the United States"



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IAWM resource page

- let's look at the web address path for the *Opinions* section of the website



Internet Archive: "Supreme Court of the United States"



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IAWM resource page

http://supremecourtus.gov/ Go APR MAY JUN
20 1999 2000 2001 About this capture

4,585 captures
20 May 2000 - 10 Sep 2021

Supreme Court of the United States

Search for: Search Help

ABOUT THE SUPREME COURT
DOCKET
CALENDAR

COURT RULES
CASE HANDLING GUIDES
OPINIONS
ORDERS
VISITING THE COURT
PUBLIC INFORMATION
RELATED WEBSITES

www.supremecourtus.gov/opinions/opinions.html



Site Map
Proprietary and Security Notice

Internet Archive: "Supreme Court of the United States"



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Retrieving a selective IAWM index of archived resources

web.archive.org/web/*/www.supremecourtus.gov/opinions/*

- “*” character functions as a wildcard operator (i.e., *match any*)
- wildcard in place of the datetime string tells IAWM, *for any capture date*
- wildcard suffix to the original web address path tells IAWM, *for any archived resource below this path*
- combined, this asks IAWM to show all archived web resources in its index, for any date, below the path:
www.supremecourtus.gov/opinions/



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Retrieving a selective IAWM index of archived resources

INTERNET ARCHIVE 25 ABOUT BLOG PROJECTS HELP DONATE CONTACT JOBS VOLUNTEER PEOPLE

SIGN UP | LOG IN UPLOAD Search

INTERNET ARCHIVE Wayback Machine www.supremecourtus.gov/opinions/ Go Wayback!

1,372 URLs have been captured for this domain.

Filter results (i.e., *.txt): [URL or MIME Type]

URL	MIME TYPE	FROM	TO	CAPTURES	DUPLEXES	UNIQUES
http://supremecourtus.gov/opinions/05pdf/04-1477.pdf	application/pdf	May 9, 2006	Mar 30, 2021	25	20	5
http://supremecourtus.gov/opinions/05pdf/05-18.pdf	application/pdf	Jul 25, 2006	Feb 13, 2021	44	40	4
http://supremecourtus.gov/opinions/05pdf/05-352.pdf	application/pdf	Jul 25, 2006	Feb 11, 2021	33	28	5
http://supremecourtus.gov/opinions/05pdf/05-416.pdf	application/pdf	Jul 25, 2006	Apr 7, 2019	23	18	5
http://supremecourtus.gov/opinions/06pdf/05-1126.pdf	application/pdf	Jun 25, 2007	Mar 14, 2021	64	59	5
http://supremecourtus.gov/opinions/06pdf/05-1272.pdf	application/pdf	Oct 11, 2007	Mar 14, 2021	15	10	5
http://supremecourtus.gov/opinions/06pdf/05-1575.pdf	application/pdf	Jul 9, 2007	Oct 23, 2020	15	11	4
http://supremecourtus.gov/opinions/06pdf/06-116.pdf	application/pdf	Apr 26, 2008	Dec 22, 2016	9	4	5
http://supremecourtus.gov/opinions/06pdf/06-134.pdf	application/pdf	Jul 9, 2007	Nov 5, 2017	14	10	4
http://supremecourtus.gov/opinions/06pdf/06-1195.pdf	application/pdf	Oct 11, 2007	Apr 11, 2021	10	6	4
http://supremecourtus.gov/opinions/07pdf/06-1195.pdf	application/pdf	Jan 12, 2008	Sep 9, 2021	286	281	5
http://supremecourtus.gov/opinions/07pdf/06-1457.pdf	application/pdf	Sep 16, 2008	Jan 29, 2021	16	12	4
http://supremecourtus.gov/opinions/07pdf/06-1646.pdf	application/pdf	Sep 16, 2008	Mar 9, 2021	27	13	4
http://supremecourtus.gov/opinions/07pdf/06-1717.pdf	application/pdf	Sep 16, 2008	Apr 11, 2021	83	79	4
http://supremecourtus.gov/opinions/07pdf/06-1766.pdf	application/pdf	Mar 6, 2008	Mar 14, 2021	38	35	3
http://supremecourtus.gov/opinions/07pdf/06-984.pdf	application/pdf	Apr 8, 2008	Apr 27, 2021	142	138	4
http://supremecourtus.gov/opinions/07pdf/06-984a.pdf	application/pdf	Sep 16, 2008	Apr 7, 2019	10	8	2
http://supremecourtus.gov/opinions/07pdf/07-21.pdf	application/pdf	May 10, 2008	Mar 23, 2021	76	72	4
http://supremecourtus.gov/opinions/07pdf/07-210.pdf	application/pdf	Sep 16, 2008	Apr 10, 2021	13	9	4
http://supremecourtus.gov/opinions/07pdf/07-312.pdf	application/pdf	Sep 16, 2008	Apr 11, 2021	12	8	4
http://supremecourtus.gov/opinions/07pdf/07-320.pdf	application/pdf	Sep 16, 2008	Nov 27, 2020	39	34	5
http://supremecourtus.gov/opinions/07pdf/07-371.pdf	application/pdf	Sep 16, 2008	Apr 11, 2021	74	70	4
http://supremecourtus.gov/opinions/07pdf/07-411.pdf	application/pdf	Sep 16, 2008	May 7, 2021	14	11	3
http://supremecourtus.gov/opinions/07pdf/07-455.pdf	application/pdf	Sep 5, 2008	Apr 10, 2021	15	11	4
http://supremecourtus.gov/opinions/07pdf/07-552.pdf	application/pdf	Sep 16, 2008	Feb 10, 2021	25	21	4
http://supremecourtus.gov/opinions/07pdf/07-6053.pdf	application/pdf	Sep 16, 2008	Apr 1, 2021	35	31	4
http://supremecourtus.gov/opinions/07pdf/07-818.pdf	application/pdf	Sep 17, 2008	Sep 5, 2017	10	8	2
http://supremecourtus.gov/opinions/07pdf/07-9267.pdf	application/pdf	Sep 17, 2008	Sep 5, 2017	9	7	2
http://supremecourtus.gov/opinions/08pdf/07-10374.pdf	text/html	Sep 16, 2008	Aug 14, 2009	16	14	2
http://supremecourtus.gov/opinions/08pdf/07-1090.pdf	application/pdf	Sep 26, 2009	Mar 9, 2021	5	3	2
http://supremecourtus.gov/opinions/08pdf/07-6309.pdf	application/pdf	Aug 26, 2009	Aug 14, 2009	Internet Archive: "Wayback Machine"		



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Filter by string (“slip”) found in web address

INTERNET ARCHIVE 25 Years

ABOUT BLOG PROJECTS HELP DONATE CONTACT JOBS VOLUNTEER PEOPLE

INTERNET ARCHIVE Wayback Machine www.supremecourtus.gov/opinions/ Go Wayback!

1,372 URLs have been captured for this domain.

Filter results (I.e., “.txt”): [slip]

URL	MIME TYPE	FROM	TO	CAPTURES	DUPLICATES	UNIQUES
http://supremecourtus.gov/opinions/sliplists/s553pt2.html	text/html	Sep 17, 2008	Feb 15, 2019	9	7	2
http://supremecourtus.gov/opinions/sliplists/s554pt1.html	text/html	Sep 17, 2008	Oct 23, 2009	9	8	1
http://supremecourtus.gov/opinions/sliplists/s554pt2.html	text/html	Sep 17, 2008	Oct 23, 2009	10	9	1
http://supremecourtus.gov/opinions/sliplists/s555pt2.html	text/html	Oct 23, 2009	Oct 23, 2009	1	0	1
http://supremecourtus.gov/opinions/sliplists/s556pt1.html	text/html	May 11, 2009	Jan 28, 2010	4	3	1
http://supremecourtus.gov/opinions/sliplists/s556pt2.html	text/html	Oct 23, 2009	Jan 28, 2010	3	2	1
http://supremecourtus.gov/opinions/sliplists/s557pt1.html	text/html	Oct 23, 2009	Jan 28, 2010	3	2	1
http://supremecourtus.gov/80/opinions/03slipopinion.html	text/html	Dec 6, 2003	Apr 27, 2021	233	216	17
http://supremecourtus.gov/80/opinions/sliplists/s53pt2.html	text/html	Jan 26, 2003	Sep 23, 2008	16	12	4
http://supremecourtus.gov/80/opinions/sliplists/s541pt1.html	text/html	Apr 17, 2004	Aug 2, 2007	15	11	4
http://supremecourtus.gov/80/opinions/sliplists/s558pt1.html	text/html	Jan 27, 2010	Jan 29, 2010	2	1	1
http://www.supremecourtus.gov/opinions/03slipopinion.htm	unk	Feb 11, 2021	Feb 11, 2021	1	0	1
http://www.supremecourtus.gov/opinions/03slipopinion.html	unk	Jun 10, 2021	Jun 10, 2021	1	0	1
http://www.supremecourtus.gov/opinions/03slipopinion.html_	unk	May 9, 2021	May 7, 2021	3	2	1
http://www.supremecourtus.gov/opinions/01slipopinion.html	unk	Apr 11, 2021	Apr 11, 2021	1	0	1
http://www.supremecourtus.gov/opinions/03slipopinion.html	unk	Jan 25, 2021	Jan 25, 2021	1	0	1
http://www.supremecourtus.gov/opinions/03slipopinion.html%20%80%99	unk	Mar 1, 2021	Mar 8, 2021	2	1	1
http://www.supremecourtus.gov/opinions/04slipopinion.html	unk	Mar 14, 2021	Mar 14, 2021	1	0	1
http://www.supremecourtus.gov/opinions/04slipopinion.html	unk	Mar 9, 2021	Mar 9, 2021	1	0	1
http://www.supremecourtus.gov/opinions/04slipopinion.html=	unk	Apr 1, 2021	Apr 11, 2021	1	0	1
http://www.supremecourtus.gov/opinions/04slipopinion.html=20	unk	Apr 11, 2021	Apr 11, 2021	1	0	1
http://www.supremecourtus.gov/opinions/04slipopinion.html_=20	unk	Jan 1, 2021	Jan 25, 2021	1	0	1
http://www.supremecourtus.gov/opinions/05slipopin=	unk	Feb 27, 2021	Feb 27, 2021	1	0	1
http://www.supremecourtus.gov/opinions/05slipopin=	unk	Jun 8, 2021	Jun 8, 2021	2	1	1
http://www.supremecourtus.gov/opinions/05slipopin=	unk	Jun 9, 2021	Jun 9, 2021	1	0	1
http://www.supremecourtus.gov/opinions/05slipopin.html=20	unk	May 5, 2021	May 5, 2021	2	1	1
http://www.supremecourtus.gov/opinions/06slipopin.html	unk	Feb 11, 2021	Feb 13, 2021	1	0	1
http://www.supremecourtus.gov/opinions/07slipopin.html	unk	Feb 27, 2021	Feb 27, 2021	2	1	1
http://www.supremecourtus.gov/opinions/08slipopin.html	text/html	Sep 16, 2006	Apr 27, 2021	73	57	16
http://www.supremecourtus.gov/opinions/09slipopin.html	unk	Apr 22, 2019	Apr 22, 2019	1	0	1
http://www.supremecourtus.gov/opinions/09slipopin.html	unk	Sep 17, 2012	Sep 17, 2012	1	0	1

Internet Archive: “Wayback Machine”



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Filter by string (“slip”) found in web address

INTERNET ARCHIVE 25 ABOUT BLOG PROJECTS HELP DONATE CONTACT JOBS VOLUNTEER PEOPLE

INTERNET ARCHIVE Wayback Machine www.supremecourt.gov/opinions/ Go Wayback!

1,372 URLs have been captured for this domain.

Filter results (i.e., “.txt”):

URL	MIME TYPE	FROM	TO	CAPTURES	DUPES	UNQNS
http://supremecourt.gov/opinions/slipsts/s553pt2.html	text/html	Sep 17, 2008	Feb 15, 2019	9	7	2
http://supremecourt.gov/opinions/slipsts/s554pt1.html	text/html	Sep 17, 2008	Oct 23, 2009	9	8	1
http://supremecourt.gov/opinions/slipsts/s554pt2.html	text/html	Sep 17, 2008	Oct 23, 2009	10	9	1
http://supremecourt.gov/opinions/slipsts/s555pt2.html	text/html	Sep 17, 2008	Oct 23, 2009	1	0	1
http://supremecourt.gov/opinions/slipsts/s556pt1.html	text/html	May 11, 2009	Jan 28, 2010	4	3	1
http://supremecourt.gov/opinions/slipsts/s556pt2.html	text/html	Oct 23, 2009	Jan 28, 2010	3	2	1
http://supremecourt.gov/opinions/slipsts/s557pt1.html	text/html	Oct 23, 2009	Jan 28, 2010	3	2	1
http://supremecourt.gov/80/opinions/03slipopinion.html	text/html	Dec 4, 2003	Apr 27, 2021	233	216	17
http://supremecourt.gov/80/opinions/slipsts/s53pt2.html	text/html	Jan 28, 2003	Sep 23, 2006	16	12	4
http://supremecourt.gov/80/opinions/slipsts/s54pt1.html	text/html	Apr 17, 2004	Aug 2, 2007	15	11	4
http://supremecourt.gov/80/opinions/slipsts/s558pt1.html	text/html	Jan 27, 2010	Jan 28, 2010	2	1	1
http://www.supremecourt.gov/opinions/03slipopinion.htm	unk	Feb 10, 2021	Feb 11, 2021	1	0	1
http://www.supremecourt.gov/opinions/03slipopinion.html	unk	Jun 10, 2021	Jun 10, 2021	1	0	1
http://www.supremecourt.gov/opinions/03slipopinion.html_	unk	May 5, 2021	May 7, 2021	3	2	1
http://www.supremecourt.gov/opinions/03slipopinion.html_	unk	Apr 11, 2021	Apr 11, 2021	1	0	1
http://www.supremecourt.gov/opinions/03slipopinion.html_	unk	Jan 25, 2021	Jan 25, 2021	1	0	1
http://www.supremecourt.gov/opinions/03slipopinion.html%E2%80%99	unk	Mar 6, 2021	Mar 6, 2021	2	1	1
http://www.supremecourt.gov/opinions/04slipopinion.html	unk	Mar 14, 2021	Mar 14, 2021	1	0	1
http://www.supremecourt.gov/opinions/04slipopinion.html	unk	Mar 9, 2021	Mar 9, 2021	1	0	1
http://www.supremecourt.gov/opinions/04slipopinion.html=	unk	Apr 11, 2021	Apr 11, 2021	1	0	1
http://www.supremecourt.gov/opinions/04slipopinion.html=20	unk	Apr 11, 2021	Apr 11, 2021	1	0	1
http://www.supremecourt.gov/opinions/04slipopinion.html_=20	unk	Jan 10, 2021	Jan 25, 2021	1	0	1
http://www.supremecourt.gov/opinions/04slipopinion.html_=20	unk	Feb 27, 2021	Feb 27, 2021	1	0	1
http://www.supremecourt.gov/opinions/05slipopin	unk	Jun 8, 2021	Jun 8, 2021	2	1	1
http://www.supremecourt.gov/opinions/05slipopin	unk	Jun 9, 2021	Jun 9, 2021	1	0	1
http://www.supremecourt.gov/opinions/05slipopin.html=20	unk	May 5, 2021	May 5, 2021	2	1	1
http://www.supremecourt.gov/opinions/06slipopin.html	unk	Feb 10, 2021	Feb 13, 2021	1	0	1
http://www.supremecourt.gov/opinions/07slipopin.html	unk	Feb 27, 2021	Feb 27, 2021	2	1	1
http://www.supremecourt.gov/opinions/08slipopin.html	text/html	Sep 16, 2006	Apr 9, 2021	73	57	16
http://www.supremecourt.gov/opinions/09slipopin.html	unk	Apr 22, 2019				
http://www.supremecourt.gov/opinions/99slipopin.html	unk	Sep 17, 2012				

Internet Archive: “Wayback Machine”



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Machine-readable indexes via Wayback CDX Server API

- CDX = Crawl inDeX
- metadata about IAWM contents
- structured data, for machine processing
- filter + retrieve with specially-formatted web address, described in [API documentation](#)
- output can be reformatted into a download manifest for bulk retrieval (e.g., using [wget](#))
- full text of downloaded webpages can be searched locally (e.g., using [DocFetcher](#))



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The path forks...

As the story reaches a turning point, the speaking figure again quiets. The screen at the front of the room abruptly changes once more. You feel a sense of déjà vu...



"You are here." by Paul Thompson under CC BY-ND 2.0

questions



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Other IAWM features

- [Changes tool](#)
- [“editing” IAWM contents](#)



[“ancillary dreams” by mandam](#) under [CC BY 2.0](#)



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Changes tool



"Getting my succulents and cacti on the path to being outdoors this summer. Pachyphytum in bloom." by [Ron Frazier](#) under [CC BY 2.0](#)



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Changes tool

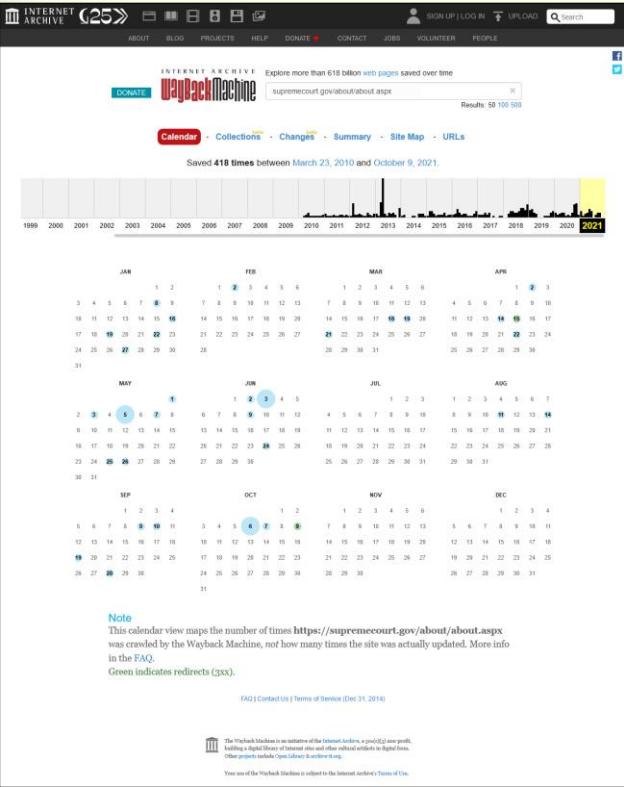
- flags differences in text b/t 2 captures of same web page
- caveats:
 - doesn't consider non-textual elements
 - doesn't account for intermediate changes
 - changes may not matter for legal issue
- use to:
 - identify when a web page changed
 - quickly visualize the text changes over time
 - establish when web page text was substantially identical



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IAWM calendar page



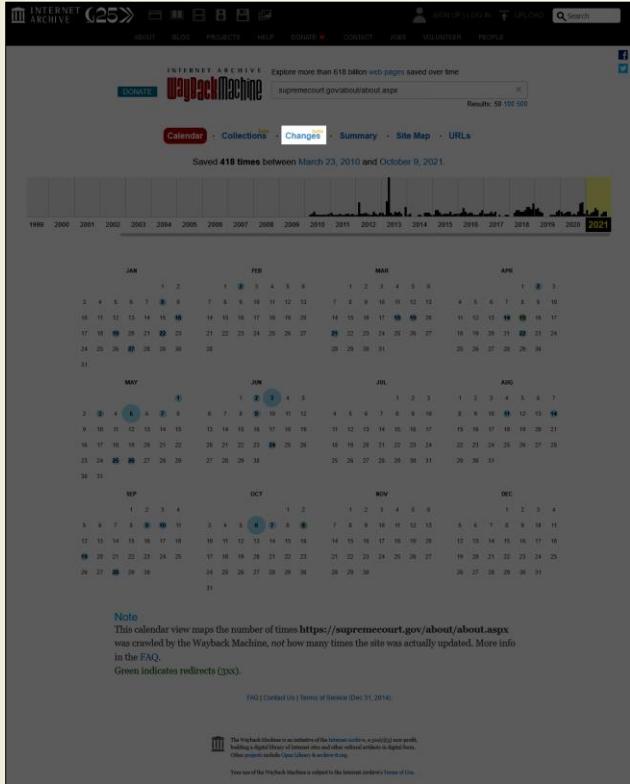
Internet Archive: "Wayback Machine"



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IAWM calendar page



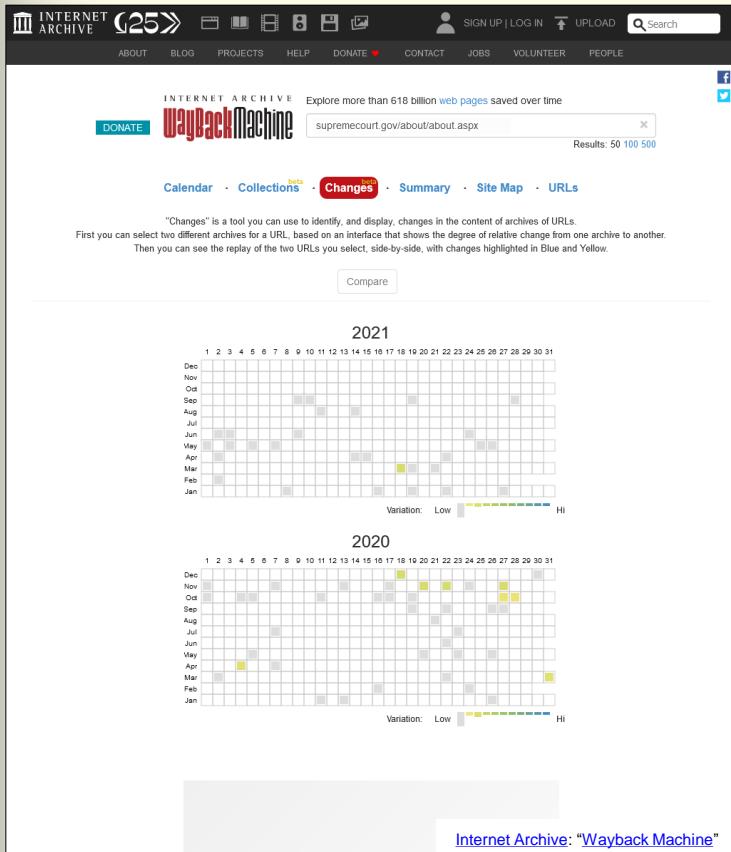
Internet Archive: "Wayback Machine"



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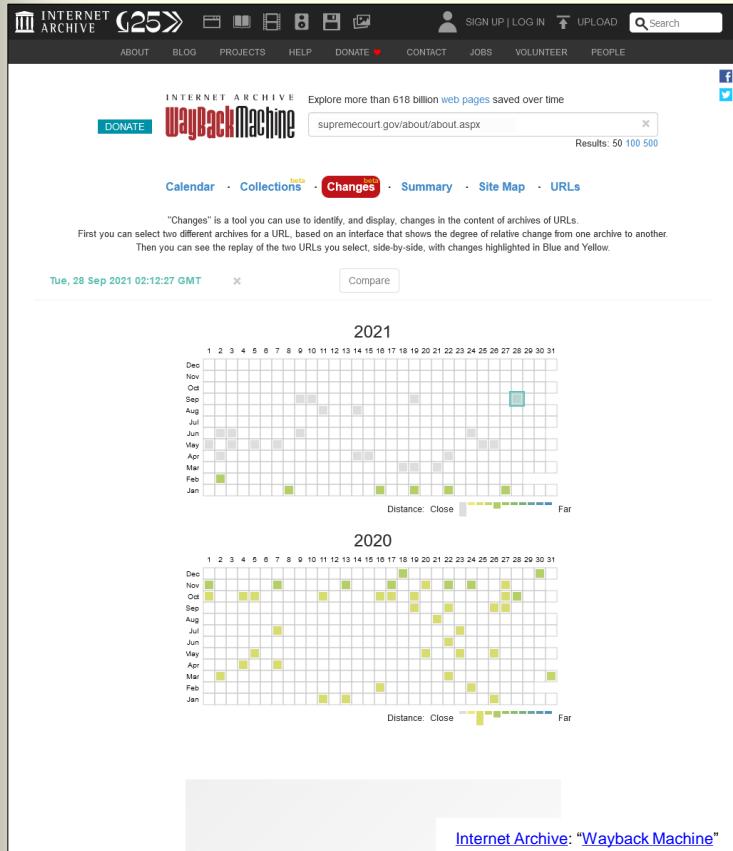
Changes tool



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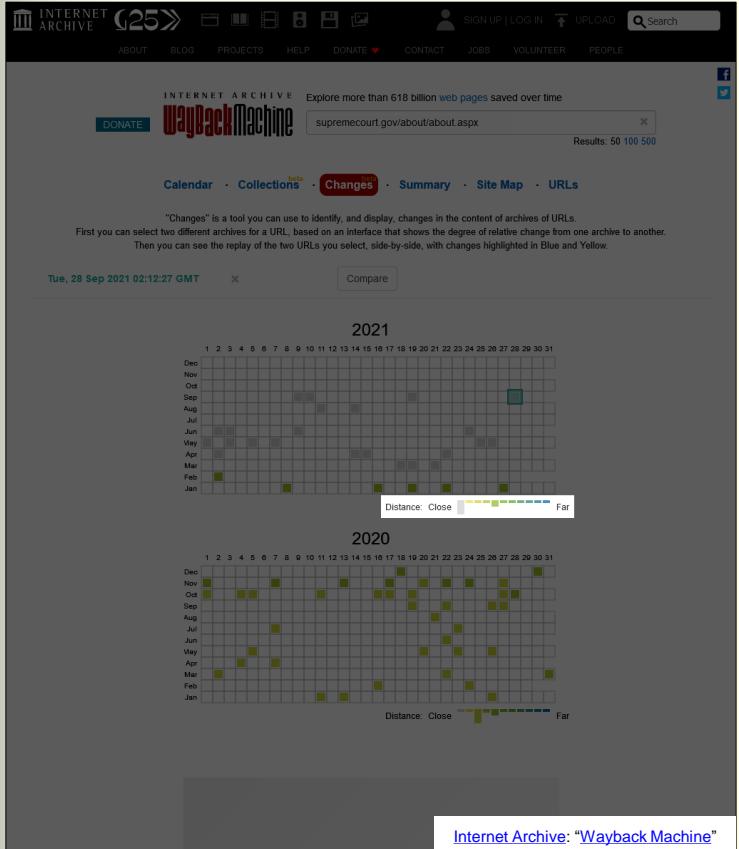
Changes tool: choose 28 September 2021 capture



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Changes tool: degree of difference key



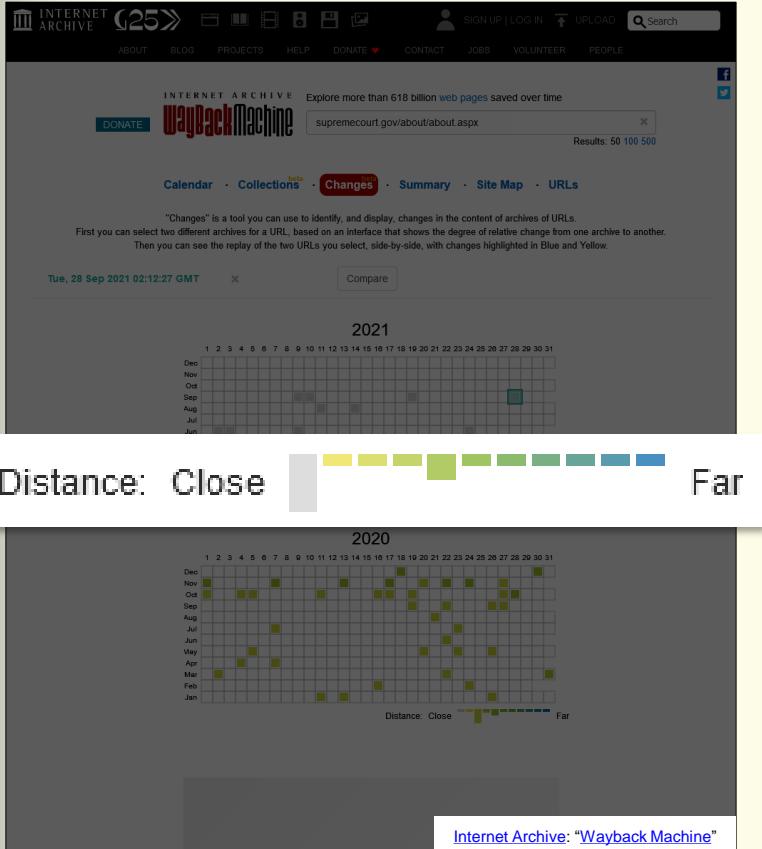
Internet Archive: "Wayback Machine"



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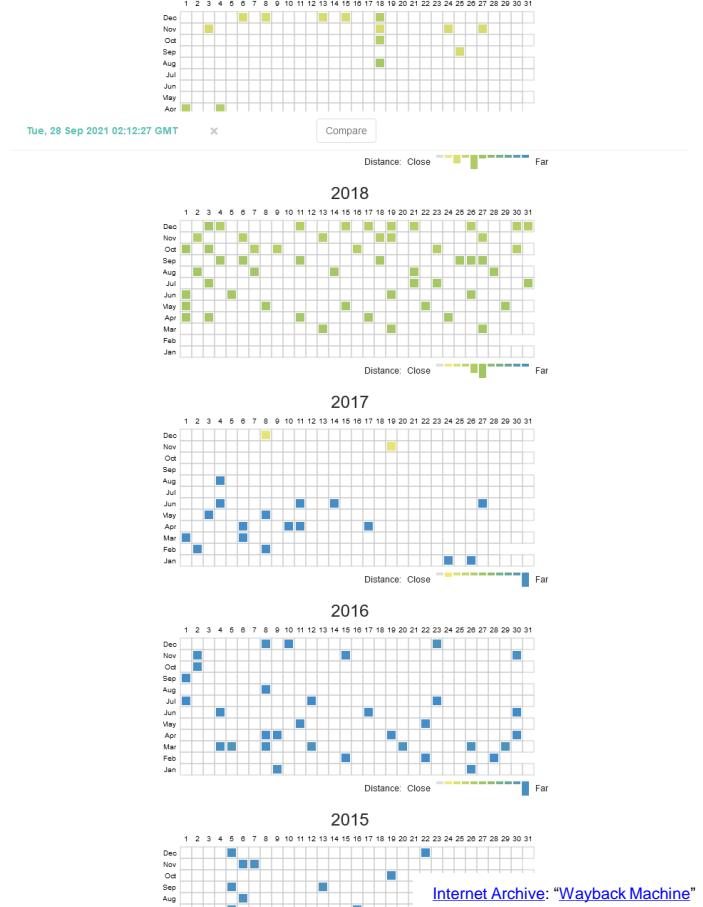
Changes tool: degree of difference key



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Changes tool: difference from 2017 captures



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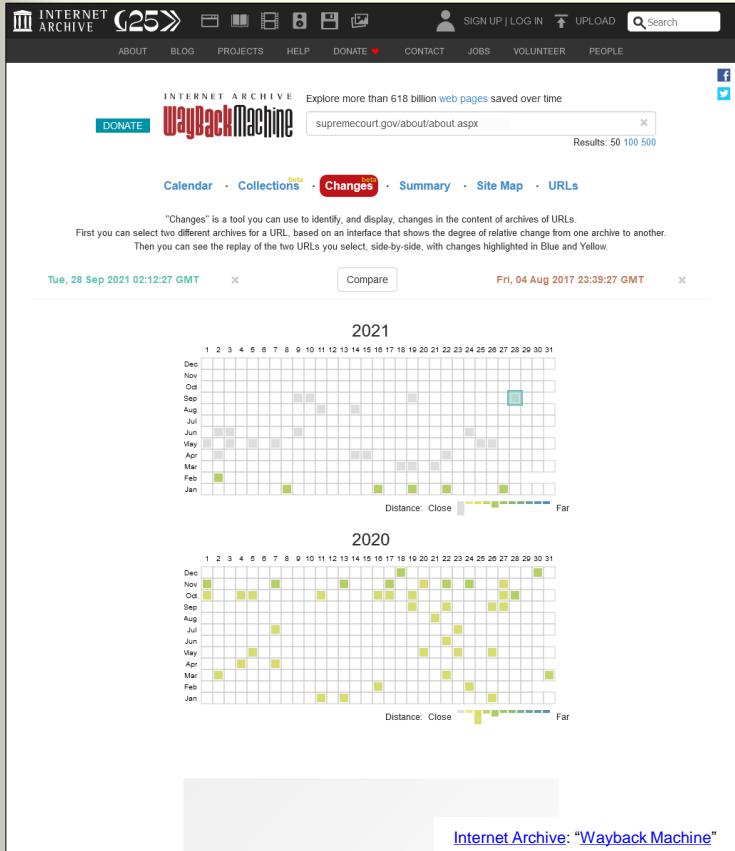
Changes tool: compare w/ 4 August 2017 capture



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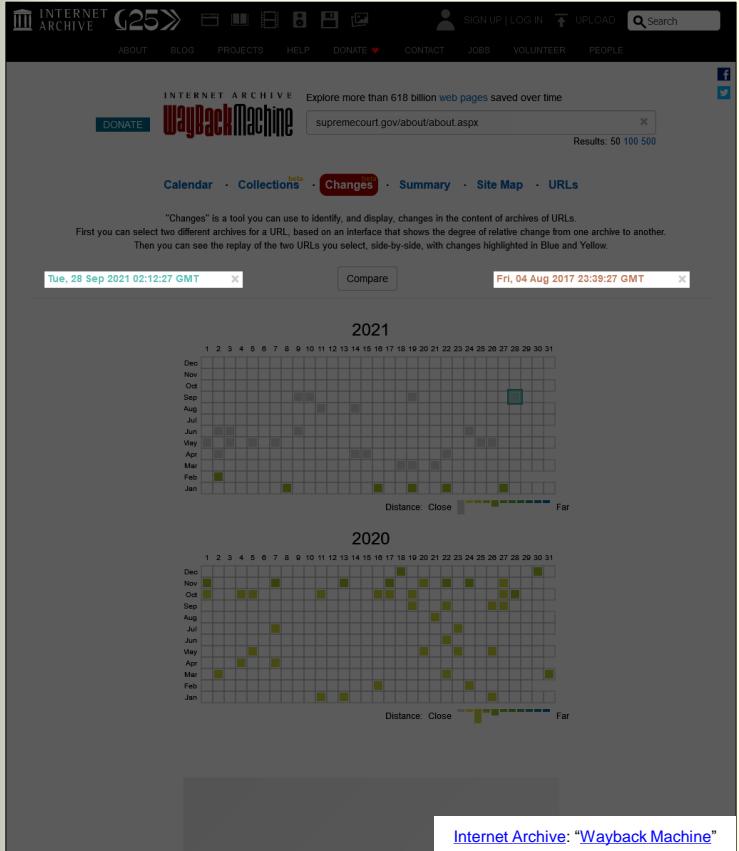
Changes tool: two captures selected



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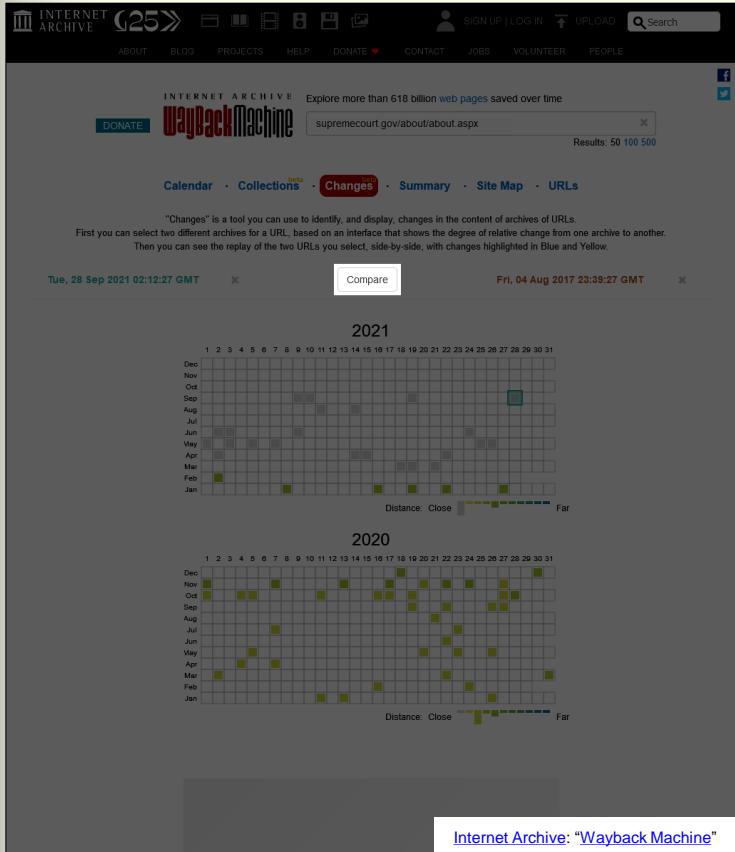
Changes tool: two captures selected



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Changes tool: click Compare



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Changes tool: compare 28 Sep. 2021 + 4 Aug. 2017 captures

The screenshot shows the Internet Archive Wayback Machine interface comparing two web captures of the Supreme Court of the United States website. The left panel displays the site from Tuesday, 28 Sep 2021 at 02:12:27 GMT, and the right panel displays it from Friday, 04 Aug 2017 at 23:39:27 GMT. Both panels show the official Supreme Court homepage with its seal and the text "SUPREME COURT OF THE UNITED STATES". The 2021 version includes a search bar and a "About the Court" section with information about the Justices. The 2017 version includes a "Justices" section with a photo of the Supreme Court Justices.

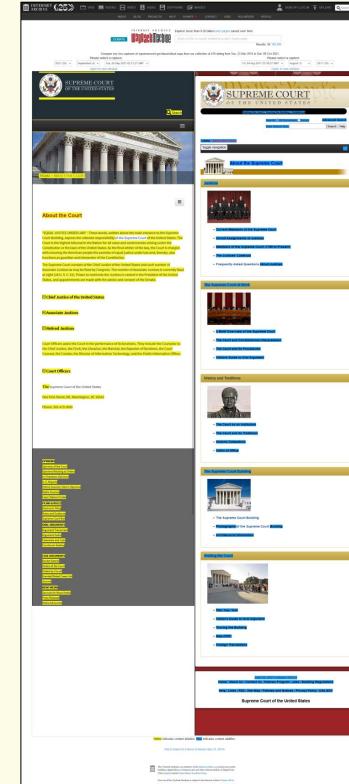


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Changes tool: comparing captures

- yellow highlighted text was deleted
- blue highlighted text was added
- note that the website design has changed significantly, but this isn't specifically detected by the Changes tool
- however, major text changes often accompany major website design changes



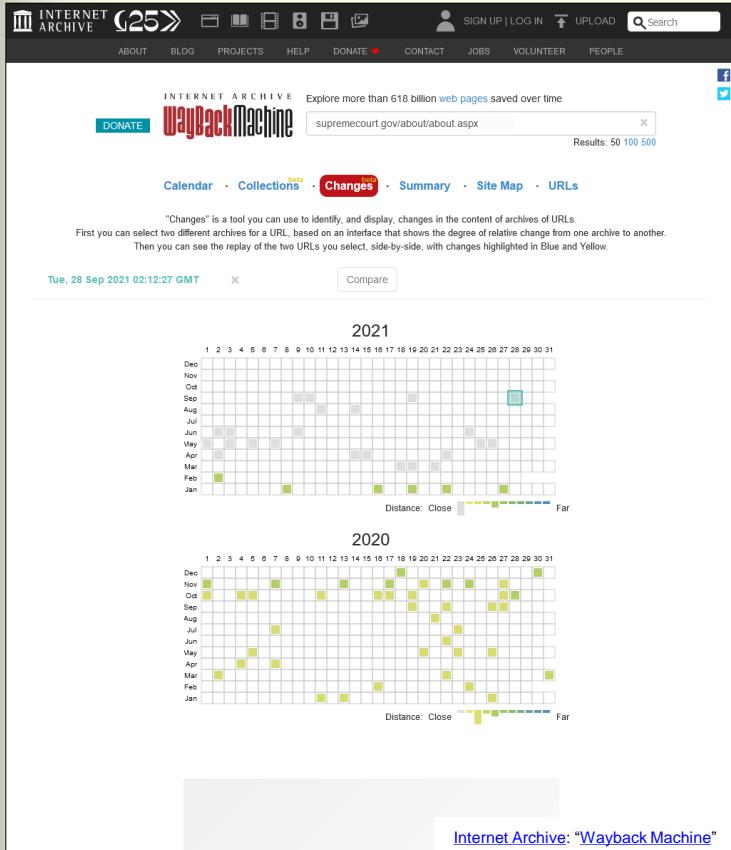
Internet Archive: "Wayback Machine"



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Changes tool: choose 28 September 2021 capture

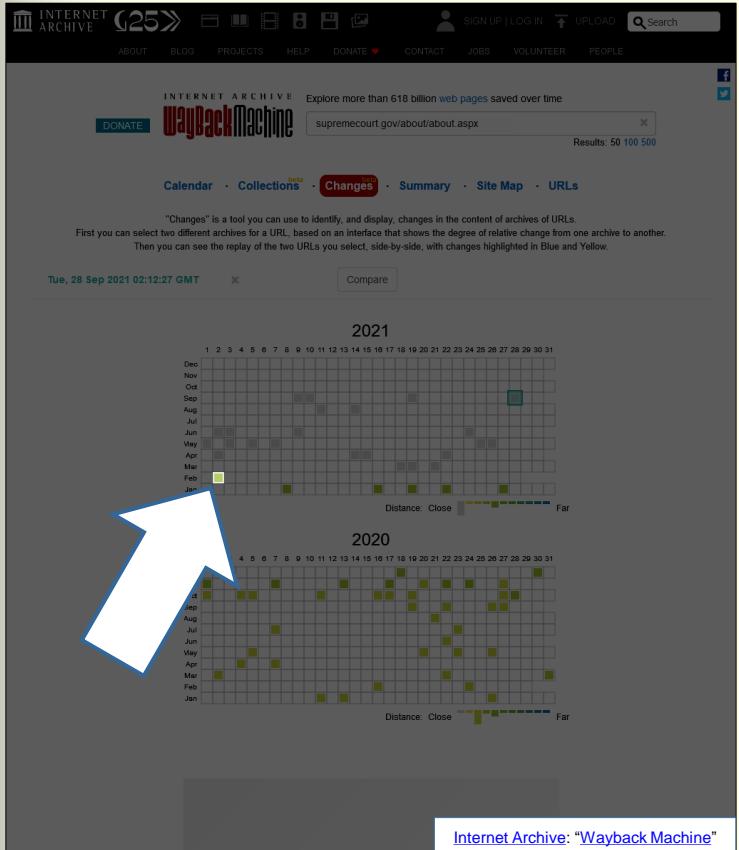


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[Internet Archive: "Wayback Machine"](#)

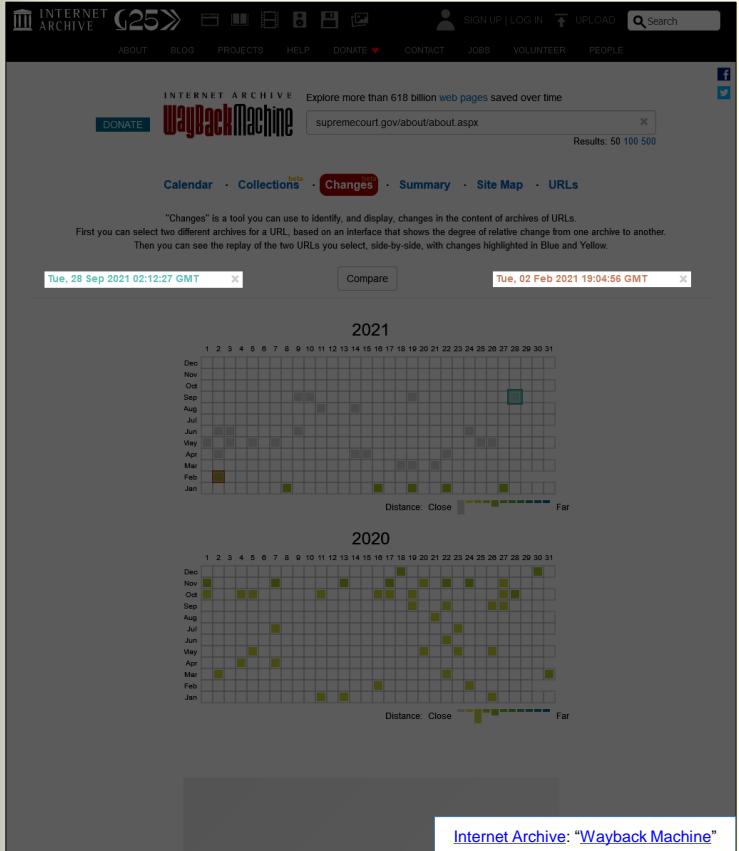
Changes tool: compare w/ 2 February 2021 capture



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Changes tool: two captures selected



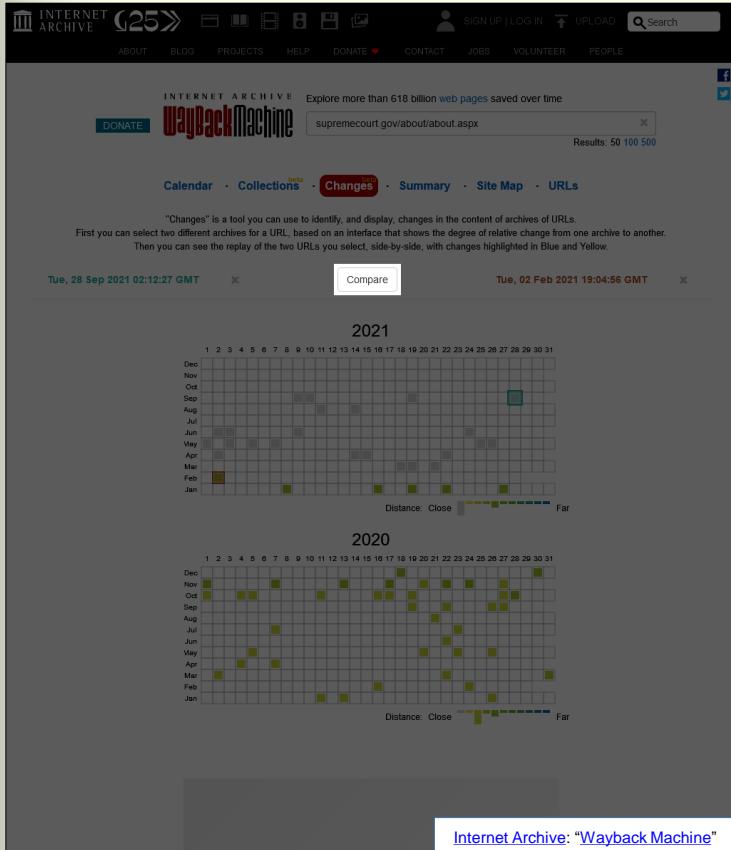
Internet Archive: "Wayback Machine"



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Changes tool: click Compare



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Changes tool: compare 28 Sep. 2021 + 2 Feb. 2021 captures

The screenshot shows a comparison between two versions of the Supreme Court of the United States website. The left side represents the version from September 28, 2021, and the right side represents the version from February 2, 2021.

Left Side (September 28, 2021):

- About the Court:** Describes the Supreme Court's role as the highest tribunal in the nation for all cases and controversies arising under the Constitution or laws of the United States. It mentions the Chief Justice and Associate Justices, and notes that the number of Associate Justices is currently fixed at eight (28 U.S.C. §31). Power to nominate the Justices is vested in the President of the United States, and appointments are made with the advice and consent of the Senate.
- Chief Justice of the United States:** Lists the Chief Justice and Associate Justices.
- Associate Justices:** Lists the Associate Justices.
- Retired Justices:** Lists the retired Justices.
- Court Officers:** Lists the Counselor to the Chief Justice, Clerk, Librarian, Marshal, Reporter of Decisions, Court Counsel, Curator, Director of Information Technology, and Public Information Officer. The Clerk position is highlighted in yellow.
- The Supreme Court of the United States:** Provides the address (One First Street, NE, Washington, DC 20543) and phone number (202-479-3000).
- OPINIONS:** Links to Opinions of the Court, Opinions Relating to Orders, and Other Court Opinions. The "Opinions" link is highlighted in yellow.
- U.S. Reports:** Links to Online Sources Cited in Opinions, Media Sources, and Case Citation Finder. The "U.S. Reports" link is highlighted in yellow.
- RULES & RITES:** Links to Electronic Filing, Rules and Guidance, and Supreme Court Bar.
- COURT ARGUMENTS:** Links to Argument Agendas, Argument Audio, Calendars and Lists, and Supreme Court Calendar. The "Court Arguments" link is highlighted in yellow.

Right Side (February 2, 2021):

- About the Court:** Describes the Supreme Court's role as the highest tribunal in the nation for all cases and controversies arising under the Constitution or laws of the United States. It mentions the Chief Justice and Associate Justices, and notes that the number of Associate Justices is currently fixed at eight (28 U.S.C. §31). Power to nominate the Justices is vested in the President of the United States, and appointments are made with the advice and consent of the Senate.
- Chief Justice of the United States:** Lists the Chief Justice and Associate Justices.
- Associate Justice:** Lists the Associate Justices.
- Retired Justices:** Lists the retired Justices.
- Court Officers:** Lists the Counselor to the Chief Justice, Clerk, Librarian, Marshal, Reporter of Decisions, Court Counsel, Curator, Director of Information Technology, and Public Information Officer. The Clerk position is highlighted in yellow.
- The Supreme Court of the United States:** Provides the address (One First Street, NE, Washington, DC 20543) and phone number (202-479-3000).
- OPINIONS:** Links to Opinions of the Court, Opinions Relating to Orders, and Other Court Opinions. The "Opinions" link is highlighted in yellow.
- Report Volume:** Links to Online Sources Cited in Opinions, Media Sources, and Case Citation Finder. The "Report Volume" link is highlighted in yellow.
- RULES & RITES:** Links to Electronic Filing, Rules and Guidance, and Supreme Court Bar.
- COURT ARGUMENTS:** Links to Argument Agendas, Argument Audio, Calendars and Lists, and Supreme Court Calendar. The "Court Arguments" link is highlighted in yellow.

Internet Archive: "Wayback Machine"



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The path forks...

As the story reaches a turning point, the speaking figure again quiets. The screen at the front of the room abruptly changes once more. You feel a sense of déjà vu...



"You are here." by Paul Thompson under CC BY-ND 2.0

questions



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“Editing” IAWM contents



“Punakaiki Pancake Rocks” by Ruth Hartnup under [CC BY 2.0](#)



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Can IAWM contents be edited?

- not as such; archive is append-only
- missing content may be captured later
- content can be excluded from access
- IA has made no public claims that content is ever deleted
- individual webpages or web resources can be manually archived



"Stone engraving" by Jinx McCombs under CC BY-ND 2.0



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Exclusion requests + crawler directives

exclusion requests

- domain owner can request exclusion of their content from IAWM
- criteria unclear, but IA exercises discretion
- if granted, IAWM access to content will be disabled + IA archiving will cease

crawler directives

- domain owner can configure a robots.txt file to ward off IA archiving agents
- again, IA exercises discretion
- updates to robots.txt directives can restore access

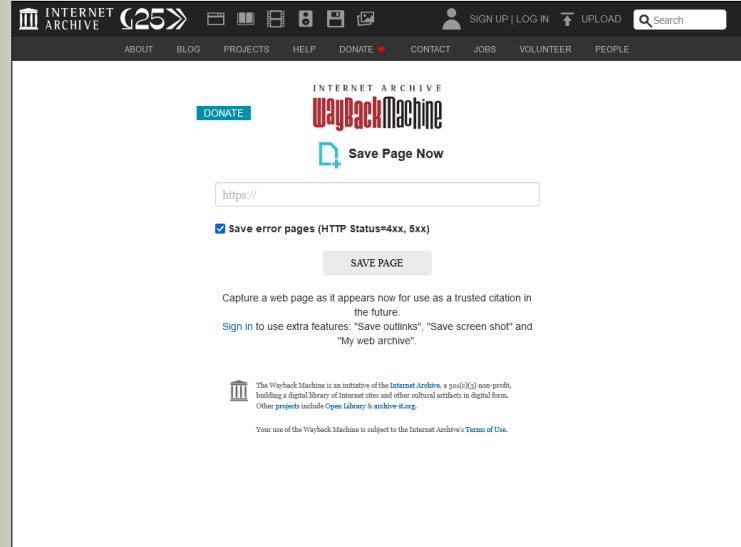


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IAWM Save Page Now feature

- manually archive to IAWM a real-time webpage snapshot
- good habit when relying on live web evidence
- works for error pages (i.e., document absence)
- when signed in, can archive current webpage + 1 hop out



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The path forks...

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"You are here." by Paul Thompson under CC BY-ND 2.0

questions



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IAWM in the legal context

- authentication + admissibility
- patents + IAWM



"Columns" by Joe Campbell under CC BY-SA 2.0



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Authentication + admissibility



"Dollar" by Images Money under [CC BY 2.0](#)



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Authentication + admissibility overview

- IAWM cited in 300+ U.S. federal court cases
- harder to authenticate than other web content
 - archived vs. live site discrepancies
 - IAWM reliability disclaimers
 - IA is NGO
 - third party providing first party records (hearsay)
- strategies include:
 - judicial notice
 - IA affidavit
 - witness w/ personal knowledge
 - expert witness
 - mutual stipulation



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Judicial notice (FRE 201)

Wikipedia

"Judicial notice is a rule in the law of evidence that allows a fact to be introduced into evidence if the truth of that fact is so notorious or well known, or so authoritatively attested, that it cannot reasonably be doubted... Facts and materials admitted under judicial notice are accepted without being formally introduced by a witness or other rule of evidence"

[Wikipedia: "Judicial notice"](#)

FRE 201

Judicial Notice of Adjudicative Facts

- b. Kinds of Facts That May Be Judicially Noticed. The court may judicially notice a fact that is not subject to reasonable dispute because it:
 - 2. can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned.

[Legal Information Institute: "Rule 201. Judicial Notice of Adjudicative Facts | Federal Rules of Evidence"](#)



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Authentication via judicial notice

- efficient but inconsistent + jurisdiction-sensitive
- judges may themselves introduce IAWM evidence
- more likely to prevail in absence of specific assertions of unreliability



["Earthrise"](#) by [Bill Anders](#) under [Public Domain](#)



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Authentication via IA affidavit

- reliable + efficient
- has only failed when incorrectly applied
- works best for simple cases
- but less ideal when conclusions require interpretation



"Paperwork" by Damian Gadal under CC BY 2.0



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IA affidavit guidance

Do I really need an affidavit from the Internet Archive?

No. Please consider alternatives to an affidavit from the Internet Archive. Judicial notice and stipulation to a document's authenticity are two typical and straightforward options that might be used instead of an affidavit. Since our resources are limited, we urge you to pursue these alternatives before coming to us with authentication requests.

Does the Internet Archive's affidavit mean that the printout was actually the page posted on the Web at the recorded time?

The Internet Archive's affidavit only affirms that the printed document is a true and correct copy of our records. It remains your burden to convince the finder of fact what pages were up when.

[Internet Archive: "Legal FAQ"](#)



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Witness w/ personal knowledge – FRE 901(b)(1)

Authenticating or Identifying Evidence

- b) Examples. The following are examples only – not a complete list – of evidence that satisfies the requirement:
 - 1) Testimony of a Witness with Knowledge. Testimony that an item is what it is claimed to be.

[Legal Information Institute: "Rule 901. Authenticating or Identifying Evidence | Federal Rules of Evidence"](#)



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Authentication via witness w/ personal knowledge

- more effective when leveraging witness w/ personal knowledge of historical web content
- less effective when instrumentally entering into record a comparison performed by a random person



"One year + of journals" by Pain Chaud under CC BY-ND 2.0



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Expert witnesses – FRE 702

Testimony by Expert Witnesses

- a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- b) the testimony is based on sufficient facts or data;
- c) the testimony is the product of reliable principles and methods; and
- d) the expert has reliably applied the principles and methods to the facts of the case.

[Legal Information Institute: "Rule 702. Testimony by Expert Witnesses | Federal Rules of Evidence"](#)



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Frye + Daubert standards

Frye standard

- established in *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923)
- “*...the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.*”

[Legal Information Institute: "Frye Standard"](#)

Daubert standard

- established in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993)
- “*...the trial judge...must make a preliminary assessment of whether the testimony's underlying reasoning or methodology is scientifically valid and properly can be applied to the facts at issue.*”

[Legal Information Institute: "Daubert Standard"](#)



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Authentication via expert witness

- reliable but more involved + less-used mechanism
- use when interpretation, explanation, or qualification needed
- expert witnesses have included:
 - digital forensics specialists
 - patent examiners
 - web archiving professional(s)



"Test tubes and other recipients in chemistry lab" by Old Photo Profile under CC BY 2.0



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Admissibility trends summary – U.S. federal courts

admitted?	judicial notice		IA standard affidavit		witness w/ personal knowledge		expert witness	
	yes	no	yes	no	yes	no	yes	no
U.S. district court	44	11	12	2	6	3	7	0
U.S. circuit court	1	2	2	0	1	1	2	0



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The path forks...

As the story reaches a turning point, the speaking figure again quiets. The screen at the front of the room abruptly changes once more. You feel a sense of déjà vu...



"You are here." by Paul Thompson under CC BY-ND 2.0

questions



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Patents + IAWM

U.S. Patent Dec. 18, 1979 Sheet 2 of 2 Des. 253,711

FIG. 6



FIG. 7

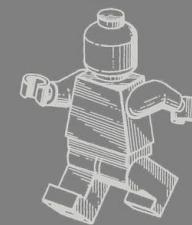


FIG. 8



FIG. 9



"US patent 253711 - Toy figure" by [Vera de Kok](#) under [CC BY 2.0](#)



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Patents + IAWM

- IAWM referenced in 200+ PTAB decisions
- regularly used for citations of prior art in issued patents
- USPTO doesn't apply FRE
- useful for timestamping patent disclosures
- patentability voided by description of invention in a "printed publication" prior to filing date
- reference qualifies as a printed publication if it, "*has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it.*"
 - [*In re Wyer*, 655 F.2d 221 \(C.C.P.A. 1981\)](#), quoting [*I.C.E. Corp. v. Armco Steel Corp.*, 250 F. Supp. 738 \(S.D.N.Y. 1966\)](#)



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Manual of Patent Examining Procedure (MPEP) guidance

*"Prior art obtained via the Wayback Machine® sets forth a **prima facie case that the art was publicly accessible at the date and time provided in the time stamp.** The burden then shifts to the applicant should they wish to challenge the authenticity, reliability or accessibility of such information."*

United States Patent and Trademark Office: "[2128
'Printed Publications' as Prior Art \[R-10.2019\]](#)"

Manual of PATENT EXAMINING PROCEDURE

Original Ninth Edition, March 2014

Latest Revision June 2020 [R-10.2019]

U.S. DEPARTMENT OF
COMMERCE



United States Patent and
Trademark Office

Rev. 10.2019, June 2019

United States Patent and Trademark Office:
["Manual of Patent Examining Procedure \(MPEP\)"](#)



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America Invents Act FAQ

Question: “*For Web references, does the USPTO use archive.org (aka, ‘The Wayback Machine’) to get the actual publication [sic] date rather than printout date of the Web reference? (Question: FITF1058)*”

Answer: “**Yes, examiners use ‘The Wayback machine’ as a source of information to determine when a Web reference was first made available to the public.**”

[United States Patent and Trademark Office: “America Invents Act \(AIA\) Frequently Asked Questions”](#)

PUBLIC LAW 112-29—SEPT. 16, 2011

LEAHY-SMITH AMERICA INVENTS ACT

[United States Government Publishing Office: “PUBL029.PS - PLAW-112publ29.pdf” \(PDF\)](#)



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The path forks...

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"*You are here:*" by Paul Thompson under CC BY-ND 2.0

questions



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IAWM temporal dynamics

- timestamping content changes
- temporal (in)coherence



"clock world" by Mathanki Kodavasal under CC BY-SA 2.0



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Timestamping content changes



"Tree rings and Arlington Estate history - Arlington National Cemetery - 2013-08-24" by Tim Evanson under [CC BY-SA 2.0](#)



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Sources of temporal info

conspicuous

- (system-generated) datetime string in webpage text
- IAWM capture timestamp

less obvious

- (system-generated) datetime string in webpage source code
- Google [before: operator](#)
- Twitter [until: operator](#)
- IAWM capture datetime of webpage w/ inlinks
- web server ⇔ client network headers (e.g., X-Archive-Orig-last-modified)
- timestamps in embedded image metadata (e.g., [Exif](#), [XMP](#))

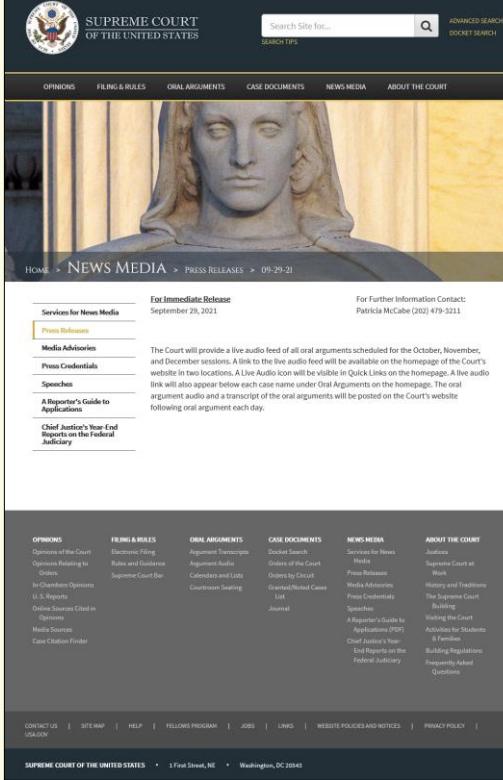


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When was a webpage first published?

- when was the webpage for the oral arguments live audio stream first made available?
- press release said it would go live at the start of October Term 2021
- link would be published on the home page



The screenshot shows the Supreme Court of the United States website's news media section. At the top, there is a search bar with "Search Site for..." and "SEARCH TIPS" buttons, along with links for "ADVANCED SEARCH" and "DOCKET SEARCH". Below the search bar is a navigation menu with links for "OPINIONS", "FILING & RULES", "ORAL ARGUMENTS", "CASE DOCUMENTS", "NEWS MEDIA", and "ABOUT THE COURT". A large, detailed image of a classical statue of a woman with a crown and a scale is displayed prominently. Below the image, the breadcrumb navigation reads "HOME > NEWS MEDIA > PRESS RELEASES > 09-29-21". To the left, a sidebar titled "Services for News Media" lists links for "Press Releases", "Media Advisories", "Press Credentials", "Speeches", "A Reporter's Guide to Applications", and "Chief Justice's Year-End Report on the Federal Judiciary". To the right, a section titled "For Immediate Release" for September 29, 2021, provides information about live audio feeds for oral arguments. It states that the Court will provide a live audio feed of all oral arguments scheduled for the October, November, and December sessions. A link to the live audio feed will be available on the homepage of the Court's website in two locations. A "Live Audio" icon is mentioned as appearing below each case name under Oral Arguments on the homepage. The oral argument audio and a transcript of the oral arguments will be posted on the Court's website following oral argument each day. There is also a link for "For Further Information Contact: Patricia McCabe (202) 479-3211". At the bottom of the page, there are links to various sections of the website: OPINIONS, FILING & RULES, ORAL ARGUMENTS, CASE DOCUMENTS, NEWS MEDIA, and ABOUT THE COURT. The footer contains links for CONTACT US, SITEMAP, HELP, FELLOWS PROGRAM, JOBS, LINFO, WEBSITE POLICIES AND NOTICES, and PRIVACY POLICY, along with the address "SUPREME COURT OF THE UNITED STATES • 1 First Street, NE • Washington, DC 20543".

Supreme Court of the United States: "Press Releases - pr_09-29-21"



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When was a webpage first published?

The screenshot shows the official website of the Supreme Court of the United States. At the top, the seal of the Supreme Court is displayed next to the text "SUPREME COURT OF THE UNITED STATES". A search bar with placeholder text "Search Site for..." and a "SEARCH" button is located on the right. Below the header, a banner states: "Out of concern for the health and safety of the public and Supreme Court employees, the Supreme Court Building will be closed to the public until further notice. The Building will remain open for official business. Please see all COVID-19 announcements [here](#)." The main content area features a large image of the Supreme Court building. Below the image are several "Quick Links": Electronic Filing, Visit, Fellows Program, Contact Us, and Live Audio. To the right, there is a calendar for February 2022, a legend for "Calendar Info/Key", and a section for "Oral Arguments". The footer contains links for "Ysleta del Sur Pueblo v. Texas (20-493)" and "Supreme Court of the United States: [Home](#)".



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When was a webpage first published?



www.supremecourt.gov/oral_arguments/live.aspx

A screenshot of the "Oral Arguments" page for the week of Monday, February 21. It features a calendar for the week with color-coded boxes: red for Non argument Days, green for Conference Days, yellow for Opinion Issuance Days, blue for Order List Issuance Days, and grey with a circled "H" for Holiday. A note states: "Out of concern for the health and safety of the public and Supreme Court employees, the Supreme Court Building will be closed to the public until further notice. The Building will remain open for official business. Please see all COVID-19 announcements here." Another note says: "All public lectures and visitor programs are temporarily suspended." Below the calendar, there are sections for "Tuesday, February 22" and "Wednesday, February 23", each listing several cases. At the bottom right is a link to "Supreme Court of the United States: Home".



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When was a webpage first published?

The screenshot shows the official website of the Supreme Court of the United States. At the top, the seal of the Supreme Court is displayed next to the text "SUPREME COURT OF THE UNITED STATES". A search bar with "Search Site for..." and "SEARCH TIPS" is present, along with links for "ADVANCED SEARCH" and "DOCKET SEARCH". Below the header, a navigation menu includes "OPINIONS", "FILING & RULES", "ORAL ARGUMENTS", "CASE DOCUMENTS", "NEWS MEDIA", and "ABOUT THE COURT". A large image of the Supreme Court courtroom is shown below the menu. The main content area is titled "HOME > ORAL ARGUMENTS > LIVE ORAL ARGUMENT AUDIO". It features a sidebar with links for "Argument Transcripts", "Argument Audio", "Calendars and Lists", and "Courtroom Seating". The main content area displays a message: "There are no Oral Arguments or Live Audio scheduled for today. For previous Oral Argument audio, please select Oral Arguments from the [audio page](#)." The footer contains links for various sections: OPINIONS, FILING & RULES, ORAL ARGUMENTS, CASE DOCUMENTS, NEWS MEDIA, and ABOUT THE COURT. It also includes links for "CONTACT US", "SITE MAP", "HELP", "FELLOWS PROGRAM", "JOBS", "LINK", "WEBSITE POLICIES AND NOTICES", "PRIVACY POLICY", and "USA.GOV". The footer also notes the location: "SUPREME COURT OF THE UNITED STATES • 1 First Street, NE • Washington, DC 20543".

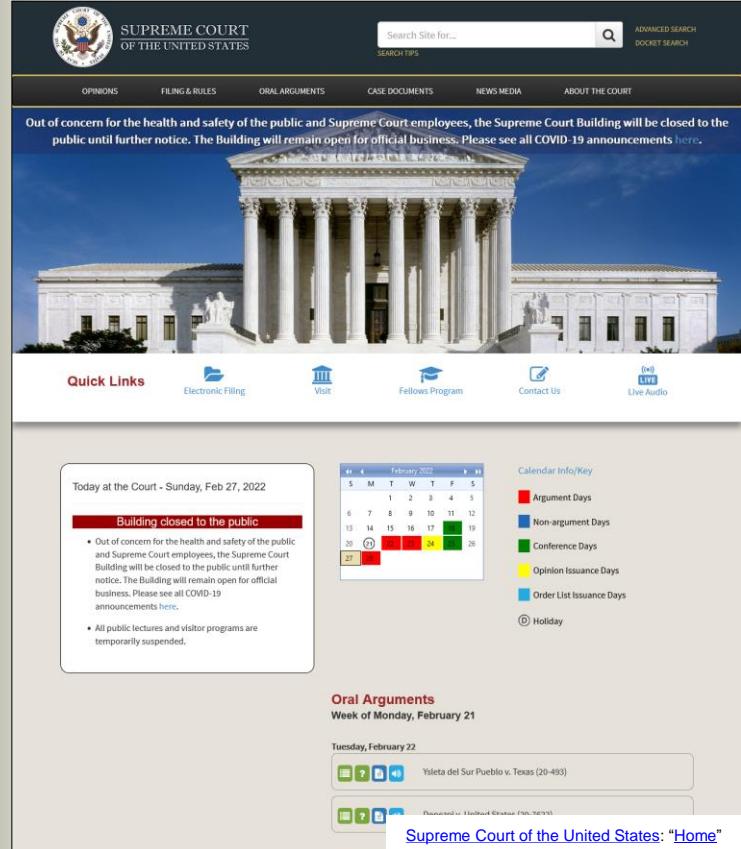
[Supreme Court of the United States: "Live Oral Argument Audio"](#)



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When did link appear on home page?



The image shows the homepage of the Supreme Court of the United States website. At the top, the seal of the Supreme Court is displayed next to the text "SUPREME COURT OF THE UNITED STATES". A search bar with the placeholder "Search Site for..." and a "SEARCH" button is located on the right. Below the header, there are links for "OPINIONS", "FILING & RULES", "ORAL ARGUMENTS", "CASE DOCUMENTS", "NEWS MEDIA", and "ABOUT THE COURT". A prominent message in blue text states: "Out of concern for the health and safety of the public and Supreme Court employees, the Supreme Court Building will be closed to the public until further notice. The Building will remain open for official business. Please see all COVID-19 announcements [here](#)". Below this message is a large photograph of the Supreme Court building. Underneath the photo are several "Quick Links": "Electronic Filing", "Visit", "Fellows Program", "Contact Us", and "Live Audio". To the left of the calendar, a box titled "Today at the Court - Sunday, Feb 27, 2022" contains the text: "Building closed to the public" and a bulleted list: "Out of concern for the health and safety of the public and Supreme Court employees, the Supreme Court Building will be closed to the public until further notice. The Building will remain open for official business. Please see all COVID-19 announcements [here](#)." and "All public lectures and visitor programs are temporarily suspended." To the right of the calendar is a legend titled "Calendar Info/Key" with color-coded boxes: red for Argument Days, blue for Non-argument Days, green for Conference Days, yellow for Opinion Issuance Days, and light blue for Order List Issuance Days. It also includes a "Holiday" entry with a small icon.

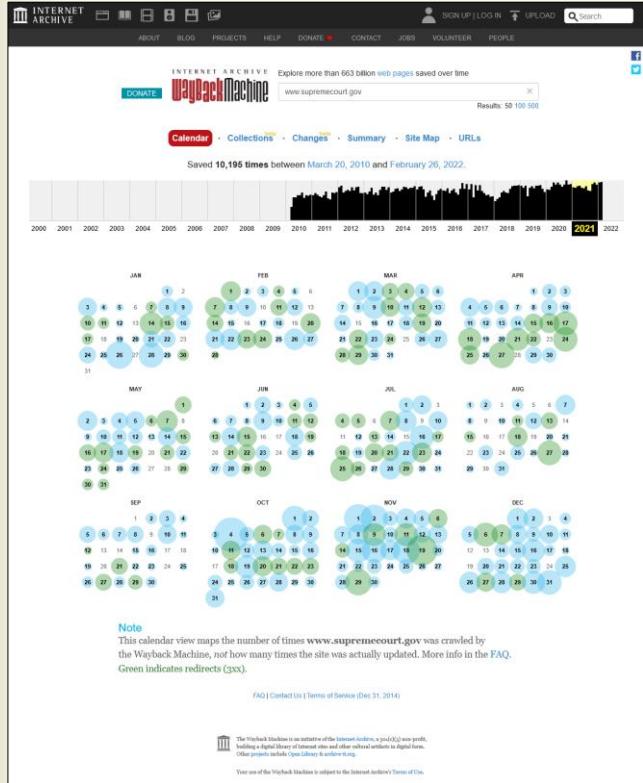


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When did link appear on home page?

- brute force (i.e. try inside-outside dates, then narrow down)
- use [Archive-It](#) to [search for “live audio”](#)
- use [CDX Server API](#) to bulk retrieve captures, then run local full-text search for “live audio”



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When did link appear on home page?

The screenshot shows the official website of the Supreme Court of the United States. At the top, there's a banner with the text: "Out of concern for the health and safety of the public and Supreme Court employees, the Supreme Court Building will be closed to the public until further notice. The Building will remain open for official business. Please see all COVID-19 announcements [here](#)." Below the banner is a large image of the Supreme Court building. A navigation bar at the top includes links for OPINIONS, FILING & RULES, ORAL ARGUMENTS, CASE DOCUMENTS, NEWS MEDIA, and ABOUT THE COURT. Below the navigation bar are "Quick Links" for Electronic Filing, Visit, Fellows Program, Contact Us, and Live Audio. On the left side, there's a box titled "Today at the Court - Monday, Oct 4, 2021" containing a list of events. To the right of that is a calendar for October 2021 with a legend for argument days, non-argument days, conference days, order list issuance days, and holidays. At the bottom, there are sections for "Oral Arguments" and "Monday, October 4" with a list of cases.

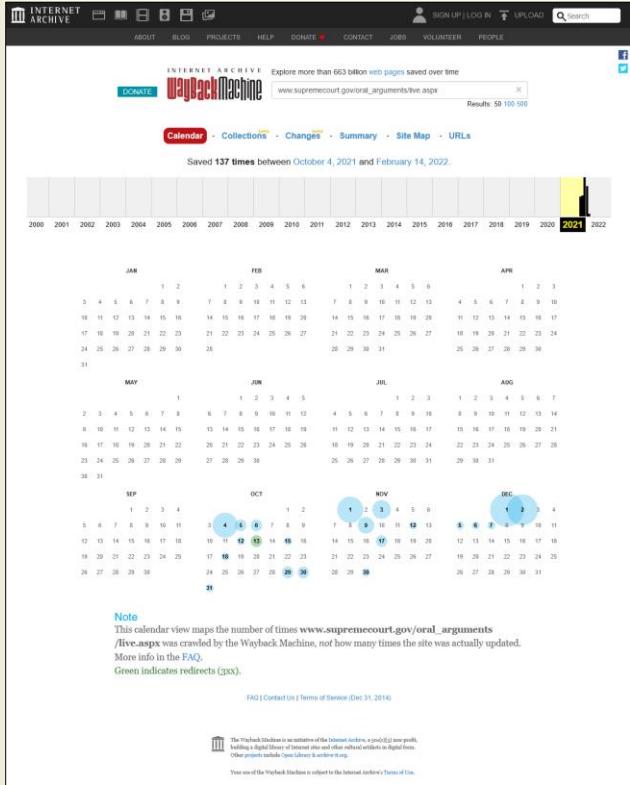


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Captures of webpage itself

- timeline histogram only shows captures for calendar years 2021 + 2022, up to current date
- click back to 2021
- IAWM calendar page shows captures dating back to 4 October 2021



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First capture of webpage: 4 October 2021

The screenshot shows the official website of the Supreme Court of the United States. At the top, the seal of the Supreme Court is displayed next to a search bar and links for 'ADVANCED SEARCH' and 'DOCKET SEARCH'. Below the header, there are navigation links for 'OPINIONS', 'FILING & RULES', 'ORAL ARGUMENTS', 'CASE DOCUMENTS', 'NEWS MEDIA', and 'ABOUT THE COURT'. A large image of the Supreme Court courtroom is shown below the navigation bar. The main content area is titled 'HOME > ORAL ARGUMENTS > LIVE ORAL ARGUMENT AUDIO'. It features a 'Live Oral Argument Audio' section with a video player placeholder and a link to 'Argument Transcripts'. On the left, there are links for 'Argument Audio', 'Calendars and Lists', and 'Courtroom Seating'. The bottom of the page contains footer links for various sections like 'OPINIONS', 'FILING & RULES', 'ORAL ARGUMENTS', 'CASE DOCUMENTS', 'NEWS MEDIA', and 'ABOUT THE COURT', along with contact information and links to other government websites.

[Internet Archive: "Live Oral Argument Audio"](#)



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Browser web developer tools

- IAWM can re-present original network communications b/t archiving agent + web host
- most modern browsers have built-in “developer tools” enabling review of these communications
- communications sometimes include metadata related to content datetimes

The screenshot shows the Mozilla Firefox Developer Tools homepage. At the top, there's a header with the Mozilla logo and the text "Firefox Developer Tools". Below the header, there are sections for "Get Involved" and "Speak Up". The main content area is divided into a grid of nine icons, each representing a different developer tool: Inspector, Console, Debugger, Network, Storage, Responsive Design Mode, Visual Editing, Performance, and Memory. Each tool has a brief description and a "Learn more" link. At the bottom of the page, there's a section for "Firefox Developer Edition" with a similar layout.

Mozilla: "[Firefox Developer Tools](#)"



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Network panel shows response headers

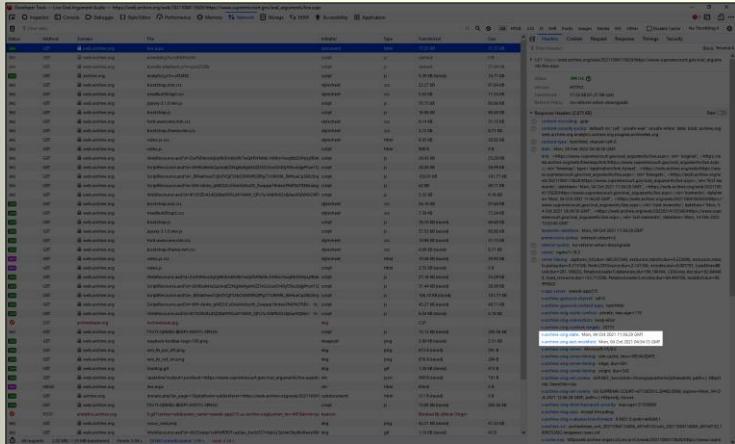
The screenshot displays a NetworkMiner tool interface with a list of captured network traffic entries. Each entry includes a timestamp, source IP, destination IP, port, type (e.g., http, https), and a detailed view of the response header. A specific entry for 'Response Headers (237)' is highlighted, showing various headers such as Content-Type, Content-Length, Date, and Server. The interface also includes tabs for Requests, Cookies, Report, Response, Storage, Security, and Network.



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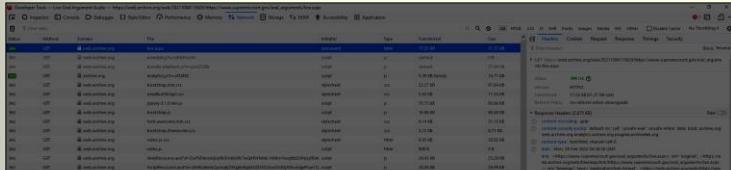
Network panel shows response headers



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Network panel shows response headers



x-archive-orig-date: Mon, 04 Oct 2021 11:36:29 GMT

x-archive-orig-last-modified: Mon, 04 Oct 2021 04:34:15 GMT



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Timestamping content changes when first published

- this example was amenable to multiple approaches
- traces via diverse services increase precision + confidence
- more typical to be working w/ fragments
- key limitations on assertions:
 - generally only establish *no later than*
 - don't necessarily establish *the moment when*

when continuously available

- use similar techniques to document availability across successive short intervals
- continuous intermediate availability more reasonable to assume than up-down-up
- can get complicated for content situated deep in a website across redesigns or platform changes
 - content may persist, but specific web address (which is what IAWM keys off of) may change



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The path forks...

As the story reaches a turning point, the speaking figure again quiets. The screen at the front of the room abruptly changes once more. You feel a sense of déjà vu...



"*You are here:*" by Paul Thompson under CC BY-ND 2.0

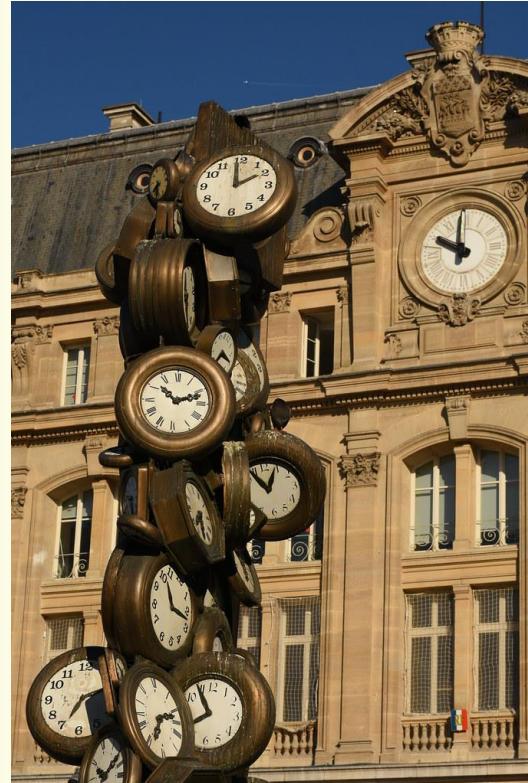
questions



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Temporal (in)coherence



"Jumble of Clocks Gare St Lazare - L'Heure de tous Arman" by Amaury Laporte under [CC BY 2.0](#)



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Temporal (in)coherence

The screenshot shows the Wunderground.com homepage. At the top, there's a search bar for "Varina, Iowa". Below it, a sidebar on the left lists various weather-related links such as "Member Benefits", "No Ads", "Weather Email", "55¢ a year", "Signup Here", "Email", "davorm@gmail.com", "Password", "*****", "Login", "Print This Page", "Maps", "Temperature", "Heat Index", "Windchill", "Humidity", "Radar", "Dew Point", "Wind", "Visibility", "Visible Satellite", "Satellite", "Fronts", "Snow Depth", "Jet Streams", "Flight Rules", "Health Maps", "UV Forecast", "Air Quality", "Park Air Quality Index", "International United States", "Canada", "Mexico", "Central America", "South America", "Northern Asia", "Southern Asia", "Europe", "Australia", "Africa", "Islands", "Antarctica", "Information", "Need Help?", "Link To Us", "About Us", "Custom Weather", "Newspaper Weather", "Advertising", "State Farm", "StateFarm.com", "Auto Quotes", "Video Center", "Natural Disasters", "Astronomy", and "Regional Radar".
The main content area displays the current conditions for Varina, Iowa, with a map showing the location. It includes details like temperature (41°F / 5°C), dew point (41°F / 5°C), wind (6 mph), pressure (29.56 in / 1000 hPa), visibility (5.0 miles / 8.0 kilometers), UV index (1 out of 12), and clouds (Overcast 6500 ft / 1900 m). There are also links for "Local Radar", "Regional Radar", "Local Satellite", "Regional Satellite", "Ski Conditions", "Trip Planner", "Personal Weather Stations", and "Talk to State Farm Agents near you!".
To the right, a 5-day forecast for ZIP Code 50593 is shown, with icons for Thursday through Monday. Each day includes a detailed forecast with chance of rain, humidity, and UV index. Below the forecast, there are sections for "Meet Locals", "Unbiased reviews and advice for Varina hotels and other sites", and "Local Allergy Info from Pollen.com".
At the bottom, there are sections for "Forecast as of 11:42 am CST on December 9, 2004" and "Forecast for Pocahontas County". The "Forecast as of 11:42 am CST on December 9, 2004" section shows a "Normal" day with a chance of rain in the evening. The "Forecast for Pocahontas County" section shows a "Normal" day with a chance of snow in the morning.
At the very bottom, a note from Scott G. Ainsworth et al. states: "Only One Out of Five Archived Web Pages Existed as Presented".



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Temporal (in)coherence

The screenshot shows the Wayback Machine interface with the URL <http://www.waybackmachine.org/2004/12/09/varina-iowa-weather-forecast>. The page displays the weather forecast for Varina, Iowa, on December 9, 2004. The forecast shows a high of 41°F and a low of 39°F with light drizzle. It includes a map of the area, a 5-day forecast, and various weather details like wind speed and visibility. The Wayback Machine interface includes navigation buttons for previous and next pages, and a search bar at the top.

Scott G. Ainsworth et al: "Only One Out of Five Archived Web Pages Existed as Presented"

Internet Archive: "Weather Underground: Varina, Iowa Forecast"



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Temporal (in)coherence

Find the Weather for any City, State or ZIP Code, or Airport
Code or Country

Member Benefits:
No Ads
Weather Email
\$5 a year
Sign up here

E-mail
taylorw@gmail.com
Password
Remember Me
Login

Print This Page

Map

Temperature
Heat Index
Windchill
Humidity
Radar
Gust Point
Wind
Visibility
Visible Satellite
Satellite

Floods
Snow Depth
Net Stream
Flight Rules

Health Maps
UV Forecast
Air Quality
Peak Air Quality
Tire Pressure

International
United States
Canada
Mexico
Central America
South America
Northern Asia
Southern Asia
Europe
Australia
Africa
Islands
Antarctica

Information
Need Help?
Link to us
About Us
Custom Weather
Newspaper Weather
Advertising
Sister Sites
Sister Sites
Sister Sites

• Auto-Digitize
• Video Center
• Natural Disaster

Feature: Wunder Photos BERRAD Radar Regional Radar **Zoom Satellite** Maps Site Planner
Topical: Hunting Marine Boats Astronomy Sky Education Favorites Personal Weather Stations

Local Time: 1:09 PM CST Set My Timezone

Varina, Iowa

Current Conditions
Updated: 12:55 PM CST on December 09, 2004
Observation from Storm Lake, Iowa (History)
Elevation: 1480 ft / 453 m

41°F / 5°C

Light Drizzle
Wind: 5 mph / 3 m/s
Humidity: 100%
Dew Point: 41°F / 5°C
Wind: 6 mph / 9 km/h from the South
Pressure: 29.56 in / 1001 hPa
Visibility: 3.0 miles / 4.8 kilometers
UV: 1 out of 12
Clouds: Overcast 60% (AQU: 100%)
Show full METARS (help)

Local Radar
Regional Radar
Local Satellites
Ski Conditions
Trip Planner
Personal Weather Stations

Most Local
read their live trip and travel guides for Varina, IA

Unbiased reviews and advice for Varina hotels and other cities

Show Varina or Iowa

5-Day Forecast for ZIP Code 50593

Thu	Fri	Sat	Sun	Mon
43° 29° Chance of Rain Detail	36° 22° Mostly Cloudy Detail	47° 34° Mostly Cloudy Detail	41° 25° Partly Cloudy Detail	31° 15° Partly Cloudy Detail

Click details for hourly wind, temperature, humidity and UV forecasts.
Alternate Computer Forecast: AVN MOS Weather Graph | Local Allergy Info from Pollen.com

Nowcast as of 11:42 am CST on December 9, 2004

Now
Drizzle fog will persist along and west of Highway 169 through the early afternoon, locations from Algona to Estherville can expect visibilities to remain around a quarter mile or less with localized areas in low lying spots under one eighth of a mile.

Forecast for Pocahontas County

Updated: 11:20 am CST on December 9, 2004
No Active Advisories (US Severe Weather)

This Afternoon
A chance of light rain showers. High in the lower 40s. West wind 10 to 15 mph. Chance of rain 10 percent.
Detail

Tonight
Rain likely through the evening. Light snow likely after midnight. Little or no accumulation. Low around 30. Northwest wind 15 to 20 mph. Chance of precipitation 60 percent.

Friday
Partly cloudy and breezy. A chance of light snow in the morning. High in the upper 30s. North wind 15 to 25 mph. Chance of snow 30 percent.
Detail

Friday Night
Partly cloudy. Low in the lower 20s. Northwest wind 15 to 20 mph.

Saturday
Partly cloudy. Not as cool with high in the upper 40s. Southwest wind 10 to 15 mph. Chance of rain 10 percent.
Detail

Saturday Night
Mostly cloudy and not as cool. Low in the lower 30s.

Sunday
Partly cloudy and very windy. High around 40. Temperature steady or slowly falling in the afternoon.

Sunday Night
Partly cloudy and brisk. Much colder. Low around 15.

Monday
Mostly sunny. Cooler with high around 30.

Scott G. Ainsworth et al: "Only One Out of Five Archived Web Pages Existed as Presented"

Internet Archive: "Weather Underground: Varina, Iowa Forecast"



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Temporal (in)coherence

http://www.wunderground.com/cgi-bin/findweather/getForecast?query=50593
24 cameras
27 Oct 2002 - 10 Jun 2017
COLLECTED BY
Alex
Organization: Alexa Crawl EA
Started in 1996, Alexa Internet has been donating their crawl data to the Internet Archive
Flowers in over 10k pages are added to the Wayback Machine after an embargo period.
Alex Web Informer
TIME STAMPS
http://icnames.wunderground.com/idx/avmappew/abby/20-banner.scp -9 years 5 months
http://icnames.wunderground.com/idx/avmappew/07/07e0e07bumb.scp -9 years 18 days
http://icnames.wunderground.com/idx/avmappew/07/07e0e07bumb.scp -9 years 11 months
http://icnames.wunderground.com/idx/avmappew/mx19.html -1 day -9 months 7 days
http://icnames.wunderground.com/practices/mashable/localRating/ -20 days 1 minute
http://icnames.wunderground.com/practices/mashable/localRating/ -20 days 52 seconds
http://icnames.wunderground.com/practices/mashable/localRating/ -20 days 48 seconds
http://icnames.wunderground.com/practices/mashable/localRating/ -20 days 43 seconds
http://icnames.wunderground.com/practices/mashable/localRating/ -20 days 37 seconds
http://icnames.wunderground.com/practices/mashable/localRating/ -20 days 11 seconds
http://icnames.wunderground.com/practices/mashable/localRating/ -20 days 14 seconds
http://icnames.wunderground.com/practices/mashable/skip/ -20 days 13 hours
http://icnames.wunderground.com/practices/mashable/skip/ -20 days 13 seconds
http://icnames.wunderground.com/practices/mashable/exchange/ -20 days 4 seconds
http://icnames.wunderground.com/practices/mashable/add/ -19 days 23 hours

Heat Index
Windchill
Humidity
Dew Point
Wind
Radar
Satellite
Pressure: 29.56 in / 100 hPa
Visibility: 5.0 miles / 8.0 kilometers
UV: 1 out of 12
Clouds: Overcast 6500 ft / 1900 m
Show full METARS (Help)

Talk to State Farm agents near you!

Conditions, Nearby
City Temp Conditions Updated
* Storm 41 °F / Light Drizzle CST
Lake 5 °C
Fort Dodge 41 °F / Partly Cloudy 12:55 PM CST
Dodge 5 °C
Carroll 41 °F / Haze 12:55 PM CST
37 °F / Haze 12:55 PM CST
Algona 3 °C

History & Almanac
Max Temperature Min Temperature
Normal (KFDO) 33 °F / 0 °C 15 °F / -10 °C
Record (KFDO) 53 °F / 11 °C -4 °F / -18 °C (1976)
Yesterday 45 °F / 7 °C 32 °F / 0 °C

Detailed History and Climate
December 5 9 2004
December Calendar View (KFDO)
Seasonal Weather Averages

Astronomy

Scott G. Ainsworth et al: "Only One Out of Five Archived Web Pages Existed as Presented"
in the mid 30s

Internet Archive: "Weather Underground: Varina, Iowa Forecast"



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Temporal (in)coherence

The screenshot shows a search results page for "Alex Crawls" on the Internet Archive's Wayback Machine. The results are from a collection named "Alex Crawls EA". The search term "Alex Crawls" is highlighted in red. Below the search bar, it says "COLLECTED BY Alex Web Informer". The results list several URLs related to Alex Crawls, including his homepage and various news articles. On the right side of the page, there is a weather forecast for Varina, Iowa, showing current conditions and a 7-day forecast. There is also a link to "Internet Archive: Weather Underground: Varina, Iowa Forecast".

Organization: Alex Crawls
Starting in 1996, Alex Internet has been donating their crawl data to the Internet Archive.
Flowers in every day. Fresh cuts are added to the Warback Machine after an embargo period.

http://www.wunderground.com/stations/pennsylvania/20-barber.aspx?+8 years 5 months
http://www.wunderground.com/stations/mississippi/07-dobie@thunder.aspx?+9 years 13 days
http://www.wunderground.com/stations/bayarea/07-dobie@thunder.aspx?+10 years 1 month 10 days
http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+10 years 1 year 3 months

http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+9 years 7 days

http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+10 years 1 month 1 day 1 minute

http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+10 years 1 month 1 day 52 seconds

http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+20 days 48 seconds

http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+20 days 43 seconds

http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+20 days 37 seconds

http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+20 days 18 seconds

http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+20 days 16 seconds

http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+20 days 11 seconds

http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+20 days 10 seconds

http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+20 days 2 seconds

http://www.wunderground.com/stations/cvcs/07-dobie@thunder.aspx?+10 days 23 hours

Heat Index: 100°F / 3°C
Humidity: 100%
Dew Point: 41°F / 5°C
Wind: 6 mph
9 km/h from North
Gust: 9 mph
Visibility: 5 miles / 8.0 kilometers
Clouds: 1 out of 12
UV: 0 out of 12
Clouds: Overcast 60% (AQU: 1491)
Show full METARS (Help)

Local Radar
Regional Radar
Local Satellite
Regional Satellite
Trip Planner
Personal Weather Stations

Nowcast as of 11:42 am CST on December 9, 2004

Now: Drizzle fog will persist along and west of Highway 169 through the early afternoon. Locations from Algona to Estherville can expect visibilities to remain around a quarter mile or less with localized areas in low lying spots under one eighth of a mile.

Forecast for Pocahontas County

Updated: 11:20 am CST on December 9, 2004
No Active Advisories (US Severe Weather)

This Afternoon: Partly cloudy with a chance of light rain showers. High in the lower 40s. West wind 10 to 15 mph. Chance of rain 30 percent.
Detail

Tonight: Partly rain likely through the evening. Light snow likely after midnight. Little or no accumulation. Low around 30. Northwest wind 15 to 20 mph. Chance of precipitation 60 percent.

Friday: Mostly cloudy and breezy. A chance of light snow in the morning. High in the upper 30s. North wind 15 to 25 mph. Chance of snow 30 percent.
Detail

Friday Night: Party cloudy. Low in the lower 20s. Northwest wind 15 to 20 mph.

Saturday: Party cloudy. Not as cool with high in the upper 40s. Southwest wind 10 to 15 mph. Chance of rain 30 percent.
Detail

Saturday Night: Mostly cloudy and not as cool. Low in the lower 30s.

Sunday: Party cloudy and very windy. High around 40. Temperature steady or slowly falling in the afternoon.

Sunday Night: Party cloudy and brisk. Much colder. Low around 15.

Monday: Mostly sunny. Cooler with high around 30.

Scott G. Ainsworth et al: "Only One Out of Five Archived Web Pages Existed as Presented"

Internet Archive: "Weather Underground: Varina, Iowa Forecast"



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Temporal (in)coherence

The screenshot shows the Wayback Machine interface with the URL <http://www.waybackmachine.org/2004/12/09/weather/forecast?query=50593>. The page displays the Varina, Iowa weather forecast for December 9, 2004. The forecast shows a high of 41°F and a low of 39°F with light drizzle. It includes a map of the area, a 5-day forecast, and various weather details like wind speed and visibility. The Wayback Machine interface also shows other weather-related pages and navigation options.

Scott G. Ainsworth et al: "Only One Out of Five Archived Web Pages Existed as Presented"

Internet Archive: "Weather Underground: Varina, Iowa Forecast"



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Temporal (in)coherence

Webpage was captured on
9 December 2004 at 1:09p CST.

http://www.weatherunderground.com/cgi-bin/findweather/getForecast?query=50593

24 cameras
27 Oct 2005 - 10 Jun 2017

Find the Weather for any City, State or ZIP Code, or Airport
Code or Country

Features: Wunder Photos, BERRAD Radar, Reciprocating Radar, Zoom Sat, Topical, Hunting, Marine, Beavers, Astronomy, Ski, Education, Favorites, Political weather stations

Member Benefits:
No Ads, Weather Email \$5 a year, Sign up here

E-mail taylorm@gmail.com
Password
Remember
Login

Print This Page
Map
Temperature
Heat Index
Windchill
Humidity
Radar
Gauge Point
Wind
Visibility
Visible Satellite
Satellite
Fronts
Snow Depth
Net Stream
Flight Rules
Health Maps
UV Forecast
Air Quality
Peak Air Quality
Tides
International
United States
Canada
Mexico
Central America
South America
Northern Asia
Southern Asia
Europe
Australia
Africa
Islands
Antarctica
Information
Need Help?
Link to us
About Us
Custom Weather
Newspaper Weather
Advertising
Sister Sites
Sister Sites
Sister Sites

• Auto Updates
• Video Center
• Natural Disaster

Varina, Iowa

Local Time: 1:09 PM CST Set My Timezone
Updated: 12:55 PM CST on December 09, 2004
Observation: at Storm Lake, Iowa (History)
Elevation: 1480 ft / 453 m

Current Conditions
41 °F / 5 °C
Light Drizzle
Wind: 5 mph / 3 m/s
Humidity: 100%
Dew Point: 41 °F / 5 °C
Wind: 6 mph / 9 km/h from the South
Pressure: 29.56 in / 1001 hPa
Visibility: 3.0 miles / 4.8 kilometers
UV: 1 out of 12
Clouds: Overcast 60% (AQU: 100%)
Show full METARS (help)

Local Radar
Regional Radar
Local Satellites
Regional Satellites
Trip Planner
Personal Weather Stations

Click detail for hourly wind, temperature, humidity and UV forecasts.
Alternate Computer Forecast: AVN MOS Weather Graph | Local Allergy Info from Pollen.com

Most Locales
read their local trip and travel guides for Varina, IA

Unbiased reviews and advice for Varina hotels and other cities

Best Rates GUARANTEED
Discount Hotels

Show Varina or Iowa

Wunder Photos

5-Day Forecast for ZIP Code 50593

Thu	Fri	Sat	Sun	Mon
 43° 29° Detail	 36° 22° Detail	 47° 34° Detail	 41° 15° Detail	 31° 15° Detail

Nowcast as of 11:42 am CST on December 9, 2004

Now
Drizzle fog will persist along and west of Highway 169 through the early afternoon, locations from Algona to Esterville can expect visibilities to remain around a quarter mile or less with localized areas in low lying spots under one eighth of a mile.

Forecast for Pocahontas County

Updated: 11:20 am CST on December 9, 2004
No Active Advisories (US Severe Weather)

This Afternoon
A chance of light rain showers. High in the lower 40s. West wind 10 to 15 mph. Chance of rain 10 percent.
[Detail](#)

Tonight
Rain likely through the evening. Light snow likely after midnight. Little or no accumulation. Low around 30. Northwest wind 15 to 20 mph. Chance of precipitation 60 percent.

Friday
Partly cloudy and breezy. A chance of light snow in the morning. High in the upper 30s. North wind 15 to 25 mph. Chance of snow 30 percent.
[Detail](#)

Friday Night
Partly cloudy. Low in the lower 20s. Northwest wind 15 to 20 mph.

Saturday
Partly cloudy. Not as cool with high in the upper 40s. Southwest wind 10 to 15 mph.
[Detail](#)

Saturday Night
Mostly cloudy and not as cool. Low in the lower 30s.

Sunday
Partly cloudy and very windy. High around 40. Temperature steady or slowly falling in the afternoon.

Sunday Night
Partly cloudy and brisk. Much colder. Low around 15.

Monday
Mostly sunny. Cooler with high around 30.

Scott G. Ainsworth et al: "Only One Out of Five Archived Web Pages Existed as Presented"

Internet Archive: "Weather Underground: Varina, Iowa Forecast"



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Temporal (in)coherence

http://www.weatherunderground.com/cgi-bin/findweather/getForecast?query=50593

24 cameras
27 Oct 2005 - 10 Jun 2017

Find the Weather for any City, State or ZIP Code, or Airport
Code or Country:

Feature: Wunder Photos BERRAD Radar Regional Radar **Zoom Sat**
Topo / Hunting Marine Rivers Astronomy Sky Education Favorites Meteorological stations

Varina, Iowa
Local Time: 1:09 PM CST Set My Timezone
Current Conditions
Updated: 12:55 PM CST on December 09, 2004
Observation at Storm Lake, Iowa (History)
Elevation: 1480 ft / 453 m

41°F / 5°C
Light Drizzle
Wind: 5 mph / 3 m/s
Humidity: 100%
Dew Point: 41°F / 5°C
Wind: 6 mph, from the South
Pressure: 29.56 in / 1001 hPa
Visibility: 3.0 miles / 4.8 kilometers
UV: 1 out of 12
Clouds: Overcast 60% (AQU: 100%)
Show full METARS (help)

Conditions, Nearby
City Temp Conditions Updated
Storm 41°F / Light Drizzle CST
Lake 51°C Partly Cloudy CST
Fort Dodge 41°F / Partly Cloudy CST
Carroll 41°F / Haze CST
Algona 32°F / Haze CST

History & Almanac
Max Temperature Min Temperature
Normal (KFDO) 33°F / 0°C 19°F / -10°C
Record (KFDO) 53°F / 11°C -1°F / -18°C (1976)
Yesterday 45°F / 7°C 32°F / 0°C

Detailed History and Climate
December 9, 2004 - December Calendar View (KFDO)
Seasonal Weather Averages

Astronomy
Astro: 1 to 15. in the mid 30.

Webpage was captured on 9 December 2004 at 1:09p CST.
Timestamp in text on webpage corroborates time of capture (i.e., 9 December 2004 at 1:09p CST).

43° | 29° 36° | 22° 47° | 34° 41° | 15° 31° | 15°
Chance of Rain Mostly Cloudy Mostly Cloudy Partly Cloudy Partly Cloudy
Detail Detail Detail Detail Detail Detail
Click details for hourly wind, temperature, humidity and UV forecasts.
Alternate Computer Forecast: AVN MOS Weather Graph | Local Allergy Info from Pollen.com
Most Locals
read their local trip and travel guides for Varina, IA
Unbiased reviews and advice for Varina, IA
hotels and other cities
In Varina
Best Rates GUARANTEED Discount Hotels
Show -Varina or Iowa
Wunder Photos

Now: Drizzle fog will persist along and west of Highway 169 through the early afternoon. Locations from Algona to Esterville can expect visibilities to remain around a quarter mile or less with localized areas in low lying spots under one eighth of a mile.
Forecast for Pocahontas County
Updated: 11:20 am CST on December 9, 2004
No Active Advisories (US Severe Weather)
This Evening: A chance of light rain showers. High in the lower 40s. West wind 10 to 15 mph. Chance of rain 10 percent.
Tonight: Light rain likely through the evening. Light snow likely after midnight. Little or no accumulation. Low around 30. Northwest wind 15 to 20 mph. Chance of precipitation 60 percent.
Friday: Partly cloudy and breezy. A chance of light snow in the morning. High in the upper 30s. North wind 15 to 25 mph. Chance of snow 30 percent.
Detail
Friday Night: Partly cloudy. Low in the lower 20s. Northwest wind 15 to 20 mph.
Saturday: Partly cloudy. Not as cool with high in the upper 40s. Southwest wind 10 to 15 mph. Chance of rain 10 percent.
Saturday Night: Mostly cloudy and not as cool. Low in the lower 30s.
Sunday: Partly cloudy and very windy. High around 40. Temperature steady or slowly falling in the afternoon.
Sunday Night: Partly cloudy and brisk. Much colder. Low around 15.
Monday: Mostly sunny. Cooler with high around 30.

Scott G. Ainsworth et al: "Only One Out of Five Archived Web Pages Existed as Presented"
Internet Archive: "Weather Underground: Varina, Iowa Forecast"



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Temporal (in)coherence

http://www.weatherunderground.com/cgi-bin/findweather/getForecast?query=50593

AM DEC 09 BAR 2005 2006

24 cameras 27 Oct 2005 - 10 Am (EST)

Find the Weather for any City, State or ZIP Code, or Airport

Code or Country:

Member Benefits:

- No Ads!
- Weather Email
- \$5 a year
- Sign up here

E-mail: taylorm@gmail.com
Password:
Remember me
Login

[Print This Page](#) [Map](#) [Temperature](#) [Wind Index](#) [Windchill](#) [Humidity](#)

Varina, Iowa

Local Time: 1:09 PM CST Set My Timezone

Current Conditions

Updated: 12:55 PM CST on December 09, 2004
Observed at Storm Lake, Iowa (History)
Elevation: 1480 ft / 453 m

41 °F / 5 °C

Light Drizzle

Wind: 37 °F / 3 °C
Humidity: 41 %
Dew Point: 41 °F / 5 °C
Windchill: 3 mph /

43° | 29° 36° | 22° 47° | 34° 41° | 15° 31° | 15°

Chance of Rain [Detail](#) Mostly Cloudy [Detail](#) Mostly Cloudy [Detail](#) Partly Cloudy [Detail](#) Partly Cloudy [Detail](#)

Click Detail for hourly wind, temperature, humidity and UV forecasts.

Alternate Computer Forecast: AVN MOS Weather Graph | Local Allergy Info from Pollen.com

Most Locals [read their local trip and travel guides for Varina, IA](#)

Unbiased reviews and advice for Varina hotels and other cities

Wunder Photos

Varina or Iowa

Text on webpage and associated infographic indicate current conditions as raining. Infographic captured on 12 December 2004 at 8:54a CST.

Health Maps UV Forecast Air Quality Peak Air Quality Interactive International United States Canada Mexico Central America South America Northern Asia Southern Asia Europe Australia Africa Islands Antarctica Information Need Help? Link to us About Us Custom Weather Newspaper Weather Advertising Scales of Justice - Steiner.com

• Auto-Digitals • Video Center • Natural Disaster

Conditions, Nearby

City	Temp	Conditions	Updated
Storm Lake	41 °F / 5 °C	Light Drizzle	12:55 PM CST
Fort Dodge	41 °F / 5 °C	Partly Cloudy	12:55 PM CST
Carroll	41 °F / 5 °C	Haze	12:55 PM CST
Algona	37 °F / 3 °C	Haze	12:55 PM CST

History & Almanac

Max Temperature	Min Temperature
Normal (KFDO) 33 °F / 0 °C	19 °F / -10 °C
Record (KFDO) 53 °F / 11 °C	-1 °F / -18 °C (1976)
Yesterday 45 °F / 7 °C	32 °F / 0 °C

Detailed History and Climate

December 9, 2004 - 1:09 PM CST

December Calendar View (KFDO)

Seasonal Weather Averages

Astronomy

Scott G. Ainsworth et al: "Only One Out of Five Archived Web Pages Existed as Presented"

Internet Archive: "Weather Underground: Varina, Iowa Forecast"



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Temporal (in)coherence

The screenshot shows a weather website for Varina, Iowa. The top navigation bar includes links for Wunder Photos, BERRAD Radar, Regional Radar, Zoom Sat, Local Time, Set My Timezone, Current Conditions, and a map of the area. Below this, there's a weather summary for Varina, Iowa, with a map showing precipitation levels (41°F / 5°C, Light Drizzle). A timestamp at the bottom left indicates the page was captured on 9 December 2004 at 1:09p CST.

Timestamp in text on webpage corroborates time of capture (i.e., 9 December 2004 at 1:09p CST).

Text on webpage and associated infographic indicate current conditions as raining. Infographic captured on 12 December 2004 at 8:54a CST.

The screenshot shows a weather website for Pocahontas County, West Virginia. It features a forecast for rain and snow, with a timestamp indicating it was captured on 12 September 2005 at 5:34p CDT. The page includes sections for Health Maps, UV Forecast, Air Quality, Peak Air Quality, International, United States, Canada, Mexico, Central America, South America, Northern Asia, Southern Asia, Europe, Australia, Africa, Islands, Antarctica, Information, Need Help?, Link to Us, About Us, Custom Weather, Newspaper Weather, Advertising, and more. A sidebar on the right provides a detailed history and climate for the area.

Scott G. Ainsworth et al: "Only One Out of Five Archived Web Pages Existed as Presented"

Internet Archive: "Weather Underground: Varina, Iowa Forecast"



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What conclusions does this page support?

http://www.wunderground.com/cgi-bin/findweather/getForecast?query=50593

INTERNET SERVICE
Wunderground.com
PODCASTS

Find the Weather for any City, State or ZIP Code, or Airport Code or Country

Features: Wunder Photos, NEXRAD radar, Regional Radar, Zoom Satellite, Maps, Trip Planner, Travel Journals, Marine, Severe, Astronomy, Bar, Education, Favorites, Personal Weather Stations

Local Time: 1:09 PM CST Set My Timezone

Current Conditions

Updated: 12:55 PM CST on December 09, 2004
Observed at Slone Lake, Iowa (History)
Elevation: 1480 ft / 453 m

41°F / 5°C

Light Drizzle
Wind: 6 mph from the South
Humidity: 100%
Dew Point: 41°F / 5°C
Wind: 6 mph from the South
Pressure: 29.56 in / 1000 hPa
Visibility: 3.0 miles / 5.0 kilometers
UV: 1 out of 12
Clouds: Overcast 600 ft (AGL):
Show full METARS (help)

Local Radar
Regional Radar
Local Satellite
Regional Satellite
Personal Weather Stations

Click Detail for hourly wind, temperature, humidity and UV forecasts.

Alternate Computer Forecast: AVN MOS Weather Graph | Local Allergy Info from Pollen.com

5-Day Forecast for ZIP Code 50593

Thu	Fri	Sat	Sun	Mon
 43° 29° Chance of Rain Detail	 36° 22° Mostly Cloudy Detail	 47° 34° Mostly Cloudy Detail	 41° 15° Partly Cloudy Detail	 31° 15° Partly Cloudy Detail

In Varina
Best Rates
Guaranteed
Discount Hotels

Show Varina or Iowa

Nowcast as of 11:42 am CST on December 9, 2004

Now Dense fog will persist along and west of Highway 166 through the early afternoon. Locations from Alona to Esterville can expect visibilities to remain around a quarter mile or less with low lying spots under one eighth of a mile.

Forecast for Pocahontas County

Updated: 11:20 am CST on December 9, 2004

No Active Advisories (US Severe Weather)

Tonight
Clouds with a chance of light rain showers. High in the lower 40s. West wind 10 to 15 mph. Chance of rain 30 percent.
Detail

Tuesday
Clouds with a chance of light rain showers. High in the lower 40s. West wind 10 to 15 mph. Chance of rain 30 percent.
Detail

Wednesday
Clouds with a chance of light rain showers. High in the lower 40s. West wind 10 to 15 mph. Chance of rain 30 percent.
Detail

Friday Night
Party cloudy, low in the lower 20s. Northwest wind 15 to 20 mph.
Detail

Saturday
Party cloudy. Not as cool with high in the upper 40s. Southwest wind 10 to 15 mph.
Detail

Saturday Night
Mostly cloudy and not as cool. Low in the lower 30s.
Detail

Sunday
Party cloudy and very windy. High around 40. Temperature steady or slowly falling in the afternoon.
Detail

Sunday Night
Party cloudy and brisk. Much colder. Low around 15.
Detail

Scott G. Ainsworth et al: "Only One Out of Five Archived Web Pages Existed as Presented"

Internet Archive: "Weather Underground: Varina, Iowa Forecast"



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What conclusions does this page support?

1. it was raining in Varina, Iowa at 12:55p CST on 9 December 2004
2. the sky was clear in Varina, Iowa at 12:55p CST on 9 December 2004
3. no definitive conclusions are supported, because different parts of the page suggest inconsistent weather conditions
4. the question is moot, since an observant judge or opposing party will highlight the page's unreliability, resulting in it being deemed inadmissible
5. IAWM evidence is inherently unreliable, due to issues of temporal incoherence



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What conclusions does this page support?

- **it was raining in Varina, Iowa at 12:55p CST on 9 December 2004**
- supporting text (i.e., “Light Drizzle”) is in webpage HTML
- rain infographic is displaced in time, but file name (i.e., “rain.GIF”) still indicates rain
- content presentation is consistent w/ IAWM behavior
- temporally violative image can be qualified + discounted



[“11NOV2015 Following The Storm” by Carl Wycoff under CC BY 2.0](#)

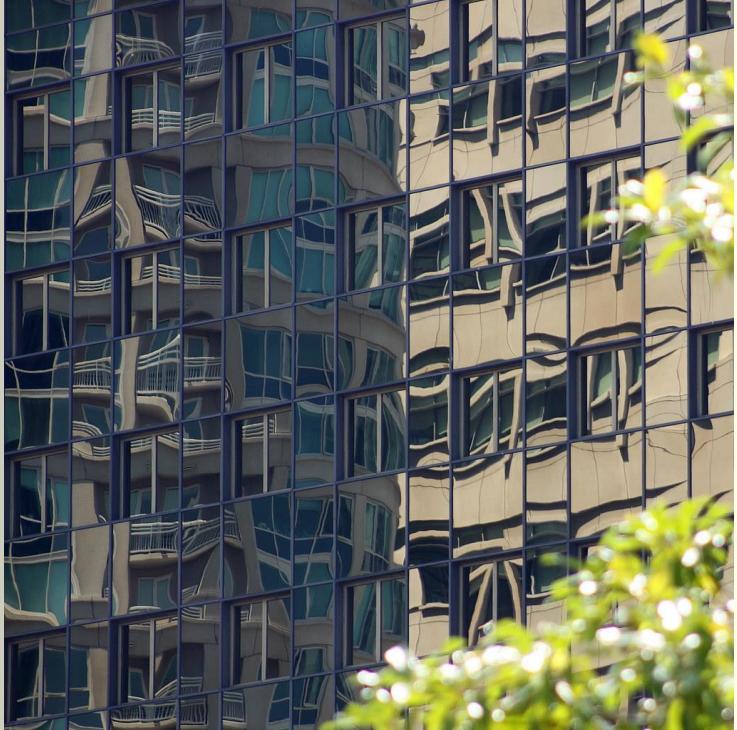


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What's going on here?

- archiving of web resources is time-staggered
- IAWM reconstitutes archived webpage w/ most temporally proximate elements
- IAWM may therefore re-present fictitious web pages
- examine capture dates + assess materiality of temporal incoherence



"chaos" by jenny.downing under CC BY 2.0



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Problems w/ PDF

- IAWM evidence submitted as PDF screenshots
- temporal variations no longer apparent
- if temporal coherence is an issue, provide supplementary info

The screenshot shows a weather forecast for Varina, Iowa, with the following details:

Current Conditions: Updated: 12:15 PM CST on December 09, 2004. Observed in Storm Lake, Iowa (Historical). Elevation: 403 m. Temperature: 41°F / 5°C. Windchill: 37°F / 3°C. Humidity: 100%. Dew Point: 37°F / 5°C. Wind: 6 mph / 9 km/h from the southwest. Pressure: 29.56 in / 1000 hPa. Visibility: 5.0 miles / 8 km. UV: 1 out of 12. Clouds: Overcast 6000 ft. Show full METARS (HTML).

5-Day Forecast for ZIP Code 50993: Varina, Iowa (43°N 94.8°W)

Day	Temp (F)	Temp (C)	Condition
Thu	43°	29°	Mostly Cloudy
Fri	36°	2.2°	Mostly Cloudy
Sat	47°	3.4°	Partly Cloudy
Sun	45°	1.5°	Partly Cloudy
Mon	31°	-1.5°	Partly Cloudy

Conditions Nearby:

City	Temp (F)	Temp (C)	Condition
Storm Lake	41°	5°	Drizzle
Dodge City	50°	10°	Cloudy
Carroll	43°	6°	Haze
Arlene	37°	3°	Haze

History & Almanac:

Month	Max Temperature	Min Temperature
Normal (FPRD)	33° / 0 °C	10° / -10 °C
Record (KFRD) (1979)	53°F / 11 °C	-1°F / -19°C (1976)
Yesterday	45° / 7 °C	32°F / 0 °C

Seasonal Weather Averages:

Month	Normal View (FPRD)	Seasonal Weather Averages
December	9 ° / 204 ft (in)	32°F / 0 °C

Astronomy:

Event	Extended View	Normal View	Large View
Sunrise	[Link]	[Link]	[Link]
Sunset	[Link]	[Link]	[Link]



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Problems w/ PDF

- IA will still provide an affidavit
- however, this IAWM evidence is more easily contested
- or viewed as less credible by judge
- consider an expert witness



"Door Ajar" by Jenn Turner under CC BY 2.0



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The path forks...

As the story reaches a turning point, the speaking figure again quiets. The screen at the front of the room abruptly changes once more. You feel a sense of déjà vu...



"You are here." by Paul Thompson under CC BY-ND 2.0

questions



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Questions?

The speaking figures evidently conclude their soliloquies. The image on the screen is still. You reflect on your journey, wondering what they meant when they said...



"Big blue bear looking in" by Tim Wilson under CC BY 2.0



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Parting...

*The figures give their
thanks, bid you farewell.
You rise to your feet and
go forth, confident in
newfound knowledge...*



© Chris Devaraj (<http://www.flickr.com/photos/chrisdevaraj>)

"[IMG_1039](#)" by [Chris Devaraj](#) under [CC BY 2.0](#)



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