Mirror site

Mirror sites or **mirrors** are replicas of other websites. The concept of mirroring applies to network services accessible through any protocol, such as HTTP or FTP. Such sites have different URLs than the original site, but host identical or near-identical content.[1] Mirror sites are often located in a different geographic region than the original, or upstream site. The purpose of mirrors is to reduce network traffic, improve access speed, ensure availability of the original site for technical[2] or political reasons,[3] or provide a real-time backup of the original site.[4][5][6] Mirror sites are particularly important in developing countries, where internet access may be slower or less reliable.[7]

Mirror sites were heavily used on the early internet, when most users accessed through dialup and the Internet backbone had much lower bandwidth than today, making a geographically-localized mirror network a worthwhile benefit. Download archives such as Info-Mac, Tucows and CPAN maintained worldwide networks mirroring their content accessible over HTTP or anonymous FTP. Some of these networks, such as Info-Mac or Tucows are no longer active or have removed their mirrored download sections, but some like CPAN or the Debian package mirrors are still active in 2023.[8] Debian removed FTP access to its mirrors in 2017 because of declining use and the relative stagnation of the FTP protocol, mentioning FTP servers' lack of support for techniques such as caching and load balancing that are available to HTTP.[9] Modern mirrors support HTTPS and IPv6 along with IPv4.[10]

On occasion, some mirrors may choose not to replicate the entire contents of the upstream server because of technical constraints, or selecting only a subset relevant to their purpose, such as software written in a particular programming language, runnable on a single computer platform, or written by one author. These sites are called **partial mirrors** or **secondary mirrors**.[11]

Examples

Notable websites with mirrors include Project Gutenberg,[12] KickassTorrents,[13][14][15][16] The Pirate Bay,[17][18][19][20] WikiLeaks,[21][22] the website of the Environmental Protection Agency,[23][24] and Wikipedia.[25][26][27] Some notable partial mirrors include free and open-source software projects such as GNU,[28] in particular Linux distributions CentOS,[29] Debian,[30] Fedora,[31] and Ubuntu;[32][33] such projects provide mirrors of the download sites (since those are expected to have high server load). Many open source application providers such as VideoLAN use mirrors to distribute VLC Media Player,[34] and The Document Foundation uses mirrors to distribute LibreOffice.[35]

It was once common for tech companies such as Microsoft, Hewlett-Packard or Apple to maintain a network of mirrors accessible over HTTP or anonymous FTP, hosting software updates, sample code and various freely-downloadable utilities. Much of these sites were shut down in the first decades of the 21st century, with Apple shutting down its FTP services in 2012 and Microsoft stopping updates in 2010.[36][37] Today, the contents of a number of these mirror sites are archived at The FTP Site Boneyard.[38] Occasionally, some people will use web scraping software to produce static dumps of existing sites, such as the BBC's *Top Gear* and RedFlagDeals.

See also

- InterPlanetary File System – makes mirror sites redundant
- Content delivery network
- cURL
- Cyber resilience
- Dark web
- DDoS
- Downtime
- HTTrack
- IRC network
- Mesh networking
- Peer-to-peer
- Replication (computing)
- Web archiving
- Website monitoring
- Wget
- Wikipedia:Mirrors and forks

References

1. Glushko, Robert J. (25 August 2014). *The Discipline of Organizing: Core Concepts Edition* (https://books.google.com/books?id=9ISMBAAAQBAJ&pg=PT154). O'Reilly Media. ISBN 9781491912812. Archived (https://web.archive.org/web/20240530050415/https://books.google.com/books?id=9ISMBAAAQBAJ&pg=PT154#v=onepage&q&f=false) from the original on 30 May 2024. Retrieved 29 April 2017.
2. "Debian worldwide mirror sites" (https://www.debian.org/mirror/list). Archived (https://web.archive.org/web/20170906024523/http://www.debian.org/mirror/list) from the original on 6 September 2017. Retrieved 27 August 2017. "Using a nearby server will probably speed up your download, and also reduce the load on our central servers and on the Internet as a whole."
3. "Impending Trump has Internet Archive mirror to Canada" (https://www.slashgear.com/impending-trump-has-internet-archive-mirror-to-canada-29465694/). 29 November 2016. Archived (https://web.archive.org/web/20191211171137/https://www.slashgear.com/impending-trump-has-internet-archive-mirror-to-canada-29465694/) from the original on 11 December 2019. Retrieved 11 December 2019. "The Internet Archive has several mirrors up right now, and Canada is set to be its next. This move is taking place specifically because of the new presidential elect Trump here in the United States."
4. "What is Mirror Site? Webopedia Definition" (http://www.webopedia.com/TERM/M/mirror_site.html). *www.webopedia.com*. 21 July 1998. Archived (https://web.archive.org/web/20170520062622/http://www.webopedia.com/TERM/M/mirror_site.html) from the original on 20 May 2017. Retrieved 29 April 2017.
5. "What is Mirror Site? - Definition from Techopedia" (https://www.techopedia.com/definition/4894/mirror-site). *Techopedia.com*. Archived (https://web.archive.org/web/20180104015353/https://www.techopedia.com/definition/4894/mirror-site) from the original on 4 January 2018. Retrieved 29 April 2017.

6. Wisshak, Max; Tapanila, Leif (2 June 2008). *Current Developments in Bioerosion* (https://books.google.com/books?id=6Zy6xC4rB3oC&pg=PA477). Springer Science & Business Media. ISBN 9783540775973. Archived (https://web.archive.org/web/20240530050432/https://books.google.com/books?id=6Zy6xC4rB3oC&pg=PA477#v=onepage&q&f=false) from the original on 30 May 2024. Retrieved 29 April 2017.

7. Sekikawa, A.; Sa, E. R.; Acosta, B.; Aaron, D. J.; Laporte, R. E. (2000). "Internet mirror sites - The Lancet" (https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(05)72944-5/fulltext). *Lancet*. **355** (9219): 2000. doi:10.1016/s0140-6736(05)72944-5 (https://doi.org/10.1016%2Fs0140-6736%2805%2972944-5). PMID 10859070 (https://pubmed.ncbi.nlm.nih.gov/10859070). S2CID 32218172 (https://api.semanticscholar.org/CorpusID:32218172). Archived (https://web.archive.org/web/20221006003810/https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(05)72944-5/fulltext) from the original on 6 October 2022. Retrieved 11 December 2019. "We all become frustrated when web pages take minutes to unfold. This can increase the gap between infrastructure haves and have-nots. Downloading time is important for other reasons; users connecting to the internet via telephone line in many countries are charged per minute and slow downloading itself may make users lose interest."

8. "The status of CPAN mirrors" (https://mirrors.cpan.org/). *mirrors.cpan.org*. Archived (https://web.archive.org/web/20130707160025/http://mirrors.cpan.org/) from the original on 7 July 2013. Retrieved 5 February 2023.

9. Nestor, Marius (26 April 2017). "Debian Project to Shut Down Its Public FTP Services, Developers Are Not Affected" (https://news.softpedia.com/news/debian-project-shuts-down-its-public-ftp-services-developers-are-not-affected-515196.shtml). *Softpedia*. Archived (https://web.archive.org/web/20240208131414/https://news.softpedia.com/news/debian-project-shuts-down-its-public-ftp-services-developers-are-not-affected-515196.shtml) from the original on 8 February 2024. "The decision to close the Debian FTP services for users was made because the FTP servers in their current state lack support for acceleration or caching, and they aren't quite used lately due to the fact that the Debian Installer no longer provides an FTP option for accessing mirrors since more than ten years ago... FTP as a protocol appears to no longer be efficient, requiring adding strange workarounds to firewalls and load-balancing daemons."

10. "CSpace Hostings Public Mirror" (https://mirror.cspacehostings.com/). Archived (https://web.archive.org/web/20210121194601/https://mirror.cspacehostings.com/) from the original on 21 January 2021. Retrieved 21 January 2021. "This page and mirror are available over IPv4 and IPv6 and accessible over HTTP, HTTPS and Rsync"

11. "Debian worldwide mirror sites" (https://www.debian.org/mirror/list). Archived (https://web.archive.org/web/20170906024523/http://www.debian.org/mirror/list) from the original on 6 September 2017. Retrieved 27 August 2017. "A secondary mirror site may have restrictions on what they mirror"

12. "Project Gutenberg, nonprofit organization" (https://www.britannica.com/topic/Project-Gutenberg). Archived (https://web.archive.org/web/20210713010557/https://www.britannica.com/topic/Project-Gutenberg) from the original on 13 July 2021. Retrieved 11 December 2019. "In addition, dozens of "mirror" Web sites were created around the world, where the e-books were also stored and available for downloading."

13. Russon, Mary-Ann (22 July 2016). "Kickass Torrents is back: New domains, mirrors and proxies show business is as usual" (http://www.ibtimes.co.uk/kickass-torrents-back-new-domains-mirrors-proxies-show-business-usual-1572010). International Business Times UK. Archived (https://web.archive.org/web/20170505222858/http://www.ibtimes.co.uk/kickass-torrents-back-new-domains-mirrors-proxies-show-business-usual-1572010?) from the original on 5 May 2017. Retrieved 29 April 2017.

14. Clark, Bryan (21 July 2016). "IsoHunt just launched a working KickassTorrent mirror" (http s://thenextweb.com/insider/2016/07/21/that-didnt-take-long-isohunt-already-has-a-working-k ickasstorrent-mirror/). The Next Web. Archived (https://web.archive.org/web/2017071209370 3/https://thenextweb.com/insider/2016/07/21/that-didnt-take-long-isohunt-already-has-a-wor king-kickasstorrent-mirror/) from the original on 12 July 2017. Retrieved 29 April 2017.

15. "Mexican Police Target Popular KickassTorrents 'Clone,' Seize Domain – TorrentFreak" (http s://torrentfreak.com/mexican-police-target-popular-kickasstorrents-clone-seize-domain-1609 23/). TorrentFreak. 23 September 2016. Archived (https://web.archive.org/web/2017082721 2147/https://torrentfreak.com/mexican-police-target-popular-kickasstorrents-clone-seize-do main-160923/) from the original on 27 August 2017. Retrieved 29 April 2017.

16. Wei, Wang. "New Kickass Torrents Site is Back Online by Original Staffers" (https://thehacke rnews.com/2016/12/kickass-torrents-site.html). The Hacker News. Archived (https://web.arc hive.org/web/20170508211606/http://thehackernews.com/2016/12/kickass-torrents-site.htm l) from the original on 8 May 2017. Retrieved 29 April 2017.

17. "The Piratebay Blocked By Chrome, Mirror Sites Accessible" (http://www.itechpost.com/articl es/38171/20161008/piratebay-blocked-chrome-mirror-sites-accessible-firefox.htm). iTech Post. 8 October 2016. Archived (https://web.archive.org/web/20170712194602/http://www.it echpost.com/articles/38171/20161008/piratebay-blocked-chrome-mirror-sites-accessible-fire fox.htm) from the original on 12 July 2017. Retrieved 29 April 2017.

18. "The Pirate Bay is blocked Australia wide... except it really isn't" (https://www.cnet.com/au/n ews/the-pirate-bay-blocked-australia-wide-proxy-mirror-site-dns-blocking-telstra-vodafone-o ptus/). CNET. Archived (https://web.archive.org/web/20170422111926/https://www.cnet.co m/au/news/the-pirate-bay-blocked-australia-wide-proxy-mirror-site-dns-blocking-telstra-voda fone-optus/) from the original on 22 April 2017. Retrieved 29 April 2017.

19. "Pirate Bay Mirror Shut Down: Alternative Clone Had Kickass Torrents Skin, Vows To Continue" (http://www.techtimes.com/articles/179181/20160924/pirate-bay-mirror-shut-down -alternative-clone-had-kickass-torrents-skin-vows-to-continue.htm). *Tech Times*. 24 September 2016. Archived (https://web.archive.org/web/20170422123800/http://www.techti mes.com/articles/179181/20160924/pirate-bay-mirror-shut-down-alternative-clone-had-kicka ss-torrents-skin-vows-to-continue.htm) from the original on 22 April 2017. Retrieved 29 April 2017.

20. "Pirate Bay Blocked By Google Chrome And Firefox: Kickass Torrents Mirror, Extratorrent, Torrentz And Other Clones Accessible" (http://www.techtimes.com/articles/181353/2016100 8/pirate-bay-blocked-by-google-chrome-and-firefox-kickass-torrents-mirror-extratorrent-torre ntz-and-other-clones-accessible.htm). Tech Times. 8 October 2016. Archived (https://web.ar chive.org/web/20170706064504/http://www.techtimes.com/articles/181353/20161008/pirate- bay-blocked-by-google-chrome-and-firefox-kickass-torrents-mirror-extratorrent-torrentz-and- other-clones-accessible.htm) from the original on 6 July 2017. Retrieved 29 April 2017.

21. Greenemeier, Larry. "How Has WikiLeaks Managed to Keep Its Web Site Up and Running?" (https://www.scientificamerican.com/article/wikileaks-assange-persistence-of-info/). Scientific American. Archived (https://web.archive.org/web/20170827220019/https://www.sci entificamerican.com/article/wikileaks-assange-persistence-of-info/) from the original on 27 August 2017. Retrieved 29 April 2017.

22. Schroeder, Stan (6 December 2010). "WikiLeaks Now Has Hundreds of Mirrors" (http://mas hable.com/2010/12/05/wikileaks-mirrors/). Mashable. Archived (https://web.archive.org/web/ 20170417093541/http://mashable.com/2010/12/05/wikileaks-mirrors/) from the original on 17 April 2017. Retrieved 29 April 2017.

23. "The EPA Posted a Mirror of Its Website Before Trump Can Gut the Real One" (https://www. vice.com/en/article/the-epa-posted-a-mirror-of-its-website-before-trump-can-gut-the-real-one -vgtrn/). Vice. 16 February 2017. Archived (https://web.archive.org/web/20170428204523/htt ps://www.vice.com/en_us/article/the-epa-posted-a-mirror-of-its-website-before-trump-can-gu t-the-real-one-vgtrn) from the original on 28 April 2017. Retrieved 29 April 2017.

24. Hiltzik, Michael (24 April 2017). "Did 'people power' save a trove of EPA data from a shutdown by Trump?" (https://www.latimes.com/business/hiltzik/la-fi-hiltzik-epa-opendata-20170424-story.html). *Los Angeles Times*. Archived (https://web.archive.org/web/20170429015808/http://www.latimes.com/business/hiltzik/la-fi-hiltzik-epa-opendata-20170424-story.html) from the original on 29 April 2017. Retrieved 29 April 2017.

25. "How to set up your own copy of Wikipedia – ExtremeTech" (https://www.extremetech.com/computing/114387-how-to-set-up-your-own-copy-of-wikipedia). ExtremeTech. 18 January 2012. Archived (https://web.archive.org/web/20170416141653/http://www.extremetech.com/computing/114387-how-to-set-up-your-own-copy-of-wikipedia) from the original on 16 April 2017. Retrieved 29 April 2017.

26. Broughton, John (2008). *Wikipedia: The Missing Manual* (https://books.google.com/books?id=7rB8dq6r7lEC&pg=PA340). "O'Reilly Media, Inc.". ISBN 9780596515164. Archived (https://web.archive.org/web/20240530050500/https://books.google.com/books?id=7rB8dq6r7lEC&pg=PA340#v=onepage&q&f=false) from the original on 30 May 2024. Retrieved 29 April 2017.

27. Ayers, Phoebe; Matthews, Charles; Yates, Ben (2008). *How Wikipedia Works: And how You Can be a Part of it* (https://books.google.com/books?id=lHdi1CEPLb4C&pg=PA296). No Starch Press. ISBN 9781593271763. Archived (https://web.archive.org/web/20240530050432/https://books.google.com/books?id=lHdi1CEPLb4C&pg=PA296#v=onepage&q&f=false) from the original on 30 May 2024. Retrieved 29 April 2017.

28. "gnu.org" (https://www.gnu.org/prep/ftp.html). *www.gnu.org*. Archived (https://web.archive.org/web/20170827213351/https://www.gnu.org/prep/ftp.html) from the original on 27 August 2017. Retrieved 27 August 2017.

29. "CentOS Mirror" (https://centos.org/download/mirrors/). *CentOS Mirror*. Archived (https://web.archive.org/web/20210125213051/https://www.centos.org/download/mirrors/) from the original on 25 January 2021. Retrieved 21 January 2021.

30. "Debian worldwide mirror sites" (https://www.debian.org/mirror/list). *debian.org*. Archived (https://web.archive.org/web/20170906024523/http://www.debian.org/mirror/list) from the original on 6 September 2017. Retrieved 27 August 2017.

31. "Home - MirrorManager" (https://admin.fedoraproject.org/mirrormanager/). *admin.fedoraproject.org*. Archived (https://web.archive.org/web/20171010115151/https://admin.fedoraproject.org/mirrormanager/) from the original on 10 October 2017. Retrieved 27 August 2017.

32. "Mirrors : Ubuntu" (https://launchpad.net/ubuntu/+archivemirrors). *Ubuntu Archive Mirrors*. Archived (https://web.archive.org/web/20210111175704/https://launchpad.net/ubuntu/+archivemirrors) from the original on 11 January 2021. Retrieved 21 January 2021.

33. "Mirrors : Ubuntu" (https://launchpad.net/ubuntu/+cdmirrors). *Ubuntu CD Mirrors*. Archived (https://web.archive.org/web/20210205153458/https://launchpad.net/ubuntu/+cdmirrors) from the original on 5 February 2021. Retrieved 21 January 2021.

34. "Mirrors – VideoLAN" (https://www.videolan.org/videolan/mirrors.html). *videolan.org*. Archived (https://web.archive.org/web/20210122073517/https://www.videolan.org/videolan/mirrors.html) from the original on 22 January 2021. Retrieved 21 January 2021.

35. "The Document Foundation Mirrors" (https://download.documentfoundation.org/mirmon/allmirrors.html). *download.documentfoundation.org*. Archived (https://web.archive.org/web/20210122045241/https://download.documentfoundation.org/mirmon/allmirrors.html) from the original on 22 January 2021. Retrieved 21 January 2021.

36. "How do I access the MICROSOFT FTP server? – Windows 10 Help Forums" (https://www.tenforums.com/browsers-email/27672-how-do-i-access-microsoft-ftp-server.html?s=4fec9554e637bce5d4a6f8924026bbe9). *tenforums.com*. Archived (https://web.archive.org/web/20221020102407/https://www.tenforums.com/browsers-email/27672-how-do-i-access-microsoft-ftp-server.html?s=4fec9554e637bce5d4a6f8924026bbe9) from the original on 20 October 2022. Retrieved 12 April 2022.

37. "Microsoft has closing ftp://ftp.microsoft.com" (https://www.betaarchive.com/forum/viewtopic. php?t=29011). *www.betaarchive.com*. Archived (https://web.archive.org/web/202001280555 30/https://www.betaarchive.com/forum/viewtopic.php?t=29011) from the original on 28 January 2020. Retrieved 11 December 2019.
38. "The FTP Site Boneyard : Free Software : Free Download, Borrow and Streaming : Internet Archive" (https://archive.org/details/ftpsites&tab=collection). *archive.org*.

External links