Node.js 17 ChangeLog

17.8.0 17.7.2 17.7.1 17.7.0 17.6.0 17.5.0 17.4.0 17.3.1 17.3.0 17.2.0 17.1.0 17.0.1

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 - Archive

2022-03-22, Version 17.8.0 (Current), @bengl

Notable Changes

- [<u>3bd0078457</u>] **doc**: add @ShogunPanda to collaborators (Shogun) <u>#42362</u>
- [<u>23354673be</u>] **doc**: deprecate string coercion in fs.write , fs.writeFileSync (Livia Medeiros) #42149
- [da42ffb85e] (SEMVER-MINOR) http: trace http client by perf_hooks (theanarkh) #42345
- [84fd6e54b0] **deps**: upgrade npm to 8.5.5 (npm team) #42382
- [<u>b60262ee9f</u>] **deps**: update undici to 4.15.1 (Michaël Zasso) <u>#42246</u>

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• [ 1796f035c7 ] - build: rename tools workflow and add undici to it (Michaël Zasso) #42246
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- [f27bcec2ea] build: use ccache in make-v8.sh on ppc64le and s390x (Richard Lau) #42204
- [<u>f48c3baf5a</u>] crypto: fix auth tag length error when mode!= GCM (Tobias Nießen) #42383
- [<u>1d0468f749</u>] **crypto**: fix fingerprint string size calculation (Tobias Nießen) <u>#42175</u>
- [a4632a3dc2] crypto: add CHECKs to remaining BIO_s_mem allocs (Tobias Nießen) #42155
- [<u>3b55946452</u>] **debugger**: correct typo in inspect_repl.js (Kohei Ueno) <u>#42267</u>
- [<u>84fd6e54b0</u>] **deps**: upgrade npm to 8.5.5 (npm team) <u>#42382</u>
- [<u>f2178fcc1a</u>] **deps**: cares: cherry-pick b5a3d96 (bradh352) <u>#42216</u>
- [<u>063ff08cb1</u>] **deps**: V8: cherry-pick c6f6626deb14 (Lu Yahan) <u>#42240</u>
- [<u>b60262ee9f</u>] **deps**: update undici to 4.15.1 (Michaël Zasso) <u>#42246</u>
- [70c0758308] **deps**: upgrade npm to 8.5.3 (npm team) #42205
- [<u>fd51e78963</u>] **doc**: fix version history for net.Socket and net.Server (Antoine du Hamel) #42268
- [db83c4d6dc] doc: improve README.md usability (Rich Trott) #42378
- [88d3401329] doc: add that chacha20-poly1305 is IETF version (Tobias Nießen) #42370
- [<u>04a7c0061b</u>] **doc**: update instructions for openssl updates (Michael Dawson) <u>#42353</u>
- [78b858dd4b] doc: document goal to have examples (Michael Dawson) #42274
- [a5e42f0113] doc: fix Embedder's Guide link to V8 official docs (Aroyan) #42373
- [6c265e7243] doc: remove unneeded lint disable comment (Rich Trott) #42374
- [46d3d23e64] doc: revise async_hooks docs (Rich Trott) #42337
- [3bd0078457] doc: add @ShogunPanda to collaborators (Shogun) #42362
- [e7e8eb9f03] **doc**: update base branch name for nodejs/nodejs.org (Danielle Adams) #42355
- [fd7e4ab654] doc: fix async iterable pipeline signal examples (Randall Leeds) #42258
- [96dc591b55] doc: clarify path search in child_process.spawn (Damjan Cvetko) #41418
- [72dd50016a] doc: clarify the meaning of legacy status (Darshan Sen) #42269
- [8b99099063] **doc**: improve pipe description (Mikael Finstad) #42295
- [<u>701dc14fdf</u>] **doc**: remove outdated timeout.unref content (Xuguang Mei) <u>#42241</u>
- [<u>23354673be</u>] **doc**: deprecate string coercion in fs.write , fs.writeFileSync (Livia Medeiros) #42149
- [<u>f3c6c00963</u>] **doc**: remove refs to old OpenSSL list-* commands (Tobias Nießen) <u>#42235</u>
- [19851f8d2d] doc: readline 'line' event emits final line (Matt Probert) #42214
- [e55283b978] esm: make extension-less errors in type:module actionable (Bradley Farias) #42301
- [<u>e17db8f0fa</u>] **esm**: improve typings and code coverage (Bradley Farias) <u>#42305</u>
- [4829a1047f] esm: add runtime warning for specifier resolution flag (Geoffrey Booth) #42252
- [da42ffb85e] (SEMVER-MINOR) http: trace http client by perf_hooks (theanarkh) #42345
- [88dee3c6b5] http2: fix potential integer overflow (Michael Dawson) #42248
- [160b69c31] lib: refactor to use primordials in lib/assert.js (Akhil Marsonya) #41702
- [69a3792540] **lib**: fix AsyncResource.bind not using 'this' from the caller by default (Roch Devost) #42177
- [1c87ce6a32] meta: update AUTHORS (Node.js GitHub Bot) #42404
- [e7b8d83acd] meta: update AUTHORS (Node.js GitHub Bot) #42317
- [7fc4b9f08d] meta: add dependencies label to label-pr-config (Mestery) #42129
- [e96042442b] src: convert hex2bin() into a regular function (Darshan Sen) #42321
- [21198c1407] src: fix coverity warnings in node_file.cc (Michael Dawson) #42272
- [846b074075] src: check EC_POINT_get_affine_coordinates result (Tobias Nießen) #42304
- [8b84e68cbd] src: simplify bound check in ParseArrayIndex (Tobias Nießen) #42306
- [<u>9500e5862e</u>] **src**: avoid returning invalid value from hex2bin (Tobias Nießen) <u>#42307</u>

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• [ <u>08e2d8ab86</u> ] - src: check return value of HMAC_Final (Tobias Nießen) <u>#42303</u>
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- [9fc4b9b04e] src: include internal/options in the snapshot (Joyee Cheung) #42203
- [e43aa30982] src: remove redundant buffer size check (Tobias Nießen) #42257
- [d06e92dba0] src: perform minor cleanups on zlib code (Anna Henningsen) #42247
- [9af908305d] src: use emplace_back instead of push_back (Yash Ladha) #42159
- [62d9a7f5db] src: fix unchecked return warning from coverity (Michael Dawson) #42176
- [<u>58763d7f9d</u>] **src,crypto**: avoid tristate Maybe<bool> in ExportJWKEcKey() (Darshan Sen) <u>#42223</u>
- [5367002bc8] stream: do cleanup when iterator is destroyed (Khoo Hao Yit) #42320
- [<u>3492a0eb1e</u>] **string_decoder**: fix crash when calling __proto__.write() (Darshan Sen) <u>#42062</u>
- [d9a5c2b284] test: give slow tests more time on Rasberry Pls (Michael Dawson) #42380
- [<u>b82bac09ff</u>] test: improve https_renew_cert.sh script (Tobias Nießen) #42343
- [dfdce7c182] test: improve _http_incoming.js coverage (Yoshiki Kurihara) #42211
- [4941791f29] test: improve _http_outgoing coverage (Yoshiki Kurihara) #42213
- [94e5eaa7e9] test: add test case for reverted 17.7 regression (Rich Trott) #42283
- [a4aa9eb97f] test: use global webcrypto for WPT tests (Antoine du Hamel) #42236
- [<u>26d4a2d489</u>] **test,crypto**: add and update empty passphrase regression tests (Darshan Sen) <u>#42319</u>
- [4fd2aff42e] tools: make update-undici script executable (Michaël Zasso) #42406
- [38e7681ac7] tools: update lint-md-dependencies to rollup@2.70.1 (Node.js GitHub Bot) #42403
- [<u>b7a4b4b1fd</u>] **tools**: update doc to highlight.js@11.5.0 unified@10.1.2 (Node.js GitHub Bot) #42315
- [30ea1889d5] **tools**: update lint-md-dependencies to rollup@2.70.0 unified@10.1.2 (Node.js GitHub Bot) #42316
- [eb0e1a1147] tools: update eslint to 8.11.0 (Node.js GitHub Bot) #42318
- [e95426fd3a] tools: fix web streams API links (Brian White) #42153
- [fe01940f35] url: preserve null char in WHATWG URL errors (Rich Trott) #42263
- [<u>b89f4d5c17</u>] **url**: trim leading and trailing C0 control chars (Rich Trott) #42196
- [<u>229fb40edc</u>] **worker**: do not send message if port is closing (Rich Trott) <u>#42357</u>

2022-03-17, Version 17.7.2 (Current), @richardlau

This is a security release.

Notable Changes

Update to OpenSSL 3.0.2, which addresses the following vulnerability:

• Infinite loop in BN_mod_sqrt() reachable when parsing certificates (High)(CVE-2022-0778) More details are available at https://www.openssl.org/news/secadv/20220315.txt

Commits

- [55e293e05f] deps: update archs files for quictls/openssl-3.0.2+quic (Hassaan Pasha) #42356
- [<u>b8d090603d</u>] **deps**: upgrade openssl sources to quictls/openssl-3.0.2+quic (Hassaan Pasha) #42356
- [<u>c8b6d92af0</u>] **test**: fix tests affected by OpenSSL update (Michael Dawson) <u>#42356</u>
- [457e31ea09] **test**: renew certificates for specific test (Luigi Pinca) #42342

2022-03-10, Version 17.7.1 (Current), @BethGriggs prepared by @sxa

Notable Changes

Fixed regression in url.resolve()

This release fixes an issue introduced in Node.js v17.7.0 with some URLs that contain @ . This issue affected yarn 1. This version reverts the change that introduced the regression.

Commits

• [96a9e00fb3] - url: revert fix url.parse() for @hostname (Antoine du Hamel) #42280

2022-03-09, Version 17.7.0 (Current), @BethGriggs prepared by @sxa

Notable Changes

- [<u>2b354223d4</u>] **(SEMVER-MINOR) crypto**: add KeyObject.prototype.equals method (Filip Skokan) #42093
- [<u>a2926c477a</u>] **(SEMVER-MINOR) net**: add new options to net.Socket and net.Server (Paolo Insogna) <u>#41310</u>
- [86248f1178] (SEMVER-MINOR) src: allow preventing InitializeInspector in env (Shelley Vohr) #35025
- [a4969d5c37] doc: add release key for Bryan English (Bryan English) #42102

Dependency Updates

- [<u>0b8efea182</u>] **deps**: update nghttp2 to 1.47.0 (Yash Ladha) <u>#42127</u>
- [<u>ccacf99e5c</u>] **deps**: upgrade npm to 8.5.2 (npm team) #42122

New Collaborators

- [3df001fa93] doc: add JakobJingleheimer to collaborators list (Jacob Smith) #42185
- [<u>0ce00ca5e1</u>] **doc**: move bnoordhuis back to collaborators (Ben Noordhuis) <u>#42064</u>

- [d05758f79f] buffer: improve blob read performance (Xuguang Mei) #42117
- [<u>0bbb44741b</u>] **build**: drop shortened URL from lint-commit-message (Richard Lau) <u>#42168</u>
- [4e9fac6539] build: fix usage of input in feature action (Michael Dawson) #42150
- [853cbd99b8] **build**: increase max ops for stale feature action (Michael Dawson) #42130
- [<u>3fc3f521d6</u>] build: add corepack to the auto-updated dependencies (Maël Nison) #42090
- [ec4c0de6d1] build: last test of the stale feature action (Michael Dawson) #42085
- [<u>03ebca86d9</u>] **build**: update feature close action for testing (Michael Dawson) <u>#42082</u>
- [c9ea6a9261] crypto: value for webcrypto. getRandomValues (Antoine du Hamel) #41760
- [<u>2b354223d4</u>] **(SEMVER-MINOR) crypto**: add KeyObject.prototype.equals method (Filip Skokan) #42093
- [288f627c46] crypto: clarify require("crypto").getRandomValues is Node.js specific (Antoine du Hamel) #41782
- [<u>0b8efea182</u>] **deps**: update nghttp2 to 1.47.0 (Yash Ladha) <u>#42127</u>
- [<u>ccacf99e5c</u>] **deps**: upgrade npm to 8.5.2 (npm team) #42122
- [<u>1359f60338</u>] **deps**: V8: cherry-pick 77d515484864 (Lu Yahan) <u>#42067</u>
- [769e2a486f] deps: V8: cherry-pick b66334313c8b (Lu Yahan) #42067
- [<u>fc7d429516</u>] **doc**: update stale feature messages (Michael Dawson) <u>#42217</u>
- [6183749861] doc: remove erroneous comma in cluster explainer (Tobias Nießen) #42238
- [555da9b658] doc: remove "considered" for clarity (Rich Trott) #42218

- [<u>05c3ff5e76</u>] **doc**: clarify that some modules don't work when compiled without ssl (Antoine du Hamel) #42198
- [a6clabf7e1] doc: add note about nghttp2 hd pair size (Rafael Silva) #42172
- [04d2c74c8a] doc: use parenthesis instead of em dash (Antoine du Hamel) #42202
- [6a74fa91bb] doc: add next-10 to strategic initiatives (Michael Dawson) #42167
- [<u>ee027391e7</u>] **doc**: add missing single-quotes to http.OutgoingMessage (Juan José Arboleda) #42162
- [84859c4029] **doc**: fix typos (apeltop) #42146
- [3df001fa93] doc: add JakobJingleheimer to collaborators list (Jacob Smith) #42185
- [ce86fc3006] doc: remove reference to obsolete security program (Rich Trott) #42144
- [<u>5d010bcde2</u>] **doc**: remove repeated a word (apeltop) <u>#42138</u>
- [a32ec983c6] **doc**: make building with ninja more discoverable (Balakrishna Avulapati) #41840
- [<u>26fe61b6ad</u>] **doc**: document change to IncomingMessage.headers enumerability (Arnold Zokas) #42095
- [<u>eb622a0761</u>] **doc**: add meixg to triagers (Xuguang Mei) <u>#42066</u>
- [bd04fc89da] doc: clarify persistent ref behavior (Michael Dawson) #42035
- [<u>0ce00ca5e1</u>] **doc**: move bnoordhuis back to collaborators (Ben Noordhuis) <u>#42064</u>
- [8b531dadb1] doc: clarify supported versus enabled TLS ciphers (Tobias Nießen) #42063
- [3789d668f7] doc: add missing api entries on performance (legendecas) #42018
- [a4969d5c37] doc: add release key for Bryan English (Bryan English) #42102
- [<u>8b94ea6e1c</u>] **doc**,tools: improve navigability of API docs (Paolo Insogna) <u>#41404</u>
- [2e1231b831] errors: do not access .stack in debug (Benjamin Coe) #42096
- [8dd4878850] esm: fix base URL for network imports (Bradley Farias) #42131
- [<u>2bc136d3cb</u>] **esm**: fix relative imports for https (Bradley Farias) <u>#42119</u>
- [<u>576claea8e</u>] **fs**: adjust default length for fs.readSync and fsPromises/ read (Livia Medeiros) #42128
- [<u>041373696f</u>] **http**: add default argument for Agent.prototype.getName (小菜) <u>#41906</u>
- [<u>1de80872e8</u>] **http2**: add edge case to GOAWAY request (Rafael Silva) <u>#42190</u>
- [9bc7a954fd] http2: close stream and session on frameError (Rafael Silva) #42147
- [384872fdbd] lib: clean after the cancel algorithm throw error (Chen Gang) #41366
- [<u>f7ea75fd0a</u>] **lib**: add legacy built-in functions to primordials (Antoine du Hamel) <u>#42049</u>
- [7f1c83e674] loader: fix esm resolve for symlink file (Xuguang Mei) #42197
- [5b23e67ad5] meta: update AUTHORS (Node.js GitHub Bot) #42227
- [<u>cad7dde9af</u>] **meta**: update AUTHORS (Node.js GitHub Bot) <u>#42142</u>
- [7ed2c19cbb] meta: correct link to feature request document (Simen Bekkhus) #42092
- [e0448da9a9] meta: move one or more collaborators to emeritus (Node.js GitHub Bot) #42068
- [<u>e3347dbaa8</u>] **meta**: remove collaborator (Rich Trott) <u>#42073</u>
- [96510b3411] module: prefer async/await in https imports (Benjamin Gruenbaum) #41950
- [<u>a2926c477a</u>] **(SEMVER-MINOR) net**: add new options to net.Socket and net.Server (Paolo Insogna) #41310
- [f107f8bf40] node-api: fix typo in node_api.cc (Austin Kelleher) #42110
- [<u>c72c3f4bb1</u>] **perf_hooks**: do not return all entries with getEntriesBy[Name|Type] (Xuguang Mei) #42104
- [<u>7c49785348</u>] **process**: fix named report export (madflow) <u>#41861</u>
- [d6b1a4a235] repl: remove preview when press escape (meixg) #42053
- [<u>98b1be0ec2</u>] **src**: return proper URLs from node_api_get_module_file_name (Anna Henningsen) #41758

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• [ <u>Oabc20b6cf</u> ] - src: skip revoke_data_object if uuid is not found (Xuguang Mei) <u>#42212</u>
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- [ce409279d8] src: remove dead code in AddFingerprintDigest (Tobias Nießen) #42145
- [4c9f2b5d83] src: combine GetCurveASN1Name and GetCurveNistName (Tobias Nießen) #42118
- [<u>f0558d88fb</u>] **src**: simplify TLSWrap::SetSession (Tobias Nießen) <u>#42087</u>
- [97f5ceda84] src: prefer bool over int in crypto_common (Tobias Nießen) #42097
- [<u>382ffdade0</u>] **src**: simplify arg type of AddFingerprintDigest (Tobias Nießen) <u>#42101</u>
- [<u>07de4ed641</u>] **src**: do not ignore return value of BIO_reset (Tobias Nießen) <u>#42103</u>
- [<u>3366618ce2</u>] **src**: simplify GetExponentString (Tobias Nießen) <u>#42121</u>
- [86248f1178] (SEMVER-MINOR) src: allow preventing InitializeInspector in env (Shelley Vohr) #35025
- [<u>06e5c0ee39</u>] **stream**: use .chunk when calling adapters's writev (Xuguang Mei) <u>#42161</u>
- [<u>53338fe65c</u>] **stream**: allow returning null from pipeline tail (Robert Nagy) <u>#42078</u>
- [<u>8431fb90dc</u>] **stream**: port more test262 tests (Benjamin Gruenbaum) <u>#41974</u>
- [<u>0be3c61ae9</u>] **test**: cover 32-bit sizes in generatePrime (Tobias Nießen) <u>#42207</u>
- [ceb47d13ff] test: fix test-process-env-tz.js by using RegExp (Khaidi Chu) #42113
- [<u>f21fbeec2e</u>] **test**: update V8 trace events test expectations (Nikolaos Papaspyrou) #42120
- [d0f68a398e] test: deflake test-common-expect-warning (Luigi Pinca) #42046
- [<u>482b2205b2</u>] **test**: validate EventEmitterAsyncResource methods throw on invalid this (Yoshiki Kurihara) #42041
- [99301469ed] test: increase Fibonacci argument to 40 (Rich Trott) #42055
- [<u>c01134ed27</u>] tools: update lint-md-dependencies to rollup@2.69.1 (Node.js GitHub Bot) #42226
- [41b6d9e95a] tools: update lint-md rollup dependencies (Node.js GitHub Bot) #42141
- [28f636422e] tools: update eslint to 8.10.0 (Node.js GitHub Bot) #42143
- [<u>9aeda47d9c</u>] **url**: fix url.parse() for @hostname (Rich Trott) <u>#42136</u>
- [ecb5980e2f] url, src: modify one special_back_slash (Khaidi Chu) #42112

2022-02-22, Version 17.6.0 (Current), @BethGriggs prepared by @bengl

Notable Changes

- [6b88595142] **doc**: deprecate notice for process methods (Yash Ladha) #41587
- [77462b6083] **stream**: revert map spec compliance (Benjamin Gruenbaum) #41931
- [<u>b968d89fc9</u>] **build**: remove broken x32 arch support (Ben Noordhuis) #41905
- [<u>ba639d052b</u>] **(SEMVER-MINOR) esm**: support https remotely and http locally under flag (Bradley Farias) #36328
- [<u>214d17650b</u>] **(SEMVER-MINOR) fs**: support copy of relative links with cp and cpSync (Marcos Bjoerkelund) #41819
- [ec0d623bd7] (SEMVER-MINOR) lib: add FormData global when fetch is enabled (Michaël Zasso) #41956
- [3243701997] (SEMVER-MINOR) readline: bind keystroke ctrl + 6 to redo (Ray) #41662
- [<u>5796c3a7ea</u>] **process**: deprecate multipleResolves (Benjamin Gruenbaum) <u>#41872</u>
 - Documentation-only.

Dependency Updates

- [dlef43f2aa] deps: upgrade npm to 8.5.1 (npm-robot) #42039
- [<u>09c17481f6</u>] **deps**: update undici to 3e267ece5f (Michaël Zasso) <u>#41955</u>
- [<u>0a6f0b416f</u>] **deps**: upgrade npm to 8.5.0 (npm-robot) <u>#41925</u>

New Collaborators

- [90d90e3868] doc: add marsonya to collaborators (Akhil Marsonya) #41991
- [<u>0de611f53a</u>] **doc**: add joesepi to collaborators (Joe Sepi) <u>#41914</u>

- [c673953f6d] build: cancel running CI jobs when a PR is updated (Michaël Zasso) #42017
- [782506c099] **build**: increase operations and test tag (Michael Dawson) #42038
- [<u>d3e6ad1ed5</u>] **build**: allow manual run of feature request action (Michael Dawson) #42037
- [69d7736e08] build: add action to close stale feature requests (Michael Dawson) #41981
- [1315f1eb25] build: prevent concurrent CI and CQ workflow runs (Michaël Zasso) #42016
- [<u>1e8e8bc22b</u>] **build**: use zoslib_include_dir provided by node-gyp (alexcfyung) <u>#41713</u>
- [4e2e2cb821] build: move tool updates workflow runtime a day later (Rich Trott) #41982
- [cd04ed1382] build: extend yamllint configuration (Mestery) #41756
- [<u>b968d89fc9</u>] **build**: remove broken x32 arch support (Ben Noordhuis) <u>#41905</u>
- [<u>2b1dabfb16</u>] **build**: revert fast-track changes (Filip Skokan) <u>#41892</u>
- [182e6b9ee9] **build**: improve consistency between workflows (Mestery) #41791
- [f4cb72600d] build,tools: change the quotes in YAML (Mestery) #41756
- [<u>24b0a563a4</u>] **child_process**: kHideConsoleWindows for spawnSync (Raymond Zhao) <u>#41412</u>
- [<u>c41e402c06</u>] **cluster**: respect listen backlog set by workers (Elad Nava) <u>#41623</u>
- [84b1e4fba7] crypto: check result of BIO_new in X509ToObject (Tobias Nießen) #41979
- [<u>946ac96817</u>] crypto: rename X509_NAME_FLAGS (Tobias Nießen) <u>#42001</u>
- [60682917dd] (SEMVER-MINOR) crypto: expose Web Crypto API on the global scope (Antoine du Hamel) #41938
- [<u>0fff4d2314</u>] **crypto**: do not advertise unsupported algorithms (Brian White) <u>#41864</u>
- [67f1ebf9b4] debugger: add debugger alias for exec(expr) (Xuguang Mei) #41907
- [<u>leac0a1677</u>] **debugger**: remove duplicate setPauseOnException call (Balakrishna Avulapati) <u>#41838</u>
- [<u>d1ef43f2aa</u>] **deps**: upgrade npm to 8.5.1 (npm-robot) <u>#42039</u>
- [<u>09c17481f6</u>] **deps**: update undici to 3e267ece5f (Michaël Zasso) <u>#41955</u>
- [<u>0a6f0b416f</u>] **deps**: upgrade npm to 8.5.0 (npm-robot) <u>#41925</u>
- [fea682ca94] doc: fix typo in http2 endAfterHeaders description (Alexandru Comanescu) #42060
- [9c618ad729] doc: make minor fixes to contributing guides (T-O-R-U-S) #41966
- [60bbacdd91] doc: use openpgp.org for keyserver examples (Nick Schonning) #39227
- [<u>2e252b3c95</u>] **doc**: adjust a/an word usage (Derek Wolpert) <u>#41915</u>
- [<u>c7d590c66e</u>] **doc**: remove extra (Ray) <u>#42006</u>
- [<u>06f225c6a6</u>] **doc**: capitalize valgrind (T•Ø•R•Ü•S) <u>#41986</u>
- [6195de506a] doc: fix deprecation number (Antoine du Hamel) #41990
- [<u>90d90e3868</u>] **doc**: add marsonya to collaborators (Akhil Marsonya) <u>#41991</u>
- [6b88595142] **doc**: deprecate notice for process methods (Yash Ladha) #41587
- [d34ee45134] doc: fix bug in readable.unshift code example (Xuguang Mei) #41944
- [<u>8748ble6ld</u>] **doc**: add missing buffer in the stream/consumers import example (Mestery) #41961
- [<u>cb9dba034a</u>] **doc**: fix typo in readableStream.locked description (Tobias Nießen) #41923
- [43a5161cee] doc: fix wrong indent in stream documentation (Xuguang Mei) #41943
- [dca2692ae3] doc: emphasize security warning in vm module doc (Rich Trott) #41916
- [<u>b0e8ccb84c</u>] **doc**: clarify tls.Server 'connection' event documentation (Austin Cheney) #41917

- [6a7b0160df] doc: improve scrollbar appearance in dark mode (Aaron Xie) #41890
- [<u>aa684a78fe</u>] doc: replace text with paths in toggle SVGs (Brian White) #41885
- [<u>fc9d4e96c1</u>] **doc**: edit process.config deprecation text (Rich Trott) <u>#41889</u>
- [<u>0de611f53a</u>] **doc**: add joesepi to collaborators (Joe Sepi) <u>#41914</u>
- [<u>ba5cb89134</u>] **doc**: remove unneeded ellipsis in header (Rich Trott) <u>#41888</u>
- [<u>291fe631dd</u>] **doc**: fix webstream close reject state state doc (Benjamin Gruenbaum) <u>#41860</u>
- [<u>c0f4289c65</u>] **esm**: improve fetch_module test coverage and remove hack (Antoine du Hamel) #41947
- [<u>a95f7a0c25</u>] **esm**: remove erroneous context.parentURL property passed to load hook (Jacob Smith) #41975
- [66c9565f99] **esm**: fix typo in fetch_module (Michael Scovetta) #41924
- [<u>ba639d052b</u>] **(SEMVER-MINOR) esm**: support https remotely and http locally under flag (Bradley Farias) #36328
- [<u>0660ba3cd0</u>] **events**: set default handler value (Benjamin Gruenbaum) <u>#41970</u>
- [<u>5a807c5927</u>] **fs**: fix default length parameter for fs.read (wbt) <u>#40349</u>
- [<u>214d17650b</u>] **(SEMVER-MINOR) fs**: support copy of relative links with cp and cpSync (Marcos Bjoerkelund) #41819
- [<u>be5143b3f5</u>] **fs**: fix cb/sync writev empty array behavior (Benjamin Gruenbaum) <u>#41932</u>
- [<u>b4db004855</u>] **fs**: fix writev empty array error behavior (Benjamin Gruenbaum) #41919
- [<u>528c585b2b</u>] **fs**: refactor to use ES2020 syntax (小菜) <u>#41903</u>
- [ec0d623bd7] (SEMVER-MINOR) lib: add FormData global when fetch is enabled (Michaël Zasso) #41956
- [<u>c3b0e72d01</u>] lib: stop installing webcrypto if no_browser_globals is true (Mestery) #41971
- [ae36276148] lib: allow respondWithNewView on byob auto allocated streams (Sean Quinlan) #41887
- [68ec8d5824] lib: stop installing fetch if no_browser_globals is true (Darshan Sen) #41969
- [<u>f9bfdc3a65</u>] **lib**: restrict usage of fetch related globals in core internals (Antoine du Hamel) <u>#41957</u>
- [<u>3a121345e7</u>] **lib**: move kEnumerableProperty to internal/util (Mestery) <u>#41877</u>
- [<u>fa3a9135ad</u>] **lib**: add internal genericNodeError() function (Rich Trott) <u>#41879</u>
- [1e698e65a7] **meta**: update AUTHORS (Node.js GitHub Bot) #42058
- [<u>f51b55dae4</u>] **meta**: use plain emojis instead of escape sequences (Mestery) <u>#41989</u>
- [3d998112be] meta: update AUTHORS and .mailmap (Rich Trott) #41953
- [391f4e5c25] perf_hooks: use arrays to store EntryBuffers (Xuguang Mei) #42032
- [<u>5796c3a7ea</u>] **process**: deprecate multipleResolves (Benjamin Gruenbaum) #41872
- [<u>3243701997</u>] **(SEMVER-MINOR) readline**: bind keystroke ctrl + 6 to redo (Ray) <u>#41662</u>
- [c766159e68] repl: #41690 REPL gives wrong autocomplete on literals (Xuguang Mei) #41883
- [<u>f80cae8be5</u>] src: merge ToJsSet into ToV8Value (Anna Henningsen) #41757
- [<u>e2a74d2e04</u>] **src**: remove separate definitions for static constexpr members (Anna Henningsen) #41755
- [d91a956419] **src**: use const reference instead of pointer in URL::SerializeURL (Anna Henningsen)
- [<u>0330e2d796</u>] **src**: reserve string allocation space early in URL::SerializeURL (Anna Henningsen) <u>#41759</u>
- [364ec5ba8b] src: fix query/fragment serialization in URL::SerializeURL (Anna Henningsen) #41759
- [6076291168] src: don't print interface if sin6_scope_id is 0 (Santiago Gimeno) #41547
- [<u>43c12f4962</u>] **src,buffer**: evaluate THROW_AND_RETURN_IF_OOB() expression only once (Darshan Sen) #41945
- [<u>b8cbb83222</u>] **stream**: add more forEach tests (Benjamin Gruenbaum) #41937
- [<u>f5d7339b25</u>] **stream**: add more filter tests (Benjamin Gruenbaum) <u>#41936</u>

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• [ 77462b6083 ] - stream: revert map spec compliance (Benjamin Gruenbaum) #41931
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- [3e38506d1b] stream: avoid usage of deprecated APIs (Mohammed Keyvanzadeh) #41871
- [<u>5195479919</u>] stream: refactor to use more validators (Mohammed Keyvanzadeh) #41871
- [07463b3374] **stream**: use standard for loop instead of for..of (Mohammed Keyvanzadeh) #41871
- [d9008915fe] test: remove test-stdout-close-catch flaky designation (Rich Trott) #42045
- [<u>fe66d2b98c</u>] **test**: check that fetch globals are disabled by default (Michaël Zasso) <u>#42015</u>
- [<u>bcf53a89f7</u>] **test**: improve vm test coverage (Yoshiki Kurihara) <u>#41847</u>
- [9825ceddeb] test: run webmessaging/broadcastchannel WPT (Ben Noordhuis) #41962
- [f8e302c813] test: fix names of tests marked flaky on IBM i (Richard Lau) #41984
- [<u>ab73bde8c1</u>] **test**: fix typographical error (Rich Trott) <u>#41983</u>
- [<u>520dcbc9f5</u>] **test**: fix intl tests on small-icu builds (Antoine du Hamel) <u>#41939</u>
- [83b913cb90] **test**: improve code coverage for streams/duplexify (Erick Wendel) #41862
- [<u>dc14bd85ee</u>] **test**: remove lint rule for setTimeout() arguments (Rich Trott) <u>#41901</u>
- [76f0f1c06d] test: move test-crypto-engine to addon (Michael Dawson) #41830
- [<u>b1505a1250</u>] **tls**: avoid throw in onerror for bad TLSSocket obj (Valters Jansons) <u>#41523</u>
- [2cdbf0304b] tools: update lint-md-dependencies to rollup@2.67.3 (Node.js GitHub Bot) #42057
- [6742625126] tools: enable es2022 env in ESLint config (Michaël Zasso) #42043
- [896ccc13ce] tools: add console to the list of restricted globals (Antoine du Hamel) #42012
- [<u>lb4ee6cfd9</u>] **tools**: lint deprecation codes (Antoine du Hamel) #41992
- [<u>e895e6422f</u>] **tools**: fix bugs in prefer-primordials linter rule (Antoine du Hamel) <u>#42010</u>
- [47bb7dd52c] tools: add timers functions to the list of restricted globals (Antoine du Hamel) #42013
- [<u>afeed46578</u>] **tools**: reduce list of globals in ESLint config (Rich Trott) <u>#41996</u>
- [<u>2e905a63d8</u>] tools: update remark-preset-lint-node to 3.3.1 (Rich Trott) <u>#41999</u>
- [<u>35832feb6e</u>] **tools**: update ESLint to 8.9.0 (Luigi Pinca) #41973
- [06117c084e] tools: update lint-md-dependencies to rollup@2.67.2 (Node.js GitHub Bot) #41941
- [<u>f30b5e3a6d</u>] **tools**: fix typo in prefer-primordials.js (Ikko Ashimine) <u>#41891</u>
- [<u>cfafb45c2b</u>] **tools,lib**: remove global and Intl from the list of globals (Antoine du Hamel) #42014
- [<u>ba35b6ccd1</u>] **worker**: fix typo in debug statement (Antoine du Hamel) <u>#42011</u>

2022-02-10, Version 17.5.0 (Current), @ruyadorno

Notable Changes

Add fetch API

Adds experimental support to the fetch API. This adds a --experimental-fetch flag that installs the fetch , Request , Reponse and Headers globals.

• [76a229c4ff] - (SEMVER-MINOR) lib: add fetch (Michaël Zasso) #41749

Add stream methods

- [<u>1ae648567a</u>] (SEMVER-MINOR) stream: add iterator helper find (linkgoron) #41849
- [62e1a68077] (SEMVER-MINOR) stream: add toArray (Benjamin Gruenbaum) #41553
- [dallb95988] (SEMVER-MINOR) stream: add forEach method (Benjamin Gruenbaum) #41445
- [<u>34684a1c89</u>] **(SEMVER-MINOR) stream**: support some and every (Benjamin Gruenbaum) <u>#41573</u>

Other Notable Changes

• [<u>2cae99425b</u>] - (SEMVER-MINOR) node-api: add node_api_symbol_for() (Darshan Sen) <u>#41329</u>

- [9c6b078892] module: unflag esm json modules (Geoffrey Booth) #41736
- [<u>28650eca00</u>] **deps**: upgrade npm to 8.4.1 (npm team) <u>#41836</u>

- [<u>0844935e1f</u>] **async_hooks**: fix imports in context example (Yash Ladha) <u>#39229</u>
- [44ca20b7a1] benchmark: avoid input param manipulation (Jithil P Ponnan) #41741
- [ad32ad6cfd] benchmark: enable no-empty ESLint rule (Rich Trott) #41831
- [<u>28b95a5a9f</u>] **benchmark**: use Object.hasOwn() instead of hasOwnProperty() (Rich Trott) <u>#41769</u>
- [calcd4254a] benchmark: replace hasOwnProperty() with Object.hasOwn() (Rich Trott) #41724
- [<u>6fefd5112a</u>] **(SEMVER-MINOR) benchmark**: add subarray to buffer-slice (Benjamin Gruenbaum) #41596
- [<u>878b2e73bb</u>] **benchmark**: remove unreachable code from crypto/hash-stream-creation (Rich Trott) #41535
- [6064b1df5d] buffer: fix atob/btoa no-arg case (Benjamin Gruenbaum) #41478
- [89c327387b] (SEMVER-MINOR) buffer: alias subarray and slice (Benjamin Gruenbaum) #41596
- [adcde6bb78] build: check if python is a executable program (himself65) #36696
- [33351765c7] **build**: enable zoslib installation on z/OS (alexcfyung) #41493
- [<u>e8062bfb92</u>] **build**: add --v8-enable-hugepage flag (Daoming Qiu) <u>#41487</u>
- [8681c837ca] **build**: add loong64 configure (Shi Pujin) #41323
- [7c2b5861be] build: fix libuv builds for android aarch64 (Darshan Sen) #41555
- [e117c0f86c] crypto: check return code from EVP_DigestUpdate (Michael Dawson) #41800
- [9c59abe588] crypto: fix webcrypto.subtle signature (Antoine du Hamel) #41761
- [627f19a84b] crypto: revise variables for const use instead of let (Rich Trott) #41614
- [9e39e62ae2] crypto: remove wildcard options for checkEmail (Tobias Nießen) #41599
- [4a4c907604] crypto: adjust types for getRandomValues (LiviaMedeiros) #41481
- [<u>b43faf0fc5</u>] **crypto**: remove checkIP options argument (Tobias Nießen) <u>#41571</u>
- [<u>076ec47557</u>] **(SEMVER-MINOR) crypto**: support RFC 2818 compatible checkHost (Tobias Nießen) #41569
- [<u>28650eca00</u>] **deps**: upgrade npm to 8.4.1 (npm-robot) <u>#41836</u>
- [<u>bee4451ed8</u>] **deps**: V8: cherry-pick cc9a8a37445e (Gus Caplan) <u>#41823</u>
- [<u>4b174ce7f6</u>] **deps**: upgrade npm to 8.3.2 (npm team) <u>#41621</u>
- [<u>0d4f043f0e</u>] **dgram**: remove unreachable connectState assign (Rongjian Zhang) <u>#38590</u>
- [d641eb7f80] doc: use the same case as the section heading (Mestery) #41876
- [ffd1933ad9] doc: use Oxford comma in crypto docs (Tobias Nießen) #41875
- [<u>145a3b8294</u>] **doc**: use sentence case in readme introduction (Mestery) <u>#41874</u>
- [<u>f8acca8df8</u>] **doc**: add missing space before hyphen (Mestery) <u>#41873</u>
- [5085813688] doc: add stream pipelining note on Http usage (Rafael Silva) #41796
- [<u>0a8995d36b</u>] **doc**: improve SSL_OP_PRIORITIZE_CHACHA description (Tobias Nießen) #41866
- [1c62eb64f6] doc: add missing commas in cluster docs (Tobias Nießen) #41865
- [3676505413] **doc**: add history information for Corepack (Antoine du Hamel) #41813
- [<u>8a42a20b8a</u>] **doc**: add comments to empty blocks in worker_threads text (Rich Trott) <u>#41831</u>
- [<u>c3721fcf9a</u>] **doc**: remove empty block from console.timeEnd() example (Rich Trott) <u>#41831</u>
- [451f3331d9] doc: feature management proposal (Michael Dawson) #41420
- [<u>72a857f56c</u>] doc: add overhead hints for heap snapshot generation (Gerhard Stöbich) #41822
- [<u>7aeaa27d67</u>] **doc**: fix X509 CA acronym capitalization (Tobias Nießen) <u>#41841</u>
- [d3a4c62600] doc: use sentence case for X509 error codes header (Tobias Nießen) #41829

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• [ <u>cb16fad0ab</u> ] - doc: add initial version of maintaining-http.md (Michael Dawson) <u>#41798</u>
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- [49£6b97b64] doc: add registry numbers for Electron 19 and 20 (Keeley Hammond) #41814
- [4db343bb8e] doc: add note about resource type in async_hooks (Tony Gorez) #41797
- [d726a3442c] doc: use example.com for examples (Ateş Göral) #41827
- [4eb1938f51] doc: align tls port types with net port types (Tobias Nießen) #41799
- [e5db13626b] doc: use UDPv4/UDPv6 consistently with TCPv4/TCPv6 (Tobias Nießen) #41824
- [af641bdec4] doc: improve wording surrounding TLS 1.3 ciphers (Tobias Nießen) #41778
- [99e0f1458b] doc: add format-md step to release guide (Danielle Adams) #41809
- [62f2c078ec] doc: add v16 changelog link to iojs changelog (Danielle Adams) #41808
- [<u>c0629b48ce</u>] **doc**: add security-steward rotation information (Michael Dawson) <u>#41707</u>
- [<u>032df4ee17</u>] **doc**: use Object.hasOwn() in util doc (Rich Trott) <u>#41780</u>
- [<u>257c5b68d1</u>] **doc**: remove section on "recent" ECDH changes (Tobias Nießen) <u>#41773</u>
- [86644b95a5] doc: clarify that import also uses main (Ben McCann) #41720
- [4889a3177f] doc: update modules.md wording (Tobias Hernstig) #41728
- [26c5efef35] doc: update Mesteery email (Mestery) #41683
- [4339299800] doc: avoid incomplete sentence in cluster docs (Tobias Nießen) #41701
- [7f7bcd7757] doc: fix typo in contributing guides (Yoshiki Kurihara) #41723
- [30336c23b5] doc: improve docs to give descriptive info for the platform property (Harshil jain) #41650
- [29678d66b8] doc: fix link to npm documentation (Antoine du Hamel) #41712
- [ae34900ccb] doc: clarify treatment of non-string base in URL() (Rich Trott) #41685
- [<u>b83e661d30</u>] **doc**: fix typo in technical-priorities.md (Akhil Marsonya) #41694
- [8e7df048a7] doc: remove unadvisable cluster example (Tobias Nießen) #41668
- [<u>0ee468d6ba</u>] doc: document flow for supporting type generation (Michael Dawson) #41464
- [9af2862a8b] doc: clarify parameter for napi_get_cb_info (Michael Dawson) #41635
- [<u>a35c6c38f1</u>] **doc**: revise url.resolve() text (Rich Trott) <u>#41661</u>
- [986dbb3222] doc: clarify treatment of non-string argument to new URL() (Rich Trott) #41658
- [<u>2bba6cd8b6</u>] **doc**: fix documentation for MODULE_NOT_FOUND and ERR_MODULE_NOT_FOUND (Antoine du Hamel) #41645
- [<u>d40fd755d3</u>] **doc**: improve TLS/SSL introduction (Tobias Nießen) <u>#41649</u>
- [<u>b951764c32</u>] **doc**: modernize and simplify cluster example (Tobias Nießen) <u>#41626</u>
- [<u>0d6227ceab</u>] **doc**: simplify readline/stdin text (Rich Trott) <u>#41583</u>
- [ffab924444] doc: suggest worker threads in cluster docs (Tobias Nießen) #41616
- [c111a13d22] doc: add 16 and 17 to previous versions (Antoine du Hamel) #41646
- [<u>81e039fa9d</u>] **doc**: improve 'hex' Buffer decoding description and examples (Giora Guttsait) <u>#41598</u>
- [09763a2a93] doc: add note for handling signal events in trace events (Gabriel Trujillo) #41438
- [<u>2e7bf00359</u>] **(SEMVER-MINOR) doc**: deprecate buffer.slice (Benjamin Gruenbaum) <u>#41596</u>
- [<u>174155dee6</u>] **doc**: demonstrate dangers of buffer.slice() (Shalvah) <u>#41628</u>
- [22484014cd] doc: add missing word in cluster.workers details (Tobias Nießen) #41624
- [86272ca5ac] doc: fix async_hooks example in api docs (Akhil Marsonya) #41609
- [<u>5943cb9d1e</u>] **doc**: fix deprecated alias description in cluster (Tobias Nießen) <u>#41618</u>
- [574c19a8c6] doc: fix backticks around 'default' (Tobias Nießen) #41613
- [<u>4780449b4e</u>] **doc**: update timingSafeEqual error case (Alex Agranov) <u>#41507</u>
- [9c73bd5610] doc: simplify util.TextDecoder example (Rich Trott) #41574
- [e72693160e] doc: move Mesteery to collaborators (Tobias Nießen) #41597
- [<u>952623dff8</u>] **doc**: fix cjs example code for process.arch (Job) <u>#41593</u>
- [<u>2478b47a08</u>] doc: remove redunant await calls from stream docs (Giora Guttsait) #41592

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• [ <u>f6b5b8d5bb</u> ] - doc: make contributing info more discoverable (Michael Dawson) <u>#41408</u>
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- [<u>6370b4df68</u>] **doc**: recommend package exports instead of requiring folders (Antoine du Hamel) #41381
- [<u>b5104e89fc</u>] **doc**: edit async_context context loss text (Rich Trott) <u>#41550</u>
- [9ea8e49032] doc: use sentence case for Web Crypto headers (Tobias Nießen) #41577
- [<u>92484d4945</u>] **doc**: make Web Crypto example spec compliant (Tobias Nießen) <u>#41556</u>
- [60e7437a60] doc: do not reference SSL when discussing SNI (Tobias Nießen) #41549
- [<u>31d75f2f5d</u>] **doc**: fix typos in esm.md (Yu) <u>#41499</u>
- [<u>cb4dbc10bc</u>] **doc**: adjust assignment in condition in stream doc (Rich Trott) #41510
- [<u>5c700fa8e2</u>] **doc**: improve Web Crypto headings related to ECC (Tobias Nießen) <u>#41542</u>
- [84292165e7] doc: clarify module system selection (Antoine du Hamel) #41383
- [<u>be63dc5acc</u>] **doc**: remove statement about (EC)DHE performance (Tobias Nießen) #41528
- [<u>c6749bc590</u>] doc,readline: add missing node protocol in example (Mestery) <u>#41560</u>
- [74bd31213c] domain: pass opts to EventEmitter.init (Chen Gang) #41414
- [e1d5a354c5] esm: improve validation of resolved URLs (Jacob Smith) #41446
- [<u>bfddcb11a5</u>] **http2**: fix pseudo-headers order (ofir) #41735
- [499171bbd8] http2: fix no response event on continue request (ofirbarak) #41739
- [2a18859324] http2: fix memory leak on nghttp2 hd threshold (Rafael Silva) #41502
- [59a15e8f1a] lib: refactor to use validateObject() validator (Mohammed Keyvanzadeh) #41845
- [4834be373d] lib: add comments to empty catch statements (Rich Trott) #41831
- [76a229c4ff] (SEMVER-MINOR) lib: add fetch (Michaël Zasso) #41749
- [cedd26a396] lib: refactor source map stack trace prepare (Mohammed Keyvanzadeh) #41698
- [8ab0540d4a] lib: throw error in structuedClone when no arguments are passed (Giora Guttsait) #41651
- [306ddlc181] lib: fix consistency of methods that emit warnings (Yoshiki Kurihara) #41249
- [<u>e500d11806</u>] **lib**: remove erroneous JSDoc entry (Rich Trott) <u>#41604</u>
- [8a99eed7aa] lib: modify DOMException to pass WPT (Khaidi Chu) #41517
- [bd5d1583ed] meta: update AUTHORS (Node.js GitHub Bot) #41868
- [<u>f5adf54eb6</u>] **meta**: update AUTHORS (Node.js GitHub Bot) <u>#41763</u>
- [e5abdf7285] meta: update mailmap/AUTHORS info for existing collaborator (Rich Trott) #41750
- [14415fb7e0] meta: adjust mailmap/AUTHORS to reflect README change (Rich Trott) #41751
- [60eddadb65] meta: update AUTHORS (Node.js GitHub Bot) #41659
- [<u>336c18d057</u>] **meta**: update AUTHORS (Node.js GitHub Bot) <u>#41548</u>
- [9c6b078892] **module**: unflag esm json modules (Geoffrey Booth) #41736
- [<u>2cae99425b</u>] (SEMVER-MINOR) node-api: add node_api_symbol_for() (Darshan Sen) #41329
- [<u>14cb9ea93e</u>] **perf_hooks**: remove useless calls in Histogram (Michael Dawson) <u>#41579</u>
- [elae61bce5] policy: revise manifest.js to avoid empty blocks (Rich Trott) #41831
- [d83d55e6e5] policy: check for null instead of falsy in loop (Rich Trott) #41614
- [e11451c4e8] policy: replace entries with keys (Mohammed Keyvanzadeh) #41482
- [<u>cfaa1e224d</u>] process: unhandledRejection support more errors (Benjamin Gruenbaum) #41682
- [cf1d3d1565] process: check for null instead of falsy in while loop (Rich Trott) #41614
- [<u>3b45c05a23</u>] **process**: use validateString validator (Mohammed Keyvanzadeh) <u>#41595</u>
- [700f766bea] process: ignore asyncld 0 in exception handler (Anatoli Papirovski) #41424
- [<u>cbcf794562</u>] **readline**: improve code coverage for readline promises (Erick Wendel) #41817
- [<u>0a31149202</u>] (SEMVER-MINOR) readline: add feature yank and yank pop (Ray) <u>#41301</u>
- [<u>5a4c74c647</u>] readline: undo previous edit when get key code 0x1F (Ray) <u>#41392</u>
- [301a4f8781] repl: check for precise values rather than falsy in loops (Rich Trott) #41614

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• [ <u>c3d3abf112</u> ] - src: slightly simplify URLHost::ToString (Anna Henningsen) <u>#41747</u>
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- [<u>43f2abae7c</u>] src: slightly simplify V8CoverageConnection::GetFilename (Anna Henningsen) #41748
- [<u>bbfa58691e</u>] **src**: fix typo in js_native_api_v8.cc (Caio Agiani) #41764
- [<u>lae648567a</u>] **(SEMVER-MINOR) stream**: add iterator helper find (linkgoron) <u>#41849</u>
- [<u>07b6bf4e7e</u>] **stream**: resume stream on drain (Robert Nagy) <u>#41848</u>
- [<u>f8d2955b71</u>] **stream**: initial port of test262 tests (Benjamin Gruenbaum) <u>#41775</u>
- [6c82276b85] stream: remove empty block (Rich Trott) #41831
- [<u>e11a079469</u>] stream: use synchronous error validation & validate abort signal option (iMoses) #41777
- [9c2504a066] (SEMVER-MINOR) stream: add reduce (Benjamin Gruenbaum) #41669
- [<u>a05b8328d8</u>] **stream**: use synchronous error validation on iteration helpers (iMoses) #41652
- [<u>311050ebaa</u>] **stream**: add asIndexedPairs (Benjamin Gruenbaum) <u>#41681</u>
- [9b1a37979c] stream: add drop and take (Benjamin Gruenbaum) #41630
- [<u>b3390b9ddb</u>] **stream**: never flatten on toArray (Benjamin Gruenbaum) <u>#41615</u>
- [46ec74dcd1] (SEMVER-MINOR) stream: support flatMap (Benjamin Gruenbaum) #41612
- [16dec4268c] stream: check for null instead of falsy in loops (Rich Trott) #41614
- [34684a1c89] (SEMVER-MINOR) stream: support some and every (Benjamin Gruenbaum) #41573
- [62e1a68077] (SEMVER-MINOR) stream: add toArray (Benjamin Gruenbaum) #41553
- [5027e94a8a] stream: rename unknown primordial (Mohammed Keyvanzadeh) #40622
- [dallb95988] (SEMVER-MINOR) stream: add forEach method (Benjamin Gruenbaum) #41445
- [9226322394] stream: avoid function call where possible (Rich Trott) #41534
- [<u>573cafe29d</u>] **test**: remove eslint-disable comments from fixtures (Rich Trott) <u>#41859</u>
- [<u>0d9248fe0a</u>] **test**: remove test-worker-memory flaky designation (Rich Trott) <u>#41867</u>
- [<u>c694dae41c</u>] test: enable no-empty ESLint rule (Rich Trott) #41831
- [87902a7c17] test: avoid using Object.prototype methods directly on objects (Rich Trott) #41801
- [ea966404ad] test: exclude ibm i tests until we resolve (Michael Dawson) #41812
- [9c704b13af] test: make worker-take-heapsnapshot non-flaky (Michael Dawson) #41684
- [a97c817451] test: mark test-fs-rmdir-recursive flaky on win (Michael Dawson) #41533
- [<u>5f1a59cb41</u>] test: make fs watch test more stable (Benjamin Gruenbaum) <u>#41715</u>
- [<u>abbc06b5ab</u>] **test**: fix typo in MessageChannel test (Tobias Nießen) <u>#41746</u>
- [94645d8f71] test: replace commented out expectations with tests (Darshan Sen) #41667
- [<u>351ebf289a</u>] **test**: improve stability of oom test (Benjamin Gruenbaum) <u>#41681</u>
- [<u>0267d27a7d</u>] **test**: use Object.hasOwn() where applicable (Rich Trott) <u>#41664</u>
- [cca92107a4] test: remove unneeded test statement (Rich Trott) #41663
- [30df37f733] test: remove error allowance in debugger test (Jithil P Ponnan) #41640
- [b02bf41e18] test: add stream map tests (Benjamin Gruenbaum) #41642
- [12c1ac4d3b] test: simplify test-gc-http-client (Luigi Pinca) #41620
- [9d99c24d50] test: prepare tests for no-cond-assign ESLint rule (Rich Trott) #41614
- [ea6c202436] test: move test-gc-http-client-onerror to sequential (Luigi Pinca) #41619
- [<u>55adcb7f12</u>] **test**: fix typo in test-stream-toArray (Tobias Nießen) <u>#41634</u>
- [<u>506a0dde0e</u>] **test**: improve test coverage of internal/worker/io (Yoshiki Kurihara) <u>#41511</u>
- [6de8e51437] test: add DataView test entry for whatwg (Mohammed Keyvanzadeh) #40622
- [<u>f947f72b39</u>] **test**: improve util-format code coverage (Rich Trott) <u>#41572</u>
- [38e4b11391] test: fix typo in test_js_native_api_v8 (Tobias Nießen) #41584
- [<u>5e3f751260</u>] **test**: add missing await in fs-rm/fs-rmdir tests (Benjamin Coe) <u>#41545</u>
- [<u>c0aec6783a</u>] test: increase coverage for stream writable (Rich Trott) <u>#41486</u>
- [ef7c79822f] test: add coverage for util.inspect() (Rich Trott) #41527

- [2b4e46f07d] timers: check for nullish instead of falsy in loops (Rich Trott) #41614
- [<u>0d471fb0d4</u>] **tools**: enable no-empty ESLint rule (Rich Trott) <u>#41831</u>
- [72f02d87b9] tools: update lint-md-dependencies to rollup@2.67.0 (Node.js GitHub Bot) #41737
- [<u>32cdae7f65</u>] **tools**: update doc to rehype-stringify@9.0.3 (Node.js GitHub Bot) <u>#41854</u>
- [<u>e6a1896ec1</u>] **tools**: update eslint to 8.8.0 (Node.js GitHub Bot) <u>#41738</u>
- [3190e365f0] tools: use Set instead of { [key]: true } object (Tobias Nießen) #41695
- [<u>3f4ce07be9</u>] **tools**: add compile_commands to ignore file (Yash Ladha) <u>#41580</u>
- [<u>5fe7cfabaa</u>] **tools**: use Set instead of { [key]: true } object (Tobias Nießen) <u>#41675</u>
- [d33d1899c4] tools: fix typo in tools/code_cache/README.md (Tobias Nießen) #41657
- [ae7df178fd] tools: enable no-cond-assign-ESLint rule (Rich Trott) #41614
- [9202b86814] tools: update lint-md-dependencies to rollup@2.65.0 (Node.js GitHub Bot) #41638
- [<u>57ada37a1f</u>] **tools**: increase maximum line length to 120 characters (Rich Trott) <u>#41586</u>
- [3084dff702] tools: add missing .PHONY and .NOTPARALLEL targets in Makefile (Antoine du Hamel) #41515
- [544267feb2] tools: update lint-md-dependencies (Node.js GitHub Bot) #41440
- [127d2fae62] tools: bump eslint from 8.6.0 to 8.7.0 (Rich Trott) #41570
- [ad5d7c7b06] tools: update doc to highlight.js@11.4.0 to-vfile@7.2.3 (Node.js GitHub Bot) #41441
- [34dfc60742] tools,test: enable no-prototype-builtins (Rich Trott) #41801
- [<u>aee74c8156</u>] **util**: use hasOwnProperty() primordial (Rich Trott) <u>#41692</u>
- [<u>2b082def2e</u>] **util**: remove unused fast path in internal debuglog (Rich Trott) <u>#41605</u>
- [<u>0e35d01a4a</u>] **util**: check for null instead of flasy in loop (Rich Trott) <u>#41614</u>
- [869cbb7b25] (SEMVER-MINOR) worker: graduate get/setEnvironmentData APIs (James M Snell)
 #41272

2022-01-18, Version 17.4.0 (Current), @targos

Notable Changes

- [<u>ef6f98c2e3</u>] **(SEMVER-MINOR) child_process**: add support for URL to cp.fork (Antoine du Hamel) #41225
- [d62fe315c2] (SEMVER-MINOR) crypto: alias webcrypto.subtle and webcrypto.getRandomValues on crypto (James M Snell) #41266
- [<u>fcb37e9ce5</u>] **doc**: add Mesteery to collaborators (Mestery) <u>#41543</u>
- [4079fc42b7] (SEMVER-MINOR) events: graduate capturerejections to supported (James M Snell)
 #41267
- [<u>fe21607901</u>] **(SEMVER-MINOR) events**: add EventEmitterAsyncResource to core (James M Snell) #41246
- [<u>6d8eb6ace6</u>] **(SEMVER-MINOR) loader**: return package format from defaultResolve if known (Gabriel Bota) #40980
- [27c619140a] (SEMVER-MINOR) perf_hooks: multiple fixes for Histogram (James M Snell) #41153
- [09c25bb224] (SEMVER-MINOR) stream: add filter method to readable (Benjamin Gruenbaum, Robert Nagy) #41354
- [1150963217] (SEMVER-MINOR) stream: add isReadable helper (Robert Nagy) #41199
- [9f5a873965] (SEMVER-MINOR) stream: add map method to Readable (Benjamin Gruenbaum, Robert Nagy) #40815

Commits

• [314102b14d] - async_hooks: add missing initialization (Michael Dawson) #41288

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• [ <u>56345a3f63</u> ] - async_hooks: fix AsyncLocalStorage in unhandledRejection cases (Bradley Farias) <u>#41202</u>
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- [<u>fa84353952</u>] benchmark: simplify http benchmarker regular expression (Rich Trott) #38206
- [88d760c559] benchmark: fix benchmark/run.js handling of --set (Rich Trott) #41334
- [dcflea0a3f] benchmark,test: use Object.hasOwn() where applicable (Rich Trott) #41229
- [4958c800da] **build**: fix npm version detection (Michaël Zasso) #41575
- [<u>e8538c3751</u>] **build**: fix node build failures in WSL Ubuntu (MrJithil) <u>#41476</u>
- [<u>3d88ea195e</u>] **build**: fix workflow access to git history (Rich Trott) <u>#41472</u>
- [<u>b0f0ad1004</u>] **build**: start build on z/OS (alexcfyung) <u>#41273</u>
- [<u>80a3766ac7</u>] build: use list for mutable retval rather than tuple (Rich Trott) #41372
- [afe1e00509] build: remove Python 2 workaround (Rich Trott) #41357
- [011c5f6498] **build**: improve readability of texts in workflows (Mestery) #40988
- [<u>2233f31069</u>] **build,tools,win**: trim unused VCBUILD_PYTHON_LOCATION variable (David Sanders) #41235
- [<u>d9465ae614</u>] child_process: queue pending messages (Erick Wendel) <u>#41221</u>
- [ed41fd110d] child_process: revise argument processing (Rich Trott) #41280
- [<u>ef6f98c2e3</u>] **(SEMVER-MINOR) child_process**: add support for URL to cp.fork (Antoine du Hamel) #41225
- [<u>d62fe315c2</u>] (SEMVER-MINOR) crypto: alias webcrypto.subtle and webcrypto.getRandomValues on crypto (James M Snell) #41266
- [8ea56a9606] crypto: fix error capture when loading engine (Tobias Nießen) #41187
- [<u>f5b8aee1a1</u>] **deps**: upgrade npm to 8.3.1 (npm-robot) <u>#41503</u>
- [<u>af3acecd7e</u>] **deps**: V8: cherry-pick 3b6b21f595f6 (Michaël Zasso) #41457
- [<u>02ca5d7c7c</u>] **deps**: upgrade to libuv 1.43.0 (Colin Ihrig) <u>#41398</u>
- [48e4780fd7] doc: remove statement about client private keys (Tobias Nießen) #41505
- [<u>ba7160e815</u>] **doc**: fix typo in onboarding.md (Antoine du Hamel) <u>#41544</u>
- [<u>fcb37e9ce5</u>] **doc**: add Mesteery to collaborators (Mestery) <u>#41543</u>
- [abbfed8789] doc: add missing word in readable.read() text (Rich Trott) #41524
- [712dfdc11f] doc: add missing YAML tag in esm.md (Antoine du Hamel) #41516
- [f443a4e8fa] doc: expand fs.access() mode parameter docs (Colin Ihrig) #41484
- [5c0c459976] doc: correct checkHost behavior with wildcards etc (Tobias Nießen) #41468
- [<u>c632241440</u>] **doc**: remove extraneous colon in legacy subject (Tobias Nießen) <u>#41477</u>
- [<u>b7b0631b10</u>] **doc**: remove SameValue comparison reference (Rich Trott) <u>#41460</u>
- [<u>524103d6bf</u>] **doc**: update mailmap entries for mhdawson (Michael Dawson) <u>#41437</u>
- [62aa190c01] doc: add guidance on order vulns are listed in (Michael Dawson) #41429
- [d721a758b2] doc: update output in inspector examples (David Sanders) #41390
- [60025bde16] doc: add note regarding unfinished TLA (Antoine du Hamel) #41434
- [10bdb5969e] doc: add reference for === operator in assert.md (Rich Trott) #41442
- [edc6a7af42] doc: clarify uncaughtException origin for ESM (Antoine du Hamel) #41339
- [<u>4a369d03b4</u>] **doc**: revise HTTPRequestOptions text (Rich Trott) <u>#41407</u>
- [<u>f43bfe2e16</u>] **doc**: add reference for == and != operators (Rich Trott) <u>#41413</u>
- [d3111bf0cc] doc: add @RaisinTen to the TSC (Michael Dawson) #41419
- [<u>e6bed4e972</u>] doc: update Abstract Equality Comparison text in assert.md (Rich Trott) #41375
- [19db19bb80] doc: fix example commands for REPLACEME updates (Richard Lau) #41269
- [16c0bea91d] doc: document that require.main may be undefined (Antoine du Hamel) #41384
- [<u>014d4836ec</u>] **doc**: clarify entry point behavior when using loader hooks (Antoine du Hamel) <u>#41304</u>
- [6460b1b32d] doc: clarify require behavior with non .js extensions (Antoine du Hamel) #41345

- [<u>0d18a8c232</u>] **doc**: revise frozen-intrinsics text (Rich Trott) <u>#41342</u>
- [<u>c267bb2192</u>] **doc**: fix example description for worker_threads (Dmitry Petrov) <u>#41341</u>
- [<u>ffe17a84f2</u>] doc: make pull-request guide default branch agnostic (Antoine du Hamel) #41299
- [<u>5cfc547997</u>] **doc**: fix sync comment in observer snippet (Eric Jacobson) <u>#41262</u>
- [<u>3a80104b29</u>] **doc**: remove section about amending commits in PR guide (Thiago Santos) <u>#41287</u>
- [<u>23f97ec04e</u>] **doc**: remove legacy in-page links in v8.md (Rich Trott) <u>#41291</u>
- [<u>e819685cec</u>] **doc**: include stack trace difference in ES modules (Marcos Bérgamo) <u>#41157</u>
- [dac8407944] doc: fix example in node-api docs (Michael Dawson) #41264
- [29563abd85] doc: add usage recommendation for writable._destroy (Rafael Gonzaga) #41040
- [e27e8272f7] doc: make function signature comply with JSDoc comment (Rich Trott) #41242
- [d83a02994c] doc: align maxHeaderSize default with current value (Gil Pedersen) #41183
- [<u>730e25d7dd</u>] **doc**: add unhandledRejection to strict mode (Colin Ihrig) <u>#41194</u>
- [74742c3618] doc: adding estimated execution time (mawaregetsuka) #41142
- [34ef5a7d4d] doc: fix syntax error in nested conditions example (Mateusz Burzyński) #41205
- [<u>c9a4603913</u>] **esm**: make process.exit() default to exit code 0 (Gang Chen) <u>#41388</u>
- [8a94ca7a69] esm: refactor esm tests out of test/message (Geoffrey Booth) #41352
- [<u>5ebe086ea6</u>] **esm**: reconcile JSDoc vs. actual parameter name (Rich Trott) <u>#41238</u>
- [9fe304b8e8] events: clarify JSDoc entries (Rich Trott) #41311
- [4079fc42b7] (SEMVER-MINOR) events: graduate capturerejections to supported (James M Snell) #41267
- [e3a0a9cb3a] events: add jsdoc details for Event and EventTarget (James M Snell) #41274
- [<u>fe21607901</u>] **(SEMVER-MINOR) events**: add EventEmitterAsyncResource to core (James M Snell) #41246
- [<u>d4a6f2caf1</u>] **fs**: use async directory processing in cp() (Colin Ihrig) <u>#41351</u>
- [<u>0951bd94db</u>] **fs**: correct param names in JSDoc comments (Rich Trott) <u>#41237</u>
- [<u>1d75436a1c</u>] **http**: remove duplicate code (Shaw) <u>#39239</u>
- [<u>Oaacd4926d</u>] **http2**: handle existing socket data when creating HTTP/2 server sessions (Tim Perry) #41185
- [24fbbf2747] **lib**: remove spurious JSDoc entry (Rich Trott) #41240
- [<u>e457ec05d6</u>] **lib**: fix checking syntax of esm module (Qingyu Deng) <u>#41198</u>
- [<u>f176124e8b</u>] **lib,tools**: remove empty lines between JSDoc tags (Rich Trott) <u>#41147</u>
- [68fd2ac999] loader: fix package resolution for edge case (Gabriel Bota) #41218
- [6d8eb6ace6] (SEMVER-MINOR) loader: return package format from defaultResolve if known (Gabriel Bota) #40980
- [<u>a6146c7e27</u>] meta: move one or more collaborators to emeritus (Node.js GitHub Bot) #41456
- [07353e9b8b] meta: update AUTHORS (Node.js GitHub Bot) #41475
- [e1ff4521d7] meta: correct my name in AUTHORS (Jacob Smith) #41444
- [dald5d6563] meta: update AUTHORS (Node.js GitHub Bot) #41449
- [<u>0f9afa58d5</u>] **meta**: add required fields in issue templates (Rich Trott) <u>#41378</u>
- [<u>da04408075</u>] meta: update AUTHORS (Node.js GitHub Bot) <u>#41374</u>
- [<u>1f6c4e819b</u>] **meta**: replace API docs issue template with form (Rich Trott) <u>#41348</u>
- [<u>253c3e5488</u>] meta: move one or more collaborators to emeritus (Node.js GitHub Bot) #41336
- [<u>3e188cacc2</u>] **meta**: replace feature request template with form (Rich Trott) <u>#41317</u>
- [<u>e339220511</u>] **meta**: update AUTHORS (Node.js GitHub Bot) <u>#41322</u>
- [d0d595f8f2] meta: update node-api team name (Richard Lau) #41268
- [<u>a53fa2010b</u>] **meta**: move one or more collaborators to emeritus (Node.js GitHub Bot) <u>#41248</u>
- [edefb41ec1] meta: update AUTHORS (Node.js GitHub Bot) #41234

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• [ 6da7909797 ] - meta: remove community-committee from CODEOWNERS (Rich Trott) #41169
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- [<u>5fe011a24d</u>] **node-api**: add missing initialization of last error (Michael Dawson) #41290
- [27c619140a] (SEMVER-MINOR) perf_hooks: multiple fixes for Histogram (James M Snell) #41153
- [e60187d8ab] policy: add missing JSDoc @param entry (Rich Trott) #41239
- [ec9071f55d] src: use std::optional for Worker thread id (Anna Henningsen) #41453
- [<u>6aec92f959</u>] **src**: gracefully handle errors in GetX509NameObject (Tobias Nießen) <u>#41490</u>
- [<u>7ac126b75c</u>] **src**: fix out-of-bounds check of serialization indices (JoostK) <u>#41452</u>
- [93b3664b9a] src: do IWYU for some STL includes (David Sanders) #41236
- [337ebfcd53] src: split out async stack corruption detection from inline fn (Anna Henningsen) #41331
- [<u>250e197a62</u>] src: store native async execution resources as v8::Local (Anna Henningsen) #41331
- [<u>6187e81a8e</u>] **src**: guard slightly costly check in MakeCallback more strongly (Anna Henningsen) #41331
- [51d86fe6a0] stream: remove always-false condition check (Rich Trott) #41488
- [<u>b08138f367</u>] **stream**: fix error-path function call (Rich Trott) #41433
- [d79f8c2987] stream: remove unused function argument (Rich Trott) #41403
- [<u>09c25bb224</u>] **(SEMVER-MINOR) stream**: add filter method to readable (Benjamin Gruenbaum) #41354
- [1150963217] (SEMVER-MINOR) stream: add isReadable helper (Robert Nagy) #41199
- [<u>9f5a873965</u>] **(SEMVER-MINOR) stream**: add map method to Readable (Benjamin Gruenbaum) #40815
- [3dc65646c8] stream: fix enqueue race condition on esm modules (Rafael Gonzaga) #40901
- [<u>09f2fd36a4</u>] **test**: improve test coverage of dns/promises (Yoshiki Kurihara) <u>#41425</u>
- [106ef0cef4] test: remove broken wiki link from test/common doc (Yoshiki Kurihara) #41426
- [<u>9d8d7c63cb</u>] test: do not OR F_OK in fs.access() test (Colin Ihrig) #41484
- [<u>3e2154deda</u>] **test**: mark test-performance-eventloopdelay flaky (Michael Dawson) <u>#41409</u>
- [<u>e808ee68d0</u>] **test**: mark test-repl-sigint-nested-eval as flaky (Michael Dawson) <u>#41302</u>
- [f97f6c585d] test: use spawnSync() full name in test-stdio-pipe-stderr (Rich Trott) #41332
- [75c565bf18] **test**: improve expectWarning error message (Rich Trott) #41326
- [<u>c136d597f0</u>] **test**: use spawnSync() full name (Rich Trott) <u>#41327</u>
- [<u>b2a87f770d</u>] **test**: add comments explaining _setSimultaneousAccepts deprecation tests (Yoshiki Kurihara) #41307
- [fac0871102] test: mark test-worker-take-heapsnapshot flaky (Michael Dawson) #41253
- [90617b9303] test: mark wpt/test-user-timing test flaky (Michael Dawson) #41203
- [8f08328a01] test: correct param name in JSDoc comment (Rich Trott) #41241
- [367ab2a55e] test: mark test-crypto-keygen slow on windows (Michael Dawson) #41207
- [<u>f067876338</u>] **test**: improve test coverage of dns/promises (Yoshiki Kurihara) <u>#41133</u>
- [<u>2e92f6f5d9</u>] **timers**: use ref counts to count timers (Darshan Sen) <u>#41231</u>
- [<u>3c8b25bec8</u>] tls: use optional chaining to simplify checks (Antoine du Hamel) #41337
- [allff3lbca] tls: permit null as a pfx value (CallMeLaNN) #41170
- [5129b7c802] tools: fix small not-quite-a-bug in find-inactive-tsc.mjs (Rich Trott) #41469
- [<u>258ee4ba64</u>] **tools**: enable ESLint recommended configuration (Rich Trott) <u>#41463</u>
- [090a674a81] tools: enable ESLint no-constant-condition rule (Rich Trott) #41463
- [<u>1f4369a106</u>] **tools**: enable ESLint require-yield rule (Rich Trott) <u>#41463</u>
- [8090ce7a6c] tools: enable ESLint no-sparse-arrays rule (Rich Trott) #41463
- [<u>afa4f37faf</u>] **tools**: enable ESLint no-loss-of-precision rule (Rich Trott) <u>#41463</u>
- [ec337b2019] tools: replace for loop with map() (Rich Trott) #41451
- [c91ac205a5] tools: use GITHUB_ACTIONS env var in inactivity scripts (Rich Trott) #41422

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• [ 4a57d476a8 ] - tools: replace while+exec() with matchAll() (Rich Trott) #41406
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- [583f8d969a] tools: fix argv bug in find-inactive-tsc.mjs (Rich Trott) #41394
- [dcada80f30] tools: remove conditional assignment in custom ESLint rule (Rich Trott) #41325
- [<u>e15e1cb030</u>] **tools**: update lint-md-dependencies to @rollup/plugin-node-resolve@13.1.2 (Node.js GitHub Bot) #41369
- [<u>07683021b7</u>] tools: update doc to rehype-raw@6.1.1 (Node.js GitHub Bot) #41367
- [<u>bd8b95a5e8</u>] tools: remove last of error-masking in commit-queue.sh (Rich Trott) #41356
- [<u>9284d24df6</u>] **tools**: update eslint to 8.6.0 (Node.js GitHub Bot) <u>#41368</u>
- [<u>5fc886f68e</u>] **tools**: do not mask errors on multiple commit retrieval (Rich Trott) <u>#41340</u>
- [<u>Oca7cda962</u>] **tools**: enable jsdoc/check-param-names lint rule (Rich Trott) <u>#41311</u>
- [75ff8e6505] tools: improve section tag additions in HTML doc generator (Rich Trott) #41318
- [9c4124706e] tools: simplify commit-queue.sh merge command (Rich Trott) #41314
- [<u>137c814848</u>] **tools**: update lint-md-dependencies to rollup@2.62.0 (Node.js GitHub Bot) #41315
- [58da5d9b43] tools: use Object.hasOwn() in alljson.mjs (Rich Trott) #41306
- [c12cbf2020] tools: avoid generating duplicate id attributes (Rich Trott) #41291
- [80a114d1b7] tools: be intentional about masking possible error in start-ci.sh (Rich Trott) #41284
- [198528426d] tools: use {N} for spaces in regex (Rich Trott) #41295
- [46b364a684] **tools**: consolidate update-authors.js logic (Rich Trott) #41255
- [<u>c546cef4bc</u>] **tools**: update doc dependency mdast-util-gfm-table to 1.0.2 (Rich Trott) <u>#41260</u>
- [60c059e4bc] tools: make license-builder.sh comply with shellcheck 0.8.0 (Rich Trott) #41258
- [62e28f19f7] tools: use arrow function for callback in lint-sh.js (Rich Trott) #41256
- [e2df381da9] tools: add double-quotes to make-v8.sh (Rich Trott) #41257
- [dae2e5fffa] tools: enable prefer-object-has-own lint rule (Rich Trott) #41245
- [aa7d14768d] tools: update eslint to 8.5.0 (Node.js GitHub Bot) #41228
- [<u>0c14e7e7c8</u>] **tools**: enable jsdoc/tag-lines ESLint rule (Rich Trott) <u>#41147</u>
- [<u>c486da1715</u>] tools: update lint-md-dependencies to @rollup/plugin-node-resolve@13.1.1 (Node.js GitHub Bot) #41227
- [82f492bbb0] tools: fix CQ and auto-start-ci jobs (Antoine du Hamel) #41230
- [<u>c44185ca37</u>] **tools**: fix GitHub Actions status when CQ is empty (Antoine du Hamel) <u>#41193</u>
- [800640adf9] tools,benchmark,lib,test: enable no-case-declarations lint rule (Rich Trott) #41385
- [4518fdda24] tools,lib,test: enable ESLint no-regex-spaces rule (Rich Trott) #41463
- [<u>c8e8fc0ecb</u>] **typings**: add types for symbol and accessor properties on primordials (ExE Boss) #40992
- [d733b56101] typings: add JSDoc for string_decoder (Qingyu Deng) #38229
- [<u>01ad8debd3</u>] **url,lib**: pass urlsearchparams-constructor.any.js (Khaidi Chu) <u>#41197</u>
- [<u>5ed8a1c017</u>] **util**: do not reduce to a single line if not appropriate using inspect (Ruben Bridgewater)
 #41083
- [ab5e94c832] util: display a present-but-undefined error cause (Jordan Harband) #41247

2022-01-10, Version 17.3.1 (Current), @BethGriggs

This is a security release.

Notable changes

Improper handling of URI Subject Alternative Names (Medium)(CVE-2021-44531)

Accepting arbitrary Subject Alternative Name (SAN) types, unless a PKI is specifically defined to use a particular SAN type, can result in bypassing name-constrained intermediates. Node.js was accepting URI SAN types, which PKIs are often not defined to use. Additionally, when a protocol allows URI SANs, Node.js did not match the URI correctly.

Versions of Node.js with the fix for this disable the URI SAN type when checking a certificate against a hostname. This behavior can be reverted through the --security-revert command-line option.

More details will be available at CVE-2021-44531 after publication.

Certificate Verification Bypass via String Injection (Medium)(CVE-2021-44532)

Node.js converts SANs (Subject Alternative Names) to a string format. It uses this string to check peer certificates against hostnames when validating connections. The string format was subject to an injection vulnerability when name constraints were used within a certificate chain, allowing the bypass of these name constraints.

Versions of Node.js with the fix for this escape SANs containing the problematic characters in order to prevent the injection. This behavior can be reverted through the --security-revert command-line option.

More details will be available at CVE-2021-44532 after publication.

Incorrect handling of certificate subject and issuer fields (Medium)(CVE-2021-44533)

Node.js did not handle multi-value Relative Distinguished Names correctly. Attackers could craft certificate subjects containing a single-value Relative Distinguished Name that would be interpreted as a multi-value Relative Distinguished Name, for example, in order to inject a Common Name that would allow bypassing the certificate subject verification.

Affected versions of Node.js do not accept multi-value Relative Distinguished Names and are thus not vulnerable to such attacks themselves. However, third-party code that uses node's ambiguous presentation of certificate subjects may be vulnerable.

More details will be available at CVE-2021-44533 after publication.

Prototype pollution via console.table properties (Low)(CVE-2022-21824)

Due to the formatting logic of the <code>console.table()</code> function it was not safe to allow user controlled input to be passed to the <code>properties</code> parameter while simultaneously passing a plain object with at least one property as the first parameter, which could be <code>__proto__</code>. The prototype pollution has very limited control, in that it only allows an empty string to be assigned numerical keys of the object prototype.

Versions of Node.js with the fix for this use a null protoype for the object these properties are being assigned to.

More details will be available at CVE-2022-21824 after publication.

Thanks to Patrik Oldsberg (rugvip) for reporting this vulnerability.

- [<u>2a0515f73c</u>] **console**: fix prototype pollution via console.table (Tobias Nießen) <u>nodejs-private/node-private#307</u>
- [<u>2e2c45553d</u>] **crypto,tls**: implement safe x509 GeneralName format (Tobias Nießen) <u>nodejs-private/node-private#300</u>
- [df3141f59b] **src**: add cve reverts and associated tests (Michael Dawson) nodejs-private/node-private#300
- [<u>5398548746</u>] **src**: remove unused x509 functions (Tobias Nießen) <u>nodejs-private/node-private#300</u>

- [<u>1f7fdff64a</u>] **tls**: fix handling of x509 subject and issuer (Tobias Nießen) <u>nodejs-private/node-</u> private#300
- [<u>b11b4cc69d</u>] tls: drop support for URI alternative names (Tobias Nießen) <u>nodejs-private/node-private#300</u>

2021-12-17, Version 17.3.0 (Current), @danielleadams

Notable changes

OpenSSL-3.0.1

OpenSSL-3.0.1 contains a fix for CVE-2021-4044: Invalid handling of X509_verify_cert() internal errors in libssl (Moderate). This is a vulnerability in OpenSSL that may be exploited through Node.js. More information can be read here: https://www.openssl.org/news/secadv/20211214.txt.

Contributed by Richard Lau #41177.

Other Notable Changes

- lib:
 - make AbortSignal cloneable/transferable (James M Snell) #41050
- deps:
 - upgrade npm to 8.3.0 (npm team) #41127
- doc:
 - o add @bnb as a collaborator (Tierney Cyren) #41100
- process:
 - add getActiveResourcesInfo() (Darshan Sen) #40813
- timers:
 - o add experimental scheduler api (James M Snell) #40909

- [99fb6d48eb] assert: prefer reference comparison over string comparison (Darshan Sen) #41015
- [a7dfa43dc7] assert: use stricter stack frame detection in .ifError() (Ruben Bridgewater) #41006
- [28761de6d4] buffer: fix Blob constructor on various TypedArray s (Irakli Gozalishvili) #40706
- [8fcb71a5ab] **build**: update openssl config generator Dockerfile (Richard Lau) #41177
- [<u>3a9ffa86db</u>] **build**: use '<(python)' instead of 'python' (Cheng Zhao) <u>#41146</u>
- [85f1537c28] **build**: fix comment-labeled workflow (Mestery) #41176
- [61c53a667a] **build**: use gh cli in workflows file (Mestery) #40985
- [<u>1fc6fd66ff</u>] **build**: fix commit-queue-rebase functionality (Rich Trott) <u>#41140</u>
- [831face7d1] **build**: skip documentation generation if no ICU (Rich Trott) #41091
- [c776c9236e] build: re-enable V8 concurrent marking (Michaël Zasso) #41013
- [<u>2125449f89</u>] **build**: add --without-corepack (Jonah Snider) <u>#41060</u>
- [6327685363] **build**: fail early in test-macos.yml (Rich Trott) #41035
- [ee4186b305] build: add tools/doc to tools.yml updates (Rich Trott) #41036
- [db30bc97d0] **build**: update Actions versions (Mestery) #40987
- [db9cef3c4f] **build**: set persist-credentials: false on workflows (Rich Trott) #40972
- [29739f813f] build: add OpenSSL gyp artifacts to .gitignore (Luigi Pinca) #40967
- [<u>1b8baf0e4f</u>] **build**: remove legacy -J test.py option from Makefile/vcbuild (Rich Trott) #40945
- [<u>5c27ec8385</u>] build: ignore unrelated workflow changes in slow Actions tests (Rich Trott) #40928

- [8957c9bdlc] build,tools: automate enforcement of emeritus criteria (Rich Trott) #41155
- [e924dc7982] cluster: use linkedlist for round_robin_handle (twchn) #40615
- [<u>c757fa513e</u>] **crypto**: add missing null check (Michael Dawson) #40598
- [<u>35fe14454b</u>] **deps**: update archs files for quictls/openssl-3.0.1+quic (Richard Lau) <u>#41177</u>
- [0b2103419f] deps: upgrade openssl sources to quictls/openssl-3.0.1+quic (Richard Lau) #41177
- [<u>fae4945ab3</u>] **deps**: upgrade npm to 8.3.0 (npm team) <u>#41127</u>
- [<u>3a1d952e68</u>] **deps**: upgrade npm to 8.2.0 (npm team) <u>#41065</u>
- [627b5bb718] **deps**: update Acorn to v8.6.0 (Michaël Zasso) #40993
- [<u>a2fb12f9c6</u>] **deps**: patch V8 to 9.6.180.15 (Michaël Zasso) <u>#40949</u>
- [<u>93111e4662</u>] **doc**: fix closing parenthesis (AlphaDio) <u>#41190</u>
- [<u>f883bf3d12</u>] **doc**: add security steward on/offboarding steps (Michael Dawson) <u>#41129</u>
- [1274a25b14] doc: align module resolve algorithm with implementation (Qingyu Deng) #38837
- [34c6c59014] doc: update nodejs-sec managers (Michael Dawson) #41128
- [<u>db26bdb011</u>] **doc**: move style guide to findable location (Rich Trott) <u>#41119</u>
- [4369c6d9f6] doc: fix comments in test-fs-watch.js (jakub-g) #41046
- [93f5bd34e9] doc: document support building with Python 3.10 on Windows (Christian Clauss) #41098
- [d8fa227c26] doc: add note about pip being required (Piotr Rybak) #40669
- [95691801f3] doc: remove OpenJSF Slack nodejs from support doc (Rich Trott) #41108
- [e3ac384d78] doc: simplify major release preparation (Bethany Nicolle Griggs) #40816
- [<u>3406910040</u>] **doc**: clarify escaping for ES modules (notroid5) <u>#41074</u>
- [668284b5a1] **doc**: add @bnb as a collaborator (Tierney Cyren) #41100
- [94d09113a2] doc: add explicit declaration of fd with null val (Henadzi) #40704
- [<u>b353ded677</u>] doc: expand entries for isIP(), isIPv4(), and isIPv6() (Rich Trott) <u>#41028</u>
- [f18aa14b1d] doc: link to commit queue guide (Geoffrey Booth) #41030
- [681edbe75f] doc: specify that message.socket can be nulled (Luigi Pinca) #41014
- [7c41f32f06] doc: fix JSDoc in ESM loaders examples (Mestery) #40984
- [61b2e2ef9e] doc: remove legacy -J test.py option from BUILDING.md (Rich Trott) #40945
- [<u>c9b09d124e</u>] **doc,lib,tools**: align multiline comments (Rich Trott) #41109
- [12023dff4b] (SEMVER-MINOR) errors: add support for cause in aborterror (James M Snell) #41008
- [b0b7943e8f] (SEMVER-MINOR) esm: working mock test (Bradley Farias) #39240
- [<u>37dbc3b9e9</u>] **(SEMVER-MINOR) events**: propagate abortsignal reason in new AbortError ctor in events (James M Snell) <u>#41008</u>
- [<u>1b8d4e4867</u>] **(SEMVER-MINOR) events**: propagate weak option for kNewListener (James M Snell) #40899
- [bbdcd0513b] (SEMVER-MINOR) fs: accept URL as argument for fs.rm and fs.rmSync (Antoine du Hamel) #41132
- [<u>46108f8d50</u>] **fs**: fix error codes for fs.cp (Antoine du Hamel) <u>#41106</u>
- [e25671cddb] fs: fix length option being ignored during read() (Shinho Ahn) #40906
- [6eda874be0] (SEMVER-MINOR) fs: propagate abortsignal reason in new AbortSignal constructors
 (James M Snell) #41008
- [70ed4ef248] http: don't write empty data on req/res end() (Santiago Gimeno) #41116
- [<u>4b3bf7e818</u>] **(SEMVER-MINOR) http2**: propagate abortsignal reason in new AbortError constructor (James M Snell) #41008
- [8d87303f76] inspector: add missing initialization (Michael Dawson) #41022
- [<u>b191e66ddf</u>] **lib**: include return types in JSDoc (Rich Trott) #41130
- [<u>348707fca6</u>] **(SEMVER-MINOR) lib**: make AbortSignal cloneable/transferable (James M Snell) <u>#41050</u>
- [4ba883d384] (SEMVER-MINOR) lib: add abortSignal.throwlfAborted() (James M Snell) #40951

- [<u>cc3e430c11</u>] **lib**: use consistent types in JSDoc @returns (Rich Trott) <u>#41089</u>
- [<u>aled7f2810</u>] **(SEMVER-MINOR) lib**: propagate abortsignal reason in new AbortError constructor in blob (James M Snell) <u>#41008</u>
- [1572db3e86] lib: do not lazy load EOL in blob (Ruben Bridgewater) #41004
- [62c4b4c85b] (SEMVER-MINOR) lib: add AbortSignal.timeout (James M Snell) #40899
- [fod874342d] lib,test,tools: use consistent JSDoc types (Rich Trott) #40989
- [03e6771137] meta: move one or more collaborators to emeritus (Node.js GitHub Bot) #41154
- [e26c187b85] meta: move to emeritus automatically after 18 months (Rich Trott) #41155
- [<u>b89fb3ef0a</u>] **meta**: move silverwind to emeriti (Roman Reiss) <u>#41171</u>
- [<u>0fc148321f</u>] **meta**: update AUTHORS (Node.js GitHub Bot) <u>#41144</u>
- [d6d1d6647c] meta: update AUTHORS (Node.js GitHub Bot) #41088
- [f30d6bcaff] meta: move one or more TSC members to emeritus (Node.js GitHub Bot) #40908
- [<u>033a646d82</u>] meta: increase security policy response targets (Matteo Collina) #40968
- [6b6e1d054e] node-api,doc: document parms which can be optional (Michael Dawson) #41021
- [<u>93ea1666f6</u>] **perf_hooks**: use spec-compliant structuredClone (Michaël Zasso) <u>#40904</u>
- [d8a2125900] (SEMVER-MINOR) process: add getActiveResourcesInfo() (Darshan Sen) #40813
- [67124ac63a] (SEMVER-MINOR) readline: propagate signal.reason in awaitable question (James M Snell) #41008
- [<u>8fac878ff5</u>] **readline**: skip escaping characters again (Ruben Bridgewater) <u>#41005</u>
- [d3de937782] src: fix limit calculation (Michael Dawson) #41026
- [6f0ec9835a] src: use a higher limit in the NearHeapLimitCallback (Joyee Cheung) #41041
- [90097ab891] **src,crypto**: remove uses of AllocatedBuffer from crypto_sig (Darshan Sen) #40895
- [<u>b59c513c31</u>] **stream**: add isErrored helper (Robert Nagy) #41121
- [<u>1787bfab68</u>] **stream**: allow readable to end early without error (Robert Nagy) <u>#40881</u>
- [<u>01e8c15c8a</u>] (SEMVER-MINOR) stream: use cause options in AbortError constructors (James M Snell) #41008
- [<u>0e21c64ae9</u>] **stream**: remove whatwg streams experimental warning (James M Snell) <u>#40971</u>
- [<u>513305c7d7</u>] **stream**: cleanup eos (Robert Nagy) <u>#40998</u>
- [da8baf4bbb] test: do not load absolute path crypto engines twice (Richard Lau) #41177
- [1f6a9c3e31] test: skip ESLint tests if no Intl (Rich Trott) #41105
- [ce656a80b5] **test**: add missing JSDoc parameter name (Rich Trott) #41057
- [<u>fb8f2e9643</u>] **test**: deflake test-trace-atomics-wait (Luigi Pinca) <u>#41018</u>
- [de1748aca4] test: add auth option case for url.format (Hirotaka Tagawa / wafuwafu13) #40516
- [943547a0eb] **Revert** "test: skip different params test for OpenSSL 3.x" (Daniel Bevenius) #40640
- [Ocaa3483d2] (SEMVER-MINOR) timers: add experimental scheduler api (James M Snell) #40909
- [<u>e795547651</u>] **(SEMVER-MINOR) timers**: propagate signal.reason in awaitable timers (James M Snell) #41008
- [a77caelef7] tls: improve handling of shutdown (Jameson Nash) #36111
- [db410e7d3e] tools: update doc to remark-rehype@10.1.0 (Node.js GitHub Bot) #41149
- [<u>e3870f3f17</u>] **tools**: update lint-md-dependencies to rollup@2.61.1 vfile-reporter@7.0.3 (Node.js GitHub Bot) #41150
- [6fc92bd191] tools: enable jsdoc/require-returns-type ESLint rule (Rich Trott) #41130
- [<u>70e6fe860a</u>] **tools**: update ESLint to 8.4.1 (Rich Trott) <u>#41114</u>
- [78894fa888] tools: enable JSDoc check-alignment lint rule (Rich Trott) #41109
- [40a773aa29] tools: strip comments from lint-md rollup output (Rich Trott) #41092

- [<u>7b606cfef6</u>] **tools**: update highlight.js to 11.3.1 (Rich Trott) <u>#41091</u>
- [<u>52633a9e95</u>] **tools**: enable jsdoc/require-returns-check lint rule (Rich Trott) <u>#41089</u>
- [<u>dc0405e7fb</u>] **tools**: update ESLint to 8.4.0 (Luigi Pinca) <u>#41085</u>
- [855f15d059] tools: enable jsdoc/require-param-name lint rule (Rich Trott) #41057
- [78265e095a] tools: use jsdoc recommended rules (Rich Trott) #41057
- [9cfdf15da6] tools: rollback highlight.js (Richard Lau) #41078
- [<u>fe3e09bb4b</u>] **tools**: remove Babel from license-builder.sh (Rich Trott) <u>#41049</u>
- [62e0aa9725] tools: udpate packages in tools/doc (Rich Trott) #41036
- [a959f4fa72] tools: install and enable JSDoc linting in ESLint (Rich Trott) #41027
- [661960e471] tools: include JSDoc in ESLint updating tool (Rich Trott) #41027
- [<u>e2922714ee</u>] tools: ignore unrelated workflow changes in slow Actions tests (Antoine du Hamel)
 #40990
- [6525226ff7] tools: remove unneeded tool in update-eslint.sh (Rich Trott) #40995
- [5400b7963d] tools: consolidate ESLint dependencies (Rich Trott) #40995
- [86d5af14bc] tools: update ESLint update script to consolidate dependencies (Rich Trott) #40995
- [8427099f66] tools: run ESLint update to minimize diff on subsequent update (Rich Trott) #40995
- [82daaa9914] tools,test: make -J behavior default for test.py (Rich Trott) #40945
- [db77780cb9] url: detect hostname more reliably in url.parse() (Rich Trott) #41031
- [66b5083c1e] util: serialize falsy cause values while inspecting errors (Ruben Bridgewater) #41097
- [<u>09d29ca8d9</u>] util: make sure error causes of any type may be inspected (Ruben Bridgewater) #41097
- [<u>f5ff88b3cb</u>] (SEMVER-MINOR) util: pass through the inspect function to custom inspect functions (Ruben Bridgewater) #41019
- [a0326f0941] util: escape lone surrogate code points using .inspect() (Ruben Bridgewater) #41001
- [91df200ad6] (SEMVER-MINOR) util: add numericSeparator to util.inspect (Ruben Bridgewater) #41003
- [da87413257] (SEMVER-MINOR) util: always visualize cause property in errors during inspection (Ruben Bridgewater) #41002

2021-11-30, Version 17.2.0 (Current), @targos

Notable Changes

- [<u>06916490af</u>] (SEMVER-MINOR) async_hooks: expose async_wrap providers (Rafael Gonzaga) #40760
- [<u>371ee64c92</u>] **(SEMVER-MINOR) deps**: update V8 to 9.6.180.14 (Michaël Zasso) <u>#40488</u>
- [675c210b04] (SEMVER-MINOR) lib: add reason to AbortSignal (James M Snell) #40807
- [<u>0de2850680</u>] (SEMVER-MINOR) src: add x509.fingerprint512 to crypto module (3nprob) #39809
- [fa9b5c35d2] stream: deprecate thenable support (Antoine du Hamel) #40860
- [<u>534409d4e7</u>] stream: fix finished regression when working with legacy Stream (Matteo Collina) #40858

- [<u>48157c44c2</u>] **Revert** "async_hooks: merge resource_symbol with owner_symbol" (Darshan Sen) #40741
- [<u>4a971f67e4</u>] **async_hooks**: eliminate require side effects (Stephen Belanger) <u>#40782</u>
- [<u>06916490af</u>] **(SEMVER-MINOR) async_hooks**: expose async_wrap providers (Rafael Gonzaga) <u>#40760</u>
- [65b33ba510] build: remove extraneous quotation marks from commit body (Rich Trott) #40963
- [05d652a555] build: fix branch name for lint-md-dependencies update (Rich Trott) #40924
- [1482c4415f] build: fix make invocation in tools.yml (Rich Trott) #40890

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• [ 69de8c8143 ] - build: reset embedder string to "-node.0" (Michaël Zasso) #40488
• [ <u>e793331322</u> ] - build: fix tools.yml errors (Rich Trott) <u>#40870</u>

    [ <u>51ac59b047</u>] - build: add GitHub Action to update tools modules (Rich Trott) #40644

    [ <u>a8cc8b6554</u> ] - crypto: trim input for NETSCAPE_SPKI_b64_decode (Shelley Vohr) <u>#40757</u>

    [ <u>2979c58fb0</u> ] - crypto: throw errors in SignTraits::DeriveBits (Tobias Nießen) #40796

    [ <u>7f5931d03f</u> ] - crypto: fix build without scrypt (Martin Jansa) <u>#40613</u>

    [ <u>90f35fc329</u> ] - deps: upgrade npm to 8.1.4 (npm team) <u>#40865</u>

• [ <u>d461603d71</u> ] - deps: V8: cherry-pick cced52a97ee9 (Ray Wang) <u>#40656</u>

    [ d6ae50ff96 ] - deps: V8: cherry-pick 7ae0b77628f6 (Ray Wang) #40882

• [ <u>e60053deee</u> ] - deps: V8: cherry-pick 2a0bc36dec12 (Michaël Zasso) <u>#40178</u>

    [ 94acaae3d4 ] - deps: V8: patch jinja2 for Python 3.10 compat (Michaël Zasso) #40296

    [ 37c9828d39 ] - deps: disable trap handler for Windows cross-compiler (Michaël Zasso) #40488

• [ dfb97fb501 ] - deps: silence irrelevant V8 warning (Michaël Zasso) #38990
• [ <u>9ecf4be0c2</u> ] - deps: silence irrelevant V8 warning (Michaël Zasso) <u>#37587</u>
• [ 82a8736dec ] - deps: fix V8 build issue with inline methods (Jiawen Geng) #38807

    [ <u>eab5ef5505</u> ] - deps: make v8.h compatible with VS2015 (Joao Reis) #32116

• [ d6e5dd56ff ] - deps: V8: forward declaration of Rtl*FunctionTable (Refael Ackermann) #32116
• [ <u>29a6e15480</u> ] - deps: V8: patch register-arm64.h (Refael Ackermann) <u>#32116</u>
• [ 1ff83c4945 ] - deps: V8: un-cherry-pick bd019bd (Refael Ackermann) #32116
• [ <u>371ee64c92</u> ] - (SEMVER-MINOR) deps: update V8 to 9.6.180.14 (Michaël Zasso) <u>#40488</u>
• [ 6506a42c16 ] - deps: V8: cherry-pick cced52a97ee9 (Ray Wang) #40656
• [ <u>a612ecb42f</u> ] - deps: V8: cherry-pick 7ae0b77628f6 (Ray Wang) <u>#40882</u>

    [ <u>b46184df5e</u> ] - deps: update to uvwasi 0.0.12 (Colin Ihrig) <u>#40847</u>

    [ <u>fa37428472</u> ] - deps: add -fno-strict-aliasing flag to libuv (Daniel Bevenius) #40631

    [ <u>9711ccfe08</u> ] - deps: upgrade npm to 8.1.3 (npm team) <u>#40726</u>

• [ <u>8e525634c6</u> ] - deps: update ICU to 70.1 (Michaël Zasso) <u>#40658</u>

    [ <u>3bfc9f5b47</u> ] - doc: add information on suppressing initial break in debugger (Rich Trott) #40960

    [ 8966ab3c57 ] - doc: improve grammar in API description (Tobias Nießen) #40959

• [ <u>130777a61c</u> ] - doc: update BUILDING.md section on running tests (Rich Trott) <u>#40933</u>
• [ 6e9b6652e5 ] - doc: remove experimental abortcontroller flag (FrankQiu) #38968
• [ <u>b92416ff02</u> ] - doc: fix spelling of 'WebAssembly' (Geoffrey Booth) <u>#40785</u>

    [ <u>cf495a6293</u> ] - doc: clarify more optional parameters in node-api (Michael Dawson) #40888

• [ 694012b392 ] - doc: define "types", "deno" community conditions (Guy Bedford) #40708

    [ 4c47b0150b ] - doc: document optional params in napi_get_cb_info (Michael Dawson) #40821

• [ dfdf68f4d0 ] - doc: improve README.md lede section (Rich Trott) #40837
• [ 9c200e1de4 ] - doc: add pref to using draft PR versus WIP label (Michael Dawson) #40824
• [ fe2cd09750 ] - doc: fix added: info for Readable.fromWeb() (Luigi Pinca) #40820

    [ <u>c91a9ab095</u> ] - doc: tweak guidance for modules in core (Michael Dawson) #40601

• [ <u>2ea08e9b55</u> ] - doc: claim ABI version for Electron 18 (Keeley Hammond) <u>#40768</u>
• [ 8166b07ddc ] - doc: fix transform stream example (Evan Lucas) #40777

    [ <u>5ceb06cddf</u> ] - doc: fix linter-enforced formatting in crypto.md (Mohammed Keyvanzadeh) #40780

• [ d3070d8eea ] - doc: fix corepack grammar for --force flag (Steven) #40762
• [ 9271f23e3a ] - doc: update maintaining ICU guide (Michaël Zasso) #40658

    [ 20d7d657bb ] - doc: clarify getAuthTag with authTagLength (Tobias Nießen) #40713

• [ 75288fbc6b ] - doc: fix order of announce work (Michael Dawson) #40725
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• [429915aa6c] - doc: add initial list of technical priorities (Michael Dawson) #40235

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• [ <u>a5a1691514</u> ] - fs: nullish coalescing to respect zero positional reads (Omar El-Mihilmy) <u>#40716</u>
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- [bddb4c69b7] http: add missing initialization (Michael Dawson) #40555
- [80ce97f514] http: change totalSocketCount only on socket creation/close (Subhi Al Hasan) #40572
- [675c210b04] (SEMVER-MINOR) lib: add reason to AbortSignal (James M Snell) #40807
- [b614b17525] Revert "lib: use helper for readability" (Darshan Sen) #40741
- [10a842d2d1] lib: fix typos in lib code comments (Yoshiki) #40792
- [3ec78d1570] meta: add feature request label for issue template (Mestery) #40970
- [<u>9c897b69a1</u>] **meta**: update AUTHORS (Node.js GitHub Bot) <u>#40900</u>
- [dfc6fc987a] meta: update name and email (Viero Fernando) #40848
- [<u>813cf746a8</u>] **meta**: update AUTHORS (Node.js GitHub Bot) <u>#40809</u>
- [e451ec9ec1] meta: edit GOVERNANCE.md for minor updates (Rich Trott) #40798
- [<u>2536be7528</u>] **meta**: update AUTHORS (Node.js GitHub Bot) <u>#40748</u>
- [<u>3c8aa211cd</u>] **module**: import assertions improvements (Geoffrey Booth) <u>#40785</u>
- [<u>3a4f3873be</u>] **process**: support hrtime in the snapshot (Joyee Cheung) <u>#40649</u>
- [<u>1555dbdddc</u>] **repl**: fix and extend require/import tab complete (Mestery) <u>#40216</u>
- [c2259c974b] src: reset error struct if error code is napi_ok (JckXia) #40552
- [3be49d6853] src: prevent extra copies of TimerWrap::TimerCb (Darshan Sen) #40665
- [<u>0de2850680</u>] (SEMVER-MINOR) src: add x509.fingerprint512 to crypto module (3nprob) #39809
- [924d29e88f] src: add and fix some preprocessor comments (Tobias Nießen) #40701
- [acbd8220a7] src,crypto: use ByteSource::ToBuffer() in crypto_dh (Darshan Sen) #40903
- [82b422663d] src,crypto: remove AllocatedBuffer s from crypto_spkac (Darshan Sen) #40752
- [<u>415b42fbdf</u>] **src,crypto**: refactor crypto_tls.* (Darshan Sen) <u>#40675</u>
- [88b57bc9d3] **src,doc**: add SyntaxError napi support (Idan Attias) #40736
- [70bd90e039] **stream**: stricter isReadableNodeStream (Robert Nagy) #40941
- [86d1c0b19d] stream: drain Transform with 0 highWaterMark (Robert Nagy) #40947
- [fa9b5c35d2] stream: deprecate thenable support (Antoine du Hamel) #40860
- [dc99ae3bd6] stream: fix the ReadableStreamBYOBReader error message (James M Snell) #40846
- [650c9bd022] **stream**: pipeline with end option (Robert Nagy) #40886
- [534409d4e7] stream: fix finished regression when working with legacy Stream (Matteo Collina) #40858
- [<u>16ee8423d6</u>] **stream**: pipeline should drain empty readable (Robert Nagy) <u>#40654</u>
- [7d127d2fc1] stream: fix non readable Duplex readableAborted (Robert Nagy) #40801
- [7c4f9a34ae] stream: allow calling callback before promise (Robert Nagy) #40772
- [62171eb516] test: mark test-fs-watch-non-recursive flaky on Windows (Luigi Pinca) #40916
- [<u>ae12a609a5</u>] test: improve test coverage of readline/promises (Yoshiki Kurihara) #40876
- [<u>4288c6a26e</u>] **test**: deflake cluster-concurrent-disconnect (Luigi Pinca) <u>#40877</u>
- [<u>009ab4d9bb</u>] **test**: deflake fs-promises-watch (Luigi Pinca) <u>#40863</u>
- [522a30f469] test: fix argument order in assertion (Luigi Pinca) #40842
- [<u>b190b0e77b</u>] **test**: deflake http2-pipe-named-pipe (Luigi Pinca) #40842
- [<u>c485460793</u>] **test**: use descriptive name for destination file (Luigi Pinca) <u>#40842</u>
- [<u>43e86508ae</u>] **test**: add AsyncLocalStorage tests using udp, tcp and tls sockets (Darshan Sen) <u>#40741</u>
- [896073be47] **test**: deflake child-process-pipe-dataflow (Luigi Pinca) #40838
- [150c0f1b76] test: add tests for invalid UTF-8 (git-srinivas) #40351
- [3d896231cd] **test**: fix flaky test-policy-integrity (Rich Trott) #40763
- [dc9e68899d] **test**: add semicolons for linter update (Rich Trott) #40720
- [747247bc59] **tools**: update gyp-next to v0.10.1 (Michaël Zasso) #40934

- [6ebbd0d9dc] tools: fix commit-lint GH Actions CI (Antoine du Hamel) #40845
- [<u>0201f3f604</u>] **tools**: ping TSC members identified as inactive (Rich Trott) <u>#40915</u>
- [<u>22265e3fb6</u>] tools: update lint-md-dependencies to rollup@2.60.1 (Node.js GitHub Bot) #40929
- [3d593aa4ed] tools: update lint-md dependencies (Rich Trott) #40894
- [<u>e674f61720</u>] **tools**: update ESLint to 8.3.0 (Luigi Pinca) <u>#40917</u>
- [878ba91bf6] tools: add find-inactive-tsc (Rich Trott) #40884
- [d97ad3080f] tools: disable trap handler for Windows cross-compiler (Michaël Zasso) #40488
- [<u>e3f8988118</u>] **tools**: update V8 gypfiles for 9.6 (Michaël Zasso) <u>#40488</u>
- [de4d0180dc] tools: update @babel/eslint-parser to 7.16.3 (Node.js GitHub Bot) #40889
- [727b34ec95]] tools: only validate first commit message of a PR (Antoine du Hamel) #40740
- [<u>5b08e908ea</u>] **tools**: update babel-eslint-parser to 7.16.0 (Rich Trott) <u>#40720</u>
- [30623c283a] tools: improve update scripts (Rich Trott) #40644

2021-11-09, Version 17.1.0 (Current), @targos

Notable Changes

- [89b34ecffb] **doc**: add VoltrexMaster to collaborators (voltrexmaster) #40566
- [<u>95e4d29eb4</u>] **(SEMVER-MINOR) esm**: add support for JSON import assertion (Antoine du Hamel) #40250
- [<u>1ddbae2d76</u>] **(SEMVER-MINOR) lib**: add unsubscribe method to non-active DC channels (simon-id) #40433
- [aa61551b49] (SEMVER-MINOR) lib: add return value for DC channel.unsubscribe (simon-id) #40433
- [fbeb895ca6] (SEMVER-MINOR) v8: multi-tenant promise hook api (Stephen Belanger) #39283

- [<u>8a00dc5add</u>] **build**: skip long-running Actions for README-only modifications (Rich Trott) <u>#40571</u>
- [9f46fca124] build: disable v8 pointer compression on 32bit archs (Cheng Zhao) #40418
- [<u>5bef74395d</u>] **deps**: patch V8 to 9.5.172.25 (Michaël Zasso) <u>#40604</u>
- [<u>3805b806ee</u>] **deps**: upgrade npm to 8.1.2 (npm team) <u>#40643</u>
- [<u>c003ba131b</u>] **deps**: update c-ares to 1.18.1 (Richard Lau) <u>#40660</u>
- [841f35cc52] **deps**: upgrade npm to 8.1.1 (npm team) #40554
- [8d16f0d2d3] **deps**: V8: cherry-pick 422dc378a1da (Ray Wang) #40450
- [cdf5c44d62] deps: add riscv64 config into openssl gypi (Lu Yahan) #40473
- [<u>2b9fcdfe26</u>] **deps**: attempt to suppress macro-redefined warning (Daniel Bevenius) <u>#40518</u>
- [d2839bfaa9] deps: regenerate OpenSSL arch files (Daniel Bevenius) #40518
- [<u>5df8ce5cbe</u>] **deps,build,tools**: fix openssl-is-fips for ninja builds (Daniel Bevenius) <u>#40518</u>
- [79bf429405] dgram: fix send with out of bounds offset + length (Nitzan Uziely) #40568
- [<u>c29658fda7</u>] **doc**: update cjs-module-lexer repo link (Guy Bedford) <u>#40707</u>
- [e374f3ddd9] doc: fix lint re-enabling comment in README.md (Rich Trott) #40647
- [ecccf48106] doc: format v8.md in preparation for stricter linting (Rich Trott) #40647
- [95a7117037] **doc**: final round of markdown format changes (Rich Trott) #40645
- [c104f5a9ab] doc: remove --experimental-modules documentation (FrankQiu) #38974
- [ac81f89bbf] doc: update tracking issues of startup performance (Joyee Cheung) #40629
- [65effa11fc] doc: fix markdown syntax and HTML tag misses (ryan) #40608
- [<u>c78d708a16</u>] **doc**: use 'GitHub Actions workflow' instead (Mestery) <u>#40586</u>
- [71bac70bf2] doc: ref OpenSSL legacy provider from crypto docs (Tobias Nießen) #40593

```
• [ 8f410229ac ] - doc: add node: url scheme (Daniel Nalborczyk) #40573
```

- [35dbed21f2] doc: call cwd function (Daniel Nalborczyk) #40573
- [4870a23ccc] doc: remove unused imports (Daniel Nalborczyk) #40573
- [<u>5951ccc12e</u>] **doc**: simplify CHANGELOG.md (Rich Trott) <u>#40475</u>
- [<u>6ae134ecb7</u>] **doc**: correct esm spec scope lookup definition (Guy Bedford) <u>#40592</u>
- [09239216f6] doc: update CHANGELOG.md for Node.js 16.13.0 (Richard Lau) #40617
- [46ec5ac4df] doc: add info on project's usage of coverity (Michael Dawson) #40506
- [7eb1a44410] doc: fix typo in changelogs (Luigi Pinca) #40585
- [<u>132f6cba05</u>] **doc**: update onboarding task (Rich Trott) <u>#40570</u>
- [<u>5e2d0ed61e</u>] **doc**: simplify ccache instructions (Rich Trott) <u>#40550</u>
- [clc1738bfc] doc: fix macOS environment variables for ccache (Rich Trott) #40550
- [6e3e50f2ab] doc: improve async_context introduction (Michaël Zasso) #40560
- [<u>1587fe62d4</u>] **doc**: use GFM footnotes in webcrypto.md (Rich Trott) <u>#40477</u>
- [305c022db4] doc: describe buffer limit of v8.serialize (Ray Wang) #40243
- [6e39e0e10a] **doc**: run license-builder (Rich Trott) #40540
- [556e49ccb5] doc: use GFM footnotes in maintaining-V8.md (#40476) (Rich Trott) #40476
- [9c6a9fd5b1] doc: use GFM footnotes in BUILDING.md (Rich Trott) #40474
- [fd946215cc] doc: fix fs.symlink code example (Juan José Arboleda) #40414
- [404730aclb] doc: update for changed --dns-result-order default (Richard Lau) #40538
- [acc22c7c4a] doc: add missing entry in globals.md (Antoine du Hamel) #40531
- [<u>0375d958ef</u>] **doc**: explain backport labels (Stephen Belanger) <u>#40520</u>
- [4993d87c49] doc: fix entry for Slack channel in onboarding.md (Rich Trott) #40563
- [89b34ecffb] doc: add VoltrexMaster to collaborators (voltrexmaster) #40566
- [6357ef15d0] doc: document considerations for inclusion in core (Rich Trott) #40338
- [ed04827373] doc: update link in onboarding doc (Rich Trott) #40539
- [<u>34e244b8e9</u>] **doc**: clarify behavior of napi_extended_error_info (Michael Dawson) <u>#40458</u>
- [<u>5a588ff047</u>] **doc**: add updating expected assets to release guide (Richard Lau) <u>#40470</u>
- [<u>95e4d29eb4</u>] **(SEMVER-MINOR) esm**: add support for JSON import assertion (Antoine du Hamel) #40250
- [825a683423] http: response should always emit 'close' (Robert Nagy) #40543
- [81cd7f3751] lib: fix regular expression to detect `/` and `\` (Francesco Trotta) #40325
- [<u>1ddbae2d76</u>] **(SEMVER-MINOR) lib**: add unsubscribe method to non-active DC channels (simon-id) #40433
- [aa61551b49] (SEMVER-MINOR) lib: add return value for DC channel.unsubscribe (simon-id) #40433
- [d97872dd98] meta: use form schema for flaky test template (Michaël Zasso) #40737
- [c2fabdbce8] meta: update AUTHORS (Node.js GitHub Bot) #40668
- [<u>aa98c6bdce</u>] **meta**: consolidate AUTHORS entries for brettkiefer (Rich Trott) <u>#40599</u>
- [18296c3d8e] meta: consolidate AUTHORS entries for alexzherdev (Rich Trott) #40620
- [88d812793d] meta: consolidate AUTHORS entries for Azard (Rich Trott) #40619
- [d81b65ca0e] meta: move Fishrock123 to emeritus (Jeremiah Senkpiel) #40596
- [ec02e7b68a] meta: consolidate AUTHORS entries for clakech (Rich Trott) #40589
- [<u>08e7a2ff24</u>] **meta**: consolidate AUTHORS entries for darai0512 (Rich Trott) <u>#40569</u>
- [488ee51f90] **meta**: update AUTHORS (Node.js GitHub Bot) #40580
- [<u>ba9a6c5d06</u>] **meta**: consolidate AUTHORS entries for dfabulich (Rich Trott) <u>#40527</u>
- [bd06e9945e] meta: move one or more collaborators to emeritus (Node.js GitHub Bot) #40464
- [<u>7cee125dcf</u>] **meta**: add Richard Lau to TSC list in README.md (Rich Trott) <u>#40523</u>

- [6a771f8bcb] meta: consolidate AUTHORS entries for dguo (Rich Trott) #40517
- [e4c740646d] meta: consolidate AUTHORS entries for cxreg (Rich Trott) #40490
- [<u>075cfbf941</u>] **module**: resolver & spec hardening /w refactoring (Guy Bedford) <u>#40510</u>
- [<u>b320387c83</u>] **policy**: fix message for invalid manifest specifier (Rich Trott) <u>#40574</u>
- [ea968d54c5] process: refactor execution (Voltrex) #40664
- [<u>fb7c437b0b</u>] **src**: make LoadEnvironment with string work with builtin modules path (Michaël Zasso) #40607
- [e9388c87bf] src: remove usage of AllocatedBuffer from node_http2 (Darshan Sen) #40584
- [7a22f913b0] src: fix #endif description in crypto_keygen.h (Tobias Nießen) #40639
- [396342e26d] src: throw error instead of assertion (Ray Wang) #40243
- [accab383a1] src: register external references in os bindings (Joyee Cheung) #40239
- [<u>a11f9ea4f0</u>] src: register external references in crypto bindings (Joyee Cheung) #40239
- [eflace7e88] src,crypto: use std::variant in DH params (Darshan Sen) #40457
- [<u>4433852f62</u>] **src,crypto**: remove AllocatedBuffer from crypto_cipher.cc (Darshan Sen) #40400
- [<u>814126c3ed</u>] **src,fs**: remove ToLocalChecked() call from fs::AfterMkdirp() (Darshan Sen) #40386
- [<u>d4b45cc249</u>] **src,stream**: remove *Check*() calls from non- Initialize() functions (Darshan Sen) #40425
- [<u>bac7fe0797</u>] **stream**: remove no longer necessary ComposeDuplex (Robert Nagy) #40545
- [<u>e58cce49fd</u>] **test**: disable warnings to fix flaky test (Antoine du Hamel) <u>#40739</u>
- [8c103ab2ff] test: skip macos sandbox test with builtin modules path (Michaël Zasso) #40607
- [ac3bc6eed0] test: add semicolon after chunk size (Luigi Pinca) #40487
- [95fe9bb922] **test**: deflake http2-cancel-while-client-reading (Luigi Pinca) #40659
- [dfd0215266] test: avoid deep comparisons with literals (Tobias Nießen) #40634
- [5020f634b8] **test**: mark test-policy-integrity flaky on Windows (Rich Trott) #40684
- [<u>8falc6le40</u>] test: fix test-datetime-change-notify after daylight change (Piotr Rybak) #40684
- [\frac{179a5c5436}{}] \text{test} \text{ crypto.setEngine() using an actual engine (Darshan Sen) \frac{#40481}{}
- [<u>cf6ded4db5</u>] **test**: use conventional argument order in assertion (Tobias Nießen) #40591
- [aefb097d6a] test: fix test description (Luigi Pinca) #40486
- [126e669b84] test,doc: correct documentation for runBenchmark() (Rich Trott) #40683
- [<u>1844463ce2</u>] **test,tools**: increase pummel/benchmark test timeout from 4x to 6x (Rich Trott) <u>#40684</u>
- [<u>f731f5ffb5</u>] **test,tools**: increase timeout for benchmark tests (Rich Trott) <u>#40684</u>
- [bbc10f1849] tools: simplify and fix commit queue (Michaël Zasso) #40742
- [<u>a3df50d810</u>] tools: ensure the PR was not pushed before merging (Antoine du Hamel) #40747
- [<u>306d953c15</u>] **tools**: update ESLint to 8.2.0 (Luigi Pinca) <u>#40734</u>
- [<u>b7e736843c</u>] tools: use GitHub Squash and Merge feature when using CQ (Antoine du Hamel) #40666
- [50d102ec08] tools: fix bug in prefer-primordials ESLint rule (Antoine du Hamel) #40628
- [ec2cadef85] tools: add script to update c-ares (Richard Lau) #40660
- [<u>5daa313215</u>] **tools**: notify user if format-md needs to be run (Rich Trott) <u>#40647</u>
- [<u>0787c781ce</u>] tools: abort CQ session when landing several commits (Antoine du Hamel) #40577
- [<u>ddc44ddfd9</u>] **tools**: fix commit-lint workflow (Antoine du Hamel) <u>#40673</u>
- [47eddd7076] tools: avoid unnecessary escaping in markdown formatter (Rich Trott) #40645
- [<u>c700de3705</u>] **tools**: avoid fetch extra commits when validating commit messages (Antoine du Hamel) #39128
- [<u>716963484b</u>] **tools**: update ESLint to 8.1.0 (Luigi Pinca) <u>#40582</u>
- [9cb2116608] tools: fix formatting of warning message in update-authors.js (Rich Trott) #40600

- [<u>507f1dbc8d</u>] tools: udpate doc tools to accommodate GFM footnotes (Rich Trott) #40477
- [<u>c2265a92c3</u>] **tools**: update license-builder.sh for OpenSSL (Rich Trott) <u>#40540</u>
- [16624b404c] tools,meta: remove exclusions from AUTHORS (Rich Trott) #40648
- [a95e344fe5] tty: support more CI services in getColorDepth (Richie Bendall) #40385
- [<u>b4194ff349</u>] **typings**: add more bindings typings (Mestery) <u>#40415</u>
- [da859b56cb] typings: add JSDoc typings for inspector (Voltrex) #38390
- [90aa96dc44] typings: improve internal bindings typings (Mestery) #40411
- [1e9f3cc522] typings: separate internalBinding typings (Mestery) #40409
- [fbeb895ca6] (SEMVER-MINOR) v8: multi-tenant promise hook api (Stephen Belanger) #39283

2021-10-20, Version 17.0.1 (Current), @targos

Notable Changes

Fixed distribution for native addon builds

This release fixes an issue introduced in Node.js v17.0.0, where some V8 headers were missing from the distributed tarball, making it impossible to build native addons. These headers are now included. #40526

Fixed stream issues

- Fixed a regression in stream.promises.pipeline, which was introduced in version 16.10.0, is fixed. It
 is now possible again to pass an array of streams to the function. #40193
- Fixed a bug in stream.Duplex.from , which didn't work properly when an async generator function was passed to it. #40499

Commits

- [3f033556c3] build: include missing V8 headers in distribution (Michaël Zasso) #40526
- [adbd92ef1d] crypto: avoid double free (Michael Dawson) #40380
- [<u>8dce85aadc</u>] **doc**: format doc/api/*.md with markdown formatter (Rich Trott) <u>#40403</u>
- [977016a72f] doc: specify that maxFreeSockets is per host (Luigi Pinca) #40483
- [<u>f9f2442739</u>] **src**: add missing inialization in agent.h (Michael Dawson) <u>#40379</u>
- [111f0bd9b6] stream: fix fromAsyncGen (Robert Nagy) #40499
- [<u>b84f101049</u>] **stream**: support array of streams in promises pipeline (Mestery) <u>#40193</u>
- [3f7c503b69] test: adjust CLI flags test to ignore blank lines in doc (Rich Trott) #40403
- [7c42d9fcc6] **test**: split test-crypto-dh.js (Joyee Cheung) #40451

2021-10-19, Version 17.0.0 (Current), @BethGriggs

Notable Changes

Deprecations and Removals

- [<u>f182b9b29f</u>] **(SEMVER-MAJOR) dns**: runtime deprecate type coercion of dns.lookup options (Antoine du Hamel) <u>#39793</u>
- [4b030d0573] **doc**: deprecate (doc-only) http abort related (dr-js) #36670
- [36e2ffe6dc] (SEMVER-MAJOR) module: subpath folder mappings EOL (Guy Bedford) #40121
- [64287e4d45] **(SEMVER-MAJOR) module**: runtime deprecate trailing slash patterns (Guy Bedford) #40117

OpenSSL 3.0

Node.js now includes OpenSSL 3.0, specifically <u>quictls/openssl</u> which provides QUIC support. With OpenSSL 3.0 FIPS support is again available using the new FIPS module. For details about how to build Node.js with FIPS support please see <u>BUILDING.md</u>.

While OpenSSL 3.0 APIs should be mostly compatible with those provided by OpenSSL 1.1.1, we do anticipate some ecosystem impact due to tightened restrictions on the allowed algorithms and key sizes.

If you hit an <code>ERR_OSSL_EVP_UNSUPPORTED</code> error in your application with <code>Node.js</code> 17, it's likely that your application or a module you're using is attempting to use an algorithm or key size which is no longer allowed by default with <code>OpenSSL</code> 3.0. A command-line option, <code>--openssl-legacy-provider</code>, has been added to revert to the legacy provider as a temporary workaround for these tightened restrictions.

For details about all the features in OpenSSL 3.0 please see the OpenSSL 3.0 release blog.

Contributed in https://github.com/nodejs/node/pull/38512, https://github.com/nodejs/node/pull/40478

V8 9.5

The V8 JavaScript engine is updated to V8 9.5. This release comes with additional supported types for the Intl.DisplayNames API and Extended timeZoneName options in the Intl.DateTimeFormat API.

You can read more details in the V8 9.5 release post - https://v8.dev/blog/v8-release-95.

Contributed by Michaël Zasso - https://github.com/nodejs/node/pull/40178

Readline Promise API

The readline module provides an interface for reading data from a Readable stream (such as process.stdin) one line at a time.

The following simple example illustrates the basic use of the readline module:

```
import * as readline from 'node:readline/promises';
import { stdin as input, stdout as output } from 'process';

const rl = readline.createInterface({ input, output });

const answer = await rl.question('What do you think of Node.js? ');

console.log(`Thank you for your valuable feedback: ${answer}`);

rl.close();
```

Contributed by Antoine du Hamel - https://github.com/nodejs/node/pull/37947

Other Notable Changes

- [<u>1b2749ecbe</u>] (SEMVER-MAJOR) dns: default to verbatim=true in dns.lookup() (treysis) #39987
- [<u>59d3d542d6</u>] **(SEMVER-MAJOR) errors**: print Node.js version on fatal exceptions that cause exit (Divlo) <u>#38332</u>
- [<u>a35b7e0427</u>] **deps**: upgrade npm to 8.1.0 (npm team) <u>#40463</u>
- [6cd12be347] (SEMVER-MINOR) fs: add FileHandle.prototype.readableWebStream() (James M Snell) #39331
- [d0a898681f] (SEMVER-MAJOR) lib: add structuredClone() global (Ethan Arrowood) #39759

- [e4b1fb5e64] (SEMVER-MAJOR) lib: expose DOMException as global (Khaidi Chu) #39176
- [<u>0738a2b7bd</u>] **(SEMVER-MAJOR) stream**: finished should error on errored stream (Robert Nagy) #39235

Semver-Major Commits

- [9dfa30bdd5] (SEMVER-MAJOR) build: compile with C++17 (MSVC) (Richard Lau) #38807
- [9f0bc602e4] (SEMVER-MAJOR) build: compile with --gnu++17 (Richard Lau) #38807
- [62719c5fd2] (SEMVER-MAJOR) deps: update V8 to 9.5.172.19 (Michaël Zasso) #40178
- [66da32c045] (SEMVER-MAJOR) deps,test,src,doc,tools: update to OpenSSL 3.0 (Daniel Bevenius) #38512
- [<u>40c6e838df</u>] (SEMVER-MAJOR) dgram: tighten address validation in socket.send (Voltrex) #39190
- [<u>f182b9b29f</u>] **(SEMVER-MAJOR) dns**: runtime deprecate type coercion of dns.lookup options (Antoine du Hamel) <u>#39793</u>
- [<u>1b2749ecbe</u>] (SEMVER-MAJOR) dns: default to verbatim=true in dns.lookup() (treysis) #39987
- [<u>ae876d420c</u>] **(SEMVER-MAJOR) doc**: update minimum supported FreeBSD to 12.2 (Michaël Zasso) #40179
- [<u>59d3d542d6</u>] **(SEMVER-MAJOR) errors**: print Node.js version on fatal exceptions that cause exit (Divlo) <u>#38332</u>
- [<u>f9447b71a6</u>] (SEMVER-MAJOR) fs: fix rmsync error swallowing (Nitzan Uziely) <u>#38684</u>
- [<u>f27b7cf95c</u>] **(SEMVER-MAJOR) fs**: aggregate errors in fsPromises to avoid error swallowing (Nitzan Uziely) <u>#38259</u>
- [d0a898681f] (SEMVER-MAJOR) lib: add structuredClone() global (Ethan Arrowood) #39759
- [e4b1fb5e64] (SEMVER-MAJOR) lib: expose DOMException as global (Khaidi Chu) #39176
- [36e2ffe6dc] (SEMVER-MAJOR) module: subpath folder mappings EOL (Guy Bedford) #40121
- [64287e4d45] **(SEMVER-MAJOR) module**: runtime deprecate trailing slash patterns (Guy Bedford) #40117
- [<u>707dd77d86</u>] **(SEMVER-MAJOR) readline**: validate AbortSignal s and remove unused event listeners (Antoine du Hamel) <u>#37947</u>
- [8122d243ae] (SEMVER-MAJOR) readline: introduce promise-based API (Antoine du Hamel) #37947
- [<u>592d1c3d44</u>] **(SEMVER-MAJOR) readline**: refactor Interface to ES2015 class (Antoine du Hamel) #37947
- [<u>3f619407fe</u>] **(SEMVER-MAJOR) src**: allow CAP_NET_BIND_SERVICE in SafeGetenv (Daniel Bevenius) #37727
- [<u>0a7f850123</u>] **(SEMVER-MAJOR) src**: return Maybe from a couple of functions (Darshan Sen) <u>#39603</u>
- [<u>bdaf51bae7</u>] **(SEMVER-MAJOR) src**: allow custom PageAllocator in NodePlatform (Shelley Vohr) #38362
- [<u>0c6f345cda</u>] (SEMVER-MAJOR) stream: fix highwatermark threshold and add the missing error (Rongjian Zhang) <u>#38700</u>
- [<u>0e841b45c2</u>] (SEMVER-MAJOR) stream: don't emit 'data' after 'error' or 'close' (Robert Nagy) #39639
- [<u>ef992f6de9</u>] **(SEMVER-MAJOR) stream**: do not emit end on readable error (Szymon Marczak) #39607
- [<u>efd40eadab</u>] **(SEMVER-MAJOR) stream**: forward errored to callback (Robert Nagy) <u>#39364</u>
- [<u>09d8c0c8d2</u>] **(SEMVER-MAJOR) stream**: destroy readable on read error (Robert Nagy) <u>#39342</u>
- [a5dec3a470] (SEMVER-MAJOR) stream: validate abort signal (Robert Nagy) #39346
- [<u>bb275ef2a4</u>] **(SEMVER-MAJOR) stream**: unify stream utils (Robert Nagy) #39294
- [<u>b2ae12d422</u>] (SEMVER-MAJOR) stream: throw on premature close in Readable[AsyncIterator]
 (Darshan Sen) #39117

- [<u>0738a2b7bd</u>] **(SEMVER-MAJOR) stream**: finished should error on errored stream (Robert Nagy) #39235
- [<u>954217adda</u>] (SEMVER-MAJOR) stream: error Duplex write/read if not writable/readable (Robert Nagy) <u>#34385</u>
- [<u>f4609bdf3f</u>] (SEMVER-MAJOR) stream: bypass legacy destroy for pipeline and async iteration (Robert Nagy) <u>#38505</u>
- [ele669b109] (SEMVER-MAJOR) url: throw invalid this on detached accessors (James M Snell) #39752
- [70157b9cb7] (SEMVER-MAJOR) url: forbid certain confusable changes from being introduced by toASCII (Timothy Gu) #38631

Semver-Minor Commits

- [6cd12be347] (SEMVER-MINOR) fs: add FileHandle.prototype.readableWebStream() (James M Snell)
 #39331
- [341312d78a] (SEMVER-MINOR) readline: add autoCommit option (Antoine du Hamel) #37947
- [<u>1d2f37d970</u>] (SEMVER-MINOR) src: add --openssl-legacy-provider option (Daniel Bevenius) #40478
- [3b72788afb] (SEMVER-MINOR) src: add flags for controlling process behavior (Cheng Zhao) #40339
- [8306051001] (SEMVER-MINOR) stream: add readableDidRead (Robert Nagy) #36820
- [<u>08ffbd115e</u>] (SEMVER-MINOR) vm: add support for import assertions in dynamic imports (Antoine du Hamel) <u>#40249</u>

Semver-Patch Commits

- [ed01811e71] benchmark: increase crypto DSA keygen params (Brian White) #40416
- [<u>cb93fdbba5</u>] **build**: reset embedder string to "-node.0" (Michaël Zasso) <u>#40178</u>
- [ed76b49834] build: fix actions pull request's branch (Mestery) #40494
- [6baea14506] **build**: avoid run find inactive authors on forked repo (Jiawen Geng) #40465
- [<u>f9996d5b80</u>] **build**: include new public V8 headers in distribution (Michaël Zasso) <u>#40423</u>
- [983b757f3f] **build**: update codeowners-validator to 0.6 (FrankQiu) #40307
- [73c3885e10] **build**: remove duplicate check for authors.yml (Rich Trott) #40393
- [92090d3435] **build**: make scripts in gyp run with right python (Cheng Zhao) #39730
- [28f711b552] **crypto**: remove incorrect constructor invocation (gc) #40300
- [<u>228e703ded</u>] **deps**: workaround debug link error on Windows (Richard Lau) <u>#38807</u>
- [<u>a35b7e0427</u>] **deps**: upgrade npm to 8.1.0 (npm team) <u>#40463</u>
- [d434c5382a] deps: regenerate OpenSSL arch files (Daniel Bevenius) #40478
- [<u>2cebd5f02b</u>] **deps**: add missing legacyprov.c source (Daniel Bevenius) #40478
- [<u>bf82dcd5ba</u>] **deps**: patch V8 to 9.5.172.21 (Michaël Zasso) #40432
- [795108a63d] deps: V8: make V8 9.5 ABI-compatible with 9.6 (Michaël Zasso) #40422
- [5d7bd8616e] deps: suppress zlib compiler warnings (Daniel Bevenius) #40343
- [<u>fe84cd453d</u>] **deps**: upgrade Corepack to 0.10 (Maël Nison) <u>#40374</u>
- [<u>2d503ed3ff</u>] **deps**: V8: backport 239898ef8c77 (Felix Yan) <u>#39827</u>
- [<u>c9296b190f</u>] **deps**: V8: cherry-pick 2a0bc36dec12 (Michaël Zasso) <u>#40178</u>
- [<u>5b358370ad</u>] **deps**: V8: cherry-pick cf21eb36b975 (Michaël Zasso) <u>#40178</u>
- [228e703ded] deps: workaround debug link error on Windows (Richard Lau) #38807
- [cca9b95523] dgram: add nread assertion to UDPWrap::OnRecv (Darshan Sen) #40295
- [7c77db0243] **dns**: refactor and use validators (Voltrex) #40022
- [<u>a278117f28</u>] **doc**: update Collaborator guide to reflect GitHub web UI update (Antoine du Hamel) #40456
- [4cf5563147] doc: indicate n-api out params that may be NULL (Isaac Brodsky) #40371

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    [ 15ce81a464 ] - doc: remove ESLint comments which were breaking the CJS/ESM toggles (Mark Skelton)

    [ <u>54a85d6bb5</u> ] - doc: add pronouns for tniessen to README (Tobias Nießen) #40412

• [ 40db88b7b5 ] - doc: format changelogs (Rich Trott) #40388

    [ 4f68839910 ] - doc: fix missing variable in deepStrictEqual example (OliverOdo) #40396

    [ <u>ca6adcf37e</u>] - doc: fix asyncLocalStorage.run() description (Constantine Kim) #40381

• [ 7dd3adf6dd ] - doc: fix typos in n-api docs (Ignacio Carbajo) #40402
• [ <u>eb65871ab4</u> ] - doc: format doc/guides using format-md task (Rich Trott) <u>#40358</u>

    [ <u>0d50dfdf61</u> ] - doc: improve phrasing in fs.md (Arslan Ali) <u>#40255</u>

    [ 7723148758 ] - doc: add link to core promises tracking issue (Michael Dawson) #40355

    [ <u>ccee352630</u> ] - doc: esm resolver spec refactoring for deprecations (Guy Bedford) #40314

• [ <u>1fc1b0f5f2</u> ] - doc: claim ABI version for Electron v17 (Milan Burda) #40320
• [ <u>0d2b6aca60</u> ] - doc: assign missing deprecation number (Michaël Zasso) <u>#40324</u>
• [ <u>4bd8e0efa0</u> ] - doc: fix typo in ESM example (Tobias Nießen) <u>#40275</u>
• [ <u>03d25fe816</u> ] - doc: fix typo in esm.md (Mason Malone) <u>#40273</u>
• [ 6199441b00 ] - doc: correct ESM load hook table header (Jacob) #40234

    [ 78962d1ca1 ] - doc: mark readline promise implementation as experimental (Antoine du Hamel) #40211

• [ 4b030d0573 ] - doc: deprecate (doc-only) http abort related (dr-js) #36670
• [ <u>bbd4c6eee9</u> ] - doc: claim ABI version for Electron v15 and v16 (Samuel Attard) #39950
• [ <u>3e774a0500</u> ] - doc: fix history for fs.WriteStream open event (Antoine du Hamel) #39972

    [ 6fdd5827f0 ] - doc: anchor link parity between markdown and html-generated docs (foxxyz) #39304

    [ <u>7b7a0331f4</u> ] - doc: reset added: version to REPLACEME (Luigi Pinca) #39901

    [ <u>58257b7c61</u> ] - doc: fix typo in webstreams.md (Luigi Pinca) <u>#39898</u>

• [ df22736d80 ] - esm: consolidate ESM loader hooks (Jacob) #37468
• [ <u>ac4f5e2437</u> ] - lib: refactor to use let (gdccwxx) <u>#40364</u>
• [ <u>3d11bafaa0</u> ] - lib: make structuredClone spec compliant (voltrexmaster) <u>#40251</u>
• [ 48655e17e1 ] - lib,url: correct URL's argument to pass idlharness (Khaidi Chu) #39848
• [ c0a70203de ] - meta: update AUTHORS (Node.js GitHub Bot) #40485

    [ <u>cbc7b5d424</u> ] - meta: consolidate AUTHORS entries for emanuelbuholzer (Rich Trott) #40469

• [ 881174e016 ] - meta: consolidate AUTHORS entries for ebickle (Rich Trott) #40447
• [ <u>b80b85e130</u> ] - meta: add typings to label-pr-config (Mestery) <u>#40401</u>

    [ 95cf944736 ] - meta: consolidate AUTHORS entries for evantorrie (Rich Trott) #40430

    [ <u>c350c217f4</u> ] - meta: consolidate AUTHORS entries for gabrielschulhof (Rich Trott) #40420

    [ <u>a9411891cf</u> ] - meta: consolidate AUTHORS information for geirha (Rich Trott) #40406

    [ <u>0cc37209fa</u> ] - meta: consolidate duplicate AUTHORS entries for hassaanp (Rich Trott) #40391

• [ 49b7ec96a4 ] - meta: update AUTHORS (Node.js GitHub Bot) #40392

    [ <u>a3c0713d9e</u> ] - meta: consolidate AUTHORS entry for thw0rted (Rich Trott) #40387

[ eaa59571e0 ] - meta: update label-pr-config (Mestery) #40199

    [ 6a205d7a56 ] - meta: use .mailmap to consolidate AUTHORS entries for ide (Rich Trott) #40367

• [ <u>f570109094</u> ] - net: check if option is undefined (Daijiro Wachi) <u>#40344</u>
• [ 119558b6a2 ] - net: remove unused ObjectKeys (Daijiro Wachi) #40344

    [ <u>c7cd8ef6c6</u> ] - net: check objectMode first and then readble || writable (Daijiro Wachi) #40344

• [ 46446623f5 ] - net: throw error to object mode in Socket (Daijiro Wachi) #40344

    [ <u>38aa7cc7c7</u>] - src: get embedder options on-demand (Joyee Cheung) #40357

• [ ad4e70c817 ] - src: ensure V8 initialized before marking milestone (Shelley Vohr) #40405
• [ <u>a784258444</u> ] - src: remove usage of AllocatedBuffer from stream_* (Darshan Sen) #40293
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- [f11493dfc9] src: add missing initialization (Michael Dawson) #40370
- [<u>5e248eceb6</u>] **src**: update NODE_MODULE_VERSION to 102 (Michaël Zasso) <u>#40178</u>
- [<u>3f0b62375b</u>] **stream**: convert premature close to AbortError (Robert Nagy) <u>#39524</u>
- [<u>79f4d5a345</u>] **stream**: fix toWeb typo (Robert Nagy) <u>#39496</u>
- [44ee6c2623] stream: call done() in consistent fashion (Rich Trott) #39475
- [<u>09ad64d66d</u>] **stream**: add CompressionStream and DecompressionStream (James M Snell) <u>#39348</u>
- [a99c230305] stream: implement streams to webstreams adapters (James M Snell) #39134
- [<u>a5ba28dda2</u>] **stream**: fix performance regression (Brian White) <u>#39254</u>
- [ce00381751] stream: use finished for async iteration (Robert Nagy) #39282
- [e0faf8c3e9] test: replace common port with specific number (Daijiro Wachi) #40344
- [8068f40313] test: fix typos in whatwg-webstreams explanations (Tobias Nießen) #40389
- [eafdeab97b] test: add test for readStream.path when fd is specified (Qingyu Deng) #40359
- [24f045dae2] **test**: replace .then chains with await (gdccwxx) #40348
- [<u>5b4ba52786</u>] **test**: fix "test/common/debugger" identify async function (gdccwxx) <u>#40348</u>
- [<u>1d84e916d6</u>] **test**: improve test coverage of fs.ReadStream with FileHandle (Antoine du Hamel) #40018
- [<u>b63e449b2e</u>] **test**: pass URL's toascii.window.js WPT (Khaidi Chu) <u>#39910</u>
- [842fd234b7] **test**: adapt test-repl to V8 9.5 (Michaël Zasso) #40178
- [d7b9b9f8d7] test: remove test-v8-untrusted-code-mitigations (Ross McIlroy) #40178
- [7624917069] tools: update tools/lint-md dependencies to support GFM footnotes (Rich Trott) #40445
- [350a95b89f] tools: update lint-md dependencies (Rich Trott) #40404
- [<u>012152d7d6</u>] **tools**: udpate @babel/eslint-parser (Rich Trott) <u>#40394</u>
- [43c780e741] tools: remove @babel/plugin-syntax-import-assertions (Rich Trott) #40394
- [<u>b39db95737</u>] **tools**: remove @bable/plugin-syntax-class-properties (Rich Trott) <u>#40394</u>
- [a6fd39f44f] tools: remove @babel/plugin-syntax-top-level-await (Rich Trott) #40394
- [<u>8ca76eba73</u>] **tools**: update ESLint to 8.0.0 (Rich Trott) <u>#40394</u>
- [dd8e219d71] tools: prepare ESLint rules for 8.0.0 requirements (Rich Trott) #40394
- [<u>0a1b399781</u>] **tools**: fix ESLint update scripts (Rich Trott) <u>#40394</u>
- [d6d6b050ff] tools: warn about duplicates when generating AUTHORS file (Rich Trott) #40304
- [<u>1fd984581c</u>] **tools**: update V8 gypfiles for 9.5 (Michaël Zasso) <u>#40178</u>
- [<u>a8a86387fa</u>] **tty**: enable buffering (Robert Nagy) <u>#39253</u>
- [<u>9467cbadcb</u>] **typings**: define types for os binding (Michaël Zasso) <u>#40222</u>
- [70a5b86049] typings: add missing types to options and util bindings (Michaël Zasso) #40222
- [3815a21beb] **typings**: define types for timers binding (Michaël Zasso) #40222
- [9e64336fbf] typings: fix declaration of primordials (Michaël Zasso) #40222
- [<u>f581f6da94</u>] **url**: fix performance regression (Brian White) <u>#39778</u>
- [<u>02de40246f</u>] **v8**: remove --harmony-top-level-await (Geoffrey Booth) <u>#40226</u>