v1.17.17

Downloads for v1.17.17

Source Code

filename	sha512 hash
kubernetes.tar.gz	b150df23f93cd08bb7e77bc08723af1344793efebf61926d24fdfe06df1d4d7a658990
kubernetes-src.tar.gz	cd3edc84cb7a70879719992913d9c7ceb08f55a961ef4fbbc78bd9d66dc9c99650df

Client binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	b4837885c3bdceb8acb47eae8b941d238577d2f861e86db571c52ead879924744db
kubernetes-client-darwin-amd64.tar.gz	3d2589761b7172896ba60fedd413b7e59e2b16262eac21e743c23acd9d2b73e4218
kubernetes-client-linux-386.tar.gz	601d7eb0f8372fbbe621830fd79c7b021d0937d6404225c0a76c340a1f1c170a19e6f
kubernetes-client-linux-amd64.tar.gz	b86ec78a4a43cf68e1ccea29c029849c97eee2534a5e42cb7a67709e1496725774fb5
kubernetes-client-linux-arm.tar.gz	2f5011bb5efcc9304ba50cfe871d48c62a82aec1ccdf78c28ccf1e27a329f4f5bf3e785
kubernetes-client-linux-arm64.tar.gz	f766f9ffd8b802b7ac8bb1e6895a72684627b70d004da38bca6537ae3f42932092e05
kubernetes-client-linux-ppc64le.tar.gz	f84ff94219a07e8c23476289c0e9013aa1f00d1e06b18ed49df36f53beca1ef924fb079
kubernetes-client-linux-s390x.tar.gz	b1b4b381dfddbe97492c7e1d33e805a244715d0f6a1f15b1351a2940bbad26e44413
kubernetes-client-windows-386.tar.gz	9f19d9dbd2a724605616d41ec1826474bc9f3ce09fcaa52f6c7c08219d0d7b8daf027
kubernetes-client-windows-amd64.tar.gz	c43e07f283344be3f85062812b54a23ce90cabc7282918b47793aeda8ca916bc5dbb

Server binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	5ff3ab1b1028b9578bc30b839b7ea7a3c59d96b6e45c848439c68e689f3f6e85060bc
kubernetes-server-linux-arm.tar.gz	c59577f5431e9cab208868a5b7d74fe502caeb9a521262b4b03533056fc19710f2972
kubernetes-server-linux-arm64.tar.gz	045affc2009845803861404450e6ed5938b62e12cdcab22a56a32d67a753bc0cd5f9

filename	sha512 hash
kubernetes-server-linux-ppc64le.tar.gz	5bf56b99d603fe0792398fc8afd0f8242eff9737b64d4cfef734b46ec34d81fd88b7c19
kubernetes-server-linux-s390x.tar.gz	01256c9f4ebb33047f338554705b3ec374164c7d78a6d45204e125cd57f8d8cb6688

Node binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	40518e641695635e05845fca17faef6b21adfc21484c29b8c30f3478adf6fd6d1f7014
kubernetes-node-linux-arm.tar.gz	616da7994270a1cefc5b2f96b41324fcf1b91b0fade3b1bcb16d0b7432366c1b5ff5e
kubernetes-node-linux-arm64.tar.gz	3b653098d7707f3ab72b837f2347f19efc3e0178ef6e2b4ea80250a6c70a569556f8e0
kubernetes-node-linux-ppc64le.tar.gz	f3b25463e589c39b22d72a292177a661929e81ec24d436392428667c1c02705d0d71
kubernetes-node-linux-s390x.tar.gz	170b52295d28f14299f62ecba0796ce9bc5d3719311a1b737067560b4a626b0ad5e0
kubernetes-node-windows-amd64.tar.gz	879d212e567bf8319905518e162e40b82c40d1f30aa7d94b162a3c41371f277d1c66

Changelog since v1.17.16

Changes by Kind

Bug or Regression

- Fix counting error in service/nodeport/loadbalancer quota check (#97830, @pacoxu) [SIG API Machinery and Network]
- GCE Internal LoadBalancer sync loop will now release the ILB IP address upon sync failure. An error in ILB forwarding rule creation will no longer leak IP addresses. (#97740, @prameshj) [SIG Cloud Provider and Network]

Dependencies

Added

Nothing has changed.

Changed

Nothing has changed.

Removed

Nothing has changed.

v1.17.16

Downloads for v1.17.16

Source Code

filename	sha512 hash
kubernetes.tar.gz	743568fe43b6ab40448f77b35fb538dae8d48e2b4cedbe5b68d07f32a0f0769416688
kubernetes-src.tar.gz	776935fe4cec3f9889826c3b1d22a38640acae2f06bbf6ff4601456a7e40314fd6744a

Client binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	a33c64d3f3db1f0e14ffe860039fb66d61c2b5d56b24dbae3fc61cc755b44b2640de4
kubernetes-client-darwin-amd64.tar.gz	395825cc972d020a24f50ad6165dc38e242813fa619225923a060b422c7feaf772e1f8
kubernetes-client-linux-386.tar.gz	1601d28e598fd0bf9d195ae8c4aff9966fb74de0a9d28cc5fa1b9a53444740cd19ac7
kubernetes-client-linux-amd64.tar.gz	5b4fee0702ea7952f5eadf0af46ec0b2bc14fbb3d8777fb745e8c9a3296438d36d994
kubernetes-client-linux-arm.tar.gz	9b007a53fb85997d89b4b75d3d792ec87104f68263939e98adfdbf6dab5827d61b65
kubernetes-client-linux-arm64.tar.gz	b7e80c04870f56f7b2f68c80c35c4d9ab4e1ab7f8a2eb17259e13c46e7b5c4d0e024b
kubernetes-client-linux-ppc64le.tar.gz	94a8b796aac2c8eea9ddb15dbbb40d326a42b2ba5f0d6ef5d78fed6152820f98cca2
kubernetes-client-linux-s390x.tar.gz	a01f3452d64d104da30c8d684d958baafc4270fafd781501b150e38cfc6d728f43815
kubernetes-client-windows-386.tar.gz	a69a3513302725eb76667093226812c12c509dd83e6625973023999ef31d3f2f8887
kubernetes-client-windows-amd64.tar.gz	bdbe204baa82d010a97861a235310863b236fff41fe232b9b873067aeb46ca644e2f4

Server binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	de68a725982c3c30a146e6cb73338573ac73a1d92ad6b33f63ffb7d59e8410c452f31
kubernetes-server-linux-arm.tar.gz	0d37019164c1f9234796f99eefa3cf6172904d01a835f6cf47599f4e20798b5ac57099
kubernetes-server-linux-arm64.tar.gz	fe7aebc8a8a964433ce9afa2a9dcfb0e72f67c2def01c7a520896ea231743963e8f924
kubernetes-server-linux-ppc64le.tar.gz	2f0fdec28757a39345513749351f2afbf07790065441ece017277bb62d0ddf5fa7e48f
kubernetes-server-linux-s390x.tar.gz	a25880fb74af9f5c7599c1ab762193161460a5c68343d421b691e83b4d7d057e4e37

Node binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	398f5d2c17701bc2d27f914682cb0d870b9c2fbab44096c210999d105bc9cca401ab
kubernetes-node-linux-arm.tar.gz	2a85976e58af70c979468518189e3a3d2c46618131f4d6b88c025fb0e15cfb8ba35e4
kubernetes-node-linux-arm64.tar.gz	0b17707ccc87cf2f67d0e60eb30813ca787beafc1017bda948a00a9a0a01046bf7ed8
kubernetes-node-linux-ppc64le.tar.gz	a9b1191239fb9966818226756f4d3bb4ced60d1ddeacc90671600eb34c265c5391fc
kubernetes-node-linux-s390x.tar.gz	f1c36089dc75cd439f479d6ca917e387b1268a77b46ce640876fee738e41cc4c67b44
kubernetes-node-windows-amd64.tar.gz	ddea86980ce0bdf2cfc1732008983ab786ce6f1a03f8891f16be6b4794d2c330159ad

Changelog since v1.17.15

Changes by Kind

Feature

- Add a new flag to set priority for the kubelet on Windows nodes so that workloads cannot overwhelm the node there by disrupting kubelet process. (#96159, @ravisantoshgudimetla) [SIG Node]

Bug or Regression

- Cordoned nodes are now deregistered from AWS target groups. (#85920, @hoelzro) [SIG Cloud Provider]

Other (Cleanup or Flake)

- Client-go header logging (at verbosity levels >= 9) now masks `Authorization` header contents (#95316, @sfowl) [SIG API Machinery]

Dependencies

Added

Nothing has changed.

Changed

Nothing has changed.

Removed

Nothing has changed.

v1.17.15

Downloads for v1.17.15

Source Code

filename	sha512 hash
kubernetes.tar.gz	37dc896be35ba6a8ae3f4f19e4836469183b64ab8e3a9199af82d8b5e48a50277b5e
kubernetes-src.tar.gz	b15ebc58b6ff7b1ab6b116c5beb50e7312746691c9b26f0adbadd3456508688e957c

Client binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	dd41ce65424a135fe0baca76b501e8e52cf254951f1a70f14825d58cb7a9189106f1ca
kubernetes-client-darwin-amd64.tar.gz	c444f4de7b8769811b3d40d5179c946b351bd2288b775304ca7477bee5a4feb8cb8
kubernetes-client-linux-386.tar.gz	3ba25a51f2d17fb3a6d6789ba7568adc51287460de11eb6d56b0c70cd030e6db143
kubernetes-client-linux-amd64.tar.gz	cff736f0e3fd6fbc7dfb44b85280549d4d80ad65f9697456e7beb2211a33b94c6ea55
kubernetes-client-linux-arm.tar.gz	e3e50c5365269e97ac75a3b804d210c72dbea9f8bf60d3237c5e800888885d26f3d1
kubernetes-client-linux-arm64.tar.gz	fd8419e6a1e21ad5f80d6371d21c758358e8693e219cd097dc88a568dc3a437daaa6

filename	sha512 hash
kubernetes-client-linux-ppc64le.tar.gz	50dc279471aeaa2e03b4009212b15c7b3f2823154c22897ea4e3d355786796ad3764
kubernetes-client-linux-s390x.tar.gz	94effe8575792a61cb3d1a5d1ec1700757855ac20e571e84bb751656ce6e3b65b620
kubernetes-client-windows-386.tar.gz	fb24e897a3f3be3c8aab02855355f1ef014a23497185666e44382613b6901c37660b3
kubernetes-client-windows-amd64.tar.gz	17797c61de63f8ce810b681520e8d736e253a0f6c9c2945eb3f949e0fe673af82c3fc3

Server binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	a42e03c48d1423b7e5276526b51e1d130561cddd261fc1f919840f12d26fad0526da
kubernetes-server-linux-arm.tar.gz	369adef81e8cc7cfabaf55ed55d0b1d99f5237e7b36d7d731774d7b28a2431433078
kubernetes-server-linux-arm64.tar.gz	014064a18fd354b8441f201ec087f95db53d7f5244e239c3adc9fe2b4a7b3759711ba
kubernetes-server-linux-ppc64le.tar.gz	73fd5925c5b74112fcc465bba034d8ef135ad7dd4cbab123e46362a0a7441f0f59715
kubernetes-server-linux-s390x.tar.gz	39255a6a06e5ab58225a408a5d6885953054c966a19a4df77b1e70638932feb927c7

Node binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	772b8983acb9bab1fd094e4d0841b0043d3fe378db9833f03ff0e43d1e007676878d
kubernetes-node-linux-arm.tar.gz	de740ab4486dbe5e650a962bb7ded4183f0a084b8369dc4528383888cca6b92d823
kubernetes-node-linux-arm64.tar.gz	890c6b68031e1cd316557b22702f2e02389afd26905731b523a11d9fb7d5c63000b2
kubernetes-node-linux-ppc64le.tar.gz	d8d5f34bc722ade023191d1f2dae5c9aacba1fdf277e7d902ca6a1183fa0acf11d493
kubernetes-node-linux-s390x.tar.gz	d178a716efab66f179304858d5851f1afd455a8b9ead546a21fd0f73a4a61dbf047fa7
kubernetes-node-windows-amd64.tar.gz	94c28828bb7c7b498ea5e13d637aff48b9536b9a19ef26368322d675dc1389dea9d4

Changelog since v1.17.14

Changes by Kind

Feature

- Add a new flag to set priority for the kubelet on Windows nodes so that workloads cannot overwhelm the node there by disrupting kubelet process. (#96159, @ravisantoshgudimetla) [SIG Node]

Bug or Regression

- Avoid GCE API calls when initializing GCE CloudProvider for Kubelets. Avoid unnecessary GCE API calls when adding IP alises or reflecting them in Node object in GCE cloud provider. (#96864, @tosi3k) [SIG Apps, Cloud Provider and Network]
- Azure: check the nil error before invoke err.Error() (#96623, @nilo19) [SIG Cloud Provider]
- Bump node-problem-detector version to v0.8.5 to fix OOM detection in with Linux kernels 5.1+ (#96716, @tosi3k) [SIG Cloud Provider, Scalability and Testing]
- Exposes and sets a default timeout for the SubjectAccessReview client for DelegatingAuthorizationOptions (#96153, @p0lyn0mial) [SIG API Machinery and Cloud Provider]
- Fix memory leak in kube-apiserver when underlying time goes forth and back. (#96266, @chenyw1990) [SIG API Machinery]
- Fix pull image error from multiple ACRs using azure managed identity (#96355, @andyzhangx) [SIG Cloud Provider]
- Fix: resize Azure disk issue when it's in attached state (#96705, @andyzhangx) [SIG Cloud Provider]
- Fixed kubelet creating extra sandbox for pods with RestartPolicyOnFailure after all containers succeeded (#92614, @tnqn) [SIG Node and Testing]
- New Azure instance types do now have correct max data disk count information. (#94340, @ialidzhikov) [SIG Cloud Provider and Storage]

Other (Cleanup or Flake)

- In GKE alpha clusters it will be possible to use the service annotation `cloud.google.com/network-tier: Standard` (#88487, @zioproto) [SIG Cloud Provider]

Dependencies

Added

Nothing has changed.

Changed

Nothing has changed.

Removed

Nothing has changed.

v1.17.14

Downloads for v1.17.14

Source Code

filename	sha512 hash
kubernetes.tar.gz	7cc1ab5518f3a7b62b8a2d05aa05b19ecd5855611e5c6b20a16747ac35c36e445a8f
kubernetes-src.tar.gz	73f86a50cc32f11a0d25c06726aad380bf48779f206b464eca95bc91928cc2939703f

Client binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	d2dddbaa1795913d9cc98cd3d392b7fb10ac0a6c6bdedfbc36571f5f12bb825f08d3
kubernetes-client-darwin-amd64.tar.gz	76a98f4cd4fecf38c4e0454270b195a7aa4f177fbe489061198dc0188593d3e8d7d94
kubernetes-client-linux-386.tar.gz	6c622a48ebd9bbe7cf2b2fd3a6af504c81aa8493458f55a88b054408fc6c0ae168caa
kubernetes-client-linux-amd64.tar.gz	027945e245693c4c0dfd818eb7b4213d21d90b2d0191d9d62c218e150ee1e604ba8
kubernetes-client-linux-arm.tar.gz	ec147440201f079b51514dab79c2a57b7da5f7991df950a2d4054a95591e937315e2
kubernetes-client-linux-arm64.tar.gz	31dc0aacf0d682103ba69dfe356ba330e1c9c29412a2c230b389859f00871d173b35
kubernetes-client-linux-ppc64le.tar.gz	dbe6ba70c84397aeda624cc7e8a6bb2ce049f4e5a9fd8c14d95aa91a0320b349a1de
kubernetes-client-linux-s390x.tar.gz	3eb0f0c03c68a20257f288ed04ba53966b772d93fa5ed2042f74694319d4a5fd2bc13
kubernetes-client-windows-386.tar.gz	53186bec70113e7862ed8a4852924bf5b9c41a3826e2671aa77301d331b207563ec2
kubernetes-client-windows-amd64.tar.gz	e73bb1fd9ebf3f1e4e87cc40a99620ee50f97382c22d369f2910e2f0d6388deb1d79fd

Server binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	c61b98f7a2308662cd00cdd21bb0167641dec4138d93d803bfbd4154cb81fab142e5
kubernetes-server-linux-arm.tar.gz	581cb209a57466638654f3397e5d978e3406fb68f0f2d4f362b4dcae5b51949684c20
kubernetes-server-linux-arm64.tar.gz	c1c3447f72fb5bb7255116698b6c595902f281fd9998bdc3549f0a5bd73f25c3cd4ea
kubernetes-server-linux-ppc64le.tar.gz	68bea93ff0b017dea4bcf4535fda6c670e75a16739952efacfaa0139a7beeb94703fe9
kubernetes-server-linux-s390x.tar.gz	25dc9d9aea4688a206c4b433050142d11165e4e6cdcd1a92a232c1c8758a5f1e9e47

Node binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	566ca46ae8679849d359e404c9dd321553182597b76c79cea2b43f7fa48d6d3172be
kubernetes-node-linux-arm.tar.gz	cbcbf2b71336c9317d35df754c3e644a97add7ca764fb436b74ebaf0f6915114c4cb2
kubernetes-node-linux-arm64.tar.gz	f1d6e7461ff2d0f2a71543496f792833fc701860ff7f6f286c7e964cb2ab126fefc7f8ac8
kubernetes-node-linux-ppc64le.tar.gz	2e9c761f5e2e2ce6d32d48b45e340826488f4d9e704564b5a2aa2eb3bc41718b3b21
kubernetes-node-linux-s390x.tar.gz	f2957dd25ba765d0b31dabdb9c1d76e3dfbf81188384df4613ca653c5db044d7104
kubernetes-node-windows-amd64.tar.gz	46b7b7d0b19de8db74aeae6367ff730b15896d082898d0b68a11ba8b7ed7dd6cb2b

Changelog since v1.17.13

Changes by Kind

Bug or Regression

- An issues preventing volume expand controller to annotate the PVC with
  `volume.kubernetes.io/storage-resizer` when the PVC StorageClass
  is already updated to the out-of-tree provisioner is now fixed. (#94489,
  @ialidzhikov) [SIG API Machinery, Apps and Storage]
- Disable watchcache for events.k8s.io/Event resource for compatibility with
  core/Event. (#96117, @wojtek-t) [SIG Scalability]
- Fix azure disk attach failure for disk size bigger than 4TB (#95463,
  @andyzhangx) [SIG Cloud Provider]
- Fix azure disk data loss issue on Windows when unmount disk (#95456,
  @andyzhangx) [SIG Cloud Provider and Storage]

- Fix azure file migration panic (#94853, @andyzhangx) [SIG Cloud Provider]
- Fixed a bug in client-go where new clients with customized `Dial`, `Proxy`, `GetCert` config may get stale HTTP transports. (#95427, @roycaihw) [SIG API Machinery]
- Fixes high CPU usage in kubectl drain (#95260, @amandahla) [SIG CLI]
- Kube-apiserver: multiple comma-separated protocols in a single X-Stream-Protocol-Version header are now recognized, in addition to multiple headers, complying with RFC2616 (#89857, @tedyu) [SIG API Machinery]
- Kube-proxy now trims extra spaces found in loadBalancerSourceRanges to match Service validation. (#94107, @robscott) [SIG Network]

Dependencies

Added

Nothing has changed.

Changed

Nothing has changed.

Removed

Nothing has changed.

v1.17.13

Downloads for v1.17.13

Source Code

filename	sha512 hash
kubernetes.tar.gz	15d61808196abe3836c101fd758933619bbd81e876e477977bbf8916f0f34930085a
kubernetes-src.tar.gz	0f51539cbb66fd120a9df948367543179e9244b54da24ba83556e9cb2e35df63b215

Client binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	5ebbd0c132d8f04afa8e9a50f0702f369063c4edc7e74e8aecc03af75f48bd6a5e33a0
kubernetes-client-darwin-amd64.tar.gz	dd9c1fa387afef35f61f2e4f631d2e187a715b6f7a40719b099037778bcfc599303f12
kubernetes-client-linux-386.tar.gz	749fb9ffcc7530a0a77036c06070dfe610d9f569fbfb8677ff64cb6ea50cfe9683158a0

filename	sha512 hash
kubernetes-client-linux-amd64.tar.gz	bc67e49b2ea5e703fe5c06ca443d4d99dd10b320941b63e184f478b019ef31a655c4
kubernetes-client-linux-arm.tar.gz	3f71a300a8e3c25c90e0723b30f2ec2fb550e92d8e7b177f6e80181f615b8a5ed1262a
kubernetes-client-linux-arm64.tar.gz	b8e9df333a3df22e44bab002f0a687fc1ea7929437bb63bec5d579bcab6b8cd7f27c9
kubernetes-client-linux-ppc64le.tar.gz	faf1c0bd1c77fb40856d39cdafb877b83fa8e7c9bf14a095f5008c3eab1c905dc5928
kubernetes-client-linux-s390x.tar.gz	09baebc33fa1a9ab932bbdc8df572103a92b7819f80169f6a8f8b3aee184091d5ca42
kubernetes-client-windows-386.tar.gz	18a3385e967a88ea2ab04ca74d94a51bb5664dd87b26754e94620dd31a82e55a291
kubernetes-client-windows-amd64.tar.gz	7014c5829ec6492af9e991e73e92eb203eaef3d52bf4c87f2362d32c46605c05adb69

Server binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	e071c7b5671c0391e5c87a5322402bbfee3c369bd2fd79cd6dfcba683f16b56a878f5
kubernetes-server-linux-arm.tar.gz	bb4aa695264976ed47ca2c82192522911991ba40b174159805c989a65be4f6bb3ed
kubernetes-server-linux-arm64.tar.gz	63caf7bc0b517ee196ae7742f45726542afd312df568d4ba0a28e827cf72753748c74
kubernetes-server-linux-ppc64le.tar.gz	fb1c047dc6984f740eefe9ee1530ac998b49fe09bb52000155de81e013fd7a8dc891d
kubernetes-server-linux-s390x.tar.gz	1d5067ff2319255ac4d65934c320361f1c82d05d89a0b9866c867240e1f97a63ffbd5

Node binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	cddad2f5a4d50e71a9af5e305c9c5ee85e9ebf1355f5d4da7641c171f4809c89d4241a
kubernetes-node-linux-arm.tar.gz	0931a4bfd545bd99ea7fb7948cd7455d27fd5c82f75d0553998de40ffadea3427150
kubernetes-node-linux-arm64.tar.gz	13a75da6ea9f8bc37bbabed7b2f1a6f643fdcef9a045d5a23820103b69a41f4515da
kubernetes-node-linux-ppc64le.tar.gz	64528984a36a8c2fc1bb99f3b374b507f9ca460b34e65997c52dbf05ed28fc741c774

filename	sha512 hash
kubernetes-node-linux-s390x.tar.gz	17cae7323eaad30609361a31bf4a08199851729562eb70e610b82948c27c9ab72f6f6
kubernetes-node-windows-amd64.tar.gz	11f60cd0ad3111aac1e2d9fdccaef1a195143ee5ca94b3011f85b850d89e664b8e608

Changelog since v1.17.12

Changes by Kind

Design

- Prevent logging of docker config contents if file is malformed (#95348, @sfowl) [SIG Auth and Node]

Bug or Regression

- Do not fail sorting empty elements. (#94666, @soltysh) [SIG CLI]
- Fix detach azure disk issue when vm not exist (#95177, @andyzhangx) [SIG Cloud Provider]
- Fix etcd_object_counts metric reported by kube-apiserver (#94817, @tkashem) [SIG API Machinery]
- Fix kubectl printer to correctly handle timestamps of events emitted using events.k8s.io API (#90227, @gosoon) [SIG CLI]
- Fix the `cloudprovider_azure_api_request_duration_seconds` metric buckets to correctly capture the latency metrics. Previously, the majority of the calls would fall in the "+Inf" bucket. (#95376, @marwanad) [SIG Cloud Provider and Instrumentation]
- Fix: detach azure disk broken on Azure Stack (#94885, @andyzhangx) [SIG Cloud Provider]
- Fixed a bug where improper storage and comparison of endpoints led to excessive API traffic from the endpoints controller (#94935, @damemi) [SIG Apps, Network and Testing]
- Kubeadm: warn but do not error out on missing "ca.key" files for root CA, front-proxy CA and etcd CA, during "kubeadm join –control-plane" if the user has provided all certificates, keys and kubeconfig files which require signing with the given CA keys. (#94988, @neolit123) [SIG Cluster Lifecycle]

Other (Cleanup or Flake)

- Masks ceph RBD adminSecrets in logs when logLevel >= 4 (#95245, @sfowl) [SIG Storage]

Dependencies

Added

Nothing has changed.

Changed

Nothing has changed.

Removed

Nothing has changed.

v1.17.12

Downloads for v1.17.12

Source Code

filename	sha512 hash
kubernetes.tar.gz	7f7115d5012393103c318af07375deb1883d63b160d60a590230b989e8dd5a6e947
kubernetes-src.tar.gz	d43249e0295663804b941c49a7b3f75c5d81bccbbeaffd746d4a2b40a6905b087adl

Client binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	5198ae2ce18d98a2819f0a2ea808a17a76325d7f85ae87663cdcae6819711df431616
kubernetes-client-darwin-amd64.tar.gz	5df0546268926906fe0e23228b2d7bad0a13564f491beb3f043981169d1ea6515829
kubernetes-client-linux-386.tar.gz	77ffaa84102fcbbfc9017b3e318cdea901dec72f568556ae8c40bf5443c07b13c030af
kubernetes-client-linux-amd64.tar.gz	760ce7837e7b70c62850f103847d8ffb33dbe6f1dc73798c28fad0cc47076fa4b718b
kubernetes-client-linux-arm.tar.gz	acdca292e5e8cd8d3e2793c66a7b734f050543bed7bf3e2ab8e1ee9e7809af9c5174e
kubernetes-client-linux-arm64.tar.gz	98a57087148e7d790fa9e564d1d69f015b4af789dfbfdaf63b856c5e1d8e036611802
kubernetes-client-linux-ppc64le.tar.gz	9a52e61404099d49fd85858fffb3deaedb09b2a565e645060d33cbb3a4159815907e
kubernetes-client-linux-s390x.tar.gz	ce38464c003f46ebca7f6d17cb311f8e45d9cd0e96d7f82c894d744a9f4340091e56d
kubernetes-client-windows-386.tar.gz	2270cf27d7d8910c7bc8275c239800510f2a1cb06990674854406824d862be29f48e

filename	sha512 hash
kubernetes-client-windows-amd64.tar.gz	8d958e82e23ee359b6e79151544adc2ad4d278815f1179e2d283b2a22f52cd9ddb9

Server binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	6f18545af85ac021c7ab4aeeb5364e70ab32baa2e50fb039c5773832c29c5c386bea3
kubernetes-server-linux-arm.tar.gz	fdc6f800f1e928b84994ab255e22f80c6fde4bf952891b3d5105579bd745213b85c03
kubernetes-server-linux-arm64.tar.gz	a805b06b3c8a8b976aa495a6882ab0efac02e189fa2d758af1d5170d45d90da3a375
kubernetes-server-linux-ppc64le.tar.gz	0b4784dc1321f5c87b411bdc5544feb8059974a9405350cecab07eb32a11583e8a63
kubernetes-server-linux-s390x.tar.gz	8e7d170050698de03dd725daae7fe69dd131d776de625dd097674b15d858c39ef04

Node binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	e22aa78efd7f4656d267bc13ce33fdfc6b255fade761cee546e2a8fa4c72b93f0fc690c
kubernetes-node-linux-arm.tar.gz	74eb348a7a4aefc925878df16620a764afca8ca5995b0db954935e05d4ce35047eb04
kubernetes-node-linux-arm64.tar.gz	08a8ae978426c252d75d655f6b299915ae3d749341554e1a2056157a03d7eb859d2
kubernetes-node-linux-ppc64le.tar.gz	03096106b34d3a3aae41fd3723929da8355af08e4373d6250fd4e341b52a3029b9d8
kubernetes-node-linux-s390x.tar.gz	0c9caf9542f0377d0c8f7dfe0b8e970962a21693d8fbef0b1ba2649a6238ba4814911
kubernetes-node-windows-amd64.tar.gz	04e21d6a4daafe1d0dc7ded20a3460597e9207c680e9a2f899cff2f205219b6f7999a

Changelog since v1.17.11

Changes by Kind

Bug or Regression

- Azure: fix a bug that kube-controller-manager would panic if wrong Azure VMSS name is configured (#94306, @knight42) [SIG Cloud Provider]

21

- Correctly handle resetting cpuacct in a live container (#94041, @andyzhangx) [SIG Node and Windows]
- Fix a concurrent map writes error in kubelet (#93773, @knight42) [SIG Node]
- Fix calling AttachDisk on a previously attached EBS volume (#93567, @gnufied) [SIG Cloud Provider, Storage and Testing]
- Fix: incorrect max azure disk max count (#92331, @andyzhangx) [SIG Cloud Provider and Storage]
- Fixes a bug evicting pods after a taint with a limited tolerationSeconds toleration is removed from a node (#93722, @liggitt) [SIG Apps and Node]
- Fixes an issue that can result in namespaced custom resources being orphaned when their namespace is deleted, if the CRD defining the custom resource is removed concurrently with namespaces being deleted, then recreated. (#93790, @liggitt) [SIG API Machinery and Apps]
- Kube-apiserver: fixed a bug returning inconsistent results from list requests which set a field or label selector and set a paging limit (#94002, @wojtek-t) [SIG API Machinery]
- The EndpointSlice controller now waits for EndpointSlice and Node caches to be synced before starting. (#94086, @robscott) [SIG Apps and Network]
- The audit event sourceIPs list will now always end with the IP that sent the request directly to the API server. (#87167, @tallclair) [SIG API Machinery and Auth]
- Upon successful authorization check, an impersonated user is added to the system:authenticated group. system:anonymous when impersonated is added to the system:unauthenticated group. (#94410, @tkashem) [SIG API Machinery and Testing]
- Use NLB Subnet CIDRs instead of VPC CIDRs in Health Check SG Rules (#93515, @t0rr3sp3dr0) [SIG Cloud Provider]

Other (Cleanup or Flake)

- Fixes the flooding warning messages about setting volume ownership for configmap/secret volumes (#92878, @jvanz) [SIG Instrumentation, Node and Storage]
- Update CNI plugins to v0.8.7 (#94367, @justaugustus) [SIG Cloud Provider, Network, Node, Release and Testing]

Dependencies

Added

Nothing has changed.

Changed

- github.com/evanphx/json-patch: 162e562 → v4.9.0+incompatible

Removed

- github.com/jessevdk/go-flags: v1.4.0

v1.17.11

Downloads for v1.17.11

Source Code

filename	sha512 hash
kubernetes.tar.gz	c257902ffc2c1f9f72a7693f84ab77c3f044f154e94bf3d48ebfa807fa8089c8caa9e874
kubernetes-src.tar.gz	98fc4ae961ad30a57ded51cb387a393d0c981eb2bb0e9ff6f8ad9b0461372ab50cf22

Client binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	9dd0f75d90659826f648a1fdf8664f1c96760b7a53022e803df403c3da69b7db60399
kubernetes-client-darwin-amd64.tar.gz	c12c1eda25b6d4a2744489e391277eb7a5b8d0ef8b14b220118ef3890fd0ade4f97d
kubernetes-client-linux-386.tar.gz	17753de2bb354cf211918d6daaa8592aeac04dc431b9b682fd023098ae90da9d636
kubernetes-client-linux-amd64.tar.gz	2f98d43173a8b5f670f6d579d954da97b17ba36f2966fcc52e661cca63338f41a9bea
kubernetes-client-linux-arm.tar.gz	0a15261c5a8264e42d5f1710adac4ce016de895aac1b4221288dcbcbee0bb32aff49
kubernetes-client-linux-arm64.tar.gz	2c127091b645a6f18cf1404aa3e94f0b0c71bb2f8414331768bb1cd5fbe753553cab7
kubernetes-client-linux-ppc64le.tar.gz	3a45c717a1452c2a165ff43ae6a75e66066ba8184657afd4c8abe4519ef2fb04e58d9
kubernetes-client-linux-s390x.tar.gz	8adcca31fa72212d1b3c49debfdb07e0214cd6629b9e0af25458ea710d554035b0de
kubernetes-client-windows-386.tar.gz	0a03a18ab8f2d0b166f0935e45c295a539118b369406fa1732f8afde6fd5a2c8cd96a
kubernetes-client-windows-amd64.tar.gz	5c90075eba8ae031edc0c017c015a1c47f178aeed4cf5be53fa347e052fb34be8fcd4c

Server binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	38f931bcd9e16b0888fd1891d26eecb04f7ff53eba99f4436effcf2bf32db29ed2cc63c
kubernetes-server-linux-arm.tar.gz	7ba11b771667298c330b3147cf1c25060d24cd8a195a6400957d038d1437f8d1605
kubernetes-server-linux-arm64.tar.gz	63fe2bfc55035bec95526bf18ce124c750cc08808732ca9ea15de53db4f378af37f9af
kubernetes-server-linux-ppc64le.tar.gz	370d2ef12f247321427f48793ebd1c9a889cfd43510e1b8aea7b8b9bb4e56cab9eac0
kubernetes-server-linux-s390x.tar.gz	2e62fc0d42433b7abaadcb481769f52894a754179dc9c51270b8723f0e43633624d7

Node binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	749f9dbb569cd7120c26bf05903b8a9d9758324b0d013f60bde6575c5c8330d0f663
kubernetes-node-linux-arm.tar.gz	ac9617906896762010ee0f8a13e135f5da87b612f907800936beb498f78d80f71e029
kubernetes-node-linux-arm64.tar.gz	299fc1379bcc22a7e59092a7ba9fee1c42ef1dd27586fc85ce303171dac15bba7eea8
kubernetes-node-linux-ppc64le.tar.gz	e6942158ebfefb0a3176ae38e9a0806769ddb661e7db53f68a2d43f1aa39a9e70af24
kubernetes-node-linux-s390x.tar.gz	c0138687e0d8c12a11b986f36257d9202c451040d33d55aedc9b3f6ebaea65fa6583
kubernetes-node-windows-amd64.tar.gz	16783c6f337c7e92a5a32b2b9495f65c3a6b869a36b053d3c86047355f4c83a16d50

Changelog since v1.17.10

Changes by Kind

Other (Cleanup or Flake)

- Kubernetes is now built with go1.13.15 (#93955, @justaugustus) [SIG Release and Testing]

Dependencies

Added

Nothing has changed.

Changed

Nothing has changed.

Removed

Nothing has changed.

v1.17.10

Downloads for v1.17.10

Release artifacts for 1.18.7 and 1.17.10 are incomplete. **Do not use these releases.**

Changelog since v1.17.9

Changes by Kind

Bug or Regression

- Do not add nodes labeled with kubernetes.azure.com/managed=false to backend pool of load balancer. (#93034, @matthias50) [SIG Cloud Provider]
- Fix instance not found issues when an Azure Node is recreated in a short time (#93316, @feiskyer) [SIG Cloud Provider]
- Fix: don't use docker config cache if it's empty (#92330, @andyzhangx) [SIG Cloud Provider]
- Fix: initial delay in mounting azure disk & file (#93052, @andyzhangx) [SIG Cloud Provider and Storage]
- Fixed a performance issue applying json patches to deeply nested objects (#93812, @liggitt) [SIG API Machinery, CLI, Cloud Provider, Cluster Lifecycle and Instrumentation]
- Fixes a regression in kube-apiserver causing 500 errors from the `/readyz` endpoint (#93643, @ialidzhikov) [SIG API Machinery]
- Terminating a restartPolicy=Never pod no longer has a chance to report the pod succeeded when it actually failed. (#88440, @smarterclayton) [SIG Node and Testing]

Other (Cleanup or Flake)

- Build: Update Debian base images
  - debian-base:v2.1.3
  - debian-iptables:v12.1.2
  - debian-hyperkube-base:v1.1.3 (#93924, @justaugustus) [SIG API Machinery, Cluster Lifecycle and Release]
- Update Golang to v1.13.14
  - Update bazel to 2.2.0
  - Update repo-infra to 0.0.8 (to support go1.14.6 and go1.13.14)
    * Includes:

25

- · bazelbuild/bazel-toolchains@3.4.0
- · bazelbuild/rules_go@v0.22.8 (#93233, @justaugustus) [SIG
  API Machinery, Release and Testing]

Dependencies

Added

- github.com/jessevdk/go-flags: v1.4.0

Changed

- github.com/evanphx/json-patch: v4.2.0+incompatible → 162e562

Removed

Nothing has changed.

v1.17.9

Downloads for v1.17.9

Source Code

filename	sha512 hash
kubernetes.tar.gz	c6d71667ec516c150e27f0d81868b90b04f620656c081c85e570f5fa8bb6e1fd70bc3
kubernetes-src.tar.gz	24dc550d00e8ad57b100f19ae33080079c8d274abea1709cf7f45f807e2f9d59bafe1

Client binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	ba2ac4b1444edb6b40e1537fa77c11796708b2a068791ee39fc54d64d31f9c2503df4
kubernetes-client-darwin-amd64.tar.gz	bb15d61ef2623d007bbda18571a864b13735a20a303a6250a1cd57e25d53cd81179
kubernetes-client-linux-386.tar.gz	6a121fcacff561b2c3040bd0803d00368743e3c7529597d1b66ea2bcba2f7caeff0ef7
kubernetes-client-linux-amd64.tar.gz	57fe9caf9d40e8b3e9e1b58552af1b74bf3cdccb3bd50fb5e51ba95d3e08263dad831
kubernetes-client-linux-arm.tar.gz	2cbfca1133446dff4d8bbf82976ba14345dfea4c2940d841949bb323c2bd33840928
kubernetes-client-linux-arm64.tar.gz	68ab42f2844ed6f9fb9e71945f0ef30468542997a0c4bb6f39776d266fd18f26e14182
kubernetes-client-linux-ppc64le.tar.gz	baeba57a163248d404f70b83bd2ee2458afec619f5c7ab0da656a96634db4dc841fd

filename	sha512 hash
kubernetes-client-linux-s390x.tar.gz	d4d9c7b152d31b83a49fd4140f88e3014b4571a31b4694fd62ce1e436872cc0227a2
kubernetes-client-windows-386.tar.gz	b3ebeaf6b83da17f7facd6029af64f4e98512e49a63188eaa59d2d8dc54ec4eb9c78e
kubernetes-client-windows-amd64.tar.gz	1ea45f8d99cf1bb69e330b81f476d6cc6d1ac4ccfe7aa56dc7a02b269e2bbb52351c0

Server binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	5b3123e442e64637d086ff154c1338ad7a63ddfe2e738dce11b590bf50f663de2d067
kubernetes-server-linux-arm.tar.gz	d8b26e70921113fe94da89ab448aea41b8c7e280abf65be569dc198d2904fc07266e
kubernetes-server-linux-arm64.tar.gz	23dab56cdd5eb320bb28d4b1fbdf452cbd9c18c38fad77796f76e0039d3c390024c5
kubernetes-server-linux-ppc64le.tar.gz	e109727a2bd63edcefa1d25fbe24280db8fd62711edd2ff1d30b748c500d8bb0a7e9
kubernetes-server-linux-s390x.tar.gz	7a1757ef6f5f2c5b3c3a3fffea0ee5abc42578331da32decce0581b37cc4a331bdaf15

Node binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	a8baebd0725d69cde59e5eaad5fbcd9b35911b67539df0d28407f96b8baafc854e7e
kubernetes-node-linux-arm.tar.gz	21c5e452391f39203cab2225204b95a7ffd223da31d95998116ed04bd0b60b9c039e
kubernetes-node-linux-arm64.tar.gz	329df0d659ab2b0daecbb5a337ecbca496db5dedb81493850eda3b8abeb24b408ff
kubernetes-node-linux-ppc64le.tar.gz	913a93cee4b34613ecb0ecc5560e51bef8a8377f7ff6d07561fb2cc37d794c6b80c516
kubernetes-node-linux-s390x.tar.gz	0c388b817c9209ff73d13cf50fea545baf0b6bfd4764d045a08451c725671ef27992ca
kubernetes-node-windows-amd64.tar.gz	77b6fb8c19c38d5faad7477e4430586fc99e589a668c61043c1e59da551bbe796dc3

Changelog since v1.17.8

Urgent Upgrade Notes

(No, really, you MUST read this before you upgrade)

- CVE-2020-8559 (Medium): Privilege escalation from compromised node to cluster. See https://github.com/kubernetes/kubernetes/issues/92914 for more details. The API Server will no longer proxy non-101 responses for upgrade requests. This could break proxied backends (such as an extension API server) that respond to upgrade requests with a non-101 response code. (#92941, @tallclair) [SIG API Machinery]

Changes by Kind

Bug or Regression

- CVE-2020-8557 (Medium): Node-local denial of service via container /etc/hosts file. See https://github.com/kubernetes/kubernetes/issues/93032 for more details. (#92916, @joelsmith) [SIG Node]

- Extend kube-apiserver /readyz with new "informer-sync" check ensuring that internal informers are synced. (#92644, @wojtek-t) [SIG API Machinery and Testing]

- Fix: GetLabelsForVolume panic issue for azure disk PV (#92166, @andyzhangx) [SIG Cloud Provider]

- Fix: use force detach for azure disk (#91948, @andyzhangx) [SIG Cloud Provider]

- Fixes a problem with 63-second or 1-second connection delays with some VXLAN-based network plugins which was first widely noticed in 1.16 (though some users saw it earlier than that, possibly only with specific network plugins). If you were previously using ethtool to disable checksum offload on your primary network interface, you should now be able to stop doing that. (#92035, @danwinship) [SIG Network and Node]

- Kubeadm: add the deprecated flag –port=0 to kube-controller-manager and kube-scheduler manifests to disable insecure serving. Without this flag the components by default serve (e.g. /metrics) insecurely on the default node interface (controlled by –address). Users that wish to override this behavior and enable insecure serving can pass a custom –port=X via kubeadm's "extraArgs" mechanic for these components. (#92720, @neolit123) [SIG Cluster Lifecycle]

- Kubeadm: during "join", don't re-add an etcd member if it already exists in the cluster. (#92118, @neolit123) [SIG Cluster Lifecycle]

- hyperkube: Use debian-hyperkube-base@v1.1.1 image

Includes iproute2 to fix a regression in hyperkube images when using hyperkube as a kubelet (#92625, @justaugustus) [SIG Cluster Lifecycle, Network and Release]

Dependencies

Added

Nothing has changed.

Changed

Nothing has changed.

Removed

Nothing has changed.

v1.17.8

Downloads for v1.17.8

Source Code

filename	sha512 hash
kubernetes.tar.gz	8212fb4e823fbae81cd7817a3a7abe5a49503b01163fb6805e40791d0639a1b22aba
kubernetes-src.tar.gz	f4838e9950ccc64f9670ce1349f24667825305d7d8d8fc3a9f5f6cc8c51c4edbb00331

Client binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	6fb3bb627a18d44bf3738d8c9d2ef8a4a624835c345447b92cfb4032f9f475d86c004
kubernetes-client-darwin-amd64.tar.gz	500e9a056a2e9b8a7744e390bedaf233c3809c789d902969e085826a0b38662e08f9
kubernetes-client-linux-386.tar.gz	64515e5358fd8b462ecde19dbeca108843ac164026ed76002032f07366d121eb5489
kubernetes-client-linux-amd64.tar.gz	87da207547a5fa06836afa7f8fc15af4b8950e4a263367a8eb59eccb2a13bb7f98db2
kubernetes-client-linux-arm.tar.gz	7d4151b63589b5271922b1fb350c403c0e4d44465daa6e1931336ce6080f443bc087
kubernetes-client-linux-arm64.tar.gz	39c1651217f51c168329d490d2c4fa9f1a572bcf016c4c13228f8ae805c63a527e69a0
kubernetes-client-linux-ppc64le.tar.gz	c4de90aa7bc7125ad8bad6b940cc8af911cd1e9a7533aec28cf32438c04188da16f6

filename	sha512 hash
kubernetes-client-linux-s390x.tar.gz	08ec9b6abfb0c0e4874a9ff0d6b43d71ce8bd77f764293c8df755827c811e243d2ba2
kubernetes-client-windows-386.tar.gz	c2edcce0a450b02432af56775eddbf49e0b031e8a9cb94a0c4320a400d2a1353a4c6
kubernetes-client-windows-amd64.tar.gz	e3c31ebb172d3077cca2d796af020ba5cb90df552a607ef54e80cdd7aa6f50d2b7cd

Server binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	8872e69c391e36d8ce2d307858108d69cf5d45202f012f8a1a019d3705c3d91a7dd3
kubernetes-server-linux-arm.tar.gz	a0d7086fd78dd5d1e8ad91859b25346b531cde97a9f8916c4dd9ea66aba91d334b1
kubernetes-server-linux-arm64.tar.gz	2cd42e859fd6519370b496da7c0b2b0d9ce47f0f8323f3384c7eca5327cd5a0be7597
kubernetes-server-linux-ppc64le.tar.gz	97edd2f2e88f77e98bc4e30e8bcd044a16aaa96a486178806e7b9d3fe231310b183c0
kubernetes-server-linux-s390x.tar.gz	a33c746865216dfee05e0718e4b91708c455e18b6b611cfecca1f4efc4f7101cfeeda1e

Node binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	16ae1e32bb0f7b6f8809ab5c20ca7c16cfcc9780476e08f18b4af36f3cb3d6004aecb2
kubernetes-node-linux-arm.tar.gz	0e4dbb87bb19422faaefd213baac1e962feeec7a3d22396436709795479bd2bcbef1
kubernetes-node-linux-arm64.tar.gz	4a431e0565c5e2c5029c6f414cb694d6e3e7ee2e056868b6e99542eb163c740d9c735
kubernetes-node-linux-ppc64le.tar.gz	c8868091220993cd4002e125508fc01e327f8025f6012ddc6bba31d785079d7dea20
kubernetes-node-linux-s390x.tar.gz	22463fb6907c28fff6ffe950a03fc9cc9877b3384d3f8a166979fb6334178b1e6d0d86b
kubernetes-node-windows-amd64.tar.gz	08b34e5a9a6c529afc23ce57acf62eaf17174812c801f3918599c407832b5b0c7b177

Changelog since v1.17.7

Changes by Kind

API Change

- Fixed: log timestamps now include trailing zeros to maintain a fixed width (#91207, @iamchuckss) [SIG Apps and Node]

Bug or Regression

- Fixes CSI volume attachment scaling issue by using informers. (#91307, @yuga711) [SIG API Machinery, Apps, Node, Storage and Testing]

- If firstTimestamp is not set use firstTimestamp or eventTime when printing event (#91055, @soltysh) [SIG CLI]

- Kubeadm increased to 5 minutes its timeout for the TLS bootstrapping process to complete upon join (#89735, @rosti) [SIG Cluster Lifecycle]

- hyperkube: Use debian-hyperkube-base@v1.1.0 image

  A previous release built hyperkube using the debian-hyperkube-base@v1.0.0, which was updated to address a CVE in the CNI plugins.

  A side-effect of using this new image was that the networking packages (namely `iptables`) drifted from the versions used in the kube-proxy images.

  The following issues were filed on kube-proxy failures when using hyperkube:

    - https://github.com/kubernetes/kubernetes/issues/92275
    - https://github.com/kubernetes/kubernetes/issues/92272
    - https://github.com/kubernetes/kubernetes/issues/92250

  To address this, the new debian-hyperkube-base image (v1.1.0) uses the debian-iptables base image (v12.1.0), which includes iptables-wrapper, a script used to determine the correct iptables mode to run in. (#92494, @justaugustus) [SIG Cluster Lifecycle and Release]

Dependencies

Added

Nothing has changed.

Changed

Nothing has changed.

Removed

Nothing has changed.

v1.17.8-rc.1

Downloads for v1.17.8-rc.1

Source Code

filename	sha512 hash
kubernetes.tar.gz	da3cb0b669e7f3c698911d819a743439e4633da49812d072105acff5122bd308863f
kubernetes-src.tar.gz	6f429fd968450dc0cc3ed02a81ebf521ed8d87880def7498004eee9b9990effd7e3908

Client binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	fa8eda07a4b96e530d8add858ee673df0dbd57d52f642d41d948bd09bdd309b7454
kubernetes-client-darwin-amd64.tar.gz	635eacbe628705bbd33c31321b069a1853fe2cb2a7fbb44a28e86c62ca2a46d2ebce
kubernetes-client-linux-386.tar.gz	b2920840fa9fe79d76a869f4021fdfecbdf8821e94270ca469be6c7ae6025991da1a8
kubernetes-client-linux-amd64.tar.gz	6beb451d551764eab4e24a463c5c1b2c5430a6a62f5e77153189a5e23268c314f5fd9
kubernetes-client-linux-arm.tar.gz	334db1268b23c4d9ff56ccbfd90a5d0cd0ca4bf2874426a45d56e11f501212f2d00e7
kubernetes-client-linux-arm64.tar.gz	e81fc23422ce62e15e02f4abc1b70dbf1ed566d400df40e5acccbe89d25bfcad466070
kubernetes-client-linux-ppc64le.tar.gz	df6320c33daae7a86a77904bd194fec51692f6de0778a95f62ad8a7b156043c04cca3
kubernetes-client-linux-s390x.tar.gz	d2286ba60a862184694dec22be601bb45abe33ae37936de497bbd290889e4b383e0
kubernetes-client-windows-386.tar.gz	148214721c7165169b382161e093d7828a15ad0149e67624f0c8c16d0e974ad94147
kubernetes-client-windows-amd64.tar.gz	9bd0fb1f2cd30ab2c5f05a294bb4f72a004627a72ed5fe8b66e76b72d97f8378e68f5

Server binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	09e4c5eb9eea18702e267a7f3e64e74e16287cb88573940f89010eeed4d6c7a3a35de
kubernetes-server-linux-arm.tar.gz	8a42e10d04f4093ddfce217081e2020165344e41df8f78ec48938adc40ae6f2c66e832
kubernetes-server-linux-arm64.tar.gz	61d4ba59824f272530f6ef957a66aad6b7394442062b3b9dfdca7b2f08fe2117f238a
kubernetes-server-linux-ppc64le.tar.gz	5693d18a66104fe1d49900297d9bb6c75fe22ee890ae0d40a6e6afb3e63a63cfbf39b
kubernetes-server-linux-s390x.tar.gz	4780f1df8236e0e3fc69c4e1fda45dcc280358215b7f834a63790226e2ae8f28295bc9

Node binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	981058f903a8fc69730d3255778ca0ad095dd8c2cd92cbf2c510ec6921bc753da736
kubernetes-node-linux-arm.tar.gz	50134de1a08dee324ea147e46e5ca805a7cea0846d832c734c6db193c2642311a6c9
kubernetes-node-linux-arm64.tar.gz	b570c281cc639a22d63a1caaf8478b80a88d27521a844799cc3153d7cdd9b8a13de
kubernetes-node-linux-ppc64le.tar.gz	357ac7d9f4b26efdd425088eb2fd966af6602c72ffb1f2a661390ec8c930b0f5a6df387
kubernetes-node-linux-s390x.tar.gz	d6369c4e72cd27c2b2232ca3e5e70dfcdad878122bde90b4f7328a27fafaee47cfdaca
kubernetes-node-windows-amd64.tar.gz	8b2f568cfddad0ab47376aaefca8ad4a69b821891e8311c96f014a92f31ac3ae114f38

Changelog since v1.17.7

Changes by Kind

API Change

- Fixed: log timestamps now include trailing zeros to maintain a fixed width (#91207, @iamchuckss) [SIG Apps and Node]

Bug or Regression

- Fixes CSI volume attachment scaling issue by using informers. (#91307, @yuga711) [SIG API Machinery, Apps, Node, Storage and Testing]

- If firstTimestamp is not set use firstTimestamp or eventTime when printing event (#91055, @soltysh) [SIG CLI]

- Kubeadm increased to 5 minutes its timeout for the TLS bootstrapping process to complete upon join (#89735, @rosti) [SIG Cluster Lifecycle]

- hyperkube: Use debian-hyperkube-base@v1.1.0 image

  A previous release built hyperkube using the debian-hyperkube-base@v1.0.0, which was updated to address a CVE in the CNI plugins.

  A side-effect of using this new image was that the networking packages (namely `iptables`) drifted from the versions used in the kube-proxy images.

  The following issues were filed on kube-proxy failures when using hyperkube:

  - https://github.com/kubernetes/kubernetes/issues/92275
  - https://github.com/kubernetes/kubernetes/issues/92272
  - https://github.com/kubernetes/kubernetes/issues/92250

  To address this, the new debian-hyperkube-base image (v1.1.0) uses the debian-iptables base image (v12.1.0), which includes iptables-wrapper, a script used to determine the correct iptables mode to run in. (#92494, @justaugustus) [SIG Cluster Lifecycle and Release]

Dependencies

Added

Nothing has changed.

Changed

Nothing has changed.

Removed

Nothing has changed.

v1.17.7

Downloads for v1.17.7

Source Code

filename	sha512 hash
kubernetes.tar.gz	b98b4e1fae60a50fe23ead412c700f8d0250d9dd327d0012efa3e4b74ff21a33bb6cf
kubernetes-src.tar.gz	8be11a7f7696aa19319c0676c1c31db37439e95ac32578d53a21dd1cf7a92ff5f5f79

Client binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	9c40a33687e212b712e904c8710b3fe4ed4d27542ffde63e40a5e19000cb9b1a3328a
kubernetes-client-darwin-amd64.tar.gz	8d294e6c28f15ee6518d0a60b809b51bfc3954e139735380305756622debf5a40437
kubernetes-client-linux-386.tar.gz	68e4839c4867172315fd1b163d2df51c588f349dd43f978dcaeb471ea44e06333e54f
kubernetes-client-linux-amd64.tar.gz	a0196a68e70422cc220e5f77d7d0104b4248c0ab03f5d1858655bb522071f22f3e9cb
kubernetes-client-linux-arm.tar.gz	2cf7efedbfde502c28b7a0c70d8a29b46a9bd12423d3d4a88429f8b19545eea1fb37e
kubernetes-client-linux-arm64.tar.gz	931d5463ec4f93c0522767f8ff35d2e59115191d93f352d68de860d6c59b8238ae631
kubernetes-client-linux-ppc64le.tar.gz	0f27cc434068ffd14c5b301f9c9e3f6fcf7e003817b7b831b33fcf38292de51b645be1f
kubernetes-client-linux-s390x.tar.gz	5030d86f1516e6d48f3d29ec20f5c9d3a7b578935cef28c1512b2b67548ce8c0a6b12
kubernetes-client-windows-386.tar.gz	3d5b4689a0ed8bd935cf116cc6c8c43663d0d7a208811075ebe6af26434d4d9280f7
kubernetes-client-windows-amd64.tar.gz	e54073dae3b756b899caf4298db20e2da2986fe7539a3b4aaa960bb8341021cb3f3e

Server binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	2fa986227f26663708dc2062e72160eef46931b561f97e9e81b9156b7cf1338da3d9c
kubernetes-server-linux-arm.tar.gz	8335b464da28d66c773dd3fb96846b20104fcae656d41edec1bc5212a0a5bf843a02
kubernetes-server-linux-arm64.tar.gz	7c19c83dda8d501249fdac24d07fe5ab7a99d5c540967107c2c4ec8561b5362d8ae3
kubernetes-server-linux-ppc64le.tar.gz	ac954e3c467a144b59168b67b7153050260531b3560edf101f4be77cca8bd81b3dd
kubernetes-server-linux-s390x.tar.gz	ca673ec937d28e90eb2c0e8d7ce2b83e823ea4221435b15b244bce30909839f5721e

Node binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	8da87e04eea4fedd7462992042894aab97052e09fd68c4a7e47bf70d6ad411b214ec
kubernetes-node-linux-arm.tar.gz	458d8f4e52995581a163ac51c7f6b6e06a11a900494d92d1a290d78dc03cb2ebe0cb
kubernetes-node-linux-arm64.tar.gz	7ed90a0028a5205e1b2fd41058260b7497dc9718773f9bef828d3b6e7457a136072c
kubernetes-node-linux-ppc64le.tar.gz	59500c1fc178afe92ad8799c2c622586f80209112b966ea20adbcee9a6dc68c3b5c39
kubernetes-node-linux-s390x.tar.gz	e10f2ca363a02ba786d92ae8e2ab502afd434560dc83e2f5b1c9bd8ca9b076b9c53c
kubernetes-node-windows-amd64.tar.gz	67a7b24e93597eb5a7de462d379ee7e1a7c878dd04eda4fd5eb01b4ed0ac161cc67c

Changelog since v1.17.6

Changes by Kind

API Change

- Resolve regression in metadata.managedFields handling in update/patch requests submitted by older API clients (#92008, @apelisse) [SIG API Machinery and Testing]

Feature

- Extend AWS azToRegion method to support Local Zones (#90874, @Jeffwan) [SIG Cloud Provider]

Bug or Regression

- Azure: set dest prefix and port for IPv6 inbound security rule (#91831, @aramase) [SIG Cloud Provider]
- Fix internal loadbalancer configuration failure when subnet name too long (#86276, @yangl900) [SIG Cloud Provider]
- Fix public IP not shown issues after assigning public IP to Azure VMs (#90886, @feiskyer) [SIG Cloud Provider]
- Fixed a regression preventing garbage collection of RBAC role and binding objects (#90534, @apelisse) [SIG Auth]
- Kubeadm: increase robustness for "kubeadm join" when adding etcd members on slower setups (#90645, @neolit123) [SIG Cluster Lifecycle]
- Kubelet podresources API now provides the information about active pods only. (#79409, @takmatsu) [SIG Node]
- Pod Finalizers and Conditions updates are skipped for re-scheduling attempts (#91950, @alculquicondor) [SIG Scheduling]

- Resolve regression in metadata.managedFields handling in create/update/patch requests not using server-side apply (#91794, @apelisse) [SIG API Machinery and Testing]
- Resolves an issue using `kubectl certificate approve/deny` against a server serving the v1 CSR API (#91691, @liggitt) [SIG Auth and CLI]

Other (Cleanup or Flake)

- Update CNI to v0.8.6
  - build: Use debian-hyperkube-base@v1.0.0 image (#91386, @justaugustus) [SIG Cluster Lifecycle, Network, Release and Testing]

Dependencies

Added

Nothing has changed.

Changed

Nothing has changed.

Removed

Nothing has changed.

v1.17.6

Downloads for v1.17.6

Source Code

filename	sha512 hash
kubernetes.tar.gz	90b10c16aea412c39ea57f6ebb0f5cb74f939089ebad91cdc1a3c2d83890a88305b2
kubernetes-src.tar.gz	ea8bff7a3c607d1d10787d5160527ac26e05c11fd7247e9db2066e55f1514d8d8e0ee

Client binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	a828219247db473d0e83e72d6b16811da5f6568ed6df9c62b81e42be97e74bebe20
kubernetes-client-darwin-amd64.tar.gz	99accc972bd3c3412916867e8fa29ba7895f3f74b1d63999d8a7ba686a34be616962
kubernetes-client-linux-386.tar.gz	591211c27a91c3890530a90a0afc16a53a965e518b0db0e17024efeb34ee7c2279532

37

filename	sha512 hash
kubernetes-client-linux-amd64.tar.gz	43ed75d64419d965c5f42dafe06ab8c511001883d91c93ca68d90f36c7f5f2014fd29
kubernetes-client-linux-arm.tar.gz	faf2a45cfd178cc1bacaca3d1df6e109ce423214cbc3ef7ea45fae19bc8e4be058ecd0
kubernetes-client-linux-arm64.tar.gz	a3d58a6d4accebecb15d7d53f89b1a198db3563f4986a96f38537dec939836f03958
kubernetes-client-linux-ppc64le.tar.gz	b65305e339f6e4daeaa098baeae16688d99a5e1d869d3f1d875b98ab309f26b7ee35
kubernetes-client-linux-s390x.tar.gz	31448fc881a4e03cf494615cfc11605c432e8db30eff5355a3e331b65836a23cecfc0a7
kubernetes-client-windows-386.tar.gz	e3943a7030298ffa3ecd49636df99e1786d079db9765ca1b6ac090300224e6fa29e7c
kubernetes-client-windows-amd64.tar.gz	4d48a854a66700aa84774219ea647803cbfb93ffd4d392d1b73c85f1aae2457c634b

Server binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	aea400c0debb56417d113fa733d6434dff0db8a38f425b307fc204b7035a2b15f4529
kubernetes-server-linux-arm.tar.gz	4d5370b5b4aed73bbda6adf4bfbc2dee2c7dea61af6041c9e7f2713e727d653b218b
kubernetes-server-linux-arm64.tar.gz	1e6972d013ef6a365175dc621fb72f5b3fad5bb239947bd2ffcc348c0179b565cb4d2
kubernetes-server-linux-ppc64le.tar.gz	f3ac669007db1ff156349f80511e8768eef4e0fb6032074549bc779b78f0810abd7592
kubernetes-server-linux-s390x.tar.gz	2cb7e373aeda7e76edaa5576280d8944ae8c9b09905ae82e884f2a769a92ec06c0f5

Node binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	f6eb62e4939c166f2b0b5ed4b7acf723220f6b30d896b281387af8790a0598fb12622
kubernetes-node-linux-arm.tar.gz	b945c9c7645b65e7c34bab8f9b3038d4f07b14ccb0cf1ce3bc92bcede90b971a2efe7
kubernetes-node-linux-arm64.tar.gz	b642196aca36c3079b1cf9ff942369976f1291d91393b3c6e8fdcd1df7415636de29b
kubernetes-node-linux-ppc64le.tar.gz	4fb68986045b2725eeb7a9089fafe99f4faa37e366e494282e07f6c2b957170b0ae962

filename	sha512 hash
kubernetes-node-linux-s390x.tar.gz	f237a2992907c59b71593fedcc3aea993d2c1eca2c8cd0025e9b79d4b193aee4c9aa
kubernetes-node-windows-amd64.tar.gz	5c591a1907e01047b8ead6f23a1a0cd08b82b7fd88d93d72ba8d79dfd24ae28550d

Changelog since v1.17.5

Changes by Kind

API Change

- Fix bug where sending a status update completely wipes managedFields for some types. (#90032, @apelisse) [SIG API Machinery and Testing]

Bug or Regression

- Base-images: Update to kube-cross:v1.13.9-5 (#90965, @justaugustus) [SIG Release]
- CSINode initialization does not crash kubelet on startup when APIServer is not reachable or kubelet has not the right credentials yet. (#89589, @jsafrane) [SIG Storage]
- Fix HPA when using init containers and CRI-O (#90901, @joelsmith) [SIG Node]
- Fix flaws in Azure CSI translation (#90325, @andyzhangx) [SIG Cloud Provider]
- Fix: Init containers are now considered for the calculation of resource requests when scheduling (#90414, @alculquicondor) [SIG Scheduling]
- Fix: azure disk dangling attach issue which would cause API throttling (#90749, @andyzhangx) [SIG Cloud Provider]
- Fix: get attach disk error due to missing item in max count table (#89768, @andyzhangx) [SIG Cloud Provider and Storage]
- Fix: support removal of nodes backed by deleted non VMSS instances on Azure (#91184, @bpineau) [SIG Cloud Provider]
- Fixed "requested device X but found Y" attach error on AWS. (#85675, @jsafrane) [SIG Cloud Provider and Storage]
- Fixes a bug defining a default value for a replicas field in a custom resource definition that has the scale subresource enabled (#90020, @liggitt) [SIG API Machinery, CLI, Cloud Provider, Cluster Lifecycle and Instrumentation]
- Fixes a regression in 1.17 that dropped cache-control headers on API requests (#90468, @liggitt) [SIG API Machinery and Testing]
- Provides a fix to allow a cluster in a private Azure cloud to authenticate to ACR in the same cloud. (#90425, @DavidParks8) [SIG Cloud Provider]
- Scheduling failures due to no nodes available are now reported as unschedulable under `schedule_attempts_total` metric. (#90989, @ahg-g) [SIG

Scheduling]

Other (Cleanup or Flake)

- base-images: Use debian-base:v2.1.0 (includes CVE fixes)
- base-images: Use debian-iptables:v12.1.0 (includes CVE fixes) (#90938, @justaugustus) [SIG API Machinery, Cluster Lifecycle and Release]

Dependencies

Added

Nothing has changed.

Changed

- k8s.io/kube-openapi: 82d701f → bcb3869

Removed

Nothing has changed.

v1.17.5

Documentation

Downloads for v1.17.5

filename	sha512 hash
kubernetes.tar.gz	d0d1b451d5cafd3e909ba15d09c7277a85eba682696cd60684dca8c5ce8db06
kubernetes-src.tar.gz	b7a78f9ea3e8088ac3f7dfd671d011fdb0a6cd28342fc19cf35d183f7cf8ff

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	8fc24f1f69052372078d76208f9137cf38a3ba689580cf197ab8fff503663e(
kubernetes-client-darwin-amd64.tar.gz	fb7ff087cc82b930399c5512656de68a8b9c61f54e3bd3e627fff097e67a184
kubernetes-client-linux-386.tar.gz	544a71885ac66ba4911db7d086880badbf395518b1e6d7bcc03ffc2139c1dc(
kubernetes-client-linux-amd64.tar.gz	4cf67f972aad3425bccc48af83f8cb59ddcc96de49d3bb21cdbbcbbeee31718

filename	sha512 hash
kubernetes-client-linux-arm.tar.gz	c90a93b3ffc5d2fc41bb913b6b698b5e9a54c737ea13738dc94ef8baed88d0b
kubernetes-client-linux-arm64.tar.gz	c2e2f02a75e92a0505db81941e03cc42effc7f49b89a0c151f5389d57cbc44c
kubernetes-client-linux-ppc64le.tar.gz	f1b023d6ae59c5f0f7bbb44f23c7f6185673ff834dd6929e23d14e190a5d015
kubernetes-client-linux-s390x.tar.gz	b7f4e92ee30a57f2f20244e092614ea7dc5bb0791b041b39f9593b35bd10afe
kubernetes-client-windows-386.tar.gz	d21824110b75cfbe3d144eb303560e0a193c9d998be00d4f1f77c672c6fbea4
kubernetes-client-windows-amd64.tar.gz	5dc5d50b85aaa40998b3ade4fd51fffe3c4be4bad4382495cf9f6a3e910de23

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	90f571a24527a119499a1546c44dfdb29df74f302a2907ce14f378d79c5e9fc
kubernetes-server-linux-arm.tar.gz	0555e1969f5fa44ecbe331c4ed75df6d56e929e123d9abe6f4ba75c0ffb1ae1
kubernetes-server-linux-arm64.tar.gz	2e8e446d7a132227c0e926504e65bf9ff6180b7171ac16d51dd92c1729161c5
kubernetes-server-linux-ppc64le.tar.gz	08733b06f4174cd14d27d33966fe821b20abd67da94f3aa90b146a3d9ce6f28
kubernetes-server-linux-s390x.tar.gz	a170a62da4e3d5d27c0af7d03aa9db5a947a5d296ccba40fc283fb0da671a39

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	99d92cbc9227b49d52fdec303aca4c529bcb45ed66ecbd559803b6d68314b39
kubernetes-node-linux-arm.tar.gz	931dd0c7b56c7914495cbcba7df998d1db335d635d457c0cf062a3db0c2ec0a
kubernetes-node-linux-arm64.tar.gz	23bbfe1f60b95705846f214bbe243beaeec6c53de33b15231b99094914584da
kubernetes-node-linux-ppc64le.tar.gz	808abe9a96f461ac303b020c716e3a7fc94b1901cbd56bba836f2caf8292e7f
kubernetes-node-linux-s390x.tar.gz	a645d8e8ade9af849764755165cdf0fc9eb04671afe2610562082f27f2aba74

filename	sha512 hash
kubernetes-node-windows-amd64.tar.gz	501a5d52229012e8bfcf1e8f7e4cf72f226d5aac451cc70ca23ead5ed3f9d5f

Changelog since v1.17.4

Changes by Kind

Feature

- deps: Update to Golang 1.13.9
  - build: Remove kube-cross image building (#89399, @justaugustus) [SIG Release, Storage and Testing]

Bug or Regression

- Client-go: resolves an issue with informers falling back to full list requests when timeouts are encountered, rather than re-establishing a watch. (#89976, @liggitt) [SIG API Machinery and Testing]
- EndpointSlice controller now handles terminating pods correctly and is better at preventing race conditions. (#89118, @robscott) [SIG Apps and Network]
- Ensure Azure availability zone is always in lower cases. (#89722, @feiskyer) [SIG Cloud Provider]
- Fix failing conformance when using docker container runtime w/ the docker/journald logging driver. #87933 (#88586, @jdef) [SIG Node]
- Fix invalid VMSS updates due to incorrect cache (#89002, @ArchangelSDY) [SIG Cloud Provider]
- Fix the VMSS name and resource group name when updating Azure VMSS for LoadBalancer backendPools (#89337, @feiskyer) [SIG Cloud Provider]
- Fix: check disk status before delete azure disk (#88360, @andyzhangx) [SIG Cloud Provider]
- Fixed a data race in kubelet image manager that can cause static pod workers to silently stop working. (#88915, @roycaihw) [SIG Node]
- Fixed an issue that could cause the kubelet to incorrectly run concurrent pod reconciliation loops and crash. (#89055, @tedyu) [SIG Node]
- Fixed the EndpointSlice controller to run without error on a cluster with the OwnerReferencesPermissionEnforcement validating admission plugin enabled. (#89805, @marun) [SIG Auth and Network]
- Fixes conversion error for HorizontalPodAutoscaler objects with invalid annotations (#89967, @liggitt) [SIG Autoscaling]
- Fixes conversion error in multi-version custom resources that could cause metadata.generation to increment on no-op patches or updates of a custom resource. (#88995, @liggitt) [SIG API Machinery]
- Fixes kubectl apply/prune in namespace other than default. (#90024, @seans3) [SIG CLI and Testing]

- For GCE cluster provider, fix bug of not being able to create internal type load balancer for clusters with more than 1000 nodes in a single zone. (#89902, @wojtek-t) [SIG Cloud Provider, Network and Scalability]
- For volumes that allow attaches across multiple nodes, attach and detach operations across different nodes are now executed in parallel. (#89239, @verult) [SIG Apps, Node and Storage]
- Kube-proxy no longer modifies shared EndpointSlices and will not break with EndpointSlice feature gate enabled on Windows. (#89117, @robscott) [SIG Network]
- Kubeadm: apply further improvements to the tentative support for concurrent etcd member join. Fixes a bug where multiple members can receive the same hostname. Increase the etcd client dial timeout and retry timeout for add/remove/... operations. (#87505, @neolit123) [SIG Cluster Lifecycle]
- Kubelet metrics gathered through metrics-server or prometheus should no longer timeout for Windows nodes running more than 3 pods. (#87730, @marosset) [SIG Node, Testing and Windows]
- Restores priority of static control plane pods in the cluster/gce/manifests control-plane manifests (#89970, @liggitt) [SIG Cluster Lifecycle and Node]

Other (Cleanup or Flake)

- Reduce event spam during a volume operation error. (#89794, @msau42) [SIG Storage]

v1.17.4

Documentation

Downloads for v1.17.4

filename	sha512 hash
kubernetes.tar.gz	cf69ebcaddc3902008399b96a18548d9a2a551d9fa6a1e34533f0f83ef10ab5
kubernetes-src.tar.gz	c638e47bc54754842a018e2cd2e724357f5e3906c0971dad76656e8a8e0ced6

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	64eee9f00ce02b6a139bd20512130f5d193d3862853460fa94b43c946cbcc90
kubernetes-client-darwin-amd64.tar.gz	02646ce4087a59c2b6a3e398554173f969639d47ef6b14f384812f44f5dbbb7

filename	sha512 hash
kubernetes-client-linux-386.tar.gz	bef8fe2453666b9e8a4b5f130b95b1dfaf1294d30cbc08eea53caaa715db0b
kubernetes-client-linux-amd64.tar.gz	42907ace0672b839f656e3afa09827725cdb94980435b186221c36f7a9e2d6e
kubernetes-client-linux-arm.tar.gz	f50785865d8830fa05bc27f7812e213c4ab4b1d020b5eb919bbf20910cfd98
kubernetes-client-linux-arm64.tar.gz	13b0ec947cb186e17fbb571ad1bceef84cf236a8ab3bf52679006f30bbafa8
kubernetes-client-linux-ppc64le.tar.gz	e4727134da0b01a31977f225794cff9d9860b0f62b670fb525cba1b686d7d7
kubernetes-client-linux-s390x.tar.gz	368b03ac429d2c8368312214be0ce656e7d9ac7ae334a3659b8fbb8c75713d5
kubernetes-client-windows-386.tar.gz	962779586897ec218afad31178b547b2eec1e79c434ead49d51459174cca357
kubernetes-client-windows-amd64.tar.gz	c905c5ed45bd430aa9c8f2147edb0a0ac7d5bbd934a77ac6b9527dd5f0abc04

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	a26953a277a383629139651913b85092ef722cf00722193df31ff977cac70a7
kubernetes-server-linux-arm.tar.gz	0c8def28b67d7a8e2644662f8a42aeda5536249d8c7f63e0bbe225e1dab45a1
kubernetes-server-linux-arm64.tar.gz	95285714bf8542bbc482b0544eb6cdfcb0cf217e6863c27810dfe10371674d5
kubernetes-server-linux-ppc64le.tar.gz	5cb63c371dc9b2ad7a1d665debd1e9890cc49235b61767aa5244141989e90b1
kubernetes-server-linux-s390x.tar.gz	fd26e9f6d8dc473c75f83ffd5c0fed0e28d307d88915db7c3152804e7728504

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	31cfbc4610504a02c7b3fcd0b97b48b27afdf9232fa0d02527c7873a78bb72f
kubernetes-node-linux-arm.tar.gz	5f458a3b8d91cd9b5fb47a9f6d1091bc960115140d4ed6f6dab7d275599b801
kubernetes-node-linux-arm64.tar.gz	1d92b3de82c9db491a2281a684d9a2dd86e998b66455ab2b48a4449e50aedd2

filename	sha512 hash
kubernetes-node-linux-ppc64le.tar.gz	ee17d8964217e6a53b2e9a93edecb882a8e8ad9c6d40c2875bc61f35a5e1dfc
kubernetes-node-linux-s390x.tar.gz	7e38f136462d6edfe117d8c98da5e5011d4a21bd5e9121649a73ca29d0ed36e
kubernetes-node-windows-amd64.tar.gz	1f36238ced406817dd25971616b6bbb3ff595b334442ce614c611e4ef3bde62

Changelog since v1.17.3

Changes by Kind

API Change

- Fixes a regression with clients prior to 1.15 not being able to update podIP in pod status, or podCIDR in node spec, against >= 1.16 API servers (#88505, @liggitt) [SIG Apps and Network]

Other (Bug, Cleanup or Flake)

- Add delays between goroutines for vm instance update (#88094, @aramase) [SIG Cloud Provider]
- Adds "volume.beta.kubernetes.io/migrated-to" annotation to PV's and PVC's when they are migrated to signal external provisioners to pick up those objects for Provisioning and Deleting. (#87098, @davidz627) [SIG Apps and Storage]
- Build: Enable kube-cross image-building on K8s Infra (#88595, @justaugustus) [SIG Release and Testing]
- Fix /readyz to return error immediately after a shutdown is initiated, before the –shutdown-delay-duration has elapsed. (#88953, @tkashem) [SIG API Machinery]
- Fix a bug in kube-proxy that caused it to crash when using load balancers with a different IP family (#87117, @aojea) [SIG Network]
- Fix handling of aws-load-balancer-security-groups annotation. Security-Groups assigned with this annotation are no longer modified by kubernetes which is the expected behaviour of most users. Also no unnecessary Security-Groups are created anymore if this annotation is used. (#88689, @Elias481) [SIG Cloud Provider]
- Fix route conflicted operations when updating multiple routes together (#88209, @feiskyer) [SIG Cloud Provider]
- Fix: add azure disk migration support for CSINode (#88014, @andyzhangx) [SIG Cloud Provider and Storage]
- Fix: add remediation in azure disk attach/detach (#88444, @andyzhangx) [SIG Cloud Provider]
- Fix: azure file mount timeout issue (#88610, @andyzhangx) [SIG Cloud Provider and Storage]

- Fix: corrupted mount point in csi driver (#88569, @andyzhangx) [SIG Storage]
- Fix: get azure disk lun timeout issue (#88158, @andyzhangx) [SIG Cloud Provider and Storage]
- Fixes issue where you can't attach more than 15 GCE Persistent Disks to c2, n2, m1, m2 machine types. (#88602, @yuga711) [SIG Storage]
- Fixes kubelet crash in client certificate rotation cases (#88079, @liggitt) [SIG API Machinery, Auth and Node]
- Get-kube.sh uses the gcloud's current local GCP service account for auth when the provider is GCE or GKE instead of the metadata server default (#88383, @BenTheElder) [SIG Cluster Lifecycle]
- Golang/x/net has been updated to bring in fixes for CVE-2020-9283 (#88381, @BenTheElder) [SIG API Machinery, CLI, Cloud Provider, Cluster Lifecycle and Instrumentation]
- Limit number of instances in a single update to GCE target pool to 1000. (#87881, @wojtek-t) [SIG Cloud Provider, Network and Scalability]
- Update to use golang 1.13.8 (#87648, @ialidzhikov) [SIG Release and Testing]

v1.17.3

Documentation

Downloads for v1.17.3

filename	sha512 hash
kubernetes.tar.gz	63e54488630e41488f7153583b3c536df766a623c9eb41634e09a113e2ffda1
kubernetes-src.tar.gz	e09b1010d1673faeba6684d28405ee0963c1b42a28da4b00c38169b0422ab86

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	00233c38903b92cd328b5bf4f48df47df9d858690887e46647e29f2453778ab
kubernetes-client-darwin-amd64.tar.gz	587b2f0e4a8b4e736dfc480a939ad866f5cea8b28fe7cfd34bc383f9150096f
kubernetes-client-linux-386.tar.gz	4ab88ef8526ee5a3fdffe3f6fcd85d0314c80cc079cc50945c073849dcc1dc0
kubernetes-client-linux-amd64.tar.gz	351d6b0d8077cadd8d4b95c145b165be5bc5cd07b59d44b7e81e6dc46f5b85f
kubernetes-client-linux-arm.tar.gz	0b2c490398001aa363b4e4dd3ac93abbcb6330e76a54534b6c66dbcd356f5fe

46

filename	sha512 hash
kubernetes-client-linux-arm64.tar.gz	be0cab0399bea7aa78f286031328b049177107168a9ed28f0c7f0e38a04813k
kubernetes-client-linux-ppc64le.tar.gz	8ce6ba5ee2f4867786dd279c016f1a2ac3355898cbe647455e108348131cb6c
kubernetes-client-linux-s390x.tar.gz	88f20dd15d89b8134240c6c1c036529f1deca1e8f32860c2043147cfd533097
kubernetes-client-windows-386.tar.gz	71cdda152a25556743f7c83164b45988c9844fe3eae9033d76177a2615f8441
kubernetes-client-windows-amd64.tar.gz	19f2a02540c9348b235e43854b3093989c41de0dcfc57df9ad9d63a339d9df1

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	12f86462f6ab4c1fd1d057d4f8c874bd8782174966ffb3cb2477f0f68c3ede8
kubernetes-server-linux-arm.tar.gz	ada379873db29c3f6eefcb5efa2b027ae835beb20b39c03fbbbf1c8490f447c
kubernetes-server-linux-arm64.tar.gz	e3fc5cf9b111e232d28879116434481a45e2c38ad56a349a7353e020ab88baf
kubernetes-server-linux-ppc64le.tar.gz	8b8f8af3864fe71c4fb8f767a42dc47882816216da41c0b5d114a75b37c50c9
kubernetes-server-linux-s390x.tar.gz	5483e4835ea03686b0f79413c3cde16305d752fd15665b3f78848c90f0ee7bc

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	74f34a4c00b6b9350d978bcdd06f6adce55b211876186e98bcef4eef35008ab
kubernetes-node-linux-arm.tar.gz	6cd247524ca8373e0f23eba5a2021844a12d068dee64aaf195b8c430c7fc0ac
kubernetes-node-linux-arm64.tar.gz	238e02534c2b905987fe54df477a793561d1e79c40a6c669cabdbec025e17ck
kubernetes-node-linux-ppc64le.tar.gz	a8d0ff718320cfa2771e4010d970f4e27c80daa2eb7e082be03d4310cf51292
kubernetes-node-linux-s390x.tar.gz	c323ad2690a7924a0b264de678a01b4948cdfbac0d0cc357fcdc17c31ebc9de
kubernetes-node-windows-amd64.tar.gz	7323b7adf83fccc65eea9f23370794aa9901e9a9b3b1ac90403197448408eee

Changelog since v1.17.2

Changes by Kind

Other (Bug, Cleanup or Flake)

- Bind metrics-server containers to linux nodes to avoid Windows scheduling on kubernetes cluster includes linux nodes and windows nodes (#87020, @wawa0210) [SIG Cluster Lifecycle and Instrumentation]
- Bug fixes for EndpointSlice controller that prevent race condition and modifying shared objects. (#87731, @robscott) [SIG Apps and Network]
- Fix a regression in kubenet that prevent pods to obtain ip addresses (#87286, @aojea) [SIG Network and Node]
- Fix regression in statefulset conversion which prevented applying a statefulset multiple times. (#87721, @liggitt) [SIG Apps and Testing]
- Fix the bug PIP's DNS is deleted if no DNS label service annotation isn't set. (#87312, @nilo19) [SIG Cloud Provider]
- Fix: set nil cache entry based on old cache (#87591, @aramase) [SIG Cloud Provider]
- Fixed a bug which could prevent a provider ID from ever being set for node if an error occurred determining the provider ID when the node was added. (#87043, @zjs) [SIG Apps and Cloud Provider]
- Fixed the following
  - AWS Cloud Provider attempts to delete LoadBalancer security group it didn't provision
  - AWS Cloud Provider creates default LoadBalancer security group even if annotation [service.beta.kubernetes.io/aws-load-balancer-security-groups] is present (#87206, @bhagwat070919) [SIG Cloud Provider]
- Fixed two scheduler metrics (pending_pods and schedule_attempts_total) not being recorded (#87692, @everpeace) [SIG Scheduling]
- Kubelet metrics have been changed to buckets. For example the exec/{podNamespace}/{podID}/{containerName} is now just exec. (#87913, @cheftako) [SIG Node]
- Pods that are considered for preemption and haven't started don't produce an error log. (#87900, @alculquicondor) [SIG Scheduling]
- Reverted a kubectl azure auth module change where oidc claim spn: prefix was omitted resulting a breaking behavior with existing Azure AD OIDC enabled api-server (#87507, @weinong) [SIG API Machinery, Auth and Cloud Provider]
- The client label for apiserver_request_count and apiserver_request_total now no-opts and merely records an empty string. (#87673, @logicalhan) [SIG API Machinery, Instrumentation and Scalability]

v1.17.2

Documentation

Downloads for v1.17.2

filename	sha512 hash
kubernetes.tar.gz	82771f9ea6e1da774473500e03bbb8ad8328c27c05ee79514528df5283556f8
kubernetes-src.tar.gz	117222d9590e17e5f932644e54299cf35c870b7969b12aff51392ba958a2987

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	fb0163fd0f8e8372c6f6424097badf1ee0b9af1aff5aa6331bdfebf529e71c3
kubernetes-client-darwin-amd64.tar.gz	b8cc6dde28dbf06ecfdad6917e1707c3e776aca05d6d3bf782cc26210d87fd2
kubernetes-client-linux-386.tar.gz	bb2ba270c7953a5ff020cd28116c6067c4299af31c2b2521fd54296b66047c6
kubernetes-client-linux-amd64.tar.gz	c5cd8954953ea348318f207c99c9dcb679d73dbaf562ac72660f7dab85616fc
kubernetes-client-linux-arm.tar.gz	e53a85f0ff2f522603005fec16a9019794f6c7b2704b66e2a963909193caff9
kubernetes-client-linux-arm64.tar.gz	9cdd0e75bc67f8197c50d7b07ef3aa5b59882cb50ac06abf56d4897b12dc757
kubernetes-client-linux-ppc64le.tar.gz	f0ae9f154146047c8153df0de7d085977ff308227503e8cb673d8c97af933a4
kubernetes-client-linux-s390x.tar.gz	203d030803959df4dab13e17e57cfd9ece1e68b09c769172475b73268c3d25b
kubernetes-client-windows-386.tar.gz	de36a20e3484c2039344123853cf3b60bd9ce49e248a2d0c821aeb7a9d90515
kubernetes-client-windows-amd64.tar.gz	e43beb437f077dd995b28bf8a306c413117315612eb5cf2ecbb686b2420d6d2

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	472e911bf28a6fc583c20cf56eee4a8ec2ede557454b4f5dabc668cd211aea
kubernetes-server-linux-arm.tar.gz	14b95f7e8ecf75026f19e4f28c53ed6d1bc82b5577c045168c787cd95cff997
kubernetes-server-linux-arm64.tar.gz	cec1cc9a4f99295a9c98467ac76cec50f7da23ed45f21ad9bf860fb950f4ffe
kubernetes-server-linux-ppc64le.tar.gz	4727e58ba35303280a4203b2a09b4344cfed372e943a29176e43b3877c1b854

filename	sha512 hash
kubernetes-server-linux-s390x.tar.gz	e178c46402b9c308ff915a5f7675fead8a43de45fe1c55b0b36b26aa6fe2c97

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	e7546138dd1768716e7bbfe6136625ff2023293ec1f62741b63c167aaebe9b2
kubernetes-node-linux-arm.tar.gz	0360d2676726a6884d6a2a66ecfe77e1b50882ab1301bd9bfb935b958de4da7
kubernetes-node-linux-arm64.tar.gz	4ca031a44f2dbbca883406258904e11e11360ab80300f5c422e88103545214a
kubernetes-node-linux-ppc64le.tar.gz	79a20f5c2acc454e9803bd9ece890ebc0564a45471e4afa03c92b6b48935446
kubernetes-node-linux-s390x.tar.gz	553b5fccf539da0f149b97ba47d4d1e163c86a6a057132fa308f9eb2e3df728
kubernetes-node-windows-amd64.tar.gz	0d17642c68aeaffa276ee92c87181a3ef6d9e4dd2b41d6b064f7a20bb3ad9cc

Changelog since v1.17.1

No notable changes for this release

v1.17.1

Documentation

Downloads for v1.17.1

filename	sha512 hash
kubernetes.tar.gz	b75a513ac1edc366a0ab829866687c4937485a00a0621a729860ae95fa278ed
kubernetes-src.tar.gz	18402d56c7b4b01b59bd8fb6251bf53dcbd1b68b79ca5d7cf0ca6789d8ad9cc

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	160471e49fd1117154bd22b4aabe2c61051db5c0160c4ea32f9341a3f9b2e1a

filename	sha512 hash
kubernetes-client-darwin-amd64.tar.gz	29291fc2c8b36d13590c7cfdf423ac64d102962c39470398ee7b9e6191c44da
kubernetes-client-linux-386.tar.gz	41dafee8a1e73a56a25d87b93c2d8287145cfcd3a844a085c34cd6cafdbb229
kubernetes-client-linux-amd64.tar.gz	0f8b21ce610b738d0a993b40134edf4ce5ef3d2b020f2bf2ca5a5f142bbe5d0
kubernetes-client-linux-arm.tar.gz	c7d4d89c06161ffedec679bc5697b7975bfd4ad40df3d083ef056db0a8c3851
kubernetes-client-linux-arm64.tar.gz	60d5edd8cd48b2facb3e1c5b347ed0f204e7c808933453abd6ed11586cf0127
kubernetes-client-linux-ppc64le.tar.gz	0b7c8275bde773fbf5be33522e8f5397646d812b82fd76c94a5267d75695ba1
kubernetes-client-linux-s390x.tar.gz	b6e71cb554e521a15c132910c603aee5a6af1e1c5626dbddeb34f1185a6ee77
kubernetes-client-windows-386.tar.gz	ecb66c26b38e5ef7e4e8a56387abb04c91db4986b3cd7ef885c1f483064f166
kubernetes-client-windows-amd64.tar.gz	84892304a154f52815211c4b34f6d2d733edca81bb7cb9b9f82b57dd80d276b

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	6167314423333f34a4850bd3860617217650f6d2cabf1c287de868040c59460
kubernetes-server-linux-arm.tar.gz	87e04427e7001cb065d1de505f250e054ed3b11d6d3e35b19d830c4040dcf96
kubernetes-server-linux-arm64.tar.gz	6c6e58a97a6235b37be076439b76f3b102a131b87371793833b420d5b22ae7c
kubernetes-server-linux-ppc64le.tar.gz	31aa35a2fff29f54183f1ca82ca7cf3ae1796e1f49592f2f789597edb300364
kubernetes-server-linux-s390x.tar.gz	287eaa186dde6858c84234f7219bb4959476033805294e7d9cddb8b097644b2

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	c91c314caa7a5a7ad6d7bf1663b5fd7a7d4a125c250dc1442bae6d742f964e1
kubernetes-node-linux-arm.tar.gz	c3cefebf12aa0848201cf68d32227386498180c31c78a38e81988953bd0dc38

filename	sha512 hash
kubernetes-node-linux-arm64.tar.gz	a278b708b1d68405315128619fca63a7cd35cd980575309a8893c8d128e4cc5
kubernetes-node-linux-ppc64le.tar.gz	8a74e82b6e07203d273c598c6c63af16f278d4d42224157a82b52a490f9549c
kubernetes-node-linux-s390x.tar.gz	fd35476eff035bcf35423a5fec3579861c5b2bd7b970c47075cc3f314be6988
kubernetes-node-windows-amd64.tar.gz	feddf53e05819f081d08d8d4086b395848d638c728a8aaa30e7d83cdfdbbbfc

Changelog since v1.17.0

Other notable changes

- Fixed a regression where the kubelet would fail to update the ready status of pods. (#84951, @tedyu)
- Fix nil pointer dereference in azure cloud provider (#85975, @ldx)
- fix: azure disk could not mounted on Standard_DC4s/DC2s instances (#86612, @andyzhangx)
- Fix v1.17.0 regression in reflector relist causing master rolling upgrade to fail for large clusters due to excessive list calls to etcd (#86824, @jpbetz)
- Fixes issue where AAD token obtained by kubectl is incompatible with on-behalf-of flow and oidc. (#86412, @weinong)
    - The audience claim before this fix has "spn:" prefix. After this fix, "spn:" prefix is omitted.
- fix: azure data disk should use same key as os disk by default (#86351, @andyzhangx)
- Fixes an issue with kubelet-reported pod status on deleted/recreated pods. (#86320, @liggitt)
- Fixes v1.17.0 regression in –service-cluster-ip-range handling with IPv4 ranges larger than 65536 IP addresses (#86534, @liggitt)
- Fixed a panic in the kubelet cleaning up pod volumes (#86277, @tedyu)
- Resolves performance regression in `kubectl get all` and in client-go discovery clients constructed using `NewDiscoveryClientForConfig` or `NewDiscoveryClientForConfigOrDie`. (#86168, @liggitt)
- Fix LoadBalancer rule checking so that no unexpected LoadBalancer updates are made (#85990, @feiskyer)

v1.17.0

Documentation

Downloads for v1.17.0

filename	sha512 hash
kubernetes.tar.gz	68d5af15901281954de01164426cfb5ca31c14341387fad34d0cb9aa5f40c93
kubernetes-src.tar.gz	5424576d7f7936df15243fee0036e7936d2d6224e98ac805ce96cdf7b83a7c5

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	4c9a06409561b8ecc8901d0b88bc955ab8b8c99256b3f6066811539211cff5b
kubernetes-client-darwin-amd64.tar.gz	78ce6875c5f5a03bc057e7194fd1966beb621f825ba786d35a9921ab1ae33ed
kubernetes-client-linux-386.tar.gz	7a4bcd7d06d0f4ba929451f652c92a3c4d428f9b38ed83093f076bb25699b9d
kubernetes-client-linux-amd64.tar.gz	7f9fc9ac07e9acbf12b58ae9077a8ce1f7fb4b5ceccd3856b55d2beb5e435d4
kubernetes-client-linux-arm.tar.gz	8f74fff80a000cfaefa2409bdce6fd0d546008c7942a7178a4fa88a9b3ca05d
kubernetes-client-linux-arm64.tar.gz	18d92b320f138f5080f98f1ffee20e405187549ab3aad55b7f60f02e3b7f5a4
kubernetes-client-linux-ppc64le.tar.gz	fd9b15a88b3d5a506a84ebfb56de291b85978b14f61a2c05f4bdb6a7e45a36f
kubernetes-client-linux-s390x.tar.gz	ae3b284a78975cbfccaac04ea802085c31fd75cccf4ece3a983f44faf755dd9
kubernetes-client-windows-386.tar.gz	4ba83b068e7f4a203bcc5cc8bb2c456a6a9c468e695f86f69d8f2ac81be9a1d
kubernetes-client-windows-amd64.tar.gz	fc79b0e926a823c7d8b9010dee0c559587b7f97c9290b2126d517c4272891ce

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	28b2703c95894ab0565e372517c4a4b2c33d1be3d778fae384a6ab52c06cea7
kubernetes-server-linux-arm.tar.gz	b36a9f602131dba23f267145399aad0b19e97ab7b5194b2e3c01c57f678d7b0
kubernetes-server-linux-arm64.tar.gz	42adae077603f25b194e893f15e7f415011f25e173507a190bafbee0d0e86cc
kubernetes-server-linux-ppc64le.tar.gz	7e72d4255e661e946203c1c0c684cd0923034eb112c35e3ba08fbf9d1ef5e8b
kubernetes-server-linux-s390x.tar.gz	00bc634654ec7d1ec2eca7a3e943ac287395503a06c8da22b7efb3a35435ceb

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	49ef6a41c65b3f26a4f3ffe63b92c8096c26aa27a89d227d935bc06a497c975
kubernetes-node-linux-arm.tar.gz	21a213fd572200998bdd71f5ebbb96576fc7a7e7cfb1469f028cc1a310bc2b5
kubernetes-node-linux-arm64.tar.gz	3642ee5e7476080a44005db8e7282fdbe4e4f220622761b95951c2c15b3e10c
kubernetes-node-linux-ppc64le.tar.gz	99687088be50a794894911d43827b7e1125fbc86bfba799f77c096ddaa5b234
kubernetes-node-linux-s390x.tar.gz	73b9bc356de43fbed7d3294be747b83e0aac47051d09f1df7be52c33be670b6
kubernetes-node-windows-amd64.tar.gz	2fbc80f928231f60a5a7e4f427953ef17244b3a8f6fdeebcbfceb05b0587b84

Changes

A complete changelog for the release notes is now hosted in a customizable format at relnotes.k8s.io. Check it out and please give us your feedback!

What's New (Major Themes)

Cloud Provider Labels reach General Availability

Added as a beta feature way back in v1.2, v1.17 sees the general availability of cloud provider labels.

Volume Snapshot Moves to Beta

The Kubernetes Volume Snapshot feature is now beta in Kubernetes v1.17. It was introduced as alpha in Kubernetes v1.12, with a second alpha with breaking changes in Kubernetes v1.13.

CSI Migration Beta

The Kubernetes in-tree storage plugin to Container Storage Interface (CSI) migration infrastructure is now beta in Kubernetes v1.17. CSI migration was introduced as alpha in Kubernetes v1.14.

Known Issues

- volumeDevices mapping ignored when container is privileged
- The `Should recreate evicted statefulset` conformance test fails because `Pod ss-0 expected to be re-created at least once`. This

was caused by the `Predicate PodFitsHostPorts failed` scheduling error. The root cause was a host port conflict for port `21017`. This port was in-use as an ephemeral port by another application running on the node. This will be looked at for the 1.18 release.

- client-go discovery clients constructed using `NewDiscoveryClientForConfig` or `NewDiscoveryClientForConfigOrDie` default to rate limits that cause normal discovery request patterns to take several seconds. This is fixed in https://issue.k8s.io/86168 and will be resolved in v1.17.1. As a workaround, the `Burst` value can be adjusted higher in the rest.Config passed into `NewDiscoveryClientForConfig` or `NewDiscoveryClientForConfigOrDie`.
- the IP allocator in v1.17.0 can return errors such as `the cluster IP <ip> for service <service-name> is not within the service CIDR <cidr>; please recreate` in the logs of the kube-apiserver. The cause is incorrect CIDR calculations if the service CIDR (`--service-cluster-ip-range`) is set to bits lower than `/16`. This is fixed in http://issue.k8s.io/86534 and will be resolved in v1.17.1.

Urgent Upgrade Notes

(No, really, you MUST read this before you upgrade)

Cluster Lifecycle

- Kubeadm: add a new `kubelet-finalize` phase as part of the `init` workflow and an experimental sub-phase to enable automatic kubelet client certificate rotation on primary control-plane nodes. Prior to 1.17 and for existing nodes created by `kubeadm init` where kubelet client certificate rotation is desired, you must modify `/etc/kubernetes/kubelet.conf` to point to the PEM symlink for rotation: `client-certificate: /var/lib/kubelet/pki/kubelet-client-current.pem` and `client-key: /var/lib/kubelet/pki/kubelet-client-current.pem`, replacing the embedded client certificate and key. (#84118, @neolit123) #### Network
- EndpointSlices: If upgrading a cluster with EndpointSlices already enabled, any EndpointSlices that should be managed by the EndpointSlice controller should have a `endpointslice.kubernetes.io/managed-by` label set to `endpointslice-controller.k8s.io`.

Scheduling

- Kubeadm: when adding extra apiserver authorization-modes, the defaults `Node,RBAC` are no longer prepended in the resulting static Pod manifests and a full override is allowed. (#82616, @ghouscht)

Storage

- A node that uses a CSI raw block volume needs to be drained before kubelet can be upgraded to 1.17. (#74026, @mkimuram)

Windows

- The Windows containers RunAsUsername feature is now beta.
- Windows worker nodes in a Kubernetes cluster now support Windows Server version 1903 in addition to the existing support for Windows Server 2019
- The RuntimeClass scheduler can now simplify steering Linux or Windows pods to appropriate nodes
- All Windows nodes now get the new label `node.kubernetes.io/windows-build` that reflects the Windows major, minor, and build number that are needed to match compatibility between Windows containers and Windows worker nodes.

Deprecations and Removals

- `kubeadm.k8s.io/v1beta1` has been deprecated, you should update your config to use newer non-deprecated API versions. (#83276, @Klaven)
- The deprecated feature gates GCERegionalPersistentDisk, EnableAggregatedDiscoveryTimeout and PersistentLocalVolumes are now unconditionally enabled and can no longer be specified in component invocations. (#82472, @draveness)
- Deprecate the default service IP CIDR. The previous default was `10.0.0.0/24` which will be removed in 6 months/2 releases. Cluster admins must specify their own desired value, by using `--service-cluster-ip-range` on kube-apiserver. (#81668, @darshanime)
- Remove deprecated "include-uninitialized" flag. (#80337, @draveness)
- All resources within the `rbac.authorization.k8s.io/v1alpha1` and `rbac.authorization.k8s.io/v1beta1` API groups are deprecated in favor of `rbac.authorization.k8s.io/v1`, and will no longer be served in v1.20. (#84758, @liggitt)
- The certificate signer no longer accepts ca.key passwords via the `CFSSL_CA_PK_PASSWORD` environment variable. This capability was not prompted by user request, never advertised, and recommended against in the security audit. (#84677, @mikedanese)
- Deprecate the instance type beta label (`beta.kubernetes.io/instance-type`) in favor of its GA equivalent: `node.kubernetes.io/instance-type` (#82049, @andrewsykim)
- The built-in system:csi-external-provisioner and system:csi-external-attacher cluster roles are removed as of 1.17 release (#84282, @tedyu)
- The in-tree GCE PD plugin `kubernetes.io/gce-pd` is now deprecated and will be removed in 1.21. Users that self-deploy Kubernetes on GCP should enable CSIMigration + CSIMigrationGCE features and install the

GCE PD CSI Driver (https://github.com/kubernetes-sigs/gcp-compute-persistent-disk-csi-driver) to avoid disruption to existing Pod and PVC objects at that time. Users should start using the GCE PD CSI CSI Driver directly for any new volumes. (#85231, @davidz627)

- The in-tree AWS EBS plugin `kubernetes.io/aws-ebs` is now deprecated and will be removed in 1.21. Users that self-deploy Kubernetes on AWS should enable CSIMigration + CSIMigrationAWS features and install the AWS EBS CSI Driver (https://github.com/kubernetes-sigs/aws-ebs-csi-driver) to avoid disruption to existing Pod and PVC objects at that time. Users should start using the AWS EBS CSI CSI Driver directly for any new volumes. (#85237, @leakingtapan)
- The CSINodeInfo feature gate is deprecated and will be removed in a future release. The storage.k8s.io/v1beta1 CSINode object is deprecated and will be removed in a future release. (#83474, @msau42)
- Removed Alpha feature `MountContainers` (#84365, @codenrhoden)
- Removed plugin watching of the deprecated directory `{kubelet_root_dir}/plugins` and CSI V0 support in accordance with deprecation announcement in https://v1-13.docs.kubernetes.io/docs/setup/release/notes (#84533, @davidz627)
- kubeadm deprecates the use of the hyperkube image (#85094, @rosti) ## Metrics Changes ### Added metrics
- Add `scheduler_goroutines` metric to track number of kube-scheduler binding and prioritizing goroutines (#83535, @wgliang)
- Adding initial EndpointSlice metrics. (#83257, @robscott)
- Adds a metric `apiserver_request_error_total` to kube-apiserver. This metric tallies the number of `request_errors` encountered by verb, group, version, resource, subresource, scope, component, and code. (#83427, @logicalhan)
- A new `kubelet_preemptions` metric is reported from Kubelets to track the number of preemptions occurring over time, and which resource is triggering those preemptions. (#84120, @smarterclayton)
- Kube-apiserver: Added metrics `authentication_latency_seconds` that can be used to understand the latency of authentication. (#82409, @RainbowMango)
- Add `plugin_execution_duration_seconds` metric for scheduler framework plugins. (#84522, @liu-cong)
- Add `permit_wait_duration_seconds` metric to the scheduler. (#84011, @liu-cong)

Deprecated/changed metrics

- etcd version monitor metrics are now marked as with the ALPHA stability level. (#83283, @RainbowMango)
- Change `pod_preemption_victims` metric from Gauge to Histogram. (#83603, @Tabrizian)
- Following metrics from kubelet are now marked as with the AL-

57

PHA stability level: `kubelet_container_log_filesystem_used_bytes`
`kubelet_volume_stats_capacity_bytes` `kubelet_volume_stats_available_bytes`
`kubelet_volume_stats_used_bytes` `kubelet_volume_stats_inodes`
`kubelet_volume_stats_inodes_free` `kubelet_volume_stats_inodes_used`
`plugin_manager_total_plugins` `volume_manager_total_volumes`
(#84907, @RainbowMango)

- Deprecated metric `rest_client_request_latency_seconds` has been turned off. (#83836, @RainbowMango)
- Following metrics from kubelet are now marked as with the ALPHA stability level: `node_cpu_usage_seconds_total` `node_memory_working_set_bytes` `container_cpu_usage_seconds_total` `container_memory_working_set_bytes` `scrape_error` (#84987, @RainbowMango)
- Deprecated prometheus request meta-metrics have been removed `http_request_duration_microseconds` `http_request_duration_microseconds_sum` `http_request_duration_microseconds_count` `http_request_size_bytes` `http_request_size_bytes_sum` `http_request_size_bytes_count` `http_requests_total`, `http_response_size_bytes` `http_response_size_bytes_sum` `http_response_size_bytes_count` due to removal from the prometheus client library. Prometheus http request meta-metrics are now generated from `promhttp.InstrumentMetricHandler` instead.
- Following metrics from kube-controller-manager are now marked as with the ALPHA stability level: `storage_count_attachable_volumes_in_use` `attachdetach_controller_total_volumes` `pv_collector_bound_pv_count` `pv_collector_unbound_pv_count` `pv_collector_bound_pvc_count` `pv_collector_unbound_pvc_count` (#84896, @RainbowMango)
- Following metrics have been turned off: `apiserver_request_count` `apiserver_request_latencies` `apiserver_request_latencies_summary` `apiserver_dropped_requests` `etcd_request_latencies_summary` `apiserver_storage_transformation_latencies_microseconds` `apiserver_storage_data_key_generation_latencies_microseconds` `apiserver_storage_transformation_failures_total` (#83837, @RainbowMango)
- Following metrics have been turned off: `scheduler_scheduling_latency_seconds` `scheduler_e2e_scheduling_latency_microseconds` `scheduler_scheduling_algorithm_latency_mic` `scheduler_scheduling_algorithm_predicate_evaluation` `scheduler_scheduling_algorithm_prio` `scheduler_scheduling_algorithm_preemption_evaluation` `scheduler_scheduling_binding_laten` (`[#83838](https://github.com/kubernetes/kubernetes/pull/83838)`, @RainbowMango)
- Deprecated metric `kubeproxy_sync_proxy_rules_latency_microseconds` has been turned off. (#83839, @RainbowMango)

Notable Features

Stable

- Graduate ScheduleDaemonSetPods to GA. (feature gate will be removed in 1.18) (#82795, @draveness)
- Graduate TaintNodesByCondition to GA in 1.17. (feature gate will be removed in 1.18) (#82703, @draveness)
- The WatchBookmark feature is promoted to GA. With WatchBookmark feature, clients are able to request watch events with BOOKMARK type. See https://kubernetes.io/docs/reference/using-api/api-concepts/#watch-bookmarks for more details. (#83195, @wojtek-t)
- Promote NodeLease feature to GA. The feature make Lease object changes an additional healthiness signal from Node. Together with that, we reduce frequency of NodeStatus updates to 5m by default in case of no changes to status itself (#84351, @wojtek-t)
- CSI Topology feature is GA. (#83474, @msau42)
- The VolumeSubpathEnvExpansion feature is graduating to GA. The `VolumeSubpathEnvExpansion` feature gate is unconditionally enabled, and will be removed in v1.19. (#82578, @kevtaylor)
- Node-specific volume limits has graduated to GA. (#83568, @bertinatto)
- The ResourceQuotaScopeSelectors feature has graduated to GA. The `ResourceQuotaScopeSelectors` feature gate is now unconditionally enabled and will be removed in 1.18. (#82690, @draveness)

Beta

- The Kubernetes Volume Snapshot feature has been moved to beta. The VolumeSnapshotDataSource feature gate is on by default in this release. This feature enables you to take a snapshot of a volume (if supported by the CSI driver), and use the snapshot to provision a new volume, pre-populated with data from the snapshot.
- Feature gates CSIMigration to Beta (on by default) and CSIMigrationGCE to Beta (off by default since it requires installation of the GCE PD CSI Driver) (#85231, @davidz627)
- EndpointSlices are now beta but not yet enabled by default. Use the EndpointSlice feature gate to enable this feature. (#85365, @robscott)
- Promote CSIMigrationAWS to Beta (off by default since it requires installation of the AWS EBS CSI Driver) (#85237, @leakingtapan)
- Moving Windows RunAsUserName feature to beta (#84882, @marosset)

CLI Improvements

- The kubectl's api-resource command now has a `--sort-by` flag to sort resources by name or kind. (#81971, @laddng)
- A new `--prefix` flag added into kubectl logs which prepends each log line with information about it's source (pod name and container name)

(#76471, @m1kola)

API Changes

- CustomResourceDefinitions now validate documented API semantics of `x-kubernetes-list-type` and `x-kubernetes-map-type` atomic to reject non-atomic sub-types. (#84722, @sttts)
- Kube-apiserver: The `AdmissionConfiguration` type accepted by `--admission-control-config-file` has been promoted to `apiserver.config.k8s.io/v1` with no schema changes. (#85098, @liggitt)
- Fixed EndpointSlice port name validation to match Endpoint port name validation (allowing port names longer than 15 characters) (#84481, @robscott)
- CustomResourceDefinitions introduce `x-kubernetes-map-type` annotation as a CRD API extension. Enables this particular validation for server-side apply. (#84113, @enxebre)

Other notable changes

API Machinery

- kube-apiserver: the `--runtime-config` flag now supports an `api/beta=false` value which disables all built-in REST API versions matching `v[0-9]+beta[0-9]+`. (#84304, @liggitt) The `--feature-gates` flag now supports an `AllBeta=false` value which disables all beta feature gates. (#84304, @liggitt)
- New flag `--show-hidden-metrics-for-version` in kube-apiserver can be used to show all hidden metrics that deprecated in the previous minor release. (#84292, @RainbowMango)
- kube-apiserver: Authentication configuration for mutating and validating admission webhooks referenced from an `--admission-control-config-file` can now be specified with `apiVersion: apiserver.config.k8s.io/v1, kind: WebhookAdmissionConfiguration`. (#85138, @liggitt)
- kube-apiserver: The `ResourceQuota` admission plugin configuration referenced from `--admission-control-config-file` admission config has been promoted to `apiVersion: apiserver.config.k8s.io/v1, kind: ResourceQuotaConfiguration` with no schema changes. (#85099, @liggitt)
- kube-apiserver: fixed a bug that could cause a goroutine leak if the apiserver encountered an encoding error serving a watch to a websocket watcher (#84693, @tedyu)
- Fix the bug that EndpointSlice for masters wasn't created after enabling EndpointSlice feature on a pre-existing cluster. (#84421, @tnqn)
- Switched intstr.Type to sized integer to follow API guidelines and improve compatibility with proto libraries (#83956, @liggitt)

- Client-go: improved allocation behavior of the delaying workqueue when handling objects with far-future ready times. (#83945, @barkbay)
- Fixed an issue with informers missing an `Added` event if a recently deleted object was immediately recreated at the same time the informer dropped a watch and relisted. (#83911, @matte21)
- Fixed panic when accessing CustomResources of a CRD with `x-kubernetes-int-or-string`. (#83787, @sttts)
- The resource version option, when passed to a list call, is now consistently interpreted as the minimum allowed resource version. Previously when listing resources that had the watch cache disabled clients could retrieve a snapshot at that exact resource version. If the client requests a resource version newer than the current state, a TimeoutError is returned suggesting the client retry in a few seconds. This behavior is now consistent for both single item retrieval and list calls, and for when the watch cache is enabled or disabled. (#72170, @jpbetz)
- Fixes a goroutine leak in kube-apiserver when a request times out. (#83333, @lavalamp)
- Fixes the bug in informer-gen that it produces incorrect code if a type has nonNamespaced tag set. (#80458, @tatsuhiro-t)
- Resolves bottleneck in internal API server communication that can cause increased goroutines and degrade API Server performance (#80465, @answer1991)
- Resolves regression generating informers for packages whose names contain . characters (#82410, @nikhita)
- Resolves issue with `/readyz` and `/livez` not including etcd and kms health checks (#82713, @logicalhan)
- Fixes regression in logging spurious stack traces when proxied connections are closed by the backend (#82588, @liggitt)
- Kube-apiserver now reloads serving certificates from disk every minute to allow rotation without restarting the server process (#84200, @jackkleeman)
- Client-ca bundles for the all generic-apiserver based servers will dynamically reload from disk on content changes (#83579, @deads2k)
- Client-go: Clients can request protobuf and json and correctly negotiate with the server for JSON for CRD objects, allowing all client libraries to request protobuf if it is available. If an error occurs negotiating a watch with the server, the error is immediately return by the client `Watch()` method instead of being sent as an `Error` event on the watch stream. (#84692, @smarterclayton) Renamed FeatureGate RequestManagement to APIPriorityAndFairness. This feature gate is an alpha and has not yet been associated with any actual functionality. (#85260, @MikeSpreitzer)
- Filter published OpenAPI schema by making nullable, required fields non-required in order to avoid kubectl to wrongly reject null values. (#85722, @sttts)
- kube-apiserver: fixed a conflict error encountered attempting to delete a pod with `gracePeriodSeconds=0` and a resourceVersion precondition

(#85516, @michaelgugino)

- Use context to check client closed instead of http.CloseNotifier in processing watch request which will reduce 1 goroutine for each request if proto is HTTP/2.x . (#85408, @answer1991)
- Reload apiserver SNI certificates from disk every minute (#84303, @jackkleeman)
- The mutating and validating admission webhook plugins now read configuration from the admissionregistration.k8s.io/v1 API. (#80883, @liggitt)
- kube-proxy: a configuration file specified via `--config` is now loaded with strict deserialization, which fails if the config file contains duplicate or unknown fields. This protects against accidentally running with config files that are malformed, mis-indented, or have typos in field names, and getting unexpected behavior. (#82927, @obitech)
- When registering with a 1.17+ API server, MutatingWebhookConfiguration and ValidatingWebhookConfiguration objects can now request that only `v1` AdmissionReview requests be sent to them. Previously, webhooks were required to support receiving `v1beta1` AdmissionReview requests as well for compatibility with API servers <= 1.15.
  - When registering with a 1.17+ API server, a CustomResourceDefinition conversion webhook can now request that only `v1` ConversionReview requests be sent to them. Previously, conversion webhooks were required to support receiving `v1beta1` ConversionReview requests as well for compatibility with API servers <= 1.15. (#82707, @liggitt)
- OpenAPI v3 format in CustomResourceDefinition schemas are now documented. (#85381, @sttts)
- kube-apiserver: Fixed a regression accepting patch requests > 1MB (#84963, @liggitt)
- The example API server has renamed its `wardle.k8s.io` API group to `wardle.example.com` (#81670, @liggitt)
- CRDs defaulting is promoted to GA. Note: the feature gate CustomResourceDefaulting will be removed in 1.18. (#84713, @sttts)
- Restores compatibility with <=1.15.x custom resources by not publishing OpenAPI for non-structural custom resource definitions (#82653, @liggitt)
- If given an IPv6 bind-address, kube-apiserver will now advertise an IPv6 endpoint for the kubernetes.default service. (#84727, @danwinship)
- Add table convertor to component status. (#85174, @zhouya0)
- Scale custom resource unconditionally if resourceVersion is not provided (#80572, @knight42)
- When the go-client reflector relists, the ResourceVersion list option is set to the reflector's latest synced resource version to ensure the reflector does not "go back in time" and reprocess events older than it has already processed. If the server responds with an HTTP 410 (Gone) status code response, the relist falls back to using `resourceVersion=""`. (#83520, @jpbetz)
- Fix unsafe JSON construction in a number of locations in the codebase (#81158, @zouyee)
- Fixes a flaw (CVE-2019-11253) in json/yaml decoding where large or

malformed documents could consume excessive server resources. Request bodies for normal API requests (create/delete/update/patch operations of regular resources) are now limited to 3MB. (#83261, @liggitt)

- CRDs can have fields named `type` with value `array` and nested array with `items` fields without validation to fall over this. (#85223, @sttts)

Apps

- Support Service Topology (#72046, @m1093782566)
- Finalizer Protection for Service LoadBalancers is now in GA (enabled by default). This feature ensures the Service resource is not fully deleted until the correlating load balancer resources are deleted. (#85023, @MrHohn)
- Pod process namespace sharing is now Generally Available. The `PodShareProcessNamespace` feature gate is now deprecated and will be removed in Kubernetes 1.19. (#84356, @verb)
- Fix handling tombstones in pod-disruption-budged controller. (#83951, @zouyee)
- Fixed the bug that deleted services were processed by EndpointSliceController repeatedly even their cleanup were successful. (#82996, @tnqn)
- Add `RequiresExactMatch` for `label.Selector` (#85048, @shaloulcy)
- Adds a new label to indicate what is managing an EndpointSlice. (#83965, @robscott)
- Fix handling tombstones in pod-disruption-budged controller. (#83951, @zouyee)
- Fixed the bug that deleted services were processed by EndpointSliceController repeatedly even their cleanup were successful. (#82996, @tnqn)
- An end-user may choose to request logs without confirming the identity of the backing kubelet. This feature can be disabled by setting the `AllowInsecureBackendProxy` feature-gate to false. (#83419, @deads2k)
- When scaling down a ReplicaSet, delete doubled up replicas first, where a "doubled up replica" is defined as one that is on the same node as an active replica belonging to a related ReplicaSet. ReplicaSets are considered "related" if they have a common controller (typically a Deployment). (#80004, @Miciah)
- Kube-controller-manager: Fixes bug setting headless service labels on endpoints (#85361, @liggitt)
- People can see the right log and note. (#84637, @zhipengzuo)
- Clean duplicate GetPodServiceMemberships function (#83902, @gongguan)

Auth

- K8s docker config json secrets are now compatible with docker config desktop authentication credentials files (#82148, @bbourbie)
- Kubelet and aggregated API servers now use v1 TokenReview and SubjectAccessReview endpoints to check authentication/authorization. (#84768,

@liggitt)

- Kube-apiserver can now specify `--authentication-token-webhook-version=v1` or `--authorization-webhook-version=v1` to use `v1` TokenReview and SubjectAccessReview API objects when communicating with authentication and authorization webhooks. (#84768, @liggitt)
- Authentication token cache size is increased (from 4k to 32k) to support clusters with many nodes or many namespaces with active service accounts. (#83643, @lavalamp)
- Apiservers based on k8s.io/apiserver with delegated authn based on cluster authentication will automatically update to new authentication information when the authoritative configmap is updated. (#85004, @deads2k)
- Configmaps/extension-apiserver-authentication in kube-system is continuously updated by kube-apiservers, instead of just at apiserver start (#82705, @deads2k)

CLI

- Fixed kubectl endpointslice output for get requests (#82603, @robscott)

- Gives the right error message when using `kubectl delete` a wrong resource. (#83825, @zhouya0)

- If a bad flag is supplied to a kubectl command, only a tip to run `--help` is printed, instead of the usage menu. Usage menu is printed upon running `kubectl command --help`. (#82423, @sallyom)

- Commands like `kubectl apply` now return errors if schema-invalid annotations are specified, rather than silently dropping the entire annotations section. (#83552, @liggitt)

- Fixes spurious 0 revisions listed when running `kubectl rollout history` for a StatefulSet (#82643, @ZP-AlwaysWin)

- Correct a reference to a not/no longer used kustomize subcommand in the documentation (#82535, @demobox)

- Kubectl set resources will no longer return an error if passed an empty change for a resource. kubectl set subject will no longer return an error if passed an empty change for a resource. (#85490, @sallyom)

- Kubectl: –resource-version now works properly in label/annotate/set selector commands when racing with other clients to update the target object (#85285, @liggitt)

- The `--certificate-authority` flag now correctly overrides existing skip-TLS or CA data settings in the kubeconfig file (#83547, @liggitt) ### Cloud Provider

- Azure: update disk lock logic per vm during attach/detach to allow concurrent updates for different nodes. (#85115, @aramase)

- Fix vmss dirty cache issue in disk attach/detach on vmss node (#85158, @andyzhangx)

- Fix race condition when attach/delete azure disk in same time (#84917, @andyzhangx)

- Change GCP ILB firewall names to contain the `k8s-fw-` prefix like the rest of the firewall rules. This is needed for consistency and also for other components to identify the firewall rule as k8s/service-controller managed. (#84622, @prameshj)

- Ensure health probes are created for local traffic policy UDP services on Azure (#84802, @feiskyer)

- Openstack: Do not delete managed LB in case of security group reconciliation errors (#82264, @multi-io)

- Fix aggressive VM calls for Azure VMSS (#83102, @feiskyer)

- Fix: azure disk detach failure if node not exists (#82640, @andyzhangx)

- Add azure disk encryption(SSE+CMK) support (#84605, @andyzhangx)

- Update Azure SDK versions to v35.0.0 (#84543, @andyzhangx)

- Azure: Add allow unsafe read from cache (#83685, @aramase)

- Reduces the number of calls made to the Azure API when requesting the instance view of a virtual machine scale set node. (#82496, @hasheddan)

- Added cloud operation count metrics to azure cloud controller manager. (#82574, @kkmsft)

- On AWS nodes with multiple network interfaces, kubelet should now more reliably report the same primary node IP. (#80747, @danwinship)

- Update Azure load balancer to prevent orphaned public IP addresses (#82890, @chewong) ### Cluster Lifecycle

- Kubeadm alpha certs command now skip missing files (#85092, @fabriziopandini)

- Kubeadm: the command "kubeadm token create" now has a "–certificate-key" flag that can be used for the formation of join commands for control-planes with automatic copy of certificates (#84591, @TheLastProject)

- Kubeadm: Fix a bug where kubeadm cannot parse kubelet's version if the latter dumps logs on the standard error. (#85351, @rosti)

- Kubeadm: added retry to all the calls to the etcd API so kubeadm will be more resilient to network glitches (#85201, @fabriziopandini)

- Fixes a bug in kubeadm that caused init and join to hang indefinitely in specific conditions. (#85156, @chuckha)

- Kubeadm now includes CoreDNS version 1.6.5

  - `kubernetes` plugin adds metrics to measure kubernetes control plane latency.
  - the `health` plugin now includes the `lameduck` option by default, which waits for a duration before shutting down. (#85109, @rajansandeep)

- Fixed bug when using kubeadm alpha certs commands with clusters using external etcd (#85091, @fabriziopandini)

- Kubeadm no longer defaults or validates the component configs of the kubelet or kube-proxy (#79223, @rosti)

- Kubeadm: remove the deprecated `--cri-socket` flag for `kubeadm upgrade apply`. The flag has been deprecated since v1.14. (#85044, @neolit123)

- Kubeadm: prevent potential hanging of commands such as "kubeadm reset" if the apiserver endpoint is not reachable. (#84648, @neolit123)

- Kubeadm: fix skipped etcd upgrade on secondary control-plane nodes when the command `kubeadm upgrade node` is used. (#85024, @neolit123)

- Kubeadm: fix an issue with the kube-proxy container env. variables (#84888, @neolit123)

- Utilize diagnostics tool to dump GKE windows test logs (#83517, @YangLu1031)

- Kubeadm: always mount the kube-controller-manager hostPath volume that is given by the `--flex-volume-plugin-dir` flag. (#84468, @neolit123)

- Update Cluster Autoscaler version to 1.16.2 (CA release docs: https://github.com/kubernetes/autoscaler/releases/tag/cluster-autoscaler-1.16.2) (#84038, @losipiuk)

- Kubeadm no longer removes /etc/cni/net.d as it does not install it. Users should remove files from it manually or rely on the component that created them (#83950, @yastij)

- Kubeadm: fix wrong default value for the `upgrade node --certificate-renewal` flag. (#83528, @neolit123)

- Bump metrics-server to v0.3.5 (#83015, @olagacek)

- Dashboard: disable the dashboard Deployment on non-Linux nodes. This step is required to support Windows worker nodes. (#82975, @wawa0210)

- Fixes a panic in kube-controller-manager cleaning up bootstrap tokens (#82887, @tedyu)

- Kubeadm: add a new `kubelet-finalize` phase as part of the `init` workflow and an experimental sub-phase to enable automatic kubelet client certificate rotation on primary control-plane nodes.

  Prior to 1.17 and for existing nodes created by `kubeadm init` where kubelet client certificate rotation is desired, you must modify "/etc/kubernetes/kubelet.conf" to point to the PEM symlink for rotation: `client-certificate: /var/lib/kubelet/pki/kubelet-client-current.pem` and `client-key: /var/lib/kubelet/pki/kubelet-client-current.pem`, replacing the embedded client certificate and key. (#84118, @neolit123)

- Kubeadm: add a upgrade health check that deploys a Job (#81319, @neolit123)

- Kubeadm now supports automatic calculations of dual-stack node cidr masks to kube-controller-manager. (#85609, @Arvinderpal)

- Kubeadm: reset raises warnings if it cannot delete folders (#85265, @SataQiu)

- Kubeadm: enable the usage of the secure kube-scheduler and kube-controller-manager ports for health checks. For kube-scheduler was 10251, becomes 10259. For kube-controller-manager was 10252, becomes 10257. (#85043, @neolit123)

- A new kubelet command line option, `--reserved-cpus`, is introduced to explicitly define the CPU list that will be reserved for system. For example, if `--reserved-cpus=0,1,2,3` is specified, then cpu 0,1,2,3 will be reserved for the system. On a system with 24 CPUs, the user may specify `isolcpus=4-23` for the kernel option and use CPU 4-23 for the user containers. (#83592, @jianzzha)

- Kubelet: a configuration file specified via `--config` is now loaded with strict deserialization, which fails if the config file contains duplicate or unknown fields. This protects against accidentally running with config files that are malformed, mis-indented, or have typos in field names, and getting unexpected behavior. (#83204, @obitech)

- Kubeadm now propagates proxy environment variables to kube-proxy (#84559, @yastij)

- Update the latest validated version of Docker to 19.03 (#84476, @neolit123)

- Update to Ingress-GCE v1.6.1 (#84018, @rramkumar1)

- Kubeadm: enhance certs check-expiration to show the expiration info of related CAs (#83932, @SataQiu)

- Kubeadm: implemented structured output of 'kubeadm token list' in JSON, YAML, Go template and JsonPath formats (#78764, @bart0sh)

- Kubeadm: add support for `127.0.0.1` as advertise address. kubeadm will automatically replace this value with matching global unicast IP address on the loopback interface. (#83475, @fabriziopandini)

- Kube-scheduler: a configuration file specified via `--config` is now loaded with strict deserialization, which fails if the config file contains duplicate or unknown fields. This protects against accidentally running with config files that are malformed, mis-indented, or have typos in field names, and getting unexpected behavior. (#83030, @obitech)

- Kubeadm: use the `--service-cluster-ip-range` flag to init or use the ServiceSubnet field in the kubeadm config to pass a comma separated list of Service CIDRs. (#82473, @Arvinderpal)

- Update crictl to v1.16.1. (#82856, @Random-Liu)

- Bump addon-resizer to 1.8.7 to fix issues with using deprecated extensions APIs (#85864, @liggitt)

- Simple script based hyperkube image that bundles all the necessary binaries. This is an equivalent replacement for the image based on the go based hyperkube command + image. (#84662, @dims)

- Hyperkube will now be available in a new Github repository and will not be included in the kubernetes release from 1.17 onwards (#83454, @dims)

- Remove prometheus cluster monitoring addon from kube-up (#83442, @serathius)

- SourcesReady provides the readiness of kubelet configuration sources such as apiserver update readiness. (#81344, @zouyee)

- This PR sets the –cluster-dns flag value to kube-dns service IP whether or not NodeLocal DNSCache is enabled. NodeLocal DNSCache will listen on both the link-local as well as the service IP. (#84383, @prameshj)

- kube-dns add-on:
  - All containers are now being executed under more restrictive privileges.
  - Most of the containers now run as non-root user and has the root filesystem set as read-only.
  - The remaining container running as root only has the minimum Linux capabilities it requires to run.
  - Privilege escalation has been disabled for all containers. (#82347, @pjbgf)

- Kubernetes no longer monitors firewalld. On systems using firewalld for firewall maintenance, kube-proxy will take slightly longer to recover from disruptive firewalld operations that delete kube-proxy's iptables rules.

  As a side effect of these changes, kube-proxy's `sync_proxy_rules_last_timestamp_seconds` metric no longer behaves the way it used to; now it will only

change when services or endpoints actually change, rather than reliably updating every 60 seconds (or whatever). If you are trying to monitor for whether iptables updates are failing, the `sync_proxy_rules_iptables_restore_failures_total` metric may be more useful. (#81517, @danwinship) ### Instrumentation

- Bump version of event-exporter to 0.3.1, to switch it to protobuf. (#83396, @loburm)

- Bumps metrics-server version to v0.3.6 with following bugfix:

    - Don't break metric storage when duplicate pod metrics encountered causing hpa to fail (#83907, @olagacek)

- addons: elasticsearch discovery supports IPv6 (#85543, @SataQiu)

- Update Cluster Autoscaler to 1.17.0; changelog: https://github.com/kubernetes/autoscaler/releases/tag/cluster-autoscaler-1.17.0 (#85610, @losipiuk) ### Network

- The official kube-proxy image (used by kubeadm, among other things) is now compatible with systems running iptables 1.8 in "nft" mode, and will autodetect which mode it should use. (#82966, @danwinship)

- Kubenet: added HostPort IPv6 support. HostPortManager: operates only with one IP family, failing if receives port mapping entries with different IP families. HostPortSyncer: operates only with one IP family, skipping portmap entries with different IP families (#80854, @aojea)

- Kube-proxy now supports DualStack feature with EndpointSlices and IPVS. (#85246, @robscott)

- Remove redundant API validation when using Service Topology with externalTrafficPolicy=Local (#85346, @andrewsykim)

- Update github.com/vishvananda/netlink to v1.0.0 (#83576, @andrewsykim)

- `-- kube-controller-manager --node-cidr-mask-size-ipv4 int32` Default: 24. Mask size for IPv4 node-cidr in dual-stack cluster. `--node-cidr-mask-size-ipv6 int32` Default: 64. Mask size for IPv6 node-cidr in dual-stack cluster.

  These 2 flags can be used only for dual-stack clusters. For non dual-stack clusters, continue to use `--node-cidr-mask-size` flag to configure the mask size.

  The default node cidr mask size for IPv6 was 24 which is now changed to 64. (#79993, @aramase)

- deprecate cleanup-ipvs flag (#83832, @gongguan)

- Kube-proxy: emits a warning when a malformed component config file is used with v1alpha1. (#84143, @phenixblue)

- Set config.BindAddress to IPv4 address `127.0.0.1` if not specified (#83822, @zouyee)

- Updated kube-proxy ipvs README with correct grep argument to list loaded ipvs modules (#83677, @pete911)

- The userspace mode of kube-proxy no longer confusingly logs messages about deleting endpoints that it is actually adding. (#83644, @danwinship)

- Kube-proxy iptables probabilities are now more granular and will result in better distribution beyond 319 endpoints. (#83599, @robscott)

- Significant kube-proxy performance improvements for non UDP ports. (#83208, @robscott)

- Improved performance of kube-proxy with EndpointSlice enabled with more efficient sorting. (#83035, @robscott)

- EndpointSlices are now beta for better Network Endpoint performance at scale. (#84390, @robscott)

- Updated EndpointSlices to use PublishNotReadyAddresses from Services. (#84573, @robscott)

- When upgrading to 1.17 with a cluster with EndpointSlices enabled, the `endpointslice.kubernetes.io/managed-by` label needs to be set on each EndpointSlice. (#85359, @robscott)

- Adds FQDN addressType support for EndpointSlice. (#84091, @robscott)

- Fix incorrect network policy description suggesting that pods are isolated when a network policy has no rules of a given type (#84194, @jackkleeman)

- Fix bug where EndpointSlice controller would attempt to modify shared objects. (#85368, @robscott)

- Splitting IP address type into IPv4 and IPv6 for EndpointSlices (#84971, @robscott)

- Added appProtocol field to EndpointSlice Port (#83815, @howardjohn)

- The docker container runtime now enforces a 220 second timeout on container network operations. (#71653, @liucimin)

- Fix panic in kubelet when running IPv4/IPv6 dual-stack mode with a CNI plugin (#82508, @aanm)

- EndpointSlice hostname is now set in the same conditions Endpoints hostname is. (#84207, @robscott)

- Improving the performance of Endpoint and EndpointSlice controllers by caching Service Selectors (#84280, @gongguan)

- Significant kube-proxy performance improvements when using Endpoint Slices at scale. (#83206, @robscott)

Node

- Mirror pods now include an ownerReference for the node that created them. (#84485, @tallclair)

- Fixed a bug in the single-numa-policy of the TopologyManager. Previously, best-effort pods would result in a terminated state with a TopologyAffinity error. Now they will run as expected. (#83777, @lmdaly)

- Fixed a bug in the single-numa-node policy of the TopologyManager. Previously, pods that only requested CPU resources and did not request any third-party devices would fail to launch with a TopologyAffinity error. Now they will launch successfully. (#83697, @klueska)

- Fix error where metrics related to dynamic kubelet config isn't registered (#83184, @odinuge)

- If container fails because ContainerCannotRun, do not utilize the Fallback-ToLogsOnError TerminationMessagePolicy, as it masks more useful logs. (#81280, @yqwang-ms)

- Use online nodes instead of possible nodes when discovering available NUMA nodes (#83196, @zouyee)

- Use IPv4 in wincat port forward. (#83036, @liyanhui1228)

- Single static pod files and pod files from http endpoints cannot be larger than 10 MB. HTTP probe payloads are now truncated to 10KB. (#82669, @rphillips)

- Limit the body length of exec readiness/liveness probes. remote CRIs and Docker shim read a max of 16MB output of which the exec probe itself inspects 10kb. (#82514, @dims)

- Kubelet: Added kubelet serving certificate metric `server_rotation_seconds` which is a histogram reporting the age of a just rotated serving certificate in seconds. (#84534, @sambdavidson)

- Reduce default NodeStatusReportFrequency to 5 minutes. With this change, periodic node status updates will be send every 5m if node status doesn't change (otherwise they are still send with 10s).

  Bump NodeProblemDetector version to v0.8.0 to reduce forced NodeStatus updates frequency to 5 minutes. (#84007, @wojtek-t)

- The topology manager aligns resources for pods of all QoS classes with respect to NUMA locality, not just Guaranteed QoS pods. (#83492, @ConnorDoyle)

- Fix a bug that a node Lease object may have been created without OwnerReference. (#84998, @wojtek-t)

- External facing APIs in plugin registration and device plugin packages are now available under k8s.io/kubelet/pkg/apis/ (#83551, @dims) ### Release

- Added the `crictl` Windows binaries as well as the Linux 32bit binary to the release archives (#83944, @saschagrunert)

- Bumps the minimum version of Go required for building Kubernetes to 1.12.4. (#83596, @jktomer)

- The deprecated mondo `kubernetes-test` tarball is no longer built. Users running Kubernetes e2e tests should use the `kubernetes-test-portable` and `kubernetes-test-{OS}-{ARCH}` tarballs instead. (#83093, @ixdy)

Scheduling

- Only validate duplication of the RequestedToCapacityRatio custom priority and allow other custom predicates/priorities (#84646, @liu-cong)
- Scheduler policy configs can no longer be declared multiple times (#83963, @damemi)
- TaintNodesByCondition was graduated to GA, CheckNodeMemoryPressure, CheckNodePIDPressure, CheckNodeDiskPressure, CheckNodeCondition were accidentally removed since 1.12, the replacement is to use CheckNodeUnschedulablePred (#84152, @draveness)
- [migration phase 1] PodFitsHostPorts as filter plugin (#83659, @wgliang)
- [migration phase 1] PodFitsResources as framework plugin (#83650, @wgliang)
- [migration phase 1] PodMatchNodeSelector/NodAffinity as filter plugin (#83660, @wgliang)
- Add more tracing steps in generic_scheduler (#83539, @wgliang)
- [migration phase 1] PodFitsHost as filter plugin (#83662, @wgliang)
- Fixed a scheduler panic when using PodAffinity. (#82841, @Huang-Wei)
- Take the context as the first argument of Schedule. (#82119, @wgliang)
- Fixed an issue that the correct PluginConfig.Args is not passed to the corresponding PluginFactory in kube-scheduler when multiple PluginConfig items are defined. (#82483, @everpeace)
- Profiling is enabled by default in the scheduler (#84835, @denkensk)
- Scheduler now reports metrics on cache size including nodes, pods, and assumed pods (#83508, @damemi)
- User can now use component config to configure NodeLabel plugin for the scheduler framework. (#84297, @liu-cong)
- Optimize inter-pod affinity preferredDuringSchedulingIgnoredDuringExecution type, up to 4x in some cases. (#84264, @ahg-g)
- Filter plugin for cloud provider storage predicate (#84148, @gongguan)
- Refactor scheduler's framework permit API. (#83756, @hex108)
- Add incoming pods metrics to scheduler queue. (#83577, @liu-cong)
- Allow dynamically set glog logging level of kube-scheduler (#83910,

@mrkm4ntr)

- Add latency and request count metrics for scheduler framework. (#83569, @liu-cong)
- Expose SharedInformerFactory in the framework handle (#83663, @draveness)
- Add per-pod scheduling metrics across 1 or more schedule attempts. (#83674, @liu-cong)
- Add `podInitialBackoffDurationSeconds` and `podMaxBackoffDurationSeconds` to the scheduler config API (#81263, @draveness)
- Expose kubernetes client in the scheduling framework handle. (#82432, @draveness)
- Remove MaxPriority in the scheduler API, please use MaxNodeScore or MaxExtenderPriority instead. (#83386, @draveness)
- Consolidate ScoreWithNormalizePlugin into the ScorePlugin interface (#83042, @draveness)
- New APIs to allow adding/removing pods from pre-calculated prefilter state in the scheduling framework (#82912, @ahg-g)
- Added Clone method to the scheduling framework's PluginContext and ContextData. (#82951, @ahg-g)
- Modified the scheduling framework's Filter API. (#82842, @ahg-g)
- Critical pods can now be created in namespaces other than kube-system. To limit critical pods to the kube-system namespace, cluster admins should create an admission configuration file limiting critical pods by default, and a matching quota object in the `kube-system` namespace permitting critical pods in that namespace. See https://kubernetes.io/docs/concepts/policy/resource-quotas/#limit-priority-class-consumption-by-default for details. (#76310, @ravisantoshgudimetla)
- Scheduler ComponentConfig fields are now pointers (#83619, @damemi)
- Scheduler Policy API has a new recommended apiVersion `apiVersion: kubescheduler.config.k8s.io/v1` which is consistent with the scheduler API group `kubescheduler.config.k8s.io`. It holds the same API as the old apiVersion `apiVersion: v1`. (#83578, @Huang-Wei)
- Rename PluginContext to CycleState in the scheduling framework (#83430, @draveness)
- Some scheduler extender API fields are moved from `pkg/scheduler/api` to `pkg/scheduler/apis/extender/v1`. (#83262, @Huang-Wei)
- Kube-scheduler: emits a warning when a malformed component config file is used with v1alpha1. (#84129, @obitech)
- Kube-scheduler now falls back to emitting events using core/v1 Events when events.k8s.io/v1beta1 is disabled. (#83692, @yastij)
- Expand scheduler priority functions and scheduling framework plugins' node score range to [0, 100]. Note: this change is internal and does not affect extender and RequestedToCapacityRatio custom priority, which are still expected to provide a [0, 10] range. (#83522, @draveness)

Storage

- Bump CSI version to 1.2.0 (#84832, @gnufied)

- CSI Migration: Fixes issue where all volumes with the same inline volume inner spec name were staged in the same path. Migrated inline volumes are now staged at a unique path per unique volume. (#84754, @davidz627)

- CSI Migration: GCE PD access mode now reflects read only status of inline volumes - this allows multi-attach for read only many PDs (#84809, @davidz627)

- CSI detach timeout increased from 10 seconds to 2 minutes (#84321, @cduchesne)

- Ceph RBD volume plugin now does not use any keyring (`/etc/ceph/ceph.client.lvs01cinder.keyring`, `/etc/ceph/ceph.keyring`, `/etc/ceph/keyring`, `/etc/ceph/keyring.bin`) for authentication. Ceph user credentials must be provided in PersistentVolume objects and referred Secrets. (#75588, @smileusd)

- Validate Gluster IP (#83104, @zouyee)

- PersistentVolumeLabel admission plugin, responsible for labeling `PersistentVolumes` with topology labels, now does not overwrite existing labels on PVs that were dynamically provisioned. It trusts the dynamic provisioning that it provided the correct labels to the `PersistentVolume`, saving one potentially expensive cloud API call. `PersistentVolumes` created manually by users are labelled by the admission plugin in the same way as before. (#82830, @jsafrane)

- Existing PVs are converted to use volume topology if migration is enabled. (#83394, @bertinatto)

- local: support local filesystem volume with block resource reconstruction (#84218, @cofyc)

- Fixed binding of block PersistentVolumes / PersistentVolumeClaims when BlockVolume feature is off. (#84049, @jsafrane)

- Report non-confusing error for negative storage size in PVC spec. (#82759, @sttts)

- Fixed "requested device X but found Y" attach error on AWS. (#85675, @jsafrane)

- Reduced frequency of DescribeVolumes calls of AWS API when attaching/detaching a volume. (#84181, @jsafrane)

- Fixed attachment of AWS volumes that have just been detached. (#83567, @jsafrane)

- Fix possible fd leak and closing of dirs when using openstack (#82873, @odinuge)

- local: support local volume block mode reconstruction (#84173, @cofyc)

- Fixed cleanup of raw block devices after kubelet restart. (#83451, @jsafrane)

- Add data cache flushing during unmount device for GCE-PD driver in Windows Server. (#83591, @jingxu97) ### Windows

- Adds Windows Server build information as a label on the node. (#84472, @gab-satchi)

- Fixes kube-proxy bug accessing self nodeip:port on windows (#83027, @liggitt)

- When using Containerd on Windows, the `TerminationMessagePath` file will now be mounted in the Windows Pod. (#83057, @bclau)

- Fix kubelet metrics gathering on non-English Windows hosts (#84156, @wawa0210)

Dependencies

- Update etcd client side to v3.4.3 (#83987, @wenjiaswe)
- Kubernetes now requires go1.13.4+ to build (#82809, @liggitt)
- Update to use go1.12.12 (#84064, @cblecker)
- Update to go 1.12.10 (#83139, @cblecker)
- Update default etcd server version to 3.4.3 (#84329, @jingyih)

Detailed go Dependency Changes

Added

- github.com/OpenPeeDeeP/depguard: v1.0.1
- github.com/StackExchange/wmi: 5d04971
- github.com/agnivade/levenshtein: v1.0.1
- github.com/alecthomas/template: a0175ee
- github.com/alecthomas/units: 2efee85
- github.com/andreyvit/diff: c7f18ee
- github.com/anmitsu/go-shlex: 648efa6
- github.com/bazelbuild/rules_go: 6dae44d
- github.com/bgentry/speakeasy: v0.1.0
- github.com/bradfitz/go-smtpd: deb6d62
- github.com/cockroachdb/datadriven: 80d97fb
- github.com/creack/pty: v1.1.7
- github.com/gliderlabs/ssh: v0.1.1
- github.com/go-critic/go-critic: 1df3008
- github.com/go-kit/kit: v0.8.0
- github.com/go-lintpack/lintpack: v0.5.2
- github.com/go-logfmt/logfmt: v0.3.0
- github.com/go-ole/go-ole: v1.2.1

- github.com/go-stack/stack: v1.8.0
- github.com/go-toolsmith/astcast: v1.0.0
- github.com/go-toolsmith/astcopy: v1.0.0
- github.com/go-toolsmith/astequal: v1.0.0
- github.com/go-toolsmith/astfmt: v1.0.0
- github.com/go-toolsmith/astinfo: 9809ff7
- github.com/go-toolsmith/astp: v1.0.0
- github.com/go-toolsmith/pkgload: v1.0.0
- github.com/go-toolsmith/strparse: v1.0.0
- github.com/go-toolsmith/typep: v1.0.0
- github.com/gobwas/glob: v0.2.3
- github.com/golangci/check: cfe4005
- github.com/golangci/dupl: 3e9179a
- github.com/golangci/errcheck: ef45e06
- github.com/golangci/go-misc: 927a3d8
- github.com/golangci/go-tools: e32c541
- github.com/golangci/goconst: 041c5f2
- github.com/golangci/gocyclo: 2becd97
- github.com/golangci/gofmt: 0b8337e
- github.com/golangci/golangci-lint: v1.18.0
- github.com/golangci/gosec: 66fb7fc
- github.com/golangci/ineffassign: 42439a7
- github.com/golangci/lint-1: ee948d0
- github.com/golangci/maligned: b1d8939
- github.com/golangci/misspell: 950f5d1
- github.com/golangci/prealloc: 215b22d
- github.com/golangci/revgrep: d9c87f5
- github.com/golangci/unconvert: 28b1c44
- github.com/google/go-github: v17.0.0+incompatible
- github.com/google/go-querystring: v1.0.0
- github.com/gostaticanalysis/analysisutil: v0.0.3
- github.com/jellevandenhooff/dkim: f50fe3d
- github.com/julienschmidt/httprouter: v1.2.0
- github.com/klauspost/compress: v1.4.1
- github.com/kr/logfmt: b84e30a
- github.com/logrusorgru/aurora: a7b3b31
- github.com/mattn/go-runewidth: v0.0.2
- github.com/mattn/goveralls: v0.0.2
- github.com/mitchellh/go-ps: 4fdf99a
- github.com/mozilla/tls-observatory: 8791a20
- github.com/mwitkow/go-conntrack: cc309e4
- github.com/nbutton23/zxcvbn-go: eafdab6
- github.com/olekukonko/tablewriter: a0225b3
- github.com/quasilyte/go-consistent: c6f3937
- github.com/rogpeppe/fastuuid: 6724a57
- github.com/ryanuber/go-glob: 256dc44

- github.com/sergi/go-diff: v1.0.0
- github.com/shirou/gopsutil: c95755e
- github.com/shirou/w32: bb4de01
- github.com/shurcooL/go-goon: 37c2f52
- github.com/shurcooL/go: 9e1955d
- github.com/sourcegraph/go-diff: v0.5.1
- github.com/tarm/serial: 98f6abe
- github.com/tidwall/pretty: v1.0.0
- github.com/timakin/bodyclose: 87058b9
- github.com/ultraware/funlen: v0.0.2
- github.com/urfave/cli: v1.20.0
- github.com/valyala/bytebufferpool: v1.0.0
- github.com/valyala/fasthttp: v1.2.0
- github.com/valyala/quicktemplate: v1.1.1
- github.com/valyala/tcplisten: ceec8f9
- github.com/vektah/gqlparser: v1.1.2
- go.etcd.io/etcd: 3cf2f69
- go.mongodb.org/mongo-driver: v1.1.2
- go4.org: 417644f
- golang.org/x/build: 2835ba2
- golang.org/x/perf: 6e6d33e
- golang.org/x/xerrors: a985d34
- gopkg.in/alecthomas/kingpin.v2: v2.2.6
- gopkg.in/cheggaaa/pb.v1: v1.0.25
- gopkg.in/resty.v1: v1.12.0
- grpc.go4.org: 11d0a25
- k8s.io/system-validators: v1.0.4
- mvdan.cc/interfacer: c200402
- mvdan.cc/lint: adc824a
- mvdan.cc/unparam: fbb5962
- sourcegraph.com/sqs/pbtypes: d3ebe8f

Changed

- github.com/Azure/azure-sdk-for-go: v32.5.0+incompatible → v35.0.0+incompatible
- github.com/Microsoft/go-winio: v0.4.11 → v0.4.14
- github.com/bazelbuild/bazel-gazelle: c728ce9 → 70208cb
- github.com/bazelbuild/buildtools: 80c7f0d → 69366ca
- github.com/beorn7/perks: 3a771d9 → v1.0.0
- github.com/container-storage-interface/spec: v1.1.0 → v1.2.0
- github.com/coredns/corefile-migration: v1.0.2 → v1.0.4
- github.com/coreos/etcd: v3.3.17+incompatible → v3.3.10+incompatible
- github.com/coreos/go-systemd: 39ca1b0 → 95778df
- github.com/docker/go-units: v0.3.3 → v0.4.0
- github.com/docker/libnetwork: a9cd636 → f0e46a7
- github.com/fatih/color: v1.6.0 → v1.7.0

- github.com/ghodss/yaml: c7ce166 → v1.0.0
- github.com/go-openapi/analysis: v0.19.2 → v0.19.5
- github.com/go-openapi/jsonpointer: v0.19.2 → v0.19.3
- github.com/go-openapi/jsonreference: v0.19.2 → v0.19.3
- github.com/go-openapi/loads: v0.19.2 → v0.19.4
- github.com/go-openapi/runtime: v0.19.0 → v0.19.4
- github.com/go-openapi/spec: v0.19.2 → v0.19.3
- github.com/go-openapi/strfmt: v0.19.0 → v0.19.3
- github.com/go-openapi/swag: v0.19.2 → v0.19.5
- github.com/go-openapi/validate: v0.19.2 → v0.19.5
- github.com/godbus/dbus: v4.1.0+incompatible → 2ff6f7f
- github.com/golang/protobuf: v1.3.1 → v1.3.2
- github.com/google/btree: 4030bb1 → v1.0.0
- github.com/google/cadvisor: v0.34.0 → v0.35.0
- github.com/gregjones/httpcache: 787624d → 9cad4c3
- github.com/grpc-ecosystem/go-grpc-middleware: cfaf568 → f849b54
- github.com/grpc-ecosystem/grpc-gateway: v1.3.0 → v1.9.5
- github.com/heketi/heketi: v9.0.0+incompatible → c2e2a4a
- github.com/json-iterator/go: v1.1.7 → v1.1.8
- github.com/mailru/easyjson: 94de47d → v0.7.0
- github.com/mattn/go-isatty: v0.0.3 → v0.0.9
- github.com/mindprince/gonvml: fee913c → 9ebdce4
- github.com/mrunalp/fileutils: 4ee1cc9 → 7d4729f
- github.com/munnerz/goautoneg: a547fc6 → a7dc8b6
- github.com/onsi/ginkgo: v1.8.0 → v1.10.1
- github.com/onsi/gomega: v1.5.0 → v1.7.0
- github.com/opencontainers/runc: 6cc5158 → v1.0.0-rc9
- github.com/opencontainers/selinux: v1.2.2 → 5215b18
- github.com/pkg/errors: v0.8.0 → v0.8.1
- github.com/prometheus/client_golang: v0.9.2 → v1.0.0
- github.com/prometheus/client_model: 5c3871d → fd36f42
- github.com/prometheus/common: 4724e92 → v0.4.1
- github.com/prometheus/procfs: 1dc9a6c → v0.0.2
- github.com/soheilhy/cmux: v0.1.3 → v0.1.4
- github.com/spf13/pflag: v1.0.3 → v1.0.5
- github.com/stretchr/testify: v1.3.0 → v1.4.0
- github.com/syndtr/gocapability: e7cb7fa → d983527
- github.com/vishvananda/netlink: b2de5d1 → v1.0.0
- github.com/vmware/govmomi: v0.20.1 → v0.20.3
- github.com/xiang90/probing: 07dd2e8 → 43a291a
- go.uber.org/atomic: 8dc6146 → v1.3.2
- go.uber.org/multierr: ddea229 → v1.1.0
- go.uber.org/zap: 67bc79d → v1.10.0
- golang.org/x/crypto: e84da03 → 60c769a
- golang.org/x/lint: 8f45f77 → 959b441
- golang.org/x/net: cdfb69a → 13f9640

- golang.org/x/oauth2: 9f33145 → 0f29369
- golang.org/x/sync: 42b3178 → cd5d95a
- golang.org/x/sys: 3b52091 → fde4db3
- golang.org/x/text: e6919f6 → v0.3.2
- golang.org/x/time: f51c127 → 9d24e82
- golang.org/x/tools: 6e04913 → 65e3620
- google.golang.org/grpc: v1.23.0 → v1.23.1
- gopkg.in/inf.v0: v0.9.0 → v0.9.1
- k8s.io/klog: v0.4.0 → v1.0.0
- k8s.io/kube-openapi: 743ec37 → 30be4d1
- k8s.io/repo-infra: 00fe14e → v0.0.1-alpha.1
- k8s.io/utils: 581e001 → e782cd3
- sigs.k8s.io/structured-merge-diff: 6149e45 → b1b620d

Removed

- github.com/cloudflare/cfssl: 56268a6
- github.com/coreos/bbolt: v1.3.3
- github.com/coreos/rkt: v1.30.0
- github.com/globalsign/mgo: eeefdec
- github.com/google/certificate-transparency-go: v1.0.21
- github.com/heketi/rest: aa6a652
- github.com/heketi/utils: 435bc5b
- github.com/pborman/uuid: v1.2.0

v1.17.0-rc.2

Documentation

Downloads for v1.17.0-rc.2

filename	sha512 hash
kubernetes.tar.gz	c71521ab0ab1905776b4e05d99672b7ae6555693b95bc4b84c61134197afe4b
kubernetes-src.tar.gz	68248a0610e6971db509fa3475032704ed2d37bb5937ee462fff0a7f0b84ee9

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	1bd00995cc4a58050d42bd4b430cd353f808eade67556946d70e3e8a365d9e0
kubernetes-client-darwin-amd64.tar.gz	704727bc0d1ca207ff75f901ffb7b8afd29cdc532455e76bfcf8c0223c605c1

filename	sha512 hash
kubernetes-client-linux-386.tar.gz	706a08ecd314afbc63a7fdedcc47f17d4ab8bc36a2a7239d1f86e4321a6bc27
kubernetes-client-linux-amd64.tar.gz	36e7041453f735ea19141eebcce48fdc18cd3cae76fa7ac97bc7b46077e9208
kubernetes-client-linux-arm.tar.gz	e6f1bfa5170238fc676e3717ee212e96076e8ec3ceca6b9a4bd4233822185ec
kubernetes-client-linux-arm64.tar.gz	29bf7b4df9786c9be9995b15f05ebb18bd1dfad9cebf61207c1cac050000cal
kubernetes-client-linux-ppc64le.tar.gz	d1774fbeafd01447d11e05734055ad133dc90108f5c1bc9adaf84b8334f997e
kubernetes-client-linux-s390x.tar.gz	ca93b0539bda64f3e168b1ca1178eaf13f81de297475fc750893678a0cc6c62
kubernetes-client-windows-386.tar.gz	cda5e2526779991d3169d0089e69a2b9e7aa2a127aeb7eec339f4ed1b2b74af
kubernetes-client-windows-amd64.tar.gz	c95b17ecd976cf33f182c2d26d49102dad2d7d78fe36d389b18730d59a8866c

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	aac109354621dc061e01aa6c72aabe43bb1c784a986be86f2e53c8f8243a247
kubernetes-server-linux-arm.tar.gz	d9755aa8c2b0c2d2fdd0756422176c7b34a85553edde03f075363f79bada3f3
kubernetes-server-linux-arm64.tar.gz	e0bf1247872b0361237e7c5f0837b496b2c4ed05e38d5878c11a81d86282ac8
kubernetes-server-linux-ppc64le.tar.gz	44d54154e37b87841123d9f12bce979e5faec88fa9654c0f46904f1bf477af1
kubernetes-server-linux-s390x.tar.gz	9f42dd736b9575eabb4ef37dae8f18e2f433d00d94e7a994734a9b362127de0

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	6f94d2f4a9e2b37797c482a9d42ee9c93d6100fb8b21a983944cb611d57e4e0
kubernetes-node-linux-arm.tar.gz	7078f7372d733b2933d24ddca38401b6d044f90a9c82e12d61c968f545a24a0
kubernetes-node-linux-arm64.tar.gz	9d9365699ecfecac6e7413bdf6d77b917a0e4ed5747810db8c04a3a6d5d2ae4

filename	sha512 hash
kubernetes-node-linux-ppc64le.tar.gz	6103b55f433a864360231cc509bd692b3ebdc6be34e3fe43fdc2fbd1a2bff75
kubernetes-node-linux-s390x.tar.gz	d83008a4cc86c837afd89b3ef7eece8deac67ba29a9a29076333481e630b59a
kubernetes-node-windows-amd64.tar.gz	50b03637ecaacf3e6acd56d1a1eac7a95bb05697a179cd83494726ae0548083

Changelog since v1.17.0-rc.1

Other notable changes

- Resolved regression in admission, authentication, and authorization webhook performance in v1.17.0-rc.1 (#85810, @liggitt)
- Filter published OpenAPI schema by making nullable, required fields non-required in order to avoid kubectl to wrongly reject null values. (#85732, @sttts)
- Update Cluster Autoscaler to 1.17.0; changelog: https://github.com/kubernetes/autoscaler/releases/tag/cluster-autoscaler-1.17.0 (#85610, @losipiuk)
- kube-apiserver: Fixes a bug that hidden metrics can not be enabled by the command-line option `--show-hidden-metrics-for-version`. (#85444, @RainbowMango)
- Fix bug where EndpointSlice controller would attempt to modify shared objects. (#85368, @robscott)
- Revert ensure the KUBE-MARK-DROP chain in kube-proxy mode=iptables. Fix a bug in which kube-proxy deletes the rules associated with the chain in iptables mode. (#85527, @aojea)

v1.17.0-rc.1

Documentation

Downloads for v1.17.0-rc.1

filename	sha512 hash
kubernetes.tar.gz	f349b451362bf489066a5a0ad29e0eeb4c3c9bedd05c46309dbdac85abab6ae
kubernetes-src.tar.gz	7bda9be86cf317827b66d553eb876ec24a649e60d558f9e6e66db842fdf21ee

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	2ada2da6da63ae97dad4a6b5b64326501eed3a19d6f52fdf36b8224a1341142
kubernetes-client-darwin-amd64.tar.gz	ac06923e4c056d5ab97688e1f42ff408eeab0c0e8f3b010630d45f3530696c1
kubernetes-client-linux-386.tar.gz	bb1f4384b6e3aa4cdaf6f629adeb0f81df138f17fc1c5a39c1584c31e228340
kubernetes-client-linux-amd64.tar.gz	f66119eb66f87f19c993e380813c0a8051e562fb62c1e8a2f49237774fe5d9e
kubernetes-client-linux-arm.tar.gz	5a077f979ea775ba45d741b1137ab8a579164601bd8033704e03646ba1c9932
kubernetes-client-linux-arm64.tar.gz	1b595b0aa568b8de3a4a56d9226e618c3648fb167c5ad62c833578ced95293d
kubernetes-client-linux-ppc64le.tar.gz	955b1ecf8b04944cc04a06c3023574b7ccfad655df658320402bca15647b8fc
kubernetes-client-linux-s390x.tar.gz	273d5ca8b5fa042b68c7f01f8f6b293c308ee2ce5675419350f01f7763824b6
kubernetes-client-windows-386.tar.gz	94e20c417c626166cff39a74b05d7eb443a00be9ef7d7f7bb014d170a41ff9b
kubernetes-client-windows-amd64.tar.gz	59deabc78139ad4d6dced570f5292eaa67da4d6fca88f90d7e1484b77a71ef6

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	b73983175bb95accb505ab953635e49d5ce3ef0a58e4de6575e431a6c0c8181
kubernetes-server-linux-arm.tar.gz	7f2b75c7fe9f97dcab6ef00fa72bda3493225c58aa963e6843184f24c32631c
kubernetes-server-linux-arm64.tar.gz	113e978c8400acc8048b0a1979cf5cf95cfec76de7a9b2a5e1c204de8969ff7
kubernetes-server-linux-ppc64le.tar.gz	5dfb184689e9d534788f86dc29bf69e779c5a9927adc50338fee0f7a71603ae
kubernetes-server-linux-s390x.tar.gz	ae7a6399672a7333ba85567bf9b6b1f9af7ad9616acbd0bd52237cb5d5c968f

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	17279e9220a2423aba35056bc631d0b2af1df45297dd40e36949a0ff809d3b7

filename	sha512 hash
kubernetes-node-linux-arm.tar.gz	4611354f214b2d7d5138adaffd764574dfc6a68d27b7f53563c486a8ba25cef...
kubernetes-node-linux-arm64.tar.gz	361e44be2d5a98fb94fd8a39ab9a57198bc7613b2004b239920438853db0a33...
kubernetes-node-linux-ppc64le.tar.gz	69f9da64ae19bb4cfc616a2abd587c9711e9667da4743d776510e92aa23da72...
kubernetes-node-linux-s390x.tar.gz	0fb52cfc24b58887be71d98dd1c826be520eef69448f2f207e849b85533c277...
kubernetes-node-windows-amd64.tar.gz	7d3ce000317a05737101ff1fd0fd0423be2649e5ae387b9d89e57242a3cf8b2...

Changelog since v1.17.0-beta.2

Other notable changes

- kubeadm: fix a panic in case the KubeProxyConfiguration feature gates were not initialized. (#85524, @Arvinderpal)
- kubeadm: fix stray "node-cidr-mask-size" flag in the kube-controller-manager manifest when IPv6DualStack is enabled (#85494, @tedyu)
- CRDs can have fields named `type` with value `array` and nested array with `items` fields without validation to fall over this. (#85223, @sttts)
- Resolves error from v1.17.0-beta.2 with –authorizer-mode webhook complaining about an invalid version (#85441, @liggitt)
- Promote CSIMigrationAWS to Beta (off by default since it requires installation of the AWS EBS CSI Driver) (#85237, @leakingtapan)
  - The in-tree AWS EBS plugin "kubernetes.io/aws-ebs" is now deprecated and will be removed in 1.21. Users should enable CSIMigration + CSIMigrationAWS features and install the AWS EBS CSI Driver (https://github.com/kubernetes-sigs/aws-ebs-csi-driver) to avoid disruption to existing Pod and PVC objects at that time.
  - Users should start using the AWS EBS CSI CSI Driver directly for any new volumes.

v1.17.0-beta.2

Documentation

Downloads for v1.17.0-beta.2

filename	sha512 hash
kubernetes.tar.gz	c4e937e784b26b5b18cac0bc8d4c91e1ae576107f14bb475e2d38687fbb5790...
kubernetes-src.tar.gz	79351b61539c7dc608f4c2a184e788f74503cd801304204de1d52e9ea7b5045...

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	3940ed06c0848b6ddf9e37e66535085d58a5cf7b66a015eab718eb7b4927e9e
kubernetes-client-darwin-amd64.tar.gz	2d6497ad8f5ca592717fcc704f581020922e317e60c2f7def6b6899398666c6
kubernetes-client-linux-386.tar.gz	220713aea7709facd2317015467ce1922abf39cdf486d44f4a3fae497aa119f
kubernetes-client-linux-amd64.tar.gz	afe7fbecb04bba24f6c2d794a7c9b83cdc48032137776e660537541e3b2da6a
kubernetes-client-linux-arm.tar.gz	97addcebe381cfd6ccca94ca4f039ec6e300bda701fc005b1d292a055a2ed85
kubernetes-client-linux-arm64.tar.gz	ca3880ce4c6ca1aa8500d67d0c0eeb85f0323306308d2abe26caa9f97b20432
kubernetes-client-linux-ppc64le.tar.gz	84c40110c8ae3bfc02edd3f6e937032b41dd67b9c48e738ff8590d9b26d249d
kubernetes-client-linux-s390x.tar.gz	31521ef3a8426676e73011dbe5b00a7cb9479aa9d1147e824c1c4287634f1c0
kubernetes-client-windows-386.tar.gz	8601fb516a4557b7579dc3fb3e83e1be2f8e8a6a19aaca5232a5be25d9d2305
kubernetes-client-windows-amd64.tar.gz	00b4e163629f415c9c9caca4e5a9b0753ecddc29fde7d63b379d9d13af8992f

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	a5d21dfe1c05ca6fb1357975b75ff9549642f37e8754a884567c0a00048208b
kubernetes-server-linux-arm.tar.gz	d33a18da3aa4305183f7e3cd3f43f100ed1484c59811c0e8172c5838b94cd0e
kubernetes-server-linux-arm64.tar.gz	2bba562b5e5f28d1b840490cbcc837f421e30a715daca08234b1302f5b7a528
kubernetes-server-linux-ppc64le.tar.gz	a80a80233832aca887b90e688a5ab537468071d8d3237a28cf3e9d7cf4ef1f3
kubernetes-server-linux-s390x.tar.gz	ba23bc2a9c94dd19a8a0a739e15e72dcb30ec103978686e1b4a845175ae8cad

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	76298a3e8a6184c7ca7026a83c016172e22f5be18e68d3ec01a3d6fc1b3ca25
kubernetes-node-linux-arm.tar.gz	d21b60164cb3ee15a493567e1852fb8844f8a5fa5d6d4e71f8078a039d9fea4
kubernetes-node-linux-arm64.tar.gz	9707c6e9c3835f8a5a80be9600f651c992ae717a8a6efc20cc8e67d562ddc62
kubernetes-node-linux-ppc64le.tar.gz	4c8dea040321fbf8e444ba0252567cb3aed3173db4c82b7572b9f8053b1275b
kubernetes-node-linux-s390x.tar.gz	7a720070b28ab5b83ec054a3137d434c39f7b8f1a0c751f5d06b1f2bbe00777
kubernetes-node-windows-amd64.tar.gz	85b3a0bcb5a319f443cc0f3a9aff0b6fb038d42f515698d51cba27a4a1a6b3c

Changelog since v1.17.0-beta.1

Action Required

- Renamed FeatureGate RequestManagement to APIPriorityAndFairness. This feature gate is an alpha and has not yet been associated with any actual functionality. (#85260, @MikeSpreitzer)
  - Action required: change references to feature gate RequestManagement into references to APIPriorityAndFairness
- ACTION REQUIRED: kubeadm: add a new "kubelet-finalize" phase as part of the "init" workflow and an experimental sub-phase to enable automatic kubelet client certificate rotation on primary control-plane nodes. (#84118, @neolit123)
  - Prior to 1.17 and for existing nodes created by "kubeadm init" where kubelet client certificate rotation is desired, you must modify "/etc/kubernetes/kubelet.conf" to point to the PEM symlink for rotation:
  - "client-certificate: /var/lib/kubelet/pki/kubelet-client-current.pem" and "client-key: /var/lib/kubelet/pki/kubelet-client-current.pem", replacing the embedded client certificate and key.
- action required: kubeadm deprecates the use of the hyperkube image (#85094, @rosti)

Other notable changes

- Following metrics have been turned off: (#83837, @RainbowMango)
  - * apiserver_request_count
  - * apiserver_request_latencies
  - * apiserver_request_latencies_summary
  - * apiserver_dropped_requests
  - * etcd_request_latencies_summary

- – ∗ apiserver_storage_transformation_latencies_microseconds
- – ∗ apiserver_storage_data_key_generation_latencies_microseconds
- – ∗ apiserver_storage_transformation_failures_total
- OpenAPI v3 format in CustomResourceDefinition schemas are now documented. (#85381, @sttts)
- The official kube-proxy image (used by kubeadm, among other things) is now (#82966, @danwinship)
  - compatible with systems running iptables 1.8 in "nft" mode, and will autodetect
  - which mode it should use.
- Kubenet: added HostPort IPv6 support (#80854, @aojea)
  - HostPortManager: operates only with one IP family, failing if receives portmapping entries with different IP families
  - HostPortSyncer: operates only with one IP family, skipping portmap entries with different IP families
- Implement the documented API semantics of list-type and map-type atomic to reject non-atomic sub-types. (#84722, @sttts)
- kubeadm: Fix a bug where kubeadm cannot parse kubelet's version if the latter dumps logs on the standard error. (#85351, @rosti)
- EndpointSlices are not enabled by default. Use the EndpointSlice feature gate to enable this feature. (#85365, @robscott)
- Feature gates CSIMigration to Beta (on by default) and CSIMigrationGCE to Beta (off by default since it requires installation of the GCE PD CSI Driver) (#85231, @davidz627)
  - The in-tree GCE PD plugin "kubernetes.io/gce-pd" is now deprecated and will be removed in 1.21. Users should enable CSIMigration + CSIMigrationGCE features and install the GCE PD CSI Driver (https://github.com/kubernetes-sigs/gcp-compute-persistent-disk-csi-driver) to avoid disruption to existing Pod and PVC objects at that time.
  - Users should start using the GCE PD CSI CSI Driver directly for any new volumes.
- kube-controller-manager: Fixes bug setting headless service labels on endpoints (#85361, @liggitt)
- When upgrading to 1.17 with a cluster with EndpointSlices enabled, the `endpointslice.kubernetes.io/managed-by` label needs to be set on each EndpointSlice. (#85359, @robscott)
- Remove redundant API validation when using Service Topology with externalTrafficPolicy=Local (#85346, @andrewsykim)
- Following metrics have been turned off: (#83838, @RainbowMango)
  - ∗ scheduler_scheduling_latency_seconds
  - ∗ scheduler_e2e_scheduling_latency_microseconds
  - ∗ scheduler_scheduling_algorithm_latency_microseconds
  - ∗ scheduler_scheduling_algorithm_predicate_evaluation
  - ∗ scheduler_scheduling_algorithm_priority_evaluation
  - ∗ scheduler_scheduling_algorithm_preemption_evaluation

- – * scheduler_scheduling_binding_latency_microseconds
- CSI Migration: Fixes issue where all volumes with the same inline volume inner spec name were staged in the same path. Migrated inline volumes are now staged at a unique path per unique volume. (#84754, @davidz627)
- kube-controller-manager (#79993, @aramase)
  - –node-cidr-mask-size-ipv4 int32 Default: 24. Mask size for IPv4 node-cidr in dual-stack cluster.
  - –node-cidr-mask-size-ipv6 int32 Default: 64. Mask size for IPv6 node-cidr in dual-stack cluster.
  - These 2 flags can be used only for dual-stack clusters. For non dual-stack clusters, continue to use
  - –node-cidr-mask-size flag to configure the mask size.
  - The default node cidr mask size for IPv6 was 24 which is now changed to 64.
- The following information is available through environment variables: (#83123, @aramase)
  - status.podIPs - the pod's IP addresses
- update github.com/vishvananda/netlink to v1.0.0 (#83576, @andrewsykim)
- kubectl: –resource-version now works properly in label/annotate/set selector commands when racing with other clients to update the target object (#85285, @liggitt)
- `--runtime-config` now supports an `api/beta=false` value which disables all built-in REST API versions matching `v[0-9]+beta[0-9]+`. (#84304, @liggitt)
  - `--feature-gates` now supports an `AllBeta=false` value which disables all beta feature gates.
- kube-proxy now supports DualStack feature with EndpointSlices and IPVS. (#85246, @robscott)
- Add table convertor to componentstatus. (#85174, @zhouya0)
- kubeadm: added retry to all the calls to the etcd API so kubeadm will be more resilient to network glitches (#85201, @fabriziopandini)
- azure: update disk lock logic per vm during attach/detach to allow concurrent updates for different nodes. (#85115, @aramase)
- Scale custom resource unconditionally if resourceVersion is not provided (#80572, @knight42)
- Bump CSI version to 1.2.0 (#84832, @gnufied)
- Adds Windows Server build information as a label on the node. (#84472, @gab-satchi)
- Deprecated metric `kubeproxy_sync_proxy_rules_latency_microseconds` has been turned off. (#83839, @RainbowMango)
- Existing PVs are converted to use volume topology if migration is enabled. (#83394, @bertinatto)
- Finalizer Protection for Service LoadBalancers is now in GA (enabled by default). This feature ensures the Service resource is not fully deleted until the correlating load balancer resources are deleted. (#85023, @MrHohn)

- EndpointSlices are now beta and enabled by default for better Network Endpoint performance at scale. (#84390, @robscott)
- When using Containerd on Windows, the `TerminationMessagePath` file will now be mounted in the Windows Pod. (#83057, @bclau)
- apiservers based on k8s.io/apiserver with delegated authn based on cluster authentication will automatically update to new authentication information when the authoritative configmap is updated. (#85004, @deads2k)
- fix vmss dirty cache issue in disk attach/detach on vmss node (#85158, @andyzhangx)
- Fixes a bug in kubeadm that caused init and join to hang indefinitely in specific conditions. (#85156, @chuckha)
- kube-apiserver: Authentication configuration for mutating and validating admission webhooks referenced from an `--admission-control-config-file` can now be specified with `apiVersion: apiserver.config.k8s.io/v1, kind: WebhookAdmissionConfiguration`. (#85138, @liggitt)
- Kubeadm now includes CoreDNS version 1.6.5 (#85109, @rajansandeep)
    - * `kubernetes` plugin adds metrics to measure kubernetes control plane latency.
    - * the `health` plugin now includes the `lameduck` option by default, which waits for a duration before shutting down.
- Kubeadm now includes CoreDNS version 1.6.5 (#85108, @rajansandeep)
    - * `kubernetes` plugin adds metrics to measure kubernetes control plane latency.
    - * the `health` plugin now includes the `lameduck` option by default, which waits for a duration before shutting down.
- kube-apiserver: The `ResourceQuota` admission plugin configuration referenced from `--admission-control-config-file` admission config has been promoted to `apiVersion: apiserver.config.k8s.io/v1, kind: ResourceQuotaConfiguration` with no schema changes. (#85099, @liggitt)
- kube-apiserver: The `AdmissionConfiguration` type accepted by `--admission-control-config-file` has been promoted to `apiserver.config.k8s.io/v1` with no schema changes. (#85098, @liggitt)
- New flag `--show-hidden-metrics-for-version` in kube-apiserver can be used to show all hidden metrics that deprecated in the previous minor release. (#84292, @RainbowMango)
- The ResourceQuotaScopeSelectors feature has graduated to GA. The `ResourceQuotaScopeSelectors` feature gate is now unconditionally enabled and will be removed in 1.18. (#82690, @draveness)
- Fixed bug when using kubeadm alpha certs commands with clusters using external etcd (#85091, @fabriziopandini)
- Fix a bug that a node Lease object may have been created without OwnerReference. (#84998, @wojtek-t)
- Splitting IP address type into IPv4 and IPv6 for EndpointSlices (#84971, @robscott)

- Pod process namespace sharing is now Generally Available. The `PodShareProcessNamespace` feature gate is now deprecated and will be removed in Kubernetes 1.19. (#84356, @verb)
- Fix incorrect network policy description suggesting that pods are isolated when a network policy has no rules of a given type (#84194, @jackkleeman)
- add RequiresExactMatch for label.Selector (#85048, @shaloulcy)
- Deprecated metric `rest_client_request_latency_seconds` has been turned off. (#83836, @RainbowMango)
- Removed dependency on kubectl from several storage E2E tests (#84042, @okartau)
- kubeadm no longer defaults or validates the component configs of the kubelet or kube-proxy (#79223, @rosti)
- Add plugin_execution_duration_seconds metric for scheduler framework plugins. (#84522, @liu-cong)
- Moving WindowsRunAsUserName feature to beta (#84882, @marosset)
- Node-specific volume limits has graduated to GA. (#83568, @bertinatto)
- kubelet and aggregated API servers now use v1 TokenReview and SubjectAccessReview endpoints to check authentication/authorization. (#84768, @liggitt) * kube-apiserver can now specify `--authentication-token-webhook-version=v1` or `--authorization-webhook-version=v1` to use v1 TokenReview and SubjectAccessReview API objects when communicating with authentication and authorization webhooks.
- BREAKING CHANGE: Remove plugin watching of deprecated directory {kubelet_root_dir}/plugins and CSI V0 support in accordance with deprecation announcement in https://v1-13.docs.kubernetes.io/docs/setup/release/notes/ (#84533, @davidz627)
- Adds a new label to indicate what is managing an EndpointSlice. (#83965, @robscott)
- Fix a racing issue in client-go UpdateTransportConfig. (#80284, @danielqsj)
- Enables VolumeSnapshotDataSource feature gate and promotes volume snapshot APIs to beta. (#80058, @xing-yang)
- Added appProtocol field to EndpointSlice Port (#83815, @howardjohn)
- kubeadm alpha certs command now skip missing files (#85092, @fabriziopandini)
- A new flag "progress-report-url" has been added to the test context which allows progress information about the test run to be sent to a webhook. In addition, this information is printed to stdout to aid in users watching the logs. (#84524, @johnSchnake)
- kubeadm: remove the deprecated "–cri-socket" flag for "kubeadm upgrade apply". The flag has been deprecated since v1.14. (#85044, @neolit123)
- Clients can request protobuf and json and correctly negotiate with the server for JSON for CRD objects, allowing all client libraries to request protobuf if it is available. If an error occurs negotiating a watch with the server, the error is immediately return by the client `Watch()` method instead of being sent as an `Error` event on the watch stream. (#84692,

89

@smarterclayton)
- Following metrics from kubelet are now marked as with the ALPHA stability level: (#84987, @RainbowMango)
  - node_cpu_usage_seconds_total
  - node_memory_working_set_bytes
  - container_cpu_usage_seconds_total
  - container_memory_working_set_bytes
  - scrape_error
- Following metrics from kubelet are now marked as with the ALPHA stability level: (#84907, @RainbowMango)
  - kubelet_container_log_filesystem_used_bytes
  - kubelet_volume_stats_capacity_bytes
  - kubelet_volume_stats_available_bytes
  - kubelet_volume_stats_used_bytes
  - kubelet_volume_stats_inodes
  - kubelet_volume_stats_inodes_free
  - kubelet_volume_stats_inodes_used
  - plugin_manager_total_plugins
  - volume_manager_total_volumes
- kubeadm: enable the usage of the secure kube-scheduler and kube-controller-manager ports for health checks. For kube-scheduler was 10251, becomes 10259. For kube-controller-manager was 10252, becomes 10257. (#85043, @neolit123)
- kubeadm: prevent potential hanging of commands such as "kubeadm reset" if the apiserver endpoint is not reachable. (#84648, @neolit123)
- Mirror pods now include an ownerReference for the node that created them. (#84485, @tallclair)
- kubeadm: fix skipped etcd upgrade on secondary control-plane nodes when the command "kubeadm upgrade node" is used. (#85024, @neolit123)
- fix race condition when attach/delete azure disk in same time (#84917, @andyzhangx)
- If given an IPv6 bind-address, kube-apiserver will now advertise an IPv6 endpoint for the kubernetes.default service. (#84727, @danwinship)
- kubeadm: the command "kubeadm token create" now has a "–certificate-key" flag that can be used for the formation of join commands for control-planes with automatic copy of certificates (#84591, @TheLastProject)
- Deprecate the instance type beta label ("beta.kubernetes.io/instance-type") in favor of it's GA equivalent: "node.kubernetes.io/instance-type" (#82049, @andrewsykim)
- kube-apiserver: Fixed a regression accepting patch requests > 1MB (#84963, @liggitt)
- Promote NodeLease feature to GA. (#84351, @wojtek-t)
  - The feature make Lease object changes an additional healthiness signal from Node. Together with that, we reduce frequency of NodeStatus updates to 5m by default in case of no changes to status itself
- Following metrics from kube-controller-manager are now marked as with

the ALPHA stability level: (#84896, @RainbowMango)
- storage_count_attachable_volumes_in_use
- attachdetach_controller_total_volumes
- pv_collector_bound_pv_count
- pv_collector_unbound_pv_count
- pv_collector_bound_pvc_count
- pv_collector_unbound_pvc_count

- Deprecate the beta labels for zones ("failure-domain.beta.kubernetes.io/zone") and (#81431, @andrewsykim)
  - regions ("failure-domain.beta.kubernetes.io/region") in favor of their GA equivalents:
  - "topology.kubernetes.io/zone" and "topology.kubernetes.io/region".
  - The beta labels "failure-domain.beta.kubernetes.io/zone" and "failure-domain.beta.kubernetes.io/region" will be removed in v1.21
- kube-apiserver: fixed a bug that could cause a goroutine leak if the apiserver encountered an encoding error serving a watch to a websocket watcher (#84693, @tedyu)
- EndpointSlice hostname is now set in the same conditions Endpoints hostname is. (#84207, @robscott)
- Simple script based hyperkube image that bundles all the necessary binaries. This is a equivalent replacement for the image based on the go based hyperkube command + image. (#84662, @dims)
- configmaps/extension-apiserver-authentication in kube-system is continuously updated by kube-apiservers, instead of just at apiserver start (#82705, @deads2k)
- kubeadm: fix an issue with the kube-proxy container env. variables (#84888, @neolit123)
- Updated EndpointSlices to use PublishNotReadyAddresses from Services. (#84573, @robscott)
- The example API server has renamed its `wardle.k8s.io` API group to `wardle.example.com` (#81670, @liggitt)
- A new kubelet command line option, –reserved-cpus, is introduced to explicitly define the CPU list that will be reserved for system. For example, if –reserved-cpus=0,1,2,3 is specified, then cpu 0,1,2,3 will be reserved for the system. On a system with 24 CPUs, the user may specify isolcpus=4-23 for the kernel option and use CPU 4-23 for the user containers. (#83592, @jianzzha)
- Utilize diagnostics tool to dump GKE windows test logs (#83517, @YangLu1031)
- Improving the performance of Endpoint and EndpointSlice controllers by caching Service Selectors (#84280, @gongguan)
- When the go-client reflector relists, the ResourceVersion list option is set to the reflector's latest synced resource version to ensure the reflector does not "go back in time" and reprocess events older than it has already processed. If the server responds with an HTTP 410 (Gone) status code response, the relist falls back to using resourceVersion="". (#83520, @jpbetz)

- Kubernetes now requires go1.13.4+ to build (#82809, @liggitt)
- Ensure health probes are created for local traffic policy UDP services on Azure (#84802, @feiskyer)
- CRDs defaulting is promoted to GA. Note: the feature gate CustomResourceDefaulting will be removed in 1.18. (#84713, @sttts)
- Profiling is enabled by default in the scheduler (#84835, @denkensk)
- CSI Migration: GCE PD access mode now reflects read only status of inline volumes - this allows multi-attach for read only many PDs (#84809, @davidz627)
- All resources within the rbac.authorization.k8s.io/v1alpha1 and rbac.authorization.k8s.io/v1beta1 API groups are deprecated in favor of rbac.authorization.k8s.io/v1, and will no longer be served in v1.20. (#84758, @liggitt)
- Scheduler ComponentConfig fields are now pointers (#83619, @damemi)
- Adding initial EndpointSlice metrics. (#83257, @robscott)

v1.17.0-beta.1

Documentation

Downloads for v1.17.0-beta.1

filename	sha512 hash
kubernetes.tar.gz	6d6c61bb4d3372d56b7a429b5b8b5adbfb0aaddd65283d169bb719b8aca7c27
kubernetes-src.tar.gz	9878c454c5b482621a7ddeab2ab3290fdafd0cfb3d580b261081ba3943b19b1

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	67c9d4d97db40ee94a5e021642eeea006dfd66f0c50ccd0d833c52d2bc4156f
kubernetes-client-darwin-amd64.tar.gz	9a1494c082af52186620d1cd1b02f8a8f4af7e676e2ec217f41cf2915bd6fb1
kubernetes-client-linux-386.tar.gz	9de6254a6a267ea283b6118d9da079f072e73ba377e81a361943f6d42baa5dc
kubernetes-client-linux-amd64.tar.gz	a93d028c3adda047864b36f314752fbe4745bb6ad8f37574cc124eb1453bad0
kubernetes-client-linux-arm.tar.gz	5ca7feea1c4a33cf92f0ee79a92daee4876b43c626346dcc701bb7d6b956c00
kubernetes-client-linux-arm64.tar.gz	d6a63efa140a1c2cde43252e9f917a02752e90628b51ca28ec7118245cd00da
kubernetes-client-linux-ppc64le.tar.gz	cdb805bc7bae052a0585b88c5e7980bd8bf9f32a840728455c18f4f01e03cda

filename	sha512 hash
kubernetes-client-linux-s390x.tar.gz	a9ff545cad6a42dbcdf9f91214c15e2ebee2df20579b7f62ec07397eca792f2
kubernetes-client-windows-386.tar.gz	eb3e4dbbb1dc6829bfa320853b695e61f4daafdff4aaa1f4ffb2e4be4b3f2e0
kubernetes-client-windows-amd64.tar.gz	ad0087ef7a0da961d3f22eab2ddab302be2190df5a2150046f7162dfc5072aa

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	8f4878dfbe7e6abc30516bd801bb5c07873b4a80d8bc560e5b5593e0c1d64be
kubernetes-server-linux-arm.tar.gz	3e5745bffbfb3551b4d4962b7ab6524c9b71f55860a91992dd0495266c56b74
kubernetes-server-linux-arm64.tar.gz	ed00c196e6e229229b6523e7c3a201e00805304ad72c54bf7d0fc456d179140
kubernetes-server-linux-ppc64le.tar.gz	57b5cc144fc4f3bfa6217e0d5494e4a4367f0c0d3504721d4343ff009f00fe1
kubernetes-server-linux-s390x.tar.gz	6f6d2b61a11e30199997582487f7e4f967771e0367d7f471043e0b9b373d463

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	0c1b9dbb630a3bc47a835f9bfd9259d464abae8a30b0824a73b20892b013ed6
kubernetes-node-linux-arm.tar.gz	191087e26632dcc80991530b79bcda49bd4d0a131689ef48164a0bdb30e0a52
kubernetes-node-linux-arm64.tar.gz	f0f58aa8f9ad0ac0a1ee29d318ebb4d14f0bef4cba1fee9081ee2bfb6b41245
kubernetes-node-linux-ppc64le.tar.gz	bf574c4a46731ebc273910176ab67b2455b021972de3aeeb2a2b04af2a10792
kubernetes-node-linux-s390x.tar.gz	5a5d2ece704178a630dc228b51229b8598eb45bf3eaeae75b1475f249922c6a
kubernetes-node-windows-amd64.tar.gz	22fc9a7eb0e8244d51fd11f6d90f44e973983cb21692724c919493a235d2f9b

Changelog since v1.17.0-alpha.3

Action Required

- Graduate ScheduleDaemonSetPods to GA. (feature gate will be removed in 1.18) action required. (#82795, @draveness)

Other notable changes

- kube-scheduler: emits a warning when a malformed component config file is used with v1alpha1. (#84129, @obitech)
- add azure disk encryption(SSE+CMK) support (#84605, @andyzhangx)
- The certificate signer no longer accepts ca.key passwords via the CF-SSL_CA_PK_PASSWORD environment variable. This capability was not prompted by user request, never advertised, and recommended against in the security audit. (#84677, @mikedanese)
- Reduce default NodeStatusReportFrequency to 5 minutes. With this change, periodic node status updates will be send every 5m if node status doesn't change (otherwise they are still send with 10s). (#84007, @wojtek-t)
  - Bump NodeProblemDetector version to v0.8.0 to reduce forced NodeStatus updates frequency to 5 minutes.
- CSI Topology feature is GA. The CSINodeInfo feature gate is deprecated and will be removed in a future release. The storage.k8s.io/v1beta1 CSINode object is deprecated and will be removed in a future release. (#83474, @msau42)
- Only validate duplication of the RequestedToCapacityRatio custom priority and allow other custom predicates/priorities (#84646, @liu-cong)
- Added kubelet serving certificate metric `server_rotation_seconds` which is a histogram reporting the age of a just rotated serving certificate in seconds. (#84534, @sambdavidson)
- During namespace deletion some controllers create event and log spam because they do not recognize namespace deletion as a terminal state. (#84123, @smarterclayton)
- Removed Alpha feature `MountContainers` (#84365, @codenrhoden)
- People can see the right log and note. (#84637, @zhipengzuo)
- Ensure the KUBE-MARK-DROP chain in kube-proxy mode=iptables. The chain is ensured for both ipv4 and ipv6 in dual-stack operation. (#84422, @aojea)
- deprecate cleanup-ipvs flag (#83832, @gongguan)
- Scheduler Policy API has a new recommended apiVersion "apiVersion: kubescheduler.config.k8s.io/v1" which is consistent with the scheduler API group "kubescheduler.config.k8s.io". It holds the same API as the old apiVersion "apiVersion: v1". (#83578, @Huang-Wei)
- Fixed a bug in the single-numa-policy of the TopologyManager. Previously, best-effort pods would result in a terminated state with a TopologyAffinity error. Now they will run as expected. (#83777, @lmdaly)

- local: support local filesystem volume with block resource reconstruction (#84218, @cofyc)
- Fix the bug that EndpointSlice for masters wasn't created after enabling EndpointSlice feature on a pre-existing cluster. (#84421, @tnqn)
- kubelet: a configuration file specified via `--config` is now loaded with strict deserialization, which fails if the config file contains duplicate or unknown fields. This protects against accidentally running with config files that are malformed, mis-indented, or have typos in field names, and getting unexpected behavior. (#83204, @obitech)
- kubeadm now propagates proxy environment variables to kube-proxy (#84559, @yastij)
- Reload apiserver SNI certificates from disk every minute (#84303, @jack-kleeman)
- sourcesReady provides the readiness of kubelet configuration sources such as apiserver update readiness. (#81344, @zouyee)
- Update Azure SDK versions to v35.0.0 (#84543, @andyzhangx)
- Fixed EndpointSlice port name validation to match Endpoint port name validation (allowing port names longer than 15 characters) (#84481, @robscott)
- Scheduler now reports metrics on cache size including nodes, pods, and assumed pods (#83508, @damemi)
- kube-proxy: emits a warning when a malformed component config file is used with v1alpha1. (#84143, @phenixblue)
- Update default etcd server version to 3.4.3 (#84329, @jingyih)
- Scheduler policy configs can no longer be declared multiple times (#83963, @damemi)
- This PR sets the –cluster-dns flag value to kube-dns service IP whether or not NodeLocal DNSCache is enabled. NodeLocal DNSCache will listen on both the link-local as well as the service IP. (#84383, @prameshj)
- Remove prometheus cluster monitoring addon from kube-up (#83442, @serathius)
- update the latest validated version of Docker to 19.03 (#84476, @neolit123)
- kubeadm: always mount the kube-controller-manager hostPath volume that is given by the –flex-volume-plugin-dir flag. (#84468, @neolit123)
- Introduce x-kubernetes-map-type annotation as a CRD API extension. Enables this particular validation for server-side apply. (#84113, @enxebre)
- kube-scheduler now fallbacks to emitting events using core/v1 Events when events.k8s.io/v1beta1 is disabled. (#83692, @yastij)
- Migrate controller-manager and scheduler to EndpointsLeases leader election. (#84084, @wojtek-t)
- User can now use component config to configure NodeLabel plugin for the scheduler framework. (#84297, @liu-cong)
- local: support local volume block mode reconstruction (#84173, @cofyc)
- Fixed kubectl endpointslice output for get requests (#82603, @robscott)
- set config.BindAddress to IPv4 address "127.0.0.1" if not specified (#83822, @zouyee)

- CSI detach timeout increased from 10 seconds to 2 minutes (#84321, @cduchesne)
- Update etcd client side to v3.4.3 (#83987, @wenjiaswe)
    - Deprecated prometheus request meta-metrics have been removed (http_request_duration_microseconds, http_request_duration_microseconds_sum, http_request_duration_microseconds_count, http_request_size_bytes, http_request_size_bytes_sum, http_request_size_bytes_count, http_requests_total, http_response_size_bytes, http_response_size_bytes_sum, http_response_size_bytes_count) due to removal from the prometheus client library. Prometheus http request meta-metrics are now generated from promhttp.InstrumentMetricHandler instead.
- The built-in system:csi-external-provisioner and system:csi-external-attacher cluster roles are removed as of 1.17 release (#84282, @tedyu)
- Pod labels can no longer be updated through the pod/status updates by nodes. (#84260, @tallclair)
- Reload apiserver serving certificate from disk every minute (#84200, @jackkleeman)
- Adds FQDN addressType support for EndpointSlice. (#84091, @robscott)
- Add permit_wait_duration_seconds metric for scheduler. (#84011, @liucong)
- Optimize inter-pod affinity preferredDuringSchedulingIgnoredDuringExecution type, up to 4x in some cases. (#84264, @ahg-g)
- When a namespace is being deleted and spec.finalizers are still being processed, stop returning a 409 conflict error and instead return the object as we would during metadata.finalizer processing. (#84122, @smarterclayton)
- client-ca bundles for the all generic-apiserver based servers will dynamically reload from disk on content changes (#83579, @deads2k)
- Reduced frequency of DescribeVolumes calls of AWS API when attaching/detaching a volume. (#84181, @jsafrane)
- Add a metric to track number of scheduler binding and prioritizing goroutines (#83535, @wgliang)
- Fix kubelet metrics gathering on non-English Windows hosts (#84156, @wawa0210)
- A new `kubelet_preemptions` metric is reported from Kubelets to track the number of preemptions occurring over time, and which resource is triggering those preemptions. (#84120, @smarterclayton)

v1.17.0-alpha.3

Documentation

Downloads for v1.17.0-alpha.3

filename	sha512 hash
kubernetes.tar.gz	dfdb758b21a3dbd820063cb2ba4b4a19e5e1e03fdb95856bf9c99c2c436bbc2
kubernetes-src.tar.gz	1718547ef5baf7ab6514bafff05451fc9d2f0db0b74f094b4d9004e949ef86e

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	207b281b7da796faa34beaf0c8f7e70f9685b132c2838a12e0c8f2084627e2c
kubernetes-client-darwin-amd64.tar.gz	b0c19de40aa4210c0f06e1864779d60a69b75a443042f448746a0cd8cae680a
kubernetes-client-linux-386.tar.gz	e8149e6373b48ab97b844b5450be12ec4bb86c869cdf71f98b78b88a9a9ef53
kubernetes-client-linux-amd64.tar.gz	d4176dfd049ffa1e59b7c4efd4d4189463153fa6cf53d5fc43c953983b74cbc
kubernetes-client-linux-arm.tar.gz	d6de12989c091e78ad95d7e01274936a28ca74219196c27775d00665c9fb98f
kubernetes-client-linux-arm64.tar.gz	2f62aeaa39d7b7ab0840bd6c845d73e6135357edbbf93046c1fbd52d02a8c19
kubernetes-client-linux-ppc64le.tar.gz	895fd028e409cca1667a08ba6d1b32517b23b796530eecef7c1a4783287b45f
kubernetes-client-linux-s390x.tar.gz	50fe03594da3c90932e83d0befad9053ef1fb72f4af1a5c139455c8acc6c10a
kubernetes-client-windows-386.tar.gz	3e32d47078da5d3d31c4b854c01e081a437fab2c01c7e7be291262b029046ac
kubernetes-client-windows-amd64.tar.gz	42ec1f3273ea070cedcf65bbb76ebf05a24aca5ed55af4b17889fb1be3df99b

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	0b1fe1eca603579f70c13509dff32dcb8383ee340b8fc6b8edf23cdaf1f86c1
kubernetes-server-linux-arm.tar.gz	ac1a804dd8980281afe12a116ffaf4ed9fc1066c3a531f3a6ced14f021c69d6
kubernetes-server-linux-arm64.tar.gz	e34daf4c37ab5c2f52a116ed4ca0f7b52c0d0b5863d027550241b03f9019dcb
kubernetes-server-linux-ppc64le.tar.gz	9c285800beecc53cf5293604270cbcc5ba6245ddf4dfe0c0ec9a1359ed3771c
kubernetes-server-linux-s390x.tar.gz	ea883497e80fdb2182342a2bae0382c7d38b0273cae6f8a5ee05d149669134c

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	450197a746a52c3129f97e50b4b69bf2d1e94290be72f1ae143e36bb0fd76b2
kubernetes-node-linux-arm.tar.gz	c10c6ea591a15dc873afb01a7aa1916188e411ba57201f436d6d96cd2bad8cb
kubernetes-node-linux-arm64.tar.gz	47764435a9367571f7de12d54f0aff7d615fc50383230c6fba08475dc33be60
kubernetes-node-linux-ppc64le.tar.gz	48d2694450f4b94e8ff76e95ef102670d4a4c933010afadf7a019db73d96646
kubernetes-node-linux-s390x.tar.gz	20e712415af7304ecb55e9c2c2f29dda3af4a78f5833499c1f51a492c929a45
kubernetes-node-windows-amd64.tar.gz	2e88bf26e1293dd733cf1bfe1f0f2dcfb5c482687cf52690488e943a0922a5c

Changelog since v1.17.0-alpha.2

Action Required

- Graduate TaintNodesByCondition to GA in 1.17. (feature gate will be removed in 1.18) action required (#82703, @draveness)

Other notable changes

- TaintNodesByCondition was graduated to GA, CheckNodeMemoryPressure, CheckNodePIDPressure, CheckNodeDiskPressure, CheckNodeCondition were accidentally removed since 1.12, the replacement is to use CheckNodeUnschedulablePred (#84152, @draveness)
- filter plugin for cloud provider storage predicate (#84148, @gongguan)
- Fixed binding of block PersistentVolumes / PersistentVolumeClaims when BlockVolume feature is off. (#84049, @jsafrane)
- Updated kube-proxy ipvs README with correct grep argument to list loaded ipvs modules (#83677, @pete911)
- Add data cache flushing during unmount device for GCE-PD driver in Windows Server. (#83591, @jingxu97)
- Adds a metric apiserver_request_error_total to kube-apiserver. This metric tallies the number of request_errors encountered by verb, group, version, resource, subresource, scope, component, and code. (#83427, @logicalhan)
- Refactor scheduler's framework permit API. (#83756, @hex108)
- The kubectl's api-resource command now has a `--sort-by` flag to sort resources by name or kind. (#81971, @laddng)
- Update to use go1.12.12 (#84064, @cblecker)
- Update to Ingress-GCE v1.6.1 (#84018, @rramkumar1)

- Update Cluster Autoscaler version to 1.16.2 (CA release docs: https://github.com/kubernetes/autoscaler/releases/tag/cluster-autoscaler-1.16.2) (#84038, @losipiuk)
- When scaling down a ReplicaSet, delete doubled up replicas first, where a "doubled up replica" is defined as one that is on the same node as an active replica belonging to a related ReplicaSet. ReplicaSets are considered "related" if they have a common controller (typically a Deployment). (#80004, @Miciah)
- Promote WatchBookmark feature to GA. (#83195, @wojtek-t)
  - With WatchBookmark feature, clients are able to request watch events with BOOKMARK type. Clients should not assume bookmarks are returned at any specific interval, nor may they assume the server will send any BOOKMARK event during a session.
- kubeadm no longer removes /etc/cni/net.d as it does not install it. Users should remove files from it manually or rely on the component that created them (#83950, @yastij)
- kubeadm: enhance certs check-expiration to show the expiration info of related CAs (#83932, @SataQiu)
- Add incoming pods metrics to scheduler queue. (#83577, @liu-cong)
- An end-user may choose to request logs without confirming the identity of the backing kubelet. This feature can be disabled by setting the `AllowInsecureBackendProxy` feature-gate to false. (#83419, @deads2k)
- Switched intstr.Type to sized integer to follow API guidelines and improve compatibility with proto libraries (#83956, @liggitt)
- Fix handling tombstones in pod-disruption-budged controller. (#83951, @zouyee)
- client-go: improved allocation behavior of the delaying workqueue when handling objects with far-future ready times. (#83945, @barkbay)
- Added the `crictl` Windows binaries as well as the Linux 32bit binary to the release archives (#83944, @saschagrunert)
- Fixed an issue with informers missing an `Added` event if a recently deleted object was immediately recreated at the same time the informer dropped a watch and relisted. (#83911, @matte21)
- Allow dynamically set glog logging level of kube-scheduler (#83910, @mrkm4ntr)
- clean duplicate GetPodServiceMemberships function (#83902, @gongguan)
- Add information from Lease object corresponding to a given Node to kubectl describe node output (#83899, @wojtek-t)
- Gives the right error message when using `kubectl delete` a wrong resource. (#83825, @zhouya0)
- The userspace mode of kube-proxy no longer confusingly logs messages about deleting endpoints that it is actually adding. (#83644, @danwinship)
- Add latency and request count metrics for scheduler framework. (#83569, @liu-cong)
- ETCD version monitor metrics are now marked as with the ALPHA stability level. (#83283, @RainbowMango)

- Significant kube-proxy performance improvements when using Endpoint Slices at scale. (#83206, @robscott)
- Upgrade default etcd server version to 3.3.17 (#83804, @jpbetz)

v1.17.0-alpha.2

Documentation

Downloads for v1.17.0-alpha.2

filename	sha512 hash
kubernetes.tar.gz	37583337b992d9a5ebe5a4677e08c13617b8b9db9ee8f049773b624351c00ad
kubernetes-src.tar.gz	a44fee5be20c7fb64c58d0a69377074db05ec6889892c93ce970406cb393a1f

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	4aa92894eeaedb022e5409e08784ce1bd34ba268032ef93ad4c438b6ed9f1a2
kubernetes-client-darwin-amd64.tar.gz	1815a3bdd1c13782026fced8720201dea2e518dc56a43e2b53f89341108f03e
kubernetes-client-linux-386.tar.gz	9a470907d6203e69c996f8db3cc257af23f9b35236ee2d5a87d22cd6056eef4
kubernetes-client-linux-amd64.tar.gz	011d44cf35c841d331a5a0d88b8a5deb7781fa678702ac6402050d096e72396
kubernetes-client-linux-arm.tar.gz	1f45d9a9852d2b0a0420b0a26b3add9031d7d691c55660d60580614e6ab6e2c
kubernetes-client-linux-arm64.tar.gz	e355f69caed044e5e27efe7ae42027e799a87ec647810fbadf644d147de2f6b
kubernetes-client-linux-ppc64le.tar.gz	355e0d8c5f241bc2303c38447c241ff8f5151af51aeacf15fa2b96e2721ecc0
kubernetes-client-linux-s390x.tar.gz	7cdfc6cde7922290b46f291a168519f4c923fee97968399940164a8a7d85927
kubernetes-client-windows-386.tar.gz	7170da100b2d1d8700990c4175c7d048347b8dcc71e0ceb6c01728f5e6266dc
kubernetes-client-windows-amd64.tar.gz	74484b5c841e1c57c9baf88b84a9cbf3b9865527a8723815cbe8e7384805c80

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	3fb3c5da6e45b32e8d89d4914f0b04cf95242cb0e4ea70b06a665c2975d8b6b
kubernetes-server-linux-arm.tar.gz	ff71c9a3f81f2e43d541b9b043e5f43fd30972c2b0ae5d9f3992f76effdcab2
kubernetes-server-linux-arm64.tar.gz	26b9fce5ed930ad3eea5eeab3bec3b009f65837139f7da3644aacdcccda654f
kubernetes-server-linux-ppc64le.tar.gz	ad980f5efe83da1f2a202035eb1cff44ea72692fc3fc5f7d23fd8fc3b80a679
kubernetes-server-linux-s390x.tar.gz	8e1ab7abd4c13c3d4211e5dd1be63ecd482691fd2cb7b2d3492bb2a02003ec3

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	c0928e414e439ba63321ce770a04ea332a4cc93ec87dd9d222fe3f5a5939951
kubernetes-node-linux-arm.tar.gz	990a253ba49203348a587ca4d4acf7c25ff47a97b39519dfc7d5bdc2f3ea471
kubernetes-node-linux-arm64.tar.gz	79381ad17eefc679fb549126eba23ffa65e625d0e1fec459dd54823897947b1
kubernetes-node-linux-ppc64le.tar.gz	7cfea9b9fa27dcc2024260e19d5e74db2175b491093c8906721d99c94b46af1
kubernetes-node-linux-s390x.tar.gz	590bc2afd835a4a236a4a2ab2cde416aae9efdec14c34355a54b671d89308f3
kubernetes-node-windows-amd64.tar.gz	4c15c7c30de0f9d921b534433332b14eb685ad8a3a416315def1cc1064b8022

Changelog since v1.17.0-alpha.1

Action Required

- Expand scheduler priority functions and scheduling framework plugins' node score range to [0, 100]. action required. Note: this change is internal and does not affect extender and RequestedToCapacityRatio custom priority, which are still expected to provide a [0, 10] range. (#83522, @draveness)
- action required: kubeadm: when adding extra apiserver authorization-modes, the defaults "Node,RBAC" are no longer prepended in the resulting static Pod manifests and a full override is allowed. (#82616, @ghouscht)
- ACTION REQUIRED: kubeadm: properly enable kubelet client certificate rotation on primary control-plane nodes, created using "kubeadm init". A side effect of this change is that for external CA users, kubeadm

now requires "bootstrap-kubelet.conf" instead of "kubelet.conf" during "kubeadm init" and its phases. (#83339, @neolit123)

- Action Required: `kubeadm.k8s.io/v1beta1` has been deprecated, you should update your config to use newer non-deprecated API versions. (#83276, @Klaven)

Other notable changes

- [migration phase 1] PodFitsHostPorts as filter plugin (#83659, @wgliang)
- [migration phase 1] PodFitsResources as framework plugin (#83650, @wgliang)
- Fixed attachment of AWS volumes that have just been detached. (#83567, @jsafrane)
- [migration phase 1] PodMatchNodeSelector/NodAffinity as filter plugin (#83660, @wgliang)
- Upgrade to etcd client 3.3.17 to fix bug where etcd client does not parse IPv6 addresses correctly when members are joining, and to fix bug where failover on multi-member etcd cluster fails certificate check on DNS mismatch (#83801, @jpbetz)
- Fixed panic when accessing CustomResources of a CRD with x-kubernetes-int-or-string. (#83787, @sttts)
- Change `pod_preemption_victims` metric from Gauge to Histogram. (#83603, @Tabrizian)
- Expose SharedInformerFactory in the framework handle (#83663, @draveness)
- Add more tracing steps in generic_scheduler (#83539, @wgliang)
- [migration phase 1] PodFitsHost as filter plugin (#83662, @wgliang)
- The topology manager aligns resources for pods of all QoS classes with respect to NUMA locality, not just Guaranteed QoS pods. (#83492, @ConnorDoyle)
- Fix unsafe JSON construction in a number of locations in the codebase (#81158, @zouyee)
- Fixed a bug in the single-numa-node policy of the TopologyManager. Previously, pods that only requested CPU resources and did not request any third-party devices would fail to launch with a TopologyAffinity error. Now they will launch successfully. (#83697, @klueska)
- Add per-pod scheduling metrics across 1 or more schedule attempts. (#83674, @liu-cong)
- Fix validation message to mention bytes, not characters. (#80880, @DirectXMan12)
- external facing APIs in pluginregistration and deviceplugin packages are now available under k8s.io/kubelet/pkg/apis/ (#83551, @dims)
- Fix error where metrics related to dynamic kubelet config isn't registered (#83184, @odinuge)
- The VolumeSubpathEnvExpansion feature is graduating to GA. The `VolumeSubpathEnvExpansion` feature gate is unconditionally enabled, and

will be removed in v1.19. (#82578, @kevtaylor)

- Openstack: Do not delete managed LB in case of security group reconciliation errors (#82264, @multi-io)
- The mutating and validating admission webhook plugins now read configuration from the admissionregistration.k8s.io/v1 API. (#80883, @liggitt)
- kubeadm: implemented structured output of 'kubeadm token list' in JSON, YAML, Go template and JsonPath formats (#78764, @bart0sh)
- kube-proxy: a configuration file specified via `--config` is now loaded with strict deserialization, which fails if the config file contains duplicate or unknown fields. This protects against accidentally running with config files that are malformed, mis-indented, or have typos in field names, and getting unexpected behavior. (#82927, @obitech)
- Add "podInitialBackoffDurationSeconds" and "podMaxBackoffDurationSeconds" to the scheduler config API (#81263, @draveness)
- Authentication token cache size is increased (from 4k to 32k) to support clusters with many nodes or many namespaces with active service accounts. (#83643, @lavalamp)
- Bumps the minimum version of Go required for building Kubernetes to 1.12.4. (#83596, @jktomer)
- kube-proxy iptables probabilities are now more granular and will result in better distribution beyond 319 endpoints. (#83599, @robscott)
- Fixed the bug that deleted services were processed by EndpointSliceController repeatedly even their cleanup were successful. (#82996, @tnqn)
- If a bad flag is supplied to a kubectl command, only a tip to run –help is printed, instead of the usage menu. Usage menu is printed upon running `kubectl command --help`. (#82423, @sallyom)
- If container fails because ContainerCannotRun, do not utilize the FallbackToLogsOnError TerminationMessagePolicy, as it masks more useful logs. (#81280, @yqwang-ms)
- Fixed cleanup of raw block devices after kubelet restart. (#83451, @jsafrane)
- Commands like `kubectl apply` now return errors if schema-invalid annotations are specified, rather than silently dropping the entire annotations section. (#83552, @liggitt)
- Expose kubernetes client in the scheduling framework handle. (#82432, @draveness)
- kubeadm: fix wrong default value for the "upgrade node –certificate-renewal" flag. (#83528, @neolit123)
- IP validates if a string is a valid IP address (#83104, @zouyee)
- The `--certificate-authority` flag now correctly overrides existing skip TLS or CA data settings in the kubeconfig file (#83547, @liggitt)
- hyperkube will now be available in a new github repository and will not be included in the kubernetes release from 1.17 onwards (#83454, @dims)
- more complete and accurate logging of stack backtraces in E2E failures (#82176, @pohly)
- Kubeadm: add support for 127.0.0.1 as advertise address. kubeadm will

automatically replace this value with matching global unicast IP address on the loopback interface. (#83475, @fabriziopandini)

- Rename PluginContext to CycleState in the scheduling framework (#83430, @draveness)
- kube-scheduler: a configuration file specified via `--config` is now loaded with strict deserialization, which fails if the config file contains duplicate or unknown fields. This protects against accidentally running with config files that are malformed, mis-indented, or have typos in field names, and getting unexpected behavior. (#83030, @obitech)
- Significant kube-proxy performance improvements for non UDP ports. (#83208, @robscott)
- Fixes a flaw (CVE-2019-11253) in json/yaml decoding where large or malformed documents could consume excessive server resources. Request bodies for normal API requests (create/delete/update/patch operations of regular resources) are now limited to 3MB. (#83261, @liggitt)

v1.17.0-alpha.1

Documentation

Downloads for v1.17.0-alpha.1

filename	sha512 hash
kubernetes.tar.gz	40985964b5f4b1e1eb448a8ca61ae5fe05b76cf4e97a4a6b0df0f7933071239
kubernetes-src.tar.gz	475dfeb8544804dcc206f2284205fb1ee0bcb73169419be5e548ff91ffe6a35

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	3f894661ed9b6ed3e75b6882e6c3e4858325f3b7c5c83cb8f7f632a8c8f30dc
kubernetes-client-darwin-amd64.tar.gz	f3070d79b0835fdc0791bbc31a334d8b46bf1bbb02f389c871b31063417598c
kubernetes-client-linux-386.tar.gz	64e8961fa32a18a780e40b753772c6794c90a6dd5834388fd67564bb36f5301
kubernetes-client-linux-amd64.tar.gz	d7ba0f5f4c879d8dcd4404a7c18768190f82985425ab394ddc832ee71c407d0
kubernetes-client-linux-arm.tar.gz	36fc47ee9530ee8a89d64d4be6b78b09831d0838a01b63d2a824a9e7dd0c212
kubernetes-client-linux-arm64.tar.gz	a0a8fba0f4424f0a1cb7bad21244f47f98ba717165eaa49558c2612e1949a1b
kubernetes-client-linux-ppc64le.tar.gz	eaae9ed0cc8c17f27cff31d92c95c11343b9f383de27e335c83bfdf236e6da6

filename	sha512 hash
kubernetes-client-linux-s390x.tar.gz	994cf2dc42d20d36956a51b98dde31a00eae3bd853f7be4fbc32f48fec7b323
kubernetes-client-windows-386.tar.gz	68ebe4abea5a174eb189caea567e24e87cca57e7fbc9f8ec344aafbaf48c892
kubernetes-client-windows-amd64.tar.gz	f29cd3caf5b40622366eae87e8abb47bea507f275257279587b507a00a858de

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	93e560e8572c6a593583d20a35185b93d04c950e6b1980a7b40ca5798958d18
kubernetes-server-linux-arm.tar.gz	fe2af93336280e1251f97afecbdfb7416fd9dd7d08b3e5539abeea8ccaf7114
kubernetes-server-linux-arm64.tar.gz	efc32c8477efda554d8e82d6e52728f58e706d3d53d1072099b3297c310632e
kubernetes-server-linux-ppc64le.tar.gz	bda4fce6f5be7d0102ff265e0ba10e4dab776caeba1cebdf57db9891a34b497
kubernetes-server-linux-s390x.tar.gz	655c7157176f4f972c80877d73b0e390aaff455a5dcd046b469eb0f07d18ea1

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	1ec25c0350973ed06f657f2b613eb07308a9a4f0af7e72ebc5730c3c8d39ce3
kubernetes-node-linux-arm.tar.gz	c65ac3db834596bcb9e81ffa5b94493244385073a232e9f7853759bce2b96a8
kubernetes-node-linux-arm64.tar.gz	0de8af66269db1ef7513f92811ec52a780abb3c9c49c0a4de9337eb987119bb
kubernetes-node-linux-ppc64le.tar.gz	adb43c68cd5d1d52f254a14d80bb66667bfc8b367176ff2ed242184cf0b5acc
kubernetes-node-linux-s390x.tar.gz	1c834cfc06b9ba4a6da3bca2d504b734c935436546bc9304c7933e256dba849
kubernetes-node-windows-amd64.tar.gz	6fc54fd17ebb65a6bd3d4efe93a713cc2aaea54599ddd3d73d01e93d6484087

Changelog since v1.16.0

Action Required

- The deprecated feature gates `GCERegionalPersistentDisk`, `EnableAggregatedDiscoveryTimeout` and `PersistentLocalVolumes` are now unconditionally enabled and can no longer be specified in component invocations. (#82472, @draveness)
- ACTION REQUIRED: (#81668, @darshanime)
  - Deprecate the default service IP CIDR. The previous default was `10.0.0.0/24` which will be removed in 6 months/2 releases. Cluster admins must specify their own desired value, by using `--service-cluster-ip-range` on kube-apiserver.
- Remove deprecated "include-uninitialized" flag. action required (#80337, @draveness)

Other notable changes

- Bump version of event-exporter to 0.3.1, to switch it to protobuf. (#83396, @loburm)
- kubeadm: use the –service-cluster-ip-range flag to init or use the Service-Subnet field in the kubeadm config to pass a comma separated list of Service CIDRs. (#82473, @Arvinderpal)
- Remove MaxPriority in the scheduler API, please use MaxNodeScore or MaxExtenderPriority instead. (#83386, @draveness)
- Fixes a goroutine leak in kube-apiserver when a request times out. (#83333, @lavalamp)
- Some scheduler extender API fields are moved from `pkg/scheduler/api` to `pkg/scheduler/apis/extender/v1`. (#83262, @Huang-Wei)
- Fix aggressive VM calls for Azure VMSS (#83102, @feiskyer)
- Update Azure load balancer to prevent orphaned public IP addresses (#82890, @chewong)
- Use online nodes instead of possible nodes when discovering available NUMA nodes (#83196, @zouyee)
- Fix typos in `certificates.k8s.io/v1beta1` KeyUsage constant names: `UsageContentCommittment` becomes `UsageContentCommitment` and `UsageNetscapSGC` becomes `UsageNetscapeSGC`. (#82511, @abursavich)
- Fixes the bug in informer-gen that it produces incorrect code if a type has nonNamespaced tag set. (#80458, @tatsuhiro-t)
- Update to go 1.12.10 (#83139, @cblecker)
- Update crictl to v1.16.1. (#82856, @Random-Liu)
- Reduces the number of calls made to the Azure API when requesting the instance view of a virtual machine scale set node. (#82496, @hasheddan)
- Consolidate ScoreWithNormalizePlugin into the ScorePlugin interface (#83042, @draveness)
- On AWS nodes with multiple network interfaces, kubelet should now more reliably report the same primary node IP. (#80747, @danwinship)
- Fixes kube-proxy bug accessing self nodeip:port on windows (#83027,

@liggitt)

- Resolves bottleneck in internal API server communication that can cause increased goroutines and degrade API Server performance (#80465, @answer1991)
- The deprecated mondo `kubernetes-test` tarball is no longer built. Users running Kubernetes e2e tests should use the `kubernetes-test-portable` and `kubernetes-test-{OS}-{ARCH}` tarballs instead. (#83093, @ixdy)
- Improved performance of kube-proxy with EndpointSlice enabled with more efficient sorting. (#83035, @robscott)
- New APIs to allow adding/removing pods from pre-calculated prefilter state in the scheduling framework (#82912, @ahg-g)
- Conformance tests may now include disruptive tests. If you are running tests against a live cluster, consider skipping those tests tagged as `Disruptive` to avoid non-test workloads being impacted. Be aware, skipping any conformance tests (even disruptive ones) will make the results ineligible for consideration for the CNCF Certified Kubernetes program. (#82664, @johnSchnake)
- Resolves regression generating informers for packages whose names contain . characters (#82410, @nikhita)
- Added metrics 'authentication_latency_seconds' that can be used to understand the latency of authentication. (#82409, @RainbowMango)
- kube-dns add-on: (#82347, @pjbgf)
    - * All containers are now being executed under more restrictive privileges.
    - * Most of the containers now run as non-root user and has the root filesystem set as read-only.
    - * The remaining container running as root only has the minimum Linux capabilities it requires to run.
    - * Privilege escalation has been disabled for all containers.
- k8s dockerconfigjson secrets are now compatible with docker config desktop authentication credentials files (#82148, @bbourbie)
- Use ipv4 in wincat port forward. (#83036, @liyanhui1228)
- Added Clone method to the scheduling framework's PluginContext and ContextData. (#82951, @ahg-g)
- Bump metrics-server to v0.3.5 (#83015, @olagacek)
- dashboard: disable the dashboard Deployment on non-Linux nodes. This step is required to support Windows worker nodes. (#82975, @wawa0210)
- Fix possible fd leak and closing of dirs when using openstack (#82873, @odinuge)
- PersistentVolumeLabel admission plugin, responsible for labeling `PersistentVolumes` with topology labels, now does not overwrite existing labels on PVs that were dynamically provisioned. It trusts the dynamic provisioning that it provided the correct labels to the `PersistentVolume`, saving one potentially expensive cloud API call. `PersistentVolumes` created manually by users are labelled by the admission plugin in the same way as before. (#82830, @jsafrane)

- Fixes a panic in kube-controller-manager cleaning up bootstrap tokens (#82887, @tedyu)
- Fixed a scheduler panic when using PodAffinity. (#82841, @Huang-Wei)
- Modified the scheduling framework's Filter API. (#82842, @ahg-g)
- Fix panic in kubelet when running IPv4/IPv6 dual-stack mode with a CNI plugin (#82508, @aanm)
- Kubernetes no longer monitors firewalld. On systems using firewalld for firewall (#81517, @danwinship)
  - maintenance, kube-proxy will take slightly longer to recover from disruptive
  - firewalld operations that delete kube-proxy's iptables rules.
- Added cloud operation count metrics to azure cloud controller manager. (#82574, @kkmsft)
- Report non-confusing error for negative storage size in PVC spec. (#82759, @sttts)
- When registering with a 1.17+ API server, MutatingWebhookConfiguration and ValidatingWebhookConfiguration objects can now request that only `v1` AdmissionReview requests be sent to them. Previously, webhooks were required to support receiving `v1beta1` AdmissionReview requests as well for compatibility with API servers <= 1.15. (#82707, @liggitt) * When registering with a 1.17+ API server, a CustomResourceDefinition conversion webhook can now request that only `v1` ConversionReview requests be sent to them. Previously, conversion webhooks were required to support receiving `v1beta1` ConversionReview requests as well for compatibility with API servers <= 1.15.
- Resolves issue with /readyz and /livez not including etcd and kms health checks (#82713, @logicalhan)
- fix: azure disk detach failure if node not exists (#82640, @andyzhangx)
- Single static pod files and pod files from http endpoints cannot be larger than 10 MB. HTTP probe payloads are now truncated to 10KB. (#82669, @rphillips)
- Restores compatibility with <=1.15.x custom resources by not publishing OpenAPI for non-structural custom resource definitions (#82653, @liggitt)
- Take the context as the first argument of Schedule. (#82119, @wgliang)
- Fixes regression in logging spurious stack traces when proxied connections are closed by the backend (#82588, @liggitt)
- Correct a reference to a not/no longer used kustomize subcommand in the documentation (#82535, @demobox)
- Limit the body length of exec readiness/liveness probes. remote CRIs and Docker shim read a max of 16MB output of which the exec probe itself inspects 10kb. (#82514, @dims)
- fixed an issue that the correct PluginConfig.Args is not passed to the corresponding PluginFactory in kube-scheduler when multiple PluginConfig items are defined. (#82483, @everpeace)
- Adding TerminationGracePeriodSeconds to the test framework API (#82170, @vivekbagade)

- /test/e2e/framework: Adds a flag "non-blocking-taints" which allows tests to run in environments with tainted nodes. String value should be a comma-separated list. (#81043, @johnSchnake)