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v1.11.10

Documentation

Downloads for v1.11.10

filename	sha512 hash
kubernetes.tar.gz	30e201e86df369cafb6269436acd87aca7d7894474df671ef806725121399e2
kubernetes-src.tar.gz	e4c62ccd033dc76dc3063e72ef6011e2555d77fe535477a548131821c34f1d

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	ab145cccd69b7a34843e69a5b92ec218614554746fbc68fe6ead0ca0c5e9023
kubernetes-client-darwin-amd64.tar.gz	08040a1cd0e7a802ce2026456eb49675a2716fc9a01e3aadcf71b8c1e07dca2
kubernetes-client-linux-386.tar.gz	935d5fd62a980930aa32d4c5c3f3ac68f1fee28e43042665edf30d54bd687c1
kubernetes-client-linux-amd64.tar.gz	661fee4e2e811d84038ace861e444d762d23ceaed382f46160bf5cce8060863
kubernetes-client-linux-arm.tar.gz	da3c03415f541a9ef0d1110211574135660ab61b8053aac3c6407199dbf7508
kubernetes-client-linux-arm64.tar.gz	e73febd50414f70055f88c1912ed12f292788830d3d22d239306526fdb98cd1
kubernetes-client-linux-ppc64le.tar.gz	00e83e737d6767a88cd0b6c490c5d935af488639f0228108564c8c15a485d4e
kubernetes-client-linux-s390x.tar.gz	9c0ca1f3a1c46c26a7816d281b3308a1fbe6cf21a0cd5d3a7b5bd8a313e0e4e
kubernetes-client-windows-386.tar.gz	52657dafa6b6016dd95a4e474298113531dfc346d421a1e50b85288fb972b4
kubernetes-client-windows-amd64.tar.gz	7ec2177b591221fe8f709f19f8a2e7689a6814e3c7f083373c58725c48ffaec

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	f5497894e65c760c60cf97387302e985cb590187a17aef474ce40c7387a603
kubernetes-server-linux-arm.tar.gz	be3a73aed443b0c1757774a84aaef9201ab556614ae81e7bf5b4e5e6d25b484
kubernetes-server-linux-arm64.tar.gz	37ed2be5ab045533825f4c90a1d284f5225916425747ff7fec2bf98892316ea
kubernetes-server-linux-ppc64le.tar.gz	cbed99d274f4c49e9112e8faf714f8a75b038f581e566e6e1629faa47d6dd8e
kubernetes-server-linux-s390x.tar.gz	c7d94e35ba281eedde7cd6def759504a67b31be8c6146e72c40313abf2fd4e

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	a656209b3d3fc154cd3be9810c140a73bf3abebbc8b0d9b5cf47dcbd804209b
kubernetes-node-linux-arm.tar.gz	f7b15fe61b5ce96c27b9a497c360c91e64d0f71564edbf9b9cec212b5984f31e
kubernetes-node-linux-arm64.tar.gz	c4b5a90ddf9d88fc61cfddc6406bdcdeed8c7a39032fe677eb9457422a359e3
kubernetes-node-linux-ppc64le.tar.gz	f253c1a094d4e39e901a7e5fcbf3914aca7f69a42a2e1bfd84d18831465a05e
kubernetes-node-linux-s390x.tar.gz	178db55a4cc6bd99bcd2735ea63bee7a52a99393226d1fe85fac11b772b649c
kubernetes-node-windows-amd64.tar.gz	88cacbd2d46ec18c9b73513d653beb603f11c37129b8ed0aa0c4248d75f24c0

Changelog since v1.11.9

Other notable changes

- [stackdriver addon] Bump prometheus-to-sd to v0.5.0 to pick up security fixes. (#75362, @serathius)
 - [fluentd-gcp addon] Bump fluentd-gcp-scaler to v0.5.1 to pick up security fixes.
 - [fluentd-gcp addon] Bump event-exporter to v0.2.4 to pick up security fixes.
 - [fluentd-gcp addon] Bump prometheus-to-sd to v0.5.0 to pick up security fixes.
 - [metatada-proxy addon] Bump prometheus-to-sd v0.5.0 to pick up security fixes.
- Ensure the backend pools are set correctly for Azure SLB with multiple backend pools (e.g. outbound rules) (#76691, @feiskyer)
- Increase Azure default maximumLoadBalancerRuleCount to 250. (#72621, @feiskyer)
- Fixes a NPD bug on GCI, so that it disables glog writing to files for log-counter (#76211, @wangzhen127)
- Node-Problem-Detector configuration is now decoupled from the Kubernetes release on GKE/GCE. (#73288, @wangzhen127)
- Restores `--username` and `--password` flags to `kubectrl` (#75451, @liggitt)
- Update Cluster Autoscaler version to 1.3.8. Release notes: <https://github.com/kubernetes/autoscaler/releases/tag/autoscaler-1.3.8> (#75174, @losipiuk)
- Kubelet won't evict a static pod with priority `system-node-critical` upon resource pressure. (#74222, @Huang-Wei)

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Documentation

Downloads for v1.11.9

filename	sha512 hash
kubernetes.tar.gz	41566482c4decf1ed6c1d40a103cfad394a7b67a3139399f9d09d95ba8c2b79
kubernetes-src.tar.gz	05dd958daead86f3a1822e5a7c4c387912559c71bca74c81629f7ac65908603

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	c3c6e04368e0b9da324dccb945bab8e7d34514e2cd4525fe7ba91035ba6a8a1
kubernetes-client-darwin-amd64.tar.gz	057014e823f35395d47424381d47cca6de91f8c234803b50966577da2c1c8f0
kubernetes-client-linux-386.tar.gz	03c3a5fa4568985bca3b55652d62450e00db5564999b18648744ff5ef365ba1
kubernetes-client-linux-amd64.tar.gz	d4a8ad7411ab9fc2a72fc6495870f1e34de66561b4d89b46cee710ea3e09650
kubernetes-client-linux-arm.tar.gz	ad940e68378b8a03a98c47e166c46a377638d6b74cf75ceeebd5c5de15ea6d8
kubernetes-client-linux-arm64.tar.gz	b621de9283e98c807468a4bc983959dacb191747c36ec1eb07bdd682f8bb7e5
kubernetes-client-linux-ppc64le.tar.gz	e61f621d988ccd1bc13550b81d10cd5832159a76794b6414a47005a89ef9a17
kubernetes-client-linux-s390x.tar.gz	f6079c05fb69c3e83a27206596be494369850f1286a8c94af6e3e0c78142723
kubernetes-client-windows-386.tar.gz	76c6ebb850415675d9dac9d718dc11e146f7ebb07d324cca6ffd5c703ca8c23
kubernetes-client-windows-amd64.tar.gz	dc11c189f3cfb029710044e61fbd0395712639873950d27c7a19429ab4fb250

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	7c30fb2696e93470bdd7d67f898a4603e79cd1766e90162efda6189d291277
kubernetes-server-linux-arm.tar.gz	9716d34dfbf50091b611cd5002291976492411f50c3f1fda92d45d886549971

filename	sha512 hash
kubernetes-server-linux-arm64.tar.gz	de2b769e6e694d8497311f293efd81ecddceea331a072bd97262b3fd9a356c
kubernetes-server-linux-ppc64le.tar.gz	396b4c531b30ee0ad9b14b1b08fb7c81c4bed15e93857723aa60b1980a10ac
kubernetes-server-linux-s390x.tar.gz	ef6ea8fdc511163cc349204f6a3d8659e977edd1ddbd1e798e288dcff232eb

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	1371a7ee273d429526e99262d66233adb6f8406a8d83eb03a31eaab238fefdf
kubernetes-node-linux-arm.tar.gz	fb7df0635e804770eed6eb5b62b813303e15de8102a554a3599f7e89a8fe37
kubernetes-node-linux-arm64.tar.gz	036e4fb0aa0010920aa313c8af17778a0f5bbb52ab14c33e04e378b9d2b53e2
kubernetes-node-linux-ppc64le.tar.gz	8959fac67dfa7aa97e55a8c8d30e6aaedff313e3cecaefa13c7fbd9bdd838e8
kubernetes-node-linux-s390x.tar.gz	6fec9fedec5efc78664045b2090fca077cd3822ed5872481d467431483212b5
kubernetes-node-windows-amd64.tar.gz	b029552d9211ae7fa3c8168f3887ca07b590501ee5863dc00c66c218134e4a

Changelog since v1.11.8

Other notable changes

- Prevent AWS Network Load Balancer security groups ingress rules to be deleted by ensuring target groups are tagged. (#73594, @masterzen)
- Allow disable outbound SNAT when Azure standard load balancer is used together with outbound rules. (#75282, @feiskyer)
- Ensure Azure load balancer cleaned up on 404 or 403 when deleting LoadBalancer services. (#75256, @feiskyer)
- Fix kubelet start failure issue on Azure Stack due to InstanceMetadata setting (#74936, @rjaini)
- Fix panic in kubectcl cp command (#75037, @soltys)
- Fixes an issue with missing apiVersion/kind in object data sent to admission webhooks (#74448, @liggitt)
- fix get azure accounts timeout issue when there is no out-bound IP (#74191, @andyzhangx)
- fix issue: fail to detach azure disk when there is server side error (#74398, @andyzhangx)
- fix parse devicePath issue on Azure Disk (#74499, @andyzhangx)

- fix Azure Container Registry anonymous repo image pull error (#74715, @andyzhangx)
- Add `metrics-port` to kube-proxy cmd flags. (#72682, @whypro)
- Reduce memory utilization of admission webhook metrics by removing resource related labels. (#69895, @jpbetz)

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Downloads for v1.11.8

filename	sha512 hash
kubernetes.tar.gz	65ef9150911023033efd486148d6827a9531ef29e2bd5ec0d6269b1e1d5bd1e
kubernetes-src.tar.gz	bea4877aa38da12a3bf99200b02c51a9db8f4f0e58e1b28158fa816e1dc5de

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	002b24d8026be295df278d02f40261b07f6fecf413c794e95ce4501f313e9a
kubernetes-client-darwin-amd64.tar.gz	4120da867ed18d1fd5dedbf290c107a5769b767d18c42d4ef9f9e4ed0bd076
kubernetes-client-linux-386.tar.gz	e9b2053e3b09e895f9149bb94a432ba62a980ea26efddb9f8ab6cc5123db21
kubernetes-client-linux-amd64.tar.gz	95bc0c1d9b7eea56d5cc20c8f92a486adba379602b9cb6280670e4be458f7f
kubernetes-client-linux-arm.tar.gz	1a92e09afb9c64be08b45e228c62a4fb69611d8d7d106adf57e8b82ce9774a
kubernetes-client-linux-arm64.tar.gz	a9a823bd51f7a27bd5158edea5fd4ae40f527e4028a8d3e2a2820862593f10
kubernetes-client-linux-ppc64le.tar.gz	8b351358175833a970e664e35ef24b14af6fbe5286983d781856ce6a7a3fda
kubernetes-client-linux-s390x.tar.gz	c110b67a6b73e542af9f20991d4f9d6e80542555a6b7158b629cc1f3f69eff
kubernetes-client-windows-386.tar.gz	0b5db213b847f49cfd934fa55ee30b1dd6c375d5dd3e6d4e2cfef9742b01af
kubernetes-client-windows-amd64.tar.gz	c842c77215e1d0cf6e7ad8c780488a5085984cbdf0aef46e37709544577b08

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	6a5a8764ac75067ea5f81cc8cca179b56d72a2feb870bd096a8cfba4cfcbce7
kubernetes-server-linux-arm.tar.gz	e5cf04f368e6c5f455bbd2e584bec8774773ea03672697cd43605c96ad2d89
kubernetes-server-linux-arm64.tar.gz	4accbd3ce3d1ed5cbe6003ba83ab881378a3fa9e01cebc9d58dc4f8fa10bdb9
kubernetes-server-linux-ppc64le.tar.gz	1004fc3bcb09876d002ae0c273736eca27e54861c3194b822fa6f01245b265
kubernetes-server-linux-s390x.tar.gz	c571688de79022ece009adcee44dd18e614b566f1fafa9c1b87174d57a48403

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	224ddda592871d2842c4cea3fdab37e21ea57f355a991f3fcf821305bd72be1
kubernetes-node-linux-arm.tar.gz	989aa76291cd8e7c5ac49359b210059cbc7ebe6890cffde930c419fb87b4981
kubernetes-node-linux-arm64.tar.gz	d5880c71de9991ea3415a7931aa82bf080945632bbb2af92cfda581e619390c
kubernetes-node-linux-ppc64le.tar.gz	a8f4362b2d00f298e3abbbf056387b1c38673babbc02957f3b78b7b5c1ba59d2
kubernetes-node-linux-s390x.tar.gz	07e39957e314cb2b343a736a5aded1c46a0dbe1980e48d87355ed794c33401c
kubernetes-node-windows-amd64.tar.gz	84b74af3042c301d94136e67fabbb9296e72e4574e35bf9b163fb4ba66a6c601

Changelog since v1.11.7

Other notable changes

- fix smb remount issue on Windows (#73661, @andyzhangx)
- kube-apiserver: a request body of a CREATE/UPDATE/PATCH/DELETE resource operation larger than 100 MB will return a 413 “request entity too large” error. (#73805, @caesarxuchao)
 - Custom apiservers built with the latest apiserver library will have the 100MB limit on the body of resource requests as well. The limit can be altered via `ServerRunOptions.MaxRequestBodyBytes`.
 - The body size limit does not apply to subresources like pods/proxy that proxy request content to another server.
- The apiserver, including both the kube-apiserver and apiservers built with the generic apiserver library, will now return 413 RequestEntityTooLarge

error if a json patch contains more than 10,000 operations. (#74000, @caesarxuchao)

- Update Cluster Autoscaler to version 1.3.7. (#74136, @jkaniuk)
- Fix watch to not send the same set of events multiple times causing watcher to go back in time (#73845, @wojtek-t)
- fixes an error processing watch events when running skewed apiservers (#73482, @liggitt)
- MAC Address filter has been fixed in vSphere Cloud Provider, it no longer ignores 00:1c:14 and 00:05:69 prefixes (#73721, @frapposelli)
- add goroutine to move unschedulable pods to activeq if they are not retried for more than 1 minute (#72558, @denkens)
- Scale max-inflight limits together with master VM sizes. (#73268, @wojtek-t)
- Update to go1.10.8 (#73379, @cblecker)

v1.11.7

Documentation

Downloads for v1.11.7

filename	sha512 hash
kubernetes.tar.gz	3cc7476722a60c67caa7525e2c2843f0d3369bd16328e8d16ea2a271e097e9b
kubernetes-src.tar.gz	2aed3dd96137cd3503fd9239934d4cdcaf87bf1bc2e14cdc2cc1b0bd7b53da

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	3229c0e19b0e9f5f830ba6078b924251a35e77170b55f06cbf1f645b3db613
kubernetes-client-darwin-amd64.tar.gz	2e3458e278a3c7fedc705d12cb3a0285267c009f14609fd575f38ed29f1ccba
kubernetes-client-linux-386.tar.gz	6d5a67e5b3c5b07e2da17bb260402c2d587399db76613a7189b62557b7a46d
kubernetes-client-linux-amd64.tar.gz	da620f9ade85a0da2e9b4fb36cce08f871be2a0d36034f691ad48161e9c187
kubernetes-client-linux-arm.tar.gz	53d91312f0003883d27d137e007b90979f38ad75f49c87266967040f4446c4
kubernetes-client-linux-arm64.tar.gz	694f206610d732acbdab8bd3d910bcea7f1f8990cf11c7661ae835e3dbb501
kubernetes-client-linux-ppc64le.tar.gz	2319bbc4d8fe722a8594a5e11857a5beb6362267668cee05fd66d6730ece9f1

filename	sha512 hash
kubernetes-client-linux-s390x.tar.gz	1bd93bfeac5a74e554d1d70dcd843be7a4abd9d8e2c138898dbc95821043194
kubernetes-client-windows-386.tar.gz	51ace4ae0aa19c67294a7d9ba3ef054a736f61c8f38e649796cdf899cde904f
kubernetes-client-windows-amd64.tar.gz	55120afdcb5a9a6fa510c951e939372c4fb87d78505e925168212d2b209e74f

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	71348acb1a132eec6acc901f35064befc4023f1a281b92d4eeab5e30121e412
kubernetes-server-linux-arm.tar.gz	a64f15f4297051f3446207afc9e0a7b93565cc9b4e22e5efce46b51233b4ab
kubernetes-server-linux-arm64.tar.gz	f05f894a7001ec6b4775f4cec9957e44af93e00a25850213ad19baa4508e893
kubernetes-server-linux-ppc64le.tar.gz	4df94d9242da30d291b44fe1436728c5f402173a99cb57566a936edd7e4bd23
kubernetes-server-linux-s390x.tar.gz	b683bab4fed8ddff8d70ce1dce10ec7c687604f2729aac7739d93afcc99e939

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	75422281977ed68021ff5ddd3e8d67837f47a12e01c54212a935e76c2e4f9e1
kubernetes-node-linux-arm.tar.gz	f5def4c21097d953b19195b58ee702aeee6f68e795f8b29ba8d1fa7d31c62ca
kubernetes-node-linux-arm64.tar.gz	da2e9c20c9f052aa49aec2c6805297d969769cc584ffe3600d6c9f0ade1f2d8
kubernetes-node-linux-ppc64le.tar.gz	5c6b8148a9058f2941214b56896cfbca4a5294149e878b6a9b41a52c2f3a767
kubernetes-node-linux-s390x.tar.gz	fc5709208ab6b0c07a42aa38f86ae37f62abb237e08184dd2e440a6bae5f99f
kubernetes-node-windows-amd64.tar.gz	4e42f8c431680066c91b86f0974c9f805ebfe59d0d5dc8fb4c8706a26bcda5f

Changelog since v1.11.6

Other notable changes

- Allow for watching objects larger than 1MB given etcd accepts objects of size up to 1.5MB (#72053, @wojtek-t)
- Fix AWS NLB security group updates where valid security group ports were incorrectly removed (#68422, @kellycampbell)
 - when updating a service or when node changes occur.
- kubectl: fixed an issue with “too old resource version” errors continuously appearing when calling `kubectl delete` (#72825, @liggitt)
- Fixes issue where subpath volume content was deleted during orphaned pod cleanup for Local volumes that are directories (and not mount points) on the root filesystem. (#72291, @msau42)
- Fixes spurious 0-length API responses. (#72856, @liggitt)
- Do not detach volume if mount in progress (#71145, @gnufied)
- Improve efficiency of preemption logic in clusters with many pending pods. (#72895, @bsalamat)
- Fix scheduling starvation of pods in cluster with large number of unschedulable pods. (#72619, @everpeace)
- change azure disk host cache to ReadOnly by default (#72229, @andyzhangx)
- Fixes issue with cleaning up stale NFS subpath mounts (#71804, @msau42)
- Update Cluster Autoscaler to version 1.3.5. Release notes: <https://github.com/kubernetes/autoscaler/releases/tag/autoscaler-1.3.5> (#72579, @MaciekPytel)
- Fix kube-proxy PodSecurityPolicy binding on GCE & GKE. This was only an issue when running kube-proxy as a DaemonSet, with PodSecurityPolicy enabled. (#72761, @tallclair)
- Scheduler only activates unschedulable pods if node’s scheduling related properties change. (#71551, @mlmhl)
- Fix a race condition in the scheduler preemption logic that could cause nominatedNodeName of a pod not to be considered in one or more scheduling cycles. (#72504, @bsalamat)
- fix race condition when attach azure disk in vmss (#71992, @andyzhangx)
- Fixed kubelet reporting “resource name may not be empty” when mounting a volume very quickly after unmount. (#71074, @jsafrane)
- Fix race condition introduced by graceful termination which can lead to a deadlock in kube-proxy (#72361, @lbernail)
- Fixes an issue where Portworx volumes cannot be mounted if 9001 port is already in use on the host and users remap 9001 to another port. (#70392, @harsh-px)
- kube-proxy in IPVS mode will stop initiating connections to terminating pods for services with sessionAffinity set. (#71834, @lbernail)
- Update to use go1.10.7 with fix for CVE-2018-16875 (#72074, @ixdy)

v1.11.6

Documentation

Downloads for v1.11.6

filename	sha512 hash
kubernetes.tar.gz	78e865de9aa6065a48027fc2c9c5e9e957c36dd69d1859e29db283875562cf1
kubernetes-src.tar.gz	e9309ebcc5ca68c86ff623c45af0a91c4d9b11d4a39df6f6df98101aea2242

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	b5b3bcf9aab8694647bb03d13c83fdc5250d29f52cdf3ff9e52147f8be5fad9
kubernetes-client-darwin-amd64.tar.gz	dc25f6121501d79c3871848dc91a4528e24031ef7c7c52f85e1706e5d83b41a
kubernetes-client-linux-386.tar.gz	8e8e22e03126c8de297ca45b7e1b292ac1c0fd1e5cc119964de2332457c63d1
kubernetes-client-linux-amd64.tar.gz	6048e7ccb5c084f7582511cba3bd0db2c8ccb237d409956d08cb3c20735e076
kubernetes-client-linux-arm.tar.gz	3fcc09d617949c09fc0a470633460b534092f45e47b74365bbbed243f582817f
kubernetes-client-linux-arm64.tar.gz	5fc0c5d1f1580080ac383cdef61ce11d21845a84e2f196ccbc826ec565ad347
kubernetes-client-linux-ppc64le.tar.gz	95f986284501b681ba45158383248dacdb42b95445776509844a34e79391166
kubernetes-client-linux-s390x.tar.gz	a83f75d6698b8586c7974d2fb67b7f25aaf591ee6b17381b0d415a170941969
kubernetes-client-windows-386.tar.gz	f083073409ef17c29a4791163d6ca0cbb19d61dbd79f8057c2e7056951638d6
kubernetes-client-windows-amd64.tar.gz	3a8198a787c2efc74e40e7eaa2c66ff76b3ae13656ba49382de0fbda6ff21b1

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	4aa44b92ecaed54ff3535687729d8a3e4421a9c3772937b7a26bb813d1cce06
kubernetes-server-linux-arm.tar.gz	56f2b429e48858bbac7a28a46c4a59b942fbcad14da8c89d997f87b84268a71

filename	sha512 hash
kubernetes-server-linux-arm64.tar.gz	afd2aa213c6485591faf734d58415aef44f887bd4da4a895f37f091665c372a
kubernetes-server-linux-ppc64le.tar.gz	0ecf8feafb05746a43fc8e9cd822dbee294f9e02323851b3b9cdf27eba0f40c
kubernetes-server-linux-s390x.tar.gz	88a450b30aa213b30092447761eadd6c8440a406a10819400f365edde42f3d

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	5627a6382277e34ad5240b41740b5bb300dd86cbceb9fe8967da07650939b1a
kubernetes-node-linux-arm.tar.gz	d6d497bd02eb7b749663f600b11ce5364d79e1a2e7229c9ed9abaf25d99de20
kubernetes-node-linux-arm64.tar.gz	bd23aced861869fb857bf36754882274f3c7353eccdbc9fc7f1b3e24ab8025a
kubernetes-node-linux-ppc64le.tar.gz	fb78c12993b800b235fe31a0d21172aeb207b2d2d78bb84a6e4cb1b8536bf3e
kubernetes-node-linux-s390x.tar.gz	15945c55c3665d9694b0a6476e53af5a372742ef59c49a8678141a545db049
kubernetes-node-windows-amd64.tar.gz	3bf95932081fe7f62741f0ad652d0bef94aa61961a6af4b097b0a92a80deffa

Changelog since v1.11.5

Other notable changes

- Scheduler only activates unschedulable pods if node's scheduling related properties change. (#71551, @mlmhl)
- Disable proxy to loopback and linklocal (#71980, @micahhausler)
- Scheduler only activates unschedulable pods if node's scheduling related properties change. (#71551, @mlmhl)
- fix issue: vm sku restriction policy does not work in azure disk attach/detach (#71941, @andyzhangx)
- Include CRD for BGPCConfigurations, needed for calico 2.x to 3.x upgrade. (#71868, @satyasm)
- On GCI, NPD starts to monitor kubelet, docker, containerd crashlooping, read-only filesystem and corrupt docker overlay2 issues. (#71522, @wangzhen127)
- UDP connections now support graceful termination in IPVS mode (#71515, @lbernail)
- Fix a potential bug that scheduler preempts unnecessary pods. (#70898, @Huang-Wei)

- Only use the first IP address got from instance metadata. This is because Azure CNI would set up a list of IP addresses in instance metadata, while only the first one is the Node's IP. (#71736, @feiskyer)
- Fix scheduling starvation of pods in cluster with large number of unschedulable pods. (#71488, @bsalamat)
- Fixes an issue with stuck connections handling error responses (#71419, @liggitt)
- Ensure orphan public IPs on Azure deleted when service recreated with the same name. (#70463, @feiskyer)
- Upgrade Stackdriver Logging Agent addon image to 0.6-1.6.0-1 to use Fluentd v1.2. This provides nanoseconds timestamp granularity for logs. (#70954, @qingling128)
- [GCE] Filter out spammy audit logs from cluster autoscaler. (#70696, @loburm)
- Fix a scheduler panic due to internal cache inconsistency (#71063, @Huang-Wei)
- apiserver: fixes handling and logging of panics in REST handlers to prevent crashes (#71076, @liggitt)
- Upgrade golang.org/x/net image to release-branch.go1.10 (#70663, @wen-jiaswe)
- Fixes a bug in previous releases where a pod could be placed inside another pod's cgroup when specifying `-cgroup-root` (#70678, @dashpole)
- Fixes ability for admin/edit/view users to see controller revisions, needed for kubectl rollout commands (#70699, @liggitt)
- remove retry operation on attach/detach azure disk (#70568, @andyzhangx)
- Fix cloud-controller-manager crash when using OpenStack provider and PersistentVolume initializing controller (#70459, @mvladev)
- Update defaultbackend to 1.5: move /metrics to a private endpoint (:10254). (#69383, @bowei)
- Allows changing nodeName in endpoint update. (#68575, @prameshj)
- Improve Azure instance metadata handling by adding caches. (#70353, @feiskyer)

v1.11.5

Documentation

Downloads for v1.11.5

filename	sha512 hash
kubernetes.tar.gz	42d12fec828546af526b1dd9e5a54fd72cebc458b4e0e3ad9ac50d592ca6be3
kubernetes-src.tar.gz	c7df3c980bae5bdc9e865846a32b3e8a44650cf1f860eb2a5e444e7b4e07d37

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	8044fd8afaa1113f6b11f9a24d6236faec281f245f9fcd773e6a70af7388cf7
kubernetes-client-darwin-amd64.tar.gz	40fdf051aaa3455f3ca289e8b5c6e8835f53f6e034aa622e91a6264b5eca911
kubernetes-client-linux-386.tar.gz	d947642bd65b08315b998d32afe3b3c03dbc9bda5d0a81fb1364127eae72ba8
kubernetes-client-linux-amd64.tar.gz	7028d357f65603398c35b7578793a153248e17c2ad631541a587f4ae13ef931
kubernetes-client-linux-arm.tar.gz	141a65303ed15b53f8bbf19031d19e257a8a02bf735b95099f8f1904c51499a
kubernetes-client-linux-arm64.tar.gz	35d8e64f641b140e954fc2c79232b73cddec5863a70dc72b700a9eb0f7b245e
kubernetes-client-linux-ppc64le.tar.gz	3aa8cc0ef637fd834d5495cf1cd30a4cb2285ee473fd0f9abea71eee559661a
kubernetes-client-linux-s390x.tar.gz	834367f2f24df60b3786fb526321a7c8efc36f187de6677c8e3f3e90afe0b87
kubernetes-client-windows-386.tar.gz	ff049e98859eb7d1126a2108a51c33f8643a17bc0f5c46990312ac1cbdb20a5
kubernetes-client-windows-amd64.tar.gz	f813af0f54917dd73b943367ea62f9c412f09a3fa74d8b6fc834f2e2496d4d

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	52ba9a169932e509db13b0ef839c82cc7834b1e8444ab7e59bd99ec95c3199
kubernetes-server-linux-arm.tar.gz	7751c9d6f13944748d4ee514afa53a8c6e897a68edfa0441198d31860fb8b13
kubernetes-server-linux-arm64.tar.gz	37b29b0742e1d2c83d2003282f9b0e9fec066dda2b463cc365e66ef69ecaec8
kubernetes-server-linux-ppc64le.tar.gz	383a2023249542c75d8ab19e53ae9b27369a55ec81551103ae0e126a761f3e4
kubernetes-server-linux-s390x.tar.gz	aa63b5eeffec85c2e3ba58eb6c92bdb24d65fe6f987be5d0db2f24a4538a2d3

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	fcaea8d5a89ee29e52f59157d746f469078471b316b71e28197986ffe07b419
kubernetes-node-linux-arm.tar.gz	b6fe554a7a2d2c2123e9362abaa86f0d4434139d2c1f60c7a47d5ba00afd68
kubernetes-node-linux-arm64.tar.gz	5d88c504cae76098783d00d17c684c505774f32941d0be476c68e293ea9baf2
kubernetes-node-linux-ppc64le.tar.gz	2238cb556ea3e8d5fe9b58b7c460331c0c2f1390e894d1cf7dfe5f0d9ce779
kubernetes-node-linux-s390x.tar.gz	6780f4b5898cfc3685abb46269349a065d28e91f1f29c993ebc7cd769949f67
kubernetes-node-windows-amd64.tar.gz	0e5cd07333516f53cf728d9223e82c02bf5a0aa83f45392bbf371a676d422b

Changelog since v1.11.4

Other notable changes

- CVE-2018-1002105: Fix critical security issue in kube-apiserver upgrade request proxy handler (#71411, @liggitt)
- IPVS proxier mode now support connection based graceful termination. (#66012, @Lion-Wei)
- Update Cluster Autoscaler to 1.3.4 (#70285, @losipiuk)
- Fix cluster autoscaler addon permissions so it can access batch/job. (#69858, @losipiuk)
- Do not remove shutdown nodes from api-server for vSphere. (#70291, @gnufied)
 - Fixes volume detach from shutdown nodes.
- Enable insertId generation, and update Stackdriver Logging Agent image to 0.5-1.5.36-1-k8s. This help reduce log duplication and guarantee log order. (#68920, @qingling128)
- fix azure disk attachment error on Linux (#70002, @andyzhangx)
- GCE/GKE load balancer health check default interval changes from 2 seconds to 8 seconds, unhealthyThreshold to 3. (#70099, @grayluck)
 - Health check parameters are configurable to be bigger than default values.

v1.11.4

Documentation

Downloads for v1.11.4

filename	sha512 hash
kubernetes.tar.gz	035d123271ca72372be955631cf106b94b53ba7b6d2242e0111c0557fbe2153
kubernetes-src.tar.gz	b59a340b0f325649648b0a0e361398f613e093f2b4ba087a8b602fc27888ea

Client Binaries

filename	sha512 hash
kubernetes-client-darwin-386.tar.gz	e1914c95260ad7a2418c68017710941151ef069cb2101e404ef17658585dc6
kubernetes-client-darwin-amd64.tar.gz	145d67df9135acf237f41c48dded2e017943a5806bdd1ecc23c33c35befc354
kubernetes-client-linux-386.tar.gz	586a48872a8e1082c165cee3168babdf925c9e1b3ee7a1e6f38f85acb863de
kubernetes-client-linux-amd64.tar.gz	6d9060ab605c3c86dafd40dbfcb25e4f2d8c2a0d4770ab949f57c96a74cdc4
kubernetes-client-linux-arm.tar.gz	7c12e679f13c6a11ed05df0e4204862a7db3bbf273e5e837eeb59c656c9450
kubernetes-client-linux-arm64.tar.gz	662a33a7f00eb3bb607bfcdb3f599e6a378c9e9e32fe7b4bb697b5858b8cad4
kubernetes-client-linux-ppc64le.tar.gz	64f07ac851068fa5c784ed9e66551016b9f5436663e2a98a3b07734ecf98a71
kubernetes-client-linux-s390x.tar.gz	bc72689bd75b65820097d640cb3e26fcbf95600438cf9486265b209cd82b16
kubernetes-client-windows-386.tar.gz	d5d41f4f70d6e9be229c1c00eb4184d5cd14f9eec78e5ea65481e81d51d4a0
kubernetes-client-windows-amd64.tar.gz	12ef0cc939f6ff834c7e8f4b2a6e441cd5c50aa7a10e3b3545c116c07feb67

Server Binaries

filename	sha512 hash
kubernetes-server-linux-amd64.tar.gz	58d22b0c5339d75ef72266c3922ad3c44690ef937703653a966379c6791d52
kubernetes-server-linux-arm.tar.gz	a1ad67cf28c5d583f103a89070e76f210bdd193b16a7b505b4a2d5d9a92186
kubernetes-server-linux-arm64.tar.gz	25f544e2834dc2c12f1e22cffb8becbbffae37fffb36232d3100d5944e0d09e
kubernetes-server-linux-ppc64le.tar.gz	07089eae49a3fc7a368ac8e084041cc28102de2fd3c5fc7354aea14d6f2283
kubernetes-server-linux-s390x.tar.gz	ed4ec0353218e6846cf9e5a6509148cb6ba08c131d48dca8e2bb618eec3fbc

Node Binaries

filename	sha512 hash
kubernetes-node-linux-amd64.tar.gz	43865ed40735aaa36ca8536596972f0b98d238df8f22d22184c9a585d7aedd2
kubernetes-node-linux-arm.tar.gz	453d709310cad4def41d31583c8bb27090e2599befb28974e00fc40886a76ad
kubernetes-node-linux-arm64.tar.gz	0975e8023b4e53b439b20e97378883b1e7c60f451ac853346a3fa6de9ca518e
kubernetes-node-linux-ppc64le.tar.gz	9f3e615e4422c4ffaaf4c583b0f5bbaf45ecc38c678f08621391e1bbb1d370f
kubernetes-node-linux-s390x.tar.gz	513125ab48ff96e632e17fe15b0e1eadbb77ae1ee19f91089e1f93403771c6b
kubernetes-node-windows-amd64.tar.gz	5826b54be51abc9f874e79347677579fb68d9664e7b058851dbd057640b72bc

Changelog since v1.11.3

Other notable changes

- support cross resource group for azure file (#68117, @andyzhangx)
- change default azure file mount permission to 0777 (#69854, @andyzhangx)
- Scheduling conformance tests related to daemonsets should set the annotation that relaxes node selection restrictions, if any are set. This ensures conformance tests can run on a wider array of clusters. (#68793, @aveshagarwal)
- Add tolerations for Stackdriver Logging and Metadata Agents. (#69737, @qingling128)
- Fix scheduler crashes when Prioritize Map function returns error. (#69618, @DylanBLE)
- Add fallbacks to ARM API when getting empty node IP from Azure IMDS (#69077, @feiskyer)
- Verify invalid secret/configmap/projected volumes before calling setup (#68691, @gnufied)
- Immediately close the other side of the connection when proxying. (#67288, @MHBauer)
- fix a bug that overwhelming number of prometheus metrics are generated because \$NAMESPACE is not replaced by string "{namespace}" (#68530, @wenjiaswe)
- locking fix in vSphere cleanup function (#68388, @wgliang)
 - The vSphere cloud provider has a cleanup function with a loop,
 - inside of which a write lock was intended to prevent races against
 - VM creation, but the usage of the sync.RWMutex type is incorrect,
 - plus is placed in a defer call so the locking is effectively
 - nonexistent. This patch adds an anonymous function call inside

- the loop to correctly handle acquiring the write lock with deferred
 - unlock to run at that function’s completion, following the normal
 - go lang lock/deferred-unlock pattern.
- fix UnmountDevice failure on Windows (#68608, @andyzhangx)
- Get public IP for Azure vmss nodes. (#68498, @feiskyer)
- Role, ClusterRole and their bindings for cloud-provider is put under system namespace. Their addonmanager mode switches to EnsureExists. (#67224, @grayluck)
- Bump up version number of debian-base, debian-hyperkube-base and debian-iptables. (#67026, @satyasm)
 - Also updates dependencies of users of debian-base.
 - debian-base version 0.3.1 is already available.
- Update debian-iptables and hyperkube-base images to include CVE fixes. (#67365, @ixdy)
- Support configuring the Azure load balancer idle connection timeout for services (#66045, @cpuguy83)
- Let service controller retry creating load balancer when persistUpdate failed due to conflict. (#68087, @grayluck)
- Return apiserver panics as 500 errors instead terminating the apiserver process. (#68001, @sttts)
- adjusted http/2 buffer sizes for apiservers to prevent starvation issues between concurrent streams (#67902, @liggitt)
- Reduced excessive logging from fluentd-gcp-scaler. (#68837, @x13n)
- Fix potential panic when getting azure load balancer status (#68609, @feiskyer)
- Fix an issue where filesystems are not unmounted when a backend is not reachable and returns EIO. (#67097, @chakri-nelluri)
- [GCE] Enable by default audit logging truncating backend. (#68342, @loburm)
- [fluentd-gcp-scaler addon] Bump fluentd-gcp-scaler to 0.4 to pick up security fixes. (#67691, @loburm)
 - [prometheus-to-sd addon] Bump prometheus-to-sd to 0.3.1 to pick up security fixes, bug fixes and new features.
 - [event-exporter addon] Bump event-exporter to 0.2.3 to pick up security fixes.
- [GCP] Added env variables to control CPU requests of kube-controller-manager and kube-scheduler. (#68823, @loburm)
- Update Cluster Autoscaler to version 1.3.3. (#68936, @losipiuk)
- Bump addon-manager to v8.7 (#68299, @MrHohn)
 - Support extra `--prune-whitelist` resources in kube-addon-manager.
 - Update kubectl to v1.10.7.
- Support extra `--prune-whitelist` resources in kube-addon-manager. (#67743, @Random-Liu)
 - Before, when users run admission webhook as an addon pod, after they remove the webhook, kube-addon-manager won’t cleanup the webhook configuration `MutatingWebhookConfiguration/ValidationWebhookConfiguration`,

- because those resources are not prune-whitelisted. Cluster will go into a bad state that no pod can be admitted.
- With this feature, users can config kube-addon-manager to whitelist those resources to fix this issue.
- Bump ip-masq-agent to v2.1.1 (#67916, @MrHohn)
 - Update debian-iptables image for CVEs.
 - Change chain name to IP-MASQ to be compatible with the pre-injected masquerade rules.
- If `TaintNodesByCondition` is enabled, add `node.kubernetes.io/unschedulable` and `node.kubernetes.io/network-unavailable` automatically to DaemonSet pods. (#64954, @k82cn)
- Fix VMWare VM freezing bug by reverting #51066 (#67825, @nikopen)

v1.11.3

Documentation & Examples

Downloads for v1.11.3

filename	sha256 hash
kubernetes.tar.gz	032fd2483176aea999cc92a455676cf1dbf70538e916fedaa6b851b50c6009
kubernetes-src.tar.gz	bbb1541985eaa3d2ccb5d627196423298e3a2581adb21f0aa3c8650691780e3

Client Binaries

filename	sha256 hash
kubernetes-client-darwin-386.tar.gz	983ad8892a392373009fef3aee823aec5c23bec789eb386e889aa5163b887b2
kubernetes-client-darwin-amd64.tar.gz	8e4b0f9cc1918e22c44468c667b2a362d933216ae37cc4d9e770a3e5c8d0ea3
kubernetes-client-linux-386.tar.gz	48ae3e0c9ce4b6964abe5a93cc0677f39e7e23f2ae09ff965e5fb8a807ab93
kubernetes-client-linux-amd64.tar.gz	14a70ac05c00fcfd7d632fc9e7a5fbc6615ce1b370bb1a0e506a24972d4614
kubernetes-client-linux-arm.tar.gz	c62835797d58b50f19706d897a9106b219f5868b0a6c7bb62c6284f809c0147
kubernetes-client-linux-arm64.tar.gz	a43510f821d349519ecba27b24788a0e41eae31d79bc7af73b6132190b0dccc
kubernetes-client-linux-ppc64le.tar.gz	11aca4d23d16b676576c7a78b4ad444b2b478ff60f7ab8838885d5e2c28836
kubernetes-client-linux-s390x.tar.gz	1dd9204e91f9865fbf85da90f7afbcca6cf00df145627f7d500d9ec865d67f9

filename	sha256 hash
kubernetes-client-windows-386.tar.gz	e72c2495f9bf8aff2ee8010125371ed00bb048ebd9d800fe3cd7dabf10c2352
kubernetes-client-windows-amd64.tar.gz	d1bd2cf1ef21753d572060882c258b30b286bb4376edc7970b0798b40d5c05e

Server Binaries

filename	sha256 hash
kubernetes-server-linux-amd64.tar.gz	e49d0db1791555d73add107d2110d54487df538b35b9dde0c5590ac4c5e9e03
kubernetes-server-linux-arm.tar.gz	7b0932dc1c48352fa300b5eec66c222772c5ccadee2d0187558b55d5c78003
kubernetes-server-linux-arm64.tar.gz	9e89136c2e84f2e5e709b84123166f149babb6c3f17efe5a607f7166c2a5ee7
kubernetes-server-linux-ppc64le.tar.gz	ffc9b8eb6e421d64c355629c6e1a9bf775ec11ad89a1817983461dc6821dd30
kubernetes-server-linux-s390x.tar.gz	0dbb55cd80ac62d3c8c9859a1d6cb0b55b04ad4b3a880f0c9ff1f1040db6333

Node Binaries

filename	sha256 hash
kubernetes-node-linux-amd64.tar.gz	14761794210f7b17a0a51ea9746e55eb1d538c7b86601b98e1df562e68f9602
kubernetes-node-linux-arm.tar.gz	578232ffbd559997b0d8302afbe4ef1f425507c8642f8d72f00f5cb3c07c268
kubernetes-node-linux-arm64.tar.gz	d827b87664c5f6fa627fb1294cb816d5f7bc7a959da659319b51e37f0ece214
kubernetes-node-linux-ppc64le.tar.gz	a60b6deccaa6a25276d7ce9a08a038df0aad8f4566ce05a71f4e084d609e680
kubernetes-node-linux-s390x.tar.gz	5435a7040f0f289619176625084c8ec7c400481931d18b061a7a2697225fd23
kubernetes-node-windows-amd64.tar.gz	b8c9353388390bf256fb8d3d32cc03cd1828aa5f38f94883d41edaec3de21ae

Changelog since v1.11.2

Action Required

- action required: the API server and client-go libraries have been fixed to support additional non-alpha-numeric characters in UserInfo “extra” data

keys. Both should be updated in order to properly support extra data containing “/” characters or other characters disallowed in HTTP headers. (#65799, @dekkagaijin)

Other notable changes

- Orphan DaemonSet when deleting with `-cascade` option set (#68007, @soltys)
- Bump event-exporter to 0.2.2 to pick up security fixes. (#66157, @loburm)
- PVC may not be synced to controller local cache in time if PV is bound by external PV binder (e.g. kube-scheduler), double check if PVC is not found to prevent reclaiming PV wrongly. (#67062, @cofyc)
- kube-apiserver: fixes error creating system priority classes when starting multiple apiservers simultaneously (#67372, @tanshanshan)
- Add NoSchedule/NoExecute tolerations to ip-masq-agent, ensuring it to be scheduled in all nodes except master. (#66260, @tanshanshan)
- Prevent `resourceVersion` updates for custom resources on no-op writes. (#67562, @nikhita)
- fix cluster-info dump error (#66652, @charrywanganthony)
- attachdetach controller attaches volumes immediately when Pod's PVCs are bound (#66863, @cofyc)
- kube-apiserver now includes all registered API groups in discovery, including registered extension API group/versions for unavailable extension API servers. (#66932, @nilebox)
- fixes an issue with multi-line annotations injected via downward API files getting scrambled (#65992, @liggitt)
- Revert #63905: Setup dns servers and search domains for Windows Pods. DNS for Windows containers will be set by CNI plugins. (#66587, @feiskyer)
- Fix an issue that pods using hostNetwork keep increasing. (#67456, @Huang-Wei)
- Bump Heapster to v1.6.0-beta.1 (#67074, @kawych)
- fix azure disk create failure due to sdk upgrade (#67236, @andyzhangx)
- Fix creation of custom resources when the CRD contains non-conventional pluralization and subresources (#66249, @deads2k)
- Allows extension API server to dynamically discover the requestheader CA certificate when the core API server doesn't use certificate based authentication for it's clients (#66394, @rtripat)

v1.11.2

Documentation

Downloads for v1.11.2

filename	sha256 hash
kubernetes.tar.gz	deaabdab00003ef97309cde188a61db8c2737721efeb75f7b19c6240863d9c
kubernetes-src.tar.gz	7d98defe2eb909bc5ebcbddd8d55ffaa902d5d3c76d9e42fe0a092c341016a

Client Binaries

filename	sha256 hash
kubernetes-client-darwin-386.tar.gz	bee271bf7b251428fe5cf21fd586cc43dfd2c842932f4d9e0b1b549546dc7a
kubernetes-client-darwin-amd64.tar.gz	fc1d506c63b48997100aa6099b5d1b019dcd41bb962805f34273ada9a6b2252
kubernetes-client-linux-386.tar.gz	bc7d637eff280bacf2059a487ca374169e63cf311808eb8e8b7504fc8a28a07
kubernetes-client-linux-amd64.tar.gz	f7444a2200092ca6b4cd92408810ae88506fb7a27f762298fafb009b031250e
kubernetes-client-linux-arm.tar.gz	d976e2ca975d5142364df996e4e9597817b65ab6bd0212bde807ec82f734587
kubernetes-client-linux-arm64.tar.gz	7641599ee2d8743f861ff723cf54d3f01732f354729f4c8c101cad5ceeeb0e
kubernetes-client-linux-ppc64le.tar.gz	ceea9bb4f218b3cd7346b44c56ffc7113540ceb1eb59e34df503b281722516a
kubernetes-client-linux-s390x.tar.gz	e1b3ae15e84c8f911537c5e8af0d79d5187ded344fc3330e9d43f22dff3073b
kubernetes-client-windows-386.tar.gz	5ea3c0aba710df3c95bb59621c8b220989ac45698b5268a75b17144d361d338
kubernetes-client-windows-amd64.tar.gz	0499fe3b55fa6252c6c3611c3b22e8f65bf3d2aebcde7b847f7572a539ac9d7

Server Binaries

filename	sha256 hash
kubernetes-server-linux-amd64.tar.gz	1323f4d58522e4480641948299f4804e09c20357682bc12d547f78a60c92083
kubernetes-server-linux-arm.tar.gz	a0d145a1794da4ae1018ad2b14c74e564be3c0c13514a3ed32c6177723d2e47
kubernetes-server-linux-arm64.tar.gz	8f4419ec15470e450094b24299ecae21eb59fc8308009b5b726b98730f7e13a
kubernetes-server-linux-ppc64le.tar.gz	e40aebbaa17976699125913fd6a7d8b66ab343e02c7da674bd4256d1de02995
kubernetes-server-linux-s390x.tar.gz	924d2b177e3646be59f6411b574d99e32ca74e5b7419e12e8642bc085d7355e

Node Binaries

filename	sha256 hash
kubernetes-node-linux-amd64.tar.gz	d254aa910a0dc47e587bec5a5fa8544c743835ba6d9ca5627d9d11a2df90c56
kubernetes-node-linux-arm.tar.gz	d1104c040efbdca831d5af584ad1482a2ade883af198aefef99ad1884794ce1
kubernetes-node-linux-arm64.tar.gz	c983f7e35aaee922865ab5d4d7893f168e026c3216dbc87658ce1bf6d8e67e0
kubernetes-node-linux-ppc64le.tar.gz	b8f784a4b142450bb990ab80a76950c8816e96e4b6e15134d0af5bd48f62c91
kubernetes-node-linux-s390x.tar.gz	b541c476b797f346b5ea68437904995c02d55e089433bdca6fd40531034fc83
kubernetes-node-windows-amd64.tar.gz	c3e91f4b30b801cc942bd0f160dc1afd01bebc3d2f11e69f373b1116409ffb

Changelog since v1.11.1

Action Required

- Cluster Autoscaler version updated to 1.3.1. Release notes: <https://github.com/kubernetes/autoscaler/releases/tag/autoscaler-1.3.1> (#66123, @aleksandra-malinowska)
 - Default value for expendable pod priority cutoff in GCP deployment of Cluster Autoscaler changed from 0 to -10.
 - action required: users deploying workloads with priority lower than 0 may want to use priority lower than -10 to avoid triggering scale-up.

Other notable changes

- Metadata Agent Improvements (#66485, @bmoyles0117)
 - Bump metadata agent version to 0.2-0.0.21-1.
 - Expand the metadata agent's access to all API groups.
 - Remove metadata agent config maps in favor of command line flags.
 - Update the metadata agent's liveness probe to a new /healthz handler.
 - Logging Agent Improvements
 - Bump logging agent version to 0.2-1.5.33-1-k8s-1.
 - Appropriately set log severity for k8s_container.
 - Fix detect exceptions plugin to analyze message field instead of log field.
 - Fix detect exceptions plugin to analyze streams based on local resource id.
 - Disable the metadata agent for monitored resource construction in logging.
 - Disable timestamp adjustment in logs to optimize performance.
 - Reduce logging agent buffer chunk limit to 512k to optimize performance.

- Fix a bug on GCE that `/etc/crictl.yaml` is not generated when `crictl` is preloaded. (#66877, @Random-Liu)
- Fix validation for `HealthzBindAddress` in `kube-proxy` when `-healthz-port` is set to 0 (#66138, @wsong)
- fix `acr` could not be listed in `sp` issue (#66429, @andyzhangx)
- Fixed an issue which prevented `gcloud` from working on GCE when meta-data concealment was enabled. (#66630, @dekkagaijin)
- Fix for `resourcepool-path` configuration in the `vsphere.conf` file. (#66261, @divyenpatel)
- This fix prevents a GCE PD volume from being mounted if the `udev` device link is stale and tries to correct the link. (#66832, @msau42)
- Fix `kubelet` startup failure when using `ExecPlugin` in `kubeconfig` (#66395, @awly)
- GCE: Fixes loadbalancer creation and deletion issues appearing in 1.10.5. (#66400, @nicksardo)
- `kubeadm`: Pull sidecar and `dnsmasq-nanny` images when using `kube-dns` (#66499, @roster)
- fix `smb` mount issue (#65751, @andyzhangx)
- Extend TLS timeouts to work around slow arm64 math/big (#66264, @joelijulian)
- Allow `ScaleIO` volumes to be provisioned without having to first manually create `/dev/disk/by-id` path on each `kubernetes` node (if not already present) (#66174, @ddebroy)
- `kubeadm`: stop setting `UID` in the `kubelet ConfigMap` (#66341, @runiq)
- fixes a panic when using a mutating webhook admission plugin with a `DELETE` operation (#66425, @liggitt)
- Update `crictl` to v1.11.1. (#66152, @Random-Liu)
- `kubectrl`: fixes a panic displaying pods with `nominatedNodeName` set (#66406, @liggitt)
- fixes a validation error that could prevent updates to `StatefulSet` objects containing non-normalized resource requests (#66165, @liggitt)
- Tolerate missing watch permission when deleting a resource (#65370, @deads2k)
- prevents infinite CLI wait on delete when item is recreated (#66136, @deads2k)
- Preserve `vmUUID` when renewing `nodeinfo` in `vSphere` cloud provider (#66007, @w-leads)

v1.11.1

Documentation

Downloads for v1.11.1

filename	sha256 hash
kubernetes.tar.gz	77d93c4ab10b1c4421835ebf3c81dc9c6d2a798949ee9132418e24d500c22d0
kubernetes-src.tar.gz	e597a3a73f4c4933e9fb145d398adfc4e245e4465bbea50b0e55c78d2b0e70e

Client Binaries

filename	sha256 hash
kubernetes-client-darwin-386.tar.gz	d668a91a52ad9c0a95a94172f89b42b42ca8f9eafe4ac479a97fe2e11f5dbd8
kubernetes-client-darwin-amd64.tar.gz	5d6ce0f956b789840baf207b6d2bb252a4f8f0eaf6981207eb7df25e398714f
kubernetes-client-linux-386.tar.gz	1e47c66db3b7a194327f1d3082b657140d4cfee09eb03162a658d0604c31028
kubernetes-client-linux-amd64.tar.gz	a6c7537434fedde75fb77c593b2d2978be1aed00896a354120c5b7164e54aa3
kubernetes-client-linux-arm.tar.gz	6eed4c3f11eb844947344e283482eeeb38a4b59eb8e24174fb706e997945ce1
kubernetes-client-linux-arm64.tar.gz	c260ee179420ce396ab972ab1252a26431c50b5412de2466ede1fb506d5587a
kubernetes-client-linux-ppc64le.tar.gz	01ec89ebbeb2b673504bb629e6a20793c31e29fc9b96100796533c391f3b13f
kubernetes-client-linux-s390x.tar.gz	28b171b63d5c49d0d64006d331daba0ef6e9e841d69c3588bb3502eb122ef76
kubernetes-client-windows-386.tar.gz	9ee394cadd909a937aef5c82c3499ae12da226ccbaa21f6d82c4878b7cb31d6
kubernetes-client-windows-amd64.tar.gz	ab2c21e627a2fab52193ad7af0aabc001520975aac35660dc5f857320176e6c

Server Binaries

filename	sha256 hash
kubernetes-server-linux-amd64.tar.gz	f120baa4b37323a8d7cd6e8027f7b19a544f528d2cae4028366ffbb28dc68d8
kubernetes-server-linux-arm.tar.gz	eac27b81cf2819619fdda54a83f06aecf77aefef1f2f2accd7adcc725cb6071
kubernetes-server-linux-arm64.tar.gz	25d87248f0da9ba71a4e6c5d1b7af2259ffd43435715d52db6044ebe85466fa
kubernetes-server-linux-ppc64le.tar.gz	7eba9021f93b6f99167cd088933aabbf11d5a6f990d796fc1b884ed97e066a3
kubernetes-server-linux-s390x.tar.gz	144fa932ab4bea9e810958dd859fdf9b11a9f90918c22b2c9322b6c21b5c82e

Node Binaries

filename	sha256 hash
kubernetes-node-linux-amd64.tar.gz	45fae35f7c3b23ff8557dcf638eb631dabbcc46a804534ca9d1043d846ec440
kubernetes-node-linux-arm.tar.gz	19c29a635807979a87dcac610f79373df8ee90de823cf095362dcca08684483
kubernetes-node-linux-arm64.tar.gz	35b9a5fa8671c46b9c175a4920dce269fccf84b1defdbccb24e76c4eab9fb25
kubernetes-node-linux-ppc64le.tar.gz	b4a111ee652b42c9d92288d4d86f4897af524537b9409b1f5cedefb4122bb20
kubernetes-node-linux-s390x.tar.gz	4730b9d81cdde078c17c0831b1b20eeda65f4df37e0f595accc63bd2c1635ba
kubernetes-node-windows-amd64.tar.gz	d7fdf0341efe3d6a80a295aae19874a4099644c7ddba5fa34bee3a6924e0840

Changelog since v1.11.0

Action Required

- **ACTION REQUIRED:** Removes defaulting of CSI file system type to ext4. All the production drivers listed under <https://kubernetes-csi.github.io/docs/drivers.html> were inspected and should not be impacted after this change. If you are using a driver not in that list, please test the drivers on an updated test cluster first. (#65499, @krunaljain)
- kube-apiserver: the **Priority** admission plugin is now enabled by default when using **--enable-admission-plugins**. If using **--admission-control** to fully specify the set of admission plugins, the **Priority** admission plugin should be added if using the **PodPriority** feature, which is enabled by default in 1.11. (#65739, @liggitt)
- The **system-node-critical** and **system-cluster-critical** priority classes are now limited to the **kube-system** namespace by the **PodPriority** admission plugin. (#65593, @bsalamat)

Other notable changes

- kubeadm: run kube-proxy on non-master tainted nodes (#65931, @neolit123)
- Fix an issue with dropped audit logs, when truncating and batch backends enabled at the same time. (#65823, @loburm)
- set **EnableHTTPSTrafficOnly** in azure storage account creation (#64957, @andyzhangx)
- Re-adds **pkg/generated/bindata.go** to the repository to allow some parts of k8s.io/kubernetes to be go-vendorable. (#65985, @ixdy)
- Fix a scalability issue where high rates of event writes degraded etcd performance. (#64539, @ccding)

- “kubectl delete” no longer waits for dependent objects to be deleted when removing parent resources (#65908, @juanvallejo)
- Update to use go1.10.3 (#65726, @ixdy)
- Fix the bug where image garbage collection is disabled by mistake. (#66051, @jiaxuanzhou)
- Fix `RunAsGroup` which doesn’t work since 1.10. (#65926, @Random-Liu)
- Fixed cleanup of CSI metadata files. (#65323, @jsafrane)
- Reload systemd config files before starting kubelet. (#65702, @mborsz)
- Fix a bug that preempting a pod may block forever. (#65987, @Random-Liu)
- fixes a regression in kubectl printing behavior when using go-template or jsonpath output that resulted in a “unable to match a printer” error message (#65979, @juanvallejo)
- add external resource group support for azure disk (#64427, @andyzhangx)
- Properly manage security groups for loadbalancer services on OpenStack. (#65373, @multi-io)
- Allow access to ClusterIP from the host network namespace when kube-proxy is started in IPVS mode without either masqueradeAll or cluster-CIDR flags (#65388, @lbernail)
- kubeadm: Fix pause image to not use architecture, as it is a manifest list (#65920, @dims)
- bazel deb package bugfix: The kubeadm deb package now reloads the kubelet after installation (#65554, @rdodev)
- The garbage collector now supports CustomResourceDefinitions and APIServices. (#65915, @nikhita)
- fix azure storage account creation failure (#65846, @andyzhangx)
- skip nodes that have a primary NIC in a ‘Failed’ provisioningState (#65412, @yastij)
- Fix ‘kubectl cp’ with no arguments causes a panic (#65482, @wgliang)
- On COS, NPD creates a node condition for frequent occurrences of unregister_netdevice (#65342, @dashpole)
- bugfix: Do not print feature gates in the generic apiserver code for glog level 0 (#65584, @neolit123)
- Add prometheus scrape port to CoreDNS service (#65589, @rajansandeep)
- kubectl: fixes a regression with `-use-openapi-print-columns` that would not print object contents (#65600, @liggitt)
- fixes an out of range panic in the NoExecuteTaintManager controller when running a non-64-bit build (#65596, @liggitt)
- Fixed issue 63608, which is that under rare circumstances the ResourceQuota admission controller could lose track of an request in progress and time out after waiting 10 seconds for a decision to be made. (#64598, @MikeSpreitzer)

v1.11.0

Documentation

Downloads for v1.11.0

filename	sha256 hash
kubernetes.tar.gz	3c779492574a5d8ce702d89915184f5dd52280da909abf134232e5ab00b4a88
kubernetes-src.tar.gz	f0b2d8e61860acaf50a9bae0dc36b8bfdb4bb41b8d0a1bb5a9bc3d87aad3b79

Client Binaries

filename	sha256 hash
kubernetes-client-darwin-386.tar.gz	196738ef058510438b3129f0a72544544b7d52a8732948b4f9358781f87dab5
kubernetes-client-darwin-amd64.tar.gz	9ec8357b10b79f8fd87f3a836879d0a4bb46fb70adbb82f1e34dc7e91d74999
kubernetes-client-linux-386.tar.gz	e8ee8a965d3ea241d9768b9ac868ecbbee112ef45038ff219e4006fa7f4ab4e
kubernetes-client-linux-amd64.tar.gz	d31377c92b4cc9b3da086bc1974cbf57b0d2c2b22ae789ba84cf1b7554ea70e
kubernetes-client-linux-arm.tar.gz	9e9da909293a4682a5d6270a39894b056b3e901532b15eb8fdc0814a8d628d6
kubernetes-client-linux-arm64.tar.gz	149df9daac3e596042f5759977f9f9299a397130d9dddc2d4a2b513dd64f109
kubernetes-client-linux-ppc64le.tar.gz	ff3d3e4714406d92e9a2b7ef2887519800b89f6592a756524f7a37dc48057f4
kubernetes-client-linux-s390x.tar.gz	e5a39bdc1e474d9d00974a81101e043aaff37c30c1418fb85a0c2561465e14c
kubernetes-client-windows-386.tar.gz	4ba1102a33c6d4df650c4864a118f99a9882021fea6f250a35f4b4f4a2d68ea
kubernetes-client-windows-amd64.tar.gz	0bb74af7358f9a2f4139ed1c10716a2f5f0c1c13ab3af71a0621a1983233c8c

Server Binaries

filename	sha256 hash
kubernetes-server-linux-amd64.tar.gz	b8a8a88afd8a40871749b2362dbb21295c6a9c0a85b6fc87e7febea1688eb99
kubernetes-server-linux-arm.tar.gz	88b9168013bb07a7e17ddc0638e7d36bcd2984d049a50a96f54cb4218647d8c

filename	sha256 hash
kubernetes-server-linux-arm64.tar.gz	12fab9e9f0e032f278c0e114c72ea01899a0430fc772401f23e26de306e0f59
kubernetes-server-linux-ppc64le.tar.gz	6616d726a651e733cfd4cccd78bfdc1d421c4a446edf4b617b8fd8f5e21f073
kubernetes-server-linux-s390x.tar.gz	291838980929c8073ac592219d9576c84a9bdf233585966c81a380c3d753310

Node Binaries

filename	sha256 hash
kubernetes-node-linux-amd64.tar.gz	b23e905efb828dfdfc4efc208f7343236b22c964e408fe889f529502aed4a33
kubernetes-node-linux-arm.tar.gz	44bf8973581887a2edd33eb637407e76dc0dc3a5abcc2ff04aec8338b533150
kubernetes-node-linux-arm64.tar.gz	51e481c782233b46ee21e9635c7d8c2a84450cbe30d7b1cbe5c5982b33f40b7
kubernetes-node-linux-ppc64le.tar.gz	d1a3feda31a954d3a83193a51a117873b6ef9f8acc3e10b3f1504fece91f2e1
kubernetes-node-linux-s390x.tar.gz	0ad76c6e6aef670c215256803b3b0d19f4730a0843429951c6421564c73d493
kubernetes-node-windows-amd64.tar.gz	8ad26200ed40d40a1b78d7a5dbe56220f0813d31194f40f267b476499fe2c50

Kubernetes 1.11 Release Notes

Urgent Upgrade Notes

(No, really, you **MUST** do this before you upgrade)

Before upgrading to Kubernetes 1.11, you must keep the following in mind:

- **JSON configuration files that contain fields with incorrect case will no longer be valid. You must correct these files before upgrading.** When specifying keys in JSON resource definitions during direct API server communication, the keys are case-sensitive. A bug introduced in Kubernetes 1.8 caused the API server to accept a request with incorrect case and coerce it to correct case, but this behaviour has been fixed in 1.11 and the API server will once again be enforcing the correct case. It's worth noting that during this time, the `kubect1` tool continued to enforce case-sensitive keys, so users that strictly manage resources with `kubect1` will be unaffected by this change. (#65034, @caesarxuchao)
- **Pod priority and preemption is now enabled by default.** Note that this means that pods from *any* namespace can now request priority

classes that compete with and/or cause preemption of critical system pods that are already running. If that is not desired, disable the PodPriority feature by setting `--feature-gates=PodPriority=false` on the kube-apiserver, kube-scheduler, and kubelet components before upgrading to 1.11. Disabling the PodPriority feature limits critical pods to the `kube-system` namespace.

Major Themes

SIG API Machinery

This release SIG API Machinery focused mainly on CustomResources. For example, subresources for CustomResources are now beta and enabled by default. With this, updates to the `/status` subresource will disallow updates to all fields other than `.status` (not just `.spec` and `.metadata` as before). Also, `required` and `description` can be used at the root of the CRD OpenAPI validation schema when the `/status` subresource is enabled.

In addition, users can now create multiple versions of CustomResourceDefinitions, but without any kind of automatic conversion, and CustomResourceDefinitions now allow specification of additional columns for `kubectl get` output via the `spec.additionalPrinterColumns` field.

SIG Auth

Work this cycle focused on graduating existing functions, and on making security functions more understandable for users.

RBAC cluster role aggregation, introduced in 1.9, graduated to stable status with no changes in 1.11, and client-go credential plugins graduated to beta status, while also adding support for obtaining TLS credentials from an external plugin.

Kubernetes 1.11 also makes it easier to see what's happening, as audit events can now be annotated with information about how an API request was handled: * Authorization sets `authorization.k8s.io/decision` and `authorization.k8s.io/reason` annotations with the authorization decision (“allow” or “forbid”) and a human-readable description of why the decision was made (for example, RBAC includes the name of the role/binding/subject which allowed a request). * PodSecurityPolicy admission sets `podsecuritypolicy.admission.k8s.io/admit-policy` and `podsecuritypolicy.admission.k8s.io/validate-policy` annotations containing the name of the policy that allowed a pod to be admitted. (PodSecurityPolicy also gained the ability to limit hostPath volume mounts to be read-only.)

In addition, the NodeRestriction admission plugin now prevents kubelets from modifying taints on their Node API objects, making it easier to keep track of which nodes should be in use.

SIG CLI

SIG CLI's main focus this release was on refactoring `kubectl` internals to improve composability, readability and testability of `kubectl` commands. Those refactors will allow the team to extract a mechanism for extensibility of `kubectl` – that is, plugins – in the next releases.

SIG Cluster Lifecycle

SIG Cluster Lifecycle focused on improving `kubeadm`'s user experience by including a set of new commands related to maintaining the `kubeadm` configuration file, the API version of which has now been incremented to `v1alpha2`. These commands can handle the migration of the configuration to a newer version, printing the default configuration, and listing and pulling the required container images for bootstrapping a cluster.

Other notable changes include:

- * CoreDNS replaces kube-dns as the default DNS provider
- * Improved user experience for environments without a public internet connection and users using other CRI runtimes than Docker
- * Support for structured configuration for the kubelet, which avoids the need to modify the systemd drop-in file
- * Many improvements to the upgrade process and other bug fixes

SIG Instrumentation

As far as Sig Instrumentation, the major change in Kubernetes 1.11 is the deprecation of Heapster as part of ongoing efforts to move to the new Kubernetes monitoring model. Clusters still using Heapster for autoscaling should be migrated over to metrics-server and the custom metrics API. See the deprecation section for more information.

SIG Network

The main milestones for SIG Network this release are the graduation of IPVS-based load balancing and CoreDNS to general availability.

IPVS is an alternative approach to in-cluster load balancing that uses in-kernel hash tables rather than the previous iptables approach, while CoreDNS is a replacement for kube-dns for service discovery.

SIG Node

SIG-Node advanced several features and made incremental improvements in a few key topic areas this release.

The dynamic kubelet config feature graduated to beta, so it is enabled by default, simplifying management of the node object itself. Kubelets that are configured to work with the CRI may take advantage of the log rotation feature, which is graduating to beta this release.

The cri-tools project, which aims to provide consistent tooling for operators to debug and introspect their nodes in production independent of their chosen container runtime, graduated to GA.

As far as platforms, working with SIG-Windows, enhancements were made to the kubelet to improve platform support on Windows operating systems, and improvements to resource management were also made. In particular, support for sysctls on Linux graduated to beta.

SIG OpenStack

SIG-OpenStack continued to build out testing, with eleven acceptance tests covering a wide-range of scenarios and use-cases. During the 1.11 cycle our reporting back to test-grid has qualified the OpenStack cloud provider as a gating job for the Kubernetes release.

New features include improved integration between the Keystone service and Kubernetes RBAC, and a number of stability and compatibility improvements across the entire provider code-base.

SIG Scheduling

Pod Priority and Preemption has graduated to Beta, so it is enabled by default. Note that this involves significant and important changes for operators. The team also worked on improved performance and reliability of the scheduler.

SIG Storage

Sig Storage graduated two features that had been introduced in previous versions and introduced three new features in an alpha state.

The StorageProtection feature, which prevents deletion of PVCs while Pods are still using them and of PVs while still bound to a PVC, is now generally available, and volume resizing, which lets you increase size of a volume after a Pod restarts is now beta, which means it is on by default.

New alpha features include: * Online volume resizing will increase the filesystem size of a resized volume without requiring a Pod restart. * AWS EBS and GCE PD volumes support increased limits on the maximum number of attached volumes per node. * Subpath volume directories can be created using DownwardAPI environment variables.

SIG Windows

This release supports more of Kubernetes API for pods and containers on Windows, including:

- Metrics for Pod, Container, Log filesystem
- The run_as_user security contexts

- Local persistent volumes and fstype for Azure disk

Improvements in Windows Server version 1803 also bring new storage functionality to Kubernetes v1.11, including:

- Volume mounts for ConfigMap and Secret
- Flexvolume plugins for SMB and iSCSI storage are also available out-of-tree at Microsoft/K8s-Storage-Plugins

Known Issues

- IPVS based kube-proxy doesn't support graceful close connections for terminating pod. This issue will be fixed in a future release. (#57841, @jsravn)
- kube-proxy needs to be configured to override hostname in some environments. (#857, @detiber)
- There's a known issue where the Vertical Pod Autoscaler will radically change implementation in 1.12, so users of VPA (alpha) in 1.11 are warned that they will not be able to automatically migrate their VPA configs from 1.11 to 1.12.

Before Upgrading

- When Response is a `metav1.Status`, it is no longer copied into the `audit.Event` status. Only the "status", "reason" and "code" fields are set. For example, when we run `kubectl get pods abc`, the API Server returns a status object: `{"kind":"Status","apiVersion":"v1","metadata":{},"status":"Failure","message":"abc\" not found","reason":"NotFound","details":{"name":"abc","kind":"pods"},"code":404}`. In previous versions, the whole object was logged in audit events. Starting in 1.11, only `status`, `reason`, and `code` are logged. Code that relies on the older version must be updated to avoid errors. (#62695, @CaoShuFeng)
- HTTP transport now uses `context.Context` to cancel dial operations. `k8s.io/client-go/transport/Config` struct has been updated to accept a function with a `context.Context` parameter. This is a breaking change if you use this field in your code. (#60012, @ash2k)
- `kubectl`: This client version requires the `apps/v1` APIs, so it will not work against a cluster version older than v1.9.0. Note that `kubectl` only guarantees compatibility with clusters that are +/-1 minor version away. (#61419, @enisoc)
- Pod priority and preemption is now enabled by default. Even if you don't plan to use this feature, you might need to take some action immediately after upgrading. In multi-tenant clusters where not all users are trusted, you are advised to create appropriate quotas for two default priority classes, `system-cluster-critical` and `system-node-critical`, which are added to clusters by default. `ResourceQuota` should be created to limit users from creating Pods at these priorities if not all users of your cluster are trusted. We do not advise disabling this feature because critical system Pods rely on

the scheduler preemption to be scheduled when cluster is under resource pressure.

- Default mount propagation has changed from **HostToContainer** (“rslave” in Linux terminology), as it was in 1.10, to **None** (“private”) to match the behavior in 1.9 and earlier releases; **HostToContainer** as a default caused regressions in some pods. If you are relying on this behavior you will need to set it explicitly. (#62462, @jsafrane)
- The kube-apiserver **--storage-version** flag has been removed; you must use **--storage-versions** instead. (#61453, @hxxuzhonghu)
- Authors of aggregated API servers must not rely on authorization being done by the kube-apiserver, and must do delegated authorization in addition. (#61349, @sttts)
- GC is now bound by QPS so if you need more QPS to avoid ratelimiting GC, you’ll have to set it explicitly. (#63657, @shyamjvs)
- **kubeadm join** is now blocking on the kubelet performing the TLS Bootstrap properly. Earlier, **kubeadm join** only did the discovery part and exited successfully without checking that the kubelet actually started properly and performed the TLS bootstrap correctly. Now, as **kubeadm** runs some post-join steps (for example, annotating the Node API object with the CRISocket), **kubeadm join** is now waiting for the kubelet to perform the TLS Bootstrap, and then uses that credential to perform further actions. This also improves the UX, as **kubeadm** will exit with a non-zero code if the kubelet isn’t in a functional state, instead of pretending everything’s fine. (#64792, @luxas)
- The structure of the kubelet dropin in the **kubeadm** deb package has changed significantly. Instead of hard-coding the parameters for the kubelet in the dropin, a structured configuration file for the kubelet is used, and is expected to be present in `/var/lib/kubelet/config.yaml`. For runtime-detected, instance-specific configuration values, a environment file with dynamically-generated flags at **kubeadm init** or **kubeadm join** run time is used. Finally, if you want to override something specific for the kubelet that can’t be done via the **kubeadm** Configuration file (which is preferred), you might add flags to the **KUBELET_EXTRA_ARGS** environment variable in either `/etc/default/kubelet` or `/etc/sysconfig/kubelet`, depending on the system you’re running on. (#64780, @luxas)
- The **--node-name** flag for **kubeadm** now dictates the Node API object name the kubelet uses for registration, in all cases but where you might use an in-tree cloud provider. If you’re not using an in-tree cloud provider, **--node-name** will set the Node API object name. If you’re using an in-tree cloud provider, you MUST make **--node-name** match the name the in-tree cloud provider decides to use. (#64706, @lizzio)
- The **PersistentVolumeLabel** admission controller is now disabled by default. If you depend on this feature (AWS/GCE) then ensure it is added to the **--enable-admission-plugins** flag on the kube-apiserver. (#64326, @andrewsykim)
- **kubeadm**: kubelets in **kubeadm** clusters now disable the readonly port

(10255). If you're relying on unauthenticated access to the readonly port, please switch to using the secure port (10250). Instead, you can now use ServiceAccount tokens when talking to the secure port, which will make it easier to get access to, for example, the `/metrics` endpoint of the kubelet, securely. (#64187, @luxas)

- The formerly publicly-available cAdvisor web UI that the kubelet ran on port 4194 by default is now turned off by default. The flag configuring what port to run this UI on `--cadvisor-port` was deprecated in v1.10. Now the default is `--cadvisor-port=0`, in other words, to not run the web server. If you still need to run cAdvisor, the recommended way to run it is via a DaemonSet. Note that the `--cadvisor-port` will be removed in v1.12 (#63881, @luxas)

New Deprecations

- As a reminder, etcd2 as a backend is deprecated and support will be removed in Kubernetes 1.13. Please ensure that your clusters are upgraded to etcd3 as soon as possible.
- InfluxDB cluster monitoring has been deprecated as part of the deprecation of Heapster. Instead, you may use the metrics server. It's a simplified heapster that is able to gather and serve current metrics values. It provides the Metrics API that is used by `kubectl top`, and horizontal pod autoscaler. Note that it doesn't include some features of Heapster, such as short term metrics for graphs in kube-dashboard and dedicated push sinks, which proved hard to maintain and scale. Clusters using Heapster for transferring metrics into long-term storage should consider using their metric solution's native Kubernetes support, if present, or should consider alternative solutions. (#62328, @serathius)
- The kubelet `--rotate-certificates` flag is now deprecated, and will be removed in a future release. The kubelet certificate rotation feature can now be enabled via the `.RotateCertificates` field in the kubelet's config file. (#63912, @luxas)
- The kubeadm configuration file version has been upgraded from `v1alpha1` to `v1alpha2`. `v1alpha1` read support exists in v1.11, but will be removed in v1.12. (#63788, @luxas) The following PRs changed the API spec:
 - In the new `v1alpha2` kubeadm Configuration API, the `.CloudProvider` and `.PrivilegedPods` fields don't exist anymore. Instead, you should use the out-of-tree cloud provider implementations, which are beta in v1.11.
 - If you have to use the legacy in-tree cloud providers, you can rearrange your config like the example below. If you need the `ccloud-config` file (located in `{ccloud-config-path}`), you can mount it into the API Server and controller-manager containers using ExtraVolumes, as in:

```
“ kind: MasterConfiguration apiVersion: kubeadm.k8s.io/v1alpha2
apiServerExtraArgs: cloud-provider: “{cloud}” cloud-config: “{ccloud-config-path}”
apiServerExtraVolumes:
```

- name: cloud hostPath: "{cloud-config-path}" mountPath: "{cloud-config-path}" controllerManagerExtraArgs: cloud-provider: "{cloud}" cloud-config: "{cloud-config-path}" controllerManagerExtraVolumes:
- name: cloud hostPath: "{cloud-config-path}" mountPath: "{cloud-config-path}"

* If you need to use the `.PrivilegedPods`` functionality, you can still edit the manifests in ([#63866](https://github.com/kubernetes/kubernetes/pull/63866)), [luxas](https://github.com/luxas) ([#61285](https://github.com/kubernetes/kubernetes/pull/61285))

* kubeadm: The Token-related fields in the `MasterConfiguration`` object have now been refactored into `TokenConfiguration``

* `.NodeName`` and `.CRISocket`` in the `MasterConfiguration`` and `NodeConfiguration`` v1alpha2 API have been removed.

* kubeadm: Support for `.AuthorizationModes`` in the kubeadm v1alpha2 API has been removed.

* The annotation `service.alpha.kubernetes.io/tolerate-unready-endpoints`` is deprecated. Use `tolerate-unready-endpoints`` instead.

* `--show-all``, which only affected pods, and even then only for human readable/non-API printouts, is deprecated.

* The `kubectl rolling-update`` is now deprecated. Use `kubectl rollout`` instead. ([#61285](https://github.com/kubernetes/kubernetes/pull/61285))

* kube-apiserver: the default `--endpoint-reconciler-type`` is now `lease``. The `master-controller`` is deprecated.

* OpenStack built-in cloud provider is now deprecated. Please use the external cloud provider.

* The Kubelet's deprecated `--allow-privileged`` flag now defaults to true. This enables user namespaces.

* The old dynamic client has been replaced by a new one. The previous dynamic client will continue to work for a while.

* In-tree support for openstack credentials is now deprecated. please use the "client-keystone" plugin.

* The GitRepo volume type is deprecated. To provision a container with a git repo, mount an external volume.

([#63445](https://github.com/kubernetes/kubernetes/pull/63445)), [ericchiang](https://github.com/ericchiang) ([#63445](https://github.com/kubernetes/kubernetes/pull/63445))

* Alpha annotation for PersistentVolume node affinity has been removed. Update your PersistentVolume manifests ([#63445](https://github.com/kubernetes/kubernetes/pull/63445))

Removed Deprecations

* kubeadm has removed the `.ImagePullPolicy`` field in the v1alpha2 API version. Instead it's `imagePullPolicy``.

* kubeadm has removed `.Etcd.SelfHosting`` from its configuration API. It was never used in production.

* The deprecated and inactive option `'--enable-custom-metrics'` has been removed in 1.11. ([#61285](https://github.com/kubernetes/kubernetes/pull/61285))

* `--include-extended-apis`, which was deprecated back in [#32894](https://github.com/kubernetes/kubernetes/pull/32894), has been removed.

* Kubelets will no longer set `externalID`` in their node spec. This feature has been deprecated.

* The `initresource`` admission plugin has been removed. ([#58784](https://github.com/kubernetes/kubernetes/pull/58784))

* `ObjectMeta``, `ListOptions``, and `DeleteOptions`` have been removed from the core api group.

* The deprecated `--mode`` flag in `check-network-mode`` has been removed. ([#60102](https://github.com/kubernetes/kubernetes/pull/60102))

* Support for the `alpha.kubernetes.io/nvidia-gpu`` resource, which was deprecated in 1.10, has been removed.

* The `kube-cloud-controller-manager`` flag `--service-account-private-key-file`` has been removed.

* The rknetes code, which was deprecated in 1.10, has been removed. Use rktlet and CRI instead.

* DaemonSet scheduling associated with the alpha `ScheduleDaemonSetPods`` feature flag has been removed.

* The `METADATA_AGENT_VERSION`` configuration option has been removed to keep metadata agent consistent.

* The deprecated `--service-account-private-key-file`` flag has been removed from the cloud-controller-manager.

* Removed alpha functionality that allowed the controller manager to approve kubelet server certificates.

Graduated to Stable/GA

* IPVS-based in-cluster load balancing is now GA ([ref](https://github.com/kubernetes/enhancements/pull/1000))

* Enable CoreDNS as a DNS plugin for Kubernetes ([ref](https://github.com/kubernetes/enhancements/pull/1000))

* Azure Go SDK is now GA ([#63063](https://github.com/kubernetes/kubernetes/pull/63063)), [Onyiah](https://github.com/Onyiah)

- * ClusterRole aggregation is now GA ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * CRI validation test suite is now GA ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * StorageObjectInUseProtection is now GA ([ref](https://github.com/kubernetes/enhancements/issues/1000))

Graduated to Beta

- * Supporting out-of-tree/external cloud providers is now considered beta ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * Resizing PersistentVolumes after pod restart is now considered beta. ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * sysctl support is now considered beta ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * Support for Azure Virtual Machine Scale Sets is now considered beta. ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * Azure support for Cluster Autoscaler is now considered beta. ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * The ability to limit a node's access to the API is now considered beta. ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * CustomResource versioning is now considered beta. ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * Windows container configuration in CRI is now considered beta ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * CRI logging and stats are now considered beta ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * The dynamic Kubelet config feature is now beta, and the DynamicKubeletConfig feature gate is now beta. ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * The Sysctls experimental feature has been promoted to beta (enabled by default via the `Sysctl` feature gate). ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * Volume expansion is now considered Beta. ([#64288](https://github.com/kubernetes/enhancements/pull/64288))
- * CRI container log rotation is now considered beta, and is enabled by default. ([#64046](https://github.com/kubernetes/enhancements/pull/64046))
- * The `PriorityClass` API has been promoted to `scheduling.k8s.io/v1beta1` ([#63100](https://github.com/kubernetes/enhancements/pull/63100))
- * The priorityClass feature is now considered beta. ([#63724](https://github.com/kubernetes/enhancements/pull/63724))
- * client-go: credential exec plugins is now considered beta. ([#64482](https://github.com/kubernetes/enhancements/pull/64482))
- * Subresources for custom resources is now considered beta and enabled by default. With this change, the `subresource` field in the `CustomResourceDefinition` is now required.

New alpha features

- * kube-scheduler can now schedule DaemonSet pods ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * You can now resize PersistentVolumes without taking them offline ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * You can now set a maximum volume count ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * You can now do environment variable expansion in a subpath mount. ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * You can now run containers in a pod as a particular group. ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * You can now bind tokens to service requests. ([ref](https://github.com/kubernetes/enhancements/issues/1000))
- * The `--experimental-qos-reserve` kubelet flag has been replaced by the alpha level `--qos-reserve` flag.

Other Notable Changes

SIG API Machinery

- * Orphan delete is now supported for custom resources. ([#63386](https://github.com/kubernetes/enhancements/pull/63386))
- * Metadata of CustomResources is now pruned and schema-checked during deserialization of requests.
- * The kube-apiserver openapi doc now includes extensions identifying `APIService` and `CustomResourceDefinition`.
- * CustomResourceDefinitions Status subresource now supports GET and PATCH ([#63619](https://github.com/kubernetes/enhancements/pull/63619))
- * When updating `/status` subresource of a custom resource, only the value at the `.status` field is updated.
- * Added a way to pass extra arguments to etcd. The these extra arguments can be used to adjust the etcd configuration.
- * Added Establishing Controller on CRDs to avoid race between Established condition and CRDs.
- * Added `spec.additionalPrinterColumns` to CRDs to define server side printing columns. ([#63619](https://github.com/kubernetes/enhancements/pull/63619))

- * Added CRD Versioning with NOP converter ([#63830](https://github.com/kubernetes/kubernetes/commit/63830))
- * Allow "required" and "description" to be used at the CRD OpenAPI validation schema root
- * Etcd health checks by the apiserver now ensure the apiserver can connect to and exercise the health endpoint
- * The deprecated `--service-account-private-key-file` flag has been removed from the `cloud-provider`
- * Webhooks for the mutating admission controller now support the "remove" operation. ([#6425](https://github.com/kubernetes/kubernetes/commit/6425))
- * The CRD OpenAPI v3 specification for validation now allows `additionalProperties`, which allows for more flexible validation
- * Added the apiserver configuration option to choose the audit output version. ([#60056](https://github.com/kubernetes/kubernetes/commit/60056))
- * Created a new `dryRun` query parameter for mutating endpoints. If the parameter is set, the endpoint will not perform any mutating operation
- * `list/watch` API requests with a `fieldSelector` that specifies `metadata.name` can now be used to filter by name
- * Exposed `/debug/flags/v` to allow dynamically set glog logging level. For example, to change the log level to `debug`, run `curl -XPOST http://localhost:8080/debug/flags/v?glog=debug`
- * Exec authenticator plugin supports TLS client certificates. ([#61803](https://github.com/kubernetes/kubernetes/commit/61803))
- * The `serverAddressByClientCIDRs` property in `metav1.APIGroup` (discovery API) is now optional
- * `apiservices/status` and `certificatesigningrequests/status` now support `GET` and `PATCH` verbs
- * APIServices with kube-like versions (e.g. `v1`, `v2beta1`, etc.) will be sorted appropriately
- * Event object references with `apiversion` will now use that value. ([#63913](https://github.com/kubernetes/kubernetes/commit/63913))
- * Fixes the `kubernetes.default.svc` loopback service resolution to use a loopback configuration

SIG Apps

- * Added generators for `apps/v1` deployments. ([#61288](https://github.com/kubernetes/kubernetes/commit/61288))

SIG Auth

- * RBAC information is now included in audit logs via `audit.Event` annotations:
 - * `authorization.k8s.io/decision` = {allow, forbid}
 - * `authorization.k8s.io/reason` = human-readable reason for the decision ([#58807](https://github.com/kubernetes/kubernetes/commit/58807))
- * `kubectrl certificate approve|deny` will not modify an already approved or denied CSR unless the `reason` is provided
- * The `--bootstrap-kubeconfig` argument to Kubelet previously created the first bootstrap certificate
- * Owner references can now be set during creation, even if the user doesn't have deletion permission
- * Laid the groundwork for OIDC distributed claims handling in the apiserver authentication module
- * RBAC: all configured authorizers are now checked to determine if an RBAC role or clusterrole is applicable
- * kube-apiserver: OIDC authentication now supports requiring specific claims with `--oidc-requires-claims`
- * Included the list of security groups when failing with the errors that more than one is targeted
- * Added proxy for container streaming in kubelet for streaming auth. ([#64006](https://github.com/kubernetes/kubernetes/commit/64006))
- * PodSecurityPolicy admission information has been added to audit logs. ([#58143](https://github.com/kubernetes/kubernetes/commit/58143))
- * TokenRequests now are required to have an expiration duration between 10 minutes and 2^32-1 minutes
- * The `NodeRestriction` admission plugin now prevents kubelets from modifying/removing taints
- * authz: nodes should not be able to delete themselves ([#62818](https://github.com/kubernetes/kubernetes/commit/62818))

SIG Autoscaling

- * A cluster-autoscaler ClusterRole is added to cover only the functionality required by ClusterAutoscaler

SIG Azure

- * The Azure cloud provider now supports standard SKU load balancer and public IP.

`excludeMasterFromStandardLB` defaults to true, which means master nodes are excluded from t
 ([#61884](https://github.com/kubernetes/kubernetes/pull/61884), [#62707](https://github.com/
 * The Azure cloud provider now supports specifying allowed service tags by the `service.beta.
 * You can now change the size of an azuredisk PVC using `kubectl edit pvc pvc-azuredisk`. No
 * Block device support has been added for azure disk. ([#63841](https://github.com/kubernetes/
 * Azure VM names can now contain the underscore (`_`) character ([#63526](https://github.com/
 * Azure disks now support external resource groups.
 ([#64427](https://github.com/kubernetes/kubernetes/pull/64427), [@andyzhangx](https://github.com/
 * Added reason message logs for non-existent Azure resources.
 ([#64248](https://github.com/kubernetes/kubernetes/pull/64248), [@feiskyer](https://github.com/

SIG CLI

* You can now use the `base64decode` function in kubectl go templates to decode base64-encod
 * `kubectl patch` now supports `--dry-run`. ([#60675](https://github.com/kubernetes/kubernetes/
 * The global flag `--match-server-version` is now global. `kubectl version` will respect it
 * kubectl will list all allowed print formats when an invalid format is passed. ([#64371](ht
 * The global flag "context" now gets applied to `kubectl config view --minify`. In previous
 * `kubectl apply --prune` supports CronJob resources. ([#62991](https://github.com/kubernetes/
 * The `--dry-run` flag has been enabled for `kubectl auth reconcile` ([#64458](https://github.com/
 * `kubectl wait` is a new command that allows waiting for one or more resources to be delete
 * `kubectl auth reconcile` only works with rbac.v1; all the core helpers have been switched
 * kubectl and client-go now detect duplicated names for user, cluster and context when loadi
 * Added 'UpdateStrategyType' and 'RollingUpdateStrategy' to 'kubectl describe sts' command
 * Initial Korean translation for kubectl has been added. ([#62040](https://github.com/kubernetes/
 * `kubectl cp` now supports completion.
 ([#60371](https://github.com/kubernetes/kubernetes/pull/60371), [@superbrothers](https://github.com/
 * The shortcuts that were moved server-side in at least 1.9 have been removed from being ha
 * When using `kubectl delete` with selection criteria, the defaults to is now to ignore "not
 * `kubectl create [secret | configmap] --from-file` now works on Windows with fully-qualifie
 * Portability across systems has been increased by the use of `/usr/bin/env` in all script s
 * You can now use `kubectl api-resources` to discover resources.
 ([#42873](https://github.com/kubernetes/kubernetes/pull/42873), [@xilabao](https://github.com/
 * You can now display requests/limits of extended resources in node allocated resources. ([#
 * The `--remove-extra-subjects` and `--remove-extra-permissions` flags have been enabled for
 * kubectl now has improved compatibility with older servers when creating/updating API obje
 * `kubectl apply` view/edit-last-applied now supports completion. ([#60499](https://github.com/

SIG Cluster Lifecycle

* kubeadm: The `:Etcd` struct has been refactored in the v1alpha2 API. All the options now
 * kubeadm now uses an upgraded API version for the configuration file, `kubeadm.k8s.io/v1alp
 * Phase `kubeadm alpha phase kubelet` has been added to support dynamic kubelet configuratio
 * The kubeadm config option `API.ControlPlaneEndpoint` has been extended to take an optional
 * The `--cluster-name` parameter has been added to kubeadm init, enabling users to specify t
 * The logging feature for kubeadm commands now supports a verbosity setting. ([#57661](https://

- * kubeadm now has a join timeout that can be controlled via the `discoveryTimeout` config option.
- * Added the `writable` boolean option to kubeadm config. This option works on a per-volume basis.
- * Added a new `kubeadm upgrade node config` command. ([#64624](https://github.com/kubernetes/kubernetes/pull/64624))
- * kubeadm now makes the CoreDNS container more secure by dropping (root) capabilities and in
- * kubeadm now detects the Docker cgroup driver and starts the kubelet with the matching driver. ([#64347](https://github.com/kubernetes/kubernetes/pull/64347), [neolit123](https://github.com/neolit123))
- * Added a `kubeadm config migrate` command to convert old API types to their newer counterparts.
- * kubeadm will now pull required images during preflight checks if it cannot find them on the host.
- * "kubeadm init" now writes a structured and versioned kubelet ComponentConfiguration file to disk.
- * A `kubeadm config print-default` command has now been added. You can use this command to check the default configuration.
- * Updated kubeadm's minimum supported kubernetes in v1.11.x to 1.10 ([#63920](https://github.com/kubernetes/kubernetes/pull/63920))
- * Added the `kubeadm upgrade diff` command to show how static pod manifests will be changed during an upgrade.
- * The `kubeadm config images pull` command can now be used to pull container images used by kubeadm.
- * kubeadm will now deploy CoreDNS by default instead of KubeDNS ([#63509](https://github.com/kubernetes/kubernetes/pull/63509))
- * Preflight checks for kubeadm no longer validate custom kube-apiserver, kube-controller-manager, or kube-scheduler images.
- * Added a `kubeadm config images list` command that lists required container images for a kubeadm configuration.
- * You can now use `kubeadm token` specifying `--kubeconfig`. In this case, kubeadm searches for the kubeconfig file in the specified directory.
- * kubeadm now sets peer URLs for the default etcd instance. Previously we left the defaults.
- * Kubernetes now packages crictl in a cri-tools deb and rpm package. ([#64836](https://github.com/kubernetes/kubernetes/pull/64836))
- * kubeadm now prompts the user for confirmation when resetting a master node. ([#59115](https://github.com/kubernetes/kubernetes/pull/59115))
- * kubeadm now creates kube-proxy with a toleration to run on all nodes, no matter the taint.
- * kubeadm now sets the kubelet `--resolv-conf` flag conditionally on init. ([#64665](https://github.com/kubernetes/kubernetes/pull/64665))
- * Added ipset and udevadm to the hyperkube base image. ([#61357](https://github.com/kubernetes/kubernetes/pull/61357))

SIG GCP

- * Kubernetes clusters on GCE now have crictl installed. Users can use it to help debug their clusters.
- * `cluster/kube-up.sh` now provisions a Kubelet config file for GCE via the metadata server.
- * GCE: Update cloud provider to use TPU v1 API ([#64727](https://github.com/kubernetes/kubernetes/pull/64727))
- * GCE: Bump GLBC version to 1.1.1 - fixing an issue of handling multiple certs with identical names.

SIG Instrumentation

- * Added prometheus cluster monitoring addon to kube-up. ([#62195](https://github.com/kubernetes/kubernetes/pull/62195))
- * Kubelet now exposes a new endpoint, `/metrics/probes`, which exposes a Prometheus metric for kubelet health.

SIG Network

- * The internal IP address of the node is now added as additional information for kubect1. ([#64775](https://github.com/kubernetes/kubernetes/pull/64775))
- * NetworkPolicies can now target specific pods in other namespaces by including both a namespace and pod name.
- * CoreDNS deployment configuration now uses the k8s.gcr.io imageRepository. ([#64775](https://github.com/kubernetes/kubernetes/pull/64775))
- * kubelet's `--cni-bin-dir` option now accepts multiple comma-separated CNI binary directories.
- * You can now use `--ipvs-exclude-cidrs` to specify a list of CIDR's which the IPVS proxier will ignore.
- * You can now receive node DNS info with the `--node-ip` flag, which adds `ExternalDNS`, `InternalDNS`, and `InternalIP` to the node's status.
- * You can now have services that listen on the same host ports on different interfaces by specifying the interface in the service spec.
- * Added port-forward examples for service

SIG Node

- * CRI: The container log path has been changed from `containername_attempt#.log` to `containername.log`
- * Introduced the ``ContainersReady`` condition in Pod status. ([#64646](https://github.com/kubernetes/kubernetes/pull/64646), [kubernetes/kubernetes#64646])
- * Kubelet will now set extended resource capacity to zero after it restarts. If the extended resource capacity is non-zero, Kubelet will not restart.
- * You can now use a security context with Windows containers ([#64009](https://github.com/kubernetes/kubernetes/pull/64009), [kubernetes/kubernetes#64009], [feiskyer](https://github.com/feiskyer))
- * Added e2e regression tests for kubelet security. ([#64140](https://github.com/kubernetes/kubernetes/pull/64140), [kubernetes/kubernetes#64140], [kubernetes/kubernetes#64140])
- * The maximum number of images the Kubelet will report in the Node status can now be controlled by the `node-config-max-images` flag.
- * The Kubelet now exports metrics that report the assigned (``node_config_assigned``), last-known-good (``node_config_last_known_good``), and current (``node_config_current``) configurations.
- * You now have the ability to quota resources by priority. ([#57963](https://github.com/kubernetes/kubernetes/pull/57963), [kubernetes/kubernetes#57963], [kubernetes/kubernetes#57963])
- * The gRPC max message size in the remote container runtime has been increased to 16MB. ([#64009](https://github.com/kubernetes/kubernetes/pull/64009), [kubernetes/kubernetes#64009], [kubernetes/kubernetes#64009])
- * Added a feature gate for the plugin watcher. ([#64605](https://github.com/kubernetes/kubernetes/pull/64605), [kubernetes/kubernetes#64605], [kubernetes/kubernetes#64605])
- * The status of dynamic Kubelet config is now reported via `Node.Status.Config`, rather than `Node.Status.ConfigSource`.
- * You must now specify ``Node.Spec.ConfigSource.ConfigMap.KubeletConfigKey`` when using dynamic Kubelet config.
- * The dynamic Kubelet config feature will now update the config in the event of a ConfigMap update.
- * Change seccomp annotation from "docker/default" to "runtime/default" ([#62662](https://github.com/kubernetes/kubernetes/pull/62662), [kubernetes/kubernetes#62662], [kubernetes/kubernetes#62662])
- * The node authorizer now automatically sets up rules for ``Node.Spec.ConfigSource`` when the `Node.Spec.ConfigSource` is set.
- * CRI now defines mounting behavior. If the host path doesn't exist, the runtime should return `ErrNotExist`.

SIG OpenStack

- * Provide a meaningful error message in the openstack cloud provider when no valid IP address is found.
- * Restored the pre-1.10 behavior of the openstack cloud provider, which uses the instance name to find the IP address.
- * Kubernetes will try to read the openstack auth config from the client config and fall back to the environment variables.

SIG Scheduling

- * Schedule DaemonSet Pods in scheduler, rather than the Daemonset controller. ([#63223](https://github.com/kubernetes/kubernetes/pull/63223), [kubernetes/kubernetes#63223], [k82cn](https://github.com/k82cn))
- * Added ``MatchFields`` to ``NodeSelectorTerm``; in 1.11, it only supports ``metadata.name``. ([#62515](https://github.com/kubernetes/kubernetes/pull/62515), [kubernetes/kubernetes#62515], [kubernetes/kubernetes#62515])
- * kube-scheduler now has the ``--write-config-to`` flag so that Scheduler can write its default configuration to a file. ([#62515](https://github.com/kubernetes/kubernetes/pull/62515), [kubernetes/kubernetes#62515], [kubernetes/kubernetes#62515])
- * Performance of the affinity/anti-affinity predicate for the default scheduler has been significantly improved.
- * The `'scheduling_latency_seconds'` metric into has been split into finer steps (predicate, priority, nodeSelector, request, capacity, and total).
- * Scheduler now has a summary-type metric, `'scheduling_latency_seconds'`. ([#64838](https://github.com/kubernetes/kubernetes/pull/64838), [kubernetes/kubernetes#64838], [kubernetes/kubernetes#64838])
- * ``nodeSelector.matchFields`` (node's ``metadata.name``) is now supported in scheduler. ([#62451](https://github.com/kubernetes/kubernetes/pull/62451), [kubernetes/kubernetes#62451], [kubernetes/kubernetes#62451])
- * Added a parametrizable priority function mapping requested/capacity ratio to priority. This is useful for scheduling pods with different resource requirements. ([#63929](https://github.com/kubernetes/kubernetes/pull/63929), [kubernetes/kubernetes#63929], [kubernetes/kubernetes#63929])
- * System critical priority classes are now automatically added at cluster bootstrapping. ([#64009](https://github.com/kubernetes/kubernetes/pull/64009), [kubernetes/kubernetes#64009], [kubernetes/kubernetes#64009])

SIG Storage

- * AWS EBS, Azure Disk, GCE PD and Ceph RBD volume plugins now support dynamic provisioning of volumes.
- * gitRepo volumes in pods no longer require git 1.8.5 or newer; older git versions are now supported.

- * Added support for resizing Portworx volumes. ([#62308](https://github.com/kubernetes/kuber
- * Added block volume support to Cinder volume plugin. ([#64879](https://github.com/kubernetes
- * Provided API support for external CSI storage drivers to support block volumes. ([#64723](https://github.com/kubernetes
- * Volume topology aware dynamic provisioning for external provisioners is now supported. ([#64723](https://github.com/kubernetes
- * Added a volume projection that is able to project service account tokens. ([#62005](https://github.com/kubernetes
- * PodSecurityPolicy now supports restricting hostPath volume mounts to be readOnly and under
- * Added StorageClass API to restrict topologies of dynamically provisioned volumes. ([#63233](https://github.com/kubernetes
- * Added Alpha support for dynamic volume limits based on node type ([#64154](https://github.com/kubernetes
- * AWS EBS volumes can be now used as ReadOnly in pods. ([#64403](https://github.com/kubernetes
- * Basic plumbing for volume topology aware dynamic provisionin has been implemented. ([#63233](https://github.com/kubernetes
- * Changed ext3/ext4 volume creation to not reserve any portion of the volume for the root us ([#64102](https://github.com/kubernetes/kubernetes/pull/64102), [atombender](https://github.com/atombender)
- * Added support for NFS relations on kubernetes-worker charm. ([#63817](https://github.com/kubernetes/charms))
- * Implemented kubelet side online file system resizing ([#62460](https://github.com/kubernetes/kubelet))
- * Generated subpath name from Downward API env ([#49388](https://github.com/kubernetes/kubelet))

SIG vSphere

- * Added a mechanism in vSphere Cloud Provider to get credentials from Kubernetes secrets, ra
- * vSphere Cloud Provider: added SAML token authentication support ([#63824](https://github.com/kubernetes/cloud-provider-vsphere))

SIG Windows

- * Added log and fs stats for Windows containers. ([#62266](https://github.com/kubernetes/kubernetes/pull/62266))
- * Added security contexts for Windows containers. [64009](https://github.com/kubernetes/kubernetes/pull/64009)
- * Added local persistent volumes for Windows containers. ([#62012](https://github.com/kubernetes/kubernetes/pull/62012))
- * Improvements in Windows Server version 1803 also bring new storage functionality to Kubern
 - * Volume mounts for ConfigMap and Secret
 - * Flexvolume plugins for SMB and iSCSI storage are also available out-of-tree at [Microsoft Windows Server 2019](https://github.com/kubernetes/kubernetes/pull/62012)
- * Setup dns servers and search domains for Windows Pods in dockershim. Docker EE version >= 1.13.0

Additional changes

- * Extended the Stackdriver Metadata Agent by adding a new Deployment for ingesting unschedul
- * Added all kinds of resource objects' statuses in HPA description. ([#59609](https://github.com/kubernetes/kubernetes/pull/59609))
- * Implemented preemption for extender with a verb and new interface ([#58717](https://github.com/kubernetes/kubernetes/pull/58717))
- * Updated nvidia-gpu-device-plugin DaemonSet config to use RollingUpdate updateStrategy inst
- * increased grpc client default response size. ([#63977](https://github.com/kubernetes/kubernetes/pull/63977))
- * Applied pod name and namespace labels to pod cgroup in cAdvisor metrics ([#63406](https://github.com/kubernetes/kubernetes/pull/63406))
- * [fluentd-gcp addon] Use the logging agent's node name as the metadata agent URL. ([#63353](https://github.com/kubernetes/kubernetes/pull/63353))
- * The new default value for the --allow-privileged parameter of the Kubernetes-worker charm is false

External Dependencies

- * Default etcd server version is v3.2.18 compared with v3.1.12 in v1.10 ([#61198](https://github.com/kubernetes/kubernetes/pull/61198))
- * Rescheduler is v0.4.0, compared with v0.3.1 in v1.10 ([#65454](https://github.com/kubernetes/kubernetes/pull/65454))

- * The validated docker versions are the same as for v1.10: 1.11.2 to 1.13.1 and 17.03.x (release notes)
- * The Go version is go1.10.2, as compared to go1.9.3 in v1.10. ([#63412](https://github.com/kubernetes/kubernetes/pull/63412))
- * The minimum supported go is the same as for v1.10: go1.9.1. ([#55301](https://github.com/kubernetes/kubernetes/pull/55301))
- * CNI is the same as v1.10: v0.6.0 ([#51250](https://github.com/kubernetes/kubernetes/pull/51250))
- * CSI is updated to 0.3.0 as compared to 0.2.0 in v1.10. ([#64719](https://github.com/kubernetes/kubernetes/pull/64719))
- * The dashboard add-on is the same as v1.10: v1.8.3. ([#517326](https://github.com/kubernetes/kubernetes/pull/517326))
- * Bump Heapster to v1.5.2 as compared to v1.5.0 in v1.10 ([#61396](https://github.com/kubernetes/kubernetes/pull/61396))
- * Updates Cluster Autoscaler version to v1.3.0 from v1.2.0 in v1.10. See [release notes](https://github.com/kubernetes/autoscaler/releases)
- * Kube-dns has been updated to v1.14.10, as compared to v1.14.8 in v1.10 ([#62676](https://github.com/kubernetes/kubernetes/pull/62676))
- * Influxdb is unchanged from v1.10: v1.3.3 ([#53319](https://github.com/kubernetes/kubernetes/pull/53319))
- * Grafana is unchanged from v1.10: v4.4.3 ([#53319](https://github.com/kubernetes/kubernetes/pull/53319))
- * CAdvisor is v0.30.1, as opposed to v0.29.1 in v1.10 ([#64987](https://github.com/kubernetes/kubernetes/pull/64987))
- * fluentd-gcp-scaler is unchanged from v1.10: v0.3.0 ([#61269](https://github.com/kubernetes/kubernetes/pull/61269))
- * fluentd in fluentd-es-image is unchanged from 1.10: v1.1.0 ([#58525](https://github.com/kubernetes/kubernetes/pull/58525))
- * fluentd-elasticsearch is unchanged from 1.10: v2.0.4 ([#58525](https://github.com/kubernetes/kubernetes/pull/58525))
- * fluentd-gcp is unchanged from 1.10: v3.0.0. ([#60722](https://github.com/kubernetes/kubernetes/pull/60722))
- * Ingress glbc is unchanged from 1.10: v1.0.0 ([#61302](https://github.com/kubernetes/kubernetes/pull/61302))
- * OIDC authentication is unchanged from 1.10: coreos/go-oidc v2 ([#58544](https://github.com/kubernetes/kubernetes/pull/58544))
- * Calico is unchanged from 1.10: v2.6.7 ([#59130](https://github.com/kubernetes/kubernetes/pull/59130))
- * hcsshim has been updated to v0.6.11 ([#64272](https://github.com/kubernetes/kubernetes/pull/64272))
- * gitRepo volumes in pods no longer require git 1.8.5 or newer; older git versions are now supported
- * Update crictl on GCE to v1.11.0. ([#65254](https://github.com/kubernetes/kubernetes/pull/65254))
- * CoreDNS is now v1.1.3 ([#64258](https://github.com/kubernetes/kubernetes/pull/64258))
- * Setup dns servers and search domains for Windows Pods in dockershim. Docker EE version >= 18.03.0
- * Update version of Istio addon from 0.5.1 to 0.8.0. See [full Istio release notes](https://istio.io/newsroom/releases/0.8.0/)
- * Update cadvisor godeps to v0.30.0 ([#64800](https://github.com/kubernetes/kubernetes/pull/64800))
- * Update event-exporter to version v0.2.0 that supports old (gke_container/gce_instance) annotations
- * Rev the Azure SDK for networking to 2017-06-01 ([#61955](https://github.com/kubernetes/kubernetes/pull/61955))

Bug Fixes

- * Fixed spurious "unable to find api field" errors patching custom resources ([#63146](https://github.com/kubernetes/kubernetes/pull/63146))
- * Nodes are not deleted from Kubernetes anymore if node is shutdown in Openstack. ([#59931](https://github.com/kubernetes/kubernetes/pull/59931))
- * Re-enabled nodeipam controller for external clouds. Re-enables nodeipam controller for external clouds ([#63049](https://github.com/kubernetes/kubernetes/pull/63049), [AndrewSykim](https://github.com/AndrewSykim))
- * Fixed a configuration error when upgrading kubeadm from 1.9 to 1.10+; Kubernetes must have kubelet no longer renders a List as suffix kind name for CRD resources ([#62512](https://github.com/kubernetes/kubernetes/pull/62512))
- * Restored old behavior to the `--template` flag in `get.go`. In old releases, providing a template flag would result in a panic ([#65377](https://github.com/kubernetes/kubernetes/pull/65377), [JuanVallejo](https://github.com/JuanVallejo))
- * Ensured cloudprovider.InstanceNotFound is reported when the VM is not found on Azure ([#62512](https://github.com/kubernetes/kubernetes/pull/62512))
- * Kubernetes version command line parameter in kubeadm has been updated to drop an unnecessary version parameter
- * Fixes incompatibility with custom scheduler extender configurations specifying `bindVerb`
- * kubelet built for darwin from darwin now enables cgo to use the system-native C libraries
- * API server properly parses propagationPolicy as a query parameter sent with a delete request
- * Corrected a race condition in bootstrapping aggregated cluster roles in new HA clusters ([#62512](https://github.com/kubernetes/kubernetes/pull/62512))
- * kubelet: fix hangs in updating Node status after network interruptions/changes between the node and kubelet

- * Added log and fs stats for Windows containers ([#62266](https://github.com/kubernetes/kube
- * Fail fast if cgroups-per-qos is set on Windows ([#62984](https://github.com/kubernetes/kub
- * Minor fix for VolumeZoneChecker predicate, storageclass can be in annotation and spec. ([#
- * Fixes issue for readOnly subpath mounts for SELinux systems and when the volume mountPath
- * Fixed CSI gRPC connection leak during volume operations. ([#64519](https://github.com/kube
- * Fixed error reporting of CSI volumes attachment. ([#63303](https://github.com/kubernetes/k
- * Fixed SELinux relabeling of CSI volumes. ([#64026](https://github.com/kubernetes/kubernete
- * Fixed detach of already detached CSI volumes. ([#63295](https://github.com/kubernetes/kube
- * fix rbd device works at block mode not get mapped to container ([#64555](https://github.c
- * Fixed an issue where Portworx PVCs remain in pending state when created using a StorageCla
- * FIX: The OpenStack cloud providers DeleteRoute method fails to delete routes when it can't
- * [fluentd-gcp addon] Increase CPU limit for fluentd to 1 core to achieve 100kb/s throughput
- * GCE: Fixed operation polling to adhere to the specified interval. Furthermore, operation e
- * Included kms-plugin-container.manifest to master nifests tarball. ([#65035](https://github
- * Fixed missing nodes lines when kubectl top nodes ([#64389](https://github.com/kubernetes/k
- * Fixed kubectl drain --timeout option when eviction is used. ([#64378](https://github.com/k
- * Fixed kubectl auth can-i exit code. It will return 1 if the user is not allowed and 0 if i
- * Fixed data loss issue if using existing azure disk with partitions in disk mount ([#63270
- * Fixed azure file size grow issue ([#64383](https://github.com/kubernetes/kubernetes/pull/6
- * Fixed SessionAffinity not updated issue for Azure load balancer ([#64180](https://github.c
- * Fixed kube-controller-manager panic while provisioning Azure security group rules ([#64739
- * Fixed API server panic during concurrent GET or LIST requests with non-empty `resourceVer
- * Fixed incorrect OpenAPI schema for CustomResourceDefinition objects ([#65256](https://gith
- * Fixed issue where PersistentVolume.NodeAffinity.NodeSelectorTerms were ANDed instead of OR
- * Fixed potential infinite loop that can occur when NFS PVs are recycled. ([#62572](https://
- * Fixed column alignment when kubectl get is used with custom columns from OpenAPI schema (
- * kubectl: restore the ability to show resource kinds when displaying multiple objects ([#6
- * Fixed a panic in `kubectl run --attach ...` when the api server failed to create the runti
- * kube-scheduler has been fixed to use `--leader-elect` option back to true (as it was in pr
- * kubectl: fixes issue with `-o yaml` and `-o json` omitting kind and apiVersion when used w
- * Ensure reasons end up as comments in `kubectl edit`. ([#60990](https://github.com/kubernetes
- * Fixes issue where subpath readOnly mounts failed ([#63045](https://github.com/kubernetes/k
- * Fix stackdriver metrics for node memory using wrong metric type ([#63535](https://github.c
- * fix mount unmount failure for a Windows pod ([#63272](https://github.com/kubernetes/kubern

General Fixes and Reliability

- * Fixed a regression in kube-scheduler to properly load client connection information from a
- * Fix regression in `v1.JobSpec.backoffLimit` that caused failed Jobs to be restarted indefi
- * fixes a potential deadlock in the garbage collection controller ([#64235](https://github.c
- * fix formatAndMount func issue on Windows ([#63248](https://github.com/kubernetes/kubernete
- * Fix issue of colliding nodePorts when the cluster has services with externalTrafficPolicy
- * fixes a panic applying json patches containing out of bounds operations ([#64355](https://
- * Fix incorrectly propagated ResourceVersion in ListRequests returning 0 items. ([#64150](ht
- * GCE: Fix to make the built-in `kubernetes` service properly point to the master's load bal
- * Fixes fake client generation for non-namespaced subresources ([#60445](https://github.com/

- * Schedule even if extender is not available when using extender ([#61445](https://github.com/kubernetes/kubernetes/pull/61445))
- * Fix panic create/update CRD when mutating/validating webhook configured. ([#61404](https://github.com/kubernetes/kubernetes/pull/61404))
- * Pods requesting resources prefixed with `*kubernetes.io` will remain unscheduled if there is no matching node ([#61375](https://github.com/kubernetes/kubernetes/pull/61375))
- * fix scheduling policy on ConfigMap breaks without the --policy-configmap-namespace flag ([#61375](https://github.com/kubernetes/kubernetes/pull/61375))
- * Bugfix for erroneous upgrade needed messaging in kubernetes worker charm. ([#60873](https://github.com/kubernetes/kubernetes/pull/60873))
- * Fix inter-pod anti-affinity check to consider a pod a match when all the anti-affinity terms are satisfied ([#60873](https://github.com/kubernetes/kubernetes/pull/60873))
- * Pod affinity `nodeSelectorTerm.matchExpressions` may now be empty, and works as previously ([#60873](https://github.com/kubernetes/kubernetes/pull/60873))
- * Fix an issue in inter-pod affinity predicate that cause affinity to self being processed ([#60873](https://github.com/kubernetes/kubernetes/pull/60873))
- * fix WaitForAttach failure issue for azure disk ([#62612](https://github.com/kubernetes/kubernetes/pull/62612))
- * Fix user visible files creation for windows ([#62375](https://github.com/kubernetes/kubernetes/pull/62375))
- * Fix machineID getting for vmss nodes when using instance metadata ([#62611](https://github.com/kubernetes/kubernetes/pull/62611))
- * Fix Forward chain default reject policy for IPVS proxier ([#62007](https://github.com/kubernetes/kubernetes/pull/62007))
- * fix nsenter GetFileType issue in containerized kubelet ([#62467](https://github.com/kubernetes/kubernetes/pull/62467))
- * Ensure expected load balancer is selected for Azure ([#62450](https://github.com/kubernetes/kubernetes/pull/62450))
- * Resolves forbidden error when the `daemon-set-controller` cluster role access `controller` ([#62450](https://github.com/kubernetes/kubernetes/pull/62450))
- * fix incompatible file type checking on Windows ([#62154](https://github.com/kubernetes/kubernetes/pull/62154))
- * fix local volume absolute path issue on Windows ([#62018](https://github.com/kubernetes/kubernetes/pull/62018))
- * fix the issue that default azure disk fsypte(ext4) does not work on Windows ([#62250](https://github.com/kubernetes/kubernetes/pull/62250))
- * Fixed bug in rbd-nbd utility when nbd is used. ([#62168](https://github.com/kubernetes/kubernetes/pull/62168))
- * fix local volume issue on Windows ([#62012](https://github.com/kubernetes/kubernetes/pull/62012))
- * Fix a bug that fluentd doesn't inject container logs for CRI container runtimes (containerd, cri-o) ([#62012](https://github.com/kubernetes/kubernetes/pull/62012))
- * flexvolume: trigger plugin init only for the relevant plugin while probe ([#58519](https://github.com/kubernetes/kubernetes/pull/58519))
- * Fixed ingress issue with CDK and pre-1.9 versions of kubernetes. ([#61859](https://github.com/kubernetes/kubernetes/pull/61859))
- * Fixed racy panics when using fake watches with ObjectTracker ([#61195](https://github.com/kubernetes/kubernetes/pull/61195))
- * Fixed mounting of UNIX sockets (and other special files) in subpaths ([#61480](https://github.com/kubernetes/kubernetes/pull/61480))
- * Fixed [#61123](https://github.com/kubernetes/kubernetes/pull/61123) by triggering syncer.LivenessProbe ([#61123](https://github.com/kubernetes/kubernetes/pull/61123))
- * Fixed data race in node lifecycle controller ([#60831](https://github.com/kubernetes/kubernetes/pull/60831))
- * Fixed resultRun by resetting it to 0 on pod restart ([#62853](https://github.com/kubernetes/kubernetes/pull/62853))
- * Fixed the liveness probe to use `/bin/bash -c` instead of `/bin/bash c`. ([#63033](https://github.com/kubernetes/kubernetes/pull/63033))
- * Fixed scheduler informers to receive events for all the pods in the cluster. ([#63003](https://github.com/kubernetes/kubernetes/pull/63003))
- * Fixed in vSphere Cloud Provider to handle upgrades from kubernetes version less than v1.9 ([#63003](https://github.com/kubernetes/kubernetes/pull/63003))
- * Fixed error where config map for Metadata Agent was not created by addon manager. ([#62909](https://github.com/kubernetes/kubernetes/pull/62909))
- * Fixed permissions to allow statefulset scaling for admins, editors, and viewers ([#62336](https://github.com/kubernetes/kubernetes/pull/62336))
- * GCE: Fixed for internal load balancer management resulting in backend services with outdated labels ([#62336](https://github.com/kubernetes/kubernetes/pull/62336))
- * Deployment will stop adding pod-template-hash labels/selector to ReplicaSets and Pods it manages ([#62336](https://github.com/kubernetes/kubernetes/pull/62336))
- * Used inline func to ensure unlock is executed ([#61644](https://github.com/kubernetes/kubernetes/pull/61644))
- * kubernetes-master charm now properly clears the client-ca-file setting on the apiserver service ([#61644](https://github.com/kubernetes/kubernetes/pull/61644))
- * Bound cloud allocator to 10 retries with 100 ms delay between retries. ([#61375](https://github.com/kubernetes/kubernetes/pull/61375))
- * Respect fstype in Windows for azure disk ([#61267](https://github.com/kubernetes/kubernetes/pull/61267))
- * Unready pods will no longer impact the number of desired replicas when using horizontal autoscaling ([#61267](https://github.com/kubernetes/kubernetes/pull/61267))
- * Removed unsafe double RLock in cpumanager ([#62464](https://github.com/kubernetes/kubernetes/pull/62464))

Non-user-facing changes

- * Remove UID mutation from request.context. ([#63957](https://github.com/kubernetes/kubernetes/pull/63957))
- * Use Patch instead of Put to sync pod status. ([#62306](https://github.com/kubernetes/kubernetes/pull/62306))

- * Allow env from resource with keys & updated tests ([#60636](https://github.com/kubernetes/
- * set EnableHTTPTrafficOnly in azure storage account creation ([#64957](https://github.com/
- * New conformance test added for Watch. ([#61424](https://github.com/kubernetes/kubernetes/p
- * Use DeleteOptions.PropagationPolicy instead of OrphanDependents in kubect1 ([#59851](http
- * Add probe based mechanism for kubelet plugin discovery ([#63328](https://github.com/kubern
- * keep pod state consistent when scheduler cache UpdatePod ([#64692](https://github.com/kube
- * kubect1 delete does not use reapers for removing objects anymore, but relies on server-side
- * Updated default image for nginx ingress in CDK to match current Kubernetes docs. ([#64285]
- * Increase scheduler cache generation number monotonically in order to avoid collision and u
- * Adding CSI driver registration code. ([#64560](https://github.com/kubernetes/kubernetes/pu
- * Do not check vmSetName when getting Azure node's IP ([#63541](https://github.com/kubernetes
- * [fluentd-gcp addon] Update event-exporter image to have the latest base image. ([#61727](k
- * Make volume usage metrics available for Cinder ([#62668](https://github.com/kubernetes/kub
- * cinder volume plugin : When the cinder volume status is `error`, controller will not do `
- * Allow user to scale l7 default backend deployment ([#62685](https://github.com/kubernetes/
- * Add support to ingest log entries to Stackdriver against new "k8s_container" and "k8s_node
- * Disabled CheckNodeMemoryPressure and CheckNodeDiskPressure predicates if TaintNodesByCondi
- * Support custom test configuration for IPAM performance integration tests ([#61959](https://
- * OIDC authentication now allows tokens without an "email_verified" claim when using the "en
- * Add e2e test for CRD Watch ([#61025](https://github.com/kubernetes/kubernetes/pull/61025).
- * Return error if get NodeStageSecret and NodePublishSecret failed in CSI volume plugin ([#6
- * kubernetes-master charm now supports metrics server for horizontal pod autoscaler. ([#6017
- * In a GCE cluster, the default `HIRPIN_MODE` is now "hairpin-veth". ([#60166](https://github
- * Balanced resource allocation priority in scheduler to include volume count on node ([#608
- * new dhcp-domain parameter to be used for figuring out the hostname of a node ([#61890](htt
- * Disable ipamperf integration tests as part of every PR verification. ([#61863](https://git
- * Enable server-side print in kubect1 by default, with the ability to turn it off with --ser
- * Updated admission controller settings for Juju deployed Kubernetes clusters ([#61427](http
- * Performance test framework and basic tests for the IPAM controller, to simulate behavior o
- * Removed always pull policy from the template for ingress on CDK. ([#61598](https://github.
- * `make test-cmd` now works on OSX. ([#61393](https://github.com/kubernetes/kubernetes/pull/
- * Conformance: ReplicaSet must be supported in the `apps/v1` version. ([#61367](https://gith
- * Remove 'system' prefix from Metadata Agent rbac configuration ([#61394](https://github.com
- * Support new NODE_OS_DISTRIBUTION 'custom' on GCE on a new add event. ([#61235](https://git
- * include file name in the error when visiting files ([#60919](https://github.com/kubernetes
- * Split PodPriority and PodPreemption feature gate ([#62243](https://github.com/kubernetes/k
- * Code generated for CRDs now passes `go vet`. ([#62412](https://github.com/kubernetes/kuber
- * "beginPort+offset" format support for port range which affects kube-proxy only ([#58731](k
- * Added e2e test for watch ([#60331](https://github.com/kubernetes/kubernetes/pull/60331),
- * add warnings on using pod-infra-container-image for remote container runtime ([#62982](htt
- * Mount additional paths required for a working CA root, for setups where /etc/ssl/certs doe
- * Introduce truncating audit bacnd that can be enabled for existing backend to limit the siz
- * stop kubelet to cloud provider integration potentially wedging kubelet sync loop ([#62543]
- * Set pod status to "Running" if there is at least one container still reporting as "Running
- * Fix memory cgroup notifications, and reduce associated log spam. ([#63220](https://github.
- * Remove never used NewCronJobControllerFromClient method ([#59471](https://github.com/kuber

- [v1.11.0-rc.3] (#v1110-rc3)
- [v1.11.0-rc.2] (#v1110-rc2)
- [v1.11.0-rc.1] (#v1110-rc1)
- [v1.11.0-beta.2] (#v1110-beta2)
- [v1.11.0-beta.1] (#v1110-beta1)
- [v1.11.0-alpha.2] (#v1110-alpha2)
- [v1.11.0-alpha.1] (#v1110-alpha1)

v1.11.0-rc.3

[Documentation](https://docs.k8s.io)

Downloads for v1.11.0-rc.3

filename	sha256 hash
[kubernetes.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes.tar.gz)	`25879ba96d7baf1eb90`
[kubernetes-src.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-src.tar.gz)	`748786c084`

Client Binaries

filename	sha256 hash
[kubernetes-client-darwin-386.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-client-darwin-386.tar.gz)	`25879ba96d7baf1eb90`
[kubernetes-client-darwin-amd64.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-client-darwin-amd64.tar.gz)	`748786c084`
[kubernetes-client-linux-386.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-client-linux-386.tar.gz)	`25879ba96d7baf1eb90`
[kubernetes-client-linux-amd64.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-client-linux-amd64.tar.gz)	`748786c084`
[kubernetes-client-linux-arm.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-client-linux-arm.tar.gz)	`25879ba96d7baf1eb90`
[kubernetes-client-linux-arm64.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-client-linux-arm64.tar.gz)	`748786c084`
[kubernetes-client-linux-ppc64le.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-client-linux-ppc64le.tar.gz)	`25879ba96d7baf1eb90`
[kubernetes-client-linux-s390x.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-client-linux-s390x.tar.gz)	`748786c084`
[kubernetes-client-windows-386.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-client-windows-386.tar.gz)	`25879ba96d7baf1eb90`
[kubernetes-client-windows-amd64.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-client-windows-amd64.tar.gz)	`748786c084`

Server Binaries

filename	sha256 hash
[kubernetes-server-linux-amd64.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-server-linux-amd64.tar.gz)	`25879ba96d7baf1eb90`
[kubernetes-server-linux-arm.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-server-linux-arm.tar.gz)	`748786c084`
[kubernetes-server-linux-arm64.tar.gz](https://dl.k8s.io/v1.11.0-rc.3/kubernetes-server-linux-arm64.tar.gz)	`25879ba96d7baf1eb90`

[kubernetes-server-linux-ppc64le.tar.gz] (<https://dl.k8s.io/v1.11.0-rc.3/kubernetes-server-linux-ppc64le.tar.gz>)
[kubernetes-server-linux-s390x.tar.gz] (<https://dl.k8s.io/v1.11.0-rc.3/kubernetes-server-linux-s390x.tar.gz>)

Node Binaries

filename	sha256 hash
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[kubernetes-node-linux-amd64.tar.gz]	(https://dl.k8s.io/v1.11.0-rc.3/kubernetes-node-linux-amd64.tar.gz)
[kubernetes-node-linux-arm.tar.gz]	(https://dl.k8s.io/v1.11.0-rc.3/kubernetes-node-linux-arm.tar.gz)
[kubernetes-node-linux-arm64.tar.gz]	(https://dl.k8s.io/v1.11.0-rc.3/kubernetes-node-linux-arm64.tar.gz)
[kubernetes-node-linux-ppc64le.tar.gz]	(https://dl.k8s.io/v1.11.0-rc.3/kubernetes-node-linux-ppc64le.tar.gz)
[kubernetes-node-linux-s390x.tar.gz]	(https://dl.k8s.io/v1.11.0-rc.3/kubernetes-node-linux-s390x.tar.gz)
[kubernetes-node-windows-amd64.tar.gz]	(https://dl.k8s.io/v1.11.0-rc.3/kubernetes-node-windows-amd64.tar.gz)

Changelog since v1.11.0-rc.2

Other notable changes

- * Pass cluster_location argument to Heapster ([#65176] (<https://github.com/kubernetes/kubernetes/pull/65176>))
- * Fix concurrent map access panic ([#65331] (<https://github.com/kubernetes/kubernetes/pull/65331>))
 - * Don't watch .mount cgroups to reduce number of inotify watches
 - * Fix NVML initialization race condition
 - * Fix brtfs disk metrics when using a subdirectory of a subvolume
- * User can now use `sudo crictl` on GCE cluster. ([#65389] (<https://github.com/kubernetes/kubernetes/pull/65389>))

v1.11.0-rc.2

[Documentation] (<https://docs.k8s.io>)

Downloads for v1.11.0-rc.2

filename	sha256 hash
-----	-----

[kubernetes.tar.gz]	(https://dl.k8s.io/v1.11.0-rc.2/kubernetes.tar.gz) `30742ea1e24ade88e14`
[kubernetes-src.tar.gz]	(https://dl.k8s.io/v1.11.0-rc.2/kubernetes-src.tar.gz) `77e1f018820`

Client Binaries

filename	sha256 hash
-----	-----

[kubernetes-client-darwin-386.tar.gz]	(https://dl.k8s.io/v1.11.0-rc.2/kubernetes-client-darwin-386.tar.gz)
[kubernetes-client-darwin-amd64.tar.gz]	(https://dl.k8s.io/v1.11.0-rc.2/kubernetes-client-darwin-amd64.tar.gz)
[kubernetes-client-linux-386.tar.gz]	(https://dl.k8s.io/v1.11.0-rc.2/kubernetes-client-linux-386.tar.gz)

```
[kubernetes-client-linux-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-client-linux-amd64.tar.gz)
[kubernetes-client-linux-arm.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-client-linux-arm.tar.gz)
[kubernetes-client-linux-arm64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-client-linux-arm64.tar.gz)
[kubernetes-client-linux-ppc64le.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-client-linux-ppc64le.tar.gz)
[kubernetes-client-linux-s390x.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-client-linux-s390x.tar.gz)
[kubernetes-client-windows-386.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-client-windows-386.tar.gz)
[kubernetes-client-windows-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-client-windows-amd64.tar.gz)
```

Server Binaries

```
filename | sha256 hash
----- | -----
[kubernetes-server-linux-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-server-linux-amd64.tar.gz)
[kubernetes-server-linux-arm.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-server-linux-arm.tar.gz)
[kubernetes-server-linux-arm64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-server-linux-arm64.tar.gz)
[kubernetes-server-linux-ppc64le.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-server-linux-ppc64le.tar.gz)
[kubernetes-server-linux-s390x.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-server-linux-s390x.tar.gz)
```

Node Binaries

```
filename | sha256 hash
----- | -----
[kubernetes-node-linux-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-node-linux-amd64.tar.gz)
[kubernetes-node-linux-arm.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-node-linux-arm.tar.gz)
[kubernetes-node-linux-arm64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-node-linux-arm64.tar.gz)
[kubernetes-node-linux-ppc64le.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-node-linux-ppc64le.tar.gz)
[kubernetes-node-linux-s390x.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-node-linux-s390x.tar.gz)
[kubernetes-node-windows-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.2/kubernetes-node-windows-amd64.tar.gz)
```

Changelog since v1.11.0-rc.1

Other notable changes

- * Prevents a `kubectl delete` hang when deleting controller managed lists ([#65367](https://github.com/kubernetes/kubernetes/pull/65367))
- * fixes a memory leak in the kube-controller-manager observed when large numbers of pods with labels are deleted ([#65189](https://github.com/kubernetes/kubernetes/pull/65189))
- * The "kubectl cp" command now supports path shortcuts (../) in remote paths. ([#65189](https://github.com/kubernetes/kubernetes/pull/65189))
- * Split 'scheduling_latency_seconds' metric into finer steps (predicate, priority, preemption) ([#65256](https://github.com/kubernetes/kubernetes/pull/65256))
- * fixed incorrect OpenAPI schema for CustomResourceDefinition objects ([#65256](https://github.com/kubernetes/kubernetes/pull/65256))

v1.11.0-rc.1

[Documentation](https://docs.k8s.io)

Downloads for v1.11.0-rc.1

```
filename | sha256 hash
----- | -----
[kubernetes.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes.tar.gz) | `f4d6126030d76f4340b
[kubernetes-src.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-src.tar.gz) | `6383966a2b
```

Client Binaries

```
filename | sha256 hash
----- | -----
[kubernetes-client-darwin-386.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-client-darwi
[kubernetes-client-darwin-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-client-dar
[kubernetes-client-linux-386.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-client-linux
[kubernetes-client-linux-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-client-lin
[kubernetes-client-linux-arm.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-client-linux
[kubernetes-client-linux-arm64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-client-lin
[kubernetes-client-linux-ppc64le.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-client-l
[kubernetes-client-linux-s390x.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-client-lin
[kubernetes-client-windows-386.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-client-wind
[kubernetes-client-windows-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-client-w
```

Server Binaries

```
filename | sha256 hash
----- | -----
[kubernetes-server-linux-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-server-lin
[kubernetes-server-linux-arm.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-server-linux
[kubernetes-server-linux-arm64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-server-lin
[kubernetes-server-linux-ppc64le.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-server-l
[kubernetes-server-linux-s390x.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-server-lin
```

Node Binaries

```
filename | sha256 hash
----- | -----
[kubernetes-node-linux-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-node-linux-ar
[kubernetes-node-linux-arm.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-node-linux-arm
[kubernetes-node-linux-arm64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-node-linux-ar
[kubernetes-node-linux-ppc64le.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-node-linux
[kubernetes-node-linux-s390x.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-node-linux-s
[kubernetes-node-windows-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-rc.1/kubernetes-node-window
```

Changelog since v1.11.0-beta.2

Action Required

- * A cluster-autoscaler ClusterRole is added to cover only the functionality required by Clus
- * action required: Cloud providers other than GCE might want to update their deployments

Other notable changes

- * The "kubectl cp" command now supports path shortcuts (../) in remote paths. ([#65189](http://github.com/kubernetes/kubernetes/pull/65189))
- * Update crictl on GCE to v1.11.0. ([#65254](https://github.com/kubernetes/kubernetes/pull/65254))
- * kubeadm: Use the release-1.11 branch by default ([#65229](https://github.com/kubernetes/kubernetes/pull/65229))
- * Updates Cluster Autoscaler version to 1.3.0. Release notes: <https://github.com/kubernetes/autoscaler/releases/tag/v1.3.0>
- * The deprecated `--service-account-private-key-file` flag has been removed from the cloud-provider
- * Update Cluster Autoscaler to v1.3.0-beta.2. Release notes for this version: <https://github.com/kubernetes/autoscaler/releases/tag/v1.3.0-beta.2>
- * Fixed API server panic during concurrent GET or LIST requests with non-empty `resourceVersion`
- * Kubernetes json deserializer is now case-sensitive to restore compatibility with pre-1.8 s
 - * If your config files contains fields with wrong case, the config files will be now inv
- * GCE: Fixes operation polling to adhere to the specified interval. Furthermore, operation e
- * Updated hcsshim dependency to v0.6.11 ([#64272](https://github.com/kubernetes/kubernetes/pull/64272))
- * Include kms-plugin-container.manifest to master manifests tarball. ([#65035](https://github.com/kubernetes/kubernetes/pull/65035))
- * kubeadm - Ensure the peer port is secured by explicitly setting the peer URLs for the defa
 - * kubeadm - Ensure that the etcd certificates are generated using a proper CN
 - * kubeadm - Update generated etcd peer certificate to include localhost addresses for th
 - * kubeadm - Increase the manifest update timeout to make upgrades a bit more reliable.
- * Kubernetes depends on v0.30.1 of cAdvisor ([#64987](https://github.com/kubernetes/kubernetes/pull/64987))
- * Update Cluster Autoscaler version to 1.3.0-beta.1. Release notes: <https://github.com/kubernetes/autoscaler/releases/tag/v1.3.0-beta.1>
- * Webhooks for the mutating admission controller now support "remove" operation. ([#64255](https://github.com/kubernetes/kubernetes/pull/64255))
- * deprecated and inactive option `--enable-custom-metrics` is removed in 1.11 ([#60699](https://github.com/kubernetes/kubernetes/pull/60699))
- * kubernetes now packages cri-tools (crictl) in addition to all the other kubeadm tools in a
- * Fix setup of configmap/secret/projected/downwardapi volumes ([#64855](https://github.com/kubernetes/kubernetes/pull/64855))
- * Setup dns servers and search domains for Windows Pods in dockershim. Docker EE version >=

v1.11.0-beta.2

[Documentation](https://docs.k8s.io)

Downloads for v1.11.0-beta.2

filename	sha256 hash
-----	-----

[kubernetes.tar.gz](https://dl.k8s.io/v1.11.0-beta.2/kubernetes.tar.gz)	`0addbff3fc6104740
[kubernetes-src.tar.gz](https://dl.k8s.io/v1.11.0-beta.2/kubernetes-src.tar.gz)	`943629abc

Client Binaries

```

filename | sha256 hash
----- | -----
[kubernetes-client-darwin-386.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-client-darwin-386.tar.gz)
[kubernetes-client-darwin-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-client-darwin-amd64.tar.gz)
[kubernetes-client-linux-386.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-client-linux-386.tar.gz)
[kubernetes-client-linux-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-client-linux-amd64.tar.gz)
[kubernetes-client-linux-arm.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-client-linux-arm.tar.gz)
[kubernetes-client-linux-arm64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-client-linux-arm64.tar.gz)
[kubernetes-client-linux-ppc64le.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-client-linux-ppc64le.tar.gz)
[kubernetes-client-linux-s390x.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-client-linux-s390x.tar.gz)
[kubernetes-client-windows-386.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-client-windows-386.tar.gz)
[kubernetes-client-windows-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-client-windows-amd64.tar.gz)

```

Server Binaries

```

filename | sha256 hash
----- | -----
[kubernetes-server-linux-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-server-linux-amd64.tar.gz)
[kubernetes-server-linux-arm.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-server-linux-arm.tar.gz)
[kubernetes-server-linux-arm64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-server-linux-arm64.tar.gz)
[kubernetes-server-linux-ppc64le.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-server-linux-ppc64le.tar.gz)
[kubernetes-server-linux-s390x.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-server-linux-s390x.tar.gz)

```

Node Binaries

```

filename | sha256 hash
----- | -----
[kubernetes-node-linux-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-node-linux-amd64.tar.gz)
[kubernetes-node-linux-arm.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-node-linux-arm.tar.gz)
[kubernetes-node-linux-arm64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-node-linux-arm64.tar.gz)
[kubernetes-node-linux-ppc64le.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-node-linux-ppc64le.tar.gz)
[kubernetes-node-linux-s390x.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-node-linux-s390x.tar.gz)
[kubernetes-node-windows-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.2/kubernetes-node-windows-amd64.tar.gz)

```

Changelog since v1.11.0-beta.1

Action Required

- * [action required] `kubeadm join` is now blocking on the kubelet performing the TLS Bootstrap
 - * Earlier, `kubeadm join` only did the discovery part and exited successfully without checking if the kubelet was ready.
 - * kubelet actually started properly and performed the TLS bootstrap correctly. Now, as kubelet is ready, `kubeadm join` can proceed with the remaining steps.
 - * some post-join steps (e.g. annotating the Node API object with the CRISocket as in the previous version), `kubeadm join` is now waiting for the kubelet to be ready before proceeding.
 - * stop-gap until this is discoverable automatically), `kubeadm join` is now waiting for the kubelet to be ready before proceeding.
 - * perform the TLS Bootstrap, and then uses that credential to perform further actions. This improves the UX, as `kubeadm` will exit with a non-zero code if the kubelet isn't in a ready state, instead of pretending like everything's fine.

- * [action required] The structure of the kubelet dropin in the kubeadm deb package has changed
 - * Instead of hard-coding the parameters for the kubelet in the dropin, a structured config file for the kubelet is used, and is expected to be present in `/var/lib/kubelet/config.yaml`.
 - * For runtime-detected, instance-specific configuration values, a environment file with dynamically-generated flags at ``kubeadm init`` or ``kubeadm join`` run time is used.
 - * Finally, if the user wants to override something specific for the kubelet that can't be done by the kubeadm Configuration file (which is preferred), they might add flags to the ``KUBELET_EXTRA_ARGS`` environment variable in either `/etc/default/kubelet`` or `/etc/sysconfig/kubelet``, depending on the system you're running on.
- * [action required] The ``--node-name`` flag for kubeadm now dictates the Node API object name kubelet uses for registration, in all cases but where you might use an in-tree cloud provider.
 - * If you're not using an in-tree cloud provider, ``--node-name`` will set the Node API object name.
 - * If you're using an in-tree cloud provider, you MUST make ``--node-name`` match the name the in-tree cloud provider decides to use.
- * [action required] kubeadm: The Token-related fields in the ``MasterConfiguration`` object have changed.

Other notable changes

- * Add Vertical Pod Autoscaler to autoscaling/v2beta1 ([#63797](https://github.com/kubernetes/kubernetes/pull/63797)).
- * kubeadm: only run kube-proxy on architecture consistent nodes ([#64696](https://github.com/kubernetes/kubernetes/pull/64696)).
- * kubeadm: Add a new ``kubeadm upgrade node config`` command ([#64624](https://github.com/kubernetes/kubernetes/pull/64624)).
- * Orphan delete is now supported for custom resources ([#63386](https://github.com/kubernetes/kubernetes/pull/63386)).
- * Update version of Istio addon from 0.6.0 to 0.8.0. ([#64537](https://github.com/kubernetes/kubernetes/pull/64537)).
 - * See <https://istio.io/news/2018/announcing-0.8/> for full Istio release notes.
- * Provides API support for external CSI storage drivers to support block volumes. ([#64723](https://github.com/kubernetes/kubernetes/pull/64723)).
- * kubectl will list all allowed print formats when an invalid format is passed. ([#64371](https://github.com/kubernetes/kubernetes/pull/64371)).
- * Use IONice to reduce IO priority of du and find ([#64800](https://github.com/kubernetes/kubernetes/pull/64800)).
 - * cAdvisor ContainerReference no longer contains Labels. Use ContainerSpec instead.
 - * Fix a bug where cadvisor failed to discover a sub-cgroup that was created soon after top level cgroup.
- * Kubelet will set extended resource capacity to zero after it restarts. If the extended resource capacity is non-zero, kubelet will restart.
- * Introduce ContainersReady condition in Pod Status ([#64646](https://github.com/kubernetes/kubernetes/pull/64646)).
- * The Sysctls experimental feature has been promoted to beta (enabled by default via the ``SystemReserved`` flag).
- * kubeadm now configures the etcd liveness probe correctly when etcd is listening on all interfaces.
- * Fix regression in ``v1.JobSpec.backoffLimit`` that caused failed Jobs to be restarted indefinitely.
- * GCE: Update cloud provider to use TPU v1 API ([#64727](https://github.com/kubernetes/kubernetes/pull/64727)).
- * Kubelet: Add security context for Windows containers ([#64009](https://github.com/kubernetes/kubernetes/pull/64009)).
- * Volume topology aware dynamic provisioning ([#63193](https://github.com/kubernetes/kubernetes/pull/63193)).
- * CoreDNS deployment configuration now uses k8s.gcr.io imageRepository ([#64775](https://github.com/kubernetes/kubernetes/pull/64775)).
- * Updated Container Storage Interface specification version to v0.3.0 ([#64719](https://github.com/kubernetes/kubernetes/pull/64719)).
- * Kubeadm: Make CoreDNS run in read-only mode and drop all unneeded privileges ([#64473](https://github.com/kubernetes/kubernetes/pull/64473)).
- * Add a volume projection that is able to project service account tokens. ([#62005](https://github.com/kubernetes/kubernetes/pull/62005)).
- * Fix kubectl auth can-i exit code. It will return 1 if the user is not allowed and 0 if it is allowed.
- * apply global flag "context" for kubectl config view --minify ([#64608](https://github.com/kubernetes/kubernetes/pull/64608)).
- * Fix kube-controller-manager panic while provisioning Azure security group rules ([#64739](https://github.com/kubernetes/kubernetes/pull/64739)).
- * API change for volume topology aware dynamic provisioning ([#63233](https://github.com/kubernetes/kubernetes/pull/63233)).
- * Add azuredisk PV size grow feature ([#64386](https://github.com/kubernetes/kubernetes/pull/64386)).

- * Modify e2e tests to use priorityClass beta version & switch priorityClass feature to beta
- * Adding CSI driver registration code. ([#64560](https://github.com/kubernetes/kubernetes/pull/64560))
- * fixes a potential deadlock in the garbage collection controller ([#64235](https://github.com/kubernetes/kubernetes/pull/64235))
- * Fixes issue for readOnly subpath mounts for SELinux systems and when the volume mountPath is not absolute
- * Add log and fs stats for Windows containers ([#62266](https://github.com/kubernetes/kubernetes/pull/62266))
- * client-go: credential exec plugins have been promoted to beta ([#64482](https://github.com/kubernetes/kubernetes/pull/64482))
- * Revert [#64364](https://github.com/kubernetes/kubernetes/pull/64364) to resurrect rescheduler
- * Add RequestedToCapacityRatioPriority priority function. Function is parametrized with set of points.
 - * Function is linear between points. Resource utilization is defined as one minus ratio of requested to capacity
 - * Final utilization used for computation is arithmetic mean of cpu utilization and memory utilization
 - * Function is disabled by default and can be enabled via scheduler policy config file.
 - * If no parametrization is specified in config file it defaults to one which gives score of 1000
- * `kubeadm init` detects if systemd-resolved is running and configures the kubelet to use a specific DNS
- * fix data loss issue if using existing azure disk with partitions in disk mount ([#63270](https://github.com/kubernetes/kubernetes/pull/63270))
- * Meta data of CustomResources is now pruned and schema checked during deserialization of resource
- * Add Alpha support for dynamic volume limits based on node type ([#64154](https://github.com/kubernetes/kubernetes/pull/64154))
- * Fixed CSI gRPC connection leak during volume operations. ([#64519](https://github.com/kubernetes/kubernetes/pull/64519))
- * in-tree support for openstack credentials is now deprecated. please use the "client-keystone" plugin
- * `ScheduleDaemonSetPods` is an alpha feature (since v1.11) that causes DaemonSet Pods ([#63248](https://github.com/kubernetes/kubernetes/pull/63248))
 - * to be scheduled by default scheduler, instead of Daemonset controller. When it is enabled
 - * the `NodeAffinity` term (instead of `.spec.nodeName`) is added to the DaemonSet Pods;
 - * this enables the default scheduler to bind the Pod to the target host. If node affinity of DaemonSet Pod already exists, it will be replaced.
 - * DaemonSet controller will only perform these operations when creating DaemonSet Pods;
 - * and those operations will only modify the Pods of DaemonSet, no changes are made to the DaemonSet
 - * `.spec.template` of DaemonSet.
- * fix formatAndMount func issue on Windows ([#63248](https://github.com/kubernetes/kubernetes/pull/63248))
- * AWS EBS, Azure Disk, GCE PD and Ceph RBD volume plugins support dynamic provisioning of raw block devices
- * kubeadm upgrade apply can now ignore version errors with --force ([#64570](https://github.com/kubernetes/kubernetes/pull/64570))
- * Adds feature gate for plugin watcher ([#64605](https://github.com/kubernetes/kubernetes/pull/64605))
- * Kubelet now proxies container streaming between apiserver and container runtime. The connection is now secure.
 - * In this way, the whole container streaming connection is secure. To switch back to the old insecure connection, set the feature gate to false.
- * TokenRequests now are required to have an expiration duration between 10 minutes and 2^32-1 hours
- * Expose `/debug/flags/v` to allow dynamically set glog logging level, if want to change glog logging level
- * New conformance test added for Watch. ([#61424](https://github.com/kubernetes/kubernetes/pull/61424))
- * The GitRepo volume type is deprecated. To provision a container with a git repo, mount an emptyDir volume and use the git plugin
- * kubeadm now preserves previous manifests after upgrades ([#64337](https://github.com/kubernetes/kubernetes/pull/64337))
- * Implement kubelet side online file system resizing ([#62460](https://github.com/kubernetes/kubernetes/pull/62460))

v1.11.0-beta.1

[Documentation](https://docs.k8s.io)

Downloads for v1.11.0-beta.1

```

filename | sha256 hash
----- | -----
[kubernetes.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes.tar.gz) | `3209303a10ca8dd3
[kubernetes-src.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-src.tar.gz) | `c2e4d3b1

```

Client Binaries

```

filename | sha256 hash
----- | -----
[kubernetes-client-darwin-386.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-client-darwin-386.tar.gz) | `
[kubernetes-client-darwin-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-client-darwin-amd64.tar.gz) | `
[kubernetes-client-linux-386.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-client-linux-386.tar.gz) | `
[kubernetes-client-linux-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-client-linux-amd64.tar.gz) | `
[kubernetes-client-linux-arm.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-client-linux-arm.tar.gz) | `
[kubernetes-client-linux-arm64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-client-linux-arm64.tar.gz) | `
[kubernetes-client-linux-ppc64le.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-client-linux-ppc64le.tar.gz) | `
[kubernetes-client-linux-s390x.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-client-linux-s390x.tar.gz) | `
[kubernetes-client-windows-386.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-client-windows-386.tar.gz) | `
[kubernetes-client-windows-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-client-windows-amd64.tar.gz) | `

```

Server Binaries

```

filename | sha256 hash
----- | -----
[kubernetes-server-linux-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-server-linux-amd64.tar.gz) | `
[kubernetes-server-linux-arm.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-server-linux-arm.tar.gz) | `
[kubernetes-server-linux-arm64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-server-linux-arm64.tar.gz) | `
[kubernetes-server-linux-ppc64le.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-server-linux-ppc64le.tar.gz) | `
[kubernetes-server-linux-s390x.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-server-linux-s390x.tar.gz) | `

```

Node Binaries

```

filename | sha256 hash
----- | -----
[kubernetes-node-linux-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-node-linux-amd64.tar.gz) | `
[kubernetes-node-linux-arm.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-node-linux-arm.tar.gz) | `
[kubernetes-node-linux-arm64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-node-linux-arm64.tar.gz) | `
[kubernetes-node-linux-ppc64le.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-node-linux-ppc64le.tar.gz) | `
[kubernetes-node-linux-s390x.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-node-linux-s390x.tar.gz) | `
[kubernetes-node-windows-amd64.tar.gz] (https://dl.k8s.io/v1.11.0-beta.1/kubernetes-node-windows-amd64.tar.gz) | `

```

Changelog since v1.11.0-alpha.2

Action Required

- * [action required] `.nodeName` and .CRISocket` in the MasterConfiguration` and NodeConf`
- * (ACTION REQUIRED) PersistentVolumeLabel admission controller is now disabled by default. If
- * [action required] kubeadm: The `:Etcd` struct has been refactored in the v1alpha2 API. All`
- * [action required] kubeadm: kubelets in kubeadm clusters now disable the readonly port (102
- * [action required] kubeadm: Support for `.AuthorizationModes` in the kubeadm v1alpha2 API`
- * [action required] The formerly publicly-available cAdvisor web UI that the kubelet ran on
- * [action required] kubeadm: The `.ImagePullPolicy` field has been removed in the v1alpha2 A`
- * [action required] In the new v1alpha2 kubeadm Configuration API, the `.CloudProvider` and

 - Instead, you should use the out-of-tree cloud provider implementations which are beta
 - If you have to use the legacy in-tree cloud providers, you can rearrange your config
 - If you need to use the .PrivilegedPods` functionality, you can still edit the manifes`

kind: MasterConfiguration apiVersion: kubeadm.k8s.io/v1alpha2 apiServerExtraArgs: cloud-provider: "{cloud}" cloud-config: "{cloud-config-path}" apiServerExtraVolumes: - name: cloud hostPath: "{cloud-config-path}" mountPath: "{cloud-config-path}" controllerManagerExtraArgs: cloud-provider: "{cloud}" cloud-config: "{cloud-config-path}" controllerManagerExtraVolumes: - name: cloud hostPath: "{cloud-config-path}" mountPath: "{cloud-config-path}"

* [action required] kubeadm now uses an upgraded API version for the configuration file, kubeadm.k8s.io/v1alpha2. kubeadm in v1.11 will still be able to read v1alpha1 configuration, and will automatically convert the configuration to v1alpha2 internally and when storing the configuration in the ConfigMap in the cluster. ([#63788] (<https://github.com/kubernetes/kubernetes/pull/63788>), [luxas] (<https://github.com/luxas>))

* The annotationservice.alpha.kubernetes.io/tolerate-unready-endpoints is deprecated. Users should use Service.spec.publishNotReadyAddresses instead. (#63742, @thockin)

* avoid duplicate status in audit events (#62695, @CaoShuFeng)

Other notable changes

- Remove rescheduler from master. (#64364, @ravisantoshgudimetla)
- Declare IPVS-based kube-proxy GA (#58442, @m1093782566)
- kubeadm: conditionally set the kubelet cgroup driver for Docker (#64347, @neolit123)
- kubectld built for darwin from darwin now enables cgo to use the system-native C libraries for DNS resolution. Cross-compiled kubectld (e.g. from an official kubernetes release) still uses the go-native netgo DNS implementation. (#64219, @ixdy)
- AWS EBS volumes can be now used as ReadOnly in pods. (#64403, @jsafrane)
- Exec authenticator plugin supports TLS client certificates. (#61803, @awly)
- Use Patch instead of Put to sync pod status (#62306, @freehan)
- kubectld apply --prune supports CronJob resource. (#62991, @tomoe)

- Label `ExternalEtcdClientCertificates` can be used for ignoring all preflight check issues related to client certificate files for external etcd. (#64269, @kad)
- Provide a meaningful error message in openstack cloud provider when no valid IP address can be found for a node (#64318, @gonzolino)
- kubeadm: Add a 'kubeadm config migrate' command to convert old API types to their newer counterparts in the new, supported API types. This is just a client-side tool, it just executes locally without requiring a cluster to be running. You can think about this as an Unix pipe that upgrades config files. (#64232, @luxas)
- The `--dry-run` flag has been enabled for kubectl auth reconcile (#64458, @mrogers950)
- Add probe based mechanism for kubelet plugin discovery (#63328, @vikaschoudhary16)
- Add Establishing Controller on CRDs to avoid race between Established condition and CRs actually served. In HA setups, the Established condition is delayed by 5 seconds. (#63068, @xmudrui)
- CoreDNS is now v1.1.3 (#64258, @rajansandeep)
- kubeadm will pull required images during preflight checks if it cannot find them on the system (#64105, @chuckha)
- kubeadm: rename the addon parameter `kube-dns` to `coredns` for `kubeadm alpha phases addons` as CoreDNS is now the default DNS server in 1.11. (#64274, @neolit123)
- kubeadm: when starting the API server use the arguments `--enable-admission-plugins` and `--disable-admission-plugins` instead of the deprecated `--admission-control`. (#64165, @neolit123)
- Add `spec.additionalPrinterColumns` to CRDs to define server side printing columns. (#60991, @sttts)
- fix azure file size grow issue (#64383, @andyzhangx)
- Fix issue of colliding nodePorts when the cluster has services with external-TrafficPolicy=Local (#64349, @nicksardo)
- fixes a panic applying json patches containing out of bounds operations (#64355, @liggitt)
- Fail fast if `cgroups-per-qos` is set on Windows (#62984, @feiskyer)
- Move Volume expansion to Beta (#64288, @gnufied)
- kubectl delete does not use reapers for removing objects anymore, but relies on server-side GC entirely (#63979, @soltys)
- Basic plumbing for volume topology aware dynamic provisioning (#63232, @lichuqiang)
- API server properly parses `propagationPolicy` as a query parameter sent with a delete request (#63414, @roycaiwh)
- Property `serverAddressByClientCIDRs` in `metav1.APIGroup` (discovery API) now become optional instead of required (#61963, @roycaiwh)
- The dynamic Kubelet config feature is now beta, and the `DynamicKubeletConfig` feature gate is on by default. In order to use dynamic Kubelet config, ensure that the Kubelet's `--dynamic-config-dir` option is

- set. (#64275, @mtaufen)
- Add reason message logs for non-exist Azure resources (#64248, @feiskyer)
- Fix SessionAffinity not updated issue for Azure load balancer (#64180, @feiskyer)
- The kube-apiserver openapi doc now includes extensions identifying APIService and CustomResourceDefinition kinds (#64174, @liggitt)
- apiservices/status and certificatesigningrequests/status now support GET and PATCH (#64063, @roycaiwh)
- kubectl: This client version requires the **apps/v1** APIs, so it will not work against a cluster version older than v1.9.0. Note that kubectl only guarantees compatibility with clusters that are +/-1 minor version away. (#61419, @enisoc)
- Correct the way we reset containers and pods in kubeadm via crictl (#63862, @runcom)
- Allow env from resource with keys & updated tests (#60636, @PhilipGough)
- The kubelet certificate rotation feature can now be enabled via the **.RotateCertificates** field in the kubelet's config file. The **--rotate-certificates** flag is now deprecated, and will be removed in a future release. (#63912, @luxas)
- Use DeleteOptions.PropagationPolicy instead of OrphanDependents in kubectl (#59851, @nilebox)
- add block device support for azure disk (#63841, @andyzhangx)
- Fix incorrectly propagated ResourceVersion in ListRequests returning 0 items. (#64150, @wojtekt)
- Changes ext3/ext4 volume creation to not reserve any portion of the volume for the root user. (#64102, @atombender)
- Add CRD Versioning with NOP converter (#63830, @mbohlool)
- adds a kubectl wait command (#64034, @deads2k)
- "kubeadm init" now writes a structured and versioned kubelet Component-Configuration file to **/var/lib/kubelet/config.yaml** and an environment file with runtime flags (you can source this file in the systemd kubelet dropin) to **/var/lib/kubelet/kubeadm-flags.env**. (#63887, @luxas)
- **kubectl auth reconcile** only works with rbac.v1 (#63967, @deads2k)
- The dynamic Kubelet config feature will now update config in the event of a ConfigMap mutation, which reduces the chance for silent config skew. Only name, namespace, and kubeletConfigKey may now be set in Node.Spec.ConfigSource.ConfigMap. The least disruptive pattern for config management is still to create a new ConfigMap and incrementally roll out a new Node.Spec.ConfigSource. (#63221, @mtaufen)
- Graduate CRI container log rotation to beta, and enable it by default. (#64046, @yujuhong)
- APIServices with kube-like versions (e.g. v1, v2beta1, etc.) will be sorted appropriately within each group. (#64004, @mbohlool)
- kubectl and client-go now detects duplicated name for user, cluster and context when loading kubeconfig and reports error (#60464, @roycaiwh)

- event object references with `apiversion` will now report an `apiversion`. (#63913, @deads2k)
- Subresources for custom resources is now beta and enabled by default. With this, updates to the `/status` subresource will disallow updates to all fields other than `.status` (not just `.spec` and `.metadata` as before). Also, `required` can be used at the root of the CRD OpenAPI validation schema when the `/status` subresource is enabled. (#63598, @nikhita)
- increase grpc client default response size (#63977, @runcom)
- HTTP transport now uses `context.Context` to cancel dial operations. `k8s.io/client-go/transport/Config` struct has been updated to accept a function with a `context.Context` parameter. This is a breaking change if you use this field in your code. (#60012, @ash2k)
- Adds a mechanism in vSphere Cloud Provider to get credentials from Kubernetes secrets (#63902, @abrarshivani)
- kubeadm: A `kubeadm config print-default` command has now been added that you can use as a starting point when writing your own kubeadm configuration files (#63969, @luxas)
- Update event-exporter to version v0.2.0 that supports old (`gke_container/gce_instance`) and new (`k8s_container/k8s_node/k8s_pod`) stackdriver resources. (#63918, @cezarygerard)
- Cluster Autoscaler 1.2.2 (release notes: <https://github.com/kubernetes/autoscaler/releases/tag/cluster-autoscaler-1.2.2>) (#63974, @aleksandra-malinowska)
- Update kubeadm's minimum supported kubernetes in v1.11.x to 1.10 (#63920, @dixudx)
- Add 'UpdateStrategyType' and 'RollingUpdateStrategy' to 'kubectl describe sts' command output. (#63844, @tossmilestone)
- Remove UID mutation from request.context. (#63957, @hxxuzhonghu)
- kubeadm has removed `.Etcd.SelfHosting` from its configuration API. It was never used in practice. (#63871, @luxas)
- list/watch API requests with a fieldSelector that specifies `metadata.name` can now be authorized as requests for an individual named resource (#63469, @wojtekt)
- Add a way to pass extra arguments to etcd. (#63961, @mborsz)
- minor fix for VolumeZoneChecker predicate, storageclass can be in annotation and spec. (#63749, @wenlxie)
- vSphere Cloud Provider: add SAML token authentication support (#63824, @dougmn)
- adds the `kubeadm upgrade diff` command to show how static pod manifests will be changed by an upgrade. (#63930, @lizzio)
- Fix memory cgroup notifications, and reduce associated log spam. (#63220, @dashpole)
- Adds a `kubeadm config images pull` command to pull container images used by kubeadm. (#63833, @chuckha)
- Restores the pre-1.10 behavior of the openstack cloud provider which uses the instance name as the Kubernetes Node name. This requires instances be named with RFC-1123 compatible names. (#63903, @liggitt)

- Added support for NFS relations on `kubernetes-worker` charm. (#63817, @hyperbolic2346)
- Stop using InfluxDB as default cluster monitoring (#62328, @serathius)
 - InfluxDB cluster monitoring is deprecated and will be removed in v1.12
- GCE: Fix to make the built-in `kubernetes` service properly point to the master's load balancer address in clusters that use multiple master VMs. (#63696, @grosskur)
- Kubernetes cluster on GCE have `crictl` installed now. Users can use it to help debug their node. The documentation of `crictl` can be found <https://github.com/kubernetes-incubator/cri-tools/blob/master/docs/crictl.md>. (#63357, @Random-Liu)
- The `NodeRestriction` admission plugin now prevents kubelets from modifying/removing taints applied to their Node API object. (#63167, @liggitt)
- The status of dynamic Kubelet config is now reported via `Node.Status.Config`, rather than the `KubeletConfigOk` node condition. (#63314, @mtaufen)
- `kubeadm` now checks that IPv4/IPv6 forwarding is enabled (#63872, @kad)
- `kubeadm` will now deploy CoreDNS by default instead of KubeDNS (#63509, @detiber)
- This PR will leverage subtests on the existing table tests for the scheduler units. (#63658, @xchapter7x)
 - Some refactoring of error/status messages and functions to align with new approach.
- `kubeadm` upgrade now supports external etcd setups again (#63495, @detiber)
- fix mount unmount failure for a Windows pod (#63272, @andyzhangx)
- CRI: update documents for container logpath. The container log path has been changed from `containername_attempt#.log` to `containername/attempt#.log` (#62015, @feiskyer)
- Create a new `dryRun` query parameter for mutating endpoints. If the parameter is set, then the query will be rejected, as the feature is not implemented yet. This will allow forward compatibility with future clients; otherwise, future clients talking with older apiservers might end up modifying a resource even if they include the `dryRun` query parameter. (#63557, @apelisse)
- kubelet: fix hangs in updating Node status after network interruptions/changes between the kubelet and API server (#63492, @liggitt)
- The `PriorityClass` API is promoted to `scheduling.k8s.io/v1beta1` (#63100, @ravisantoshgudimetla)
- Services can listen on same host ports on different interfaces with `--nodeport-addresses` specified (#62003, @m1093782566)
- `kubeadm` will no longer generate an unused etcd CA and certificates when configured to use an external etcd cluster. (#63806, @detiber)
- corrects a race condition in bootstrapping aggregated cluster roles in new HA clusters (#63761, @liggitt)
- Adding initial Korean translation for `kubectl` (#62040, @ianychoi)

- Report node DNS info with `-node-ip` flag (#63170, @micahhausler)
- The old dynamic client has been replaced by a new one. The previous dynamic client will exist for one release in `client-go/deprecated-dynamic`. Switch as soon as possible. (#63446, @deads2k)
- CustomResourceDefinitions Status subresource now supports GET and PATCH (#63619, @roycaiwh)
- Re-enable nodeipam controller for external clouds. (#63049, @andrewsykim)
- Removes a preflight check for kubeadm that validated custom kube-apiserver, kube-controller-manager and kube-scheduler arguments. (#63673, @chuckha)
- Adds a list-images subcommand to kubeadm that lists required images for a kubeadm install. (#63450, @chuckha)
- Apply pod name and namespace labels to pod cgroup in cAdvisor metrics (#63406, @derekwaynecarr)
- try to read openstack auth config from client config and fall back to read from the environment variables if not available (#60200, @dixudx)
- GC is now bound by QPS (it wasn't before) and so if you need more QPS to avoid ratelimiting GC, you'll have to set it. (#63657, @shyamjvs)
- The Kubelet's deprecated `-allow-privileged` flag now defaults to true. This enables users to stop setting `-allow-privileged` in order to transition to PodSecurityPolicy. Previously, users had to continue setting `-allow-privileged`, because the default was false. (#63442, @mtaufen)
- You must now specify `Node.Spec.ConfigSource.ConfigMap.KubeletConfigKey` when using dynamic Kubelet config to tell the Kubelet which key of the ConfigMap identifies its config file. (#59847, @mtaufen)
- Kubernetes version command line parameter in kubeadm has been updated to drop an unnecessary redirection from `ci/latest.txt` to `ci-cross/latest.txt`. Users should know exactly where the builds are stored on Google Cloud storage buckets from now on. For example for 1.9 and 1.10, users can specify `ci/latest-1.9` and `ci/latest-1.10` as the CI build jobs what build images correctly updates those. The CI jobs for master update the `ci-cross/latest` location, so if you are looking for latest master builds, then the correct parameter to use would be `ci-cross/latest`. (#63504, @dims)
- Search standard KubeConfig file locations when using `kubeadm token` without `--kubeconfig`. (#62850, @neolit123)
- Include the list of security groups when failing with the errors that more than one is tagged (#58874, @sorenmat)
- Allow "required" to be used at the CRD OpenAPI validation schema when the `/status` subresource is enabled. (#63533, @sttts)
- When updating `/status` subresource of a custom resource, only the value at the `.status` subpath for the update is considered. (#63385, @CaoShuFeng)
- Supported nodeSelector.matchFields (node's `metadata.node`) in scheduler. (#62453, @k82cn)
- Do not check vmSetName when getting Azure node's IP (#63541, @feiskyer)

- Fix stackdriver metrics for node memory using wrong metric type (#63535, @serathius)
- [fluentd-gcp addon] Use the logging agent's node name as the metadata agent URL. (#63353, @bmoyles0117)
- `kubect1 cp` supports completion. (#60371, @superbrothers)
- Azure VMSS: support VM names to contain the `_` character (#63526, @djsly)
- OpenStack built-in cloud provider is now deprecated. Please use the external cloud provider for OpenStack. (#63524, @dims)
- the shortcuts which were moved server-side in at least 1.9 have been removed from being hardcoded in `kubect1` (#63507, @deads2k)
- Fixes fake client generation for non-namespaced subresources (#60445, @jhorwit2)
- `kubect1 delete` with selection criteria defaults to ignoring not found errors (#63490, @deads2k)
- Increase scheduler cache generation number monotonically in order to avoid collision and use of stale information in scheduler. (#63264, @bsalamat)
- Fixes issue where subpath readOnly mounts failed (#63045, @msau42)
- Update to use go1.10.2 (#63412, @praseodym)
- `kubect1 create [secret | configmap] --from-file` now works on Windows with fully-qualified paths (#63439, @liggitt)
- kube-apiserver: the default `--endpoint-reconciler-type` is now `lease`. The `master-count` endpoint reconciler type is deprecated and will be removed in 1.13. (#63383, @liggitt)
- owner references can be set during creation without deletion power (#63403, @deads2k)
- Lays groundwork for OIDC distributed claims handling in the apiserver authentication token checker. (#63213, @filmil)
 - A distributed claim allows the OIDC provider to delegate a claim to a separate URL. Distributed claims are of the form as seen below, and are
 - defined in the OIDC Connect Core 1.0, section 5.6.2.
 - For details, see:
 - http://openid.net/specs/openid-connect-core-1_0.html#AggregatedDistributedClaims
- Use `/usr/bin/env` in all script shebangs to increase portability. (#62657, @matthyx)

v1.11.0-alpha.2

Documentation

Downloads for v1.11.0-alpha.2

filename	sha256 hash
kubernetes.tar.gz	8f352d4f44b0c539cfb4fb72a64098c155771916cff31642b131f1eb7879da2
kubernetes-src.tar.gz	d2de8df039fd3bd997c992abedb0353e37691053bd927627c6438ad654055f8

Client Binaries

filename	sha256 hash
kubernetes-client-darwin-386.tar.gz	ca70a374de0c3be4897d913f6ad22e426c6336837be6debbff3cbf5f3fcf4b3a
kubernetes-client-darwin-amd64.tar.gz	d6e0e6f286ef20a54047038b337b8a47f6cbd105b69917137c5c30c8fbee00
kubernetes-client-linux-386.tar.gz	6e73e49fa99391e1474d63a102f3cf758ef84b781bc0c0de42f1e5d1cc89132
kubernetes-client-linux-amd64.tar.gz	1c0c7a7aefabcda0d0407dfadd2ee7e379b395ae4ad1671535d99305e72eb2a
kubernetes-client-linux-arm.tar.gz	e6310653c31114efe32db29aa06c2c1530c285cda4cccc30edf4926d0417a3a
kubernetes-client-linux-arm64.tar.gz	188312f25a53cf30f8375ab5727e64067ede4fba53823c3a4e2e4b76893824
kubernetes-client-linux-ppc64le.tar.gz	875f77e17c3236dde0d6e5f302c52a5193f1bf1d79d72115ae1c6de5f494b0a
kubernetes-client-linux-s390x.tar.gz	18502d6bd9fb483c3a858d73e2d55e32b946cbb351e09788671aca6010e39ba
kubernetes-client-windows-386.tar.gz	f0e83868dd731365b8e3f95fe33622a59d0b67d97907089c2a1c56a8eca8eb1
kubernetes-client-windows-amd64.tar.gz	571898fd6f612d75c9cfb248875cefbe9761155f3e8c7df48f3ce38960641402

Server Binaries

filename	sha256 hash
kubernetes-server-linux-amd64.tar.gz	1f36c8bb40050d4371f0d8362e8fad9d60c39c5f7f9e5569ec70d0731c9dd43
kubernetes-server-linux-arm.tar.gz	f503c149c1aaef2df9fea146524c4f2cb505a1946062959d1acf8bc39933343
kubernetes-server-linux-arm64.tar.gz	660d282c18e2988744d902cb2c9f3b962b3418cbfae3644e3ea854835ca19d3
kubernetes-server-linux-ppc64le.tar.gz	0682060c38c704c710cc42a887b40e26726fad9cb23368ef44236527c2a785e
kubernetes-server-linux-s390x.tar.gz	319337deee4e12e30da57ca484ef435f280a36792c2e2e3cd3515079b911283

Node Binaries

filename	sha256 hash
kubernetes-node-linux-amd64.tar.gz	8d111b862d4cb3490d5ee2b97acd439e10408cba0c7f04c98a9f0470a4869e2
kubernetes-node-linux-arm.tar.gz	e04a30445bdabc0b895e036497fdebd102c39a53660108e45c870ae7ebc6dce
kubernetes-node-linux-arm64.tar.gz	5fea9ce404e76e7d32c06aa2e1fbf2520531901c16a2e5f0047712d0a9422e4
kubernetes-node-linux-ppc64le.tar.gz	fc6e0568f5f72790d14260ff70fe0802490a3772ed9aef2723952d706ef0fa3
kubernetes-node-linux-s390x.tar.gz	54f97b09c5adb4657e48fda59a9f4657386b0aa4be787c188eef1ece41bd4eb
kubernetes-node-windows-amd64.tar.gz	72dbc9c474b15cc70e7d806cd0f78f10af1f9a7b4a11f014167f1d47277154c

Changelog since v1.11.0-alpha.1

Other notable changes

- `kubeadm upgrade plan` now accepts a version which improves the UX nicer in air-gapped environments. (#63201, @chuckha)
- `kubectl` now supports `--field-selector` for `delete`, `label`, and `annotate` (#60717, @liggitt)
- `kube-apiserver`: `--endpoint-reconciler-type` now defaults to `lease`. The `master-count` reconciler is deprecated and will be removed in 1.13. (#58474, @rphillips)
- OpenStack cloudprovider: Fix deletion of orphaned routes (#62729, @databus23)
- Fix a bug that headless service without ports fails to have endpoint created. (#62497, @MrHohn)
- Fix panic for attaching AzureDisk to vmss nodes (#63275, @feiskyer)
- `kubectl api-resources` now supports filtering to resources supporting specific verbs, and can output fully qualified resource names suitable for combining with commands like `kubectl get` (#63254, @liggitt)
- fix cephfs fuse mount bug when user is not admin (#61804, @zhangxiaoyu-zidif)
- `StorageObjectInUseProtection` feature is GA. (#62870, @pospispas)
- fixed spurious “unable to find api field” errors patching custom resources (#63146, @liggitt)
- `KUBE_API_VERSIONS` is no longer respected. It was used for testing, but `runtime-config` is the proper flag to set. (#63165, @deads2k)
- Added `CheckNodePIDPressurePredicate` to checks if a pod can be scheduled on (#60007, @k82cn)
 - a node reporting pid pressure condition.

- Upgrade Azure Go SDK to stable version (v14.6.0) (#63063, @feiskyer)
- kubeadm: prompt the user for confirmation when resetting a master node (#59115, @alexbrand)
- add warnings on using pod-infra-container-image for remote container runtime (#62982, @dixudx)
- Deprecate kubectl rolling-update (#61285, @soltys)
- client-go developers: the new dynamic client is easier to use and the old is deprecated, you must switch. (#62913, @deads2k)
- Fix issue where on re-registration of device plugin, `allocatable` was not getting updated. This issue makes devices invisible to the Kubelet if device plugin restarts. Only work-around, if this fix is not there, is to restart the kubelet and then start device plugin. (#63118, @vikaschoudhary16)
- Remove `METADATA_AGENT_VERSION` configuration option. (#63000, @kawych)
- kubelets are no longer allowed to delete their own Node API object. Prior to 1.11, in rare circumstances related to cloudprovider node ID changes, kubelets would attempt to delete/recreate their Node object at startup. If a legacy kubelet encounters this situation, a cluster admin can remove the Node object: `kubectl delete node/<nodeName>` (#62818, @mikedanese)
 - or grant self-deletion permission explicitly:
 - * `kubectl create clusterrole self-deleting-nodes --verb=delete --resource=nodes`
 - * `kubectl create clusterrolebinding self-deleting-nodes --clusterrole=self-deleting-nodes --group=system:nodes`
- kubeadm creates kube-proxy with a toleration to run on all nodes, no matter the taint. (#62390, @discordianfish)
- fix resultRun by resetting it to 0 on pod restart (#62853, @tony612)
- Mount additional paths required for a working CA root, for setups where `/etc/ssl/certs` doesn't contain certificates but just symlink. (#59122, @klausenbusk)
- Introduce truncating audit backend that can be enabled for existing backend to limit the size of individual audit events and batches of events. (#61711, @crassirostris)
- kubeadm upgrade no longer races leading to unexpected upgrade behavior on pod restarts (#62655, @stealthybox)
 - kubeadm upgrade now successfully upgrades etcd and the controlplane to use TLS
 - kubeadm upgrade now supports external etcd setups
 - kubeadm upgrade can now rollback and restore etcd after an upgrade failure
- Add `-ipvs-exclude-cidrs` flag to kube-proxy. (#62083, @rramkumar1)
- Fix the liveness probe to use `/bin/bash -c` instead of `/bin/bash c`. (#63033, @bmoyles0117)
- Added `MatchFields` to `NodeSelectorTerm`; in 1.11, it only support `metadata.name`. (#62002, @k82cn)
- Fix scheduler informers to receive events for all the pods in the cluster.

- (#63003, @bsalamat)
- removed unsafe double RLock in cpumanager (#62464, @choury)
- Fix in vSphere Cloud Provider to handle upgrades from kubernetes version less than v1.9.4 to v1.9.4 and above. (#62919, @abrarshivani)
- The `--bootstrap-kubeconfig` argument to Kubelet previously created the first bootstrap client credentials in the certificates directory as `kubelet-client.key` and `kubelet-client.crt`. Subsequent certificates created by cert rotation were created in a combined PEM file that was atomically rotated as `kubelet-client-DATE.pem` in that directory, which meant clients relying on the `node.kubeconfig` generated by bootstrapping would never use a rotated cert. The initial bootstrap certificate is now generated into the cert directory as a PEM file and symlinked to `kubelet-client-current.pem` so that the generated kubeconfig remains valid after rotation. (#62152, @smarterclayton)
- stop kubelet to cloud provider integration potentially wedging kubelet sync loop (#62543, @ingvagabund)
- Fix error where config map for Metadata Agent was not created by addon manager. (#62909, @kawych)
- Fixes the `kubernetes.default.svc` loopback service resolution to use a loopback configuration. (#62649, @liggitt)
- Code generated for CRDs now passes `go vet`. (#62412, @bhcleek)
- fix permissions to allow statefulset scaling for admins, editors, and viewers (#62336, @deads2k)
- Add support of standard LB to Azure vmss (#62707, @feiskyer)
- GCE: Fix for internal load balancer management resulting in backend services with outdated instance group links. (#62885, @nicksardo)
- The `--experimental-qos-reserve` kubelet flags is replaced by the alpha level `--qos-reserved` flag or `QOSReserved` field in the kubeletconfig and requires the `QOSReserved` feature gate to be enabled. (#62509, @sjenning)
- Set pod status to “Running” if there is at least one container still reporting as “Running” status and others are “Completed”. (#62642, @ceshihao)
- Split PodPriority and PodPreemption feature gate (#62243, @resouer)
- Add support to resize Portworx volumes. (#62308, @harsh-px)

v1.11.0-alpha.1

Documentation

Downloads for v1.11.0-alpha.1

filename	sha256 hash
kubernetes.tar.gz	8e7f2b4c8f8fb948b4f7882038fd1bb3f2b967ee240d30d58347f40083ed199
kubernetes-src.tar.gz	62ab39d8fd02309c74c2a978402ef809c0fe4bb576f1366d6bb0cff26d62e21

Client Binaries

filename	sha256 hash
kubernetes-client-darwin-386.tar.gz	332fd9e243c9c37e31fd26d8fa1a7ccffba770a48a9b0ffe57403f028c6ad61
kubernetes-client-darwin-amd64.tar.gz	1703462ad564d2d52257fd59b0c8acab595fd08b41ea73fed9f6ccb4bfa074
kubernetes-client-linux-386.tar.gz	61073b7c5266624e0f7be323481b3111ee01511b6b96cf16468044d8a68068e
kubernetes-client-linux-amd64.tar.gz	9a29117fa44ffc14a7004d55f4de97ad88d94076826cfc0bf9ec73c998c78f6
kubernetes-client-linux-arm.tar.gz	55114364aacd4eb6d080b818c859877dd5ce46b8f1e58e1469dfa9a50ade1c1
kubernetes-client-linux-arm64.tar.gz	276fb16cf4aef7d1444ca754ec83365ff36184e1bc30104853f791a57934ee3
kubernetes-client-linux-ppc64le.tar.gz	8a9096dd1908b8f4004249daff7ae408e390dbc728cd237bc558192744f5211
kubernetes-client-linux-s390x.tar.gz	9297755244647b90c2d41ce9e04ee31fb158a69f011c0f4f1ec2310fa57234e
kubernetes-client-windows-386.tar.gz	449562a4d6d82b5eb60151e6ff0b301f92b92f957e3a38b741a4c0d8b3c0611
kubernetes-client-windows-amd64.tar.gz	ab97f150723614bcbacdf27c4ced8b45166425522a44e7de693d0e987c425f0

Server Binaries

filename	sha256 hash
kubernetes-server-linux-amd64.tar.gz	4c2db4089271366933d0b63ea7fe8f0d9eb4af06fe91d6aac1b8240e2fbd62e
kubernetes-server-linux-arm.tar.gz	d5abdfe5aa28b23cf4f4f6be27db031f885f87e2defef680f2d5b92098b2d78
kubernetes-server-linux-arm64.tar.gz	bd8a8d7c45108f4b0c2af81411c00e338e410b680abe4463f6b6d88e8adcc81
kubernetes-server-linux-ppc64le.tar.gz	cb5341af600c82d391fc5ca726ff96c48e741f597360a56cc2ada0a0f9e7ec5
kubernetes-server-linux-s390x.tar.gz	91009df3801430afde03e888f1f13a83bcb9d00b7cd4194b085684cc116575

Node Binaries

filename	sha256 hash
kubernetes-node-linux-amd64.tar.gz	22bf846c692545e7c2655e2ebe06ffc61313d7c76e4f75716be4cec457b548e
kubernetes-node-linux-arm.tar.gz	351095bb0ec177ce1ba950d366516ed6154f6ce920eac39e2a26c48203a94e
kubernetes-node-linux-arm64.tar.gz	947e6e9e362652db435903e9b40f14750a7ab3cc60622e78257797f6ed63b1a
kubernetes-node-linux-ppc64le.tar.gz	1a0a1d0b96c3e01bc0737245eed76ed3db970c8d80c42450072193f23a0e18
kubernetes-node-linux-s390x.tar.gz	6891b2e8f1f93b4f590981dccc6fd976a50a0aa5c425938fc5ca3a9c0742d1
kubernetes-node-windows-amd64.tar.gz	70daea86c14fcabfd46f3d1bb252db50148fb9aab3371dfc4a039791caeba

Changelog since v1.10.0

Action Required

- ACTION REQUIRED: Alpha annotation for PersistentVolume node affinity has been removed. Update your PersistentVolumes to use the beta PersistentVolume.nodeAffinity field before upgrading to this release (#61816, @wackxu)
- ACTION REQUIRED: In-place node upgrades to this release from versions 1.7.14+, 1.8.9+, and 1.9.4+ are not supported if using subpath volumes with PVCs. Such pods should be drained from the node first. (#61373, @msau42)

Other notable changes

- Make volume usage metrics available for Cinder (#62668, @zetaab)
- kubectl stops rendering List as suffix kind name for CRD resources (#62512, @dixudx)
- Removes `--include-extended-apis` which was deprecated back in <https://github.com/kubernetes/kubernetes/pull/32894> (#62803, @deads2k)
- Add `write-config-to` to scheduler (#62515, @resouer)
- Kubelets will no longer set `externalID` in their node spec. (#61877, @mikedanese)
- kubeadm preflight: check CRI socket path if defined, otherwise check for Docker (#62481, @taharah)
- fix network setup in `hack/local-up-cluster.sh` (<https://github.com/kubernetes/kubernetes/pull/60431>) (#60633, @pohly)
 - better error diagnostics in `hack/local-up-cluster.sh` output
- Add prometheus cluster monitoring addon to kube-up (#62195, @serathius)

- Fix inter-pod anti-affinity check to consider a pod a match when all the anti-affinity terms match. (#62715, @bsalamat)
- GCE: Bump GLBC version to 1.1.1 - fixing an issue of handling multiple certs with identical certificates (#62751, @nicksardo)
- fixes configuration error when upgrading kubeadm from 1.9 to 1.10+ (#62568, @liztio)
 - enforces kubeadm upgrading kubernetes from the same major and minor versions as the kubeadm binary.
- Allow user to scale l7 default backend deployment (#62685, @freehan)
- Pod affinity `nodeSelectorTerm.matchExpressions` may now be empty, and works as previously documented: nil or empty `matchExpressions` matches no objects in scheduler. (#62448, @k82cn)
- Add @andrewsykim as an approver for CCM related code. (#62749, @andrewsykim)
- Fix an issue in inter-pod affinity predicate that cause affinity to self being processed incorrectly (#62591, @bsalamat)
- fix WaitForAttach failure issue for azure disk (#62612, @andyzhangx)
- Update kube-dns to Version 1.14.10. Major changes: (#62676, @MrHohn)
 - Fix a bug in DNS resolution for externalName services
 - and PTR records that need to query from upstream nameserver.
- Update version of Istio addon from 0.5.1 to 0.6.0. (#61911, @ostromart)
 - See <https://istio.io/news/releases/0.x/announcing-0.6/> for full Istio release notes.
- Phase `kubeadm alpha phase kubelet` is added to support dynamic kubelet configuration in kubeadm. (#57224, @xiangpengzhao)
- `kubeadm alpha phase kubeconfig user` supports groups (organizations) to be specified in client cert. (#62627, @xiangpengzhao)
- Fix user visible files creation for windows (#62375, @feiskyer)
- remove deprecated initresource admission plugin (#58784, @wackxu)
- Fix machineID getting for vmss nodes when using instance metadata (#62611, @feiskyer)
- Fixes issue where PersistentVolume.NodeAffinity.NodeSelectorTerms were ANDed instead of ORed. (#62556, @msau42)
- Fix potential infinite loop that can occur when NFS PVs are recycled. (#62572, @joelsmith)
- Fix Forward chain default reject policy for IPVS proxier (#62007, @m1093782566)
- The kubeadm config option `API.ControlPlaneEndpoint` has been extended to take an optional port which may differ from the apiserver's bind port. (#62314, @rjosephwright)
- cluster/kube-up.sh now provisions a Kubelet config file for GCE via the metadata server. This file is installed by the corresponding GCE init scripts. (#62183, @mtaufen)
- Remove alpha functionality that allowed the controller manager to approve kubelet server certificates. (#62471, @mikedanese)
- gitRepo volumes in pods no longer require git 1.8.5 or newer, older git

versions are supported too now. (#62394, @jsafrane)

- Default mount propagation has changed from “HostToContainer” (“rslave” in Linux terminology) to “None” (“private”) to match the behavior in 1.9 and earlier releases. “HostToContainer” as a default caused regressions in some pods. (#62462, @jsafrane)
- improve performance of affinity/anti-affinity predicate of default scheduler significantly. (#62211, @bsalamat)
- fix nsenter GetFileType issue in containerized kubelet (#62467, @andyzhangx)
- Ensure expected load balancer is selected for Azure (#62450, @feiskyer)
- Resolves forbidden error when the `daemon-set-controller` cluster role access `controllerrevisions` resources. (#62146, @frodenas)
- Adds `--cluster-name` to kubeadm init for specifying the cluster name in kubeconfig. (#60852, @karan)
- Upgrade the default etcd server version to 3.2.18 (#61198, @jpbetz)
- [fluentd-gcp addon] Increase CPU limit for fluentd to 1 core to achieve 100kb/s throughput. (#62430, @bmoyles0117)
- GCE: Bump GLBC version to 1.1.0 - supporting multiple certificates and HTTP2 (#62427, @nicksardo)
- Fixed #731 kubeadm upgrade ignores HighAvailability feature gate (#62455, @fabriziopandini)
- Cluster Autoscaler 1.2.1 (release notes: <https://github.com/kubernetes/autoscaler/releases/tag/cluster-autoscaler-1.2.1>) (#62457, @mwielgus)
- Add generators for `apps/v1` deployments. (#61288, @ayushpateria)
- kubeadm: surface external etcd preflight validation errors (#60585, @alexbrand)
- kube-apiserver: oidc authentication now supports requiring specific claims with `--oidc-required-claim=<claim>=<value>` (#62136, @rithujohn191)
- Implements verbosity logging feature for kubeadm commands (#57661, @vbmade2000)
- Allow additionalProperties in CRD OpenAPI v3 specification for validation, mutually exclusive to properties. (#62333, @sttts)
- cinder volume plugin : (#61082, @wenlxie)
 - When the cinder volume status is **error**, controller will not do **attach** and **detach** operation
- fix incompatible file type checking on Windows (#62154, @dixudx)
- fix local volume absolute path issue on Windows (#62018, @andyzhangx)
- Remove `ObjectMeta ListOptions DeleteOptions` from core api group. Please use that in meta/v1 (#61809, @hxxuzhonghu)
- fix the issue that default azure disk fsypte(ext4) does not work on Windows (#62250, @andyzhangx)
- RBAC information is included in audit logs via audit.Event annotations: (#58807, @CaoShuFeng)
 - `authorization.k8s.io/decision` = {allow, forbid}
 - `authorization.k8s.io/reason` = human-readable reason for the decision

- Update kube-dns to Version 1.14.9 in kubeadm. (#61918, @MrHohn)
- Add support to ingest log entries to Stackdriver against new “k8s_container” and “k8s_node” resources. (#62076, @qingling128)
- remove deprecated `-mode` flag in `check-network-mode` (#60102, @satyasm)
- Schedule even if extender is not available when using extender (#61445, @resouer)
- Fixed column alignment when `kubectl get` is used with custom columns from OpenAPI schema (#56629, @luksa)
- Fixed bug in `rbd-nbd` utility when `nbd` is used. (#62168, @piontec)
- Extend the Stackdriver Metadata Agent by adding a new Deployment for ingesting unscheduled pods, and services. (#62043, @supriyagarg)
- Disabled `CheckNodeMemoryPressure` and `CheckNodeDiskPressure` predicates if `TaintNodesByCondition` enabled (#60398, @k82cn)
- kubeadm config can now override the Node CIDR Mask Size passed to kube-controller-manager. (#61705, @jstangroome)
- Add warnings that authors of aggregated API servers must not rely on authorization being done by the kube-apiserver. (#61349, @sttts)
- Support custom test configuration for IPAM performance integration tests (#61959, @satyasm)
- GCE: Updates GLBC version to 1.0.1 which includes a fix which prevents multi-cluster ingress objects from creating full load balancers. (#62075, @nicksardo)
- OIDC authentication now allows tokens without an “email_verified” claim when using the “email” claim. If an “email_verified” claim is present when using the “email” claim, it must be `true`. (#61508, @rithujohn191)
- fix local volume issue on Windows (#62012, @andyzhangx)
- kubeadm: Introduce join timeout that can be controlled via the `discovery-Timeout` config option (set to 5 minutes by default). (#60983, @roster)
- Add e2e test for CRD Watch (#61025, @ayushpateria)
- Fix panic create/update CRD when mutating/validating webhook configured. (#61404, @hxxuzhonghu)
- Fix a bug that fluentd doesn’t inject container logs for CRI container runtimes (containerd, cri-o etc.) into elasticsearch on GCE. (#61818, @Random-Liu)
- Support for “alpha.kubernetes.io/nvidia-gpu” resource which was deprecated in 1.10 is removed. Please use the resource exposed by DevicePlugins instead (“nvidia.com/gpu”). (#61498, @mindprince)
- Pods requesting resources prefixed with `*kubernetes.io` will remain unscheduled if there are no nodes exposing that resource. (#61860, @mindprince)
- flexvolume: trigger plugin init only for the relevant plugin while probe (#58519, @linyouchong)
- Update to use go1.10.1 (#60597, @cblecker)
- Rev the Azure SDK for networking to 2017-06-01 (#61955, @brendandburns)
- Return error if get `NodeStageSecret` and `NodePublishSecret` failed in CSI

- volume plugin (#61096, @mlmhl)
- kubectl: improves compatibility with older servers when creating/updating API objects (#61949, @liggitt)
- kubernetes-master charm now supports metrics server for horizontal pod autoscaler. (#60174, @hyperbolic2346)
- fix scheduling policy on ConfigMap breaks without the `-policy-configmap-namespace` flag set (#61388, @zjj2wry)
- kubectl: restore the ability to show resource kinds when displaying multiple objects (#61985, @liggitt)
- `kubectl certificate approve|deny` will not modify an already approved or denied CSR unless the `--force` flag is provided. (#61971, @smarterclayton)
- Kubelet now exposes a new endpoint `/metrics/probes` which exposes a Prometheus metric containing the liveness and/or readiness probe results for a container. (#61369, @rramkumar1)
- Balanced resource allocation priority in scheduler to include volume count on node (#60525, @ravisantoshgudimetla)
- new `dhcp-domain` parameter to be used for figuring out the hostname of a node (#61890, @dims)
- Fixed a panic in `kubectl run --attach ...` when the api server failed to create the runtime object (due to name conflict, PSP restriction, etc.) (#61713, @mountkin)
- Ensure reasons end up as comments in `kubectl edit`. (#60990, @bmcsdio)
- kube-scheduler has been fixed to use `--leader-elect` option back to true (as it was in previous versions) (#59732, @dims)
- Azure cloud provider now supports standard SKU load balancer and public IP. To use it, set cloud provider config with (#61884, @feiskyer)
 - `{`
 - `"loadBalancerSku": "standard",`
 - `"excludeMasterFromStandardLB": true,`
 - `}`
 - If `excludeMasterFromStandardLB` is not set, it will be default to true, which means master nodes are excluded to the backend of standard LB.
 - Also note standard load balancer doesn't work with annotation `service.beta.kubernetes.io/azure-load-balancer-mode`. This is because all nodes (except master) are added as the LB backends.
- The node authorizer now automatically sets up rules for `Node.Spec.ConfigSource` when the `DynamicKubeletConfig` feature gate is enabled. (#60100, @mtaufen)
- Update kube-dns to Version 1.14.9. Major changes: (#61908, @MrHohn)
 - Fix for kube-dns returns `NXDOMAIN` when not yet synced with apiserver.
 - Don't generate empty record for `externalName` service.
 - Add validation for `upstreamNameserver` port.

- Update go version to 1.9.3.
- CRI: define the mount behavior when host path does not exist: runtime should report error if the host path doesn't exist (#61460, @feiskyer)
- Fixed ingress issue with CDK and pre-1.9 versions of kubernetes. (#61859, @hyperbolic2346)
- Removed rknetes code, which was deprecated in 1.10. (#61432, @filbranden)
- Disable ipamperf integration tests as part of every PR verification. (#61863, @satyasm)
- Enable server-side print in kubect1 by default, with the ability to turn it off with `-server-print=false` (#61477, @soltys)
- Add ipset and udevadm to the hyperkube base image. (#61357, @rphillips)
- In a GCE cluster, the default HAIRPIN_MODE is now "hairpin-veth". (#60166, @rramkumar1)
- Deployment will stop adding pod-template-hash labels/selector to ReplicaSets and Pods it adopts. Resources created by Deployments are not affected (will still have pod-template-hash labels/selector). (#61615, @janetkuo)
- kubect1: fixes issue with `-o yaml` and `-o json` omitting kind and apiVersion when used with `--dry-run` (#61808, @liggitt)
- Updated admission controller settings for Juju deployed Kubernetes clusters (#61427, @hyperbolic2346)
- Performance test framework and basic tests for the IPAM controller, to simulate behavior of the four supported modes under lightly loaded and loaded conditions, where load is defined as the number of operations to perform as against the configured kubernetes API server QPS. (#61143, @satyasm)
- kubernetes-master charm now properly clears the client-ca-file setting on the apiserver snap (#61479, @hyperbolic2346)
- Fix racy panics when using fake watches with ObjectTracker (#61195, @grantr)
- [fluentd-gcp addon] Update event-exporter image to have the latest base image. (#61727, @crassirostris)
- Use inline func to ensure unlock is executed (#61644, @resouer)
- `kubect1 apply` view/edit-last-applied support completion. (#60499, @superbrothers)
- Automatically add system critical priority classes at cluster bootstrapping. (#60519, @bsalamat)
- Ensure cloudprovider.InstanceNotFound is reported when the VM is not found on Azure (#61531, @feiskyer)
- Azure cloud provider now supports specifying allowed service tags by annotation `service.beta.kubernetes.io/azure-allowed-service-tags` (#61467, @feiskyer)
- Add all kinds of resource objects' statuses in HPA description. (#59609, @zhangxiaoyu-zidif)
- Bound cloud allocator to 10 retries with 100 ms delay between retries. (#61375, @satyasm)

- Removed always pull policy from the template for ingress on CDK. (#61598, @hyperbolic2346)
- escape literal percent sign when formatting (#61523, @dixudx)
- Cluster Autoscaler 1.2.0 - release notes available here: <https://github.com/kubernetes/autoscaler/releases> (#61561, @mwielgus)
- Fix mounting of UNIX sockets (and other special files) in subpaths (#61480, @gnufied)
- `kubectl patch` now supports `--dry-run`. (#60675, @timoreimann)
- fix sorting taints in case the sorting keys are equal (#61255, @dixudx)
- NetworkPolicies can now target specific pods in other namespaces by including both a namespaceSelector and a podSelector in the same peer element. (#60452, @danwinship)
- include node internal ip as additional information for kubectl (#57623, @dixudx)
- Add apiserver configuration option to choose audit output version. (#60056, @crassirostris)
- `make test-cmd` now works on OSX. (#61393, @totherme)
- Remove kube-apiserver `--storage-version` flag, use `--storage-versions` instead. (#61453, @hxxuzhonghu)
- Bump Heapster to v1.5.2 (#61396, @kawych)
- Conformance: ReplicaSet must be supported in the `apps/v1` version. (#61367, @enisoc)
- You can now use the `base64decode` function in kubectl go templates to decode base64-encoded data, for example `kubectl get secret SECRET -o go-template='{{ .data.KEY | base64decode }}'`. (#60755, @glb)
- Remove 'system' prefix from Metadata Agent rbac configuration (#61394, @kawych)
- Remove `--tls-ca-file` flag. (#61386, @hxxuzhonghu)
- fix sorting tolerations in case the keys are equal (#61252, @dixudx)
- respect fstype in Windows for azure disk (#61267, @andyzhangx)
- `--show-all` (which only affected pods and only for human readable/non-API printers) is inert in v1.11, and will be removed in a future release. (#60793, @charrywanganthony)
- Remove never used `NewCronJobControllerFromClient` method (#59471, @dmathieu)
- Support new `NODE_OS_DISTRIBUTION` 'custom' on GCE (#61235, @yguo0905)
- Fixed #61123 by triggering `syncer.Update` on all cases including when a syncer is created (#61124, @satyasm)
 - on a new add event.
- Unready pods will no longer impact the number of desired replicas when using horizontal auto-scaling with external metrics or object metrics. (#60886, @mattjmcnaughton)
- include file name in the error when visiting files (#60919, @dixudx)
- Implement preemption for extender with a verb and new interface (#58717, @resouer)

- `kube-cloud-controller-manager` flag `--service-account-private-key-file` is removed in v1.11 (#60875, @charrywanganthony)
- `kubeadm`: Add the writable boolean option to `kubeadm` config. The option works on a per-volume basis for `*ExtraVolumes` config keys. (#60428, @roster)
- `DaemonSet` scheduling associated with the alpha `ScheduleDaemonSetPods` feature flag has been removed from the 1.10 release. See <https://github.com/kubernetes/enhancements/issues/548> for feature status. (#61411, @liggitt)
- Bugfix for erroneous upgrade needed messaging in `kubernetes` worker charm. (#60873, @wwwtyro)
- Fix data race in node lifecycle controller (#60831, @resouer)
- Nodes are not deleted from `kubernetes` anymore if node is shutdown in `Openstack`. (#59931, @zetaab)
- “beginPort+offset” format support for port range which affects `kube-proxy` only (#58731, @yue9944882)
- Added e2e test for watch (#60331, @jennybuckley)
- `kubelet`’s `-cni-bin-dir` option now accepts multiple comma-separated CNI binary directory paths, which are search for CNI plugins in the given order. (#58714, @dcbw)