v2.5.15-matrix

Rancher Server v2.5.15

Installing Rancher Server v2.5.15 on RKE

Recommended RKE CLI version

RANCHER VERSION	RECOMMENDED RKE CLI VERSION	DEFAULT KUBERNETES VERSION
v2.5.15	v1.2.20	v1.20.15-rancher1-3(default) v1.19.16-rancher1-5 v1.18.20-rancher1-3 v1.17.17-rancher2-4

OS & Docker

TYPE	VERSION	VALIDATED/CERTIFIED ON[1]
CentOS	7.7, 7.8, 7.9	Docker 18.06.3, 18.09.x, 19.03.x, 20.10.x
	8.2, 8.3, 8.4 (Until EOL - DEC 2021)	Docker 19.03.x, 20.10.x
Oracle Linux	7.7, 7.9	Docker 19.03.x, 20.10.x
	8.2, 8.3, 8.4	Docker 19.03.x, 20.10.x
RHEL	7.7, 7.8, 7.9	RHEL Docker 1.13.x Docker 18.06.3, 18.09.x, 19.03.x, 20.10.x
	8.2, 8.3, 8.4	Docker 19.03.x, 20.10.x
SLES	12 SP5, 15SP1, 15SP2, 15SP3	Docker 19.03.x
Ubuntu	16.04, 18.04, 20.04	Docker 18.06.3, 18.09.x, 19.03.x, 20.10.x
Rocky Linux	8.4	Docker 19.03.x, 20.10.x
openSUSE Leap	15.3	19.03.x, 20.10.x

Installing Rancher Server v2.5.15 on K3S

K3S VERSION	VALIDATED/CERTIFIED ON
v1.20.15+k3s1	Aurora (Mysql 5.7) 2.09.0 MySQL 5.7 PostgreSQL 11.5, 12.5, 13.1 MariaDB 10.4.8 External Etcd 3.4.18 Embedded Etcd 3.4.18-k3s1 CRI: embedded Containerd v1.4.12-k3s1 CNI: embedded Flannel v0.14.1-k3s1
v1.19.16+k3s1	Aurora (Mysql 5.7) 2.09.0 MySQL 5.7 PostgreSQL 11.5, 12.5, 13.1 MariaDB 10.4.8 External Etcd 3.4.13 Embedded Etcd 3.4.13-k3s3 CRI: embedded Containerd v1.4.11-k3s1 CNI: embedded Flannel v0.14.1-k3s.1

v1.18.20+k3s1 **(supported on Ubuntu and CentOS/RHEL 7.x only)**	Aurora (Mysql 5.7) 2.09.0 MySQL 5.7 PostgreSQL 11.5 MariaDB 10.3.20 External Etcd 3.3.15 CRI: embedded Containerd v1.3.10-k3s1 CNI: embedded Flannel v0.11.0-k3s.2
v1.17.17+k3s1 **(supported on Ubuntu only)**	Aurora (Mysql 5.7) 2.09.0 MySQL 5.7 PostgreSQL 11.5 MariaDB 10.3.20 External Etcd 3.3.15 CRI: embedded Containerd v1.3.9-k3s1 CNI: embedded Flannel v0.11.0-k3s.1

OS

TYPE	VERSION	VALIDATED/CERTIFIED ON[1]
Ubuntu	16.04, 18.04, 20.04	x86_64 architecture
SLES	15SP1, 15SP2, 15SP3	x86_64 architecture
openSUSE Leap	15.3	x86_64
CentOS	7.8, 7.9, 8.2, 8.3, 8.4	x86_64 architecture
Rocky Linux	8.4	x86_64 architecture
RHEL	7.8, 7.9, 8.2, 8.3, 8.4	x86_64 architecture

Installing Rancher Server v2.5.15 on RKE2

RKE2 VERSION	VALIDATED/CERTIFIED ON
v1.20.15+rke2r2	CRI: Containerd v1.4.12-k3s1 CNI: Flannel v0.14.1
v1.19.16+rke2r1	CRI: Containerd v1.4.11-k3s1 CNI: Flannel v0.14.1
v1.18.20+rke2r1 **(supported on Ubuntu only)**	CRI: Containerd v1.3.10-k3s4 CNI: Flannel v0.13.0-rancher1

OS

TYPE	VERSION	VALIDATED/CERTIFIED ON[1]
Ubuntu	18.04, 20.04	x86_64 architecture
SLES	15SP1, 15SP2, 15SP3	x86_64 architecture
openSUSE Leap	15.3	x86_64_architecture

Installing Rancher Server v2.5.15 on Hosted Kubernetes

SERVICE	PROVIDER	HIGHEST VERSION VALIDATED/CERTIFIED ON[‡]
AKS	Microsoft Azure	1.20.9
EKS	Amazon	v1.20.x

GKE	Google	v1.20.10-gke.301

Downstream Clusters in Rancher v2.5.15

Rancher RKE Downstream Clusters - Linux Worker Nodes

Note: Rancher RKE Downstream clusters can be either provisioned by node drivers or custom/existing nodes, or registered into Rancher

OS & Docker

TYPE	VERSION	VALIDATED/CERTIFIED ON[1]
CentOS	7.7, 7.8, 7.9	Docker 18.06.3, 18.09.x, 19.03.x, 20.10.x
	8.2, 8.3	Docker 19.03.x, 20.10.x
Oracle Linux	7.7, 7.9	Docker 19.03.x, 20.10.x
	8.2, 8.3, 8.4	Docker 19.03.x, 20.10.x
RHEL	7.7, 7.8, 7.9	RHEL Docker 1.13.x Docker 18.06.3, 18.09.x, 19.03.x, 20.10.x
	8.2, 8.3, 8.4	Docker 19.03.x, 20.10.x
SLES	12SP5, 15SP1, 15SP2, 15SP3	Docker 19.03.x, 20.10.x
openSUSE Leap	15.3	Docker 19.03.x, 20.10.x
Ubuntu	16.04, 18.04, 20.04	Docker 18.06.3, 18.09.x, 19.03.x, 20.10.x
Rocky Linux	8.4	Using custom node provisioning only: Docker 19.03.x, 20.10.x (Rancher node driver provisioning of Docker is not supported)

Supported K8S Versions

UPSTREAM K8S VERSION	VALIDATED/CERTIFIED ON[2,3,4,5]
1.20.15	etcd: v3.4.15 flannel: v0.15.1 canal: v3.17.2 nginx-ingress-controller: 1.1.0-rancher1
1.19.16	etcd: v3.4.15 flannel: v0.15.1 canal: v3.16.5 nginx-ingress-controller: 1.1.0-rancher1
1.18.20	etcd: v3.4.15 flannel: v0.15.1 canal: v3.13.4 nginx-ingress-controller: 0.35.0
1.17.17	etcd: v3.4.3 flannel: v0.15.1 canal: v3.13.4 nginx-ingress-controller: 0.35.0

Node Drivers

TYPE	VERSION	SLA LIMITED TO
AWS	N/A	Built-in, Active[6]

Azure	N/A	Built-in, Active[6]
Digital Ocean	N/A	Built-in, Active[6]
Linode	N/A	Built-in, Active[6]
VMware	vSphere 6.5, 6.7, 7.0	Built-in, Active[6]

Rancher RKE Downstream Clusters - Windows Worker Nodes

Note: Windows clusters are added with Windows worker nodes only.

Supported Windows Server, Docker, K8S Versions

Windows Server	Docker Version	UPSTREAM K8S VERSION	Windows EOM
Windows Server 2019 LTSC	Docker 19.03.x EE	1.20.x 1.19.8 1.18.16 1.17.12	1/19/2024

Matrix based off of:

Kubernetes/Windows Support: https://kubernetes.io/docs/setup/production-environment/windows/intro-windows-in-kubernetes/#windows-os-version-support

Windows Support: https://docs.microsoft.com/en-us/windows-server/get-started/windows-server-release-info

Windows Servicing Channels: https://docs.microsoft.com/en-us/windows-server/get-started-19/servicing-channels-19

Rancher K3S Downstream Clusters

Note: Rancher k3s clusters can only be registered into Rancher

OS

TYPE	VERSION	VALIDATED/CERTIFIED ON[1]
Ubuntu	16.04, 18.04, 20.04	x86_64 architecture
SLES	15SP1, 15SP2, 15SP3	x86_64 architecture
openSUSE Leap	15.3	x86_64 architecture
CentOS	7.8, 7.9, 8.2, 8.3	x86_64 architecture
Rocky Linux	8.4	x86_64 architecture
RHEL	7.8, 7.9, 8.2, 8.3, 8.4	x86_64 architecture

Supported K3S Versions

K3S VERSION	VALIDATED/CERTIFIED ON[2,3,4,5]
v1.20.15+k3s1	Aurora (Mysql 5.7) 2.09.0 MySQL 5.7 PostgreSQL 11.5, 12.5, 13.1 MariaDB 10.3.20 External Etcd 3.4.18 Embedded Etcd 3.4.18-k3s1 CRI: embedded Containerd v1.4.12-k3s1 CNI: embedded Flannel v0.14.1-k3s1

v1.19.16+k3s1	Aurora (Mysql 5.7) 2.09.0 MySQL 5.7 PostgreSQL 11.5, 12.5, 13.1 MariaDB 10.3.20 External Etcd 3.3.15 Embedded Etcd 3.4.13-k3s3 CRI: embedded Containerd v1.4.11-k3s1 CNI: embedded Flannel v0.14.1-k3s.1
v1.18.20+k3s1 **(supported on Ubuntu and CentOS/RHEL 7.x only)**	Aurora (Mysql 5.7) 2.09.0 MySQL 5.7 PostgreSQL 11.5 MariaDB 10.3.20 External Etcd 3.3.15 CRI: embedded Containerd v1.3.10-k3s1 CNI: embedded Flannel v0.11.0-k3s.2
1.17.17+k3s1 (supported on Ubuntu only)	Aurora (Mysql 5.7) 2.09.0 MySQL 5.7 PostgreSQL 11.5 MariaDB 10.3.20 External Etcd 3.3.15 CRI: embedded Containerd v1.3.9-k3s1 CNI: embedded Flannel v0.11.0-k3s.1

Rancher RKE2 Downstream Clusters

Note: Rancher RKE2, also known as **RKE Government**, clusters can only be registered into Rancher.

OS

TYPE	VERSION	VALIDATED/CERTIFIED ON[1]
CentOS	7.8, 7.9, 8.2, 8.3	x86_64 architecture
Rocky Linux	8.4	x86_64 architecture
RHEL	7.8, 7.9, 8.2, 8.3, 8.4	x86_64 architecture
SLES	15SP1, 15SP2, 15SP3	x86_64 architecture
openSUSE Leap	15.3	x86_64 architecture
Ubuntu	16.04, 18.04, 20.04	x86_64 architecture

Supported RKE2 Versions

RKE2 VERSION	VALIDATED/CERTIFIED ON[2,3,4,5]
v1.20.15+rke2r2	Etcd: v3.4.13-k3s1 Containerd: v1.4.12-k3s1 Runc: v1.0.3 CNI Plugins: v0.9.1 Flannel: v0.14.1 Calico: v3.13.3 Cilium: v1.9.8 Metrics-server: v0.5.0 CoreDNS: v1.8.5 Ingress-Nginx: v4.0.3 Helm-controller: v0.11.7
v1.19.16+rke2r1	Etcd: v3.4.13-k3s1 Containerd: v1.4.11-k3s1 Runc: v1.0.1 CNI Plugins: v0.9.1 Flannel: v0.14.1 Calico: v3.13.3 Metrics-server: v0.3.6 CoreDNS: v1.6.9 Ingress-Nginx: v4.0.3 Helm-controller: v0.8.4

v1.18.20+rke2r1	Etcd: v3.4.13-k3s1 Containerd: v1.3.10-k3s4 Runc: v1.0.0-rc95 CNI Plugins: v0.8.7 Flannel: v0.13.0-rancher1 Calico: v3.13.3 Metrics-server: v0.3.6 CoreDNS: v1.6.9 Ingress-Nginx: v1.36.3 Helm-controller: v0.8.4

Hosted Kubernetes Downstream Clusters

Note: Hosted Kubernetes clusters can be either provisioned by Rancher or registered into Rancher

Supported K8S Versions

SERVICE	PROVIDER	HIGHEST VERSION VALIDATED/CERTIFIED ON‡	Notes
AKS	Microsoft Azure	1.20.13	
EKS	Amazon	v1.20.7-eks-d88609	Managed node groups provisioned by Rancher support Amazon Linux 2 OS
GKE	Google	v1.20.15-gke.4100	

Other Registered Kubernetes Downstream Clusters

Note: Any other type of registered Kubernetes cluster can be registered

Supported K8S Versions

TYPE	HIGHEST VERSION VALIDATED/CERTIFIED ON‡
Any	1.20.6
Any	1.19.10
Any	1.18.18
Any	1.17.17
Any	1.16.15
EKS	1.20.x

Cluster Explorer Apps

Rancher Apps

FEATURE	APP NAME	APP VERSION[2 3 4 5]
Alerting and Monitoring	rancher-monitoring	16.6.1
Istio	rancher-istio	1.11.701
Logging	rancher-logging	3.15.00
CIS	rancher-cis-benchmark	1.0.700
Rancher Backup	rancher-backup	1.2.1

Rancher Longhorn

Version	Validated/certified on[2 3 4 5]

v1.1.3	Default settings of individual components
v1.2.3	Default settings of individual components

Partner Apps[7] [8]

Rancher Continuous Delivery (Available in Cluster Explorer)

APP VERSION[2] [3] [4] [5]
v0.3.9

Cluster Manager Tools

TYPE	VERSION	VALIDATED/CERTIFIED ON[2] [3] [4] [5]
Monitoring/Alerts/Notifiers	0.1.5 0.2.2	**0.1.5** prometheus: v2.18.2 prometheus-operator: v0.38.1 prometheus-config-reloader: v0.38.1 prometheus-auth: v0.2.1 node-exporter: v1.0.1 kube-state-metrics: v1.9.7 configmap-reload: v0.3.0 grafana: v7.1.5 **0.2.2** prometheus: v2.18.2 prometheus-operator: v0.39.0 prometheus-config-reloader:v0.39.0 prometheus-auth: v0.2.1 node-exporter: v1.0.1 kube-state-metrics: v1.9.7 configmap-reload: v0.3.0 grafana: v7.1.5
Istio Service Mesh	v1.5.901	istio-citadel: v1.5.9 istio-galley: v1.5.9 istio-proxyv2: v1.5.9 istio-pilot: v1.5.9 istio-mixer: v1.5.9 istio-sidecar_injector: v1.5.9 jaegertracing-all-in-one: v1.14 kiali-kiali: v1.17 istio-node-agent-k8s: v1.5.9 coredns-coredns: v1.6.9 prom-prometheus: v2.18.2 jetstack-cert-manager-controller: v0.8.1

Cluster Manager Catalog

TYPE	TAG	SLA APPLIES
Library	None	To the extent of being able to launch app with default configurations[7]
	Partner	To the extent of being able to launch app with default configurations[7] [8]
	Experimental	N/A

† All “latest” tagged releases are intended for the Rancher community users to test-drive a new release and provide feedback. These “latest” tagged releases whilst covered by Rancher SLA are not generally meant for production use cases. Kindly use only the “stable” tagged releases for your own production use cases.

[0] For open source components not listed in the matrix above, support is limited to troubleshooting for root cause up to Rancher's drivers and interfaces to those components. Root causes that are identified to be beyond this limit will need to be pursued by Company with the maintainers and providers of commercial support for those components.

[00] for ensuring best support and clarity on supportability, Company is recommended to publish to Rancher a list of components that are critical to its deployment but not not explicitly called out in the support matrix

[1] certified on default OS kernel. Issues resulting from third party tools (typically, for reasons such as security) interfering with Docker or other necessary system calls are deemed resolved should disabling such tools restore functionality

[2] certified configurations are based on default settings of individual components. Where Company has deviated from certified configurations, Rancher Labs reserves the right to recommend the Company to revert to a certified configuration to resolve the reported issue.

[3] whilst running kubernetes clusters in uncertified configurations may be possible, it is not recommended

[4] upgrade of any individual component to a different version is likely to result in system downtime

[5] changes to default settings of individual components may be necessary on exceptional basis, for reasons such as fine tuning for performance and scale. Engagement with Rancher Consulting or a partner may be recommended.

[6] SLA on node drivers is limited to those that are built-in and active by default when Rancher is installed

[7] SLA does not apply to issues within an application and its lifecycle management

[8] issues may be referred to the partner as appropriate

[‡] SLA is limited to running workload clusters on hosted kubernetes provider and does not apply to running the Rancher control plane on one of the listed hosted kubernetes providers