

Tencent Kubernetes Engine

TKE General Cluster Updates

Product Documentation



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TKE General Cluster Updates

Last updated : 2023-03-31 10:02:59

Note :

For more information on TKE General cluster updates, see [TKE General Cluster Updates \(2023\)](#).

December 2022

Update	Description	Date	Related Documents
Supports upgrading a Kubernetes version to 1.22	You can upgrade a cluster Kubernetes version from 1.20 to 1.22.	2022-12-08	Update Notes of TKE Kubernetes Major Versions

November 2022

Update	Description	Date	Related Documents
Launches the imc-operator component	You can cache super nodes in clusters on images with CRD.	2022-11-10	Image Cache
Enhanced the dedicated scheduler for native nodes	Supports virtually expanding the capacity of native nodes and configuring scheduling and running thresholds for the nodes.	2022-11-01	-

September 2022

Update	Description	Date	Related Documents
Launched the Ceberus enhanced add-on	Signature images in the TCR repository can be verified for trustworthiness, reducing the security risks of invalid images being deployed in the container environment.	2022-09-29	-
Enabled all custom kubelet parameters	It provides an entry for you to modify parameters.	2022-09-29	Custom Kubernetes Component Launch Parameters
Defined the error codes of Service/Ingress events	It helps quickly troubleshoot business exceptions and provides solutions.	2022-09-28	-
Supported scheduling Pods in kube-system to monthly subscribed super nodes	It helps reduce resource use costs.	2022-09-26	Pod Schedulable to Super Node
Integrated the basic monitoring add-on `tke-monitor-agent` into the add-on management module for maintenance	You can upgrade the add-on in the console.	2022-09-22	Upgrading tke-monitor-agent
Launched the `SecurityGroupPolicy` enhanced add-on	You can bind a Pod not matching a policy to a security group to control the inbound and outbound network traffic of the Pod.	2022-09-08	-
Launched the in-place	You can directly modify the Request/Limit	2022-09-08	-

Pod configuration adjustment capabilities for TKE native nodes	values of CPU and memory without restarting a Pod, which helps handle traffic surges and reduce business costs.		
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August 2022

Update	Description	Date	Related Documents
Launched Request smart recommendation for native nodes	It recommends the Request/Limit values of resources at the container level for Kubernetes workloads to reduce resource waste.	2022-08-22	-
Launched the dedicated scheduler for native nodes	It virtually expands the capacity of native nodes, solving the problem of resource occupation and low utilization.	2022-08-19	-
Supported automatic update for the image cache feature	Automatic update is supported for the image cache feature. After it is enabled, a cache update will be triggered when the updated image is uploaded to TCR, eliminating the need to recreate an image cache.	2022-08-08	Image Cache
Supported edit operations for the image cache feature	The image cache feature allows you to edit security groups, images, cache sizes, and expiration policies.	2022-08-08	Image Cache
Released the brand-new native	A native node is a brand-new node type of TKE. It supports declarative APIs and adopts the FinOps concept, facilitating cost reduction	2022-08-04	-

node	and efficiency improvement for Tencent Cloud resources through the "visual resource management dashboard", "smart request recommendation", and "dynamic dedicated scheduler".		
Supported managing image caches through CRD	Image caches can be managed through CRD on super nodes. Currently, management can be performed in the console and through TencentCloud API. With the image caching feature, Pods can be started within seconds.	2022-08-04	Image Cache
Supported declaring the size of resources required by a Pod.	You can declare the size of the system disk required by a Pod through an annotation on super nodes. If the size exceeds 20 GiB, the excessive part will be billed based on the pay-as-you-go published price of CBS Premium Cloud Storage, meeting your requirements for system disk resources in special scenarios.	2022-08-03	Annotations
Added third-party nodes	The TencentOS Server 2.4 (TK4) operating system is supported, which is compatible with the CentOS 7 user mode. The entry to create Cilium-Overlay clusters is added in the TKE console for easier use. In Cilium-Overlay network mode, the check for a conflict between the IP range of a container and that of another container in another cluster within the same VPC can be ignored, thereby solving your problem of IP resource insufficiency.	2022-08-01	Cilium-Overlay Mode

July 2022

Update	Description	Date	Related
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			Documents
Released all the super nodes	A super node is a brand-new node form of TKE, which supports custom node size and flexible configuration adjustment. The monthly subscription mode is more cost-effective, while the pay-as-you-go mode eliminates the need to reserve resource buffer, contributing to your cost reduction and efficiency improvement. Node management and resource operations are simplified, so that you can concentrate on the business.	2022-07-26	Super Node Overview
Supported productized Nginx-ingress	The Nginx-ingress add-on can be quickly deployed for out-of-the-box Nginx services. By default, CM and CLS are integrated to meet the observability requirement.	2022-07-25	Installing Nginx-ingress Instance
Quickly cleared invalid RBAC resources	RBAC resource objects can be quickly cleared. De-registered Tencent Cloud accounts can be automatically detected, which is suitable for scenarios where cluster permissions need to be reclaimed after personnel turnover.	2022-07-15	Clearing De-registered Tencent Cloud Account Resources
Released the deletion protection feature for the node pool	This feature is suitable for node resource protection, fixing the issue where node resources were batched released due to maloperations.	2022-07-13	Node Pool Overview
Supported associating with a TMP instance	A cluster can be associated with a TMP instance during creation, simplifying the association process.	2022-07-06	Quick Migration from TPS to TMP

June 2022

Update	Description	Date	Related Documents
TMP provides metrics recommended by experts	Simplifies the metric selection.	2022-06-21	-
qGPU supports viewing GPU card resources with CRD	Unifies and streamlines the GPU resource view.	2022-06-07	-
qGPU supports scheduling at both the node and GPU card levels	Realizes refined scheduling of GPU resources and solves fragmentation problems.	2022-06-07	-
Unschedulable nodes can be bound to the CLB backend	Solves the issue of unbalanced traffic load.	2022-06-01	Service 后端选择

May 2022

Update	Description	Date	Related Documents
TKE provides audit/log/event APIs	You can install relevant add-ons in TKE clusters by calling the audit/log/event APIs.	2022-05-18	-

April 2022

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Update	Description	Date	Related Documents
Kubernetes versions are discontinued	Kubernetes v1.14 and earlier versions cannot be created from May 20, 2022 (UTC +8).	2022-04-26	Discontinuing Kubernetes v1.14 and Earlier Versions
The scaling group service is discontinued	Starting from June 6, 2022 (UTC +8), no more TKE scaling groups can be created in the console and by using the API. The feature will be officially discontinued from June 13, 2022 (UTC +8). Existing scaling groups will be migrated to node pools automatically.	2022-04-26	Deactivation of Scaling Group Feature
Updates CFS dynamic persistence storage	TKE supports sharing a CFS storage instance when dynamically create a PVC.	2022-04-18	CFS-CSI
Launches TMP	Supports cross-region monitoring in multiple VPCs and supports checking multiple monitoring instances on a single Grafana instance.	2022-04-01	TMP Overview
TMP Overview	You can have enhanced cloud native monitoring capabilities with quick migration.	2022-04-01	Quick Migration of TPS Instances to TMP

March 2022

Update	Description	Date	Related Documents
		2022-03-21	Starting

Starts charging on managed clusters	For TKE managed clusters created before March 21, 2022 10:00 (UTC +8), select a specification for them in the console before April 1, 2022 10:00 (UTC +8). If you do not select a specification, they will be billed on the basis of the recommended specification.		Charging on Managed Clusters
Backend architecture upgrade of TKE basic monitoring	Backend architecture upgrade of TKE basic monitoring	2022-03-21	Description of tke-monitor-agent
Supports upgrading of log collection add-on in the Ops center	Supports upgrading of log collection add-on in the Ops center. Please upgrade the add-on to the latest version.	2022-03-15	Log Add-On Version Upgrade
Optimized user experience in the TKE console	On the Pods management details page, you can search by Pod status in the search box. In the Log column of cluster workload details page, you can search by name in the drop-down list.	2022-03-14	Cluster Management

February 2022

Update	Description	Date	Related Documents
Optimized the search feature in the console	You can filter clusters by status, and prompts are available when you search by node/node pool label.	2022-02-27	Cluster Overview

Upgraded the add-on architecture	Add-ons can be installed via cloud APIs after the add-on architecture upgrade.	2022-02-26	Overview of APIs
Optimized CFS Turbo add-on	Fixed known mounting issues.	2022-02-25	Static Mounting of CFS-Turbo for TKE Clusters
Optimized operations of log collection rules in the console	When Pod Labels are specified as the log source, you can add != label filter and optimize selection for namespaces in container standard output (multiple namespaces can be chosen and excluded).	2022-02-15	-

January 2022

Update	Description	Date	Related Documents
Configures the httpHeaders for health check in the TKE console	Health Check is a service provided by TKE to check the status and running of resources in the cluster.	2022-01-17	Health Check
Optimized operations of node pool in the console	You can set cloud tags and configure instance creation policies in the node pool.	2022-01-15	Node Pool Overview
Updates CFS add-on	CFS supports using V3 and V4 protocols for mounting.	2022-01-13	CFS Instructions
Updates CBS-CSI add-on	Cloud disks dynamically created by CBS-CSI inherit the cluster cloud	2022-01-12	CBS-CSI

	tags.		
Updates Request Recommendation	Supports downloading of recommended Request values.	2022-01-10	Resource Utilization Analysis and Optimization Suggestions
Supports connecting to the Pods in TKE clusters via the API gateway	Supports exposing services via API gateways. It can be specified when you create an Ingress.	2022-01-03	API Gateway TKE Tunnel Configuration

December 2021

Update	Description	Date	Related Documents
Updates CFS-CSI add-on	Cloud tags can be added when CFS instances are created dynamically through StorageClass.	2021-12-25	Managing CFS Templates by Using a StorageClass

November 2021

Update	Description	Date	Related Documents
Enhances qGPU features	qGPU supports multiple GPU cards in one container. A container can be bound with multiple entire cards or a scorecard. In addition, GPU monitoring is supported. qGPU supports GPU monitoring. It supports GPU card/Pod/container utilization monitoring. qGPU supports TKE BM clusters and supports Ampere GPU cards. qGPU supports the online/offline hybrid deployment feature and supports the native priority scheduling capabilities of online inference and offline training.	2021-11-05	-
Feature updates of CFS-CSI add-on	The CFS-CSI add-on in clusters of v1.20 supports reading the fsgroup configuration of security context in workloads.	2021-11-02	CFS-CSI

October 2021

Update	Description	Date	Related Documents
Launches Request Recommendation	Request Recommendation is a resource recommendation feature launched by TKE. It recommends Request and Limit values for resources at the container level in TKE and TKE Serverless clusters.	2021-10-27	-
Launches the registered cluster feature	Registered cluster is a new cluster type of TKE. It allows you to register Kubernetes clusters in your local infrastructure or those of other cloud vendors with TKE for unified management.	2021-10-26	-
Launches the cloud-native AI service	Cloud-native AI is a complete solution for AI scenarios launched by TKE, which has the characteristics of modularity, low coupling, and high scalability.	2021-10-18	-

September 2021

Update	Description	Date	Related Documents
Launches qGPU add-on	qGPU is a GPU sharing technique launched by Tencent Cloud. It supports sharing of GPU cards among multiple containers and provides the capacity to isolate the vRAM and computing resource among containers.	2021-09-16	qGPU

August 2021

Update	Description	Date	Related Documents
Uses pre-request script to add existing nodes	When adding existing nodes, you can use pre-request scripts via API. The script is executed before the K8s node is initialized. You can customize the configuration such as data disk mounting.	2021-08-01	-

July 2021

Update	Description	Date	Related Documents
Supports specifying the model when creating a GPU CVM in the console	Chooses the GPU driver version, CUDA version and cuDNN version in the console.	2021-07-13	Using a GPU Node
Supports MIG	Once enabled, you can improve the GPU utilization in scenarios where multiple jobs are running in parallel.	2021-07-13	Using a GPU Node
Enhances TKE console	Supports formatting and mounting of multiple data disks when adding existing nodes.	2021-07-05	Adding an Existing Node

June 2021

Update	Description	Date	Related Documents
Introduced the feature of adding external nodes	External nodes allow users to add non-Tencent Cloud CVMs to a TKE cluster. Users provide computing resources and TKE manages cluster lifecycle.	2021-06-28	-

May 2021

Update	Description	Date	Related Documents
Improves cloud native monitoring	Optimizes data collecting configuration. Displays status of collection targets. Optimizes interaction process. Tests the collection target.	2021-05-28	Log Collection
Launches OLM add-on	The OLM add-on helps users automatically install and upgrade Operator, and manage its lifecycle.	2021-05-28	OLM
Launches	Developed by Tencent Cloud, HPC can help periodically modify the	2021-	HPC

HPC add-on	number of replicas of K8s workload. Used in conjunction with HPC CRD resources, it can support scheduled actions in seconds.	05-28	
Enhances TKE console	Selects OS upon node creation. Modifies desired number of nodes while scaling up a node pool. Searches workloads by labels.	2021-05-20	Adding a Node

April 2021

Update	Description	Date	Related Documents
Enhances TKE console	StatefulSet and DaemonSet can be redeployed with a few steps. Secret supports TLS certificate. You can import it from file or paste multiple key-value pairs to enter in a batch. The container health check readinessProbe supports configuration and naming of a port. Namespace supports the selection of "All namespaces" and can be searched by keyword.	2021-04-30	StatefulSet Management DaemonSet Management Secret Management Setting the Health Check for a Workload Namespaces
Enhances log collection capability	It supports the extraction mode of multiple lines - full regex, which is suitable for searching for log by key-value pair in multi-line logs such as java program. It supports automatic generation of regular expressions based on user's log samples, and automatic extraction of corresponding key-value pairs.	2021-04-15	Log Collection

March 2021

动态名称	动态描述	发布时间	相关文档
The beta ARM cluster starts	The beta of ARM cluster starts. To join the beta, submit a ticket .	2021-03-31	-
	Kubernetes objects support batch input by	2021-03-31	Kubernetes Object

Enhances TKE console	<p>pastings multiple key-value pairs.</p> <p>When configMap is used as an environment variable, all keys can be selected with one-click.</p> <p>Secret can be modified through console.</p> <p>ConfigMap can be managed through console. You can manually add or upload file to add key-value pairs.</p> <p>SubPathExpr can be configured through console.</p> <p>CronJob supports displaying the generated active Jobs. User can customize the “Completed Jobs Retained” and “Failed Jobs Retained”, pause the generation of a scheduled Job, resume the paused Job, and manually generate a new Job.</p>		Secret Management ConfigMap Management Instructions for Other Storage Volumes CronJob Management
Enhances node search capability	The nodes can be searched in batch by label or IP address.	2021-03-19	Node Overview

February 2021

Update	Description	Date	Related Documents
Enhances the operations for nodes in the node pool	The node in the node pool can be cordoned and drained, and the node management capability of the node pool is improved.	2021-02-25	Node Pool Overview
Users can mount data disk partition when adding an existing node	When adding an existing node to a cluster or node pool, users can select partition or logical volume name for the data disk mounting, which provides more flexible mount settings.	2021-02-20	Adding an Existing Node

January 2021

Update	Description	Date	Related Documents

Master version upgrade supports minor version	This feature provides a more flexible version upgrade mechanism.	2021-01-14	Upgrading the Master Kubernetes Version
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December 2020

Update	Description	Date	Related Documents
Node pool supports configuration of removal protection	Removal protection is used to prevent the nodes of important application from being scaled in or being removed from the node pool during manually size adjustment.	2020-12-30	-
Node pool supports configuration of multiple alternative models that have the same specification	This feature can reduce the risk of scale-out failure caused by sold out single model resource.	2020-12-29	Adjusting a Node Pool
Launches Descheduler add-on	Based on the actual node loads, this add-on supports automatic rescheduling of marked services on high-load nodes to maintain the cluster load balance.	2020-12-25	DeScheduler
Fully launches Nginx-ingress add-on	The issue of nginx-ingress-controller toleration scheduling is fixed. Nginx-Ingress UI experience is improved, including the regular matching of forwarding rule, configuration of backend ClusterIP mode Service, and certificate supporting kubernetes.io/tls type Secret.	2020-12-24	Nginx-ingress
Launches CBS-CSI add-on	CBS-CSI add-on supports: Creating static volume/dynamic volume Storage topology awareness Scheduler awareness of node maxAttachLimit Online volume expansion Volume snapshot and restoration	2020-12-22	CBS-CSI
Enhances TKE console	The console supports Resource Quota, which can be used to configure the resource quotas and default resource request values for the namespace. The ConfigMap can be generated based on the imported file.	2020-12-09	-
Launches NetworkPolicy	This add-on supports automatic synchronization of	2020-	Network

add-on	NetworkPolicy to make the network isolation policy effective.	12-03	Policy
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November 2020

Update	Description	Date	Related Documents
Launches beta for new TKE network solution	Leveraging intelligent ENI, TKE launches a new container network solution. In this solution, each pod is assigned a dedicated ENI. Pod-to-pod communications can be implemented without traveling through the node protocol stack (default namespace), so as to shorten the container access link and the access latency.	2020-11-27	-
Launches beta for productized Nginx-Ingress	TKE extends and maintains native Nginx-ingress to help you quickly deploy and build a traffic access gateway in the production environment, and provide complete Nginx-ingress lifecycle management, automated cloud native monitoring, CLS and supporting OPS capabilities.	2020-11-26	Nginx-ingress
Launches event dashboard	This feature implements the aggregation search and trend observation of top events and exception events.	2020-11-26	Event Dashboard
Launches audit dashboard	This feature implements the aggregation search and direct observation of cluster global, nodes, K8s objects and other important operations.	2020-11-26	Audit Dashboard
The node pool and cluster operating system can be modified	Users can create node pools of different operating systems as needed to facilitate the standardized management of nodes.	2020-11-23	Creating a Node Pool
Adds DynamicScheduler add-on	This add-on performs scheduling based on actual node loads, so as to prevent traffic hotspots.	2020-11-21	DynamicScheduler

October 2020

Update	Description	Date	Related Documents
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TPS supports using edge cluster as monitoring object to access the monitoring instance.	TPS supports the monitoring of edge clusters and the management of multiple clusters across VPCs.	2020-10-30	PROM Instance Management
TPS alarm policy supports webhook configuration.	The alarm policy supports webhook configuration, which enables users to troubleshoot abnormal services in time and improve service stability.	2020-10-30	Alarm Configurations
TKE node pool adds the capability of viewing scaling log	This feature helps users to more easily observe the change of node number in the node pool as well as the trigger cause and result of scaling, improving the node pool observability.	2020-10-13	Viewing Node Pool Scaling Logs

September 2020

Update	Description	Date	Related Documents
TKE ServiceConfig was optimized	You can configure service/ingress to create tkeserviceconfig automatically.	2020-09-23	Using TKEServiceConfig to Configure CLBs
Launches DNSAutoscaler add-on	This add-on can obtain number of nodes and cores of the cluster via Deployment, and auto-scaling the number of DNS replicas according to the preset scaling policy, so as to improve DNS availability.	2020-09-23	DNSAutoscaler
Launches beta for cloud native ETCD	This feature enables you to one-click deploy the high-reliability and high-performance ETCD cluster, which is profusely verified through Tencent's internal services. It also provides cross-AZ disaster recovery capabilities and optimal performance configuration.	2020-09-16	-
Quick add-on configuration is available when creating the cluster	You can easily and quickly configure the required add-ons for the cluster.	2020-09-15	Creating a Cluster

August 2020

Update	Description	Date	Related Documents
Optimizes the monitoring capability of TPS	The cluster monitoring collection items are preset, and a diverse Grafana dashboard is available. The Targets list page is added to allow users to view the real-time status of monitoring tasks.	2020-08-31	Data Collection Configurations Alarm Configurations
The alarm module of the cloud native monitoring service was upgraded.	It can be associated with a local Alertmanager add-on. It supports managing PROM instance rules with CRD.	2020-08-31	Alarm Configurations
TKE launches NodeProblemDetectorPlus add-on	It supports configuring node self-healing policy on the basis of existing detection feature.	2020-08-25	Node-Problem-Detector-Plus
TKE launches in-place major-version upgrade capabilities	The in-place major-version upgrade feature supports major-version upgrade without node reinstallation.	2020-08-25	-
Fully launches TKE add-ons	The add-on feature enables users to install or uninstall multiple advanced add-ons for clusters.	2020-08-25	Add-on Overview
Fully launches TKE Kubernetes 1.18 version	Allows users to create clusters of the Kubernetes 1.18 version and upgrade clusters to the 1.18 version.	2020-08-24	-

July 2020

Update	Description	Date	Related Documents
Optimizes capabilities of storage plug-ins	The TKE console supports PV creation without specifying StorageClass. Users can set and mount COS sub-directories.	2020-07-28	PV and PVC Binding Rules Using COS
Cluster creation supports setting node configuration	This feature enables disaster recovery and high availability for nodes when they are launched.	2020-07-15	Creating a Cluster

placement groups			
Cloud native monitoring is launched for beta testing.	It supports one-click deployment of the high-availability monitoring architecture and quick association with TKE clusters and TKE Serverless clusters.	2020-07-15	-
The collection configuration and alarm configuration of TPS are implemented through products	Three configuration modes are supported: service monitor, pod monitor, and raw job. Alarm history rewinding is supported.	2020-07-15	-
Launches beta for RBAC-based permission control with finer granularity	It allows cluster admins to configure management permissions for different roles regarding different resources in the cluster. It supports certificate revocation. It is suitable for enterprises' compliance permission management scenarios.	2020-07-10	TKE Kubernetes Object-level Permission Control

June 2020

Update	Description	Date	Related Documents
Launches beta for IPVS-bpf mode	TKE uses eBPF to bypass conntrack and optimize the Kubernetes Service, improving the non-persistent connection performance by over 40% and reducing the p99 latency by over 31%.	2020-06-19	-
TKE supports the creation of services in CLB-to-Pod direct access mode	The forwarding performance of pods with LoadBalancer directly connected to ENI can be improved by over 10%.	2020-06-18	Using Services with CLB-to-Pod Direct Access Mode
TKE supports balanced forwarding and local binding	TKE has strengthened the Loadbalancer Service and the LoadBalancer Ingress backend binding with the RS feature. TKE supports balanced forwarding and local binding.	2020-06-18	Service Backend Selection
Comprehensively upgrades The TKE app market	The app market provides an output window for Tencent Cloud's practical cloud-native technologies and also	2020-06-10	Application Market

	provides a variety of great community apps that users can easily and quickly use.		
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May 2020

Update	Description	Date	Related Documents
TKE launches the ContainerNative network LoadBalancer (supports CLB-to-Pod direct access)	In TKE, you can use services and ingresses with LoadBalancer directly connected to pods, which provides higher performance and more robust product capabilities. This feature can resolve issues such as imbalanced load for persistent connections, health check session persistence configuration issues, and IPVS jitter.	2020-05-12	-
Optimizes the cluster deletion feature	When deleting a cluster, you can view the existing nodes, security groups, cloud disks, and other resources in the cluster. A deletion risk reminder is added to prevent accidental deletion that may interrupt your business. You can delete the nodes, cloud disks, and other resources in the cluster at the same time.	2020-05-12	Deleting Clusters
TKE launches the open-source KMS plug-in	The Tencent Cloud TKE-KMS plug-in integrates the rich key management features of the Key Management Service (KMS) to provide robust encryption/decryption capabilities for secrets in Kubernetes clusters. By using the TKE-KMS plug-in, you can perform KMS encryption on your business credential information stored in clusters to enhance your security.	2020-05-08	-

April 2020

Update	Description	Date	Related Documents
The TKE console supports multidimensional node filtering and node list export	Cluster nodes can be filtered based on lock status. Cluster nodes can be filtered based on CVM attributes such as node status and IP address. Cluster nodes can be exported in batches.	2020-04-22	Node Overview

TKE Image Registry can configure a global image lifecycle management policy	TKE Image Registry adds the image lifecycle management feature, which allows users to configure a global image version clearing policy for the main account and supports independent version clearing policies retained for individual repositories.	2020-04-16	Image Lifecycle Management
The TKE beta version supports the node pool feature	<p>The node pool feature can be used in the following scenarios:</p> <p>When a cluster contains multiple heterogeneous nodes (different models), node pools can standardize node group management.</p> <p>If a cluster needs to scale nodes in or out frequently, node pools can reduce the operation costs.</p> <p>If application scheduling rules in a cluster are complex, node pool tags can quickly specify business scheduling rules.</p> <p>During routine cluster node maintenance, node pools can conveniently manage Kubernetes and Docker version upgrades.</p>	2020-04-10	-
TKE removes Kubernetes 1.8 as an option	TKE no longer supports creating clusters using Kubernetes 1.8.	2020-04-03	Creating a Cluster
Upgrades self-deployed cluster master	You can now use the TKE console to perform rolling updates of Kubernetes masters on self-deployed clusters.	2020-04-02	Upgrading a Cluster

March 2020

Update	Description	Date	Related Documents
TKE now supports both GlobalRouter and VPC-CNI network modes	TKE now supports GlobalRouter and VPC-CNI network modes for your business needs. Choose the one that fits your needs.	2020-03-30	How to Choose TKE Network Mode
TKE has stopped providing features related to TencentHub	We plan to discontinue support for TencentHub this month, so TKE has officially stopped providing features related to TencentHub and no longer supports related APIs.	2020-03-25	-
TKE supports enabling	TKE now allows you to enable "Local Disk Formatting" for	2020-	Creating a

"Local Disk Formatting" for BM and big data models	BM and big data model nodes and also allows you to mount and set container directories.	03-02	Cluster
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February 2020

Update	Description	Date	Related Documents
TKE cluster scaling groups support node shutdown when scaling in	When scaling in, cluster scaling groups now support shutting nodes down instead of terminating or draining them . To enable this feature, submit a ticket .	2020-02-17	Cluster Scaling
TKE fully launches Kubernetes 1.16 and passes conformance verification	Users can create self-deployed clusters and managed clusters of the Kubernetes 1.16 version. Users can update a cluster from Kubernetes 1.14 to 1.16.	2020-02-14	Creating a Cluster Upgrading a Cluster

January 2020

Update	Description	Date	Related Documents
TKE allows users to create clusters using a cluster template	The template-based cluster creation feature provides multiple templates for creating managed clusters, self-deployed clusters, and serverless clusters, simplifying the current cluster creation process and improving the cluster creation experience . It applies to various business scenarios such as HA clusters and GPU clusters.	2020-01-12	Creating a Cluster

December 2019

Update	Description	Date	Related Documents
TKE supports the PVs and the PVCs of the	TKE supports the PVCs and the PVs of the CFS and COS types connecting storage resources with	2019-12-27	-

Cloud File Storage (CFS) and Cloud Object Storage (COS) types	Kubernetes , which makes it convenient for users to use basic Tencent Cloud products through the native Kubernetes mode and allows users to manage file storage and object storage via PVs and PVCs .		
Launches beta for TKE Kubernetes 1.16	This allows users to create Kubernetes 1.16 self-deployed clusters and managed clusters via the console. It also allows users to upgrade the Kubernetes version of a cluster from 1.14 to 1.16.	2019-12-18	Creating a Cluster Upgrading a Cluster
TKE supports purchasing multiple data disks during node initialization as well as custom formatting	TKE allows users to purchase multiple data disks during node initialization and supports custom data disk formatting, allowing users to isolate data and format settings flexibly based on their actual needs .	2019-12-12	Adding a Node
TKE nodes support the in-place rolling updates of minor Kubernetes versions	Nodes in in-place updates support the rolling update mode. Only one node is updated at a time , and the next node will be updated only after the current node is successfully updated. Currently, in-place updates only support updating different minor versions of the same major version .	2019-12-03	Upgrading a Cluster

November 2019

Update	Description	Date	Related Documents
Launches beta for TKE custom Hostname	The TKE custom Hostname feature provides the following advantages: Helps clusters interwork with enterprises' internal domain name service systems. Makes it easier for users to quickly create nodes with a specified Hostname in batches.	2019-11-15	Adding a Node
Releases TKE Ingress performance optimization	TKE Ingress performance is optimized to better serve users. CLB changes are optimized to allow batch calling APIs to process backend binding . CVM backend query is optimized to help users avoid unnecessary repeated queries .	2019-11-07	Basic Ingress Features

October 2019

Update	Description	Date	Related Documents
Cluster worker nodes support configuring several security groups simultaneously and using the default security group	TKE allows a cluster worker node to bind multiple security groups and provides a default security group, helping users quickly configure available security groups .	2019-10-22	TKE Security Group Settings
Node labels can be added in batches during creation of clusters/nodes	When a cluster is created or new nodes are added to an existing cluster, TKE allows users to add labels for nodes that run the same business or have the same configurations . The labels help users divide resources, label resource attributes, and filter and batch process massive resource volumes.	2019-10-21	-
Runtime component Containerd supports the GPU model	The TKE runtime component Containerd supports the GPU model. When users need to create a GPU application in a cluster, they can choose Containerd as the runtime component .	2019-10-17	How to Choose Containerd and Docker
Launches beta for rolling Kubernetes reinstallation and upgrade of TKE nodes	TKE supports the batch update of nodes in a cluster from an earlier version to a later version . This feature applies to clusters whose Kubernetes version is outdated and clusters whose nodes do not have relevant custom configurations . Custom configurations will become invalid after the rolling reinstallation and upgrade of nodes.	2019-10-15	Upgrading a Cluster
TKE supports GPU monitoring metrics	TKE supports GPU monitoring metrics, enabling users to monitor GPU-related resources . By checking monitoring data, users can precisely identify specific problems, shorten troubleshooting time, and reduce OPS costs, ensuring the continuous and stable running of businesses.	2019-10-15	List of Monitoring and Alarm Metrics

September 2019

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Update	Description	Date	Related Documents
Related APIs of the TKE cluster scaling group have been updated to API 3.0	TKE APIs have been updated to 3.0 and support all-region access. The new API documentation is more standardized and comprehensive, with unified parameter styles and common error codes. The SDK/CLI version is consistent with the API documentation , providing a simple and convenient user experience.	2019-09-12	CreateClusterAsGroup
TKE Kubernetes 1.14 is fully launched and has passed conformance verification	TKE Kubernetes 1.14 is fully launched and has passed conformance verification to ensure that the latest Kubernetes version is available.	2019-09-07	Conformance Verification
TKE supports the Tencent Cloud tag, allowing authorization by tag	If the Tencent Cloud tag is added to a cluster when the cluster is created, the Tencent Cloud services, cloud disks, CLBs, and other resources created in the cluster will automatically inherit the cluster's tag, allowing users to clearly view resource categories.	2019-09-06	-
The default instance type for created LoadBalancer-type services is CLB	When TKE creates a LoadBalancer-type service, the default instance type is CLB. This instance type covers all features of a conventional CLB. The CLB instance type supports the TCP, UDP, HTTP, and HTTPS protocols. It provides flexible forwarding capabilities based on domain names and URLs.	2019-09-06	Instance Types
TKE self-deployed clusters support the separate viewing of Master and Etcd nodes	This feature allows users to intuitively view the list of all Master and Etcd nodes of a self-deployed cluster and the details of such nodes . Users no longer have trouble distinguishing Master and Etcd nodes in self-deployed clusters.	2019-09-05	-

August 2019

Update	Description	Date	Related
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			Documents
When a “self-deployed cluster” is created, a security group is automatically bound to the Master node	This feature can automatically bind an applicable security group to the Master node in a self-deployed cluster . This prevents the Master node from being associated with a security group with communication problems and improves the success rate of creating self-deployed clusters.	2019-08-27	Creating a Cluster
TKE supports the visualized display of the cluster creation progress	The visualized display of the cluster creation progress enables users to see the waiting time for cluster creation and troubleshoot the steps with exceptions . This improves the success rate of cluster creation and ensures the continuous and stable running of businesses.	2019-08-23	Creating a Cluster
Open source components: TencentCloud-controller-manager and cbs-csi support Kubernetes 1.14	The open source components Tencent Cloud-controller-manager and cbs-csi support Kubernetes 1.14 .	2019-08-12	Open Source Components
Use existing CLB instances to create Ingress	Users no longer have to create new CLB instances in order to create a new Ingress. They can now avoid additional costs by using existing CLB instances to create a new Ingress.	August 8, 2019	Basic Ingress Features
Launches beta for TKE Kubernetes 1.14	Users can now use the TKE console to create clusters based on Kubernetes 1.14 .	2019-08-04	-
Related APIs of TKE cluster nodes have been updated to API 3.0	TKE APIs have been updated to 3.0 and support all-region access. The new API documentation is more standardized and comprehensive, with unified parameter styles and common error codes. The SDK/CLI version is consistent with the API documentation, providing a simple and convenient user experience.	2019-08-04	API 3.0
TKE now supports application-level log collection	By checking the collected file logs in the container, users can view the running status of applications in the container , precisely identify specific problems, shorten the troubleshooting time, and reduce OPS costs to ensure the continuous and stable running of businesses.	2019-08-01	Log Collection

July 2019

Update	Description	Date	Related Documents
The CLB health check failure issue in IPVS mode is fixed	Fixed the compatibility issue between the TLinux kernel and IPVS and fixed the CLB health check failures in IPVS mode.	2019-07-16	-
Fixed the compatibility issue between the TLinux kernel and IPVS and fixed the CLB health check failures in IPVS mode.	When TKE creates a scaling group, users can choose spot instances and purchase pods at a certain discount. However, the system may automatically recall these pods that are sold at a discount.	2019-07-10	Spot Instances
TKE supports choosing Containerd as the container runtime component	When Containerd serves as the container runtime component, it only runs necessary features to manage images and the container lifecycle , providing users with more stable and more resource-efficient container running infrastructures.	2019-07-05	How to Choose Containerd and Docker

June 2019

Update	Description	Date	Related Documents
Launches beta for VPC-CNI network mode	TKE provides the VPC-CNI extended network mode, which can assign intra-VPC IP addresses to Pods in a cluster. In the VPC-CNI mode, clusters can create StatefulSet that supports fixed IP address types, and the Pod IP addresses will not change because of restart or migration.	2019-06-29	-
Launches beta for StatefulSet	The StatefulSet with fixed IP addresses help resolve issues related to IP address changes caused by Pod restart or	2019-06-29	Managing StatefulSets

with fixed IP addresses	migration. Users can create the StatefulSet with fixed IP addresses for source IP address authorization, IP-based process review, log query based on Pod IP addresses, and other business needs to ensure the continuous and stable running of businesses.		with Static Pod IP Addresses
TKE uses the new console version by default	In order to provide a better product user experience, TKE now uses the new Kubernetes-compatible console.	2019-06-17	The New TKE Console
Fixes an issue where cordoning a node while it is being created causes the process to freeze	Fixes an issue where cordoning a node while it is being created causes the process to freeze.	2019-06-13	pr69047
Fixes an issue where too many secrets results in a pod creation failure	Fixes an issue where too many secrets results in a pod creation failure.	2019-06-13	pr74755
Launches the new version of the TKE international console	The new version of the TKE international console adjusts a series of functional modules and provides a native, easier-to-use platform , which helps users resolve environmental issues in development, testing, and OPS, reduce costs, and improve efficiency.	2019-06-05	TKE International Console
Managed clusters support configuring ACLs for public network access	Users can set security group rules for managed clusters that enable public network access.	2019-06-05	TKE Security Group Settings

May 2019

Update	Description	Date	Related Documents

Nodes in a scaling group tolerate drain failures during automatic scaling in	When scale-in conditions such as the number of idle nodes are met, the cluster automatically scales in. However, only when all pods of a node are successfully scheduled to other nodes can the pods be drained successfully and scale-in be performed successfully.	2019-05-20	Cluster Scaling
Supports registering the TKE network to CCN	TKE allows users to register existing clusters to CCN, which can manage the container's network. After the container's network is registered, you can enable or disable its IP range routing on the CCN side to achieve interconnection between the container's cluster and the resources in CCN.	2019-05-17	Register Container Clusters with CCN
TKE supports GPU virtualization	Extension components support the installation and the deployment of GPU visualization components. Clusters that have deployed GPU nodes and gpu_manager can extend GPU-related settings during workload creation.	2019-05-17	Using a GPU Node

April 2019

Update	Description	Date	Related Documents
Kubelet applies CNI mode by default	TKE Kubelet uses the VPC-CNI network mode by default.	2019-04-24	-
Launches beta for Docker 18.06	Runtime components that use Docker 18.06 can create clusters.	2019-04-22	-
The new alarm version is launched and supports all regions	Alarms enable users to discover exceptions in TKE in a timely manner to ensure business stability and reliability. The new alarm version provides more alarm metrics. We recommend that you configure necessary alarms for all production clusters.	2019-04-22	Setting Alarms
Cluster management - Kubernetes online updates - managed master nodes	In the managed cluster mode, the Master and Etcd nodes of your Kubernetes cluster will be centrally managed and maintained by the Tencent Cloud technical team. The online updates of the Kubernetes version ensure business stability.	2019-04-11	Cluster Hosting Modes
Self-deployed	Users can query monitoring information about Master and Etcd	2019-	Viewing

clusters support Master and Etcd monitoring	nodes on the Node Management page of self-deployed clusters.	04-11	Monitoring Data
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March 2019

Update	Description	Date	Related Documents
TKE supports Bare Metal (BM 2.0) nodes	BM physical servers are a type of on-demand pay-as-you-go physical server rental service that provides high-performance and securely isolated physical server clusters for cloud users.	2019-03-28	-
Users can use a purchased CVM to create clusters	Using existing CVMs to create clusters helps users reuse existing resources and reduce costs .	2019-03-28	Creating a Cluster
Cluster auto-scaling (CA) supports disabling pod draining	When there are multiple idle nodes in a cluster, scale-in will be triggered. CA supports disabling pod draining.	2019-03-16	Cluster Scaling
Cluster scaling groups support the scale-out of GPU nodes	When a pod in a cluster cannot be scheduled due to a lack of available resources in the cluster, the previously set auto scale-out policy will be triggered. GPU nodes can be added during scale-out .	2019-03-12	Cluster Scaling

February 2019

Update	Description	Date	Related Documents
Release a new monitoring system	A good monitoring environment ensures the high reliability, high availability, and high performance of Tencent Cloud TKE. You can collect monitoring data in different dimensions for different resources to quickly understand the resource usage situation and easily locate errors.	2019-02-18	Overview of Monitoring and Alarms
Self-deployed clusters	Users can now create Kubernetes 1.12 self-deployed clusters in the TKE console.	2019-02-15	-

support Kubernetes 1.12			
Fixes the runC vulnerability CVE-2019-5736	The lightweight container runtime environment runc was found to have a container escape vulnerability, which allowed attackers to overwrite the host runc file (and consequently obtain host root access). This vulnerability has been fixed.	2019-02-13	-

January 2019

Update	Description	Date	Related Documents
Existing CLBs can be used to create Service	Using existing CLBs to create Service can save resources and help users reduce costs.	2019-01-24	Service Management
Custom images can be used to create clusters	TKE allows users to create custom images based on the basic image provided by TKE and use these custom images to create clusters. To enable this feature, submit a ticket to apply.	2019-01-24	-
Affinity scheduling can be set during workload creation	YAML is delivered to the Kubernetes cluster to schedule pods in a workload. The affinity and anti-affinity mechanism of Kubernetes ensures that pods are scheduled according to specific rules.	2019-01-24	Setting the Scheduling Rule for a Workload
TKE allows multiple Services to use the same CLB instance	Multiple Services can now use the same CLB instance to avoid additional resource costs.	2019-01-10	Service Management

December 2018

Update	Description	Date	Related Documents
TencentHub supports	Helm is a package management tool of Kubernetes. Chart is a collection of files describing Kubernetes resources. Tencent Hub provides an address for users to store Helm Charts.	2018-12-26	-

Helm Chart management			
TKE supports Helm application installation	Helm is a packaging tool for managing Kubernetes applications. TKE has integrated Helm-related features to visually add, delete, modify, and query Helm Charts in a specified cluster.	2018-12-26	Helm Application Management
Fixes the privilege escalation vulnerability in Kubernetes	Tencent Cloud Security Center detected that a severe privilege escalation vulnerability existed in Kubernetes (vulnerability ID: CVE-2018-1002105). This vulnerability has been fixed. Now, TKE can effectively prevent attackers from using the vulnerability to illegally access Kubernetes cluster resources, inducing privilege escalation and initiating malicious requests that ultimately jeopardize the security of the business system.	2018-12-04	-
Removes Kubernetes 1.7.8 as an option for creating clusters	The entry for creating clusters of Kubernetes 1.7.8 in the console is disabled. To enable it, submit a ticket .	2018-12-04	-
pr71415 is merged to fix CVE-2018-1002105	CVE-2018-1002105 is fixed and backend error responses are processed.	2018-12-04	pr71415
Kubelet disables kmem accounting to avoid kernel cgroup leakage	Kernel cgroup leakage has an adverse impact on the system. Kubelet disables kmem accounting to avoid kernel cgroup leakage.	2018-12-04	-

November 2018

Update	Description	Date	Related Documents
Fixes the kubelet inotify	The kubelet inotify leakage problem is	2018-11-	-

leakage	fixed.	12	
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October 2018

Update	Description	Date	Related Documents
Launches beta for the new TKE console	The new TKE console adjusts a series of feature modules to provide you with a native and easy-to-use platform. The new and old consoles are fully compatible in terms of features. Switching consoles will not affect your business. You can use the new console to continue to operate existing clusters.	2018-10-31	-
Service CLB can be bound to specified nodes	If your cluster is large, you will need to set affinity for entry-type applications to schedule them to certain nodes. You can configure the Service CLB to be bound only to specified nodes.	2018-10-31	-
Conflicts and Pod creation failures caused by the frequent updates of quota statuses by the quota controller are resolved	Previously, if the quota controller frequently updated the quota status, conflicts and even Pod creation failures would occur. This problem has been resolved.	2018-10-22	-

September 2018

Update	Description	Date	Related Documents
The default Kubernetes version in TKE is 1.10	When a new cluster is created, the default Kubernetes version is 1.10. However, you can change the version based on your actual needs.	2018-09-10	Creating a Cluster
BM clusters support Kubernetes 1.10	TKE allows users to create BM clusters with Kubernetes 1.10.	2018-09-10	-
BM clusters support Ubuntu	When TKE creates a BM cluster, the default operating system is Ubuntu 16.04.	2018-09-10	-

16.04

July 2018

Update	Description	Date	Related Documents
TKE supports the Russia and India regions	The TKE console supports the Russia and India regions. You can go to the console to switch to and use these regions.	2018-07-30	-
TKE supports private network access to the Master node	After the private network access entry is enabled, TKE allows private network access to the Master node.	2018-07-30	-
The open source component tencentcloud-cloud-controller-manager is released	This component is the Cloud Controller Manager implementation for TKE and allows the following features to be implemented on the Kubernetes clusters built by Tencent Cloud CVMs: Updates the relevant addresses information of the Kubernetes nodes. Routecontroller: creates routes within pod IP ranges in a VPC. Servicecontroller: creates a corresponding CLB when a load balancer-type service is created in a cluster.	2018-07-30	Open Source Components
The open source component kubernetes-csi-tencentcloud is released	This component is a plug-in for the Tencent Cloud CBS service and complies with CSI standards. It allows users to use CBS on Kubernetes clusters built by Tencent Cloud CVMs.	2018-07-30	Open Source Components
The BM cluster ingress plug-in is released	ingress-tke-bm is the ingress controller for Tencent Cloud TKE BM clusters. This controller monitors ingress resources, creates BM CLBs, and binds them to the corresponding services.	2018-07-30	-

June 2018

Update	Description	Date	Related Documents

CCS is renamed TKE	Tencent Kubernetes Engine (TKE) is a highly scalable and high-performance container management service. It allows you to easily run applications on a managed CVM instance cluster.	2018-06-22	Tencent Kubernetes Engine
Cluster auto scaling supports custom configurations	TKE allows users to customize cluster scaling settings based on their actual needs, making it easier for them to configure businesses flexibly.	2018-06-22	Cluster Scaling
Node initialization supports the import of scripts	This feature allows users to configure a node using custom data. As long as the script can be re-inputted and has a clear retry pattern, it will be used to configure the node after startup.	2018-06-22	Adding a Node

May 2018

Update	Description	Date	Related Documents
TKE supports BM clusters	BM container clusters extend Tencent Cloud's CPM, BM Load Balancer, and other Kubernetes plug-ins, providing a complete set of features such as high-efficient deployment and resource scheduling for containerized applications. This helps industries such as gaming and AI easily cope with the challenges of high-performance computing business scenarios.	2018-05-01	-
TKE supports GPU clusters	If your business involves scenarios such as deep learning and high-performance computing , you can use the GPU feature supported by TKE, which can help you quickly use a GPU container.	2018-05-01	Enabling GPU Scheduling for a Cluster

April 2018

Update	Description	Date	Related Documents
TKE integrates the new Tencent Cloud UI version	The new Tencent Cloud UI is elegant and easy to use, offering a better container service experience.	2018-04-01	TKE Console
TKE now supports all CVM models	During cluster creation or node addition, the models available for selection on the TKE console are consistent with those on	2018-04-01	Creating a Cluster

	the CVM platform.		
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March 2018

Update	Description	Date	Related Documents
TKE supports the auto-scaling of services	Horizontal Pod Autoscaler (HPA) can automatically scale the number of pods for services according to the average CPU utilization and other metrics of target pods.	2018-03-01	Basic Operations of Automatic Scaling
The TKE console interface is updated	The feature modules of the TKE console are adjusted.	2018-03-01	-

February 2018

Update	Description	Date	Related Documents
TKE supports the auto-scaling of clusters	Cluster auto scaling adjusts the number of nodes dynamically according to resource demand: If pods become unschedulable due to a lack of resources, the cluster will automatically scale out. If there are enough idle nodes, the cluster will automatically scale in to reduce costs.	2018-02-08	Cluster Scaling
TKE supports log collection	This feature allows log files from services or specific node paths to be sent to Kafka, Elasticsearch, or CLS so that users can store and analyze them.	2018-02-06	Log Collection
TKE supports application management	TKE supports the group management of services via applications, which significantly simplifies service management.	2018-02-06	-

December 2017

Update	Description	Date	Related Documents
Vouchers can be used to purchase cluster nodes	TKE allows users to use vouchers in their accounts to purchase nodes.	2017-12-20	-
Empty clusters can be created	This feature allows users to create clusters that do not contain nodes.	2017-12-20	-
Users can set the container directory and the project of the resources when adding existing nodes	Container directory: users can set the directory for storing containers and images. We recommend that they be stored in data disks. Project: newly added resources will be automatically assigned to this project.	2017-12-20	Adding an Existing Node

November 2017

Update	Description	Date	Related Documents
Cluster reservation policy	Reserves system process resources such as dockerd and kubelet: when a cluster runs the retention policy, certain resources are reserved to ensure the proper running of system processes such as dockerd and kubelet.	2017-11-30	-
Cluster draining policy	To ensure that there are sufficient resources for system processes, pods will be drained when necessary.	2017-11-30	Draining or Cordoning a Node
Dockerd log rollback	Logs are recycled automatically to ensure that there is sufficient disk space: when log files occupy a certain amount of memory, the log rollback feature will be triggered to automatically recycle logs to ensure that there is sufficient disk space.	2017-11-30	-
Ingress forwarding rules support wildcards	Ingress forwarding rules must comply with both the rules for the public network load balancing domain names and the Kubernetes rules for the Ingress domain names. They support regular expressions with a length of 1-80 characters. Other than regular expressions, they also support `a - z, 0 - 9, and -`. For domain names with wildcards, currently, only one `*` can be used in a domain name, such as `*.example.com`.	2017-11-30	-

October 2017

Update	Description	Date	Related Documents
Launches beta for TKE application management feature	With the rise of micro-service and Devops, users need to deploy and manage multiple services in multiple environments. TKE supports the group management of services via applications , which significantly simplifies service management.	2017-10-31	-
The multi-region deployment of Image Registry supports the new Hong Kong (China) region	Image Registry is used to store Docker images, which are used to deploy TKE. Each image has a unique ID (the image's repository address + the image name + the image Tag). Image Registry can be deployed in multiple regions, including the Hong Kong (China) region that is now also supported.	2017-10-31	Image Registry Overview
The Tencent Cloud international console supports TKE	The TKE international console is launched, which helps users solve environmental issues in development, testing, and OPS, reduce costs, and improve efficiency.	2017-10-31	TKE International Console

September 2017

Update	Description	Date	Re Do
TKE Image Registry integrates access permission management	The address format of a TKE image is as follows: <code>ccr.ccs.tencentyun.com/\${namespace}/\${name}:\${tag}</code> The following fields are required for configuring the permissions of Image Registry: \${namespace}: the namespace of the image repository. \${name}: the name of the image repository.	2017-09-26	TK Re Re lev Pei Sel
TKE supports setting labels for services	TKE supports setting labels for service pods. When searching services, you can filter them by label.	2017-09-26	-
Configuration items can be	When deploying a container in a pod, users can import the configuration items ConfigMap and Secret to environment variables.	2017-09-26	-

imported to environment variables			
Clusters support the Project attribute	Clusters are not project-specific, but CVMs, CLBs, and other resources in a cluster are project-specific. Project: new resources added to the cluster will be allocated to the project.	2017-09-26	-
TKE supports the Singapore region	TKE now supports purchasing resources and deploying businesses in the Singapore region.	2017-09-26	TK Co

August 2017

Update	Description	Date	Related Documents
TKE integrates the alarm platform	TKE allows users to set multi-dimensional alarms for clusters to discover cluster exceptions quickly and reduce business risks .	2017-08-23	Setting Alarms
TKE clusters support Kubernetes 1.7	TKE allows users to create clusters with Kubernetes 1.7 .	2017-08-23	-
Continuous integration and deployment based on TencentHub	TencentHub is a management platform created by Tencent Cloud for storing R&D process files and creating DevOps workflows. TencentHub allows users to quickly and conveniently perform operations such as storage, query, and calls for files generated during the full project cycle.	2017-08-23	-
Image Registry adds the trigger feature	The Image Registry trigger feature allows users to trigger actions such as service update, webhook, and message push after creating an image. The trigger feature can be combined with continuous integration for continuous deployment .	2017-08-23	-
Image Registry	Operation logs allow users to view image uploads and download records, which helps troubleshoot problems.	2017-08-23	-

supports operation logs			
Kubectl is used to operate clusters on public networks	Kubectl is a CLI tool for Kubernetes cluster operations. You can use Kubectl to connect a local client to a TKE cluster.	2017-08-04	Connecting to a Cluster
TKE clusters integrate access permission management	Access management is mainly used to help you securely manage and control access to resources under your Tencent Cloud accounts. Using CAM, you can create, manage, and terminate users (or user groups) and manage the use of Tencent Cloud resources through identity management and policies.	2017-08-04	TKE Cluster-level Permission

July 2017

Update	Description	Date	Related Documents
TKE supports configuration file management	The configuration file management feature can help you manage the configurations of different businesses under different environments. It supports multiple versions and the YAML format. The configuration file supports multiple versions, allowing you to update and roll back applications. It also allows you to quickly import configurations, in the form of files, into containers.	2017-07-19	-
TKE supports CI source code building	Continuous container integration enables the automatic and manual building of container images on the Tencent TKE Platform.	2017-07-18	-
Image Registry adds TencentHub images	Image Registry allows users to view and use TencentHub images.	2017-07-18	-
Image Registry adds	"Favorite Public Images" will display the images bookmarked by users, allowing users to query and use specific images.	2017-07-18	Image Registry Overview

"Favorite Public Images"			
Image Registry supports multiple namespaces	Image Registry supports the creation of multiple namespaces. The names of namespaces are globally unique. If the namespace name you want to use is already being used by another user, try using another appropriate name.	2017-07-18	Creating a Namespace

June 2017

Update	Description	Date	Related Documents
TKE supports NFS volumes	NFS volumes are used for the persistent storage of data that is read and written many times. They can also be used in scenarios such as big data analysis, media processing, and content management.	2017-06-24	Volume Management
TKE supports privileged containers and working directory configurations	A privileged container has a certain priority. WorkingDir: specifies the current working directory. If it does not exist, one will be automatically created. If no directory is specified, the default directory when the container runs is used. If workingDir is not specified in the image or through the console, the default workingDir is `.`.	2017-06-24	-
TKE supports cluster capacity	A cluster is a collection of cloud resources required for running a container, including several CVMs and CLBs. You can run your applications in your cluster.	2017-06-07	Cluster Overview
TKE supports auto-formatting data disks and specifying container directories while creating/adding CVMs in container clusters	If the system disk capacity is small or a server with a data disk needs to format the data disk, you can set the storage directory of the containers and images.	2017-06-07	Creating a Cluster Adding a Node
TKE supports service re-deployment	Re-deployment means to re-deploy containers under a service and re-fetch images.	2017-06-07	Service Management

[Basic Ingress Features](#)

April 2017

Update	Description	Date	Related Documents
TKE supports adding existing CVMs to container clusters	TKE allows users to add existing CVMs to container clusters, which helps users reuse existing resources and effectively reduce costs.	2017-04-27	Adding an Existing Node
TKE supports the query of monitoring metrics for instances, services, and clusters	A good monitoring environment ensures the high reliability, high availability, and high performance of Tencent Cloud TKE. You can collect monitoring data in different dimensions for different resources to quickly understand the resource usage situation and easily locate errors.	2017-04-27	Overview of Monitoring and Alarms
TKE supports viewing container logs	By creating log collection rules, TKE can provide users with log information from within a cluster, making it easier for them to maintain and troubleshoot containers.	2017-04-27	Log Collection
The TKE remote terminal supports uploading and downloading files remotely	When uploading files, you need to specify the file directory. When downloading files, you need to specify the file path.	2017-04-19	Basic Remote Terminal Operations
TKE supports custom security groups when creating a cluster	If the current default security group cannot meet your business requirements, you can customize cluster security groups by referring to "Managing Security Group Rules".	2017-04-19	Creating a Cluster

March 2017

Update	Description	Date	Related Documents
TKE allows remote web terminals to	Remote terminals help you debug containers quickly and connect to the containers for troubleshooting. It supports	2017-03-15	Basic Remote

log in to containers	file copy, paste, upload, and download operations, and helps solve the problems of long container login paths and difficult debugging.		Terminal Operations
TKE supports third-party image creation services	The third-party image creation service helps users deploy applications flexibly based on their actual business needs.	2017-03-15	-
TKE now supports 7-layer load balancing	An Ingress is a collection of rules that allow access to services within a cluster. You can configure different forwarding rules to allow different URLs to access different services within the cluster.	2017-03-06	Ingress Management
Users can query monitoring information about clusters, services, and pods	A good monitoring environment ensures the high reliability, high availability, and high performance of Tencent Cloud TKE. You can collect monitoring data in different dimensions for different resources to quickly understand the resource usage situation and easily locate errors.	2017-03-06	Overview of Monitoring and Alarms
TKE supports native Kubernetes APIs, requesting Kubernetes certificates via Tencent Cloud APIs, and all Kubernetes features	TKE makes it easy for you to build, operate, and manage container clusters by seamlessly utilizing Tencent Cloud computing, networking, storage, monitoring, and security capabilities. You can refer to corresponding examples in the API documentation to perform operations such as adding, deleting, modifying, and querying scaling groups, networks, nodes, and clusters.	2017-03-06	Overview of APIs

December 2016

Update	Description	Date	Related Documents
Cluster management	Cluster management supports cluster addition, deletion, modification, and query, VPC-based container clusters, cross-AZ clusters, and open-source native Kubernetes APIs.	2016-12-26	-
Service management	Service management supports service addition, deletion, modification, and query, the creation of services via private images and official Docker images, and cross-AZ scheduling of services.	2016-12-26	-
Image management	Image management supports official Docker images, My	2016-	-

	Images, uploading and downloading private images, and official Docker image acceleration.	12-26	
Cluster monitoring and container monitoring	TKE provides the basic monitoring feature for all clusters by default.	2016-12-26	Viewing Monitoring Data
Service creation, event updates, and rolling updates for services	Rolling updates indicate that pods are updated one by one, which allows you to update the service without interrupting your business.	2016-12-26	-