

# Serverless Cloud Function

## Release Notes and Announcements

### Product Documentation



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# Release Notes and Announcements

## Release Notes

Last updated : 2024-12-02 20:27:11

### April 2022

Update	Description	Release Date	Documentation
Added support for processing multiple concurrent requests by a single instance for HTTP-triggered functions	In web applications, typical business scenarios are I/O-intensive, and access to downstream services such as database or other system APIs in the function takes a long time to wait for the downstream services to respond. Generally, such waits are iowait and don't consume the CPU resources. In this case, if the multiple concurrent requests feature is enabled, one instance can process multiple requests to better utilize the CPU resources of the single instance.	2022-04-28	<a href="#">HTTP-Triggered Function Request Concurrency Management</a>

### February 2022

Update	Description	Release Date	Documentation
Added support for GPU computing power	SCF provides T4 GPU Computing and T4 GPU Rendering computing power to support the serverless implementation of various use cases, such as audio/video transcoding, AI inference, high-performance graphic processing, and 3D rendering.	2022-02-17	-
Added the dynamic provisioned concurrency	SCF provides the dynamic provisioned concurrency metric feature, so that the	2022-02-14	<a href="#">Dynamic Provisioned</a>

metric feature	function provisioned concurrency can be closer to the actual resource usage, thereby reducing the idle provisioned concurrency fees.		<a href="#">Concurrency Metric</a>
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## November 2021

Update	Description	Release Date	Documentation
Added support for provisioned concurrency	SCF supports configuring the provisioned concurrency to prepare computing resources in advance and reduce the duration for cold start and initialization of runtime environment and business code.	2021-11-01	<a href="#">Provisioned Concurrency</a>

## July 2021

Update	Description	Release Date	Documentation
Added support for deployment of multiple web frameworks	SCF allows you to deploy a local project to the cloud through an HTTP-triggered function.	2021-07-29	<a href="#">Web Framework Deployment</a>

## June 2021

Update	Description	Release Date	Documentation
Added support for container image delivery of SCF	SCF supports container image delivery, richer repository types, non-intrusive log	2021-06-08	<a href="#">Feature Description</a>

	collection and aggregation, image pull based on image digest, and custom image, so that you don't need to modify the code or recompile binary dependencies, which accelerates the serverless transformation of your applications.		<a href="#">Usage</a>
New HTTP-triggered functions	SCF supports creating HTTP-triggered functions that can accept and process native HTTP requests.	2021-06-08	<a href="#">HTTP-Triggered Function Overview</a>

## January 2021

Update	Description	Release Date	Documentation
Added retry capability for async SCF invocation	<p>Added support for modifying the configurations of retry and maximum retention for async invocations. You can control the retry capabilities of function resources through relevant configurations.</p> <p>Updated the function overrun retry policy, eliminating your need to concern over data retry failures caused by overrun. Functions will make special retries for overrun errors by default.</p>	2021-01-18	<a href="#">Dead Letter Queue</a> <a href="#">Error Types and Retry Policies</a> <a href="#">Concurrency</a> <a href="#">Overrun</a>

## December 2020

Update	Description	Release Date	Documentation
Upgraded the function creation process	<p>Simplified the function creation process for quicker creation.</p> <p>Added support for configurations for template-based function creation.</p>	2020-12-30	-

	<p>Added support for trigger configurations for function creation.</p> <p>Interconnected with Serverless Cloud Framework for creating applications in the SCF console.</p> <p>Interconnected with CODING for deploying functions and applications through CI.</p>		
Released the async function execution feature	<p>SCF provides the async function execution mode to extend the execution timeout period and solve the problems with existing execution mechanisms.</p>	2020-12-29	<a href="#">Async Execution</a>
Released SCF Serverless Web IDE	<p>SCF and CODING jointly released Serverless Web IDE to provide a development experience closer to local IDE, which supports:</p> <p>Complete function development, deployment, and testing capabilities.</p> <p>Terminal capabilities. Common development tools such as pip and npm and programming language development environments already supported by SCF are pre-configured in it.</p> <p>The basic capabilities of a complete IDE, such as smart prompt and code autocomplete.</p> <p>User-defined IDE configuration, which ensures a consistent IDE user experience for the development of different functions.</p>	2020-12-29	<a href="#">Serverless Web IDE</a>
Supported MPS triggers	<p>The combination of SCF and MPS enables you to quickly process and manipulate callback events generated by MPS.</p>	2020-12-11	<a href="#">MPS Function Processing Overview</a>
Added support for data sync between SCF API Gateway trigger and API Gateway	<p>Creating, deleting, and updating serverless APIs on the API Gateway side are completely synced with creating, deleting, and updating API Gateway triggers on the SCF side. Changes on one side will be automatically synced to the other side.</p>	2020-12-08	<a href="#">Overview</a>

## November 2020

Update	Description	Release Date	Documentation
Released the online debugging feature	With the online debugging feature of SCF, you can complete checkpoint debugging, use the console, and view the runtime memory and CPU status, so that you can quickly locate problems in the console.	2020-11-27	<a href="#">Debugging Function</a>
Added support for CLS triggers	You can use SCF to process the logs collected in the CLS service. By passing the collected logs as a parameter, the function can be invoked, where the function code can process and analyze the data or dump it to other Tencent Cloud services.	2020-11-17	<a href="#">CLS Trigger</a> <a href="#">CLS Function Processing Overview</a>
Added support for CKafka message dump to ES	SCF is connected with CKafka to allow you to dump messages to Elasticsearch Service (ES) for consumption and management, making it easier to store and search massive amounts of data and analyze logs in real time.	2020-11-17	<a href="#">Message Dump to ES</a>

## August 2020

Update	Description	Release Date	Documentation
Released the CKafka-to-CKafka dump feature based on SCF	You can use SCF to dump messages from one CKafka topic cluster to another.	2020-08-06	<a href="#">Message Dump to CKafka</a>
Released the Custom	SCF provides Custom Runtime to	2020-08-05	<a href="#">Custom</a>



Runtime feature	customize the runtime environment. By enabling custom implementation for the function runtime, you can use any version of any programming language to write functions as needed.		<a href="#">Runtime</a>
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## July 2020

Update	Description	Release Date	Documentation
Started the beta test of the provisioned concurrency feature	The provisioned concurrency feature can start concurrent instances in advance according to the configuration.	2020-07-27	<a href="#">Provisioned Concurrency</a>
Added support for CFS file systems	SCF supports mounting CFS file systems to have a larger disk space. It allows different functions to write into the same file system.	2020-07-22	<a href="#">Mounting CFS File System</a>
Released the SCF-based CDN cache purge feature	You can quickly configure an SCF-based CDN purge scheme in the COS console.	2020-07-03	<a href="#">CDN Cache Purge</a>

## June 2020

Update	Description	Release Date	Documentation
Released the ICP filing feature	If your website is hosted in Tencent Cloud's Serverless service in the Chinese mainland, and the organizer and domain name of the website have never obtained an ICP filing, then you need to perform the initial ICP filing operation in the Tencent Cloud ICP filing system first before activating the Serverless service	2020-06-12	<a href="#">ICP Filing</a>

	and using SCF for HTTP access to the custom domain name.		
Released the SCF VS Code plugin	The SCF VS Code plugin was upgraded to v2.0: The specification used by the plugin was adjusted to the Tencent-SCF Component specification in Serverless Cloud Framework. The original TCSAM-compatible specification can be converted to the Serverless Cloud Framework Tencent-SCF Component specification. Node.js 10.15 and Node.js 12.16 runtime environments were added. Node.js 10 and later runtime environments were added for cloud debugging.	2020-06-12	SCF VS Code Plugin Usage
Added the Node.js 12.16 runtime environment	The Node.js 12.16 runtime environment was added for SCF. You can choose to use Node.js 12.16 as the runtime environment when creating a function. The upgrade of the Node.js version brings new features and performance improvements and, mostly importantly, speeds up launches.	2020-06-04	<a href="#">Notes on Node.js</a>

## May 2020

Update	Description	Release Date	Documentation
Added support for providing a fixed outbound IP on the public network	When the public network is enabled for a function, a fixed outbound IP on the public network can be enabled to get a randomly assigned EIP. The traffic generated by the function accessing the public network will be forwarded based on the EIP. When both public network access and private network access are enabled for the function, the traffic generated by	2020-05-26	<a href="#">Fixed Public Outbound IP</a>

	accessing the public network will be forwarded based on the EIP, while that generated by accessing the private network will be forwarded based on the VPC.		
Added support for installing dependencies online for the Node.js runtime	If "Online install dependency" is enabled in the function configuration, each time the code is uploaded, the SCF backend will check the `package.json` file in the root directory of the code package and try using npm to install the dependent package based on the dependencies in `package.json`. Currently, you can install dependencies online for the Node.js runtime, and each time the code is updated, the SCF backend will automatically install dependencies.	2020-05-09	<a href="#">Online Dependency Installation</a>

## April 2020

Update	Description	Release Date	Documentation
Added support for enabling both the public network and VPC	SCF now supports enabling both the public network and VPC, and the code can access resources in the VPC and public network, lowering the configuration complexity. Both or either of the VPC and public network can be enabled.	2020-04-28	<a href="#">Network Configuration Management</a>
Released the grayscale release feature	SCF allows you to configure aliases, versions, and traffic routing to switch traffic between multiple versions. Two versions can be configured for an alias, and a rule can be configured to switch traffic between the two versions. Traffic can be routed based on weight or request attribute. A trigger can be configured for an alias.	2020-04-28	<a href="#">Traffic Routing Configuration</a>

	You can view logs and monitoring data by alias or version.		
Released the layer feature	SCF allows you to use layers to manage dependent libraries and common code files.	2020-04-07	<a href="#">Layer Management</a>

## March 2020

Update	Description	Release Date	Documentation
Released the SCF-based COS file decompression feature	The file decompression feature is a data processing solution provided by COS based on SCF. After it is enabled, when a compressed file is uploaded to COS, the function pre-configured by COS will be automatically triggered to decompress the file to the specified bucket and directory.	2020-03-26	<a href="#">File Decompression</a>

# Announcements

## Layer Supporting Tag Management and Resource Authorization Upgrade Announcement

Last updated : 2024-12-26 11:01:05

To enhance product security and ensure effective isolation of business resources, Serverless Cloud Function (SCF) plans to implement a critical upgrade to the advanced feature of Serverless Cloud Function — Layer, starting from November 8, 2024. Below are the details of the upgrade:

### Upgrade Content

#### 1. Layer integrates tag management.

**Effective Date:** November 8, 2024

**Feature Description:** The layer of SCF integrates with the tag management system. Users can bind specified tags to the layer resources to achieve greater granularity of permission isolation.

#### 2. Layer enables authentication plan.

**Effective Date:** January 13, 2025

**Change Content:**

The layer list will only display the visible items based on the tags of the user.

When associating a layer in a function, you can only select the layer resources that match the tags of the user.

#### 3. Authorization is upgraded for resource association.

**Effective immediately.**

**Feature Description:** If you need to associate other cloud resources (such as Layers, TCR, VPC, CLS, etc.) when using the functions, ensure you have the permissions for the corresponding resources, otherwise the association will fail.

### Important Reminder

1. If there are functions associated with layer resources and tag management system is adopted to manage function visibility for different businesses, ensure to timely add the corresponding tags to the layer resources.

2. If tags are not added in time, you will not be able to see the layer resources that are not matching your permissions after tag-based authentication is enabled for layers.

## Additional Announcement

The actual running status of the existing function services is not affected by this upgrade, and all layer files and the associated resources can be used normally.

Please pay close attention to these changes. We sincerely invite you to experience this new feature and look forward to your valuable feedback and suggestions. If you have any questions or need assistance, please feel free to [contact us](#) for customer support.

# SCF Log Service Change Notification

Last updated : 2024-12-02 20:27:11

## Notes:

SCF plans to upgrade the log service on January 29, 2021 to connect to Cloud Log Service (CLS). After the upgrade, you need to specify the destination log topic or use the default shipping configuration for **new functions**. For more information, please see [Log Search Guide](#).

Functions created before January 29, 2021 will be gradually migrated by region from April 5, 2021. We will configure the SCF-specific log topic for functions for which you have not configured logging. In the following scenarios, the SCF cannot complete automatic migration or will not perform automatic migration. If you need to view the function invocation logs, please manually associate your functions with a log topic to save the function invocation logs. For details, please see [Log Delivery Configuration](#).

Status	Scenario
SCF cannot complete the automatic migration.	Your Tencent Cloud account has not completed the identity verification. Please complete the <a href="#">identity verification</a> , and then associate your functions with a log topic to save the function invocation logs.
	Your Tencent Cloud account has overdue payment. Please top up your account first, and then associate your functions with a log topic to save the function invocation logs.
	The role SCF_QcsRole does not exist. Please complete <a href="#">SCF service authorization</a> , and then associate your functions with a log topic to save the function invocation logs.
SCF will not perform automatic migration.	The functions under your Tencent Cloud account were not invoked during the migration statistical period (March and April 2021). The system determines that you are an inactive user of SCF and will not create log service related resources for you. Before invoking the function again, you need to manually associate your function with a log topic to save the function invocation logs.

## Background

[Cloud Log Service \(CLS\)](#) is a one-stop logging solution. It can be easily integrated in just five minutes, freeing you from resource or scaling issues. CLS offers solutions for collecting, storing, searching, and analyzing logs, helping you

identify business issues, monitor metrics, ensure security, and simplify operations.

After SCF is connected to CLS, function logs can support:

**Real-time index:** index collected log data in real time to enable data search.

**Flexible search:** you can use various features such as full-text search, multi-keyword search, range search, and fuzzy search.

**Log shipping:** you can ship specified logs to other cloud products to meet storage or other computing needs. For example, you can ship a log to a specified COS bucket to manage its lifecycle and meet the need for log auditing.

## SCF Log Service Upgrade Details

Starting from January 29, 2021, the new functions will use the default log topic if no destination log topic is specified, and their invocation logs will be delivered to the specified topic according to the function log configuration.

Existing functions will be migrated by region from April 5 to June 30, 2021. We will associate the default destination log topic with functions for which you have not configured logging, while the functions for which you have already configured logging will not be affected.

### Note:

If you want to specify the destination log topic for function logs, please configure it before the migration of existing functions starts. For the configuration method, please see [Log Delivery Configuration \(Legacy\)](#).

We recommend you not change the log configuration during the migration window of existing functions so as to avoid exceptional log query caused by log delivery to different topics.

Existing functions will be migrated in stages. For specific migration time, please see the SMS and Message Center notification you receive.

When the default log shipping feature is enabled, SCF will activate CLS automatically and ship function invocation logs to the log topic (prefixed by "SCF\_logtopic") in the SCF-specific logset (prefixed by "SCF\_logset"). If the log topic and logset do not exist, new ones will be created automatically. Logs are stored for seven days by default. You can check and manage them on the [CLS console](#).

The `GetFunctionLogs` API will be disused on July 1, 2021. After the function is connected to CLS, we recommend you use the [related CLS API](#) to get the best log search experience.

### Note:

To ensure the compatibility of the `GetFunctionLogs` API, the input parameter `FunctionName` is optional, but we recommend you enter it; otherwise, log acquisition may fail.

After the CLS service is commercialized, Tencent Cloud still provides a certain free tier for all users in each region.

The SCF-specific topic will consume the free tier. For more information on CLS billing, please see [Free Tier](#).

For more information on the format of logs delivered from SCF to CLS, please see [Log Search Guide](#).

After SCF logs are connected to CLS, return data will be retained for asynchronously invoked functions, which will be written to `SCF_Message` in the format of `Response RequestId:xxx RetMsg:xxx`.

### Note:



The value of `SCF_Message` is limited to 8 KB in length, and excessive parts will be discarded.