

# **IoT Hub**

## **Release Notes**

### **Product Documentation**



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# Release Notes

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## October 2020

Update	Description	Release Date	Document
Supported remote device configuration	The remote device configuration feature is added, which enables you to batch update the configuration information of devices.	2020-10-14	<a href="#">Remote Device Configuration</a>
Supported status monitoring	The status monitoring and alarming feature is added, and the data statistics feature in status monitoring is optimized.	2020-10-14	<a href="#">Status Monitoring</a>
Supported gateway subdevice topological relationship management	The feature of gateway subdevice topological relationship management is added. A gateway device can query its topological relationships with subdevices through the gateway subdevice system topic.	2020-10-14	<a href="#">Gateway Subdevice</a>
Updated the SDK for C	The remote device configuration feature is added. The feature of querying gateway subdevice topological relationships is added.	2020-10-14	<a href="#">SDK for C</a>
Updated the SDK for Android	The remote device configuration feature is added. The feature of querying gateway subdevice topological relationships is added. The MQTT over WebSocket protocol is supported.	2020-10-14	<a href="#">SDK for Android Release Notes</a>
Updated the SDK for Java	The remote device configuration feature is added. The feature of querying gateway subdevice topological relationships is added. The MQTT over WebSocket protocol is supported.	2020-10-14	<a href="#">SDK for Java Release Notes</a>

## August 2020

Update	Description	Release Date	Document
Supported the SDK for Java	The device SDK for Java is supported.	2020-08-26	<a href="#">SDK for Java Release Notes</a>
Updated the SDK for C	<p>The RRPC sync communication feature is added.</p> <p>The broadcast communication feature is added.</p> <p>The gateway-subdevice binding/unbinding APIs are added.</p>	2020-08-04	<a href="#">SDK for C Download</a>

## July 2020

Update	Description	Release Date	Document
Supported RRPC communication	IoT Hub supports the Revert RPC (RRPC) technology to implement a sync communication mechanism.	2020-7-31	<a href="#">RRPC Communication</a>
Supported broadcast communication	IoT Hub supports broadcast communication.	2020-7-31	<a href="#">Broadcast Communication</a>
Supported rule functions in the rule engine	Rule functions are added in the rule engine for diverse data processing.	2020-7-23	<a href="#">Rule Function</a>

## May 2020

Update	Description	Release Date	Document
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Supported gateway subdevice topological relationship management	The gateway subdevice feature is added, where gateway devices can bind/unbind subdevices through gateway topics automatically.	2020-5-29	<a href="#">Topological Relationship Management</a>
Supported subdevice connection and disconnection proxied by the gateway device	The gateway subdevice feature is added, where gateway devices can connect/disconnect their subdevices to/from IoT Hub through gateway topics.	2020-5-29	<a href="#">Proxied Subdevice Connection and Disconnection</a>

## March 2020

Update	Description	Release Date	Document
Added the feature of forwarding data to Cloud Base through the rule engine	IoT Hub supports forwarding eligible device data through the rule engine to Cloud Base.	2020-03-28	<a href="#">Data Forwarding to CloudBase</a>

## December 2019

Update	Description	Release Date	Document
Supported batch device creation in the console	The IoT Hub console allows you to batch add devices through automatic generation or file upload and view historical device creation tasks and processes in batch management.	2019-12-29	<a href="#">Device Connection Preparations</a>
Supported the device disablement feature	IoT Hub supports the device disablement feature. Once disabled, a device cannot perform operations such as establishing connections and sending/receiving messages as normal devices.	2019-12-29	<a href="#">Feature Components</a>
Deleted the	During product creation, the NB-IoT type is no longer available	2020-	-

NB-IoT product type	as an independent product type. You can use general products with connection over the MQTT protocol.	12-29	
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## September 2019

Update	Description	Release Date	Document
Supported CA certificate download in the console	When you create a certificate-authenticated device, the console allows you to download the CA certificate required for connection authentication in a visual way.	2019-8-23	-
Supported MQTT signature calculation in the console	To reduce your workload in development and testing, for key-authenticated devices, IoT Hub allows you to quickly generate a valid MQTT password in the console for connection debugging.	2019-8-23	-

## July 2019

Update	Description	Release Date	Document
Added the device tag feature	The console allows you to add tags to devices and search for devices by tag name.	2019-7-12	-
Added the online debugging feature	The console supports the online debugging feature. You can specify the `Topic`, `QOS`, and `Payload` to deliver messages to specified devices for debugging.	2019-07-12	-

## May 2019

Update	Description	Release Date	Document
Added the product-level key authentication feature	The IoT Hub platform supports product-level key authentication. In this mode, you only need to enable dynamic device registration and then burn the same configuration firmware (ProductID + ProductSecret) for all devices under the same product. In this way, the devices can get device certificates or keys through registration requests and then communicate with the platform.	2019-05-30	<a href="#">Product-Level Key Authentication</a>
Modified the processing logic of the `metadata` field of device shadow	<p>The `metadata` field will not be delivered to devices by default.</p> <p>When a device uses the `get shadow` method, the `metadata` bool tag can be used to specify whether to get the metadata.</p> <p>The `metadata` field is added to `JSON Payload` in `Device Update Shadow`, which is optional. The default value is `false`.</p> <p>The `metadata` field will still be returned when TencentCloud APIs are used to query device shadows.</p>	2019-05-30	<a href="#">Device Shadow Details</a>

## April 2019

Update	Description	Release Date	Document
Added the device grouping feature	<p>IoT Hub provides the multi-level device grouping feature to meet your needs for managing devices under different products by group in different business scenarios. You can:</p> <ul style="list-style-type: none"> <li>Add, delete, modify, and query groups.</li> <li>Add devices under different products or the same product to a group.</li> <li>Manage multiple group levels.</li> <li>Query the list of devices in a group.</li> </ul>	2019-04-05	<a href="#">Device Grouping</a>

Added device payload logs	To meet your needs in connection debugging and business operations, the device payload log feature is added. You can get the message payload logs of device-cloud communication in the console or through APIs and search for them by device name, `RequestID`, and keyword. Payload logs in the last 15 days can be queried.	2019-04-05	<a href="#">Cloud Log</a>
Modified the strong verification logic of `Shadow Version`	<p>Strong verification of `Shadow Version` is modified to reduce the problems of shadow update failures due to inconsistent version numbers when you use device shadows. The current cloud-based processing logic is as follows:</p> <p>For shadow update by TencentCloud APIs, a default value of the `Shadow Version` parameter is added. If the value is 0, IoT Hub will not check the shadow version number.</p> <p>For shadow update by devices, if `Version` does not exist or `Version=0` is set, IoT Hub will not verify the shadow version.</p>	2019-04-05	UpdateDeviceShadow

## March 2019

Update	Description	Release Date	Document
Added device exception log features	<p>The device exception log collection and reporting feature is added to help you remotely locating device exceptions:</p> <p>You can set four log levels (ERROR, WARN, INFO, and DEBUG) in the cloud and deliver them to devices for log collection and storage.</p> <p>You can view device exception logs in the console or through APIs and search for them by time or keyword.</p> <p>The device SDK provides a callback mechanism. If the communication is faulty, you can cache logs that cannot be reported temporarily based on the actual conditions and report cached logs after the communication recovers.</p>	2019-03-06	<a href="#">Cloud Log</a>



## January 2019

Update	Description	Release Date	Document
Added the gateway product connection feature	IoT Hub supports the creation of gateway and subdevice products. You can bind a gateway product/device and the corresponding subproduct/subdevice, add the subproduct topic permission to the permission list of the gateway product, and then the gateway device can connect, disconnect, and send/receive messages on behalf of the subdevice over the MQTT protocol.	2019-01-22	<a href="#">Gateway Product Connection</a>

## August 2018

Update	Description	Release Date	Document
Supported TencentCloud API 3.0 specifications	The IoT Hub APIs are upgraded to v3.0. The new API documentation is more standardized and comprehensive. The unified parameter style, common error codes, and SDK/CLI version are highly consistent with the API documentation, providing a simple and fast user experience. The support for nearby access in all regions allows faster connection to Tencent Cloud services.	2018-08-30	API Documentation
Supported binary data for the rule engine	The data supported by the rule engine is extended from JSON to binary format (the data format should be defined when the product is created), making it suitable for more scenarios such as private protocols and encrypted data. Data filtering and cleansing are not available for binary data forwarding.	2018-08-20	<a href="#">Device Connection Preparations</a>
Supported device key customization/modification	To be compatible with device data from existing systems, device keys (Base64-encoded strings containing 4–64 characters) can be customized and modified.	2018-08-20	<a href="#">Device Connection Preparations</a>
Supported device	For the management needs of tenants in the	2018-	<a href="#">Device</a>

category (tag) and remarks management	production environment, tags (for searching, filtering, and grouping) and remarks can be set for the device categories under the same product, so that the upper-layer applications can easily manage device assets better.	08-20	<a href="#">Connection Preparations</a>
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## July 2018

Update	Description	Release Date	Document
Supported private deployment	For the data privacy in government-oriented and business-oriented scenarios, IoT Hub supports private deployment. The feature points include the basic capabilities of the public edition, and the modules at the rule engine extension layer can also be privatized.	2018-07-31	-
Supported cross-regional access and automated scheduling	The deployment of IoT Hub's access layer has expanded from one region (Guangzhou) to three regions (Guangzhou, Shanghai, and Beijing), making it easier for local connection by devices. In addition, based on QQ's network access node quality detection platform, the actual connection to IoT Hub is scheduled and intervened to improve fault detection and connection quality.	2018-07-12	-

## April 2018

Update	Description	Release Date	Document
Supported device monitoring	IoT Hub provides monitoring capabilities for the device connection, message sending/receiving, device shadow, rule engine, and OTA features. You can view the monitoring data in the last 30 days, which helps you identify and troubleshoot business issues.	2018-04-24	<a href="#">Status Monitoring</a>
Supported data forwarding to CTSDB	The rule engine allows you to configure rules to forward eligible data reported by devices to CTSDB, and then your application server can read the data from CTSDB for processing. This takes advantage of CTSDB's high storage compression rate and aggregate display for	2018-04-20	<a href="#">Data Forwarding to CTSDB</a>

	massive amounts of data, effectively meeting the daily needs of devices for data storage, analysis, and visual display.		
Refactored the console	The overall layout of the console is adjusted for an optimized user experience.	2018-04-11	-
Supported data forwarding to CMQ topics	Tencent Cloud Message Queue (CMQ) is a distributed message queue service that provides a reliable message-based async communication mechanism. It enables message receiving/sending among different applications deployed in a distributed manner (or different components of the same application) and stores the messages in reliable and valid CMQ queues to prevent message loss. It supports multi-process simultaneous read/write, so that message sending and receiving do not interfere with each other, eliminating the need for the applications or components to keep running.	2018-04-11	<a href="#">Data Forwarding to CMQ Topic</a>

## March 2018

Update	Description	Release Date	Document
Supported data forwarding to CKafka	The rule engine allows you to configure rules to forward eligible data reported by devices to CKafka, and then your application server can read the data from CKafka for processing. This takes advantage of CKafka's high throughput to create a highly available message linkage.	2018-03-13	<a href="#">Data Forwarding to CKafka</a>
Supported firmware update	Device firmware update (aka OTA) is an important part of the IoT Hub service. When a device has new features available or vulnerabilities that need to be fixed, firmware update can be quickly performed for it using the OTA service.	2018-03-13	<a href="#">Firmware Update</a>

## February 2018

Update	Description	Release	Document
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		Date	
Supported sub-account permission control	"Creating Sub-account" describes how to grant sub-accounts the full access to IoT Hub. The product-level access control permissions allow sub-accounts to access and control the products created by themselves or created for them by the root account.	2018-02-08	<a href="#">Sub-account Permission Control</a>
Supported the device monitoring capability	The device status is monitored for troubleshooting exceptions based on the online/offline status of the device.	2018-02-08	-
Supported data forwarding to third-party services	When forwarding a message field extracted through a rule to a third-party service, you can customize how to process the data. This is the most flexible way for you to process the message. Please note that the third-party service must be HTTP-based. To configure forwarding to a third-party service, you need to provide a URL and port number supporting HTTP.	2018-02-08	<a href="#">Data Forwarding to Third-Party Service</a>
Updated the SDK for C	The support for MQTT/CoAP symmetric encryption connection is added.  The Linux C compilation is optimized.	2018-02-08	<a href="#">Usage Overview</a>
Updated the SDK version	The API SDKs for PHP and Java are released, which support basic features.	2018-02-08	SDK for Java Usage
Supported configuring forwarding to CKafka	There are two types of messages configured for CKafka: device-reported message and device status change notification.	2018-02-08	Configuring Forwarding to CKafka

## January 2018

Update	Description	Release Date	Document
Optimized the architecture	In order to provide more robust and stable IoT Hub platform services, the system has been refactored after thorough integration. The legacy console is still available, but its features	2018-01-16	-

	will no longer be updated. Plus, its resources and data are isolated from the new system.		
Updated the device SDK	<p>The underlying layer supports message deduplication (configurable).</p> <p>For the MQTT protocol, QoS 1 messages are published asynchronously to improve the communication efficiency.</p> <p>The device SDK is connected to the updated domain name for connection to the new system.</p> <p>The CoAP protocol is supported.</p> <p>The SDK for Android is supported.</p>	2018-01-16	-
Supported cloud logs	Key information is logged for the main scenario nodes and connections/disconnections of the device message linkage, so you can analyze the device behaviors based on the logs for troubleshooting.	2018-01-16	<a href="#">Cloud Log</a>
Optimized device communication	In order to better meet your needs in different use cases, the product's default topic permissions are changed to `\${productId}/\${deviceName}/event` (permission for publishing) and `\${productId}/\${deviceName}/control` (permission for subscribing).	2018-01-16	<a href="#">Feature Components</a>
Updated TencentCloud API	TencentCloud API's access domain name is changed to `iotcloud.api.qcloud.com` for connection to the new system. The `productId` concept is introduced, and the TencentCloud APIs use `productId` + `deviceName` as the device's unique identifier.	2018-01-16	IoT Hub API Overview