Blockchain Service

Billing

Issue 01

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1 Billing Description

This section introduces how Blockchain Service (BCS) is billed along with details about billing mode, billing items, and accounts in arrears.

- **Billing mode**

  BCS instances are billed on a pay-per-use basis. Pay-per-use is a postpaid mode. You can use the service first and will be billed for your usage duration. For details about the billing mode, see **Overview**.

- **Billing items**

  The billing items include the BCS configurations and underlying resource configurations. Underlying resources are charged on a pay-per-use basis and are not settled on the checkout page.

  - BCS configurations include the edition, type, number of nodes, Elastic Cloud Server (ECS) specifications for new CCE clusters, and bandwidth settings.

  - Underlying resources include resources in Scalable File Service (SFS), Log Tank Service (LTS), Object Storage Service (OBS), and Cloud Backup and Recovery (CBR).

  For details about the billing factors and formulas for each billing item, see **Billing Items**.

- **Bills**

  Choose **Billing Center** > **Billing** to check the BCS transactions and bills. For details, see **Bills**.

- **Arrears**

  Your account gets into arrears when the balance is less than the bill to be settled. To continue using your cloud services, top up your account in time. For details, see **Arrears**.

- **Stopping billing**

  If you delete an enhanced Hyperledger Fabric instance and choose to delete CCE clusters, BCS will no longer be charged. For details, see **Stopping Billing**.

- **Cost management**

  There are ownership and O&M costs. You can allocate, analyze, and optimize costs to save more money. For details, see **Cost Management**.

2 Billing Modes

2.1 Overview

BCS instances are billed on a pay-per-use basis.

Pay-per-use: a postpaid billing mode. You are charged based on the edition and node specifications you use.

This allows you to adjust resource usage easily. You neither need to prepare for resources in advance, nor end up with excessive or insufficient preset resources.

2.2 Pay-per-Use

Pay-per-use is a billing mode in which you pay after using the service. This mode is recommended if you do not need any prepayment or long-term commitment. This section describes the billing rules for pay-per-use BCS instances.

Application Scenarios

Pay-per-use billing is good for short-term, bursty, or unpredictable workloads that cannot tolerate any interruptions, such as applications for e-commerce flash sales, temporary testing, and scientific computing.

Billing Items

The fee is calculated based on the BCS configurations and underlying resource configurations.

Table 2-1 Billing items

Billing Item	Description
Configuration fee	Fee of the BCS settings, including the edition, type, number of nodes (peers), ECS specifications, and bandwidth
Underlying resource fee	Fee of the resources in SFS, LTS, OBS, and CBR

Billing Cycle

The bill for each day's fees is generated on the next day, based on the hourly usage, and sent to you between 13:00 and 22:00 (UTC+8). The fees are subject to the actual usage.

Impact of Arrears

Arrears alert

The system will deduct fees for pay-per-use resources at the end of each billing cycle. You will be notified by email, SMS, or internal messages when your account is in arrears.

Impact of arrears

Enhanced Hyperledger Fabric instances will be unavailable if your account is in arrears.

📖 **NOTE**

For details, see **Topping Up an Account**.

3 Billing Items

Description

The billing items include the BCS configurations and underlying resource configurations. For details, see **Table 3-1**.

Table 3-1 Billing items

Category	Item	Description	Billing Mode
Configuration fee	Edition	Edition of BCS, which can be **Professional**, **Enterprise**, or **Platinum**. The specifications are described in detail as follows: ● **Professional** (Small scale commercial use) Maximum number of organizations: 2 Maximum number of peers for each organization: 2 Maximum number of orderers: 3 Maximum number of channels: 2 ● **Enterprise** (Medium-scale commercial use) Maximum number of organizations: 5 Maximum number of peers for each organization: 2 Maximum number of orderers: 4 Maximum number of channels: 4 ● **Platinum** (Large scale commercial use) Maximum number of organizations: 10 Maximum number of peers for each organization: 5 Maximum number of orderers: 10 Maximum number of channels: 10	● **Professional** Pay-per-use: CNY8.00/ hour Yearly/Monthly: CNY5000.00/month ● **Enterprise** Pay-per-use: CNY17.00/ hour Yearly/Monthly: CNY10,000.00/month ● **Platinum** Yearly/Monthly: CNY60,000.00/month

Categ ory	Item	Description	Billing Mode
	Peers	Number of peers in an organization. **Professional**: A total of four peers are supported, with a maximum of two organizations and two peers for each organization. **Enterprise**: A total of 10 peers are supported, with a maximum of five organizations and two peers for each organization. **Platinum**: A total of 50 peers are supported, with a maximum of 10 organizations and five peers for each organization.	**Professional**: CNY2000.00/ peer **Enterprise**: CNY3000.00/ peer **Platinum**: CNY10,000.00/ peer Fee for the number of nodes = Fee for each node x Number of nodes **NOTE** Two peers are provided free of charge. New nodes will be charged.
	ECS Specific ations	If you select **Create a new CCE cluster** for **Cluster**, you can set **ECS Specifications** as needed. ECSs with different specification have different prices. If you select **Yes** for **Use EIP of a CCE Node**, the bandwidth fee is calculated on a pay-per-use basis.	For details about the ECS and bandwidth billing mode, see the **Billing Items** section in *ECS Billing*.
Underl ying resour ce fee	Network storage	It is charged based on the actual usage.	For details, see **Pricing Details**.
	LTS	Pay-per-use	For details, see **Pricing Details**.
	OBS	It is charged based on the actual usage.	For details, see **Pricing Details**.
	CBR	It is charged if you select **Yes** for **Data Backup**.	For details, see **Pricing Details**.

Billing Examples

The following uses an enhanced Hyperledger Fabric instance of the enterprise edition as an example.

Assume that you have purchased this instance for two months in the yearly/ monthly billing mode, created five organizations, and created 10 peers (two peers are free of charge). The fee is calculated as follows:

(Edition fee + Fee for each peer x Number of nodes) x Purchase duration = (10,000.00 + 3000.00 x 8) x 2 = CNY68,000.00

4 Bills

You can view the bill of a resource in the **Billing** section of Billing Center to learn about its usage and billing information in a certain period.

Bill Reporting Period

The usage of pay-per-use resources is reported to the billing system at a fixed interval for settlement. BCS reports service detail records (SDRs) every hour, collects statistics on the usage of all BCS resources by hour, and settles fees based on the usage.

Viewing Bills of a Specific Resource

Step 1 Log in to the BCS console.

Step 2 In the navigation pane, click **Instance Management**, and click a BCS instance.

Step 3 Copy the instance ID.

Step 4 On the top menu bar of the console, choose **Billing & Costs** > **Bills**.

Step 5 In the navigation pane, choose **Billing** > **Expenditure Details**. Select **Resource ID** as the filter condition, enter the copied ID, and click to search for the bill of the resource.

----End

5 Arrears

When you use cloud services, your account goes into arrears when the balance is less than the bill to be settled. To continue using your cloud services, top up your account in time.

Reasons

Your account balance is insufficient to pay for the used resources on the pay-per-use basis.

Impact of Arrears

Enhanced Hyperledger Fabric instances cannot be used if your account is in arrears.

Avoiding and Handling Arrears

For details about how to top up your account, see **Top-Up and Repayment**.

Configure the **Balance Alert** function on the **Billing Center** > **Overview** page. When the total amounts of the available quota, general cash coupons, and cash coupons are lower than the threshold, the system automatically notifies you by SMS or email.

If your account is in arrears, top up your account in time.

6 Stopping Billing

If you delete an enhanced Hyperledger Fabric instance and choose to delete CCE clusters, BCS will no longer be charged.

7 Cost Management

Enterprises are paying more and more attention to the cost of using cloud. How can you manage costs when using BCS? The following describes how to manage costs from four dimensions: cost composition, allocation, analysis, and optimization, to help maximize return on your investment.

Cost Composition

BCS incurs two types of costs:

- Resource cost: cost of various types of resources (billing items of BCS). For details, see the section 3 "Billing Items".
- O&M cost: labor cost generated during the use of BCS.

Cost Allocation

A good cost accountability system is the basis of cost management. It ensures that departments, business teams, and owners are accountable for their respective cloud costs. Allocate costs to different teams or projects so that organizations have a clear picture of their respective costs.

Huawei Cloud **Cost Center** supports cost collection and reallocation with multiple tools for you to choose from.

- **Allocate costs by linked account.**

  The enterprise master account can categorize the costs of its member accounts by linked account to manage the accounting of those member accounts. For details, see **Viewing Costs by Linked Account**.

- **Allocate costs by enterprise project.**

  Before allocating costs, enable Enterprise Project Management Service (EPS) and plan your enterprise projects based on your organizational structure or businesses. Select an enterprise project for a newly purchased cloud resource so that the costs of that resource will be allocated to the selected enterprise project. For details, see **Viewing Costs by Enterprise Project**.

- **Allocate costs by cost tag.**

  Huawei Cloud assigns tags to your cloud resources so they can be sorted in different ways, for example, by purpose, owner, or environment. These are the four steps for managing costs by predefined tags.
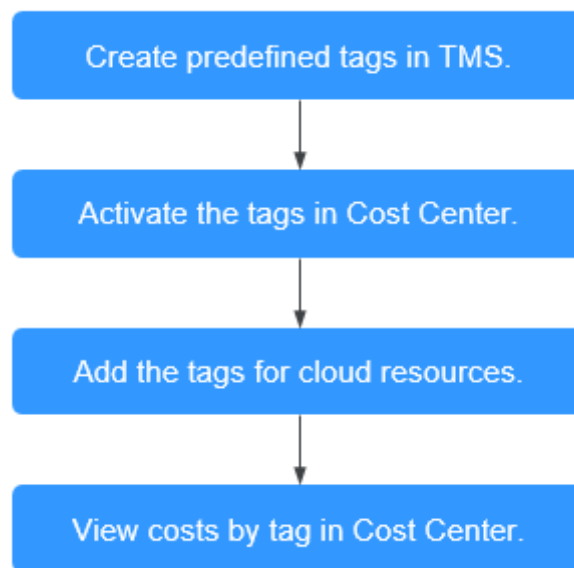
For details, see **Viewing Costs by Cost Tag**.

- **Allocate costs by cost category.**

  You can use **Cost Categories** provided by **Cost Center** to split shared costs. Shared costs include the costs for the resources (compute network, storage, or resource packages) shared across departments or the costs that cannot be directly split by cost tag or enterprise project configured for the resources. These costs are not attributable to one owner, and hence cannot be categorized as a whole. In this case, you can define cost splitting rules to fairly allocate these costs among teams or business units. For details, see **Viewing Cost By Cost Category**.

Cost Analysis

To precisely control and optimize your costs, you need a clear understanding of what parts of your enterprise incur costs. **Cost Center** visualizes your original costs or amortized costs using various dimensions and display filters. You can analyze the trends and drivers of your service usage and costs from a variety of perspectives and scopes.

Cost Anomaly Detection provided by **Cost Center** also detects unexpected expenses promptly for tracing, monitoring, and analysis.

For details, see **Performing Cost Analysis to Explore Costs and Usage** and **Enabling Cost Anomaly Detection to Identify Anomalies**.

Cost Optimization

- **Cost control**

  You can create different types of budgets on the **Budgets** page of Cost Center to track your costs against the budgeted amount you specified and send alerts to the recipients you configured if the thresholds you defined are reached. You can also create budget reports and specify recipients to receive budget alerts at a specified interval. For details, see **Enabling Forecasting and Creating Budgets to Track Cost and Usage**.

- **Resource rightsizing**

  You can monitor resource usage in **Cost Center** to evaluate whether your configurations are too high. You can also identify resources with high costs based on the evaluation results, use Cloud Eye to monitor resource usage, determine the causes of high costs, and take measures accordingly.

- **Billing mode selection**

  Different types of services have different requirements on resource usage periods and therefore require different billing modes to achieve the optimal outcome.

  - For mature services that are stable for a long time, use the yearly/monthly billing mode.

  - For short-term, unpredictable services that experience traffic bursts and cannot be interrupted, use pay-per-use billing.

8 Billing FAQs

8.1 How Do I Change the Billing Mode of a BCS Instance from Pay-per-Use to Yearly/Monthly?

Changing from pay-per-use to yearly/monthly billing is currently unavailable.

8.2 How Do I Unsubscribe from a Yearly/Monthly BCS Instance?

Choose **More** > **Unsubscribe** on the instance card. After the unsubscription application is approved, the remaining fees paid for the instance will be refunded.

8.3 What Can I Do If My BCS Instance Is Abnormal Because My Account Is in Arrears?

Renew your BCS instance at **Billing Center** > **Renewal**, and the instance status will become normal within 5 to 10 minutes. If the BCS instance remains abnormal, refer to **Abnormal Instance Statuses**.