

# Alibaba Cloud

游戏盾

Product Pricing









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# Document conventions

Style	Description	Example
 <b>Danger</b>	A danger notice indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 <b>Danger:</b> Resetting will result in the loss of user configuration data.
 <b>Warning</b>	A warning notice indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 <b>Warning:</b> Restarting will cause business interruption. About 10 minutes are required to restart an instance.
 <b>Notice</b>	A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.	 <b>Notice:</b> If the weight is set to 0, the server no longer receives new requests.
 <b>Note</b>	A note indicates supplemental instructions, best practices, tips, and other content.	 <b>Note:</b> You can use Ctrl + A to select all files.
>	Closing angle brackets are used to indicate a multi-level menu cascade.	Click <b>Settings&gt; Network&gt; Set network type</b> .
<b>Bold</b>	Bold formatting is used for buttons , menus, page names, and other UI elements.	Click <b>OK</b> .
Courier font	Courier font is used for commands	Run the <code>cd /d C:/window</code> command to enter the Windows system folder.
<i>Italic</i>	Italic formatting is used for parameters and variables.	<code>bae log list --instanceid</code> <i>Instance_ID</i>
[] or [a b]	This format is used for an optional value, where only one item can be selected.	<code>ipconfig [-all -t]</code>
{ } or {a b}	This format is used for a required value, where only one item can be selected.	<code>switch {active stand}</code>

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# 1. Billing methods

GameShield uses the subscription billing method. The price for one-year subscription is calculated based on the clean bandwidth and the number of standalone instances. This topic describes the billing rules, examples, and relevant terms.

## Notice

- The initial number of daily active units (DAUs) for newly purchased GameShield instance is changed from 30,000 to 80,000 since May 1, 2020. For GameShield instances purchased between April 1, 2020 and May 1, 2020, the initial number of DAUs is automatically increased to 80,000.
- The billing method of GameShield has been updated since April 1, 2020 for your convenience. The new billing method removes the limit on the number of applications bound to a GameShield instance that you purchase. However, the new billing method places a limit on the number of DAUs. Even if the billing method is updated, updated instances still provide around-the-clock defense for your services. For more information, see [Terms](#).

## (Not supported) Five-day unconditional refunds

GameShield supports only the subscription billing method. GameShield instances do not support five-day unconditional refunds.

## Billing rules

The one-year subscription price for a GameShield instance with default specifications is USD 150,943.39.

The default instance specifications contain one standalone instance, 100 Mbit/s of clean bandwidth, and 80,000 DAUs.


You can upgrade the default instance specifications as required. To upgrade specifications, you can increase standalone instances and clean bandwidth. DAUs are increased in proportion to the increase of standalone instances and clean bandwidth. The number of DAUs after the increase is calculated as follows:

$$\text{DAUs} = 80,000 + (\text{Number of standalone instances} - 1) \times 50,000 + (\text{Clean bandwidth} - 100) \times 300$$

The following table describes the billing items of GameShield instances, and lists the monthly subscription prices of billing items.

Billing item	Description	Monthly subscription price
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Billing item	Description	Monthly subscription price
Standalone instance	<p>A standalone GameShield instance supports a gateway capacity of 100,000 queries per second (QPS) and contains 10 defense nodes. Resources are isolated among instances.</p> <p>The system automatically increases 50,000 DAUs each time an instance is added.</p> <p>We recommend that you add standalone instances if your services must be isolated from each other.</p>	USD 7,861.64 per instance
Clean bandwidth	<p>It indicates the total bandwidth that is used by all the protected services. The 95th percentile bandwidth billing method is applied. You are billed by calendar month based on the bandwidth that you use to protect services.</p> <p>The system automatically increases 300 DAUs for each additional clean bandwidth of 1 Mbit/s. The system automatically configures one defense node for each additional clean bandwidth of 10 Mbit/s.</p>	USD 47.17 per Mbit/s
DAU	<p>You are billed based on the number of DAUs. By default, 80,000 DAUs are allowed.</p> <p>DAUs cannot be independently added. To add DAUs, you must increase the clean bandwidth or standalone instances.</p>	None


 **Notice** If the total bandwidth required by the protected services or the number of required DAUs exceeds your existing specifications, you must upgrade GameShield. For more information, see [Upgrade GameShield specifications](#).

## Billing examples

### Example 1: Query subscription prices and the number of DAUs

In this example, purchase one standalone instance. You can adjust the clean bandwidth to obtain different numbers of DAUs and defense nodes. The following table lists the number of DAUs and monthly subscription prices for different bandwidths.

Number of DAUs	Number of instances	Clean bandwidth (unit: Mbit/s)	Number of nodes	Monthly subscription price
80000	1	100	10	USD 12,578.62
110000	1	200	20	USD 17,295.61
155000	1	350	35	USD 24,371.08
200000	1	500	50	USD 31,446.56
300000	1	1000	100	USD 55,031.48

 **Note** Defense nodes and gateways are not priced independently. The specifications of defense nodes and gateways are based on the number of standalone instances and the clean bandwidth that you purchase. If you need additional defense nodes and gateways, upgrade GameShield. For more information, see [Upgrade GameShield specifications](#).

### Example 2: Protect a single game service

In this example, protect a single game service by using GameShield. The total bandwidth that is used by the protected service is 200 Mbit/s, and the total number of DAUs is 100,000. We recommend that you purchase an instance with default specifications and increase the clean bandwidth of the instance that you purchase to 200 Mbit/s. Then, the system increases the number of DAUs to 110,000. In this case, both clean bandwidth and DAUs can meet your business needs.

The total number of DAUs after the increase is calculated as follows:

$$110,000 = 80,000 + (200 - 100) * 300$$

The yearly subscription price is calculated as follows:

$$\text{USD } 207,547.39 = \text{USD } 150,943.39 + (200 \text{ Mbit/s} - 100 \text{ Mbit/s}) \times \text{USD } 47.17 \text{ per Mbit/s} \times 12$$

### Example 3: Protect multiple game services

In this example, protect three game services by using GameShield. The total bandwidth that is used by the protected services is 150 Mbit/s, and the total number of DAUs is 210,000. We recommend that you purchase three instances with default specifications and increase the clean bandwidth to 200 Mbit/s. Then, the system increases the number of DAUs to 210,000. In this case, both clean bandwidth and DAUs can meet your business needs.

The total number of DAUs after the increase is calculated as follows:

$$210,000 = 80,000 + (3 - 1) * 50,000 + (200 - 100) * 300$$


The yearly subscription price is calculated as follows:

$$\text{USD } 396,226.75 = \text{USD } 150,943.39 + ((3 \text{ instances} - 1 \text{ instance}) \times \text{USD } 7,861.64 \text{ per instance} + (200 \text{ Mbit/s} - 100 \text{ Mbit/s}) \times \text{USD } 47.17 \text{ per Mbit/s}) \times 12$$

## Terms

- Around-the-clock defense


Indicates that GameShield uses all the available cleansing resources in the region where your service resides to ensure service continuity.

 **Notice** If your service experiences attacks that affect the infrastructure of Alibaba Cloud data centers, Alibaba Cloud reserves the rights to throttle traffic. If traffic throttling occurs on your GameShield instances, your service may slow down for a short period of time or become unavailable.

- DAU

Indicates the daily active devices for all the services that are protected by GameShield. The number of DAUs is calculated based on the following rules:

- Only Android and iOS devices are considered when the number of DAUs is calculated.


 **Notice** Windows devices are not considered when the number of DAUs is calculated. If this rule changes, you will receive notifications.

- If a device is active at various points in time in a day, the device is considered as only one DAU. You can check the actual number of DAUs in the GameShield console.

- Standalone instance

Indicates a GameShield instance that has independent resources.

GameShield has removed the limit on the number of applications that are bound to a single instance since April 1, 2020. However, we recommend that you bind a standalone instance to each service.

 **Warning** If you bind multiple applications to a single instance, your service may experience the following risks.

Risk	Description	Solution
Scheduling center	An independent scheduling center is configured for each standalone instance. If a scheduling center for a standalone instance is monitored or blocked, all services that use the AccessKey pair for the standalone instance are affected.	<ul style="list-style-type: none"><li>◦ Deploy a standalone instance for each service. This ensures that scheduling centers for standalone instances are isolated from each other.</li><li>◦ Enable hotfix for applications. This allows you to change the AccessKey pairs and group names of applications with the minimized downtime.</li><li>◦ Provide a feature to allow the manual disabling of GameShield on the application side.</li></ul>



Risk	Description	Solution
Forwarding node	If multiple services share a forwarding node and the forwarding node is attacked, you cannot identify the specific service that causes the attack. Therefore, operations cannot be performed on the specific service to handle the attack. The services that share a forwarding node affect each other.	<ul style="list-style-type: none"> <li>◦ We recommend that you connect different applications to different instances and deploy a forwarding node for each application.</li> <li>◦ If multiple applications share a forwarding node, we recommend that you perform the following operations: <ul style="list-style-type: none"> <li>■ Increase bandwidth based on your business needs. The system automatically configures one defense node for each additional clean bandwidth of 10 Mbit/s.</li> <li>■ Assign nodes to services based on the service scale. This ensures that users are evenly distributed among nodes if possible.</li> </ul> </li> </ul>

- Clean bandwidth

The 95th percentile bandwidth billing method is applied. You are billed by calendar month based on the bandwidth that you use to protect services.

When the 95th percentile bandwidth billing method is applied, you are billed by the calendar month based on the running durations of GameShield instances. In a calendar month, GameShield collects peak bandwidth values every five minutes. These values are sorted in descending order. The top 5% peak bandwidth values are ignored when the total prices are calculated. You are billed based on the largest peak bandwidth value among the remaining 95% peak bandwidth values.

For example, in a calendar month (30 days), each peak bandwidth value that GameShield collects is valid by default. In this case, 12 peak bandwidth values are collected each hour. The number of peak bandwidth values that are collected in each calendar month is calculated as follows:  $12 \times 24 \times 30 = 8,640$ . You can sort these peak bandwidth values in descending order. A total of 432 ( $8,640 \times 5\%$ ) values are ignored. You are billed based on the 433th bandwidth value.

## 2. Upgrade GameShield specifications

This topic describes how to upgrade GameShield specifications to meet your requirements for service protection.

### Scenarios

If you have activated GameShield in subscription mode, you must upgrade its specifications in the following scenarios:


- The required bandwidth of your services that are protected by GameShield exceeds the existing clean bandwidth.
- The number of the required daily active units (DAUs) exceeds that of existing number of DAUs.
- A standalone GameShield instance must be deployed for a single service.

### Background information


You can increase the clean bandwidth and standalone instances to upgrade the service specifications. Defense nodes, DAUs, and gateways cannot be independently added or increased. To add or increase them, you must increase the clean bandwidth or standalone instances.

Rules for specifications conversion are as follows:

- Defense nodes
  - The system automatically increases 10 defense nodes each time a standalone instance is added.
  - The system automatically configures one defense node for each additional clean bandwidth of 10 Mbit/s.
- DAUs
  - By default, 80,000 DAUs are allowed.
  - The system automatically increases 50,000 DAUs each time a standalone instance is added.
  - The system automatically configures 300 DAUs for each additional clean bandwidth of 1 Mbit/s.
- Gateways
  - By default, a gateway allows 100,000 queries per second (QPS).

 **Note** The preceding default specification is only applicable when workloads are normal. The capacity of a gateway is not limited during the protection against attacks.

- The system automatically increases 100,000 QPS each time a standalone instance is added.
- The system automatically configures 100,000 QPS for each additional clean bandwidth of 100 Mbit/s.

 **Note** The system configured 100,000 QPS for each additional clean bandwidth that is lower than 100 Mbit/s.

Before you upgrade GameShield specifications, you must create a suitable plan to increase standalone instances and clean bandwidth based on your business needs. For more information, see [Billing examples](#).

## Procedure


1. Log on to the [GameShield console](#).
2. In the upper-right corner of the page, click **Upgrade**.
3. On the **Upgrade/Downgrade** page, increase the standalone instances and clean bandwidth based on your business needs.
4. Read and select **Service Agreement** and click **Buy Now**.
5. Confirm and pay for the order.

## 3.Create a GameShield instance

This topic describes how to create a GameShield instance.

### Procedure

1. Access [the buy page of GameShield](#) by using your Alibaba Cloud account.
2. Configure the specifications of your GameShield instance based on your business needs.

Parameter	Description
Product Type	The default value is <b>GameShield (Subscription)</b> .
DAUs	<p>The number of daily active units (DAUs). By default, 80,000 DAUs are allowed. The value is determined by the values of <b>Standalone Instances</b> and <b>Clean Bandwidth</b> and cannot be modified.</p> <p>For more information, see <a href="#">Billable resources</a>.</p>
Standalone Instances	<p>The number of GameShield instances that you want to purchase. The default value is 1.</p> <p>Resources are isolated among instances to protect different services.</p> <p>By default, a standalone GameShield instance supports a gateway capacity of 100,000 queries per second (QPS) and contains 10 defense nodes. The system automatically increases 50,000 DAUs each time an instance is added.</p>
Clean Bandwidth	<p>The clean bandwidth for normal workloads that the instance supports. Minimum value: 100 Mbit/s.</p> <p>The system automatically configures 300 DAUs for each additional clean bandwidth of 1 Mbit/s. The system automatically configures one defense node for each additional clean bandwidth of 10 Mbit/s.</p> <p>The value of <b>Clean Bandwidth</b> is estimated based on the number of services to be protected by the current instance. Set it to the value of either the inbound traffic or outbound traffic whose value is bigger. For more information, see <a href="#">Clean bandwidth</a>.</p> <div> <b>Warning</b> If the traffic on your instance exceeds the clean bandwidth, packet loss or service disruption may occur. We recommend that you upgrade your clean bandwidth in a timely manner.</div>
Duration	<p>The validity period of the instance. The default value is <b>1 year</b> and cannot be modified.</p> <p>If you select <b>Auto renewal</b>, auto-renewal is triggered before the expiration date of the instance.</p>

3. Confirm the configurations and click **Buy Now**.
4. Confirm your order and complete the payment.