

Alibaba Cloud Apsara File Storage NAS

Storage types

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Generic conventions

Table -1: Style conventions

| Style | Description | Example |
|---|--|--|
|  | This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results. |  Danger: Resetting will result in the loss of user configuration data. |
|  | This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results. |  Warning: Restarting will cause business interruption. About 10 minutes are required to restore business. |
|  | This indicates warning information, supplementary instructions, and other content that the user must understand. |  Notice: Take the necessary precautions to save exported data containing sensitive information. |
| | This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user. |  Note: You can use Ctrl + A to select all files. |
| > | Multi-level menu cascade. | Settings > Network > Set network type |
| Bold | It is used for buttons, menus, page names, and other UI elements. | Click OK. |
| <code>Courier font</code> | It is used for commands. | Run the <code>cd / d C :/ windows</code> command to enter the Windows system folder. |
| <i>Italics</i> | It is used for parameters and variables. | <code>bae log list --instanceid Instance_ID</code> |
| [] or [a b] | It indicates that it is an optional value, and only one item can be selected. | <code>ipconfig [-all -t]</code> |

| Style | Description | Example |
|---------------------------------------|--|------------------------------------|
| <code>{}</code> or <code>{a b}</code> | It indicates that it is a required value, and only one item can be selected. | <code>swich {stand slave}</code> |

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1 Apsara File Storage NAS Performance

This topic describes the features, specifications, and scenarios of Apsara File Storage NAS Performance. You can select the storage type based on your business requirements.

Apsara File Storage NAS Performance is backed by solid-state drives (SSDs), providing high throughput, high IOPS, and low latency performances for workloads. It is a shared file storage service that is applicable to scenarios that require high throughput, elasticity, and low latency of read operations. You can use this solution if you have frequent read/write operations and high requirements over system response performance.

Features

- Scalable capacity and a throughput (up to 20 GB/s) that enjoys linear scaling along with capacity.
- A maximum throughput of 600 MB/s for a single TB and milliseconds of latency.
- Improved performance, applicable to businesses that require large capacity and high throughput.

Specifications

- Capacity: 1 PB
- Latency: A latency of milliseconds
- IOPS: up to 30,000 (4,000 random read/write)
- Throughput: linear scaling along with capacity, applicable to computing businesses that require large capacity, high throughput, and low latency

Scenarios

Random I/O access, data-intensive, and latency-sensitive businesses, such as enterprise applications, websites, and containers.

Throughput calculation

The maximum throughput of an Apsara File Storage NAS Performance file system (MB/s) = 0.6 MB/s × storage space of the file system (GB) + 600 MB/s (initial bandwidth).

The maximum throughput is 20 GB/s.

2 Apsara File Storage NAS Capacity

This topic describes the features, specifications, and scenarios of Apsara File Storage NAS Capacity. You can select the storage type based on your business requirements.

Apsara File Storage NAS Capacity is backed by SATA hard disk drives (SATA HDDs), providing high-performance storage at relatively low costs. It is a shared file storage service that is applicable to cost-sensitive scenarios that require high throughput and elasticity. You can adopt this cost-efficient solution if you have infrequent read/write operations and moderate latency requirements over your storage resources.

Features

- Scalable capacity and a throughput (up to 10 GB/s) that enjoys linear scaling along with capacity.
- A maximum throughput of 150 MB/s for a single TB and maximum latency of 10 ms.
- Improved performance, applicable to businesses that require large capacity and high throughput.

Specifications

- Capacity: 10 PB
- Latency: 10 ms
- IOPS: up to 15,000 (4,000 random read/write)
- Throughput: linear scaling along with capacity, applicable to computing businesses that require large capacity and high throughput but moderate latency

Scenarios

Scalable capacity and cost-sensitive applications, such as big data analysis, file sharing, and data backup.

Throughput calculation

The maximum throughput of an Apsara File Storage NAS Capacity file system (MB/s) = $0.15 \text{ MB/s} \times \text{storage space of the file system (GB)} + 150 \text{ MB/s (initial bandwidth)}$. The maximum throughput is 10 GB/s.