

# USER GUIDE

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## Asset Management

You can check resource status and its history of operating Multi Cloud and Hybrid Infrastructure.  
Asset Management provides you five types of service.

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## Dashbaord

You can access summary about usage and performance of operating resources.  
Asset Management > Dashboard

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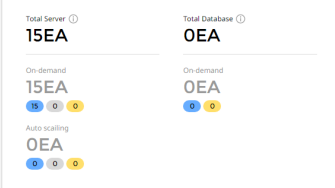
## CLOUD VENDOR













Last updated 2017.04.14 20:20:41

## TOTAL SUMMARY

● RUNNING ● STOPPED ● ETC



## Total Used Cloud Products ①

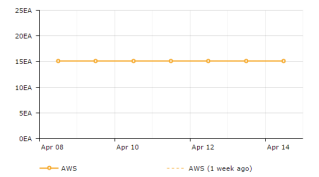
Total		201EA					
 EBS	15	 Internet Gateways	20	 Route Tables	24	 VPC	20
 EC2	15	 Network ACLs	20	 Security Groups	26		
 EIP	3	 Network Interface	15	 Subnets	43		

## SERVER

CLOUD VENDOR	RUNNING SERVER	STOPPED SERVER	ETC SERVER
TOTAL	15EA	0EA	0EA
AWS	15EA	0EA	0EA

## Server / Usage

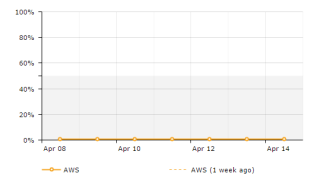
Total Instance



Last updated 2017.04.14 19:00:00

## Server / Performance

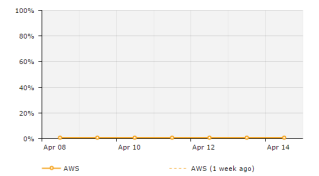
Total CPU avg. utiliz



Last updated 2017.04.14 19:00:00

## Server / Performance

CPU Utilization with Threshold

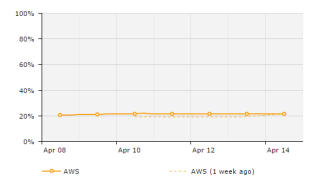


Last updated 2017.04.14 19:00:00



## Server / Performance

Memory Utilization with Threshold

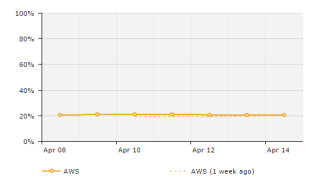


Last updated 2017.04.14 19:00:00



## Server / Performance

Disk Utilization with Threshold



Last updated 2017.04.14 19:00:00



## DATABASE &amp; STORAGE

CLOUD VENDOR	DB AVAILABLE USAGE	STORAGE USAGE	DISK USAGE
TOTAL	0EA   0GB	0EA   0GB	15EA   142GB
AWS	0EA   0GB	0EA   0GB	15EA   142GB

## Database / Usage

Total Instance



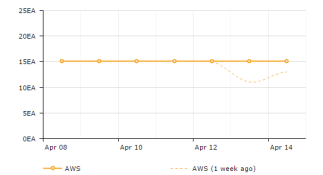
## Storage(s3) / Usage

Total Instance



## Disk / Usage

Total Instance



Last updated 2017.04.14 19:00:00

Attached Volumes with Snapshots

Attached Volumes without Snapshots

Detached Volumes

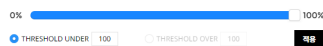
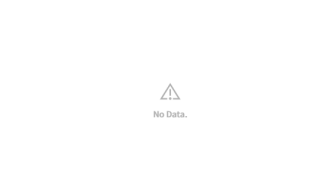
15EA

0EA

0EA

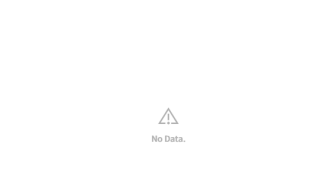
## Database / Performance

CPU Utilization with Threshold



## Database / Performance

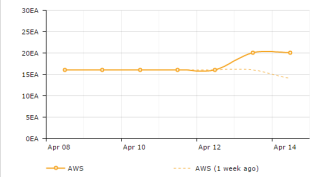
Read IOPS / Write IOPS Average Threshold



## NETWORK

CLOUD VENDOR	PRIVATE NETWORK	NETWORK IP	LOAD BALANCER
TOTAL	20EA	3EA	0EA
AWS	20EA	3EA	0EA

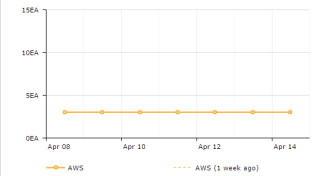
## Private Network / Usage



Last updated 2017.04.14 19:00:00

Private Network	20EA
Subnet	43EA
Network ACL	20EA
Internet Gateway	20EA
Route Table	24EA
Security Group	26EA

## Network / Usage



Last updated 2017.04.14 19:00:00

Network IP	3EA
Load Balancer	0EA

## 1. Cloud Vendor

Shows the Cloud Vendors currently in use and Account information of each Vendor.

If you select Cloud Vendor and Account, Dashboard shows you resource status of the selected Vendor and Account.

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## 2. Total Summary

Shows Server and DB quantity of the selected Vendor and Account.

You can check the item 'On-demand' and value of Auto Scalling Instance separately. It also provides volume of each status.

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## 3. Total Used Cloud Product

Shows the list of all products in use by the selected Cloud Vendor. You can check usage of each product.

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## 4. Server

With the trend chart, you can check usage and performance of Servers in use.

### 1) Server/Usage - Total Instance :

Provides the trend chart of usage of Server for the last 7 days and last week.

### 2) Server/Performance - Total CPU avg. utiliz :

Provides the trend chart of average usage of CPU for the last 7 days and last week.

### 3) Server/Performance - CPU Utilization with Threshold :

By setting Threshold, you can check any instance whose CPU usage is above/below than the Threshold for the last 7 days and last week.

### 4) Server/Performance - Memory Utilization with Threshold :

By setting Threshold, you can check any instance whose Memory usage is above/below than the Threshold for the last 7 days and last week.

### 5) Server/Performance - Disk Utilization with Threshold :

By setting Threshold, you can check any instance whose Disk usage is above/below than the Threshold for the last 7 days and last week.

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## 5. Database & Storage

With the trend chart, you can check usage and performance of Database & Storage in use.

### 1) Database/Usage - Total Instance :

Provides trend chart of usage of DB for the last 7 days and last week.

### 2) Storage(S3)/Usage - Total Instance :

Provides trend chart of usage of S3 for the last 7 days and last week.

### 3) Disk/Usage - Total Instance :

Provides trend chart of usage of Disk for the last 7 days and last week.

#### 4) Database/Performance - CPU Utilization with Threshold :

By setting Threshold, you can check any instance whose CPU usage is above/below than the Threshold for the last 7 days and last week.

#### 5) Database/Performance - Read iops / Write iops Average Threshold :

By setting Threshold, you can check any instance whose Read/Write iops is above/below than the Threshold for the last 7 days and last week.

## 6. Network

With the trend chart, you can check usage of Network resources in use.

#### 1) Private Network/Usage :

Provides trend chart of usage of Private Network resources for the last 7 days and last week. The bottom of the trend chart has the list and volumes of particular resources. By selecting each resource, you can check its own trend chart.

#### 2) Network/Usage :

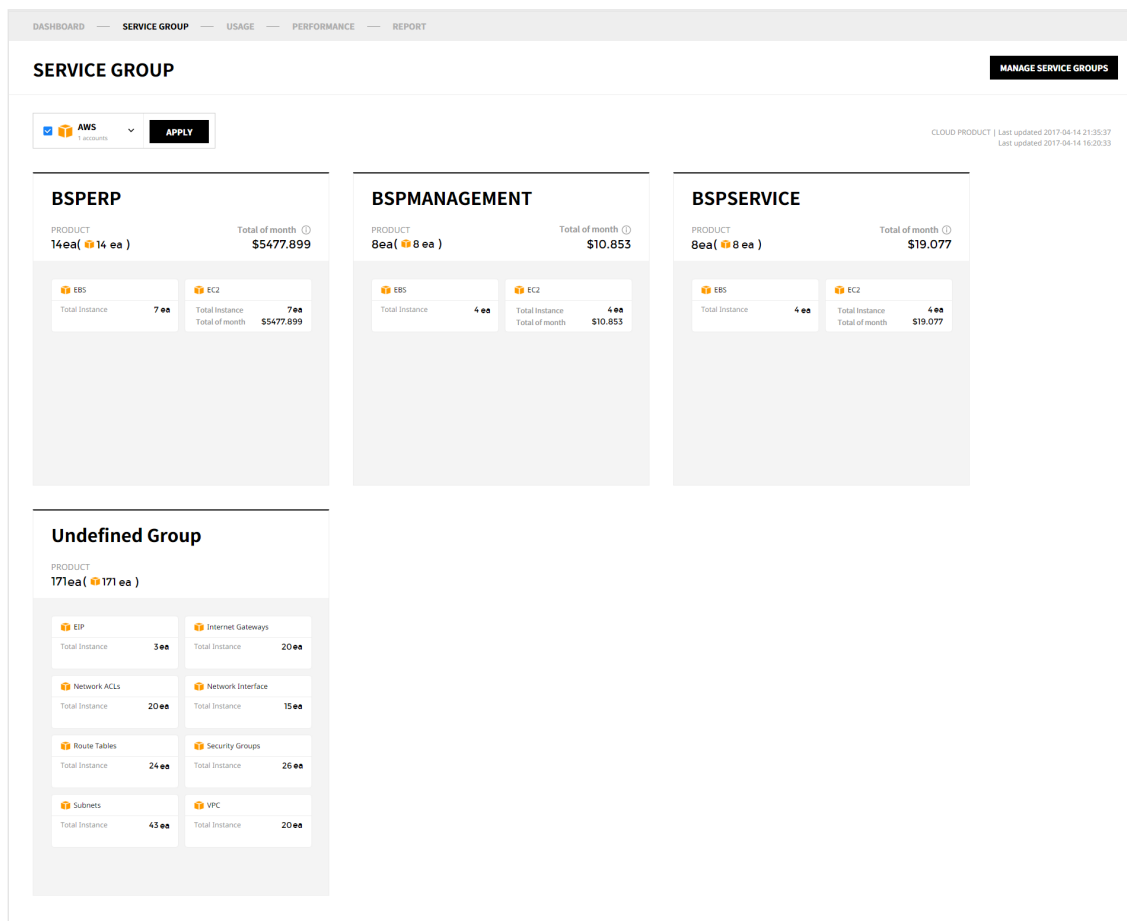
Provides trend chart of usage of Network resources for the last 7 days and last week. The bottom of the trend chart has the list and volumes of particular resources. By selecting each resource, you can check its own trend chart.

## Service Group

Provides the 'Service Group' feature which you can group all resources of Multi Cloud and Hybrid environment with operating service standard.

By re-grouping resources with the Service Group feature, you can check resource usage, cost and status of operating services.

Asset Management > Service Group



## 1. Cloud Vendor

Shows the Cloud Vendors currently in use and Account information of each Vendor.

If you select Cloud Vendor and Account, Dashboard shows you resource status of the selected Vendor and Account.

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## 2. Managing Service Group

You can go to the Service Group Management pane on which you can create and edit Service Group.

For more information, please refer to the 'Managing Service Group' documentation.

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## 3. Service Group Card

You can check volumes, types and costs of resources being used by Service Group.

### 1) Service Group Name :

The name of Service Group is shown.

### 2) Product :

Total amount of Products in Service Group and the amount per Vendor are shown.

### 3) Monthly Aggregate :

Total cost of resource usage in Service Group is shown.

### 4) Product Card :

The name of resource included in Service Group and cost incurred by using the resource are shown.

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## Usage

You can check the current status and history of resource usage per Vendor.

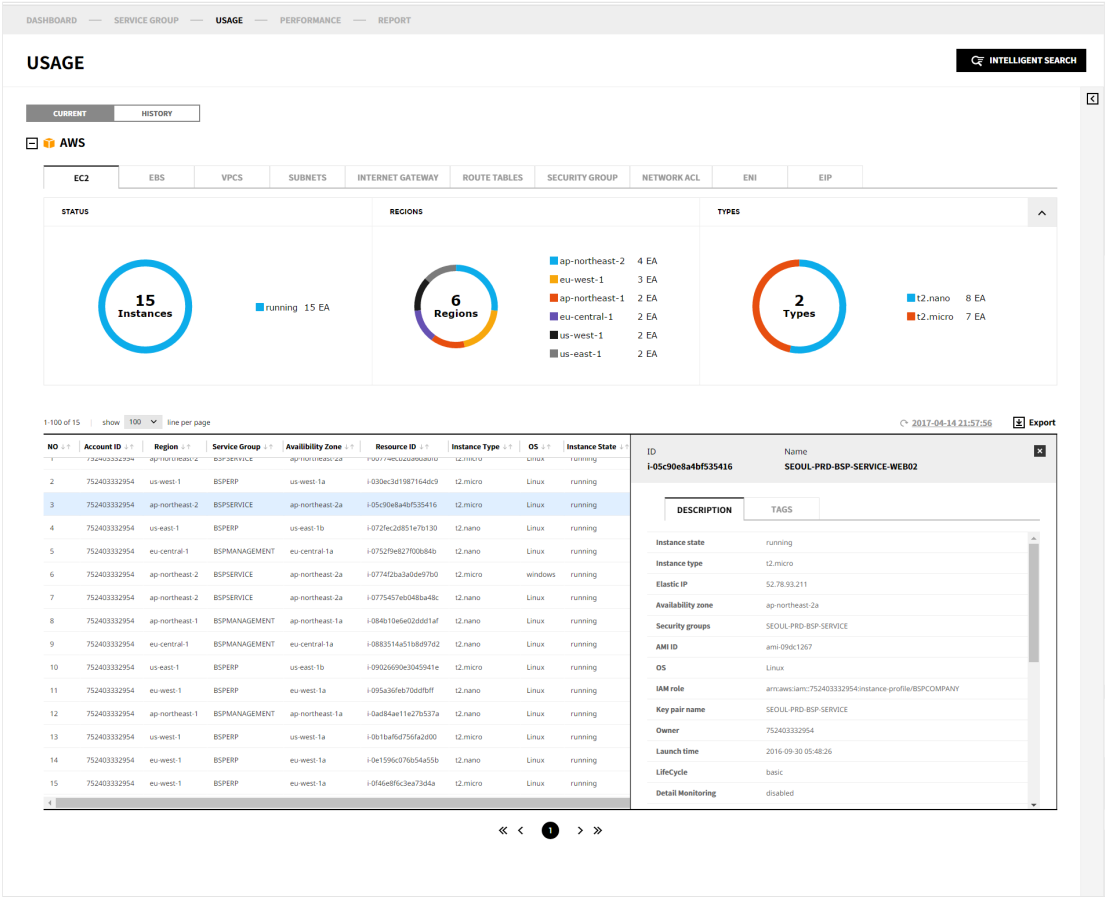
Asset Management > Usage

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### 1. Current

Asset Management > Usage > **Current**

You can check resource usage status per Vendor.



Provides the pie chart of Status, Region and Type respectively for the resources listed below.  
In addition, you can check the list of resources in use and also details about each resource on the list.

Amazon Web Service

You can check usage status of AWS resources listed below.

AMIs Auto Scailing Groups Auto Scailing Instances EBS EC2 EIP Internet Gateways Lamda

Launch Configurations Load Balancer Network ACLs Network Interface RDS Route Tables S3

Security Groups Snapshot Subnets VPC

Microsoft Azure

You can check usage status of Azure resources listed below.

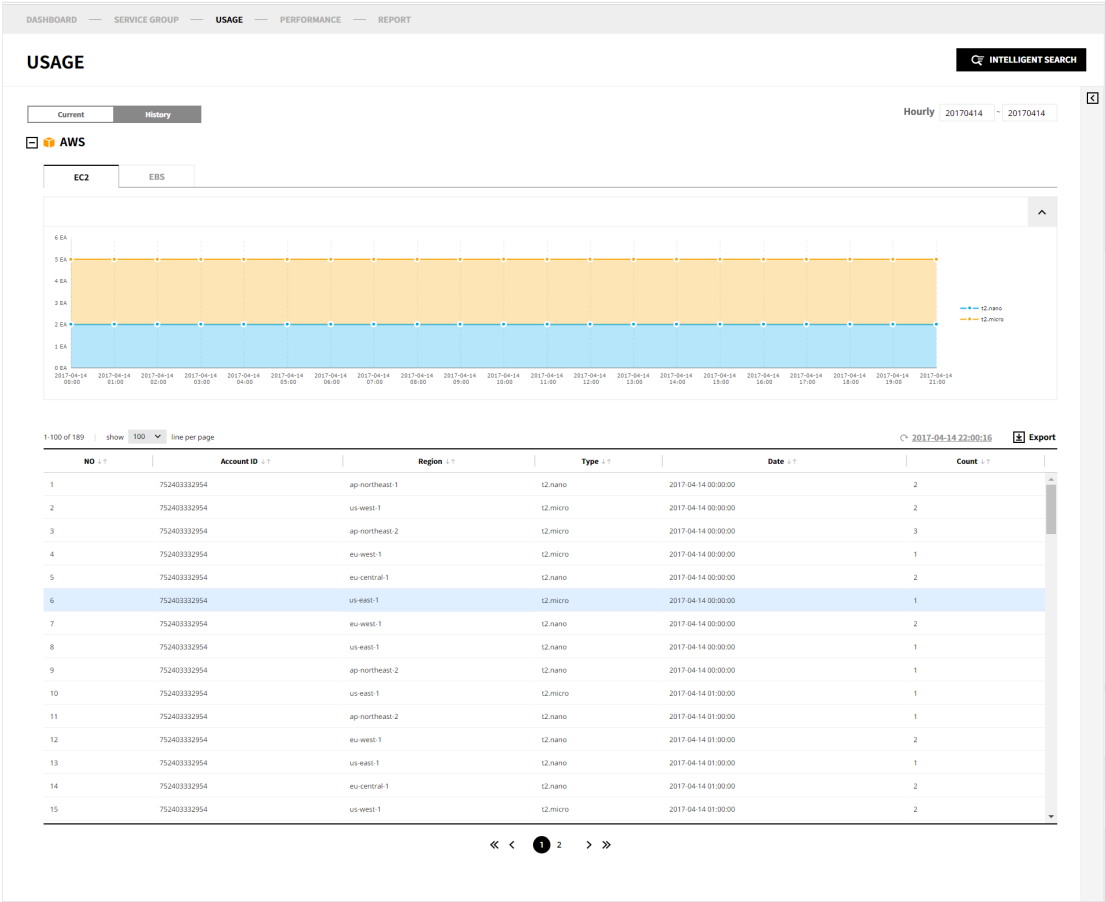
CDN Cloud Service Database Virtual Network Gateway Network Security Group Storage

Virtual Network Subnet Traffic Manager Virtual Network Virtual Machine

2. History

Asset Management > Usage > History

You can check history of resource usage per Vendor.



Provides trend chart of usage history of the resources listed below on an hourly/daily/monthly basis. Also provides details about each resource on the list.

Amazon Web Service

You can check usage history of AWS resources listed below.

EC2

EBS

RDS

Microsoft Azure

You can check usage history of Azure resources listed below.

Database

Storage

Virtual Machine

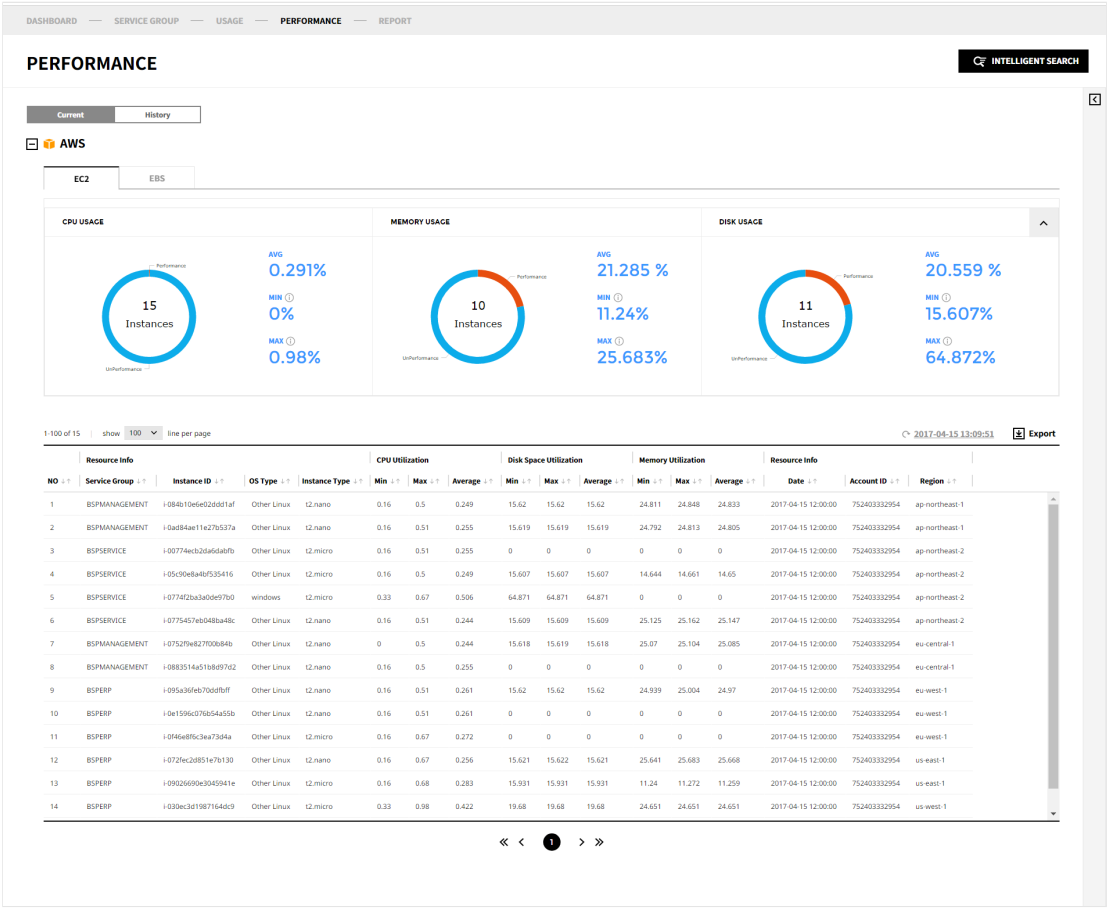
Performance

You can check current status and history for Performance of resources in use.  
Asset Management > Performance

1. Current

Asset Management > Performance > Current

You can check Performance status of resources in use.



Amazon Web Service

You can check Performance status of AWS resources listed below.

Resources	Items	Remarks
EC2	Resource Info	
	CPU Utilization (%)	Min, Max, Avg
	Memory Utilization (%)	Min, Max, Avg
	Disk Space Utilization (%)	Min, Max, Avg
EBS	Resource Info	
	VolumeQueue Length (EA)	Min, Max, Avg
	VolumeRead IOPS (EA)	Min, Max, Avg
	VolumeWrite Bytes (MB)	Min, Max, Avg
RDS	VolumeWrite IOPS (EA)	Min, Max, Avg
	Resource Info	
	CPU Utilization (%)	Min, Max, Avg
	Freeable Memory (MB)	Min, Max, Avg
	Free Storage Space (MB)	Min, Max, Avg



S3	Read IOPS (EA)	Min, Max, Avg
	Write IOPS (EA)	Min, Max, Avg
	Resource Info	
	BucketSizeBytes	Min, Max, Avg
	NumberOfObjects	Min, Max, Avg

Microsoft Azure

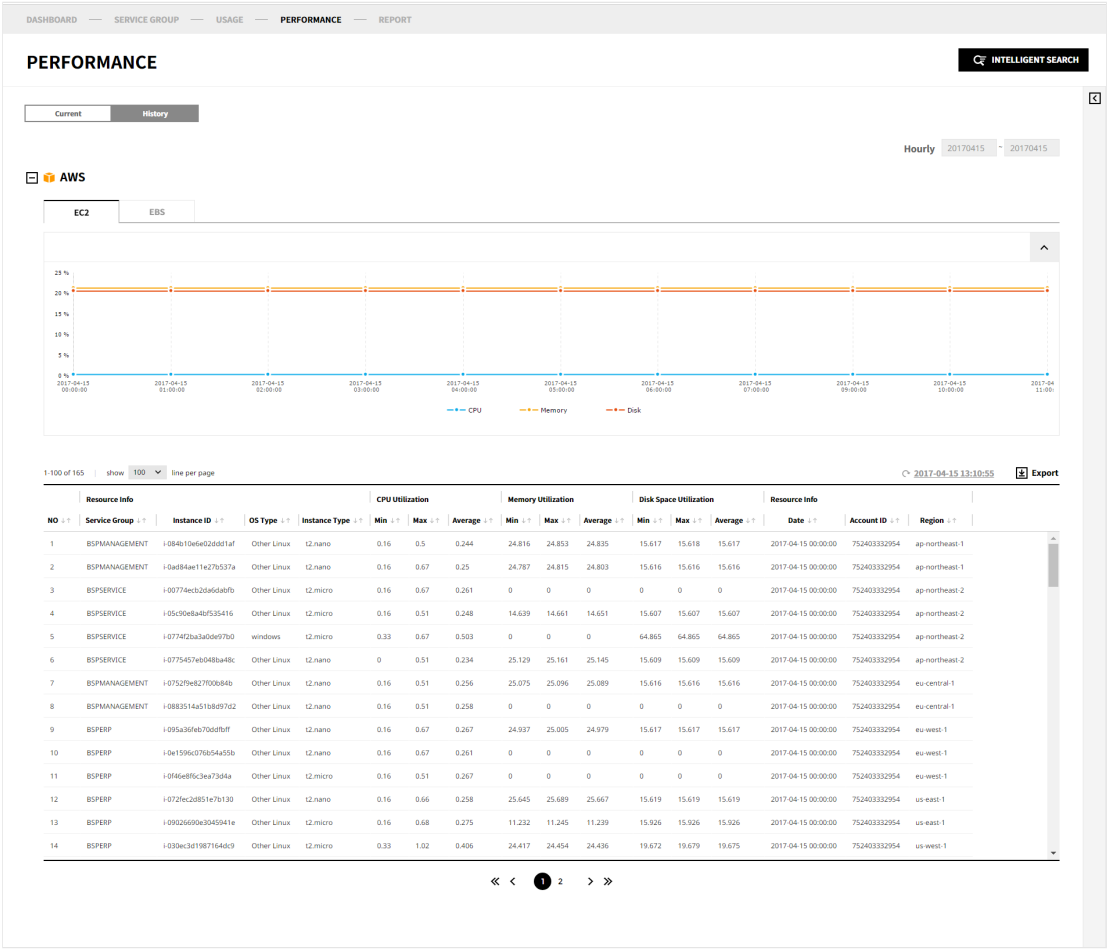
You can check Performance status of Azure resources listed below.

Resources	Items	Remarks
Virtual Machine	Resource Info	
	CPU Utilization (%)	Min, Max, Avg
	Memory Utilization (%)	Min, Max, Avg
	Disk Space Utilization (%)	Min, Max, Avg
SQL Database	Resource Info	
	CPU Utilization (%)	Min, Max, Avg
	Physical Data Read Percent (%)	Min, Max, Avg
	Connection Success (EA)	Min, Max, Avg
	Connection Fail (EA)	Min, Max, Avg
	DTU Consumption (%)	Min, Max, Avg
	DeadLock (EA)	Min, Max, Avg

2. History

Asset Management > Performance > History

You can check Performance history of resource for a certain period of time you set.



Amazon Web Service

You can check Performance history of AWS resources listed below.

Resources	Items	Remarks
EC2	Resource Info	
	CPU Utilization (%)	Min, Max, Avg
	Memory Utilization (%)	Min, Max, Avg
	Disk Space Utilization (%)	Min, Max, Avg
EBS	Resource Info	
	VolumeQueue Length (EA)	Min, Max, Avg
	VolumeRead IOPS (EA)	Min, Max, Avg
	VolumeWrite Bytes (MB)	Min, Max, Avg
RDS	Resource Info	
	CPU Utilization (%)	Min, Max, Avg
	Freeable Memory (MB)	Min, Max, Avg

	Free Storage Space (MB)	Min, Max, Avg
	Read IOPS (EA)	Min, Max, Avg
	Write IOPS (EA)	Min, Max, Avg
	Resource Info	
	BucketSizeBytes	Min, Max, Avg
	NumberOfObjects	Min, Max, Avg

### Microsoft Azure

You can check Performance history of Azure resources listed below.

Resources	Items	Remarks
Virtual Machine	Resource Info	
	CPU Utilization (%)	Min, Max, Avg
	Memory Utilization (%)	Min, Max, Avg
	Disk Space Utilization (%)	Min, Max, Avg
SQL Database	Resource Info	
	CPU Utilization (%)	Min, Max, Avg
	Physical Data Read Percent (%)	Min, Max, Avg
	Connection Success (EA)	Min, Max, Avg
	Connection Fail (EA)	Min, Max, Avg
	DTU Consumption (%)	Min, Max, Avg
	DeadLock (EA)	Min, Max, Avg

## Intelligent Search

Provides 'Intelligent Search' feature based on interrelation between resources in use.  
 Shows a list of all resources used for a certain period of time you set. You can use them as search conditions.  
 You can use Intelligent Search feature in Usage menu and Performance menu.  
 Asset Management > Usage > Intelligent Search Asset Management > Performance > Intelligent Search

### 1) Duration :

You can set a period of time you want to check history for.

In accordance with a period you set, available search conditions may change.

Resources used for a period you set will be automatically included in search conditions.

### 2) Search Conditions :

Vendor, Account, Product, Service Group and Tag will be shown as search conditions.

According to a period you set, available search conditions may change considerably.

If you select search conditions, search conditions related to the selected condition only become available to be selected.

After selecting the duration and search conditions, click [Apply] button and search results of the duration and conditions you selected will be shown.

## Report

Provides Report Templates. You can also download Reports which have made.

Asset Management > Report

## 1. Report Template

Provides three types of Report Templates listed below.

Summary

Usage

Performance

If you click each Report Template, the menu listed below appears on the right side.

### 1) Report Info :

As you set a period and select file format of a Report, you can download a Report accordingly.

.xls and .pdf formats are available for download.

2) Log :

Shows download history of Reports created with the selected Report Template.  
You can download created Reports again.