



## 跨帐户和跨区域配置 Cloud Backup

NetApp  
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# 跨帐户和跨区域配置

这些主题介绍如何在使用不同的云提供商时为跨帐户配置配置 Cloud Backup 。

- ["在 AWS 中配置 Cloud Backup 以实现多帐户访问"](#)
- ["在 Azure 中配置 Cloud Backup 以实现多帐户访问"](#)

## 在 **AWS** 中为多帐户访问配置备份

通过 Cloud Backup ，您可以在与源 Cloud Volumes ONTAP 卷所在位置不同的 AWS 帐户中创建备份文件。这两个帐户都可以与 Cloud Manager Connector 所在的帐户不同。

只有在您使用时，才需要执行这些步骤 ["将 Cloud Volumes ONTAP 数据备份到 Amazon S3"](#)。

按照以下步骤以这种方式设置您的配置。

### 在帐户之间设置 **VPC** 对等关系

1. 登录到第二个帐户并创建对等连接：
  - a. 选择本地 VPC ：选择第二个帐户的 VPC 。
  - b. 选择其他 VPC ：输入第一个帐户的帐户 ID 。
  - c. 选择运行 Cloud Manager Connector 的区域。在此测试设置中，两个帐户都在同一区域运行。
  - d. VPC ID ：登录到第一个帐户并输入接收者 VPC ID 。这是 Cloud Manager Connector 的 VPC ID 。

aws Services ▾

Peering Connections > Create Peering Connection

## Create Peering Connection

Peering connection name tag  ⓘ

Select a local VPC to peer with

VPC (Requester)\*  ↕ ↻

CIDRs	CIDR	Status	Status Reason
	10.0.0.0/16	● associated	

Select another VPC to peer with

Account ☐ My account ☒ Another account

Account ID\*

Region ☒ This region (us-east-1) ☐ Another Region

VPC ID (Accepter)\*

此时将显示成功对话框。

**Success**

A VPC peering connection (pcx-049758069d9b7c140) has been requested.  
The owner of **vpc-116d9174** must accept the peering connection.

<b>Requester VPC owner</b>	733004784675 (This account)	<b>Accepter VPC owner</b>	464262061435
<b>Requester VPC ID</b>	vpc-82f55afa	<b>Accepter VPC ID</b>	vpc-116d9174
<b>Requester VPC Region</b>	us-east-1	<b>Accepter VPC Region</b>	us-east-1
<b>Requester VPC CIDRs</b>	10.0.0.0/16	<b>Accepter VPC CIDRs</b>	-

对等连接的状态显示为待接受。

<input type="checkbox"/>	Name	Peering Connection	Status	Requester VPC	Accepter VPC	Requester CIDRs	Accepter CIDRs	Requester Owner	Accepter Owner
<input checked="" type="checkbox"/>	cbs-multi-ac...	pcx-049758069d9b7c140	<span style="border: 2px solid red; border-radius: 50%; padding: 2px;">Pending Acceptance</span>	vpc-82f55afa   VP...	vpc-116d9174	10.0.0.0/16	-	733004784675	464262061435
<input type="checkbox"/>	cbs-multi-peer	pcx-05f2d310cb7f...	Deleted	vpc-82f55afa   VP...	vpc-116d9174	-	-	733004784675	464262061435
<input type="checkbox"/>	New_Peering	pcx-6d55ca04	Active	vpc-b16c90d4   V...	vpc-fc2aa39a   De...	172.31.0.0/16	192.168.0.0/16	733004784675	733004784675

2. 登录到第一个帐户并接受对等请求：

Create Peering Connection		Actions							
Filter by tags and attributes		<div> <div>Accept Request</div> <div>Reject Request</div> <div>Delete VPC Peering Connection</div> <div>Edit ClassicLink Settings</div> <div>Edit DNS Settings</div> <div>Add/Edit Tags</div> </div>							
<input type="checkbox"/>	Name	Peering Connection	Status	Requester VPC	Accepter VPC	Requester CIDRs	Accepter CIDRs	Requester Owner	Accepter Owner
<input type="checkbox"/>			Active	vpc-0647747d   M...	vpc-116d9174	10.2.0.0/24	172.31.0.0/16	464262061435	464262061435
<input type="checkbox"/>	estycvoconnect		Active	vpc-116d9174	vpc-445d4f21	172.31.0.0/16	10.129.0.0/20	464262061435	759995470648
<input checked="" type="checkbox"/>		pcx-049758069d9b7c140	Pending Acceptance	vpc-82f55afa	vpc-116d9174	10.0.0.0/16	-	733004784675	464262061435
<input type="checkbox"/>	hlll-vpc-peer-chen	pcx-0d0e5c7fc4360254d	Active	vpc-0d12df59528f...	vpc-824dc0e4   nf...	10.0.0.0/24	10.20.30.0/24	464262061435	464262061435

Accept VPC Peering Connection Request

×

Are you sure you want to accept this VPC peering connection request (pcx-049758069d9b7c140)?

Requester Account ID

733004784675

Requester VPC ID

vpc-82f55afa

Requester VPC Region

us-east-1

Requester VPC CIDR

10.0.0.0/16

Accepter Account ID

464262061435 (This account)

Accepter VPC ID

vpc-116d9174

Accepter VPC Region

us-east-1

Accepter VPC CIDR

-

Cancel

Yes, Accept

a. 单击 \* 是 \*。

Accept VPC Peering Connection Request

×

Your VPC Peering Connection has been established.

To send and receive traffic across this VPC peering connection, you must add a route to the peered VPC in one or more of your VPC route tables. [Learn more](#)

[Modify my route tables now](#)

Close

此时，此连接将显示为 "Active"。我们还添加了一个名称标记来标识名为 CBS-Multi-account 的对等连接。

<input type="checkbox"/>	Name	Peering Connection	Status	Requester VPC	Accepter VPC	Requester CIDRs	Accepter CIDRs	Requester Owner	Accepter Owner
<input type="checkbox"/>		pcx-004715531514cb0d8	Active	vpc-0647747d   M...	vpc-116d9174	10.2.0.0/24	172.31.0.0/16	464262061435	464262061435
<input type="checkbox"/>	estycvoconnect	pcx-0305041f9cc2dfbdb	Active	vpc-116d9174	vpc-445d4f21	172.31.0.0/16	10.129.0.0/20	464262061435	759995470648
<input checked="" type="checkbox"/>	cbs-multi-account	pcx-049758069d9b7c140	Active	vpc-82f55afa	vpc-116d9174	10.0.0.0/16	172.31.0.0/16	733004784675	464262061435
<input type="checkbox"/>	hill-vpc-peer-chen	pcx-0d0e5c7fc4360254d	Active	vpc-0d12df59528f...	vpc-824dc0e4   nf...	10.0.0.0/24	10.20.30.0/24	464262061435	464262061435

a. 刷新第二个帐户中的对等连接，并注意状态将更改为 "Active"。

<input type="checkbox"/>	Name	Peering Connection	Status	Requester VPC	Accepter VPC	Requester CIDRs	Accepter CIDRs	Requester Owner	Accepter Owner
<input checked="" type="checkbox"/>	cbs-multi-account	pcx-049758069d9b7c140	Active	vpc-82f55afa   VP...	vpc-116d9174	10.0.0.0/16	172.31.0.0/16	733004784675	464262061435
<input type="checkbox"/>	New_Peering	pcx-6d55ca04	Active	vpc-b16c90d4   V...	vpc-fc2aa39a   De...	172.31.0.0/16	192.168.0.0/16	733004784675	733004784675

向两个帐户中的路由表添加路由

1. 转至 VPC > 子网 > 路由表。

VPC > Subnets > subnet-4d315328

## subnet-4d315328 / The Subnet created

**Details**

Subnet ID subnet-4d315328	State Available	VPC vpc-116d9174	IPv4 CIDR 172.31.64.0/20
Available IPv4 addresses 3587	IPv6 CIDR -	Availability Zone us-east-1a	Availability Zone ID use1-az1
Network border group us-east-1	Route table rtb-4da55528	Network ACL acl-c37384a6	Default subnet Yes
Auto-assign public IPv4 address Yes	Auto-assign IPv6 address No	Auto-assign customer-owned IPv4 address No	Customer-owned IPv4 pool -
Outpost ID -	Owner 464262061435	Subnet ARN arn:aws:ec2:us-east-1:464262061435:subnet/subnet-4d315328	

[Flow logs](#)
[Route table](#)
[Network ACL](#)
[Sharing](#)
[Tags](#)

2. 单击路由选项卡。

Route Table ID : rtb-4da55528 Add filter

Name	Route Table ID	Explicit subnet association	Edge associations	Main	VPC ID	Owner
rtb-4da55528	subnet-4d315328	-		Yes	vpc-116d9174	464262061435

Route Table: rtb-4da55528

[Summary](#)
[Routes](#)
[Subnet Associations](#)
[Edge Associations](#)
[Route Propagation](#)
[Tags](#)

[Edit routes](#)

View All routes

Destination	Target	Status	Propagated
172.31.0.0/16	local	active	No
pl-63a5400a	vpce-098587ed33c36408c	active	No

3. 单击 \* 编辑路由 \*。

## Edit routes

Destination	Target	Status	Propagated
172.31.0.0/16	local	active	No
10.20.30.0/24	pcx-0791b47f6f9a27d65	active	No
10.129.0.0/20	pcx-0305041f9cc2dfbdb	active	No

[Add route](#)

\* Required

[Cancel](#)
[Save routes](#)

4. 单击 \* 添加路由 \*，然后从目标下拉列表中选择 \* 对等连接 \*，然后选择您创建的对等连接。

a. 在目标中，输入另一帐户的子网 CIDR。

Edit routes

Destination	Target	Status	Propagated
172.31.0.0/16	local	active	No
10.20.30.0/24	pcx-0791b47f6f9a27d65	active	No
10.129.0.0/20	pcx-0305041f9cc2dfbdb	active	No
10.0.0.0/24	pcx-		No

Add route

\* Required

pcx-05f2d310cb7f49843  
pcx-004715531514cb0d8  
pcx-049758069d9b7c140  
pcx-094f9fdb10a2045ea  
pcx-0791b47f6f9a27d65  
pcx-0305041f9cc2dfbdb

cbs-multi-account  
hill-peer-vadim-vpc  
estycvoconnect

Cancel
Save routes

b. 单击 \* 保存路由 \* ，此时将显示一个成功对话框。

Route Tables > Edit routes

Edit routes

Routes successfully edited

Close

## 在 Cloud Manager 中添加第二个 AWS 帐户凭据

1. 添加第二个 AWS 帐户，例如 *Saran-XCP-Dev* 。

Credentials

+ Add Credentials

3 Credentials

aws
Instance Profile

Credential Type: AWS Keys

464262061435  
AWS Account ID

CBS-5R-OCCMOCCM1620912870830...  
IAM Role

aws-sub-a2  
Subscription

2  
Working Environments

aws
Saran-XCP-Dev

Credential Type: AWS Keys

733004784675  
AWS Account ID

AKIA2VKT5MQRZRAWW3HI  
AWS Access Key

aws-sub-a2  
Subscription

0  
Working Environments

2. 在发现 Cloud Volumes ONTAP 页面中，选择新添加的凭据。

Choose an AWS region and then select the working environment that you want to discover.

AWS Region

US East | N. Virginia

---

**aws** AWS Credentials

Credential Name

Saran-XCP-Dev | Account ID: 733004784675

Instance Profile | Account ID: 464262061435

To add new AWS credentials, go to the [Credentials settings](#).

Apply Cancel

- 选择要从第二个帐户发现的 Cloud Volumes ONTAP 系统。您也可以在第二个帐户中部署新的 Cloud Volumes ONTAP 系统。

Add an Existing Cloud Volumes ONTAP Region

↑ Previous Step This working environment will be created in Cloud Provider Account: **Saran-XCP-Dev** | Account ID: 733004784675 | [Switch Account](#)

Choose an AWS region and then select the working environment that you want to discover.

AWS Region

US East | N. Virginia

Cloud Volumes ONTAP instances found

Name	VPC Name	Availability Zone	Subnet Id	Cloud Formation Name	Cluster Address	Type
cbscv001	VPC-NAT	us-east-1f	subnet-68e8d464	cbscv001	10.0.0.80	Cloud Volumes ONTAP
testbyolliraz	VPC for VSA	us-east-1a	subnet-c1d99699	testbyolliraz	172.31.5.142	Cloud Volumes ONTAP
ldanAwsHa991001	VPC for VSA	us-east-1a	subnet-c1d99699	ldanAwsHa991001	172.31.5.234,172.31.5.110	HA Cloud Volumes ONTAP

Continue

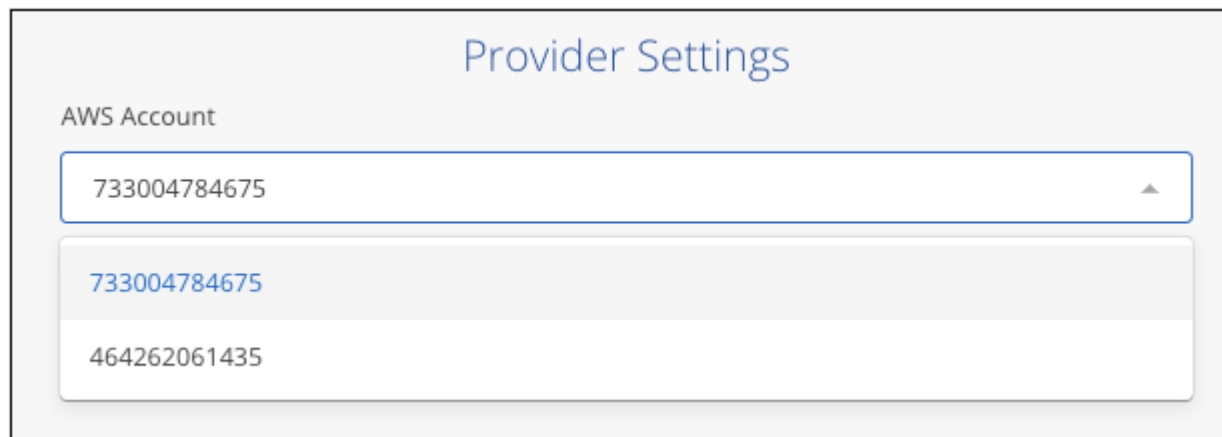
现在，第二个帐户中的 Cloud Volumes ONTAP 系统将添加到在其他帐户中运行的 Cloud Manager 中。





## 在其他 **AWS** 帐户中启用备份

1. 在 Cloud Manager 中，为第一个帐户中运行的 Cloud Volumes ONTAP 系统启用备份，但选择第二个帐户作为创建备份文件的位置。



2. 然后，选择一个备份策略以及要备份的卷，Cloud Backup 将尝试在选定帐户中创建一个新存储分段。

但是，将存储分段添加到 Cloud Volumes ONTAP 系统将失败，因为 Cloud Backup 使用实例配置文件添加存储分段，而 Cloud Manager 实例配置文件无法访问第二个帐户中的资源。

3. 获取 Cloud Volumes ONTAP 系统的工作环境 ID 。



Cloud Backup 会创建前缀为 `netapp-backup-` 的每个存储分段，并包含工作环境 ID；例如：87ULeAI0

- 在 EC2 门户中，转到 S3 并搜索名称以 87uLeAI0 结尾的分段，此时您将看到分段名称显示为 `NetApp-backup-vsa87uLeAI0`。



- 单击存储分段，然后单击权限选项卡，然后单击存储分段策略部分中的 \* 编辑 \*。



- 为新创建的存储分段添加存储分段策略，以访问 Cloud Manager 的 AWS 帐户，然后保存更改。

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "PublicRead",
      "Effect": "Allow",
      "Principal": {
        "AWS": "arn:aws:iam::464262061435:root"
      },
      "Action": [
        "s3:ListBucket",
        "s3:GetBucketLocation",
        "s3:GetObject",
        "s3:PutObject",
        "s3:DeleteObject"
      ],
      "Resource": [
        "arn:aws:s3:::netapp-backup-vsa87uleai0",
        "arn:aws:s3:::netapp-backup-vsa87uleai0/*"
      ]
    }
  ]
}
```

请注意，"AWS"："ARN：AWS：iam：：464262061435：root" 为帐户 464262061435 中的所有资源提供了此存储分段的完全访问权限。如果要策略缩减为特定角色，级别，则可以使用特定角色更新策略。如果要添加单个角色，请确保同时添加了 `occa` 角色，否则备份将不会在 Cloud Backup UI 中更新。

例如："AWS"："ARN：AWS：iam：：464262061435：role/cvo-instance-profile-version10-d8e-lamInstanceRole-ikjpJ1HC2E7R"

7. 请重试在 Cloud Volumes ONTAP 系统上启用云备份，此时应成功启用。

## 在 Azure 中配置用于多帐户访问的备份

通过 Cloud Backup，您可以在与源 Cloud Volumes ONTAP 卷所在位置不同的 Azure 帐户中创建备份文件。这两个帐户都可以与 Cloud Manager Connector 所在的帐户不同。

只有在您使用时，才需要执行这些步骤 ["将 Cloud Volumes ONTAP 数据备份到 Azure Blob 存储"](#)。

只需按照以下步骤以这种方式设置您的配置即可。

### 在帐户之间设置 vNet 对等关系

请注意，如果您希望 Cloud Manager 在其他帐户 / 区域管理您的 Cloud Volumes ONTAP 系统，则需要设置 vNet 对等关系。存储帐户连接不需要建立 vNet 对等关系。

1. 登录到 Azure 门户，然后从主页选择 Virtual Networks。
2. 选择要用作订阅 1 的订阅，然后单击要设置对等关系的 vNet。



3. 选择 \* cbsnetwork\*，然后从左侧面板中单击 \* 产品\*，然后单击 \* 添加\*。

Subscription \* ⓘ  
OCCM Automation

Virtual network \*  
cbse2evnet

Traffic to remote virtual network ⓘ  
☒ Allow (default)  
☐ Block all traffic to the remote virtual network

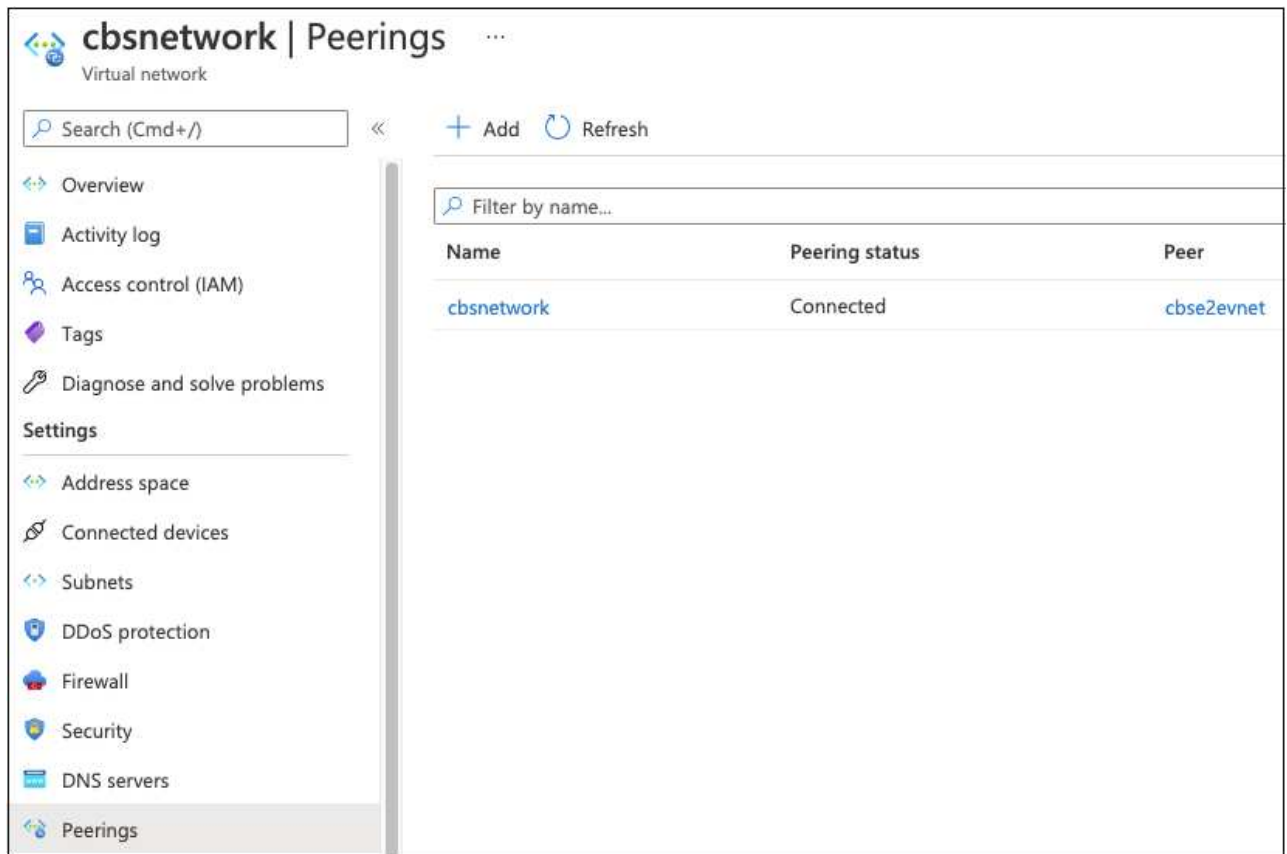
Traffic forwarded from remote virtual network ⓘ  
☒ Allow (default)  
☐ Block traffic that originates from outside this virtual network

Virtual network gateway or Route Server ⓘ  
☐ Use this virtual network's gateway or Route Server  
☐ Use the remote virtual network's gateway or Route Server  
☒ None (default)

Add

4. 在对等页面上输入以下信息，然后单击 \* 添加\*。
  - 此网络的对等链路名称：您可以提供任何名称来标识对等连接。
  - 远程虚拟网络对等链路名称：输入一个名称以标识远程 vNet。
  - 将所有选择保留为默认值。

- 在订阅下，选择订阅 2.
- 虚拟网络，请在订阅 2 中选择要设置对等关系的虚拟网络。



5. 在 subscription 2 vNet 中执行相同的步骤，并指定 subscription 1 的订阅和远程 vNet 详细信息。

Subscription \* ⓘ

OCCM Dev

Virtual network \*

cbsnetwork

Traffic to remote virtual network ⓘ

☒ Allow (default)
☐ Block all traffic to the remote virtual network

Traffic forwarded from remote virtual network ⓘ

☒ Allow (default)
☐ Block traffic that originates from outside this virtual network

Virtual network gateway or Route Server ⓘ

☐ Use this virtual network's gateway or Route Server
☐ Use the remote virtual network's gateway or Route Server
☒ None (default)

Add

此时将添加对等设置。



为存储帐户创建私有端点

现在，您需要为此存储帐户创建一个专用端点。在此示例中，存储帐户在订阅 1 中创建， Cloud Volumes ONTAP 系统在订阅 2 中运行。



要执行以下操作，您需要网络贡献者权限。

```

{
  "id": "/subscriptions/d333af45-0d07-4154-943dc25fbbce1b18/providers/Microsoft.Authorization/roleDefinitions/4d97b98b-1d4f-4787-a291-c67834d212e7",
  "properties": {
    "roleName": "Network Contributor",
    "description": "Lets you manage networks, but not access to them.",
    "assignableScopes": [
      "/"
    ],
    "permissions": [
      {
        "actions": [
          "Microsoft.Authorization/*/read",
          "Microsoft.Insights/alertRules/*",
          "Microsoft.Network/*",
          "Microsoft.ResourceHealth/availabilityStatuses/read",
          "Microsoft.Resources/deployments/*",
          "Microsoft.Resources/subscriptions/resourceGroups/read",
          "Microsoft.Support/*"
        ],
        "notActions": [],
        "dataActions": [],
        "notDataActions": []
      }
    ]
  }
}

```

1. 转到存储帐户 > 网络 > 专用端点连接，然后单击 \* + 专用端点 \*。



2. 在 Private Endpoint \_Basics 页面中:

- 选择订阅 2 （部署 Cloud Manager Connector 和 Cloud Volumes ONTAP 系统的位置）和资源组。
- 输入端点名称。
- 选择区域。

## Create a private endpoint

1 Basics 2 Resource 3 Configuration 4 Tags 5 Review + create

Use private endpoints to privately connect to a service or resource. Your private endpoint must be in the same region as your virtual network, but can be in a different region from the private link resource that you are connecting to. [Learn more](#)

**Project details**

Subscription \* ① OCCM Dev

Resource group \* ① cbsoccmdevcvo-rg [Create new](#)

**Instance details**

Name \* cbse2e ✓

Region \* (Asia Pacific) East Asia

3. 在 Resources 页面中，选择目标子资源为 \* BLOB \*。



## Create a private endpoint ...

✓ Basics **2 Resource** 3 Configuration 4 Tags 5 Review + create

Private Link offers options to create private endpoints for different Azure resources, like your private link service, a SQL server, or an Azure storage account. Select which resource you would like to connect to using this private endpoint. [Learn more](#)

Subscription OCCM Dev (d333af45-0d07-4154-943d-c25fbbce1b18)

Resource type Microsoft.Storage/storageAccounts

Resource test150521

Target sub-resource \* ⓘ blob

4. 在配置页面中：

- 选择虚拟网络和子网。
- 单击 \* 是 \* 单选按钮以 " 与专用 DNS 区域集成 "。

## Create a private endpoint ...

✓ Basics ✓ Resource **3 Configuration** 4 Tags 5 Review + create

### Networking

To deploy the private endpoint, select a virtual network subnet. [Learn more](#)

Virtual network \* ⓘ cbsnetwork

Subnet \* ⓘ default (10.2.0.0/24)

**i** If you have a network security group (NSG) enabled for the subnet above, it will be disabled for private endpoints on this subnet only. Other resources on the subnet will still have NSG enforcement.

### Private DNS integration

To connect privately with your private endpoint, you need a DNS record. We recommend that you integrate your private endpoint with a private DNS zone. You can also utilize your own DNS servers or create DNS records using the host files on your virtual machines. [Learn more](#)

Integrate with private DNS zone ☒ Yes ☐ No

Configuration name	Subscription	Private DNS zone
privatelink-blob-core-...	OCCM Dev	privatelink.blob.core.windows.net

**Review + create** < Previous Next : Tags >

5. 在专用 DNS 区域列表中，确保从正确的区域中选择了专用区域，然后单击 \* 查看 + 创建 \*。

Configuration name	Subscription	Private DNS zone
privatelink-blob-core-...	OCCM Dev	privatelink.blob.core.windows.net
		<div>Filter private DNS zones</div> <div> <div>occm_group_centralus</div> <div>privatelink.blob.core.windows.net</div> </div> <div> <div>occm_group_eastus</div> <div>privatelink.blob.core.windows.net</div> </div> <div> <div>occm_group_eastus2</div> <div>privatelink.blob.core.windows.net</div> </div>

现在，存储帐户（在订阅 1 中）可以访问在订阅 2 中运行的 Cloud Volumes ONTAP 系统。

6. 请重试在 Cloud Volumes ONTAP 系统上启用云备份，此时应成功启用。

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