Microsoft Azure or BYO-AZURE (Bring Your Own Azure Account)

This guide explains the Azure permissions and configuration required for customers who want to deploy Elestio services in their own Azure subscription. By connecting your Azure account, Elestio will create and manage resources directly in your Azure environment.

Prerequisites

Before connecting your Azure subscription to Elestio, ensure you have:

- An active Azure subscription
- **Global Administrator**, **Privileged Role Administrator**, or **Application Administrator** role in Azure AD
- **Contributor** role on the target Azure subscription (or ability to assign it)

Required Azure Permissions

Minimum Required Role

- **Role**: `Contributor`
- **Scope**: Subscription level

Why:
This role allows Elestio to create, manage, and delete resources in your subscription while preventing it from modifying access controls or role assignments.

Alternative: Custom Role (Advanced)

If your organization requires granular permissions, you can create a custom role with the following permissions:

```
{
  "Name": "Elestio Service Manager",
  "Description": "Custom role for Elestio to manage cloud resources",
```

```
  "Actions": [
    "Microsoft.Resources/subscriptions/resourceGroups/*",
    "Microsoft.Compute/virtualMachines/*",
    "Microsoft.Compute/disks/*",
    "Microsoft.Network/virtualNetworks/*",
    "Microsoft.Network/networkInterfaces/*",
    "Microsoft.Network/networkSecurityGroups/*",
    "Microsoft.Network/publicIPAddresses/*",
    "Microsoft.Storage/storageAccounts/*",
    "Microsoft.RecoveryServices/vaults/*",
    "Microsoft.RecoveryServices/register/action",
    "Microsoft.Authorization/locks/*"
  ],
  "NotActions": [],
  "AssignableScopes": [
    "/subscriptions/{your-subscription-id}"
  ]
}
```

What Resources Will Elestio Create?

When you deploy services through Elestio using your Azure subscription, the following resources are created:

Resource Type	Purpose
Resource Groups	Logical containers for all resources (`elestio-{region}`)
Virtual Machines	Compute instances for your applications
Managed Disks	OS and data storage for VMs
Virtual Networks	Network isolation
Network Interfaces	VM network connectivity
Public IP Addresses	IPv4 and IPv6 external access
Network Security Groups	Firewall rules
Storage Accounts	Backups and object storage
Recovery Services Vaults	Backup and disaster recovery
Resource Locks	Prevent accidental deletion

OAuth Scope Required

Elestio uses the following OAuth 2.0 scope:

```
https://management.azure.com/user_impersonation
```

This allows Elestio to act on your behalf via Azure Resource Manager.

Step-by-Step Setup Guide

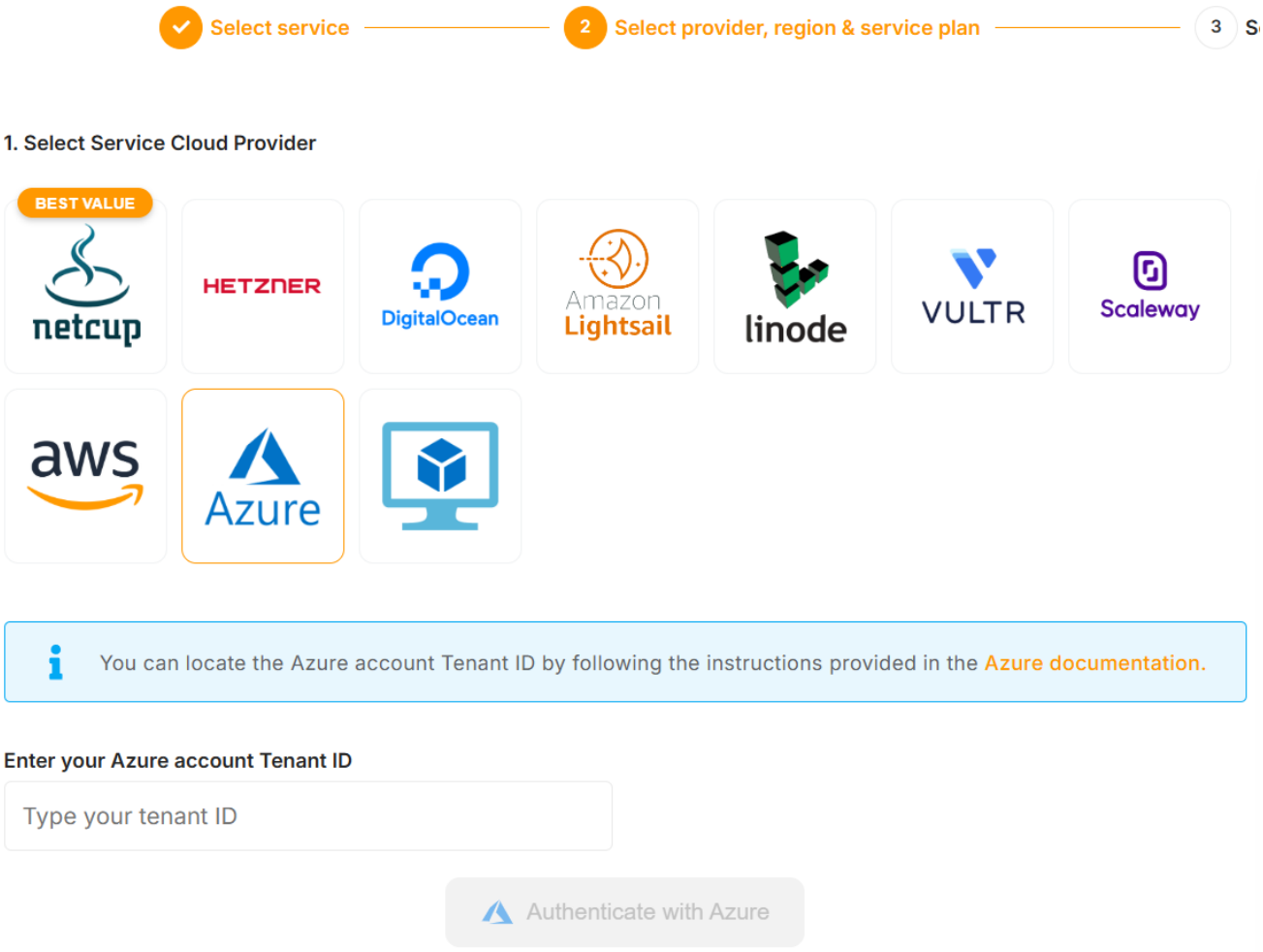
Step 1: Assign Contributor Role

1. Sign in to the **Azure Portal**
2. Go to **Subscriptions**
3. Select your subscription
4. Open **Access control (IAM)**
5. Click **+ Add** → **Add role assignment**
6. Select **Contributor**
7. Assign it to your user account
8. Click **Review + assign**

> You can assign the role in the Azure portal by following the steps outlined in the **Microsoft documentation.**

Verification:
Your account should appear under *Role assignments* with the **Contributor** role.

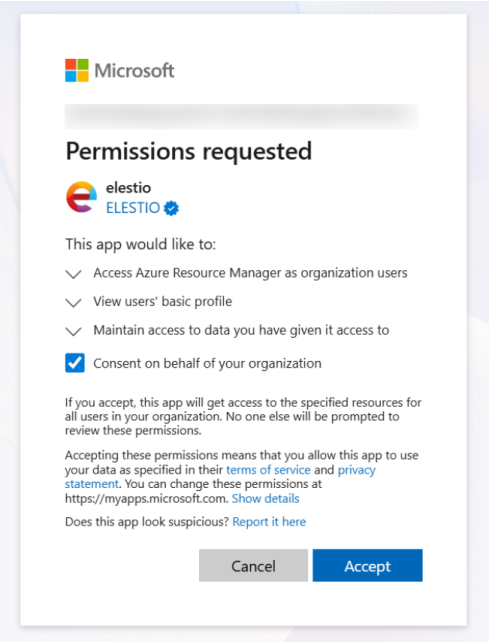
Step 2: Register Elestio Application in Azure AD



1. Log in to the Elestio dashboard
2. Select **Software** inside Services.
3. Go to **Cloud Providers → Azure**
4. Enter your **Azure Tenant ID** (see how to find it in the **Azure portal**)
5. Click **Authenticate with Azure**

You will be redirected to the Microsoft login page.

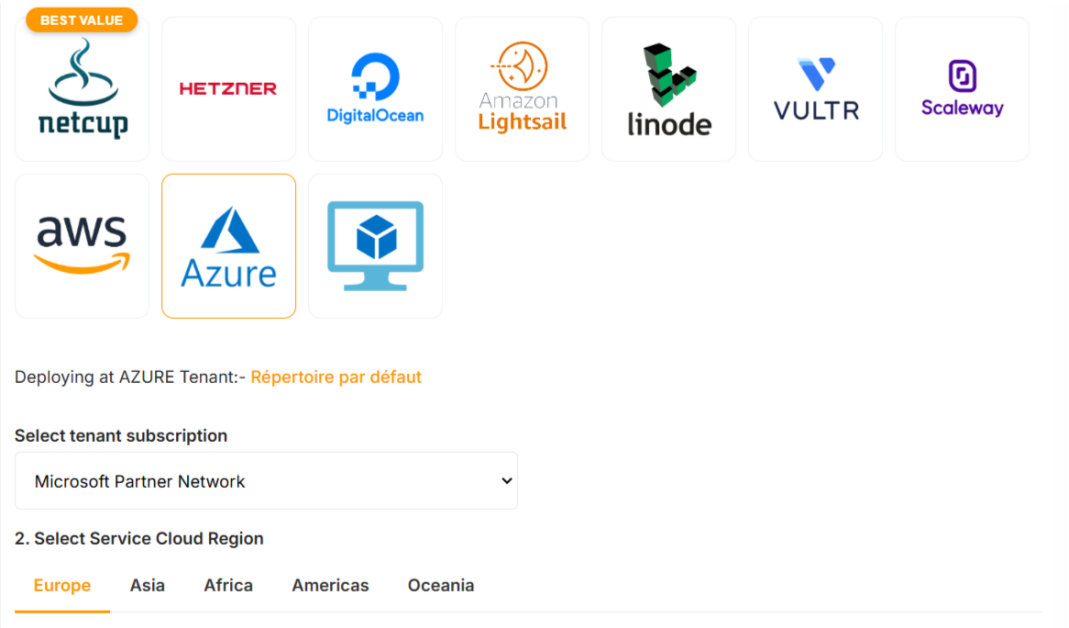
Step 3: Grant Admin Consent



1. Review requested permissions:
   - **Access Azure Service Management as you** (`user_impersonation`)
2. Sign in with an admin account if required
3. Click **Accept**

> **Note**: If you lack privileges, your Azure AD administrator must grant consent.

Step 4: Select Subscription



1. Return to the Elestio dashboard
2. Select the Azure subscription.

Your Azure account is now connected.

Security Best Practices

Use Dedicated Subscriptions

Recommended for production to ensure:

- Clear cost tracking
- Workload isolation
- Easier audits and compliance

Resource Naming Conventions

Resource	Pattern	Example
Resource Group	`elestio-{region}`	`elestio-eastus`
VM	`{service-name}`	`my-postgres-db`
Public IPv4	`{service-name}_ipv4`	`my-postgres-db_ipv4`
Public IPv6	`{service-name}_ipv6`	`my-postgres-db_ipv6`
Virtual Network	`elestio_{region}_vnet`	`elestio_eastus_vnet`
Backup Policy	`elestioBackup`	`elestioBackup`

Troubleshooting

Insufficient Permissions

Cause: Missing Contributor role
Fix:

- Assign Contributor at subscription level
- Wait 5–10 minutes for propagation

Admin Consent Required

Cause: Azure AD consent missing
Fix:

- Ask an admin to approve permissions

Provider Not Registered

Fix:

1. Subscriptions → Resource providers
2. Register `Microsoft.RecoveryServices`

Quota Exceeded

Fix:

- Check **Usage + quotas**
- Request an increase via Azure Support

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