i want to create a server in aws and i want to store database backup files using pg_backrest in the server directly, so explain clearly how to create a server and how to connect using ssh through windows not using putty and how to download pg_backrest and the backup process clealry i have postgresql, pgadmin 4 in my laptop

Here's a clear step-by-step guide for your request to create an AWS server, connect via SSH on Windows without PuTTY, install pgBackRest, and perform PostgreSQL backups:

1. Create a Server (EC2 Instance) on AWS

1. **Create AWS Account** (if you don't have one): Visit aws.amazon.com and register.
2. **Log into AWS Management Console** and open the **EC2 Dashboard**.
3. Click **Instances** on the sidebar, then click **Launch instances**.
4. **Choose an Amazon Machine Image (AMI):**
    - For your PostgreSQL and pgBackRest setup, select an Ubuntu Server (e.g., Ubuntu 20.04 LTS or 22.04 LTS).
5. **Choose Instance Type:**
    - For testing/development, select `t2.micro` (free tier eligible). For production, choose based on your needs.
6. **Configure Instance Details:**
    - Default settings are mostly fine; ensure it's set to launch in a public subnet if you want internet access.
7. **Add Storage:**
    - Use default or increase disk size based on backup and database needs.
8. **Add Tags:** (Optional) Tag your instance for easy identification.
9. **Configure Security Group:**
    - Add rules to allow SSH access (port 22) from your IP.
    - Add any additional rules required for your app (e.g., HTTP/HTTPS ports).
10. **Review and Launch:**

- Confirm your settings and **Launch**.

11. **Create a key pair:**
    - Download the `.pem` key file (Save securely; you'll need it to connect via SSH).

2. Connect to Your AWS EC2 Server via SSH on Windows (Without PuTTY)

Windows 10/11 includes an OpenSSH client you can use directly in PowerShell or Command Prompt:

1. Open **PowerShell** or **Command Prompt**.
2. Change permissions of your `.pem` file to secure it:

```
icacls "C:\path\to\your-key.pem" /inheritance:r
icacls "C:\path\to\your-key.pem" /grant:r "%username%:R"
```

3. Connect using this SSH command:

```
ssh -i "C:\path\to\your-key.pem" ubuntu@<your-ec2-public-ip>
```

    - Replace `ubuntu` with your AMI's username (e.g., `ec2-user` for Amazon Linux, `ubuntu` for Ubuntu).
    - Replace `<your-ec2-public-ip>` with the EC2 instance's public IP address.
4. You should connect directly to the server terminal.

3. Install pgBackRest on Your AWS EC2 Server

Assuming Ubuntu:

1. Update package lists and install prerequisites:

```
sudo apt update
sudo apt install -y wget build-essential libxml2-dev libyaml-dev libssl-dev bzip2 lib
```

2. Download and compile pgBackRest (example for version 2.48):

```
wget https://github.com/pgbackrest/pgbackrest/archive/refs/tags/release/2.48.tar.gz
tar xzf 2.48.tar.gz
cd pgbackrest-2.48/src
./configure
make
sudo make install
```

3. Create the backup directory and set permissions:

```
sudo mkdir -p /var/lib/pgbackrest
sudo chown postgres:postgres /var/lib/pgbackrest
sudo chmod 750 /var/lib/pgbackrest
```

4. Configure pgBackRest and Backup PostgreSQL

1. Create `pgbackrest.conf` configuration file (default path: `/etc/pgbackrest/pgbackrest.conf`):

```
[global]
repo1-path=/var/lib/pgbackrest
repo1-retention-full=2
start-fast=y

[your-db]
pg1-path=/var/lib/postgresql/data  # Use your PostgreSQL data directory here
```

2. Adjust ownership and permissions of config files as required.
3. Test pgBackRest backup by running:

```
sudo -u postgres pgbackrest --stanza=your-db --log-level-console=info backup
```

4. To create a stanza (initialize backup configuration):

```
sudo -u postgres pgbackrest --stanza=your-db stanza-create
```

5. You can also use pgBackRest to restore backups if needed later.

Summary

- Create an AWS EC2 instance via the AWS Management Console (Ubuntu recommended).
- Connect using Windows built-in OpenSSH client with your `.pem` key.
- Install pgBackRest by downloading source and compiling it on your EC2 server.
- Configure `pgbackrest.conf` for your PostgreSQL database.
- Execute backup commands as the `postgres` user.

You already have PostgreSQL and pgAdmin 4 locally, so for backup you just need to ensure pgBackRest runs on the AWS server with proper config and access to the PostgreSQL data directory.

If you want, I can provide detailed commands/scripts for any of these steps. Just ask!

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1. https://docs.aws.amazon.com/transfer/latest/userguide/create-server-in-vpc.html
2. https://www.youtube.com/watch?v=zrTHgq7vBDw
3. https://docs.percona.com/postgresql/14/solutions/pgbackrest.html
4. https://pgbackrest.org/user-guide-rhel.html
5. https://runcloud.io/blog/aws
6. https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EC2_GetStarted.html

7. https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/CHAP_Tutorials.WebServerDB.CreateWebServer.html
8. https://aws.amazon.com/ec2/getting-started/
9. https://www.clickittech.com/cloud-services/how-to-create-a-server-on-aws/
10. https://www.nakivo.com/blog/creating-an-ssh-connection-with-amazon-ec2-instance-connect/
11. https://fluca1978.github.io/2023/10/23/pgbackrestAmazonLinux.html
12. https://access.crunchydata.com/documentation/pgbackrest/latest/user-guide-rhel/
13. https://www.youtube.com/watch?v=eemnMG83h3g