

1. Enable OpenSSH Server on Windows:

- Go to Settings > Apps > Optional features.
- Click Add a feature and search for OpenSSH Server.
- Install it if not already present.

2. Configure SSH Server and User Accounts:

- Create a dedicated user account (e.g., "gituser") on your Windows machine to host the repositories. This account will own the bare repositories and have SSH access.
- Ensure the OpenSSH SSH Server service is running. You can check this in the Services application (search for "Services"). Set its startup type to Automatic.
- Configure the sshd_config file (typically located at C:\ProgramData\ssh\sshd_config) to allow public key authentication and potentially restrict access to specific users or groups.

3. Generate SSH Keys:

- On the client machine (where you will be cloning and pushing), open the terminal.
- Generate an SSH key pair using:

```
ssh-keygen -t ed25519
```

4. Authorize Client SSH Keys on the Server:

- Copy the public key (id_ed25519.pub) from the client machine to the gituser's home directory on the Windows server.
- Create an .ssh folder within the gituser's home directory (e.g., C:\Users\gituser\.ssh).
- Create a file named authorized_keys within the .ssh folder.
- Paste the content of the client's public key (id_ed25519.pub) into the authorized_keys file.

5. Create a Bare Git Repository on the Server:

- Log in to the Windows server as the gituser.
- Navigate to the desired location for your repositories (e.g., C:\Repos).
- Create a new bare repository:

```
git init --bare myproject.git
```

6. Clone and Use the Repository from the Client:

- On your client machine, navigate to the directory where you want to clone the repository.
- Clone the bare repository using the SSH URL:

```
git clone ssh://gituser@<server_ip_address_or_hostname>/C:/Repos/myproject.git
```

(Adjust the path to your bare repository on the server.)

You can now use standard Git commands (pull, push, fetch) to interact with your repository over SSH.