

# DotNetAotHelper

2025-03-26

v1.1

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## How To Write Config File [Config檔填寫方式]

### Server

The IP address or hostname of a Linux machine with the .NET 8 SDK installed.

[含有 .NET 8 SDK的Linux主機IP位址或主機名稱]

- e.g., "192.168.1.2"

### Port

The SSH port of Linux machine, typically 22 .

[Linux 主機的 SSH port，通常為 22 ]

### Account

The username used to log in to Linux.

[用於登入Linux主機的帳號]

- e.g., "root"

### Password

The password used to log in to the Linux machine.

[用於登入Linux主機的密碼]

- e.g., "MyPassw0rd"
- If there is no password, enter an empty string "" .  
[若無密碼請填空字串 "" ]

### SolutionFolder

The local path of the solution (or project) to be compiled.

[欲編譯的方案(或專案)的本機位置]

- e.g., `"D:/Project/DotNetAotHelper"`
- Either an absolute or relative path can be used.  
[可填寫絕對路徑或相對路徑]

## RemoteFolder

The folder on the Linux machine where the solution (or project) will be compiled.

[欲編譯的方案(或專案)在Linux主機上的資料夾]

- e.g., `"/var/tmp/DotNetAotHelper"`
- Either an absolute or relative path can be used.  
[可填寫絕對路徑或相對路徑]

## ProjectFile

The relative path of the project file on the Linux machine (relative to `RemoteFolder` ).

[欲編譯的專案檔在Linux主機上的相對位置(相對於 `RemoteFolder` )]

- e.g., If the file is located at `/var/tmp/DotNetAotHelper/DNAHelper/Project.csproj` , set this value to `"DNAHelper/Project.csproj"` .  
[當檔案位於 `/var/tmp/DotNetAotHelper/DNAHelper/Project.csproj` 時，應填寫 `"DNAHelper/Project.csproj"` ]
- `null` means that all projects in `RemoteFolder` will be published.  
[ `null` 表示嘗試發佈 `RemoteFolder` 中的所有專案]
- If the solution contains multiple projects that can be published, explicitly specifying `ProjectFile` prevents unnecessary resource usage and ensures the correct output file is retrieved.  
[若該方案有多個專案可發佈時，應明確指定 `ProjectFile` 以免浪費資源發佈非必要專案，或導致最後取得錯誤檔案]

## DownloadFolder

The local path where the compiled AOT output will be stored.

[AOT編譯完成後，欲存放編譯結果的本機位置]

- e.g., `"D:/Project/DotNetAotHelper/Publish/linux-x64"`

## FileName

The name of the local file where the compiled executable will be saved.

[下載編譯完成的執行檔時，欲儲存的本機檔案名稱]

e.g., `"DNAHelper.elf"`

- `null` means the default filename will be used.

[ `null` 表示使用預設名稱 ]

## Publish

The name of the publish profile.

[發佈檔(PublishProfile)的名稱]

- e.g., If the publish profile file is `linux-x64.pubxml`, set this value to `"linux-x64"`.  
[當發佈檔為 `linux-x64.pubxml` 時，應填入 `"linux-x64"` ]
- `null` means no `pubxml` will be used, and the .NET SDK will determine the publishing method automatically.

[ `null` 表示不使用 `pubxml`，由.NET SDK自動判斷發佈方式 ]

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## Scenario (範例情境)

1. The user saves the following configuration as `sample_config.json`.

[使用者將下列範例Config內容存成 `sample_config.json` ]

```
{
  "Server": "192.168.1.2",
  "Port": 22,
  "Account": "root",
  "Password": "MyPassw0rd",
  "SolutionFolder": "D:/Project/DotNetAotHelper",
  "ProjectFile": "DNAHelper/Project.csproj",
  "RemoteFolder": "/var/tmp/DotNetAotHelper",
  "DownloadFolder": "D:/Project/DotNetAotHelper/Publish/linux-x64",
  "FileName": "DNAHelper.elf",
  "Publish": "linux-x64"
}
```

2. The user runs `DNAHelper sample_config.json`.

[使用者執行 `DNAHelper sample_config.json` ]

3. The software connects to `sftp://root@192.168.1.2:22`.

[軟體連線至 `sftp://root@192.168.1.2:22` ]

4. The software uploads the contents of `D:/Project/DotNetAotHelper` to `/var/tmp/DotNetAotHelper` on the Linux machine.

[軟體將 `D:/Project/DotNetAotHelper` 的資料夾內容上傳至 `/var/tmp/DotNetAotHelper` ]

5. The software executes `dotnet publish` targeting

`/var/tmp/DotNetAotHelper/DNAHelper/Project.csproj` , applying the `linux-x64.pubxml` publish profile.

[軟體進行 `dotnet publish` , 目標為 `/var/tmp/DotNetAotHelper/DNAHelper/Project.csproj` , 並套用發佈檔 `linux-x64.pubxml` ]

6. The software downloads the compiled output to

`D:/Project/DotNetAotHelper/Publish/linux-x64/DNAHelper.elf` .

[軟體將發佈結果下載到 `D:/Project/DotNetAotHelper/Publish/linux-x64/DNAHelper.elf` ]