

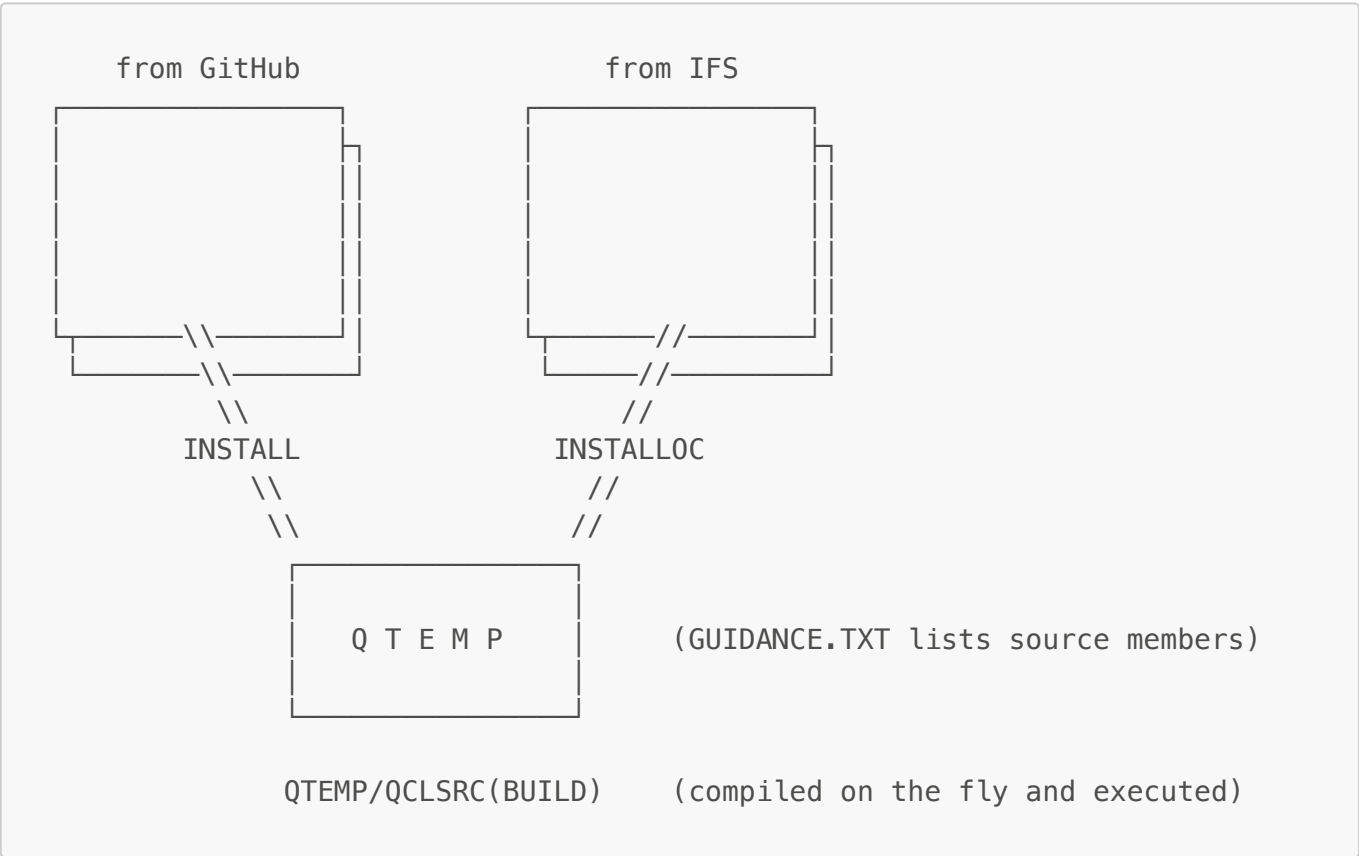
# PASERIE (V1R1M0)

## Utility for Source-Level Distribution in IBM i

This utility helps you maintain your IBM i source code on GitHub. Once available on a target system, the utility allows you to install your packages in a very simple way, directly accessing your repositories on GitHub or the repositories of other developers that authorized you.

The suite provides a total of three commands:

- For end users of a package:
  - **PASERIE/INSTALL** the main command focusing on the installation phase of an already developed and GitHub-released package.
- For developers:
  - **PASERIE/INSTALLOC** the command used in the development phase to test the installation of a package (planned to be released on GitHub or not) directly from a directory in the IFS.
  - **PASERIE/LIBCLONE** the command used to jump-start the packaging (consistently with PASERIE tools' conventions) from an existing native library.



## INSTALLATION

Let's first create an empty SAVEFILE named **QGPL/PASERIE**:

```
CRTSAVF FILE(QGPL/PASERIE) TEXT('Paserie Save File')
```

Then, from **CALL QP2TERM**, we verify that **curl** is installed:

```
$  
> PATH=/Q0penSys/pkgs/bin:$PATH  
$  
> export PATH  
$  
> which curl  
/Q0penSys/pkgs/bin/curl
```

Using curl, we download 2 archives:

```
curl -o Pase0ssFloating.tar  
https://www.andrearibuoli.it/paserie/Pase0ssFloating.tar
```

```
curl -o /QSYS.LIB/QGPL.LIB/PASERIE.FILE  
https://www.andrearibuoli.it/paserie/PASERIE.SAVF
```

From the home path of the user that will be using **PASERIE/INSTALL** we install **PaseOss** folder by untarring *PaseOssFloating* tar file:

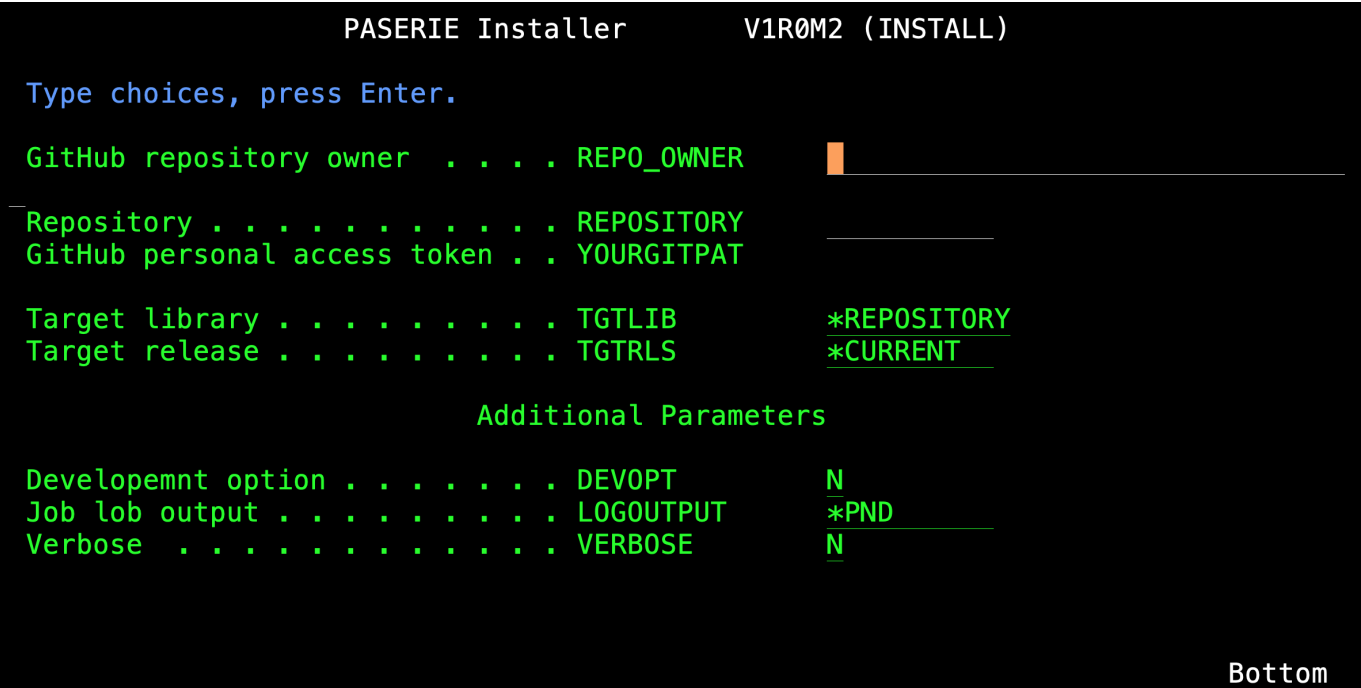
```
cd ~  
tar xvf Pase0ssFloating.tar
```

Now, after exiting from the QP2TERM session, we can perform the **RSTLIB** for PASERIE:

```
RSTLIB SAVLIB(PASERIE) DEV(*SAVF) SAVF(QGPL/PASERIE)
```


PARAMETERS FOR THE THREE COMMANDS WITH SCREEN SHOTS

KWD	INSTALL	INSTALLOC	LIBCLONE
REPO_OWNER	yes		
REPOSITORY	yes		
YOURGITPAT	yes		
SRCLIB			yes
LOCALPATH		yes	yes
TGTLIB	yes	yes	
TGTRLS	yes	yes	
DEVOPT	yes	yes	yes
LOGOUTPUT	yes	yes	yes
VERBOSE	yes	yes	yes



```
PASERIE Local Installer V1R0M2 (INSTALL0C)

Type choices, press Enter.

Project directory . . . . . 

Target library . . . . . *LOCAL_PATH Character value, *LOCAL_PATH
Target release . . . . . *CURRENT Character value, *CURRENT...


Additional Parameters

Developemnt option . . . . . N Character value
Job lob output . . . . . *PND Character value, *SAME...
Verbose . . . . . N Character value

Bottom
```

```
PASERIE Library Clone V1R0M2 (LIBCLONE)

Type choices, press Enter.

Source library . . . . . SRCLIB 
Target project directory . . . . LOCAL_PATH *SRCLIB

Additional Parameters

Developemnt option . . . . . DEVOPT N
Job lob output . . . . . LOGOUTPUT *PND
Verbose . . . . . VERBOSE N

Bottom
```

On a system based in Italy the commands will be compiled from localized source files:

```
PASERIE Clona Libreria V1R1M0 (LIBCLONE)

Immettere le scelte e premere Invio.

Libreria di sorgenti . . . . . Valore carattere
Directory del progetto . . . . . *SRCLIB

Parametri aggiuntivi

Opzione di sviluppo . . . . . N Valore carattere
Emissione registrazione lavoro . . . . . *PND Valore carattere, *SAME...
Verboso . . . . . N Valore carattere
```

```
PASERIE Installa locale V1R1M0 (INSTALLLOC)

Immettere le scelte e premere Invio.

Directory del progetto . . . . . █

Caricamento nella libreria . . . *LOCAL_PATH Valore carattere, *LOCAL_PATH
Rilascio di destinazione . . . . *CURRENT Valore carattere, *CURRENT...

Parametri aggiuntivi

Opzione di sviluppo . . . . . N Valore carattere
Emissione registrazione lavoro *PND Valore carattere, *SAME...
Verboso . . . . . N Valore carattere
```

```
PASERIE Clona Libreria V1R1M0 (LIBCLONE)

Immettere le scelte e premere Invio.

Libreria di sorgenti . . . . . Valore carattere
Directory del progetto . . . . . *SRCLIB

Parametri aggiuntivi

Opzione di sviluppo . . . . . N Valore carattere
Emissione registrazione lavoro *PND Valore carattere, *SAME...
Verboso . . . . . N Valore carattere
```

THE NAME

pastry ==> pâ-tis-se-rie ==> PASERIE

HINTS FOR DEVELOPERS

The minimum provision to enable PASERIE/INSTALL handling your "native" IBM i GitHub repository is:

- creating a file named GUIDANCE.TXT in the root of the repository and
- creating a directory named QCLSRC and a QCLSRC/BUILD.CLLE ILE CL source

The installer will use the token passed with YOURGITPDA (GitHub personal access token) to access GitHub APIs and download GUIDANCE.TXT in memory. The content is a list of member files that will be created in the QTEMP of the batch job. Once all files are transferred the job will attempt the compilation of QTEMP/QCLSRC(BUILD) member file into QTEMP/BUILD \*PGM. If successful, it will pass control to your build procedure.

The expected input parameters of a well-behaving QCLSRC/BUILD.CLLE are the following (in this order):

```
DCL VAR(&DEVOPT) TYPE(*CHAR) LEN(1)
DCL VAR(&TGTRLS) TYPE(*CHAR) LEN(10)
DCL VAR(&TGTLIB) TYPE(*CHAR) LEN(10)
```

that default to 'N', '\*CURRENT', and '\*PACKAGEN' if not set in PASERIE/INSTALL, or PASERIE/INSTALLLOC, corresponding parameters.

The PASERIE/LIBCLONE utility generates a directory with all the required PASERIE-related objects. It also introduces a dependency on the TMKMAKE utility (from QUSRT00L library). I have re-packaged it for a plain installation with PASERIE/INSTALL (please contact me if you need help in installing it: [andrea.ribuoli@yahoo.com](mailto:andrea.ribuoli@yahoo.com))

## HANDS ON

Let us take confidence with PASERIE/LIBCLONE.

First we create a new native library named **SIMPLE**:

```
CRTLIB LIB(SIMPLE)
```

Now we create a source file named **QCLSRC** with a member named **GREETINGS**:

```
CRTSRCPF FILE(SIMPLE/QCLSRC)
        MBR(GREETINGS)
        TEXT('Help me understand PASERIE tools')
```

Let us assign the CLLE SEU-type to our member file:

```
CHGPFM FILE(SIMPLE/QCLSRC) MBR(GREETINGS) SRCTYPE(CLLE)
```

Let us edit the source file:

```
EDTF FILE(SIMPLE/QCLSRC) MBR(GREETINGS)
```

and enter a simple CL source like:

```
Edit File: SIMPLE/QCLSRC(GREETINGS)
Record :      1      of      3 by 10
Control : _____

CMD ..+....2....+....3....+....4....+....5....+....6....
*****Beginning of data*****
PGM
SDNPGMSG MSG('Your first use of PASERIE/LIBCLONE')
ENDPGM
*****End of Data*****
```

Now we issue the following command:

PASERIE/LIBCLONE SRCLIB(SIMPLE)

We should receive:

```
Selection or command
===>

F3=Exit   F4=Prompt
F23=Set initial menu
LIBCLONE_B completed.
```

Now let us run **WRKLNK OBJ(SIMPLE)** and use option **5** to enter the directory. We should find:

Opt	Object link	Type	Attribute	Text
	GUIDANCE.TXT	STMF		
	QCLSRC	DIR		
	QMAKSRC	DIR		

The content of **GUIDANCE.TXT** will be:

```
*****Beginning of data*****
QCLSRC      GREETINGS      Help me understand PASERIE tools
QCLSRC      BUILD      CLLE      BUILD CLLE auto-generated
QMAKSRC      BUILD      TXT      BUILD Makefile auto-generated
*****End of Data*****
```

Inside **QCLSRC** directory you will find two source members:

Opt	Object link	Type
	BUILD.CLLE	STMF
	GREETINGS.CLLE	STMF

And there is also a **QMAKSRC** with a **BUILD** member.

Assuming you have a **TMKMAKE** library with a working **TMKMAKE** command you will be able to run successfully:

PASERIE/INSTALLOC LOCAL\_PATH(SIMPLE)

Now issuing **CALL PGM(SIMPLE/GREETINGS)** we will get:

```
Selection or command
===>
```

```
F3=Exit   F4=Prompt   F9=Retrieve  
F23=Set initial menu  
Your first use of PASERIE/LIBCLONE
```



# VERSIONS

**PASERIE** currently supports **IBM i PASE** from 7.2 to 7.5 but I am working on extending the coverage of previous versions to facilitate reuse of code originally developed on older versions of the operating system.

PASE	AIX	
7.5	7.2	TL5
7.4		TL2
7.3	7.1	TL4
7.2		TL1
7.1	6.1	TL2
6.1	5.3	TL6
5.4		ML3