

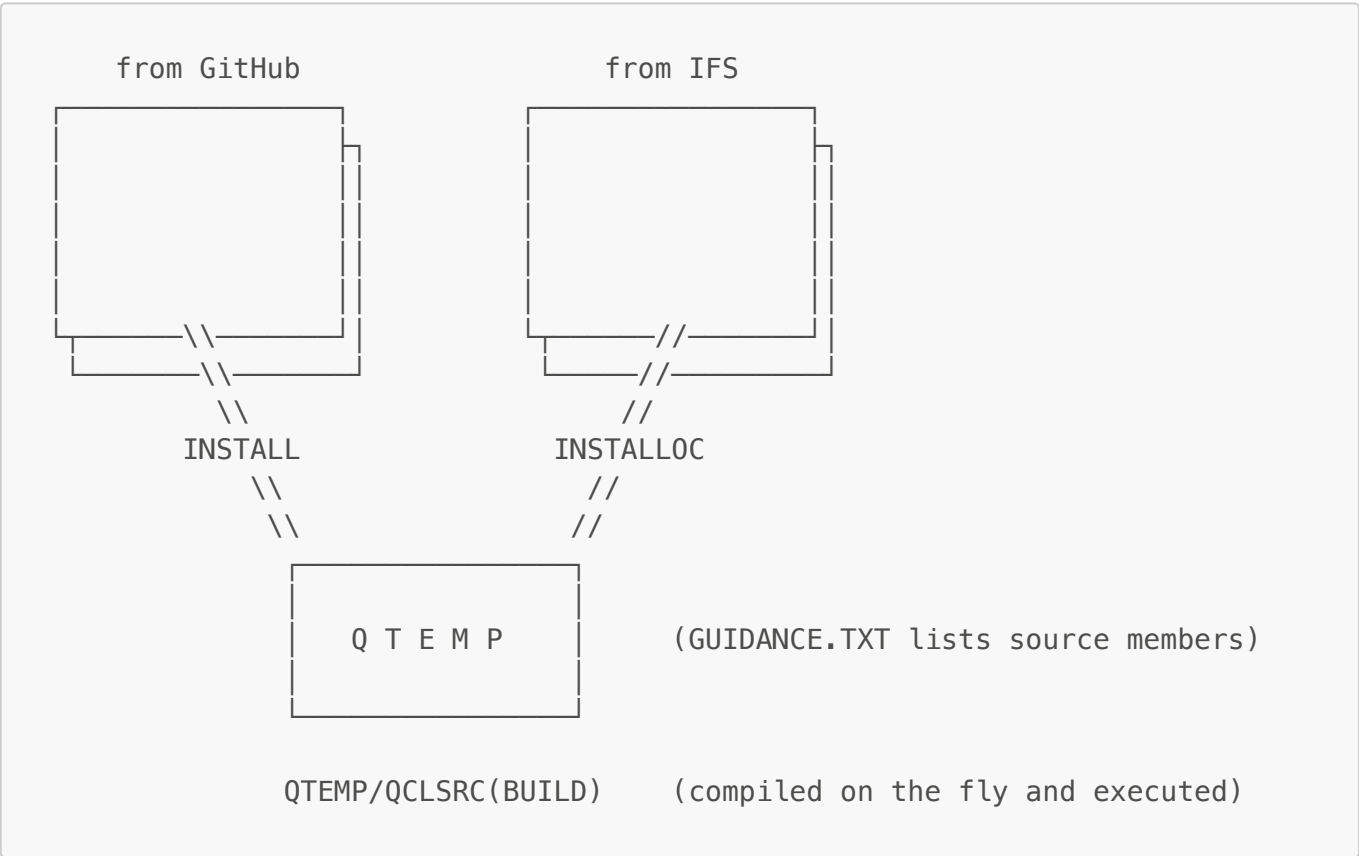
PASERIE (V1R1M0)

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 Installer          V1R0M2 (INSTALL)

Type choices, press Enter.

GitHub repository owner . . . . REPO_OWNER
Repository . . . . . REPOSITORY
GitHub personal access token . . YOURGITPAT

Target library . . . . . TGTLIB      *REPOSITORY
Target release . . . . . TGTRLS     *CURRENT

Additional Parameters

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

Bottom
```

Bottom

Bottom

```

PASERIE Clona Libreria  V1R1M0 (LIBCLONE)

Immettere le scelte e premere Invio.

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

Parametri aggiuntivi

Opzione di sviluppo . . . . .  N
Emissione registrazione lavoro  *PND
Verboso . . . . .  N

```

```
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)

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 CLLE      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.

IBM i 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

- **TR** *Technology Refresh (IBM i)*
 - **TL** *Technology Level (AIX)*
 - **ML** *Modification Level (AIX)*
- Note: Starting in 2006, as part of the new AIX 5L Service Strategy, **MLs** were replaced by **TLs***