

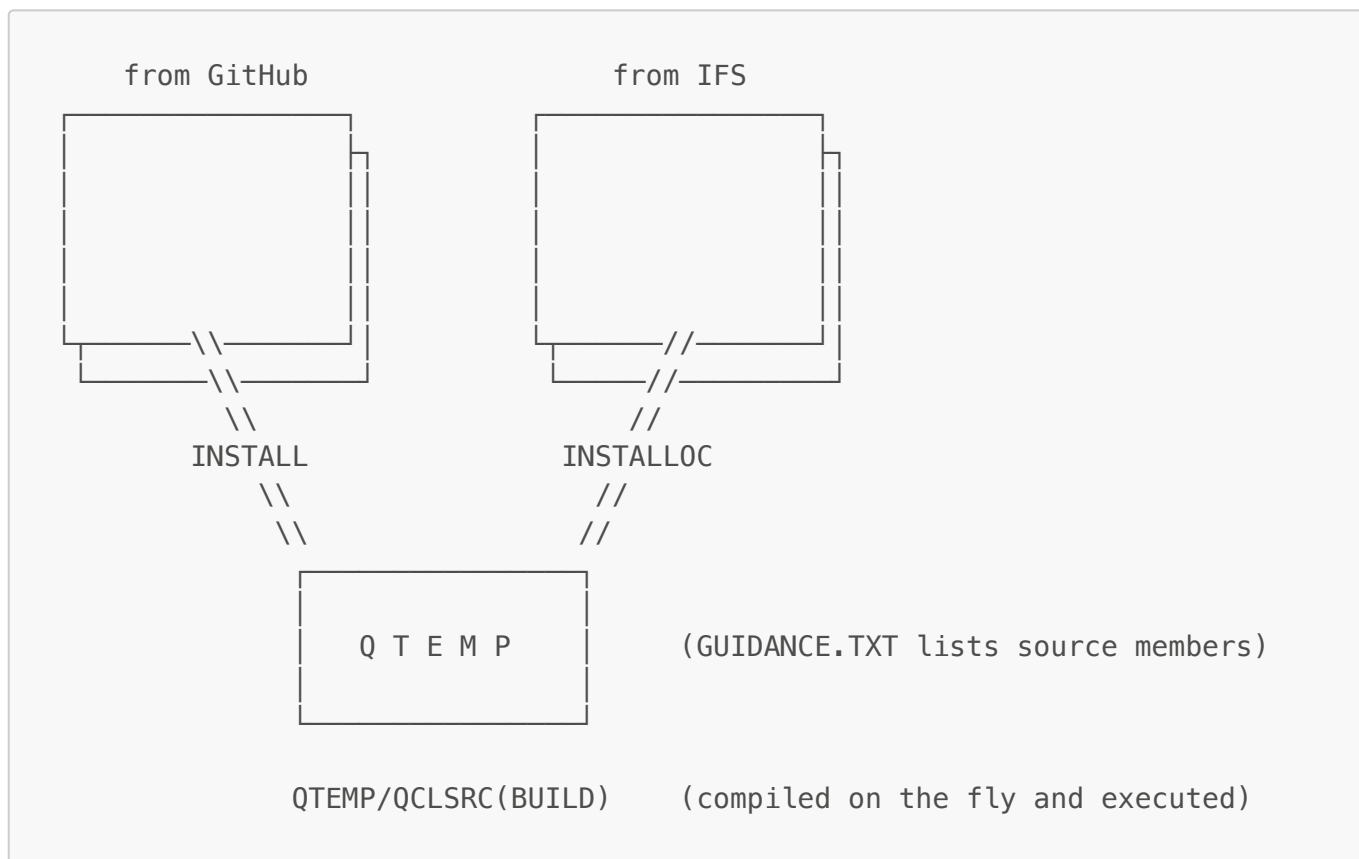
PASERIE (V1R1M0)

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/INSTALLOD** 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=/QOpenSys/pkgsrc/bin:$PATH
$
> export PATH
$
> which curl
/QOpenSys/pkgsrc/bin/curl
```

Using curl, we download 2 archives:

```
curl -o PaseOssFloating.tar
      https://www.andrearibuoli.it/paserie/PaseOssFloating.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 PaseOssFloating.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 | INSTALLOCC | LIBCLONE |
|------------|---------|------------|----------|
| REPO_OWNER | yes | | |
| REPOSITORY | yes | | |
| YOURGITPAT | yes | | |
| SRCLIB | | | yes |
| LOCALPATH | | yes | yes |
| TGTLIB | yes | yes | |

| KWD | INSTALL | INSTALLOC | LIBCLONE |
|-----------|---------|-----------|----------|
| 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
```

```

PASERIE Local Installer V1R0M2 (INSTALLOC)

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 Installatore      V1R1M0 (INSTALL)

Immettere le scelte e premere Invio.

Proprietario repo su GitHub . . > AndreaRibuoli
Repository . . . . . > PASERIE      Valore carattere
Token di accesso a GitHub . . . >

Caricamento nella libreria . . . *REPOSITORY  Valore carattere, *REPOSITORY
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 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 transfered 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')
```

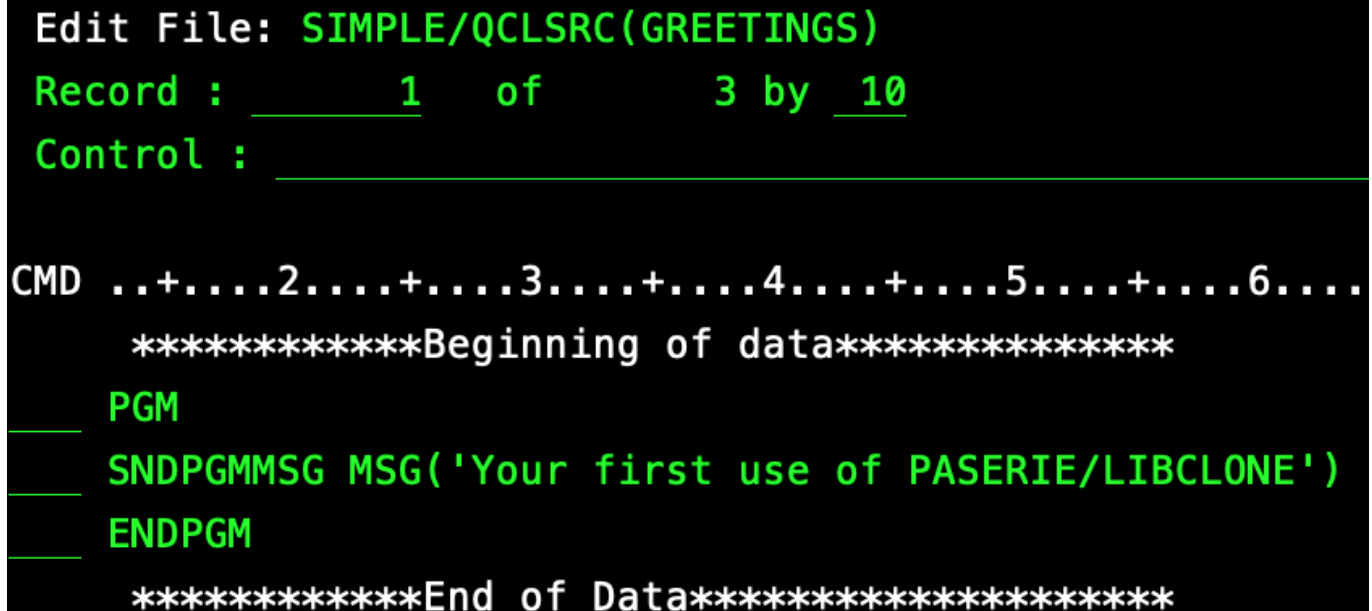
Let us assign the **CLLE** SEU-type to our member file:

```
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
SNDPGMMMSG 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
```