

Moving into git

For RPGLE, COBOL, CL, and more

Liam Allan - liama@ibm.com



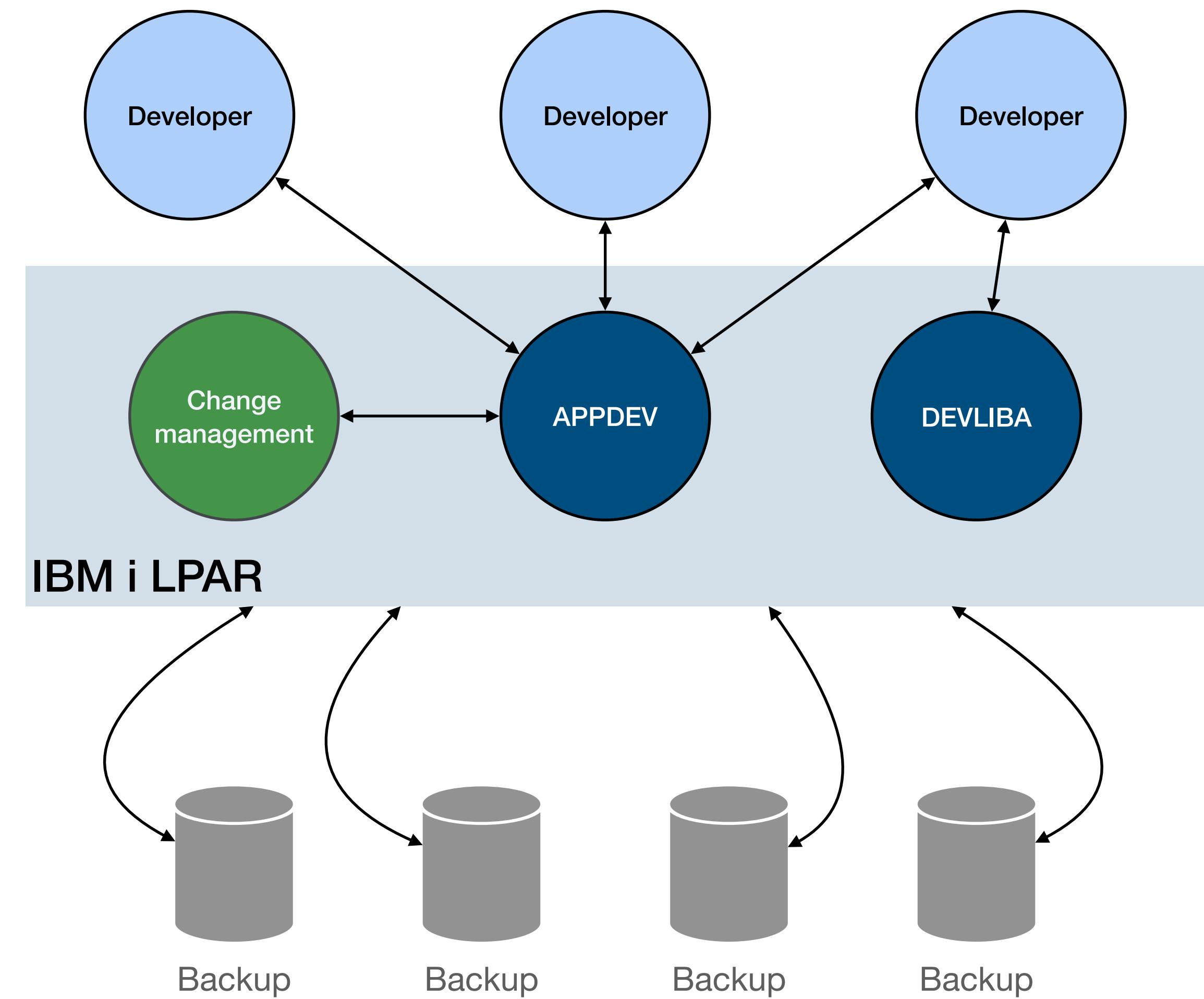
Abstract

- Moving source code
 - why?
 - out of source members
 - into git
 - metadata
- Git workflow
- Tools
 - Rational Developer for i
 - Visual Studio Code
- Compilers
 - source changes

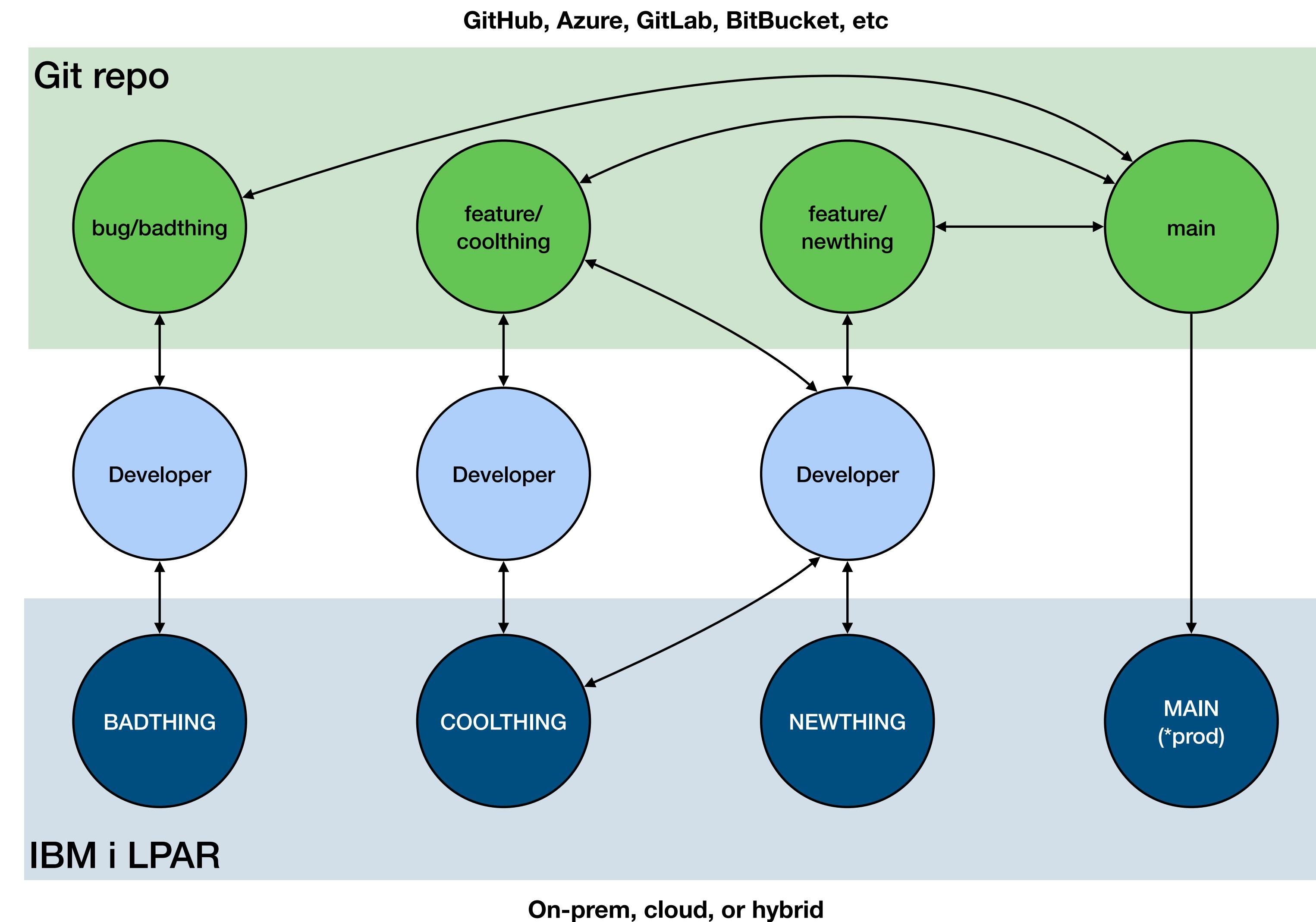
Why?

Moving source code

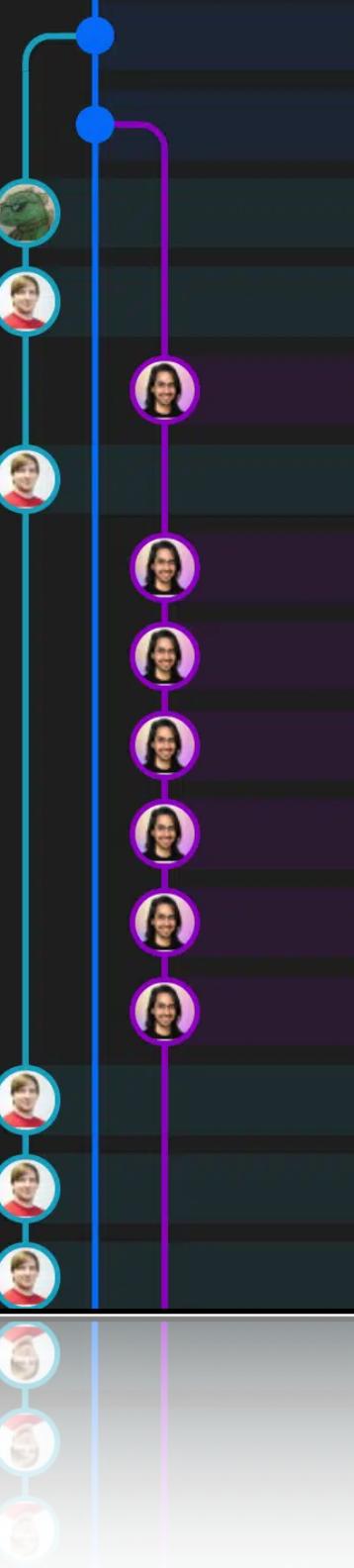
Lack of control



Concurrent development

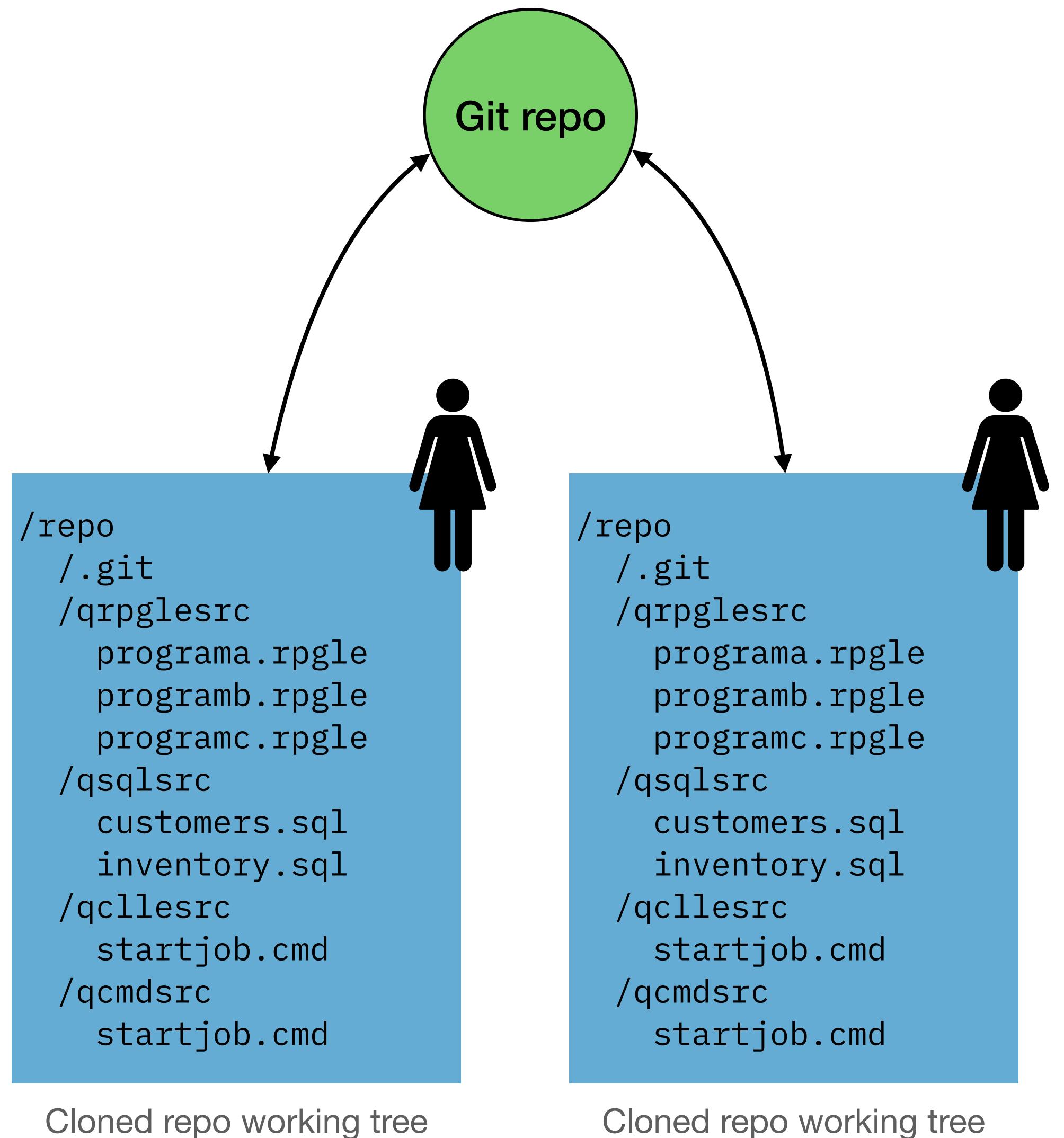


All change history

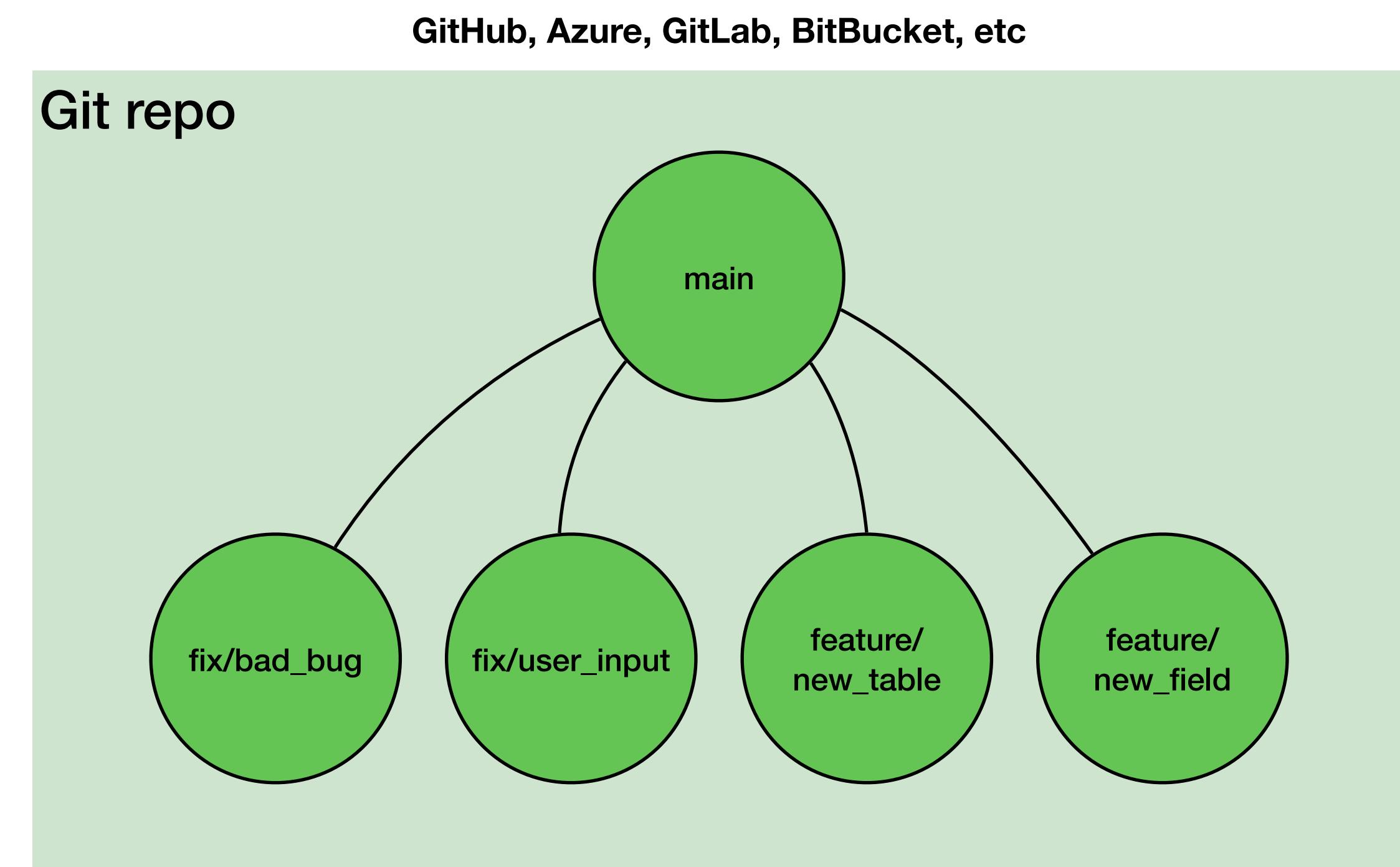
BRANCH / TAG	GRAPH	COMMIT MESSAGE	AUTHOR	COMMIT DATE / TIME	SHA
main		Fixed broken link additional changes Updating image URL for login page Spelling & grammar fixes from Tristan Updates directly to prod Merge pull request #52 from Axxzilla/Add-SO-docs@... into main Merge pull request #51 from jjsilva4/v8-8-1 into main	Melese Alex Alex Alex Alex Alex Latham Alex Latham	8/12/22, 1:32 PM 8/11/22, 9:27 AM 8/11/22, 9:17 AM 8/11/22, 8:39 AM 8/10/22, 4:27 PM 8/10/22, 3:12 PM 8/10/22, 3:12 PM	def... bf3... bff... a28... d74... bbc... a8c...
Add-SO-docs		Further edits/grammar/spelling fixes Updates Updated video link to remove Ping adding more SSO instructions Update the date Tweak a feature Simplify SSO definition Formatting General fixes First draft of v8.8 release notes for the Help Center Updating LFS homebrew and teams section more SSO, adding updates for other pages sso work for the day work for the day changes for other features in libpurple OSS from me ...other members from wednesday SFL purplebug	Alex Alex Jonathan Silva Alex Jonathan Silva Jonathan Silva Jonathan Silva Jonathan Silva Jonathan Silva Jonathan Silva Jonathan Silva Alex Alex Alex alexIA alexIA alexIA	8/10/22, 1:46 PM 8/9/22, 4:49 PM 8/9/22, 2:53 PM 8/9/22, 2:16 PM 8/8/22, 4:30 PM 8/5/22, 2:31 PM 8/5/22, 2:28 PM 8/5/22, 2:15 PM 8/5/22, 2:03 PM 8/5/22, 12:43 PM 8/3/22, 3:49 PM 8/3/22, 3:21 PM 8/2/22, 4:40 PM 8/1/22, 4:40 PM 8/1/22, 3:21 PM 8/1/22, 3:18 PM	266... d2f... 1b5... f23... 53c... a16... 106... 300... 377... c4b... 07b... 9e1... c52... c25... ...16... ...10...

Git concepts

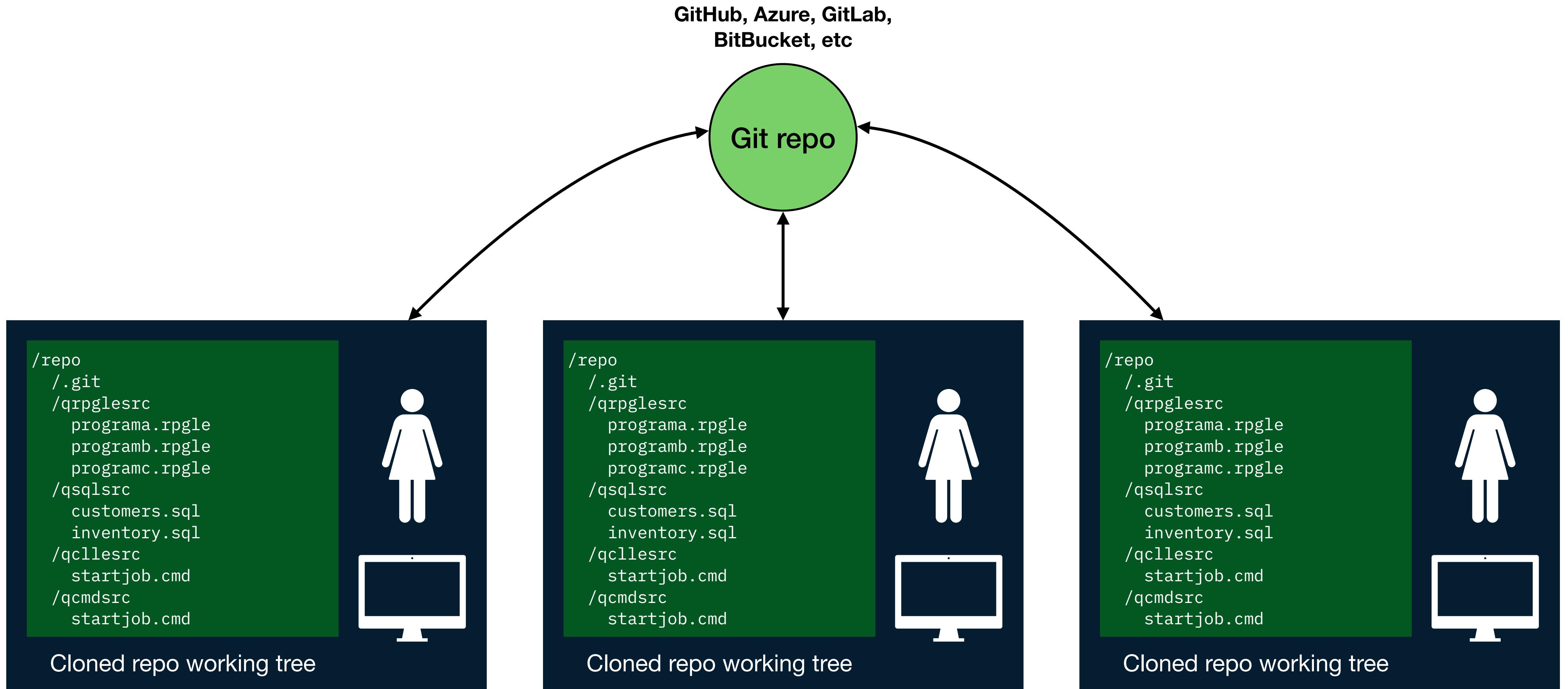
Distributed



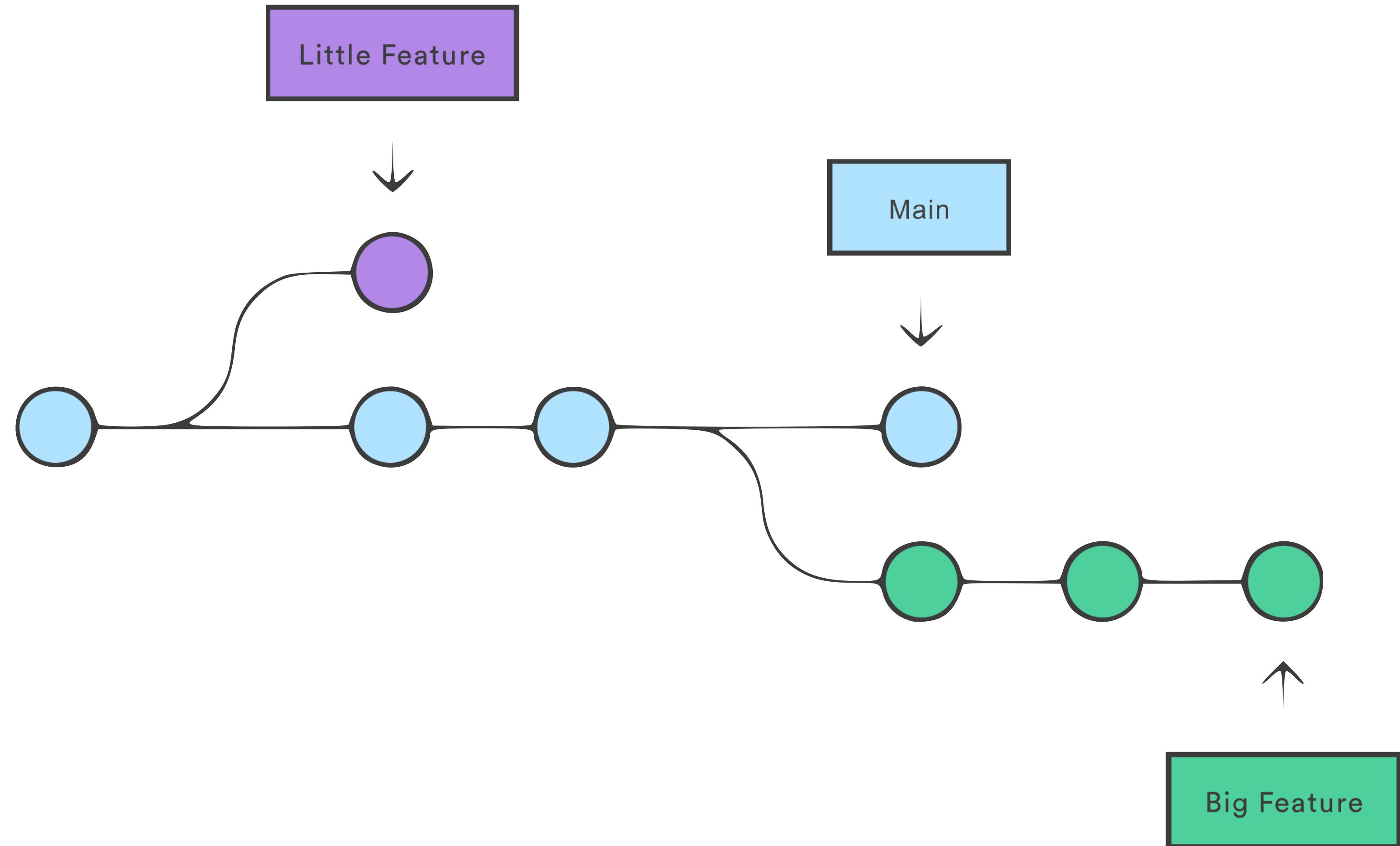
Branching



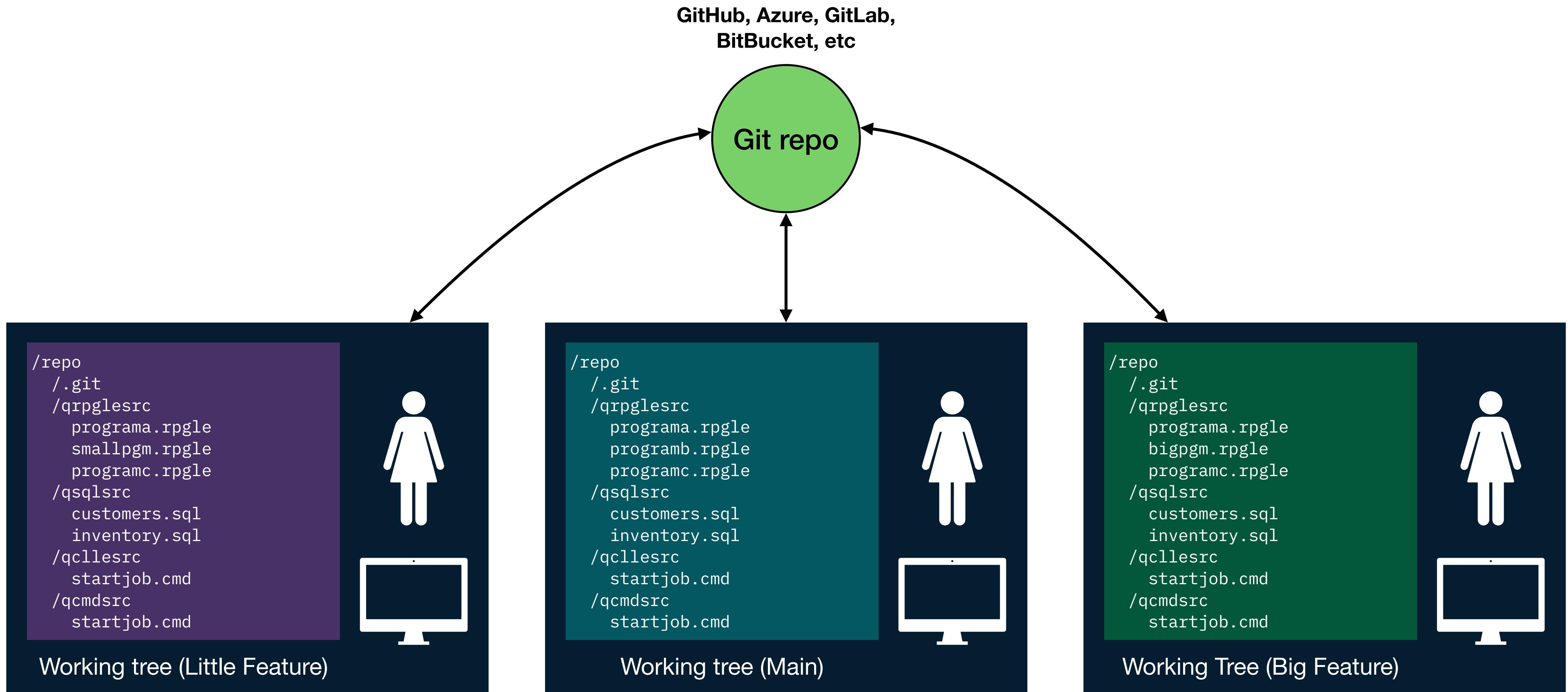
Distributed



Branching

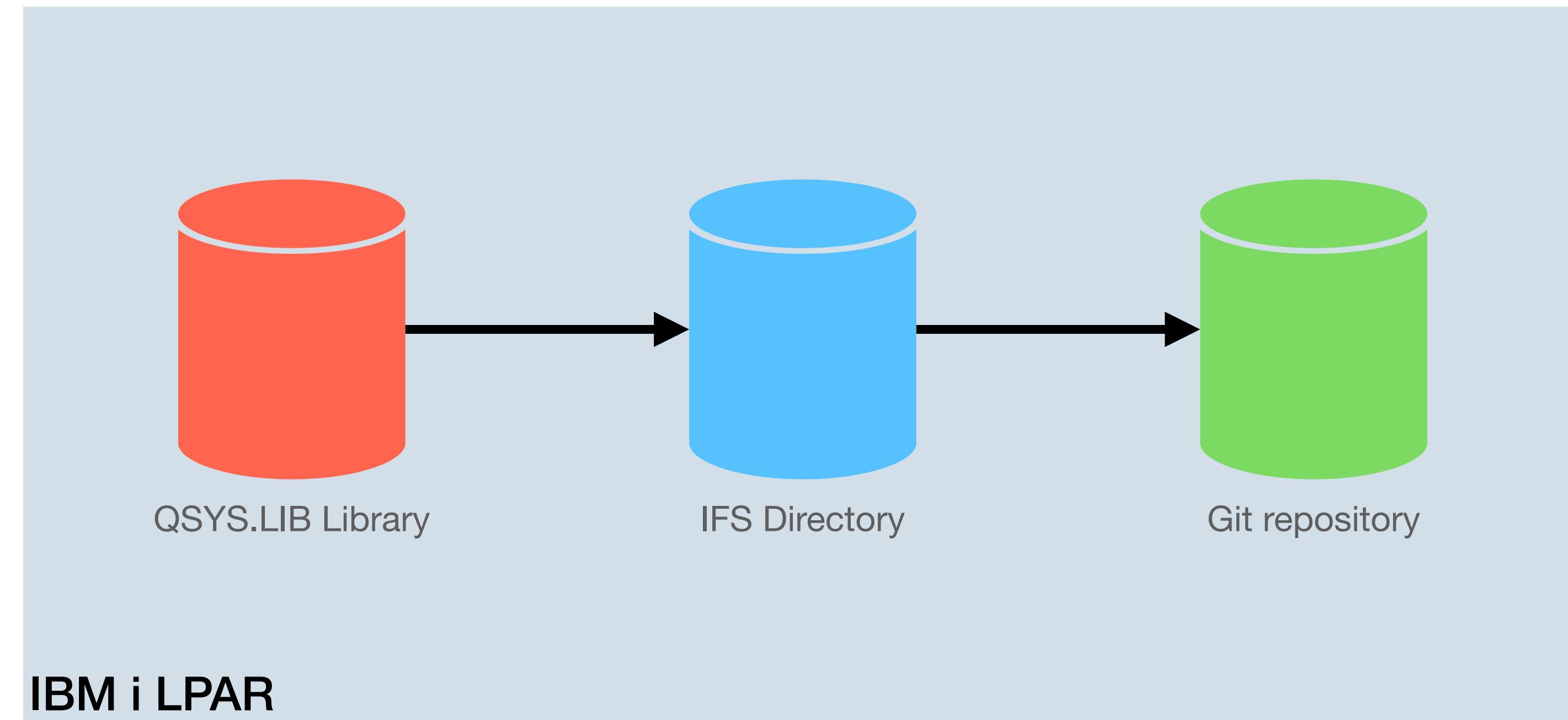


Branching



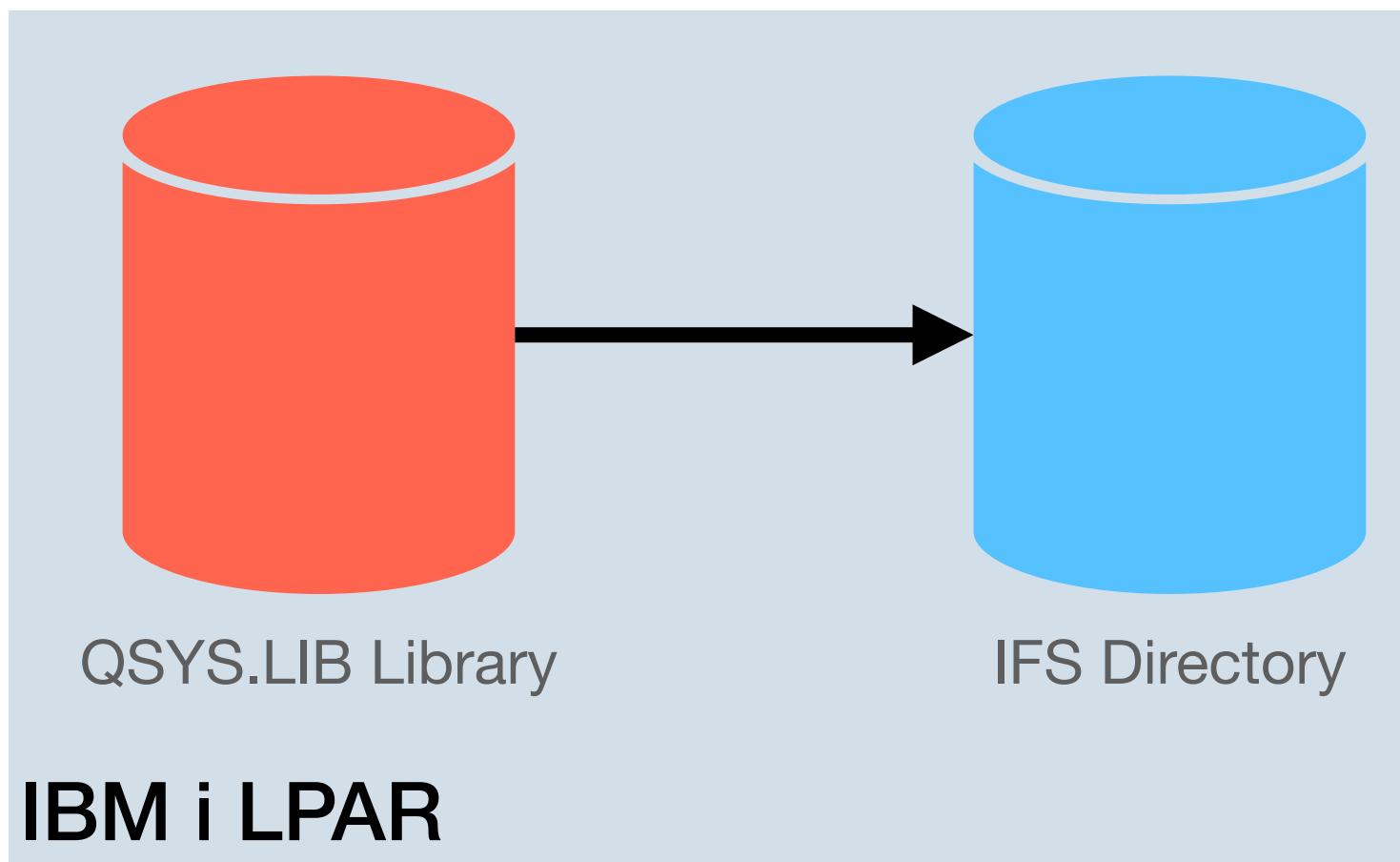
How?

How to move source into git?



CPYTOSTMF

```
CPYTOSTMF  
FROMMBR('/QSYS.lib/DEVLIB.lib/QRPGLESRC.file/PROGRAMA.mbr')  
TOSTMF('/home/barry/myproject/qrglesrc/programa.rpgle')  
STMFOPT(*REPLACE) STMFCCSID(1208)
```



ibmi-bob cvtsrcpf (FOSS)

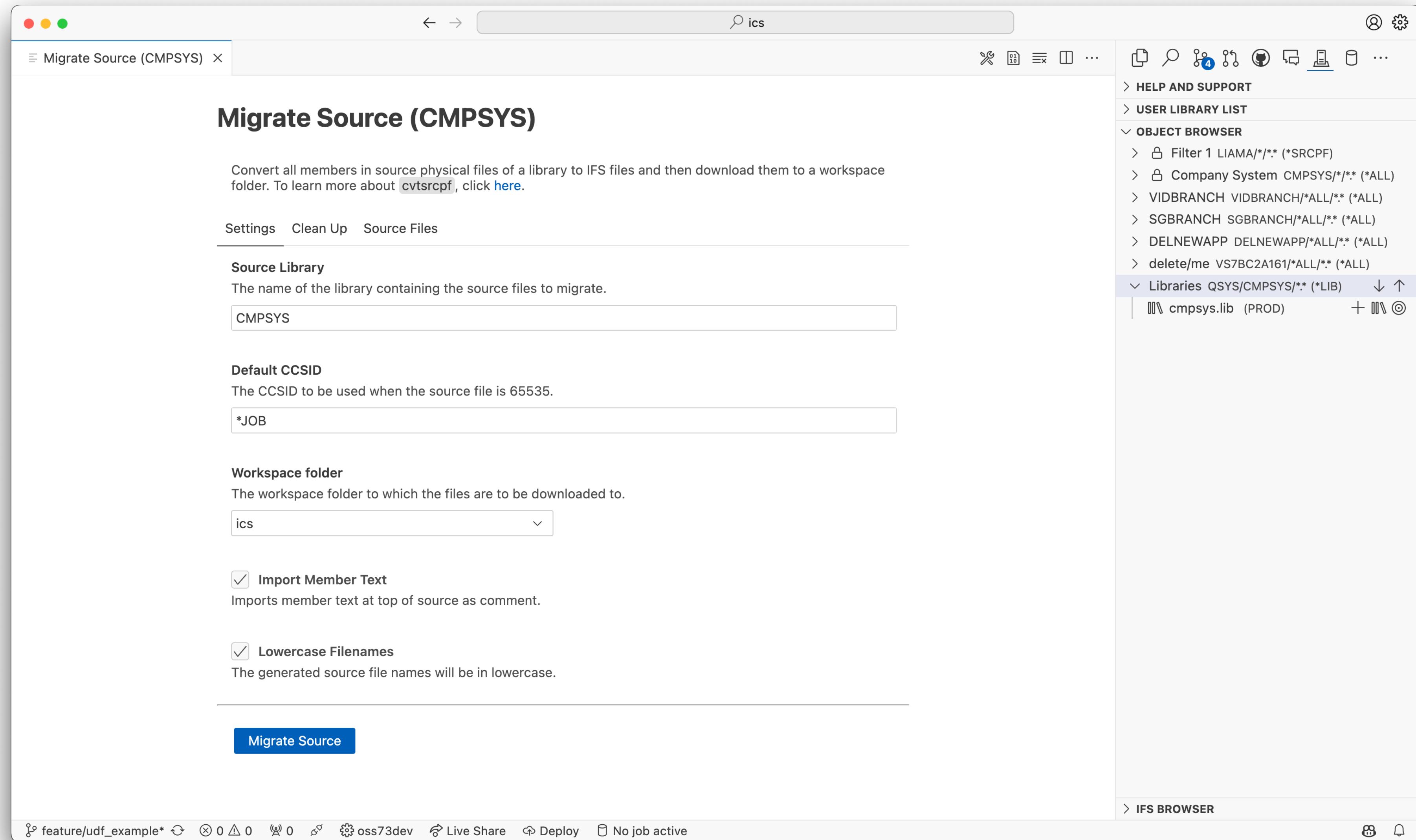
```
cd myproject/qrglesrc  
makei cvtsrcpf qrglesrc testproj
```

Migrate Tool (FOSS)

```
MIGSRCPF LIBRARY(TESTPROJ) SOURCEPF(QRPGLESRC)  
OUTDIR('/home/BARRY/myproject')
```

Vendor tools

Thru VS Code



<https://ibm.github.io/vscode-ibmi-projectexplorer/#/pages/projectExplorer/migrate-source>

Similar look

Just a different file system!

DEVLIB

- QRPGLESRC
 - PROGRAMA.RPGL
 - PROGRAMB.RPGL
 - PROGRAMC.RPGL
- QSQLSRC
 - CUSTOMERS.SQL
 - INVENTORY.SQL
- QCLLESRC
 - STARTJOB.CLLE
- QCMDSRC
 - STARTJOB.CMD

QSYS.LIB Library

```
/repo
/.git
/qrpglesrc
    programa.rpgle
    programb.rpgle
    programc.rpgle
/qsqlsrc
    customers.sql
    inventory.sql
/qcllesrc
    startjob.cmd
/qcmdsrc
    startjob.cmd
```

IFS and git repository

```
cd ./repo  
git init --bare
```

Changes for the compilers

Compilers

Streamfile support

Command	Supports compiling from IFS?
CRTBNDRPG / CRTRPGMOD	SRCSTMF(path)
CRTSQLRPGI	SRCSTMF(path)
CRTSRVPGM	SRCSTMF(path)
CRTBNDCL / CRTCLMOD	SRCSTMF(path)
CRTDSPF	No
CRTPF / CRTLTF	No
RUNSQLSTM	SRCSTMF(path)
CRTBNDC / CRTCMOD	SRCSTMF(path)
CRTBNDCBL / CRTCBLMOD	SRCSTMF(path)

/COPY and /INCLUDE

- Both /COPY and /INCLUDE work for both file systems
 - QSYS
 - IFS
- Can also work across file systems
 - Copy in IFS source from within source member
 - Vice-versa

```
/INCLUDE QRPGLEREF,REF001  
/INCLUDE `qrpgleref/ref001.rpgle'
```

Include syntax

BBSADNUDFR.pgm.rpgle — BBS400

```

EXPLORER
  BBS400
    > IFS
    > screenshots
    > src
      #BUILD.pgm.cle
      #LICENSE.txt
      #MAKE.pgm.cle
      BBS400PROD.pgm.cle
      BBSAACCLVD.dspf
      BBSAACCLVR.pgm.rpgle M
      BBSABLD.dspf
      BBSADGCD.dspf
      BBSADGCR.pgm.rpgle M
      BBSADMMNUD.dspf
      BBSADMMUR.pgm.rpgle M
      BBSADNUDFD.dspf
      BBSADNUDFR.pgm.rpgle M
      BBSAEPGMMD.dspf
      BBSAEPGMMR.pgm.rpgle M
      BBSBRDLD.dspf
      BBSBRDLR.pgm.rpgle M
      BBSDSPIFSC.pgm.cle
      BBSETPGMSD.dspf
      BBSETPGMSR.pgm.rpgle M
      BBSHELPERC.pgm.cle
      BBSHELPPNL.pnlgrp
      BBSIFSFILD.dspf
      BBSIFSFILR.pgm.rpgle M
      BBSINFC.pgm.cle
      BBSINFID.dspf
      BBSLGIND.dspf
      BBSLGINR.pgm.rpgle M
      BBSLSTUSRD.dspf
      BBSLSTUSRR.pgm.rpgle M
      BBSMENUD.dspf
      BBSMENUR.pgm.rpgle M
      BBSMSGSD.dspf
      BBSMSGSLL.DSPF
  PROJECT EXPLORER
  JOB LOG

BBSADNUDFR.pgm.rpgle (Working Tree) M X
src > BBSADNUDFR.pgm.rpgle > ...
1 H/TITLE Administration - New User default values
2 H COPYRIGHT('(C) 2020 David Asta under MIT License')
3 * SYSTEM : V4R5
4 * PROGRAMMER : David Asta
5 * DATE-WRITTEN: 25/NOV/2020
6 *
7 * This program allows an Administrator user to display/change the
8 * New User default values
9 ****
10- H/COPY DVBB5400/CURRENTSRC,CBKOPTIMIZ → 10+
11 ****
12 * INDICATORS USED:
13 * 80 - *ON turns DSPATR(PR), which protects fields from being change
14 * 81 - CBKPCFGREA CHAIN Not Found
15 ****
16 FBBSADNUDFDC F E WORKSTN
17 FPCONFIG UF E K DISK
18 ****
19 * Data structures
20- D/COPY DVBB5400/CURRENTSRC,CBKDTAARA → 20+
21 * Constants
22 D cKeysDft C CONST('F10>Edit F12=Go back')
23 D cKeysEdit C CONST('F10=Confirm Changes F1
cel')
24 D cSavedOK C CONST('Configuration was change
cessfully.')
25 D cSavedKO C CONST('There was an error while
ting to PCONFIG.')
26 D
27 D
28 D
29 * Variables
30- D/COPY DVBB5400/CURRENTSRC,CBKPCFGDCL → 30+
31 D wCfgKey S 6A
32 ****
33 C WRITE HEADER
34 C 80 EVAL KEYSLS = cKeysDft
35 C N80 EVAL KEYSLS = cKeysEdit
36 C WRITE FOOTER
37 C EXFMT BODY
38 C CLEAR MSGLIN
39 C EXSR CheckFkeys
40 ****
41 * Subroutine called automatically at startup
42 ****
43 C *INZSR BEGSR
44 C EVAL SCRSCR = 'BBSADNUDF'
45 C *Protect fields from being modified
46 C EVAL *IN80 = *ON
47 C *Get values from PCONFIG and show them on screen

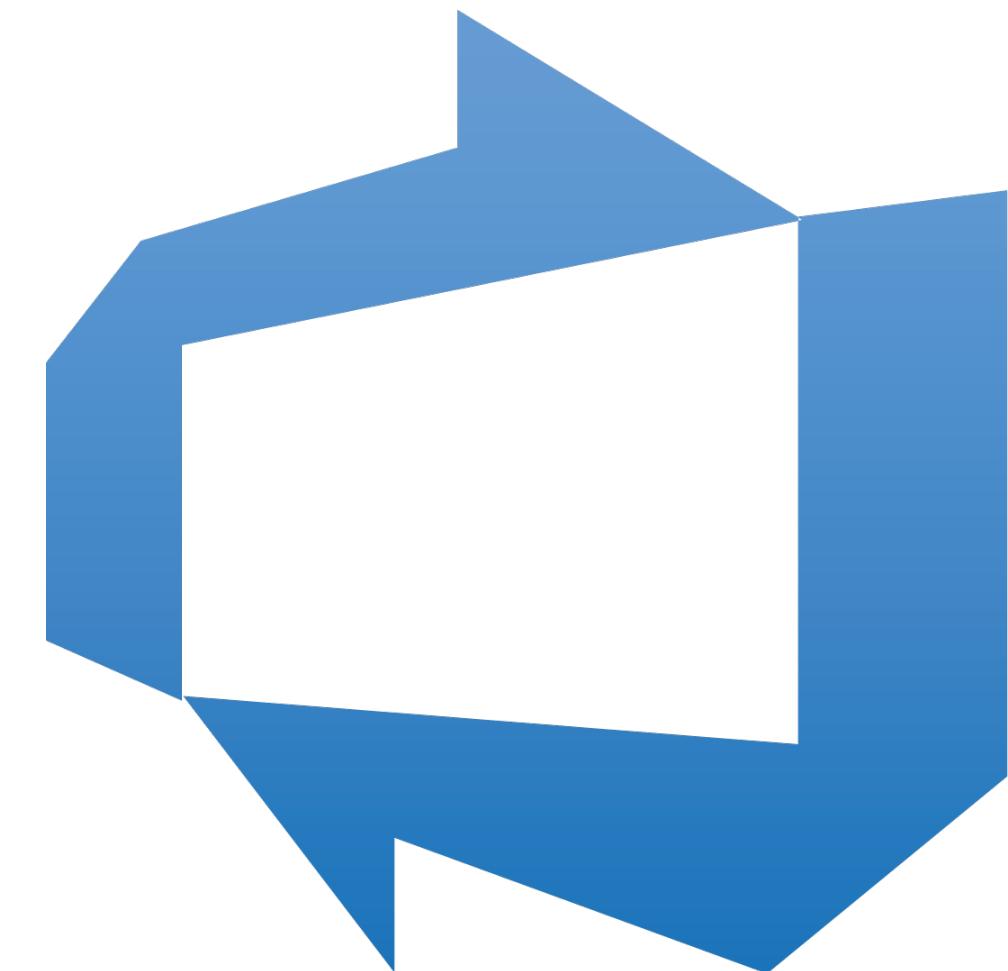
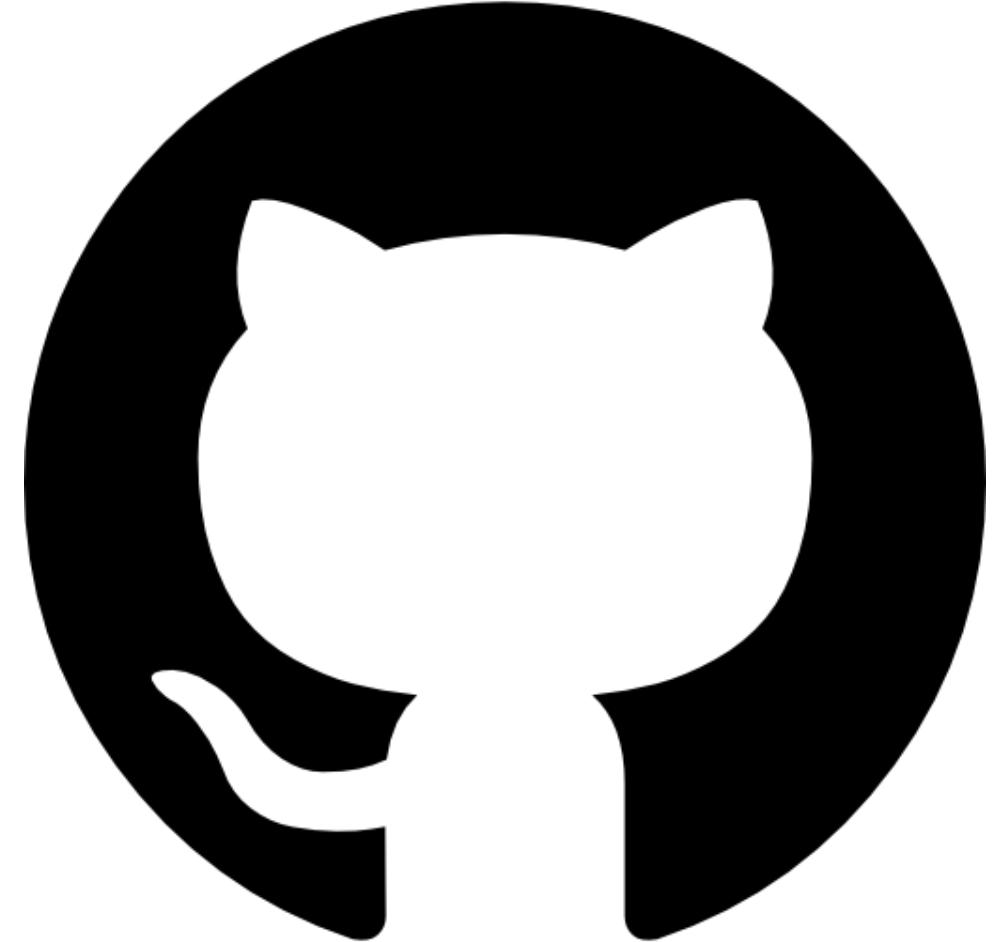
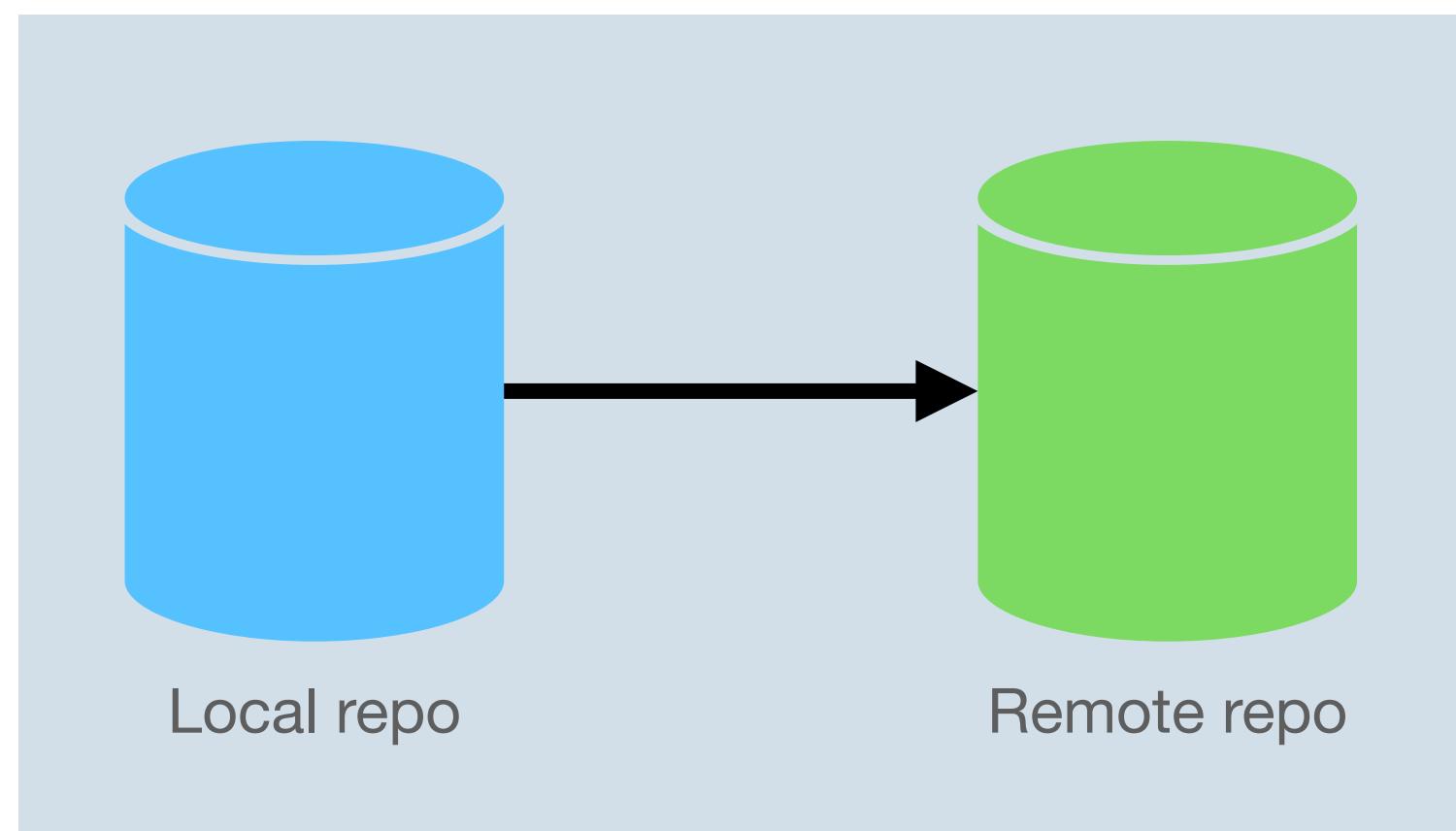
1 H/TITLE Administration - New User default values
2 H COPYRIGHT('(C) 2020 David Asta under MIT License')
3 * SYSTEM : V4R5
4 * PROGRAMMER : David Asta
5 * DATE-WRITTEN: 25/NOV/2020
6 *
7 * This program allows an Administrator user to display/change the
8 * New User default values
9 ****
10+ /copy 'src/CBKOPTIMIZ.rpgleinc' You, 1 second ago • Uncommitted
11 ****
12 * INDICATORS USED:
13 * 80 - *ON turns DSPATR(PR), which protects fields from being change
14 * 81 - CBKPCFGREA CHAIN Not Found
15 ****
16 FBBSADNUDFDC F E WORKSTN
17 FPCONFIG UF E K DISK
18 ****
19 * Data structures
20+ /copy 'src/CBKDTAARA.rpgleinc'
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25 D cSavedKO C CONST('There was an error while
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26 D
27 D
28 D
29 * Variables
30+ /copy 'src/CBKPCFGDCL.rpgleinc'
31 D wCfgKey S 6A
32 ****
33 C WRITE HEADER
34 C 80 EVAL KEYSLS = cKeysDft
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```

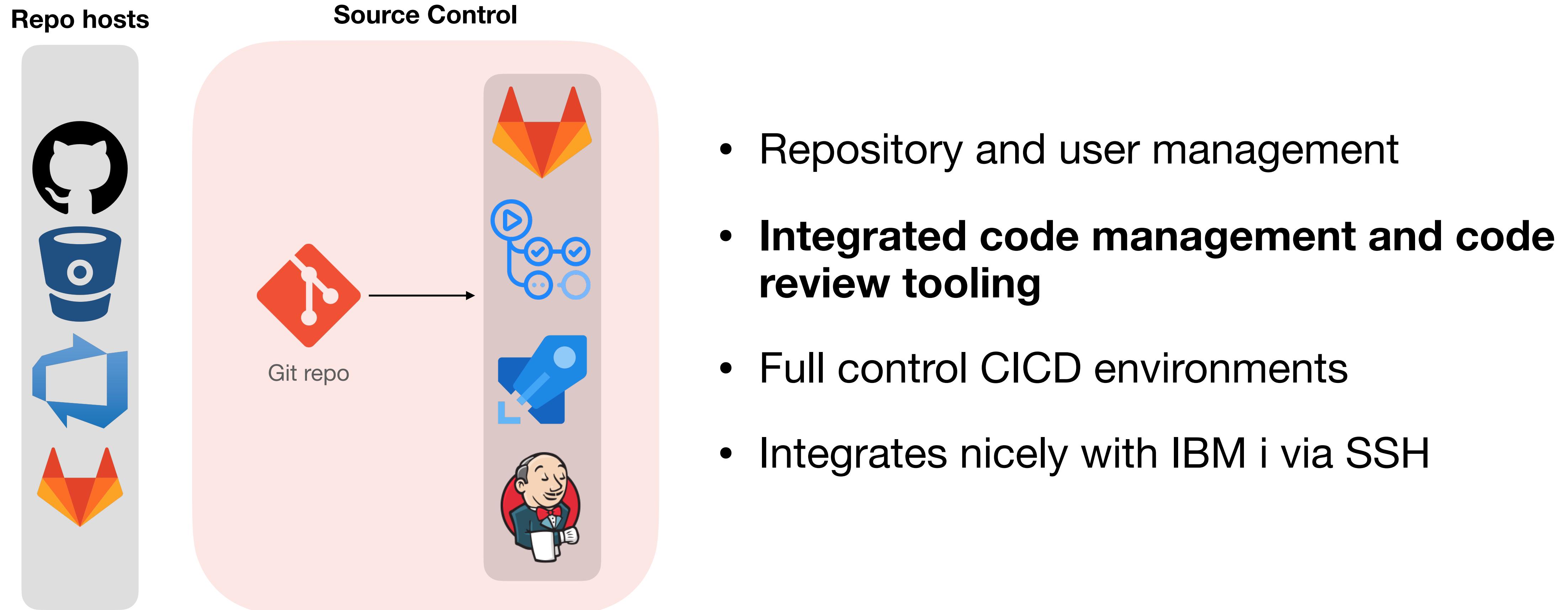
x gggg* ⌂ ⌂ 0 △ 0 Project: GitLens Pro (Trial)

You, 1 second ago Ln 10, Col 1 Spaces: 5 UTF-8 LF RPGLE ⌂ ⌂

Where to host?

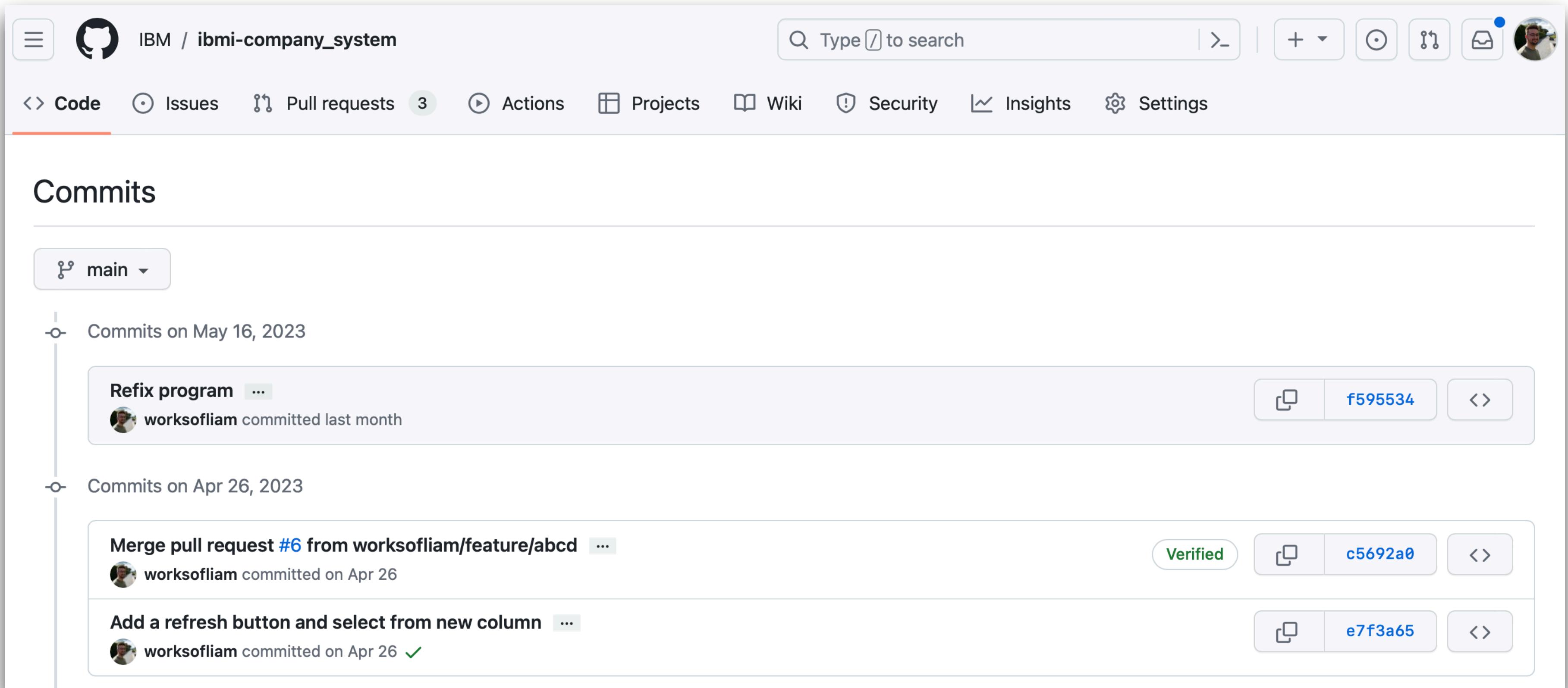


Git tooling and automation



Commit History

GitHub
Azure DevOps
GitLab
Bamboo

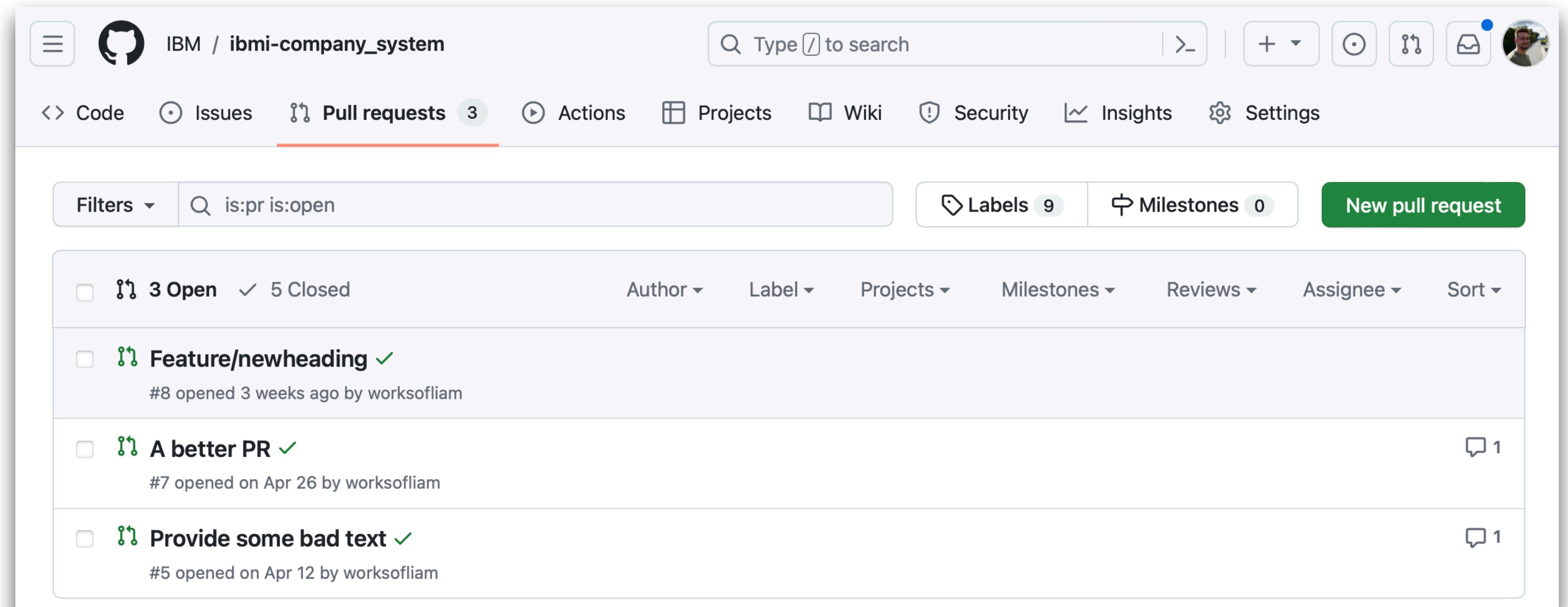


The screenshot shows the GitHub interface for the repository `ibmi-company_system`. The main navigation bar includes links for Code, Issues, Pull requests (3), Actions, Projects, Wiki, Security, Insights, and Settings. A search bar at the top right allows users to search for specific commits or code snippets. The main content area is titled "Commits" and displays the commit history for the `main` branch. Two distinct commit groups are shown:

- Commits on May 16, 2023:**
 - A single commit by `worksofliam` titled "Refix program". The commit message indicates it was committed "last month". The commit hash is `f595534`.
- Commits on Apr 26, 2023:**
 - A merge commit by `worksofliam` titled "Merge pull request #6 from worksofliam/feature/abcd". The commit message notes it was committed on Apr 26. It is marked as "Verified". The commit hash is `c5692a0`.
 - A second commit by `worksofliam` titled "Add a refresh button and select from new column". The commit message notes it was committed on Apr 26. The commit hash is `e7f3a65`.

Pull Requests

GitHub
Azure DevOps
GitLab
Bamboo



The screenshot shows the GitHub interface for the repository `ibmi-company_system`. The `Pull requests` tab is selected, showing 3 open pull requests and 5 closed ones. The search bar contains the query `is:pr is:open`. The filters section shows 3 open PRs and 5 closed PRs. The pull requests listed are:

- #8: **Feature/newheading** ✓, opened 3 weeks ago by `worksofliam`
- #7: **A better PR** ✓, opened on Apr 26 by `worksofliam`, with 1 comment
- #5: **Provide some bad text** ✓, opened on Apr 12 by `worksofliam`, with 1 comment

CI/CD

GitHub Actions
 Azure DevOps Pipelines
 GitLab CICD
 Bamboo

worksofliam / ibmi-company_system Public
 forked from IBM(ibmi-company_system)

Code Pull requests 1 Actions Projects Wiki Security Insights Settings

← rpglint CI New commit #3 Re-run jobs ...

Summary

build (18.x) failed 1 hour ago in 6s

Set up job 1s

Run actions/checkout@v3 1s

Use Node.js 18.x 0s

Run npm i @halcyontech/rpglint -g 1s

Run rpglint 0s

```

1 ► Run rpglint
4
5 /home/runner/work/ibmi-company_system/ibmi-company_system/qrpglesrc/employees.pgm.sqlrpgle: 22 errors.
6           Line 10: expected indent of 0, got 6
7           Line 14: expected indent of 0, got 6
8           Line 40: expected indent of 0, got 6
9           Line 41: expected indent of 0, got 6
  
```

Insights

halcyon-tech / vscode-ibmi

Type to search | [>](#) | [+ ▾](#) | [\(\)](#) | [\(\)](#) | [\(\)](#) | [\(\)](#) | 

[Code](#) [Issues 39](#) [Pull requests 9](#) [Discussions](#) [Actions](#) [Security](#) [Insights](#) [Settings](#)

Pulse

Contributors

Community

Community Standards

Traffic

Commits

Code frequency

Dependency graph

Network

Forks

People

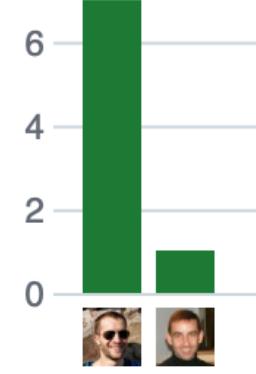
June 6, 2023 – June 13, 2023 Period: 1 week ▾

Overview

8 Active pull requests 10 Active issues

 5 Merged pull requests	 3 Open pull requests	 6 Closed issues	 4 New issues
---	---	--	---

Excluding merges, **2 authors** have pushed **7 commits** to master and **8 commits** to all branches. On master, **5 files** have changed and there have been **97 additions** and **56 deletions**.

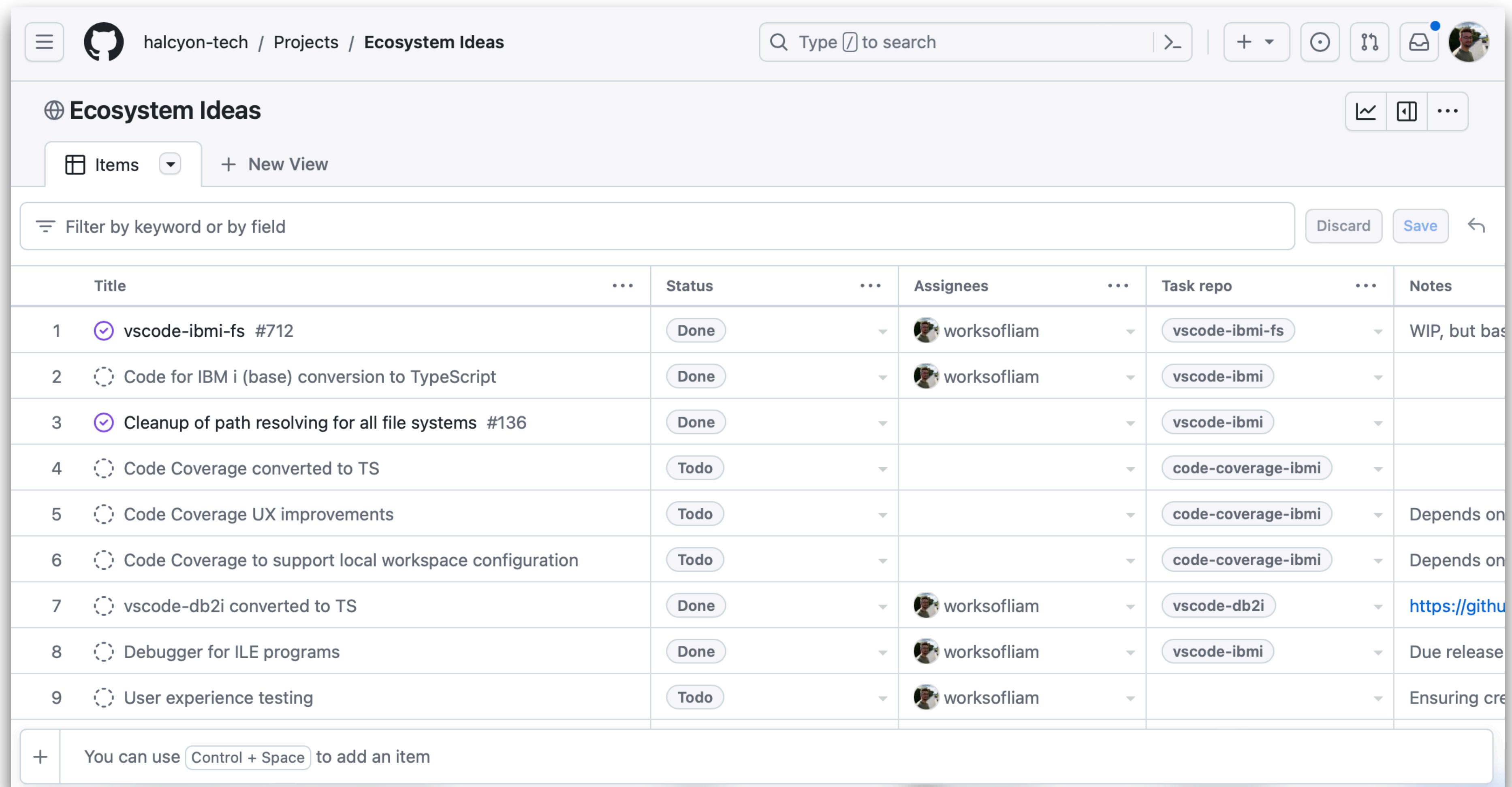


1 Release published by 1 person

 **1.9.4 Code for IBM i 1.9.4**
published 4 days ago

Project Management

GitHub
 Azure DevOps
 GitLab
 Bamboo (Jira)

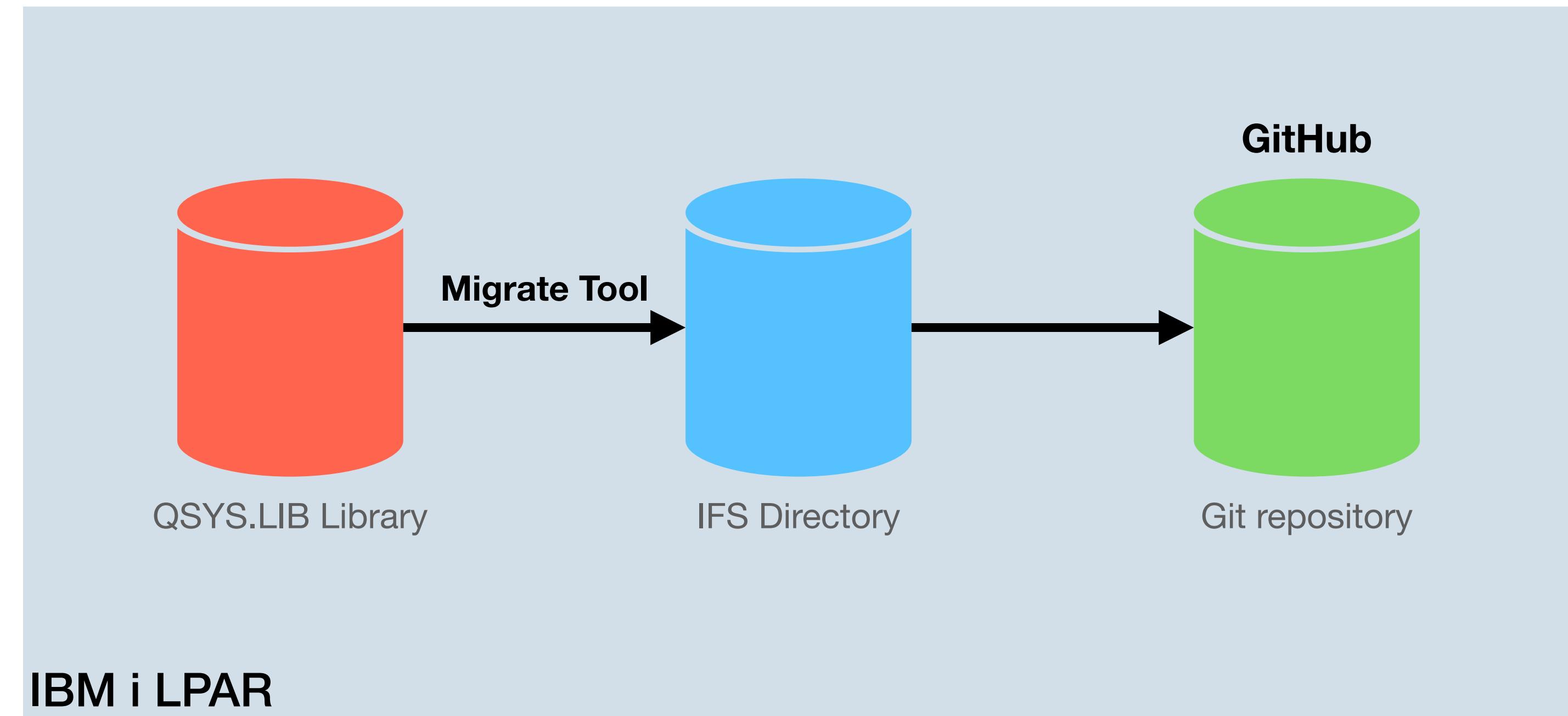


The screenshot shows a project management interface for the repository `halcyon-tech / Projects / Ecosystem Ideas`. The interface includes a search bar, navigation buttons, and a toolbar with various icons. A table lists nine items under the heading **Ecosystem Ideas**, with columns for Title, Status, Assignees, Task repo, and Notes.

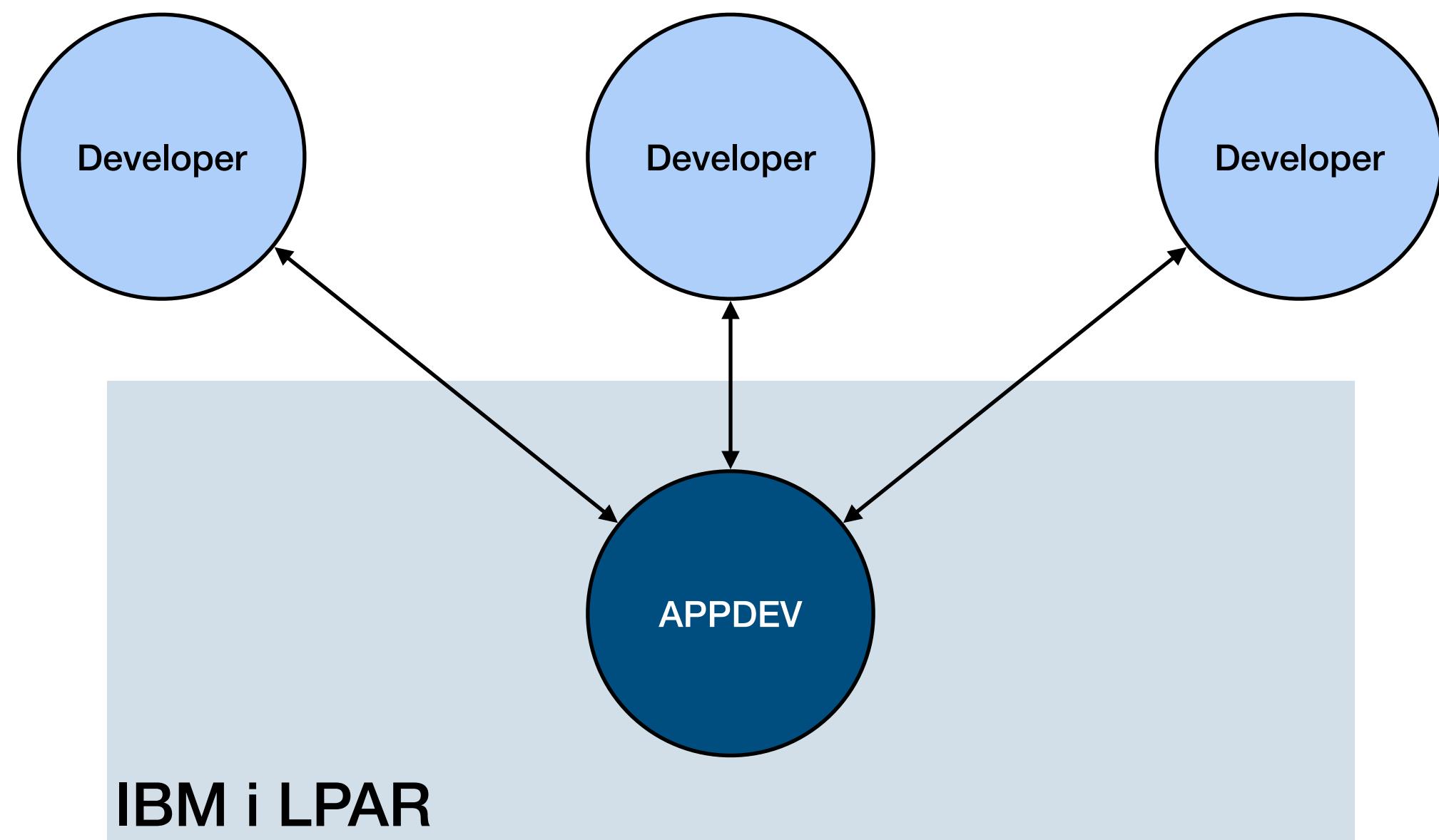
	Title	Status	Assignees	Task repo	Notes
1	<input checked="" type="checkbox"/> vscode-ibmi-fs #712	Done	worksofliam	vscode-ibmi-fs	WIP, but bas...
2	<input type="checkbox"/> Code for IBM i (base) conversion to TypeScript	Done	worksofliam	vscode-ibmi	
3	<input checked="" type="checkbox"/> Cleanup of path resolving for all file systems #136	Done		vscode-ibmi	
4	<input type="checkbox"/> Code Coverage converted to TS	Todo		code-coverage-ibmi	
5	<input type="checkbox"/> Code Coverage UX improvements	Todo		code-coverage-ibmi	Depends on...
6	<input type="checkbox"/> Code Coverage to support local workspace configuration	Todo		code-coverage-ibmi	Depends on...
7	<input type="checkbox"/> vscode-db2i converted to TS	Done	worksofliam	vscode-db2i	https://github...
8	<input type="checkbox"/> Debugger for ILE programs	Done	worksofliam	vscode-ibmi	Due release...
9	<input type="checkbox"/> User experience testing	Todo	worksofliam		Ensuring cre...

+ You can use Control + Space to add an item

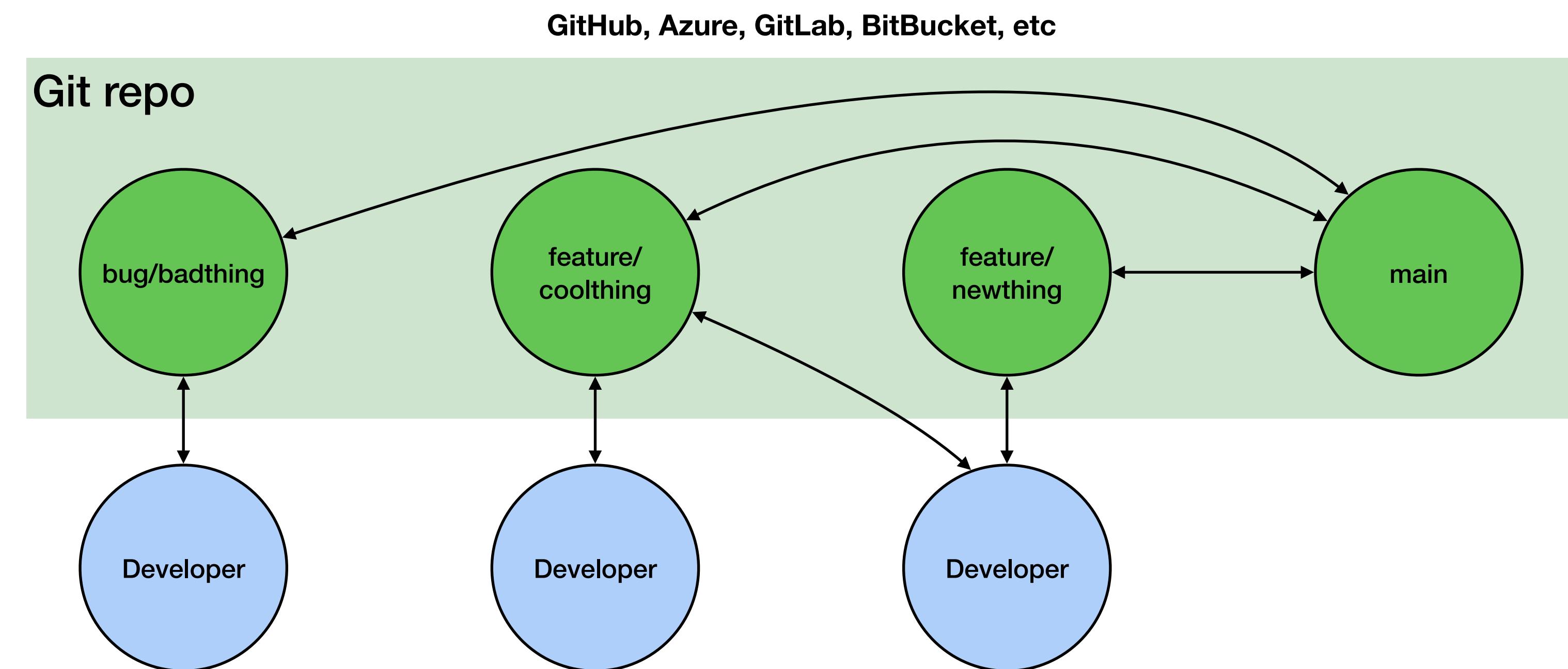
Know your choices



Old way (source members)

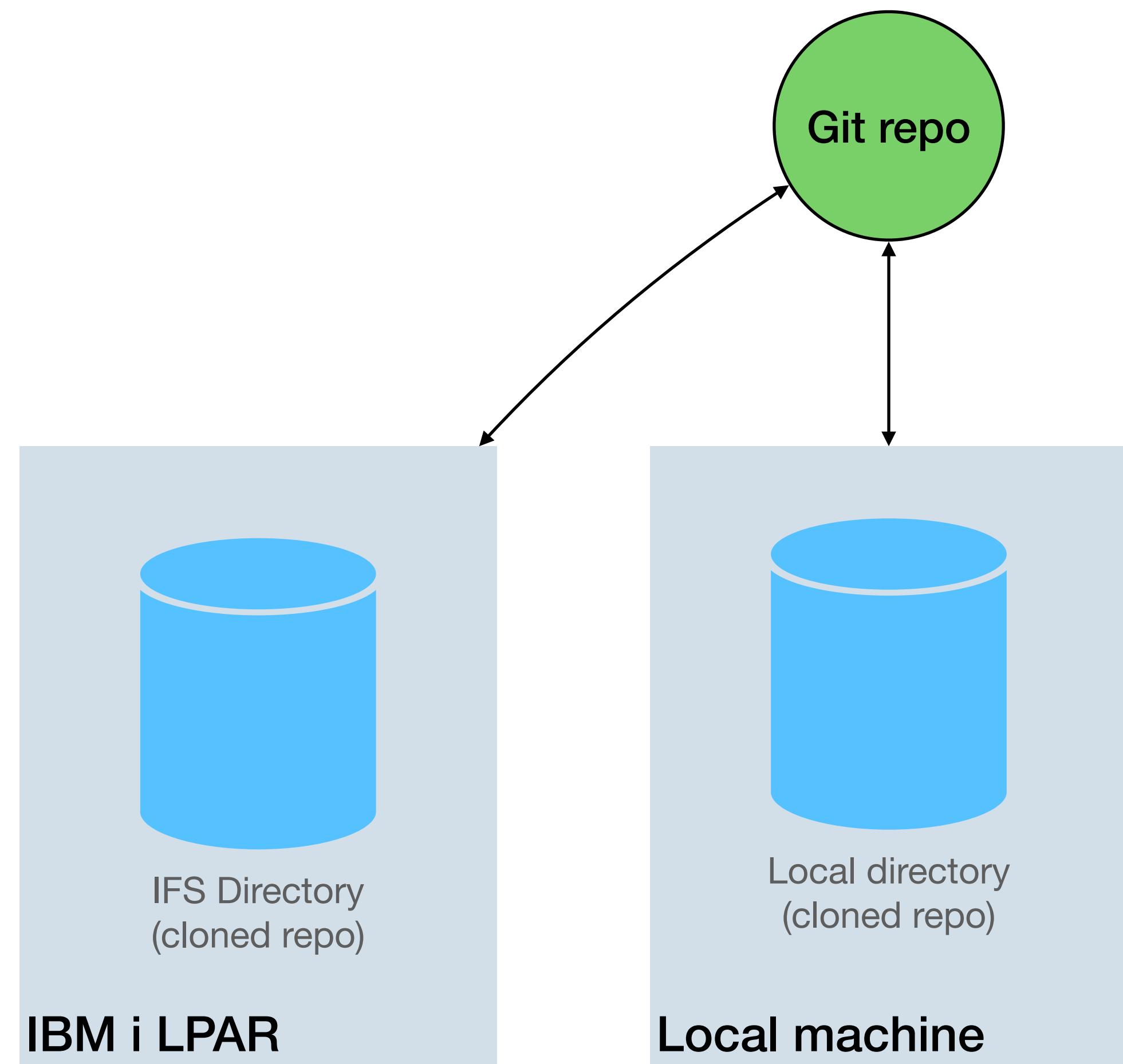


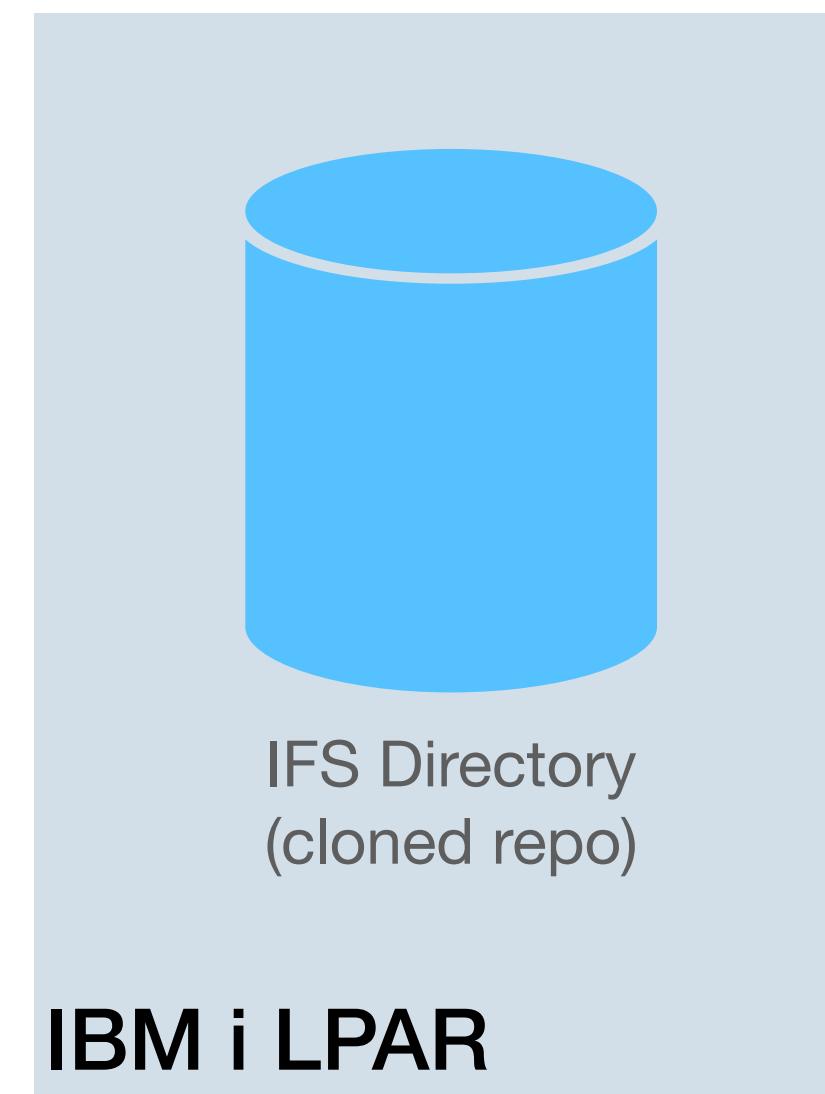
New way



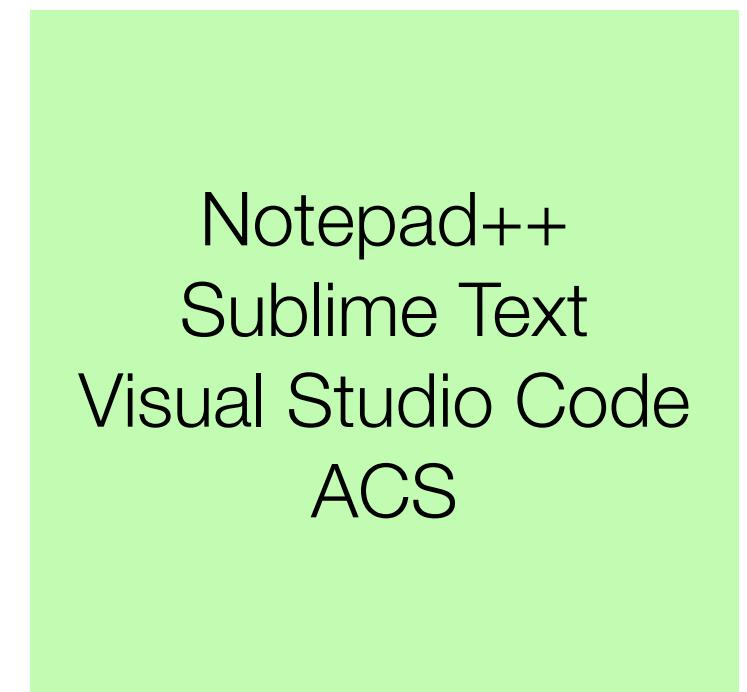
**Where
can you develop?**

Where do you write code?

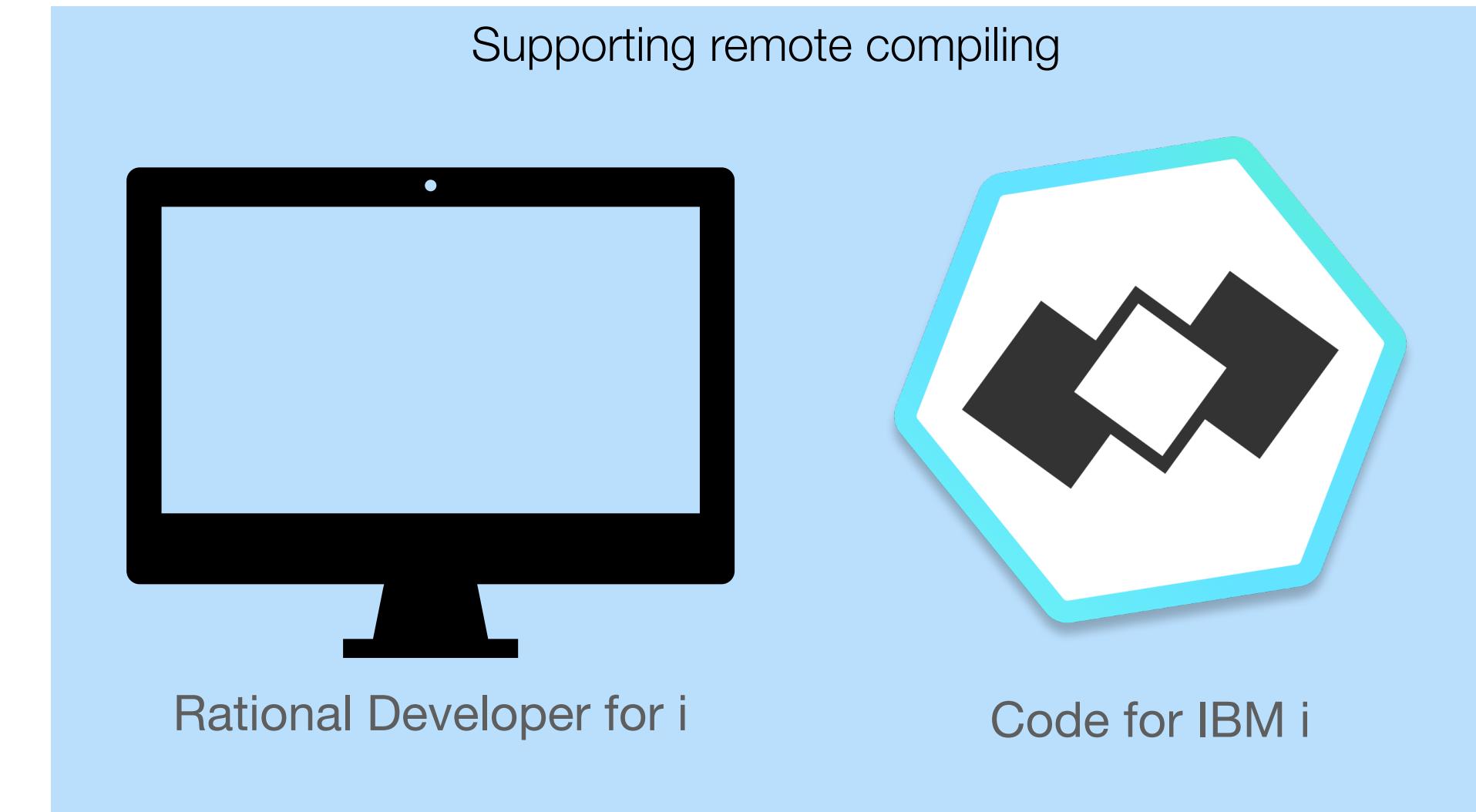


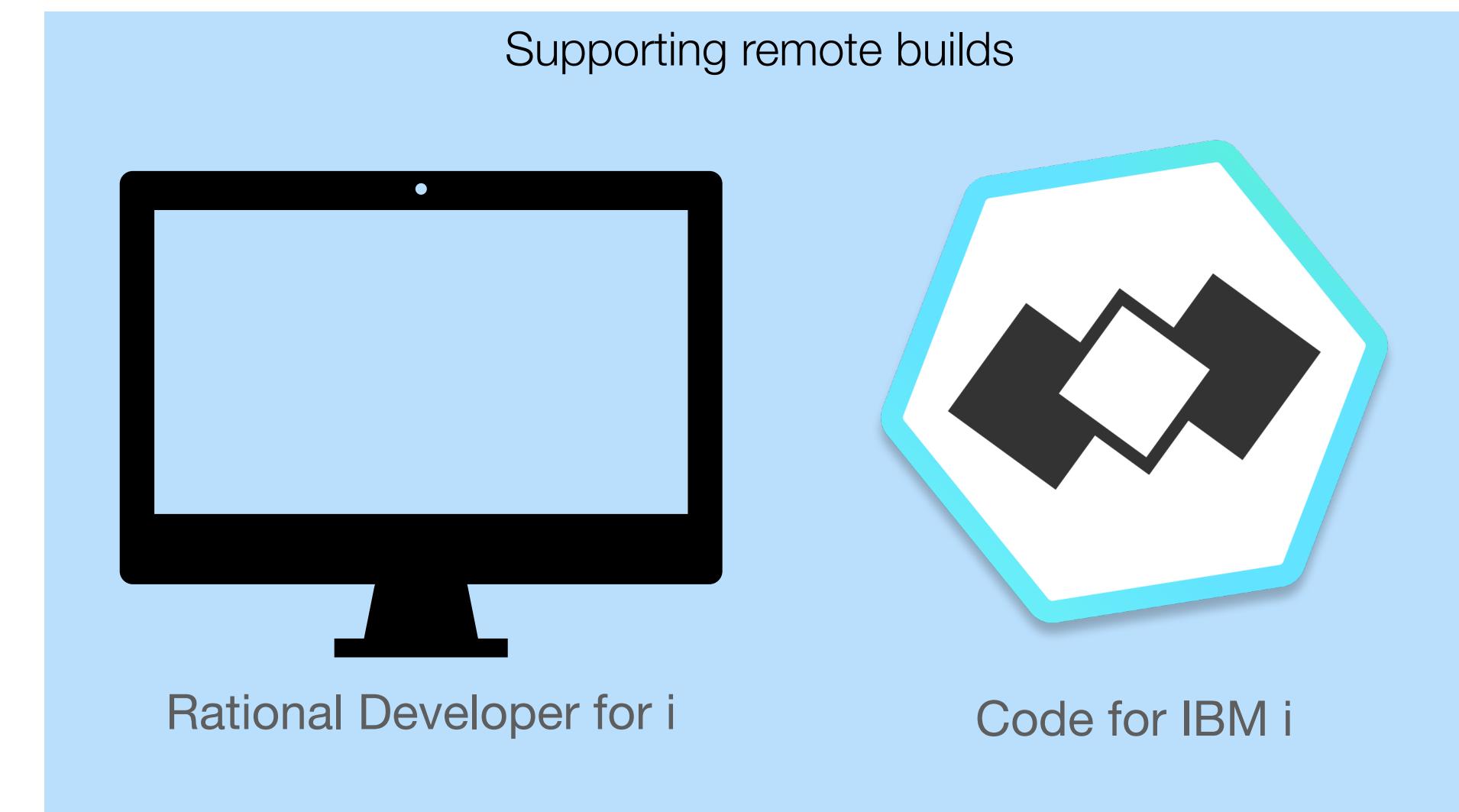
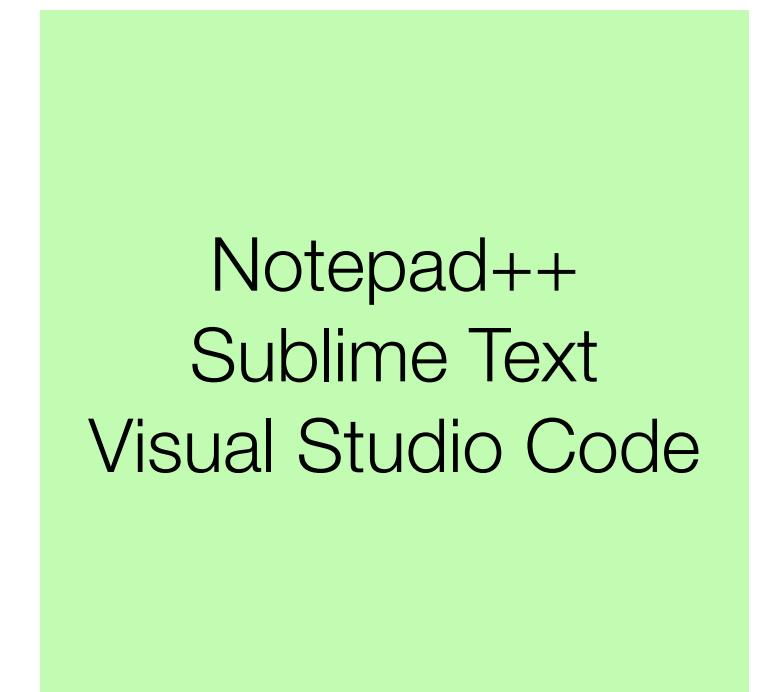
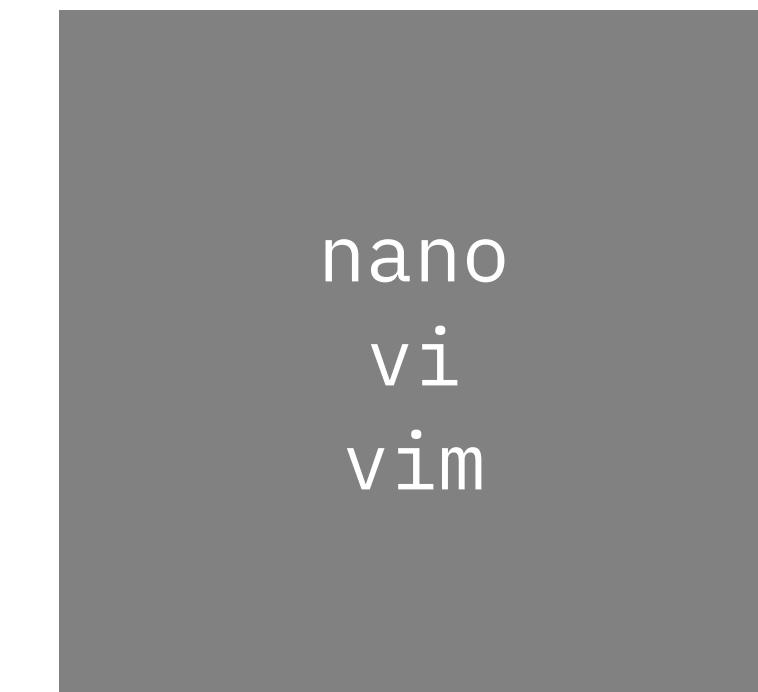
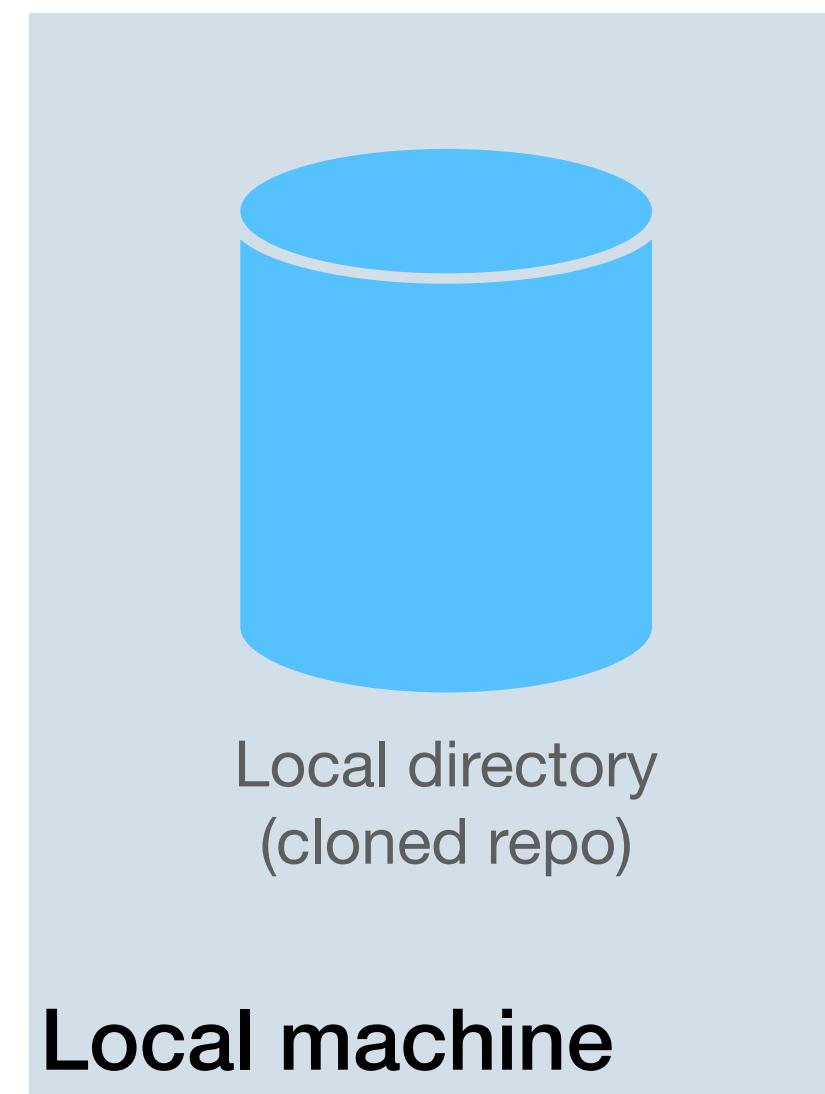


Terminal Editors



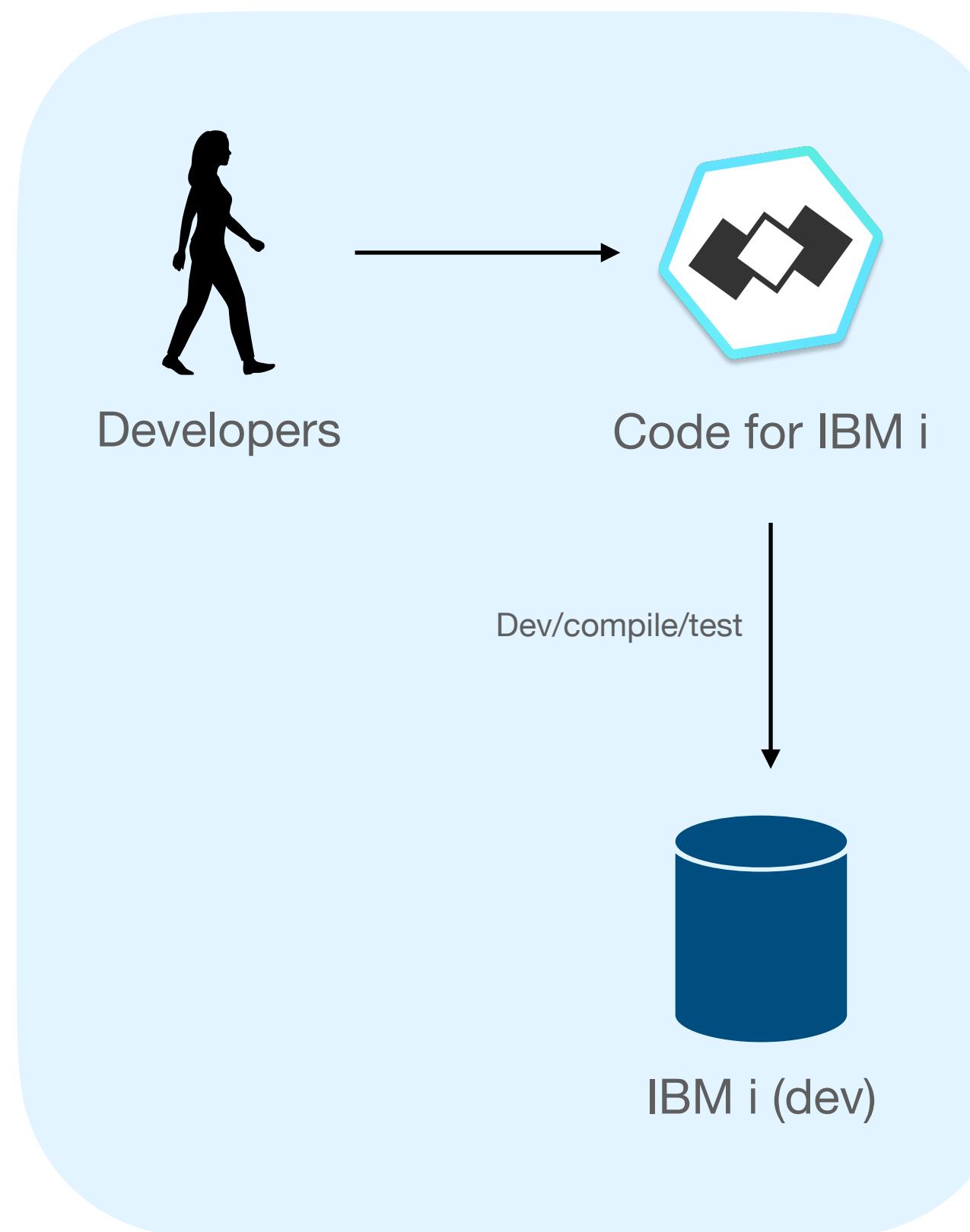
SSH editors





Visual Studio Code

Development



- First class git support
- IBM i integration via extensions
- Access to hundreds of git tools
- Integrates with vendors or self-managed tools
- RPGLE, COBOL, CL, SQL, and more

The screenshot shows a development environment with two code editors and a Source Control sidebar.

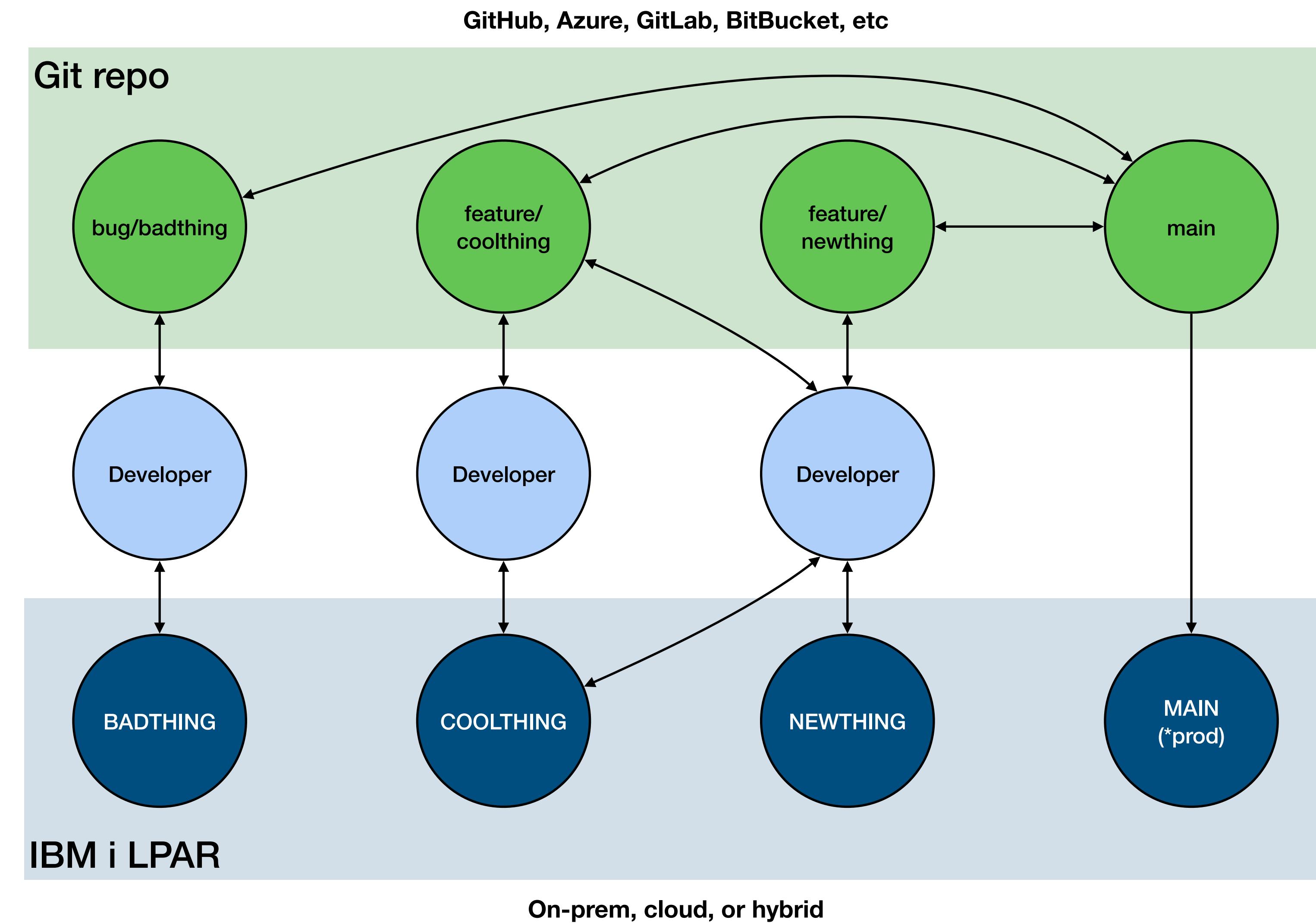
Code Editors:

- Left Editor:** Displays RPGLE code for `employees.pgm.sqlrpgle`. Lines 102-120 show logic involving `sqlstate`, `XID`, `XNAME`, `XJOB`, and `rrn`. Lines 117-120 handle a condition where `rrn > 0`.
- Right Editor:** Displays the same RPGLE code, but with changes highlighted in green. Lines 103+ and 111+ are new, adding `NewProcedure` and `If (Rrn > 0)` respectively. Lines 136+ through 156+ show a DCL-PROC block for `NewProcedure` with parameters `*N` and `Rrn`, and logic to set `XID`, `XNAME`, `XJOB`, and increment `pRrn`.

Source Control Sidebar:

- SOURCE CONTROL:** Shows a repository named `ics` with a commit message box containing `feature/coolness`. A blue button labeled `Commit` is visible.
- SOURCE CONTROL REPOSITORIES:** Lists repositories: `ics` (Git), `feature/coolness`, and `source-control`.
- Changes:** Shows staged changes for `employees.pgm.sqlrpgle` and other files like `iproj.json`, `makefile`, etc.
- Commits, Branches, Remotes:** Standard Git navigation sections.

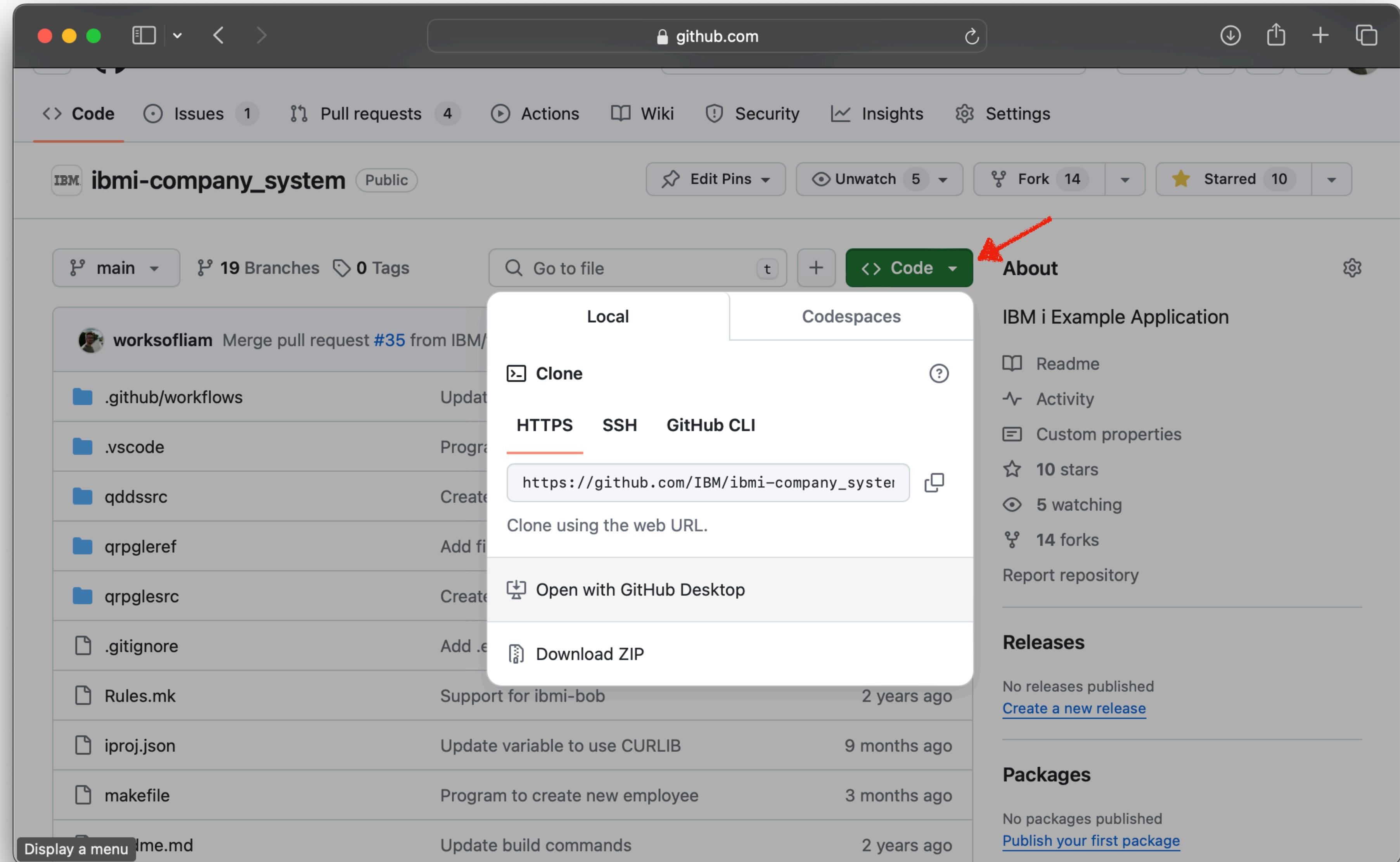
Concurrent development



Local development how?

New methodologies

- Cloning the repository
- Compiling from local machine
- Terms:
 - Actions
 - Deploy location
 - Deployment
 - Deploy and build



A screenshot of a GitHub repository page for the repository `ibmi-company_system`. The page shows various repository details like branches, tags, and pull requests. A context menu is open over the `Code` button in the top navigation bar. The menu is titled "Local" and includes options for "Clone" via "HTTPS", "SSH", or "GitHub CLI". It also has links to "Open with GitHub Desktop" and "Download ZIP". A red arrow points from the text "About" in the top right corner of the page to the "About" link in the menu. The menu has a dark background with white text and icons.

ibmi-company_system Public

Code Issues 1 Pull requests 4 Actions Wiki Security Insights Settings

ibmi-company_system Public Edit Pins Unwatch Fork Starred

main 19 Branches 0 Tags Go to file + <> Code About

worksofliam Merge pull request #35 from IBM/

.github/workflows .vscode qddssrc qrgleref qrglesrc .gitignore Rules.mk iproj.json makefile

Support for ibmi-bob 2 years ago Update variable to use CURLIB 9 months ago Program to create new employee 3 months ago Update build commands 2 years ago

Display a menu Home.md

Local Codespaces

Clone

HTTPS SSH GitHub CLI

https://github.com/IBM/ibmi-company_system

Clone using the web URL.

Open with GitHub Desktop

Download ZIP

About

IBM i Example Application

Readme Activity Custom properties 10 stars 5 watching 14 forks

Report repository

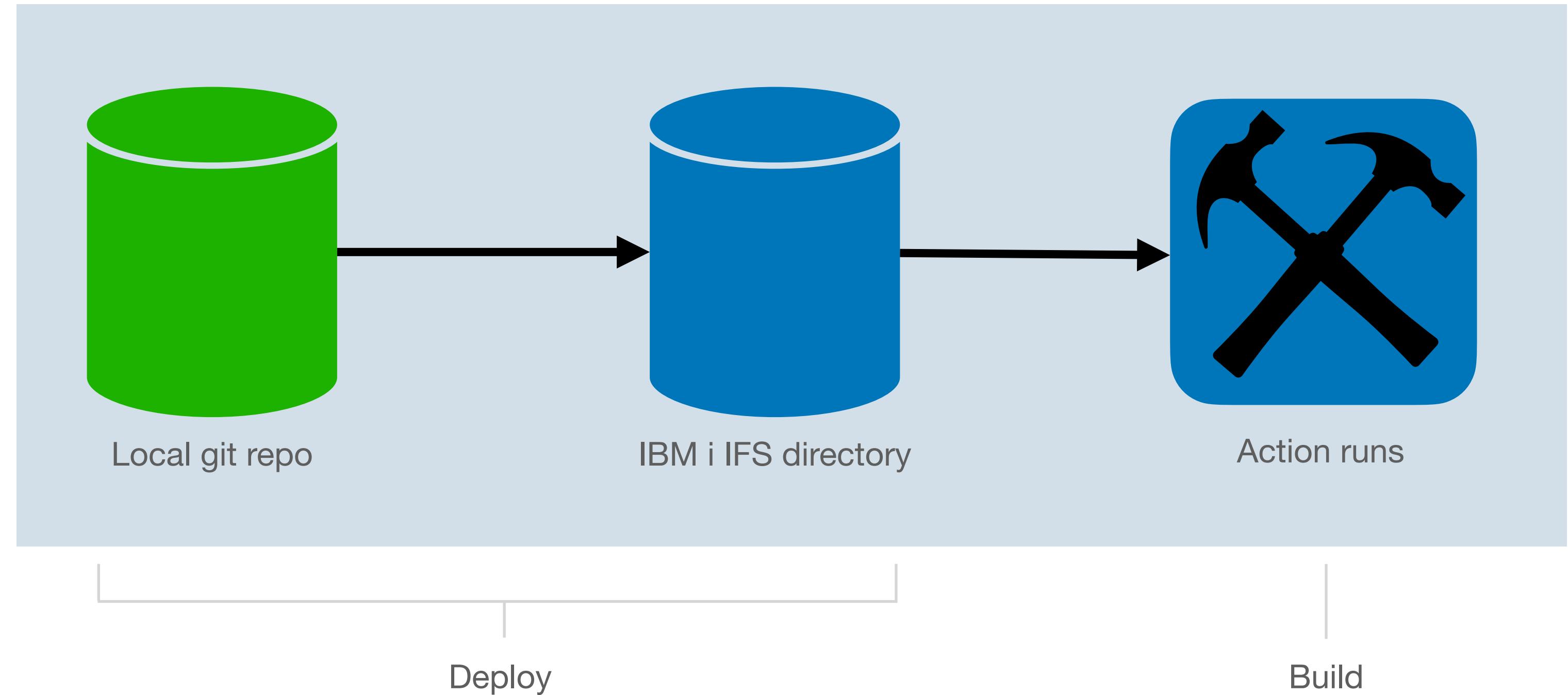
Releases

No releases published [Create a new release](#)

Packages

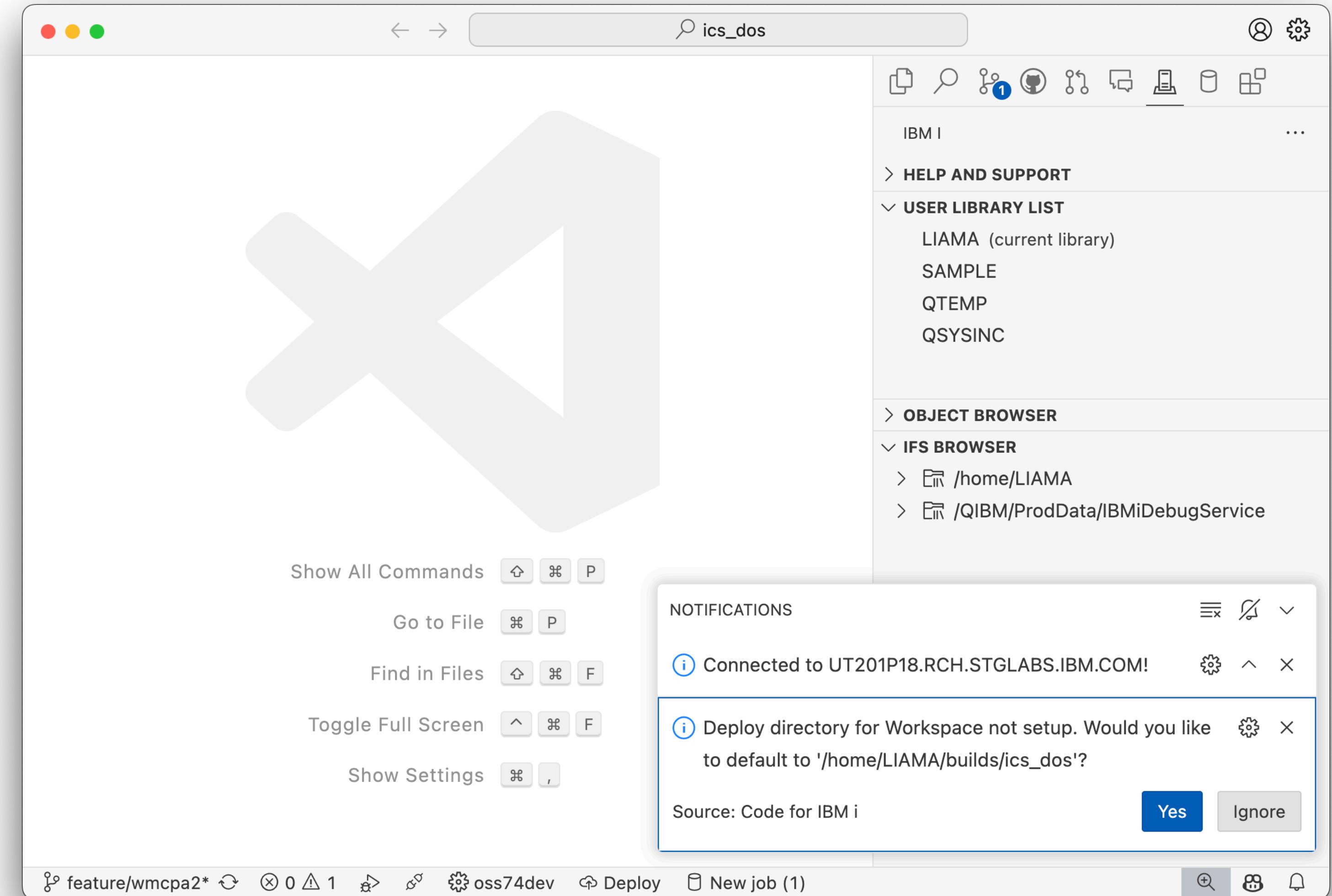
No packages published [Publish your first package](#)

Deploy and build



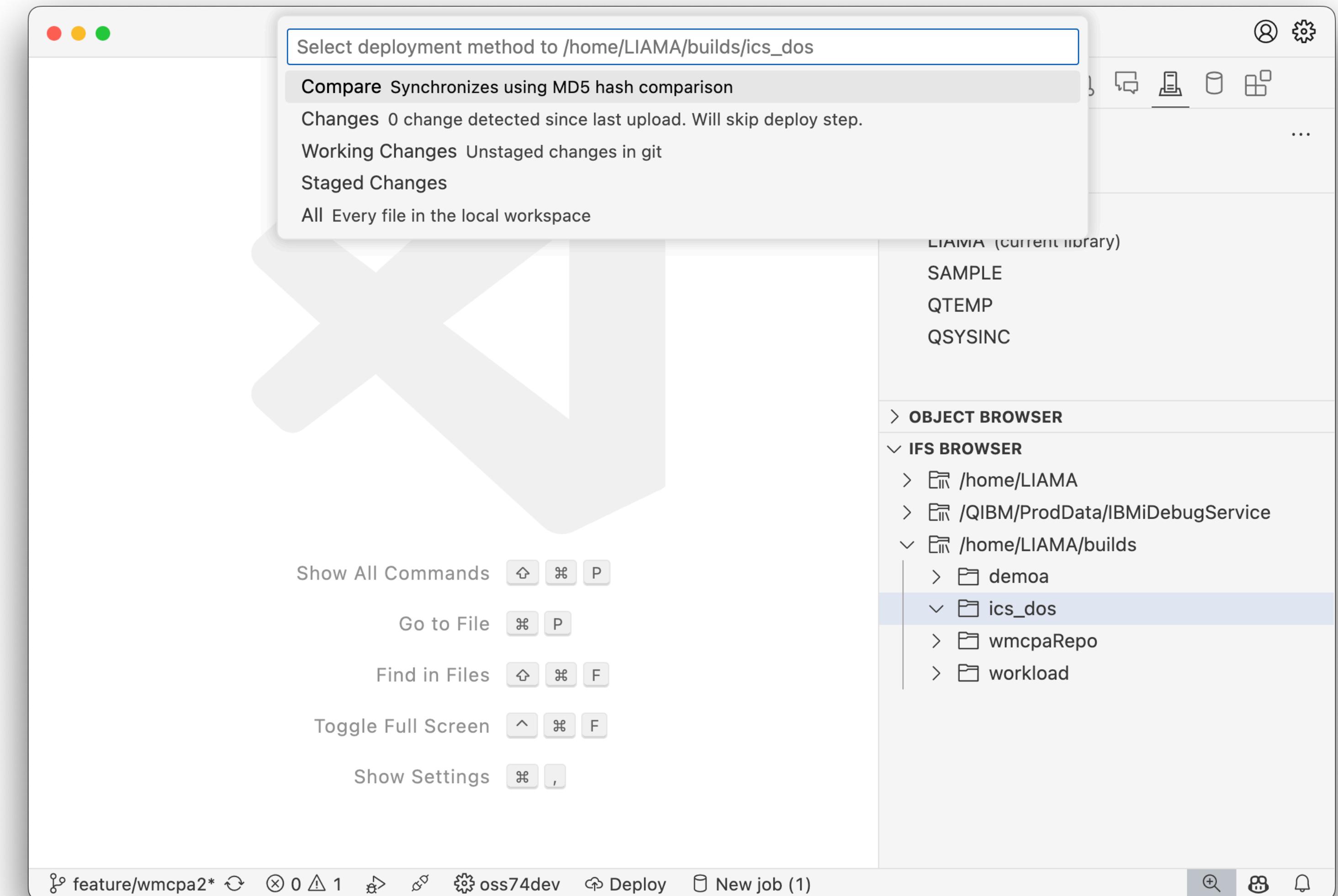
Deploy location

- Typically set only once
- Where sources get uploaded to get compiled
- Each developer gets a unique location
- Each repos get a unique location



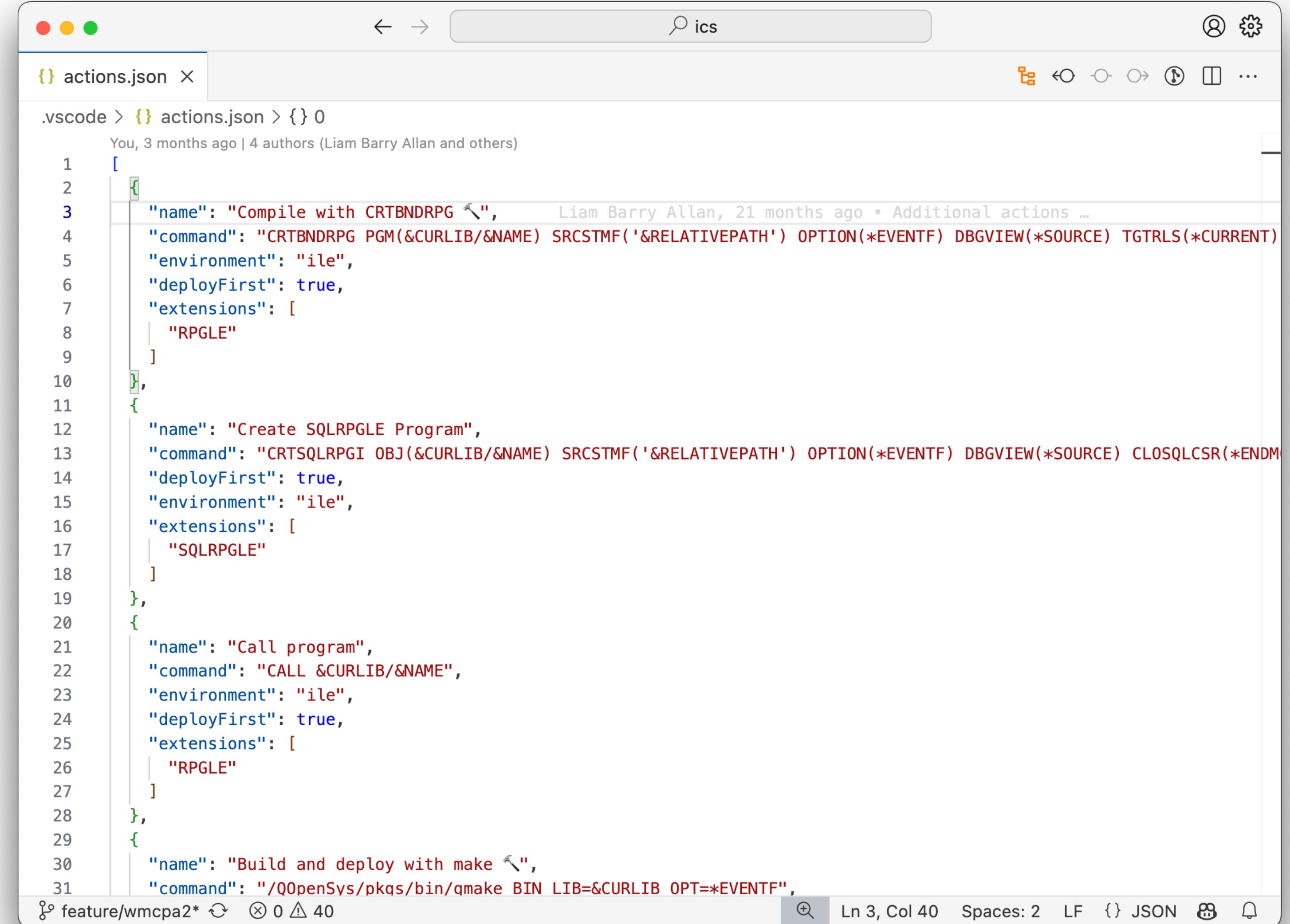
Deploy

- The process of moving files to the deploy location
- Different options to determine how files get uploaded
- Typically 'Compare' is the safest



Actions

- JSON file inside of repo
- Lists all compile commands
- Checked into git
- Common commands used by all



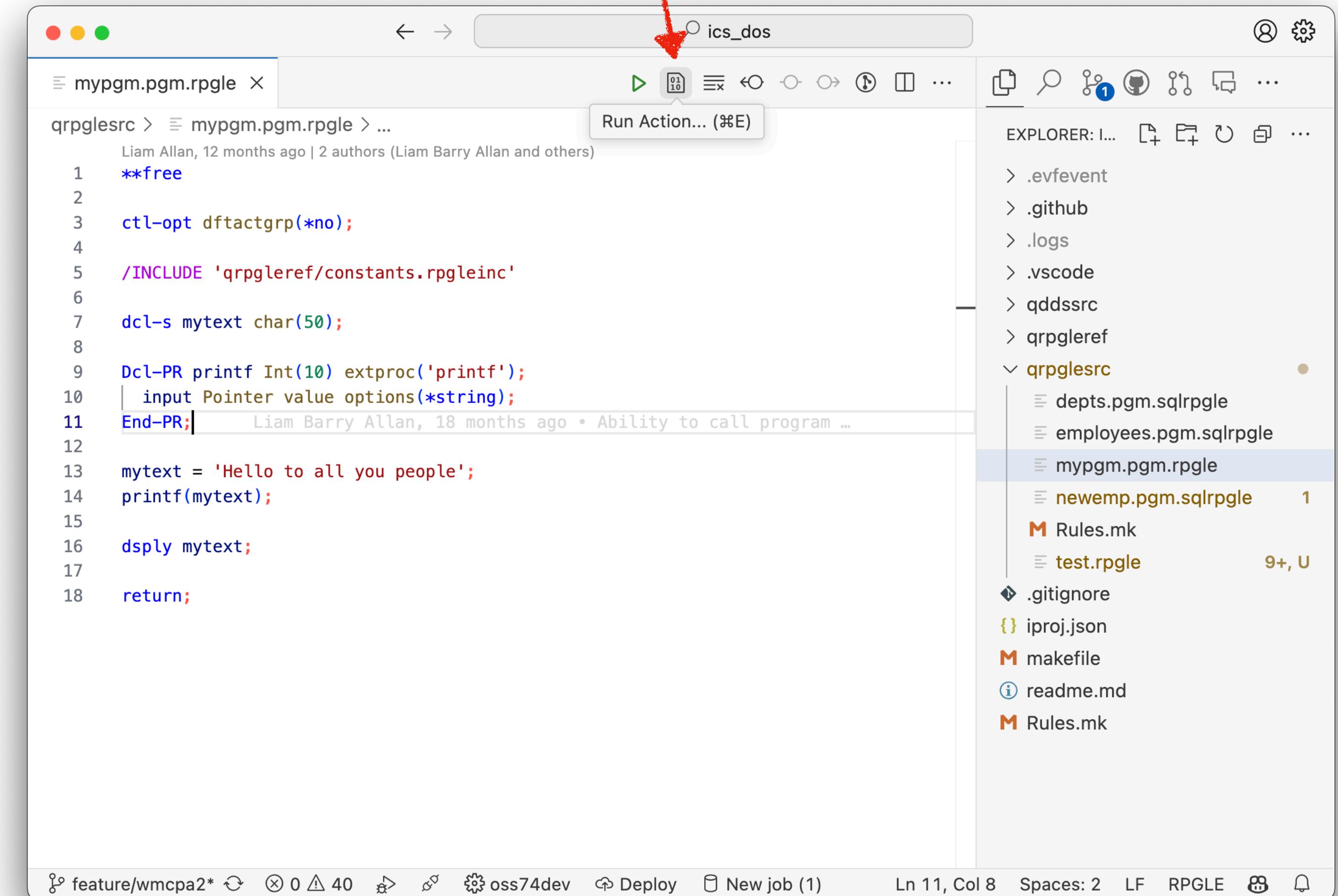
```

1  [
2    {
3      "name": "Compile with CRTBNDRPG",
4      "command": "CRTBNDRPG PGM(&CURLIB/&NAME) SRCSTMF('&RELATIVEPATH') OPTION(*EVENTF) DBGVIEW(*SOURCE) TGTRL(&CURRENT)",
5      "environment": "ile",
6      "deployFirst": true,
7      "extensions": [
8        "RPGL"
9      ],
10     },
11     {
12       "name": "Create SQLRPGLE Program",
13       "command": "CRTSQLRPGI OBJ(&CURLIB/&NAME) SRCSTMF('&RELATIVEPATH') OPTION(*EVENTF) DBGVIEW(*SOURCE) CLOSQLCSR(*ENDM)",
14       "environment": "ile",
15       "deployFirst": true,
16       "extensions": [
17         "SQLRPGLE"
18       ],
19     },
20     {
21       "name": "Call program",
22       "command": "CALL &CURLIB/&NAME",
23       "environment": "ile",
24       "deployFirst": true,
25       "extensions": [
26         "RPGL"
27       ],
28     },
29     {
30       "name": "Build and deploy with make",
31       "command": "/00openSys/pkgs/bin/qmake BIN LIB=&CURLIB OPT=*EVENTF",
32     }
33   ]

```

Run Action

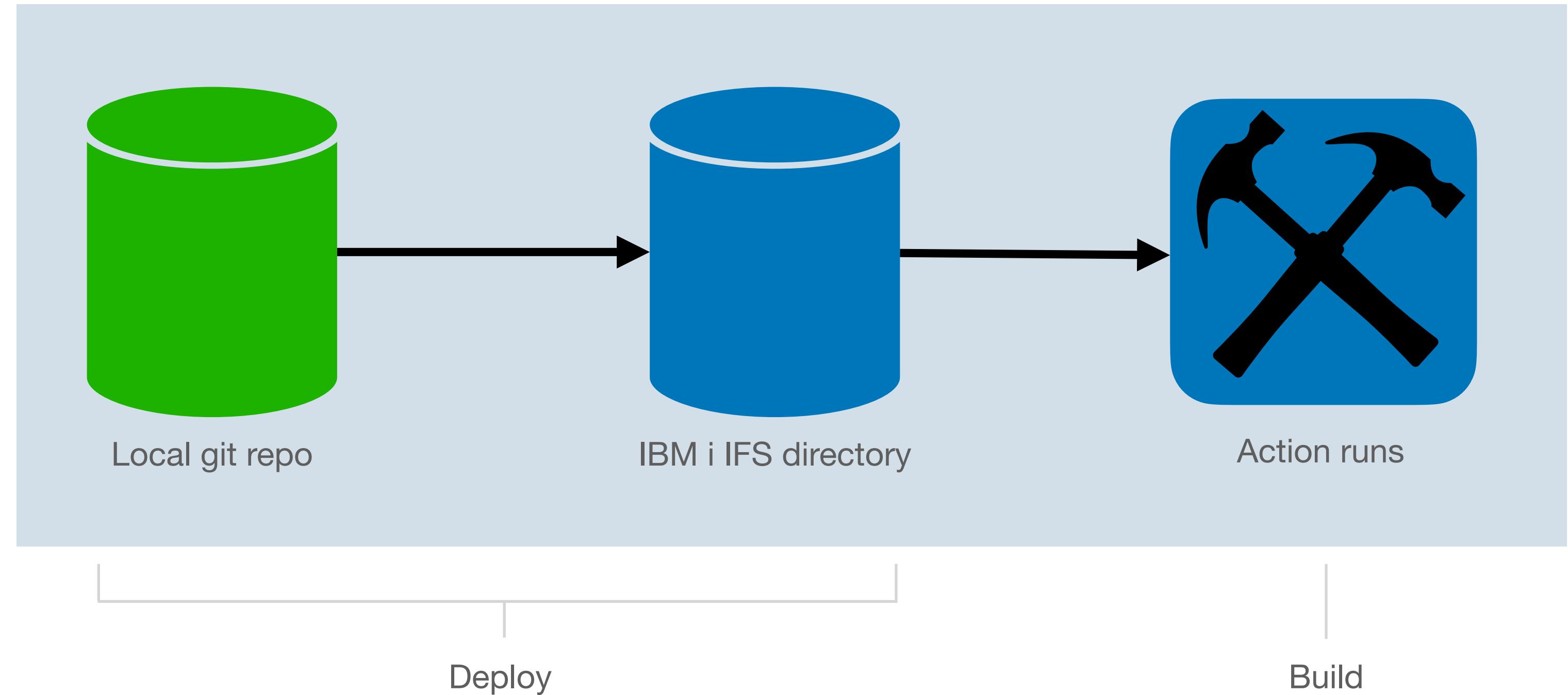
- User can select which Action to run (based on the actions.json)
- Triggers the deploy process
- Runs command(s) on the server
- Also known as the build



The screenshot shows the RDZ interface with the following details:

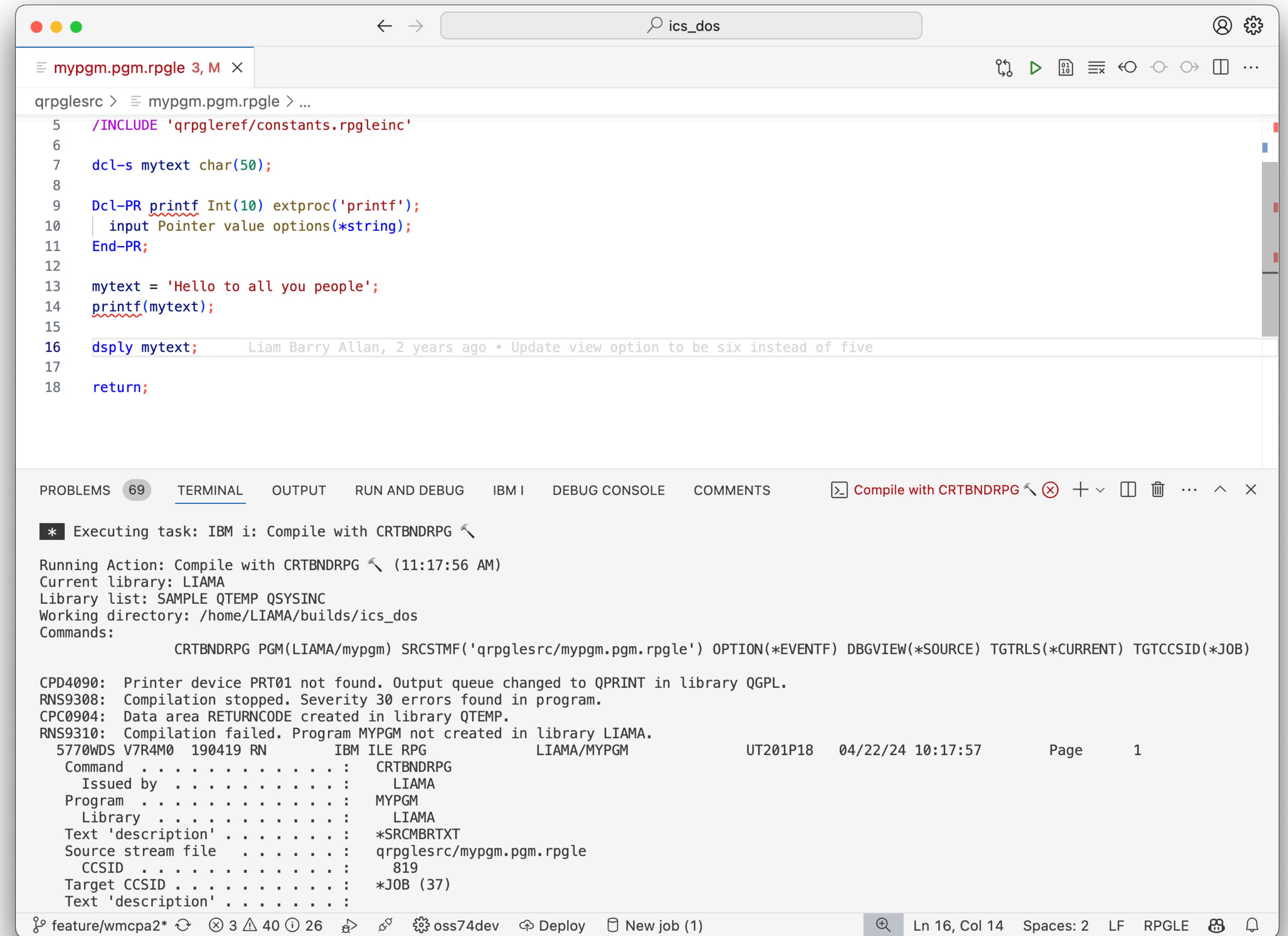
- Title Bar:** Shows the project name "mympgm.pgm.rpgle" and the connection "ics_dos".
- Toolbar:** Includes standard file operations like New, Open, Save, and a "Run Action..." button, which is highlighted with a red arrow.
- Code Editor:** Displays RPGLE code for a program named "mympgm.pgm.rpgle". The code includes declarations for pointers, constants, and a main processing loop.
- Explorer View:** Shows the project structure under "qrpglesrc", including files like "dept.pgm.sqlrpgle", "employees.pgm.sqlrpgle", "mympgm.pgm.rpgle" (which is selected), "newemp.pgm.sqlrpgle", and "Rules.mk".
- Bottom Status Bar:** Provides information about the current file ("feature/wmcpa2*"), the connection ("oss74dev"), deployment status ("Deploy"), and other system details.

Deploy and build



Action result

- List of problems are highlighted
- Spool file result as expected
- Except built from within git



The screenshot shows an IDE interface with a code editor and a terminal output spool.

Code Editor:

```

mympgm.pgm.rpgle 3, M
qrpglesrc > mympgm.pgm.rpgle > ...
5 /INCLUDE 'qrpgleref/constants.rpgleinc'
6
7 dcl-s mytext char(50);
8
9 Dcl-PR printf Int(10) extproc('printf');
10 | input Pointer value options(*string);
11 End-PR;
12
13 mytext = 'Hello to all you people';
14 printf(mytext);
15
16 dsply mytext; Liam Barry Allan, 2 years ago • Update view option to be six instead of five
17
18 return;

```

Terminal Output Spool:

```

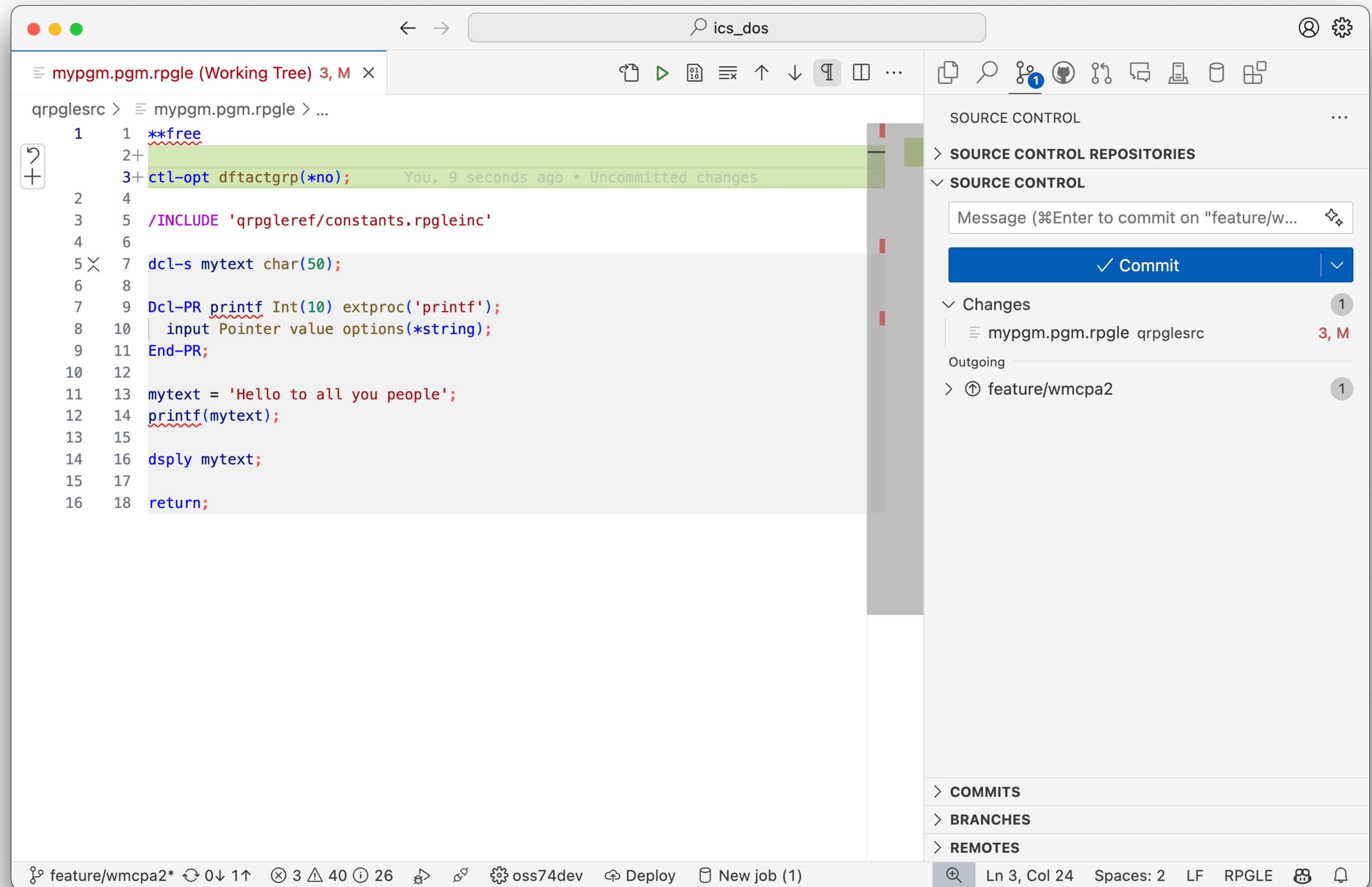
PROBLEMS 69 TERMINAL OUTPUT RUN AND DEBUG IBM I DEBUG CONSOLE COMMENTS
* Executing task: IBM i: Compile with CRTBNDRPG ↵
Running Action: Compile with CRTBNDRPG ↵ (11:17:56 AM)
Current library: LIAMA
Library list: SAMPLE QTEMP QSYSINC
Working directory: /home/LIAMA/builds/ics_dos
Commands:
    CRTBNDRPG PGM(LIAMA/mypgm) SRCSTMF('qrpglesrc/mypgm.pgm.rpgle') OPTION(*EVENTF) DBGVIEW(*SOURCE) TGTRL(*CURRENT) TGTCCSID(*JOB)

CPD4090: Printer device PRT01 not found. Output queue changed to QPRINT in library QGPL.
RNS9308: Compilation stopped. Severity 30 errors found in program.
CPC0904: Data area RETURNCODE created in library QTEMP.
RNS9310: Compilation failed. Program MYPGM not created in library LIAMA.
5770WDS V7R4M0 190419 RN IBM ILE RPG LIAMA/MYPGM UT201P18 04/22/24 10:17:57 Page 1
Command . . . . . : CRTBNDRPG
Issued by . . . . . : LIAMA
Program . . . . . : MYPGM
Library . . . . . : LIAMA
Text 'description' . . . . : *SRCMBRTXT
Source stream file . . . . : qrpglesrc/mypgm.pgm.rpgle
CCSID . . . . . : 819
Target CCSID . . . . : *JOB (37)
Text 'description' . . . . :
```

The terminal output shows a compilation error due to a missing printer device (PRT01), resulting in severity 30 errors and failing to create the program (MYPGM). The command used was CRTBNDRPG with various options like SRCSTMF and DBGVIEW.

Git lifecycle

- Compile and test code
- Make commits to a branch
- Make pull requests
- That is developer life



The screenshot shows a Git commit interface with the following details:

- Repository:** mypgm.pgm.rpgle (Working Tree) 3, M
- File:** qrpglesrc > mypgm.pgm.rpgle > ...
- Commit Message:** You, 9 seconds ago • Uncommitted changes
- Code Diff:**

```

1  1 **free
2+
3+ctl-opt dftactgrp(*no);      You, 9 seconds ago • Uncommitted changes
4
5 /INCLUDE 'qrpgleref/constants.rpgleinc'
6
7 dcl-s mytext char(50);
8
9 Dcl-PR printf Int(10) extproc('printf');
10    input Pointer value options(*string);
11 End-PR;
12
13 mytext = 'Hello to all you people';
14 printf(mytext);
15
16 dsply mytext;
17
18 return;

```
- Source Control Panel:**
 - Changes:** mypgm.pgm.rpgle qrpglesrc (3, M)
 - Outgoing:** feature/wmcpa2 (1)
 - Commits:**
 - Branches:**
 - Remotes:**
- Bottom Status Bar:** feature/wmcpa2*, 0↓ 1↑, 3 ▲ 40, 26, oss74dev, Deploy, New job (1), Ln 3, Col 24, Spaces: 2, LF, RPGLE

[GitHub.com/worksoufliam](https://github.com/worksoufliam)

codefori.github.io/docs/workshop/git/