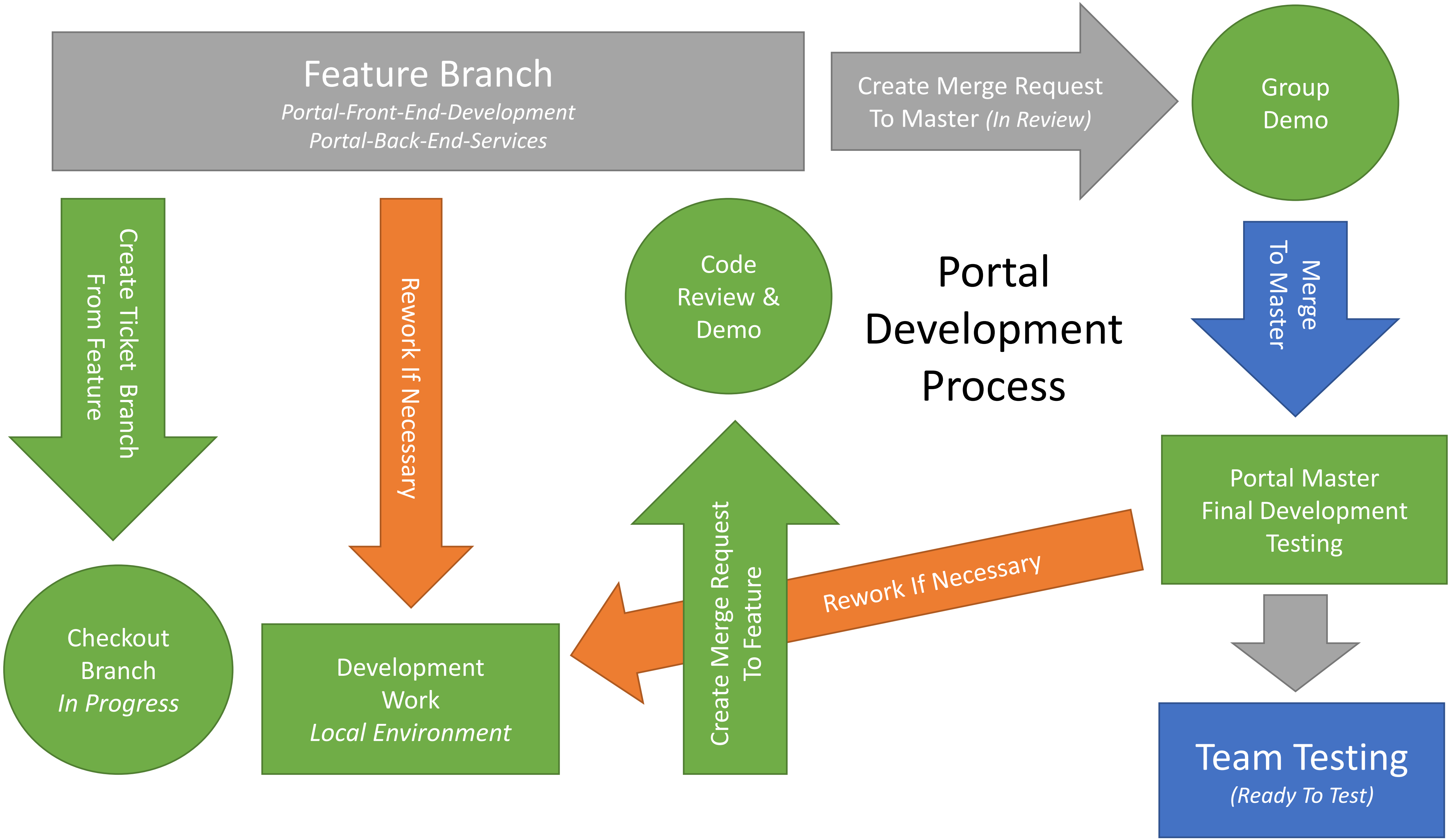
Portal Development Process



Feature Branch
Portal-Front-End-Development
Portal-Back-End-Services

Create Ticket Branch From Feature

Checkout Branch
In Progress

Rework If Necessary

Development Work
Local Environment

Create Merge Request To Feature

Code Review & Demo

Create Merge Request To Master *(In Review)*

Group Demo

Merge To Master

Portal Master Final Development Testing

Rework If Necessary

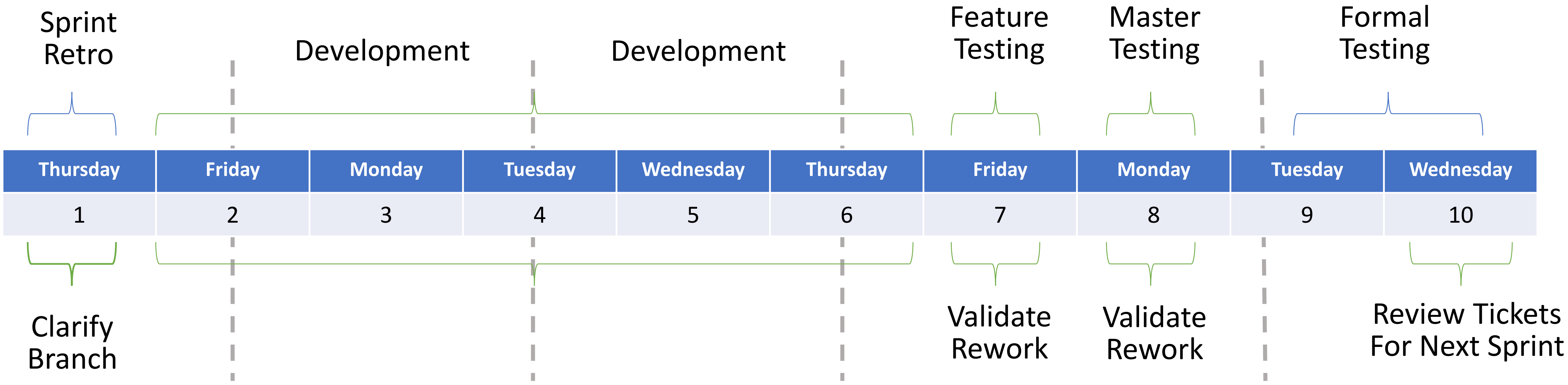
Team Testing
(Ready To Test)

Sprint Timeline

Reality

Sprint = 10 Days

1 Day	Retro/Clarification
5 Days	Development
1 Days	Feature Testing/Rework
1 Days	Master Testing/Rework
2 Day	Wrap Up/Prepare



Thursday	Friday	Monday	Tuesday	Wednesday	Thursday	Friday	Monday	Tuesday	Wednesday
1	2	3	4	5	6	7	8	9	10

I understand all parts of my ticket.

I'm about half done.

I'm wrapping up my development.

My ticket is ready for formal testing.

Branching

- Always create a new ticket branch from Feature
- Make sure your branch fits the following format for consistency.

Main Portal Branches To Branch From …

Portal Front-End: feature/Portal-Front-End-Development
Portal Back-End Services: feature/Portal-Services-Development
Portal Database: feature/Portal-Database-Development

dev/<Project>-<Repo>/<Ticket #>-*<Short-Ticket-Description-Dashes-AllCaps>*

- You will have a separate branch for each <Project>-<Repo>
  - Communications Portal (Portal-UI)
  - Portal Services (Portal-Services)
  - Portal Database (Portal-DB)

Examples

dev/Portal-UI/PPAYAD-1765-Implement-Multiple-Providers

dev/Portal-Services/PPAYAD-1765-Implement-Multiple-Providers

dev/Portal-DB/PPAYAD-1765-Implement-Multiple-Providers

- Checkout your branch locally before starting any development work.
- Verify the branch at the bottom of your solutions.
- You should see your branch number (Not Feature / Not Master)

When you create all your branches and check them out first, you can run everything locally as a base line that it all works before you start.

Development

- At the beginning create your branches for all projects
- Communications Portal | ProperPay Services | Portal Database
- Sketch out each pseudo code then go back and flesh out solution.
- Develop your ticket solution testing along the way.
- Use the office hours each day to ask questions & get clarification.

If you sketch out everything first then you realize early what you need clarification on and get the big picture overview.

Merging

- When development done, create a Merge Request (MR) to Feature
- Make sure your MR fits the following format for consistency.

MR/<Project>-<Repo>/<Ticket #>-*<Short-Ticket-Description-Dashes-AllCaps>*

- You will have a separate branch for each <Project>-<Repo>
  - Communications Portal (Portal-UI)
  - Portal Services (Portal-Services)
  - Portal Database (Portal-DB)

Examples

MR/Portal-UI/PPAYAD-1765-Implement-Multiple-Providers

MR/Portal-Services/PPAYAD-1765-Implement-Multiple-Providers

MR/Portal-DB/PPAYAD-1765-Implement-Multiple-Providers

Prepare for internal code review with a demonstration at the next office hours

Development Information

In order to run the Portal locally,

- You must be logged on to the RNAS-TOR VPN
- You must have a user account setup on Admin UI

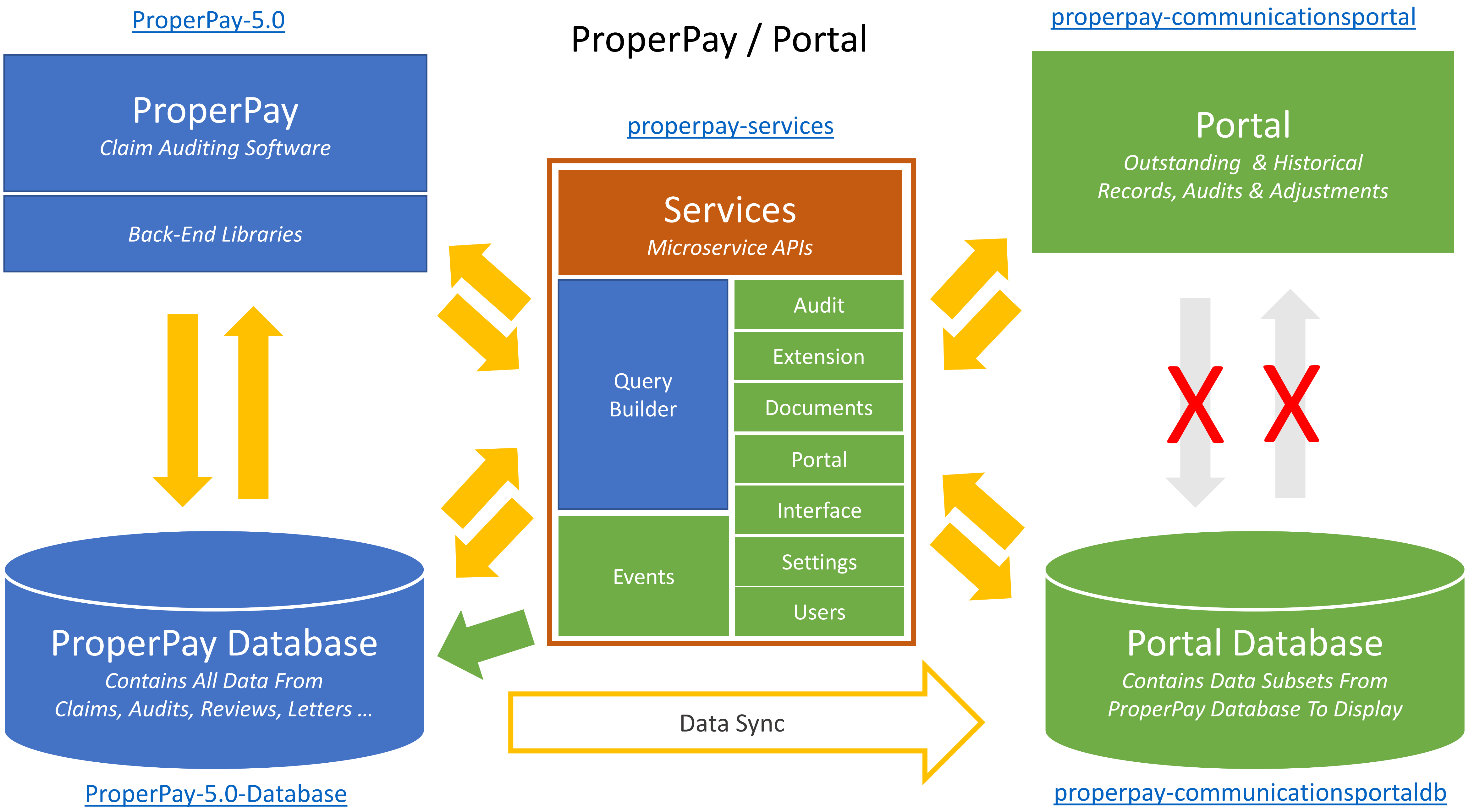
You can connect to the microservices API by either running the services project locally or by connecting to those services on the portal demo site.

To run the services locally, you can either have the services connected to the portal database server or configure a local db portal database with scripts.

To connect to the Portal Database via SSMS, you must have login access to the portal database server and also be logged in to the RNAS-TOR VPN.

Portal Remote Demo Site	http://w2k19-ppweb-01.ams.com/
Portal URL Running Locally	http://localhost:4200/
Admin UI (User Account)	https://w2k19-ppweb-01.ams.com:5001/en-GB
Rock Solid Direct Login	https://w2k19-ppweb-01.ams.com:5003/hmho
Portal Database Server	w2k19-ppsql-01.ams.com

ProperPay / Portal



ProperPay-5.0

ProperPay

Claim Auditing Software

Back-End Libraries

ProperPay Database

Contains All Data From Claims, Audits, Reviews, Letters …

ProperPay-5.0-Database

properpay-services

Services

Microservice APIs

Query Builder

Events

- Audit
- Extension
- Documents
- Portal
- Interface
- Settings
- Users

Data Sync

properpay-communicationsportal

Portal

Outstanding & Historical Records, Audits & Adjustments

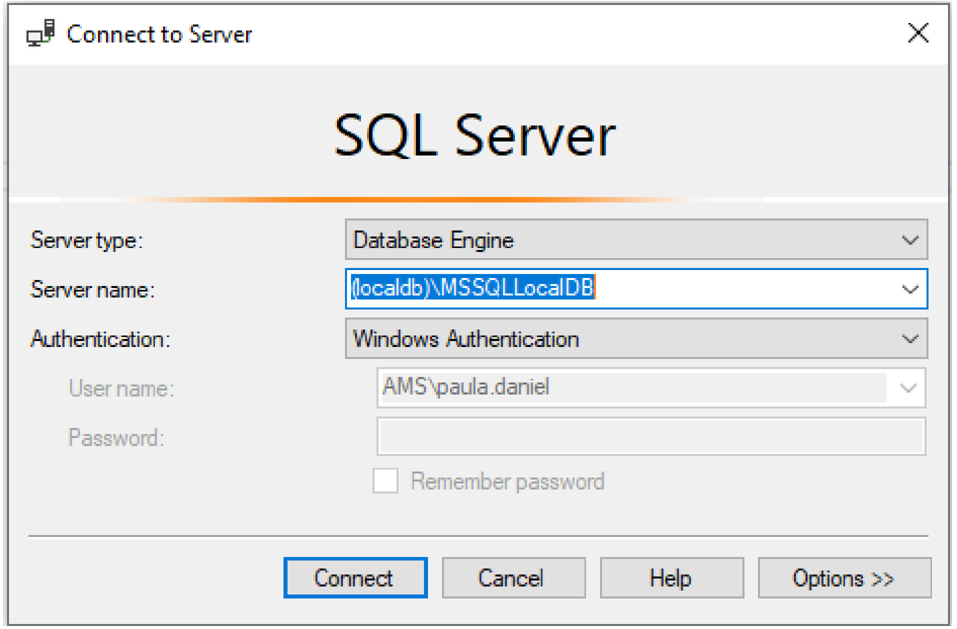
Portal Database

Contains Data Subsets From ProperPay Database To Display

properpay-communicationsportaldb

Portal Database

For DB changes, make them in your localdb and when everything is working, include them in your portal db branch and create an MR as normal. I will add new db objects to the site.



Connect to Server

SQL Server

Server type: Database Engine

Server name: (localdb)\MSSQLLocalDB

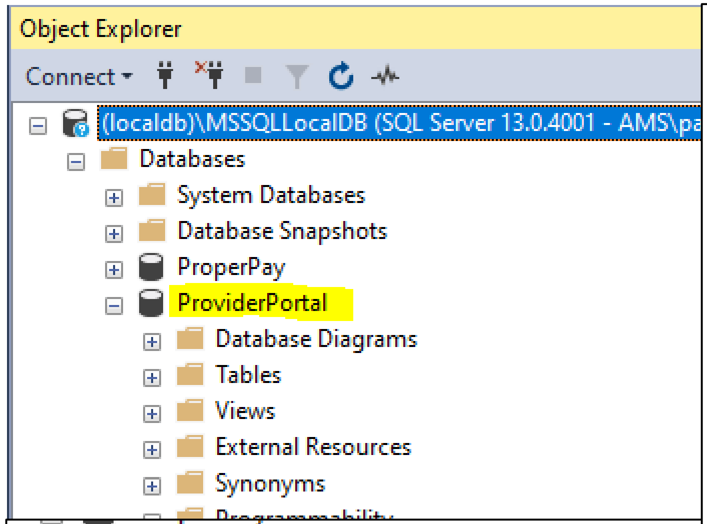
Authentication: Windows Authentication

User name: AMS\paula.daniel

Password:

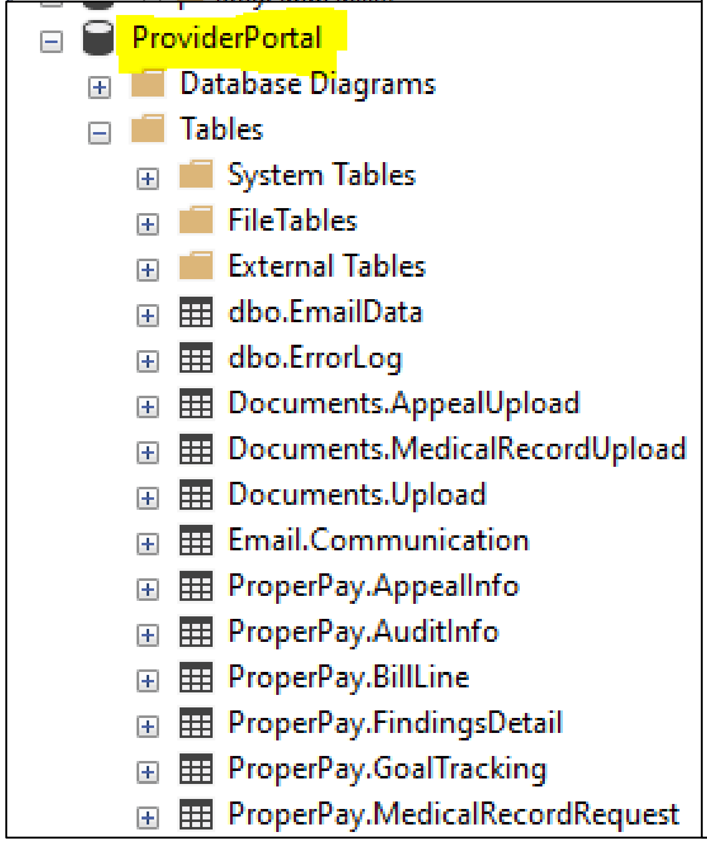
□ Remember password

1. Connect To Unified Access RNAS-TOR
2. Open SSMS
3. Connect To Local Database:
   - Server Name: (localdb)\MSSQLLocalDB
   - Default Windows Authentication

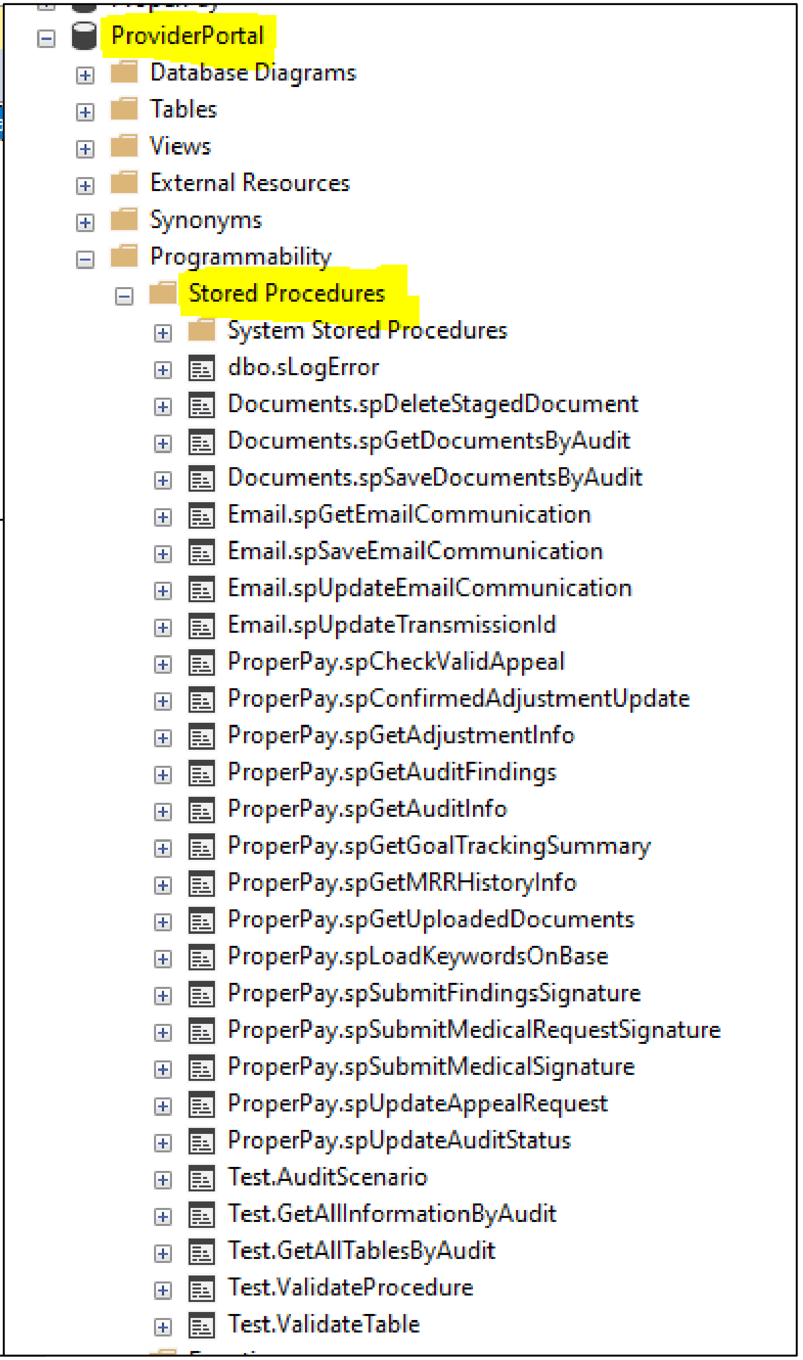


Object Explorer

- (localdb)\MSSQLLocalDB (SQL Server 13.0.4001 - AMS\pa
  - Databases
    - System Databases
    - Database Snapshots
    - ProperPay
    - ProviderPortal
      - Database Diagrams
      - Tables
      - Views
      - External Resources
      - Synonyms



- ProviderPortal
  - Database Diagrams
  - Tables
    - System Tables
    - FileTables
    - External Tables
    - dbo.EmailData
    - dbo.ErrorLog
    - Documents.AppealUpload
    - Documents.MedicalRecordUpload
    - Documents.Upload
    - Email.Communication
    - ProperPay.AppealInfo
    - ProperPay.AuditInfo
    - ProperPay.BillLine
    - ProperPay.FindingsDetail
    - ProperPay.GoalTracking
    - ProperPay.MedicalRecordRequest



- ProviderPortal
  - Database Diagrams
  - Tables
  - Views
  - External Resources
  - Synonyms
  - Programmability
    - Stored Procedures
      - System Stored Procedures
      - dbo.sLogError
      - Documents.spDeleteStagedDocument
      - Documents.spGetDocumentsByAudit
      - Documents.spSaveDocumentsByAudit
      - Email.spGetEmailCommunication
      - Email.spSaveEmailCommunication
      - Email.spUpdateEmailCommunication
      - Email.spUpdateTransmissionId
      - ProperPay.spCheckValidAppeal
      - ProperPay.spConfirmedAdjustmentUpdate
      - ProperPay.spGetAdjustmentInfo
      - ProperPay.spGetAuditFindings
      - ProperPay.spGetAuditInfo
      - ProperPay.spGetGoalTrackingSummary
      - ProperPay.spGetMRRHistoryInfo
      - ProperPay.spGetUploadedDocuments
      - ProperPay.spLoadKeywordsOnBase
      - ProperPay.spSubmitFindingsSignature
      - ProperPay.spSubmitMedicalRequestSignature
      - ProperPay.spSubmitMedicalSignature
      - ProperPay.spUpdateAppealRequest
      - ProperPay.spUpdateAuditStatus
      - Test.AuditScenario
      - Test.GetAllInformationByAudit
      - Test.GetAllTablesByAudit
      - Test.ValidateProcedure
      - Test.ValidateTable

Office Hours: Every Work Day
7:00-8:30am CST | 8:00-9:30am EST | 6:30-8:00pm IST

Office Hours Are Available To Anyone But Optional Each Day For Each Person

Reasons To Join Office Hours

- Have a question or concern about a ticket.
- Have a portal MR to review code.
- Have a development technical issue.
- Have a portal discussion topic.

Notification To Join Office Hours

If you want to participate in office hours that day, post a notification in the office hours chat before or during the meeting time:

Merge Request : <Ticket Number>
OR …
Discussion : <Ticket Number | Reason>

Office Hour Guidelines

- If you get the meeting reminder and you have nothing to discuss, then you don’t need to join.
- If you are alerted that someone started the meeting and you have nothing to discuss, then you don’t need to join.
- If you see someone post that they have a MR to review or a topic to discuss, you still don’t need to join.
- The merge requests, code reviews & demos for internal portal is just done with Paula & developer
- You don’t need to watch other MRs or hear other discussions unless they will help your ticket.
- ***Only join the portal daily office hours if it helps you implement your ticket or benefits you specifically.***
- It’s preferred that you attend as few meetings as possible to minimize time spent not working on tickets.

Administrative Changes For This PI 22-1

- Paula will handle the ticket changes for updates, status changes & sprint movement.
- Paula will ensure the code gets merged & functional into the various environments.
- Paula will communicate with Steven and the testers on any status, questions or issues.
- Paula will reach out to Steven or Rani as needed.
- *You will not attend regular scrum or status meetings.*

Team Member Responsibilities

- Start understanding your ticket on Day 1.
- Create your ticket branches on Day 1.
- Try your best to work within the timeline.
- Join office hours if you're having issues.
- Join office hours if you need clarification.
- Join office hours to review MR code.
- Have demo prepared when reviewing code.
- *Provide short status message daily to Paula (PM)*
- Attend team parking lot meetings only when you have a functionality demo to display.

My Goals & Objectives:

- To allow the team to have the most time possible to work on tickets without distractions.
- To minimize the amount of team time spent dealing with other team questions, testing issues, ticket management and meetings.
- To be available daily for clarification, questions, coding help & testing help.
- To help move the tickets along as needed.
- To do anything I can to help you perform your best and put forward your best work.

Daily Work Status Template

Work Status: Name

- Ticket: Ticket # - Short Description
- Work Completed (%): Approximate %
- Obstacles: Issues preventing work
- Concerns: Issues slowing down work
- Progress: Ticket Timeline Progress
- On Track: Confident | Not Confident | Not Sure
- Need Help: Yes / No

Work Status Examples

Work Status: Paula Daniel

- Ticket : PPAYAD-1048 – Data Sync
- Work Completed (%): 20%
- Obstacles: N/A
- Concerns: Mockup from rani is confusing.
- Progress: Finished service work; starting on front end.
- On Track: Confident
- Need Help: Yes – Clarify mockup detail with Rani

Work Status: Paula Daniel

- Ticket : PPAYAD-1048 – Data Sync
- Work Completed (%): 50%
- Obstacles: Cannot hit endpoint
- Concerns: Testing issues
- Progress: Implementation Done; Testing
- On Track: Not Sure
- Need Help: Yes – Joining office hours today

Work Status: Paula Daniel

- Ticket : PPAYAD-1048 – Data Sync
- Work Completed (%): 75%
- Obstacles: N/A
- Concerns: Testing rework taking longer
- Progress: Maybe done by Friday
- On Track: Not Confident
- Need Help: No

Work Status: Paula Daniel

- Ticket: PPAYAD-1048 – Data Sync
- Work Completed (%): 90%
- Obstacles: N/A
- Concerns: N/A
- Progress: MR created to review tomorrow
- On Track: Confident
- Need Help: No

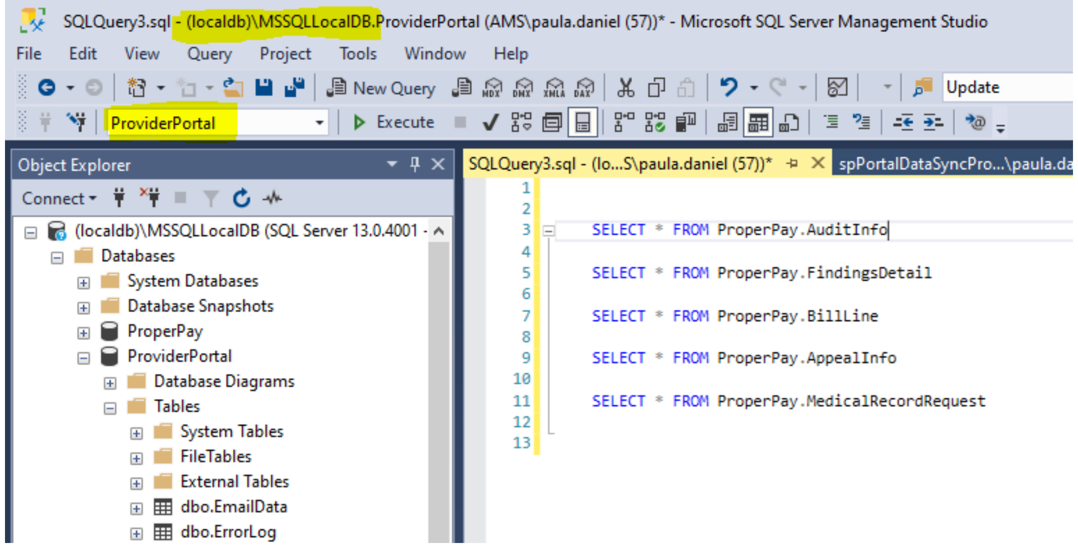
Portal Work Tips & Tricks

Start every work day with logging into RNAS-TOR VPN. You can stay on RNAS all day and get anything needed done.

Utilize all the resources on the portal information pages …
Portal Development Overview : Training Slides, Training Videos, Credentials, Development & Testing Information.
Portal Implementation Overview : Sprint Information, Ticket Information, Development Process, Sprint Timeline

Develop & test using your localdb set up when you completed your checklist. It should already be configured in your services project. Localdb will allow you to make changes which only affect your work and it is much faster to run the application with data coming from your local db.

When using SSMS, make sure you are in the Localdb connection and using ProviderPortal as your database before executing any commands and making any database changes.



SQLQuery3.sql - (localdb)\MSSQLLocalDB.ProviderPortal (AMS\paula.daniel (57))* - Microsoft SQL Server Management Studio

ProviderPortal

SQLQuery3.sql - (lo...S\paula.daniel (57))*

spPortalDataSyncPro...\paula.da

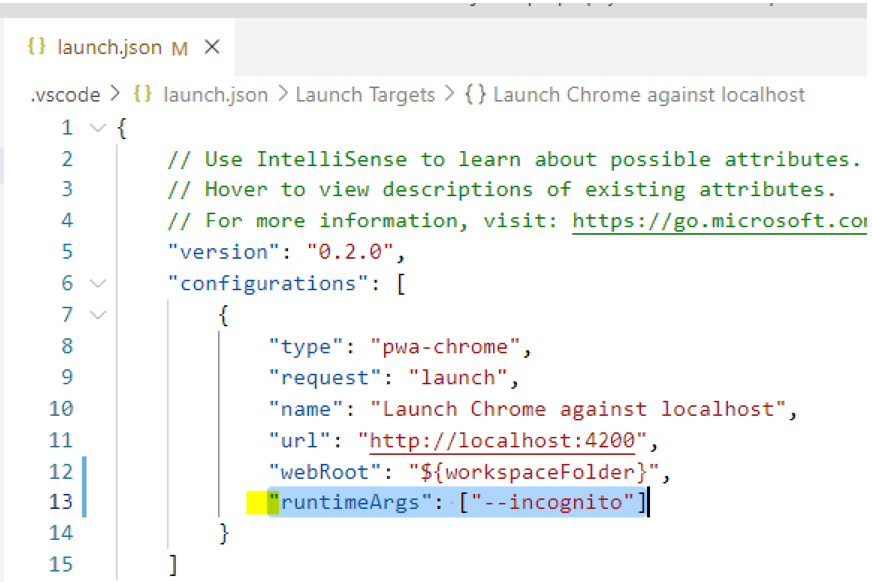
```
(localdb)\MSSQLLocalDB (SQL Server 13.0.4001 -
    Databases
        System Databases
        Database Snapshots
        ProperPay
        ProviderPortal
            Database Diagrams
            Tables
                System Tables
                FileTables
                External Tables
                dbo.EmailData
                dbo.ErrorLog
```

```


SELECT * FROM ProperPay.AuditInfo

SELECT * FROM ProperPay.FindingsDetail

SELECT * FROM ProperPay.BillLine

SELECT * FROM ProperPay.AppealInfo

SELECT * FROM ProperPay.MedicalRecordRequest


```

Communications Portal Front-End

- VS Code will allow real-time compile in VS Code and it will run again just by saving any changes so you do not need to *ng build* or *ng serve* after each change. <u>However</u>, after 1-2 hours of making changes you may notice things not working correctly. At that point you will want to Ctrl-C to stop running, then ng serve to compile and start fresh.

- Applications including angular that use ng serve for development sometimes save old code in the cache which leads you to believe the new code is not working. You can avoid this by testing in incognito mode. If you are using VSCode you can add an argument to the launch.json file.

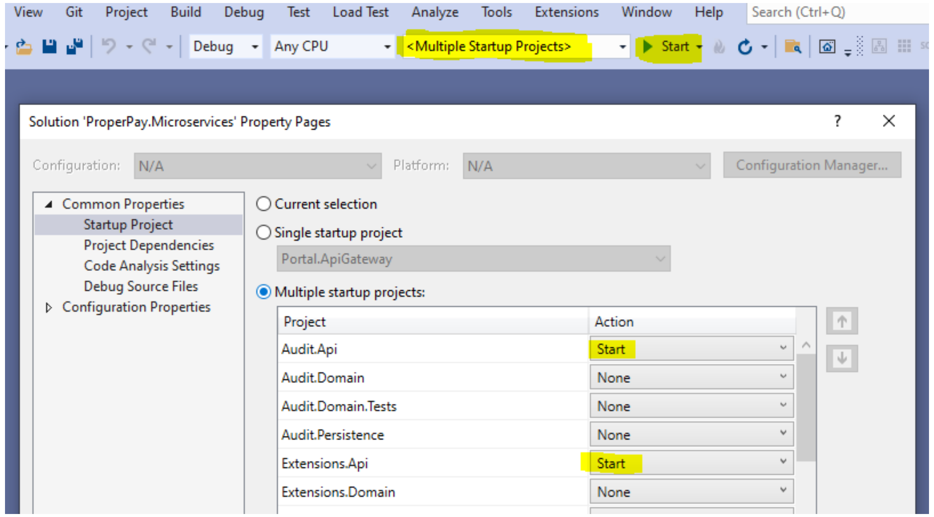

{} launch.json M ×
.vscode > {} launch.json > Launch Targets > {} Launch Chrome against localhost

```
{
    // Use IntelliSense to learn about possible attributes.
    // Hover to view descriptions of existing attributes.
    // For more information, visit: https://go.microsoft.co
    "version": "0.2.0",
    "configurations": [
        {
            "type": "pwa-chrome",
            "request": "launch",
            "name": "Launch Chrome against localhost",
            "url": "http://localhost:4200",
            "webRoot": "${workspaceFolder}",
            "runtimeArgs": ["--incognito"]
        }
    ]
```

Portal Services

- VS Code will allow real-time compile in VS Code and it will run again just by saving any changes so you do not need to *ng build* or *ng serve* after each change. However, after 1-2 hours of making changes you may notice things not working correctly. At that point you will want to Ctrl-C to stop running, then ng serve to compile and start fresh.

- Applications including angular that use ng serve for development sometimes save old code in the cache which leads you to believe the new code is not working. You can avoid this by testing in incognito mode. If you are using VSCode you can add an argument to the launch.json file.



Solution 'ProperPay.Microservices' Property Pages

Configuration: N/A   Platform: N/A

○ Current selection

○ Single startup project

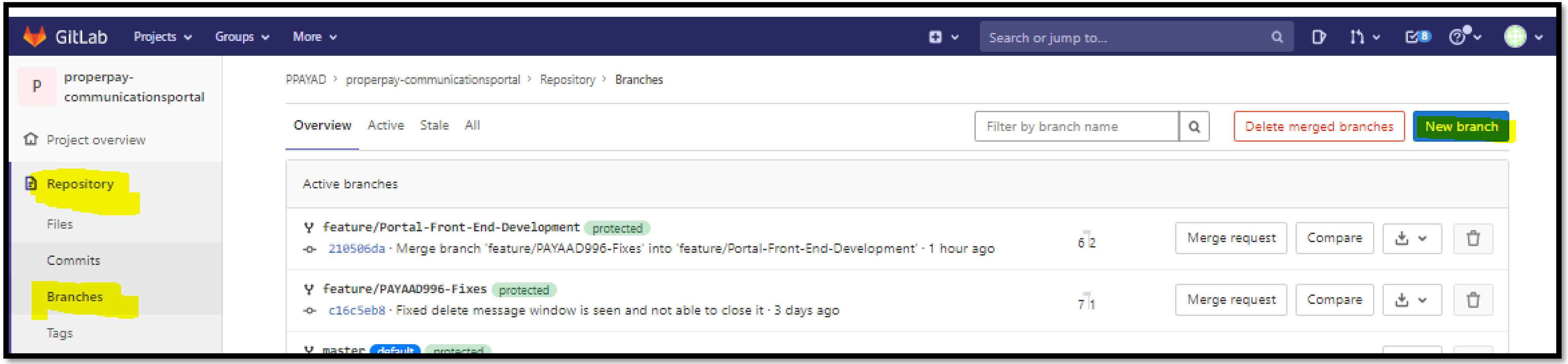
Portal.ApiGateway

● Multiple startup projects:

Project	Action
Audit.Api	Start
Audit.Domain	None
Audit.Domain.Tests	None
Audit.Persistence	None
Extensions.Api	Start
Extensions.Domain	None

Creating Your Branch

dev/<Project>-<Repo>/<Ticket #>-*<Short-Ticket-Description-Dashes-AllCaps>*

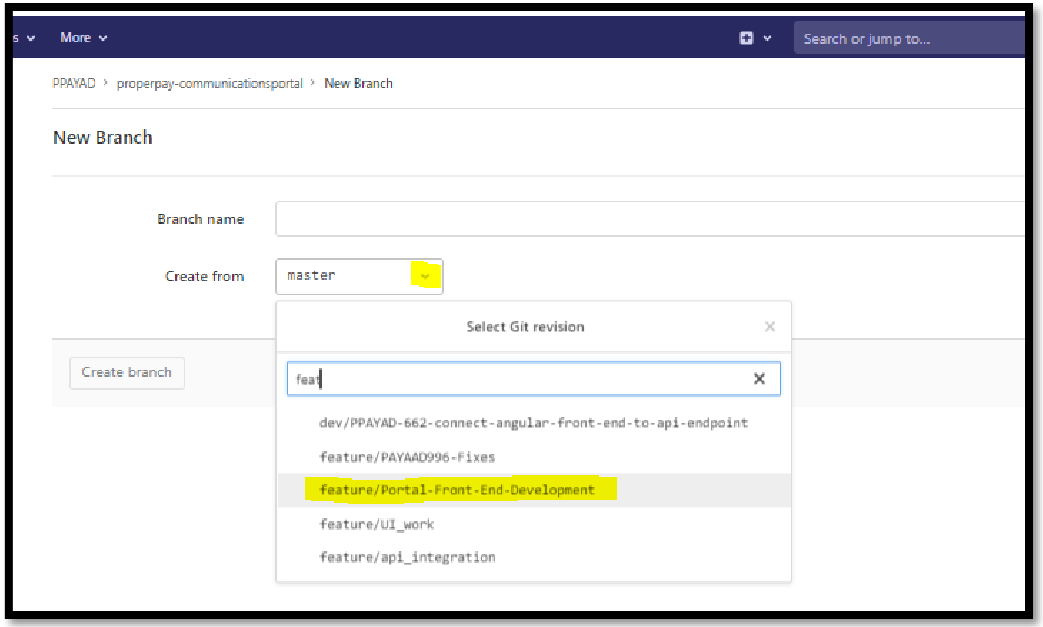


Active branches

feature/Portal-Front-End-Development protected
210506da · Merge branch 'feature/PAYAAD996-Fixes' into 'feature/Portal-Front-End-Development' · 1 hour ago
6 2 Merge request Compare

feature/PAYAAD996-Fixes protected
c16c5eb8 · Fixed delete message window is seen and not able to close it · 3 days ago
7 1 Merge request Compare

master default protected



New Branch

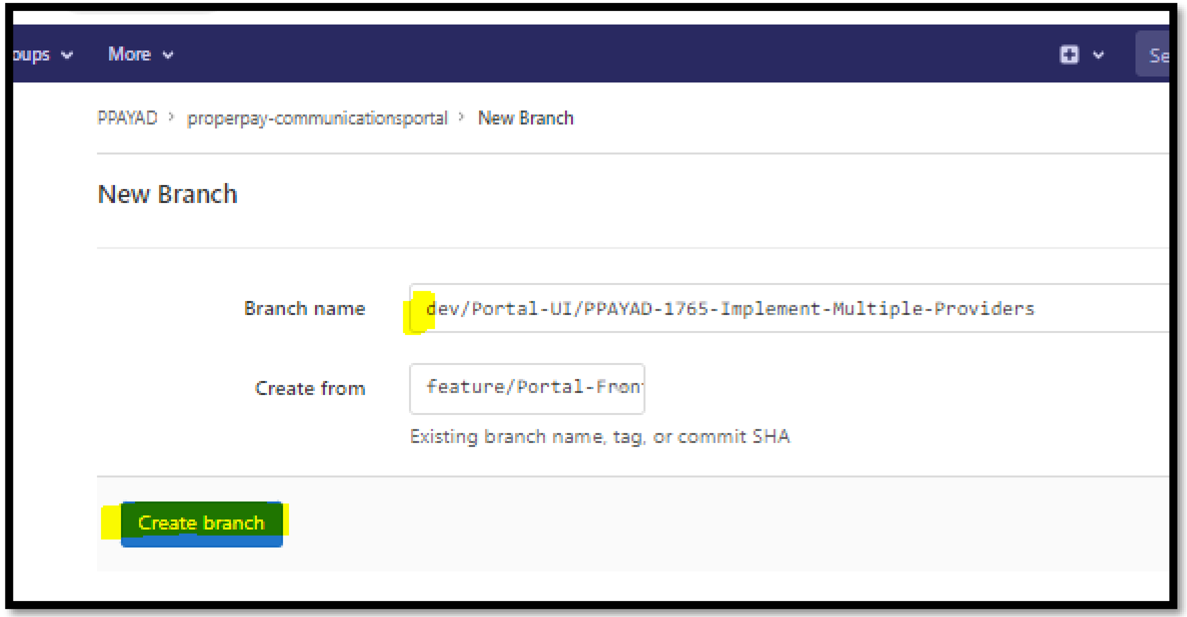
Branch name

Create from master

Select Git revision

feat

dev/PPAYAD-662-connect-angular-front-end-to-api-endpoint
feature/PAYAAD996-Fixes
feature/Portal-Front-End-Development
feature/UI_work
feature/api_integration



New Branch

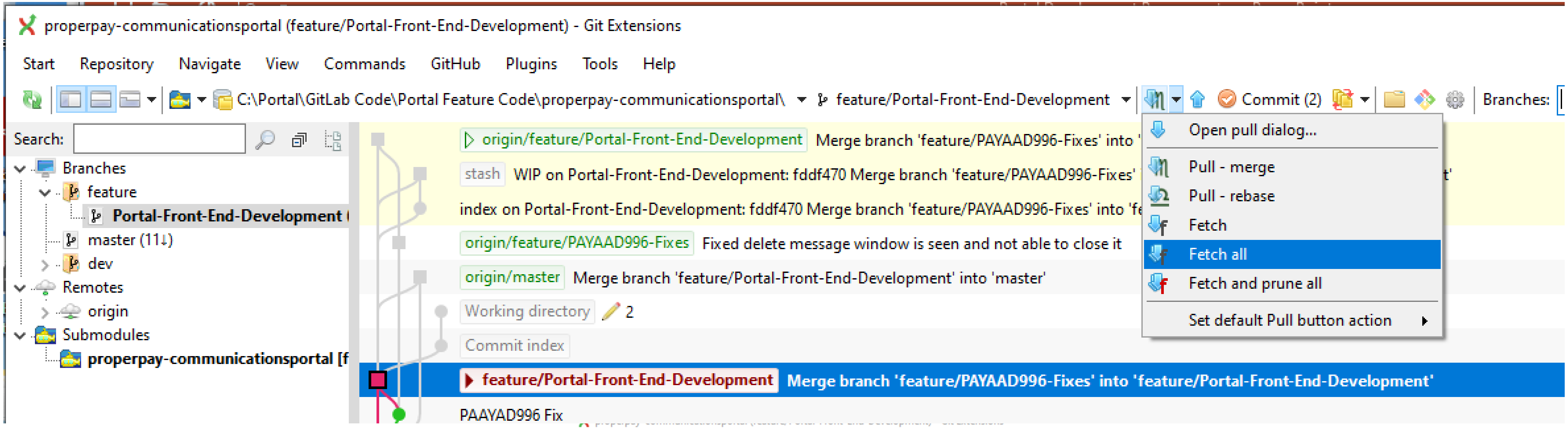
Branch name dev/Portal-UI/PPAYAD-1765-Implement-Multiple-Providers

Create from feature/Portal-Fron

Existing branch name, tag, or commit SHA

Create branch

Checking Out Your Branch


properperpay-communicationsportal (feature/Portal-Front-End-Development) - Git Extensions

origin/feature/Portal-Front-End-Development Merge branch 'feature/PAYAAD996-Fixes' into '

stash WIP on Portal-Front-End-Development: fddf470 Merge branch 'feature/PAYAAD996-Fixes'

index on Portal-Front-End-Development: fddf470 Merge branch 'feature/PAYAAD996-Fixes' into 'fe

origin/feature/PAYAAD996-Fixes Fixed delete message window is seen and not able to close it

origin/master Merge branch 'feature/Portal-Front-End-Development' into 'master'

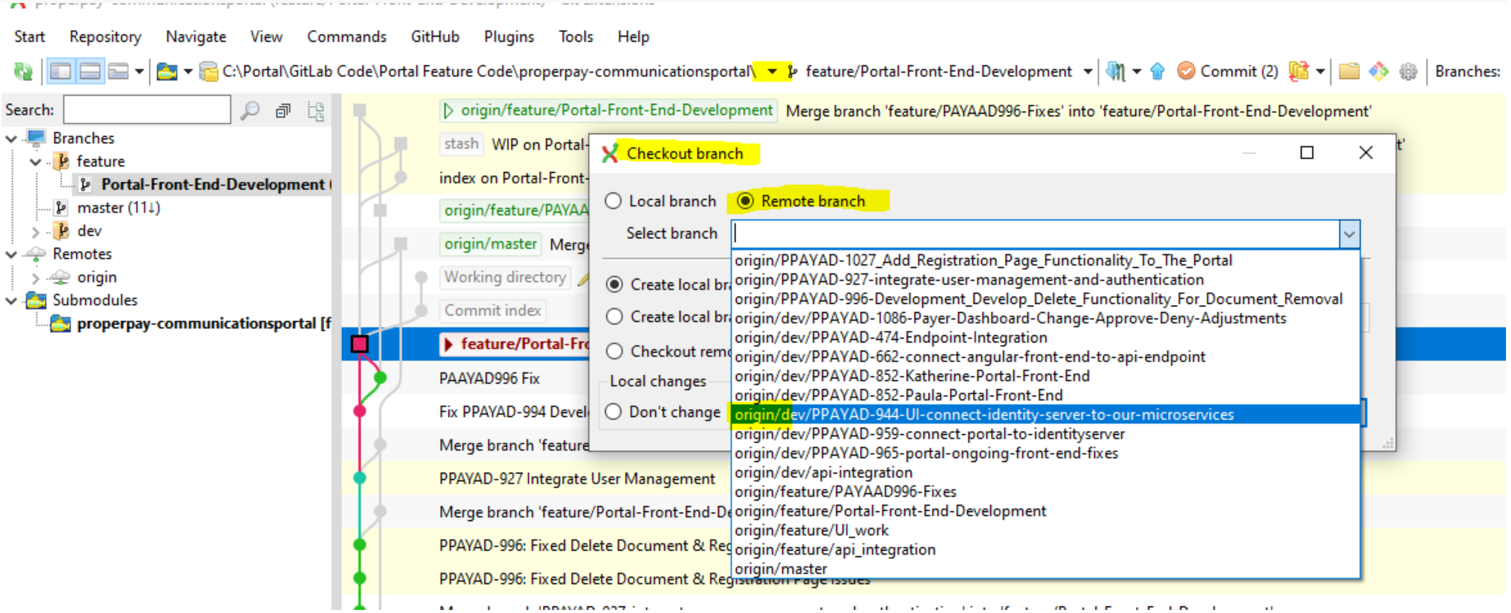
Working directory 2

Commit index

feature/Portal-Front-End-Development Merge branch 'feature/PAYAAD996-Fixes' into 'feature/Portal-Front-End-Development'

PAAYAD996 Fix

You will choose Remote Branch when you are checking out the branch for the first time. You will see origin/ on the front. After you check it out, it will show on your solutions as just dev/


Checkout branch

○ Local branch ● Remote branch

Select branch

● Create local br
○ Create local br
○ Checkout rem

Local changes

○ Don't change

origin/PPAYAD-1027_Add_Registration_Page_Functionality_To_The_Portal
origin/PPAYAD-927-integrate-user-management-and-authentication
origin/PPAYAD-996-Development_Develop_Delete_Functionality_For_Document_Removal
origin/dev/PPAYAD-1086-Payer-Dashboard-Change-Approve-Deny-Adjustments
origin/dev/PPAYAD-474-Endpoint-Integration
origin/dev/PPAYAD-662-connect-angular-front-end-to-api-endpoint
origin/dev/PPAYAD-852-Katherine-Portal-Front-End
origin/dev/PPAYAD-852-Paula-Portal-Front-End
origin/dev/PPAYAD-944-UI-connect-identity-server-to-our-microservices
origin/dev/PPAYAD-959-connect-portal-to-identityserver
origin/dev/PPAYAD-965-portal-ongoing-front-end-fixes
origin/dev/api-integration
origin/feature/PAYAAD996-Fixes
origin/feature/Portal-Front-End-Development
origin/feature/UI_work
origin/feature/api_integration
origin/master

Start
Repository
Navigate
View
Commands
GitHub
Plugins
Tools
Help
C:\Portal\GitLab Code\Portal Feature Code\properpay-communicationsportal\
feature/Portal-Front-End-Development
Commit (2)
Branches:
Search:
Branches
feature
Portal-Front-End-Development
master (11↓)
dev
Remotes
origin
Submodules
properpay-communicationsportal [f

origin/feature/Portal-Front-End-Development Merge branch 'feature/PAYAAD996-Fixes' into 'feature/Portal-Front-End-Development'

PAAYAD996 Fix

Fix PPAYAD-994 Devel

Merge branch 'feature

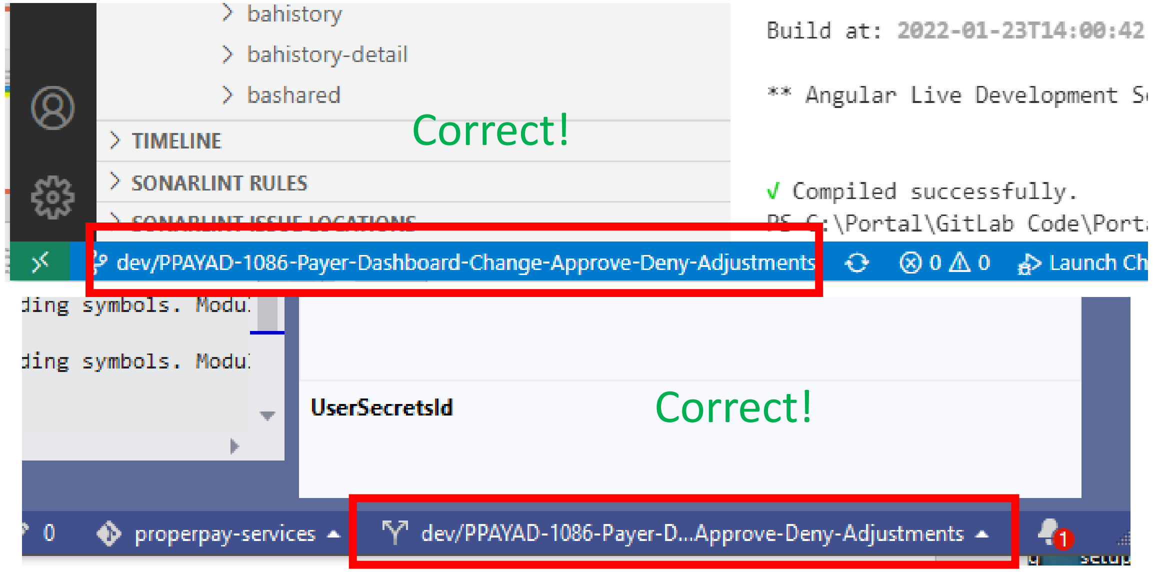
PPAYAD-927 Integrate User Management

Merge branch 'feature/Portal-Front-End-De

PPAYAD-996: Fixed Delete Document & Reg

PPAYAD-996: Fixed Delete Document & Registration Page Issues

When in development, verify the branch at the bottom of your solutions with the ticket number. You should see your ticket number (Not Feature / Not Master). This will avoid you submitting code directly to a protected branch.



```
> bahistory
> bahistory-detail
> bashared
> TIMELINE
> SONARLINT RULES
> SONARLINT ISSUE LOCATIONS
dev/PPAYAD-1086-Payer-Dashboard-Change-Approve-Deny-Adjustments  ⊗ 0 ⚠ 0  Launch Ch
```

```
Build at: 2022-01-23T14:00:42

** Angular Live Development S

√ Compiled successfully.
PS C:\Portal\GitLab Code\Port
```

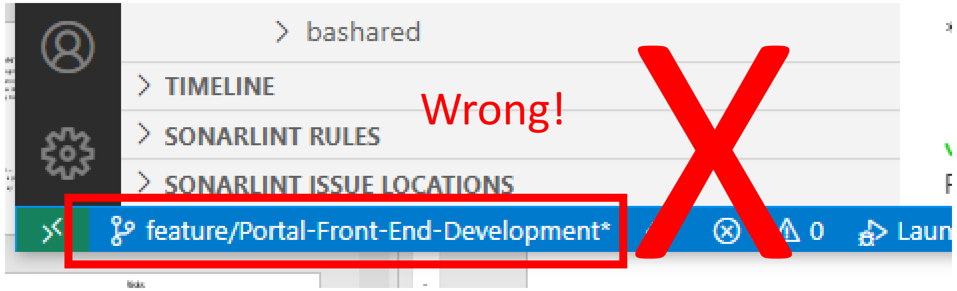
```
ding symbols. Modu
ding symbols. Modu
```

UserSecretsId

```
0  properpay-services ▲  dev/PPAYAD-1086-Payer-D...Approve-Deny-Adjustments ▲
```

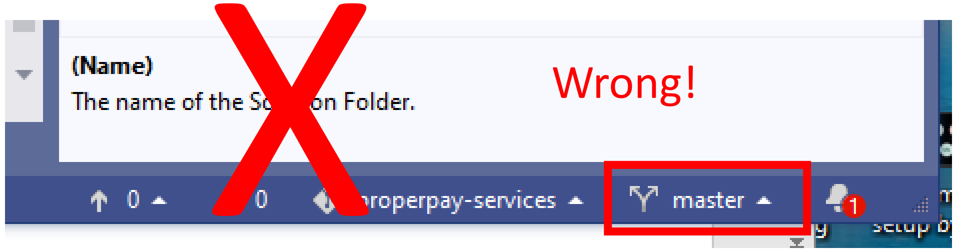
Correct!

Correct!



```
> bashared
> TIMELINE
> SONARLINT RULES
> SONARLINT ISSUE LOCATIONS
feature/Portal-Front-End-Development*  ⊗ ⚠ 0  Laun
```

Wrong!

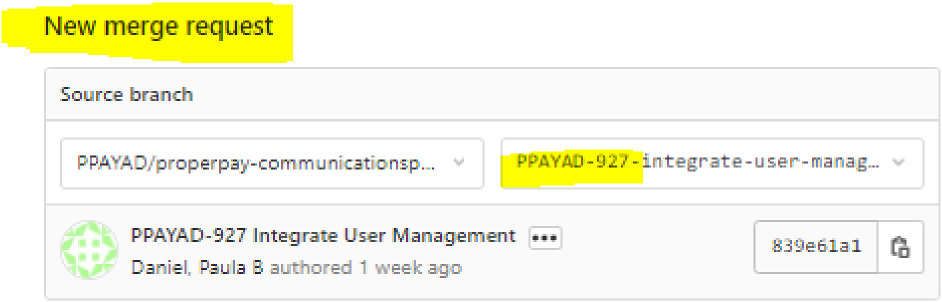


(Name)
The name of the So on Folder.

```
↑ 0 ▲  0  properpay-services ▲  master ▲
```

Wrong!

When creating a merge request, make sure the source code is your branch where you committed your code and the target is the feature branch for either the Front-End or Back-End. It should never be master!



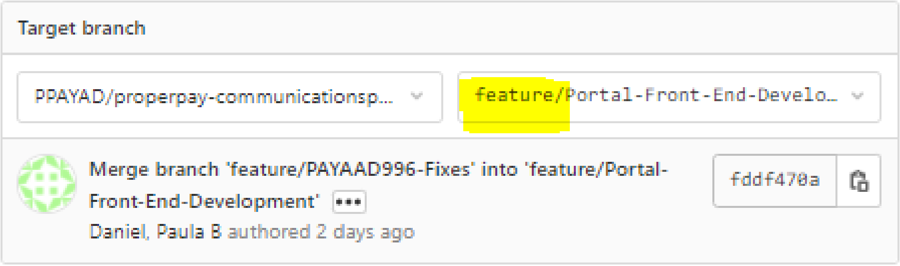
New merge request

Source branch

PPAYAD/properpay-communicationsp...

PPAYAD-927-integrate-user-manag...

PPAYAD-927 Integrate User Management •••
Daniel, Paula B authored 1 week ago
839e61a1



Target branch

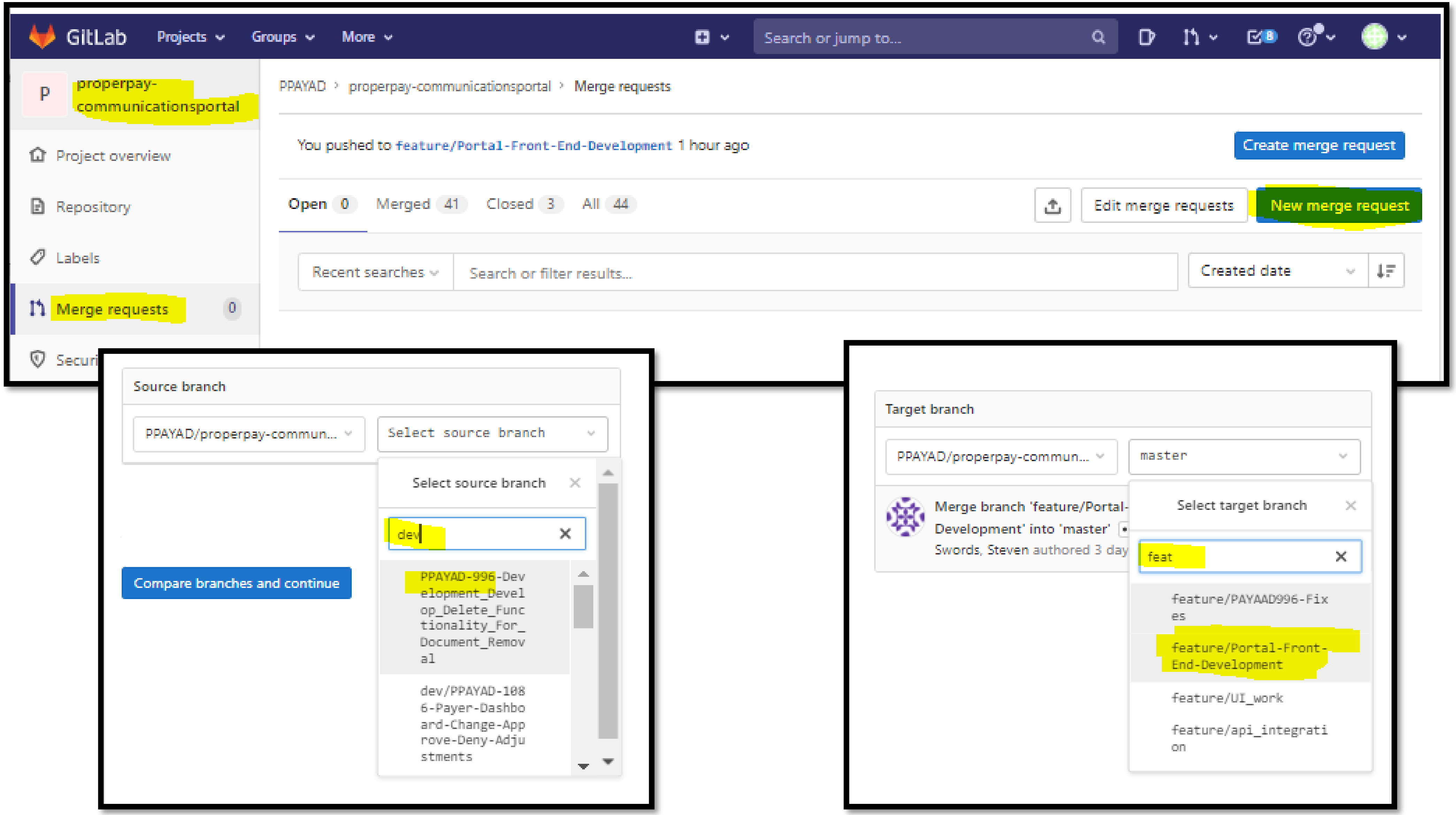
PPAYAD/properpay-communicationsp...

feature/Portal-Front-End-Develo...

Merge branch 'feature/PAYAAD996-Fixes' into 'feature/Portal-Front-End-Development' •••
Daniel, Paula B authored 2 days ago
fddf470a

Creating Your Merge Request

MR/<Project>-<Repo>/<Ticket #>-*<Short-Ticket-Description-Dashes-AllCaps>*



You pushed to feature/Portal-Front-End-Development 1 hour ago

dev

PPAYAD-996-Development_Develop_Delete_Functionality_For_Document_Removal

dev/PPAYAD-1086-Payer-Dashboard-Change-Approve-Deny-Adjustments

Merge branch 'feature/Portal-Front-End-Development' into 'master'

Swords, Steven authored 3 day

feat

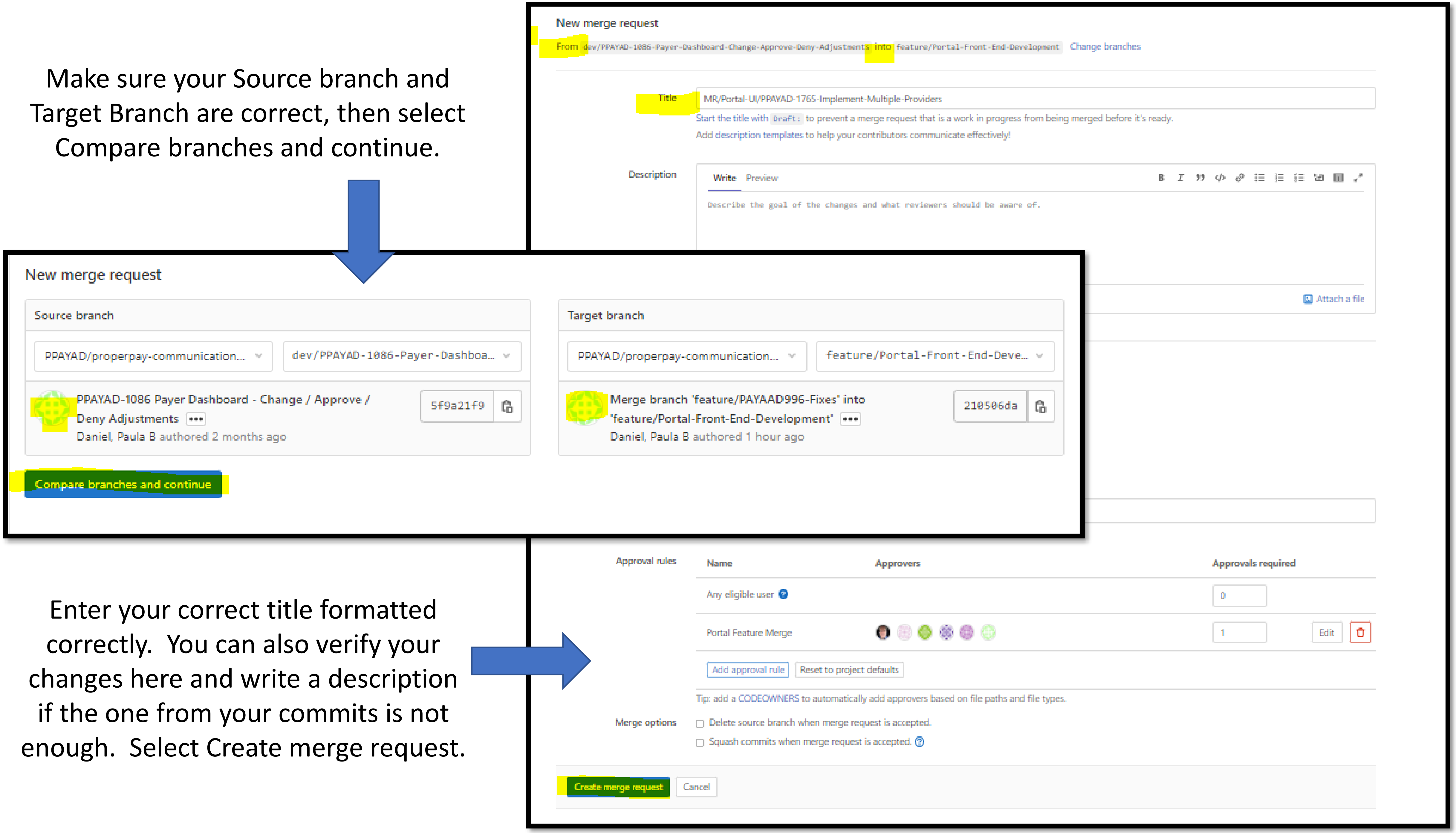
feature/PAYAAD996-Fixes

feature/Portal-Front-End-Development

feature/UI_work

feature/api_integration

Make sure your Source branch and Target Branch are correct, then select Compare branches and continue.



New merge request

Source branch	Target branch
PPAYAD/properpay-communication... dev/PPAYAD-1086-Payer-Dashboa...	PPAYAD/properpay-communication... feature/Portal-Front-End-Deve...
PPAYAD-1086 Payer Dashboard - Change / Approve / Deny Adjustments ••• Daniel, Paula B authored 2 months ago 5f9a21f9	Merge branch 'feature/PAYAAD996-Fixes' into 'feature/Portal-Front-End-Development' ••• Daniel, Paula B authored 1 hour ago 210506da

New merge request

From `dev/PPAYAD-1086-Payer-Dashboard-Change-Approve-Deny-Adjustments` into `feature/Portal-Front-End-Development` Change branches

Title: MR/Portal-UI/PPAYAD-1765-Implement-Multiple-Providers

Start the title with `Draft:` to prevent a merge request that is a work in progress from being merged before it's ready.

Add description templates to help your contributors communicate effectively!

Description

Write Preview

`Describe the goal of the changes and what reviewers should be aware of.`

Attach a file

Approval rules

Name	Approvers	Approvals required	
Any eligible user		0	
Portal Feature Merge		1	Edit

Tip: add a CODEOWNERS to automatically add approvers based on file paths and file types.

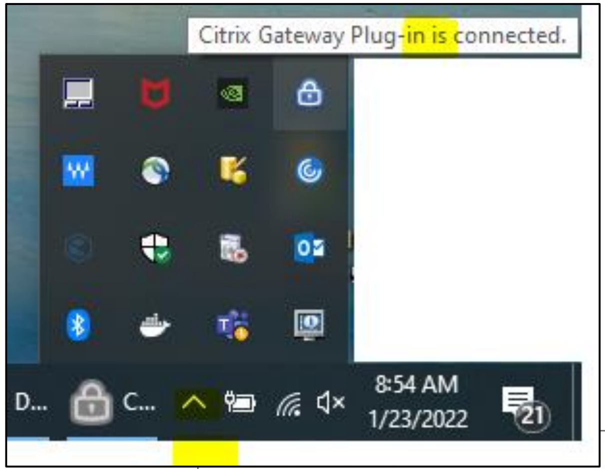
Merge options

□ Delete source branch when merge request is accepted.

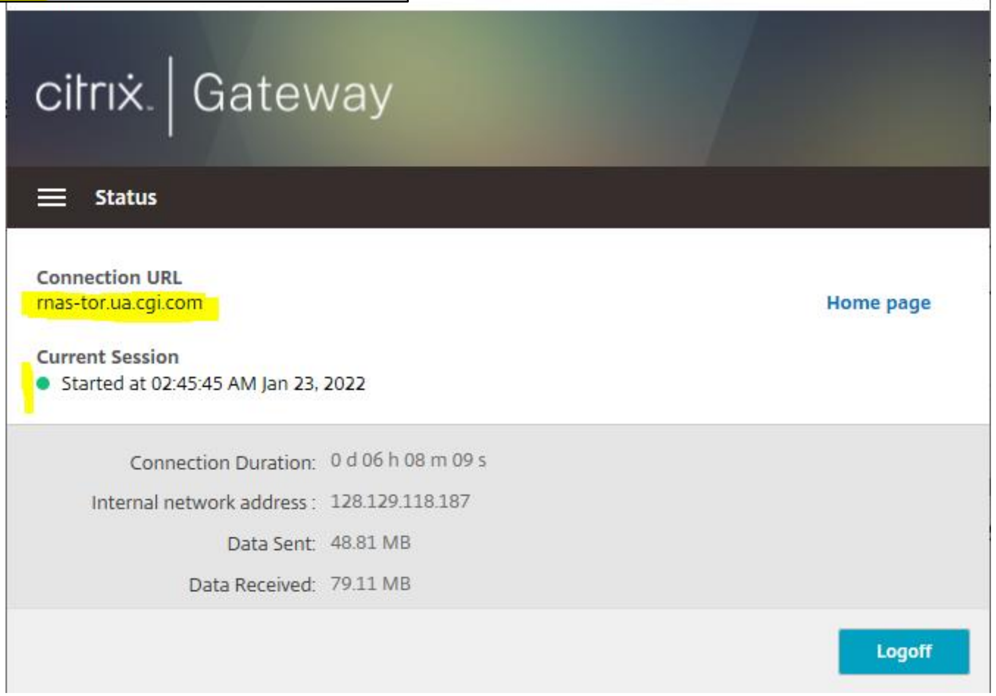
□ Squash commits when merge request is accepted.

Enter your correct title formatted correctly. You can also verify your changes here and write a description if the one from your commits is not enough. Select Create merge request.

Troubleshooting: Two Most Important Issues


Citrix Gateway Plug-in is connected.

Are you connected to the RNAS-TOR VPN?

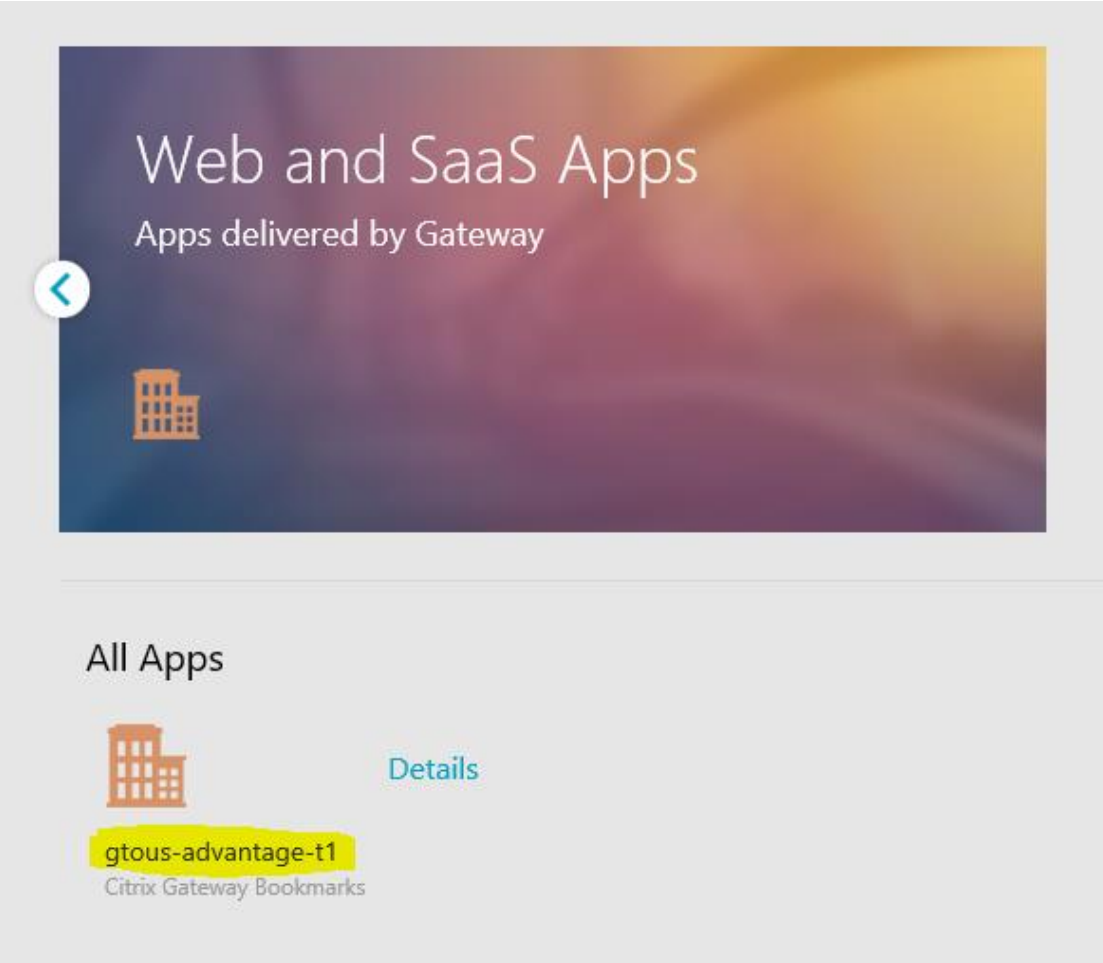


Connection URL
rnas-tor.ua.cgi.com

Current Session
● Started at 02:45:45 AM Jan 23, 2022

Connection Duration: 0 d 06 h 08 m 09 s
Internal network address : 128.129.118.187
Data Sent: 48.81 MB
Data Received: 79.11 MB

Did you click the gtous-advantage-t1 on the RNAS window and let it count down?



Additional Troubleshooting

- Is your configuration for the front-end pointing to the local back-end services?
- Are you serving your front-end code ng serve?
- Are there any red error on your front-end terminal window even though it compiled? Often after it compiles it will give some errors related to running.
- Are you running your portal using incognito mode?
- Have you been modifying your front-end code for a long time without restarting Ctrl-C , then ng serve?

- Are your services running locally?
- Is your configuration for the back-end services pointing to your localdb that you previously scripted?
- Check your services for being stuck on a break point. It will not alert you from the front-end angular code.
- Are there any errors in the services windows that opened when you started it. Often if there is a services error it will be displayed in the window of the specific service.
- Set breakpoints on the server controller endpoints to see if the front-end code is actually getting to the back-end.