

## Documentation for Automated Deployment to QC Soiver8

Goal: Automate deployment to QC Soiver8 through github actions

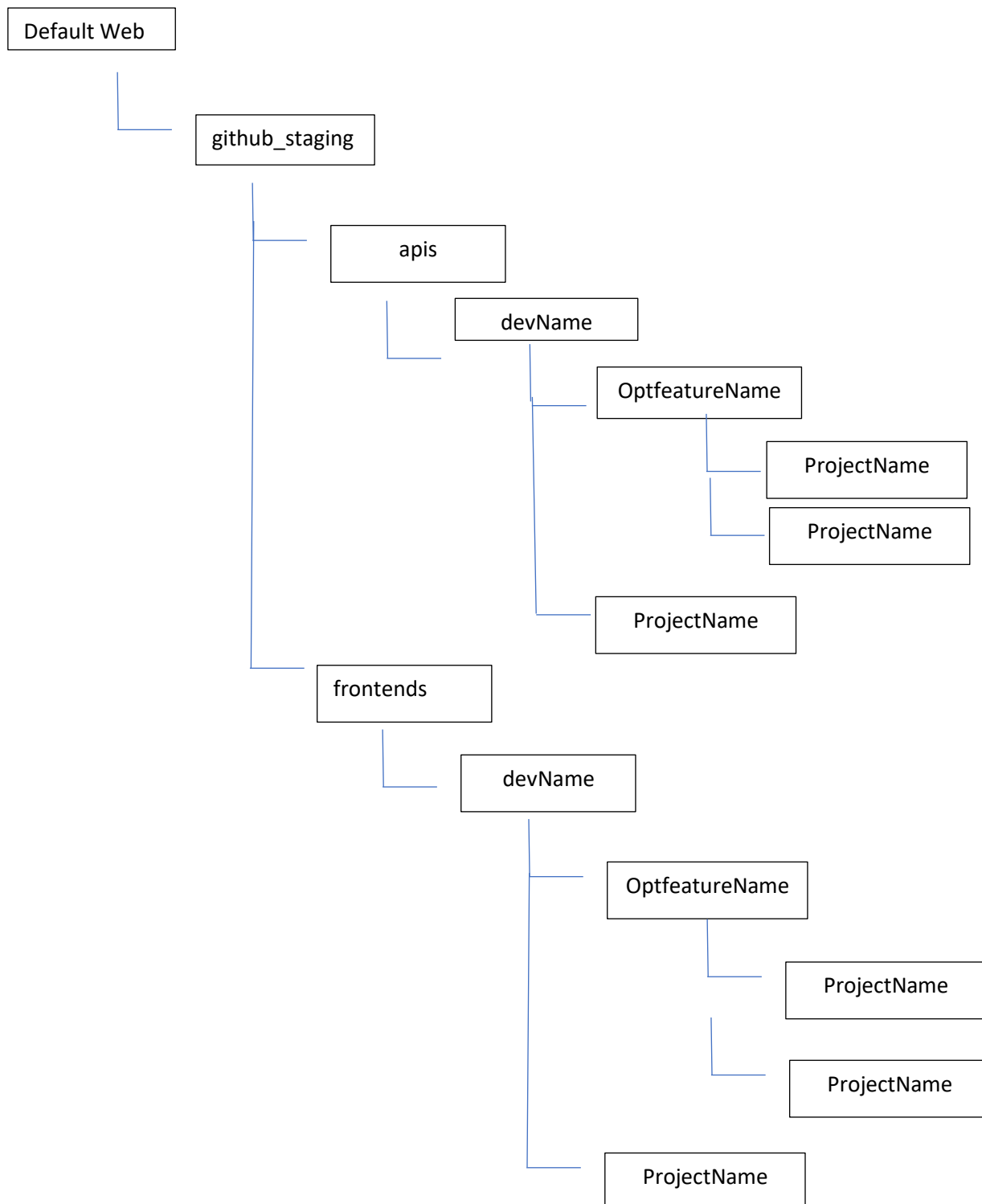
Tools used:

- Git bash /Command line / Github Desktop
- Github online UI (Github Actions- Actions tab inside the repository)

Section1:

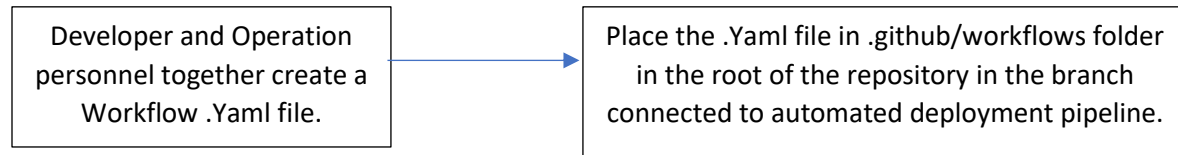
Proposed folder structure in IIS:

(Note: the developer **can** work on multiple task feature under same project name)



## Section2: How Github actions Work?

Step 1:



Example: folder structure

automated-depl... ▾		6 branches	7 tags
This branch is 162 commits ahead of Production/Production_20210329.			
CSG-richard Merge pull request #1 from CommunitySoftwareGroup/NextRelease ...			
📁 .github/workflows	removed slash , must work final		
📁 docs	Project Moved Back to main directory.		
📁 e2e	Project Moved Back to main directory.		
📁 src	Merge pull request #1 from CommunitySoft		
📄 .editorconfig	Project Moved Back to main directory.		
📄 .gitignore	Project Moved Back to main directory.		
📄 .htmlhintrc	Project Moved Back to main directory.		
📄 .stylelintrc	Project Moved Back to main directory.		
📄 README.md	Angular Project Initilized.		
📄 angular.json	added web config		

## Example: Workflow

automated-depl... ContractSystem / .github / workflows / build.yml

 CSG-richard folder name changed to dev name Li

1 contributor

57 lines (40 sloc) | 1.86 KB

```
1  name: build contract system UI
2
3  on:
4    push:
5      branches:
6        - automated-deployment/RD
7
8
9
10 jobs:
11   Job1:
12     name: build contract system
13     runs-on: [Soiver8-Runner]
14     env:
15       CI: false
16
17     steps:
18
19       - name: checkout code
20         uses: actions/checkout@v2
21
22       - name: setup-node 14
23         uses: actions/setup-node@v2
24         with:
25           node-version: '14'
26
27       - name: install dependencies
28         run: C:\Program` Files\PowerShell\7\pwsh -command npm ci
29
30       - name: build-angular and deploy
31         env:
32           CI: false
33         run: |
34           $devName = "Charlie"
35           $OptFeatureFolderName=""
36           $frontEndName = "ContractSystem"
37
38
39           if (!$OptFeatureFolderName.length -eq 0){$OptFeatureFolderName= "\" + $OptFeatureFolderName}
40           $target= "D:\test_i_soivers\github_staging\frontends\" + $foldername + $OptFeatureFolderName + "\" + $frontEndName
41
42           $baseRefPath= "\github_staging\frontends\" + $foldername + $OptFeatureFolderName + "\" + $frontEndName + "/"
43           $baseRefPath= $baseRefPath.replace("\","/")
44
45           $ErrorActionPreference = "Continue"; C:\Program` Files\PowerShell\7\pwsh -command $ErrorActionPreference = "Continue"; nod
46
47
48           if (Test-Path -path $target )
49           {
50             Remove-Item $target -Recurse
51           }
52           Copy-Item "C:\actions-runner\_work\ContractSystem\ContractSystem\dist" -Recurse -Destination $target
53           echo "
54
55
56           Physical-path = `"$target`"
57           Frontend-URL= `"$http://test_i_soiver8.communitysoftwaregroup.com$baseRefPath`" ""
```

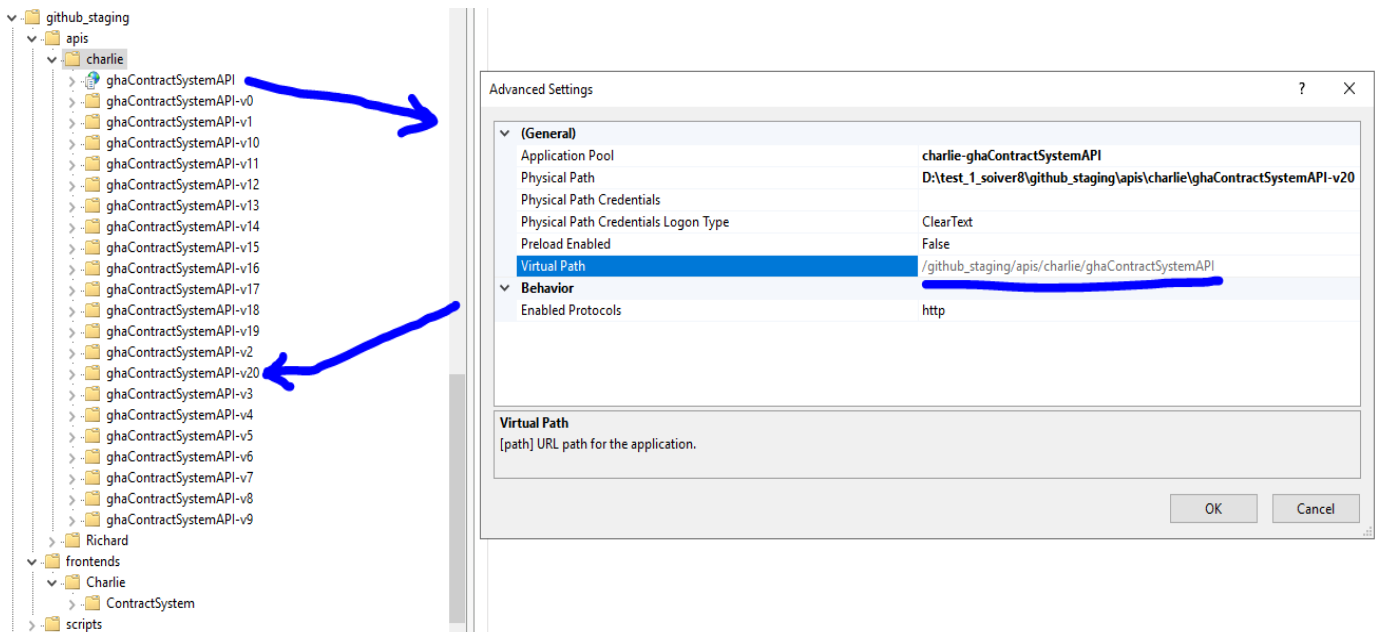
- On → specifies event trigger
- Jobs contains steps

General changes that are required by the developer:

```
--
30     - name: build-angular and deploy
31     env:
32       CI: false
33     run: |
34       $devName = "Charlie"
35       $OptFeatureFolderName=""
36       $frontEndName = "ContractSystem"
```

- Enter the above fields.
- OptFeatureFolderName (optional Feature folder name) can be left empty string.
- The details enter will result in the creation of folder structure in QC soiver8 as mentioned section 1.

Example: The IIS folder structure will look like



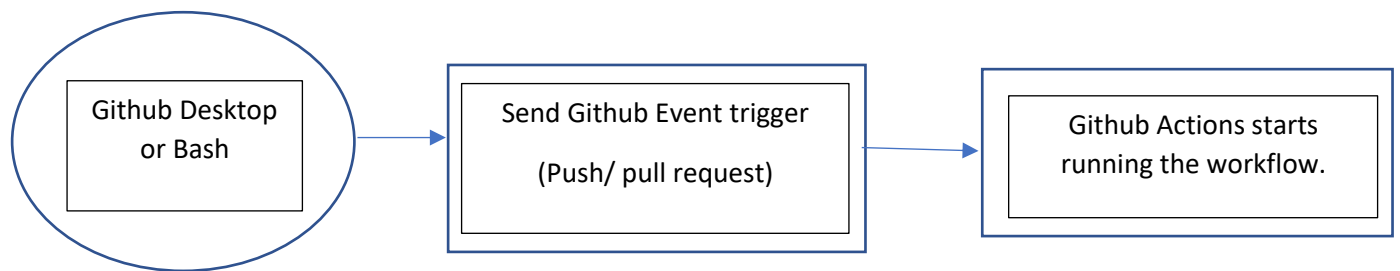
For API deployment:

- Repeated build to QC with same folder path, will create a new build folder with versioning.
- When the folder path remains unchanged, the Virtual path remains the same.
- The application physical path points to the latest version of folder.

For UI Deployment:

- Base href is changed automatically to match deployment path through the workflow

Step2:



- Open the Actions tab to view the workflow run status and logs, stats, previous logs.

Example:

The screenshot shows the GitHub web interface for the 'CommunitySoftwareGroup / ContractSystem' repository. The 'Actions' tab is selected in the top navigation bar, indicated by a blue arrow. Below the navigation bar, the 'Workflows' section is visible, showing a list of workflows. The 'All workflows' section displays a table of workflow runs. The table has columns for 'Event', 'Status', 'Branch', and 'Actor'. The first row shows a 'Merge pull request #1 from CommunitySoftwareGroup...' event, which is 'automated-deployment/RD' and '20 hours ago'. The second row shows a 'changed apiurl' event, which is 'automated-deployment/RD' and 'yesterday'. The third row shows a 'TRIAL 2 ADDED this\_hostName = window.location.hos...' event, which is 'automated-deployment/RD' and '2 days ago'. The fourth row shows a 'TRIAL ONE , RESET IF NECESSARY' event, which is 'automated-deployment/RD' and '2 days ago'. The fifth row shows a 'removed slash , must work final' event, which is 'automated-deployment/RD' and '2 days ago'. The sixth row shows a 'changed echo path and charlie to small C' event, which is 'automated-deployment/RD' and '2 days ago'.

View the logs while the run is progress or access previous logs by clicking on the workflow and commit message corresponding to the event.

## ✓ Merge pull request #1 from CommunitySoftwareGroup/NextRelease build contract system UI #152

### Summary

#### Jobs

#### ✓ build contract system

### build contract system

succeeded 20 hours ago in 9m 11s

#### ✓ Set up job

```
1 Current runner version: '2.277.1'
2 Runner name: 'Soiver8-Runner'
3 Runner group name: 'ApiServerRepos'
4 Machine name: 'EC2AMAZ-NHI27PP'
5 ▶ GITHUB_TOKEN Permissions
18 Prepare workflow directory
19 Prepare all required actions
20 Getting action download info
21 Download action repository 'actions/checkout@v2'
22 Download action repository 'actions/setup-node@v2'
```

#### ✓ checkout code

```
1 ▶ Run actions/checkout@v2
13 Syncing repository: CommunitySoftwareGroup/ContractSystem
14 ▶ Getting Git version info
18 "C:\Program Files\Git\cmd\git.exe" config --local --get remote.origin.url
19 https://github.com/CommunitySoftwareGroup/ContractSystem
20 ▶ Removing previously created refs, to avoid conflicts
207 ▶ Cleaning the repository
213 ▶ Disabling automatic garbage collection
215 ▶ Setting up auth
221 ▶ Fetching the repository
259 ▶ Determining the checkout info
260 ▶ Checking out the ref
274 "C:\Program Files\Git\cmd\git.exe" log -1 --format='%H'
275 '62b5cfd7d4a9cb21f84e3161c283ffc6d26d67'
```

#### > ✓ setup-node 14

#### > ✓ install dependencies

## changed to RD2 build contract system API #75

### Summary

Jobs

build the contract system API using .net p...

### build the contract system API using .net publish

succeeded 20 hours ago in 34s

- Set up job
- checkout code
- Setup .NET Core
- Setting up new folder and version, then publishing

```
1  ▶ Run $devName = "charlie"
30 New release version v-20 is assigned
31 Microsoft (R) Build Engine version 16.7.0-preview-20360-03+188921e2f for .NET
32 Copyright (C) Microsoft Corporation. All rights reserved.
33
34 Determining projects to restore...
35 Restored C:\actions-runner\work\ContractSystem_API\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj (in 1.
36 Warning: Controllers\InitialController.cs(162,1): warning SA1507: Code must not contain multiple blank lines in a row [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
37 Warning: Data\DocumentDataLayer.cs(297,23): warning SA1202: 'public' members must come before 'private' members [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
38 Warning: Data\ReleaseTaskDataLayer.cs(326,51): warning SA1202: 'public' members must come before 'private' members [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
39 Warning: Data\ReleaseTaskDataLayer.cs(115,21): warning SA1512: Single-line comments must not be followed by blank line [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
40 Warning: Data\ReleaseTaskDataLayer.cs(279,21): warning SA1515: Single-line comment must be preceded by blank line [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
41 Warning: Controllers\SubGranteeController.cs(436,21): warning SA1118: The parameter spans multiple lines [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
42 Warning: Controllers\SubGranteeController.cs(440,21): warning SA1118: The parameter spans multiple lines [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
43 Warning: Controllers\SubGranteeController.cs(443,21): warning SA1118: The parameter spans multiple lines [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
44 Warning: Data\ConfigurableContractDataLayer.cs(50,53): warning SA1117: The parameters must all be placed on the same line or each parameter must be placed on the same line [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
45 Warning: Data\ConfigurableContractDataLayer.cs(229,41): warning SA1117: The parameters must all be placed on the same line or each parameter must be placed on the same line [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
46 Warning: Data\ConfigurableContractDataLayer.cs(261,49): warning SA1117: The parameters must all be placed on the same line or each parameter must be placed on the same line [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
47 Warning: Startup.cs(122,13): warning SA1512: Single-line comments must not be followed by blank line [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
48 Warning: Data\ConfigurableContractDataLayer.cs(411,61): warning SA1117: The parameters must all be placed on the same line or each parameter must be placed on the same line [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
49 Warning: Data\DocumentDataLayer.cs(150,57): warning SA1117: The parameters must all be placed on the same line or each parameter must be placed on the same line [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
50 Warning: Data\DocumentDataLayer.cs(239,49): warning SA1117: The parameters must all be placed on the same line or each parameter must be placed on the same line [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
51 Warning: Data\ReleaseTaskDataLayer.cs(219,39): warning SA1129: Do not use default value type constructor [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
52 Warning: Data\EmailDataLayer.cs(44,45): warning SA1117: The parameters must all be placed on the same line or each parameter must be placed on the same line [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
53 Warning: Data\ReleaseTaskDataLayer.cs(262,53): warning SA1117: The parameters must all be placed on the same line or each parameter must be placed on the same line [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
54 Warning: Data\ReleaseTaskDataLayer.cs(295,73): warning SA1117: The parameters must all be placed on the same line or each parameter must be placed on the same line [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
55 Warning: Data\ReleaseTaskDataLayer.cs(443,9): warning SA1508: A closing brace must not be preceded by a blank line. [C:\actions-runner\work\ContractSystem_API\ContractProcessTrackingAPI\ContractProcessingSystem_API.csproj]
56 ContractProcessingSystem_API -> C:\actions-runner\work\ContractSystem_API\ContractSystem_API\ContractProcessTrackingAPI\bin\Release\netcoreapp3.1\ContractProcessingSystem_API.dll
57 ContractProcessingSystem_API -> D:\test_1_soiver8\github_staging\apis\charlie\ghaContractSystemAPI-v20\
58
59
60
61 Physical-path = "D:\test_1_soiver8\github_staging\apis\charlie\ghaContractSystemAPI-v20"
62 API-url = "http://test_1_soiver8.communitysoftwaregroup.com/github_staging/apis/charlie/ghaContractSystemAPI"
```

After API build and deploy  
Check API URL here

Summary

Jobs

build contract system

After UI build and deploy ,  
Check UI URL here

## build contract system

succeeded 4 minutes ago in 10m 5s

```
74 Compiling @angular/platform-browser-dynamic : es2015 as esm2015
75 Compiling @angular/platform-browser/testing : es2015 as esm2015
76 Compiling @angular/common/testing : es2015 as esm2015
77 Compiling @angular/router : es2015 as esm2015
78 Compiling @angular/animations/browser/testing : es2015 as esm2015
79 Compiling @angular/cdk/clipboard : es2015 as esm2015
80 Compiling @angular/cdk/drag-drop : es2015 as esm2015
81 Compiling @angular/common/http/testing : es2015 as esm2015
82 Compiling @angular/material/autocomplete : es2015 as esm2015
83 Compiling @angular/material/badge : es2015 as esm2015
84 Compiling @angular/material/bottom-sheet : es2015 as esm2015
85 Compiling @angular/material/button-toggle : es2015 as esm2015
86 Compiling @angular/material/card : es2015 as esm2015
87 Compiling @angular/material/checkbox : es2015 as esm2015
88 Compiling @angular/material/chips : es2015 as esm2015
89 Compiling @angular/material/date-picker : es2015 as esm2015
90 Compiling @angular/material/expansion : es2015 as esm2015
91 Compiling @angular/material/grid-list : es2015 as esm2015
92 Compiling @angular/material/icon/testing : es2015 as esm2015
93 Compiling @angular/material/list : es2015 as esm2015
94 Compiling @angular/material/menu : es2015 as esm2015
95 Compiling @angular/material/progress-bar : es2015 as esm2015
96 Compiling @angular/material/progress-spinner : es2015 as esm2015
97 Compiling @angular/material/radio : es2015 as esm2015
98 Compiling @angular/material/sidenav : es2015 as esm2015
99 Compiling @angular/material/slide-toggle : es2015 as esm2015
100 Compiling @angular/material/slider : es2015 as esm2015
101 Compiling @angular/material/snack-bar : es2015 as esm2015
102 Compiling @angular/material/stepper : es2015 as esm2015
103 Compiling @angular/material/table : es2015 as esm2015
104 Compiling @angular/material/tabs : es2015 as esm2015
105 Compiling @angular/material/toolbar : es2015 as esm2015
106 Compiling @angular/material/tree : es2015 as esm2015
107 Compiling @angular/platform-browser-dynamic/testing : es2015 as esm2015
108 Compiling @angular/router/testing : es2015 as esm2015
109 Compiling @angular/service-worker : es2015 as esm2015
110 Compiling @ckeditor/ckeditor5-angular : es2015 as esm2015
111 Compiling @ng-bootstrap/ng-bootstrap : es2015 as esm2015
112 Compiling ng2-dragula : es2015 as esm2015
113 Compiling ng2-tooltip-directive : es2015 as esm2015
114 Compiling ngx-ckeditor : es2015 as esm2015
115 Compiling ngx-editor : es2015 as esm2015
116 Generating ESM bundles for differential loading...
117 ESM bundle generation complete.
118 chunk {0} runtime-es2015.0dae8cbc97194c7caed4.js (runtime) 1.45 kB [entry] [rendered]
119 chunk {0} runtime-es5.0dae8cbc97194c7caed4.js (runtime) 1.45 kB [entry] [rendered]
120 chunk {2} polyfills-es2015.5c8ee57095c9c9862a4f.js (polyfills) 36.8 kB [initial] [rendered]
121 chunk {3} polyfills-es5.9c1bddce9267f5ff6131.js (polyfills-es5) 130 kB [initial] [rendered]
122 chunk {1} main-es2015.b6cc490db4786282e9a1.js (main) 1.9 MB [initial] [rendered]
123 chunk {1} main-es5.b6cc490db4786282e9a1.js (main) 2.18 MB [initial] [rendered]
124 chunk {4} styles.39c60a079f93ac7e78e8.css (styles) 197 kB [initial] [rendered]
125 Date: 2021-04-07T15:57:51.393Z - Hash: 49fea874044aa858bbde - Time: 282930ms
126
127 WARNING in budgets: Exceeded maximum budget for initial-es2015. Budget 2 MB was not met by 130 kB with a total of 2.13 MB
128
129 WARNING in budgets: Exceeded maximum budget for initial-es5. Budget 2 MB was not met by 510 kB with a total of 2.5 MB
130
131
132
133 Physical-path = "D:\test_1_soiver8\github_staging\frontends\Charlie\ContractSystem"
134 Frontend-URL = "http://test_1_soiver8.communitysoftwaregroup.com/github_staging/frontends/Charlie/ContractSystem/"
```

### Post checkout code

- 1 Post job cleanup.
- 2 "C:\Program Files\Git\cmd\git.exe" version