20230204 - Install Latest CluedIn GA 3.5.2 Docker using cluedin.ps1 from Home repo

Saturday, 4 February 2023 11:38 AM

Purpose

To install the latest CluedIn GA, taking note of any changes to CluedIn, ensuring we have the latest tools - including basic troubleshooting. There are some sections that can be skipped since they contain wrong steps and fails but are left in to show the process of discovery.

Journal

Review tooling and apply updates (optional - but a good idea)

Using Windows 10 with https://chocolatey.org/ as the package manager.



Update chocolatey managed apps using Chocolatey GUI - this is always a good starting point to ensure you are using the latest

Microsoft .NET Framework 4.8	Microsoft	4.8.0.20220524
k3d (Stable)	Rancher	5.4.6
Windows RT 8.1, Windows 8.1, and Windows Server 2012 R2 update: April 2014 (KB	Microsoft	1.0.20160915
March 2014 servicing stack update for Windows 8.1 and Windows Server 2012 R2 (k Microsoft	1.0.20160915
Kubernetes Command Line Interface (CLI)	Google	1.26.1
helm	Helm is supported by and built with a com	3.11.0
Kui - CLI Driven Graphics for Kubernetes	Kui Contributors	13.0.0
LibreOffice Fresh	LibreOffice developers	7.4.5
OpenLens	Mirantis, Inc.	6.3.0
Terraform	Mitchell Hashimoto, HashiCorp	1.3.7

Install powershell 7 (using Chocolatey GUI to bring it under Chocolatey control)



powershell-core (Install) 7.3.2 Microsoft

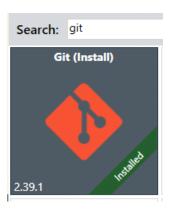
Install Azure CLI - for Azure Container Registry access - which will need since docker access is no longer sufficient



Azure CLI 2.44.1 Microsoft

Install git - particularly handy on windows for git bash

Can be used instead of vscode or visual studio to clone the CluedIn home repo



Update Docker Desktop

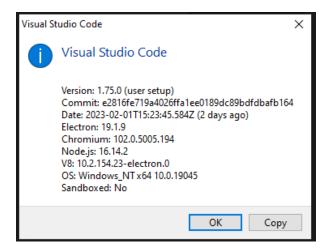
Software Updates



You're up to date

Docker Desktop 4.16.3 (96739) is currently the newest version available.

Update VSCode - handy for git or for viewing and editing files



Check Visual Studio 2022 - handy for git - not required otherwise

About Microsoft Visual Studio

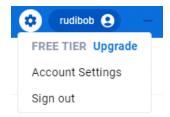
Visual Studio

Microsoft Visual Studio Community 2022 (64-bit) - Current Version 17.1.3 © 2022 Microsoft Corporation. All rights reserved.

Sign in to docker - this step is probably optional but is a good idea

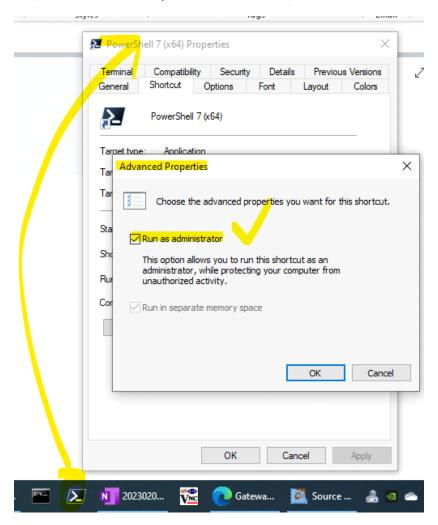


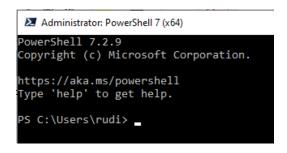
Opens browser, sign in then redirect



Launch admin powershell

Also, ensure the shortcut always starts the shell in admin, I like to have it docked in the start bar

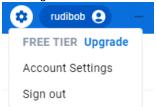




Check docker cli using powershell

PS C:\Users\rudi> docker login Authenticating with existing credentials... Login Succeeded

Docker message is the same



Check CluedIn Documentation and Release Notes (optional but recommended)

Navigate to CluedIn home repo

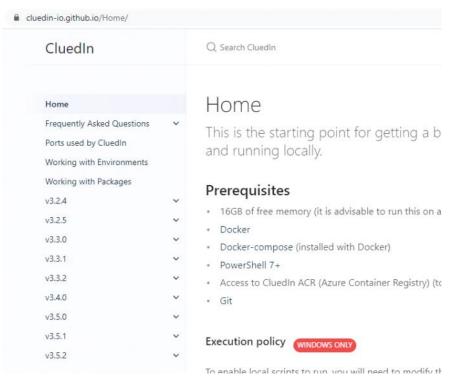
https://www.cluedin.com/

Then Documentation Portal https://documentation.cluedin.net/

Then Deployment -> Local

https://documentation.cluedin.net/deployment/docker-compose

Then "For up to the minute details, please check our the Home repository <u>documentation</u>." https://cluedin-io.github.io/Home/



We can see v3.5.2 as the latest

https://cluedin-io.github.io/Home/3.5.2/

Release Notes - v3.5.2

Features

- Moved to using CluedIn ACR (Azure Container Registry) instead of DockerHub for container storage.
 Defaults to: cluedinprod.azurecr.io. Please ensure to use the credentials you have been sent or contact support@cluedin.com to request access.
- Default username + password for rabbitmq changed from guest:guest to cluedin:cluedin due to new security defaults.

Fixes

Fix bug in detecting Docker-compose version

Back to top of home doco

https://cluedin-io.github.io/Home/

Ouick Start

All examples are provided as if running in a PowerShell session. To begin a PowerShell session, enter the command pwsh and a new session will start

Check out the repository
> git clone https://github.com/CluedIn-io/Home.git

Move to the checkout directory
> cd Home
Log in to DockerHub

Quick Start

All examples are provided as if running in a PowerShell session. To begin a PowerShell session, enter the command pwsh and a new session will start

```
# Check out the repository
> git clone https://github.com/CluedIn-io/Home.git

# Move to the checkout directory
> cd Home

# Log in to DockerHub
> docker login
```

We could just use the git clone command above in a new parent folder - however we will use GUI tools below so we can check history etc

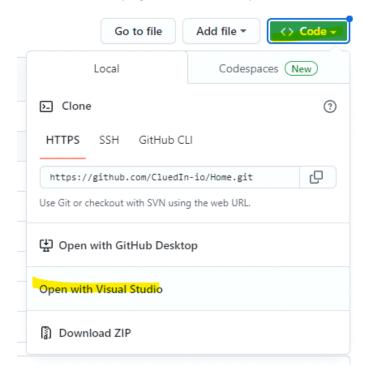
Examine code from Home repo (optional)

Let's look at this repo in the browser to check for versions and other checks

https://github.com/CluedIn-io/Home.git

We want the default **master** branch and we have a tag per release

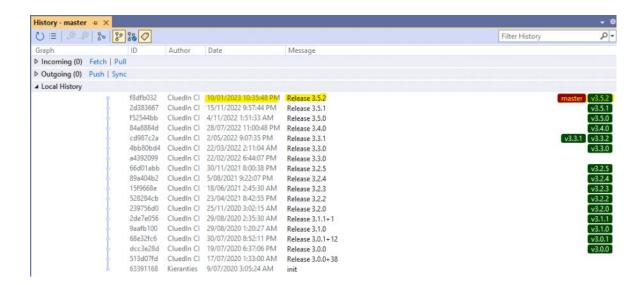
Let's git clone the repo using visual studio 2022 and then do a compare from default master to the latest release tag - result they are the same currently tag v3.5.2 is at the same point as master



Clone a repository

Enter a Git repository URL





Setup Home Repo

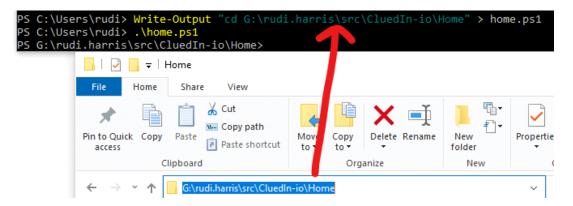
Git clone in G:\rudi.haris\src\CluedIn-io which will create Home (this was done above in the UI)

Alternatively - if you don't use the UI

change to the target drive and cd to the target parent folder

g:
 cd g:\rudi.harris\src
 mkdir CluedIn-io
 cd cluedIn-io
 git clone https://github.com/CluedIn-io/Home.git
 cd Home

Because I like being lazy, I make short powershell scripts all the time, in this case so when we run it it will take me to the folder we just created



So running .\home.ps1 will take us there and if we just run cd it will take us back to our home directory so we can run other powershell scripts...

Follow advice in https://cluedin-io.github.io/Home/

Execution policy WINDOWS ONLY

To enable local scripts to run, you will need to modify the PowerShell execution policy. This only needs to be ran once:

> Set-ExecutionPolicy RemoteSigned

Learning docker login for ACR - includes fails (optional - can skip to next section)

Try docker login - FAIL! Docker desktop not running

```
PS G:\rudi.harris\src\CluedIn-io\Home> docker login
Authenticating with existing credentials...
Login did not succeed, error: error during connect: In the default daemon configuration on Windows, the docker client must be run with elevated privileges to connect:: Post "http://%2F%2F.%2Fpipe%2Fdocker engine/v1.24/auth": open //./pipe/docker_engine: The system cannot find the file specified.
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.
Username (rudibob):
```

Hit ctrl+c and then had to start docker desktop (since mine is not set to start automatically)

Try again - success

```
PS G:\rudi.harris\src\CluedIn-io\Home> docker login
Authenticating with existing credentials...
Login Succeeded

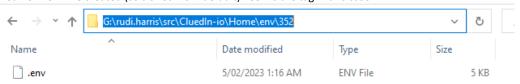
Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at <a href="https://docs.docker.com/go/access-tokens/">https://docs.docker.com/go/access-tokens/</a>
```

Try create new env profile for 3.5.2 - WRONG! We need to use a version tag something like 2022.10 or 2022.10.0 or 2022.10.1 or 2022.10.2

Doco is here https://cluedin-io.github.io/Home/3.5.2/env/

PS > .\cluedin.ps1 env 352 -tag 3.5.2 - Wrong... deadend... see later!

Confirmed new .env file created (as cloned from default) - 352 is the tag in this case



Run the pre-flight checks - we had no errors - if we had errors then we would need to fix them before continuing

Doco is here https://cluedin-io.github.io/Home/3.5.2/check/

PS > .\cluedin.ps1 check 352

```
Installed Applications

[1/3] √ » PowerShell : 7.3.2 / Core

[2/3] √ » Docker : 20.10.22 / linux

[3/3] √ » Docker Compose : 2.15.1

Available Ports

[1/30] √ » CluedIn UI : 127.0.0.1.nip.io:9080

[2/30] √ » CluedIn API : 127.0.0.1.nip.io:9000

[3/30] √ » CluedIn API : 127.0.0.1.nip.io:9001

[4/30] √ » CluedIn Jobs : 127.0.0.1.nip.io:9001

[5/30] √ » CluedIn WebHooks : 127.0.0.1.nip.io:9003

[5/30] √ » CluedIn WebHooks : 127.0.0.1.nip.io:9006

[6/30] √ » CluedIn WebHooks : 127.0.0.1.nip.io:9007

[7/30] √ » CluedIn WebHooks : 127.0.0.1.nip.io:9008

[8/30] √ » CluedIn Deb Api : 127.0.0.1.nip.io:9009

[8/30] √ » CluedIn Deb Api : 127.0.0.1.nip.io:9009

[9/30] √ » CluedIn Datasource : 127.0.0.1.nip.io:9010

[10/30] √ » CluedIn Datasource : 127.0.0.1.nip.io:9011

[11/30] √ » CluedIn Submitter : 127.0.0.1.nip.io:9012

[12/30] √ » CluedIn Submitter : 127.0.0.1.nip.io:9012

[13/30] √ » CluedIn Datasource Prometheus Endpoint : 127.0.0.1.nip.io:9014

[14/30] √ » CluedIn Datasource Prometheus File : 127.0.0.1.nip.io:9015

[15/30] √ » CluedIn Datasource Prometheus SQL : 127.0.0.1.nip.io:9016

[16/30] √ » CluedIn Datasource Prometheus SQL : 127.0.0.1.nip.io:9016

[16/30] √ » CluedIn Gql : 127.0.0.1.nip.io:8888

[18/30] √ » Ne04j Http : localhost:7474

[19/30] √ » Ne04j Bolt : localhost:7687

[20/30] √ » Elasticsearch Data : localhost:9300

[21/30] √ » RabbitMQ Data : localhost:9300

[22/30] √ » Redis : localhost:6379

[25/30] √ » Seq UI : localhost:3200

[26/30] √ » Seq Data : localhost:2525

[29/30] √ » Sql Server : localhost:2525

[29/30] √ » Sql Server : localhost:3333

Authentication

[1/1] √ » Docker Registry : https://index.docker.io/v1/

Environnent

[1/2] √ » Docker - Memory : 24.23gb available

[2/2] √ » Docker - CPU : 4 cpus available
```

I note that the checks are not against the ACR 😉 - despite release notes

Moved to using CluedIn ACR (Azure Container Registry) instead of DockerHub for container storage. Defaults to: cluedinprod.azurecr.io. Please ensure to use the credentials you have been sent or contact support@cluedin.com to request access.

Check email advice from CluedIn

From: No reply <no-reply@cluedin.com>
Sent: Tuesday, January 24, 2023 6:28 PM
To: Rudi Harris <rudi.harris@mattang.com>
Subject: ACR registry Access for cluedinprod

Hi Rudi Harris

Here are the requested ACR access details:

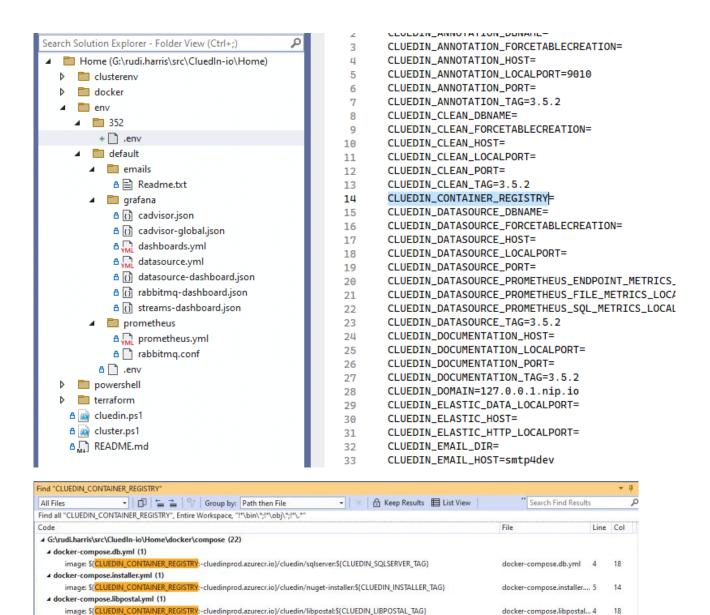
username: rudi-harris-mattang-com Password: g81ZuLn<redacted>HjSm registry: cluedinprod

Many thanks Team CluedIn

So... we need to figure out where these values go...

Examine Home repo in vs2022

Particularly, let's look at the ACR details and how they are implemented...



So, the default matches the prod ACR

How about the username and password? Let's look at the docker login help

Docker login using username and have a prompt for password - FAIL! This is wrong

PS G:\rudi.harris\src\CluedIn-io\Home> docker login -u rudi-harris-mattang-com Password:

Error response from daemon: Get "https://registry-1.docker.io/v2/": unauthorized: incorrect username or password

Try just doing the pull - this will fail - but we learn best from failures

Doco is here https://cluedin-io.github.io/Home/3.5.2/pull/

PS G:\rudi.harris\src\CluedIn-io\Home> .\cluedin.ps1 pull 352

```
| CluedIn - Environment => pull [docker] |
[+] Running 1/22
   server-extra Skipped - Image is already being pulled by server
                                                                                                                        0.0s
 - datasource Error
                                                                                                                        3.15
 - grafana Error
                                                                                                                        3.1s
 - elasticsearch Error
                                                                                                                        3.1s
 - cadvisor Error
                                                                                                                        3.15
 - annotation Error
                                                                                                                        3.1s
 - gql Error
                                                                                                                        3.1s
 - documentation Error
                                                                                                                         3.1s
 - clean Error
                                                                                                                        3.15
                                                                                                                        3.1s
 - server Error
 - seq Error
                                                                                                                         3.1s
 - installer Error
                                                                                                                        3.15
 - smtp4dev Error
                                                                                                                        3.1s
 - webapi Error
                                                                                                                         3.1s
 - neo4j Error
                                                                                                                        3.1s
 - salserver Error
                                                                                                                        3.15
 - submitter Error
                                                                                                                         3.1s
 - ui Error
                                                                                                                        3.1s
 - openrefine Error
                                                                                                                        3.1s
 - rabbitmq Error
                                                                                                                        3.1s
                                                                                                                        3.1s
 - redis Error
 - prometheus Error
                                                                                                                        3.15
```

Error response from daemon: Head "https://cluedinprod.azurecr.io/v2/datalust/seg/manifests/2022.1": unauthorized: authentication required, visit https://aka.ms/acr/authorization for more information.

Follow

https://aka.ms/acr/authorization

Then

https://learn.microsoft.com/en-us/azure/container-registry/container-registry-authentication?tabs=azure-cli

Use az login and az acr login to use ACR instead of docker hub

See https://learn.microsoft.com/en-us/azure/container-registry/container-registry-authentication?tabs=azure-cli

Try using az login and az acr login - success!

```
PS G:\rudi.harris\src\CluedIn-io\Home> az login

PS G:\rudi.harris\src\CluedIn-io\Home> az acr login --name cluedinprod

Unable to get AAD authorization tokens with message: 2023-02-04 15:54:00.259547 An error occurred: CONNECTIVITY_REFRESH_TOKEN_ERROR Access to registry 'cluedinprod.azurecr.io' was denied. Response code: 401. Please try running 'az login' again to refresh permissions.

Unable to get admin user credentials with message: The resource with name 'cluedinprod' and type
'Microsoft.ContainerRegistry/registries' could not be found in subscription 'Pay-As-You-Go (b8dd5697-ac84-4101-a1e3-bd190daf0f3f)'.

Username: rudi-harris-mattang-com

Password:
Login Succeeded
```

How to find the right version to use - 3.5.2 is wrong! (optional - can skip)

Retry pull - we have the wrong tag so this will now fail with the "not found" error - WRONG!

```
PS G:\rudi.harris\src\CluedIn-io\Home> .\cluedin.ps1 pull 352
| CluedIn - Environment => pull [docker] |
[+] Running 1/22
  server-extra Skipped - Image is already being pulled by server
                                                                                                                        0.05
 - webapi Error
                                                                                                                        6.5s
 - neo4j Error
 - annotation Error
                                                                                                                        6.5s
 - cadvisor Pulling
                                                                                                                        6.5s
 - seq Error
 - clean Error
                                                                                                                        6.5s
 - datasource Error
                                                                                                                        6.55
 - openrefine Error
                                                                                                                        6.5s
 - elasticsearch Error
                                                                                                                        6.5s
 - documentation Error
                                                                                                                        6.5s
 - gal Error
                                                                                                                        6.5s
 - prometheus Error
                                                                                                                        6.5s
 - grafana Error
                                                                                                                        6.5s

    rabbitma Error

                                                                                                                        6.5s
 - installer Error
                                                                                                                        6.5s
 - redis Error
                                                                                                                        6.5s
                                                                                                                        6.5s
6.5s
 - salserver Error
 - submitter Error
 - server Error
 - smtp4dev Error
                                                                                                                        6.5s
 - ui Error
                                                                                                                        6.5s
Error response from daemon: manifest for cluedinprod.azurecr.io/cluedin/cluedin-micro-documentation:3.5.2 not found: manifest
unknown: manifest tagged by "3.5.2" is not found
```

Try

PS G:\rudi.harris\src\CluedIn-io\Home> docker pull cluedinprod.azurecr.io/cluedin/sqlserver:3.5.2

Error response from daemon: manifest for cluedinprod.azurecr.io/cluedin/sqlserver:3.5.2 not found: manifest unknown: manifest tagged

Check

https://documentation.cluedin.net/release-notes

Then

https://cluedin-io.github.io/Releases/

Then

https://cluedin-io.github.io/Releases/2022.10/



cluedin-io.github.io/Releases/2022.10/

CluedIn Releases - 2022.10

2022.10.00 is the latest release of CluedIn!

Release Notes

- Latest
- 2022.10.00
- 2022.10.01
- 2022.10.02

Getting Started

To get started with the latest release, we recommend using the Home repository.

```
$ git clone https://github.com/CluedIn-io/Home.git
$ cd Home
$ ./cluedin.ps1 env 2022.10 -tag 2022.10
$ ./cluedin.ps1 up 2022.10 -pull
```

Note: these examples are incorrect.. You need to ensure you do not have dots in the env label e.g. ./cluedin.ps1 env 202210 -tag 2022.10 instead

See

https://cluedin-io.github.io/Releases/2022.10/2022.10.02



Docker Image	Tags	
cluedin/ui	2022.10.02 , 2022.10 , 3.5 , 3.5.2 , 3.5.2_50356	

Setup Cluster for 2022.10.02 (which is basically 3.5.2)

Note: env name has to have no dots!

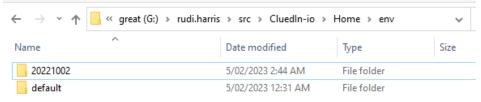
Doco is here https://cluedin-io.github.io/Home/3.5.2/env/

PS > .\cluedin.ps1 env 20221002 -tag 2022.10.02

```
| CluedIn - Manage Environment [docker] |
------+
Setting 'CLUEDIN_ANNOTATION_TAG' in '20221002' environment
Setting 'CLUEDIN_CLEAN_TAG' in '20221002' environment
```

```
Setting 'CLUEDIN_DATASOURCE_TAG' in '20221002' environment
Setting 'CLUEDIN_DOCUMENTATION_TAG' in '20221002' environment
Setting 'CLUEDIN_GQL_TAG' in '20221002' environment
Setting 'CLUEDIN_INSTALLER_TAG' in '20221002' environment
Setting 'CLUEDIN_LIBPOSTAL_TAG' in '20221002' environment
Setting 'CLUEDIN_NEO4J_TAG' in '20221002' environment
Setting 'CLUEDIN_OPENREFINE_TAG' in '20221002' environment
Setting 'CLUEDIN_SERVER_TAG' in '20221002' environment
Setting 'CLUEDIN_SQLSERVER_TAG' in '20221002' environment
Setting 'CLUEDIN_SUBMITTER_TAG' in '20221002' environment
Setting 'CLUEDIN_UI_TAG' in '20221002' environment
Setting 'CLUEDIN_UI_TAG' in '20221002' environment
```

Here is where the .env file is created (as copied from default)



Run the pre-flight checks - we had no errors - if we had errors then we would need to fix them before continuing

Doco is here https://cluedin-io.github.io/Home/3.5.2/check/

```
PS > .\cluedin.ps1 check 20221002
```

```
| CluedIn - Pre-Flight Check [docker] |
Installed Applications
   [1/3] \sqrt{\ } » PowerShell : 7.3.2 / Core [2/3] \sqrt{\ } » Docker : 20.10.22 / linux [3/3] \sqrt{\ } » Docker Compose : 2.15.1
Available Ports
    [1/30] \sqrt{\ } ° CluedIn UI : 127.0.0.1.nip.io:9080 [2/30] \sqrt{\ } ° CluedIn API : 127.0.0.1.nip.io:9000 [3/30] \sqrt{\ } ° CluedIn Auth : 127.0.0.1.nip.io:9001
    [4/30] √ » CluedIn Jobs : 127.0.0.1.nip.io:9003
    [5/30] \sqrt{\ } » CluedIn WebHooks : 127.0.0.1.nip.io:9006 [6/30] \sqrt{\ } » CluedIn Public : 127.0.0.1.nip.io:9007
    [7/30] √ » CluedIn Public : 127.0.0.1.hip.io:9008
[8/30] √ » CluedIn Web Api : 127.0.0.1.nip.io:9008
   [9/30] √ » CluedIn Annotation : 127.0.0.1.nip.io:9010 [10/30] √ » CluedIn Datasource : 127.0.0.1.nip.io:9011 [11/30] √ » CluedIn Submitter : 127.0.0.1.nip.io:9012
    [12/30] √ » CluedIn Server Prometheus : 127.0.0.1.nip.io:9013
    [13/30] √ » CluedIn Datasource Prometheus Endpoint : 127.0.0.1.nip.io:9014
    [14/30] \sqrt{\ } » CluedIn Datasource Prometheus File : 127.0.0.1.nip.io:9015 [15/30] \sqrt{\ } » CluedIn Datasource Prometheus SQL : 127.0.0.1.nip.io:9016 [16/30] \sqrt{\ } » CluedIn Documentation : 127.0.0.1.nip.io:9021
    [17/30] √ » CluedIn Gql : 127.0.0.1.nip.io:8888
   [18/30] \sqrt{\ } Neo4j Http: localhost:7474 [19/30] \sqrt{\ } Neo4j Bolt: localhost:7687 [20/30] \sqrt{\ } Elasticsearch Data: localhost:9200 [21/30] \sqrt{\ } Elasticsearch Http: localhost:9300
    [22/30] √ » RabbitMQ Data : localhost:5672
    [23/30] √ » RabbitMQ Http : localhost:15672
    [24/30] √ » Redis : localhost:6379
[25/30] √ » Seq UI : localhost:3200
    [26/30] √ » Seq Data : localhost:5341
   [27/30] √ » SMTP UI : localhost:25258

[28/30] √ » SMTP Email : localhost:2525

[29/30] √ » Sql Server : localhost:1433

[30/30] √ » OpenRefine : localhost:3333
Authentication
    [1/1] √ » Docker Registry : https://index.docker.io/v1/
Environment
   [1/2] \sqrt{\ } » Docker - Memory : 24.23gb available [2/2] \sqrt{\ } » Docker - CPU : 4 cpus available
```

Doco is here https://cluedin-io.github.io/Home/3.5.2/pull/

Note: pull is an optional step since "up" will do this for us, but it is useful for troubleshooting to do the pull by itself

PS > .\cluedin.ps1 pull 20221002

qulling down images... this could take a while... say 30 minutes depending on your network etc>

```
- seq Pulled - d7bfe07ed847 Pull complete - 1541.7s - 0669d5d3bf37 Pull complete - 1544.7s - 0d0dca445d0f Pull complete - 1545.2s - 90c033303036 Pull complete - 30103d7568c2 Pull complete - 16ebb6768757 Pull complete - 16e6.6s - 99ce9053ef7d Pull complete - 1678.2s
```

Run again to confirm all images pulled - success!

```
PS G:\rudi.harris\src\CluedIn-io\Home> .\cluedin.ps1 pull 20221002
CluedIn - Environment => pull [docker] |
[+] Running 22/22
   annotation Pulled
                                                                                                                          10.75
  grafana Pulled
   server Pulled
                                                                                                                          10.7s
 - server-extra Skipped - Image is already being pulled by server
                                                                                                                           9.95
 - installer Pulled
                                                                                                                          10.9s
 - webapi Pulled
                                                                                                                           8.8s
 - neo4j Pulled
                                                                                                                           9.95
 - clean Pulled
                                                                                                                          10.55
  openrefine Pulled
                                                                                                                          10.1s
  documentation Pulled
                                                                                                                            9.8s
 datasource Pulledelasticsearch Pulled
                                                                                                                          10.45
                                                                                                                          10.5s
   prometheus Pulled
                                                                                                                          10.0s
  gql Pulled
redis Pulled
                                                                                                                          11.1s
                                                                                                                          10.3s
  seq Pulled
                                                                                                                          11.3s

    smtp4dev Pulled

                                                                                                                          10.9s
 - submitter Pulled
                                                                                                                          10.85
 - sqlserver Pulled
                                                                                                                          10.1s
 - rabbitmq Pulled
                                                                                                                          10.6s
 - ui Pulled
                                                                                                                          11.05
 - cadvisor Pulled
                                                                                                                          10.3s
```

Bring up the cluster

This is going to be a bumpy ride! Since the containers do not come up in dependency order (like they do in kubernetes) we will have to troubleshoot until all containers are up.

Doco is here https://cluedin-io.github.io/Home/3.5.2/up/

PS G:\rudi.harris\src\CluedIn-io\Home> .\cluedin.ps1 up 20221002

```
| CluedIn - Environment => up [docker] |
[+] Running 18/21
    Network cluedin_20221002_37b57368_default
                                                                                                                                                                                      0.3s
                                                                                         Created
  - Container cluedin_20221002_37b57368-elasticsearch-1
- Container cluedin 20221002_37b57368-prometheus-1
                                                                                                                                                                                     13.2s
                                                                                                                                                                                     12.9s
                                                                                        Star.
  - Container cluedin_20221002_37b57368-grafana-1
                                                                                                                                                                                     32.7s
 - Container cluedin_20221002_37b57368-rabbitmq-1
- Container cluedin_20221002_37b57368-neo4j-1
- Container cluedin_20221002_37b57368-seq-1
- Container cluedin_20221002_37b57368-documentation-1
                                                                                        Starte..
                                                                                                                                                                                     34.6s
                                                                                        Started
                                                                                                                                                                                     16.65
                                                                                                                                                                                     40.4s
                                                                                         Started
                                                                                                                                                                                     17.3s
  - Container cluedin_20221002_37b57368-smtp4dev-1
- Container cluedin_20221002_37b57368-openrefine-1
- Container cluedin_20221002_37b57368-redis-1
                                                                                        Starte...
                                                                                                                                                                                     13.65
                                                                                        Star...
                                                                                                                                                                                     13.3s
                                                                                         Started
                                                                                                                                                                                     15.1s
  - Container cluedin 20221002 37b57368-sqlserver-1 - Container cluedin 20221002 37b57368-datasource-1
                                                                                        Start...
                                                                                                                                                                                     13.05
                                                                                                                                                                                     41.0s
                                                                                        Star...
    Container cluedin_20221002_37b57368-cadvisor-1
                                                                                        Starte...
                                                                                                                                                                                     39.9s
   Container cluedin 20221002 37b57368-webapi-1
Container cluedin 20221002 37b57368-server-1
                                                                                         Starting
                                                                                                                                                                                     41.05
                                                                                        Starting
                                                                                                                                                                                     40.85
    Container cluedin_20221002_37b57368-annotation-1
                                                                                        Crea...
                                                                                                                                                                                      1.4s
    Container cluedin_20221002_37b57368-ui-1
Container cluedin_20221002_37b57368-clean-1
Container cluedin_20221002_37b57368-submitter-1
                                                                                        Created
                                                                                                                                                                                      1.3s
                                                                                        Created
                                                                                                                                                                                      1.45
                                                                                                                                                                                      1.5s
                                                                                        Creat..
  - Container cluedin_20221002_37b57368-gql-1
                                                                                        Created
```

We can monitor the server container -s uggest run git bash for the better formatting and access to unix commands if required

Show all server logs from the beginning and follow - it will have a transient error in this case

```
rudi@maxima MINGW64 ~
$ docker logs -f cluedin_20221002_37b57368-server-1
Register CA Certificate - [SKIPPED - No File]
Enable COREDUMP mode - [SKIPPED]
ls: cannot access '../components/*/': No such file or directory
Installing component extensions - [COMPLETE]
Booting CluedIn Host ..
[#001 02:46:31 INF] -----
[#001 02:46:31 INF
[#001 02:46:31 INF
[#001 02:46:31 INF
[#001 02:46:31 INF]
[#001 02:46:31 INF
[#001 02:46:31 INF]
[#001 02:46:31 INF]
                                                      =[ Be In The Know ]=-
[#001 02:46:31 INF]
                                                 --=[ CluedIn.Server.Host ]=--
 #001 02:46:31 INF
[#001 02:46:31 INF]
[#001 02:46:31 INF]
```

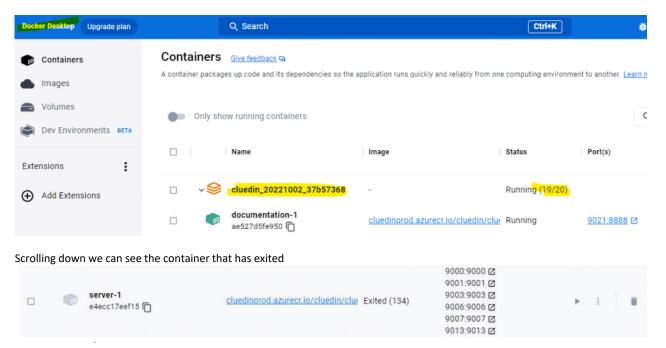
```
[#001 02:46:31 INF] CluedIn.Server.Host is starting...
 [#001 02:46:31 INF]
 [#001 02:46:31 INF] Operating System:
                                                                                     Unix 5.10.102.1
 [#001 02:46:31 INF] Architecture:
                                                                                     x64
 [#001 02:46:31 INF]
                                 Processors:
 [#001 02:46:31 INF]
                                 Working Set:
Runtime Version:
                                                                                     60485632
 [#001 02:46:31 INF]
                                                                                     v3.1.32
 [#001 02:46:31 INF]
                                 Image Runtime Version:
                                                                                     v4.0.30319
 [#001 02:46:31 INF]
                                 Host Name:
                                                                                     e4ecc17eef15
                                                                                     172.24.0.16
 [#001 02:46:31 INF]
                                 In Address:
 [#001 02:46:31 INF]
                                 User Account:
                                                                                     root
 [#001 02:46:31 INF]
                                 IsFullyTrusted:
                                                                                     True
 [#001 02:46:31 INF]
[#001 02:46:31 INF]
                                 Application Version:
Thread Pool Min Threads:
                                                                                     3.5.2
                                                                                     20
 [#001 02:46:31 INF]
                                 Thread Pool Min Iocp Threads:
                                                                                     20
[#001 02:46:31 INF]
[#001 02:46:31 INF]
                                 Thread Pool Max Threads:
                                                                                     32767
                                 Thread Pool Max Iocp Threads: 1000
 [#001 02:46:31 INF]
                                 GC IsServerGC:
 [#001 02:46:31 INF] GC LatencyMode:
                                                                                     Interactive
 [#001 02:46:31 INF
 [#001 02:46:32 INF]
                                 State transition from NotStarted to Running
 [#007 02:46:43 INF] State transition from Running to ExitedSuccessfully [#001 02:46:44 INF] State transition from NotStarted to Running
 [#012 02:46:49 INF] State transition from Running to ExitedSuccessfully
[#001 02:46:49 FTL] Unhandled Exception: One or more errors occurred. (Unexpected end when deserializing array. Path 'Components[2].Interfaces[0]', line 1, position 5237.)

System.AggregateException: One or more errors occurred. (Unexpected end when deserializing array. Path
 Components[2].Interfaces[0]', line 1, position 5237.)
    --> Newtonsoft.Json.JsonSerializationException: Unexpected end when deserializing array. Path 'Components[2].Interfaces[0]', line
1, position 5237.
     at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.ThrowUnexpectedEndException(JsonReader reader, JsonContract
contract, Object currentObject, String message)
     at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.PopulateList(IList list, JsonReader reader, JsonArrayContract
contract, JsonProperty containerProperty, String id)
     at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateList(JsonReader reader, Type objectType, JsonContract
contract, JsonProperty member, Object existingValue, String id)
  at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateValueInternal(JsonReader reader, Type objectType,
JsonContract contract, JsonProperty member, JsonContainerContract containerContract, JsonProperty containerMember, Object
existingValue)
at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.SetPropertyValue(JsonProperty property, JsonConverter propertyConverter, JsonContainerContract containerContract, JsonProperty containerProperty, JsonReader reader, Object target) at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.PopulateObject(Object newObject, JsonReader reader,
JsonObjectContract contract, JsonProperty member, String id) at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateObject(JsonReader reader, Type objectType, JsonContract
contract, JsonProperty member, JsonContainerContract containerContract, JsonProperty containerMember, Object existingValue)
     at\ Newtons of t. Js on Serialization. Js on Serializar Internal Reader. Create Value Internal (Js on Reader\ reader,\ Type\ object Type\ Js on Serialization). The content of the value 
JsonContract contract, JsonProperty member, JsonContainerContract containerContract, JsonProperty containerMember, Object
existingValue)
     at\ Newtons of t. Js on Serialization. Js on Serializer Internal Reader. Populate List (I List\ list,\ Js on Reader\ reader,\ Js on Array Contract
contract, JsonProperty containerProperty, String id) at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateList(JsonReader reader, Type objectType, JsonContract
contract, JsonProperty member, Object existingValue, String id)
at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateValueInternal(JsonReader reader, Type objectType,
JsonContract contract, JsonProperty member, JsonContainerContract containerContract, JsonProperty containerMember, Object
existingValue)
at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.SetPropertyValue(JsonProperty property, JsonConverter propertyConverter, JsonContainerContract containerContract, JsonProperty containerProperty, JsonReader reader, Object target) at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.PopulateObject(Object newObject, JsonReader reader,
JsonObjectContract contract, JsonProperty member, String id)
at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateObject(JsonReader reader, Type objectType, JsonContract contract, JsonProperty member, JsonContainerContract contract, JsonProperty containerMember, Object existingValue)
at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateValueInternal(JsonReader reader, Type objectType,
JsonContract contract, JsonProperty member, JsonContainerContract containerContract, JsonProperty containerMember, Object
existingValue)
     at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.Deserialize(JsonReader reader, Type objectType, Boolean
checkAdditionalContent)
     at Newtonsoft.Json.JsonSerializer.DeserializeInternal(JsonReader reader, Type objectType)
     at Newtonsoft.Json.JsonSerializer.Deserialize(JsonReader reader, Type objectType) at Newtonsoft.Json.JsonConvert.Deserialize(DsonReader reader, Type type, JsonSerializerSettings settings)
     at Newtonsoft. Json. JsonConvert.DeserializeObject[T](String value, JsonSerializerSettings settings) at Newtonsoft. Json. JsonConvert.DeserializeObject[T](String value)
     at \ Component Host. Hosting. In frastructure. Resolving. Net Core Component Resolver. Run Process (Process Supervisor child Process)
     --- End of inner exception stack trace --- at System.Threading.Tasks.Task`1.GetResultCore(Boolean waitCompletionNotification) at System.Threading.Tasks.Task`1.get_Result()
     at \ Component Host. Hosting. In frastructure. Resolving. NetCore Component Resolver. Get Components (I Enumerable `1 assembly File Names) \\
     at \ \ Component Host. Hosting. In frastructure. File System Component Store. Load Components ()
      at ComponentHost.Hosting.Infrastructure.ComponentHost.LoadComponents()
     at ComponentHost.Hosting.Infrastructure.ComponentHost.Initialize()
     at CluedIn.Server.Host.ComponentHostService.StartAsync(CancellationToken cancellationToken) in D:\a\1\s\Code\Server.Host
 \ComponentHostService.cs:line 41
      .
it Microsoft.Extensions.Hosting.Internal.Host.StartAsync(CancellationToken cancellationToken)
     at Microsoft.Extensions.Hosting.HostingAbstractionsHostExtensions.RunAsync(IHost host, CancellationToken token) at Microsoft.Extensions.Hosting.HostingAbstractionsHostExtensions.RunAsync(IHost host, CancellationToken token)
     at CluedIn.Server.Host.Program.Main(String[] args) in D:\a\1\s\Code\Server.Host\Program.cs:line 24
     at CluedIn.Server.Host.Program.<Main>(String[] args)
Unhandled exception. System.AggregateException: One or more errors occurred. (Unexpected end when deserializing array. Path 'Components[2].Interfaces[0]', line 1, position 5237.)
      -> Newtonsoft.Json.JsonScrializationException: Unexpected end when descrializing array. Path 'Components[2].Interfaces[0]', line
1, position 5237.
     at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.ThrowUnexpectedEndException(JsonReader reader, JsonContract
contract, Object currentObject, String message)
at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.PopulateList(IList list, JsonReader reader, JsonArrayContract contract, JsonProperty containerProperty, String id) at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateList(JsonReader reader, Type objectType, JsonContract
contract, JsonProperty member, Object existingValue, String id)
  at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateValueInternal(JsonReader reader, Type objectType,
```

JsonContract contract, JsonProperty member, JsonContainerContract containerContract, JsonProperty containerMember, Object existingValue) at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.SetPropertyValue(JsonProperty property, JsonConverter propertyConverter, JsonContainerContract containerContract, JsonProperty containerProperty, JsonReader reader, Object target)

 $at\ Newtons of t. Json. Serialization. Json Serializer Internal Reader. Populate Object (Object\ new Object,\ Json Reader\ reader,\ Newtons Object,\ Newtons$ JsonObjectContract contract, JsonProperty member, String id)
 at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateObject(JsonReader reader, Type objectType, JsonContract
contract, JsonProperty member, JsonContainerContract contract, JsonProperty containerMember, Object existingValue) at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateValueInternal(JsonReader reader, Type objectType, JsonContract contract, JsonProperty member, JsonContainerContract containerContract, JsonProperty containerMember, Object existingValue) at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.PopulateList(IList list, JsonReader reader, JsonArrayContract contract, JsonProperty containerProperty, String id)
at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateList(JsonReader reader, Type objectType, JsonContract contract, JsonProperty member, Object existingValue, String id) $at\ Newtons of t. Json\'. Serialization. JsonSerializer Internal \~Reader. Create Value Internal (JsonReader reader, Type object Type, JsonSerializer Internal \~Reader. Create Value Internal (JsonReader reader, Type object Type, JsonSerializer Internal \~Reader. Create Value Internal (JsonReader reader, Type object Type, JsonSerializer Internal \ref{thm:1}) and \ref{thm:2} and \ref{thm:2} and \ref{thm:2} and \ref{thm:3} and \ref{thm:2} and \ref{thm:3} and \ref{thm:4} and \ref{t$ JsonContract contract, JsonProperty member, JsonContainerContract containerContract, JsonProperty containerMember, Object existingValue) $at\ Newtons of t. Json. Serialization. Json Serializar Internal Reader. Set Property Value (Json Property\ property\ Json Converter Property\ pr$ propertyConverter, JsonContainerContract containerContract, JsonProperty containerProperty, JsonReader reader, Object target)
at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.PopulateObject(Object newObject, JsonReader reader, JsonObjectContract contract, JsonProperty member, String id) at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateObject(JsonReader reader, Type objectType, JsonContract contract, JsonProperty member, JsonContainerContract containerContract, JsonProperty containerMember, Object existingValue) at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.CreateValueInternal(JsonReader reader, Type objectType, JsonContract contract, JsonProperty member, JsonContainerContract containerContract, JsonProperty containerMember, Object existingValue) at Newtonsoft.Json.Serialization.JsonSerializerInternalReader.Deserialize(JsonReader reader, Type objectType, Boolean checkAdditionalContent) at Newtonsoft.Json.JsonSerializer.DeserializeInternal(JsonReader reader, Type objectType) at Newtonsoft. Json. JsonSerializer. Deserialize(JsonReader reader, Type objectType) at Newtonsoft. Json. JsonConvert. Deserialize(DsonReader reader, Type objectType) at Newtonsoft. Json. JsonSerialize(DsonReader reader) at Newtonsoft. JsonSerialize(DsonReader reader) at N at Newtonsoft.Json.JsonConvert.DeserializeObject[T](String value, JsonSerializerSettings settings) at Newtonsoft.Json.JsonConvert.DeserializeObject[T](String value) at ComponentHost.Hosting.Infrastructure.Resolving.NetCoreComponentResolver.RunProcess(ProcessSupervisor childProcess) --- End of inner exception stack trace --- at System.Threading.Tasks.Task`1.GetResultCore(Boolean waitCompletionNotification) at System.Threading.Tasks.Task`1.get_Result() Component Host. Hosting. In frastructure. Resolving. Net Core Component Resolver. Get Components (IE numerable `1 assembly File Names)at ComponentHost.Hosting.Infrastructure.FileSystemComponentStore.LoadComponents() at ComponentHost.Hosting.Infrastructure.ComponentHost.LoadComponents() at ComponentHost.Hosting.Infrastructure.ComponentHost.Initialize() $at \ CluedIn. Server. Host. Component Host Service. Start Async (Cancellation Token \ cancellation Token) \ in \ D: \all section Token \ in \ D: \all section T$ \ComponentHostService.cs:line 41 at Microsoft.Extensions.Hosting.Internal.Host.StartAsync(CancellationToken cancellationToken) at Microsoft.Extensions.Hosting.HostingAbstractionsHostExtensions.RunAsync(IHost host, CancellationToken token) at Microsoft.Extensions.Hosting.HostingAbstractionsHostExtensions.RunAsync(IHost host, CancellationToken token) at CluedIn.Server.Host.Program.Main(String[] args) in D:\a\1\s\Code\Server.Host\Program.cs:line 24 at CluedIn.Server.Host.Program.<Main>(String[] args) Aborted

Looking at Docker Desktop we can see 1 of the 20 containers are not running

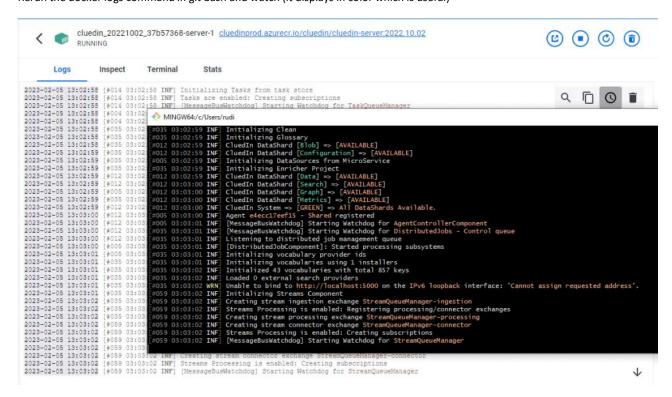


Clicking on it will can inspect the logs via the UI

We could reissue the cluedin up command from before and watch it here, or click on the play button on the right side group of icons



Rerun the docker logs command in git bash and watch (it displays in color which is useful)



From the logs we can see all GREEN/AVAILABLE and that the logs have settled into a steady state

```
[#012 03:02:59 INF] CluedIn DataShard [Blob] => [AVAILABLE]
[#012 03:02:59 INF] CluedIn DataShard [Configuration] => [AVAILABLE]
[#005 03:02:59 INF] Initializing DataSources from MicroService
[#035 03:02:59 INF] Initializing Enricher Project
[#012 03:02:59 INF] CluedIn DataShard [Data] => [AVAILABLE]
[#012 03:03:00 INF] CluedIn DataShard [Search] => [AVAILABLE]
[#012 03:03:00 INF] CluedIn DataShard [Graph] => [AVAILABLE]
[#012 03:03:00 INF] CluedIn DataShard [Graph] => [AVAILABLE]
[#012 03:03:00 INF] CluedIn DataShard [Metrics] => [AVAILABLE]
[#012 03:03:00 INF] CluedIn System => [GREEN] => All DataShards Available.
...
[#004 03:03:16 INF] Subscribed to messages
[#004 03:03:16 INF] Provider: Database Data Source, ID: 88c2252a-992c-48dc-b4a7-85915b42da08 is registered
[#004 03:03:16 INF] Provider: Endpoint Data Source, ID: 742f9d66-8ef2-4544-8a90-41531a26cc59 is registered
[#004 03:03:16 INF] Provider: Endpoint Data Source, ID: 742f9d66-8ef2-4544-8a90-41531a26cc59 is registered
[#004 03:03:16 INF] Provider: CustomHooks, ID: f084eae7-6df4-4ff6-baed-082419bcc328 is registered
[#040 03:03:19 INF] Agent e4ecc17eef15 - 02712a2b-b36a-4f11-95ba-d1850a311419 registered
[#034 03:03:19 INF] HTTP POST /api/v1/agent/repository/register responded 200 in 1208.4384 ms
```

We can do that with grep in git bash

rudi@maxima MINGW64 ~

^{\$} docker logs --since 5m cluedin_20221002_37b57368-server-1 | grep -i datashard

```
ls: cannot access '../components/*/': No such file or directory
[#012 03:02:59 INF] CluedIn DataShard [Blob] => [AVAILABLE]
[#012 03:02:59 INF] CluedIn DataShard [Configuration] => [AVAILABLE]
[#012 03:02:59 INF] CluedIn DataShard [Data] => [AVAILABLE]
[#012 03:03:00 INF] CluedIn DataShard [Search] => [AVAILABLE]
[#012 03:03:00 INF] CluedIn DataShard [Graph] => [AVAILABLE]
[#012 03:03:00 INF] CluedIn DataShard [Metrics] => [AVAILABLE]
              [#012 03:03:00 INF] CluedIn System => [GREEN] => All DataShards Available.
             Or with FindStr in powershell
                          PS G:\rudi.harris\src\CluedIn-io\Home> <mark>docker logs cluedin_20221002_37b57368-server-1 --since 5m | FindStr -i datashard</mark> [#012 03:02:59 INF] CluedIn DataShard [Blob] => [AVAILABLE]
                            [#012 03:02:59 INF] CluedIn DataShard [Configuration] => [AVAILABLE]
[#012 03:02:59 INF] CluedIn DataShard [Data] => [AVAILABLE]
[#012 03:03:00 INF] CluedIn DataShard [Search] => [AVAILABLE]
                           [#012 03:03:00 INF] CluedIn DataShard [Graph] => [AVAILABLE]
[#012 03:03:00 INF] CluedIn DataShard [Metrics] => [AVAILABLE]
[#012 03:03:00 INF] CluedIn System => [GREEN] => All DataShards Available.
Note the use of --since 5m is to limit the log output to the last 5 minutes and we omitted the -f follow flag.
```

Run the CluedIn status command to check everything is up and working

Here we can see the annotation service is down

```
PS G:\rudi.harris\src\CluedIn-io\Home> .\cluedin.ps1 status 20221002
| CluedIn - Status Check [docker] |
Docker containers status
                                                                                                                                                        COMMAND
                                                         IMAGE
                                                   STATUS
                                                                                        PORTS
                                               cluedin_20221002_37b57368-annotation-1
entrypoint.s.." annotation 24
cluedin_20221002_37b57368-cadvisor-1
"/usr/bin/cadvisor -.." cadvisor
cluedin_20221002_37b57368-clean-1
entrypoint.s.." clean
                                                                                                                                                        "docker-
                                                24 minutes ago
                                                                        Up 23 minutes
                                                                                                              0.0.0.0:9009->8888/tcp
entrypoint.s.." clean - cluedin_20221002_37b57368-datasource-1 cluedinp
                                                       cluedinprod.azurecr.io/cluedin/cluedin-micro-datasource:2022.10.02
                                                                                                                                                        "docker-
entrypoint.s..." datasc
0.0.0.0:9011->8888/tcp
                                                                                                              0.0.0.0:9014-9016->9014-9016/tcp,
                                                                         Up 23 minutes
cluedin_20221002_37b57368-documentation-1
                                                       cluedinprod.azurecr.io/cluedin/cluedin-micro-documentation:2022.10.02
                                                                                                                                                        "docker-
entrypoint.s..." documentation 24 minutes ago Up 24 minutes 0.0.0.0:9021->88 cluedin_20221002_37b57368-elasticsearch-1 cluedinprod.azurecr.io/elasticsearch/elasticsearch:7.8.0
                                                                                                              0.0.0.0:9021->8888/tcp
                                                                                                                                                        "/tini --
/usr/local..." elasticsearch 2
cluedin_20221002_37057368-gql-1
entrypoint.s..." gql
cluedin_20221002_37057368-grafana-1
                                             24 minutes ago
                                                                    Up 24 minutes
                                                                                                           0.0.0.0:9200->9200/tcp, 0.0.0.0:9300->9300/tcp
                                                cluedinprod.azurecr.io/cluedin/cluedin-ui-gq1:2022.10.02
24 minutes ago Up 23 minutes 0.0.0.0:8888->88
                                                                                                                                                        "docker-
                                                                                                             0.0.0.0:8888->8888/tcn
                                                         cluedinprod.azurecr.io/grafana/grafana:9.1.4
24 minutes 0.0.0.0:3030->3000/tcp
                                                                                                                                                        "/run.sh"
                          24 minutes ago
                                                    Up 24 minutes
                                                        cluedinprod.azurecr.io/cluedin/neo4j:2022.10.02
 cluedin_20221002_37b57368-neo4j-1
                                                                                                                                                        "tini -g --
/entrypo..." neo4j
0.0.0.0:7687->7687/tcp
                                          24 minutes ago
                                                                                                         0.0.0.0:7474->7474/tcp, 7473/tcp,
                                                                    Up 24 minutes
cluedin_20221002_37b57368-openrefine-1
                                                         cluedinprod.azurecr.io/cluedin/openrefine:2022.10.02
                                                                                                                                                        "/app/refine"
openrefine 24 minutes ago cluedin_20221002_37b57368-prometheus-1 "/bin/prometheus --w..." prometheus cluedin_20221002_37b57368-rabbitmq-1
                                                   Up 24 minutes
                                                                                        0.0.0.0:3333->3333/tcp
                                                         cluedinprod.azurecr.io/prometheus/prometheus:v2.37.0
                                                         24 minutes ago Up 24 minutes 0.0.0.999 cluedinprod.azurecr.io/bitnami/rabbitmq:3.10.8-debian-11-r4
                                                                                                                        0.0.0.0:9090->9090/tcp
                                                          24 minutes ago Up 23 minutes
 "/opt/bitnami/script..." rabbitmq
                                                                                                                        4369/tcp, 5551-5552/tcp, 5671/tcp,
0.0.0.0:5672->5672/tcp, 0.0.0.0:15672->15672/tcp, 15671/tcp, 25672/tcp, 0.0.0.0:15692->15692/tcp
                                                         cluedinprod.azurecr.io/bitnami/redis:6.2.7-debian-11-r11
24 minutes ago Up 24 minutes 0.0.0.0
cluedin_20221002_37b57368-redis-1
"/opt/bitnami/script..." redis
                                                                                                                        0.0.0.0:6379->6379/tcp
cluedin_20221002_37b57368-seq-1
                                                         cluedinprod.azurecr.io/datalust/seq:2022.1
                                                        23 minutes 443/tcp, 45341/tcp, 0.0.0.0:5341->5341/tcp, 0.0.0.0:3200->80/tcp cluedinprod.azurecr.io/cluedin/cluedin-server:2022.10.02 "sh ./boot.sh"
                          24 minutes ago
                                                    Up 23 minutes
cluedin_20221002_37b57368-server-1
                          24 minutes ago
                                                    Up 7 minutes
                                                                                        0.0.0.0:9000-9001->9000-9001/tcp, 0.0.0.0:9003->9003/tcp,
0.0.0.0:9006-9007->9006-9007/tcp, 0.0.0.0:9013->9013/tcp
cluedin_20221002_37b57368-smtp4dev-1
/app/Rnwood...." smtp4dev
0.0.0.0:25258->80/tcp
                                                       cluedinprod.azurecr.io/rnwood/smtp4dev:latest
                                                                                                                                                         dotnet"
                                                24 minutes ago
                                                                                                              143/tcp, 0.0.0.0:2525->25/tcp,
                                                                          Up 24 minutes
                                                                                                                                                        "sh -c 'mkdir -
cluedin_20221002_37b57368-sqlserver-1
                                                         cluedinprod.azurecr.io/cluedin/sqlserver:2022.10.02
p /ms..." sqlserver 24 minutes cluedin_20221002_37b57368-submitter-1 entrypoint.s..." submitter 24 r cluedin_20221002_37b57368-ui-1 entrypoint...." ui 24 m:
                                                       go Up 24 minutes 0.0.0.0:1433->1433/tcp
cluedinprod.azurecr.io/cluedin/cluedin-micro-submitter-node:2022.10.02
                                      24 minutes ago
                                                                                                                                                        "docker-
                                                24 minutes ago
                                                                        Up 23 minutes
                                                                                                              0.0.0.0:9012->8888/tcp
                                                         cluedinprod.azurecr.io/cluedin/ui:2022.10.02
                                                                                                                                                        "/docker-
                                               24 minutes ago Up 23 minutes
                                                                                                             80/tcp, 0.0.0.0:9080->8080/tcp
cluedin_20221002_37b57368-webapi-1
                                                        cluedinprod.azurecr.io/cluedin/app:2022.10.02
                                                                                                                                                        "dotnet
CluedIn.App..."
                                                24 minutes ago
                                                                                                              0.0.0.0:9008->9008/tcp
                     webapi
                                                                          Up 23 minutes
Running CluedIn instance status
Can Connect
   [1/1] \sqrt{\text{ » Is Up : http://127.0.0.1.nip.io:9000/status}}
   [1/6] \sqrt{\ } Blob [2/6] \sqrt{\ } Configuration
   [2/6] √ » Configu

[3/6] √ » Data

[4/6] √ » Search

[5/6] √ » Graph

[6/6] √ » Metrics
 Components
   [1/6] √ » Api

[2/6] √ » Authentication

[3/6] √ » Crawling

[4/6] √ » Scheduling

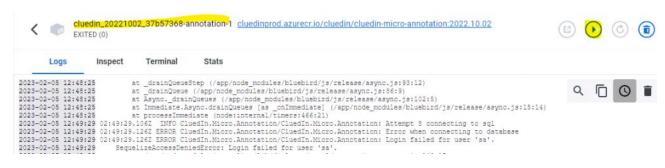
[5/6] √ » ServiceBus
```

[6/6] √ » System

We can also use git bash as below to see all the errors

```
# get the id of the annotation container
rudi@maxima MINGW64 ~
| docker ps -a | grep annotation | grep 2022.10.02
| 9e668246470d | cluedinprod.azurecr.io/cluedin/cluedin-micro-annotation:2022.10.02
                                                                                                           "docker-entrypoint.s..." 29 minutes ago
Exited (0) 23 minutes ago
cluedin_20221002_37b57368-annotation-1
# grep for ERROR
rudi@maxima MINGW64 ~
$ docker logs 9e668246470d | grep ERROR
02:46:44.720Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (θ)
02:46:44.761Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED)
02:46:49.738Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (1)
Sun, 05 Feb 2023 02:47:21 GMT tedious deprecated The default value for `config.options.trustServerCertificate` will change from
 true` to `false` in the next major version of `tedious`. Set the value to `true` or `false` explicitly to silence this message. at
node_modules/sequelize/lib/dialects/mssql/connection-manager.js:63:26
02:46:49.738Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED)
02:46:54.744Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (2)
02:46:54.744Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED)
[AMQP] reconnecting
02:46:59.746Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (3)
02:46:59.747Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED)
02:47:04.775Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (4)
02:47:04.777Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED)
02:47:09.778Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (5)
npm notice
npm notice New major version of npm available! 8.19.3 -> 9.4.1
npm notice Changelog: <https://github.com/npm/cli/releases/tag/v9.4.1>
                   `npm install -g npm@9.4.1` to update!
npm notice
02:47:09.780Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED)
02:47:14.780Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (6)
02:47:14.780Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED) 02:47:21.531Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Error when connecting to database
02:47:21.534Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Failed to connect to sqlserver:1433 - Could not connect
(sequence)
02:47:21.887Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (0)
02:47:21.893Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED)
02:47:22.539Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Error when connecting to database
02:47:22.539Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Failed to connect to sqlserver:1433 - Could not connect
(seauence)
02:47:24.543Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Error when connecting to database
02:47:24.543Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Failed to connect to sqlserver:1433 - Could not connect
(seauence)
02:47:26.889Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (1)
02:47:26.889Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED)
02:47:28.553Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Error when connecting to database
02:47:28.554Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Failed to connect to sqlserver:1433 - Could not connect
(sequence)
02:47:31.890Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (2)
02:47:31.891Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED)
02:47:36.560Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Error when connecting to database
02:47:36.560Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Failed to connect to sqlserver:1433 - Could not connect
(sequence)
02:47:36.892Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (3)
02:47:36.893Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED)
02:47:41.893Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (4)
02:47:41.894Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED)
02:47:46.895Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (5)
02:47:46.895Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED) 02:47:51.897Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Invalid connection to rabbitMQ (6)
02:47:51.897Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: connect ECONNREFUSED 172.24.0.11:5672 (err.code=ECONNREFUSED)
02:47:52.564Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Error when connecting to database 02:47:52.564Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Failed to connect to sqlserver:1433 - Could not connect
(sequence)
02:48:25.105Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Error when connecting to database
02:48:25.106Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Login failed for user 'sa'.
02:49:29.126Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Error when connecting to database
02:49:29.126Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Login failed for user 'sa'.
02:51:37.304Z ERROR CluedIn.Micro.Annotation/CluedIn.Micro.Annotation: Channel closed
```

Try starting annotation container in the docker deskup UI and monitor the logs



Ok it is up and staying up



Check all containers are up - success!



Let things settle for a while before attempting the next setup steps

Monitor the running (20/20) remains so

Check the docker desktop resources are okay



Configure Cluster

Debug Mode for Server Container

Consider putting the server container in debug mode for more verbose output (I tend to have this setting on all the time and I watch the server logs regularly to gain better insights into what is happening)

to do this we update the file .env file in Home\env\20221002

CLUEDIN_ENVIRONMENT=Production

to

CLUEDIN_ENVIRONMENT=Development

Basic GraphQL and Network Inspecting

Install GraphQL Network Inspector in Chrome

https://chrome.google.com/webstore/detail/graphql-network-inspector/ndlbedplllcgconngcnfmkadhokfaaln



Home > Extensions > GraphQL Network Inspector



Connect to apps page on new local CluedIn cluster





Sign in to your team

Enter your team's CluedIn domain.

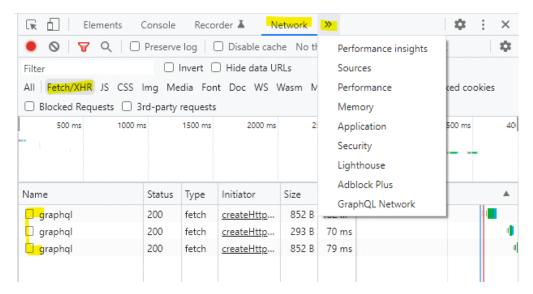
Team Domain	
	.127.0.0.1.nip.io
Continue	

Note: nip.io is a service for

Dead simple wildcard DNS for any IP Address

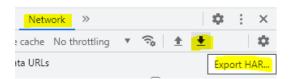
Stop editing your **etc/hosts** file with custom hostname and IP address mappings. nip.io allows you to do that by mapping any IP Address to a hostname

Open devtools (F12 in chrome) and observe the network

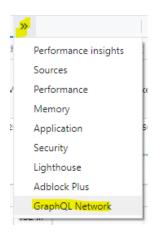


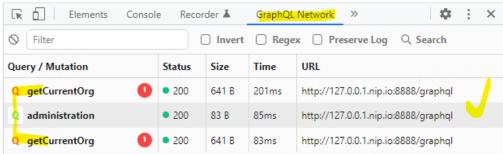
Note the graphql requests

You can save HAR files for later analysis and support tickets (the up arrow is for importing HAR files)



Open GraphQL Network - it will show the existing requests from the network tab and can also show loaded HAR files





Let's create a new org

Doco here is https://cluedin-io.github.io/Home/3.5.2/createorg/

```
PS G:\rudi.harris\src\CluedIn-io\Home> .\cluedin.ps1 createorg 20221002 -Name example -Pass Wxio523!fdH
      | CluedIn - Create Organization [docker] |
```

Active True ApplicationSubDomain : example CustomerId

 ${\tt ExternalAuthenticationId}$

example.com EmailDomainName

0515db86-5558-4ce7-b686-05e80c077f5d ${\tt IsEmailDomainSignupActivated}$

: 5/02/2023 12:21:54 PM ${\tt LastLoginTime}$ Name

example

6749e7a5-da15-47e2-918b-6a385e288865 Plan ${\tt PlanEndDate}$ 7/03/2023 12:21:54 PM

PlanIsActive True

PlanStartDate 5/02/2023 12:21:54 PM

RefreshTokenLifeTime 14400 SubscriptionId

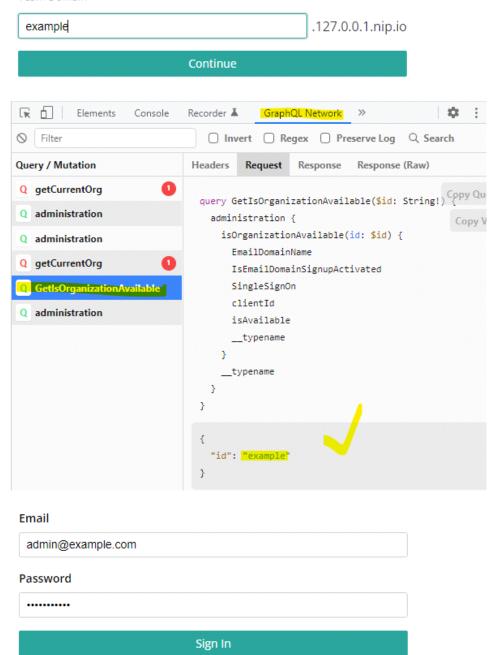
Email: admin@example.com Password: Wxio523!fdH

Server logs

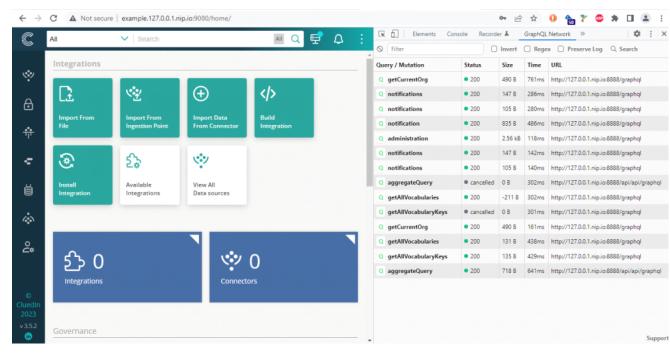
```
[#143 12:21:56 INF] Created administrative account for admin@example.com for example
[#142 12:21:56 INF] Creating default page templates for 0515db86-5558-4ce7-b686-05e80c077f5d
[#144 12:21:56 INF] Populating page templates for 0515db86-5558-4ce7-b686-05e80c077f5d
[#142 12:22:09 INF] Clue: /Organization#CluedIn:0515db86-5558-4ce7-b686-05e80c077f5d was processed successfully; Last result:
[#142 12:22:11 INF] Clue: /Infrastructure/User#CluedIn:82344ab0-7d9c-40e5-9d12-dbcc2829e58a was processed successfully; Last
result: Success
[#142 12:22:11 INF] Registration clue processing completed successfully; Last result: Success
[#142 12:22:11 INF] New organization registered: example (example)
[#142 12:22:11 INF] HTTP POST /api/account/new responded 200 in 17628.2592 ms
```

Open CluedIn UI to test it's working

Use the app page to go to example or go directly there with http://example.127.0.0.1.nip.io:9080/



Success



6.4s

4.15 5.5s

3.9s

4.2s

5.4s 1.7s

2.4s

1.9s

2.65

3.4s

3.2s 6.1s

2.6s

8.85

12.35

11.8s

12.8s 2.2s

Create start and stop scripts and stop the cluster

Create convenience scripts stop/start/status

```
PS C:\Users\rudi> .\home.ps1
PS ...\Ome> Write-Output ".\cluedin.ps1 stop 20221002" > stop_20221002.ps1
PS ...\Home> Write-Output ".\cluedin.ps1 start 20221002" > start_20221002.ps1
PS ...\Home> Write-Output ".\cluedin.ps1 startus 20221002" > startus_20221002.ps1
```

Stop the cluster - so we can shutdown our computer

```
Confirm it's running
          PS > .\status_20221002.ps1
          Can Connect
          [1/1] √ » Is Up : http://127.0.0.1.nip.io:9000/status
DataShards
              [1/6] \sqrt{\ } » Blob [2/6] \sqrt{\ } » Configuration [3/6] \sqrt{\ } » Data
              [4/6] \sqrt{\ } » Search [5/6] \sqrt{\ } » Graph [6/6] \sqrt{\ } » Metrics
          Components
              [1/6] √ » Api
              [2/6] √ » Authentication
              [3/6] \sqrt{\ } » Crawling [4/6] \sqrt{\ } » Scheduling
              [5/6] √ » ServiceBus
              [6/6] √ » System
Stop it
          PS G:\rudi.harris\src\CluedIn-io\Home> .\stop_20221002.ps1
          | CluedIn - Environment => stop [docker] |
          [+] Running 20/20
               Container cluedin_20221002_37b57368-documentation-1
            - Container cluedin_20221002_37b57368-openrefine-1
                                                                                                           Stop...
              Container cluedin_20221002_37b57368-grafana-1
Container cluedin_20221002_37b57368-gql-1
                                                                                                           Stopped
Stopped
            - Container cluedin_20221002_37b57368-smtp4dev-1

- Container cluedin_20221002_37b57368-ui-1

- Container cluedin_20221002_37b57368-cadvisor-1
                                                                                                           Stoppe..
                                                                                                           Stopped
                                                                                                           Stoppe..
              Container cluedin_20221002_37b57368-prometheus-1
Container cluedin_20221002_37b57368-submitter-1
Container cluedin_20221002_37b57368-webapi-1
                                                                                                           Stop...
                                                                                                           Stopp..
                                                                                                           Stopped
               Container cluedin_20221002_37b57368-clean-1
                                                                                                           Stopped
            - Container cluedin_20221002_37b57368-annotation-1
- Container cluedin_20221002_37b57368-datasource-1
- Container cluedin_20221002_37b57368-server-1
- Container cluedin_20221002_37b57368-neo4j-1
                                                                                                           Stop...
                                                                                                           Stop...
                                                                                                           Stopped
                                                                                                           Stopped
            - Container cluedin_20221002_37b57368-elasticsearch-1

- Container cluedin_20221002_37b57368-seq-1

- Container cluedin_20221002_37b57368-redis-1
                                                                                                          S...
Stopped
```

- Container cluedin_20221002_37b57368-rabbitmq-1 - Container cluedin_20221002_37b57368-sqlserver-1

Confirm it's stopped PS > .\status_20221002.ps1 Stopped

Stoppe...

Stopp...

cluedin_20221002_37b57368-webapi-1 CluedIn.App..." webapi cluedinprod.azurecr.io/cluedin/app:2022.10.02 ours ago Exited (0) About a minute ago 10 hours ago

"dotnet

Running CluedIn instance status

Can Connect
[1/1] x » Is Up : http://127.0.0.1.nip.io:9000/status

* [1] check(s) did not succeed. Please review for solutions:
x » Is Up : http://127.0.0.1.nip.io:9000/status
Could not connect to http://127.0.0.1.nip.io:9000/status

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