

Eddie Christopher Fox III

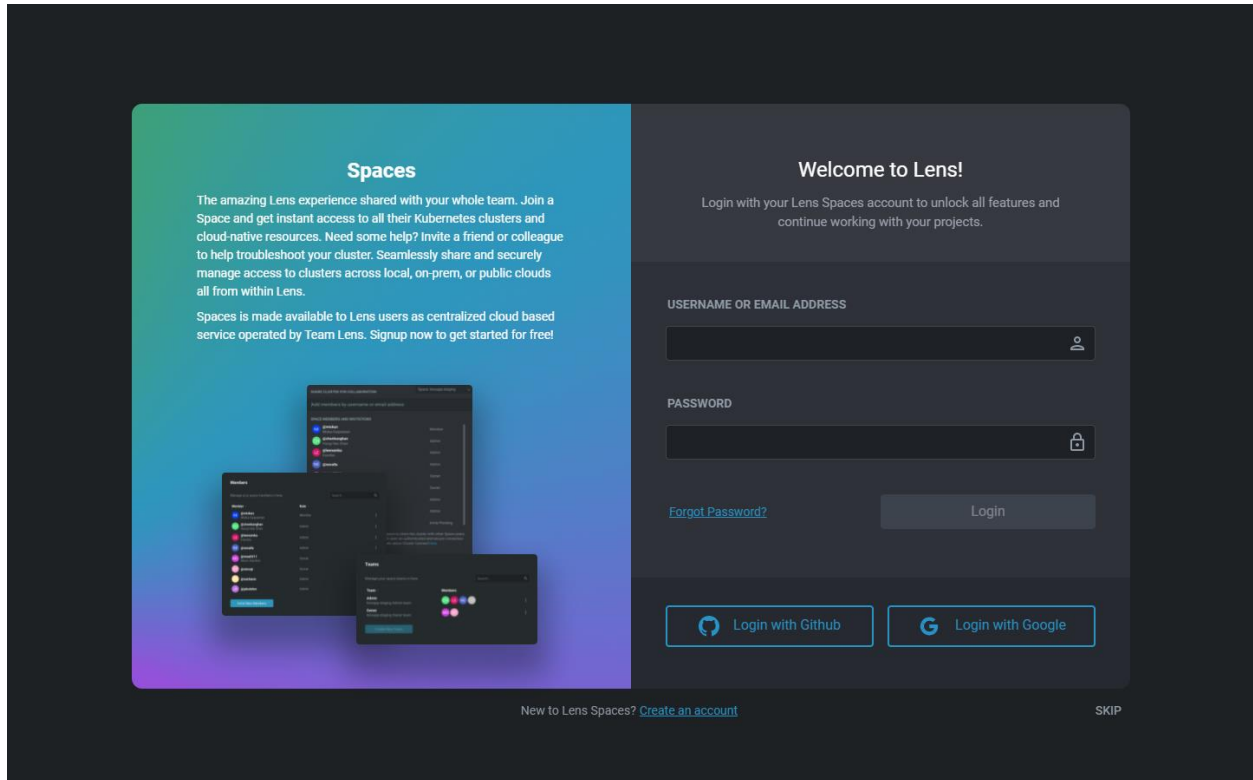
Student ID: 1155160788

April 9, 2022

Lab 5 Report: Using Kubernetes IDE: Lens

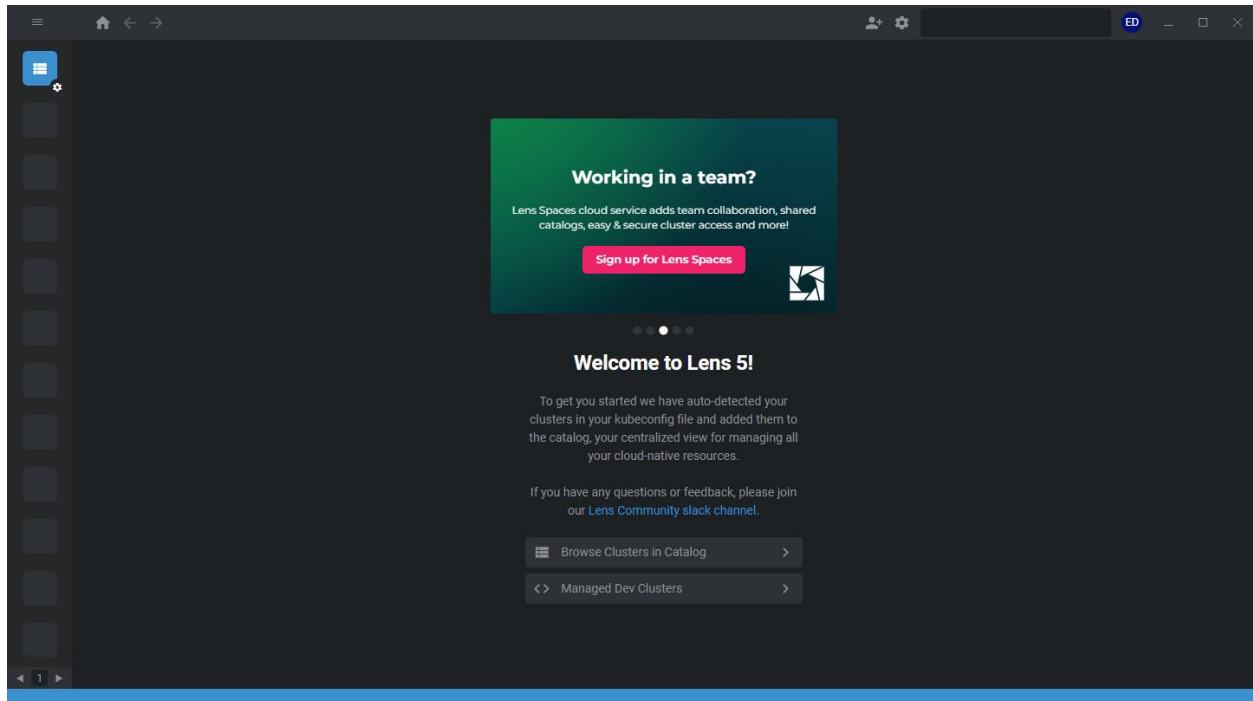
Bolded screenshots at the end with the deliverables.

Launching application after download.



After creating account and logging in:

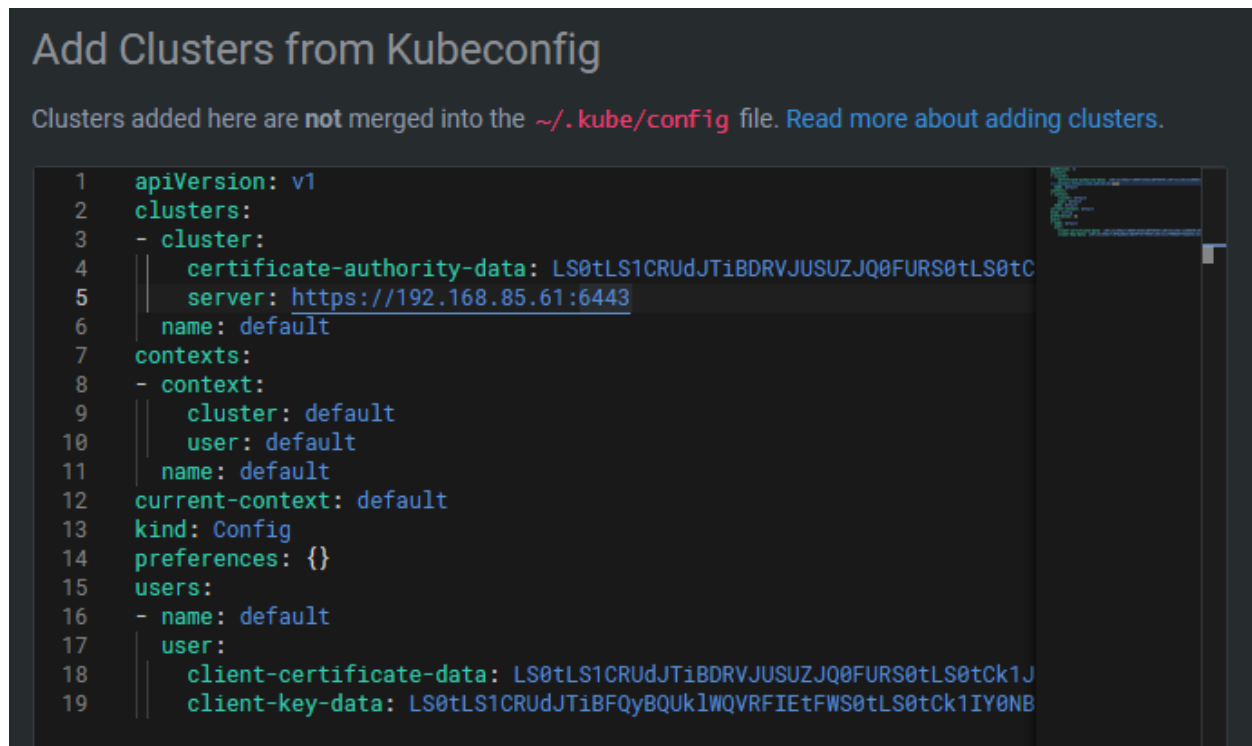
Screenshot on next page.



Kubectl config command:

```
s1l55160788@user-desktop:~$ kubectl config view --minify --raw
apiVersion: vl
clusters:
- cluster:
    certificate-authority-data: LS0tLS1CRUdJTiBDRVJUSUZJQ0FURSB0tLS0tCk1JSUJkakNDQViyZ0F3SUJBZ01CQURBS0JnZ3Foa2pPUFFRR
    EFqQWpNU0V3SHd2RFZRUUREQmhyTTNNdGMyVnkKZG1WeUxXTmhRREUyTkrNNE9ESTNOakF3SGhjTk1qSXdOREF9TURZMU9USXdxAGNOTXpJd016TXdNRF
    kxTlERJdwpXakFqTVNFD0h3WURWUUVFEREJock0zTXRjMlZ5ZG1WeUxXTmhRREUyTkrNNE9ESTNOakF3V1RBVEJnY3Foa2pPClBR5UJC22dxaGtqTlBRTUJ
    Cd05DQUFQWtUbEERt2FsdDZyUHFqZ2ZlBFlsNUtLZWVqNmoya3NKOTQvK0hwYzEKd3ZJME0xbk1Re1ZvR0hidWxrWUUpiYUFWblUzU0V0UUhYTk5WV1BM
    ZXZzV1VvME13UURBT0JnTlZlUUhCQWY4RQpCQU1DQXFRd0R3WURWUjBUQVFIL0JBVXhBd0VCL3pBZEJnTlZlUURFRmdRVUNCVnRydGhCsJyFOW1ESNWFzV
    Eh6CkJVRXJzRmd3Q2d2ZSUtVWk16ajBFQXhJRfJ3QXhSQULnWkRuOFQZajJnSzMVmeFJUQmVpTEV2RmZQOWJ0VjliaHUKZFUySFE9RzJWdEVDSUJkENDWOF
    VZVjJYVWm5xMTdjOUFzZUJYVmp1a1lHK2ZDZCt3MTE4dndMWU4KLS0tLS1FTkQgQ0VSVE1GSUNBVEU0tLS0tLQo=
    server: https://127.0.0.1:6443
    name: default
contexts:
- context:
    cluster: default
    user: default
    name: default
current-context: default
kind: Config
preferences: {}
users:
- name: default
  user:
    client-certificate-data: LS0tLS1CRUdJTiBDRVJUSUZJQ0FURSB0tLS0tCk1JSUJrakNDQVRlZ0F3SUJBZ01JZGRTelY2d3lWmXQ3Q2d2ZSUtV
    Wk16ajBFQXhJd016RWWhNQjhHQTfVRUF3dlkKYXpOekxXTnNhV1ZlZEMxallVQXh0a1E0T0RneU56WXdNOjRYRFRJeU1EUXdNakEyTlRreU1GblhEVE16T
    URRdwpNakEyTlRreU1Gbl3dNREYVYTUVR0ExVUVDaElPYzNsemRHVNRPbTfoYzNSbGNuTXhGVEFUQmdOVk9JBTBVRERE41CmMzUmxiVHBoWkcxcGJqQ1pNQk
    lH0nlxRlNNND1B20VHQ0NxrRlNNND1Bd0VIQTBJQUJFRnlVU1ozYXhyc21YWEQKV0EwNjRlVUppbU9rdjByM0dUK3RqdTEZyJklT2RNZGd3MzRtTjZ2RjB
    kbkVhd3NHQXo3bE1SSjRyeU03ZXk1SApdkd1DM1VpallNEQkdNQTRHQTfVZER3RUIvd1FFQXhJRm9EQVRCZ05WSFNVRUREQUtCZ2dyQmdFRk1JRY0RBakFm
    CkNjTlZlU01FR0RBV2dCUlJndU1KUHVXMKRlc2RuaC93NnZuWUxUMUpyekFLQmdncWhrak9QUVFEQWdOSkFEQkcKQWlFQW1ScHBUQ2g2ZEVQckx1Q3VsK
    2QlTEt6OHdYNDclRlAwVERhSm44bHY0dTRDSVFD5Uz5eDRXcnkyMnpMMwpyYXZzbC83M2FBL2NIdnVtekrVdThmK2tlaDRITlE9PQotLS0tLUVORCBDRV
    JUSUZJQ0FURSB0tLS0tC0tLS0tQkVHSU4gQ0VSVE1GSUNBVEU0tLS0tLQpNSU1CZHpDQ0F5MmdBd01CQWdJQkFEQUtCZ2dxaGtqTlBRUURBakFqTVNFD0h
    3WURWUUVFEREJock0zTXR2MnhwClpXNTBMV05oUURFMk5EzZrPREkzTmPBd0hoY05Nak13TkrBeU1EWTFFVE13V2hjTkl6SXhNek13TURZMU9USXkCkV2pB
    ak1TRXId1l1EVlFRFRERCaHJNM010WTJ4cFpXNTBMV05oUURFMk5EzZrPREkzTmPBd1dUQVRCZ2NxaGtqTwpQUU1CQmdncWhrak9QUU1CQnd0Q0FBVFNFU
    W9aeD1MbzdQNU84MkczWTEyTetsWEQrWmpSC9GSGJibWJMUJNCklwOWFIMl15Zk5Vb2xhb19qeGxPdStTRzhOaWNVVVF13c29STmpYUElWtMtbzBJd1
    FEQU9CZ05WSFE4QkFmOEUKQkFNQ0FfUXdEd1l1EVl1IwVEFRSC9CQV3QXhFQ196QWRRCZ05WSFE0RUZnUUVVWUxqQ1Q3bHRnN3PjPjRmdStyNQoyQzU5U2E
    4d0NnWUllblpJemowRUF3SURTQUF3U1FJaEF0dzNEcDlDSTA3TWdEeDR3Nkk1UDZpdEE2UTdWNWg2CnpTNURibHRRHNX10aUFPQXyxdTFCVvVtYnZKQ1dw
    amM0UXZnNnRURIszUzNPNmFPYTBVbkNJeFVYcHc9PQotLS0tLUVORCBDRVJUSUZJQ0FURSB0tLS0tCg==
    client-key-data: LS0tLS1CRUdJTiBFRQYBQUklWQVRFIEtFW50tLS0tCk1IYONBUUVFSUdUSEXtd1Q5SmlwcnBLYk1kbHkwTj1qZfZ2RzV0R05M
    R1YzaTdJcUZzCWGdwQW9HQ0NxrRlNNNDkKQXhFSG9VUURR20FFVuhKukuZHHJdXl1aZGNOWURUcmduUWlWTZTL1N2Y1pQNjJPN1hkjdjNzNTB4MkRE2ml2M
    wpxOFhSMmNSckN3WURQdV4RW5pdkl16dMdMa2QyOHdMZFNBPT0KLS0tLS1FTkQgRUMGUfJjVkfURSB1RVktLS0tLQo=
s1l55160788@user-desktop:~$
```

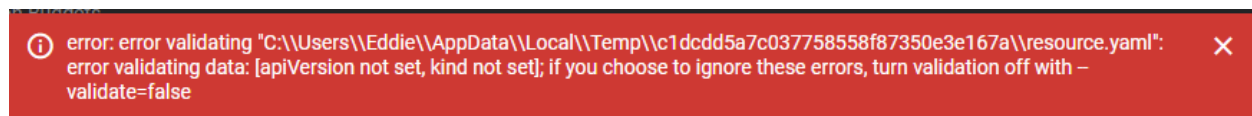
Adding Config settings to Lens:



Created open namespace in Lens:

Namespaces					5 items		Search Namespaces...	
<input type="checkbox"/>	Name ▾	Labels ▾	Age ▾	Status ▾				
<input type="checkbox"/>	default	kubernetes.io/metadata.name=default	7d6h	Active				
<input type="checkbox"/>	kube-node-lease	kubernetes.io/metadata.name=kube-node-lease	7d6h	Active				
<input type="checkbox"/>	kube-public	kubernetes.io/metadata.name=kube-public	7d6h	Active				
<input type="checkbox"/>	kube-system	kubernetes.io/metadata.name=kube-system	7d6h	Active				
<input type="checkbox"/>	opendatacam	kubernetes.io/metadata.name=opendatacam	2m1s	Active				

Note: I needed to recreate config map using kubectl Lab 4 instructions because of errors. I think Lens will only take the config map in YAML format based on what populates when selecting the “Config Map” template from “Create resource”



Command used: `kubectl create configmap opendatacam --namespace opendatacam --from-file=config.json --dry-run -o yaml | kubectl apply -f -`

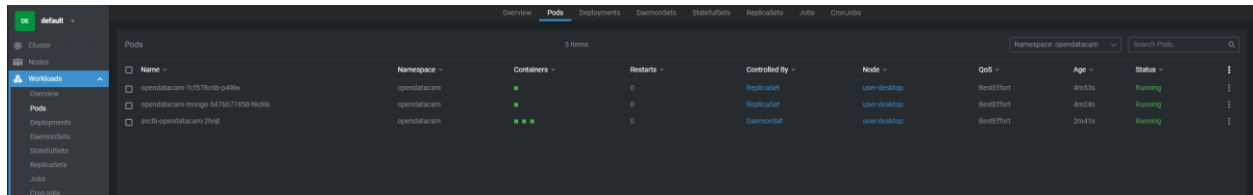
Source: <https://stackoverflow.com/questions/38216278/update-k8s-configmap-or-secret-without-deleting-the-existing-one> (had same command as our Lab 4)

<https://stackoverflow.com/questions/52619235/kubernetes-configmap-in-json-format-error>
(helped me with syntax for specifying the namespace when creating config map)

Config map creation:

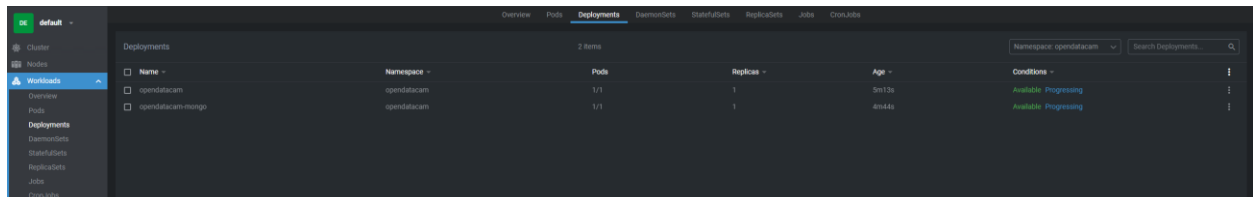
```
all5160788@user-desktop:~/opendatacam$ kubectl create configmap opendatacam --namespace opendatacam --from-file=config.json --dry-run -o yaml | kubectl apply -f -
W0409 21:35:09.798588 9677 helpers.go:555] --dry-run is deprecated and can be replaced with --dry-run=client.
configmap/opendatacam created
all5160788@user-desktop:~/opendatacam$
```

Workload > Pods



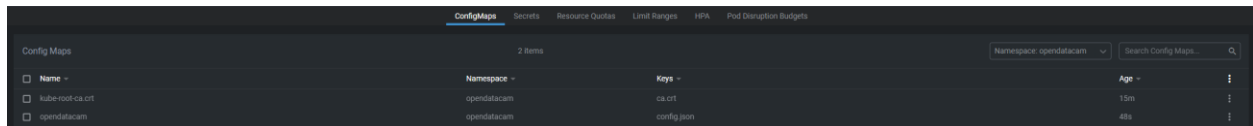
Name	Namespace	Containers	Restarts	Controlled By	Node	QoS	Age	Status
opendatacam-7cf576cb-p49lw	opendatacam	1	0	Replicaset	user-desktop	BestEffort	4m53s	Running
opendatacam-mongo-5476b77438-hu0sk	opendatacam	1	0	Replicaset	user-desktop	BestEffort	4m24s	Running
swlb-opendatacam-2lsgt	opendatacam	1	0	Daemonset	user-desktop	BestEffort	2m41s	Running

Workload > Deployment



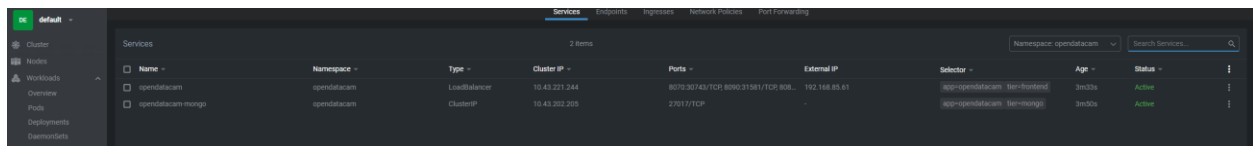
Name	Namespace	Pods	Replicas	Age	Conditions
opendatacam	opendatacam	1/1	1	5m13s	Available, Progressing
opendatacam-mongo	opendatacam	1/1	1	4m44s	Available, Progressing

Configuration > ConfigMaps



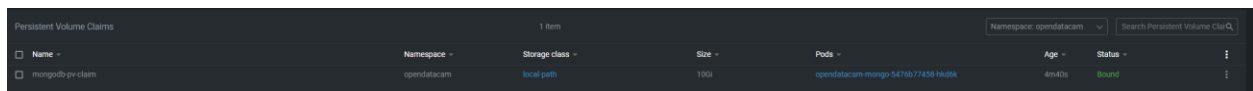
Name	Namespace	Keys	Age
kube-root-ca.crt	opendatacam	ca.crt	15m
opendatacam	opendatacam	config.json	40s

Network > Services



Name	Namespace	Type	Cluster IP	Ports	External IP	Selector	Age	Status
opendatacam	opendatacam	LoadBalancer	10.43.221.244	8070:30740/TCP, 8080:31381/TCP, 808...	192.168.85.61	app=opendatacam, tier=frontend	3m23s	Active
opendatacam-mongo	opendatacam	ClusterIP	10.43.202.205	27017/TCP	-	app=opendatacam, tier=mongo	3m50s	Active

Storage > Persistent Volume Claims



Name	Namespace	Storage class	Size	Pods	Age	Status
mongo-pv-claim	opendatacam	local-path	100G	opendatacam-mongo-5476b77438-hu0sk	4m40s	Bound

Storage > Persistent Volumes

