
Article

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[Open Exchange](#)

InterSystems IRIS in Containers

InterSystems has also released IRIS as containerized deployments. This post is to demonstrate how InterSystems IRIS and applications those rely on IRIS a backend can be packaged into an image and be run in other machines in containers and how simple it is to do that.

A container runs image/s which have all the necessary executables, binary code, libraries, and configuration files. And the images can be moved from one machine to another, and an images repository like Docker Hub can simplify that process.

I have used an application from Open Exchange for this demo.

Demo video: <https://www.loom.com/share/93f9a760b5f54c0a8811b7a212387b9d>

The image for IRIS Data Platform Community Edition can be found at the InterSystems Container Registry: <https://containers.intersystems.com/contents>

In order to use a containerized instance of IRIS in a host machine, it shall be pulled during runtime.

For that, the Dockerfile needs to have following commands like shown below:

Dockerfile:

Dockerfile

```
ARG IMAGE=intersystemsdc/iris-community:preview
```

```
FROM $IMAGE
```

```
RUN iris start IRIS /
```

```
&& iris merge IRIS /tmp/merge.cpf /
```

```
&& iris stop IRIS quietly
```

These are the base commands that make a Dockerfile written to build an image which has instructions for containerized IRIS.

The commands to also run installation of other dependencies required for the application that is running alongside the containerized instance of IRIS can be added.

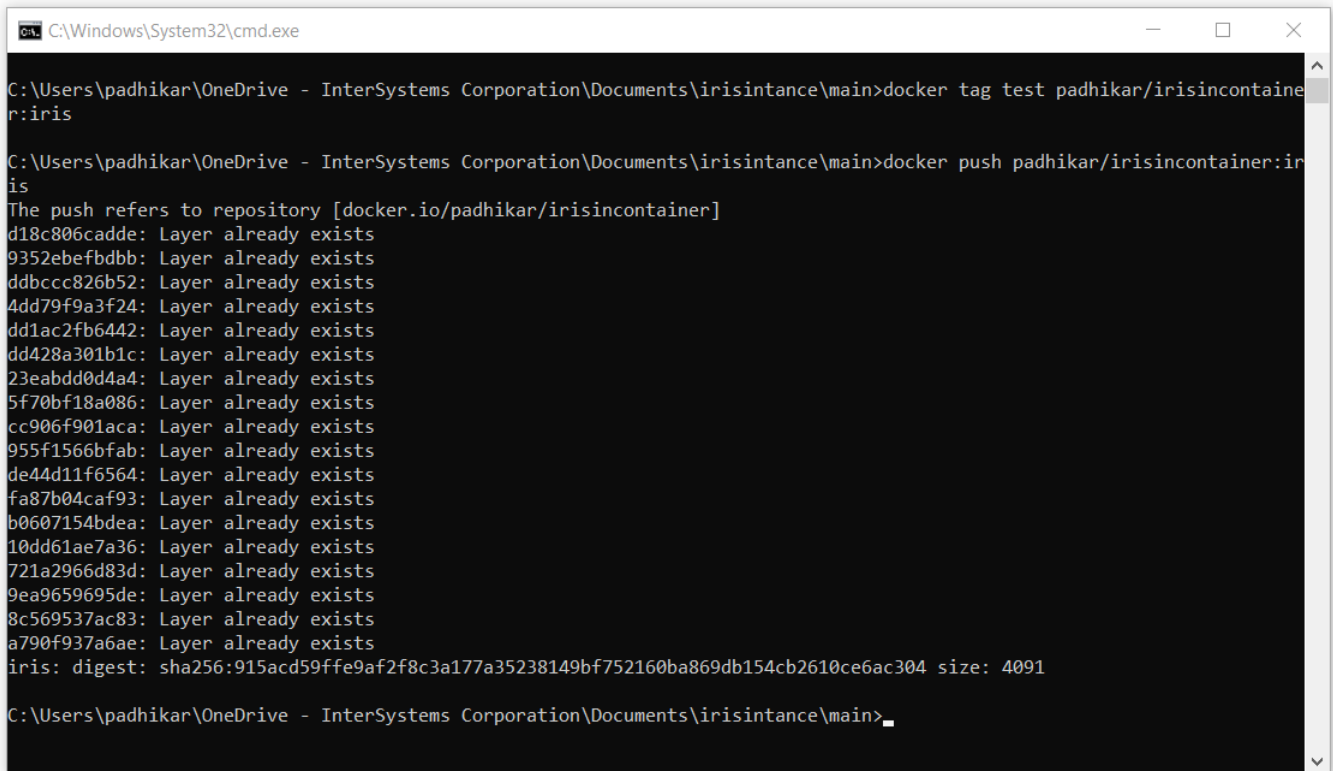
Given are the Docker commands that tag and push an image that carries IRIS instance into Docker Hub, and subsequently pull and run that image in another host machine.

Commands

```
docker build -t imagename filepath
```

```
docker tag imagename dockerhubusername/repositoryname:tagname
```

```
docker push dockerhubusername/repositoryname:tagname
```



```
C:\Windows\System32\cmd.exe

C:\Users\padhikar\OneDrive - InterSystems Corporation\Documents\irisinstance\main>docker tag test padhikar/iriscontainer:iris

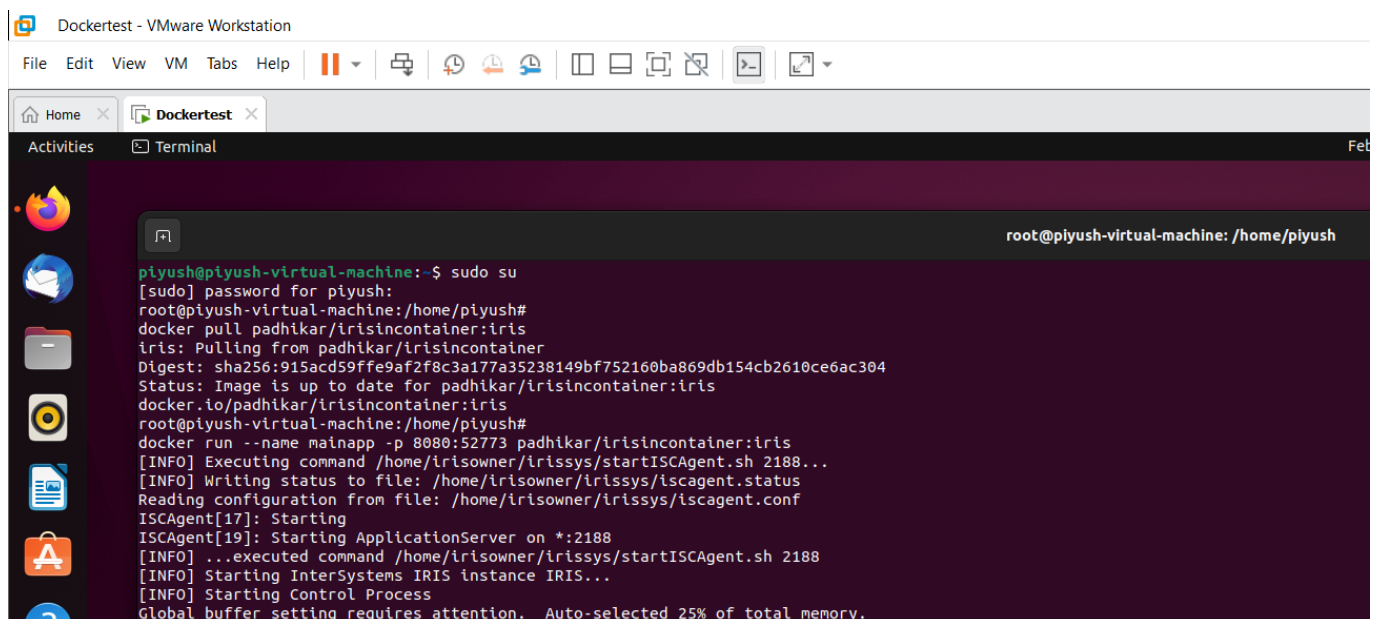
C:\Users\padhikar\OneDrive - InterSystems Corporation\Documents\irisinstance\main>docker push padhikar/iriscontainer:iris
The push refers to repository [docker.io/padhikar/iriscontainer]
d18c806cadde: Layer already exists
9352ebefbdbb: Layer already exists
ddbccc826b52: Layer already exists
4dd79f9a3f24: Layer already exists
dd1ac2fb6442: Layer already exists
dd428a301b1c: Layer already exists
23eabdd0d4a4: Layer already exists
5f70bf18a086: Layer already exists
cc906f901aca: Layer already exists
955f1566bfab: Layer already exists
de44d11f6564: Layer already exists
fa87b04caf93: Layer already exists
b0607154bdea: Layer already exists
10dd61ae7a36: Layer already exists
721a2966d83d: Layer already exists
9ea9659695de: Layer already exists
8c569537ac83: Layer already exists
a790f937a6ae: Layer already exists
iris: digest: sha256:915acd59ffe9af2f8c3a177a35238149bf752160ba869db154cb2610ce6ac304 size: 4091

C:\Users\padhikar\OneDrive - InterSystems Corporation\Documents\irisinstance\main>
```

Commands

```
docker pull dockerhubusername/repositoryname:tagname
```

```
docker run --name test -p host8080:52773 padhikar/iriscontainer:main
```



```
Dockertest - VMware Workstation

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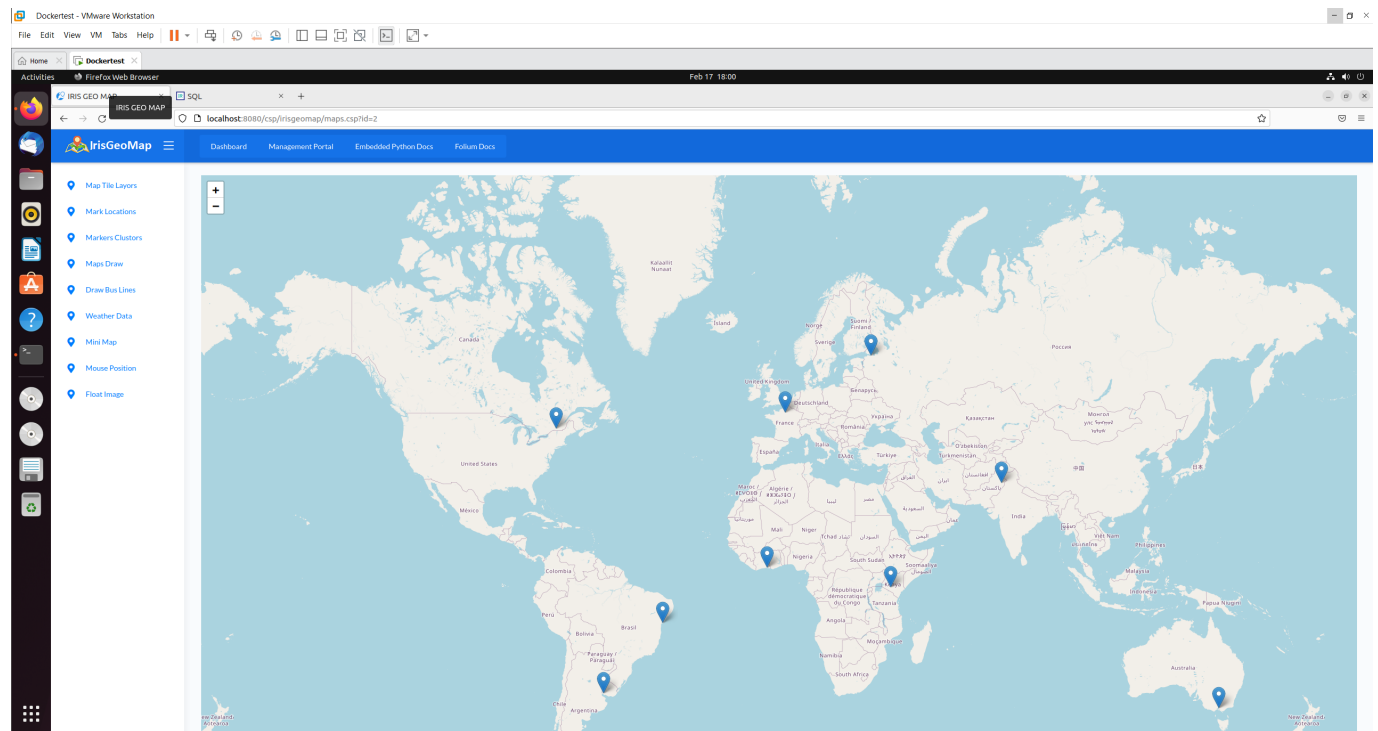
Activities Terminal

root@piyush-virtual-machine: /home/piyush

piyush@piyush-virtual-machine:~$ sudo su
[sudo] password for piyush:
root@piyush-virtual-machine: /home/piyush#
docker pull padhikar/iriscontainer:iris
iris: Pulling from padhikar/iriscontainer
Digest: sha256:915acd59ffe9af2f8c3a177a35238149bf752160ba869db154cb2610ce6ac304
Status: Image is up to date for padhikar/iriscontainer:iris
docker.io/padhikar/iriscontainer:iris
root@piyush-virtual-machine: /home/piyush#
docker run --name mainapp -p 8080:52773 padhikar/iriscontainer:iris
[INFO] Executing command /home/irisowner/irissys/startISCAgent.sh 2188...
[INFO] Writing status to file: /home/irisowner/irissys/iscagent.status
Reading configuration from file: /home/irisowner/irissys/iscagent.conf
ISCAgent[17]: Starting
ISCAgent[19]: Starting ApplicationServer on *:2188
[INFO] ...executed command /home/irisowner/irissys/startISCAgent.sh 2188
[INFO] Starting InterSystems IRIS instance IRIS...
[INFO] Starting Control Process
Global buffer setting requires attention. Auto-selected 25% of total memory.
```

InterSystems IRIS in Containers

Published on InterSystems Developer Community (<https://community.intersystems.com>)



Application used in demo: <https://openexchange.intersystems.com/package/iris-geo-map>

Creating InterSystems IRIS
images:

<https://docs.intersystems.com/irislatest/csp/docbook/DocBook.UI.Page.cls?KEY=ADOCK#ADOCKiriscreating>

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Source URL: <https://community.intersystems.com/post/intersystems-iris-containers>