

# Deploying Windows Apps Using Draft, Helm, and Kubernetes



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### Windows Containers



Working with Windows containers is special, but still has significant advantages over VMs.

#### Containers require matching kernel versions

Kernel needs to be the same across build/deploy

The rest of your pipeline can be Linux

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# Kubernetes Master Node 1 Node 1 Node 2 Node 2 Linux Agent Pool Windows Agent Pool

# Kubernetes Hybrid Clusters



#### Helm

Package Manager for Kubernetes

Helm helps you manage Kubernetes applications — Helm Charts help you define, install, and upgrade even the most complex Kubernetes application.

Charts are easy to create, version, share, and publish — so start using Helm and stop the copy-and-paste.

https://helm.sh/

#### Draft

#### Draft

Works with Helm, but made to simplify the process for developers
With just 2 commands, a developer can get started with Cloud Native Applications

`draft create`

`draft up`

https://github.com/Azure/draft

#### Pre-Reqs

#### **ASP.NET**

- Windows 10 version 1803, Windows Server version 1803 or later
- Visual Studio 2017 (any edition)
- .Net Framework 4.7.2 SDK, ASP.Net Targeting Pack for Visual Studio
- Docker

https://github.com/PatrickLang/fabrikamfiber/tree/helm-2019-mssql-linux

#### Pre-Reqs

#### .Net Core

- .Net Core 2.2 SDK
- Kubernetes cluster with Windows nodes
- A working container registry
  - If you're using Azure
    - Set up ACR
    - Authenticate it to ACR
    - Log in to ACR on your Windows machine
  - Otherwise, use docker login on your Windows machine, and be sure to set up a Kubernetes <u>image pull secret</u>
- Windows Draft Pack

https://github.com/PatrickLang/KubernetesForWindowsTutorial/tree/master/DraftWalkthrough

### Demo time!



### Questions?



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# Thank you

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