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## 

## **Prerequisites**

This exercise must be completed using local PCF Dev Cloud Foundry installation. This is important, because we need admin access to the installation.

**Creating a detect script**

1. Create a new folder for the buildpack:

|  |
| --- |
| $ mkdir ~/custom\_buildpack  $ cd ~/custom\_buildpack  $ mkdir bin |

1. Create the file bin/detect with the following content:

|  |
| --- |
| #!/usr/bin/env bash  # bin/detect <build-dir>  if [ -f $1/Staticfile ]; then  echo "staticfile" && exit 0  else  echo "no" && exit 1  fi |

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## **Creating a compile script**

1. Create the file bin/compile with the following content:

|  |
| --- |
| #!/usr/bin/env bash  # bin/compile <build-dir> <cache-dir>  set -e # fail fast  status() {  echo "-----> $\*"  }  # Configure directories  build\_dir=$1  cache\_dir=$2  status "Moving application content into public folder"  cd $build\_dir  mkdir public  shopt -s extglob dotglob  mv !(public) public  status "Installing static web server"  wget -q -O static-fileserver https://github.com/s-matyukevich/static-fileserver/blob/master/bin/static-fileserver?raw=true  chmod +x static-fileserver  status "Creating boot script"  cat > boot.sh << \EOF  setsid $HOME/static-fileserver -p $PORT -d $HOME/public > out 2>out.err  EOF  chmod +x boot.sh  echo "static"  exit 0 |

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## **Creating a release script**

1. Create the file bin/release with the following content:

|  |
| --- |
| #!/usr/bin/env bash  cat << EOF  default\_process\_types:  web: sh boot.sh  EOF |

**Package and upload the buildpack**

1. Install zip:

|  |
| --- |
| $ sudo apt-get -y install zip |

1. Add executable permissions:

|  |
| --- |
| $ chmod +x ~/custom\_buildpack/bin/\* |

1. Package the buildpack:

|  |
| --- |
| $ cd ~  $ zip -r custom\_buildpack.zip custom\_buildpack/ |

1. Upload the buildpack:

|  |
| --- |
| $ cf create-buildpack custom\_buildpack custom\_buildpack.zip 1 |

1. See the available buildpacks:

|  |
| --- |
| $ cf buildpacks |

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## **Verify the buildpack**

1. Install git

|  |
| --- |
| $ sudo apt-get update  $ sudo apt-get install git -y |

1. Download a static application:

|  |
| --- |
| $ cd ~  $ git clone https://github.com/s-matyukevich/iot-dashboard |

1. Add Staticfile to the application to make the buildpack recognize it:

|  |
| --- |
| $ cd ~/iot-dashboard  $ touch Staticfile |

1. Deploy the application:

|  |
| --- |
| $ cf push static |