**Supplementary Information: Recommendations to package and containerize bioinformatics software**

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**1. Guidelines to make your container smaller**

 **1.1 Multi-stage Dockerfile**

An example of a multi-stage build is provided in the following Dockerfile which uses a rather image (600 MB) large docker for building a go application while using a small (6 MB) distribution based on Alpine. In order to a more readable approach you can name your build stages. By default, the stages are not named, and you refer to them by their integer number, starting with 0 for the first FROM instruction. However, you can name your stages, by adding an as \_<NAME>\_ to the FROM instruction.

FROM golang:1.7.3 as builder
WORKDIR /go/src/github.com/alexellis/href-counter/
RUN wget https://raw.githubusercontent.com/go-training/helloworld/master/main.go
RUN mv main.go app.go
RUN CGO\_ENABLED=0 GOOS=linux go build -a -installsuffix cgo -o app .

FROM alpine:latest
RUN apk --no-cache add ca-certificates
WORKDIR /root/
COPY --from=builder /go/src/github.com/alexellis/href-counter/app .
CMD ["./app"]