JVM Resource Limits

- Java 11 or higher is recommended

- Earlier versions of Java did not recognize limits on memory and CPUs of a container

  - Java would see system memory, not the container

  - Docker will terminate a container when resource limits exceeded

  - Difficult to troubleshoot

Docker Host Considerations

- Running multiple Docker containers on a host can be resource intensive

- Can also consume a lot of disk space on host system

- Recommendations:

  - Use 'slim' base images - you don't need a full featured linux OS for Java runtime

  - Be aware of build layers as you build images

    - A host system only needs one copy of a layer

Which Base Image?

- Highly debated and opinionated topic in Java community

- In course we will be using OpenJDK Slim

- Opinionated options are from Fabric8 are a good choice

- Azul Systems publishes curated JVM Docker images, good choice for commercial applications

- For security and compliance, companies might want to build their own base image

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