Docker MATLAB Runtime Container

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What is XCRI? (XSEDE Cyberinfrastructure Resource Integration)

• Campus Bridging, but new branding.
• XCRI provides software toolkits to ease use of local resources and facilitate easy transitions between local and XSEDE resources.
• We also do site visits and remote consultation for HPC and cloud.
• We are always looking for feedback from XSEDE users, Campus Champions, and service providers to keep our offerings up-to-date with current needs.
MATLAB Runtime Container

• Simple container to run MATLAB compiled application.

• No need for a license on MATLAB runtime.

• Mobility to take your MATLAB applications to any Container-friendly HPC or VM.
MATLAB Runtime Container Caveats

• You cannot compile MATLAB code with the MATLAB Runtime.
• Note that code compiled and brought to MATLAB runtime is version-specific.
• Since it’s MATLAB runtime, there is no GUI and paths are fixed.
• Also, MCR is large, so you need ~10 GBs of available disk space and at least 8 GB of available memory.
Pieces of the project:

• Singularity – Runs containers on HPC
• Docker – platform for building containers
• MATLAB Runtime – Software for running high-level mathematics.
The complete container can be found here:

https://github.com/XSEDE/Container_Tutorial/blob/master/MCR-Dockerfile
Questions before we view the container?

Questions after the tutorial can be sent via email to help@xsede.org and include XCRI in the title.