Proposed Priorities for Chapel 1.23

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Top Priorities for Chapel 1.23



Chapel 2.0: make next release Chapel 2.0 if it proves worthy, address issues if not

User Support: support key users and nurture new ones

GPU Support: via libraries; explore direct code generation for GPUs

Performance Improvements: improve speed and scalability

Compiler Improvements: improve compiler speed, modes, code architecture

LLVM back-end: enabled by default

Constrained Generics: enable for next release

Standard Modules: review and stabilize key interfaces

Nilability: improve ergonomics, orthogonality

Shasta, HPE Systems: continue improving support and performance

Other Priorities for Chapel 1.23



Dogfooding: find more excuses to write Chapel ourselves

Array Initialization: fix to avoid default-init + assignment semantics

Point-of-Instantiation: fix surprising cases

Community Presence: switch to Discourse, improve website, launch blog

Import Statement: address remaining corner cases and bugs

Memory Leaks: get Chapel testing to leak-free state

Interoperability: continue to improve, particularly for Python

Mason: explore converting package modules to mason

Python3: remove any remaining reliance on Python 2

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