



Proposed Priorities for Chapel 1.19

Chapel Team, Cray Inc.
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Top Priorities

- **Complete initializers: init=, type aliases, noint**
- **More delete-free work: lifetime checking, nil checking**
- **Improved interoperability with Python, C, Fortran, C++**
- **Performance improvements**
- **Enable LLVM back-end by default**
 - explore support for vectorization
- **Continued support for AI workflows**
- **Runtime support for libfabric / OFI**
- **Namespace improvements**
- **Compiler performance improvements**





Other Priorities

- **Big ticket items:**

- GPU support
 - via direct code generation
 - via GPU libraries
- Constrained generics
- Partial reductions
- Array-as-vec improvements (via a separate type?)

- **Focused efforts:**

- UTF-8 string interfaces
- Shape preservation of range loop expressions / promotions
- Further HDF5 / NetCDF improvements
- Atomics use cstdlib by default (?)
- Incorporate GASNet-Ex

- **User support**





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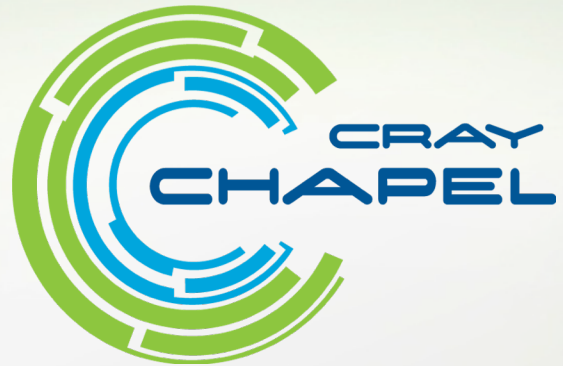
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