



# Documentation Changes

**Chapel Team, Cray Inc.**  
**Chapel version 1.17**  
**April 5, 2018**



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# Outline

- **Website Migration**
- **Finding the Latest Version of Documentation**
- **Example Code Changes**
- **Other Documentation Changes**



## Website Migration

**<http://chapel.cray.com> → <https://chapel-lang.org>**



# Migration to [chapel-lang.org](https://chapel-lang.org)

## Background:

- Chapel has traditionally been hosted at <http://chapel.cray.com>
- Reflected its Cray-based heritage

## This Effort:

- Migrated the site to <https://chapel-lang.org>
- Uses a more traditional URL for an open-source language effort
- Switched to https to avoid warnings for submitted doc search queries
- Set up forwarding for a number of common aliases:
  - <http://chapel.cray.com>
  - <http://chapel-lang.org>
  - <http://www.chapel-lang.org>
  - <https://www.chapel-lang.org>
- Performance tracking also migrated:
  - from SourceForge to <https://chapel-lang.org/perf-nightly.html>



# Migration to chapel-lang.org

## Impact:

- Provides a more traditional URL for a programming language project
- Using 'https' provides better security, reflects best practices

## Next steps:

- Move mailing lists to chapel-lang.org as well?



# Finding the Latest Version of Documentation



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# Doc Versions: Background and This Effort

## Background:

- Google searches don't always return the latest documentation version

## This Effort:

- Moved current documentation up one directory
  - from <https://chapel-lang.org/docs/latest/> to <https://chapel-lang.org/docs/>
- Added a color-coded menu button to every documentation page

The screenshot shows the Chapel Documentation website with three versions displayed side-by-side:

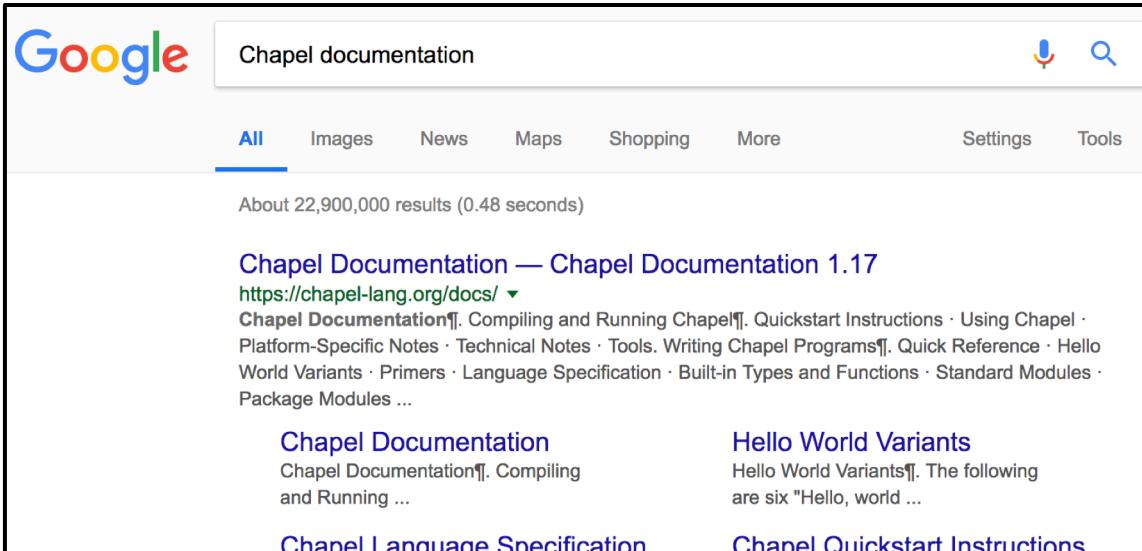
- 1.16**: The top version, with a blue header bar containing the logo and the number "1.16 ▼". To its right is the breadcrumb "Docs » Chapel Documentation".
- 1.17**: The middle version, with a blue header bar containing the logo and the number "1.17 ▼". To its right is the breadcrumb "Docs » Chapel Documentation".
- 1.18 pre-release**: The bottom version, with a blue header bar containing the logo and the number "1.18 pre-release ▼". Below it is a search bar labeled "Search docs". To its right is the breadcrumb "Docs » Chapel Documentation".

Below these three versions, the main title "Chapel Documentation" is displayed in a large, bold, dark font.

# Doc Versions: Impact and Next Steps

## Impact:

- Gives the user a strong visual cue for outdated or future pages
- Provides a quick way to get to the latest version of a page
  - assuming the URL is the same
  - if it's not, jumps to documentation index page for that version (no 404s)
- Googling "Chapel documentation" now finds top-level version

A screenshot of a Google search results page. The search query "Chapel documentation" is entered in the search bar. The results show the top result is "Chapel Documentation — Chapel Documentation 1.17" from the website https://chapel-lang.org/docs/. Below the main result, there are two columns of links: "Chapel Documentation" and "Hello World Variants" under the heading "Chapel Documentation", and "Chapel Language Specification" and "Chapel Quickstart Instructions" under the heading "Hello World Variants".

Google

Chapel documentation

All Images News Maps Shopping More Settings Tools

About 22,900,000 results (0.48 seconds)

**Chapel Documentation — Chapel Documentation 1.17**  
<https://chapel-lang.org/docs/>

Chapel Documentation · Compiling and Running Chapel · Quickstart Instructions · Using Chapel · Platform-Specific Notes · Technical Notes · Tools · Writing Chapel Programs · Quick Reference · Hello World Variants · Primers · Language Specification · Built-in Types and Functions · Standard Modules · Package Modules ...

**Chapel Documentation**  
Chapel Documentation · Compiling and Running ...

**Hello World Variants**  
Hello World Variants · The following are six "Hello, world ..."

**Chapel Language Specification**

**Chapel Quickstart Instructions**

## Next steps: Improve search for sub-pages of documentation



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## Example Code Changes (programs in \$CHPL\_HOME/examples)



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# Example Code Changes (\$CHPL\_HOME/examples)

- Added a faster version of reverse-complement
- Updated examples with respect to initializer changes
- Converted **SSCA#2** leader-follower iterators to standalone
- Fixed a multi-trial timing bug in our implementation of ISx
- Fixed a bug in the LCALS ‘inner\_prod’ loop kernel
- Removed the explicit MiniMD version from the release

# Other Documentation Changes



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# Language Specification Changes

- **Language specification** changes:

- Updated the function overload disambiguation rules
- Described combining promotion and default arguments
- Documented type arguments with type specifiers

# Other Documentation Changes

- Documented the built-in Error types
- Improved documentation of ‘-f’ configuration file parsing
- Documented supported domain maps in ‘LinearAlgebra’
- Added ‘m4’ to Chapel’s prerequisites list (needed for GMP)
- Documented ‘range.size’
- Documented ‘compileline --compile-c++’
- Added missing documentation for ‘dsiAssign()’
- Updated ‘mason’ documentation to include new features
- Fixed dead links

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