

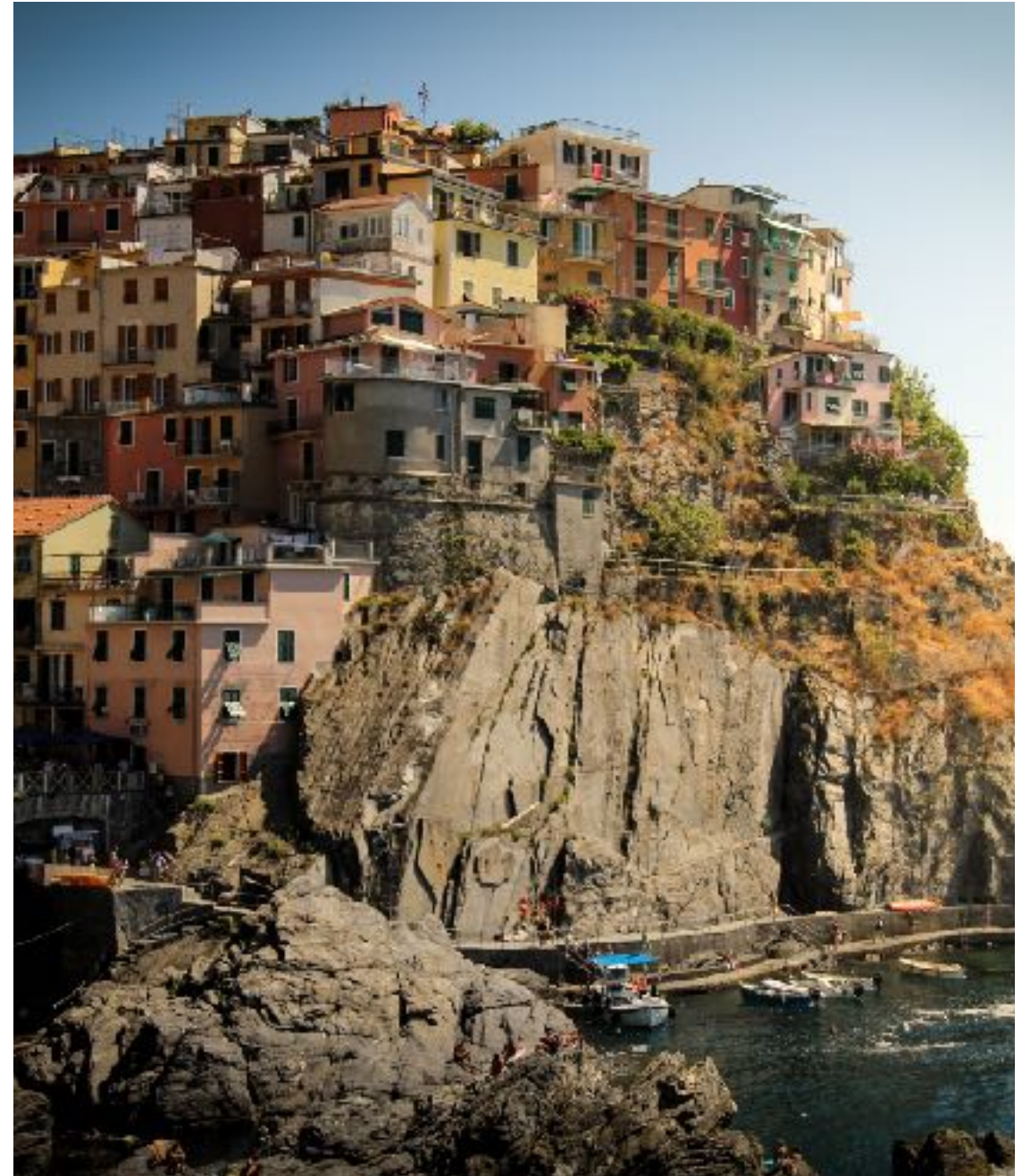
BIND 9

The Past, The Present and The Future

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BIND 9.0: The Past

- First released in 2000
- Other things from 2000:
 - gcc 2.95.2
 - Linux kernel 2.4.0
 - GNOME 1.2
 - Qt 2.0
 - Window 2000
 - First camera phone
 - Playstation 2 launched
 - New century started (only in pop-culture and US)



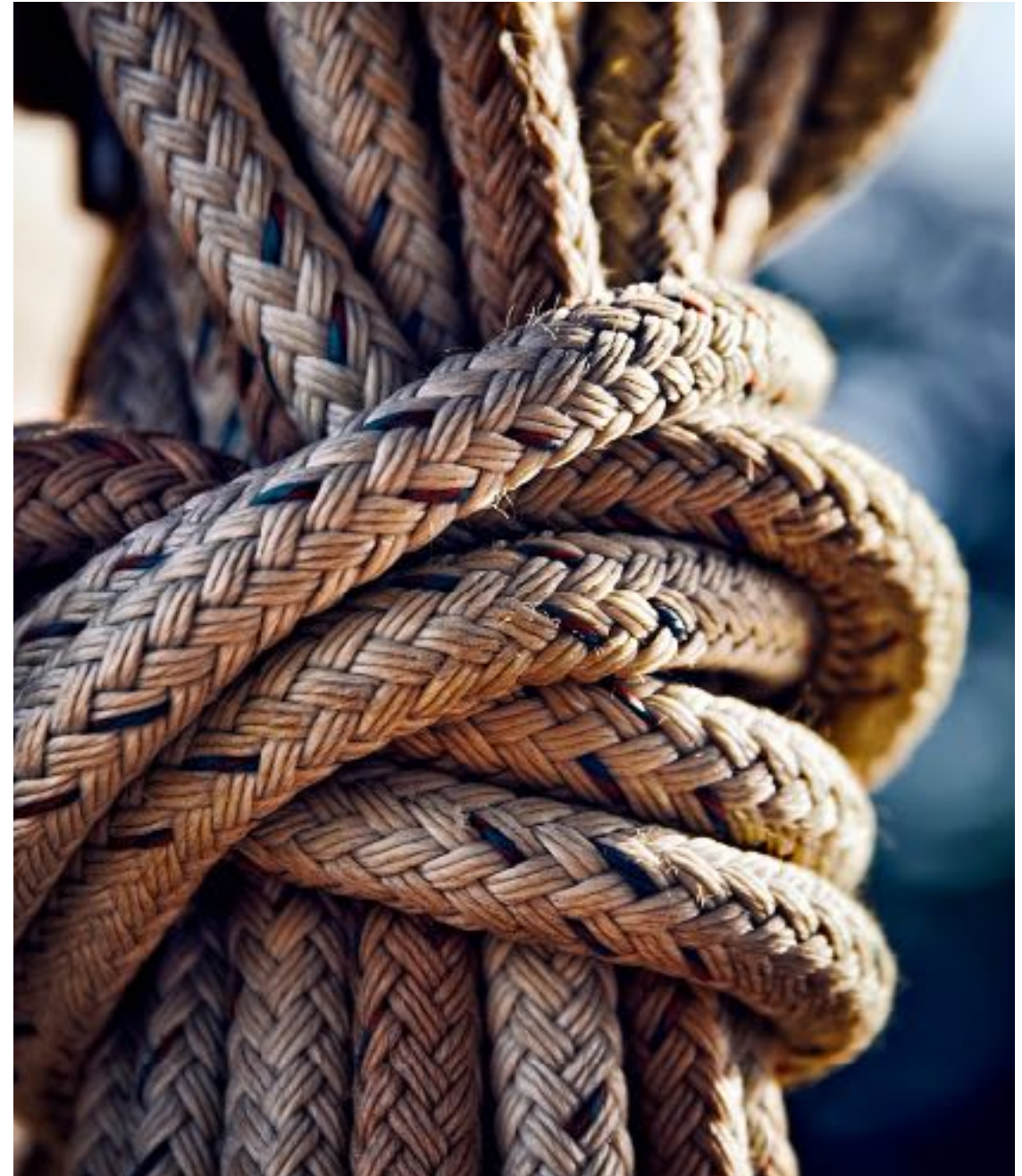
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
BIND 9.0	Blue																		
BIND 9.1		Brown	Brown	Brown															
BIND 9.2		Cyan	Cyan	Cyan	Cyan	Cyan	Cyan												
BIND 9.3					Green	Green	Green	Green	Green										
BIND 9.4(-ESV)								Pink	Pink	Pink	Pink								
BIND 9.5								Orange	Orange	Orange									
BIND 9.6(-ESV)								Purple	Purple	Purple	Purple	Purple	Purple	Purple					
BIND 9.7										Red	Red	Red							
BIND 9.8											Yellow	Yellow	Yellow	Yellow					
BIND 9.9												Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
BIND 9.10														Brown	Brown	Brown	Brown	Brown	Brown
BIND 9.11																	Cyan	Cyan	Cyan
BIND 9.12																			Green

BIND 9

Past Releases

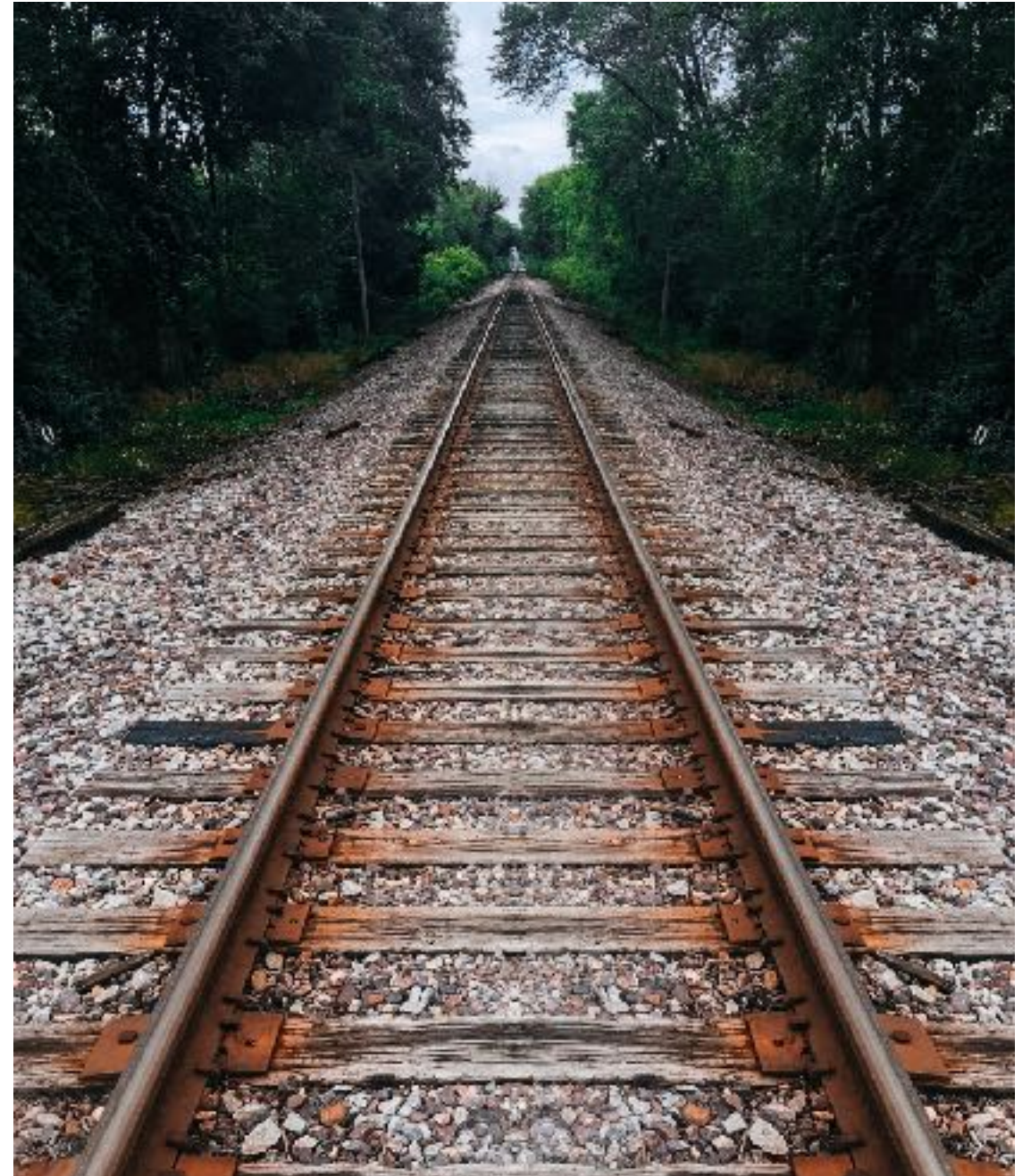
BIND 9.12: The Present

- NSEC Aggressive Use
- Serve Stale (TTL Stretching)
- Response Policy Interface
- Major Refactoring [1]
- Speedup factor: 1.25-6
- CDS/CDNSKEY tools
- EDDSA Support
(when available in OpenSSL)



BIND 9: The Future

- Open Development
- Faster Release Cycle
- Reduce Supported Platforms
- New Features
- More Refactoring



Open Development

- Open (By Default) Issue Tracker
- Public Merge Requests
- Public Wiki
- Public Continuous Integration
- (Future) Public Web Forum to discuss BIND and DNS



ISC GitLab

- <https://gitlab.isc.org/isc-projects/bind9>
- In production (but still work-in-progress):
 - 130 issues (92 open, 38 closed)
 - 107 merge requests (67 merged, 20 closed, 20 open)
 - Continuous Integration (GitLab CI) by default
 - GitLab CI exposed many intermittent test failures
- Self-hosted Instance

Faster Release Cycle

- Odd Numbers — Development Release
 - 9.13.x, 9.15.x, 9.17.x
 - Releases as we go
 - Best Effort Support
- Even Numbers — Stable Release
 - When Development Release stabilise
 - 9.13.<last> → 9.14.0
 - Supported until next Stable Release = ~ 1 year
- Every Second Stable Release — Extended Support Version
 - Supported until next ESV Release with overlap = 4 years

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
BIND 9.9-ESV	Green	Green	Blue	Blue	Blue	Blue	Blue							
BIND 9.10			Green	Green	Green	Green	Green							
BIND 9.11-ESV					Green	Green	Blue	Blue	Blue	Purple				
BIND 9.12							Green							
BIND 9.13							Orange	↵						
BIND 9.14								Green						
BIND 9.15								Orange	↵					
BIND 9.16-ESV									Green	Blue	Blue	Purple		
BIND 9.17									Orange	↵				
BIND 9.18										Green				
BIND 9.19										Orange	↵			
BIND 9.20-ESV											Green	Blue	Blue	Purple
BIND 9.21											Orange	↵		
BIND 9.22												Green		

BIND 9

Future Releases

Supported platforms

- At every release cycle we evaluate the life-cycle:
 - Major Linux distributions
 - FreeBSD, OpenBSD, NetBSD
 - Selected proprietary operating systems (Mac OS X, Windows, Solaris)
- Create a list of operating systems and distributions still supported by vendors
- Support the list for the life-cycle of each major release (9.14, 9.16, 9.18)
- There will be several Tiers:
 - Supported Tier (We will patch it)
 - Best Effort Tier (Send us the patch)
 - Non-supported Tier (Don't even bother sending a patch)

Modernise

- The new list of supported platforms will allow us:
 - Fully utilise modern C language standards
 - Depend on standard libraries (POSIX, etc...)
 - Use C11 language constructs (probably stick with the VC11++ subset)
 - Use external libraries when appropriate
 - Reduce the code we have to maintain in BIND9

Planned Features

- Local Root Zone Copy (RFC7706-like implementation)
- Modules & Hooks
 - Ability to load dynamic module and hook into query-response processing
 - Refactor non-core functionality into modules

Introducing BINDCoin!

- Every DNS Server as a Mining Node
- DNS Smart Contracts
- DNS Caches as permanent storage[1]
- ICO Resource Record
- Stocks will skyrocket!!!



Refactoring

“In anything at all, perfection is finally attained not when there is no longer anything to add, but when there is no longer anything to take away, when a body has been stripped down to its nakedness.”

–Antoine de Saint Exupéry



**BIND's not yet dead, baby,
BIND's not yet dead!
Thank you!**