



CoreDNS

Cloud Native Summit Online 2020

John Belamaric, Senior Staff Software Engineer, Google

What is CoreDNS?

- Flexible DNS server written in Go
- Focus on service discovery
- Plugin based architecture, easily extended
- Support serving via DNS, DNS over TLS, DNS over HTTP/2, DNS over gRPC
- Support forwarding to upstream via DNS, DNS over TLS, DNS over gRPC
- Integration with Route53/Google Cloud DNS/Azure DNS
- Integrates with Prometheus, Open Tracing, OPA
- Default DNS server in Kubernetes
- Basis for node local cache feature in K8s

Latest Updates

- Release 1.6.0 in late July 2019 with lots of fixes some deprecations
- Since then (as of April 2020), ***nine*** patch releases including:
 - Many bug fixes, performance improvements, and small enhancements
 - Internal refactoring to better support zone transfers
 - Add mips64le builds and release binaries
 - Metrics improvements
 - **c1ouddns** plugin for serving from Google Cloud DNS API
 - **azure** plugin for serving from Azure DNS API
 - **sign** plugin for signing zone files for DNSSEC
 - **ac1** plugin for basic ACLs by DNS type and IP block (simpler than existing external firewall plugin)