1 Release Notes for BIND Version 9.9.9b2

1.1 Introduction

This document summarizes changes since the last production release of BIND on the corresponding major release branch.

1.2 Download

The latest versions of BIND 9 software can always be found at http://www.isc.org/downloads/. There you will find additional information about each release, source code, and pre-compiled versions for Microsoft Windows operating systems.

1.3 Security Fixes

- The resolver could abort with an assertion failure due to improper DNAME handling when parsing fetch reply messages. This flaw is disclosed in CVE-2016-1286. [RT #41753]

- Malformed control messages can trigger assertions in named and rndc. This flaw is disclosed in CVE-2016-1285. [RT #41666]

- Specific APL data could trigger an INSIST. This flaw is disclosed in CVE-2015-8704. [RT #41396]

- Incorrect reference counting could result in an INSIST failure if a socket error occurred while performing a lookup. This flaw is disclosed in CVE-2015-8461. [RT#40945]

- Insufficient testing when parsing a message allowed records with an incorrect class to be be accepted, triggering a REQUIRE failure when those records were subsequently cached. This flaw is disclosed in CVE-2015-8000. [RT #40987]

1.4 New Features

- The following resource record types have been implemented: AVC, CSYNC, NINFO, RKEY, SINK, SMIMEA, TA, TALINK.

- Added a warning for a common misconfiguration involving forwarded RFC 1918 and IPv6 ULA (Universal Local Address) zones.

- Contributed software from Nominum is included in the source at contrib/dnsperf-2.1.0.0-1/. It includes dnsperf for measuring the performance of authoritative DNS servers, resperf for testing the resolution performance of a caching DNS server, resperf-report for generating a resperf report in HTML with gnuplot graphs, and queryparse to extract DNS queries from pcap capture files. This software is not installed by default with BIND.

- When loading a signed zone, **named** will now check whether an RRSIG's inception time is in the future, and if so, it will regenerate the RRSIG immediately. This helps when a system's clock needs to be reset backwards.

1.5 Feature Changes

- Updated the compiled-in addresses for H.ROOT-SERVERS.NET and L.ROOT-SERVERS.NET.

- The default preferred glue is now the address type of the transport the query was received over.

- On machines with 2 or more processors (CPU), the default value for the number of UDP listeners has been changed to the number of detected processors minus one.

- Zone transfers now use smaller message sizes to improve message compression. This results in reduced network usage.

- named -V output now also includes operating system details.

1.6 Porting Changes

- The Microsoft Windows install tool **BINDInstall.exe** which requires a non-free version of Visual Studio to be built, now uses two files (lists of flags and files) created by the Configure perl script with all the needed information which were previously compiled in the binary. Read `win32utils/build.txt` for more details. [RT #38915]

1.7 Bug Fixes

- When deleting records from a zone database, interior nodes could be left empty but not deleted, damaging search performance afterward. [RT #40997]

- The server could crash due to a use-after-free if a zone transfer timed out. [RT #41297]

- Authoritative servers that were marked as bogus (e.g. blackholed in configuration or with invalid addresses) were being queried anyway. [RT #41321]

1.8 End of Life

BIND 9.9 (Extended Support Version) will be supported until December, 2017. https://www.isc.org/downloads/software-support-policy/

1.9 Thank You

Thank you to everyone who assisted us in making this release possible. If you would like to contribute to ISC to assist us in continuing to make quality open source software, please visit our donations page at http://www.isc.org/donate/.