

Screenshot of detailed information about `bind9` package in `apt`.

```
Package: bind9
Version: 1:9.16.1-0ubuntu2
Priority: optional
Section: net
Origin: Ubuntu
Maintainer: Ubuntu Developers <ubuntu-devel-discuss@lists.ubuntu.com>
Original-Maintainer: Debian DNS Team <team+dns@tracker.debian.org>
Bugs: https://bugs.launchpad.net/ubuntu/+filebug
Installed-Size: 887 kB
Pre-Depends: init-system-helpers (>= 1.54~)
Depends: adduser, bind9-libs (= 1:9.16.1-0ubuntu2), bind9-utils (= 1:9.16.1-0ubuntu2), debconf | debconf-2.0, dns-root-data, lsb-base (>= 3.2-14), iproute2, netbase, libc6 (>= 2.7), libcap2 (>= 1:2.10), libjson-c4 (>= 0.13.1), liblmdb0 (>= 0.9.7), libmaxminddb0 (>= 1.3.0), libssl1.1 (>= 1.1.0), libxml2 (>= 2.7.4), zlib1g (>= 1:1.1.4)
Suggests: bind-doc, dnstools, resolvconf, ufw
Breaks: bind (<< 1:9.13.6~)
Replaces: bind (<< 1:9.13.6~)
Homepage: https://www.isc.org/downloads/bind/
Task: dns-server
Download-Size: 233 kB
APT-Sources: http://archive.ubuntu.com/ubuntu focal/main amd64 Packages
Description: Internet Domain Name Server
 The Berkeley Internet Name Domain (BIND 9) implements an Internet domain
 name server. BIND 9 is the most widely-used name server software on the
 Internet, and is supported by the Internet Software Consortium, www.isc.org.
.
 This package provides the server and related configuration files.

jboicken@ns1:~$
```

Screenshot of failed `debsums` command:

(I edited the README file.)

```
jboicken@ns1:~$ debsums sl
/usr/games/sl OK
/usr/share/doc/sl/README FAILED
/usr/share/doc/sl/README.Debian OK
/usr/share/doc/sl/README.jp OK
/usr/share/doc/sl/changelog.Debian.gz OK
/usr/share/doc/sl/copyright OK
/usr/share/man/de.UTF-8/man6/LS.6.gz OK
/usr/share/man/de.UTF-8/man6/sl.6.gz OK
/usr/share/man/de/man6/LS.6.gz OK
/usr/share/man/de/man6/sl.6.gz OK
/usr/share/man/ja.UTF-8/man6/LS.6.gz OK
/usr/share/man/ja.UTF-8/man6/sl.6.gz OK
/usr/share/man/ja/man6/LS.6.gz OK
/usr/share/man/ja/man6/sl.6.gz OK
/usr/share/man/man6/LS.6.gz OK
/usr/share/man/man6/sl.6.gz OK
jboicken@ns1:~$
```

Note: For the dig commands, I made two scripts that I could use to simply run each dig for all the servers or dig -x for all the IP addresses. That way I could simply change the value of the domain name or the IP to quickly test.

Screenshot dig against each machine in your infrastructure

```
jboicken@desktop:~$ ./forward_digger.sh
ns1.student15.230.com. 5950 IN A 200.35.23.200
desktop1.student15.230.com. 5846 IN A 200.35.23.201
www.student15.230.com. 5957 IN A 200.35.23.202
mail.student15.230.com. 6827 IN A 200.35.23.204
ldap.student15.230.com. 5962 IN A 200.35.23.205
www2.student15.230.com. 7172 IN A 200.35.23.206
ws.student15.230.com. 6827 IN A 200.35.23.207
splunk.student15.230.com. 6356 IN A 200.35.23.208
```

Screenshot reverse lookup against each machine in your infrastructure

```
jboicken@desktop:~$ ./reverse_digger.sh
200.23.35.200.in-addr.arpa. 604800 IN PTR ns1.student15.230.com.
201.23.35.200.in-addr.arpa. 604800 IN PTR desktop1.student15.230.com.
202.23.35.200.in-addr.arpa. 604800 IN PTR www.student15.230.com.
204.23.35.200.in-addr.arpa. 604800 IN PTR mail.student15.230.com.
205.23.35.200.in-addr.arpa. 604800 IN PTR ldap.student15.230.com.
206.23.35.200.in-addr.arpa. 604800 IN PTR www2.student15.230.com.
207.23.35.200.in-addr.arpa. 604800 IN PTR ws.student15.230.com.
208.23.35.200.in-addr.arpa. 604800 IN PTR splunk.student15.230.com.
```

Screenshot dig against another student's entire infrastructure

Screenshot reverse lookup against another student's entire infrastructure

(They are both in one picture. I did reverse first, since student 129, aka Jasmine Phompheng, only posted their IP range. I didn't need to look up their domain name.)

```
jboicken@desktop:~$ ./reverse_digger.sh
200.152.79.168.in-addr.arpa. 597498 IN PTR ns1.student129.230.com.
201.152.79.168.in-addr.arpa. 596731 IN PTR desktop1.student129.230.com.
202.152.79.168.in-addr.arpa. 598129 IN PTR www.student129.230.com.
204.152.79.168.in-addr.arpa. 598161 IN PTR mail.student129.230.com.
205.152.79.168.in-addr.arpa. 598167 IN PTR ldap.student129.230.com.
206.152.79.168.in-addr.arpa. 598172 IN PTR www2.student129.230.com.
207.152.79.168.in-addr.arpa. 598176 IN PTR ws.student129.230.com.
208.152.79.168.in-addr.arpa. 598180 IN PTR splunk.student129.230.com.
jboicken@desktop:~$ ./forward_digger.sh
ns1.student129.230.com. 596254 IN A 152.79.168.200
desktop1.student129.230.com. 596253 IN A 152.79.168.201
www.student129.230.com. 596147 IN A 152.79.168.202
mail.student129.230.com. 596080 IN A 152.79.168.204
ldap.student129.230.com. 595945 IN A 152.79.168.205
www2.student129.230.com. 596255 IN A 152.79.168.206
ws.student129.230.com. 595945 IN A 152.79.168.207
splunk.student129.230.com. 597379 IN A 152.79.168.208
```