A terminal window with a title bar containing a home icon, the text "joe — joe@ns1-thegummibear: ~ — ssh * ssh yavin — 80x24", and three colored window control buttons (red, yellow, green). The window has three tabs: the first is "joe@ns1-thegummibear: ~ — ssh * ssh yavin", the second is "joe@ns1-thegummibear: ~ — ssh * ssh...", and the third is "~/Downloads — -bash". The terminal content shows a prompt "joe@ns1-thegummibear:~\$" followed by the command "echo 'now to make reverse DNS work!'", the output "now to make reverse DNS work!", and a second prompt "joe@ns1-thegummibear:~\$" with a cursor.

```
joe@ns1-thegummibear:~$ echo "now to make reverse DNS work!"  
now to make reverse DNS work!  
joe@ns1-thegummibear:~$ █
```

```
joe — joe@ns1-thegummibear: ~ — ssh + ssh yavin — 80x25
~ — ssh + ssh yavin ... joe@ns1-thegummibear: ~ — ssh + ssh... ~/Downloads — -bash
joe@ns1-thegummibear:~$ dig @144.38.199.162 165.160-191.199.38.144.in-addr.arpa
; <<>> DiG 9.10.3-P4-Ubuntu <<>> @144.38.199.162 165.160-191.199.38.144.in-addr.
arpa
; (1 server found)
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NXDOMAIN, id: 46132
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 4096
;; QUESTION SECTION:
;165.160-191.199.38.144.in-addr.arpa. IN      A

;; AUTHORITY SECTION:
199.38.144.in-addr.arpa. 60      IN      SOA     ns1.cs.dixie.edu. root.cs.dixie.
edu. 2016100701 3600 300 2419200 60

;; Query time: 0 msec
;; SERVER: 144.38.199.162#53(144.38.199.162)
;; WHEN: Sat Oct 08 16:34:53 MDT 2016
;; MSG SIZE rcvd: 121

joe@ns1-thegummibear:~$
```

```
joe — joe@ns1-thegummibear: ~ — ssh + ssh yavin — 80x25
~ — ssh + ssh yavin ... joe@ns1-thegummibear: ~ — ssh + ssh... ~/Downloads — -bash
joe@ns1-thegummibear:~$ echo "The above dig command should work when we are dong
"
The above dig command should work when we are dong
joe@ns1-thegummibear:~$ █
```



The image shows a terminal window with a title bar that reads "joe — joe@ns1-thegummibear: ~ — ssh ◀ ssh yavin — 80x25". The window contains three tabs: the first is labeled "~ — ssh ◀ ssh yavin", the second is "joe@ns1-thegummibear: ~ — ssh ◀ ssh...", and the third is "~/Downloads — -bash". The main content of the terminal is a single line of text: "joe@ns1-thegummibear:~\$ sudo vi /etc/bind/named.conf.local", followed by a dark grey cursor block.

```
joe@ns1-thegummibear:~$ sudo vi /etc/bind/named.conf.local
```



```
joe — joe@ns1-thegummibear: ~ — ssh ◀ ssh yavin — 80x25
~ — ssh ◀ ssh yavin  ...  joe@ns1-thegummibear: ~ — ssh ◀ ssh...  ~/Downloads — -bash +
//
// Do any local configuration here
//

zone "thegummibear.com" {
    type master;
    file "/etc/bind/db.thegummibear.com";
    allow-transfer { 144.38.199.163; localhost; };
    notify yes;
    allow-query { any; };
};

zone "160-191.199.38.144.in-addr.arpa" {
    type master;
    file "/etc/bind/db.160-191.199.38.144.in-addr.arpa";
    allow-transfer { 144.38.199.163; localhost; };
    notify yes;
    allow-query { any; };
}

zone "round.it.cit.dixie.edu" {
    type master;
}

"/etc/bind/named.conf.local" 34L, 726C written                                15,54                                Top
```

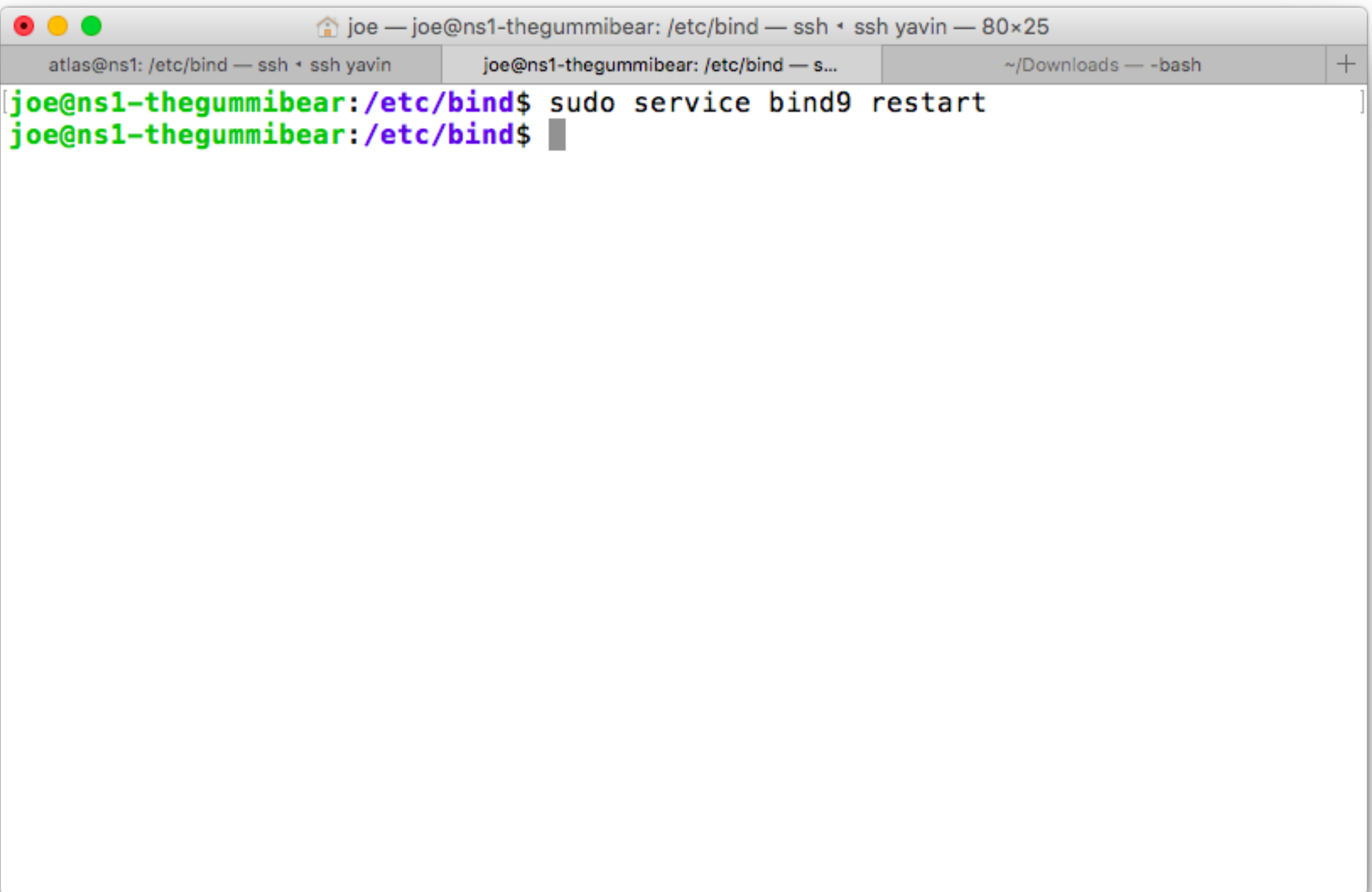
```
joe — joe@ns1-thegummibear: ~ — ssh + ssh yavin — 80x25
~ — ssh + ssh yavin ... joe@ns1-thegummibear: ~ — ssh + ssh... ~/Downloads — -bash
[joe@ns1-thegummibear:~$ echo "Now to create the zone file for the reverse"
Now to create the zone file for the reverse
joe@ns1-thegummibear:~$ █
```



```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
;
; SOA (Start of Authority) record.
;   Serial - number must increase every time you change this file
;   Refresh - How often the secondary name servers should check
;             for updated information
;   Retry   - How often the secondary name servers should retry
;             a refresh if the refresh is unsuccessful
;
;   Expire  - How long the secondary name servers should keep this
;             information before it is bad.
;   Minimum/TTL -
;             How long negative hits should be stored. This is for
;             other servers that ask us about a non-existent RR.
;             They should cache the negative response for this long.
;
@      IN      SOA      ns1.thegummibear.com. root.ns1.thegummibear.com. (
;                               2016100701      ; Serial
;                               3600            ; Refresh   every 1 hour
;                               300            ; Retry     every 5 minutes
;                               2419200       ; Expire    4 weeks to expire
;                               60 ]           ; Negative Cache TTL 1 minute
;
; Name server records
;
"db.160-191.199.38.144.in-addr.arpa" 41L, 1604C written      39,21      94%
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
    3600           ; Refresh   every 1 hour
    300           ; Retry    every 5 minutes
2419200         ; Expire   4 weeks to expire
    60 )         ; Negative Cache TTL 1 minute
;
; Name server records
;
@           IN           NS           ns1.thegummibear.com.
@           IN           NS           ns2.thegummibear.com.
;
; Pointer records (PTR)
;
162         IN           PTR           ns1.thegummibear.com.
163         IN           PTR           ns2.thegummibear.com.
164         IN           PTR           mail.thegummibear.com.
165         IN           PTR           www.thegummibear.com.
166         IN           PTR           filesystem.thegummibear.com.

"db.160-191.199.38.144.in-addr.arpa" 68L, 1886C written      53,21-34      75%
```



The image shows a terminal window with a title bar that reads "joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25". There are three window control buttons (red, yellow, green) on the left. The terminal has three tabs: "atlas@ns1: /etc/bind — ssh + ssh yavin", "joe@ns1-thegummibear: /etc/bind — s...", and "~/Downloads — -bash". The main content of the terminal shows a prompt "joe@ns1-thegummibear:/etc/bind\$" followed by the command "sudo service bind9 restart". The next line shows the prompt "joe@ns1-thegummibear:/etc/bind\$" with a cursor, indicating the command has been executed.

```
joe@ns1-thegummibear:/etc/bind$ sudo service bind9 restart
joe@ns1-thegummibear:/etc/bind$
```



joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25

atlas@ns1: /etc/bind — ssh + ssh yavin

joe@ns1-thegummibear: /etc/bind — s...

~/Downloads — -bash



```
joe@ns1-thegummibear:/etc/bind$ sudo less /var/log/syslog
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
Oct  8 16:50:03 ns1 rndc[13975]: rndc: connect failed: 127.0.0.1#953: connection
  refused
Oct  8 16:50:03 ns1 systemd[1]: bind9.service: Control process exited, code=exit
ed status=1
Oct  8 16:50:03 ns1 named[13968]: Inc. (ISC), a non-profit 501(c)(3) public-bene
fit
Oct  8 16:50:03 ns1 systemd[1]: bind9.service: Unit entered failed state.
Oct  8 16:50:03 ns1 named[13968]: corporation. Support and training for BIND 9
are
Oct  8 16:50:03 ns1 systemd[1]: bind9.service: Failed with result 'exit-code'.
Oct  8 16:50:03 ns1 named[13968]: available at https://www.isc.org/support
Oct  8 16:50:03 ns1 named[13968]: -----
-----
Oct  8 16:50:03 ns1 named[13968]: adjusted limit on open files from 4096 to 1048
576
Oct  8 16:50:03 ns1 named[13968]: found 1 CPU, using 1 worker thread
Oct  8 16:50:03 ns1 named[13968]: using 1 UDP listener per interface
Oct  8 16:50:03 ns1 named[13968]: using up to 4096 sockets
Oct  8 16:50:03 ns1 named[13968]: loading configuration from '/etc/bind/named.co
nf'
Oct  8 16:50:03 ns1 named[13968]: /etc/bind/named.conf.local:23: missing ';' bef
ore 'zone'
Oct  8 16:50:03 ns1 named[13968]: loading configuration: failure
Oct  8 16:50:03 ns1 named[13968]: exiting (due to fatal error)
(END)
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
[joe@ns1-thegummibear:/etc/bind$ echo "Forgot my semicolon again!"
Forgot my semicolon again!
joe@ns1-thegummibear:/etc/bind$ sudo vi named.conf.local █
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
};

zone "160-191.199.38.144.in-addr.arpa" {
    type master;
    file "/etc/bind/db.160-191.199.38.144.in-addr.arpa";
    allow-transfer { 144.38.199.163; localhost; };
    notify yes;
    allow-query { any; };
}

zone "round.it.cit.dixie.edu" {
    type master;
    file "/etc/bind/db.round.it.cit.dixie.edu";
    allow-transfer { 144.38.199.163; localhost; };
    notify yes;
    allow-query { any; };
};

// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";

19,1 Bot
```



```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
};

zone "160-191.199.38.144.in-addr.arpa" {
    type master;
    file "/etc/bind/db.160-191.199.38.144.in-addr.arpa";
    allow-transfer { 144.38.199.163; localhost; };
    notify yes;
    allow-query { any; };
};

zone "round.it.cit.dixie.edu" {
    type master;
    file "/etc/bind/db.round.it.cit.dixie.edu";
    allow-transfer { 144.38.199.163; localhost; };
    notify yes;
    allow-query { any; };
};

// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";

-- INSERT --
```

The image shows a terminal window with a title bar that reads "joe — joe@ns1-thegummibear: /etc/bind — ssh ◀ ssh yavin — 80x25". Below the title bar, there are three tabs: "atlas@ns1: /etc/bind — ssh ◀ ssh yavin", "joe@ns1-thegummibear: /etc/bind — s...", and "~/Downloads — -bash". The main content of the terminal is a single line of text: "joe@ns1-thegummibear:/etc/bind\$ sudo service bind9 restart". The prompt "joe@ns1-thegummibear:" is in green, and the path "/etc/bind" is in purple. The rest of the text is in black. A black cursor is positioned at the end of the command.

```
joe@ns1-thegummibear:/etc/bind$ sudo service bind9 restart
```

The image shows a terminal window with a title bar that reads "joe — joe@ns1-thegummibear: /etc/bind — ssh ◀ ssh yavin — 80x25". Below the title bar, there are three tabs: "atlas@ns1: /etc/bind — ssh ◀ ssh yavin", "joe@ns1-thegummibear: /etc/bind — s...", and "~/Downloads — -bash". The main content of the terminal is a single line of text: "joe@ns1-thegummibear:/etc/bind\$ sudo less /var/log/syslog". The prompt "joe@ns1-thegummibear:" is in green, and the rest of the command is in black. A cursor is visible at the end of the command.

```
joe@ns1-thegummibear:/etc/bind$ sudo less /var/log/syslog
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
: removing journal file
Oct  8 16:51:29 ns1 named[14038]: managed-keys-zone: loaded serial 56
Oct  8 16:51:29 ns1 named[14038]: zone 0.in-addr.arpa/IN: loaded serial 1
Oct  8 16:51:29 ns1 named[14038]: zone 160-191.199.38.144.in-addr.arpa/IN: loaded serial 2016100701
Oct  8 16:51:29 ns1 named[14038]: zone thegummibear.com/IN: loaded serial 2016100501
Oct  8 16:51:29 ns1 named[14038]: zone 127.in-addr.arpa/IN: loaded serial 1
Oct  8 16:51:29 ns1 named[14038]: zone 255.in-addr.arpa/IN: loaded serial 1
Oct  8 16:51:29 ns1 named[14038]: zone round.it.cit.dixie.edu/IN: loaded serial 2016092601
Oct  8 16:51:29 ns1 named[14038]: zone localhost/IN: loaded serial 2
Oct  8 16:51:29 ns1 named[14038]: all zones loaded
Oct  8 16:51:29 ns1 named[14038]: running
Oct  8 16:51:29 ns1 named[14038]: zone round.it.cit.dixie.edu/IN: sending notifies (serial 2016092601)
Oct  8 16:51:29 ns1 named[14038]: zone thegummibear.com/IN: sending notifies (serial 2016100501)
Oct  8 16:51:29 ns1 named[14038]: zone 160-191.199.38.144.in-addr.arpa/IN: sending notifies (serial 2016100701)
Oct  8 16:51:29 ns1 named[14038]: network unreachable resolving './DNSKEY/IN': 2001:7fd::1#53
Oct  8 16:51:29 ns1 named[14038]: network unreachable resolving './NS/IN': 2001:7fd::1#53
(END)
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
joe@ns1-thegummibear:/etc/bind$ echo "Lets do some tests to see if it is working
"
Lets do some tests to see if it is working
joe@ns1-thegummibear:/etc/bind$ █
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
joe@ns1-thegummibear:/etc/bind$
joe@ns1-thegummibear:/etc/bind$ dig @144.38.199.162 165.160-191.199.38.144.in-addr.
dr.arpa PTR

; <<>> DiG 9.10.3-P4-Ubuntu <<>> @144.38.199.162 165.160-191.199.38.144.in-addr.
arpa PTR
; (1 server found)
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 10483
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 2, ADDITIONAL: 3

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 4096
;; QUESTION SECTION:
;165.160-191.199.38.144.in-addr.arpa. IN PTR

;; ANSWER SECTION:
165.160-191.199.38.144.in-addr.arpa. 3600 IN PTR www.thegummibear.com.

;; AUTHORITY SECTION:
160-191.199.38.144.in-addr.arpa. 3600 IN NS ns2.thegummibear.com.
160-191.199.38.144.in-addr.arpa. 3600 IN NS ns1.thegummibear.com.

;; ADDITIONAL SECTION:
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 10483
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 2, ADDITIONAL: 3

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags;; udp: 4096
;; QUESTION SECTION:
;165.160-191.199.38.144.in-addr.arpa. IN PTR

;; ANSWER SECTION:
165.160-191.199.38.144.in-addr.arpa. 3600 IN PTR www.thegummibear.com.

;; AUTHORITY SECTION:
160-191.199.38.144.in-addr.arpa. 3600 IN NS ns2.thegummibear.com.
160-191.199.38.144.in-addr.arpa. 3600 IN NS ns1.thegummibear.com.

;; ADDITIONAL SECTION:
ns1.thegummibear.com. 3600 IN A 144.38.199.162
ns2.thegummibear.com. 3600 IN A 144.38.199.163

;; Query time: 0 msec
;; SERVER: 144.38.199.162#53(144.38.199.162)
;; WHEN: Sat Oct 08 16:56:36 MDT 2016
;; MSG SIZE rcvd: 166

joe@ns1-thegummibear:/etc/bind$
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
[joe@ns1-thegummibear:/etc/bind$ echo "Still need to fix slave"
Still need to fix slave
joe@ns1-thegummibear:/etc/bind$ █
```



```
joe — joe@ns2-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns2-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
joe@ns2-thegummibear:~$ cd /etc/bind/
joe@ns2-thegummibear:/etc/bind$ ls
bind.keys  db.empty  named.conf.default-zones  zones.rfc1918
db.0       db.local  named.conf.local
db.127     db.root   named.conf.options
db.255     named.conf  rndc.key
joe@ns2-thegummibear:/etc/bind$ sudo vi named.conf.local
```

```
joe — joe@ns2-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns2-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
//
// Do any local configuration here
//

zone "thegummibear.com" {
    type slave;
    file "db.thegummibear.com"; //relative path -> stored in /var/cache/bind
    masters { 144.38.199.162; };
    allow-query { any; };
    notify no;

}; //I won't forget this semicolon this time

zone "round.it.cit.dixie.edu" {
    type slave;
    file "db.round.it.cit.dixie.edu";
    masters { 144.38.199.162; };
    allow-query { any; };
    notify no;
};

// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";
```

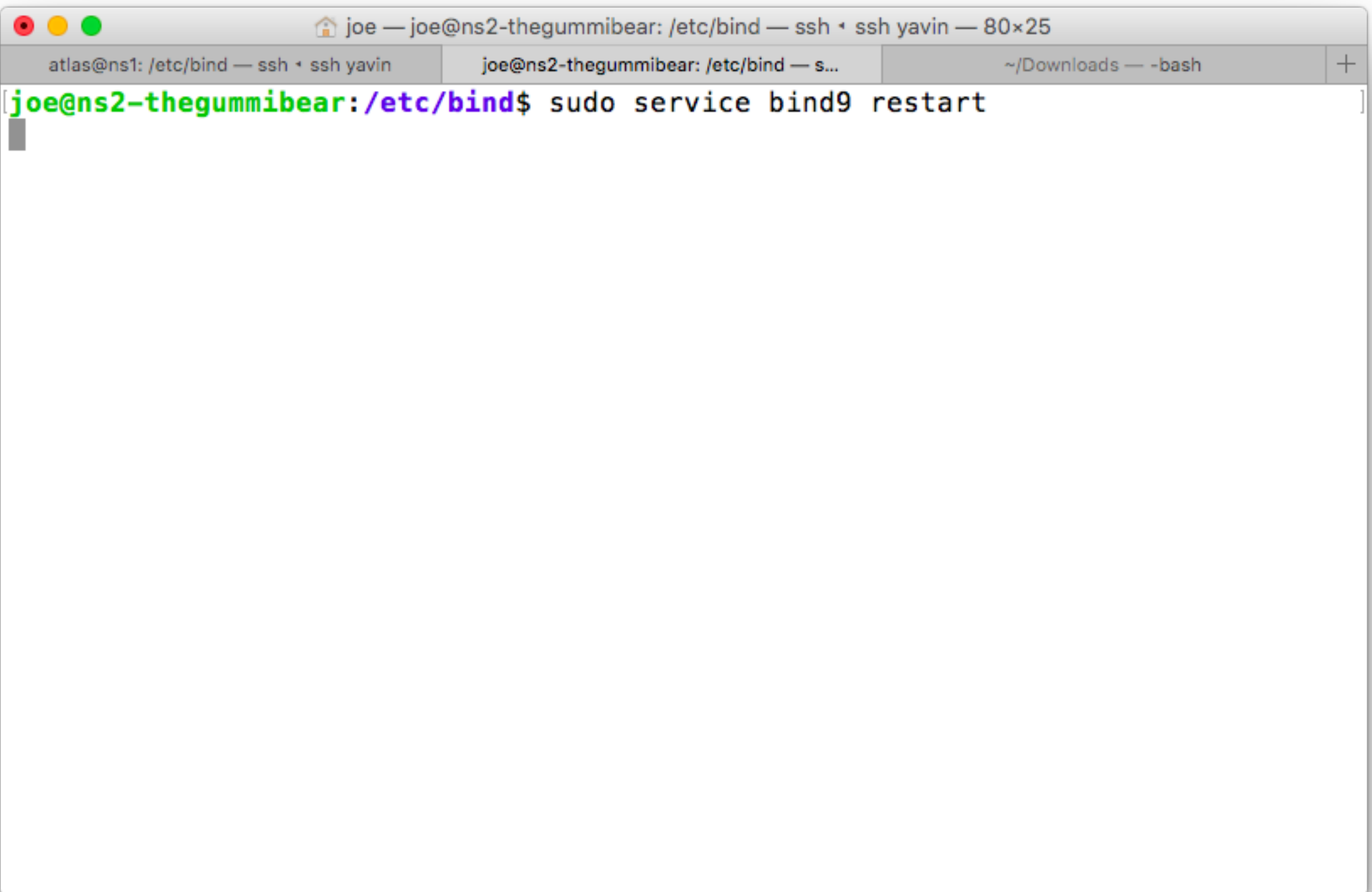
```
joe — joe@ns2-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns2-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
//
// Do any local configuration here
//

zone "thegummibear.com" {
    type slave;
    file "db.thegummibear.com"; //relative path -> stored in /var/cache/bind
    masters { 144.38.199.162; };
    allow-query { any; };
    notify no;

}; //I won't forget this semicolon this time

zone "160-191.199.38.144.in-addr.arpa" {
    type slave;
    file "db.160-191.199.38.144.in-addr.arpa";
    masters { 144.38.199.162; };
    allow-query { any; };
    notify no;
};

zone "round.it.cit.dixie.edu" {
    type slave;
    file "db.round.it.cit.dixie.edu";
3 more lines
```



The image shows a terminal window with three tabs. The active tab is titled "joe@ns2-thegummibear: /etc/bind — ssh + ssh yavin — 80x25". The terminal prompt is "[joe@ns2-thegummibear: /etc/bind\$". The command "sudo service bind9 restart" has been entered and is waiting for execution. A cursor is visible at the end of the command line.

```
joe@ns2-thegummibear: /etc/bind$ sudo service bind9 restart
```



joe — joe@ns2-thegummibear: /etc/bind — ssh + ssh yavin — 80x25

atlas@ns1: /etc/bind — ssh + ssh yavin

joe@ns2-thegummibear: /etc/bind — s...

~/Downloads — -bash



```
joe@ns2-thegummibear:/etc/bind$ sudo less /var/log/syslog
```

```
joe — joe@ns2-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns2-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
Oct  8 16:59:06 ns2 named[4058]: managed-keys-zone: journal file is out of date:
removing journal file
Oct  8 16:59:06 ns2 named[4058]: managed-keys-zone: loaded serial 41
Oct  8 16:59:06 ns2 named[4058]: zone 0.in-addr.arpa/IN: loaded serial 1
Oct  8 16:59:06 ns2 named[4058]: zone 127.in-addr.arpa/IN: loaded serial 1
Oct  8 16:59:06 ns2 named[4058]: zone localhost/IN: loaded serial 2
Oct  8 16:59:06 ns2 named[4058]: zone 255.in-addr.arpa/IN: loaded serial 1
Oct  8 16:59:06 ns2 named[4058]: zone thegummibear.com/IN: loaded serial 2016100
501
Oct  8 16:59:06 ns2 named[4058]: zone round.it.cit.dixie.edu/IN: loaded serial 2
016092601
Oct  8 16:59:06 ns2 named[4058]: all zones loaded
Oct  8 16:59:06 ns2 named[4058]: running
Oct  8 16:59:06 ns2 named[4058]: zone 160-191.199.38.144.in-addr.arpa/IN: Transf
er started.
Oct  8 16:59:06 ns2 named[4058]: transfer of '160-191.199.38.144.in-addr.arpa/IN
' from 144.38.199.162#53: connected using 144.38.199.163#56165
Oct  8 16:59:06 ns2 named[4058]: zone 160-191.199.38.144.in-addr.arpa/IN: transf
erred serial 2016100701
Oct  8 16:59:06 ns2 named[4058]: transfer of '160-191.199.38.144.in-addr.arpa/IN
' from 144.38.199.162#53: Transfer status: success
Oct  8 16:59:06 ns2 named[4058]: transfer of '160-191.199.38.144.in-addr.arpa/IN
' from 144.38.199.162#53: Transfer completed: 1 messages, 9 records, 288 bytes,
0.001 secs (288000 bytes/sec)
(END)
```



joe — joe@ns2-thegummibear: ~ — ssh • ssh yavin — 80x25

atlas@ns1: /etc/bind — ssh • ssh yavin

joe@ns2-thegummibear: ~ — ssh • ssh...

~/Downloads — -bash



```
joe@ns2-thegummibear:~$ dig @144.38.199.163 165.160-191.199.38.144.in-addr.arpa  
PTR
```

```
joe — joe@ns2-thegummibear: ~ — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns2-thegummibear: ~ — ssh + ssh...  ~/Downloads — -bash +
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 22012
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 2, ADDITIONAL: 3

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags;; udp: 4096
;; QUESTION SECTION:
;165.160-191.199.38.144.in-addr.arpa. IN PTR

;; ANSWER SECTION:
165.160-191.199.38.144.in-addr.arpa. 3600 IN PTR www.thegummibear.com.

;; AUTHORITY SECTION:
160-191.199.38.144.in-addr.arpa. 3600 IN NS ns1.thegummibear.com.
160-191.199.38.144.in-addr.arpa. 3600 IN NS ns2.thegummibear.com.

;; ADDITIONAL SECTION:
ns1.thegummibear.com. 3600 IN A 144.38.199.162
ns2.thegummibear.com. 3600 IN A 144.38.199.163

;; Query time: 0 msec
;; SERVER: 144.38.199.163#53(144.38.199.163)
;; WHEN: Sat Oct 08 17:00:01 MDT 2016
;; MSG SIZE rcvd: 166

joe@ns2-thegummibear:~$
```




joe — joe@ns2-thegummibear: ~ — ssh + ssh yavin — 80x25

atlas@ns1: /etc/bind — ssh + ssh yavin

joe@ns2-thegummibear: ~ — ssh + ssh...

~/Downloads — -bash



```
joe@ns2-thegummibear:~$ echo "Slave appears good. Test for all your PTR records"  
Slave appears good. Test for all your PTR records  
joe@ns2-thegummibear:~$ █
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
[joe@ns1-thegummibear:/etc/bind$ echo "back on master, looking at transfer logs" ]
back on master, looking at transfer logs
joe@ns1-thegummibear:/etc/bind$ sudo less /var/log/syslog
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash  +
8.199.162)
Oct  8 16:57:14 ns1 named[14038]: client 144.38.199.162#51224 (ns2.thegummibear.
com): query: ns2.thegummibear.com IN A + (144.38.199.162)
Oct  8 16:57:14 ns1 named[14038]: client 144.38.199.162#51224 (ns2.thegummibear.
com): query: ns2.thegummibear.com IN AAAA + (144.38.199.162)
Oct  8 16:57:45 ns1 named[14038]: client 144.38.199.162#34849 (ns2.thegummibear.
com): query: ns2.thegummibear.com IN A + (144.38.199.162)
Oct  8 16:57:45 ns1 named[14038]: client 144.38.199.162#34849 (ns2.thegummibear.
com): query: ns2.thegummibear.com IN AAAA + (144.38.199.162)
Oct  8 16:59:06 ns1 named[14038]: client 144.38.199.163#49404 (160-191.199.38.14
4.in-addr.arpa): query: 160-191.199.38.144.in-addr.arpa IN SOA -E (144.38.199.16
2)
Oct  8 16:59:06 ns1 named[14038]: client 144.38.199.163#56165 (160-191.199.38.14
4.in-addr.arpa): query: 160-191.199.38.144.in-addr.arpa IN AXFR -T (144.38.199.1
62)
Oct  8 16:59:06 ns1 named[14038]: client 144.38.199.163#56165 (160-191.199.38.14
4.in-addr.arpa): transfer of '160-191.199.38.144.in-addr.arpa/IN': AXFR started
(serial 2016100701)
Oct  8 16:59:06 ns1 named[14038]: client 144.38.199.163#56165 (160-191.199.38.14
4.in-addr.arpa): transfer of '160-191.199.38.144.in-addr.arpa/IN': AXFR ended
Oct  8 16:59:44 ns1 named[14038]: client 144.38.199.162#60450 (ns2.thegummibear.
com): query: ns2.thegummibear.com IN A + (144.38.199.162)
Oct  8 16:59:44 ns1 named[14038]: client 144.38.199.162#60450 (ns2.thegummibear.
com): query: ns2.thegummibear.com IN AAAA + (144.38.199.162)
(END)
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh • ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh • ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash  +
joe@ns1-thegummibear:/etc/bind$ echo "Still not hooked into dns hierarchy though
"
Still not hooked into dns hierarchy though
joe@ns1-thegummibear:/etc/bind$ █
```

```
joe — joe@ns1-thegummibear: /etc/bind — ssh + ssh yavin — 80x25
atlas@ns1: /etc/bind — ssh + ssh yavin  joe@ns1-thegummibear: /etc/bind — s...  ~/Downloads — -bash +
[joe@ns1-thegummibear:/etc/bind]$ echo "That is in next set of slides"
That is in next set of slides
joe@ns1-thegummibear:/etc/bind$ █
```