# **Reverse Lookups**

#### Reverse DNS

- $\bullet\,$  Given an IP address, find the hostname
  - some applications want to do this
- Same DNS hierarchy is used but different branch of the tree.
- For example, www.thegummibear.com should match IP [144.38.199.165]. This is given as an A record in DNS as we have previously seen.

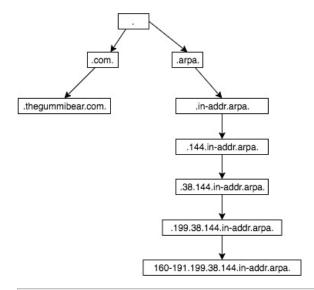
#### **Reverse DNS**

For that same example, when using reverse DNS, the special name is:

• 165.199.38.144.in-addr.arpa.

Note that this is the reverse of my IP address and a special suffix.

### **Reverse DNS**



### **Reverse DNS**

- Reverse DNS requires authoritative servers, just like any other zone
- Requires delegation from a higher server

### **Reverse DNS Steps**

- Checkout IPs from system
- Configure one authoritative master
- Configure one or more authoritative slaves
- Configure registrar to delegate to authoritative servers
- Test!

## **Reverse DNS (Authoritative Master)**

- Install bind9 (if not alread installed)
- Configure named.conf.local with authoritative zone record.
- Create zone file
- Restart named
- Check syslog for errors.

## **Reverse DNS (Authoritative Slave)**

- Install bind9 if needed
- Configure named.conf.local with authoritative zone record.
- Restart named
- Check syslog for errors
- Check master for syslog errors
- Test system for responses
- Fix errors, until correct.

# **Registrar Delegation Setup**

- Collect hostnames of all Authoritative servers
- Collect names of reverse DNS zone
- Send info to registrar
- Wait for registrar
- Test delegation
- Correct errors. Test.