

# Thought Patterns of the Troubleshooting (and Debugging) Ninja

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# Your presenter, Steve Litt

**1979-1985**



***Repair  
stereos***

**1984-2002**

```
function mainloop(menustring)
  local keystroke
  local menustring_org = menustring
  local done = false
  while not done do
    globals.cis()
    local mnu = menu.new(menustring)
    local itm
    mnu.init()
    mnu.print()
    keystroke = mnu.acquire_keystroke()
    if keystroke == "=" then
      menustring = menustring_org
    end
  end
end
```

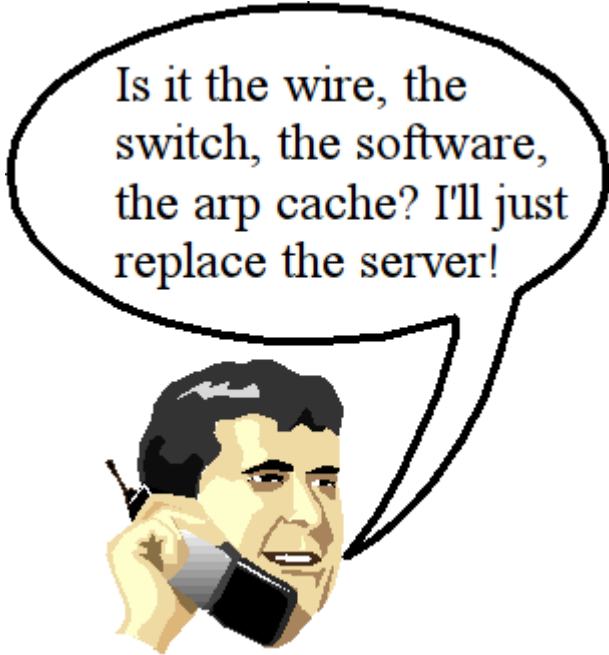
***Develop  
software***

**1992-present**

Ruled out By Test 1	
4	Test
3	2

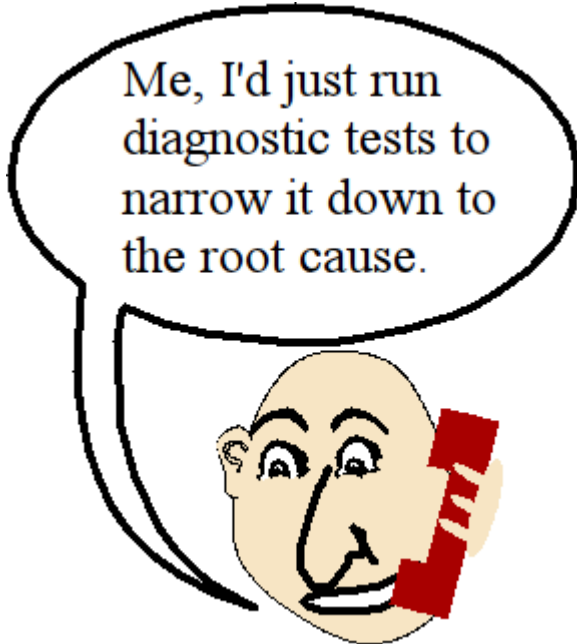
***Teach  
troubleshooting***

# It's not how smart you are, It's how you operate your brain.



Is it the wire, the switch, the software, the arp cache? I'll just replace the server!

***Peter Ph.D.***

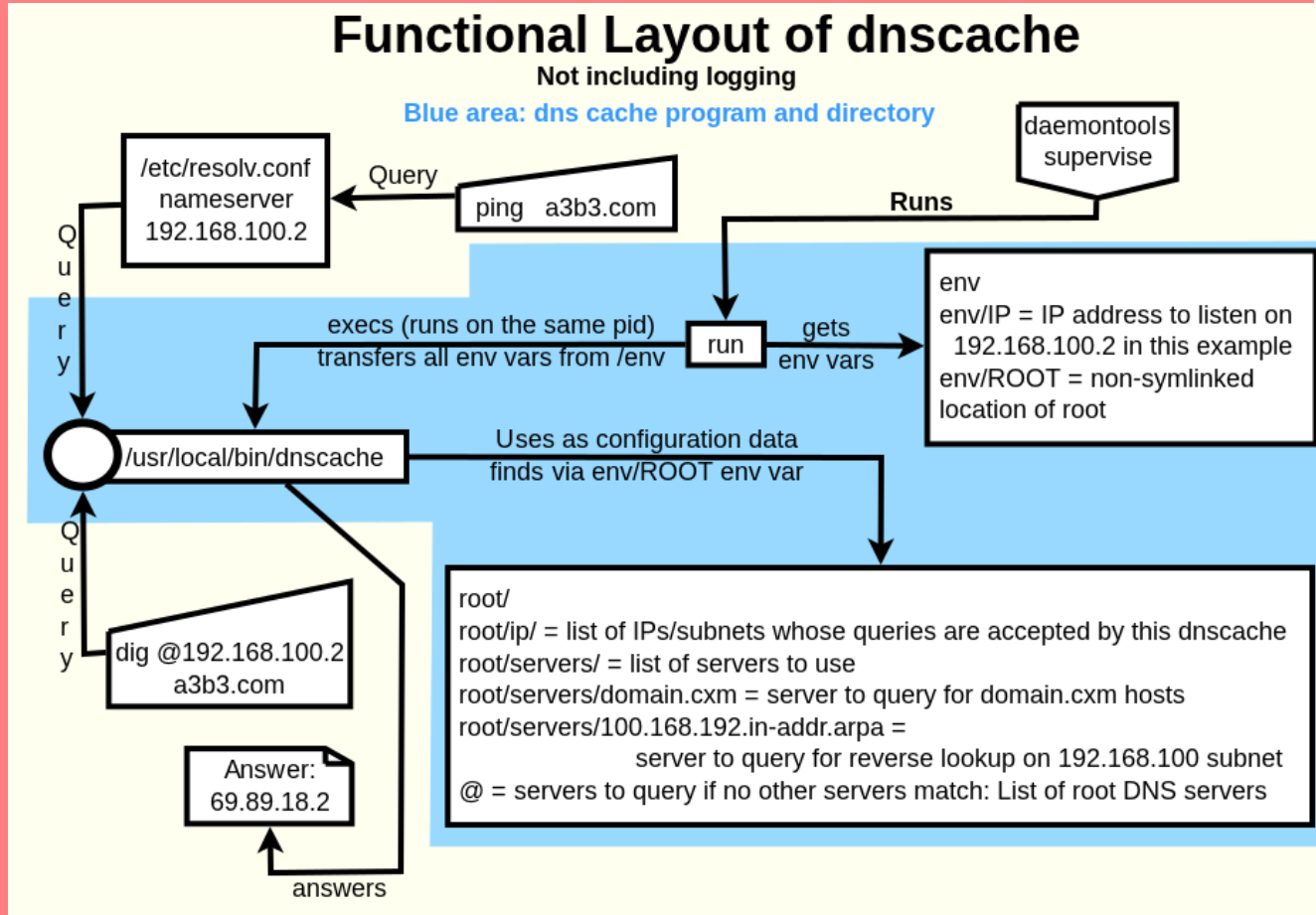


Me, I'd just run diagnostic tests to narrow it down to the root cause.

***Donnie Dropout***

# It's not how much you know, It's how you organize the knowledge.

## Entity Relationships



## WAD

*Walking Acronym Dispenser*

Resolution  
Name server  
Daemontools  
Cache  
Caching dns  
Root servers  
Daemon  
Supervise  
Ping  
IP address  
Dig  
Question section  
Answer section  
Query  
Yada yada yada!

# Don't try to fix it Just try to narrow it down.

## *Right*

Ruled out By Test 1	
4	Test
3	2

## *Wrong*

It's plain to see it's a virus!

## *Wrong*

I've spent four days, tried everything I can think of, and it's still messed up!

## *Wrong*

6/17: Replaced the thermostat and that didn't fix it.  
6/19: Replaced the radiator and that didn't fix it.  
6/22: Replaced the water pump and that didn't fix it.  
6/25: Replaced the heater core and that didn't fix it.  
6/28: Replaced the radiator hoses. That fixed it!

Boy I charged a lot of money!

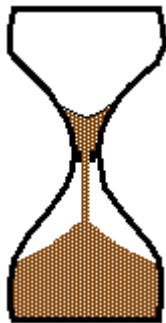
Keep repeating :

“How can I narrow it down just one more time?”

*Because if you don't...*



**Anxiety**



**Delay**

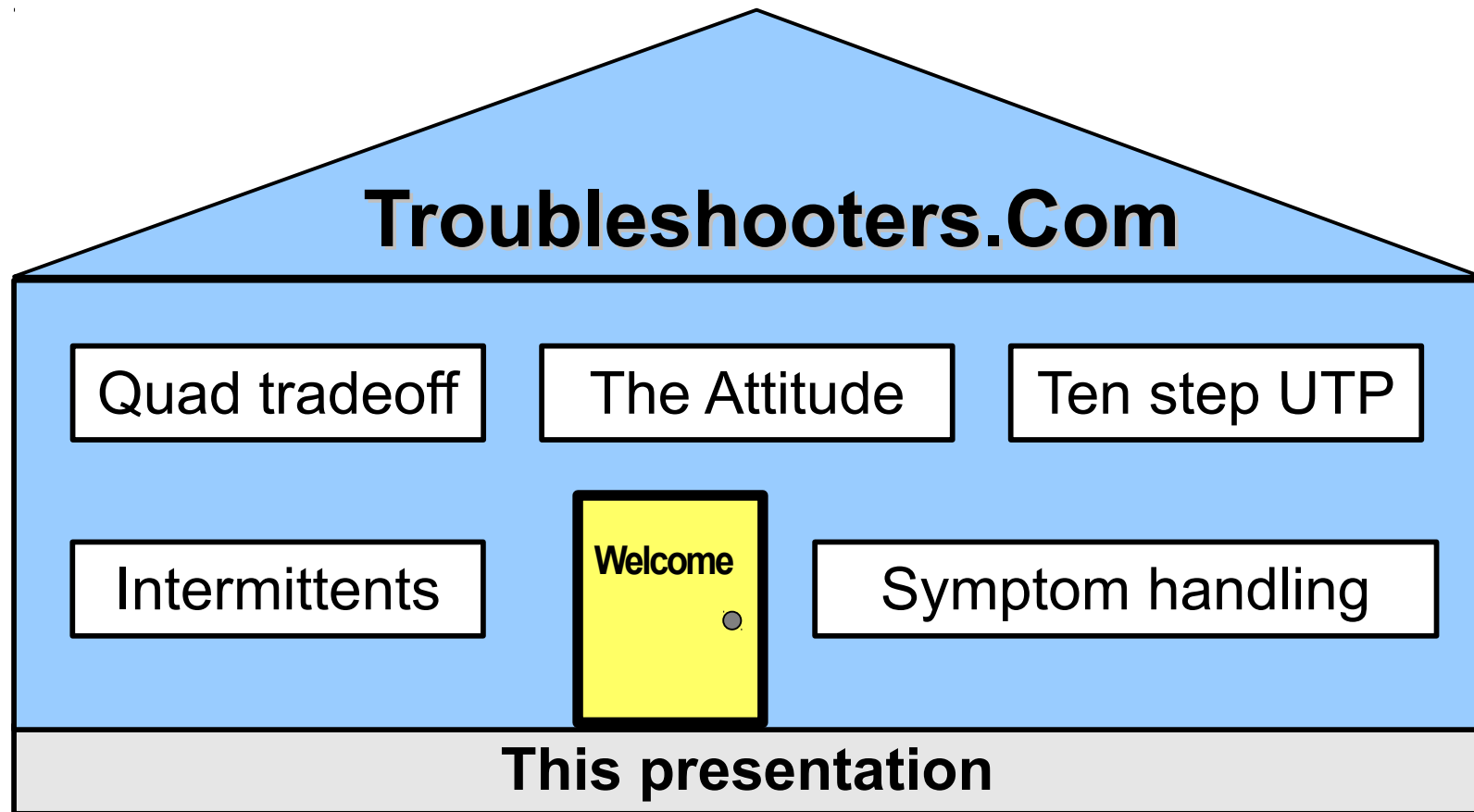


**Anger**



**Pressure**

This is the foundation,  
Get the rest from  
Troubleshooters.Com.



# Review

- It's how you operate your brain.
- It's how you organize your knowledge.
- Don't try to fix it, just try to narrow it down.
- How can I narrow it down one more time?
- Get the rest from Troubleshooters.Com
  - <http://www.troubleshooters.com>