

# Titan & Freeware

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- What is Titan?
- How does Security Freeware Fit?
- Problems Solved
- Problems Created?

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#### Titan Is

- A Host Based Audit Tool
- A Host Based Security Tool
- A Modular Toolkit

#### Titan Is

- Freely Available
- Full Source Code
- Policy Based

#### Titan IS NOT

- Not a replacement for other tools
- Not a replacement for security practices
- Not an excuse to not apply patches

- READ The documentation
- Back up your system
- Use pkgrm to remove modules
- Install vendor patches

- Re-Read the Documentation :-)
- Unpack and Run "Titan-Config"
- Run "Titan -V"
  - This runs in Audit or "Verify" mode
  - Examine the output of \$TITANHOME/ logs

- Compile the C code
  - noshell.c
  - runas.c
- Figure out which modules fit your policy

- Lastly run Titan in 'Fix' mode
  - "Titan -f";
  - OR "Titan -c config-file"
- Rerun "Titan -v"
  - Check for errors
- Reboot the system

### Contacting Team Titan

- Remember This isn't our day job
- email titan@fish.com
- http://www.fish.com/titan

Where does freeware fit?

- Two flavors of freeware
  - Initially Free
  - Really Free

### Initially Free Examples

- Sendmail
- GateD
- TIS
- ISS

### Really Free Examples

- tcp\_wrappers
- SATAN
- ipfilter
- perl
- Titan

Where does freeware fit? The BIG picture

- Security needs to be layered.
- No single point of failure is allowable

"If you only have one layer of protection you are only as safe the next bug-de-jour"

"In my experience the second layer of defence is always lacking"

"The only reason the castle wall is so formable is because of the dedicated people behind it"

"The way to strengthen the castle wall is not to add more bricks; instead build a moat around it" "The second line of defence should be different than the first."

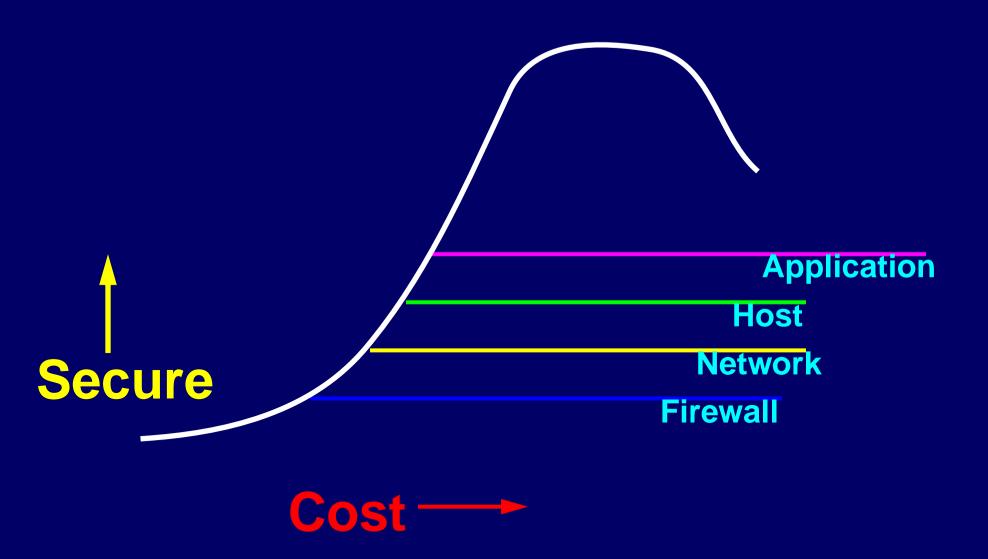
### Real World examples of dual layers

- Banks Require two signatures for cashier checks (over \$10,000) Why?
- Independent audit is required for most federal agencies - Why?
- Airlines have a co-pilot on every flight -Why?

Layers are safer!

#### The Problem

- Cost of first layer is expensive
- Commercial products have maintenance fees
- Spending money on a second layer is not in the budget



#### Solution

- Commercial Products where you can afford them
- Freeware as the second layer

#### Problems Created?

- For Team Titan:
  - User/Agencies are now pushing us to make it commercial
  - Only off hours for research and patches

#### Problems Created?

- For You
  - Some sites will /can not use freeware
  - There is a learning and support cost
  - There is no free lunch