



Architecting an MS WSUS Solution for the .edu Environment

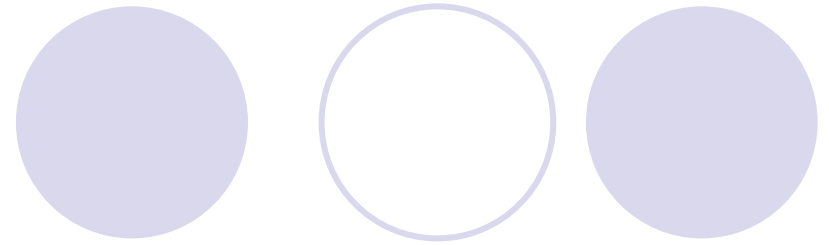
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Systems Architect, Sr. \ Manager

CIT→SETI→MIG

V1.2 - 070418

Who is the MIG?



- Microsoft Implementation Group

- 5 FTE

- “We build stuff people need.”

- MIG Motto

- Adopt

- Adapt

- Improve

- <http://vtmig.w2k.vt.edu>

- <http://vtwug.w2k.vt.edu>

- <http://www.w2k.vt.edu>

More on us...

Windows User Group

VT Active Directory

The reality of the matter



Millions of lines of code lead to...

Bugs attract pests



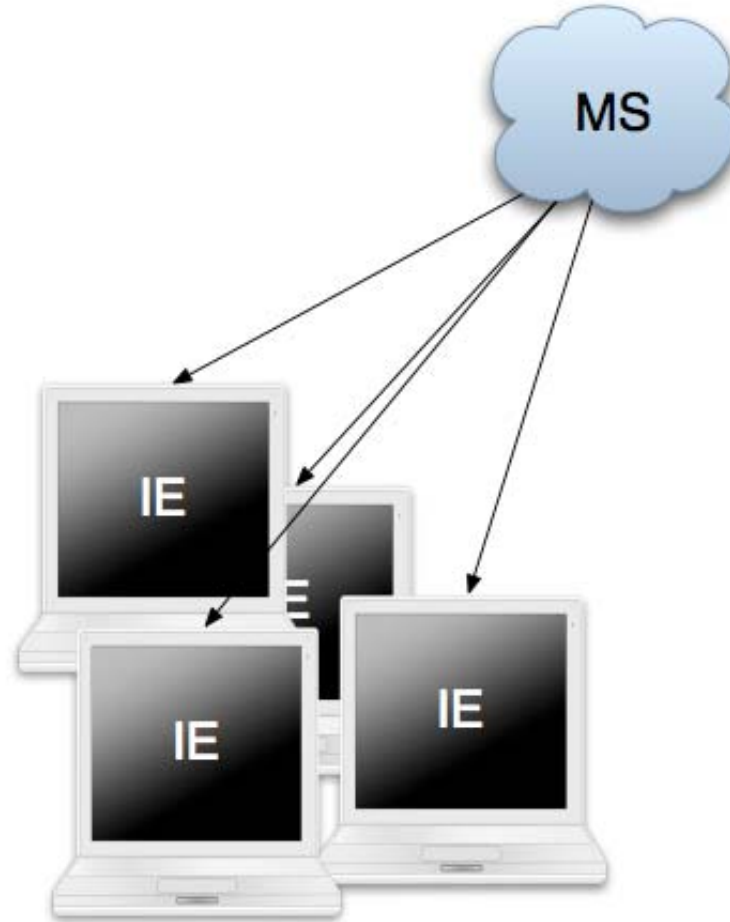
Timely updates are a necessity!

Update options - act the slacker



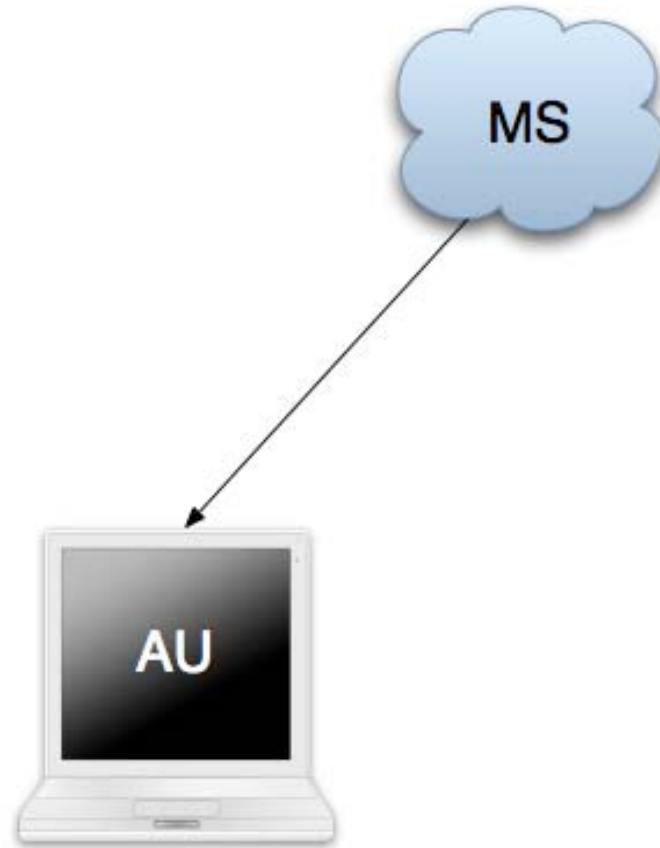
Do nothing...

Update options - have many arms...



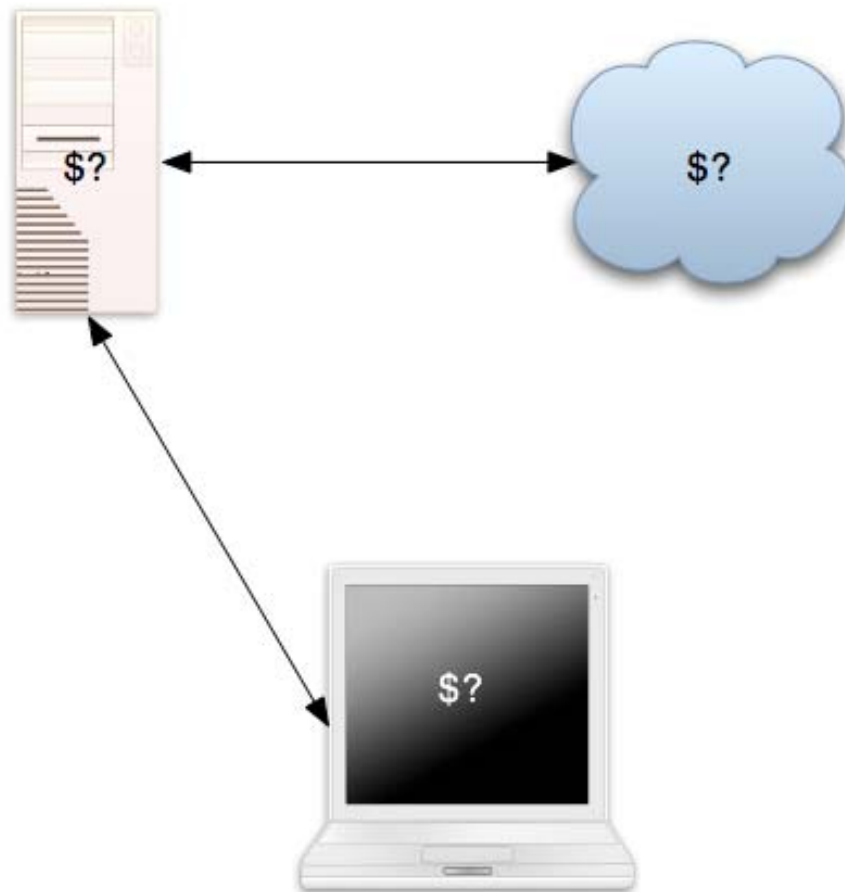
Manual updates via the web

Update options - FAF (fire and forget)



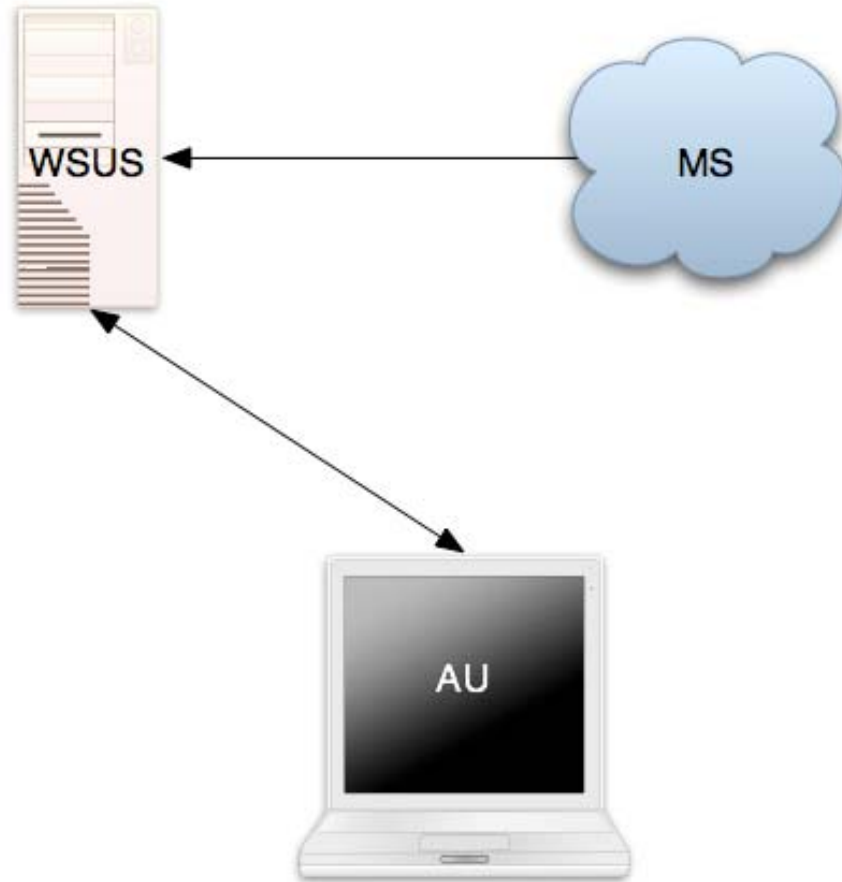
Use the built-in stuff and pray

Update options - pass the hat



3rd party tools? Maybe MS WSUS?

WSUS - the way it is

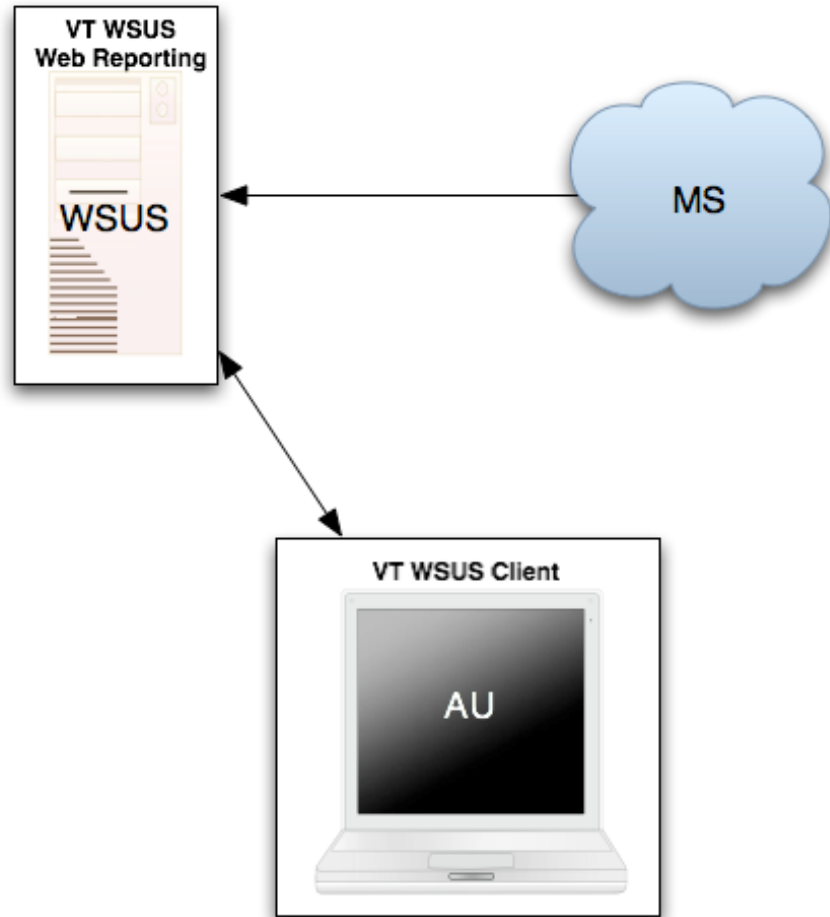


Middleman to the process

WSUS - some lumps and bumps

- .COM mindset
- Read/Write delegation
- Limited reporting
- Limited history
- No provisioning / No de-provisioning
- AU (Automatic Updates) client is dumb
- More...

WSUS - the mighty MIG way



It's all about abstraction...



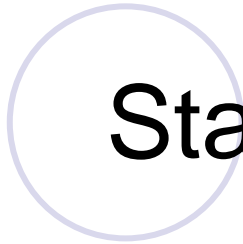
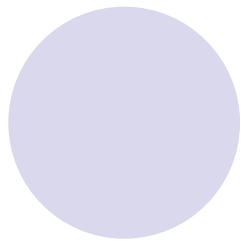
VT WSUS “system” - bennies

- .EDU mindset
- Tiered delegation
- Robust reporting
- Lots and lots of historical data
- Provision / De-provisioning
- AU client is smartened up
- More...

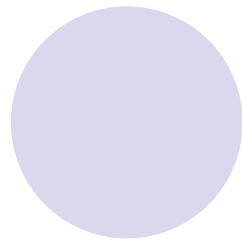
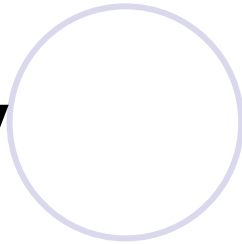


VT WSUS Client = simplicity

1. Download client
2. Install client
3. Wait a bit... no, a bit longer than that...
4. Go to VT WSUS Web Reporting website
5. Check status of system
6. Take action if required



Status by smiley

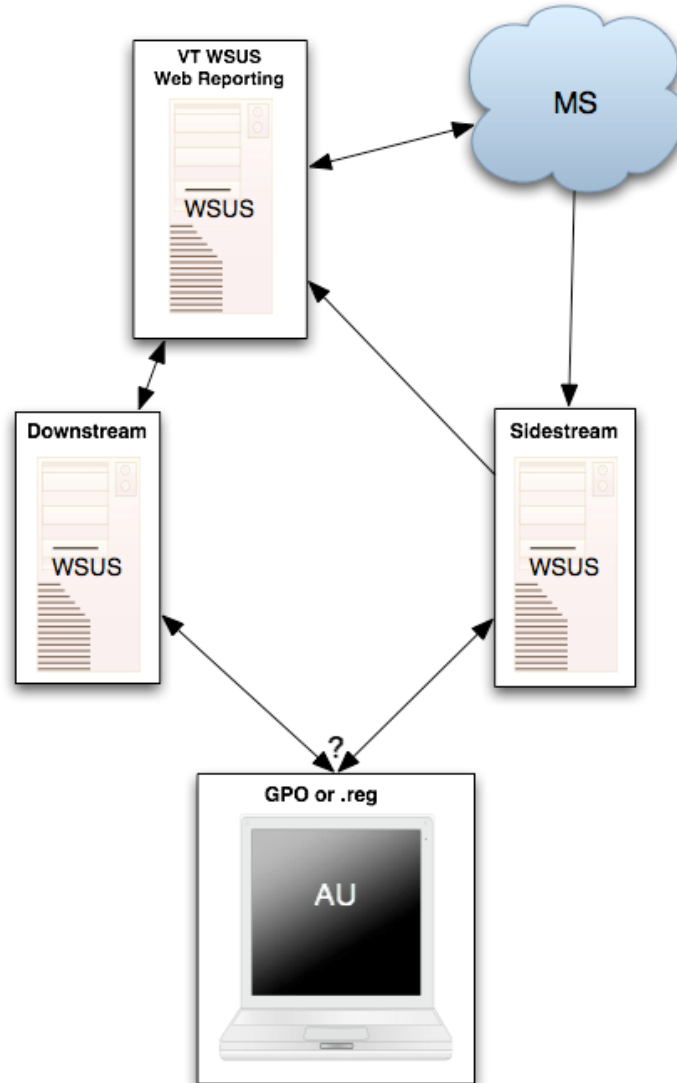


Jeepers creepers whose got the peepers?

- Person who installed the client
- OU admins (if the person who installed the client is in the OU)
 - Not an OU Admin yet? Gosh...
 - Search answers.vt.edu for “ou admin” for more info
- DIT admins*
- 4Help and Call Center staff



Client? We don't need no stinkin' client!



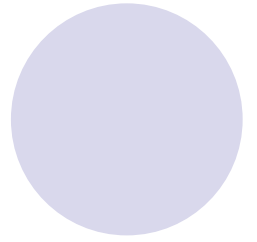
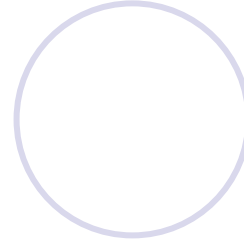
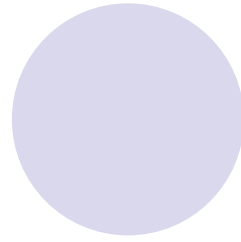
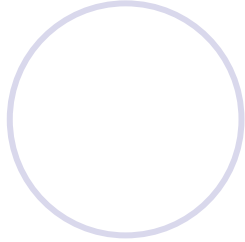
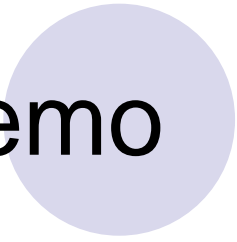
How does the flow go, Moe?

- Day 0
 - MS updates Tuesday (2nd Tuesday of every month)
- Day 1
 - VT WSUS gets updates
- Day 2
 - 4Help approves updates
- Day 3+
 - VT WSUS Client (AU) downloads updates
- Day 4+
 - If user ignores AU's pleas it will automagically install and reboot at next 4am or as soon as possible after that*

Couple of client caveats to consider

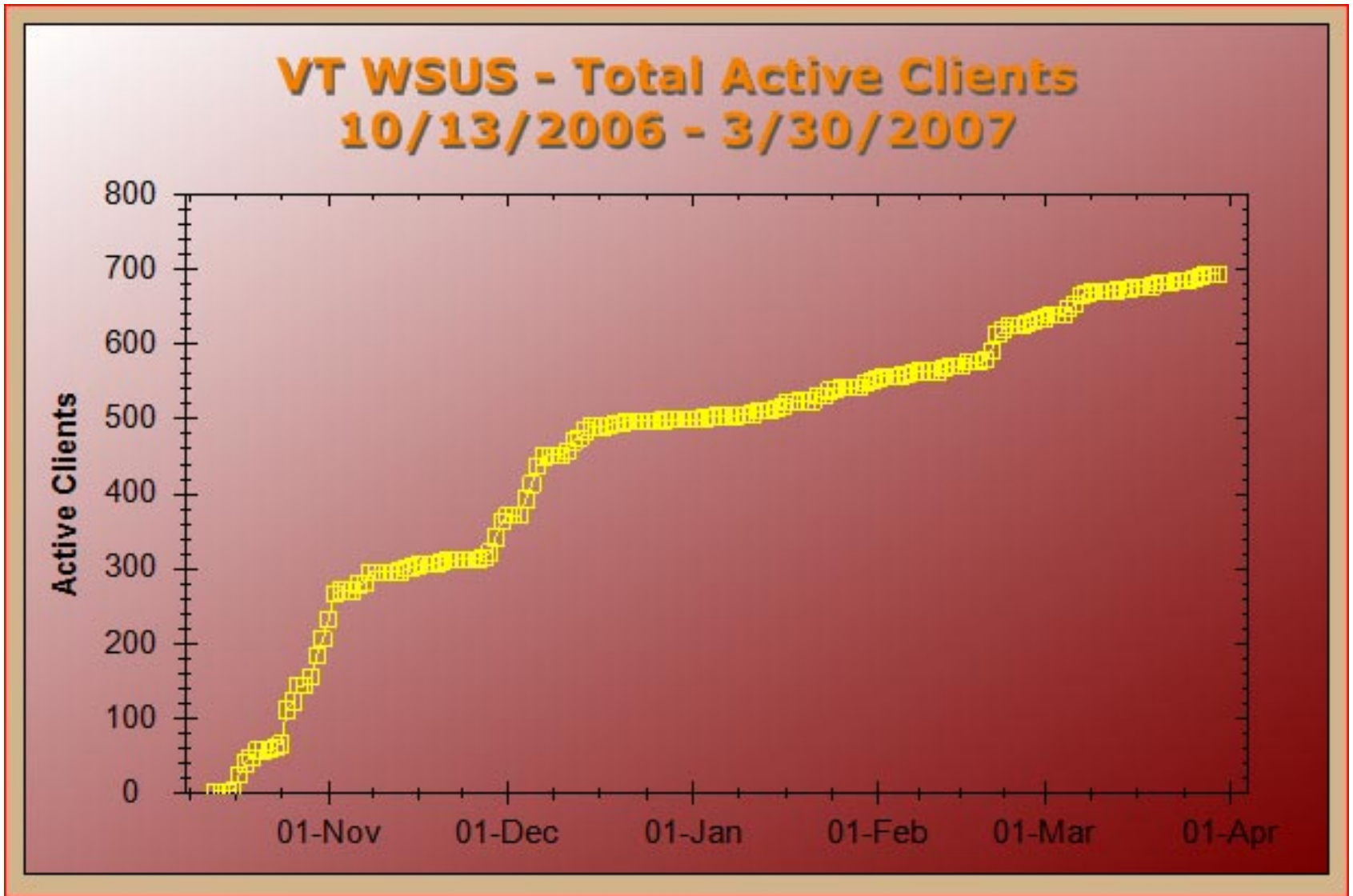
- PID / Pwd required to install (F/S only)
- Firewall rules may be necessary
- Client expires eventually
- Using client doesn't preclude you using Microsoft Update / Windows Update
- Uninstall / Expiring client reverts AU settings but leaves updates installed

Demo

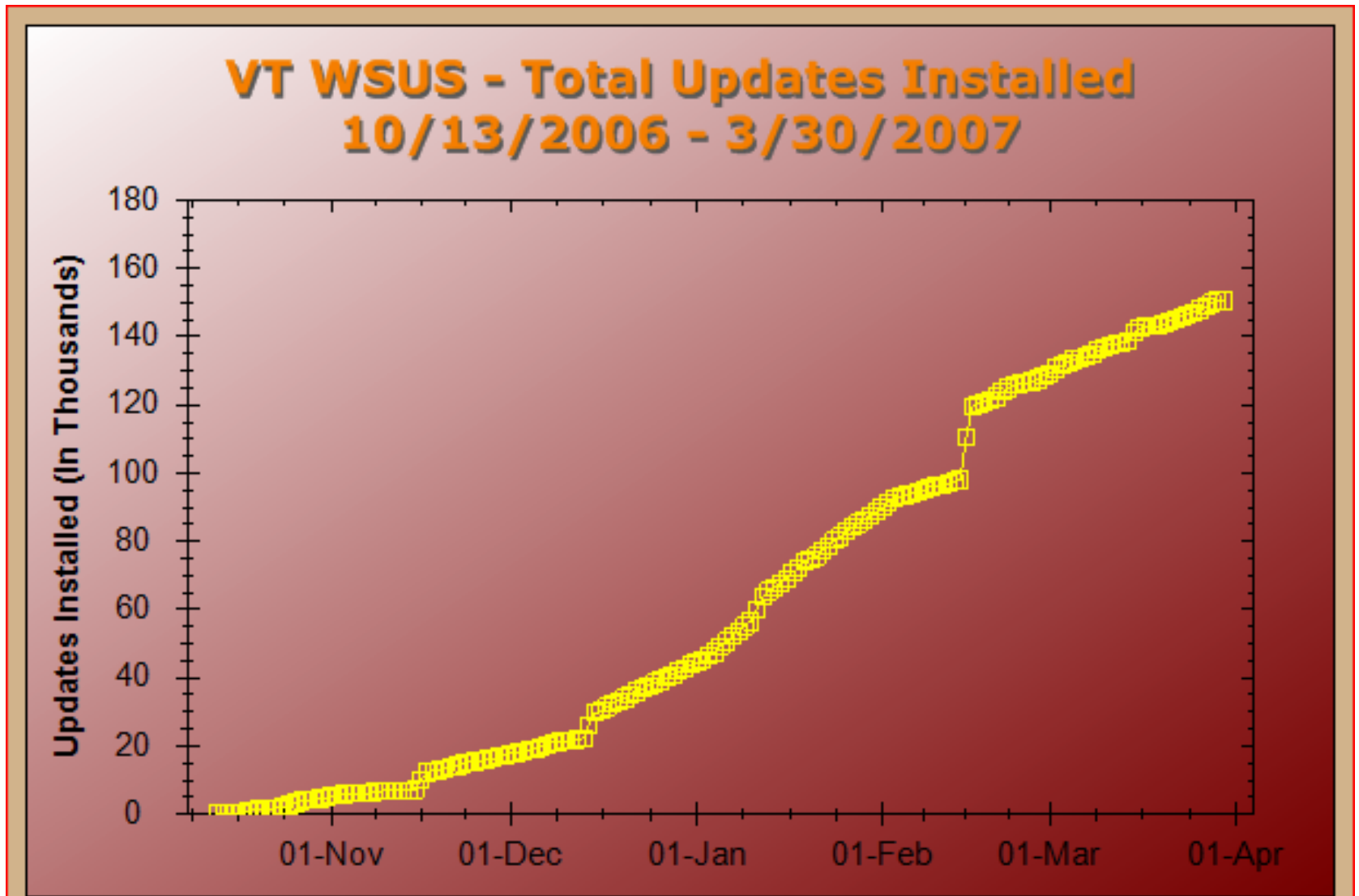


- Show off client, web reporting, etc...

Total Active Client Count



Total Updates installed to clients

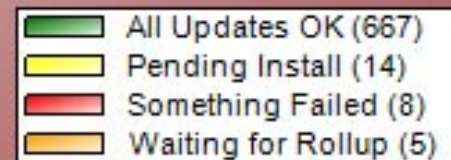


Current Status Counts

VT WSUS - Status Counts - 3/30/2007

Active Clients
694

All Updates OK (667)



Pending Install (14)

Something Failed (8)
waiting for Rollup (5)

Open Source



- OSS package of “VT WSUS” released
- <http://opensource.w2k.vt.edu>
- 70+ downloads to date

○ Such as:

- amnh.org
- cbs.com
- bkd.com
- giveblood.org
- kenavner.com
- orange-ftgroup.com
- symantec.com
- gabrobins.com
- More...
- cornell.edu
- ashland.edu
- cayuga-cc.edu
- oregonstate.edu
- ncsu.edu
- psu.edu
- rug.nl
- uevora.pt

Next up for VT WSUS



- V1.1
 - Adding additional reporting functions
 - Updating client for Vista compatibility
 - Altering detection timing from every hour to every four hours
- Many many many requested features in our “feature bucket”. So little time...
- We’ll be adding v1.1 code to the open source package soon after releasing into production

The acronym of safe computing - **PDR**

- **Prevention**

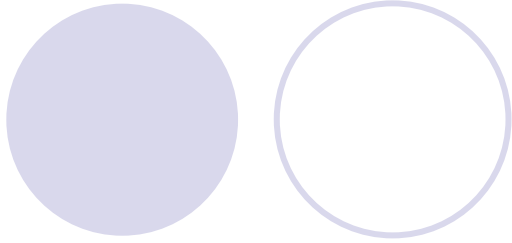
- Avoid systems running with insecure software

- **Detection**

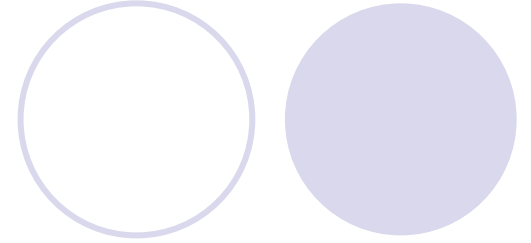
- Discover these insecure systems proactively

- **Remediation**

- Update these systems in a timely manner



Q&A?



Any questions?

More information at our Wiki

<http://wsuswiki.w2k.vt.edu>



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