

Journey to automation.

Presenter

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whoami

- Been working at IKEA IT since 2001
- Started as a PC technician
- Moved over to NT/2003 servers
- Hosted ikanobanken.se, their AD and their server park.
- Switched to linux professionally 2006, as a system administrator.
- Been working as a Product Responsible for linux since 2007
- Likes to code in python and c
- Believer in FLOSS (Free/Libre Open Source Software)

In the beginning.. (around 2006)

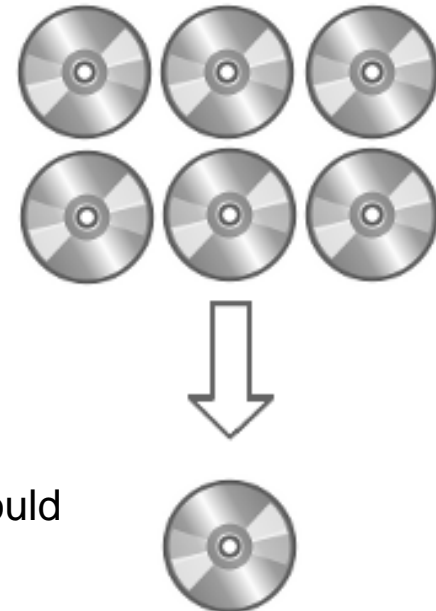
- **Access to data center**
We walked in and checked 'our' servers
- **Our own cable management!**
This was a source of error (understatement?)
- **Burning CDs, a lot!**
6 CDs for a new RHEL point release
- **Routines? – No, I'll do it my way..**
We used a word document with a lot of corrections in the margin..
- **CMDB? Had it but didn't use it regularly...**
This caused some problems
 - Where is it?
 - What is it doing?
 - What is it running on?



Installation of a server took approximately 2 hours! (minimum...)

Smarter methods but still...

- Started to use kickstart files
- Burned ISO files with an embedded kickstart file
- 6 CDs turned to 1! 😊
- Content was fetched over FTP
- Servers started to look the same...
- Started the initial work with Red Hat.



Around this time it was decided that cable management should be done by an external company.

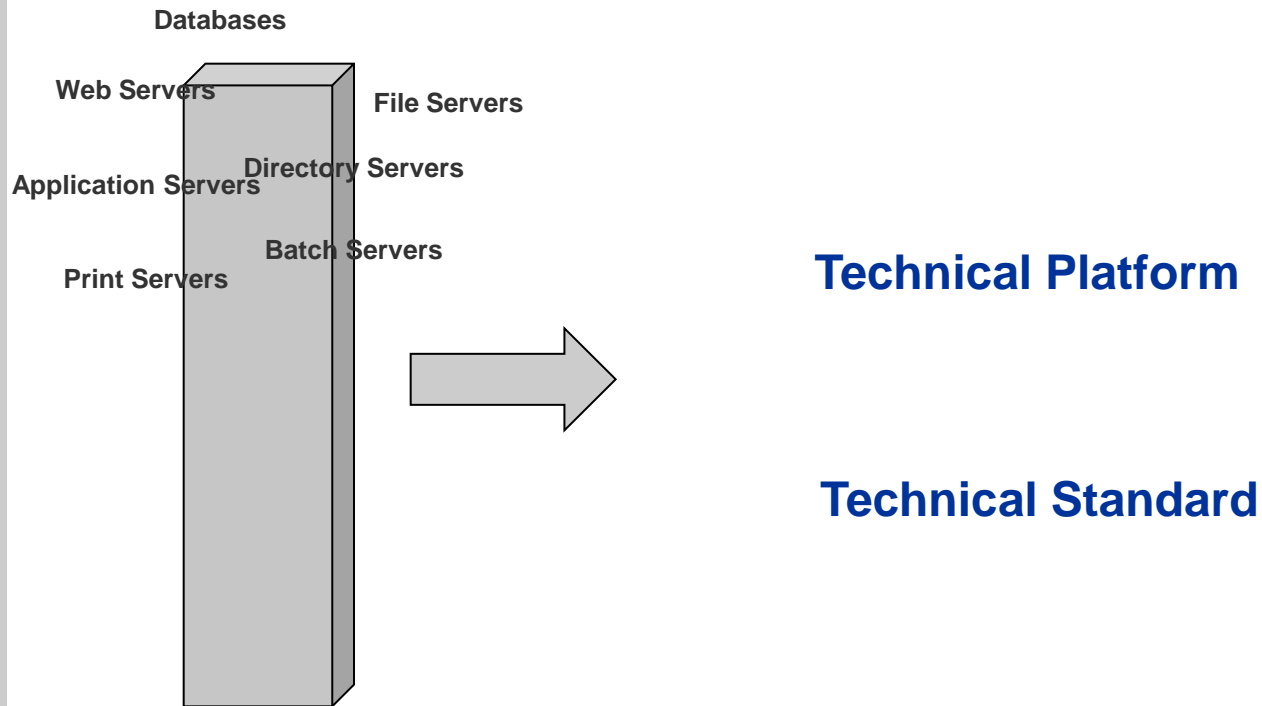
They implemented a standard in regards of routines and documentation.

What a difference that made! 😊

Installation of a server took approximately 1 hour! (minimum...)

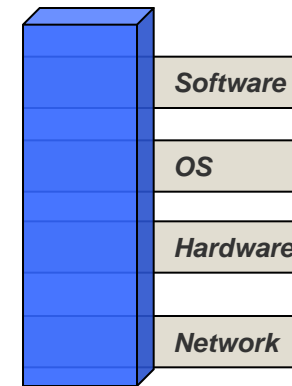
Working with services...

- A service is dependant of several products from different product areas
- To manage services we need to cover the vertical view



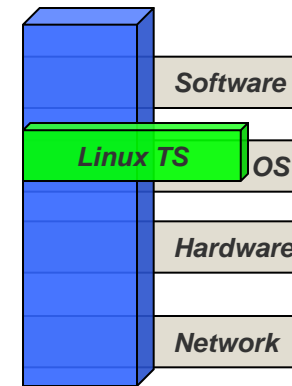
Technical Platform

- A Technical Platform is a vertical view covering a number of product areas
- A way to divide the infrastructure into maintainable blocks
- A base for multiple applications with common characteristics
- Has a fixed number of deliveries per year (1-3)
- A technical platform consists of many products which is reusable
- A reusable part is called “Technical Standard”



Technical Standard

- A reusable product structure which can be shared among platforms
- An instance of a technical standard can be used by several platforms
- A way to standardize within our environment
- A complete package (Software, Documentation, Education and Support)
- Has a defined end of life
- Has a defined yearly cost



Another standardized product...

The IKEA hex wrench is standardized and mass produced



Tools for our platform.

RHN Satellite is an solution for managing a network of RHEL systems. All Security Alerts, Bug Fix Alerts, and Enhancement Alerts (collectively known as Errata Alerts) can be downloaded directly from RHN Satellite.

We use the RHN Satellite API to programmatically register a system and apply packages/updates.

Microsoft

- Microsoft RIS as PXE boot
No more crash carts!
- Injected a PXE Linux on top of RIS
Took control!
Our own menus



RHN Proxy Server is a package-caching mechanism that reduces the bandwidth requirements for RHN and Satellite servers and enables custom package deployment

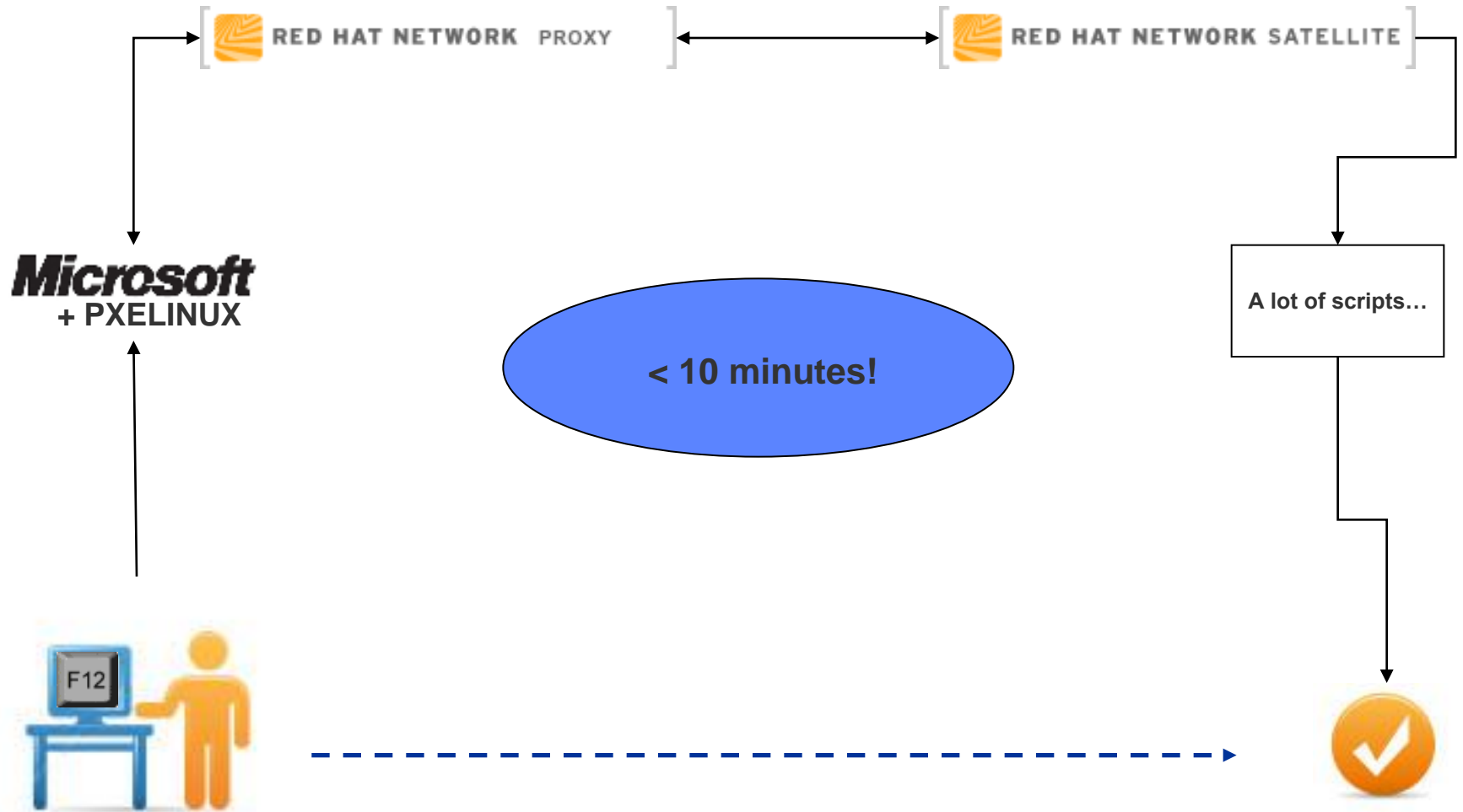


Red Hat Enterprise Linux

Backup
Monitoring
Scheduling

} These tools are included in our standard.
They are reusable products shared by many platforms.

Installation overview



Summary

- Standardize
- Consolidate
- Automate