

Welcome to

Controlling a High Security Environment with Ansible

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Introduction: En enklere hverdag med PasientSky

En enklere hverdag med PasientSky

Reduser distansen mellom deg og din behandler, uansett hvor i verden du befinner deg. Få oversikt med PasientSky.

Kom i gang med PasientSky nå

Se om din klinikk bruker PasientSky →



The image shows two devices displaying the PasientSky interface. The tablet on the left shows a user profile for 'Brian Storstrøm' with contact information and a list of consultations. The smartphone on the right shows a greeting 'Hei' and options for 'Mine gjøremål' (My tasks) and 'Min kalender' (My calendar).

Obviously this means personal data

Ansible: used for provisioning, cfg mgmt, security

Open Source

Simple playbooks and ad-hoc commands

Well supported on mainstream operating systems

over 200 modules in the core distribution

Supports just about anything which has SSH+Python

<http://www.ansible.com/>

Note: we dont use Tower

Operating systems we use

VMware ESX - pysphere and core module in Ansible, provision 10 servers no problem

Ubuntu Linux - core modules and some 100 changes after first boot

OpenBSD - pushing firewall rulesets, update PF lists and reload daemons consistently

All of the above well supported by Ansible

What we learnt about Ansible

Easy to get started YAML playbooks

Easy to configure services

Roles sometimes suck - too many files in too many directories

Using more flat playbooks are nice

What Ansible brings in a High Security Environment

We can rebuild advanced servers from scratch in 15 minutes

Example We can build a complete Log environment from a single playbook,

- Syslog servers
- PostgreSQL database
- Logstash parser, software and rules
- Elasticsearch indexing servers
- Kibana front end

From a base Ubuntu install with no manual steps, other than starting Ansible

What Ansible brings in a High Security Environment

We can deploy a complete IDS solution in 15 minutes

A complete Suricata IDS environment from a single playbook,

- Suricata IDS
- Rulesets - configuration files the same across environments
- Cron - jobs for updating rules
- Elasticsearch indexing servers
- Kibana front end

From a base Ubuntu install with no manual steps, other than starting Ansible

Templates

We can test the SAME CONFIGS in multiple environments

Using variable group vars, host vars, templates

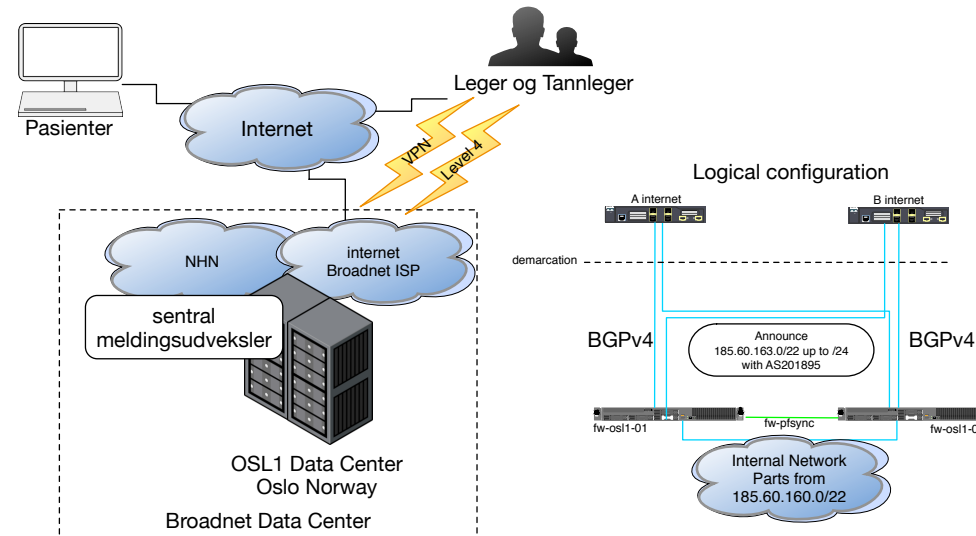
- Site specific data, RFC1918 subnets

No untested changes brought into production

Update security parameters

```
- lineinfile:
  dest=/etc/ssh/sshd_config state=present
  regexp='PasswordAuthentication'
  line='PasswordAuthentication no'
when: ansible_hostname != "vpn-{{ location_name }}-01"
notify: restart sshd
tags:
  - sshd
```

Cluster firewalls always consistent



- name: copy PF tables
- template: src=roles/infrastructure-firewall/files/pf-tables/ item | basename
- dest=/etc/pf/ item | basename owner=root group=wheel mode=0600
- with_fileglob:
 - roles/infrastructure-firewall/files/pf-tables/*.list
- notify:
 - reload pf

Golden rules

Dont use lineinfile, if changing more than a few, use a template

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Questions?

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You are always welcome to send me questions later via email