



# Fight from the inside: 2+ years Qualys Cloud Agent – lessons learned

Siemens Corporate Scan Service

# Why Cloud Agent?

Fight from the inside – unauthenticated is not enough

But...

- Authenticated scans and password life cycle are a nightmare
  - 1.5k providers and administrators
- Psychology – Humans don't want to give away control



## Cloud Agent: Lessons learned

It's mostly about politics

- Management support
- Communication is vital
- Make friends at an early stage
  - Implement a showcase
- Be prepared to answer any question
- Have a lab environment ready



## Cloud Agent: Lessons learned

- Needs a dedicated project
  - Plan for disaster
  - Establish a human network
- Track and trace
  - Communication is vital
  - Be as supportive as possible
    - Hey Qualys: can you say MSI?
- End of project doesn't mean you are done
- License costs are not the point!

# Findings

## Don't panic!

- Sit down and have a cup of tea first!
  - Your standard process will probably be not enough

## Don't get lost in the details!

- Visualize & identify patterns - Pivot is your friend
- Explain them – to management!
  - Fix it!



Some things you might discover:

- Some have no patch process at all
- Don't control their patch process
- Gave away the keys - no clue who installed what and why
- Have no support contracts and thus no access to patches
- Decommissioned machines are just abandoned and run on their own
- Systems are installed with 'all in'
- Maintenance windows are too short
- Skills and resources can be a problem

# Vulnerability Remediation: 3 Strikes Approach

## 1. Low hanging Fruits on application layer

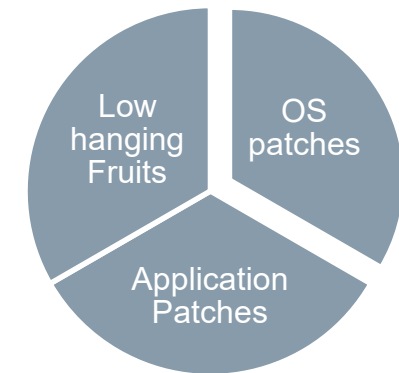
- **Remove unnecessary** software, e.g. Adobe Reader, Flash, Firefox, Office...

## 2. OS layer:

- Get **all** the latest **patches** from the OS vendor, install and verify successful installation

## 3. Applications:

- Get **all** the latest **patches** from the application vendor(s) , install and verify successful installation



Implement a regular, periodic process for the above steps –  
**be pro-active not reactive!**

# Passive Resistance

- Address people directly
  - Leverage your human network
- Your systems are at the top 100 worst of the company
  - BUT WE CAN CHANGE THAT – TOGETHER!



## How Qualys could help



- Self healing agents
- Better debugging capabilities
- More transparency
- More revision control – manifest control
- Provide MSI packages



**Thank you for your attention!**

### Michael Seeger

Siemens AG  
Cybersecurity

Mobile: +49 (173) 3758028

E-mail: [Michael.Seeger@siemens.com](mailto:Michael.Seeger@siemens.com)