Assets management with FusionInventory

Gonéri Le Bouder <goneri@teclib.com>

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About us: Gonéri Le Bouder

Free software enthusiast

- FusionInventory project co-leader
- Debian Developer
- Perl Monger
- Former OCS Inventory developer
- Work at TECLIB', Paris, France

FUSION INVENTORY

The origin

2006 Agent creation

2008 Server project (Tracker, a GLPI plugin)

2009 Agent/Server integration

2010 FusionInventory project

2010 Uranos integration

2011 Normation Rudder integration

2011 Mandriva Pulse2 integration (Android)

FUSION INVENTORY

The project infrastructure

FusionInventory is a community-driven project.

- active mailing lists
- IRC: #FusionInventory on FreeNode
- public Forge, Git repositories, etc

FUSION INVENTORY

The FusionInventory contributors

- about 10 people directly involved in the project
- active community of contributors
- 2 companies involved

We are looking for people to JOIN US!

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FUSION INVENTORY

Outline

FUSION INVENTORY

First, some vocabulary!

- Agent: a software running one a computer
- Server: a software that can speak with the Agent
- Task: an action done by the Agent for the server

FUSION INVENTORY

pull / push

FusionInventory supports “push“ and “pull“

- **”pull”: Agent $\Longrightarrow$ Server**
  the agent creates the connection to the server.
- **”push”: Agent $\Longleftarrow$ Server**
  the server awake the agent by itself.

FUSION INVENTORY

Tasks

Different Tasks are supported:

- Inventory
- Network discovery
- Remote SNMP inventory
- Software deployment
- vCenter/ESX/ESXi remote inventory
- Wake On Lan

FUSION INVENTORY

Servers today

4 different servers (so far!)

- FusionInventory for GLPI
  `http://www.FusionInventory.org`
- Uranos
  `http://uranos.sourceforge.net/`
- Rudder
  `http://www.normation.com/#produits`
- OCS Inventory NG (patched to ignore the UserAgent filter)
  `http://forge.fusioninventory.org/projects/fusioninventory-agent/wiki/Patch_ocs_server`

...local mode is also possible for Inventory

FUSION INVENTORY

Talk opened with

- FusionDirectory
- Mandriva's Pulse2
- OTRS ITSM

FUSION INVENTORY

Outline

FUSION INVENTORY

Server: Installation

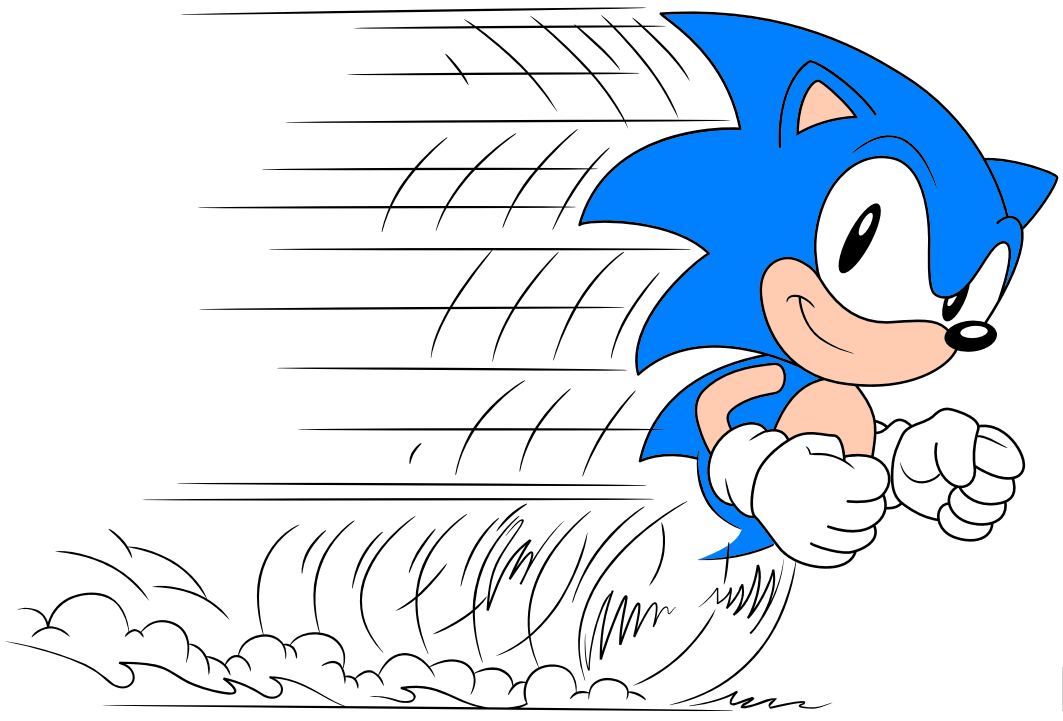
FusionInventory for GLPI

A GLPI generic plugin.

1. Extract
2. Configure
3. You're done!

FUSION INVENTORY

Agent: supported OS (1/2)



Runs everywhere!

A large collection of supported OS

- all the major system are supported
- portage is easy as soon as a Perl exist

FUSION INVENTORY

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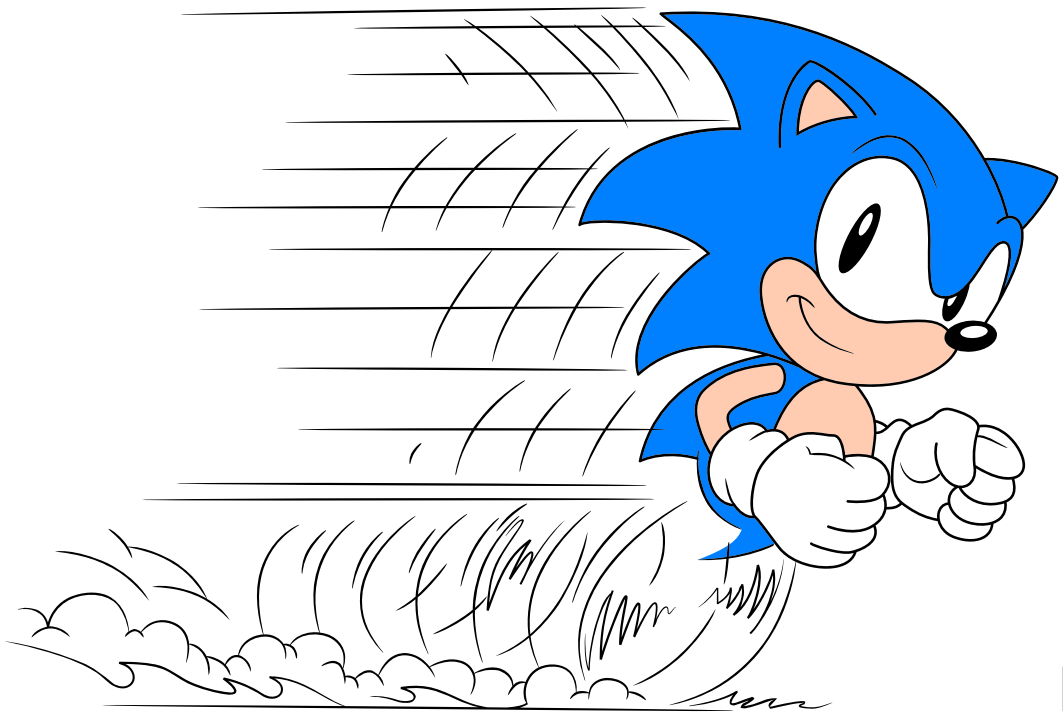

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FUSION INVENTORY

Agent: supported OS (2/2)

Supported Operating Systems:

- Linux
- Windows, all from 2000 to Seven 64bit
- MacOSX
- BSD
- AIX
- HP-UX
- Solaris
- Android

A complete list is available on the website

FUSION INVENTORY

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FUSION INVENTORY

Agent: Tested systems

Linux

- **Debian** all since 3.1
- **Ubuntu** all since 8.04
- **Mandriva** 9.2, 10.2, 2007.1, 2010.0, 2010.1
- **RedHat EL** (or CentOS) all since 3
- **Fedora** all since the 2nd
- **SUSE Linux Enterprise Server** 10, 11
- **Slackware** 10 to 13
- **RedHat Linux** 7.0, 8.0 and 9.0
- **SME Server** 7.5
- **OpenSUSE** 11.3
- **Gentoo** 1.6.14, 2008
- **Montavista** 4.0

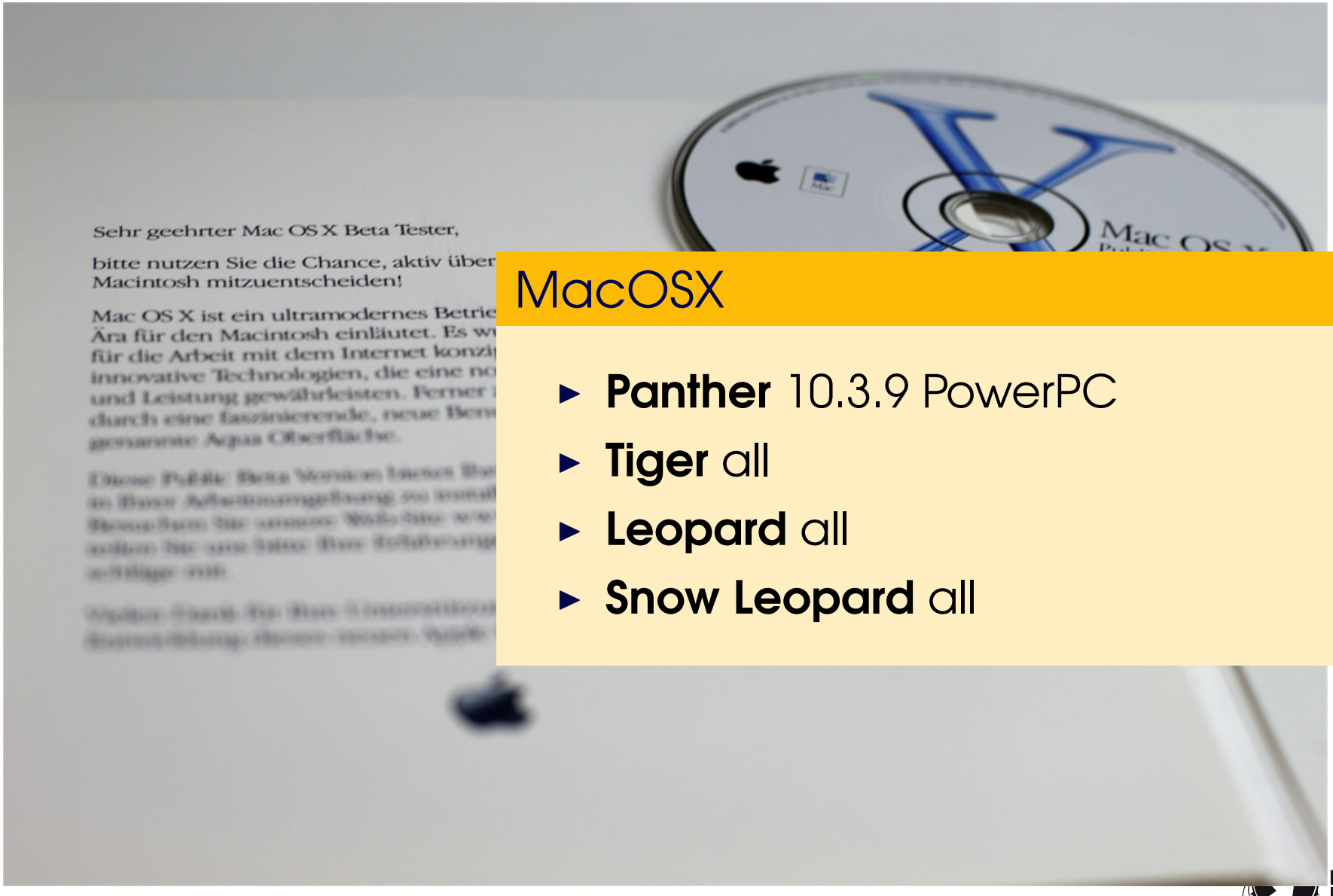
Agent: Tested systems

Windows

- **Windows 2000** $\geq$ SP4
- **Windows XP** all
- **Windows 2003** all
- **Windows 2008** all
- **Windows Vista** all
- **Windows Seven** all

FUSION INVENTORY

Agent: Tested systems

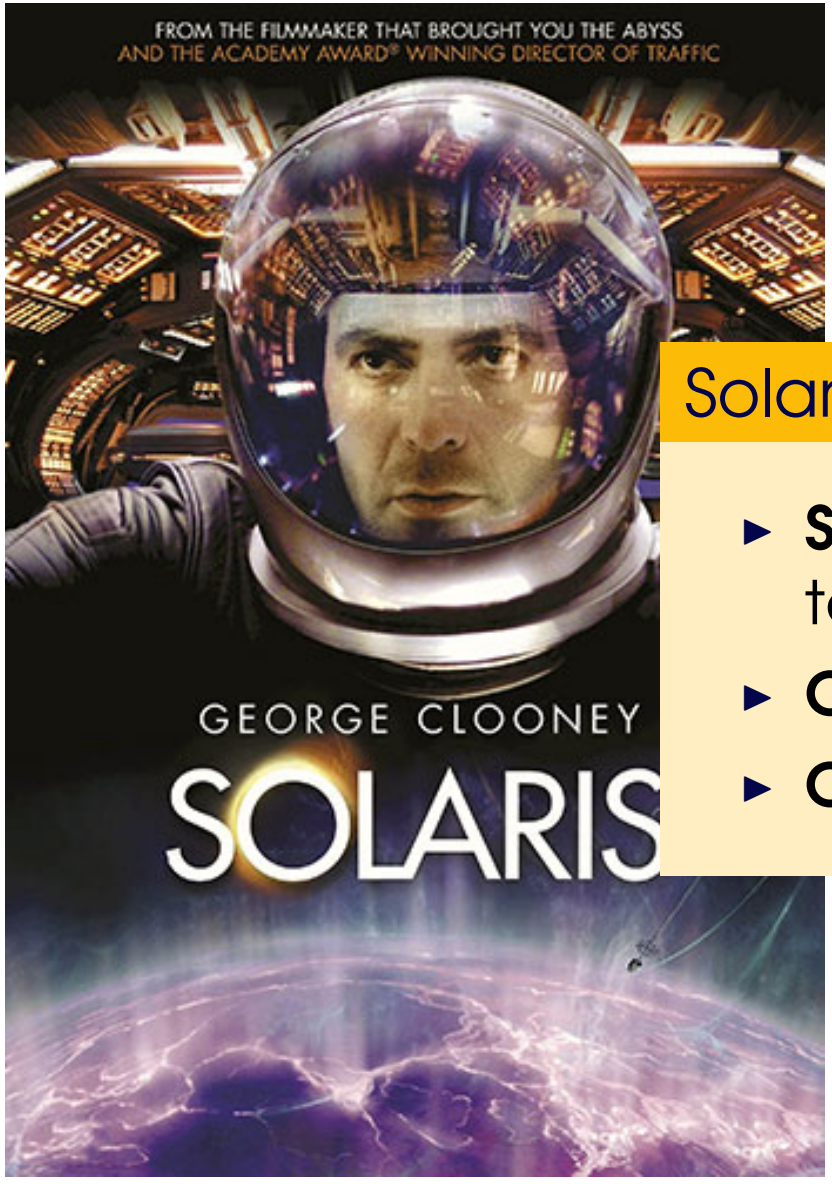


MacOSX

- **Panther** 10.3.9 PowerPC
- **Tiger** all
- **Leopard** all
- **Snow Leopard** all

FUSION INVENTORY

Agent: Tested systems



Solaris

- **Solaris** 8 to 10 for SPARC and 10 to 11 for x86
- **OpenSolaris** 2009.06
- **OpenIndiana** oi_148

FUSION INVENTORY

Agent: Tested systems

BSD

- **OpenBSD** 4.5 to 4.8
- **FreeBSD** all since 5.3 include Debian GNU/kFreeBSD
- **NetBSD** 5.0 and 5.1
- **DragonflyBSD** 2.8

FUSION INVENTORY

Agent: Tested systems

HPUX

- **11.11** PA-RISC
- **11.23** Itanium
- **11.31** Itanium

FUSION INVENTORY

Agent: Tested systems

AIX

- 5.1
- 5.2
- 6.1

FUSION INVENTORY

Agent: Tested systems

Android

- All revision since 1.6
- Available on the Market!

FUSION INVENTORY

Agent: Installation

different options

- **distribution packages**
  Debian, Fedora, EPEL, Ubuntu, Mageia, ...
- **Windows installer**
  GPO, psexec, ...
- **static prebuilt packages**, untar and run
  62 differents system so far
- tarball or CPAN installation

FUSION INVENTORY

Outline

FUSION INVENTORY

Network discovery

FusionInventory can do fast network inventory using

- NMAP
- NetBios
- SNMP query

FUSION INVENTORY

Network discovery

During this step, we identify

- Network information
- Windows domain information
- SNMP device name (sysdescr)

FUSION INVENTORY

Outline

FUSION INVENTORY

SNMP: History

History of SNMP

- Standard protocole
  First RFC: 1988
- Created for monitoring devices
- Three different version 1, 2c, 3 (Encryption)
- OID: an address per information
- MIB: definition of OID addresses

FUSION INVENTORY

SNMP: For what?

How we use SNMP?

- Identify devices remotly (switch, router, printer...)
- Inventory devices using SNMP
- Get all important information

SNMP: The MIB nightmare?

All people say us: MIB exist use it!

Yes but...

- Most of the time hard to find
- Not always free (like in FreeSoftware)
- Important information may be missing
- Worst! They are sometime wrong depending on device model/firmware

FUSION INVENTORY

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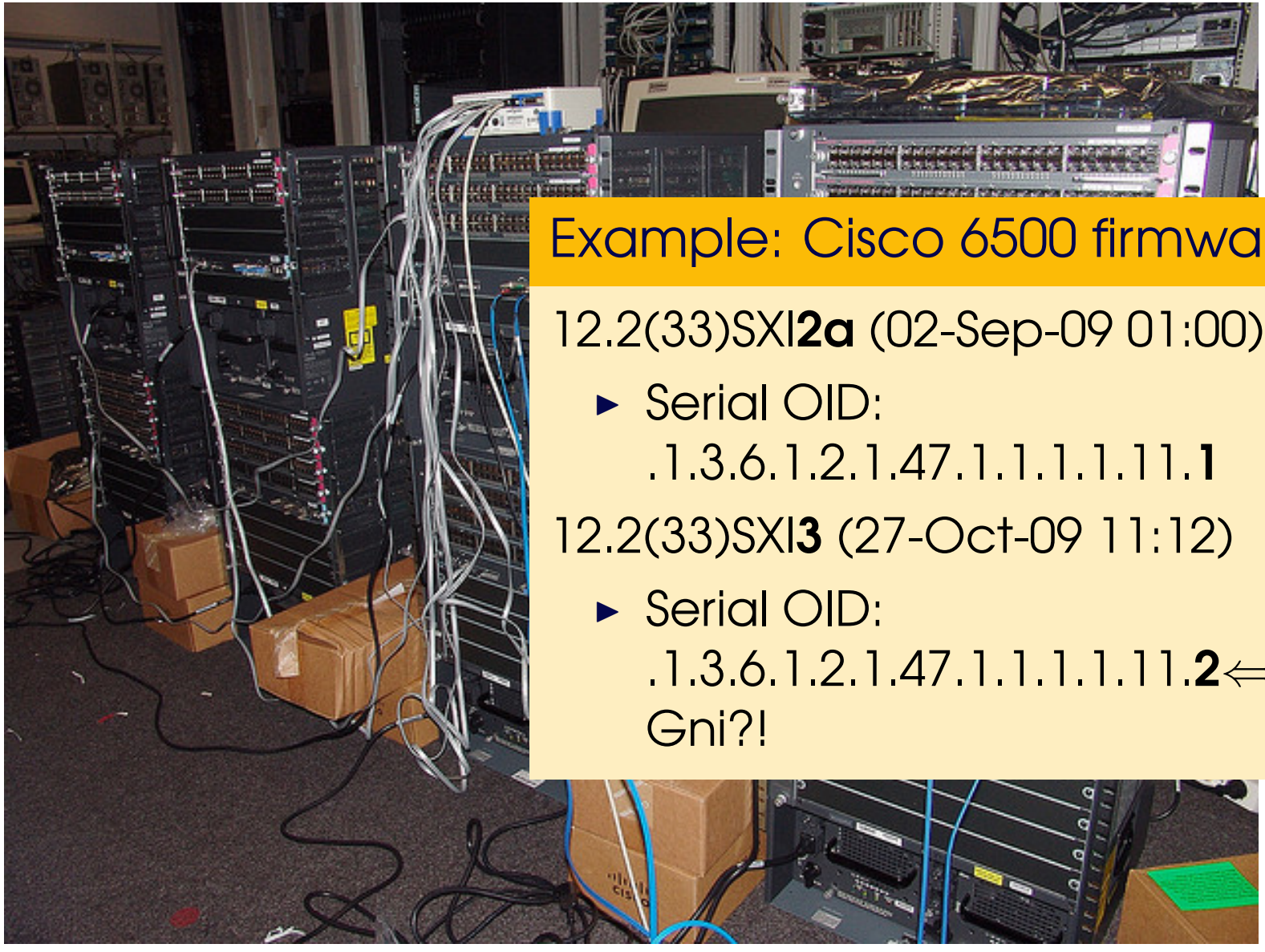
SNMP: An example



Example: Cisco 6500 firmware

12.2(33)SXI**2a** (02-Sep-09 01:00)

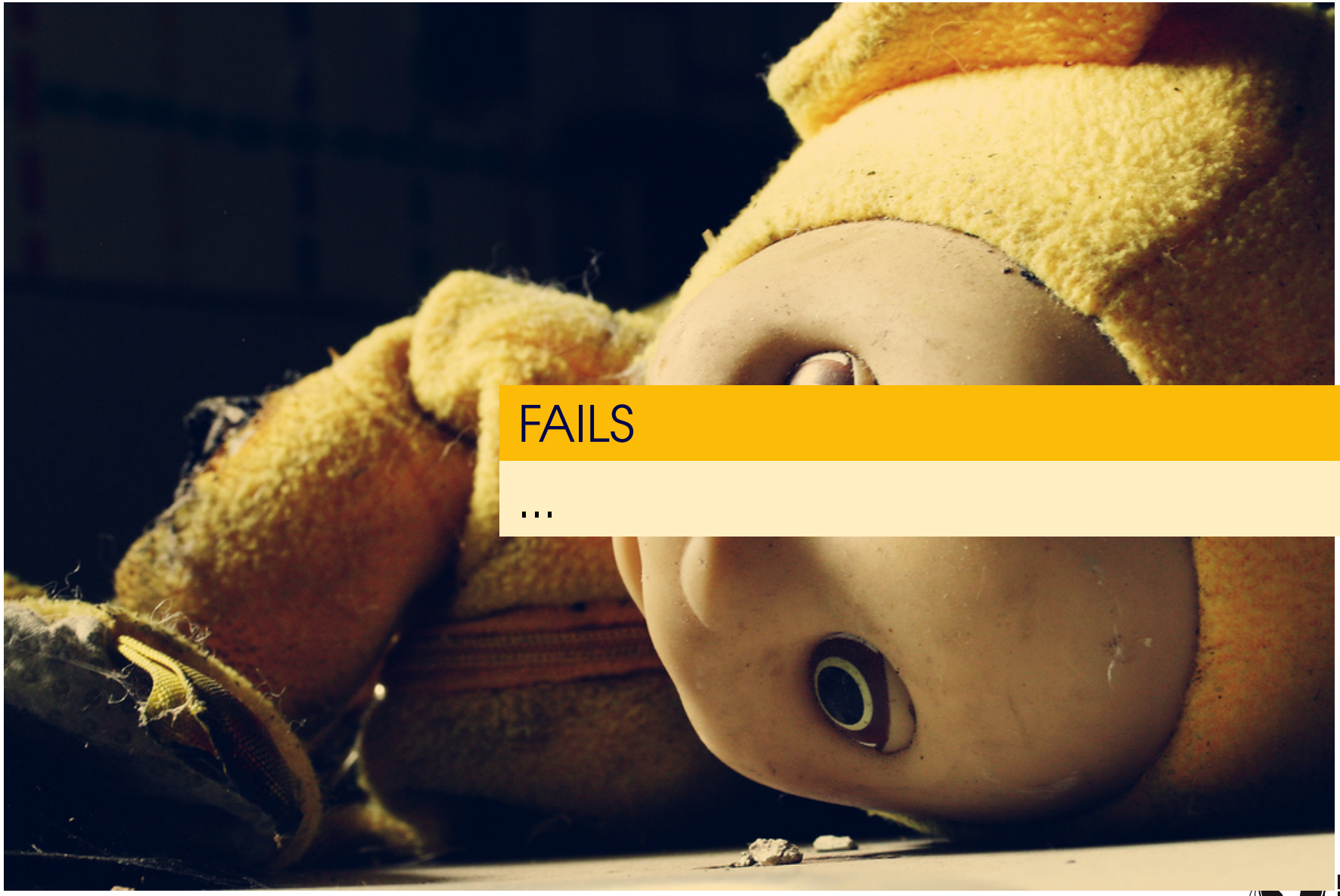
- Serial OID: .1.3.6.1.2.1.47.1.1.1.1.11.**1**

12.2(33)SXI**3** (27-Oct-09 11:12)

- Serial OID: .1.3.6.1.2.1.47.1.1.1.1.11.**2**⇐ Gni?!

FUSION INVENTORY

SNMP: dead teletubbies



FAILS

...

FUSION INVENTORY

SNMP: How do we unfuck this mess?

We create our own MIB like files

- XML files
- Relation between OID and information
  e.g: serial number is oid .1.3...
- Simple or dynamic OID
  a serial number or name of each port

FUSION INVENTORY

SNMP: Network switch (1/3)

Network switch

- Serial number
- Manufacturer
- Model
- Firmware
- Mac address
- CPU/RAM load
- etc

FUSION INVENTORY

SNMP: Network switch (2/3)

Switch port

- Name
- Network speed
- Port status (enabled / disabled)
- Errors input & output
- VLAN
- Trunk (tagged)
- Active connection

FUSION INVENTORY

SNMP: Network switch (3/3)

Connections per port

- Mac addresses
  one or many on some case
- LLDP and CDP neighborhood
  dialog and information between switches

SNMP: What results for switch?

Name	MTU	Speed	Internal status	Last Change	Number of bytes received	Number of input errors	Number of bytes sent	Number of errors in reception	Duplex	Internal MAC address	VLAN	Connected to	Connection
Gi0/25	1500	1 Gbps		186 days, 21:17:49.60	2 Go	220	528 Mo	-		00:1c:f6:e2:9d:99	8 [Users]	ent-fr-pc-029 00:23:7D:56:FF:30	
Gi0/26	1500	1 Gbps		195 days, 20:25:44.24	1 Go	-	2 Go	-		00:1c:f6:e2:9d:9a	8 [Users]	ent-fr-pc-030 00:23:7d:da:02:86 10.51.24.30	

Historique

Connection	Item	Field	Date
→	Sans nom sur ent-fr-pc-030		18-03-2011 09:34

Voir l'historique complet

Name	MTU	Speed	Internal status	Last Change	Number of bytes received	Number of input errors	Number of bytes sent	Number of errors in reception	Duplex	Internal MAC address	VLAN	Connected to	Connection
Gi0/27	1500	1 Gbps		415 days, 09:36:21.00	2 Go	-	223 Mo	-		00:1c:f6:e2:9d:9b	8 [Users]	ent-fr-pc-031 00:26:55:52:F4:D8	
Gi0/28	1500	1 Gbps		74 days, 04:34:37.97	1 Go	-	3 Go	-		00:1c:f6:e2:9d:9c	8 [Users]	ent-fr-pc-032 d8:d3:85:fc:90:b8 10.51.26.32	
Gi0/29	1500	1 Gbps		84 days, 02:42:22.94	3 Go	-	945 Mo	-		00:1c:f6:e2:9d:9d	8 [Users]	N/A 68:b5:99:6a:c8:a2	
Gi0/30	1500	1 Gbps		202 days, 21:00:48.79	1 Mo	-	5 Mo	-		00:1c:f6:e2:9d:9e	99 [public]	N/A 3c:4a:92:71:53:9e	
Gi0/31	1500	1 Gbps		131 days, 01:21:02.02	3 Go	-	4 Go	-		00:1c:f6:e2:9d:9f	99 [public]		
Gi0/32	1500	1 Gbps		199 days, 17:08:47.19	3 Go	-	3 Go	-		00:1c:f6:e2:9d:a0	12 [IPPhone]	hub N/A N/A	
Gi0/33	1500	10 Mbps		2 minutes, 31.48	-	-	-	-		00:1c:f6:e2:9d:a1	99 [public]		
Gi0/37	1500	10 Mbps		2 minutes, 31.48	-	-	-	-		00:1c:f6:e2:9d:a5	99 [public]		
Gi0/38	1500	1 Gbps		335 days, 22:46:00.05	77 Mo	-	4 Go	-		00:1c:f6:e2:9d:a6		ent-fr-sw-001 00:64:40:49:0d:99	
Gi0/39	1500	1 Gbps		26 days, 21:24:01.56	55 Mo	-	1 Go	-		00:1c:f6:e2:9d:a7		ent-fr-sw-002 00:23:34:de:79:19	

SNMP: Printer (1/2)

Get printer information

- Serial number
- Manufacturer
- Model
- Firmware
- Memory
- Mac address
- etc

FUSION INVENTORY

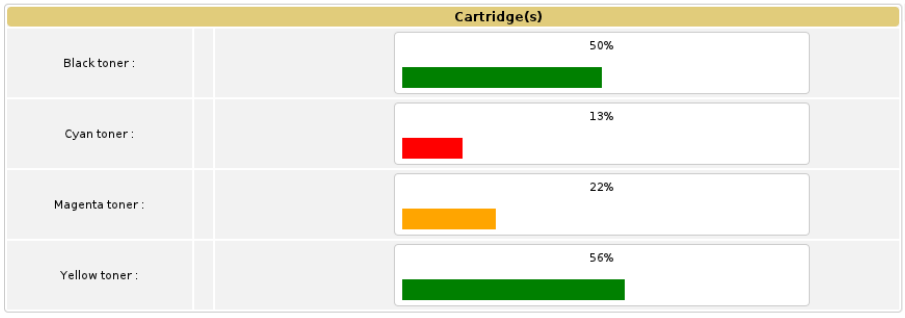
SNMP: Printer (2/2)

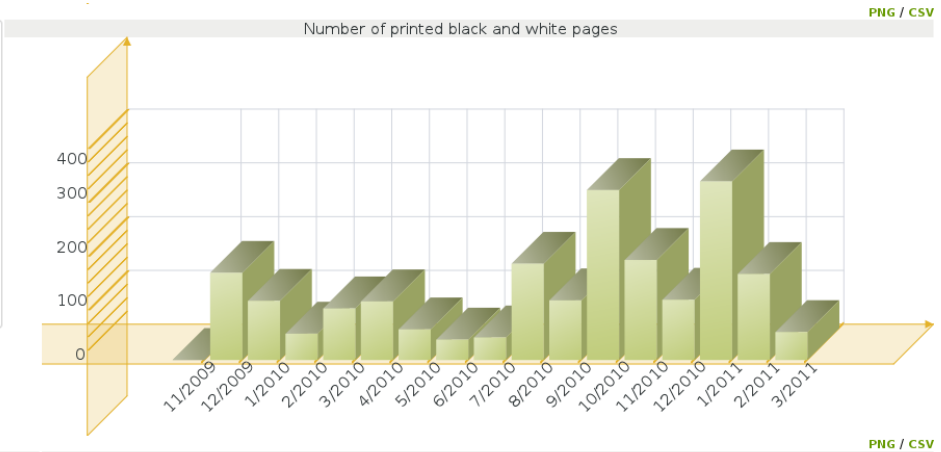
Additional important information

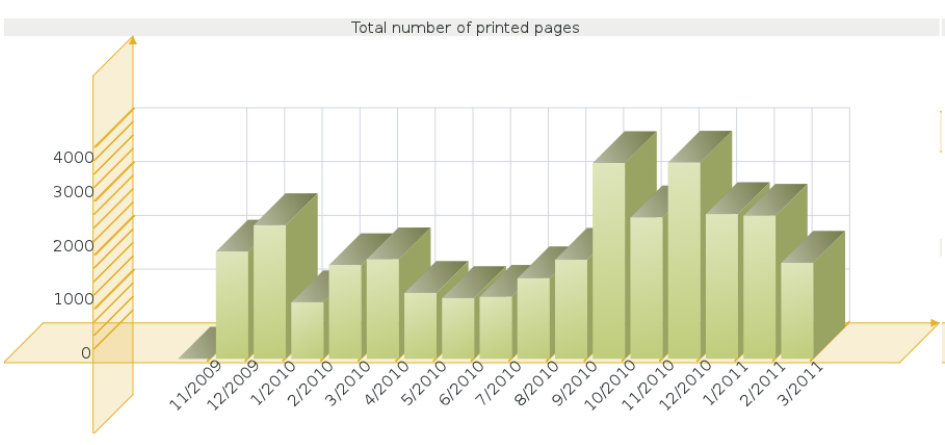
- Get cartridges ink level
- Page counter

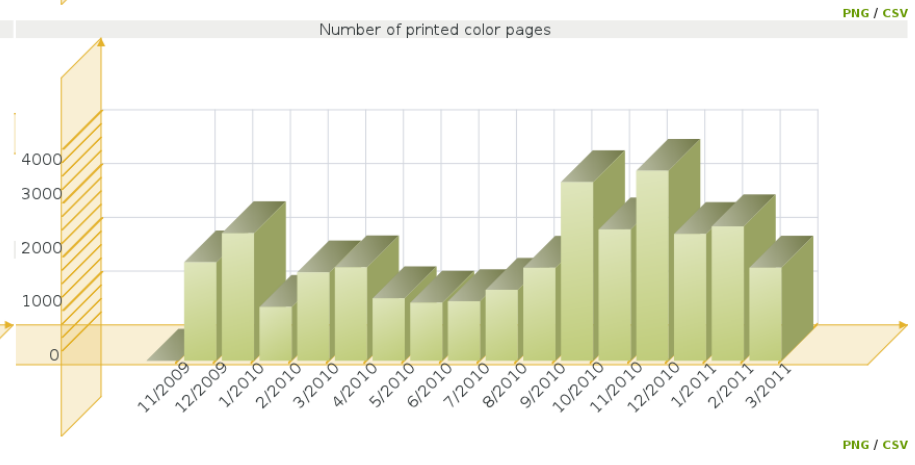
FUSION INVENTORY

SNMP: What result for printer?









FUSION INVENTORY

Outline

FUSION INVENTORY

Wake On Lan

What?

- awake computer.

How?

Send the Magic Packet with agent

- Raw ethernet packet (only from linux computer)
- else, UDP packet

Benefit

- no firewall issue
- nor special routage rule needed

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Wake On Lan: Example (1/2)

What we have

- A remote site
- 50 computers all under windows

What we want

- start all at same time, at 2:00 am for maintenance operation

Wake On Lan: Example (2/2)

Into GLPI with task management

- Define computers to awake
- Schedule it at 2:00AM
- That's all

FUSION INVENTORY

Outline

FUSION INVENTORY

Software Deployment

What?

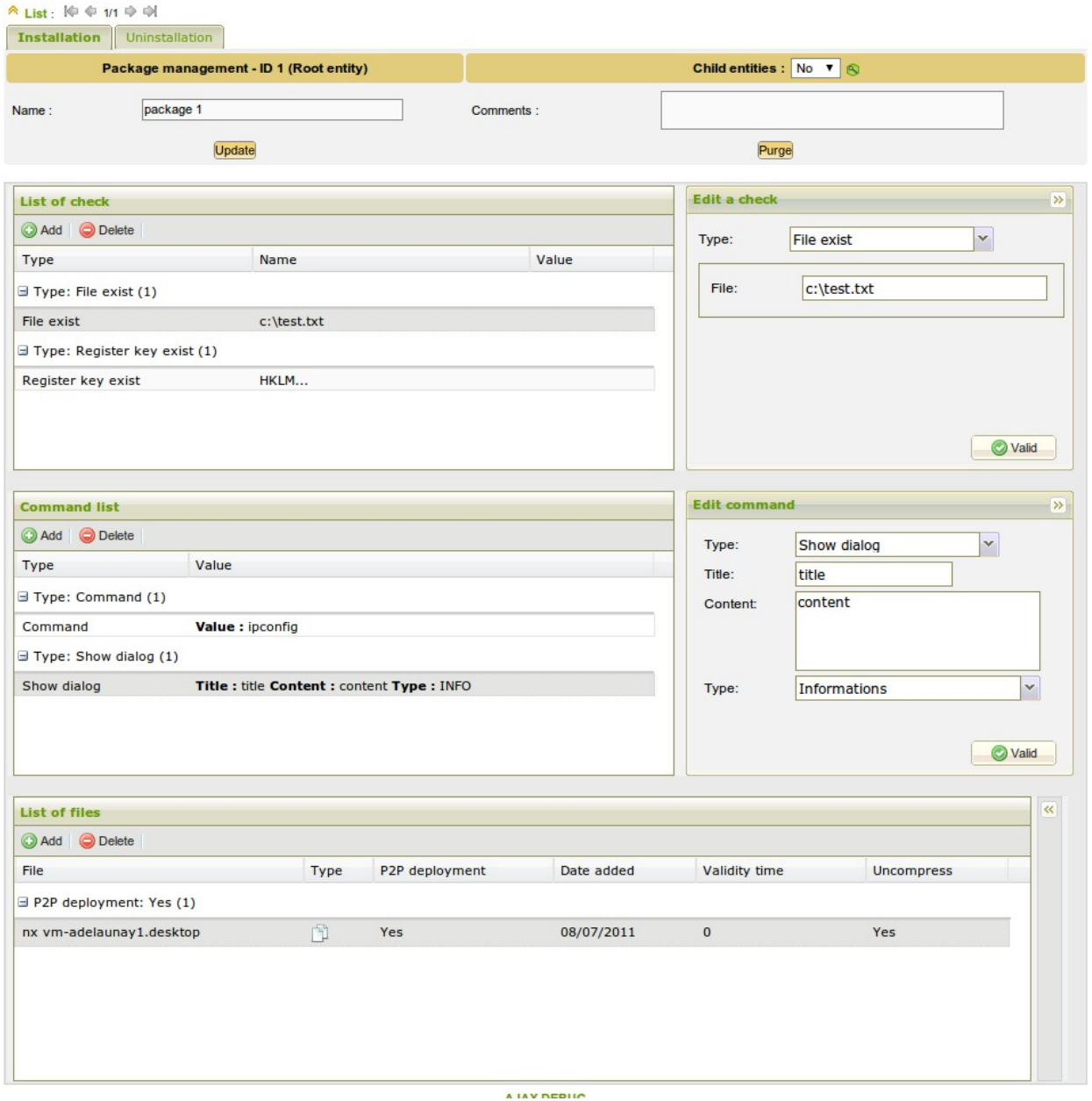
FusionInventory deployment

Why a new software deployment?

- Same user interface: GLPI
- Rights based on GLPI group/profile/entity
- Secure: HTTPS and sha512
- Sexy interface using ExtJS
- Network efficiency: use P2P

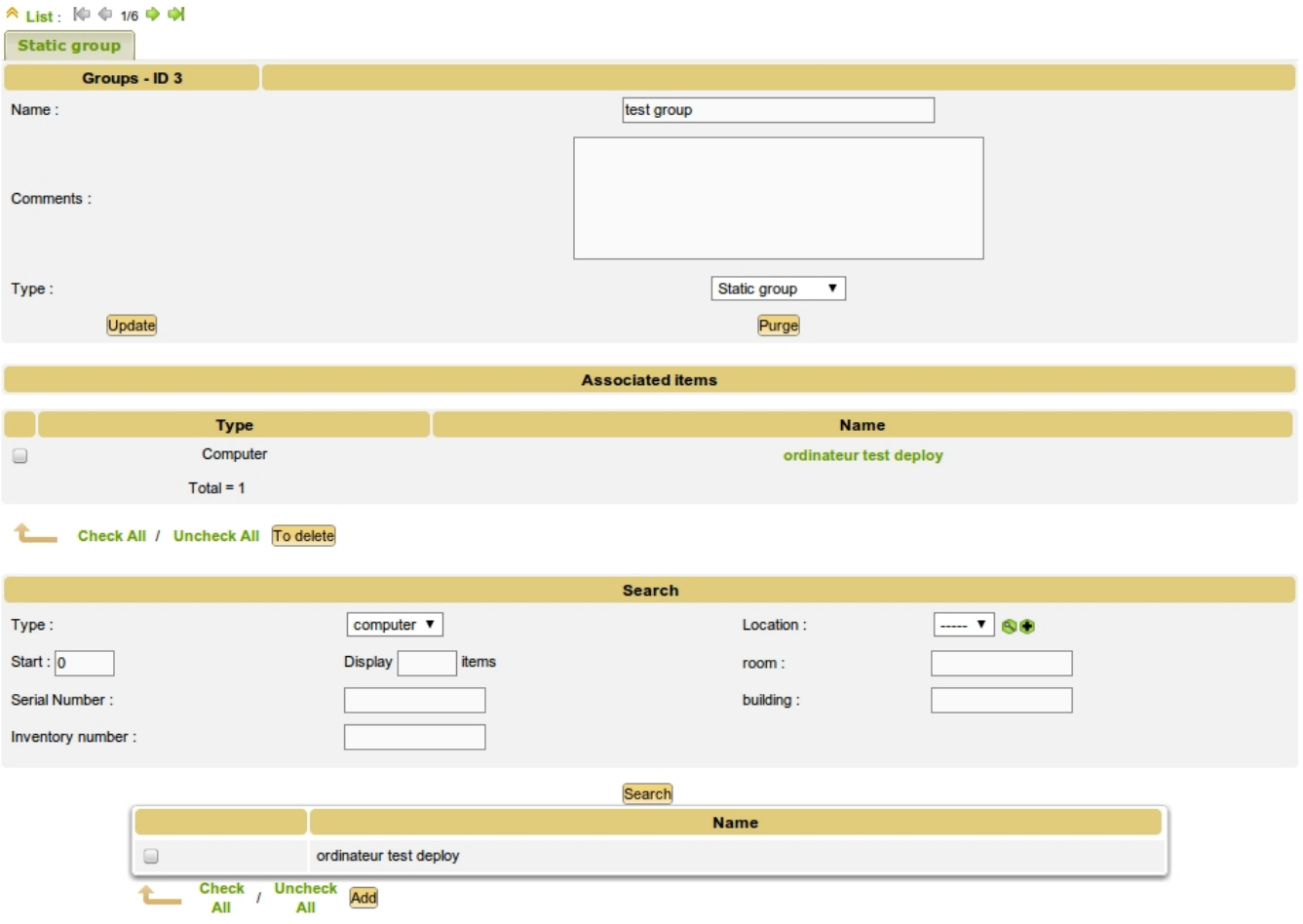
FUSION INVENTORY

FusionInventory Deploy: package creation



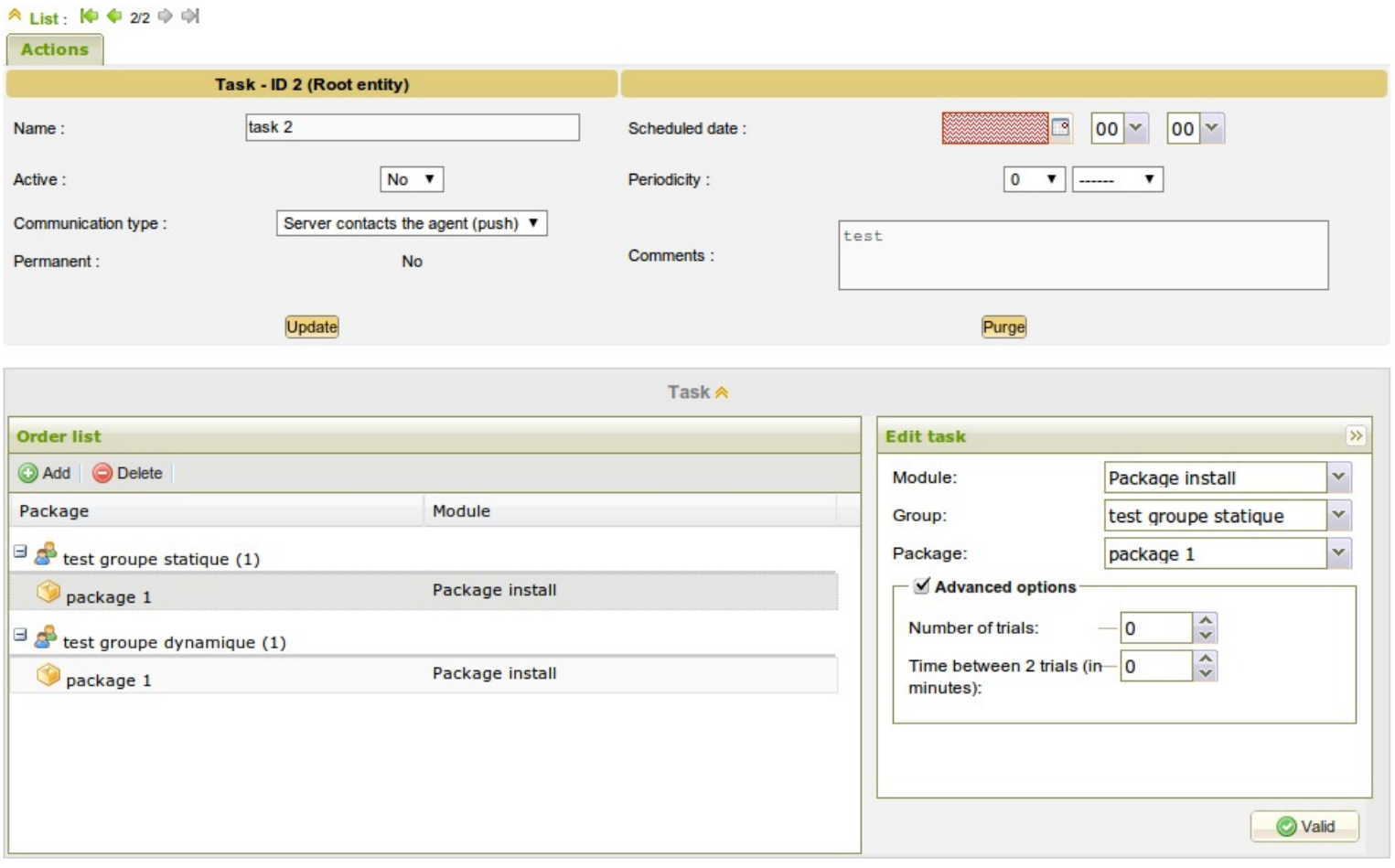
FUSION INVENTORY

FusionInventory Deploy: group creation



FUSION INVENTORY

FusionInventory Deploy: task creation



FusionInventory Deploy: Work in progres

Release planned for the coming weeks.
Stay turned!

FUSION INVENTORY

Outline

FUSION INVENTORY

vCenter/ESX/ESXi

The issue

You can **NOT** run an agent on these machines.

vCenter/ESX/ESXi

The solution

FusionInventory is able to connect to the machine using VMware SOAP API to get:

- Hardware inventory
- VirtualMachine list

vCenter

vCenter are an interface in front of a group of ESX/ESXi.

- Hardware inventory
- ESX/ESXi inventories

FUSION INVENTORY

vCenter/ESX/ESXi: command line

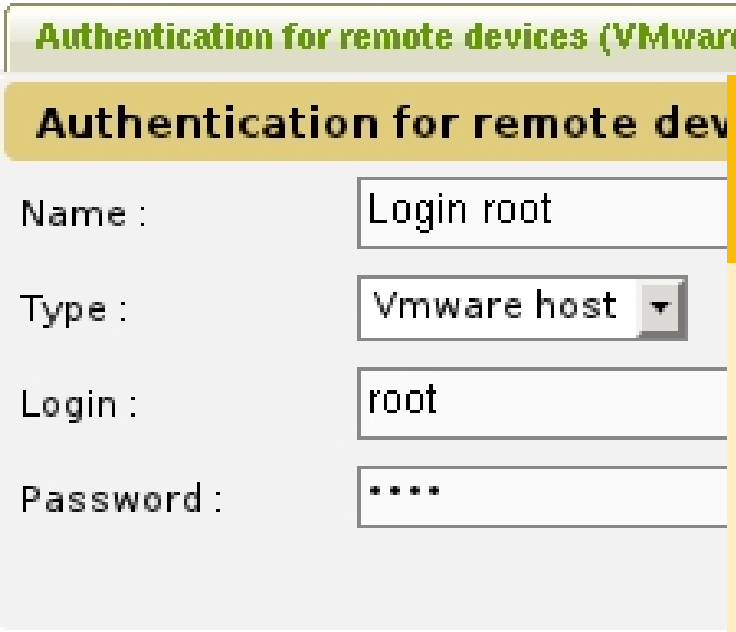
```
fusioninventory-esx --host vcenter --user foo \
  --password bar --directory /tmp
```

Then you can push the generated files in the server:

```
fusioninventory-injector -v --file /tmp/*.ocs \
  -u https://glpi/plugins/fusioninventory/
```

FUSION INVENTORY

vCenter/ESX/ESXi: from GLPI

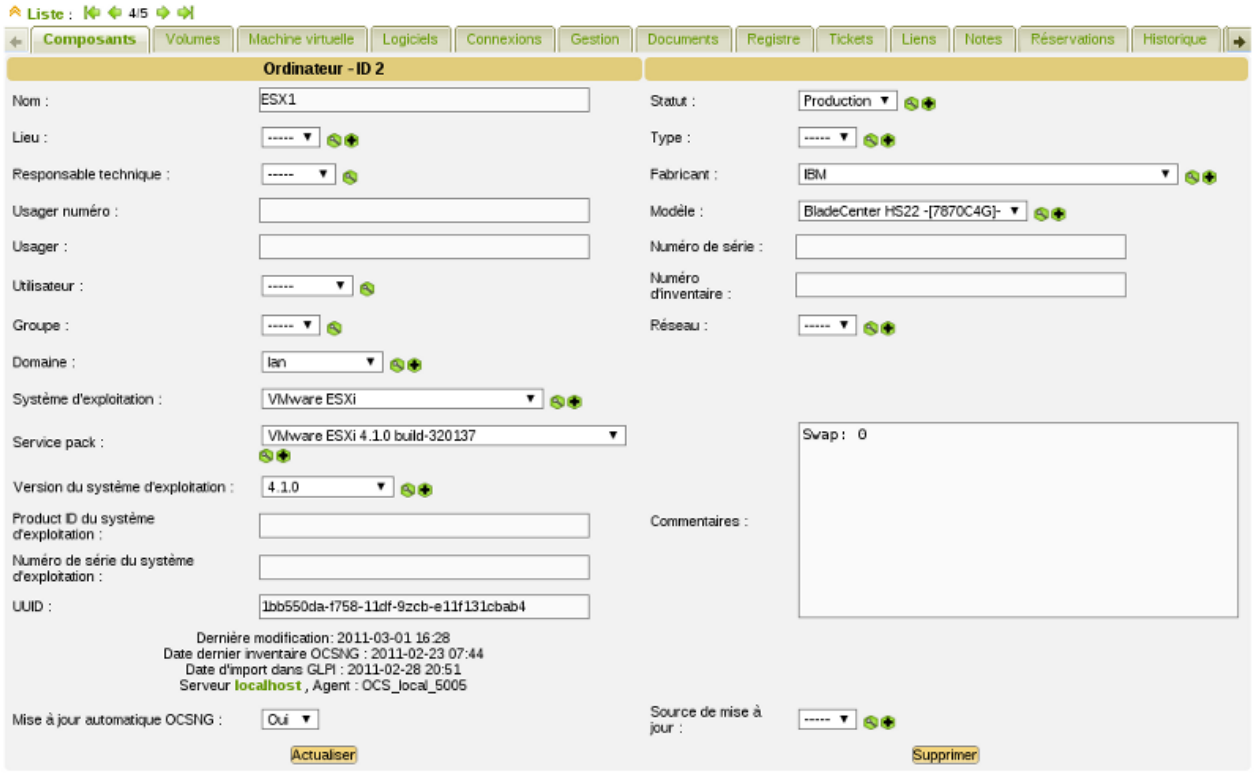


You can drive the ESX inventory directly from GLPI

- Create a credential
- Associate it to an vCenter/ESX/ESXi server
- Schedule the discovery

FUSION INVENTORY

ESX 1/2



FUSION INVENTORY

ESX 2/2

Composants

2	Processeur	Intel(R) Xeon(R) CPU X5570 @ 2.93GHz	Fréquence : 2933	MHz
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e58416c5a6176412d5471	Capacité : 302795194	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e57664c34564d446c6973	Capacité : 555176952	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e58416c5a494933384344	Capacité : 555176952	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e57664c344852752f4544	Capacité : 242262999	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e58416c5a2f594670426e	Capacité : 333104284	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e58416c5a564c32486271	Capacité : 555176952	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e57664c344f4e78475646	Capacité : 353271546	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e57664c342f5946526874	Capacité : 333104284	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e57664c3451796d4e2d30	Capacité : 508978790	Mio
1	Disque dur	/vmfs/devices/disks/naa.600508e000000000c17b9ea0cb164e0f	Capacité : 71999422	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e58416c5a2f55514f316f	Capacité : 333104284	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e57664c342f554c757247	Capacité : 333104284	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e57664c344851754e6631	Capacité : 353261060	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e57664c34485161545a4b	Capacité : 353261060	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e57664c342f59464a7035	Capacité : 333104284	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e57664c344852756c3068	Capacité : 242262999	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e58416c5a495058526c6d	Capacité : 353269449	Mio
1	Disque dur	/vmfs/devices/disks/naa.60a98000486e58416c5a485339614268	Capacité : 242262999	Mio

FUSION INVENTORY

Outline

FUSION INVENTORY

Inventory

The agent collects and send information

- System: DNS, IP, AntiVirus, users, serials, etc
- Hardware: CPUs, storage, etc
- Phone configuration: SIM card, IMEI, serial Android only
- And more

FUSION INVENTORY

Outline

FUSION INVENTORY

Perl: Why Perl?

A nice tool to do the job

- A lot of data processing
- Some complexe data structure to deal with
- Few low level access

Perl: Portability

A large collection of OSes supported

- Very few difference between UNIX like OSes
- Win32 differences remain low

Outline

FUSION INVENTORY

Some metric (1/2)

1,4 year ago

- 172 Perl modules
- 15910 lines
- 0 test

FUSION INVENTORY

Some metric (2/2)

Today

- 196 Perl modules (+11%)
- 24395 lines (+15%)
- 889 tests (+100%)

FUSION INVENTORY

Some metric (2/2)

Today

- 196 Perl modules (+11%)
- 24395 lines (+15%)
- **889 tests (+100%) We enjoy boring stuff!**

FUSION INVENTORY

Test-Suite, aka, the boring stuff we love

How to test untestable stuff to improve quality

- SSL certificat check for client: fire up a web server with SSL and run test
- various client / server protocol check
- ensure Win32 Modules build fine from an UNIX
- etc

What FusionInventory can bring to developers?

Different levels of integration

- Use directly the FusionInventory Modules
- Call and interact with the agent
- Build your solution on top of GLPI using webservices

What FusionInventory can bring to me?

Improve the solution

- Create your own “input modules” to extend inventory
- Reuse and improve the SNMP models
- Add new task to the agent
- ...

FUSION INVENTORY

Outline

FUSION INVENTORY

What else?

FUSION INVENTORY

Our roadmap

What we are about to release

- FusionInventory Agent 2.2.x
- Software deployment

Work in progress

- OCS/XML $\rightarrow$ REST/JSON transition

FUSION INVENTORY

Why JSON (1/2)

```
GET http://srv/?action=getConfig&machineid=foobar
{
    "httpd" : {
        "ip" : "0.0.0.0",
        "trust" : (
            "127.0.0.1"
        ),
        "port" : 62354
    }
}
```

FUSION INVENTORY

Why JSON (2/2)

REST/JSON benefit!

- Way simpler
- Already a standard in the IT management world
  Puppet, OPSI, etc
- Very small CPU/memory footprint
- REST is easier to debug
- REST is test-suite friendly using Test::HTTP::Server::Simple

FUSION INVENTORY

Outline

FUSION INVENTORY

Questions?

Question?

FUSION INVENTORY

Outline

FUSION INVENTORY

The inventory content

This section presents information collected in FusionInventory inventory.

Inventory: Generic machine information (1/3)

USERID	The current user list, '/' is the delimiter. This field is deprecated, you should use the USERS section instead.
OSNAME	
OSVERSION	
OSCOMMENTS	Service Pack on Windows, kernel build date on Linux
NAME	
SWAP	The swap space in MB.

FUSION INVENTORY

Inventory: Generic machine information (2/3)

IPADDR

WORKGROUP

DESCRIPTION Computer description (Windows only so far)

MEMORY Total system memory in MB

UUID

DNS

LASTLOGGEDUSER The login of the last logged user.

USERDOMAIN This field is deprecated, you should use the USERS section instead.

DATELASTLOGGEDUSER

FUSION INVENTORY

Inventory: Generic machine information (3/3)

DEFAULTGATEWAY

VMSYSTEM The virtualization technologie used if the machine is a virtual machine. Can by: Physical: (default) Xen VirtualBox Virtual Machine: Generic if it's not possible to correctly identify the solution VMware: ESX, ESXi, server, etc QEMU SolarisZone VServer OpenVZ BSDJail Parallels Hyper-V

WINOWNER

WINPRODID

WINPRODKEY

WINCOMPANY

WINLANG Language code of the Windows

CHASSIS_TYPE The computer chassis format (e.g: Notebook, Laptop, Server, etc)

FUSION INVENTORY

Inventory: BIOS

SMODEL System model

SMANUFACTURER System manufacturer

SSN System Serial number

BDATE BIOS release date

BVERSION The BIOS revision

BMANUFACTURER BIOS manufacturer

MMANUFACTURER Motherboard Manufacturer

MSN Motherboard Serial

MMODEL Motherboard model

ASSETTAG

ENCLOSURESERIAL

BASEBOARDSERIAL

BIOSSERIAL The optional asset tag for this machine.

FUSION INVENTORY

Inventory: PCI cards

DRIVER

NAME The device name, the on from the PCIIDs DB

MANUFACTURER The manifacturer name, the on from the PCIIDs DB

PCICLASS The PCI class ID

PCIID The PCI ID, e.g: 8086:2a40 (only for PCI device)

PCISUBSYSTEMID The PCI subsystem ID, e.g: 8086:2a40 (only for PCI device)

PCISLOT The PCI slot, e.g: 00:02.1 (only for PCI device)

TYPE The controller revision, e.g: rev 02. This field may be renamed in the future.

REV Revision of the device in the XX format (e.g: 04)

FUSION INVENTORY

Inventory: Memories

DESCRIPTION

FORMFACTOR Only available on Windows, See Win32_PhysicalMemory documentation on MSDN.

PURPOSE Only avalaible on Windows, See Win32_PhysicalMemory documentation on MSDN.

SPEED In Mhz, e.g: 800

TYPE

NUMSLOTS Eg. 2, start at 1, not 0

SERIALNUMBER

Inventory: CPUs

CACHESIZE	The total CPU cache size in KB. e.g: 3072
CORE	Number of core.
DESCRIPTION	
MANUFACTURER	AMD/Intel/Transmeta/Cyrix/VIA
NAME	The name of the CPU, e.g: Intel(R) Core(TM)2 Duo CPU P8600 @ 2.40GHz
THREAD	Number of thread per core.
SERIAL	Serial number
SPEED	Frequency in MHz
ID	The CPU ID: `http://en.wikipedia.org/wiki/CPUID`

Inventory: Filesystems

CREATEDATE Date of creation of the filesystem in DD/MM/YYYY format.

DESCRIPTION

FREE Free space (MB)

FILESYSTEM File system name. e.g: ext3

LABEL Name of the partition given by the user.

LETTER Windows driver letter. Windows only

SERIAL Partition serial number or UUID

SYSTEMDRIVE Boolean. Is this the system partition?

TOTAL Total space available (MB)

TYPE The mount point on UNIX.

VOLUMN System name of the partition (e.g: /dev/sda1 or server:/directory for NFS)

FUSION INVENTORY

Inventory: Storage devices

DESCRIPTION The long name of the device displayed to the user.

DISKSIZE The disk size in MB.

INTERFACE INTERFACE can be SCSI/HDC/IDE/USB/1394/Serial-ATA/SAS or empty if unknown

MANUFACTURER

MODEL The commercial name of the device

NAME The name of the device as seen by the system.

TYPE The kind of device. There is no standard for the format of the string in this field.

SERIAL The harddrive serial number

FIRMWARE Firmware version

SCSI COID, CHID, UNID and LUN

WWN World Wide Name `http://fr.wikipedia.org/wiki/World_Wide_Name`

Inventory: Softwares

NAME	
COMMENTS	
FILESIZE	
PUBLISHER	
FOLDER	
FROM	Where the information about the software came from, can be: registry, rpm, deb, etc
INSTALLDATE	Installation day in DD/MM/YYYY format. Windows only.
NO_REMOVE	Can the software be removed.
RELEASE_TYPE	Windows only for now, come from the registry
UNINSTALL_STRING	Windows only, come from the registry
URL_INFO_ABOUT	
VERSION	
IS64BIT	If the software is in 32 or 64bit, (1/0)
GUID	Windows software GUID

FUSION INVENTORY

Inventory: Virtual machines

MEMORY	Memory size, in MB.
NAME	The name of the virtual machine.
UUID	
STATUS	The VM status: running, idle, paused, shutdown, crashed, dying, off
SUBSYSTEM	The virtualisation software. E.g: VmWare ESX
VMTYPE	The name of the virtualisation system family. The same type found is HARDWARE/VMSYSTEM
VCPU	Number of CPU affected to the virtual machine
VMID	The ID of virtual machine in the virtual managment system.
MAC	The list of the MAC addresses of the virtual machine. The c is '/'. e.g: 00:23:18:91:db:8d/00:23:57:31:sb:8e
COMMENT	a comment
OWNER	

FUSION INVENTORY

Inventory: Network configuration (1/2)

A network configuration.

DESCRIPTION The name of the interface as seen in the OS settings, e.g: eth0 (Linux) or AMD PCNET Family Ethernet Adapter (Windows)

DRIVER The name of the driver used by the network interface

IPADDRESS

IPDHCP The IP address of the DHCP server (optional).

IPGATEWAY

IPMASK

IPSUBNET

FUSION INVENTORY

Inventory: Network configuration (2/2)

MACADDR	
MTU	
PCISLOT	The PCI slot name.
STATUS	Up or Down
TYPE	Interface type: Ethernet, Wifi
VIRTUALDEV	If the interface exist or not (1 or empty)
SLAVES	Bonded interfaces list in the eth0/eth1/eth2 format (/ is the separator).
MANAGEMENT	Whether or not it is a HP iLO, Sun SC, HP MP or other kind of Remote Management Interface
SPEED	Interface speed in Mb/s
BSSID	Wifi only, Access point MAC Address
SSID	Wifi only, Access point name

FUSION INVENTORY

Inventory: And also

- Logged users
- Battery
- Printer (with serial)
- LVM configuration (Linux, AIX $\geq$ 2.1.10)
- Screen and Video card
- USB devices
- Running processes
- Environment variables
- Port
- Slot
- Sound card
- Modem

FUSION INVENTORY

Thanks

Thanks!

- Windows `http://www.flickr.com/photos/aeu04117/430338509/sizes/z/in/photostream/`
- AIX `http://www.flickr.com/photos/pchow98/5115638572/`
- MacOSX `http://www.flickr.com/photos/adriannier/5555516312/sizes/l/in/photostream/`
- Cisco 6500 `http://www.flickr.com/photos/joachim_s_mueller/3084164647/sizes/z/in/photostream/`
- Teletubbies `http://www.flickr.com/photos/tudor/232849285/lightbox/`