

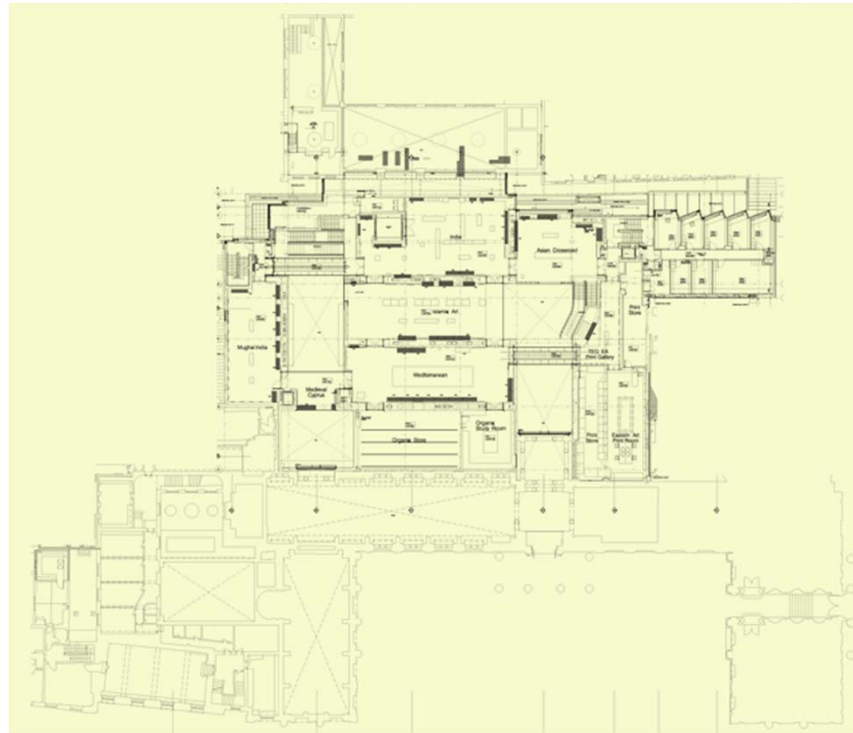
ASHMOLEAN

MUSEUM OF ART AND ARCHAEOLOGY UNIVERSITY OF OXFORD



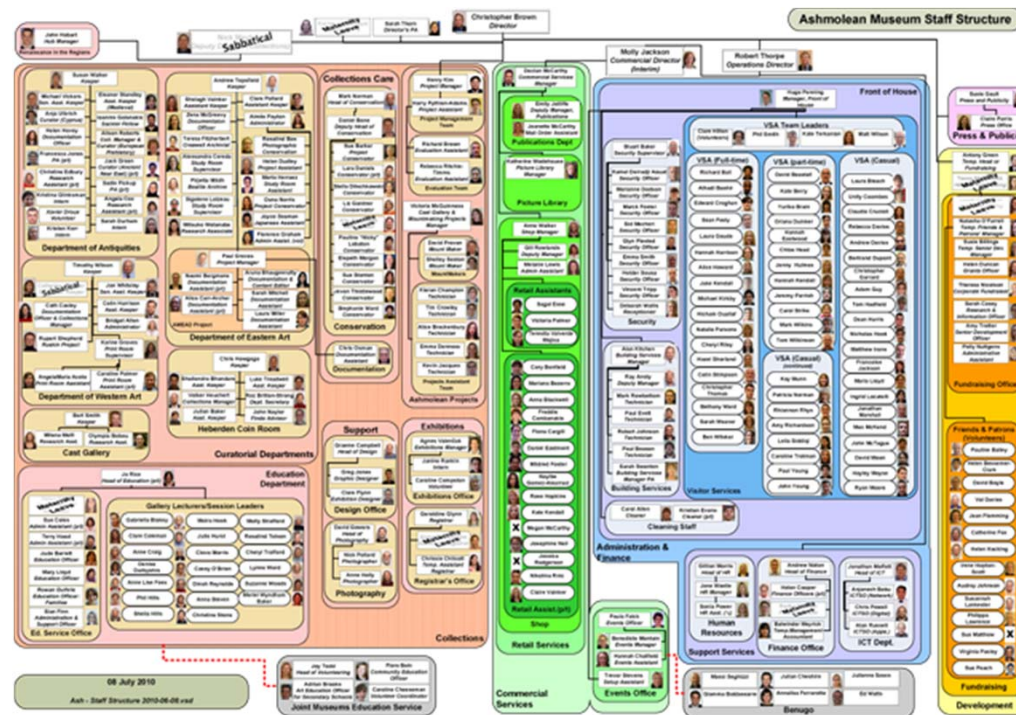
Some Background Information: Building

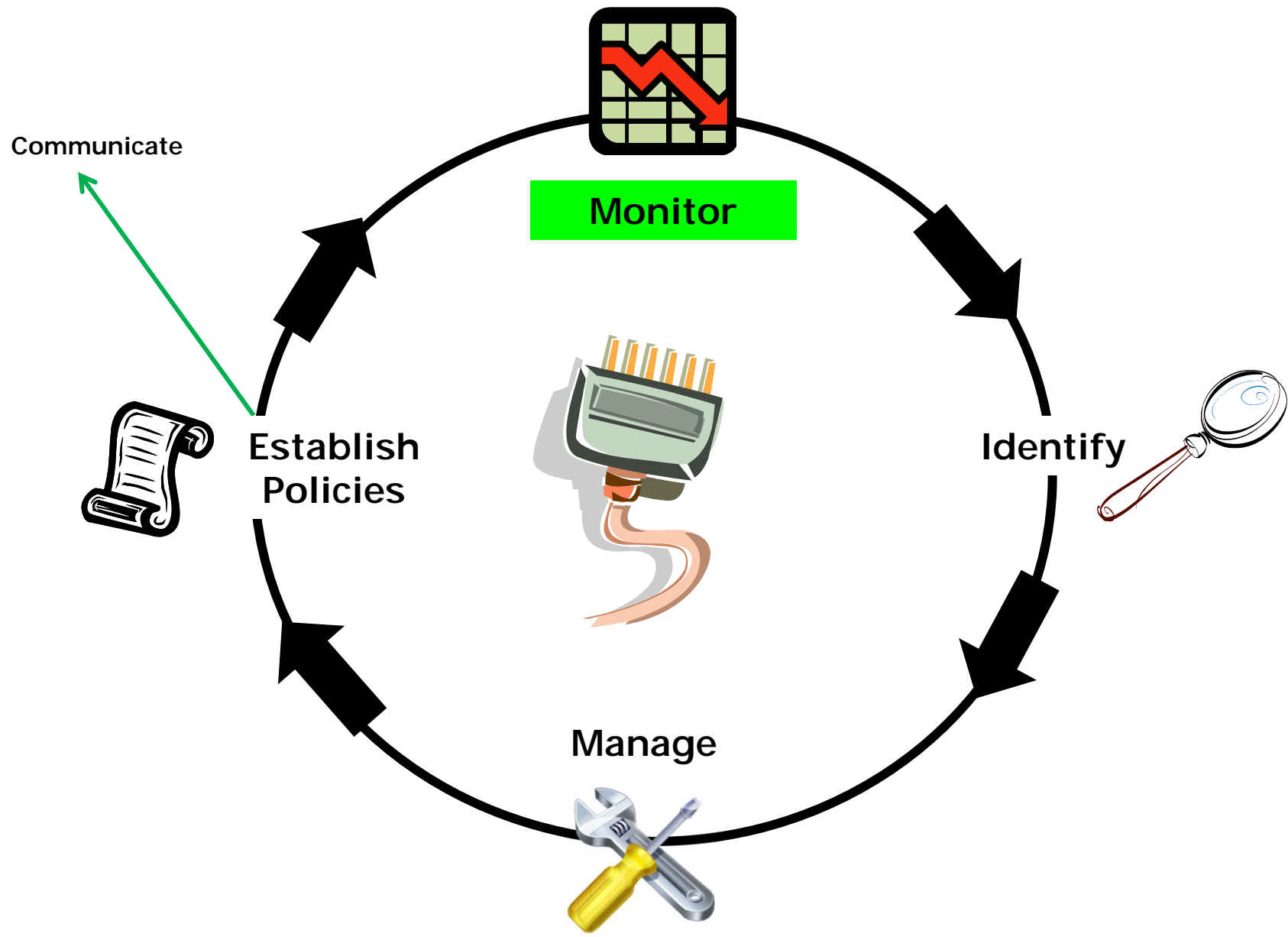
- No. of Public Galleries: 67
- No. of Offices/Labs/Work Areas: 82
- No. of Stores: 25



More Background Information: Human Resources

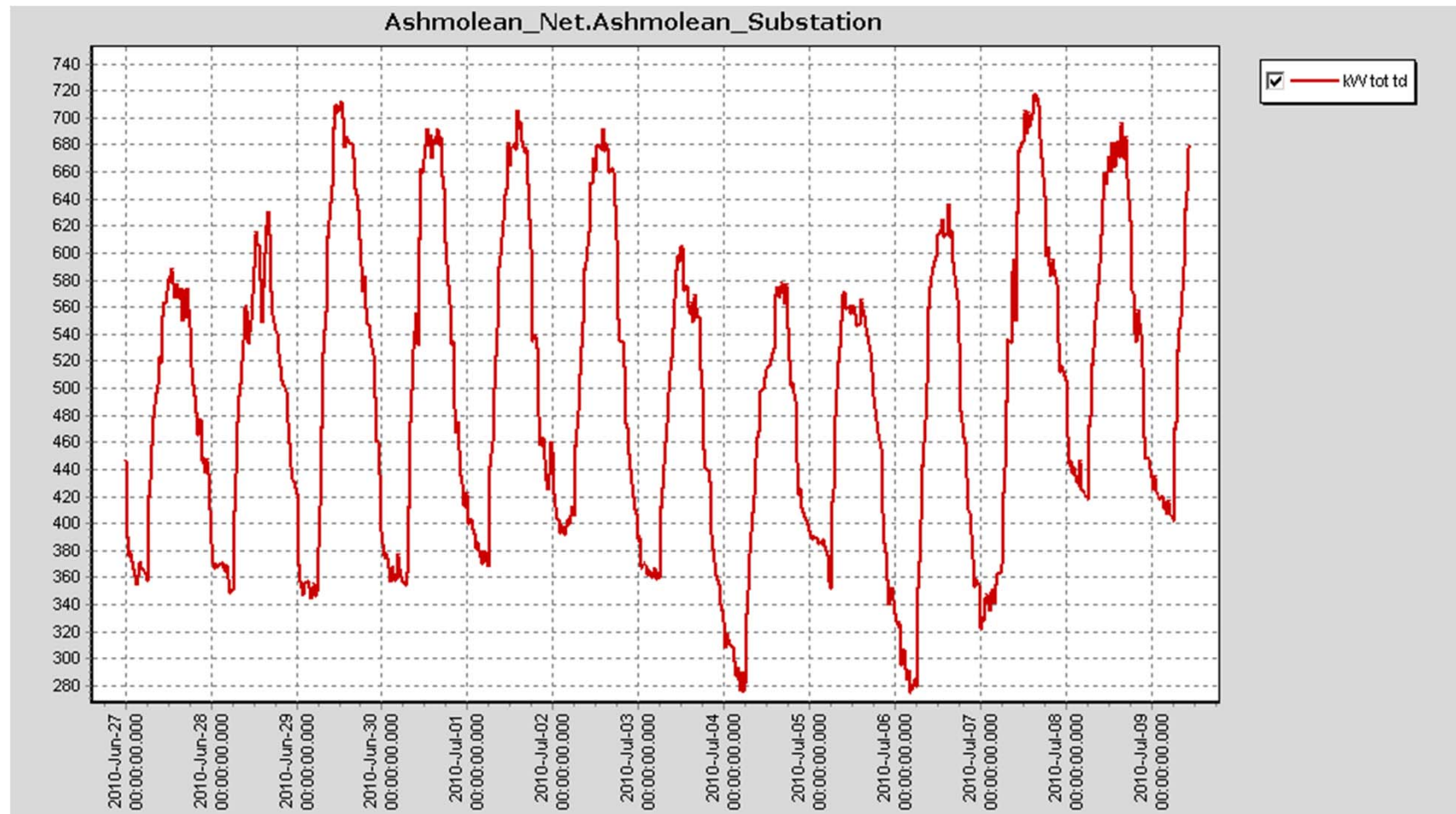
- Full-time Staff: 169
- Part-time Staff: 86 (includes VSAs)
- Volunteers & Interns: 26 (varies)



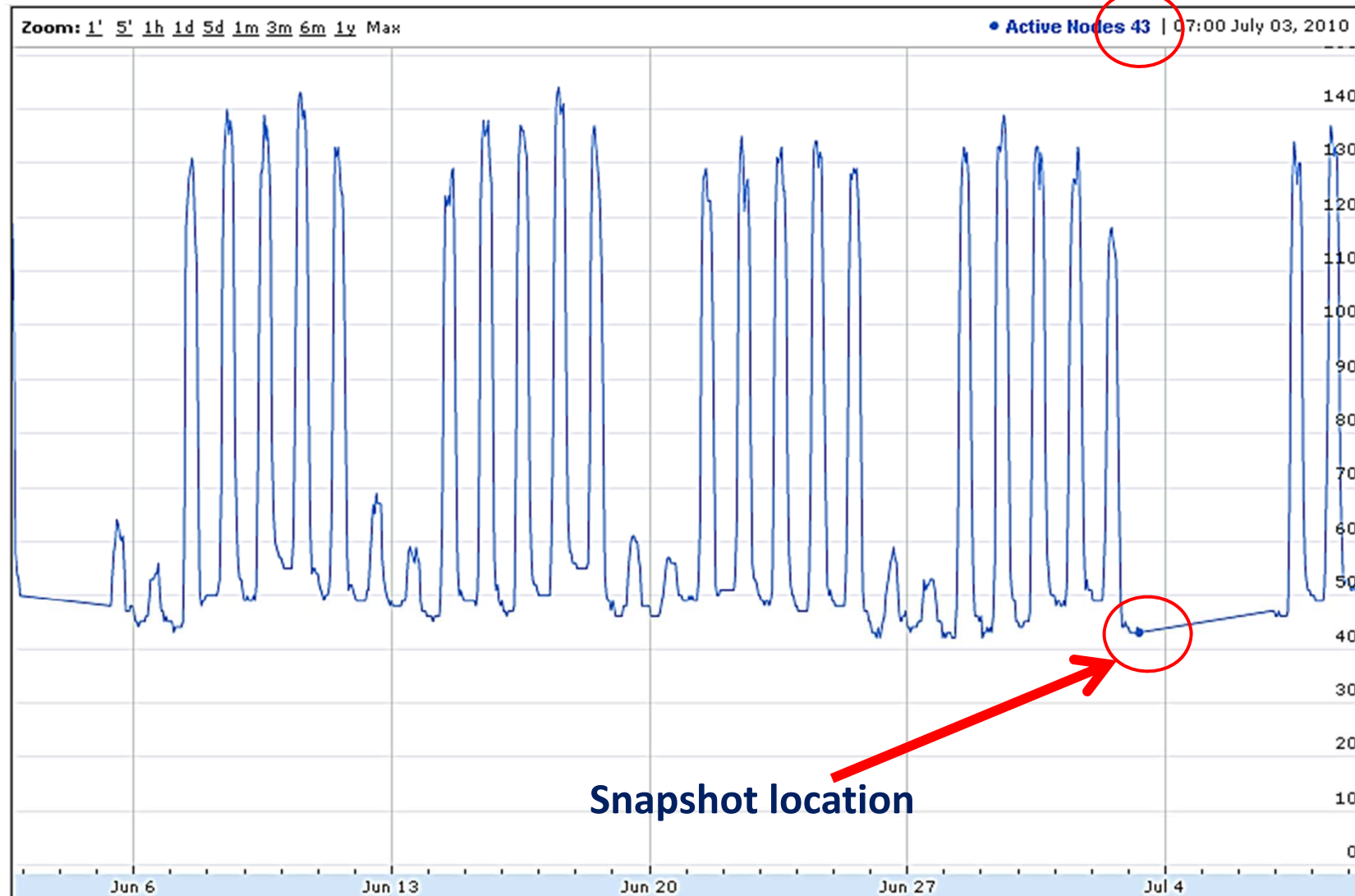


OUED Electricity Meters feed

<http://ionenterprise1.survey.ox.ac.uk/ion/>

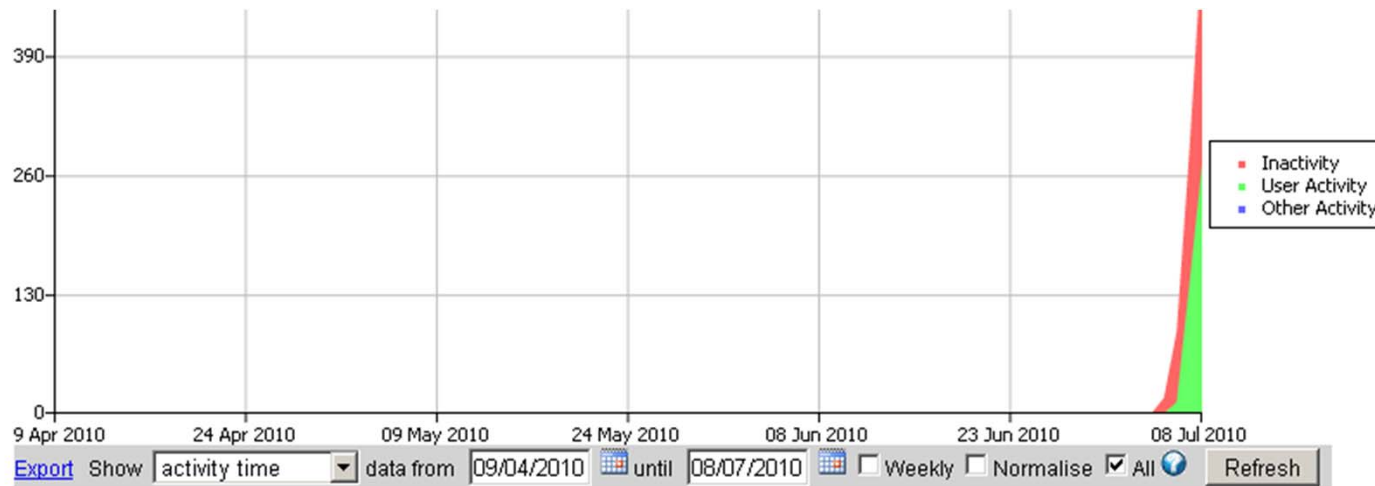


Oxford Monitoring Service



Datasynergy : Powerman

<http://www.datasynergy.co.uk/>



Computers

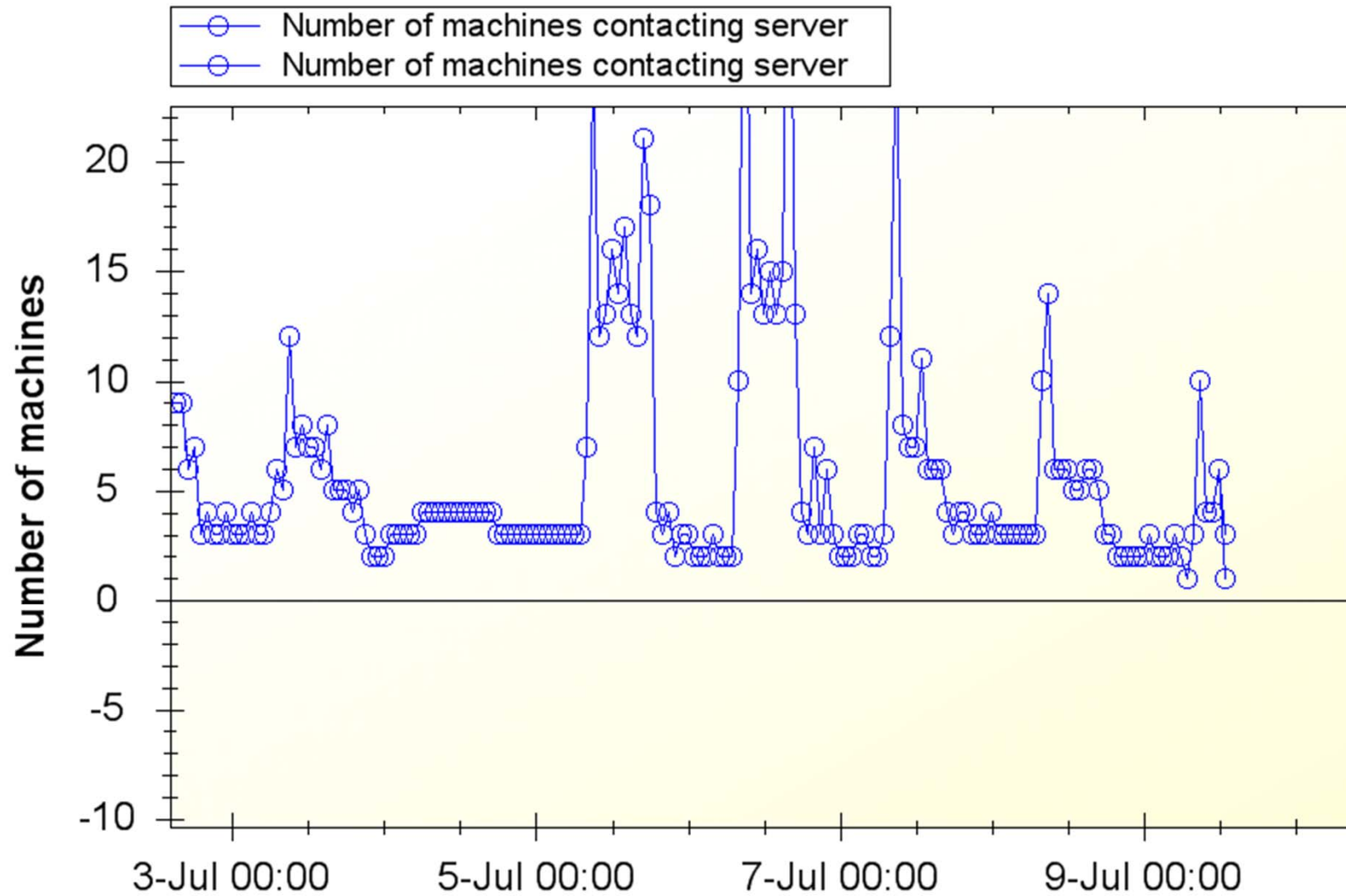
	Version	Last Status	Inactive %	Inactive Hours	Active Hours	Inactive	User Active	Other Active
ASHMVXP2	5.1.3.3597	08/07/2010	98.41	77.50	1.25			
ASHMVXP3	5.1.3.3597	08/07/2010	96.73	66.50	2.25			
ASHMVM4	5.1.3.3597	08/07/2010	94.07	59.50	3.75			
ASHMFH226	5.1.3.3597	08/07/2010	89.54	34.25	4.00			
ASHMVM5	5.1.3.3597	06/07/2010	98.36	30.00	0.50			
ASHMRE30	5.1.3.3597	08/07/2010	75.51	27.75	9.00			
ASHMFI185	5.1.3.3597	08/07/2010	81.95	27.25	6.00			
ASHMCO28	5.1.3.3597	08/07/2010	68.25	10.75	5.00			
ASHMFI32	5.1.3.3597	08/07/2010	58.06	9.00	6.50			
ASHMEA145	5.1.3.3597	08/07/2010	62.50	8.75	5.25			

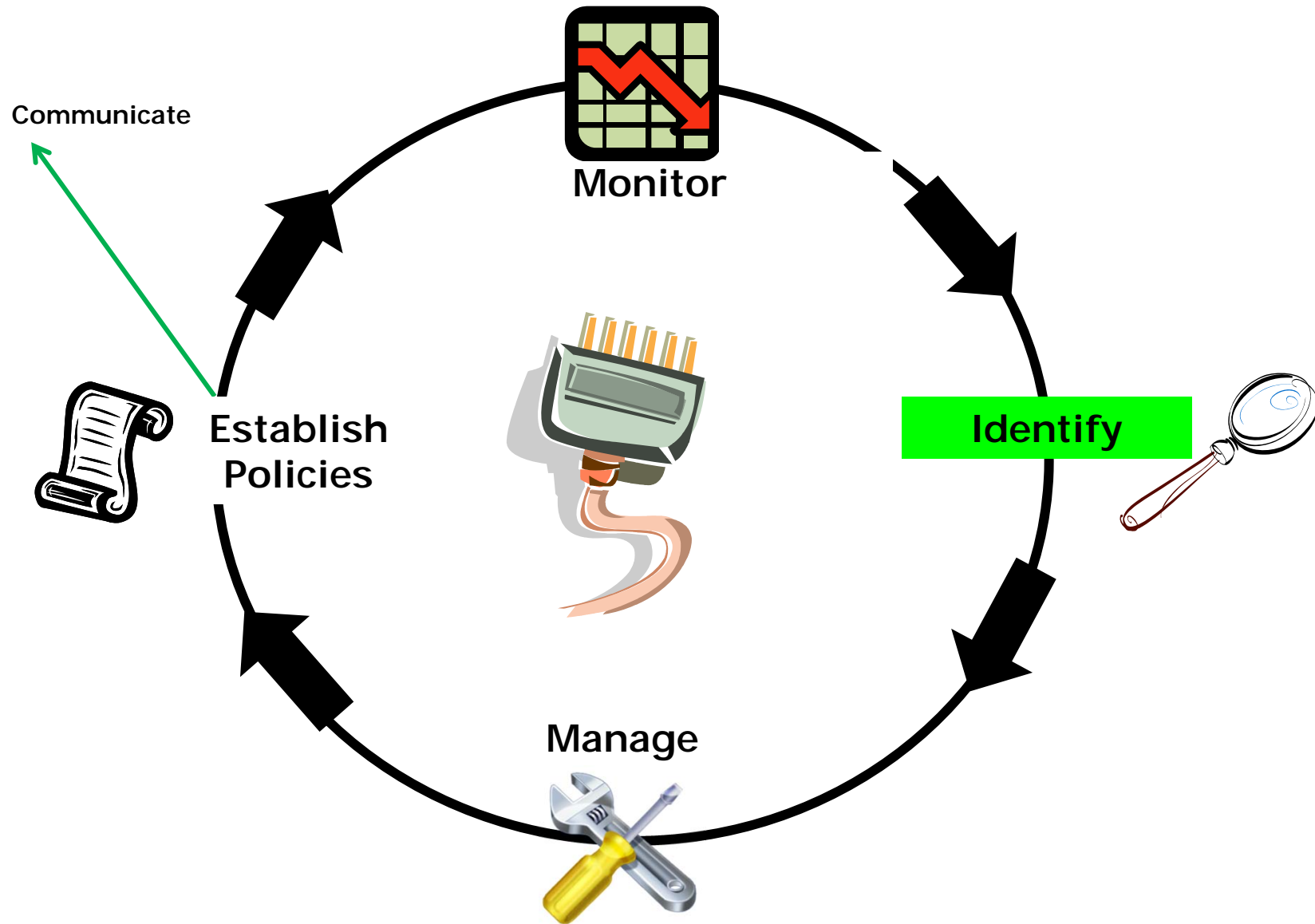
Export Show best 10 computers from 01/07/2010 until 08/07/2010 Refresh

Inactive while on

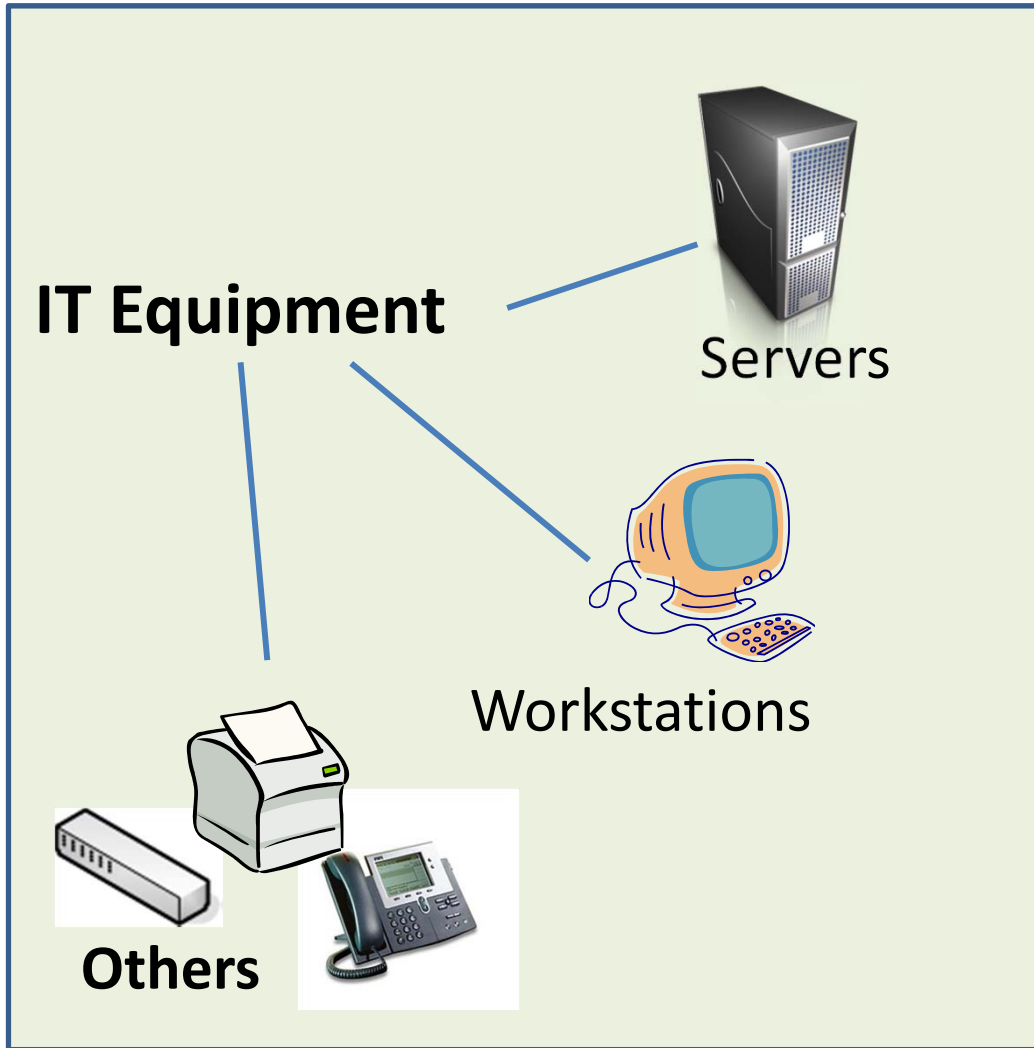
Active

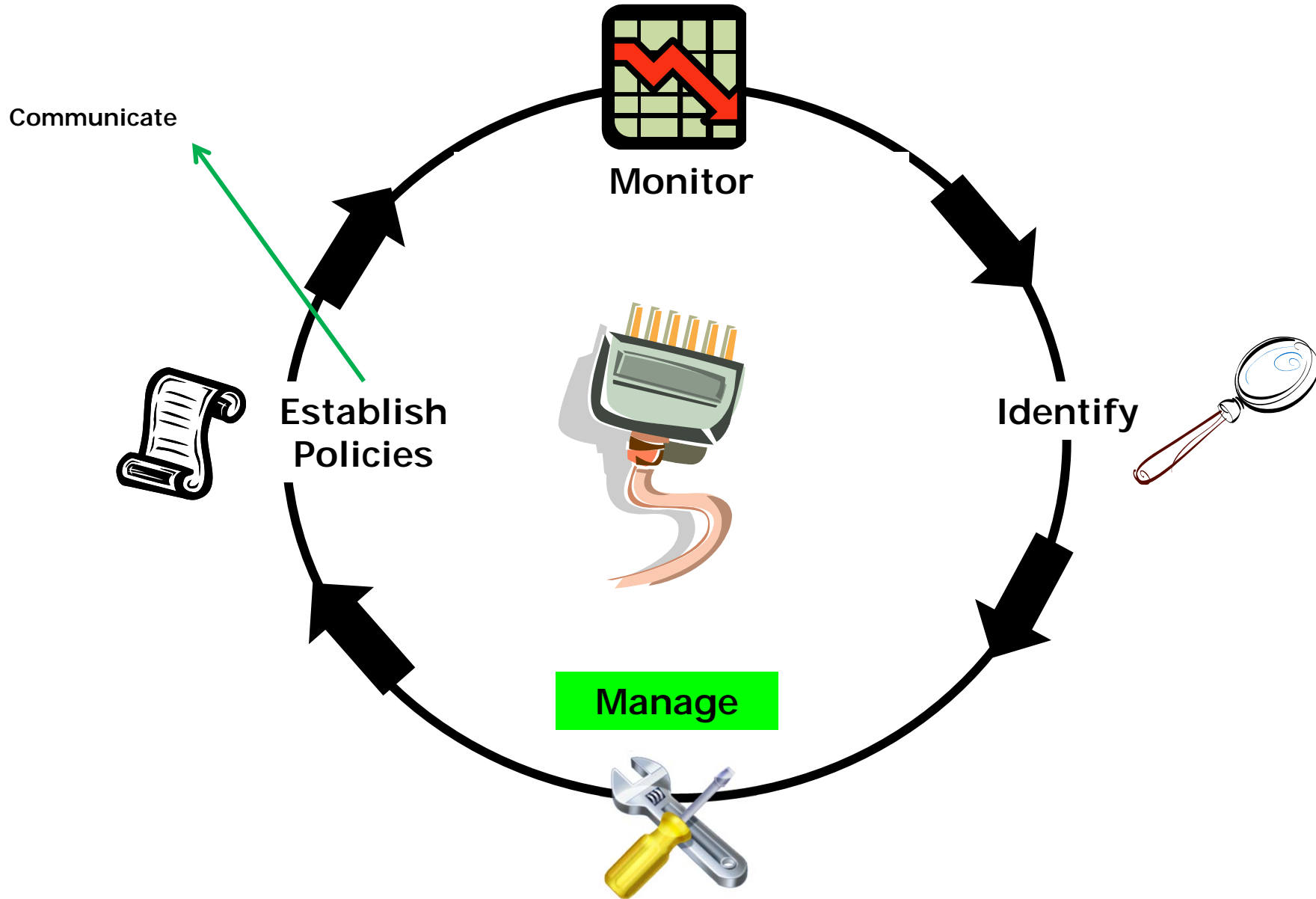
PC Powerdown monitor





Identify





Manage : Workstations



OUCS, OeRC, OUCE & OUED

Power management monitoring (PMM) and Wake on LAN (WOL)

- User driven wake up on demand
- Group Wake up
- Easy Administration
- Client less
- Excellent Support

<http://www.oucs.ox.ac.uk/greenit/wol.xml>

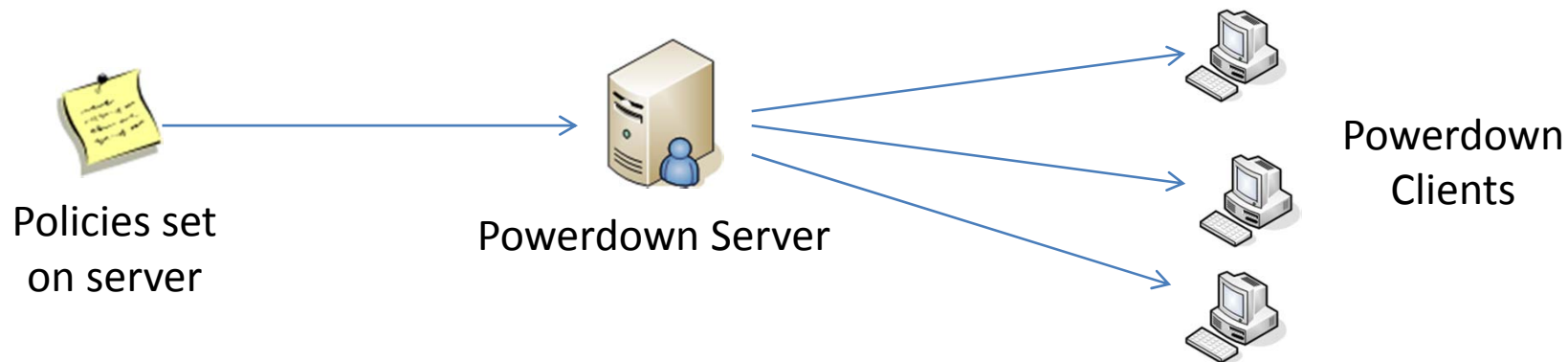
Manage : Workstations



PC Powerdown

Powerdown Server and Monitor

- Modular plugin Application
- Client – Server based deployment
- Group Shutdown management



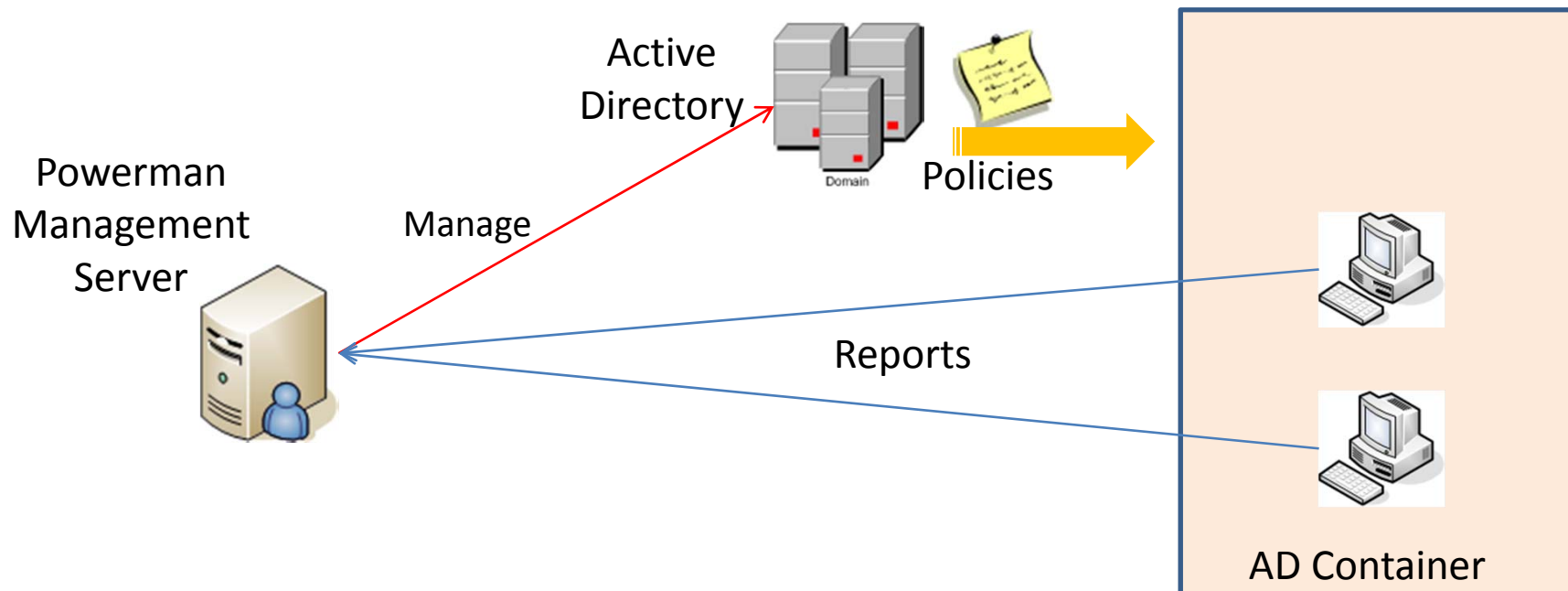
Manage : Workstations

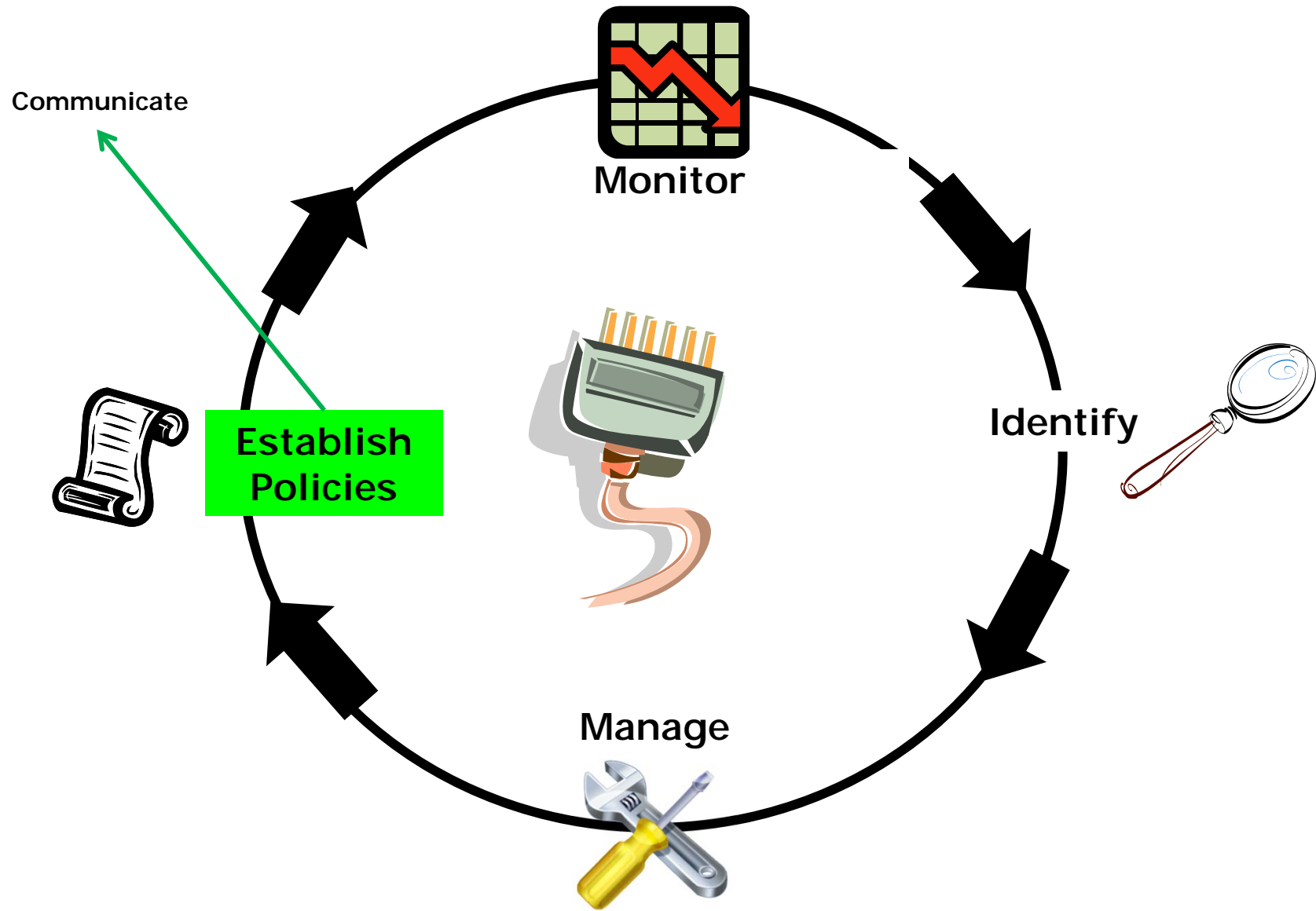


Datasynergy Systems

Powerman 5 Power Manager

- Activity Based Monitoring
- Easy Group Policy based configuration
- Client – Server application







Establish Policies

Infrastructure services

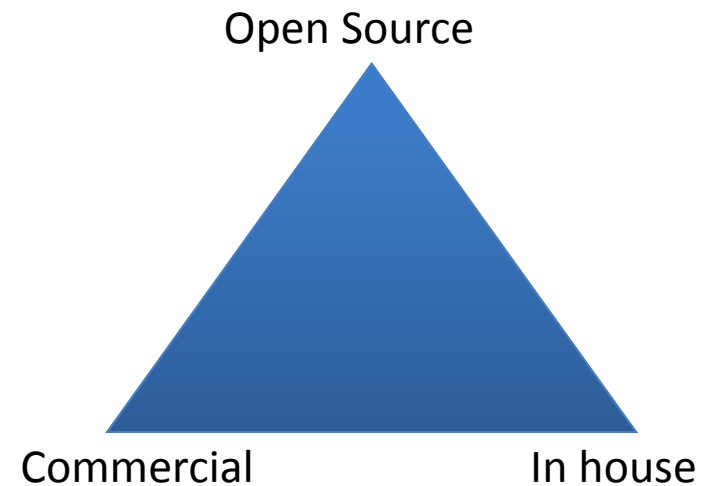
- Citrix based server virtualisation
- Storage virtualisation and consolidation

Desktop policies

- Hibernate when inactive
- Promote remote working
- Tie in remote working with OUCS WOL
- Virtual desktop delivery
- Reuse low spec computers
- Printer consolidation and management

The Future

- User education
- Shared knowledge and initiative
- Increase and consolidate server virtualisation
- Aim for the best of all worlds
- Reduce our Monthly Energy Bill (£15,000)



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Two Warnings

1. *Manage Expectations!*

- Reduce our Energy Bill (£15,000pm)
- ICT contribution: <<10% probably <£800pm
- Potential “Saving”: “only” £200pm (<2%)

2. *Beware of “Responsibility Creep”*

- What is consuming the power?
- Just because it is “controlled” by a computer does not mean it’s an IT Problem!

Ashmolean Contacts:

- Jonathan.moffett@ashmus.ox.ac.uk
 (“management/policy stuff”)
- Anjanesh.babu@ashmus.ox.ac.uk
 (“technical/really useful stuff”)

Useful Contacts:

- Data Synergy (PowerMan):
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<http://www.datasynergy.co.uk/>
- OUCS Green Team:
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<http://www.oucs.ox.ac.uk/greenit/>
- OUED Online:
philip.pike@oued.ox.ac.uk
<http://ionenterprise1/ion/>
- Qubic Group plc (PC Power Down):
Luke.Norris@pcpowerdown.com
<http://www.pcpowerdown.com/>