

System Center e o "Cliente Verde"



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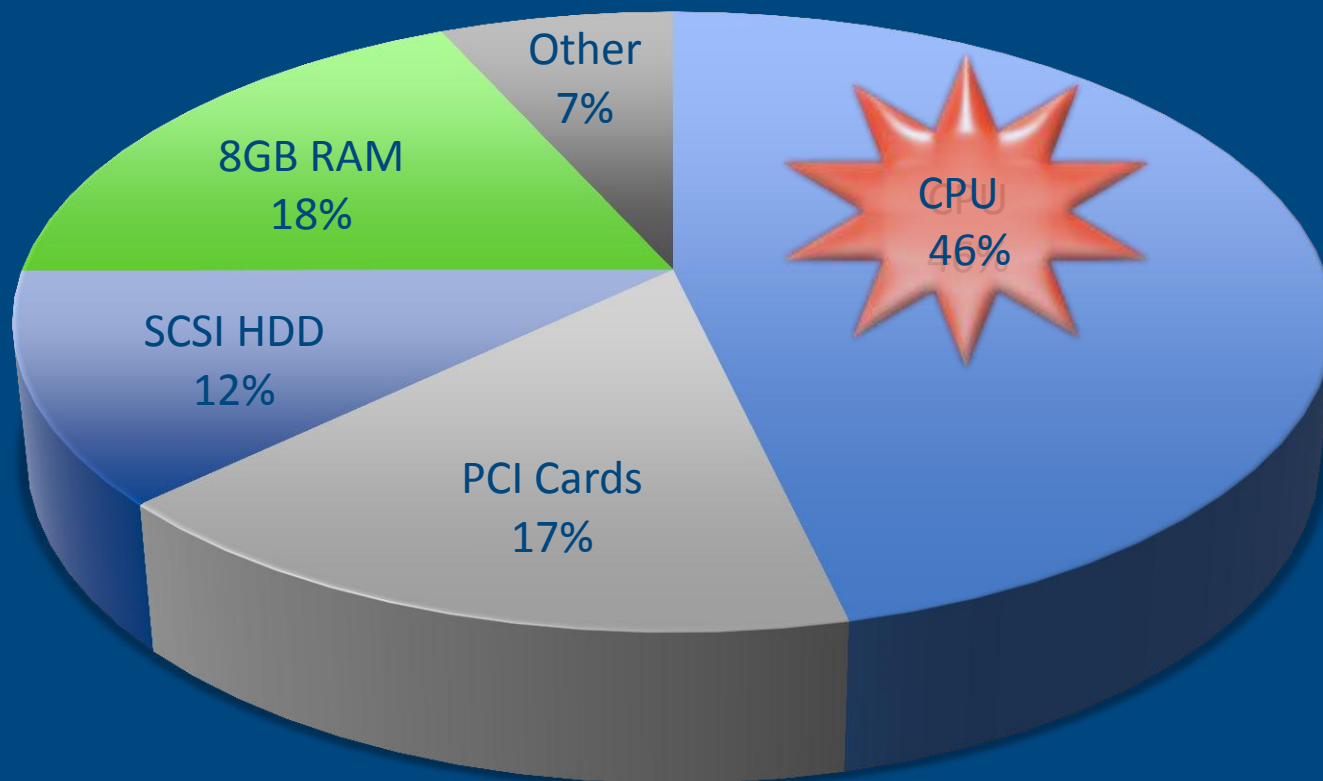
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Agenda

- Consumo de Energia das Estações
- Recursos Nativos do Windows
- Gerenciamento de Energia por GPO
- Gerenciamento de Energia pelo SCCM 2007 R3
 - DEMO Power Manager
- Wake On Lan
 - DEMO Wake On Lan
- Offline VM Servicing VM Tool 3.0

Consumo de Energia no Computador



Gerenciar a energia do processador representa a melhor oportunidade HOJE

Fonte: Intel Server Products Power Budget Analysis Tool

<http://www.intel.com/support/motherboards/server/sb/cs-016976.htm>

Redução de Custo de Energia - PC's

1 monitor 15" LCD Widescreen – 60hz 1440x900

(brilho 90% - contraste 90%) = 18W

(brilho 75% - contraste 90%) = 16W

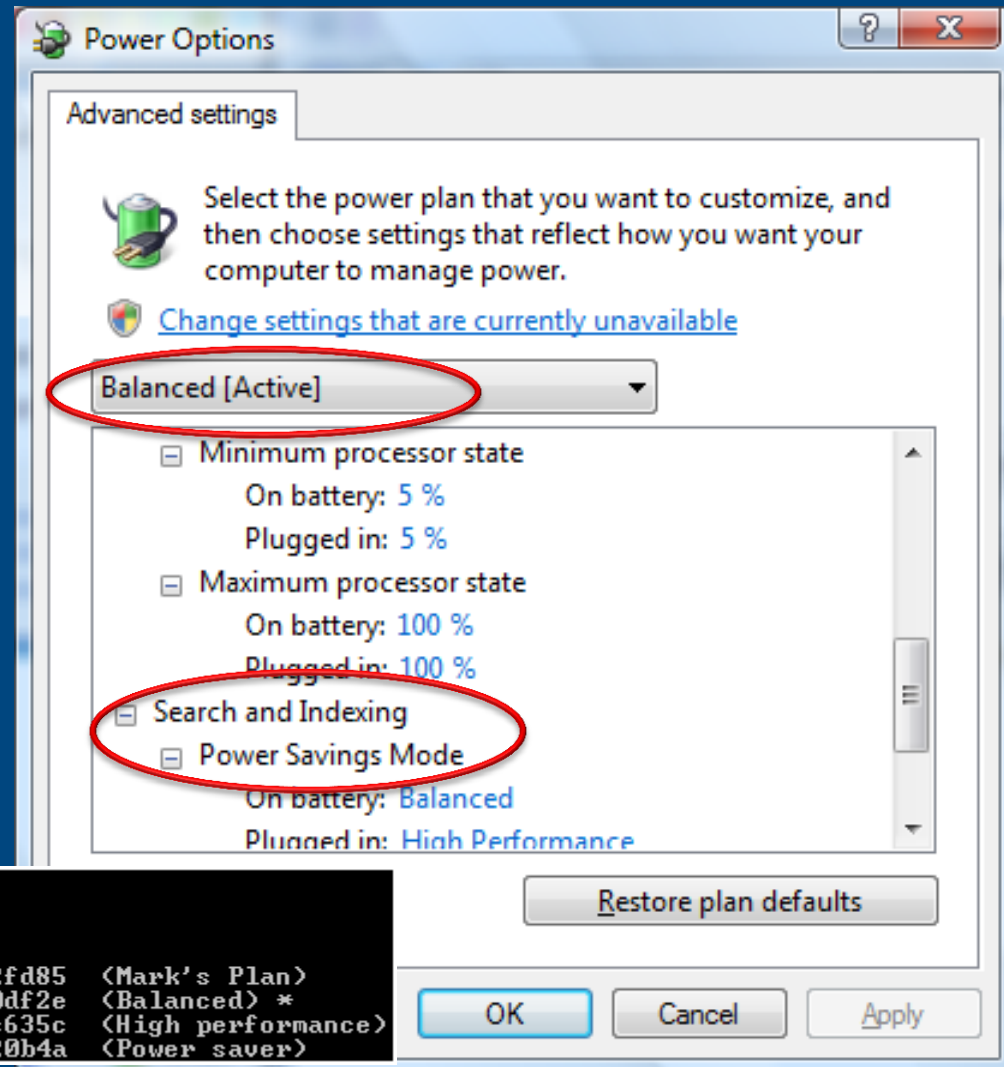
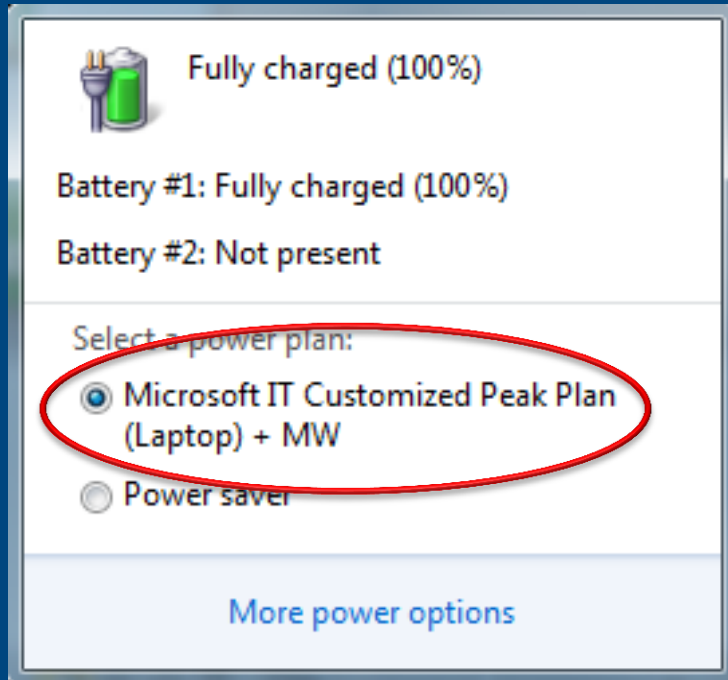
Screen-Saver c/ animação = 18W

(Gerenciamento de energia – Turn-off display = 0,9W

(Intervenção manual – Turn-off display = 0W

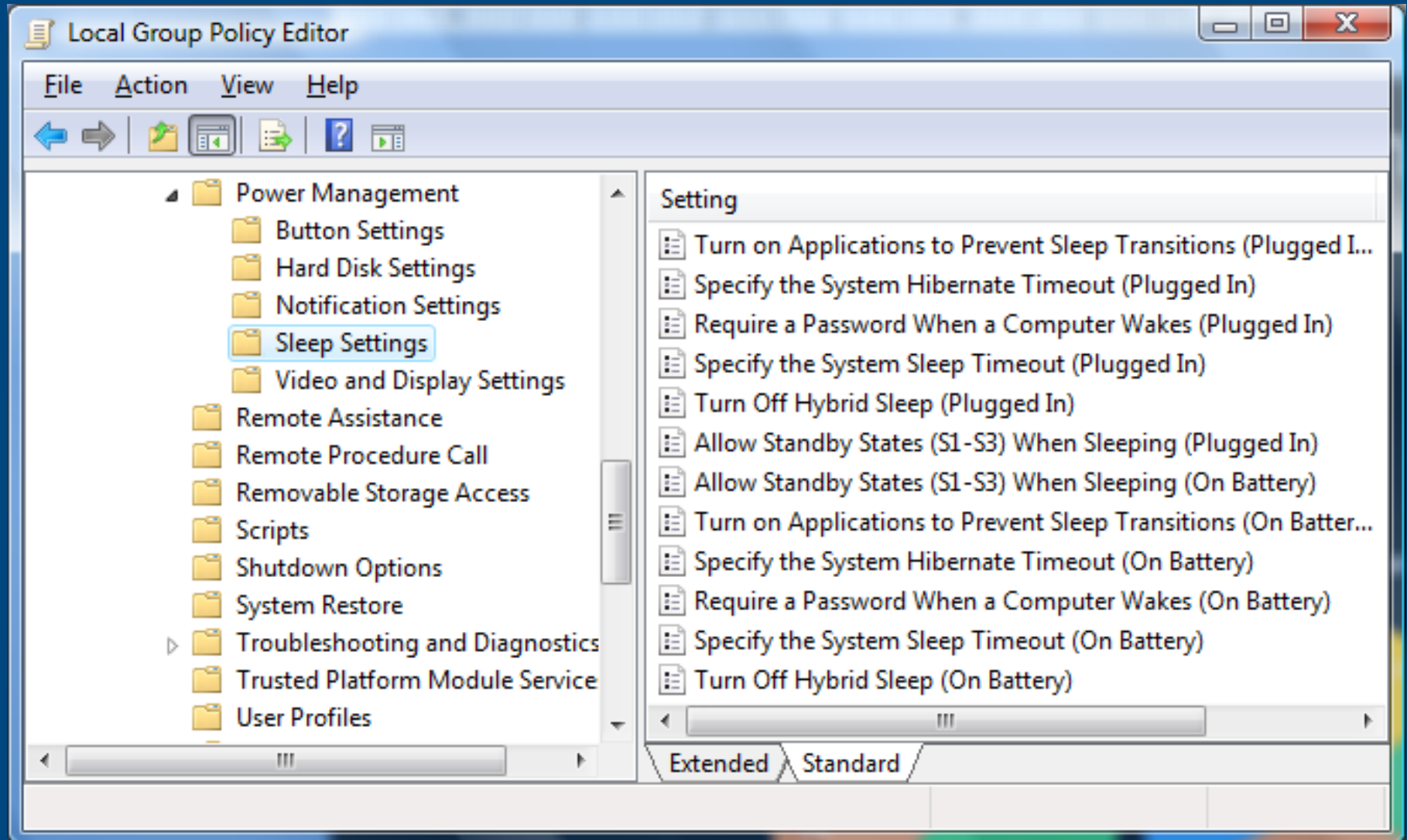
Power draw in kWh	Power draw / year (idle)	Power draw / year (sleep)	Savings per year (sleep vs idle)
P4 with CRT	791.56	31.42	760.14
P4 with LCD	632.02	34.5	597.52

Gerenciamento de Energia do Windows

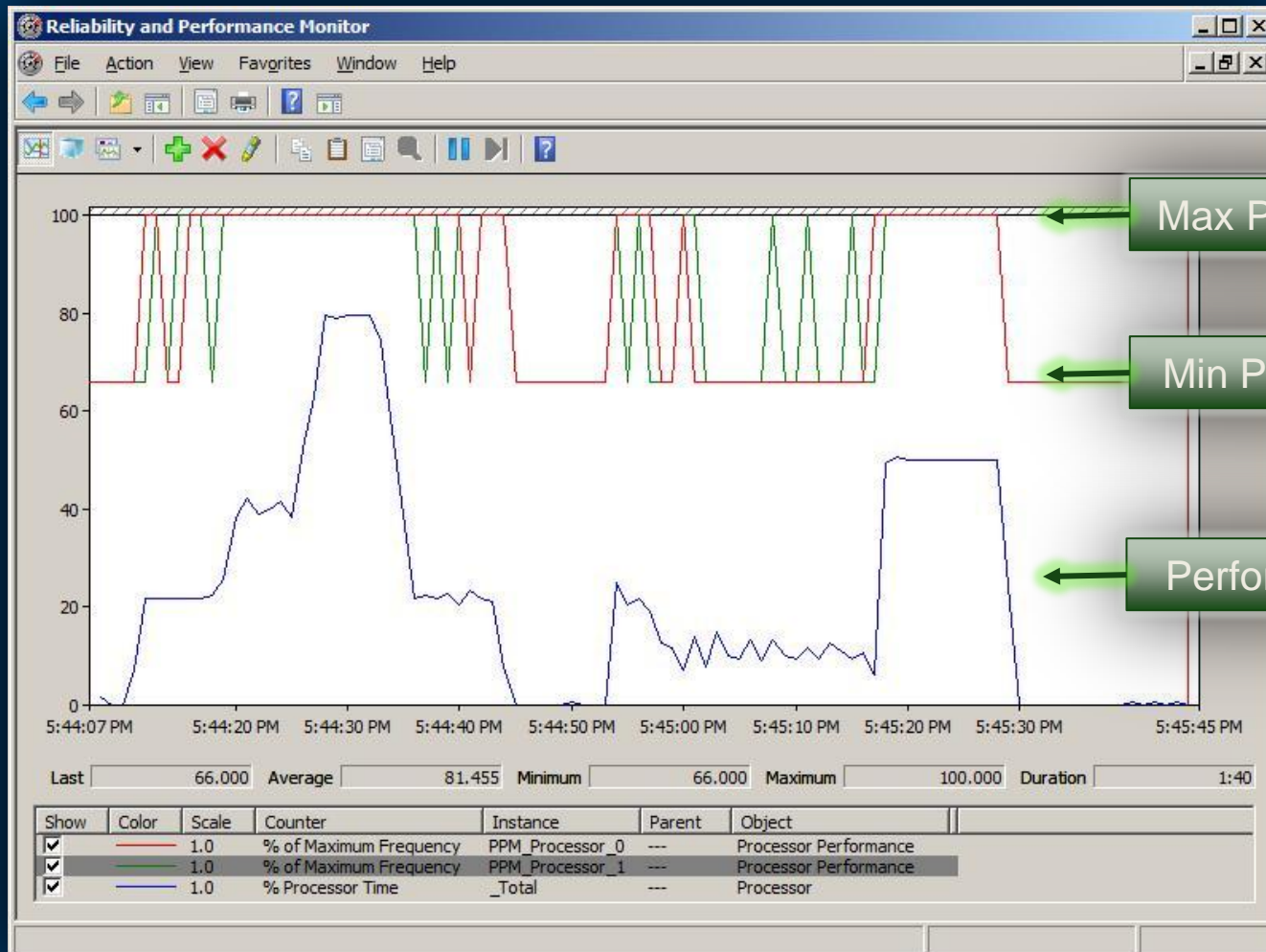


```
C:\Windows\system32>powercfg -list
Existing Power Schemes (* Active)
Power Scheme GUID: 194fb587-7a51-499f-a868-01d34002fd85 <Mark's Plan>
Power Scheme GUID: 381b4222-f694-41f0-9685-ff5bb260df2e <Balanced> *
Power Scheme GUID: 8c5e7fda-e8bf-4a96-9a85-a6e23a8c635c <High performance>
Power Scheme GUID: a1841308-3541-4fab-bc81-f71556f20b4a <Power saver>
```

Gerenciamento de Energia Centralizado - GPO



Voce pode "visualizar" os estados no Perfmon



System Center Configuration Manager 2007 R3

System Center Power Manager

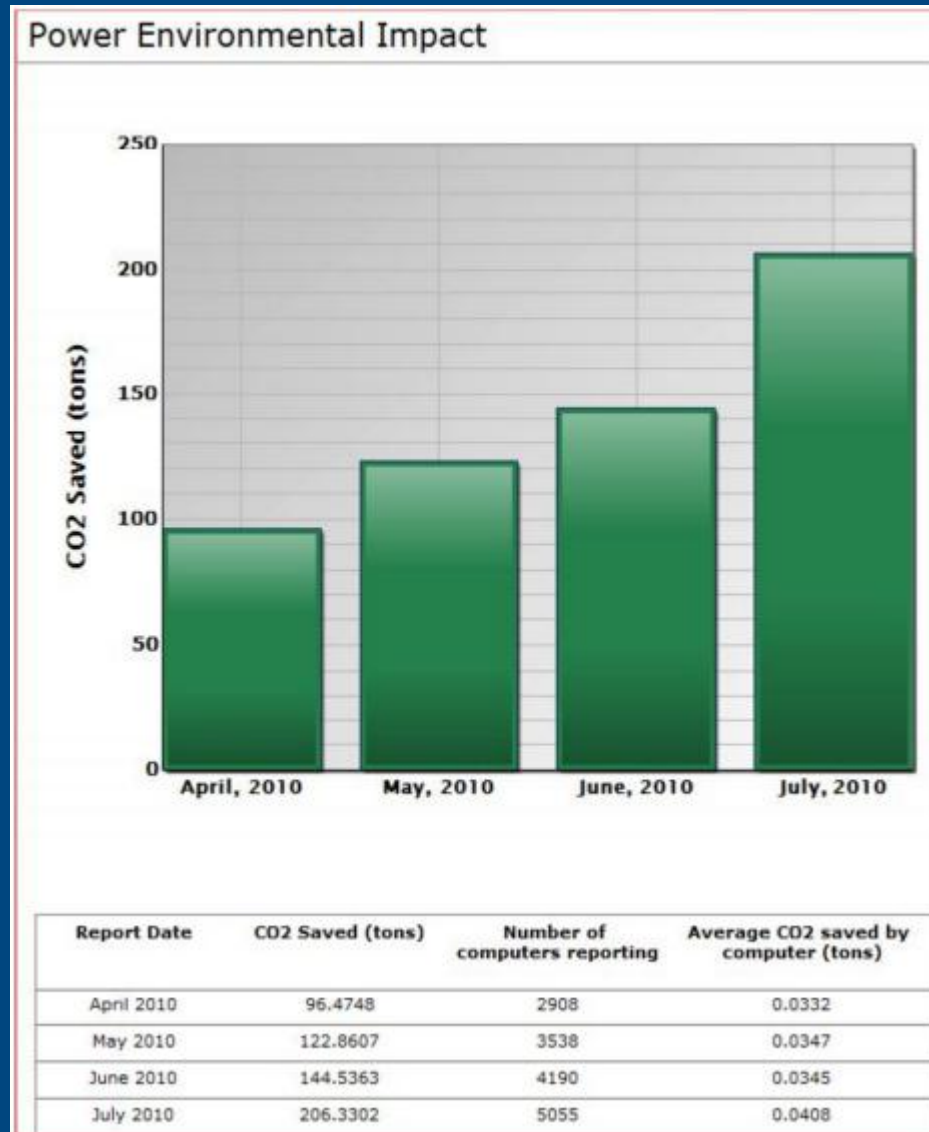
- Monitora estado e consumo de energia dos clientes
- Permite a criação de perfis de gerenciamento
- Aplica políticas de gerenciamento de energia
- Checa e remedia a aplicação.
- Gera relatórios de consumo e eficiência



Demo

Power Manager no R3

Relatórios – Impacto Ambiental



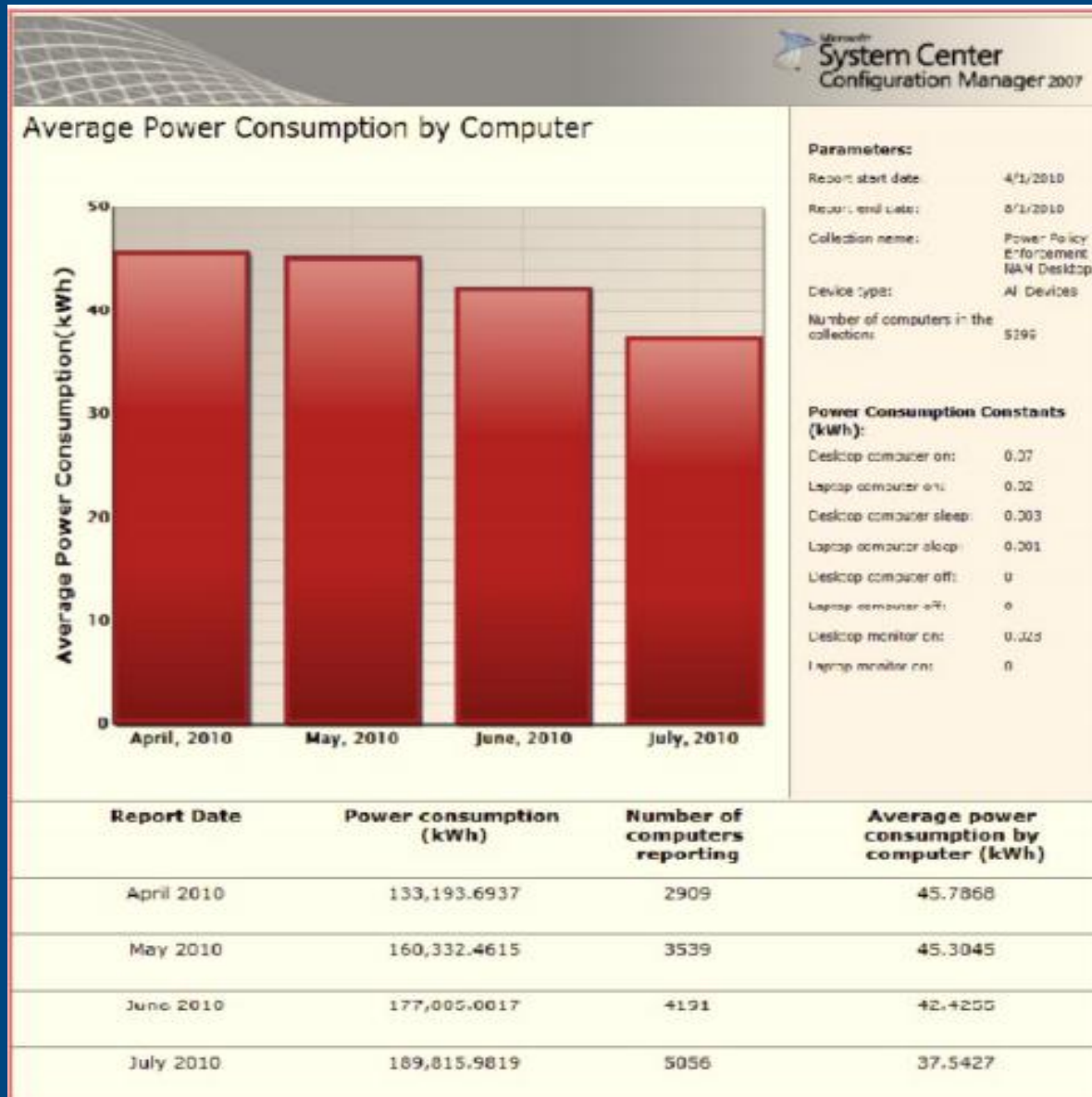
Relatórios-Power Capacity

Microsoft System Center Configuration Manager 2007

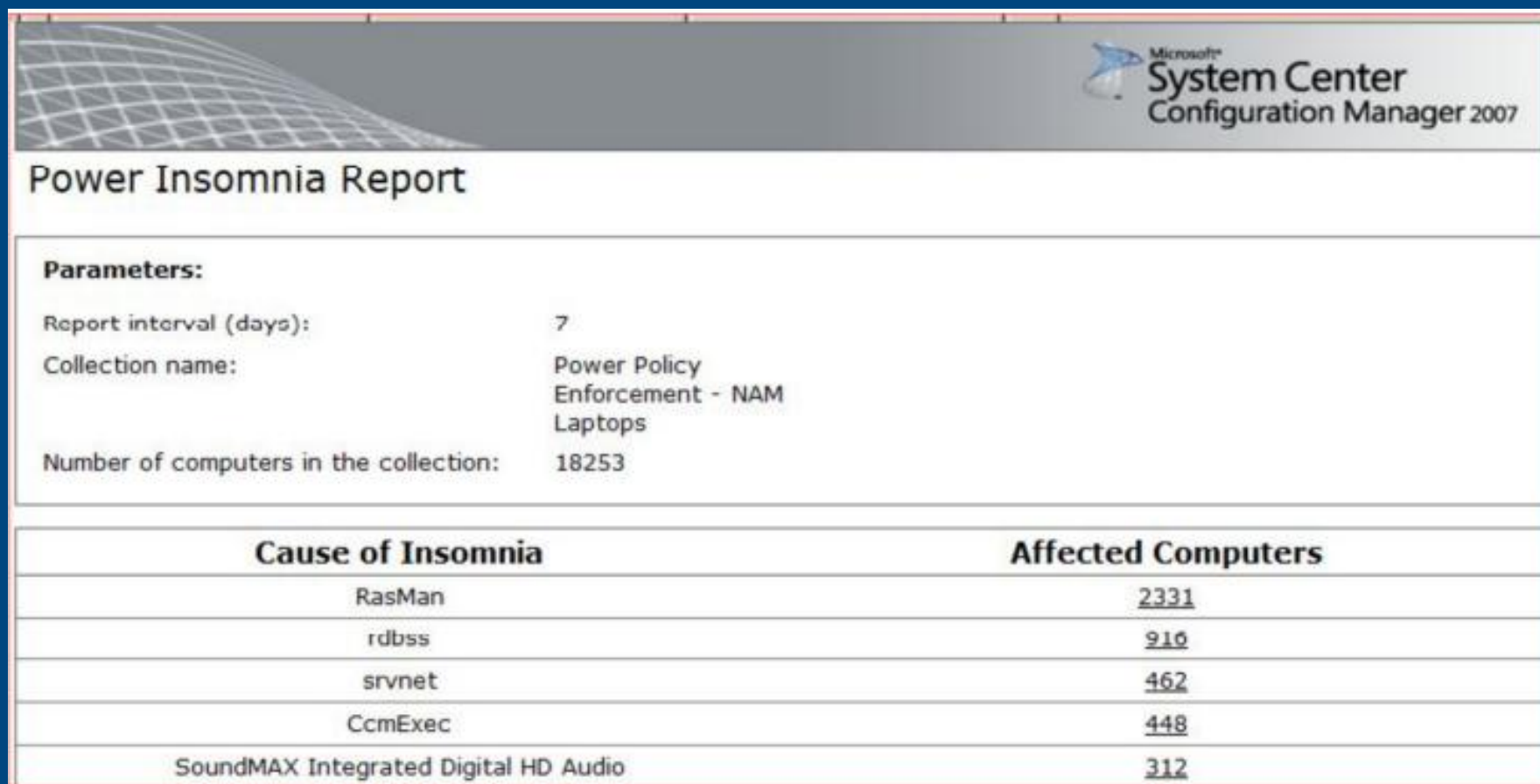
Power Capabilities Report

Computer Name	OS	Sleep	Hibernate	Wake from Sleep	Wake from Hibernate
000	Microsoft Windows Server 2008 R2 Enterprise	✗	✗	✗	✗
000	Microsoft(R) Windows(R) Server 2003 Standard x64 Edition	✗	✓	✗	✗
000	Microsoft(R) Windows(R) Server 2003 Standard x64 Edition	✗	✓	✗	✗
000	Microsoft(R) Windows(R) Server 2003, Enterprise Edition	✗	✗	✗	✗
000	Microsoft Windows XP Professional	✗	✗	✗	✗
000	Microsoft Windows XP Professional	✗	✓	✗	✗
000	Microsoft(R) Windows(R) Server 2003, Standard Edition	✗	✗	✗	✗

Relatórios-Average Consume



Relatórios-Insonnia



Wake On Lan

- Recurso nativo nas mainboards que monitoram o recebimento de um pacote do tipo WOL
- Permite que todas as máquinas sejam desligadas ao final do expediente e o ConfigMgr ligará as máquinas

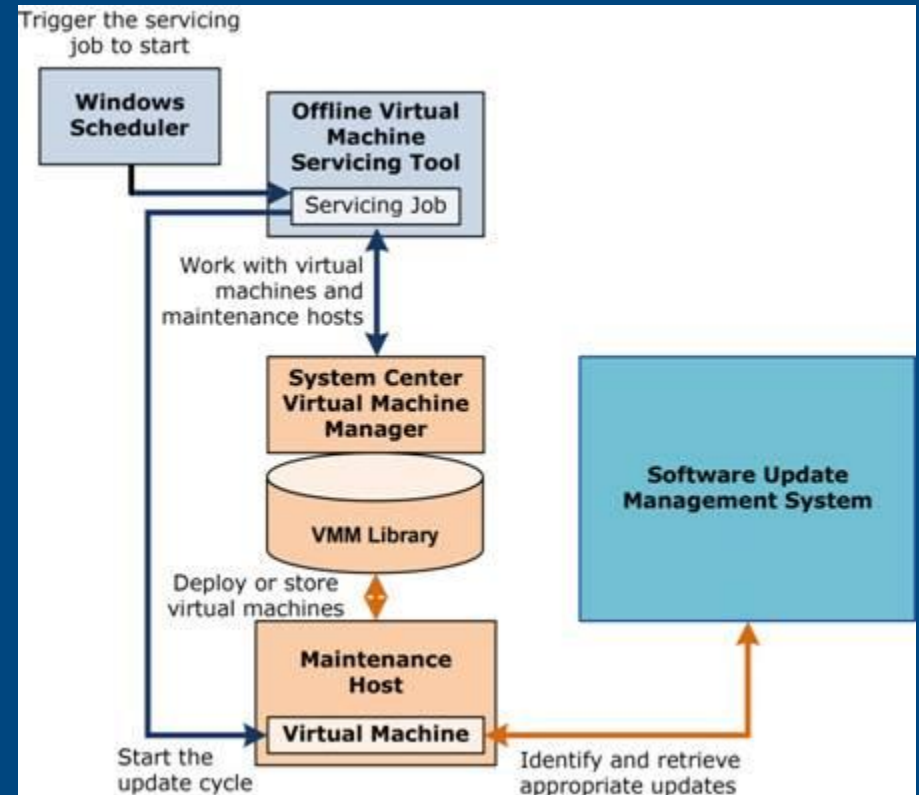


Demo

Wake On Lan

Offline VM Servicing Tool 3.0

- Faz o mesmo processo do Wake On Lan mas para máquinas virtuais, sejam Hyper-V ou VDI
- Permite atualizações e updates nas VMs, mesmo com elas em estado de shutdown ou pausadas



Referencia: <http://go.microsoft.com/fwlink/?LinkId=110333>

The background is a solid blue color with a white grid pattern that curves and flows across the page. The Microsoft logo is centered in the upper half, and the slogan is centered below it.

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