

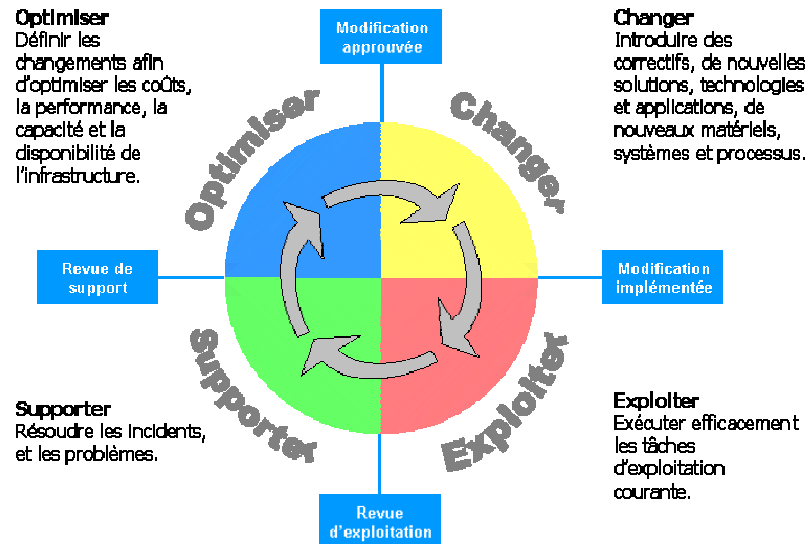
WinReporter® and RemoteExec® versus SMS® Competitive Analysis

This document reviews the differences between Microsoft® Systems Management Server and WinReporter® combined with RemoteExec®.

Today's major IT challenge: adaptability

To keep up with the uninterrupted and swift evolution in all industries and sectors, an IT environment must have the flexibility required for ongoing and fast adaptation.

This flexibility relies on rigorous management as put forth in the following diagram:



In order to successfully and efficiently achieve the cycle's tasks, the following is essential :

- ▶ An updated and comprehensive reference of managed resources
- ▶ Ways and means to rapidly intervene on these resources
- ▶ Tools to view the resource status

Some systems allow this: Microsoft Systems Management Server, IBM Tivoli Configuration Manager, Novell ZENWorks, Altiris Client Management Suite, ...

But they unfortunately and irremediably share two major setbacks: complexity and cost.

In the light of this, IS Decisions proposes a simple and cost effective alternative with WinReporter and RemoteExec.

To highlight the differences between a classical management system and the solution proposed by IS Decisions; we will compare Microsoft Systems Management Server 2003 (SMS) with WinReporter and RemoteExec.

The comparison will be based on the following guidelines:

- ▶ Features
- ▶ Technology
- ▶ Impact
- ▶ Cost

Features

SMS, WinReporter and RemoteExec have a wide variety of features.

To remain objective, only the features relating to the following tasks will be taken into account :

- ▶ Hardware audit
- ▶ Software audit
- ▶ System audit
- ▶ Patch management
- ▶ Application deployment and update
- ▶ Reporting

Hardware Audit

SMS

SMS allows to audit over 600 hardware values, but only 200 by default.

The hardware audit on the resources is scheduled in the SMS site's properties using the SMS administration console, or can be launched at demand using the SMS agent installed on each resource.

Hardware audit records are stored.

SMS only does hardware auditing on resources that are members of a SMS site.

All resources on a SMS site have to audit exactly the same values.

Steps to modify the values to audit:

1. work out which file contains the hardware audit configuration
2. modify the file
3. wait for the file to be propagated to all resources
4. wait for the next scheduled audit

All modifications made to the file must be consigned and safely stored as all SMS updates (e.g. a service pack), will re-set the file.

The consolidation of different location's hardware audits is automatic.

WinReporter and RemoteExec

WinReporter allows auditing of the most significant and pertinent hardware values for Microsoft systems management, on a daily basis.

The hardware audit can be done at demand or scheduled.

Hardware audit records are stored.

Each audit task collects specific values from specific resources only.

A wizard helps to define target resources and the values to audit.

Each task's configuration (targets, values, ...) can be saved as a template for re-use at will.

The consolidation of different geographical location's hardware audits is manual.

Software Audit

SMS

SMS will only audit the files on a resource.

The software audit on the resources is scheduled in the SMS site's properties using the SMS administration console, or can be launched at demand using the SMS agent installed on each resource.

Software audit records are stored.

SMS only does the software audit on resources that are members of a SMS site.

All resources on a SMS site have to audit exactly the same files.

The selection of the files to be audited is configured in the SMS site's properties using the SMS administration console.

The files to be audited are selected by extension (.exe, .bat, .gif, ...).

The consolidation of different location's software audits is automatic.

WinReporter and RemoteExec

WinReporter will audit the files and folders on a resource.

The software audit can be done at demand or scheduled.

Software audit records are stored.

Each audit task collects specific files and/or folders from specific resources only.

A wizard helps to define target resources and the files and/or folders to audit.

The files and/or folders to be audited are selected using wildcard characters (*.exe, autoexec.*, config*.txt, ...) and/or by their location (list of folders to scan).

Each task's configuration (targets, files, folders, wildcards, ...) can be saved as a template for re-use at will.

The consolidation of different geographical location's software audits is manual.

System Audit

SMS

SMS will audit the following system information for each resource :

- ▶ Installed applications
- ▶ Installed security patches
- ▶ Installed services

This information is collected by the hardware audit as described above.

WinReporter and RemoteExec

WinReporter will audit the following system information for each resource :

- ▶ Installed applications
- ▶ Installed security patches
- ▶ Installed services
- ▶ Shared folders
- ▶ Scheduled tasks
- ▶ User accounts and groups
- ▶ File shares
- ▶ Printers
- ▶ Printer permissions
- ▶ File(s) and/or folder(s) permissions
- ▶ Managed DNS zones
- ▶ IIS services
- ▶ Active Directory roles
- ▶ Registry keys and/or values
- ▶ Event logs

The system audit can be done at demand or scheduled.

System audit records are stored.

Each system task collects specific elements from specific resources only.

A wizard helps to define target resources and the elements to audit.

Each system task's configuration (targets, elements, ...) can be saved as a template for re-use at will.

The consolidation of different geographical location's system audits is manual.

Application installation and update

SMS

SMS will deploy all files and applications.

Only resources that are members of a SMS site can be recipients of a deployment.

The installation of applications can be done interactively with the resource's user or in silent mode.

An install can be done with administrative rights.

Application deployments for resources can be scheduled in the SMS site's properties using the SMS administration console.

When opening a session on a resource, a user can trigger an install.

Deployment targets are selected according to audit results.

The deployment process is asynchronous:

1. Creation of a package: definition of the elements to deploy
2. Creation of a program: definition of the executable as well as its rules
3. Copy the package to the distribution servers
4. Creation of a collection: definition of target resources
5. Creation of an advertisement: association of a program, a collection and the schedule
6. Delay while the execution order is sent to all resources.
7. Delay of installation on the resources depending on the next installation cycle

The success/failure of an installation is reported by the SMS status system (also an asynchronous process).

In order to update any failed installations a complete new deployment process is required.

The asynchronous mode allows targeting of mobile resources and resources that aren't always powered on.

WinReporter and RemoteExec

RemoteExec is a universal application deployer.

RemoteExec allows remote action on resources and more specifically file and application deployment.

The installation of applications can be done interactively with the resource's user or in silent mode.

An install can be done with administrative rights.

The target resources are selected by name or with the browser and can be filtered depending on system setup (OS version, Service Pack, Registry value...).

The deployment process is synchronous:

1. Definition of the action to be done
2. Target selection
3. Immediate installation on resources

The success/failure of an installation is reported instantly.

In order to update any failed installations the process can simply be launched again.

Powered off resources equipped with Wake on Lan technology can be targeted.

Patch Management

SMS

SMS has an integrated patch management system.

The hardware audit process is used to list installed or missing patches on a resource.

Patch selection for deployment is done with a wizard.

Application patches are installed using the deployment process.

WinReporter and RemoteExec

WinReporter and RemoteExec are complementary in providing patch management.

WinReporter audits installed or missing patches on a resource.

RemoteExec allows customizable patch installation on resources using its advanced installation features.

Patch selection for deployment is manual.

Reporting

SMS

SMS has a set of standard reports.

These reports have very few selection and sorting options.

WinReporter and RemoteExec

WinReporter also has a set of standard reports.

When generating a report WinReporter provides many selection and sorting options allowing report customization or fine tuning.

Technology

SMS

SMS is an environment composed of a multitude of components that interact together. Hereafter is the list of components required solely for the features described in this whitepaper :

Server components:

Site server
Database Server
Distribution point
Administration point
Report point

Client components:

SMS client
Hardware audit agent
Software audit agent
Deployment agent

The server components continually use system resources (processor, memory), and usually require extra hardware investment.

The client components must be deployed to all resources before SMS can be used.

Any SMS environment update or upgrade (e.g. Service pack) implicates an update of all components.

WinReporter and RemoteExec

Both WinReporter and RemoteExec can be installed on a standard workstation.
Both solutions only use of system resources (processor, memory) when launched.
Both solutions are agentless; no installs are required on resources.

Impact

SMS

The implementation of a management environment such as SMS needs to be seen as a significant project and comprehends the following steps :

- ▶ Design and implementation of the environment by experts
- ▶ Heavy training for the environment's administrators
- ▶ Daily environment workload: maintenance, backups

The SMS asynchronous operating mode generates latency which in turn forces modifications in decision and management habits that are usually based on instant results.

An environment managed by SMS necessitates rigorous action planning.

The multitude of components and the ongoing automatic activity of the SMS environment require expert product functionality knowledge to guarantee suitable monitoring, administration and support.

WinReporter and RemoteExec

Implementing WinReporter and RemoteExec is very straightforward and rapid.
Both applications need only be installed on a workstation to be ready and fully operational.

Their intuitiveness and ease of use enable immediate use of all functionalities without necessitating any prior training.
WinReporter and RemoteExec can be used at will and do not necessitate any daily administration or monitoring.

Cost

Scenario

In order to determine the cost of each solution, estimates have been made for a first year in production with the following assumptions.

SMS

Half of the geographical locations are Primary SMS sites. Each Primary SMS site requires an extra server (estimate: USD 2,390.00 excluding VAT) to handle the components. All the resources are assigned to the SMS site of their geographical location.

The Microsoft licenses are based on the Open Business with Software Insurance pricelist published by Microsoft Ireland Operations Ltd in November 2005 (cents rounded down and VAT excluded):

- ▶ Windows Server 2003: USD 1,562.00
- ▶ SMS 2003 Server including SQL2000 (Primary SMS site): USD 2,840.00
- ▶ SMS 2003 Client: USD 88.00

In order to take into account the discounts given by Microsoft in their enterprise licensing programs, the license cost has been reduced by 20% for the infrastructure with a 1,000 clients and by 60% for the infrastructure with 10,000 clients.

The time spent on the environment's implementation is estimated at the least: 5 days design + 1 day deployment per site + 1 day deployment per 50 resources for a third party contractor.

The pricing estimate for the third party contractor is USD 836.00 EUR per day.

5 days training is necessary per administrator (Microsoft training course 2596).

Management estimate : 1 administrator for 20 sites.

Training fee estimate : USD 2,390.00 per administrator.

The administrators are the people who will be using the features described in this document.

The environment's maintenance, excluding the features described in this document, is estimated at a day per week per 10 sites for a third party contractor. The pricing estimate for the third party contractor is USD 418.00 per day.

WinReporter and RemoteExec

For WinReporter and RemoteExec, the prices below are those advertised in December 2006 on www.isdecisions.com :

WinReporter

Reference	Description	Unit price	
		Euro	Dollar
WRW-U10	10 to 19 workstations	9,62	12,40
WRW-U20	20 to 49 workstations	8,02	10,30
WRW-U50	50 to 99 workstations	6,69	8,62
WRW-U100	100 to 199 workstations	5,58	7,19
WRW-U200	200 to 499 workstations	4,65	6,00
WRW-U500	500 to 999 workstations	3,88	5,00
WRW-U1000	1000 to 1999 workstations	3,24	4,17
WRW-U2000	2000 to 4999 workstations	2,70	3,48
WRW-U5000	5000 to 9999 workstations	2,25	2,90
WRS-U1	1 to 4 servers	150,00	193,29
WRS-U5	5 to 9 servers	132,24	170,41
WRS-U10	10 to 19 servers	116,59	150,23
WRS-U20	20 to 49 servers	102,79	132,45
WRS-U50	50 to 99 servers	90,62	116,77
WRS-U100	100 to 199 servers	79,89	102,95
WRS-U200	200 to 499 servers	70,43	90,76

RemoteExec

RE-U10	10 to 19 systems	17,00	21,91
RE-U20	20 to 49 systems	13,69	17,64
RE-U50	50 to 99 systems	11,02	14,20
RE-U100	100 to 199 systems	8,87	11,40
RE-U200	200 to 499 systems	7,14	9,20
RE-U500	500 to 999 systems	5,75	7,41
RE-U1000	1000 to 1999 systems	4,63	5,96
RE-U2000	2000 to 4999 systems	3,73	4,80
RE-U5000	5000 to 9999 systems	3,00	3,87

- These prices include 12 months maintenance.

- Educational discount : 20% off this price-list.

Cost Estimate for 1 year's use with 4 different infrastructures

Infrastructure	Management Solution	
	SMS	WinReporter and RemoteExec
1 site 2 servers 50 clients	Implementation : 7 x 836 = \$ 5 852 Training : 1 x 2390 = \$ 2 390 Maintenance : 52 x 418 = \$ 21 736 Hardware : 1 x 2390 = \$ 2 390 Licenses : Windows Server 2003 : 1 x 1562 = \$ 1 562 SMS 2003 Server : 1 x 2840 = \$ 2 840 SMS 2003 Client : 52 x 88 = \$ 4 576 Total : USD 41 346	Implementation : \$ 0 Training : \$ 0 Maintenance : \$ 0 Hardware : \$ 0 Licenses : WinReporter : \$ 818 RemoteExec : \$ 738 Total : USD 1 556
6 sites 10 servers 200 clients	Implementation : 16 x 836 = \$ 13 376 Training : 1 x 2390 = \$ 2 390 Maintenance : 52 x 418 = \$ 21 736 Hardware : 3 x 2390 = \$ 7 170 Licenses : Windows Server 2003 : 3 x 1562 = \$ 4 686 SMS 2003 Server : 3 x 2840 = \$ 8 520 SMS 2003 Client : 213 x 88 = \$ 18 744 Total : USD 76 622	Implementation : \$ 0 Training : \$ 0 Maintenance : \$ 0 Hardware : \$ 0 Licenses : WinReporter : \$ 2 702 RemoteExec : \$ 1 932 Total : USD 4 634
20 sites 30 servers 1 000 clients	Implementation : 46 x 836 = \$ 38 456 Training : 1 x 2390 = \$ 2 390 Maintenance : 52 x 2 x 418 = \$ 43 472 Hardware : 10 x 2390 = \$ 23 900 Licenses : Windows Server 2003 : 10 x 1562 x 0,8 = \$ 12 496 SMS 2003 Server : 10 x 2840 x 0,8 = \$ 22 720 SMS 2003 Client : 1040 x 88 x 0,8 = \$ 73 216 Total : USD 216 650	Implementation : \$ 0 Training : \$ 0 Maintenance : \$ 0 Hardware : \$ 0 Licenses : WinReporter : \$ 8 143 RemoteExec : \$ 6 139 Total : USD 14 282
50 sites 60 servers 10 000 clients	Implementation : 257 x 836 = \$ 214 852 Training : 3 x 2390 = \$ 7 170 Maintenance : 52 x 5 x 418 = \$ 108 680 Hardware : 25 x 2390 = \$ 59 750 Licenses : Windows Server 2003 : 25 x 1562 x 0,4 = \$ 15 620 SMS 2003 Server : 25 x 2840 x 0,4 = \$ 28 400 SMS 2003 Client : 10 085 x 88 x 0,4 = \$ 354 992 Total : USD 789 464	Implementation : \$ 0 Training : \$ 0 Maintenance : \$ 0 Hardware : \$ 0 Licenses : WinReporter : \$ 29 637 RemoteExec : \$ 31 287 Total : USD 60 924

Summary

The following chart summarizes the differences between SMS and WinReporter combined with RemoteExec.

	SMS	WinReporter/RemoteExec
Features	<ul style="list-style-type: none"> ▶ Supports powered off and mobile clients ▶ Automatic detection of potential targets ▶ Automatic data consolidation ▶ Complexity to amend audit configurations ▶ Static reports 	<ul style="list-style-type: none"> ▶ Supports Wake on Lan compatible clients ▶ Manual target selection ▶ Manual data consolidation ▶ Easily amendable audit configurations ▶ Advanced sorting options for reports
Technology	<ul style="list-style-type: none"> ▶ Multiple server components / client agents ▶ Extra hardware requirements ▶ Asynchronous operating mode ▶ Completely automatic ▶ Delayed results 	<ul style="list-style-type: none"> ▶ No server components or client agents ▶ No hardware requirements ▶ Synchronous operating mode ▶ Use at demand ▶ Immediate results
Impact	<ul style="list-style-type: none"> ▶ Extensive and complex implementation ▶ Scheduling constraints for all actions ▶ Necessary training 	<ul style="list-style-type: none"> ▶ Easy and rapid installation ▶ Ready to use immediately and at demand ▶ Optional training
Cost	<ul style="list-style-type: none"> ▶ Considerable investment and overheads 	<ul style="list-style-type: none"> ▶ 10 to 30 times cheaper than SMS depending on infrastructure, no overheads