MegaRAC XMS
Client Management
Suite

For Easy and Effective Management

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MegaRAC XMS is a centralized management server that is architected with extendibility in mind. Client Management Suite discovers and manages heterogeneous client platforms.

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Client Management Suite

For easy and effective management...

What is it?

MegaRAC XMS is an extensible management solution that provides centralized and collaborative management of any networked device. Client Management Suite is targeted for managing heterogeneous client platforms. It provides both inband and out of band manageability without requiring any software agents to be installed in the managed platforms.

Executive Summary

With increasing mobile workforce and organizations becoming more distributed, the need for remote management becomes extremely important. An administrator should be able to track inventory, monitor resource utilization and take proactive actions, without having to be physically close to the managed systems.

Variety of platforms available in the market stresses the need for an agnostic solution that manages platform from any vendor. Major vendors provide remote management tools for the platforms they sell. But having several platforms from several vendors in a typical environment, IT Staff's task gets complicated if they have to use different tools to manage different platforms.

Ever increasing workload demands efficient usage of time for any administrator. If there is a tool that allows scripting and automating the management tasks he or she performs, that will be a big benefit. The ability to schedule a repetitive task that would be performed on a regular interval will save an administrator's valuable time and energy.

Incident prevention is another important issue. If not handled proactively, every single day of downtime will cost heavily depending on the size of the infrastructure. Being alerted on any failures or watch points, immediately as it happens, will allow the administrator to react immediately and minimize the downtime. Even more, monitoring closely and alerting on threshold conditions will let administrator to take proactive steps to prevent such downtime.

MegaRAC XMS addresses the above needs and even more, to assist an administrator to perform their job more efficiently. Using XMS as a single pane of management, customers can manage any client platform irrespective of its architecture or from where it is sourced. This paper will detail how MegaRAC XMS can be used to simplify management tasks and thus manage easily and effectively.

Why Remote Management

Let us visualize a typical IT infrastructure. Hundreds of systems deployed across multiple geographical locations, sourced at different time, from different vendors. There may be more than one management tool, to manage systems from different vendors or to do different management operations. Imagine the complexity for the IT staff to manage these different kinds of systems using different tools. Adding to this complexity is the increasing mobility of the workforce and organizations getting distributed across different geographical locations.

Without remote management, simple tasks like periodic power cycling get complicated and time consuming. If it requires physically be at each system to power off or power on, you can imagine the time, effort and resources needed (or wasted) to do such simpler operations when there are many systems. Consider the case of keeping track of inventory. To record and maintain the systems purchased, with details on their configurations and software installations are tenuous tasks. Keeping track on resource-utilization and estimating the purchase of future need becomes more time consuming when they are done manually. Having a centralized management tool do it for you, simplifies asset tracking by leaps and bounds.

Think about the case of firmware updates. Consider if BIOS in all those systems need to be updated. If each system needs to be physically updated, this by itself is a huge project, unnecessarily consuming company resources and also delaying the updates and causing more inefficiency. If a centralized management solution can update BIOS in all those systems with just few clicks and lets you know the result that will be a marvelous saving on your time and energy.

How about incident handling? What if a memory dim in one of the systems fails? First of all, how do you discover that? Will you want to periodically check each system to make sure all components are working? Or would you prefer a centralized management solution to monitor this and alert you when action is needed? Similarly, making sure that a particular application, for example, antivirus software is always running in all managed systems will be a breeze if the management software can monitor such processes and alert the administrator.

Nowadays, a lot is expected from an IT staff. More than he or she can physically handle within a regular work day. This brings the need for automating every management task that is possible. A tool that would let them script the management activities and schedule them to be periodically run at any preferred time will be a very good help.

Many IT departments of today are actively looking forward to reduce the service cost as the budget is getting tight every day. A good centralized management scheme allows the IT staff to enjoy a unified way to view and control their servers. This eliminates the discomfort of cross-platform management, which means an IT system administrator can now treat the client platforms the same way irrespective of the hardware architecture (x86/PowerPC and so on) or the operating system (Windows/Linux and so on). This significantly reduces the operating cost for the IT department in terms of training and getting specific expertise.

Besides cross platform management ability for remote access, remote control of the client platforms, provisioning, software/firmware update capability and so on offer another dimension to the IT department to reduce cost and increase their server uptime.

Several products currently available in the market address this need. But they come as a big and pricey package, forcing customers to buy the entire package even the customer plans to use only part of portion of it.

MegaRAC XMS

MegaRAC® XMS is built as a cross platform centralized management suite to manage client platforms in one or multiple locations in an enterprise. It uses the standards like AMT, WMI and SSH to discover manageable systems and provides complete remote and aggregated manageability of those systems. An intuitive and browser agnostic web interface provides easy access to XMS from any standard browser.

Script Manager is a very useful tool provided as part of MegaRAC XMS that allows the end user to script any management operation on the managed devices. Management scripts are provided, which can be extended by end user to fit their custom need. Using Script Manager and management scripts, customers can automate any repetitive task or time consuming task, allowing them to spend their time in other needed places.

Architected to be extendable, the core provides the management framework and individual plugins provide specific management aspects. Customers can pick and choose the plugins, depending on their management need and thus avoid overpaying for features that they won't use.

How MegaRAC XMS helps

Client Management Suite offers out of band management through Intel AMT and inband management through remote interfaces provided by Operating System. Some of the major benefits offered by MegaRAC XMS Client Management Suite are

- Easy Installation and Configuration
- Auto Discovery
- Asset Management
- Health Monitoring and Alerting
- Remote KVM and Remote Media
- Power Control
- BIOS Update Management
- Reports
- Script Manager

Easy Installation and Configuration
Unlike many other management solutions, MegaRAC XMS is extremely easy to install. Within few minutes, an administrator can install XMS, make basic configurations and start managing the devices. Once

installed, very few configurations are needed to command XMS to manage your systems. XMS expects user to configure discovery range, a list of IP ranges, which it will use to scout for manageable devices. XMS allows the user to configure the global user account which will be used to access the managed device. With these two inputs given by the user, XMS starts discovering and presenting the manageable options for the discovered devices.
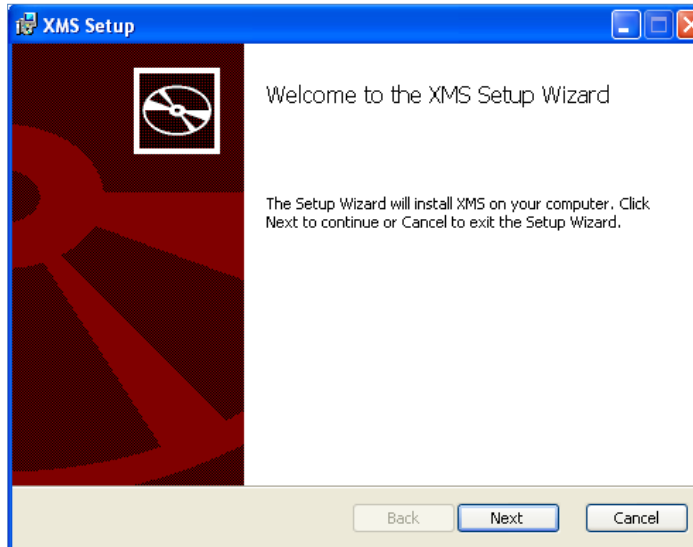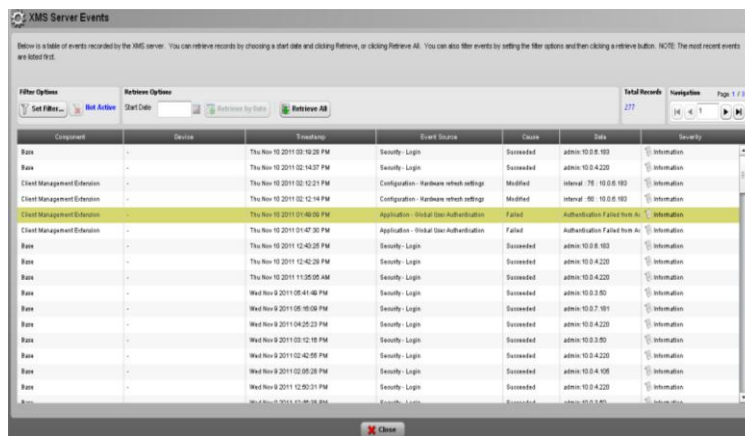

Auto Discovery

XMS automatically discovers any systems that fall within the configured discovery range. It keeps scouting for new devices being added to the network or existing devices getting off of the network. User has the choice to configure this polling interval, depending on how soon they would want to detect these changes. XMS presents the connectivity status of all discovered devices in UI, giving a visual indication to the administrator. Discovered devices are automatically categorized based on the management methods using which they are managed.
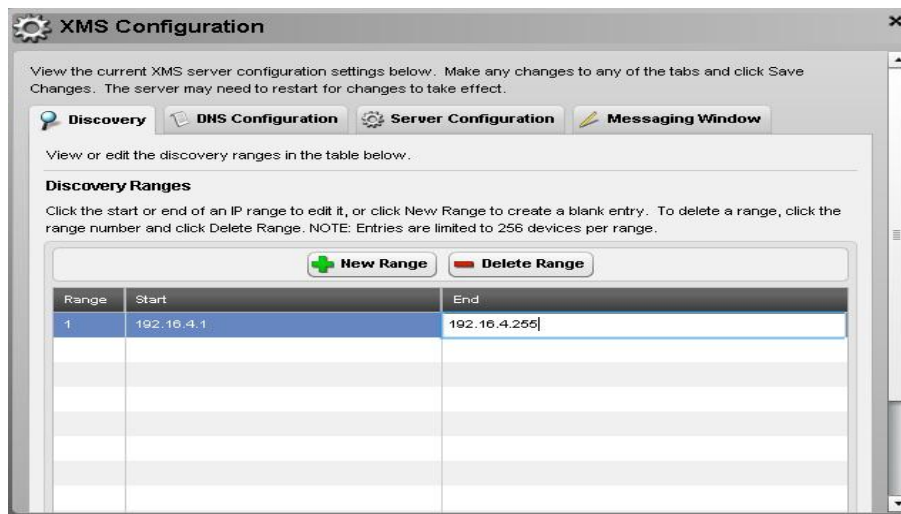
Asset Management

XMS collects asset information of all managed systems. User account with administrative privilege is needed to access each managed node. XMS allows the administrator to configure the global user account for each type of manageable device. XMS uses this global user account information to remotely access and securely collect the asset information. Collected asset information include both hardware and software components present in the managed system.

In addition to collecting and presenting asset information, XMS also tracks the changes in assets and logs meaningful events to notify the user about any change in asset. This comes in handy, as administrator can detect intrusion or even unintentional change of hardware in the managed systems.

Health Monitoring and Alerting

All managed systems are continuously monitored by MegaRAC XMS for their health. Monitored health includes various sensor information provided by Intel AMT and inband performance parameters like CPU and Hard Disk utilization. Users can even configure a process to be monitored and included as part of the health calculation. Collected health information is presented in UI, allowing the users to be informed on the health of the managed systems easily.

XMS also alerts on health conditions, which is configurable by the user. With this feature, users will be notified on any health issues immediately as it happens, minimizing the downtime.

Remote Control (KVM and Media)

Complete remote control of the managed system is a very useful feature that an administrator would appreciate. MegaRAC XMS provides remote KVM and remote Media features using Intel AMT. With remote KVM, user can control the keyboard, video and mouse of the managed system from his local system. This is very useful in trouble shoot issues remotely or training the team remotely.

Remote Media is extremely helpful for remote trouble shooting and remote installations. This feature allows user to redirect storage media in his computer to be a local storage for the managed system. Using this, administrators can redirect a diagnostic CD as a local CD to the managed system and run diagnostics. A completely different OS can be loaded using this remote media and any special maintenance operations could be performed.
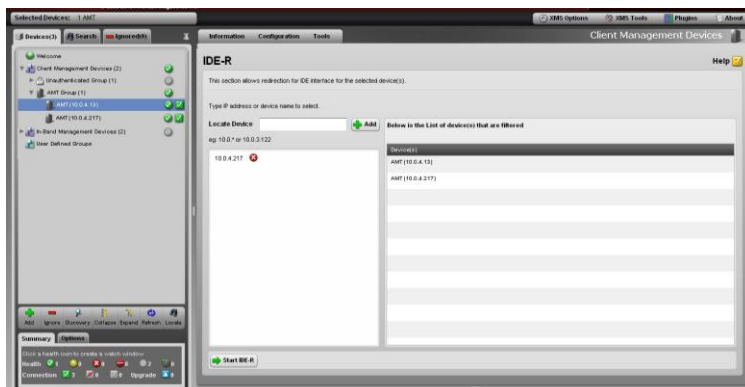

Power Management

Ability to remote power off or power on the managed system assists in being greener. Using MegaRAC XMS, systems could be monitored and if they are idle, they could be powered off to save power. When needed, those systems could be powered on using MegaRAC XMS, which uses Intel AMT or WOL to power on a powered down system.

Around 50% of computers are left running overnight and weekends, which constitutes around 75% of the week. Scheduling computers to be powered off and power on, during such unused times would reduce power consumption and save several thousand dollars on electricity cost.
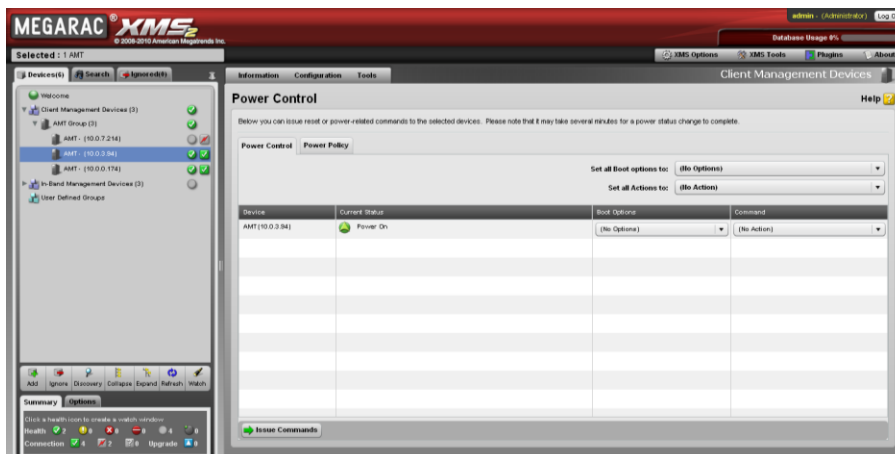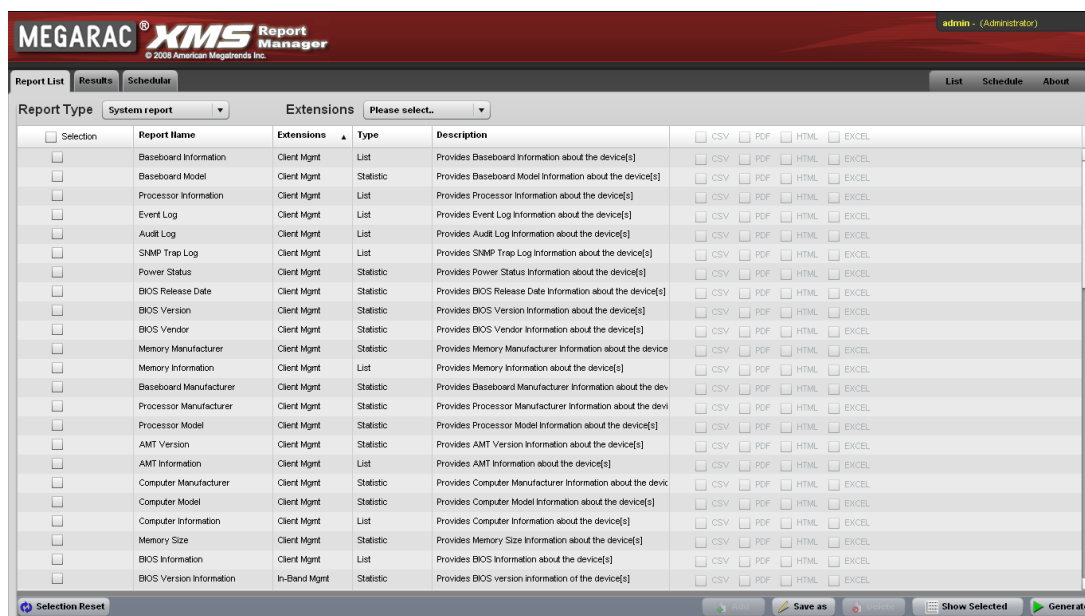
BIOS Management

MegaRAC XMS allows you to remotely configure or update BIOS of the managed system. Even better, such update operations can be scheduled to be performed on group of systems in a specific time. Using this, user can schedule BIOS updates on managed system during off peak times, thus making even after hours more productive.
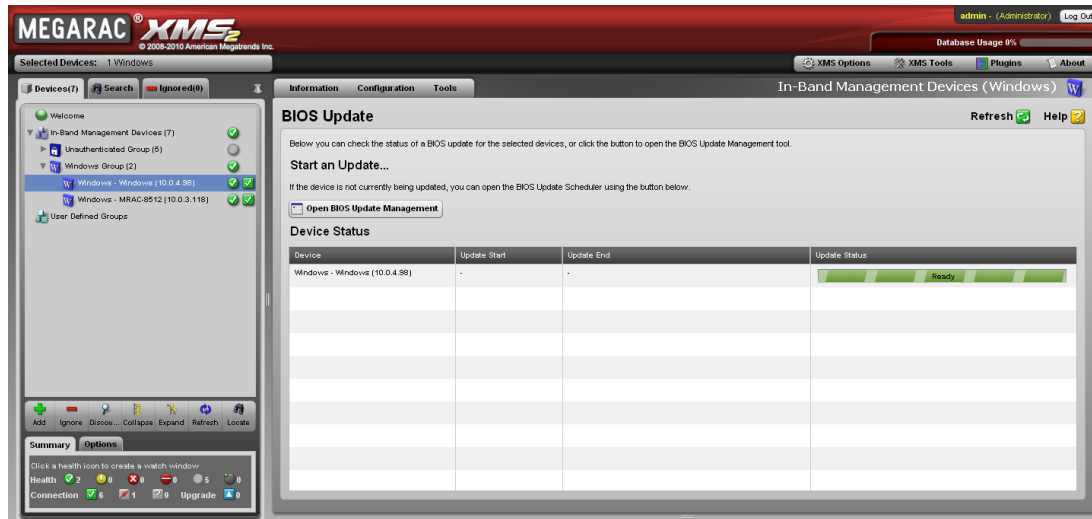

Reports

In addition to continuous monitoring and complete control of the managed system, MegaRAC XMS provides many useful reports that would allow users to make informed decisions. For example, user can view a report on assets and use it for capacity planning. Users can view a report on historic health data of different systems and decide which one is better, for future purchase needs.

Automation through Script Manager

This is the single most useful feature provided by MegaRAC XMS. MegaRAC XMS comes with a Script Engine, which executes the scheduled scripts and saves the results for you to review. Management APIs are provided, using which users can create management scripts, which can be scheduled to be executed at a specific time, one time or repeatedly.

MegaRAC XMS provides different manageability aspects through different plugins. Management APIs are also published for each such manageability aspects. Users can solve advanced use-cases by using these APIs from different plugins and creating scripts to automate management tasks.
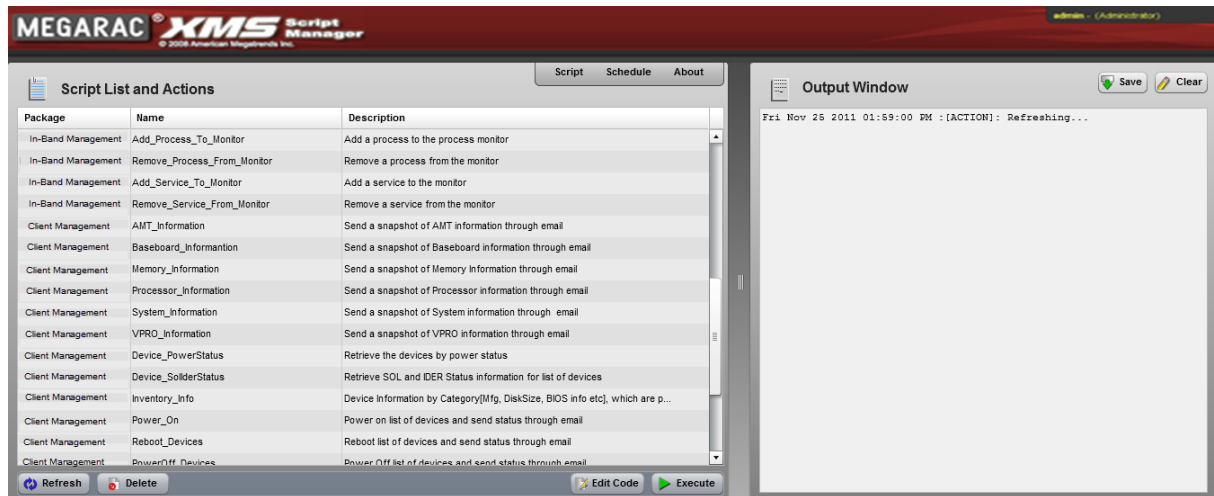
Benefits Summary

There are significant benefits of using solution like MegaRAC XMS

▷ Easy to use, intuitive user interface

- Live connectivity and health status of managed systems

- Search devices based on name or IP address

▷ Agent less Solution

- No need for software agents in the managed system

- Saves deployment time and effort

▷ Quick deployment

- Install in few minutes.

▷ 30 seconds configuration

- And start managing the devices.

▷ High ROI

- XMS can be extended with new features event after deployment, with new manageability plugins as the need dictates

▷ Reduce OPEX

- Monitors resource utilization and assists in capacity planning

- Minimizes downtime

- Minimize desk-side visits

▷ Reduce CAPEX

- Track asset utilization and avoid procuring licenses and systems more than you need

- Reports on managed devices performances are available, allowing you to make informed decisions on future purchases