SysTrack Virtual Machine Planner

Benefits

- Optimize desktop and server virtualization and terminal server projects
- Anticipate and handle problems in the planning stage instead of post-implementation
- Use iteratively for continuous desktop transformation

Features

- Models and allocates systems to hypervisors based on user, performance and workload profiles
- Helps understand user behavior and how it drives application resource requirements
- IDs suitable/unsuitable applications, users and systems for virtualization
- Outputs proposed migration plan with customized executive summary and technical analysis documentation

Comprehensive Pre-Virtualization Assessment, Modeling, Migration, and Planning

IT leaders planning desktop transformation initiatives need accurate and detailed end-user experience data to ensure objectives of enhanced experience and productivity and significantly reduced IT infrastructure costs are realized.

SysTrack Virtual Machine Planner™ (VMP) provides comprehensive pre-virtualization analysis, modeling, and planning support for enterprises and data centers.

SysTrack VMP's ability to analyze enormous volumes of real-world data allows it to leverage synergies and maximize ROI in virtualization projects.

SysTrack VMP collects and analyzes millions of data points on systems, applications and from users to create reports and automate the virtualization process.

SysTrack VMP identifies valid virtualization candidates and provides accurate performance metrics for CPU, memory, I/O and network usage for systems and applications.

SysTrack VMP uses a process-based, scientific approach to minimize effort and maximize results in virtualization planning. A highly scalable methodology is used to avoid manual data collection and analysis.

SysTrack VMP's reporting model is automated. Typical assessment projects require a broad range of documentation and planning paperwork, and this work is fully automated. SysTrack VMP directly delivers a set of output documentation in Word format that is tailored to the specific project and data and ready to deliver to IT management.

SysTrack VMP provides an integrated tool suite that provides VDI assessment, VDI capacity planning, virtualization modeling and predictive analysis, migration planning, storage throughput and space planning, power planning, firewall and latency analysis, user and application behavior analysis, pooled desktop / image planning, and application virtualization compatibility analysis.

Most of the individual components in SysTrack VMP are unique in today's marketplace. In cases where other products are available, competitive tools offer point solutions that lack breadth and interdisciplinary integration. SysTrack changes the game in VDI by dramatically improving the planning and adoption process through automation and high quality reports.

Comprehensive VDI Planning, Design, and Assessment

SysTrack VMP is the first product that addresses the full spectrum of planning needs involved in adoption of desktop virtualization. The process of virtualizing desktops is a complex undertaking that involves many disciplines. The market uptake of desktop virtualization is limited by the slow planning cycles typical of manual processes, slow adoption rate due to unquantified risk and overall "mystery" in achieving successful VDI projects.

Project Support at Every Step

SysTrack VMP provides support at every step of the VDI project:

- **Users and Applications Analysis** — SysTrack VMP automates assessment of user and application workloads and identifies both ideal and problematic candidates for your virtualization project.
- **Existing Load Characterization** — SysTrack VMP utilizes sophisticated statistical analysis to identify the time-correlated loading expected in your virtual environment.
- **"What-if" Impact Projections for Experimentation** — SysTrack VMP plots virtualized server models and accounts for data volatility. Users can designate confidence levels based upon projected requirements.
- **Automatic Modeling Selection** — SysTrack VMP automatically selects systems to model based upon rules. Models can be used across the enterprise.
- **Target Hypervisor Hardware Selection** — The SysTrack VMP user selects target hardware for virtualization. SysTrack VMP analyzes data and determines the appropriate host servers and the configuration required.
- **Complete Optimized Physical to Virtual Mapping** — SysTrack VMP completes the model cycle by assigning systems based upon multiple factors: Data volatility, load leveling, aggregation of like OS, and common application usage to optimize memory savings through saved memory from host and others.
- **Virtual Models for VM Assignments** — SysTrack VMP prescribes mappings for existing desktops and servers to hypervisors for optimal savings and results.
- **Automated Documentation** — SysTrack VMP creates a proposed migration plan that includes a customized Executive Summary and technical analysis documentation.

Technical Analysis Documentation

SysTrack VMP automatically generated process reports include the following essential planning information:

- Complete process documentation integrated with your environmental data
- Highlighted areas that need attention
- Identified applications of concern for further investigation
- Identified systems with performance issues or hardware concerns
- Identified users exhibiting behavior that may be at risk in a virtualized environment

SysTrack Image Planner

Integrated closely with SysTrack VMP is the SysTrack Image Planner (SysTrack IP) tool. SysTrack IP extends the automated VDI planning process to address desktop pooling and application virtualization in virtualized environments. Use of this tool can dramatically reduce total cost of ownership (TCO) for users by minimizing application licensing and maintenance costs, reducing administrative overhead and leveraging efficiencies through concurrent use of desktop pools.

- **Analyses Application Demand** — SysTrack IP analyzes actual application license demand by tracking the use of application packages by users. Working at both the executable and package level, SysTrack IP analyzes needs and commonality of needs within a community, and designs application pools to minimize the cost of application software licensing.
- **Checks Application Compatibility** — SysTrack IP conducts compatibility assessment within applications for application virtualization, and adjusts desktop pool models to reflect least-cost designs that can take advantage of such streaming deployments. While most applications are suitable for application virtualization, some may have attributes that either preclude or complicate the packaging process. SysTrack IP automatically reports on such limitations, eliminating much investigation and trial/error.
- **Identifies Resource Needs for Each Application** — Models constructed with SysTrack IP measure and predict desktop pool concurrency demands, allowing right-sizing of the target infrastructure. SysTrack IP also projects the CPU, memory, disk and network demands for each image, and reports the expected disk space requirements for each assigned user.
- **Creates VDI Implementation Blueprint for Applications** —SysTrack IP output documentation provides a blueprint for implementation of VDI desktop pools and golden images for non-VDI environments. These designs provide tangible reductions in both capital costs (CAPEX) and administrative costs (OPEX) on an ongoing basis.

End-User Experience Scoring

SysTrack VMP users can monitor and quantitatively measure the quality of the end user experience post-virtualization with SysTrack Enterprise Visualizer™ and SysTrack Site Visualizer™.

Leveraging a data mine that assesses resource demands (e.g. CPU, memory, storage and network), application and system reliability and performance, latency to client and back-end servers, system events and other criteria, the SysTrack Visualizers measure the extent to which the user's productivity is impacted in terms that relate directly to business cost.

Using these real measurements, SysTrack Visualizers deliver a quality scoring system that objectively reports the user experience. By comparing scores against established SLAs, SysTrack Visualizers rate this user experience, thereby providing reporting and trending. Reports at user, desktop, group, line of business site and enterprise scale are available. Reports transcend the delivery mechanism, supporting both virtual and physical environments, facilitating comparative analysis. For virtualized desktops, both persistent and non-persistent desktops are supported.

SysTrack Enterprise Visualizer provides a CIO perspective, delivering a real time, C-level picture of what's happening within key organizational groups and across the entire desktop landscape.

SysTrack Site Visualizer provides an IT Manager perspective of specific systems and users, providing more in-depth problem diagnostics.

SysTrack MarketPlace

SysTrack MarketPlace is a dynamic library of customized, vendor-specific reports that IT administrators run anytime to evaluate, measure and tune their IT solutions.

Integrated into SysTrack VMP, SysTrack MarketPlace leverages vendor-specific algorithms and methodologies to deliver quantitative, actionable data on infrastructure performance and provide deep insight on how to optimize solution deployment.

Each customized report provides detailed solution performance metrics, enabling customers to assess, optimize, measure and validate their solution implementation. Customers can utilize this data to tune a provider's solution(s) to extract maximum benefit and value.

Integration

SysTrack VMP works with a wide variety of targeted clients, supporting legacy environments as old as Windows NT 4.0. It works in large active directory environments with full authentication and encryption, but without requiring schema changes. It also works in small scale environments, including work group and standalone setups as might be found in SMB and educational settings.

SysTrack VMP does not require the use of device drivers or kernel components, which makes attainment of change control approvals in large organizations easier. It does not change the behavior of managed systems, making no changes to current applications, stored application information or application data streams on the network.

Compatibility

SysTrack VMP is compatible with all known hardware and has no application compatibility issues. It works on internal as well as cloud structures. It supports VDI desktops, physical desktops, workstations, terminal servers and servers, all from a common architecture and dashboard.

Use and Manageability

SysTrack VMP is easily deployed and integrated into existing environments, with typical installations accomplished remotely without a site visit in less than an hour. It may be deployed using built-in technologies or aided through any third-party software deployment mechanism (e.g. Microsoft SCCM, Altiris, HP Radia, IBM Tivoli, CA), or through login scripts and other mechanisms. SQL Server database setup and configuration is fully automatic. SysTrack VMP may be deployed in a running environment without reboots and while users are actively using targeted systems. Uninstall is similarly unobtrusive.

Scalability and Performance

SysTrack VMP is massively scalable, able to monitor information on thousands of systems from a single console. Over 300,000 physical and virtual desktops are currently under management at a single client.

SysTrack VMP utilizes Lakeside's DataMine™ distributed relational database architecture to effectively manage large volumes of data with negligible network traffic. Lakeside patents ensure SysTrack products are the only solutions that can condense distributed information on an enterprise scale. All communications are based on TCP/IP for efficient network bandwidth utilization.

SysTrack VMP delivers unprecedented performance through its low overhead agent-based architecture. Each agent occupies a very small footprint – less than 1% CPU utilization and 30-50 MB of pageable memory, and runs as a service with no kernel components (SysTrack VMP cannot blue screen a system).