

Case Study  
Financial Institution  
IBM Tivoli Monitoring, TEC

Author:

### **Mark Funk, Trinity Solutions**

Senior Tivoli Consultant, with over 25 years of extensive experience in the Information Technology Industry with an excellent technical background in supporting Enterprise Management, Security Compliancy, and E-business Disciplines, Tivoli Architecture/Automation, and Systems Management. His primary expertise focuses on Tivoli Management Framework, ITM, Monitoring for Databases, Messaging and Collaboration, Business Integration Manager, Tivoli Enterprise Console/NetView, Access Manager, and Identity Manager.

### **The Challenge: Monitoring the eCommerce Environment**

Mellon Financial recognizes the enormous power of the Internet and believes that electronic commerce supports and enhances their business strategy, which centers on identifying and meeting customer needs. They have always viewed technology as a means to improve products and services continuously and deliver cost-effective, comprehensive solutions for their customers. Robert Rossetti, Manager of Enterprise Automation Services at Mellon Financial, sums up his department's mission simply: "We are continuously looking for ways that systems management technology can save us both time and money. There are many times when I need to augment my staff to achieve these savings."

IT management has been a key initiative to help Mellon Financial reduce IT costs and increase information availability. Three areas were identified early on as critical to the IT organization's success: (1) Implement a fully redundant ECommerce solution; (2) improve the reliability and speed of the Web Environment; and (3) improve our service levels through proactive monitoring and faster problem diagnosis and resolution. The development of new eCommerce Web-based financial services underscored the critical need to implement a solution quickly.

### **The Solution: Stop Reacting, Start Managing**

Mellon Financial utilized IBM Tivoli Monitoring to support proactive problem management, Host Availability and Web Monitoring. New Mellon monitoring and automation requirements could only be solved by upgrading from the Tivoli DM version to the ITM version. The solution was evaluated under stringent criteria for integration, security, flexibility, and its ability to support cost savings by using policy based rules. Additional resources were needed for the upgrade and Bob contacted Trinity Solutions for assistance.

Using TS monitoring methodology, the consultant developed a distributed monitoring architecture and deployment scheme. Devices monitored include F5s, Checkpoint Firewalls, SUN, RS6000, Windows2000/2003 and HP. Host Availability and port monitoring scripts were developed in Perl to monitor the device up/down status. Unix File Systems and daemons status were implemented with ITM. Several Universal Agents were created to custom monitor applications such as Harvest, Actuate, Web/Proxy Servers, UDB, MPAM, Mint, and LDAP. Trinity Solutions also created Perl scripts to make socket connections to the Proxy and Web Servers to determine their availability. The TEC Console became the point of focus for alerting the Operations Command Center.

The project included over 2200 monitors that send threshold events to the Tivoli Enterprise Console (T/EC). Several of TEC rules were written to handle these events, which open tickets with Service Center and notify support via email and paging.

The TS consultant added some additional Perl scripting tasks to monitor the legacy Tivoli Framework agents. In order to monitor Tivoli activity, the `wep_status.pl` script was written. This script checks Tivoli communication between the TMR, the gateway and the Endpoint. Each Endpoint's status is kept in the file and mailed to the client's Tivoli Group daily. TS developed a process capable of enabling and disabling Tivoli monitors on remote devices from the TMR. This process empowered the client's Tivoli group to manage Tivoli elements without requiring root's password. This solution saved hundreds of hours for the client's Tivoli group, UNIX group, and Systems group.

"Trinity Solutions has helped us upgrade our entire environment using Tivoli ITM policies and did so with no disruption to our existing monitoring environment in just six months". For example, with Tivoli Enterprise, Trinity Solutions has developed a management solution for the secure web environment.

**The Results: A Managed Environment**

Since the upgrade to Tivoli ITM solutions, Mellon Financial began seeing immediate results. "We first focused on the areas that were causing us the most pain," says Rossetti. "We have a quality program that calls for zero defects. In the distributed environment, zero defects are a challenge, but we try hard to meet this challenge, and Tivoli is playing a major role in helping us accomplish this." "Tivoli ITM provides us with an integrated, policy based approach that allows us to manage the technology in an efficient and effective way."