



Service Offering: Enterprise Management

Client Type: Insurance

The client, a major Insurance company, has deployed the Tivoli Enterprise product suite for the management of its IT resources including the network infrastructure, systems, and complex applications. Prior to Trinity Solution's engagement the client had very little monitoring in place, little or no expertise and very few resources. They didn't have a central focal point to receive events and no TEC/rulebase experience. When a critical application went down, the client usually found out about it when the customer called in to complain. The helpdesk didn't know who to call for problem resolution either. All responsible groups started to troubleshoot their piece of the application. They never told anybody when they resolved the problem and this caused longer outages than normal. Everyone was running around fixing or rebooting their systems and they never got to the "root cause".

Since the deployment of the first Tivoli solutions, Highmark began seeing immediate results. Trinity Solutions first focused on the areas that were causing the most pain - the INSINQ application. The TS Consultant identified the "points of failure" and implemented monitors for them. This resulted in alerting the responsible group before the customer did and notified all other groups what the problem was and who was fixing it. This reduced the down time and increased accountability as well. "With Tivoli DM, they didn't have people running around, trying to figure out where and why there was a problem. They were notified of exactly what the problem was and who was responsible to fix it, so the problem could be resolved before users were impacted. That has been a huge benefit for both their business and for their staff resources. The communication and notification of the problem helped all departments resolve the problem very quickly. At Highmark, Trinity Solutions developed an end-to-end distributed monitoring methodology and architecture scalable for monitoring all aspects of their environments.

Typical approach:

- Detailed project plan
- Detailed technical design demonstrated in a "Proof of Concept/Pilot" environment.
- End-to-end distributed monitoring methodology.
- Standards for monitoring Complex Applications
- Integration of thresholds into T/EC.
- Event Notification through T/EC rulebase language.
- Integration of events into ticketing system.
- Knowledge transfer to Tivoli Support Staff.
- Documentation.

Developing standards made it possible for the Highmark Tivoli team to easily manage the enterprise monitoring project with few resources. TS and the Highmark Tivoli team met with component experts to identify the points of failure in their mission critical applications, Pinpoint thresholds and establish notification based on criticality.



The analogy that we use: We build an airport fully equipped and ready for planes. The airport is the Tivoli Management framework and the planes are the systems, services, applications and components that make up a client's enterprise. "Planes" monitored for these clients included Cisco Switches/Routers, Checkpoint Firewalls, SUN, RS6000, NT, Windows2000 and HP. Critical points of failure for complex applications.

This project included several monitors that sent critical and warning events to the Tivoli Enterprise Console (TEC). TEC rules were written to handle these events, which opened tickets with Service Center and notified level 1/on-call support via email and paging. Scripts were written empowering the Tivoli resources to invoke email notifications of the exceptions and allow for remote administration of the Tivoli Distributed Monitor environment by way of enabling and disabling monitors during outage windows.

Standardizing the way Tivoli monitors the "planes" is key. Once we build the airport, we landed any type of plane quickly, reliably and with confidence. The end result: Enterprise-wide distributed monitoring capabilities for over 200 servers and several business critical applications. This solution saved hundreds of hours for the Highmark Tivoli group, UNIX group, and Systems groups. When a problem occurs, the right people are notified as well as users who are impacted by the outage.

Client Benefits:

- Conduct Enterprise Management more productively, reliably, and, more importantly, proactively.
- Decrease the time and expertise needed for local administrators to "baby-sit" systems.
- Enable administrators to monitor hundreds of systems in parallel; therefore, decreasing the time these systems are at risk.
- Increase validity of reported risk levels and compliance levels – allowing senior leaders to spend more time on architecture and design.
- Determine root cause analysis.
- And above all, minimize risk outages.