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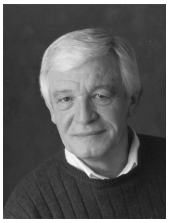

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Case Study: Autonomic Software

Policy Based, Cross-Platform System Management

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EXECUTIVE SUMMARY

Change and configuration management is clearly emerging as one of the top investment areas for IT operations. Management software vendors have been quick at picking up the trend, as witnessed by their acquisitions of smaller players in the space; typical recent examples are HP OpenView's acquisition of Novadigm and BMC Software's purchase of Marimba. Autonomic Software just introduced a new lightweight and versatile agent served by an n-tier architecture, which promises to bring a new level of automation, agility, and scalability at a fair price. Forrester interviewed several Autonomic Software clients to understand what perceived technological and economical advantages were driving their choices.

AUTONOMIC TACKLES CHANGE AND CONFIGURATION MANAGEMENT WITH ANSA

In many companies, keeping track of configurations, planning changes, and ensuring that only authorized persons correctly apply all patches to operating systems and applications has become increasingly difficult because of the sheer number of servers.[1] Increased security threats and new regulations like Sarbanes-Oxley magnify the issue.

At the same time, software and patch distribution is regarded as a relatively mature technology, and few innovations have been brought to market in the past few years. Any new entrant in the space must show that it is bringing significant technological and economical advantages to sit at the market table.

One such entrant into the market is a July 2003 spinoff of integrator Leveraged Solutions called Autonomic Software, which has developed an n-tier architecture called Autonomic Network System & Administration (ANSA): a cross-platform, agent-based solution for asset discovery, configuration management, patch management, and software distribution. The ANSA agent boasts a small footprint and ease of use, while the multi-tier architecture of the solution promises scalability.

Basic Server Configuration Management

Managing upgrades and patches in a server operation is an increasingly hazardous and costly proposition because:

- Excessive administrator resources are required to maintain different versions of software in a current and secure state.

- Lapses in deploying the necessary upgrades and patches can lead to increased downtime and, potentially, to security breaches.

A number of solutions appeared several years ago aimed at automating the process of provisioning servers, distributing applications, and applying patches.[2] Larger management software vendors who are on the road to Organic IT or are pursuing broader change and configuration management solutions have now acquired many of these companies.[3] Others vanished, while the successful ones looked for more revenue with broader, more sophisticated, and more customizable products.

For the enterprise seeking an entry point into the change and configuration management process through a simple server configuration management solution, the choice is considerably reduced. This is where Autonomic Software plays a role.

What Clients Want

The clients interviewed by Forrester clearly expressed their interest in solving immediate issues as quickly as possible, within a reasonable cost envelope. These clients run multiple platforms, mostly Windows and Solaris. They wanted to:

- **Inventory assets and applications.** While gaining or regaining control of a large infrastructure is a solid foundation for sound infrastructure management, Sarbanes-Oxley compliance is an incentive to automate the inventory process.

"We have thousands of servers in our development world, and we have to know what we have running [on them] and show that everything is properly licensed." (CTO)

- **Stay current on patches and changes.** While knowing exactly what is running on your systems is critical for regulatory compliance and bookkeeping, keeping systems patched is essential for the stability and security of your systems.

"The need to keep everything current and aligned with the latest configuration patches is critical to keep the business running." (CTO)

- **Reduce the cost of maintaining servers manually.** Operating systems may need up to 25 patches a year on average, and applications may change several times a year. The cost of manually applying these changes to thousands of servers can be quite high.

Selection Criteria

The three clients Forrester interviewed all looked at products available in the space. Their shortlist of potential solutions included: Altiris, Computer Associates, Configuresoft,

Everdream, Microsoft SMS, PatchLink, and Shavlik Technologies, in addition to Autonomic.

The choice of ANSA was primarily based on two criteria:

- **The technological advantage of a single agent with a small footprint.** The ANSA agent does more than other agents and can be customized without increasing the size of the small footprint.

"The agent technology is sweet: The size is small, and you don't even know that it is running. The agent takes up about 500K and it can go up to six or seven megabytes but then it goes right back down to 500K. . . . PatchLink has three or four agents just for patch management, and for asset management Autonomic's competitors need to deploy from six to 24 agents. Autonomic uses just one agent for everything." (IT general manager)

- **The lower cost.** Autonomic's solution was cheaper than other competitors, especially Microsoft and Computer Associates. CA's solution would have cost one company between $500,000 and $1 million, while Autonomic was much cheaper.

"Microsoft SMS wanted to use consultants for a preliminary analysis which would have cost $25,000 to $30,000. . . . Because of the design and some of the interesting things Autonomic has done with agent technology, we can pay for the ANSA system with the amount of money saved by not expanding memory in individual CPUs." (IT manager)

Availability of the product on multiple platforms, as well as its ease of setup and use were added bonuses.

- **Autonomic has been deployed on platforms like Windows, Linux, and Solaris.** SMS only supports the Windows environment, giving a leg up to ANSA. And although other products on users' shortlists were cross-platform, ANSA was found to be easier to use and cheaper.

- **The setup wizard is powerful and easy to use.** It allows users to add agents to client machines remotely from the centralized console and to set up on new servers in 15 minutes.

"They've got a strong install wizard: We were up and deploying agents in 45 minutes and were able to start patching within a few minutes after that." (IT manager)

RECOMMENDATIONS

SELECT A SOLUTION THAT FITS YOUR NEEDS

Change and configuration management can be approached from multiple angles:

- Follow IT Infrastructure Library best practices and re-engineer the whole change and configuration management process. Start with the implementation of a configuration management data base, add workflow management, and automate the implementation of change.
- First tackle the areas where the pain is severe and work one step at a time to a complete process in an ad hoc fashion.

In both cases, the advantages of Autonomic Software quickly prove that it has a role to play in server configuration management.

WHAT IT MEANS

SELECTION CRITERIA MAY BE SIMPLE

In an environment where there is no legacy of vendor partnership and where the issues to be resolved are clearly identified, selecting products boils down to answering two questions:

1. **Is there a technological advantage in using a given solution?** In the case of Autonomic Software, a powerful and easy to deploy agent, small footprint, and scalable architecture were seen as compelling advantages.
2. **Does it translate into an economic advantage?** Here low acquisition and deployment costs clinched the deals.

SUPPLEMENTAL MATERIAL

Methodology

Forrester interviewed three Autonomic Software customers to gauge the use and effectiveness of Autonomic Software's Autonomic Network System & Administration (ANSA) system management agent.

Companies Interviewed For This Document

IS Inc.

Openwave

TDSC

ENDNOTES

[1] Forrester surveyed IT infrastructure managers at GigaWorld US about their spending plans in the infrastructure management market for 2004. They reported that, on average, spending will increase by 10%. This increase is driven primarily by an increase in the perceived importance of infrastructure management technologies for overall IT service delivery. The top areas where companies are going to increase their investment are service-level management, business service management, Windows server platform management, and configuration management. However, companies are going to reduce their investment in network management technologies and are increasingly less likely to purchase point solutions. See the May 26, 2004, Trends "Infrastructure Management Spending."

[2] New products aimed specifically at server application management provide additional capabilities in the initial configuration of servers, the dependencies between software platforms, the control of versions, and the updating and patching process. See the July 24, 2002, IdeaByte "Automating Application Deployment."

[3] During the past 12 months, the perceived importance of enterprise infrastructure management technologies has increased steadily within Forrester's client base. The first wave of service-level management and business services management implementations is now being followed by a large number of change and configuration management initiatives. What was once considered a boring topic for lower-level IT operations staff is now on the agenda of CIOs of $1 billion-plus companies. This is primarily driven by business executives demanding end-to-end service delivery from IT operations. Forrester believes that change and configuration management will continue to gain momentum through 2006 as the cornerstone of more advanced IT services automation, as well as a prerequisite for Organic IT implementation — promising to slash the cost of IT service delivery through a huge reduction in manual labor, which today accounts for more than 40% of total IT costs in $1 billion-plus companies. See the November 8, 2004, Market Overview "Change And Configuration Management."