EFFECTIVE CONTROL SOLUTION

After implementing Zabbix solution, Eltele AS has improved: database growth, housekeeping issues are gone, and will hopefully stay there, stability has increased tremendously, false alarms have decreased to a bare minimum, and customers satisfaction has gone up to a level we've never been on before.

ZABBIX CUSTOMER CASE STUDY

Eltele AS is an ISP/ ASP company – the major north Norwegian supplier of total information, operations, and communications. Through a partnership with Etele AS, customers have an access to cost-effective solutions where monitoring and accessibility are priorities. Etele AS has implemeted Zabbix to provide its customers with a rock solid, stable and yet flexible monitoring soltuion that is able to run in a high availability setup.

INDUSTRY:
Communication/Media

The key goal of Eltele AS was to find a solution that would be easy to customize, able to support a big number of concurrent users and most importantly of all, to be rock solid, stable and be able to run in a high availability setup.

"Zabbix was chosen over the previous monitoring solution because it scales much better, has a much better licensing model with commercial support and is flexible enough to provide cloud based monitoring as a service for remote customers with customizable frontend access."

Alf Solli, Senior System Consultant, Eltele AS

OBJECTIVE

Eltele AS was looking for a new solution that primarily would scale much higher than our previous solution. As the company had some customers using its frontend, the new solution would have to be easy to customize and be able to support many more concurrent users and most important of all, be rock solid, stable and be able to run in a high availability setup.

REQUIREMENTS

To replace the aging and broken solution that could not handle and work with Eltele AS infrastructure size to the new stable and reliable solution that scales so well both in performance and TCO.

APPROACH

Implementing Zabbix was easy enough. The solution was to manually create custom templates for lots of devices, using discovery to automatically import most of the hosts and compare the contents of the two monitoring solutions very thoroughly while slowly tearing the old one down.

BUSINESS OUTCOMES

- Database growth and housekeeping issues are gone
- Stability has increased tremendously
- False alarms have decreased to a bare minimum
- Customers satisfaction has gone up to a level we've never been on before
- Satisfaction with performance and scalability

DROPDOWNS

- MySQL frequent timeout lock bug caused by LLD between 2.0 and 2.0.5. Altele AS has yet to reach a performance issue, using the same hardware as our previous solution.
- The frontend can become a bit slow during housekeeping. But we know partitioning can solve that.

IT for næringslivet

Eltele AS is an ISP/ASP company, established in 1998. At the time, the company had a 2Mbit internet uplink, which shortly after was downgraded because it was way too much. At the end of 2012, Eltele AS finalized upgrading its county-wide infrastructure to 10Gbit. Eltele is located in Alta, Norway, and while still growing, it counts 26 employees in 2013 and annual revenue of 43M NOK (5,06M EUR) in 2012. Some of Eltele's biggest customers are in the Oil and Energy industry, namely Alta Kraftlag, Repvåg Kraftlag, Luostejok Kraftlag, North Energy as well as several municipalities like Alta, North Cape, Karasjok, Kautokeino, Måsøy and Loppa.

The key challenge the company faced that led to look for a new monitoring solution – need for greater scalability than in previous solution. As Eltele AS had some customers using its frontend, a new solution would have to be easy to customize and be able to support many more concurrent users and most important of all, be rock solid, stable and be able to run in a high availability setup.

Company's previous monitoring solution, like most, had a housekeeping system in place. The problem was, it didn't work with a set infrastructure size, so approx. every 6 month it would bloat out of proportions, corrupt the database and everything had to be dropped and recreated, causing longer and longer periods of downtime. An almost daily issue was that the frontend graphs stopped drawing during the night, and several Windows services had to be restarted. This caused major annoyance among Eltele's customers and unwillingness to sell the service to their customers.

ZABBIX

CUSTOMER AT A GLANCE

Name:
Eltele AS

Headquarters:
Alta, Norway

Founded:
1998

Telephone:
+86-(21)-6422-1946

Number of employees:
26 (as of June 30, 2013)

Total Revenues:
43M NOK in 2012

URL:
http://www.eltele.no

Customers:
Alta Kraftlag, Repvåg Kraftlag, Luostejok Kraftlag, North Energy, Alta, North Cape, Karasjok, Kautokeino, Måsøy, Loppa

The vendor had several opportunities to fix the problems, but they always came back shortly after. The final point that went to replacing the aging and broken solution came when a new employee with several years of Zabbix experience was hired and put in charge of company's monitoring service. Zabbix had already a leading position when the replacement process was initiated, but several other solutions where brought to the table as well: Nagios, Pandora, HP Openview, PHD, MS System Center Operations manager and some bits & pieces from SolarWinds. Our new employee set together a comprehensive test rig against our live infrastructure and showed off Zabbix potential. *„No other software was even taken to this level, but Zabbix was chosen for 4 main reasons: Scalability, Stability, Flexibility, TCO and revenue potential. We will gladly pay for support and sponsor development for a solution that scales so well both in performance and TCO."* Alf Solli, Senior System Consultant, Eltele AS. According to Alf Solli, Zabbix was chosen over the previous monitoring solution because it scales much better, has a much better licensing model with commercial support and is flexible enough to provide cloud based monitoring as a service for remote customers with customizable frontend access. Other important benefits of Zabbix that make it stand out over other monitoring solutions were the facts that it's a fully open-source and at the same time Enterprise class monitoring solution!!

Our company was at that time very vulnerable as all the system knowledge and responsibility laid on one single person. So, for the transition to Zabbix, Gold Level Support was purchased in case something should happen to this employee and shortly after, Zabbix Professional Training was purchased for 7 other employees to create redundancy and spread the workload of maintaining and provide customer care on the platform.

After newly acquired competence, implementing Zabbix was easy enough. The hard part was the manual labor moving all company's monitored devices with specific parameters from the previous solution that had no way of exporting data in a way Zabbix could import it. Eltele AS also used a lot of robots (agent user parameters, custom scripts) to gather data from non-standard equipment and devices, and support (templates, LLD rules) for them didn't exist. The solution was to manually create custom templates for lots of devices, using discovery to automatically import most of the hosts and compare the contents of the two monitoring solutions very thoroughly while slowly tearing the old one down. The results gained after the implementation of Zabbix were: database growth, housekeeping issues are gone, stability has increased tremendously, false alarms have decreased to a bare minimum, and customer satisfaction has gone up to a level we've never been on before. Although there is an exception – the MySQL frequent timeout lock bug caused by LLD between 2.0 and 2.0.5, we have yet to reach a performance issue, using the same hardware as our previous solution. *"Overall, we are very pleased with the performance and scalability of Zabbix, and if anything, the only thing we've experience as a downside, is that the frontend can become a bit slow during housekeeping. But we know partitioning can solve that."*

In addition to using Zabbix to provide a service to Eltele's customers, the company, of course, is using Zabbix to monitor all its own equipment. *"Being used to have staff to monitor the monitor solution itself, Zabbix definitively gives a peace of mind due to its stability, but also the economical model we built around the platform."*

CUSTOMER SOLUTION AT A GLANCE

IT Infrastructure:
Approx. 1100 devices, with 65 000 enabled items and 15 000 triggers. Climbing steadily, we're currently only at 203NVPS.

Zabbix services used:
Technical Support, Zabbix Professopnal Training, Custom Development

Hardware used for Zabbix:
Monitoring mainly Cisco devices, Windows (and a few Linux) servers, environmental sensors and other misc devices. Zabbix server is running on on IBM x3250's, quad core CPU's of 2,5Ghz and 8GB RAM. The frontend is running on an HA protected Linux cluster. MySQL is running on dual socket, quad core Xeon IBM x3650's with 24GB RAM and 6 to 8 10K SAS disks in RAID5 and 10.

Zabbix Architecture:
Every part of Zabbix, except 6 proxies, are made redundant with OpenAIS. MySQL consists of two servers in a master-master replication setup.

SHARE WITH COLLEAGUES

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