Nagios Monitoring Solution

Pete Heiss

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

B. Table of Contents

C. Abstract

Problem Summary:

Currently the company has expanded the number of servers supporting day to day operations to a number which is requiring system monitoring. This will assist the IT team in providing customers with a higher service availability percentage as we as a way for the operations center to catch issues and resolve issues to reduce downtime.

Solution Recommendation

The department has turned down previous solutions due to cost being too high. We’ve chosen an open source solution call Nagios due to it being free and easily configurable on Linux systems, which are also free of cost. The customer already has virtual machines and hardware in place via their in-house lab which we can utilize for installation, configuration, and future upgrades/deployments. Future expansion of existing lab hardware will not be over $5,000.

Solution Benefits to Customer

The major benefit to our solution is no cost for software or hardware leaving two possible costs. First is the labor and second possible hardware upgrades in the lab to support more servers costing no more than $5,000. But with a projected growth rate from the customer this would not be required for another 2 years due to the existing hardware capable of handling 80% more resource utilization than currently required.

Project Objectives

The primary objective is to resolve this issue for the customer at a low cost, ease of solution hand-off and future management by the customer, as well painless hardware upgrades.

Funding Requirements

Cost for future hardware upgrades would amount to $5,000 every two years for new lab hardware. Due to this being a time and materials contract, our current estimation for labor is $10,000. Total cost after completion and handoff to customer would be $15,000. Please note this is assuming there’s not time materials in addition to those per our current estimate.

Relevant Expertise for Solution

We have a list of references from 10 blue chip companies who have rated our services and ability to keep costs compared to our competitors and at the same time deliver an A+ service from start to finish. We have executives at each of these 10 companies who have rated us on our website and yelp in case our ability comes into question.

D. Proposal Body

*1. Relation of Proposed Solution to RFP Requirements*

We’re aware that the customer doesn’t have an infrastructure monitoring system in place. Overall product and system reliability is placed in jeopardy without the ability to catch issues can impact customer sales when a catastrophic event is not addressed quickly. The customers primary goal is to integrate new technologies in the instruction of English language grammar and our solution will ensure deliverance of that goal to customers by ensuring high service availability. This cannot be achieved without system monitoring, so issues are caught early allowing quicker incident response and service restoration. This way any future endeavors that SC takes on, assurance can be had that new system issues from such organizational changes can be noticed and resolved in a timely manner by the IT department.

*2. Stigmatization of 3 Published Works*

*3. Deliverance of Goals, Supporting Objective, and Deliverables*

The projects goal is to setup an IT infrastructure monitoring system capable of scaling with company growth. The solution will assist the existing IT employees with noticing service availability issues earlier than they would without such a system. This will allow higher service availability percentages and fewer service disruptions during new deployments into productions for the customers software development teams. This will equate to more sales and customer satisfaction. The following tasks will be required to meet the following objectives:

* Objective 1: Meet with customer to get an understanding of their rack layout of physical hardware and which hardware is not currently used in lab work space
  1. Deliverable 1: Setup date/time for a 1 hour meeting with IT department
     + Here time will be taken to get the rundown from IT personnel to understand their setup and how we can deploy the solution without disruption to their existing framework
  2. Deliverable 2: Perform walk through in physical lab data center located onsite at customers office
     + Locating and understanding layout of physical hardware will be important in case we need to interact with IT personnel during setup when we’re not onsite
  3. Deliverable 3: Take notes on location of available hardware for solution installation including IP address spaces and sub-nets
     + Using IP address and setting up on the correct domain will be import and having such information prior to deployment will help in the planning phase
  4. Deliverable 4: Setup remote access accounts to customer lab for deployment preparation
     + Having remote access to the hardware needed for deployment will save time and money for the customer instead of having to drive onsite for tasks
* Objective 2: Provision Virtual Machines for Deployment
  1. Deliverable 1: Reserve 4 virtual machines with suitable hardware
     + Setup of software will be required to support the configuration of the solution
  2. Deliverable 2: Wipe hard disk space required for operation system
     + Standard is to clear disk space to remove any previous sensitive information and have a clean slate for installation
  3. Deliverable 3: Install/configure Linux and Nagios dependencies
     + Here simple operation system install and configuration of firewall including solution dependencies will be completed for deployment prep
* Objective 3: Deployment of Solution
  1. Deliverable 1: Nagios Deployment
     + Solution will be deployed to the virtual machines in the lab
  2. Deliverable 2: Testing and Review
     + The deployment will be tested and reviewed with the customer as part of training
* Objective 4: Training of Company Personnel
  1. Deliverable 1: Solution Prep and Deployment
     + Review of the solution preparation and deployment will be rolled out to IT staff. Time will be taken to answer all questions and to demonstrate any process steps not clear.
  2. Deliverable 2: Handoff to customers
     + Project will be closed and handed off to the customer once they are 100% happy with all work and training. They will be provided a contact to call in case they have questions.

4. Project Plan

* Task 1 – 1 Day – Setup 4 Virtual Machines (VM), install Linux Operating System (OS)
* Task 2 – 1 Day – Configure Nagios on VM’s
* Task 3 – 4 Days – Configure Nagios to monitor front end, middle tier, and backend servers
* Task 4 – 3 Days – Configure Nagios to Monitor network nodes
* Task 5 – 7 Days – fastracked during tasks 3-4 – Provide training to SC IT personnel
* Task 6 – 3 Days – Testing, final hand-off to SC IT department, project Closure

*5. Resource Cost List*



*6. Project Completion – Evaluation Framework*

During the project we will establish gate reviews of each completed milestone to ensure customer satisfaction. In addition, a review of the final result of the project will be held with customer stakeholders to ensure that all concerns, questions, and deliverables have been met. Anything that was missed on the scope statement will be reviewed and implemented to ensure the project is completed within customer expectations. The project will then be closed following customer approval to do so.



E. Justification of Technology Solution

The main product and mission of SC is to provide customers with a learning platform delivered using technology. We believe any method of product deliverance left without system monitoring leaves that customer vulnerable to major impact from service-related failures. Our solution not only provides a way to mitigate this risk, but also an avenue through which an incident response team can react and engage service owners for expedited issue resolution. Out solution will also provide a platform that is scalable for future acquisitions and business expansions providing value in more than one area.

F. Letter of Transmittal / Cover Letter

Seamus Company

Supply Chain Department

650 N South Street

Dellberg, WI 99999

January 01, 2006

Jack Tackle

Tackle Monitoring Solutions

5436 Tide St. NE

Nome, Alaska

12312

Dear Mrs. Miller,

I’m formally submitting a Statement of Work (SOW) in response to your RFP. Our solution comes at low cost, quick project completion, low future cost, and ease of future management by your IT department.

This SOW is a general summary of how our services will fulfill requirements of the current RFP as well as any future endeavors your company embarks. We performed several studies which included building a new team to handle manual monitoring, solutions from our competitors, and having a custom service monitoring system setup. Of these solutions, we believe the 3rd option is best suited for your needs and comes at the lowest cost with the greatest value.

We’ve enjoyed working with you and your colleagues in the IT Department including executive management for the duration of this project. If you have any questions, feel free to give me a call (123-123-1234).

Sincerely,

Pete Heiss

Senior PM

Tackle Monitoring Solutions