# SAGE code of conduct for SnBCorp and Change management system

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## 1 Introduction

Since our company was first founded over two years ago, we have come a long way. At the moment we have reached the limits of our IT department. The main issue isn't the number of employees but the lack of guidelines. When the organisation first started guidelines for the few IT personnell weren't set up clearly. This report discusses the SAGE[1] code of conduct.

## 2 The SAGE code of conduct[2]

#### $\operatorname{Professionalism}$

• I will maintain professional conduct in the workplace, and will not allow personal feelings or beliefs to cause me to treat people unfairly or unprofessionally.

A professional IT employee will never let it's own feelings get in the way of the execution of it's work.

Personal Integrity

• I will be honest in my professional dealings, and forthcoming about my competence and the impact of my mistakes. I will seek assistance from others when required.

A professional IT employee will not pretend to know more then he knows and is honest about what he can not do. Mistakes will be confessed immediately and completely.

• I will avoid conflicts of interest and biases whenever possible. When my advice is sought, if I have a conflict of interest or bias, I will declare it if appropriate, and recuse myself if necessary.

A professional IT employee will at all times avoid having mixed interests. If for any reasons this might occur, it will be declared to the ones seeking advice.

#### Privacy

• I will access private information on computer systems only when it is necessary in the course of my technical duties. I will maintain and protect the confidentiality of any information to which I may have access regardless of the method by which I came into knowledge of it.

A professional IT employee will at all times treat confident data as such. Obtained confident information will never be passed on to others by any means.

#### Laws and Policies

• I will educate myself and others on relevant laws, regulations and policies regarding the performance of my duties.

A professional IT employee will always be up to date on all legal laws concerning his profession.

#### Communication

• I will communicate with management, users and colleagues about computer matters of mutual interest. I will strive to listen to and understand the needs of all parties.

A professional IT employee will always gather the needs of all employees before making a decision.

System Integrity

• I will strive to ensure the necessary integrity, reliability, and availability of the systems for which I am responsible.

A professional IT employee will do it's very best to make sure systems he or she is responsible for are integer, reliable and available for as much of the time as possible.

• I will design and maintain each system in a manner to support the purpose of the system to the organization.

A professional IT employee will design and maintain a system with the organisation's mission and profile in mind.

#### Education

• I will continue to update and enhance my technical knowledge and other work-related skills. I will share my knowledge and experience with others.

A professional IT employee will always be up to date with the applicable technology and be willing to share this knowledge.

Responsibility to Computing Community

• I will cooperate with the larger computing community to maintain the integrity of network and computing resources.

A professional IT employee will always have backtalk with the community to make sure the network and computer resources are up to date with the progressing technologies, and so enforce integrity.

#### Social Responsibility

• As an informed professional, I will encourage the writing and adoption of relevant policies and laws consistent with these ethical principles.

A professional IT employee will be at the forefront of adoption policies and laws, to enforce it's ethical principles.

#### Ethical Responsibility

• I will strive to build and maintain a safe, healthy, and productive workplace.

A professional IT employee wants to make sure he has a clean, wellorganized and safe workplace so he can be productive.

• I will do my best to make decisions consistent with the safety, privacy, and well-being of my community and the public, and to disclose promptly factors that might pose unexamined risks or dangers.

A professional IT employee wants to make decisions that will not impair safety, privacy and well-being of the community and the public. He will fight against propositions that include unexamined risks or dangers.

• I will accept and offer honest criticism of technical work as appropriate and will credit properly the contributions of others.

A professional IT employee will know how to handle criticism and knows how to give objective comments to others, both good and bad. • I will lead by example, maintaining a high ethical standard and degree of professionalism in the performance of all my duties. I will support colleagues and co-workers in following this code of ethics.

A professional IT employee will be the living proof of all the above canons and will stimulate colleagues to do the same.

# 3 Importance of SAGE to our company

At this moment SnBCorp has a lack of good universal guidelines. Members of the SA team seem to be lacking uniform methods. Therefore it is vital to the survival and growth of the organisation that we embrace these new guidelines. As the organisation continues to grow, streamlining the IT department will become one of the main objectives. When the IT organisation implements these guidelines, we:

- will have a reduce in communication errors, resulting in reduced efficiency or failure of services
- the course of a problem can be found much more easily, due to the improved personal integrity
- will waste less time with non-work related manners
- will have less data 'leakage' due to improper handling of private and sensitive data
- will deliver more complete products that are inspired by all layers of customer's employees
- will have a more stable, relyable IT infrastructure due to the System Integrity canon.
- will always be updated on the latest technologies
- will have more efficient workspaces, with 'clean' desktops (prevents data leakage)
- will have a better feedback mechanism
- will have an SA team that continuously outperforms itself

For these reasons, it seems a great step forwards to adopt the SAGE rules of conduct

## 4 Example situations

To illustrate the need for the SAGE code of conduct, four examples will be given below:

• Personal Integrity

When the email service goes down at SnBCorp, it can take a long time to figure out what happens. If the employee that is the cause of this disruption comes forward and explains what has happened, this can greatly reduce the time necessary to get the mail system online again.

• Privacy

If the privacy canon was enforced last year, no critical data was leaked through social engineering at the company barbecue.

• Communication

When all parties are being heared, an integer and resilient application is developed. For instance, if the mailing system that is implemented last year, also was proposed to the administration department, it had become obvious from the start that no mailing lists could be send from it, and this steps could have been taken on forehand.

• System Integrity

Regular audits of the integrity of a system could have made the security leak apparent in our customer database before a white hat hacker pointed it out to us. This embarrassment could have been prevented if we had implemented SAGE earlier.

# 5 Call/Change management system

As our company also lacks a good CMS and and call system, one also has to be set up. At this moment SnBCorp uses email as a call/change system, which of course isn't a suitable system for it. A good Call/Change system will go through some of the following steps:

- (Greeting the user)
- Problem classification
- Problem Verification
- Solution Proposal
- Solution Selection
- Execution
- Craft verification
- User verification

In our instance, the system may assist in step 2 and will play a key role in steps 5 and 6. The system should over time gather a lot of incidents which can be categorized and can become a sort of "knowledge base". The knowledge base can be used to find a solution more easily, thus speeding the process up. Also, it can be used to assign certain calls to certain SA members, and to reassign a call if the SA member isn't able to resolve it. Scheduling is also a key item if the call/change system. With this system, a call for instance, can be scheduled for the night shift or a low-priority call can be scheduled for a time when the SA team is under less load. Also, a good change/call system will be able to generate management information, which can be used to measure the SA team's performance. Feedback to users is also greatly improved with this system as users can now check the status of their call online.

## 6 Systems examined

After some research, the following solutions where investigated:

• Wreq[3]

Wreq is a database driven system provides a web and email interface.

It has a system to produce HOWTO's and FAQ's.

It has a rights system so different groups can be made with different rights.

It is an open-source application which can be used to alter the program to our needs if necessary.

• PerlDesk[4]

Perldesk is MySQL database driven and has a email and Web interface

It has an excellent call tracking system and a knowledge base

Calls can be scheduled and prioritized

Through scheduling, multi-occurring actions can be carried out. (Daily maintenance etc.)

This call system has been used at the author's former internship and has proven itself

Both PerlDesk and Wreq seems to have all core functionality for our needs, but the management information lacks. There is no easy way to see how long a call has lasted, trending etc. are not included. This might be added by SnBCorp developers later. Werq is a fine open-source solution but PerlDesk is a commercial product that is slightly superior. Both systems are very interesting for use in our company.

## 7 Implementation

Implementing one of these two systems shouldn't be very difficult, as long as these steps are followed:

- Run the new system along the old email system for some period.
- Get the SE team up to speed on the new system
- Make all employees familiar with the new system, and explain it's benefit
- When everybody has sufficient knowledge on the system and it has run stable for some period of time, it can become the main system
- Of course, backups have to be made of this system.

## 8 Conclusion

The guidelines in the SAGE code of conduct are a guideline to which we have to function. With SAGE implemented, the efficiency of the IT department will be greatly boosted and SA members will work in a more professional manner. The whole of the company will get more professional image which plays a great role, since we are an advisory company. It can take some time before all SA members are fully familiar with it but enrolling the code of conduct can commence as soon as possible and without disruption of normal operations. The only investment is time; but the advantages can be numerous.

Implementing a Call/Change management system shouldn't interfere with normal business procedures but it might take a while for everybody to get fully familiarized with the system. When the system is fully implemented it can generate a much clearer picture of the SA team's work. If decided upon, it may take a while to write a management module for the system, but as adding modules to both solutions is pretty straight-forward it shouldn't disrupt it's normal operations.

## References

- [1] SARGE website http://www.sage.org/
- [2] SARGE code of conduct http://www.sage.org/ethics.mm
- [3] Wreq's website http://www.math.duke.edu/ yu/wreq/
- [4] PerlDesk's website http://www.perldesk.com