

Post analysis

Comparison of i-scream with Big Brother

Big Brother is an established "system and network monitor" which is very similar in nature to the i-scream monitoring system. This document compares the comparative merits of our own system and Big Brother.

Revision History

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Introduction

Big Brother is an established “system and network monitor” which is very similar in nature to the i-scream monitoring system. This document compares the comparative merits of our own system and Big Brother. More information about Big Brother is available at <http://www.bb4.com>

Comparison of features

Big Brother	i-scream
Can display status information as web pages or WML pages for WAP.	Can display status information and graphical historical information as web pages or real-time information via a client application. Our system would be easily altered to produce output for WAP.
Uses a client-server architecture to push and pull data. I.e. the server checks services on machines, and 'clients' can be run to send data to the server.	Our system is very similar. The server is responsible for service checks, and our 'host' applications can send information about machine statistics from a variety of platforms.
Redundancy offered by the provision of multiple web displays.	Resilience to failure by using distributed filters. Hosts attempt to reconfigure with the filter manager if a particular filter disappears and can be pointed towards a new filter.
Uses a protocol with an IANA-assigned port number. The protocol is open.	Uses an XML-based protocol, details of which we have made publicly available to encourage future development of hosts by third parties.
Server currently runs on Unix/Linux.	Server runs on Unix/Linux and Windows 2000.
Clients are available for Unix/Linux, NT, Novell and the Mac.	Hosts are currently available for Unix/Linux, NT and Windows 2000.
Network tests include support for testing FTP, HTTP, HTTPS, SMTP, POP3, DNS, telnet, IMAP, NNTP, SSH. Support for additional tests is easily added.	Network tests include support for testing FTP, HTTP, SMTP, POP3, telnet, IMAP, SSH. Support for additional tests can be added by including extra Service Check Plugins.
Has a sophisticated notification ruleset, delays before paging via email, Qpage or Kermit.	Fully configurable notification ruleset, with upper and lower levels for each alert threshold. Notifications may be via public helpdesk displays, real-time clients, email and an IRC bot.
History and reporting, to establish whether Service Level Agreements are being met.	Historical reports detailing machine statistics over time, browsable via a web interface.
A community of over 1500 users on a mailing list to provide quick and friendly support and commentary.	A rather small community of users, with support currently being provided by the i-scream team. We hope to get more interest in the system after our exams.
Support for plug-ins in any language.	Ability to add Java plug-ins for filtering, service checks, host monitoring and alerting.

Conclusions

The Big Brother monitoring system is well established, with a far larger user base than we currently have. They consequently have the input of many third party plug-ins and modules provided by their own users. We hope to obtain similar interest from our users in the future.

The functionality of the two systems is very similar, with both ultimately being used to monitor machines on networks. Both systems have their own merits and shortcomings. Both have provisions for configurability and additional features.

One key advantage of our server is that it can run on any platform using Java. We also believe that our data is presented in a neater format on the web pages and that we already provide a lot of information about machines without the need to install extra plug-ins.

We are confident that if i-scream were to establish a large user base, then we too would receive input from our users, for example, contributions of host applications for other operating systems. We provide people with all the information they need to be able to write their own host applications.

We do not currently provide support for SMS paging, however, an email gateway could be used without changing the current implementation of our monitoring system.

Final thoughts

We would be interested to see how i-scream competes with Big Brother if we are given permission by the University to open-source it. We believe that we offer some truly useful features and would be able to make up our shortcomings with the support of other interested parties.