

Babel 
Enterprise
v1.1

<http://babel.sourceforge.net>

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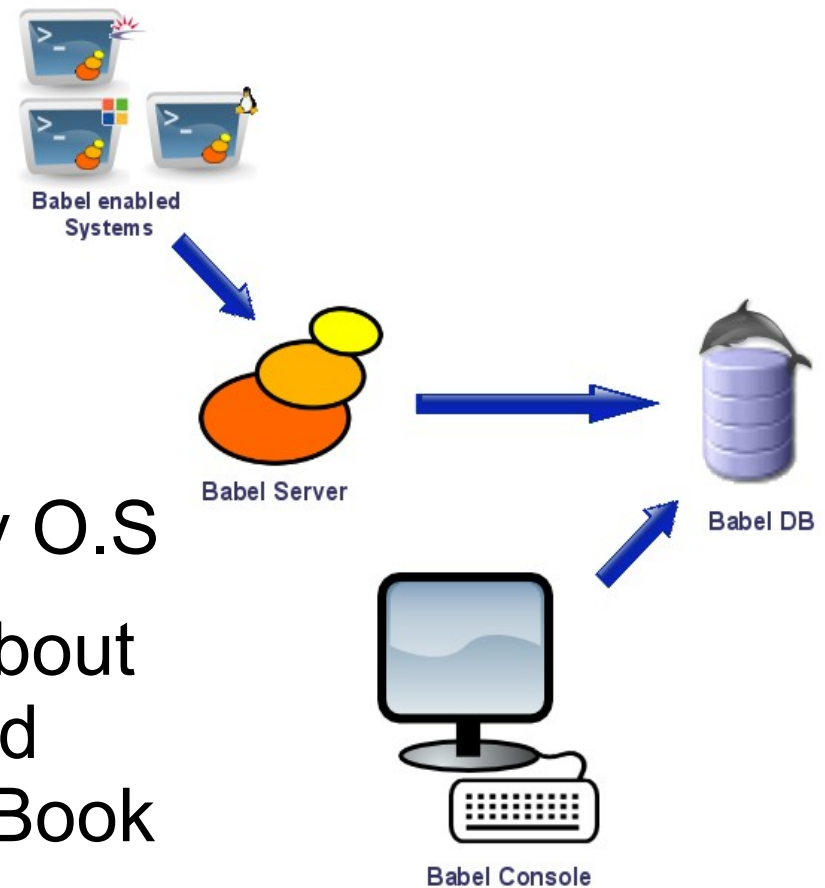
What is Babel?



- Babel Enterprise is a system auditing tool
- Babel performs a security level check of the machine or hardening
- The check consists of a number of auditing tests that obtain a snap of the security status of each machine
- The result is a security index of the system that is given after each execution

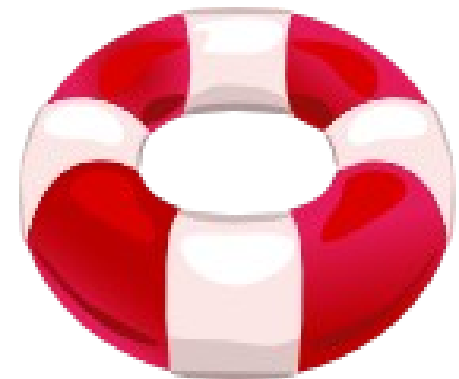
Babel Enterprise architecture

- Secure connections:
 - SSH, SSL, HTTPS).
- Light Management (WEB)
- Client-Server Architecture
- Native agents for almost any O.S
- All project is documented: About 90 pages of well-documented functionality available in DocBook and PDF.



Babel audit modules

- Centralized patch management, software inventory and file integrity.
- Listening ports, service minimization, and password strenght audits.
- Remote services, accounts, and root enviroment audit policies.
- Application hardening (Apache, Tomcat and much others).
- Much others... and very easy to define your own modules.



Babel components

- Babel Server.
- Babel Agents.
- Babel Database
- Babel Web Console



Babel server

- It process data packets sent by agents and transform them into normalized datastores in database.
- Server checks if anything changed from last policy.
- Server scores the security index of the policy.
- It is written in C



Babel server technology



- It uses glibc, gobject.
- It uses inotify.
- Babel Server, by using inotify has become an asynchronous system.
- Every piece of code is documented using oxygen.
- It has plugin architecture to define your own co-relationships.
- It runs as a daemon.

Babel agents



→ Totally customizable

→ Coded in Bash for Linux (systems)



→ Coded in ksh for Solaris & AIX Systems

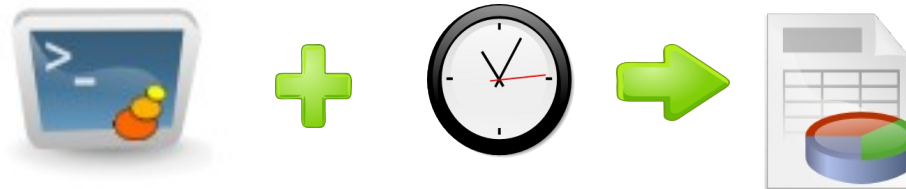


→ Wizards for installation.

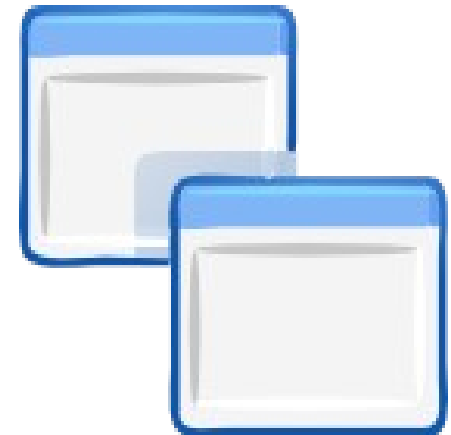
→ Coded in C++ for Windows systems (MinGW)

→ Free Source. Available to modify and improve any one of it (including install Wizards).

How Babel agents works



- Run as a daemon.
- Run their modules
- A XML file is generated and sent to the server using a secure connection.
- Run in a specific range, such hours, days or weeks



Babel agent module example (Unix)

```
.  
.br/>cat /etc/passwd | cut -f 6 -d ":" > $TEMP/remote_home.tmp  
# Search in home directories: .rhosts, .netrc and ssh authorized_keys files  
for a in `cat $TEMP/remote_home.tmp`  
do  
    if [ "$a" != "/" ]  
    then  
        # .netrc Search in home directories  
        find $a -name ".netrc" -print > $TEMP/remote_netrc.tmp  
        2>/dev/null  
        if [ ! -z "`cat $TEMP/remote_netrc.tmp`" ]  
        then  
            for b in `cat $TEMP/remote_netrc.tmp`  
            do  
                echo "<moduledata><item><![CDATA[$b]]></item>  
                <data>.netrc Dete  
                cted</data></moduledata>" >> $DATA  
            done  
        fi  
    fi  
fi  
.  
.
```



Babel WEB Console

- Written in PHP5.
- Graphics generated using GD directly and Image Graph (PEAR) library.
- PDF reports using a custom made LATEX report engine.
- Babel Server can be totally managed from Babel Console.
- Database management included.



Babel Enterprise

Babel Enterprise v1.1 devel

Report of top modules / agent

Group: All

Export to PDF format

Statistical breakdown

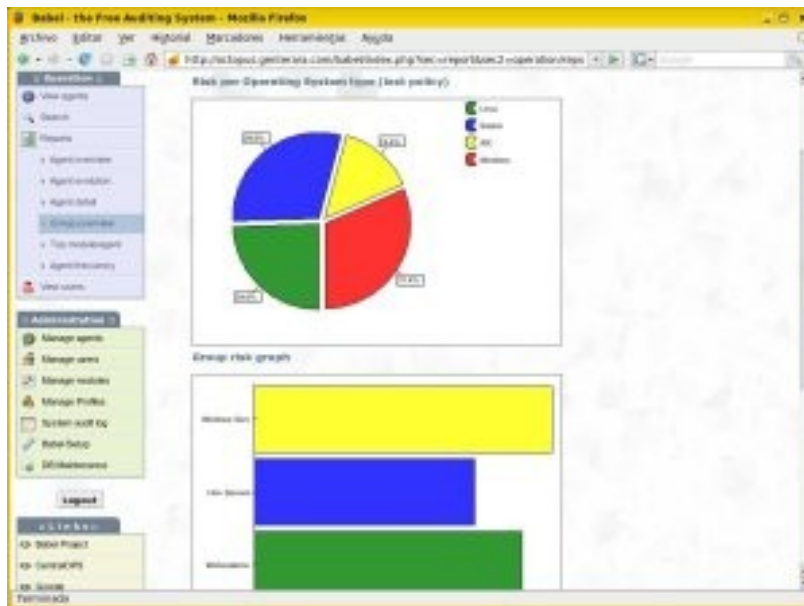
Arithmetic media	93
Typical deviation	39.66
Max value	153
Min value	39
Total number of agents	10

Report of top weak agents

Agent	OS	Risk	Risk	Report
daeva	Linux	153 / 93	Risk Media	[Bar Chart]
sundavid	Windows	150 / 93	Risk Media	[Bar Chart]
fastmle	Linux	123 / 93	Risk Media	[Bar Chart]
PIRATA	Windows	108 / 93	Risk Media	[Bar Chart]
caprica	Windows	106 / 93	Risk Media	[Bar Chart]

Terminado

Screenshots



Babel Agents

Agent	Name	IP	Defected	Service	Risk	Plugins	Status	Last audit time	Next audit time
✓	axona	192.168.1.10	7 Days	200	LOW	4	🟢🟢🟢🟢	2007-03-08 00:00:00	🟢
✓	barbata	192.168.1.11	7 Days	200	LOW	4	🟢🟢🟢🟢	2007-03-08 00:00:00	🟢
✓	axarax	192.168.1.12	7 Days	200	LOW	23	🟢🟢🟢🟢	2007-03-08 00:00:00	🟢
✓	gaxaxax	192.168.1.13	7 Days	200	LOW	4	🟢🟢🟢🟢	2007-03-08 00:00:00	🟢
✓	axaxax	192.168.1.14	7 Days	200	LOW	4	🟢🟢🟢🟢	2007-03-08 00:00:00	🟢
✓	axaxax	192.168.1.15	8 Days	200	LOW	4	🟢🟢🟢🟢	2007-03-08 00:00:00	30%
✓	axaxax	192.168.1.16	7 Days	200	LOW	4	🟢🟢🟢🟢	2007-03-08 00:00:00	🟢
✓	axaxax	192.168.1.17	7 Days	200	LOW	2	🟢🟢🟢🟢	2007-03-08 00:00:00	🟢
✓	axaxax	192.168.1.18	7 Days	200	LOW	1.1	🟢🟢🟢🟢	2007-03-08 00:00:00	🟢
✓	axaxax	192.168.1.19	7 Days	200	LOW	1	🟢🟢🟢🟢	2007-03-08 00:00:00	🟢

Screenshots

Babel - The Free Auditing System - Module Profile

You are connected as: admin | Babel Enterprise v1.1 Agent - The Free Auditing System

Detailed module data

Agent name: psf620
 Last audit run: 2007-02-18 02:00:10
 Module name: File attributes
 Module type: Regular
 Module Description: Auto added by SubAdmin

Local policy evaluation - Detailed data

Policy Name	Policy ID	Policy Description
FileAttributes	1001	File group security, recommended
FileAttributes	1002	File permissions, recommended
FileAttributes	1003	File group security, recommended
FileAttributes	1004	File permissions, recommended
FileAttributes	1005	File group security, recommended
FileAttributes	1006	File permissions, recommended
FileAttributes	1007	File group security, recommended
FileAttributes	1008	File permissions, recommended
FileAttributes	1009	File group security, recommended
FileAttributes	1010	File permissions, recommended
FileAttributes	1011	File group security, recommended
FileAttributes	1012	File permissions, recommended
FileAttributes	1013	File group security, recommended
FileAttributes	1014	File permissions, recommended
FileAttributes	1015	File group security, recommended
FileAttributes	1016	File permissions, recommended
FileAttributes	1017	File group security, recommended
FileAttributes	1018	File permissions, recommended
FileAttributes	1019	File group security, recommended
FileAttributes	1020	File permissions, recommended

Babel - The Free Auditing System - Module Profile

You are connected as: admin | Babel Enterprise v1.1 Agent - The Free Auditing System

Babel Agents

Agent general information

Agent name: ESPENON
 IP Address: 192.168.16.10
 OS: Linux
 OS Version: 2.6.18-028.el5
 Disabled: False
 Policy name: Default, L1
 Group: 50% (30/60)
 Agent Version: 1.1.0 (2007)
 Interval: 7 Days (10080 min)
 Description: Policy 30/60
 Policy runs: 0
 Last contact: 2007-02-18 02:00:10
 Current PolicyRun: 0/0 (0/1)
 Risk evaluation: 00 (0/7)
 Next policyrun: 0%

Policyrun distribution (90 days)

Agent contact frequency

Agent weakness distribution

Agent weakness progression

About ArticaST



- Free Software I+D. Working also with Universities
- Pioneer Free Software projects developed.
- System and Security Experts.

Babel OpenSource project



- Currently 5 developers
- All code licensed under GPL2
- Everybody is welcome to the project.
- Feeling like to contributed? Tell us.

<http://babel.sourceforge.net>