

PDS IMAGING NODE

Management Portal

USGS Astrogeology Research Program

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J.A. Anderson, M.E. Stewart, M. Shanker, L. Gaddis

Purpose

- 1.) Address PDS data integrity and reporting requirements for the PDS Imaging Node (PDS-IN) between delivery acceptance and transfer to the Deep Archive.
- 2.) Leverage existing Open Source Software to allow the PDS-IN to centrally manage and monitor node/data node(s) and data holdings.
 - a.) Monitor data integrity and availability
 - b.) Gather usage statistics
 - c.) Monitor the health and security of servers
 - d.) Maintain documentation and enhance communication with staff and data node(s)
 - e.) Generate meaningful reports with the above data
- 3.) Scale as data sets increase in size/volume.
- 4.) Do as little scratch development as possible.

Implementation

1.) Develop a PDS Imaging Node Management Portal that

a.) Takes advantage of existing Free and Open Source Software (FOSS)

b.) Adopts a "Portal" approach by integrating proven industry standard FOSS tools under one browser-based management interface that emphasizes:

I.) Data integrity and security

II.) Usage Statistics (Web/FTP)

III.) Backup management

IV.) Reporting

V.) Node communication and documentation

Data Integrity and Security (DI)

1.) Recognized key parallels between the industry standard Host Based Intrusion Detection Systems or "HIDS" and the requirement for Data Integrity in the PDS

a.) Core functionality for both is centered around the use of cryptographic hashing algorithms to inventory and monitor the integrity of files (e.g., MD5)

b.) Added benefit of other inherent features of a HIDS system

2.) There are several Free and Open Source (FOSS) HIDS frameworks available;

a.) Samhain - <http://www.la-samhna.de/samhain/manual/timing-file-checks.html>

b.) OSSEC - <http://www.ossec.net>

3.) We are currently evaluating both, with primary focus on **Samhain**

Samhain

1.) Samhain is a centrally managed "HIDS" initially released under the GNU General Public license in September of 2001.

2.) At its core, Samhain does the following:

- a.) Establishes contact with the log/management server
- b.) Inventories files, calculates checksums, etc
- c.) Continually verifies that the baseline inventory matches what's on disk
- d.) Logs any discrepancies (database, email, sms, etc...)

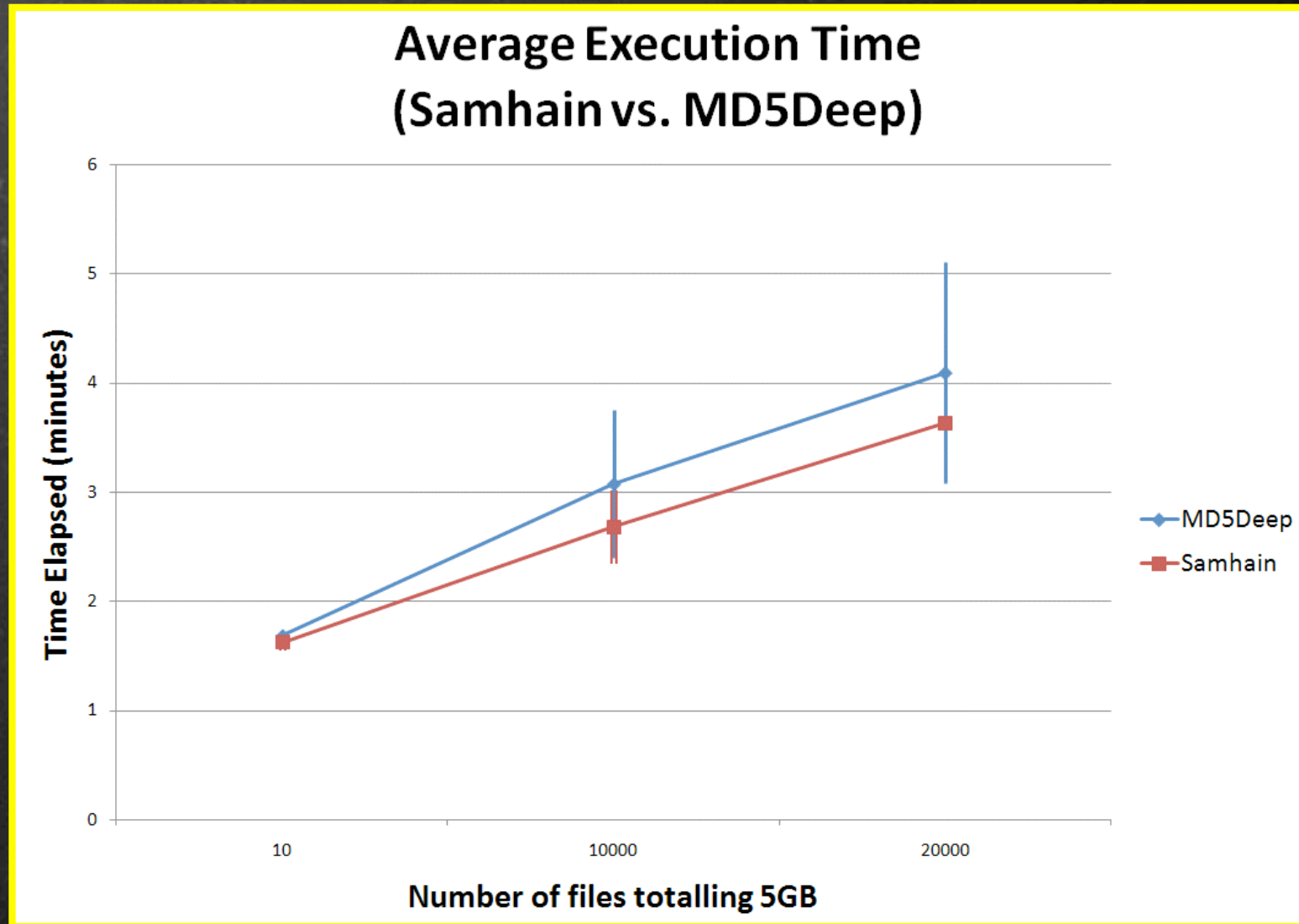
3.) By utilizing an Open Source IDS as the core of our Data Integrity system, we can

- a.) Autonomously ensure the integrity of our data
- b.) Secure our servers

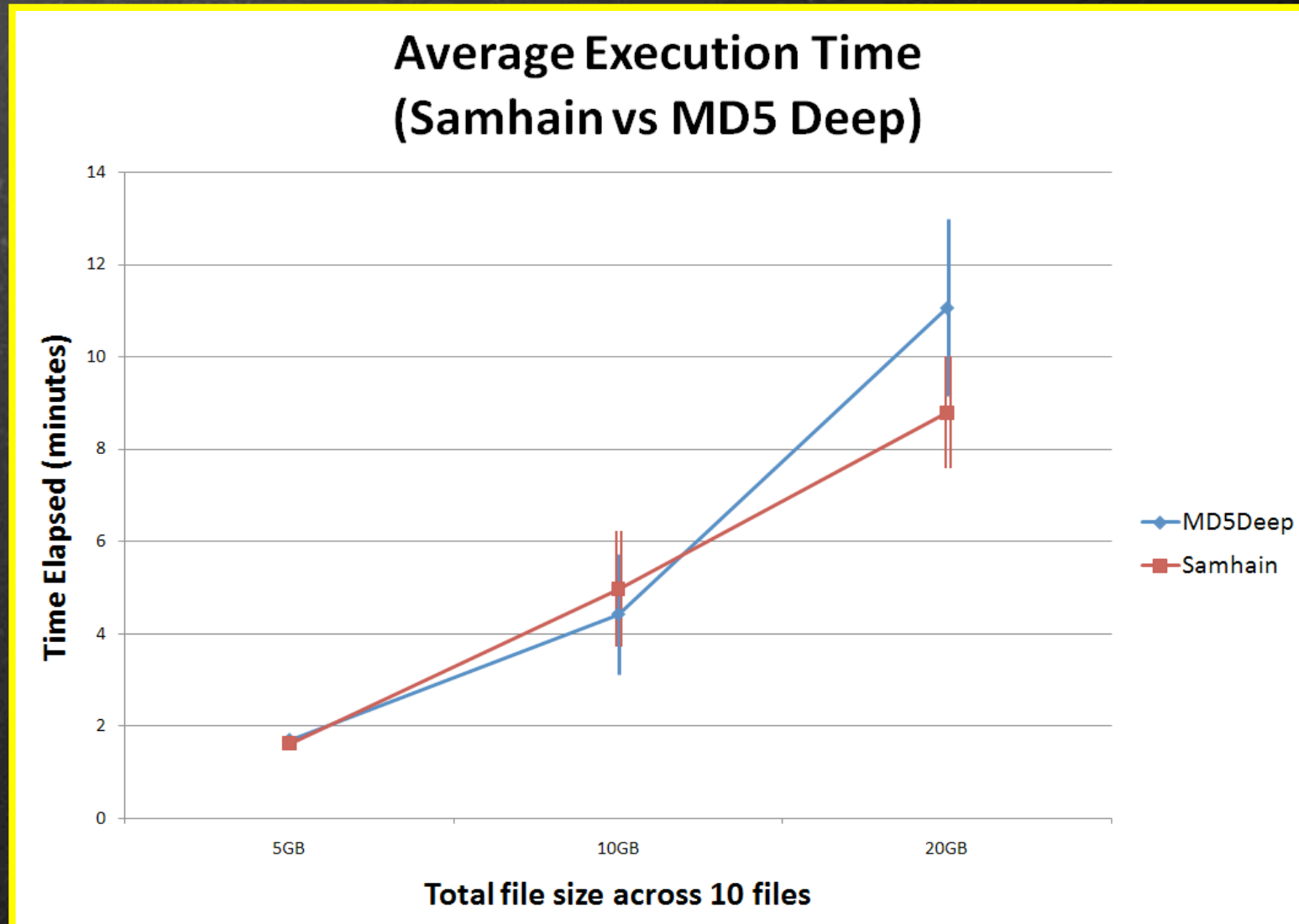
Samhain (cont'd)

- 4.) Samhain can be statically compiled and deployed from the central server in a wide variety of formats
- 5.) Agents can be deployed on the following systems
 - a.) Any POSIX compliant system
 - b.) Windows XP, and Win 2K* (with POSIX emulation)
- 6.) There is a readily accessible baseline database, as well as a centralized event log stored in RDBMS (Postgres, MySQL) to support additional reporting capabilities
- 7.) Samhain is both efficient and scales well, roughly equivalent to "md5deep" in performance as illustrated below

Samhain Performance Statistics



Samhain Performance Statistics



Samhain Baseline Database

```
76776646 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921 pdswww
1837 36437 2006-11-30T18:54:24 1994-10-22T07:02:02 2008-06-
29T12:04:55 AF1BB09A8A336402A04621FE7ACDDA85
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lnxxxxxx/lnxxxx
b/ln0398b.093
```

```
76776674 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921 pdswww
1837 43123 2006-11-30T18:54:24 1994-10-22T07:02:44 2008-06-
29T12:05:20 008346E957ACDD6C27F2C74A53B20593
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lnxxxxxx/lnxxxx
b/ln0499b.093
```

```
76776676 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921 pdswww
1837 43171 2006-11-30T18:54:24 1994-10-22T07:02:56 2008-06-
29T12:05:22 65565493B97AD57B956A0409FB341B79
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lnxxxxxx/lnxxxx
b/ln0541b.093
```

```
76776680 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921 pdswww
1837 37397 2006-11-30T18:54:24 1994-10-22T07:02:20 2008-06-
29T12:05:26 7F293AE1E55E0C470E67A7B7D5094927
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lnxxxxxx/lnxxxx
b/lnf0412b.093
```

Samhain Baseline Database

Inode Number

76776646 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 36437 2006-11-30T18:54:24 1994-10-22T07:02:02 2008-06-
29T12:04:55 AF1BB09A8A336402A04621FE7ACDDA85
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxxxx/lxxx
xxxb/lnd0398b.093

76776674 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 43123 2006-11-30T18:54:24 1994-10-22T07:02:44 2008-06-
29T12:05:20 008346E957ACDD6C27F2C74A53B20593
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxxxx/lxxx
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76776676 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 43171 2006-11-30T18:54:24 1994-10-22T07:02:56 2008-06-
29T12:05:22 65565493B97AD57B956A0409FB341B79
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxxxx/lxxx
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76776680 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 37397 2006-11-30T18:54:24 1994-10-22T07:02:20 2008-06-
29T12:05:26 7F293AE1E55E0C470E67A7B7D5094927
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxxxx/lxxx
xxxb/lnf0412b.093

Samhain Baseline Database

File Permissions

```
76776646 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 36437 2006-11-30T18:54:24 1994-10-22T07:02:02 2008-06-
29T12:04:55 AF1BB09A8A336402A04621FE7ACDDA85
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxx/lxxx
xxxb/lnd0398b.093
```

```
76776674 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 43123 2006-11-30T18:54:24 1994-10-22T07:02:44 2008-06-
29T12:05:20 008346E957ACDD6C27F2C74A53B20593
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxx/lxxx
xxxb/lne0499b.093
```

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76776676 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 43171 2006-11-30T18:54:24 1994-10-22T07:02:56 2008-06-
29T12:05:22 65565493B97AD57B956A0409FB341B79
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxx/lxxx
xxxb/lne0541b.093
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```
76776680 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 37397 2006-11-30T18:54:24 1994-10-22T07:02:20 2008-06-
29T12:05:26 7F293AE1E55E0C470E67A7B7D5094927
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxx/lxxx
xxxb/lnf0412b.093
```

Samhain Baseline Database

User UID Group GID

```
76776646 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 36437 2006-11-30T18:54:24 1994-10-22T07:02:02 2008-06-
29T12:04:55 AF1BB09A8A336402A04621FE7ACDDA85
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lnxxxxxx/lnxx
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/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lnxxxxxx/lnxx
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76776676 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 43171 2006-11-30T18:54:24 1994-10-22T07:02:56 2008-06-
29T12:05:22 65565493B97AD57B956A0409FB341B79
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lnxxxxxx/lnxx
xxb/ln0541b.093
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76776680 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 37397 2006-11-30T18:54:24 1994-10-22T07:02:20 2008-06-
29T12:05:26 7F293AE1E55E0C470E67A7B7D5094927
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lnxxxxxx/lnxx
xxb/lnf0412b.093
```

Samhain Baseline Database

Modification Time (MTIME)

```
76776646 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 36437 2006-11-30T18:54:24 1994-10-22T07:02:02 2008-06-
29T12:04:55 AF1BB09A8A336402A04621FE7ACDDA85
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxxxx/lxxx
xxxb/lnd0398b.093
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76776674 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 43123 2006-11-30T18:54:24 1994-10-22T07:02:44 2008-06-
29T12:05:20 008346E957ACDD6C27F2C74A53B20593
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxxxx/lxxx
xxxb/lne0499b.093
```

```
76776676 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 43171 2006-11-30T18:54:24 1994-10-22T07:02:56 2008-06-
29T12:05:22 65565493B97AD57B956A0409FB341B79
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxxxx/lxxx
xxxb/lne0541b.093
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76776680 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 37397 2006-11-30T18:54:24 1994-10-22T07:02:20 2008-06-
29T12:05:26 7F293AE1E55E0C470E67A7B7D5094927
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxxxx/lxxx
xxxb/lnf0412b.093
```

Samhain Baseline Database

Creation Time (CTIME)

```
76776646 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswwww 1837 36437 2006-11-30T18:54:24 1994-10-22T07:02:02 2008-06-
29T12:04:55 AF1BB09A8A336402A04621FE7ACDDA85
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lnxxxxxx/lnxx
xxxb/ln0398b.093
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76776674 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswwww 1837 43123 2006-11-30T18:54:24 1994-10-22T07:02:44 2008-06-
29T12:05:20 008346E957ACDD6C27F2C74A53B20593
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lnxxxxxx/lnxx
xxxb/ln0499b.093
```

```
76776676 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswwww 1837 43171 2006-11-30T18:54:24 1994-10-22T07:02:56 2008-06-
29T12:05:22 65565493B97AD57B956A0409FB341B79
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lnxxxxxx/lnxx
xxxb/ln0541b.093
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76776680 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswwww 1837 37397 2006-11-30T18:54:24 1994-10-22T07:02:20 2008-06-
29T12:05:26 7F293AE1E55E0C470E67A7B7D5094927
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lnxxxxxx/lnxx
xxxb/lnf0412b.093
```

Samhain Baseline Database

Last Access Time (ATIME)

```
76776646 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921 pdswww
1837 36437 2006-11-30T18:54:24 1994-10-22T07:02:02 2008-06-
29T12:04:55 AF1BB09A8A336402A04621FE7ACDDA85
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxxx/lxxxx
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76776674 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921 pdswww
1837 43123 2006-11-30T18:54:24 1994-10-22T07:02:44 2008-06-
29T12:05:20 008346E957ACDD6C27F2C74A53B20593
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxxx/lxxxx
xxb/lne0499b.093
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```
76776676 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921 pdswww
1837 43171 2006-11-30T18:54:24 1994-10-22T07:02:56 2008-06-
29T12:05:22 65565493B97AD57B956A0409FB341B79
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxxx/lxxxx
xxb/lne0541b.093
```

```
76776680 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921 pdswww
1837 37397 2006-11-30T18:54:24 1994-10-22T07:02:20 2008-06-
29T12:05:26 7F293AE1E55E0C470E67A7B7D5094927
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxxx/lxxxx
xxb/lnf0412b.093
```

Samhain Baseline Database

MD5 Checksum

```
76776646 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921 pdswww  
1837 36437 2006-11-30T18:54:24 1994-10-22T07:02:02 2008-06-  
29T12:04:55 AF1BB09A8A336402A04621FE7ACDDA85  
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxx/lxxx  
xxxb/lnd0398b.093
```

```
76776674 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921  
pdswww 1837 43123 2006-11-30T18:54:24 1994-10-22T07:02:44 2008-06-  
29T12:05:20 008346E957ACDD6C27F2C74A53B20593  
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxx/lxxx  
xxxb/lne0499b.093
```

```
76776676 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921  
pdswww 1837 43171 2006-11-30T18:54:24 1994-10-22T07:02:56 2008-06-  
29T12:05:22 65565493B97AD57B956A0409FB341B79  
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxx/lxxx  
xxxb/lne0541b.093
```

```
76776680 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921  
pdswww 1837 37397 2006-11-30T18:54:24 1994-10-22T07:02:20 2008-06-  
29T12:05:26 7F293AE1E55E0C470E67A7B7D5094927  
/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxx/lxxx  
xxxb/lnf0412b.093
```


Samhain Baseline Database

Full Path to File

76776646 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 36437 2006-11-30T18:54:24 1994-10-22T07:02:02 2008-06-
29T12:04:55 AF1BB09A8A336402A04621FE7ACDDA85
[/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxx/lxxx
xxxb/lnd0398b.093](#)

76776674 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 43123 2006-11-30T18:54:24 1994-10-22T07:02:44 2008-06-
29T12:05:20 008346E957ACDD6C27F2C74A53B20593
[/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxx/lxxx
xxxb/lne0499b.093](#)

76776676 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 43171 2006-11-30T18:54:24 1994-10-22T07:02:56 2008-06-
29T12:05:22 65565493B97AD57B956A0409FB341B79
[/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxx/lxxx
xxxb/lne0541b.093](#)

76776680 2081 -rwxrwxr-x 33277 ----- 0 1 pdsmgr 1921
pdswww 1837 37397 2006-11-30T18:54:24 1994-10-22T07:02:20 2008-06-
29T12:05:26 7F293AE1E55E0C470E67A7B7D5094927
[/www/httpd/htdocs/data/.cdroms1/clementine/cl_0019/lun093/lxxxxxx/lxxx
xxxb/lnf0412b.093](#)

Integration with Portal

Users: root (administrator)
513 sec remaining
09/22/08 12:26 Server running

Refresh Signatures Select all Update Bulk Update Confirm All clients

PDS Imaging Node

U.S. Geological Survey Jet Propulsion Laboratory

| | | | | | | | |
|--------------------------|--------------------------|---------|------|-----------|---------------------|---|------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | 1832851 | CRIT | pdsimage2 | Mon Sep 22 11:14:10 | POLICY MISSING | /www/tmp/big/file7.dat |
| <input type="checkbox"/> | <input type="checkbox"/> | 1832849 | CRIT | pdsimage2 | Mon Sep 22 11:14:10 | POLICY MISSING | /www/tmp/big |
| <input type="checkbox"/> | <input type="checkbox"/> | 1832847 | CRIT | pdsimage2 | Mon Sep 22 11:14:10 | POLICY MISSING | /www/tmp/big/file6.dat |
| <input type="checkbox"/> | <input type="checkbox"/> | 1832845 | CRIT | pdsimage2 | Mon Sep 22 11:14:10 | POLICY MISSING | /www/tmp/big |
| <input type="checkbox"/> | <input type="checkbox"/> | 1832843 | CRIT | pdsimage2 | Mon Sep 22 11:14:09 | No such file or directory | /www/tmp/big |
| <input type="checkbox"/> | <input type="checkbox"/> | 1832821 | MARK | pdserver4 | Mon Sep 22 11:13:12 | ---- TIMESTAMP ---- | |
| <input type="checkbox"/> | <input type="checkbox"/> | 1832819 | MARK | pdserver4 | Mon Sep 22 11:13:10 | File check completed. | |
| <input type="checkbox"/> | <input type="checkbox"/> | 1832816 | ERRO | pdsimage2 | Mon Sep 22 11:11:26 | Cannot remove stale lock file, PID may be a running process | |
| <input type="checkbox"/> | <input type="checkbox"/> | 1832813 | ALRT | pdsimage2 | Mon Sep 22 11:11:26 | EXIT | |

CLIENTS » ADD NEW CLIENT

Sep 22 2008 12:25:31

- pdserver4.wr.usgs.gov
- pdsimage2.wr.usgs.gov

2 clients

9/25/08

Bradshaw

18

Log Analysis and Statistics

1.) Several FOSS tools exist to analyze and report web usage.

a.) We selected **AWStats**.

2.) AWStats was released in April of 2001, and is freely available under the GPL at <http://awstats.sourceforge.net/>

AWStats

1.) Analyzes log files from all of our data servers and generates meaningful usage statistics

- a.) Number of visits, number of unique visitors
- b.) Visits duration and last visits
- c.) Authenticated users, last authenticated visits
- d.) Days of week and rush hours (pages, hits, KB for each hour and day of week)
- e.) Domains/countries of hosts visitors
- f.) Hosts list, last visits and unresolved IP addresses list
- g.) Most viewed, entry and exit pages
- h.) Files type
- i.) Web compression statistics (for mod_gzip or mod_deflate)
- j.) OS used (pages, hits, KB for each OS, 35 OS detected)
- k.) Browsers used
- l.) Visits of robots (319 robots detected)
- m.) Worm attacks (5 worm families)
- n.) Search engines, keyphrases and keywords used to find your site
- o.) HTTP errors (Page Not Found with last referrer, ...)
- p.) Other personalized reports based on url, url parameters, etc...

2.) AWStats natively supports both NCSA and W3C log formats. Can be configured to handle virtually all others as well.

AWStats Integration with Portal

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

PDS Imaging Node
U.S. Geological Survey Jet Propulsion Laboratory

Users: root (administrator)
479 sec remaining
09/22/08 11:54 Server running

Refresh Signatures Select all Update Bulk Update Confirm All clients

pdsimage2.wr.usgs.gov pdsserver4.wr.usgs.gov [back](#)

Statistics for: pdsimage2.wr.usgs.gov

Summary
When:
Monthly history
Days of month
Days of week
Hours
Who:
Countries
Full list
Hosts
Full list
Last visit
Unresolved IP Address
Robots/Spiders visitors
Full list
Last visit
Navigation:
Visits duration
File type
Viewed
Full list
Entry
Exit
Operating Systems
Versions
Unknown
Browsers
Versions
Unknown
Referrers:
Origin
Referring search engines
Referring sites
Search
Search Keyphrases
Search Keywords
Others:

Summary

Reported period: Month Sep 2008
First visit: 01 Sep 2008 - 00:14
Last visit: 22 Sep 2008 - 04:02

| Unique visitors | Number of visits | Pages | Hits | Bandwidth |
|-----------------|------------------------------|--------------------------------|--------------------------------|---------------------------------|
| 182 | 422 (2.31 visits/visitor) | 474878 (1125.3 Pages/Visit) | 486918 (1153.83 Hits/Visit) | 29.43 GB (73133.58 KB/Visit) |

Monthly history

| Month | Unique visitors | Number of visits | Pages | Hits | Bandwidth |
|-----------------|-----------------|------------------|---------------|---------------|-----------------|
| Jan 2008 | 14 | 25 | 15219 | 15219 | 0 |
| Feb 2008 | 12 | 17 | 724 | 724 | 0 |
| Mar 2008 | 0 | 0 | 0 | 0 | 0 |
| Apr 2008 | 0 | 0 | 0 | 0 | 0 |
| May 2008 | 0 | 0 | 0 | 0 | 0 |
| Jun 2008 | 0 | 0 | 0 | 0 | 0 |
| Jul 2008 | 0 | 0 | 0 | 0 | 0 |
| Aug 2008 | 86 | 165 | 41798 | 49097 | 49.08 GB |
| Sep 2008 | 182 | 422 | 474878 | 486918 | 29.43 GB |
| Oct 2008 | 0 | 0 | 0 | 0 | 0 |
| Nov 2008 | 0 | 0 | 0 | 0 | 0 |
| Dec 2008 | 0 | 0 | 0 | 0 | 0 |

AWStats Integration with Portal

Statistics for:
pdsimage2.wr.usgs.gov

Summary
When:
Monthly history
Days of month
Days of week
Hours
Who:
Countries
Full list
Hosts
Full list
Last visit
Unresolved IP Address
Robots/Spiders visitors
Full list
Last visit
Navigation:
Visits duration
File type
Viewed
Full list
Entry
Exit
Operating Systems
Versions
Unknown
Browsers
Versions
Unknown
Referrers:
Origin
Referring search engines
Referring sites
Search
Search Keyphrases
Search Keywords
Others:

Visitors domains/countries (Top 10) - Full list

| Domains/Countries | Pages | Hits | Bandwidth |
|-------------------|--------|--------|-----------|
| Czech Republic | 244985 | 244985 | 5.85 GB |
| Japan | 168620 | 168812 | 4.48 GB |
| Commercial | 40523 | 49929 | 4.10 GB |
| Network | 16315 | 18442 | 12.41 GB |
| USA Government | 2582 | 2587 | 536.34 MB |
| Unknown | 1020 | 1068 | 501.08 MB |
| USA Educational | 436 | 630 | 564.27 MB |
| Germany | 226 | 286 | 45.22 MB |
| United Kingdom | 58 | 61 | 935.73 MB |
| Poland | 46 | 46 | 65.50 MB |
| Others | 67 | 72 | 19.73 MB |

Hosts (Top 10) - Full list - Last visit - Unresolved IP Address

Hosts : 145 Known, 37 Unknown (unresolved ip)
182 Unique visitors

| Hosts | Pages | Hits | Bandwidth | Last visit |
|-------------------------------------|--------|--------|-----------|---------------------|
| t036059.dynamic.ppp.asahi-net.or.jp | 168573 | 168755 | 4.44 GB | 08 Sep 2008 - 02:55 |
| lanconsult.hk.gin.cz | 112721 | 112721 | 2.67 GB | 18 Sep 2008 - 06:36 |
| galaxy.lc.cz | 96183 | 96183 | 2.30 GB | 22 Sep 2008 - 04:02 |
| galaxy.lanconsult.cz | 25437 | 25437 | 633.71 MB | 18 Sep 2008 - 20:13 |
| 85.137.211.155.dyn.user.ono.com | 18659 | 18659 | 490.54 MB | 18 Sep 2008 - 11:44 |
| s0106001560c3a09e.ed.shawcable.net | 13745 | 13745 | 342.85 MB | 14 Sep 2008 - 14:37 |
| 85.137.208.140.dyn.user.ono.com | 12205 | 21589 | 1.33 GB | 16 Sep 2008 - 12:28 |
| adsl-137-66.in.ipex.cz | 10640 | 10640 | 265.38 MB | 07 Sep 2008 - 07:09 |
| 85.137.210.118.dyn.user.ono.com | 8563 | 8563 | 2.18 GB | 17 Sep 2008 - 11:07 |
| smtp1.sanantonio.gov | 1604 | 1604 | 306.69 MB | 02 Sep 2008 - 13:30 |
| Others | 6548 | 9022 | 14.52 GB | |

Under Development

1.) Backup Management

- a.) Pull backup logs into the management interface
- b.) Schedule Backups (some applications)

2.) Documentation and Collaboration

- a.) Evaluating CMS code for integration
- b.) Chat

3.) Reporting

- a.) Currently working to build in reporting capabilities to:
 - i.) Correlate all available data into a "standardized" report for the PDS
 - ii.) Provide an interface for generating custom reports

Summary

- 1.) Need to both comply with the operational requirements of the PDS in the "here now", as well as look to the future (PDS-2010).
- 2.) Accomplish this by leveraging FOSS software and integrating it into a "Management Portal" type interface.
- 3.) Make a best effort to align the Imaging Node's efforts with the architectural/modernization efforts of the engineering node and the PDS as a whole.
- 4.) Provide input and feedback to the PDS on potential tools, etc...

Questions ?

References (Software and Licensing)

- 1.) AWStats - <http://awstats.sourceforge.net>
- 2.) Samhain - <http://www.la-samhna.de/samhain/>
- 3.) OSSEC - <http://www.ossec.net>
- 4.) FOSS - <http://www.opensource.org>