European Internet Accessibility Observatory

Observatory Testing - WP5

Kristiansand 2007-11-09



The EIAO project is co-funded by the European Commission, under the IST contract 2003-004526-STREP



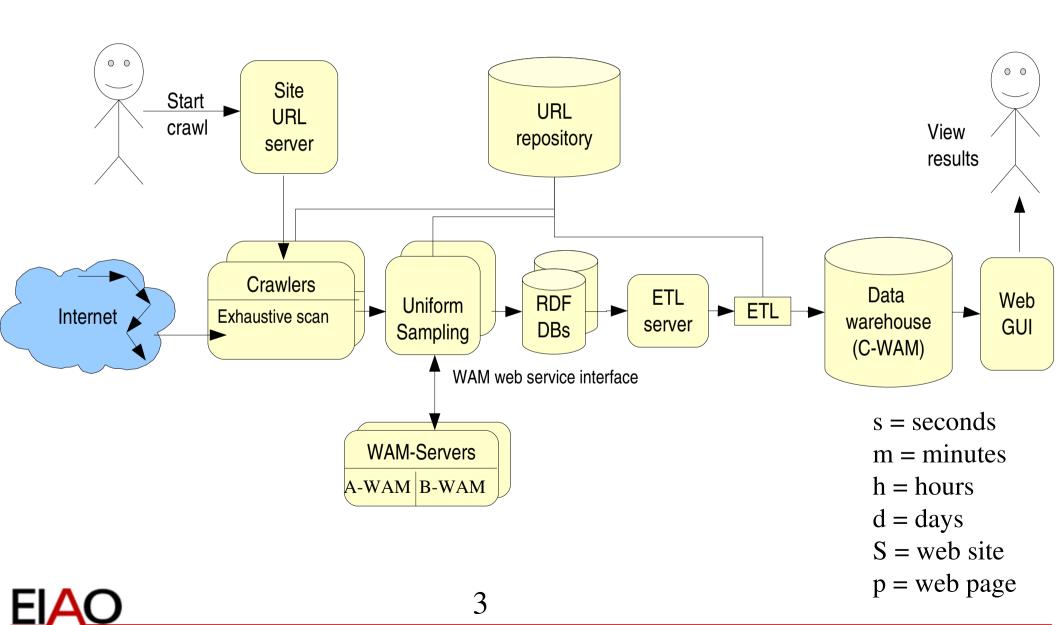
Morten Goodwin Olsen University of Agder

Overview

- Quick overview of the technical Observatory
- Speed and duration of the Observatory
- Behaviour of the Observatory
- Conclusion / Further work



Observatory Introduction



Speed of the Observatory

Crawl speed (based on a crawl for three days):

$$\frac{399 \, \text{S} * 2855 \text{p}}{3 \, \text{d} * 24 \, \text{h} * 60 \, \text{m} * 60 \, \text{s}} \approx 3.73 \, \frac{p}{s} \approx 32.2 * 10^4 \, \frac{p}{d}$$

Speed required to reach 10 000 sites within 20 days:

$$\frac{10000 \, S * 21131 p}{20 d * 24 h * 60 m * 60 s} \approx 122 \frac{p}{s} \approx 10.5 * 10^6 \frac{p}{d}$$

Distance from goal with three servers:

$$32.2*10^4 \frac{p}{d}$$

$$3 servers \frac{32.2*10^6 \frac{p}{d}}{10.5*10^6 \frac{p}{d}} \approx 9\%$$



Duration of the Observatory

Estimated average duration of crawling one site:

$$\frac{3.75^{-1} \frac{p}{s} * 21131 \frac{p}{S}}{60m * 60s} = 1.56 \frac{S}{h}$$

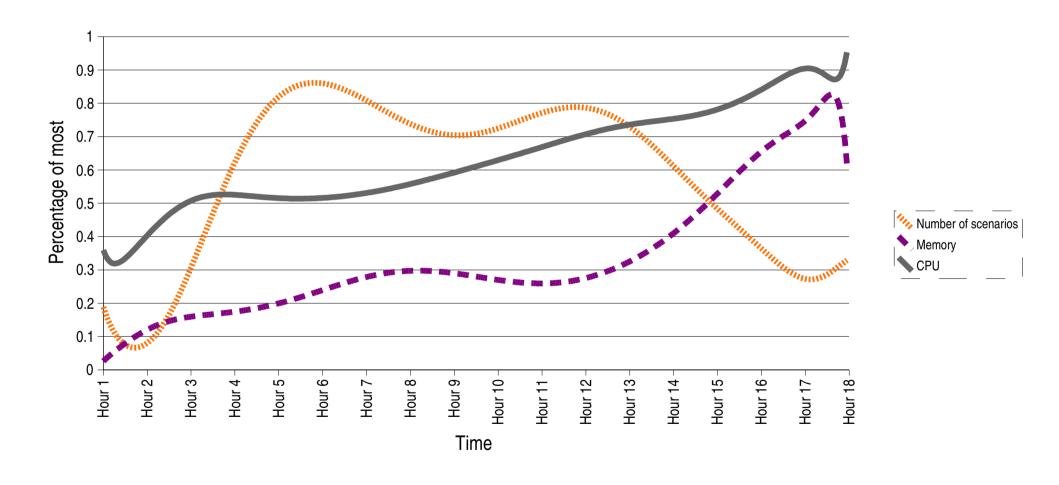
$$\frac{1^{-1}\frac{p}{s} * 250\frac{p}{S}}{60m * 60s} = 0.07\frac{S}{h}$$

stimated average unitariant $\frac{1^{-1} \frac{p}{s} * 250 \frac{p}{S}}{60m * 60s} = 0.07 \frac{S}{h}$ Percentage of time used on crawling: $\frac{1.56 \frac{S}{h}}{0.07 \frac{S}{h} + 1.56 \frac{S}{h}} \approx 95.8 \%$ 1 on sampling: $\frac{0.07 \frac{S}{h}}{0.07 \frac{S}{h}} \approx 4.2 \%$

$$\frac{h}{0.07\frac{S}{h} + 1.56\frac{S}{h}} \approx 4.2\%$$



Behaviour





Improvements

| | September (crawls never finished) | | November | |
|----------------------------|-----------------------------------|----------|--------------------|----------|
| Site | Number of restarts | Duration | Number of restarts | Duration |
| www.u-psud.fr | 242 | 3 days | | |
| www.comune.bolzano.it | 335 | 3 days | | |
| www.fingalcoco.ie | 396 | 3 days | | |
| www.gobiernodecanarias.org | 379 | 3 days | | |
| www.regione.vda.it | 392 | 3 days | 0 | 14h |
| www.ag.ch | 409 | 3 days | | |
| www.czestochowa.pl | 349 | 3 days | | |



- Observatory much more stable than previously
- •More than 95% is used for exhaustive scan.
 - Less than 5% is used for accessibility evaluation
- •33 server are required to reach the goal of evaluating 10 000 web sites.

