



Improving usage statistics for RepositoriUM

Eloy Rodrigues [eloy@s dum.uminho.pt]

Ângelo Miranda [amiranda@reitoria.uminho.pt]

Ricardo Saraiva [rsaraiva@s dum.uminho.pt]

<https://repositorium.s dum.uminho.pt>



Summary



- Introduction
- Objectives, principles and architecture of the Statistics Add-on
- Objectives and Improvements of the Statistics v2.0
- Brief Demo
- Future Work and Concluding Remark



University of Minho





- Created in 1974
- Two main campus in two different towns (Braga and Guimarães)
- +13 500 undergraduate students
- +1 500 graduate students

- 1 116 FTE academic staff
- 11 Schools/Institutes
- 30 Research Centers



RepositóriUM



- Building an I.R. was defined as a strategic objective in 2003
- The I.R. was included in the University proposal to the national Program E-U Campus Virtual, was approved and integrated E-UM (the University of Minho project)  
- RepositóriUM was publicly released on the 20th November 2003.



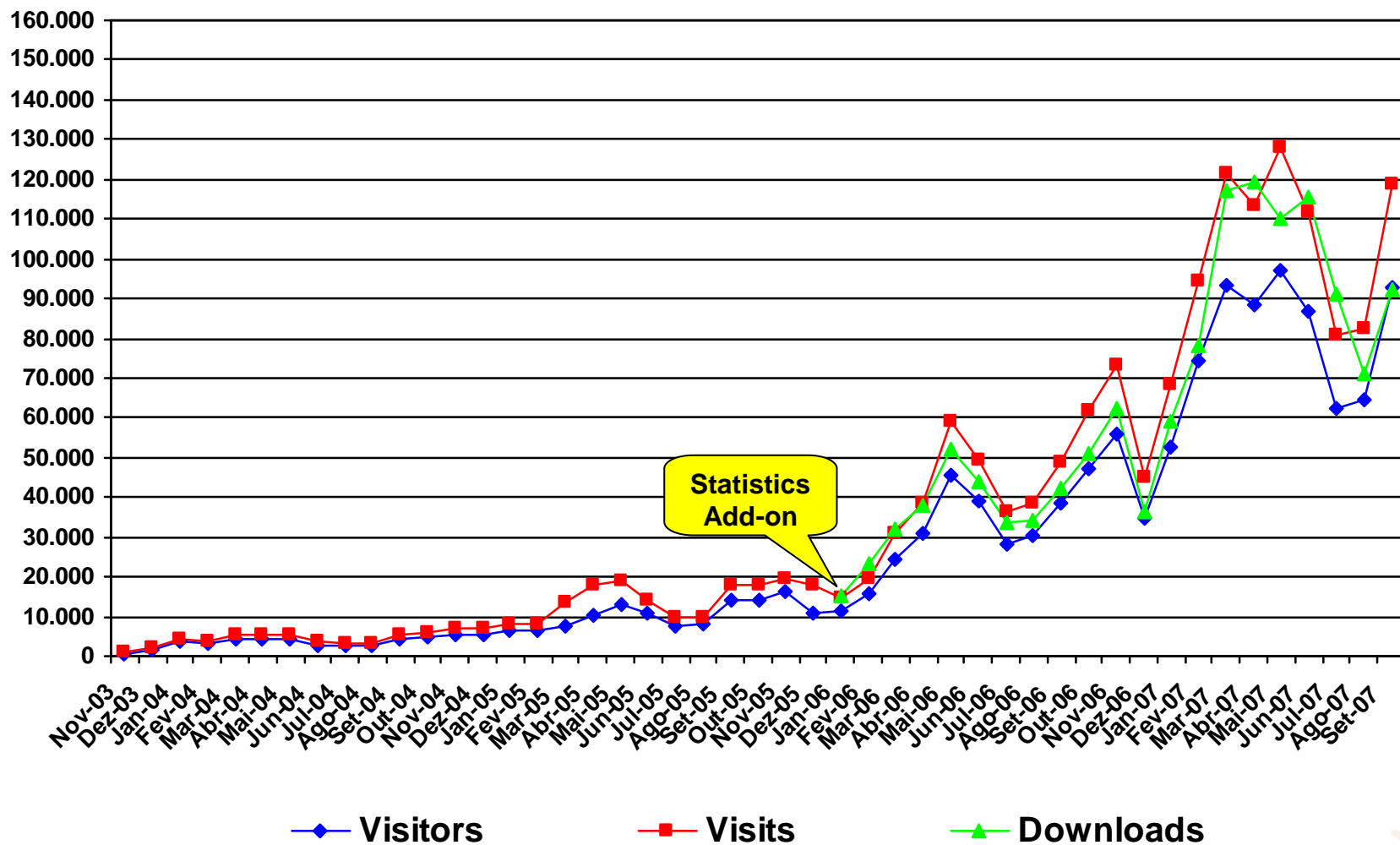
Evolution of RepositóriUM



	December 2004	December 2005	December 2006	September 2007
N.º communities	7	33	35	35
N.º documents	626	3105	4990	5942
N.º registered users	717	2410	3390	3958



Evolution of visitors, visits and downloads



Aims of RepositóriUM statistics



- Promote RepositóriUM by showing its significant usage
- Promote author self-archiving/deposit in the IR by
 - Demonstrating the usage (access/downloads) of archived documents
 - Demonstrating the worldwide accessibility of archived documents
- Provide usage, content and administrative statistics to IR and community/collection administrators or coordinators



General principles



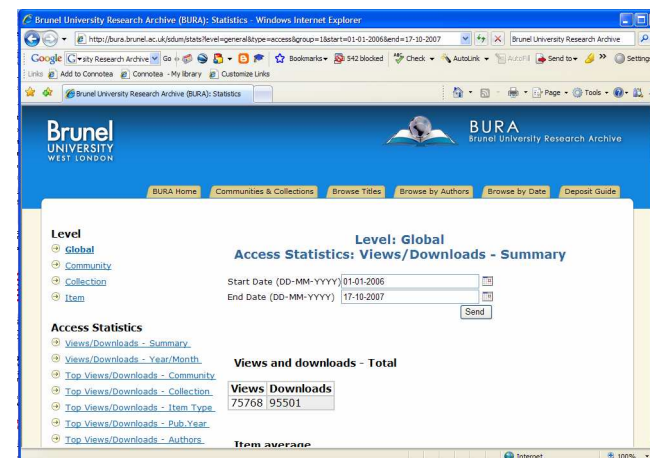
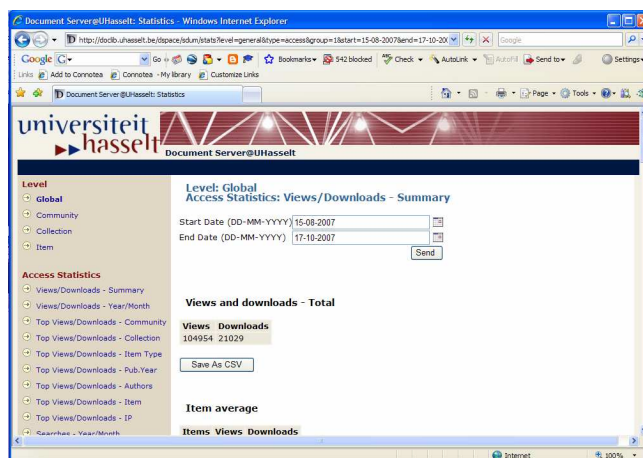
- Customizable statistics
- Customizable web interface
- Customizable access policies
- Data stored in database
- Access origin detection and processing
- Crawler exclusion
- Real time/Batch statistics



Impact of the Statistics Add-on



- Wide usage of RepositóriUM statistics by Minho University members (e.g. community managers and individual authors.)
- Several contacts from other interested DSpace users and some repositories using it (e.g. **Universiteit Hasselt (Belgium), Brunel University Research Archive (UK)** :



Problems and limitations of v1



- Increasing degradation of performance/response time as the usage of RepositóriUM and the period of the log information have been growing;
- Rigidity on the statistics definition and structure of the Web interface;
- Poor layout and data presentation (e.g. Inexistence of charts; reduced navigation and limited data presentation).



Objectives and improvements of v2



- Improvement of the performance and response time
 - Temporal data aggregations;
 - Dimensional aggregations (e.g. Country, Document type, etc.)
- Improvement of the presentation and navigation
 - Customizable menu navigation Structure (100% XML)
 - Customizable statistics layout (100% XSL style sheets)
 - Charts
- New statistics
- Better system documentation
 - Renewed Installation Guide
 - New User Guide



Overall architecture

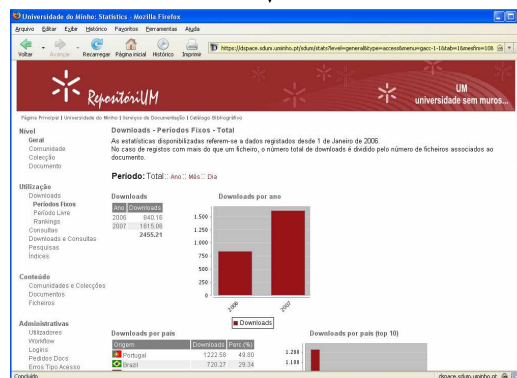


DSpace logs

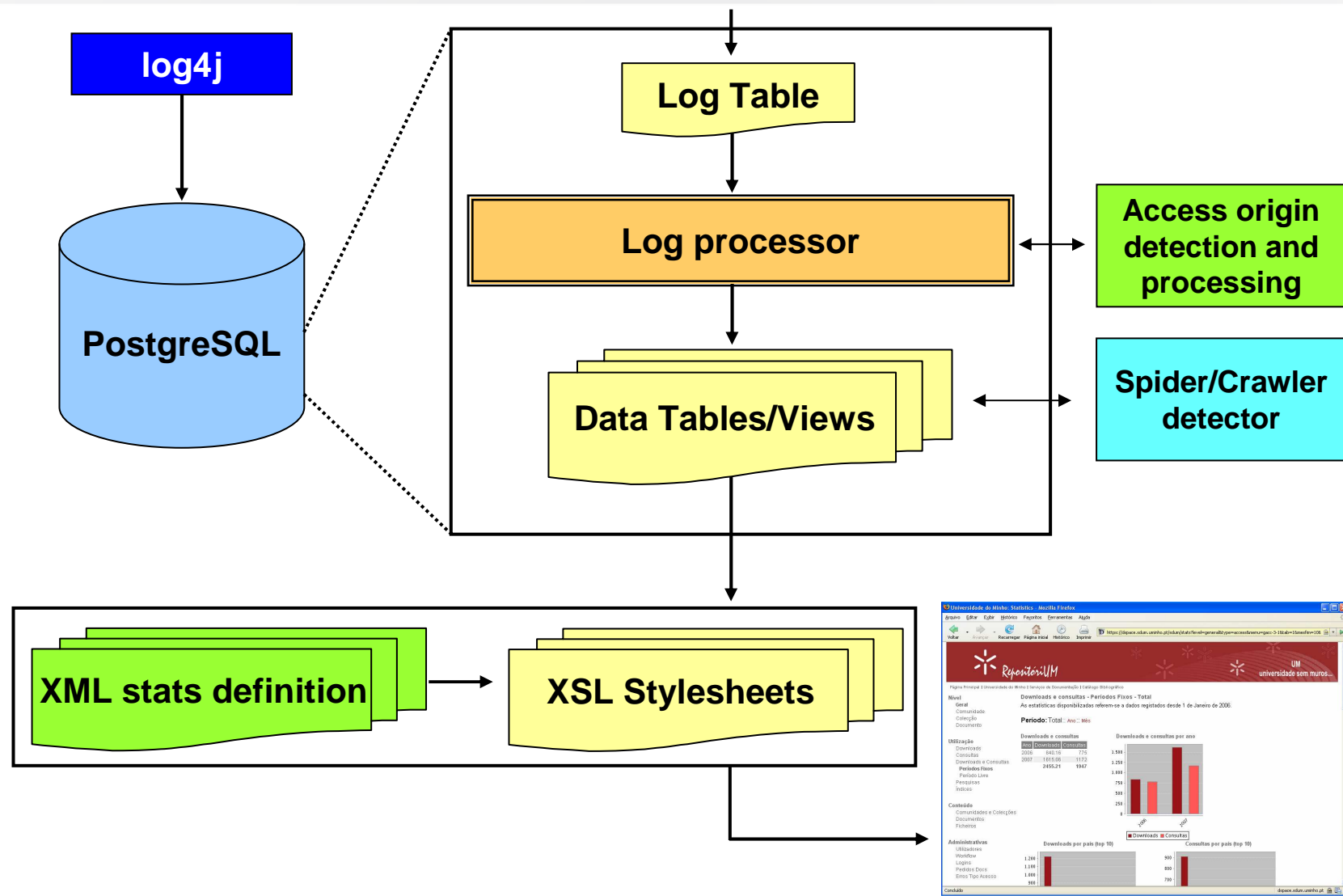
Log Processor

Data Model

Web Interface



Detailed architecture





Página Principal | Universidade do Minho | Serviços de Documentação | Catálogo Bibliográfico

Nível

Geral

- Comunidade
- Colecção
- Documento

Downloads e consultas - Períodos Fixos - Total

As estatísticas disponibilizadas referem-se a dados registados desde 1 de Janeiro de 2006.

Período: Total :: Ano :: Mês

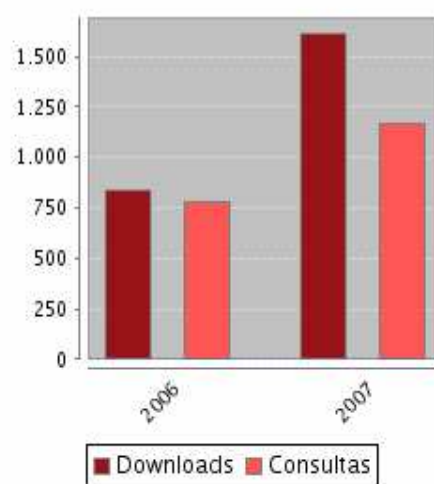
Utilização

- Downloads
- Consultas
- Downloads e Consultas
- Períodos Fixos**
- Período Livre
- Pesquisas
- Índices

Downloads e consultas

Ano	Downloads	Consultas
2006	840.16	775
2007	1615.06	1172
	2455.21	1947

Downloads e consultas por ano



Conteúdo

- Comunidades e Colecções
- Documentos
- Ficheiros

Administrativas

- Utilizadores
- Workflow
- Logins
- Pedidos Docs
- Erros Tipo Acesso

Downloads por país (top 10)



Consultas por país (top 10)



Brief Demo



Future Work



- Multilanguage support
- Drill-down and drill-up capabilities
- Exporting (CVS, PDF)
- ...



Concluding remark



- DSpace needs good statistical tools/module;
- We want to contribute, with others (GSOC a etc), to a global, single, comprehensive and highly customizable solution for this need.



Grazie/Thank You!



The screenshot shows the main page of the RepositoriUM website. At the top left, there are language options: English, French, and Spanish. Below them is the 'Universidade do Minho' logo and navigation links for 'Serviços de Documentação', 'Portal de Pesquisa', and 'Catálogo Bibliográfico'. A search bar is prominently displayed with a 'Pesquisa Simples | Pesquisa Avançada' dropdown and an 'Enviar' button. Below the search bar, there is a text box explaining search syntax: 'Use aspas (") para pesquisar frases, + e - para adicionar ou eliminar palavras e a truncatura (*) para pesquisar palavras com a mesma raiz (educ* recupera educação, education...). [Guia completo de ajuda]'. The main content area is divided into sections: 'Em Destaque:' featuring a red box that says 'RepositoriUM regista 1.000.000 de downloads!' and a text block stating 'O RepositoriUM acaba de inscrever um novo marco no seu historial. Dados estatísticos dos últimos dezassete meses de actividade (desde Janeiro de 2006) demonstram que a produção científica da U.M. arquivada no RepositoriUM já registou mais de 1.000.000 downloads e 712.000 consultas!'. Below this is 'Documentos mais recentes:' with a list of document titles. On the left side, there are navigation menus for 'Percorrer:' (Comunidades & Coleções, Títulos, Autores, Assuntos, Por Data) and 'Entrar:' (Serviço de Alertas, Meu RepositoriUM, Editar Conta). At the bottom, there are logos for 'DSpace Luso DSpace', contact information for 'repositorium@sdum.uminho.pt', and logos for 'Universidade do Minho', 'eU eum', and 'CURRICULUM DeGois'.

<https://repositorium.sdum.uminho.pt>