## Technical and Field Related Problems of Traditional and Electronic Archiving

# UNIVERSITY OF PORTO: INFORMATION MANAGEMENT AND APPRAISAL



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### **Summary**

- THE INFORMATION SYSTEM OF THE U.PORTO
   The development of its integrated management
  - > Institutional framework
  - > From the Central Archive to the Information Management Unit
  - > From archive management to information management
- THE APPRAISAL OF INFORMATION AT THE U.PORTO
  - > Appraisal: a new approach
  - > Application results
- WORK IN PROGRESS AND FUTURE PROSPECTS



### **U.PORTO** :: **Geographical Position**





Porto is the **second city** of Portugal and the centre of an urban region with a population of over one million inhabitants. The city lies at the mouth of the steep valley of the river

Douro, in northern Portugal





### **U.PORTO** :: Creation and Location

- University of Porto by a decree of the first Portuguese Republican Government, as an offspring of older schools
- September 2007: new law was approved by the Portuguese National Parliament defining a new framework for higher education institutions



Rectorate Building, in the centre of the city, marks the birthplace of the University

May 2009: new statutes were published and U.PORTO was converted into a public foundation, under a private law system



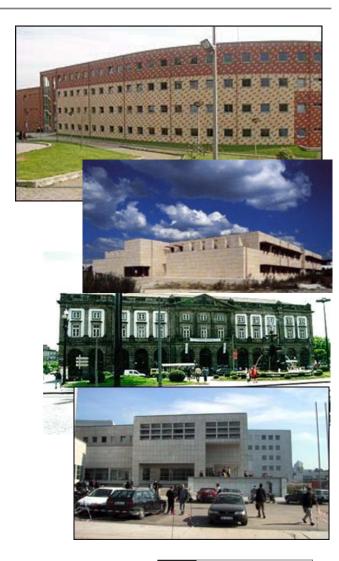


### **U.PORTO's Faculties, Research Units, ...**

### Rectorate/Central Services

#### 14 Faculties

- > Faculdade de Arquitectura
- Faculdade de Belas Artes
- Faculdade de Ciências
- Faculdade de Desporto
- Faculdade de Ciências da Nutrição e da Alimentação
- Faculdade de Direito
- Faculdade de Economia
- Faculdade de Engenharia
- Faculdade de Farmácia
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- Faculdade de Medicina
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- Faculdade de Psicologia e de Ciências da Educação
- Instituto de Ciências Biomédicas de Abel Salazar
- Escola de Negócios / Business School
- 69 I&D Research Units
- 30 Libraries
- 12 Museums
- Social Services





### **U.PORTO :: Academic Community**

- Students
  - > 29.896 (total)
- Academic staff (teachers and researchers)
  - > 2.280
    - → 75% PhD
- Techcnical and Administrative staff

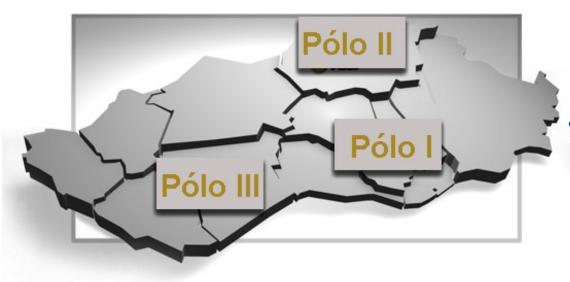
> 1.689





### **U.PORTO** :: **Geographical Distribution**

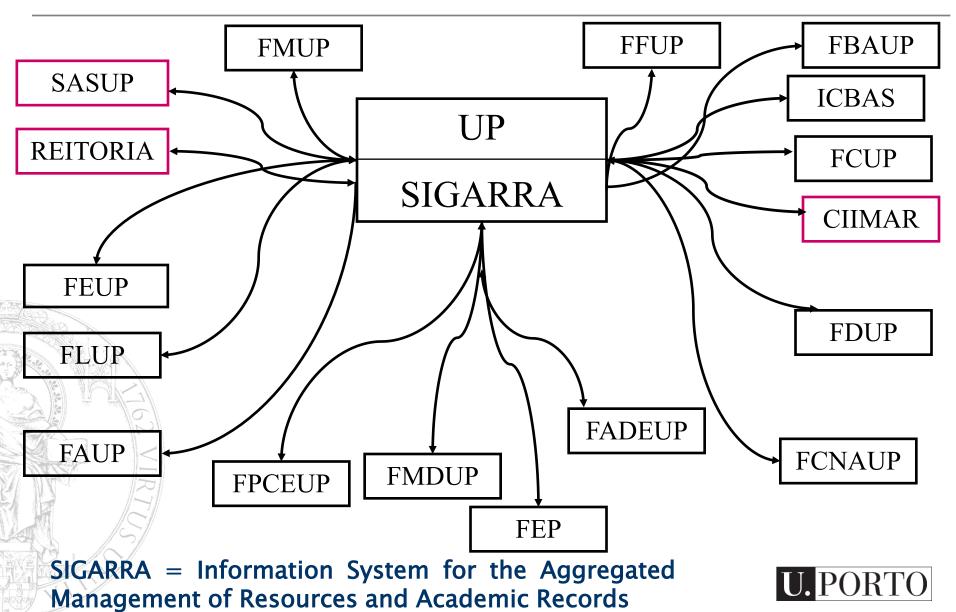
The U.PORTO is not located on a single common campus. The University buildings-Faculties, R&D institutes, student residences, cultural and sport facilities-are grouped in three main sites, called "Pólos"

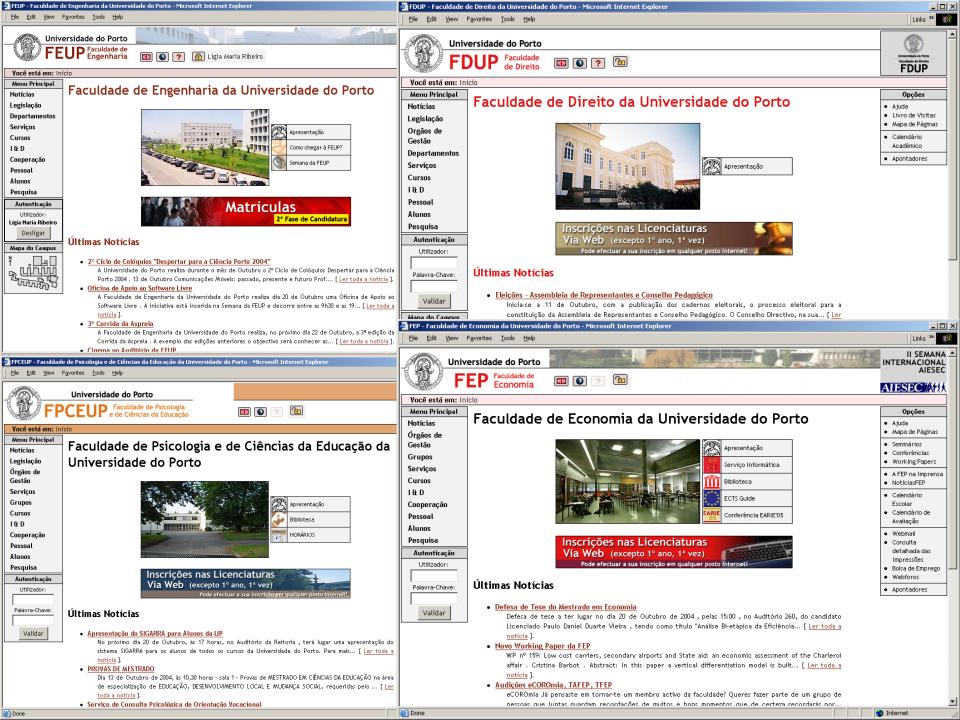


This distribution brings difficulties: puts students apart and hinders the sharing of human and physical resources

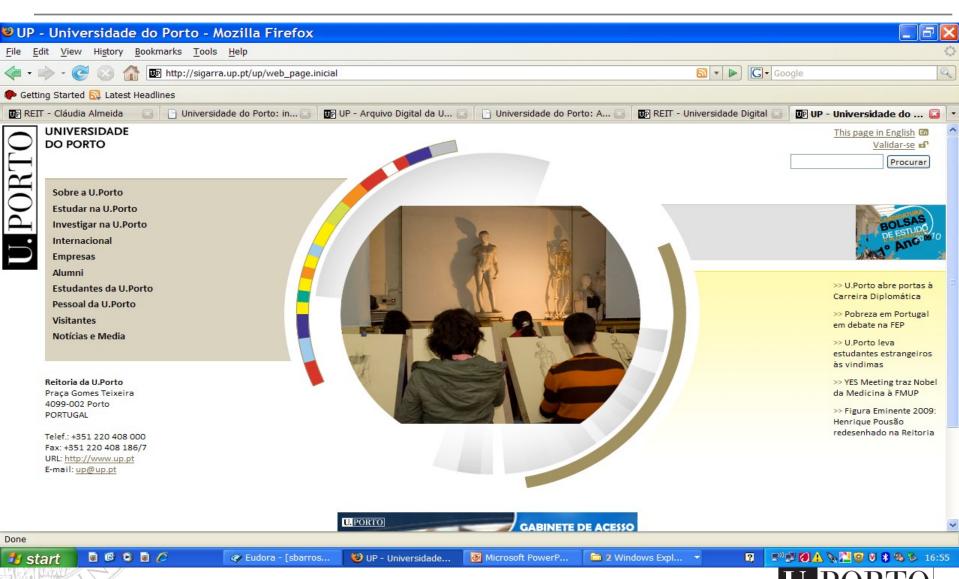


### **SIGARRA Information System :: Today**





### **U.PORTO's Information System**



### **Rectorate's Central Archive (2001-2006)**

- 2001: Oficial creation
- Main tasks (concerning the information produced and accumulated by the organic and functional sectors of Rectorate):





- Collection
- Organization
- Storage
- Preservation
- Access
- Dissemination







### **Rectorate's Central Archive :: Some Funded Projects**

- Organic-functional study of the U.PORTO
- Appraisal: Theoretical proposal
- Organizing and digitizing graphic and textual documents related to buildings and non-constructed
   University estate

















### **Appraisal at the U.PORTO :: A New Approach**

### Organic-functional study

Mission / Aims
Organic structure / Functions
Activities / Series / Information

### **Appraisal Theoretical proposal**

Information
Systemic approach
Information system
Memory



Designed and tested

by

Rectorate's Central Archive

and

Information Science Section

(Faculty of Arts and Humanities – U.PORTO)



### Appraisal at the U.PORTO :: A New Approach

- APPRAISAL is understood
- > Not as a technical and practical procedure and an end itself
- > But as methodological operation applied to

Information, in any context of production and use



### **Information Appraisal :: Main Goals**

- Information Appraisal (IA) seeks:
- ➤ To capitalise the information produced, with the exception of marginal, peripheral/or redundant information which can be eliminated after the authoritative and precautionary deadlines have expired ———— management of everyday life of the institution
- To ensure the preservation in the long term and its continuous access preserving the intellectual production and the institutional memory (U.PORTO and its communities)



### **Information Appraisal :: What shall we preserve?**

 The pertinent and dense information produced in the pursuit of the Mission of the entity producing the organisational information system





### **Appraisal at the U.PORTO :: Information in its context**

- The organic functional study of the U.PORTO and its communities (1911-20 (...) provided data to document:
- Aims/Statutory objectives
- Organic and functional structure
- Functions/Competences
- Activities
- Information produced

| Aims | Organic-functional structure | Competences | Activities<br>(procedures/tasks) | Series<br>and/or<br>Information<br>Typologies |
|------|------------------------------|-------------|----------------------------------|---|
| []   | []                           | []          | []                               | []  |



### **Appraisal at the U.PORTO :: Parameters**

#### **Parameter 1** = Pertinence of Information

It establishes the proximity of information to the core objectives of the organisation

#### **Parameter 2** = Density of Information

It identifies the informational units in which the more complete and dense information is found

#### **Parameter 3** = Frequency of Use of the Information

It quantifies the use of information by producing and/or proprietor services, in both the genesic phase and in later stages, and by external researchers and the surrounding community



### **Appraisal at the U.PORTO :: Levels of Pertinence**

Parameter 1 = Pertinence of Information (three hierarchical levels)

| Level | Description   | Weight   |
|-------|---|----------|
|       | - Direct relation between the informational acts and the institution.   |          |
| Α     |   | 1 (one)  |
|       | <ul> <li>This information meets the essential, and even<br/>perhaps unchangeable, objectives/aims of the institution</li> </ul> |          |
|       | <ul> <li>Information that proves to have an indirect relation with the objectives followed by the institution</li> </ul>        |          |
| В     |   | 1 (one)  |
| D     | – This information <b>reflects the activities</b> that allow the institution to follow through its Mission and Objectives       |          |
| C     | <ul> <li>Information with a peripheral relation to the core objectives of the institution</li> </ul>                            |          |
|       |   | 0 (zero) |
| N     | - Redundant information   |          |

U. PORTO

### **Appraisal at the U.PORTO :: Establish Density**

Analysis of Series and/or information types DENSITY

| Information under analisys |          | RELATED INFORMATION               |
|----------------------------|----------|-----------------------------------|
| Primary Information        | 1        | Primary information               |
| Duplicate Information      |          | Primary duplicate information     |
|                            |          | Secondary information             |
|                            |          | split                             |
|                            | <b>→</b> | abridged                          |
|                            |          | cumulative                        |
|                            |          | Progressive information           |
| Secondary information      |          | Primary information               |
| split                      |          | Secondary information             |
| abridged                   |          | Secondary duplicate information   |
| cumulative                 | →        | Progressive information           |
| Duplicate information      |          |                                   |
| Progressive information    |          | Primary information               |
| Duplicate information      |          | Secondary information             |
|                            | <b>→</b> | Progressive duplicate information |

### **Appraisal at the U.PORTO :: Determine the Use**

Parameter 3 = Frequency of Use of the Information

| Description                   | Weight   |
|-------------------------------|----------|
| Maximum / average use         | 1 (one)  |
| once or more than once a week |          |
| Minimum use                   |          |
| less than once a week         | 0 (zero) |





### **Appraisal at the U.PORTO :: Application Results (1)**

Analysis of Series and/or information types (4)

| FINAL DISPOSITION |         |           |                       |  |  |
|-------------------|---------|-----------|-----------------------|--|--|
| PERTINENCE        | DENSITY | FREQUENCY | FINAL DISPOSITION     |  |  |
| Level A           | 1       | 1 or 0    | Permanent retention - |  |  |
| Level A           | 0       | 1         | Temporary retention   |  |  |
| Level A           | 0       | 0         | Elimination           |  |  |
| Level B           | 1       | 1 or 0    | Permanent retention - |  |  |
| Level B           | 0       | 1         | Temporary retention   |  |  |
| Level B           | 0       | 0         | Elimination           |  |  |
| Level C           | 1 or 0  | 1         | Temporary retention   |  |  |
| Level C           | 1 or 0  | 0         | Elimination           |  |  |



### **Appraisal at the U.PORTO :: Application Results (2)**

#### EXAMPLE

> INFORMATION produced/accumulated and its CONTEXT

(2001 - )

UNIVERSITY OF PORTO / LEGAL SUPPORT OFFICE

| Goals | Organic-<br>functional<br>structure | Competences   | Activities<br>(procedures<br>/tasks)                | Series and/or<br>Information<br>Typologies                    |
|-------|-------------------------------------|---|---|---|
| []    | LEGAL<br>SUPPORT<br>OFFICE          | The Office of Legal Support () has essentially powers of legal advice, including: a) Conduct studies and legal opinions relating to the | Provide<br>advice and<br>other legal<br>information | - GAJ/12 -<br>Information and<br>legal advice - ()<br>2001 () |
|       | VI62 VIRTU                          | management of the University and its units; b) direct investigations or disciplinary proceedings ordered by the competent               |   |   |



### The U.PORTO's Appraisal Model :: Main conclusions

### Model approved by:

National Directorate-General of Archives (2002)

### Model adopted by:

- U.PORTO's Rectorate
- Faculty of Engineering of the University of Porto
- Adjoining bodies of the University (Porto University Sports Centre)

### Present challenges :: To apply the model

- In hybrid contexts of production
- > To information recorded in different media
- > To digital and born digital information
- > To differents information subsystems when some flows are redundant or duplicate



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- Instituto de Ciências Biomédicas de Abel Salazar
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### **U.PORTO's Rectorate :: Services & Units (since 2006)**



#### Madfaire

| Noticias   | Serviços  |
|------------|-----------|
| Legislação | oci viços |

Serviços

Fundações

Educação

Contínua

Publicações

Projectos

Pessoal

Pesquisa

Autenticação

Utilizador:

Maria Eugénia

Matos Fernandes

Desligar

Mapa do Campus

- Administração Financeira e Patrimonial Antigos Estudantes Web▶ Centros
  - Apoio Administrativo do IRICUP
  - Apoio Jurídico
  - Auditoria e Controlo Interno
  - Biblioteca Virtual Web
  - Comunicação e Imagem
  - Cooperação com Países Lusófonos e Latino-Americanos
  - Cultura, Desporto e Lazer
  - Editora UP Web▶
  - Financiamento Complementar
  - Formação e Organização Académica
  - Higiene, Segurança e Ambiente
  - Integração Escolar e de Apoio Social
  - Investigação, Desenvolvimento e Inovação Web\*
  - Melhoria Contínua
  - Património Edificado e Contratação Pública
  - Planeamento Estratégico, Relações e Participações Empresariais
  - Recursos Humanos e Expediente
  - Relações Internacionais
  - Secretariado do IRICUP
  - Secretariado e Órgãos de Governo
  - Servicos de Accão Social Web
  - Universidade Digital





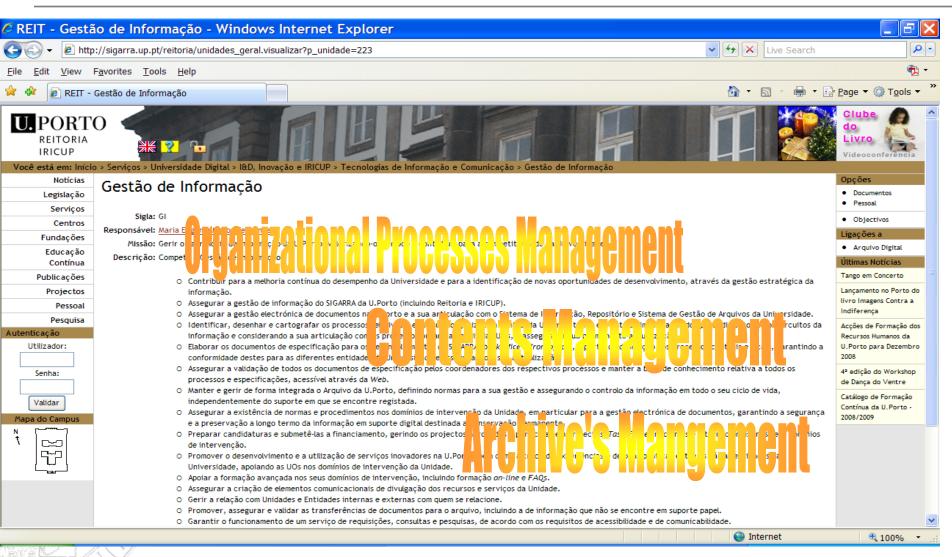
### **Digital University Department :: Units**

- Computing
- E-learning
- Information Management
- Information Systems
- Networking
- User Services





### **Information Management Unit :: Main Areas of Work**





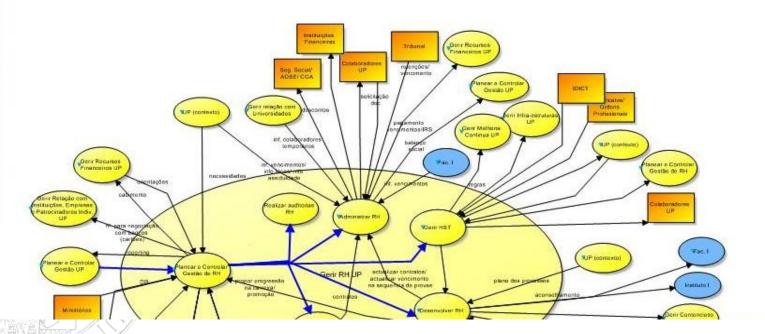
### **Management of Organizational Processes**

#### Gerir RH

Finalidade: Realizar todas as actividades necessárias para garantir a existência dos colaboradores (todos, independentemente do vínculo) necessários para que a actividade da UP se desenrole de acordo com a sua estratégia, contribuindo, dentro do possível, para a sua motivação e realização sócio-profissional.

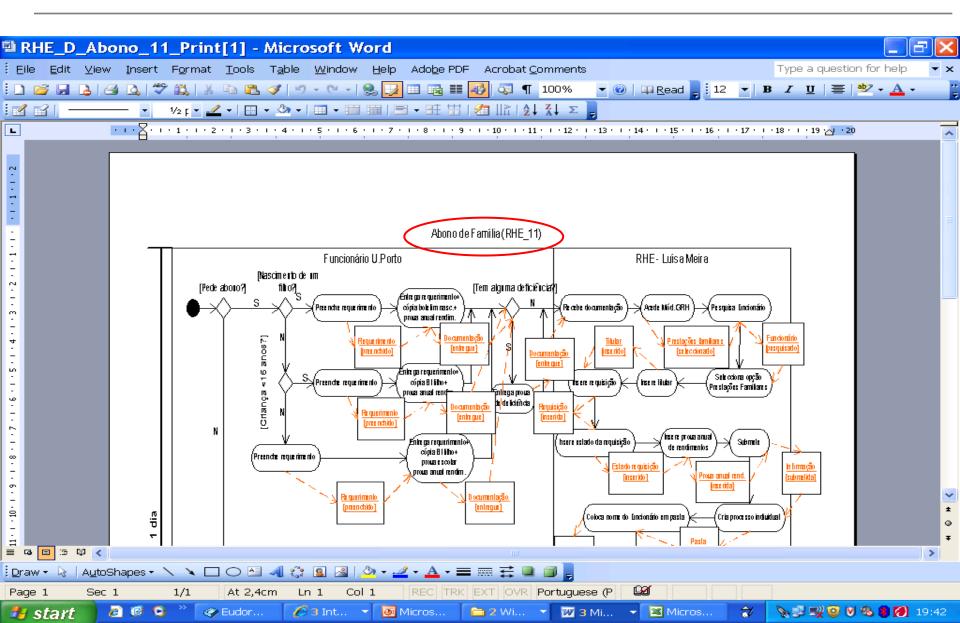
#### Objectivos:

- 1. Melhorar comunicação e conhecimento mútuo dos colaboradores
- 2. Incentivar adopção de padrões elevados de comportamento civico
- 3. Desenvolver uma atitude critica, ambiciosa, inovadora e empenhada
- 4. Garantir o ajustamento entre as competências profissionais requeridas e as competências detidas
- 5. Adequar o número de colaboradores às necessidades da UP
- 6. Promover o reconhecimento do mérito
- 7. Garantir boas condições de trabalho

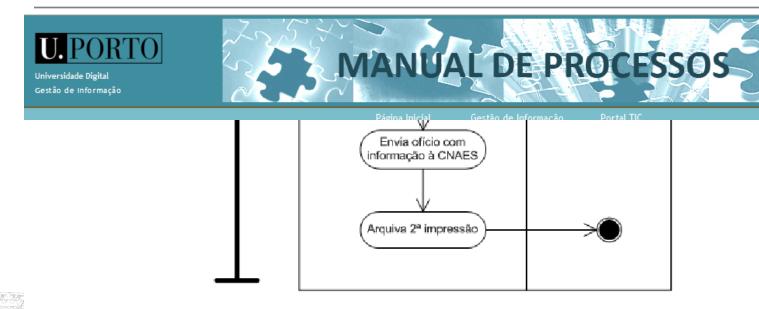




### **Modeling and mapping processes**



### **Manual of Processes :: Information appraisal**



#### Documentos

| Documentos   | Série De                         | Des     | stino Fi | nal         | Observações   |
|--|----------------------------------|---------|----------|-------------|---|
| Documentos   | Serie                            | CT CP E | E        | Observações |   |
| - Processo Abono de Família (por titular);<br>- Requerimento para abono de família;<br>- Cópia de boletim de nascimento;<br>- Prova anual de rendimentos;<br>- Criado "Processo de Abono de Família";<br>- Cópia BI descendente;<br>- Prova escolaridade | Processos de Abono de<br>Família | 2 anos  |          | x           | Os Processos Individuais de Abono de Família<br>podem ser eliminados findo o prazo legal da<br>atribuição do benefício social aos dependentes |

CT: Conservação Temporária CP: Conservação Permanente

E: Eliminação



### **Manual of Processes :: Legislation, procedures, ...**

Legislação, Regulamentos e Procedimentos

| Tipo       | Título  |  |  |  |  |
|------------|---|--|--|--|--|
| Legislação | Decreto-Lei n.º 272/2009. D.R. n.º 191, Série I de 2009-10-01 - Estabelece as medidas específicas de apoio ao desenvolvimento do desporto de alto rendimento e procede à primeira alteração ao Decreto-Lei n.º 393-A/99, de 2 de Outubro, que regula os regimes especiais de acesso e ingresso no ensino superior |  |  |  |  |
| Legislação | Deliberação n.º 2868/2009. D.R. n.º 199, Série II de 2009-10-14 - Dá nova redacção ao anexo i da deliberação n.º 1704/2009, de 18 de Junho  |  |  |  |  |
| Legislação | Despacho n.º 22688/2009. D.R. n.º Documento .pdf 09-10-14 - Aprova os prazos para desenvolvimento dos actos previstos para acesso e ingresso no ensino superior público, no ano lectivo de 2009-2010, introduzindo alterações ao calendário aprovado pelo despacho n.º 15853-A/2009, de 10 de Julho               |  |  |  |  |
| Legislação | Portaria n.º 743-A/2009. D.R. n.º 132, Suplemento, Série I de 2009-07-10 - Aprova o Regulamento do Concurso Nacional de Acesso e Ingresso no Ensino Superior Público para a Matrícula e Inscrição no Ano Lectivo de 2009-2010   |  |  |  |  |
| Legislação | Portaria n.º 1270/2009. D.R. n.º 201, Série de 2009-10-16 - Altera o Regulamento do Concurso Nacional de Acesso e Ingresso no Ensino Superior Público para a Matrícula e Inscrição no Ano Lectivo de 2009-2010, aprovado pela Portaria n.º 743-A/2009, de 10 de Julho   |  |  |  |  |
| Legislação | Portaria n.º 854-B/99. D.R. n.º 232, Suplemento, Série I-B de 1999-10-04 - Aprova o Regulamento dos Regimes Especiais de Acesso ao Ensino Superior  |  |  |  |  |

#### Comissão Nacional de Acesso ao Ensino Superior

#### Deliberação n.º 2868/2009

Considerando o disposto no artigo 20.º-A do Decreto-Lei n.º 296-A/98, de 25 de Setembro, alterado pelos Decretos-Leis n.º 99/99, de 30 de Março, 26/2003, de 7 de Fevereiro, 76/2004, de 27 de Março, 158/2004, de 30 de Junho, 147-A/2006, de 31 de Julho, 40/2007, de 20 de Fevereiro,

rvacionar de Acesso ao Ensino Superior, passa a ter a redacção constante do anexo I da presente deliberação.

2.°

A presente deliberação produz efeitos a partir da data de publicação da deliberação n.º 1704/2009, de 18 de Junho, da Comissão Nacional de Acesso ao Ensino Superior.

21 de Setembro de 2009. — O Presidente, Virgílio Meira Soares.

#### ANEXO I

Instituições de ensino superior que aplicam o disposto no artigo 20.º-A do Decreto-Lei n.º 296-A/98, de 25 de Setembro, com a redacção que lhe foi dada pelo Decreto-Lei n.º 90/2008, de 30 de Maio, no âmbito dos concursos de acesso ao ensino superior de 2010-2011.

| Código/estabelecimento de ensino | Cursos secundários estrangeiros<br>abrangidos | Cursos superiores para cujo acesso<br>se aplica o artigo 20.°-A | Exames terminais do ensino secundário estrangeiro que substituem as provas de ingresso |
|----------------------------------|---|---|--|
| 1                                | 2   | 3   | 4  |
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### **SIGARRA:** Maintenance & updating contents (PT & UK)

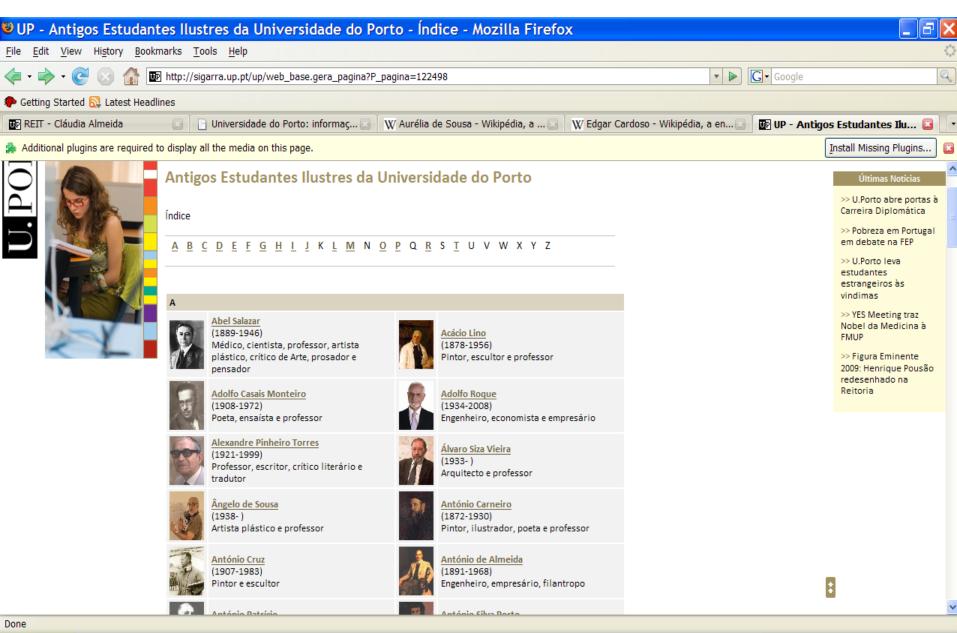


### **U.PORTO's Famous Alumni :: Biographies (PT)**

Eudora - [In]

UP - Antigos E...

🏙 start

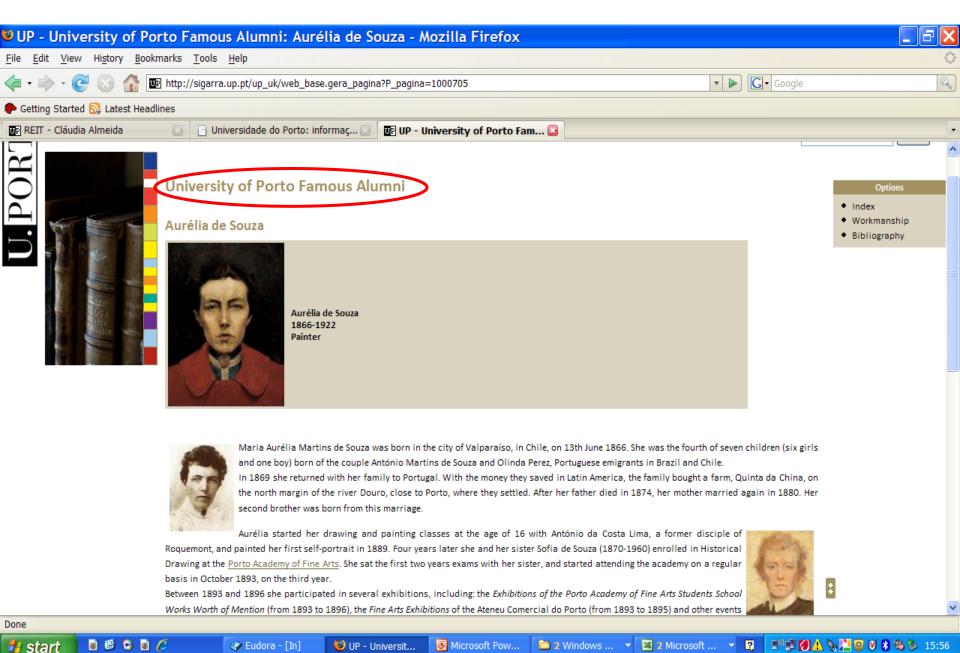


Microsoft Pow...

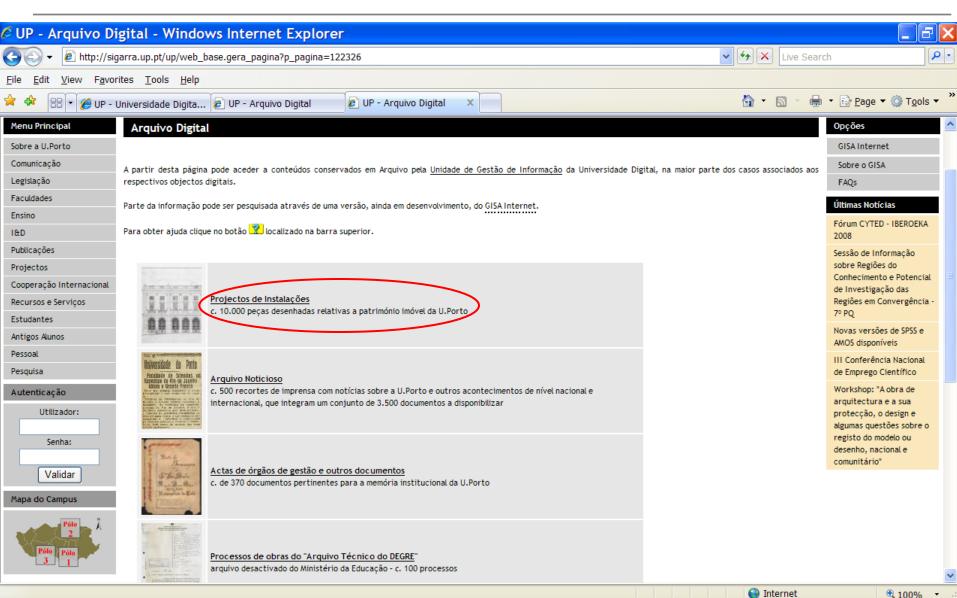
a Windows ...

Microsoft ...

### **U.PORTO's Famous Alumni :: Biographies (UK)**



### **U. PORTO's Digital Archive**

















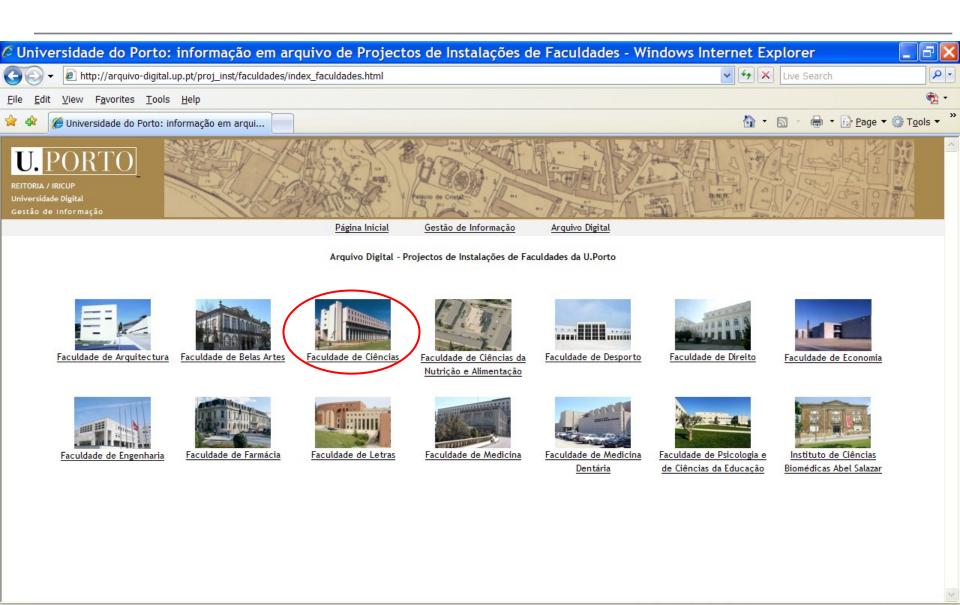
#### **GISA:: Information Management of Archive Systems**

- Computer application designed to record, manage and make accessible information produced within the organisational context
  - Developped by a consortium formed by the University of Porto, Porto City Hall and other City Halls within the metropolitan area of Porto
- Includes modules for:
- Authority Control (of producers, contents and types of information)
- Survey and management of physical units
- Information classification, description and appraisal
- Association and access to digital images





## **Drawings of Buildings and other University Estate**





Done













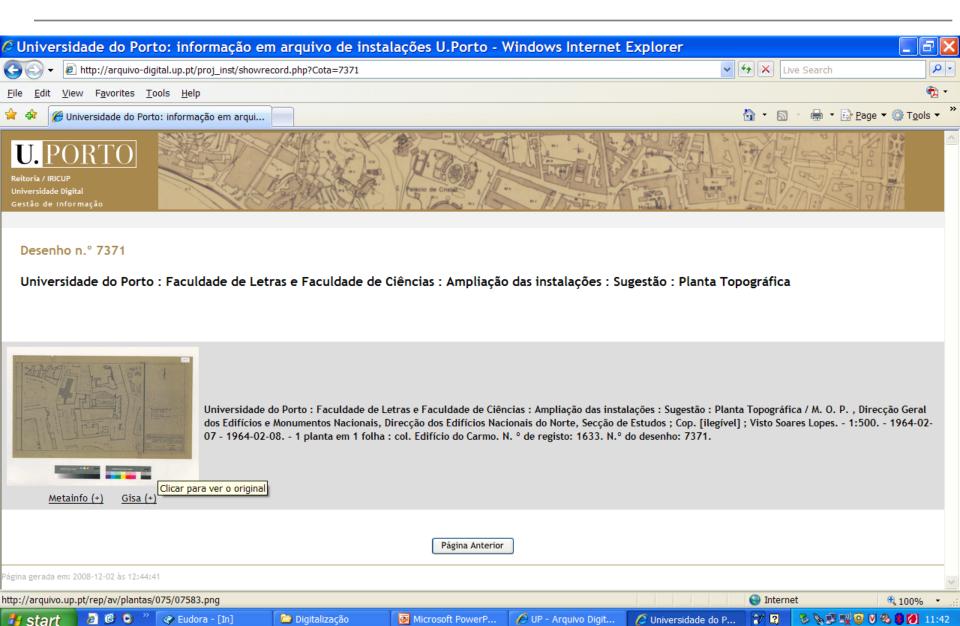


Internet

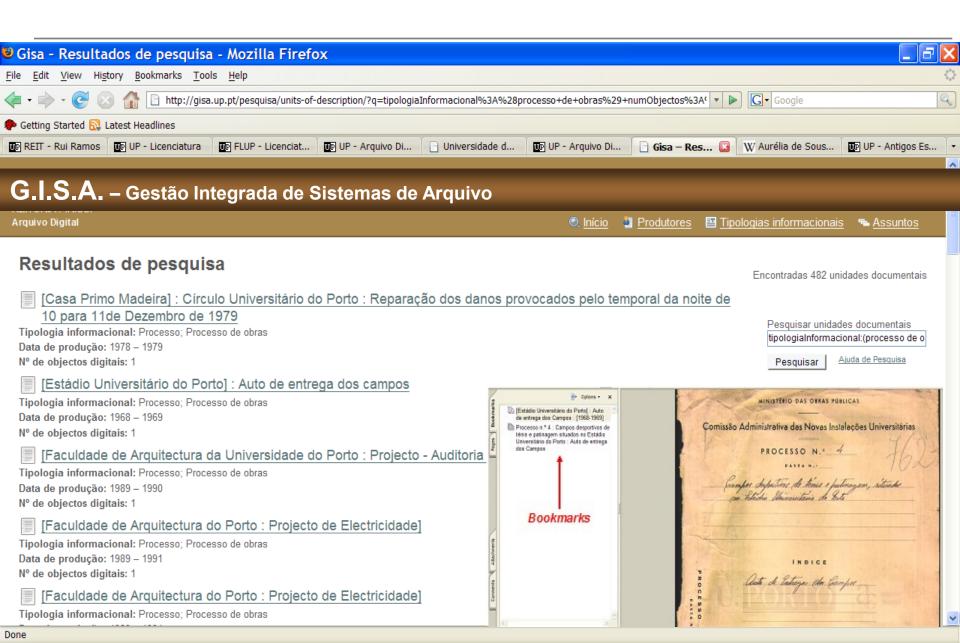


100%

## Drawings (...) :: Metadata and Digital Objects



## **Textual & Graphic Documents :: Compound Documents**



#### **News Archive :: 1919-1974**



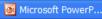
autoridades académicas presentes. Entrega de condecorações da Ordem da Instrução Pública, da Ordem de Cristo e da Ordem de Mérito Agrícola e Industrial. O Dr. Hernâni Monteiro foi agraciado com o grau de Grande Oficial da Ordem da Instrução Pública. Quatro fotografias de diferentes momentos da cerimónia de inauguração. (Jornal de Notícias, 1959-06-25)

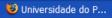














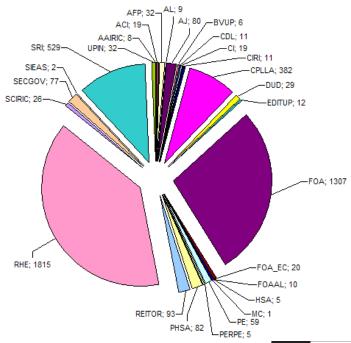
## **Management of e-Documents :: Main Goals**

- Conversion to digital format incoming and outgoing documents
- Control of administrative procedures



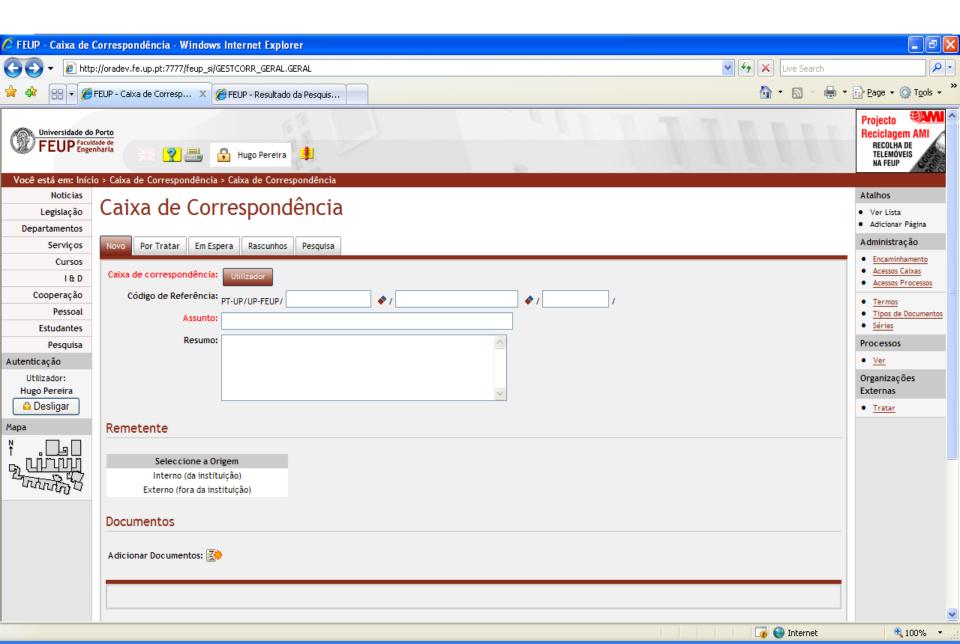
- Aggregation/attachment of documents
- Centralized storage in digital media

#### Registos de Entrada (efectuados pelo Expediente)

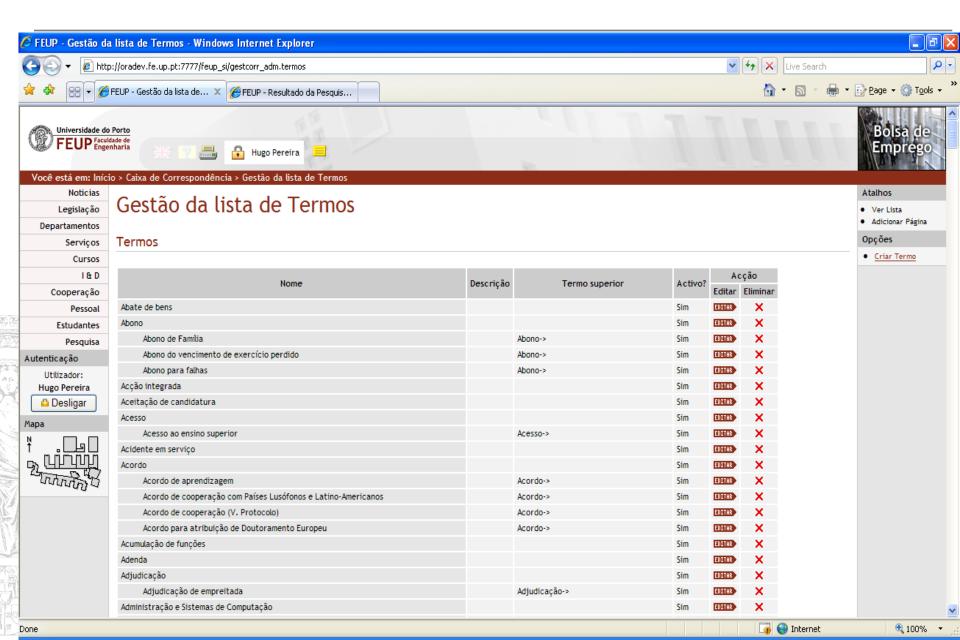




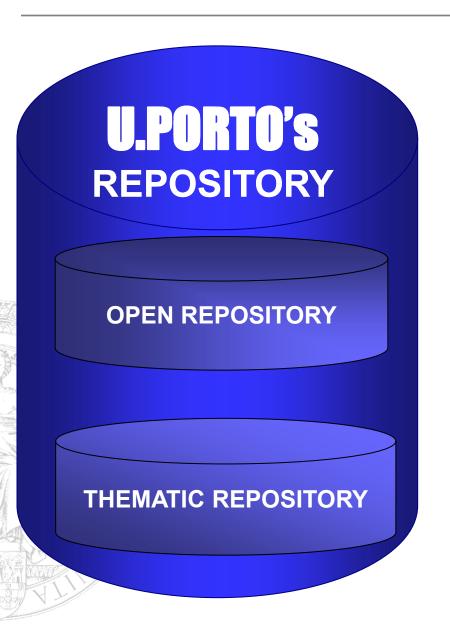
## **SIGARRA's New Module :: Management of e-Documents**



#### **Management of e-Documents :: Lists of terms, ...**



#### **U.PORTO's Repository :: Today**



**√Ingest** 

✓ Management

√Storage

**✓** Preservation

**√**Access

✓ Dissemination



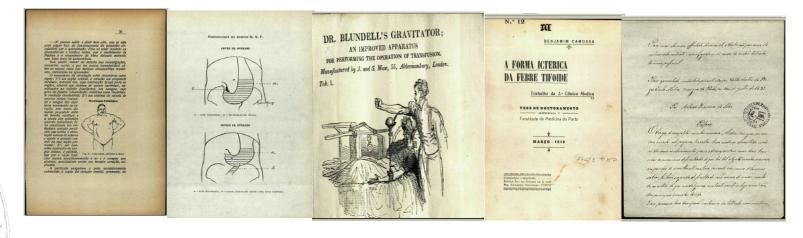
#### **Open Repository of U.PORTO :: Scientific production**

- Retroactive recovery of Master and Doctoral Theses
- Validation of data in the Open Repository



#### **Open Repository of U.PORTO :: Involvement of Faculties**

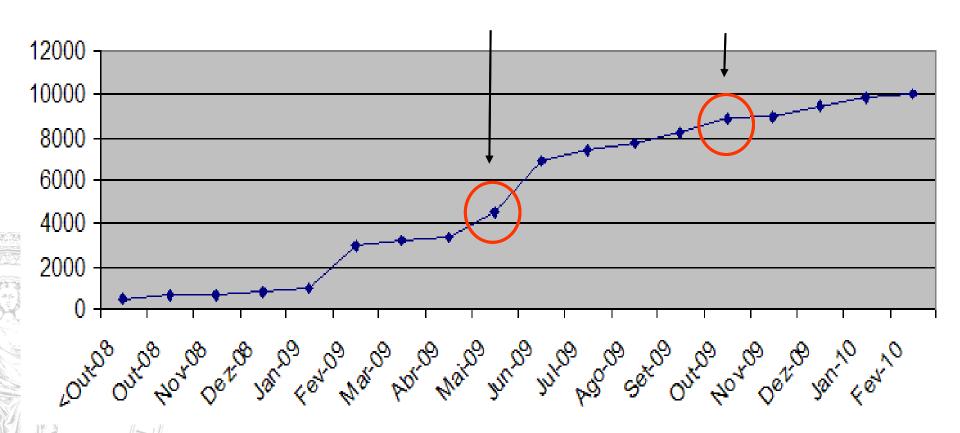
- ➤ Rectorate's Archive (1970 -2006)
- > Faculty of Arts and Humanities (1960 2006)
- ➤ Medical-Surgical School of Porto (1837–1911) and Faculty of Medicine (1911–1935)



Import into Open Repository of digital objects and descriptive metadata

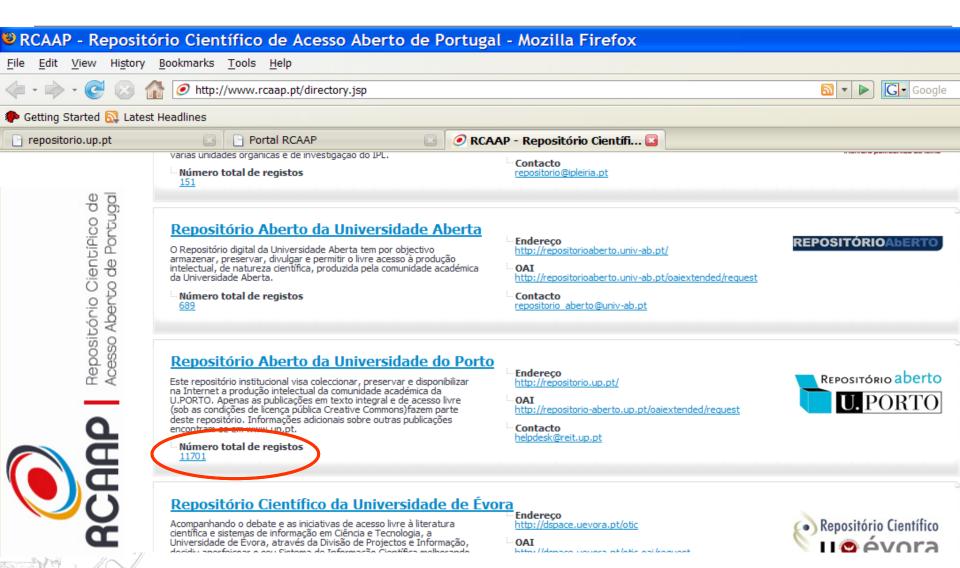


#### **Open Repository of U.PORTO :: 11.700 Publications**





# **U.PORTO :: 1.st Position National Rankings since Nov. 09**





#### **U.PORTO's Repository :: Ongoing project**



**OPEN REPOSITORY** 

**TEMATHIC REPOSITORY** 

ORGANIZATIONAL REPOSITORY

- Ingest
- Management
- Storage
- Preservation
- Access
- Dissemination

Information generated in the scope of educational activities, research, cultural, administrative and overall management of the U. PORTO



#### **Work in progress and future prospects (1)**

- Information appraisal generated within the U.PORTO has become progressively more complex as:
  - > Institution develops
  - > Traditional medium used to record information is replaced by digital media
  - Technological platforms are scattered
  - > Digital repositories tend to proliferate



#### **Work in progress and future prospects (2)**

- Impact of the computerising process:
  - Renders the analysis more complex, driving us nowadays to follow hybrid flows and flows that are developed simultaneously
  - Reveals pre-existing duplications (even in analog media) when the analysis of subsystems is intersected with an analysis of the U.PORTO information system.

INTERACTION WITH THE PRODUCING SERVICES HAS INCREASED



## **Work in progress and future prospects (3)**

- The strategy in progress is characterised by
  - ➤ Integration of SIGARRA system with the U.PORTO's Repository
  - Implementation of more reliable and powerful centralised data storage systems
  - > Developping of a "master" level entitled *Organizational Repository*, which will include:

Relevant and dense information aligned for long-term preservation, properly triaged through an appraisal and validation process



## **Work in progress and future prospects (4)**

 The digital context that currently characterizes the U.PORTO has contributed to

- > The development of an integrated information management model in a dynamic that is reflected on:
- > The working cross groups and
- The research projects in progress, which involve all the communities of U.PORTO and are led by the Digital University

