Carpe dIEN plataform: a infrastructure of information for management and preservation of scientific digital memory of the institute of nuclear engineering, Brazil

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Introduction

Nowadays, researchers use all types of resources existing in different places, develop software, collect data sets and perform experiments in a collaborative manner. In the research activities developed at Nuclear Engineering Institute (IEN) can say that the E- Science has been taking an increasingly more important to promoting a real need to be to have the data and information generated from scientific activity stored and handled so that they shared and reused in the future. Because of that, the IEN has considered the importance of integrate its technical and scientific production with the data generated as a result of teaching and research activities, believing that the information associated may be used, among other things, as tools to support decision making processes.
The Platform is defined as a digital repository aimed to archive, management, preservation and access of data and information in electronic formats generated as a result of teaching and research activities at IEN. The objective of CarpedIEN development is to be a strategy to give persistence and visibility to the scientific information produced by the Institution.

Methodology

The research is empirical. The method was inductive, because It started of a general reality, i.e, a pattern of existing metadata and used in various fields to propose a specific standard for IEN. The methodology adopted was: Firstly, It was created a way to preserve the scientific memory, i.e, an Institutional Repository, called CarpedIEN Platform. To create this plataform was necessary to study the subject, to evaluate the appropriate software for this purpose. The software choose was a dSpace 4.2. After that, It was necessary to define a repository policy. This policy defines that in this plataform. it must be deposited all the technical-scientific publications of the Institute, integrating both publications and the data used in the development of the studies, helping researchers in management and preservation of their research data, encouraging them to explore and adopt new forms of scientific communication through the use of digital environments and new collaboration practices. In the conclusion, It was developed the metadata model to ensure the digital preservation and the use of representation standards of technical and scientific documents and research data. This metadata model enabled the IEN repository be integrated to the global information infrastructure.

Results and Conclusions

The results of repository implementation are: 1) insert IEN in the national/international flows promoted by interoperability of repositories; 2) give greater visibility to the academic production of the Institute (e-prints more visible, and rapid dissemination and more citations); 3) increase the offer of qualified information services to technologists, researchers and students, creating an environment of interaction and exchange of ideas between the body of researchers, organize and increase the level of availability, access and transparency of information generated by the institution; 4) preserve memories technical and scientific digital; 5) generate indicators of academic production; 6) provide support for administrative decision-making; 7) map the knowledge produced; serve as a support tool for knowledge management.

References

[1] SALES, Luana. F. ; SAYÃO, Luís Fernando . Repositório do instituto de engenharia nuclear: curadoria digital, publicações ampliadas e gestão de pesquisa. In: CONGRESSO BRASILEIRO DE BIBLIOTECONOMIA E DOCUMENTAÇÃO, 25, 2013, Florianópolis. *Anais do XXV CBBD*, 2013. v. 25.

[2] SALES, Luana Farias. *Integração semântica de publicações científicas e dados de pesquisa: proposta de modelo de publicação ampliada para a área de ciências nucleares*. 2014. 265 p. Tese (Doutorado em Ciências da Informação)-UFRJ. Instituto brasileiro de Informação em Ciência e Tecnologia