GRID ENABLED SYSTEM FOR MEDICAL IMAGE GATHERING, ANALYZING, RETRIEVAL AND PROCESSING

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Medical images are of big interest in medical community for many reasons, but there are many significant barriers in order to become useful and there is a great need for advances in medical image gathering, analyzing, retrieval and processing. In this paper we propose a Grid-enabled system which works with medical images. Our system has a four main goals: (1) To gather medical images from existing Web image search engines and specific URLs with medical image data; (2) To extract image features and to classify, cluster and organize them by using Grid data mining techniques; (3) Based on previous analyzing, to provide Grid services for content-based image retrieval; (4) To provide a large scale Grid toolkit for medical image processing. The system has been implemented on Grid platform and uses the advantages of gLite middleware.