

# Mobilidade em Grades Computacionais

Hans A. Franke (koiote@inf.ufsc.br), Fernando Koch (koch@lrg.ufsc.br), Carlos B. Westphall (westphal@lrg.ufsc.br), Carlos O. Rolim(oberdan@lrg.ufsc.br), Fabio Navarro (fnnav@inf.ufsc.br)

Networks and Management Laboratory - LRG  
Federal University of Santa Catarina – Florianópolis, Brazil

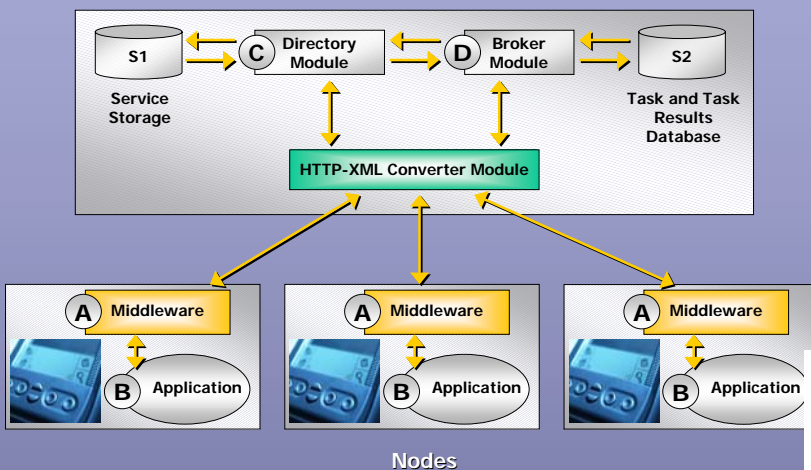
This article seeks the study of an hospital atmosphere that uses grid computing, for collection and to make available of the patients' vital data in real time. He intends the creation of a middleware to allow the integration of the data collected through the sensors with the grid, allowing like this a homogenization of the nodes of the grid and an improvement as for the easiness offered to the user. This middleware should possess the minimum existent necessary resources in other middleware, also supporting mobile devices

One of the new approaches for the grids uses is the virtualization of resources, that guarantees the homogenization of the different types of nodes.

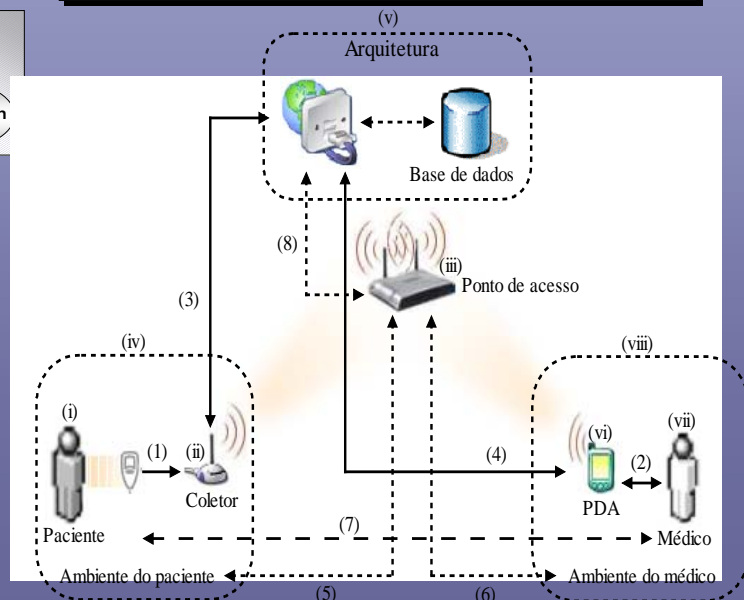
Table of the most important middleware's comparing support to mobile devices.

	GLOBUS	GRIDBUS	LEGION	UNICORE
Collaboration support	●	●	●	●
Context awareness support	●	●	●	●
Resource allocation support	●	●	●	●
Dynamic environment support	●	●	●	●
Mobile device execution support	●	●	●	●

Which are the elements and interactions needed by the grid middleware to satisfy the requirements of mobile computing scenarios?



Mobile computing requires solutions for service discovery in a dynamic environment, establishment of data communication channels between devices and service providers, development tools that allow the integration of devices and distributed resources, and security.



The proposed architecture was used as case study of hospital atmosphere. Because he has many types of different sensors and needs to make data available in real time.