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Topic :	Cluster Overview & related Technologies
Date of event :	9 February, 2011
Aim of the Event	RDIAS organized a Guest Lecture on Cluster Overview & related Technologies with IBM for the students of MCA II and IV Semester. The session was conducted by Mr. Manoj- Business Manager, IBM. Cluster has become extremely popular technique to ensure performance. Therefore a lecture was organized to acquaint the students with High Performance Computing (HPC) and its usage in almost all industries.
Description of the event	The lecture started with an objective to familiarise the student with the technology (Parallel computing, High Performance Computing). The speaker initiated with Cluster computing, or "Clustering", it is the use of multiple computers, typically PCs or UNIX workstations, multiple storage devices, and redundant interconnections, to form what appears to users as a single highly available system. Cluster computing can be used for load balancing as well as for high availability. One of the main ideas of cluster computing is that, to the outside world, the cluster appears to be a single system. Cluster Computing addresses the latest results in these fields that support High Performance Computing (HPC). In HPC environments, parallel and/or distributed computing techniques are applied to the solution of computationally intensive applications across networks of computers. Complex processes are sped up by the use of parallel processing, where a single program is divided and executed on a series of machines simultaneously.

	The speaker highlighted the benefits of Cluster computing which allows researchers and departments to maximize the most processing power out of a limited budget without the need to invest in a supercomputer or mainframe. He focussed on the architecture of the High Performance Computing. The session was very lively as the speaker cited many live cases such as ONGC using more than 300 servers; General Motors is using 100 servers for engineering the Cars and its accessories, Banking Sector and many other sectors. He quoted an example of Deep Blue machine made by IBM meant for playing chess and many more beautiful examples were covered by Mr. Manoj. The lecture was very much appreciated by all MCA students and MCA Faculty members.