The CMS Computing and Analysis system: getting ready for Data Analysis

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The CMS experiment has developed a computing system capable of serving, processing and archiving the large number of events that will be generated when the CMS detector starts taking data. During 2006 CMS undertook a large scale computing and analysis challenge to demonstrate the ability of the CMS computing system to cope with a sustained data-taking rate equivalent to 25% of startup rate and to demonstrated all data transfers and perform analysis activities at commensurate levels. Grid middleware was utilized to help complete all aspects of the challenge. To provide scalable access from anywhere in the world to the data, CMS developed a layer of software that uses Grid tools to gain access to data and resources, and that provides physicists with a user friendly interface for submitting their analysis jobs. The presentation describes the data challenge experience with Grid infrastructure, lessons learned and the goals until start of data taking.