Discuss some of the technical and nontechnical issues that might come up in trying to establish a large grid computing project such as the World Computing Grid.

The first problem is that there is no clear standard to follow.

The first thing that needs to be worked out in order to hide the diverse properties of different resources in a grid environment is a standard.

The most significant goal for the Global Grid Forum (GGF) has been standardisation since its inception. Until date, more and more people have recognised Open Grid Systems Architecture (OGSA), and more and more voices from industry have advocated for Web Services Resource Framework (WSRF). Even so, there are still distinct tones for future grid computing standards.

The more grid applications produced without broadly acknowledged standards, the more resource islands will arise.

Grid computing's challenges include the following:

In order to establish the Grid, a large amount of heterogeneous hardware is utilised, and these devices are not maintained by just one person, but by several system administrators in each of the companies.

Grid follows the problems that must be overcome in order to fully utilise the grid's potential.

There is no clear standard:-

Grid computing employs a variety of standards, although not all grids adhere to the same ones. For instance, all grid operating systems such as Linux, Apache, and others. My SQL is based on the standards of WSRF, UDDI, WWW, SOAP, and XML. Without WSRF, Oracle 10g Enterprise cannot be implemented. Grid middleware is developed by IBM and is based on J2EE. In grid computing, we can't run many operating systems on the same computer at the same time.

Grid computing vs. Distributed Computing:

Grid computing entails resource sharing, dynamic virtual organisation, and peer-to-peer computing.

The Grid aims to make access to computer power, scientific data archives, and experimental equipment as simple as access to information on the Web.  Same all facilities provide the grid computing.so it is a challenge for grid computing.

Lack of grid-enabled software: The software that enables grid computing is insufficient, and there is only limited software on the grid. Many pieces of software do not have copyright issues or licence source code. There is a need for more companies to develop grid-enabled versions, more developers to work on grid development, and more open source software to be developed.

Grid is used to share resources between different types of services. -Grid is used to share resources between different sites and grid hosts. As a grid platform, it manages a large amount of data. There are a lot of sites and multiple servers grouped there, thus the infrastructure is quite complicated. It makes it harder to share hardware resources within a virtual organisation.

Difficult to develop:-

Grid programming employs Java and XML, as well as web services such as WSDD, WSDL, UDDI, WSRF, and GT3 development standards. It is a question of who will be building grid applications. Basically, senior computer science experts and enterprise developers have access to this.