2. 英文部份

In order to reduce the operating costs of the platform and the complexity of management, cloud services usually rely on a variety of services built on the clouds, such as shared database storage services and shared message broker services. The ideal situation for all the cloud service users is that, they can equally share the compute resources. The reality is, those cloud services and users still suffer several kinds of bad neighborhood penalty issues. For example, a user could always submit jobs that consume a lot of compute resources at runtime. If the system cannot detect such situation, other users may suffer performance degradation due to resource competition and the performance of the cloud service could be affected as well. This proposal aims to study how bad neighborhood behavior influences other users on a cloud streaming hub service, and to develop an effective detection and resource throttling mechanism to solve the bad neighborhood penalty problem. We expect that, the mechanism can provide the users of Multi-Tenant Clouds a high, fair service quality.

KEY WORDS：Multi-Tenant Cloud、Bad Neighborhood Penalty、Resource Throttling