

An Effective Approach to Track and Manage Critical Geosciences Applications

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ABSTRACT

Computer applications play a major role in the advancement of oil and gas exploration and development industry. This is due to the increasing complexity of the geosciences workflows, process and data structures. Unfortunately, there is no single application which is perfect and complete to meet all the business requirements and thus multiple applications are required almost in every domain. These applications are mostly provided by multiple vendors and broken down into many licensed features. Large corporations like Saudi Aramco utilize a large set of such applications. It is very complex for IT organizations to keep track and manage all these extremely expensive applications, especially that those are operated in a dynamic environment. Throughout this work, we are introducing two in-house developed tools to help in monitoring different aspects of applications license utilization, and also in planning for applications upgrade and deployment. Our in-house developed tools helped in managing and optimizing over fifty geological and geophysical interpretation applications with more than nine hundred features while supporting hundreds of users. There are some available tools in the market to track licenses utilization, however those are not flexible enough to show and represent all the required information. This work introduces an easy, flexible, and extendable way to keep track of hundreds of applications licensed features in an efficient and reliable manner. Our work is not only a tracking and monitoring tool but also provides a mechanism to improve decision making process while planning for additional purchases or retirement of existing applications. The reports can be customized to visually represent licenses utilization details for every user's organization, vendor, application and machines over any selected period. It can also monitor abuse of application licenses overtime and report the results to various levels, including sending email notification. We also introduced a dynamic dashboard that captures all the details of our supported applications, summarizing all the attributes that helps in making strategic decision regarding all of the geological and geophysical interpretation applications in upstream organizations. This dashboard summaries all the actions required to be implemented for the entire year. It also includes technical information about operating systems platform compatibility, primary support personnel, applications version and others.