

Oracle Spatial 12c as an Applied Science for Solving Today's Real-World Engineering Problems

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Bechtel's large engineering and construction projects require a vast amount of varied spatial data for real-world problem solving. The ability to manage and manipulate these data on an Enterprise basis is well-served in an Oracle Spatial and Graph 12c database environment, where the spatial data that technical specialists and engineers need can easily be analyzed to support the work that they do. This presentation will take an in-depth look at Oracle Spatial technologies as an the applied science in the world of engineering using some of the following examples:

- dynamic hydraulic gradient calculations used for groundwater modeling by the hydrologist
- earthquake catalog classification for seismic hazard study analyses by the seismologist
- dynamic commodity cost calculations for the field engineer

By leveraging the database for what it does best...the data...technical specialists and engineers alike can spend less time on data manipulation and analysis, and even improve the quality of their deliverables through the database automation of processes that are data-intensive and often subject to human error. The case studies shared in this presentation are all examples of how Oracle Spatial has been used at Bechtel to support some of the work needed to engineer and construct large infrastructure around the globe.