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**PETROLEUM DEVELOPMENT OMAN (PDO) SAVES VALUABLE TIME AND MONEY
IN RETRO-FIT PLANNING AND EXECUTION WITH THE WALKINSIDE-LFM SERVER INTERFACE**

BRUSSELS, December 6, 2010 — PDO, the largest hydrocarbon exploration and production company in the Sultanate of Oman, is using a new approach in major changes to existing units by incorporating the latest technology that includes LFM Server from UK-based Z+F UK and Walkinside® from VRcontext International.

Increasing economic constraints and competitive and regulatory pressures force Oil & Gas industry operators to regularly modify and upgrade their existing assets. However, their unnecessary reliance on outdated or incomplete information on their physical plants typically results in expenditures and operational delays in project update execution that can be avoided.

To minimize costs and shorten plant shutdowns, PDO's management team decided to have ready access to complete and accurate information in order to optimize the planning and execution of Change Management for major plant upgrades and maintenance projects. In particular, the ability to compare high-fidelity laser scanning results of the 'as-is' asset with the 3D CAD model of the proposed plant revamp provides unique opportunities to identify and promptly address discrepancies to help accelerate the resumption of productive operations.

The high performance of the Walkinside-LFM Server interface was key to PDO's success in its latest projects. This interface offers Process Industry owner-operators unprecedented convenience and speed in importing, displaying and navigating through massive laser scan datasets of their facilities combined with the complex 3D CAD models provided by the different Engineering Contractors. The outstanding performance of this unique solution allows fast and accurate comparison of massive 'point cloud' data imported and displayed next to the CAD models in 3D.

The ability to visually detect and highlight 'clashes' between the 3D CAD model of the proposed plant revamp and the point cloud data is critical in such projects wherein pipe re-routes are evaluated and optimized to obviate existing plant obstacles. This functionality potentially saved tens of millions of dollars in project execution by preventing or minimizing unnecessary rework, on-site reassembly, and by avoiding associated plant shut-downs and lost revenues from asset operation.

Using the Walkinside-LFM Server interface, PDO graphically validated the new 3D CAD model of the proposed unit against the 'as-is' 3D point clouds. In turn, PDO was able to promptly approve the new design and to modify it where needed, by taking advantage of a key feature of the interface that enables users to adjust in real-time the displayed resolution of the 3D point-clouds. Laser scans do provide 3D data with extremely high definition, making them ideally suited for accurately capturing surfaces in 3D that are intuitively viewed in Walkinside.



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PDO estimates that the use of this new technology resulted in fewer change orders during construction because of a better design accuracy.

Also, 3D CAD models are generated from the point clouds using the LFM Modeler software, another technology from Z+F, and are used as the starting point of new engineering projects. It enables PDO to transition from 2D to 3D design while maintaining integrity via the LFM Server and Walkinside interface. These 3D CAD model outputs are also viewed using Walkinside and allow many departments to interface with the existing facilities without having to conduct site visits.

With the experience gained with this cutting-edge approach to plant retro-fit, PDO can now reduce costly shut-down time by dozens of hours per project, minimizing expensive human errors frequently encountered with traditional approaches.

With this new methodology:

- Project managers can now complete modification plans within the scheduled shut-down time, saving Plant Owners hundreds of thousands of dollars per project.
- The 3D CAD model of the new unit—together with the data registration-and 3D model output created with the laser scans—becomes a time-stamped reference for the entire life cycle of the facility. Existing models can be later updated so that they remain accessible on-line and available for planning of future projects.

About Petroleum Development Oman

Petroleum Development Oman (www.pdo.co.om) is the foremost exploration and production company in the Sultanate. It accounts for more than 70% of the country's crude-oil production and nearly all of its natural-gas supply. The Company is owned by the Government of Oman (which has a 60% interest), Royal Dutch Shell (which has a 34% interest), Total (which has a 4% interest) and Partex (which has a 2% interest). The first economic find of oil was made in 1962, and the first consignment of oil was exported in 1967.

About Z&F

Z+F UK Ltd (www.zf-uk.com) specializes in providing high-definition 3D laser scanning technology and products to the process and industrial market sectors. Its systems are used extensively in applications as diverse as forensic examination and architecture.

About VRcontext

VRcontext International S.A./N.V. (www.vrcontext.com) is the leading global provider of engineering and geospatial software that enables customers to visualize complex data in 3D. Over 200 businesses and governments in more than 30 countries rely on VRcontext's industry-specific software to organize vast amounts of data into understandable visual representations and actionable intelligence. VRcontext software and services empower its customers to build and operate plants and ships more safely and efficiently with intelligent 3D models.

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