

Nexen's Experience SPI Upgrades to v2009

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About Nexen

Canadian-based oil and gas company with operations worldwide listed on the Toronto and New York stock exchanges under the symbol NXY.

Positioned for growth in the North Sea, Western Canada, deep-water Gulf of Mexico, offshore West Africa and the Middle east.

We add value for shareholders through successful full-cycle oil and gas exploration and development and leadership in ethics, integrity, governance and environmental protection.

Headquartered in Calgary, Alberta, Canada, Nexen employs about 4,200 people worldwide.



SmartPlant Instrumentation

SPI Databases Upgraded



Nexen executed the following upgrades between November 2009 and May 2010:

- v2007 Seed upgraded to v2009
- v4.2 to v2009 Balzac Power
- v6 to v2009 SAGD
- v2007 to v2009 Upgrader

SmartPlant Instrumentation

Nexen's SPI Upgrades

Understood Challenges

Post Upgrade - Challenges



SmartPlant Instrumentation

Nexen's SPI Upgrades

Understood Challenges

Post Upgrade - Challenges

- **Functionality** - INtools v6 included Instrument Datasheets. Internal archives do not open on v.2009. Must apply SP2 HF2. [Example](#)
- **Access to Information** - Panel Strip archives initially did not open. Utility provided, now they open.
- **Performance** - c_bo_ora.pbl file needs to be deleted from each user's Citrix Profile on exit from SPI.



Nexen's SPI Upgrades

Understood Challenges

Post Upgrade Challenges

- **Access To Information** - Audit Trail Changes Log needed to be ported via Infomaker Pipe to a new Oracle Unicode instance.
- **Performance** - Changes Log needed to be re-indexed
- **Transition Requirement** - New file paths introduced for preferences and archives. Went to UNC.
- **Performance**- Exporting Panel Strip Archives from the database is not possible.
- **Performance** – Exporting Specifications from the database is possible.



Nexen's SPI Upgrades

Understood Challenges

- **Interface Compatibility** - INtools v6 needed to be moved to an Oracle Unicode Instance.
 - Units of Measure through out the database needed to be edited.

Post Upgrade - Challenges

- **Functionality** - Foundation Fieldbus Segments upgraded from previous versions need the following added. Segment Drawings will only represent the I/O if:
 - Tag Class = Foundation Fieldbus
 - I/O Type = FieldbusFF
 - Function Block must be assigned
 - Virtual Tag must exist



Nexen's SPI Upgrades

Understood Challenges

Post Upgrade - Challenges

- **Integration** – SPI and SPF Enterprise integration does not work with SP2 HF4 (TR 57784). SP2 HF4 works and SP2 on it's own works.
- **Functionality** – Admin module, could not modify user accounts, or move users from one User Group to another. This was addressed with SP2.

Problem To Solve



SmartPlant Instrumentation

Nexen's SPI Upgrades

Understood Challenges

Post Upgrade Challenges



- **Functionality** - Plant Area Unit combinations are now key.
 - Incorrect Plant Area Units resulted Panel Strips not working.
 - Could not edit Enhanced Reports
 - Could not add revisions
 - Could not see other fields e.g. Project Number
- **Performance** - v2009 appears to be slower on Citrix vs previous versions. Service Pack 3 has made strides towards better performance.



Nexen's SmartPlant Instrumentation Upgrades v2009

Thank You