



Irving Oil

Operator Shift Log Project

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Irving Oil Today



- Irving Oil is a privately-held regional refining and marketing company, headquartered in Saint John, New Brunswick
- Canada's largest refinery, producing over 300,000 bpd of finished energy products
- 10 distribution terminals and a fleet of delivery trucks serving wholesale and commercial customers throughout Atlantic Canada, Quebec, Ontario and New England





Communication – Key to Success

- A key success factor for any organization is excellent verbal and written communications between working teams. At Irving Oil, we consider it to be a critical success factor for a safe and reliable workplace.
- One way to improve upon communications is to focus on a highly engaged workforce that is equipped with all the tools they require to be successful.
 - The shift turnover log is one of those tools.
- The shift teams use the log verbally to discuss with their shift relief the current operation of the plant, optimization efforts and discuss any risks or incidents.
 - Without this conversation, we open ourselves up to potential risks and/or incidents.
- With cNotes, our turnover logs are directly tied to our operating plans. As a result our teams are better engaged in achieving plant and refinery optimization.
- All entries into cNotes record the users credentials which is raising personal and team accountabilities, and helping us to achieve our objective of a highly engaged workforce.



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Safety – Our Core Value

- In general, poor shift turnover communications has been found to be a contributing factor in refinery incidents for other companies within the Refining Industry.
- Without communication, the log is just that, a log.
 - The 'passing of the baton' from one shift to the next (during the shift turnover meeting) using a well written log as a vehicle for conversation, will enable us to ensure all incidents are prevented.



- Safety is our core value, both at work and at home, we believe **all** incidents are preventable.



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Shift Turnover Process - History

- Over the years, Operations shift turnover process has not been a structured one (mainly excel, MS word or hand written).
- In some cases, the data being recorded and communicated from one shift to the next was not current and/or relevant data.
- The overall objective was to simplify the process of Shift Handover with a consistent format across all areas, and enable operators to communicate what matters in a way that focused on accountability and accuracy while focusing on:
 - Safety Concerns
 - Environmental Concerns
 - Unit Operational Issues
 - Maintenance Activities
 - Daily Orders
 - Night Notes
 - Requests from Plant Technical Services

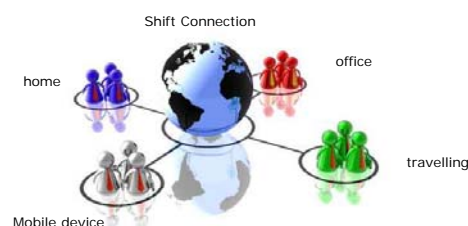


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Selected Solution - cNotes

- The process to select a software provider for our Shift Log project was extensive.
- We began with an internal review of the build vs. buy options. It was decided that buy was the best option.
- We engaged with vendors through our RFP (request for proposal) process that lead us to CSoft Technologies and their cNotes product.
- cNotes provided not only the functionality we were looking for (easy to use, web based, customizable look and feel) – CSoft also offered a cost effective hosting model that would allow our stakeholders the ability to access Shift Connection from anywhere (work, home, mobile devices).



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cNotes - Functionality

- cNotes is a software solution that is used by operators, management, engineers, planning teams.
- Our hosted environment allows for access by external resources (i.e. product inspectorates).
- Key functionality includes:
 - Web-based technology with a familiar Microsoft look and feel.
 - Security and administration within the application.
 - Provide connection to the plant historian data.
 - Provide safety notes, daily orders and night notes.
 - Ability to create expiring notes.
 - Ability to create targeted questions for user response.
 - Customized module creation capability.
 - Total Accountability at every level.
 - Every level of operational personnel has the visibility to all areas of the Operations team.
 - Advanced key word search capability.
 - Easy to use report creation and distribution.
 - Auto-save and archiving enabled.



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Shift Connection

- There was a strong desire internally to have a meaningful name - 'passing the baton' was selected to symbolize the shift handover.



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Overview

- The Shift Connection Home Page is the 'go to' page for overall safety stats, key messages and links to other internal applications.
- We also have the ability to send feedback and apply a frequently asked questions section.

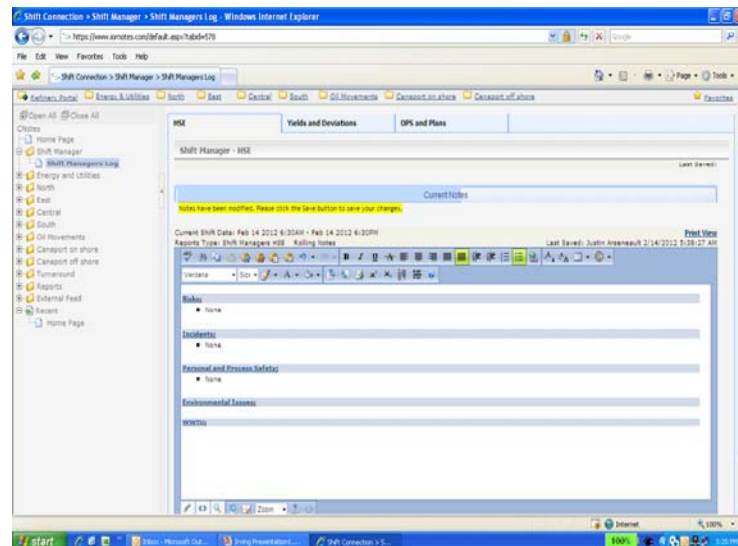


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Notes Module

- All user notes sections can be configured and be set to 'rolling notes' or 'shift by shift' notes.
 - Rolling Notes – will carry over from shift to shift until the user removes them.
 - Shift by Shift Notes – will clear at the beginning of the next shift (at a time you decide).
 - Auto save is also a key function of cNotes.

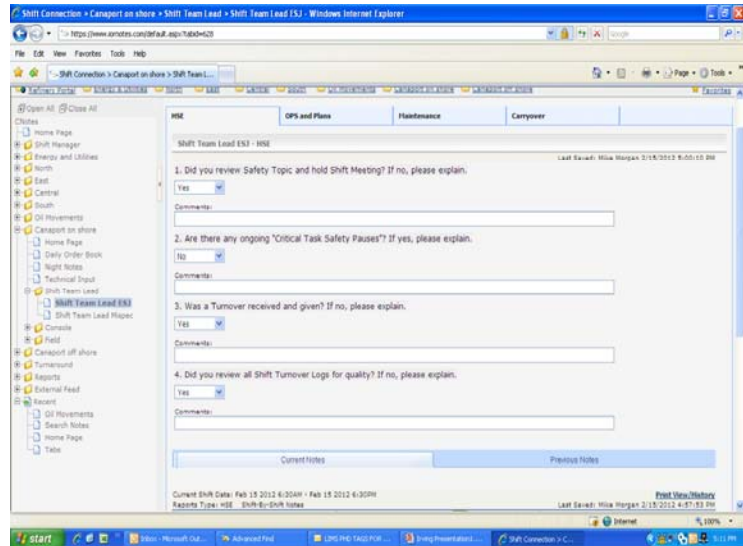


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Targeted Questions

- User notes questions are targeted as reminders for the user.
- Questions can be set to have a flagged response that can be reported on easily.

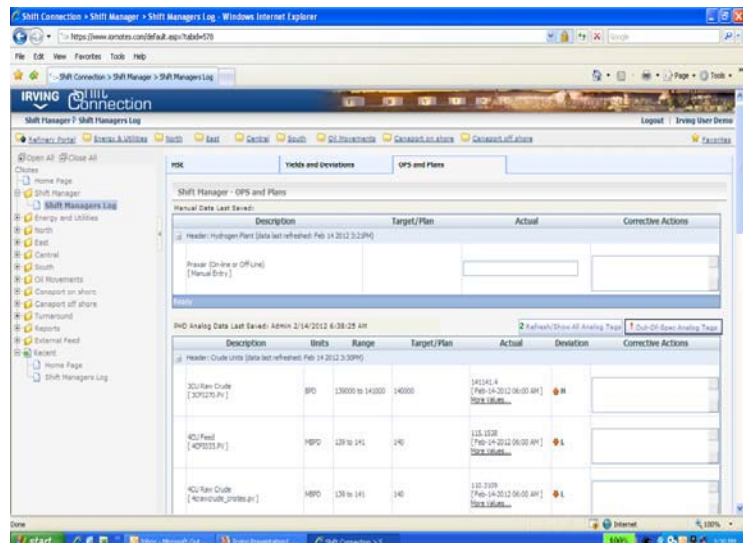


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Historian/Lab Connection

- Our plant historian data is compared to our daily plan targets.
- Operators have the opportunity to add corrective actions to deviations.
- Currently working with CSoft to develop a new module that will automate the population of our plan numbers into the logs.



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- Expiring notes allow us to add orders and instructions that will automatically expire based on number of days or a specific date.



Historical Search

- Quick historical views allow for notes lookup for the past 6 shifts.



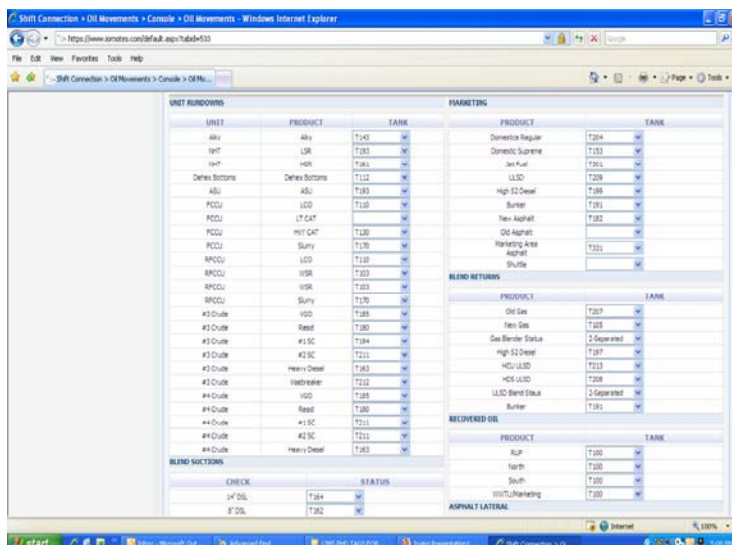
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➤ CSoft was responsive to our needs and able to deliver a tool that has been well received by the users.

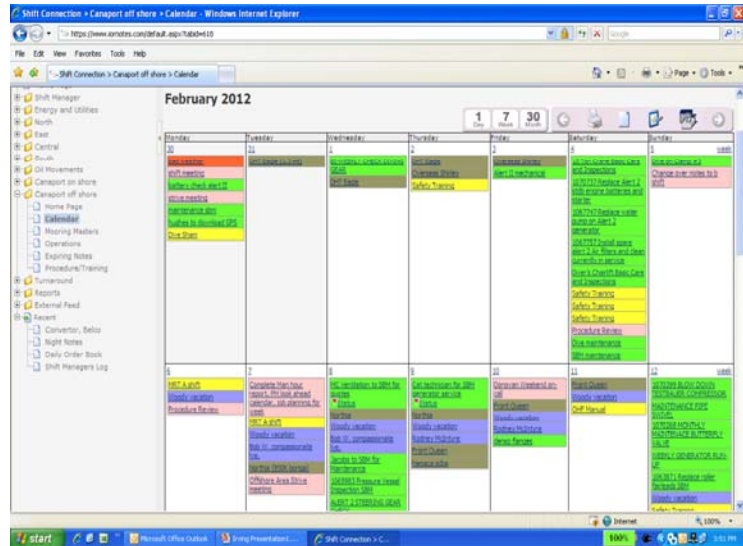


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Calendar

➤ The calendar module is used extensively by our off-shore team to schedule reminders for meetings and specific tasks.

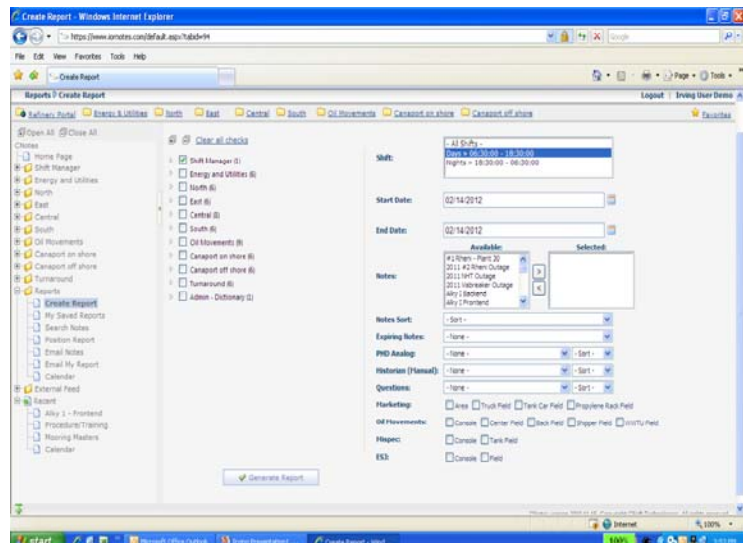


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Reports

➤ Users have the option to create a one time report or create reports to save for use later – or share with other users.



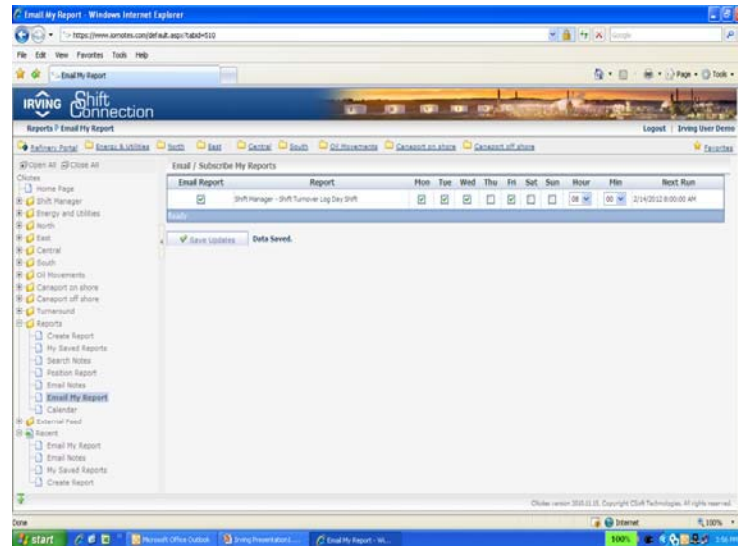
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Email Reports

➤ Reports can also be sent to users via email at the days and time they select.

➤ Notes only can be sent as well at the moment they are saved – this is beneficial for notes that are attributed to Safety or the Environment.



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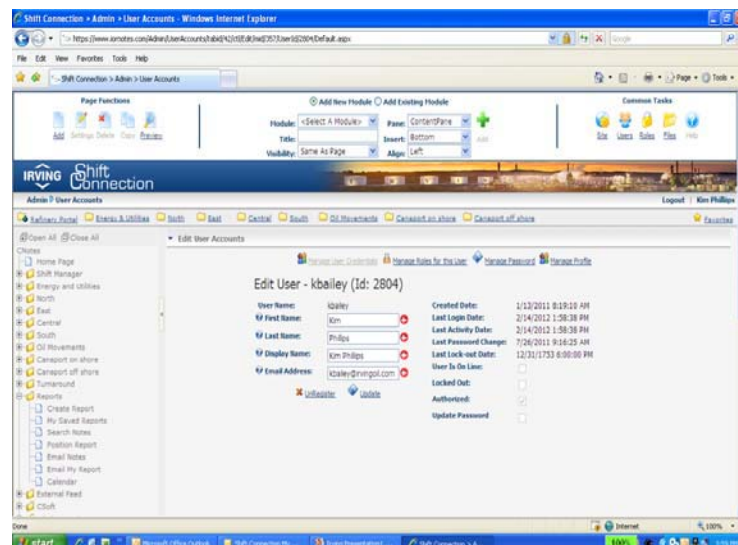


Administration

➤ For the systems administrator, cNotes is an intuitive and easy to navigate tool.

➤ Security can be set by roles and users – you can set access at the page, portlet or site level.

➤ New modules are added easily in a 'container' look and feel.



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Recap

- The CSoft team has been very responsive to our needs and timelines – they have been open to suggestions for custom modules, as well as our needs as a customer.
- We required custom built modules – which CSoft successfully created.
- Responsive to new requirements and open to suggestions for improvement.
- Change Management was an aspect of the project we knew would be a challenge internally – it was.
 - Now that the benefits are understood – users have engaged in the tool and are using it as hoped.
- Many of our team members embrace the hosted solution - many sign-in to Shift Connection from home when they are returning to shift from days off.
- Irving Oil now has a scalable sustainable shift turnover solution, that is meeting the needs of operations, management and supporting teams.



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Thank you.....

