The Metropolitan Council Saves Hundreds of Hours Producing Lake Monitoring Reports

The Metropolitan Council (Met Council) conducts an annual assessment of the more than 200 lakes located in the Minneapolis-St. Paul metropolitan area. Each lake is monitored regularly to collect data, including such elements as clarity and phosphorous levels, used to determine the water quality grade. The monitoring data collected by the Council, its partners, and citizen volunteers are used to identify pollution problems, support regional planning efforts, and meet federal and state regulations. Each year the data collected is compiled into a Lake Monitoring Report of as many as 600 pages that includes tables, charts, lake maps, and narrative content. The report is made available to the general public, delivered to libraries and scientists, and saved as a public historical report.

The Challenge:

- 200+ lakes
- Up to 600 pages
- 400+ hours
- 0 reuse
- 0 automation

The Challenge: Reduce the time and effort on the annual Lake Monitoring Report

Met Council's method for developing the annual Lake Monitoring Report was a collaborative effort among Council GIS staff and the scientists providing the data. It was a fully manual process in which the scientists provided monitoring data and charts to Council GIS staff in a variety of formats. A Council staff member would then manually build and adjust presentation slides representing the data and maps for each of the 200+ lakes. This would require an iterative effort between the scientist and the Met Council GIS member—adjusting, reviewing and updating—until the report was finally complete.

"It was a painful and tedious process for Met Council staff," said Kim Borman-Krinhop, project manager for the lake monitoring project. "This process often took more than 400 hours to complete."

With so much manual effort the risk for errors was high. Met Council had a significant amount of information that was common across multiple lakes. However, because the entire process was manual, there was no reuse, so the same information was duplicated in multiple places without any automated method to keep the information in sync. It was an untenable process.

Not surprisingly, Met Council needed an easier, more efficient way to complete the reports.

The Options: Automate data reporting and publishing

Met Council knew that the only way to reduce the effort of building the annual reports would be to automate a significant portion of the process. They identified two possible solutions among software already being used in their organization:

- Use SAP® BusinessObjects Business Intelligence tools to automatically extract the data and output a visual report including tables, charts and graphs that update automatically.

- Use PTC® Arbortext to integrate the data with structured content via data merge functionality.

After demos of both solutions, a survey was conducted to get feedback. The feedback suggested that the best solution would be to integrate the two applications to take advantage of the strengths of each tool. They wanted the automated reports features of the reporting system and the structured authoring capabilities of the XML editor, but there was no existing integration between the two systems.

The Solution: Integration of best-in-class tools

To ensure a successful project, Met Council partnered with Oberon Technologies to define both the business and functional requirements for their project. Together they identified how the integration should perform and the full scope of the project.

Once they uncovered the requirements, the experts identified that a full integration was not needed, and that the reports could be created with an easier and more cost effective approach. They simply needed a way to get the reports from SAP into the PTC software where they could easily create, maintain and reuse the content. Furthermore, they were able to identify that the DITA (Darwin Information Typing Architecture) content model would best meet the requirements for structured content.

Selecting DITA as the content model provided Met Council with capabilities needed for their project.

- As a modular content model, DITA enabled reuse of topics.
- Specializations allowed Met Council to tailor the content model to their documents.
- The XML editor provided robust, out-of-the-box support for DITA.

By clearly identifying their business and functional requirements and selecting DITA as their content model, Oberon Technologies was able to help Met Council simplify their project from an expensive, full-scale integration to an elegant, cost-effective solution that leveraged existing capabilities in both applications.

With the Business Intelligence reporting system, Met Council is now able to:

- Easily upload and manage lake monitoring data using SAP® BusinessObjects
- Automate creation and update of tables, charts and graphs
- Output the visual report to Microsoft® Word

With the XML-based content solution, Met Council is able to:

- Map the output from Microsoft® Word to DITA
- Easily create and maintain narrative content
- Maintain a single source of shared content for reuse and repurposing
- Automate publishing of entire lake monitoring report or individual lake reports

The Result: Met Council reduces process time by over 90%

Kim Borman-Krinhop reported, "Our business analyst was able produce the report and refresh the data in under 10 hours this year. The scientist will simply need to update content where data values may have changed significantly, reducing the 400 hours to under 40."

As a result of the integration, Met Council has:

- Dramatically reduced staff time for creating reports

About Oberon Technologies

Oberon Technologies partners with our customers and leading software suppliers to provide innovative solutions for creating, sharing and delivering information. Our extensive experience and expertise designing, developing and deploying these solutions has helped hundreds of companies reduce costs, increase revenue and improve quality. We are known for our integrity, accountability and commitment in every engagement.

For additional information, please contact Oberon Technologies at (734) 666-0400 or info@oberontech.com.

OBERON
Technologies

PO Box 428
Saline, Michigan 48176

+1 (734) 666-0400

info@oberontech.com
www.oberontech.com