Intergraph Software Improves Dispatching for the Australian Federal Police (AFP)

A TWO-WAY FLOW OF DATA BETWEEN SYSTEMS ENSURES OPTIMAL OPERATIONS

BACKGROUND:

The Australian Federal Police (AFP) originally used a home-grown computer system for case management on a mainframe called COPS, which provided a basic dispatching function.

When the organisation needed to replace the mainframe, it developed a new case management system called PROMIS. Prior to implementing PROMIS, the AFP determined that an updated dispatching functionality was also needed to effectively manage resources in the field and Intergraph's technology fit the bill.

Sergeant Karen Lucas, the Operations Manager for ACT Communications, which is part of ACT Policing, a division of the AFP, said Intergraph was selected to provide the updated dispatching functionality for two main reasons:" Intergraph already had a system operating in Victoria that we could reference and importantly, Intergraph products offered additional functionality, which provided us with the opportunity to grow."

THE SOLUTION:

Intergraph's tender proposal revolved around the application of two of its solutions:

- **I/Dispatcher** - enables the AFP to accurately record incident and patrol information
- **I/NetViewer** - allows AFP supervisors/officers the ability to view/monitor up-to-date dispatching information.

When a call comes in, it is the operator who determines whether a patrol is needed. If a patrol is not required, the call is forwarded directly to the Call Centre where the information is taken over the phone and entered into PROMIS. If a patrol is required, the operator creates an event in I/CAD, Intergraph's 'intelligent' mapping and data entry system, which interfaces with PROMIS allowing a two-way flow of data. The event is routed to the dispatcher who verbally dispatches a patrol to the job. The patrol investigates the event and reports back to dispatch. Any additional incident and patrol information is created/updated via I/Dispatcher. Back in the station, the supervisor/officer can use I/NetViewer, the ultimate remote resource, to retrieve dispatch information providing an overview of the current operational status, active incidents and available resources in list form and on the map display.

PROFILE:

Name - Australian Federal Police (AFP)

Web site - www.afp.gov.au

The Australian Federal Police (AFP) is a progressive and multi-faceted law enforcement organisation that strives to build a more secure future for Australia. Counter-terrorism and national security are major business priorities, underpinned by an unprecedented focus on strategy and investment. AFP has about 5,000 sworn and unsworn officers with approximately 800 of them covering the ACT from four 24-hour Police Stations and one further station covering 16 hours per day. ACT Communications handles some 360,000 phone calls per year with about 60,000 of these requiring a patrol response.

KEY OBJECTIVES:

- Add a new dispatching functionality to interface with PROMIS
- Increase the overall efficiency of the dispatching process for the ACT
- Improve the resource management process in the field

PRODUCTS USED:

- I/Dispatcher
- I/Netviewer
- Custom interface to the PROMIS records management system

> "Intergraph products offered additional functionality, which provided us with the opportunity to grow."
>
> *Sgt Karen Lucas, Operations Manager, ACT Communications*

BUSINESS BENEFITS:

The new systems and software were successfully implemented in November 1998 and today, the AFP uses the continuously upgraded systems for policing the ACT. The result: the combination of Intergraph's software and PROMIS created an efficient resource management tool leading to successful and efficient communication for the AFP.

For patrol members one of the major benefits of PROMIS relates to its integration with the AFP's CAD system (where the operator creates an event from a call if a patrol is required), which members do not have access to.

"If there was no interaction between CAD and PROMIS members would have to create investigation cases from scratch," said Sgt Lucas. "But, as CAD sends all information about a case to PROMIS, which creates a corresponding job with all existing information, members just have to add to it.

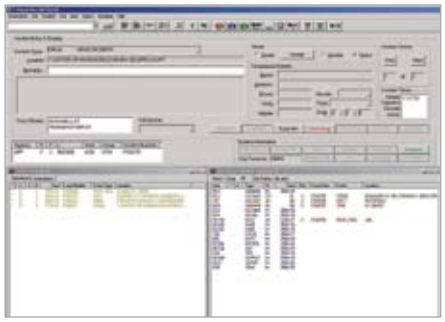
"Even for a simple case, the incident type, location and caller etc are already there and patrol members can save several minutes not having to re-enter this information. For more complicated cases members also have the ability to track back through a chronology to find out about the case history and this also saves them valuable time."

THE FUTURE:

The AFP has recently purchased a second I/CAD system to manage work in its national operations and aims to have the system operational by late 2007.

Future expansion plans may involve utilising the electronic functionality of the dispatching process to include vehicle tracking and mobile data.

For more information, visit www.intergraph.com



I/NetDispatcher system

I/NetDispatcher mapping

ABOUT INTERGRAPH

Intergraph Corporation is the leading global provider of spatial information management software. Security organisations, businesses and governments in more than 60 countries rely on the company's spatial technology and services to make better and faster operational decisions. Intergraph's customers organise vast amounts of complex data into understandable visual representations, creating intelligent maps, managing assets, building and operating better plants and ships, and protecting critical infrastructure and millions of people around the world.

For more information, visit www.intergraph.com

INTERGRAPH

Inco Goro's $1.9b nickel project: A SmartPlant Foundation journey

INCO AUSTRALIA MANAGEMENT PTY LTD

UNDER THE TROPICS

Located in the South Pacific off the coast of Australia, New Caledonia is one of the best underdeveloped laterite ore bodies in the world with around 57 million tonnes of proven and probable resources.

The Inco Goro project started as a feasibility study in 2000 - Inco Australia Management Pty Ltd, on behalf of Inco, has engineering, procurement and construction responsibilities. At the projects peak 1,400 people were involved in the design effort from Inco offices around the globe.

Inco has the exploration rights for New Caledonia. The Goro Nickel deposit has a potential life span of over 50 years with other exploration on top of that. The mine life outstrips the process plant life of 20 – 25 years.

The Inco Goro project is located in the South Province of New Caledonia. Once complete, by the end of 2007, the operation will provide 800 permanent on-site jobs and 1,500 indirect jobs in New Caledonia alone. It estimated 90% of these positions will be held by locals and around 50,000 tonnes of nickel per annum and 5,000 tonnes of cobalt will be produced.

KEEPING GREEN

The Goro circuit is a typical high pressure acid leach system – there will be three trains. The focus has been on optimising the output of the trains but also on environmental concerns relating to overflow from those circuits because they are acid based.

Inco has heavily invested in equipment to almost close the circuits off so that the overflow has a minimal amount of metals and acidic content, ensuring the pristine surrounds are maintained. In addition, the water supply has been optimised so the re-use of water will be achieved around the circuit, meaning as little as possible is pulled from the dam.

OBJECTIVES

"With exploration rights and at least 50,000 tonnes of nickel per annum, this is a big business for us," said Colin Green, IT & Systems Manager, Inco Australia Management Pty Ltd. "Because of its remote location, we wanted to reduce the numbers of workers on site and the costs associated with that.

"The decision was made to modularise the plant, breaking it into geometrical spaces – different equipment, different piping and different services.

"We needed a system to control this type of environment," he said.

ABOUT INCO:

Inco Limited is one of the world's premier mining and metals companies and the world's second largest producer of nickel. Headquartered in Toronto, Canada, Inco is a global company with offices in over 40 countries and 11,000 employees. Inco also produces copper, cobalt and precious and platinum-group metals and is a major producer of specialty nickel-based products.

SMARTPLANT FOUNDATION: UNIQUE FUNCTIONALITY

- Document control including transmittals
- Document management
- Engineering deliverable management
- Vendor data and document management
- Contracts management
- Engineering data management (equipment list, line list etc)
- Module management including key schedule dates
- Replicated SPF system for site
- Disconnected access to data and documents via the 3D PDS model
- Production of the control system software
- Integration between various engineering, project controls and procurement systems

CONTACT DETAILS:

Inco Australia Management Pty Ltd

201 Charlotte Street

Brisbane QLD 4000

+61 7 3115 9227

www.inco.com

QUOTE:

"SPF allowed us to take control of our data and share it as one central source of information amongst all of our customers"

Ben Davies, Development Lead
Inco Australia Management Pty Ltd

SOLUTION

"Having an integrated data and document management system was a key factor in going with Intergraph. We centralised the server in Brisbane and started using SmartPlant Foundation (SPF) in late 2004.

"SPF was used to control the moduralised environment through a contractual index and module index," he said. "Once out of the package we spent 6 months talking – we modelled and modified SPF to suit our processes. Modularisation for us means most equipment can be constructed in the Philippines, so there is a saving of labour costs there, and we can get locals to work on the plant. Modularisation reduces the workforce on the new Caledonia and also the schedule significantly. We have 40 – 50 regular users who contribute to the system including document control people and equipment engineers. There would be about 200 viewers and browsers around the world."

Screen grab caption

BUSINESS BENEFITS

"The main benefit SPF, as a high level tool, is allowing us to stitch together a lot of independent data, whether it is from design tools, management data, or data from other sources. It enabled us to create those items in the one spot and relate them to one level in SPF. Having a single master of published data in SPF has allow us to manage the entire project in a more efficient way," said Ben Davies, Development Lead, Inco Australia Management Pty Ltd.

"We were able to customise SPF to suit our needs and added a lot of functionality unique to the Goro project including multiple purpose document control, document, engineering deliverable, vendor data and contracts management.

"SPF is unique in the way we can drill down into any construction area and see deliverables, tag numbers, purchase orders, requisitions packages - this was one of the key capabilities SPF gave us. It also allowed us to take control of our data and share it as one central source amongst all of our customers when we needed," Davies said.

LESSONS LEARNED

"One of the biggest challenges occurred when we took SPF out of the box to start configuration. Our concern at this point was trying to understand what our business requirements were. To get agreement among 400 engineers was a difficult task," continued Green.

"We retained four staff from Intergraph to go down the rocky path of configuration, re-configuration and help us implement the solution. Then we needed to get the end users working it properly which took a full year. Now SPF is here and it is part of our day to day life – expectation and use are very high – but it took a while to get here. It's almost like turning a light switch on – we turn it on and SPF is there… but it took time to get it implemented. Internally we conducted a lot of training and encouraged experienced users to share knowledge wherever possible," he said.

FUTURE DEVELOPMENTS

There are plans to double the current size of the solution and introduce the use of SPF in the Operations Team. "We will gain significantly because what we have designed for the Goro project, we can use it as a 'template' to a certain extent. We now know what we need from the start – the year we spent working out SPF configuration and implementation has been essential for understanding our business requirements and the data," said Green."We know a lot more about how to manage the data and now we can put in the right checks and controls for long term projects in the future. Everything we have learned through implementing SPF has gone into a vault and will be used again and again," he said.

"We now know how to drive it… actually, we now know how to drive it in reverse!"

ABOUT INTERGRAPH

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INTERGRAPH

Intergraph software enhances safety and protection for the Northern Territory's community

ENABLING EMERGENCY MANAGEMENT: NORTHERN TERRITORY POLICE, FIRE AND EMERGENCY SERVICES

THE CHALLENGE:

Northern Territory Police, Fire and Emergency Services (NTPFES) is a unique public safety agency in that it contains three individual services within its organisation. In addition, St. John Ambulance, an independent organisational entity, also operates within NTPFES's environment. This unusual set up presents some challenges for NTPFES in maintaining updated and accurate records, ensuring open communication, and managing the various resources from all three services.

According to John Weippert, Director of NTPFES, "With the previous software and the number of incident calls, the various services within NTPFES were becoming disjointed. Our communication was not as good as it could be – you could say that the left hand did not know what the right hand was doing. Our system at the time made it increasingly difficult to respond in an optimal, resourceful way."

NTPFES realised they needed to replace their software to ensure better communication and efficient dispatching. This was critical to their success in ensuring the community's safety.

SOFTWARE OBJECTIVES:

To increase and maximise communications between the three services and St. John Ambulance and ensure efficiency and speed in allocating the appropriate resources to reported incidents.

THE INTERGRAPH SOLUTION:

To increase success in optimising resources and ensure faster responsiveness, NTPFES chose to replace their existing software and began to investigate alternative software solutions. Weippert says, "Once we made the decision to change our software, we simply looked around to see what others were using. We came across the Intergraph software in Melbourne and New Zealand at the time. It was the only off-the-shelf product that immediately met our requirements."

PROFILE:

Name – Northern Territory Police, Fire and Emergency Services

Web site – www.nt.gov.au/pfes

The Northern Territory Police, Fire and Emergency Services (NTPFES) is a tri-service that enhances community safety and protection through policing, fire prevention, and emergency response services to the community. It encompasses over 1,650 employees with an authorised sworn strength of approximately 1050 Police, 130 Fire Officers, and over 200 civilians. In a unique arrangement, St. John Ambulance is an independent organisational entity is also linked into NTPFES processes and systems and is comprised of approximately 115 permanent St. John Ambulance officers. The Joint Emergency Services Communications Centre (JESCC) is home to police, fire and St John Ambulance operators, all in the same location.

NTPFES emergency services cover a population of some 206,000 people scattered over an area that is one sixth of the Australian continent. This equates to an area of approximately 1.35 million km2 (equal to the combined areas of France, Italy and Spain).

KEY BENEFITS:

- Enhance communications between Police, Fire and Emergency Services
- Maximise the efficiency of resource management between the tri-service and St. John Ambulance when dispatching/responding to incidents/emergency calls

PRODUCTS USED:

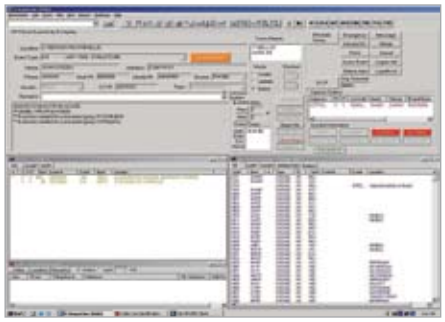
- I/Dispatcher
- I/NetViewer
- I/Calltaker

NTPFES chose Intergraph's I/CAD software to address their critical objectives:

The I/CAD software that NTPFES chose to address their critical objectives included:

- I/Calltaker offers NTPFES the tools needed to answer emergency calls, enter precise incident information and locations, and forward calls to necessary personnel.
- I/NetViewer allows NTPFES personnel, remote from the communications centre, to retrieve up-to-date dispatch information using only a web browser and connection to the NTPFES Intranet.
- I/Dispatcher provides NTPFES with resource recommendations based on incident and vehicle location, drive time, unit type, officer skills and availability, as well as other pertinent factors.

This combination of software creates efficient communication and resource management within NTPFES's services.



I/Dispatcher: event information

I/Dispatcher: location of the event

IMPROVING PROCESSES:

After implementing the I/CAD system in May 1999, NTPFES processes immediately improved. Weippert states that "From day one of its inception, the software has helped us - we were able to immediately connect all the services. It has broken through our resource management issue. Prior to this system, if we got a call, the police would have gone to it, ambulances would have gone to it and no one knew what the other was doing. Now, when one service reports to an incident, the other services are immediately aware and can step down which improves our resource management."

As an example, when NTPFES receives a multi-service call such as a motor vehicle with injuries, depending on what service takes the call, the operator enters the incident information into the system using the appropriate incident code. In this case, the code would be a 129, meaning accident with injury. In addition, a code prefix would be entered into the system – in this case an AFP meaning Ambulance, Fire and Police – and that prefix would tell the system what services need to know about the call. Immediately, the system would send the job as well as the initial report details to each requested service. At that point, all required services are able to view the incident and respond by simultaneously entering their individual dispatching information into the system. The job or incident record is then instantaneously updated with all of information posted from each responding service and can be viewed on all workstations simultaneously. As each service updates their job or closes their incident, the information continues to be posted on all workstations.

FUTURE DEVELOPMENTS:

For some time, the I/CAD system only existed in Darwin, NTPFES's headquarters, on 23 workstations which covered all the services, training and data administration. In the beginning of 2007, the I/CAD system was also rolled out to Alice Springs using I/Netviewer so officers based outside headquarters can view all operations.

NTPFES will continue to implement the software in additional locations, plan to conduct continuous upgrades and ensure the integration with I/CAD to AIRS, the National Fire Reporting System, and I/CAD to NTFAST, the radio based building Fire Alarm monitoring system.

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INTERGRAPH

GeoMedia Grid used to capture hazard and risk data used for a national initiative in New Zealand

NEW ZEALAND: A NATIONAL INITITATIVE

THE CHALLENGE

A National initiative implemented and managed by the New Zealand Fire Service, the wildfire threat analysis (WTA) is a systematic method of identifying the level of threat a particular area faces from fire.

Councils around New Zealand, on behalf of the Rural Fire Authorities, are responsible for managing and mapping the data that measures the threat of wildfire and is subsequently used to achieve optimal fire management nation-wide.

WTA is a strategic planning tool for fire managers that looks at long-term seasonal impacts and has highlighted the value of geospatial technology in this field. Christchurch City Council and Southland District Council are leading the way with their response to the requirements of the WTA.

THE PROJECT OBJECTIVE

Motivated by needs to meet new national legislative requirements to inform fire managers, the objective for both the Christchurch City Council and Southland District Council was to produce and maintain an overall map displaying various wildfire threats to capture the data and present it in a intelligible format.

The information needed to be detailed, yet clear, for fire managers to review and assess the scale of the threat instantly and also use the information to educate residents and put appropriate fire prevention schemes in place.

THE SOLUTION

Councils and Fire Authorities around New Zealand were required to undertake a study in line with national guidelines set by the New Zealand Fire Service to accumulate the risk, hazard and value data and apply a 'score' to measure the threat in their area. The level of threat is generally related to a combination of ignition potential, potential fire behaviour and the intrinsic values of the area threatened.

Christchurch City Council and Southland District Council use GeoMedia Grid to fulfil these ongoing requirements. Data is measured in three categories: risk, hazard, value – the overall threat is a calculated combination of all three.

The overall threat is a measured by calculating data within the three categories:

- Risk: How likely is a fire to start here? – e.g. people access, power lines
- Hazard: Once alight, how quickly with fire burn? – e.g. vegetation
- Value: What is the impact of fire? e.g. loss of life, property in the area

CHRISTCHURCH CITY COUNCIL PROFILE:

Christchurch City Council is located on the east coast of New Zealand's South Island, has the second largest population of all New Zealand territorial authorities, and is the largest urban centre in the South Island. Known as the garden city due to its expansive parks and public gardens, Christchurch city has a land area of 45,240 hectares.

SOUTHLAND DISTRICT COUNCIL AND SOUTHERN RURAL FIRE AUTHORITY PROFILE:

Based in the city of Invercargill, the southern most city in New Zealand, the role of the Southern Rural Fire Authority (RFA) is to train fire crew and manage issues relating to fire in the area of the Southland District Council - an area of 30,753 km^2. The RFA forms branch of the Council that has jurisdiction over the largest (by land area) territorial local authority in New Zealand.

PRODUCTS USED

- GeoMedia Professional
- GeoMedia Grid

"Users do clever things with Intergraph"

Shelley Sutcliffe
Senior Information Technician, GIS & Data
Christchurch City Council

"This measured points based system ensures that a fire manager who is not familiar with an area would be able to take one look at a map and identify the scale of the problem and instantly know the resources required for optimal fire management," said Shelley Sutcliffe, Senior Information Technician, GIS & Data with Christchurch City Council.

"The threat is calculated using the three layers of data – GeoMedia Grid is fantastic for this because you can just output layers and instantly calculate modifications to the data and how that effects the overall threat."

ORGANISING THE DATA

Southland District Council's Southern Rural Fire Authority is using GeoMedia Professional to put the base GIS layers together and then rastering from this into a format to use in GeoMedia Grid. The data has been sourced from private forestry companies, environment management organisations, department of conservation, power, railway and road departments and local authorities to name a few.

"The project is best done using GIS because of the complexity – there is so much information and data involved. We determined that GeoMedia Grid was suitable because of its ability to add up all the different layers of information," said Gerald Dysart, Wildfire Threat Analyst, Southern Rural Fire Authority.

"I was impressed by the way you can bring in a wide range of file formats without having to convert them to a native format, which was great for this project because I was dealing with a wide range of people and organisations using different software and data formats," he said.

BUSINESS BENEFITS

"The obvious benefit derived from this project is that the data is available for fire managers to use instantly for the benefit of the whole community - the benefit of the software, however is being able to work with live data," Mrs Sutcliffe continued.

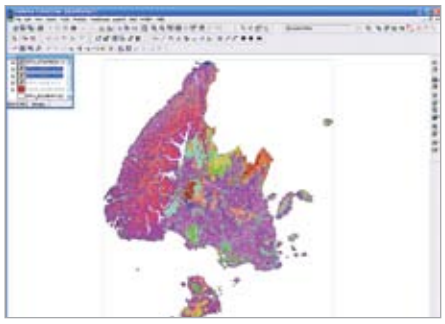
"GeoMedia has been built in such a way that users can re-run the process easily and treat it as a live document rather than a one-off report. GeoMedia Grid allows users to rasterise each layer and simply 'slip in' changed data. For example if a forest is logged, it completely changes the wildfire threat for that area – we just adjust the data and because our system is live and automated it adjusts the threat instantly."

"We can pull live data at anytime," she said. "The granularity is great as well because you can identify areas you need to zoom in on and re-process and GeoMedia Grid supports that."

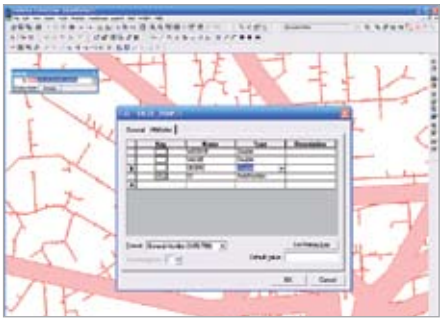
FUTURE DEVELOPMENTS

The WTA is an ongoing national initiative. Both the Christchurch City Council and Southland District Council will continue to revise the project according to new or changing data.

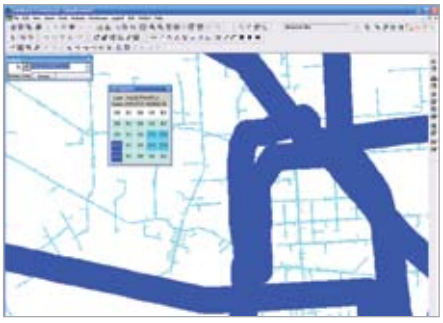
For more information, visit www.intergraph.com



GeoMedia Professional adding layers and displaying results



Taking power network data into GeoMedia Grid



Rasterise feature class using GeoMedia Grid

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INTERGRAPH

Outokumpu Technology supports Alcan's $2.4b Gove Alumina Refinery expansion

GLOBAL LEADERS OF ALUMINA CALCINING TECHNOLOGY STANDARDISES WITH INTERGRAPH SOLUTIONS

BACKGROUND

As part of Alcan's $2.4b AUD expansion of its Gove alumina refinery, Outokumpu Technology was contracted to provide detailed design and engineering of three calciners producing alumina with the capacity of 3500 tones per day (TPD).

The 'G3 project', one of the largest investments ever undertaken in Australia's Northern Territory, will increase the existing plants' capacity from 2 to 3.8 million tonnes of alumina per annum, enabling Alcan to meet the ever increasing worldwide demand.

In addition to the design and delivery of proprietary equipment, Outokumpu provided advisory service for the fabrication, pre-assembly, erection and commissioning of the two calciners that will be installed in this phase of the Alcan project.

Calciners take a hydrate feed into the process plant to produce alumina. Using Intergraph software, Outokumpu's front end design for the calciners was completed in Europe, and the design team mobilised and moved operations to Brisbane, Australia to complete the detailed design. Two of the calciners have since been pre-assembled into modules by sub-contractors in Thailand and shipped to Gove.

OBJECTIVES

Outokumpu needed to produce detailed design documentation and the key equipment for Alcan to construct the calciners. Given the increase in market demand, outside influences meant project design completion was required in six months – streamlined design operations needed to be swift and effective.

PROFILE:

About Outokumpu Technology

Outokumpu Technology is a global leader in designing, developing and supplying tailored plants, processes and equipment for the minerals and metals processing industries. As part of the Outokumpu Group, which employs 10,700 people in over 40 countries, Outokumpu Technology is able to draw on unparalleled experience in metals production and processing and are global leaders with alumina calcining technology. With a long history of operating throughout the entire mine-to-metal chain, their technology and equipment is relied upon around the world to deliver high quality and cost-effective production. For more information, visit: www.outokumputechnology.com

PRODUCTS USED:

- Plant Design System (PDS)
- SmartPlant Review (SPR)
- ISOGEN
- INtools

CLIENT CONTACT DETAILS:

Outokumpu Technology

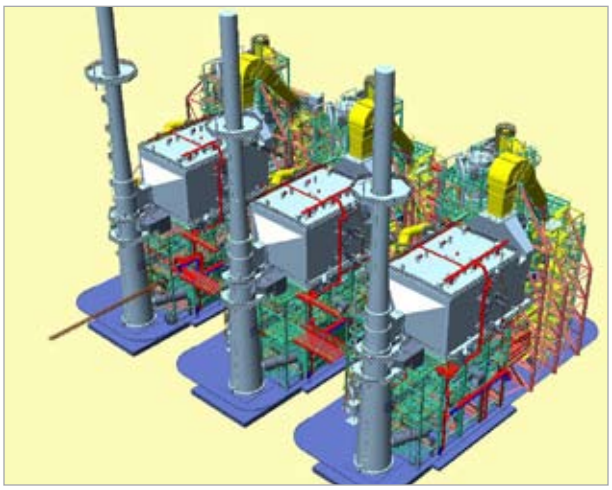
72 Market Street

South Melbourne, Victoria, Australia

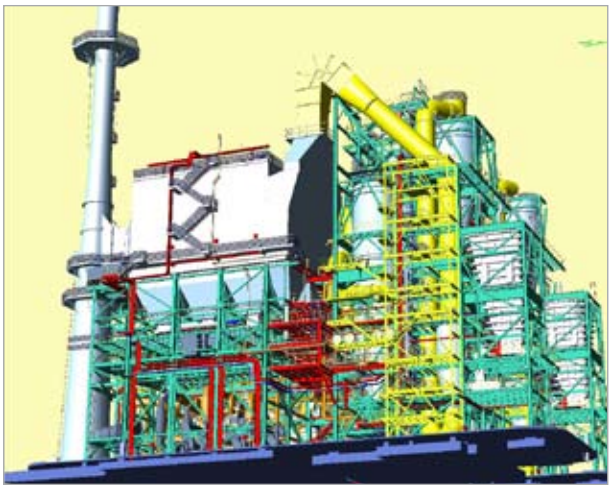
03 9696 5766

"We used SmartPlant Review closely with the client as a tool to show them the product as it was being designed – the ability to keep them up-to-date under tight timeframes was a real advantage."

David Cook
Chief Plant Designer, Outokumpu Technology



3D design: the three calciners



From a north west perspective

SOLUTION

Outokumpu Technology has adopted Intergraph software as standard – almost all plant design projects are executed using Intergraph software worldwide. For the Alcan Gove contract the Intergraph solutions included:

- Plant Design System (PDS): for equipment modeling, piping and structural
- SmartPlant Review (SPR): for previewing the design
- ISOGEN: for Isometric generation
- INtools: for instrumentation design

Piping, mechanical, structural and civil designers worked in unison with discipline engineering groups on the time critical project. "The beauty of using all the products together is that the different contributors could work to build up the model simultaneously," said David Cook, Chief Plant Designer, Outokumpu Technology. "The integration of the software was an essential factor in meeting project deadlines."

"We also used SmartPlant Review closely with the client as a tool to show them the product as it was being designed – the ability to keep them up-to-date under tight timeframes was a real advantage," he said.

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INTERGRAPH

Wyndham City Council implements a web-based geospatial data management system

CENTRALISED SOLUTION PUTS DATA IN THE HANDS OF ALL EMPLOYEES

THE CHALLENGE

Wyndham is one of the fastest growing municipalities in the State of Victoria, Australia. Spanning 542km^2 on a coastal plain on the western fringe of Melbourne, the city encompasses vibrant industrial and technology districts, two major retail precincts and intensive rural growing areas and grazing lands.

Wyndham City Council (WCC) needed to implement a software platform that would grow with the council over the next decade. The primary drivers were the need to better manage spatial datasets and enhance system integration between the current property and rates system and other information management systems.

Outdated product technology, data duplication, distribution delays, lengthy maintenance procedures, integration problems and an inability to comply with trends towards mobile computing were all reasons for WCC to look into geospatial technology capabilities.

Some of the key requirements were:

- Web based browser, accessible to internal and external users
- Spatial database – for storage of geospatial data in one centralised location
- Facility for power users to undertake their own spatial analysis
- Mobile computing capability
- Room for further development

THE PROJECT OBJECTIVE

Implement a new web-based mapping system that would be used as a portal to a range of WCC's existing information management systems.

PROFILE:

Name – Wyndham City Council

Located midway between the State's two largest urban centres, the City of Wyndham is 30km south west of the Melbourne Central Business District and approximately 35km north east of Geelong. Spanning 542km^2 on a coastal plain on the western fringe of Melbourne, it is one of the fastest growing municipalities in Victoria and is supported by one of the State's most dynamic and progressive local authorities.

- Current population 115,055 increased by 6.7% in 2005
- Wyndham's percentage of total dwelling approvals across Melbourne for the year ending June 2005 was 8.3%
- 542 sq km on a coastal plain of the western fringe of Melbourne
- Strong industrial and technology precincts. 8.9% of the total area
- Intensive vegetable growing areas and grazing land. 51.9%
- Urban Residential area 12% of the total coverage

Total revenue – $137,612,000 AUD
Total Assets – $755,176,000 AUD
Total Liabilities – $26,769,000 AUD
Net Assets – $728,407,000 AUD
Total Staff – 461 full time staff and 26 casual

PRODUCTS USED:

- GeoMedia
- GeoMedia Professional
- GeoMedia WepMap

WYNDHAM CITY COUNCIL:

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Werribee, VIC 3030
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THE SOLUTION

A solution based on Intergraph's GeoMedia suite was implemented. The project can effectively be divided into three stages:

Implementation

WCC employed a centralised SQL server database which simplified data management and maintenance. Whilst, the implementation was successful, a number of issues, namely the quality of existing data sets, change management and slower than expected map generation speeds were highlighted. The issue of change management for existing geospatial data users was overcome by overview sessions and training. The data quality issue remains an ongoing problem, slowly being rectified. The slower map generation times have improved by loosening the property and rates system integration and better management of the feature class scale settings.

GeoMedia WepMap: Werribee South

Customised enhancements

The desktop GIS and server/client solution provided the framework for the councils' spatial information. A number of software enhancements using VBScript and Delphi have been implemented to improve mobile mapping data integration, extend existing work processes such as maintenance orders, fire hazard notices, system integration with other datasets, including rates analysis, mobile mapping and disaster recovery information systems. The Intergraph team also implemented software functionality to integrate Geomedia WebMap and the property and rates system.

GeoMedia WebMap: Inspections

The future direction

The ability to custom program GeoMedia and GeoMedia WebMap will allow the council to expand their existing operations to include 3D mapping, network analysis (street sweeping, stormwater) and the integration of the external GIS with the property and rates system.

Usage of the WCC GIS solution continues to grow - in March 2006 there were 168 unique users. A number of power users have had GeoMedia training allowing them to do their own digitising and spatial analysis. There has been a definite increase in utilising GIS, which is becoming part of staff workflows. The continued integration of spatial information with other core products will ultimately improve management decision making, the service to rate payers and employee efficiency.

WHY INTERGRAPH?

"The GeoMedia and GeoMedia WebMap software integrated very well with each other and we could see how readily the web environment could be modified. The cost of the entire implementation was also an important consideration."

Kerryne Graham, GIS Administrator, WCC

For more information, visit www.intergraph.com

ABOUT INTERGRAPH

Intergraph Corporation (NASDAQ: INGR) is the leading global provider of spatial information management (SIM) software. Security organisations, businesses and governments in more than 60 countries rely on the company's spatial technology and services to make better and faster operational decisions. Intergraph's customers organise vast amounts of complex data into understandable visual representations, creating intelligent maps, managing assets, building and operating better plants and ships, and protecting critical infrastructure and millions of people around the world.

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