WYVERN
Decision support tool for emergency management

www.thalesgroup.com.au
Wyvern is an information management and command support system providing a technological advantage to organisations responsible for security, counter terrorism, incident prevention and incident management. Wyvern’s advantage stems from the user’s ability to easily collect, control and share information. This ‘all informed’ technology coupled with tight access controls means geographically dispersed teams can co-ordinate as a cohesive unit to multiply their effectiveness and speed of response. Wyvern focuses on information as a resource to support rapid reporting, decision, planning and response cycles.

> A flexible, integrated and easy to use system for:

- Reporting/logging – what happened?
- Analysis – why did it happen?
- Decisions – who, when, where?
- Planning – specifics of response?
- Assessment – what is happening now?
- Predicting – will it happen again?
- Collaborating – how to work together, co-ordinate and share what we know?
- Security – who needs to know?
- Response – action. prevent it happening again
- Review – how effective were our responses?

Wyvern allows central command posts to do the complex planning and management necessary to protect geographically dispersed sites and initiate appropriate security responses to threat situations if and when they arise. It facilitates threat assessment, timely responses and supports rapid, informed decision making at multiple locations.
Core capabilities

Operations log
Similar to email, however, taking an ‘all informed’ approach by showing a shared view (with access controls) of how an incident unfolds. The operations log is a site information feed and a communications channel for the distribution of briefings, decisions, instructions, documents and other files to every site. The revision system provides an audit trail and takes away the confusion over who made changes and which entry is the latest version.

Planning tools
Includes drawing, planning and presentation tools. Users can work with their own symbols and imagery to plan actions and ensure everyone is briefed on the situation.

Intelligence tools
Allows users to centralise, store, search and share intelligence. Identify trends, make associations, build up profiles and visualise relationships.

Situation awareness
The geographic information system (GIS) used provides users with maps and satellite imagery for planning and to visually track resources and incidents. Routes can be planned with co-ordinates for GPS upload/download.

Specialist tools
Tools can be customised to support specific groups (e.g. logistics, hazard modelling)

Connectivity
Server discovery coupled with innovative multi-master database and file replication technologies allow flexible communications over dynamic low bandwidth networks.
**Key features**

**Integrated information management system**

'Information management describes the means by which an organisation efficiently plans, collects, organises, uses, controls, disseminates and disposes of its information, and through which it ensures that the value of that information is identified and exploited to the fullest extent'.

Using an integrated information management system means you can leverage available resources to anticipate, prevent and/or avoid incidents. Information is distributed, not isolated on some unreachable server, and is made available to spot trends, automatically detect and make association or link related items.

Wyvern is an ‘all-informed’ system that allows information to be shared by all those who need to know. It provides an effective and efficient means of transferring knowledge so teams can collaborate and co-ordinate their efforts.

Users can also take on a ‘role’ that can be shared between multiple people. When someone is sick or unavailable, important information is not left in their email or personal drive. Instead fellow team members can view and action information as required.

**Multi-master database and file replication**

Wyvern supports geographically dispersed operations by distributing information efficiently between multiple servers. It allows all users to have an active copy of data locally and automatically shares new data with others. The underlying replication technology allows information to be shared effectively over bandwidths as low as 64KBS on temporary satellite links. Wyvern is designed specifically for dynamic networks which are constantly changing and where nodes are not necessarily connected all the time (e.g. deployable nodes).
Users can use Wyvern on a single laptop stand-alone. Sharing information requires the user to just plug into a network.

Wyvern is highly scaleable. It is capable of supporting multiple users with one server or connecting multiple servers to build large sites. Large sites can be connected to support national or international operations.

**Unique access control system**

Wyvern allows organisations to maximise effectiveness by organising data and enabling users to distribute information to those who ‘need to know’. Users have extensive control over who can access data and also which servers that data is distributed to. Access controls are flexible – control data sets, folders or individual entries if necessary.

**Benefits**

Wyvern is an integrated solution of core capabilities supported by pluggable and replaceable commercial off the shelf (COTS) products. It allows people to focus on their role and not on the tools which support their role.

**Easy to use, minimal training**

Wyvern has been designed to be easy to use. By mimicking the behaviour of common tools, users can transition to Wyvern with little to no training.
**Speed**

Wyvern is designed for speed of use under pressure. It has custom pre-defined symbols for planning, rapid entry mode for log entries, auto-complete typing, shortcut keys and right-click menus for expert users.

**Reduce Human Errors**

Wyvern is designed to support operations that run 24/7, where people must work long hours under pressure. A number of initiatives have been undertaken to reduce human error. Log entries are marked read and unread, user alerts appear when someone has been assigned an action for completion and lists are maintained of common contacts and locations (with automatic field validation and auto-completion to avoid typing errors).

**Flexibility**

Distributed databases provide redundancy and adaptable deployment solutions.

**Hidden Complexity and Technology**

Wyvern’s focus is on solutions to problems. Busy people do not want to worry about how tools make things happen. Tools are used to ensure that the right thing ‘does happen’. With point-n-click interfaces and administration, user’s do not need a degree in information technology to share information across the world, switch servers, modify access control, add new map data or configure database replication. Simple point-n-click user interfaces ‘hide’ the complexity and innovative solutions hide the technology.