

## SAFEmail.net

A new Web Based Military Messaging Client built on Microsoft Outlook Web Access.

Combining their experience of deploying fully conformant Stanag 4406 and ACP123/120 military messaging clients, Boldon James have identified a need for a much simplified web interface for MMHS Clients.

### Market Challenge

From time immemorial military commanders have needed to send orders and despatches to their staff. Typically messages were written on paper or dictated to a signals officer or assistant who then took responsibility for the message and ensured its delivery. In more modern times these messages were sent by a communications centre or CommCen. In the late 1970's and early 1980's the introduction of email into military messaging saw the development of military messaging clients that allowed the commander to draft his own message and indeed add all the control parameters usually added by the CommCen staff. The new methods were intended to reduce CommCen resourcing and give officers more direct control of their day to day messaging activities.

Unfortunately this approach failed to satisfy all users. The implementation of a Mail Client Application complying to the comprehensive Stanag 4406 and ACP 120/123 standards proved almost overkill and too complex for most operational officers and as a result many groups saw the rise of unofficial work-arounds and procedures to ease the task. This frustration with the full Stanag/ACP Mail client coincided with the growth in web applications and web based email clients like Hotmail etc..

Finally large projects such as the US DoD DMS (Defense Messaging System) have noted the software distribution and maintenance task across an installation of many thousands of users and are looking for alternatives.

The challenge therefore was to create:

- A simplified Stanag 4406/ACP120-123 Military Messaging Client
- A Web Based Military Messaging Client
- Reduced TCO - costs of installation, deployment, configuration and maintenance.

### The SAFEmail.net Solution

In keeping with our development strategy of building upon and taking advantage of existing COTS messaging platforms, Boldon James have built a web based Military Messaging client on top of the Microsoft Exchange 2003 Outlook Web Access (OWA) solution. The product is a true web client with zero desktop footprint. The simplified message compose User Interface is shown in Figure 1 below.

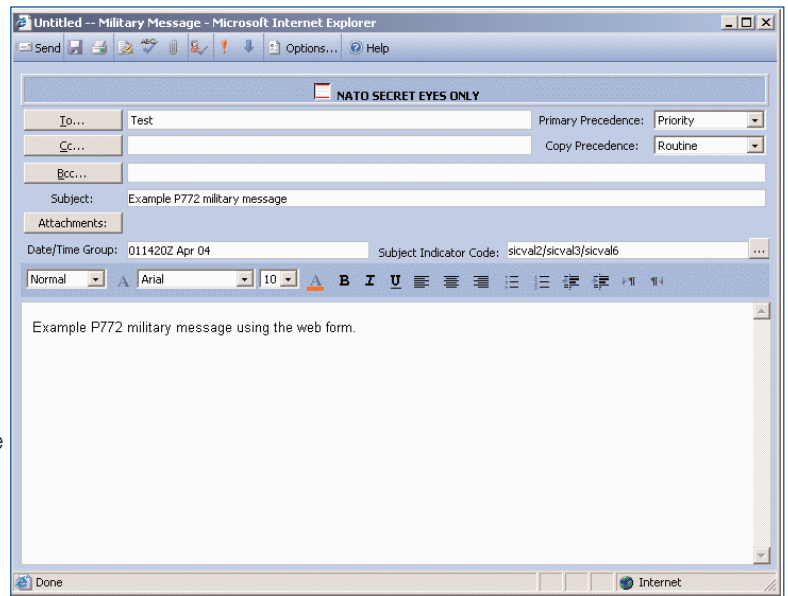


Figure 1 SAFEmail.net, Message Creations

The most striking aspect of SAFEmail.net is the dramatically simplified user interface compared to the more traditional and comprehensive Stanag 4406/ACP120-123 client, previously built on a rich messaging client. This interface is possible through a unique server side component (part of the Boldon James Virtual CommCen). The SAFEmail.net client not only renders the simplified military property set on the OWA form but also applies local policy decisions to automatically complete the full message property set, prior to dispatching the message via the local Exchange Server.

### Product Positioning

SAFEmail.net is not intended to replace the fully functional SAFEmail.mil rich Outlook client but is a complementary product. In each organisation there will be a percentage of users "Power Users" who will require the SAFEmail.mil interface with its capability to explicitly control the detailed message attributes. Additionally there will be a percentage of "Occasional Users" who will be satisfied with the simple interface of SAFEmail.net and who will rely on the default policies of the product to automatically populate the additional message fields on their behalf. There is a third category of



user who is the "Power User" who occasionally travels, works from home, etc and wants access via SAFEmail.net on some occasions.

There are two main variants of SAFEmail.net. One for Stanag 4406/ACP123 nations and a slightly different version for ACP120 (US DMS).

## How it Works

SAFEmail.net is based upon Microsoft Exchange 2003 Outlook Web Access (OWA). Boldon James have amended the OWA client and added a subset of military attributes, namely; Precedence, DTG, SIC (Nato version) and Security Label (for which there is a separate "pop-up" dialogue). On sending the simplified message, it passes to the Exchange Server where a series of processes take the message and augment the military properties to produce a fully conformant Stanag 4406/ACP 120/123 message to be signed and encrypted as required and routed through the network. The message augmentation process is illustrated in Figure 2 below.

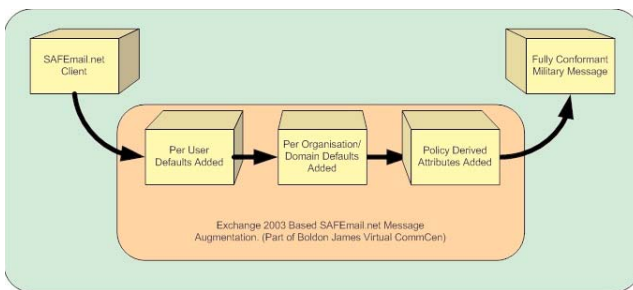


Figure 2: SAFEmail.net Processes

## SAFEmail.net Benefits

- Simple User Interface, requiring minimal training time.
- Massive reduction in deployment costs.
- Less opportunity for errors in message creation.
- Integrated within Microsoft Exchange OWA. Hence all benefits (folders, sorting, grouping, contacts, spell checking, calendar, tasks, etc) of OWA come as standard.

- Zero desktop resident foot print means low costs of software distribution and maintenance.
- Automatic/policy based augmentation of messages improves message quality and consistency
- Provides a cost effective Military Messaging Solution to ad-hoc users
- Web technology introduces exciting options on form-factor (Handhelds etc)

## Related Products

- **Exchange Bridgehead Server:** Extensions to Microsoft Exchange 5.5 and 2003 that support the X.400 protocol requirements of Stanag 4406. Tightly integrated with SAFEmail.mil, the Stanag Bridgehead Server allows Microsoft Exchange to seamlessly integrate as an X.400 server within MMHS systems.
- **ACP145 Gateway:** A Microsoft Exchange based implementation of the new ACP145 Interop Gateway Protocol. The innovative Boldon James design can be rapidly implemented and offers transition support between many legacy protocols and the new ACP145.
- **CDO Military Toolkit:** Messaging engines, prepared as toolkits and supporting latest NATO and US DMS standards and allowing rapid deployment of secure mail enabled applications.
- **e-tracker™:** Improved read receipt and delivery report management (including X.400 messages) for Microsoft Outlook.
- **Draft and Release:** Workflow system supporting the message preparation, editing and approval process often used in formal/military messaging. The system is based upon Microsoft Outlook Clients and Microsoft Exchange Server.
- **MasterkeyPlus:** Powerful add-in LDAP address book and directory browser for Microsoft Outlook. MasterKeyPlus provides many extra features to the standard Outlook LDAP address book.

We are a successful organisation focused on providing messaging and connectivity software solutions tailored to key vertical markets including Defence, Aviation and Government. In the UK our high grade consultants extend this offering by assisting organisations to manage IT and operational risks through a portfolio of services.

The utilisation of commercial off-the-shelf (COTS) software at the core of our messaging and directory solutions enables us to provide products which meet the requirements of high grade formal messaging environments such as Defence, Intelligence and Aviation as well as other environments in Government and Commerce.

The Consultancy Services division is focused on the creation of Security Policy, BS7799 implementation (through to certification if required), Risk Assessment, Training and Awareness campaigns, Business Continuity and Penetration Testing. These services are tailored for Central and Local Government, the NHS, Utilities, Police Services and large Corporations and led by consultants who are CESA Listed Advisor Scheme members (CLAS) and CHECK accredited team leaders.

Our robust data communications software provides core functionality in many OSI networks as well as including support for the majority of users of ICL (Fujitsu) VME Mainframe Computers both in the UK and around the world.

Boldon James is proud of its reputation which is built on the competence of our staff, many of whom can be categorised as world class performers in their field. Our staff hold an impressive array of relevant professional qualifications and accreditations. We believe that customer service is the key to success.

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