

X.400 Bridgehead for Microsoft Exchange

Enabling STANAG 4406, ACP120 and ACP123 for Microsoft Exchange

The power and functionality of Microsoft Exchange Server has ensured its success in most markets around the world. In Microsoft Exchange 2003 Boldon James worked with Microsoft to enhance the integrated Exchange X.400 MTA to support the extended protocol requirements of the defence messaging sector. Specifically we added full support for ACP120, ACP123 and STANAG 4406. This means that Microsoft Exchange 2003 server can (and does!) function as a fully standards compliant X.400 MTA communicating using the P1 protocol.

With the introduction of Exchange 2007, Microsoft has re-architected the messaging server and X.400 support will be provided by a Boldon James supplied component. The Exchange 2007 Boldon James X.400 Bridgehead for Exchange will be a tightly integrated plug-in installed, configured and managed by an MMC Snap-In. This new version has already been tested and conforms to all the relevant defence messaging standards.

The sample schematic below shows how an Exchange based system can operate seamlessly within a STANAG 4406 environment. Integration with legacy and other national domains is simply configured and implemented.

Benefits

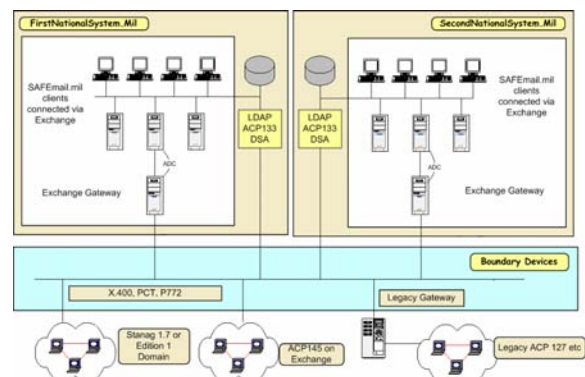
- The primary benefit of the Bridgehead Server is the ability to run a STANAG compliant MMHS across an Exchange domain. Users can benefit from the latest Microsoft technology, but still be fully integrated with the STANAG world.
- Cost effectiveness and value for money are also high on the X.400 Bridgehead list of benefits. Licence charges and support for the Bridgehead are extremely competitive and the simplified admin and management interface via Exchange really deliver genuine COTS benefits.
- The other key features of simplicity and elegance translate into reduced support and implementation costs compared to conventional X.400 products.

How it Works

The Exchange Bridgehead Server supports end-to-end STANAG messaging capability by using three separate components.

- Boldon James SAFEmail.mil Military Messaging Client
- Microsoft TNEF
- Exchange 5.5, Exchange 2003 and Exchange 2007 X.400 Bridgehead components

Firstly, in order to create a STANAG 4406 message a copy of Boldon James' market leading SAFEmail.mil military messaging client is needed to add military attributes before rendering them as MAPI properties within the message. Next the message properties are wrapped using standard Microsoft Transport Neutral Encapsulated Format (TNEF) for transmission to the next Exchange Server. If that server is another Exchange Server the message is passed straight to another Boldon James client, which interprets the TNEF and renders the military attributes, ready to be displayed.



The final component comes into play when the TNEF data is passed to the Exchange Bridgehead Server for transmission over its X.400 Bridgehead to the external X.400, ACP/Stanag world. At this stage the extensions within the Bridgehead, developed by Boldon James, remove the TNEF and reconstruct the message as a genuine STANAG 4406 message with associated military properties.

Supported content types

The bridgehead supports the following content types both outbound and inbound:

- P22 (including envelope security label)
- P772 (including envelope security label)
- Protected Content Type (PCT) (including envelope security label)

Licensing and Use

The Exchange Bridgehead Server extension is issued by Microsoft as a separate option to the Exchange 5.5 (SP4) server or as a standard configurable feature inside Exchange 2003. In Exchange 2007 the X.400 Bridgehead is available from Boldon James as a plug-in Exchange component.

Related Products

SAFEmail – Delivering a High grade (STANAG 4406) military, medium and / or basic message handling capability for the Microsoft Office Outlook client.

Tactical Messenger Gateway - supporting the exchange of messages in environments where radio silence is required or only very low bandwidth connections are available i.e. less than 300 bps.

Multi-function Gateway - A Microsoft Exchange based implementation of the new ACP145 gateway protocol. The innovative Boldon James design can be rapidly implemented and offers transition support between many legacy protocols and the new ACP145.

SAFEchat - A defence enabled CHAT solution. Based upon Microsoft Live Communications Server (LCS) SAFEchat adds persistence, labeling, archiving and conversation access control.

Boldon James, a wholly-owned QinetiQ subsidiary since October 2007, has over 20 years' experience specialising in secure messaging solutions tailored to meet the formal information exchange requirements of the worldwide defence and secure government sectors. Its Version 3 Secure Information Exchange (SIE) architecture now provides a suite of Microsoft commercial off-the-shelf (COTS) functional extensions across the Unified Communications collaboration and conferencing suites, resulting in solutions with a low total cost of ownership (TCO) and significantly reduced deployment risk. Boldon James is a Microsoft Gold Certified Partner and exclusive "Global Go-To-Market Partner for Secure Messaging"

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