

SAFEmail: Fire and Forget

Assured Delivery of Messages over a Microsoft Exchange/Outlook Infrastructure

The Requirement

In a mission-critical messaging system such as in Defence, Police and Homeland Security, the message originator (sender) needs to know that their message will be received and actioned promptly. Standard e-mail systems offer READ and DELIVERY reports or NON-READ and NON-DELIVERY reports but these require the originator to monitor the progress of the e-mail and are impractical when dealing with time critical information and large user communities. An automated system is required that provides “assured” or “guaranteed” delivery of messages (often within target read or delivery times).

The Solution

The Boldon James Fire and Forget solution is a COTS product built upon Microsoft Exchange and Outlook. Fire and Forget comprises an integrated series of components that work together to monitor any message from the moment the originator hits send, until it is opened and read by the intended recipient or an authorised deputy. All the components work together to manage the message throughout its journey, without the need for the sender to intervene.

Technical Description

Boldon James' Fire and Forget is one of the most comprehensive Assured Delivery solutions available on the market today and comprises 5 integrated functions implemented across the Microsoft Exchange and Outlook network. Fire and Forget will also work across message networks that include legacy X.400 MTAs in a backbone configuration. The 5 components of Fire and Forget are as follows:

Recipient Checking: Prior to accepting the message the system makes immediate checks to ensure that the recipient is valid, and that they are allowed to receive such a message. This action takes place on the Outlook client and involves a directory lookup to validate the recipient, his/her clearance details, connectivity speeds, message size limitations or any other configured criteria. Recipient checking is a core element of Fire and Forget since it immediately detects obvious problems that would otherwise prevent a correct and timely delivery of the message.

Message Monitoring: Monitoring a message while it is in transit to Primary or Action recipients (not cc: or info), to verify that it is delivered to the intended mailbox. Fire and Forget starts a timer on message release (with a *timeout* value based on a message property such as *precedence*). The *timeout* will only be cancelled when delivery reports from all Action recipients have been received. If non-delivery reports are received from any Action recipients, or there are monitoring timeouts, then Fire and Forget will redirect a copy of the message to a Guaranteed Access Point (GAP). Fire and Forget will monitor messages sent to a GAP as well as messages that have automatically been redirected or redistributed based on their content or subject (also known as profiling).

Mailbox Monitoring: Fire and Forget for a released message will continue once the message has been delivered to the mailbox of a Primary or Action recipient, to ensure that it is opened in an acceptable timescale for the message precedence. Fire and Forget will also monitor



messages once they have arrived in a GAP (see below) and after they have been delivered following automatic distribution (profiling).

Guaranteed Action Points (GAPs): Unfortunately the automation in Fire and Forget could still fail if all intended recipients and alternatives are not available (quite possible in times of crisis). In these circumstances Fire and Forget will redirect the message to a permanently manned station (a GAP).

Second Line Support: If the primary GAP still does not action the message in an appropriate time, Second Line Support will repeatedly attempt to notify them by various means. Second Line Support is very customer/installation specific, for example some requirements will demand a fax solution to get the message to the GAP, others will require SMS or auto dial pre-recorded voice alerts. All Second Line Support implementations are individually priced and configured.

Benefits

Fire and Forget is delivered as a cost effective series of COTS modules. Key benefits include:

- **Comprehensive:** Fire and Forget comprises 5 integrated components that combine to give far greater functionality than any competitive solution.
- **Single Supplier:** Integrated as part of the SAFEmail suite Boldon James has tested Fire and Forget specifically to work with the latest versions of the SAFEmail client.
- **Value for Money:** Built on Microsoft Exchange and Outlook and not requiring any additional servers or applications Fire and Forget is a highly cost effective solution to the Assured Delivery challenge.
- **Flexible:** Multiple configuration options delivers maximum effectiveness across multiple environments.
- **Applicability:** Originally designed for Homeland Security and Intelligence customers Fire and Forget offers the ideal solution for any mission critical messaging system in Defence, Police, Government, Border Control, Finance and Commerce.

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.

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

Draft, Review and Release: A Boldon James Client/Server implementation of a powerful, flexible workflow process required to implement local practices for message creation, review, and release.

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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