Wave goodbye to messaging

by David Banes

Google made a big splash at the end of May with the public announcement and demo of Google Wave, a new way to communicate that could replace email. As the guys from Google put it 'what if email was invented today'. So what exactly is Google Wave?

It is best explained as Web-based, near-realtime communications and collaboration platform that is leaps and bounds ahead of anything Microsoft is doing, with its 'Internet 1.0' platforms like Exchange/Outlook and Sharepoint.

This new browser-based platform will handle email and instant messaging (IM) as well as wiki-type documents and blog content like photos.

To build its new Wave platform Google has written an extension to XMPP called the Google Wave Federation Protocol.

The Extensible Messaging and Presence Protocol (XMPP) is an initiative to build a standardised approach to providing realtime communication and collaboration over the Internet.

The XMPP Standards Foundation (XSF) encourages people to write their own extensions to XMPP and this is the second time Google have done so, the first being for the creation of GTalk.

The good news is that XMPP extensions are open source so anyone should be able to build and deploy their own Wave services. Google has already published a draft specification at http://www.waveprotocol.org/ along with example code and have indicated to the XSF that they are committed to working with us to get this extension formalised.

The Google Wave Federation Protocol drives the network level transportation of data between Wave servers.

So what is this likely to mean for everyday users of email and IM?

When I last wrote about XMPP (*IDM November-December 2008*) I finished up with the question: "...do we really need SMTP as well?" There have been many enterprising people who have speculated that XMPP could one day replace SMTP, the original plain text protocol that is the backbone of today's email systems.

At my company Cleartext we have implemented an SMTP <-> XMPP gateway that sits alongside our MSN Messenger <-> XMPP and Twitter <-> XMPP gateways. Protocol gateways are a well established technology and are the core of our unified messaging platform, code namedxIMpp.

(xIMpp is the codename for ClearIM, a commercial XMPP messaging platform that aggregates multiple messaging types and passes them through a SaaS message stream that can apply a corporate policy such as archiving.)

What we have in Google Wave is a large high profile brand with deep pockets that has seen the light and decided to put some R&D and marketing dollars into a project that really does show off the power of XMPP and HTTP combined. This is very good news.

Simply put, Wave could replace current email systems with XMPP, HTTP and Google's Wave Federation Protocol extension. However, Unless they have a plan to switch the whole world to Wave at once, Google will need to need to put gateways to legacy email andIM platforms in place.

I asked Google Australia to explain how Wave will connect to legacy SMTP email and public IM systems, along with a couple of other areas of impact on corporate messaging.

Some of my questions include: Will there be both free and paid for versions of Wave as there is GMail? What does Google think about the effects of those real time word level updates on XMPP networks? Will Wave connect to regular XMPP IM networks? How does Wave effect Google Mail, Talk and Docs strategies? What security and storage hooks are in the platform for businesses to use?

Google replied that "given the very very early stage of

Google Wave will itself have a plugin architecture and Waves can be embedded in web sites, not unlike Google Maps. Wave was put together by the same Sydney based team that gave us Google Maps.

development we're at with Wave, it is probably premature to talk about these enterprise-related aspects ... because we quite simply haven't answered all of them ourselves yet."

So how does Google Wave potentially compare with solutions like Sharepoint or Clearspace?

One of the interesting aspects of the Google Wave demo (see http://wave.google.com/) is the realtime updates of on-screen text. While I can imagine this would be useful for collaborative editing of documents I doubt we all want to watch our colleagues composing instant messages or emails!

Google's Chrome browser and Google Gears are shown providing the ability to do 'drag and drop' file uploads into wiki-type documents. I suspect the HTML 5 specification is being used to its maximum potential well.

Demonstrations of the ability to place correctly ordered and indented comments anywhere within an email or document in realtime are particularly impressive and compelling. In the Wave demo an email thread begins to look more like a forum thread .

You have to think that Google will offer this for free, with probably a paid version for enterprise customers, like with Gmail. This could perhaps provide additional features such as hooks for archiving or linking to corporate directories like Active Directory andLDAP.

Assuming Google has already solved the legacy systems gateway issue then this will be a big wake-up call for anyone in the messaging and collaboration space, because very soon now the Wave will be breaking over all of us, we all know how quickly Google can ramp up a new platform.

Should the average corporate IT department be concerned? Probably not for a while as no matter how fast the adoption of Wave, it will require a strategy and the budget before any migration can be attempted.

The reality is there are hundreds of millions of dollars invested in "legacy" email, IM and document collaboration systems. No-one is going to throw that out for a first generation platform no matter how smart it is before they see some clear business benefits.

In the meantime, I'll be one of many making sure to follow the Wave closely and may even put in a Wave platform to make sure I'm ready to surf if the swell comes up.

David Banes is Co-Founder and CEO of Cleartext (www. cleartext.com), an Australian company that delivers messaging and social networking solutions as SaaS (Software as a Service). David also sits on the Board of Directors at the XMPP Standards Foundation (XSF). He blogs at http://davidbanes.com