Firebird White Paper

Firebird and IBExpert: the ideal combination for flexible e-mail archiving

Holger Klemt, March 2018

Quote Wikipedia: https://en.wikipedia.org/wiki/Email archiving#Definition

"Email archiving is an automated process for preserving and protecting all inbound and outbound email messages (as well as attachments and metadata) so they can be accessed at a later date should the need arise. The benefits of email archiving include the recovery of lost or accidentally deleted emails, accelerated audit response, preservation of the intellectual property contained in business email and its attachments and "eDiscovery" in the case of litigation or internal investigations (what happened when, who said what)."

Put your hand on your heart: Do you fulfill all the requirements of your corporate email retention policy, such as "Fundamentals for digital archiving DMS and ECM" (German: GDPdU "Grundsätze Zum Datenzugriff Und Zur Prüfbarkeit Digitaler Unterlagen)" principles?

It's not about fanning fears, and many providers of e-mail archiving systems, especially cloud providers, are offering seemingly interesting solutions. But is that the way you want to go?

What happens if the cloud provider does not exist in a few years? Or you object to the ever rising prices and would rather store your data again locally? If the provider still exists, there is at least a chance to retrieve the data. But what will that cost? Which formats are supported? Or perhaps there are encryption methods in use, which are so secure that you can no longer access your data without continuing to pay for their software?

You can see that external service providers are taking over a very sensitive area here. In the case of an audit by the Inland Revenue, you may be able to argue single missing e-mails, but a complete data base, perhaps even missing for several years, is certainly not acceptable.

We work closely together with customers in different size categories in this area. While small insurance agencies are rapidly generating 10-50 GB of e-mail every year, terabytes of data are not uncommon among SMB customers.



In the latest version of IBExpert, we have implemented several scripting features that make it easy to monitor your mailboxes with almost all providers, download the content, and, if necessary, keep existing attachments as your own data.

The resulting *.eml files are stored as originals in Firebird databases and provided with a checksum for security, so that any changes are traceable.

Depending on the data volume, new Firebird databases are created each year and the databases from the previous year are converted to ReadOnly. An appropriate nomenclature automatically queries archive databases using the "EXECUTE STATEMENT ON EXTERNAL" command, without having to explicitly specify them in the query. Views and stored procedures often offer unprecedented opportunities to keep the current production database as small as possible, so that backup processes do not take an unnecessarily long time.

Using the ibec_pop3* and ibec_imap* functions incorporated in the IBExpert script language, corresponding mailboxes can be selected with just a few lines of source code and no more e-mails are lost, even if they were accidentally moved or deleted in the e-mail program.

E-mail attachments can be extracted using the IBExpert script function ibec_mime*, so that all attachments remain reproducible in their original format independently of the *.eml files.

All data is stored in Firebird databases, which can also be encrypted with the IBExpert Encryption module if required, so that any manipulation is conceptually impossible.

The entire technology is included in each IBExpert full version from mid-March 2018. We are also happy to realize projects for e-mail archiving for you, without you having to pay extra for each mailbox. The procedure can be explained in more detail as part of our IBExpert Firebird Bootcamps.

Do you have any questions? Telephone: 407-462-7283 E-mail: contact@ibexpert.com

