Collabora in IQX

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Collabora Online

Technical Day
COOL days

LibreOffice Technology

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What is IQX?

- A long established application for managing temp recruitment businesses
  - High volume shift filling
  - Complex qualification and compliance requirements
  - Matching intricate shift patterns with availability
  - Document management
  - CRM
  - Paying and Billing
  - Word Processing!

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IQX Architecture

- Two-Tier Client-Server
- Windows MDI
- Increasingly complex to install and maintain, particularly in a cloud environment, so becoming uneconomic for smaller users
- What to do?

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IQXanywhere

- SaaS
- The full IQX product in a browser
- Zero install
- Easily accessible for small businesses and startups

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Word Processing in IQX

- Requirements:
  - Ability to closely control the WP from IQX code, including mail-merging
- History
  - Early 90s (DOS): Word Perfect
  - Late 90s: MS-Word in a Delphi OleContainer
  - From early 2000s: External MS-Word controlled by OLE Automation
  - 2020s (SaaS product): MS-Word not practical or commercially viable for SaaS. 3rd party Delphi component works up to a point, but cannot handle more complex documents
  - So where do we go?

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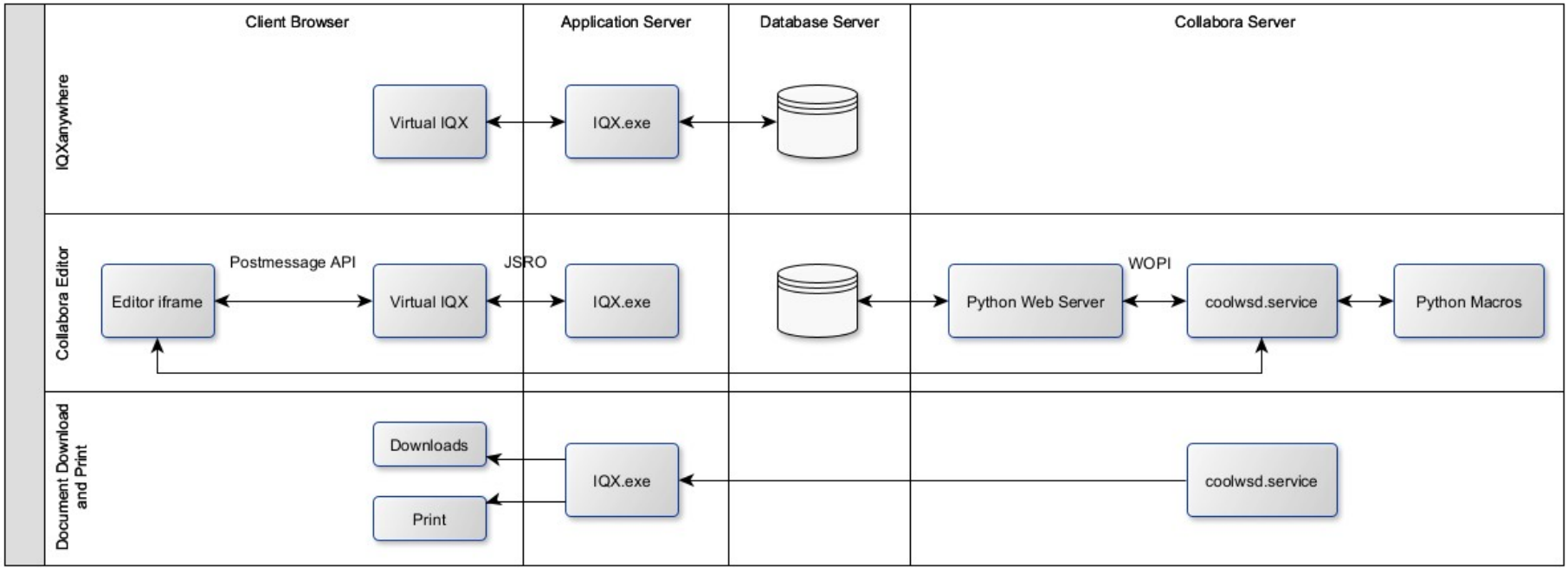
Implementing Collabora

- Initial challenge: It could not be hosted in a Delphi browser component because the virtualisation engine does not support it
- So it was necessary to explicitly create an iframe on top of the virtualisation canvas
- We need control of document internals to manage merge fields, which we do with python macros
- We need to access different representations of the document for various purposes – PDF, HTML, TXT – so we make extensive use of Action_Export messages
- We need to email documents as either HTML bodies or PDF attachments


Client Browser
Application Server
Database Server
Collabora Server
IQXanywhere
Virtual IQX
IQX.exe
Collabora Editor
Editor iframe
Postmessage API
Virtual IQX
JSRO
IQX.exe
Python Web Server
WOPI
coolwsd.service
Python Macros
Document Download and Print
Downloads
Print
IQX.exe
coolwsd.service

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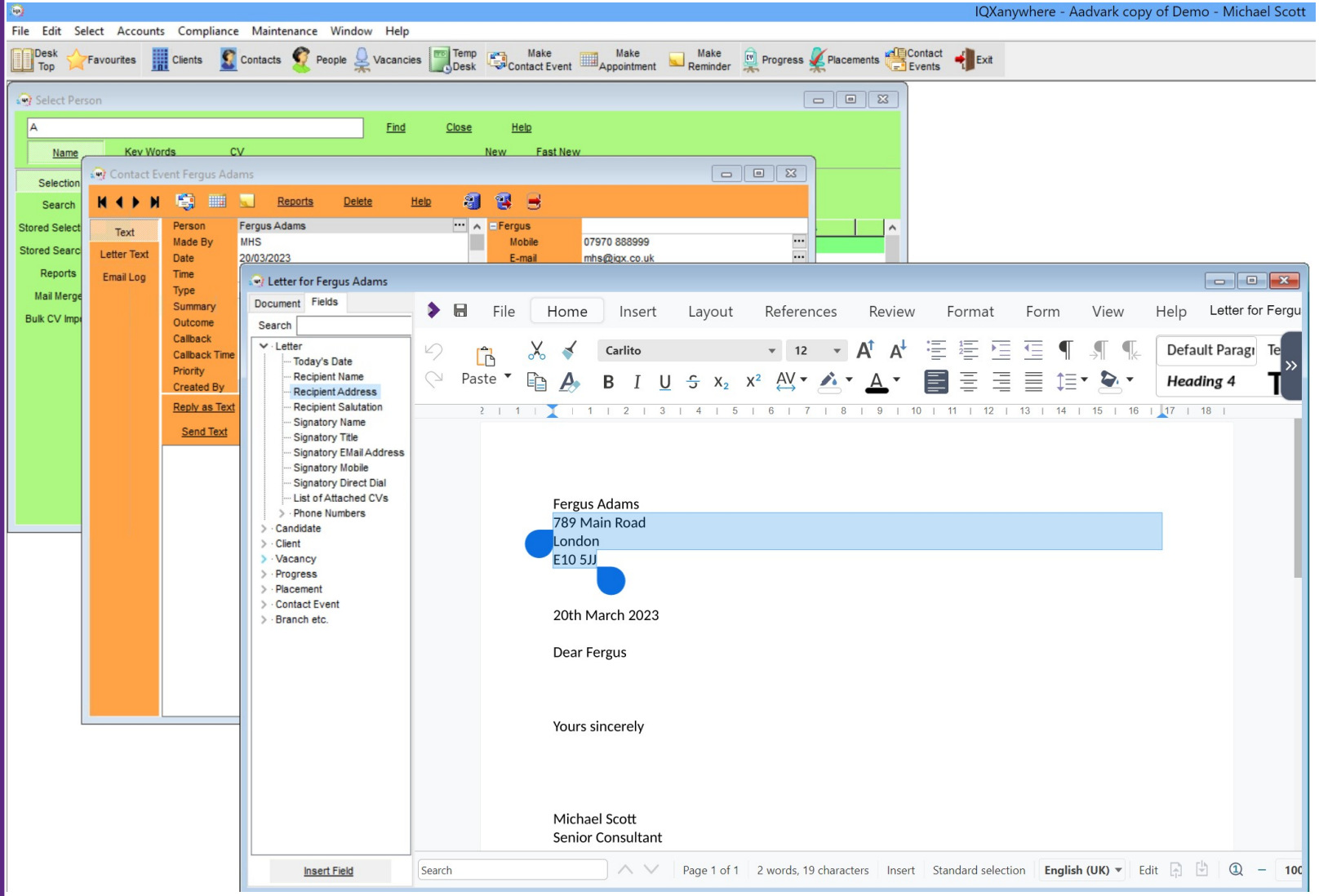

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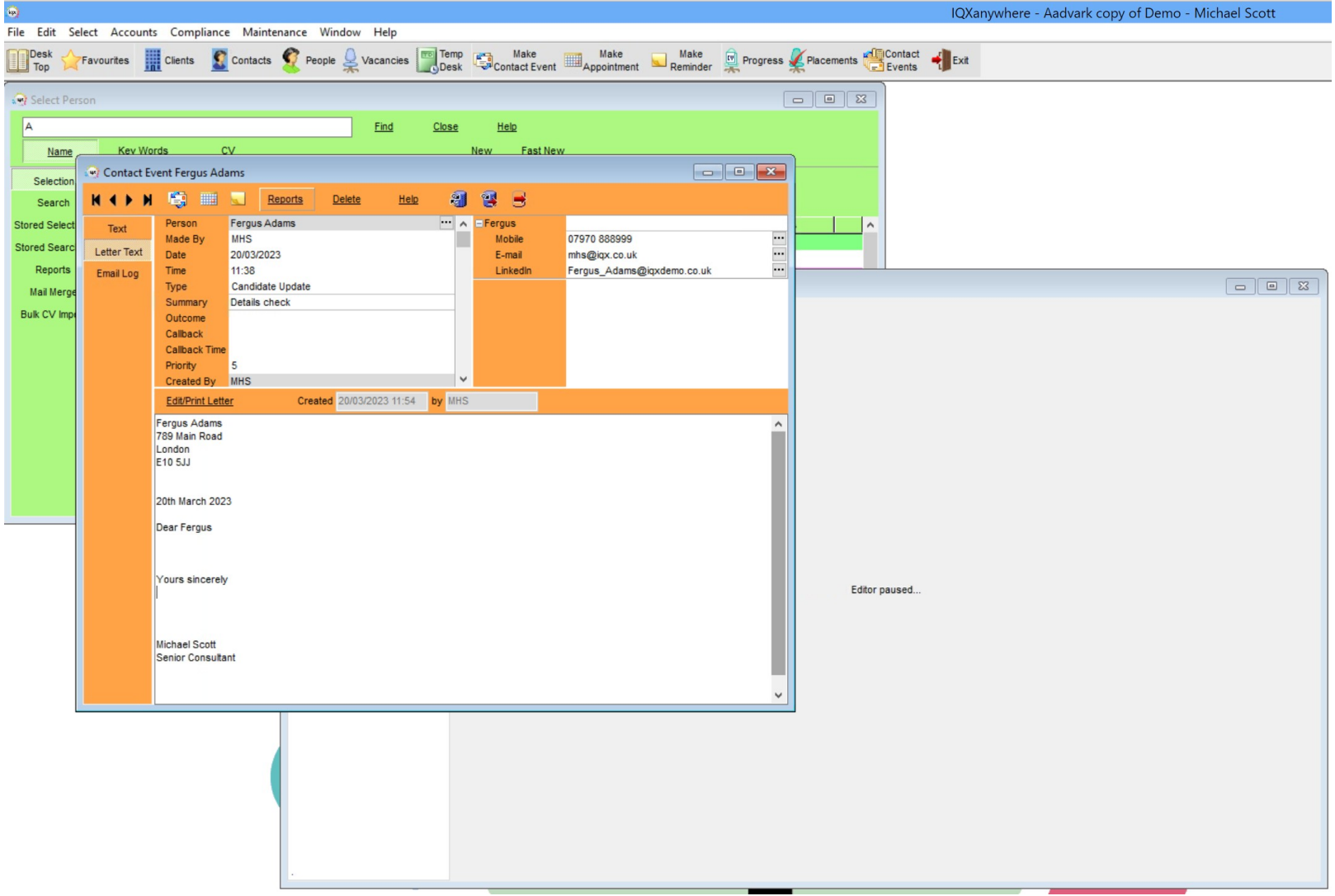

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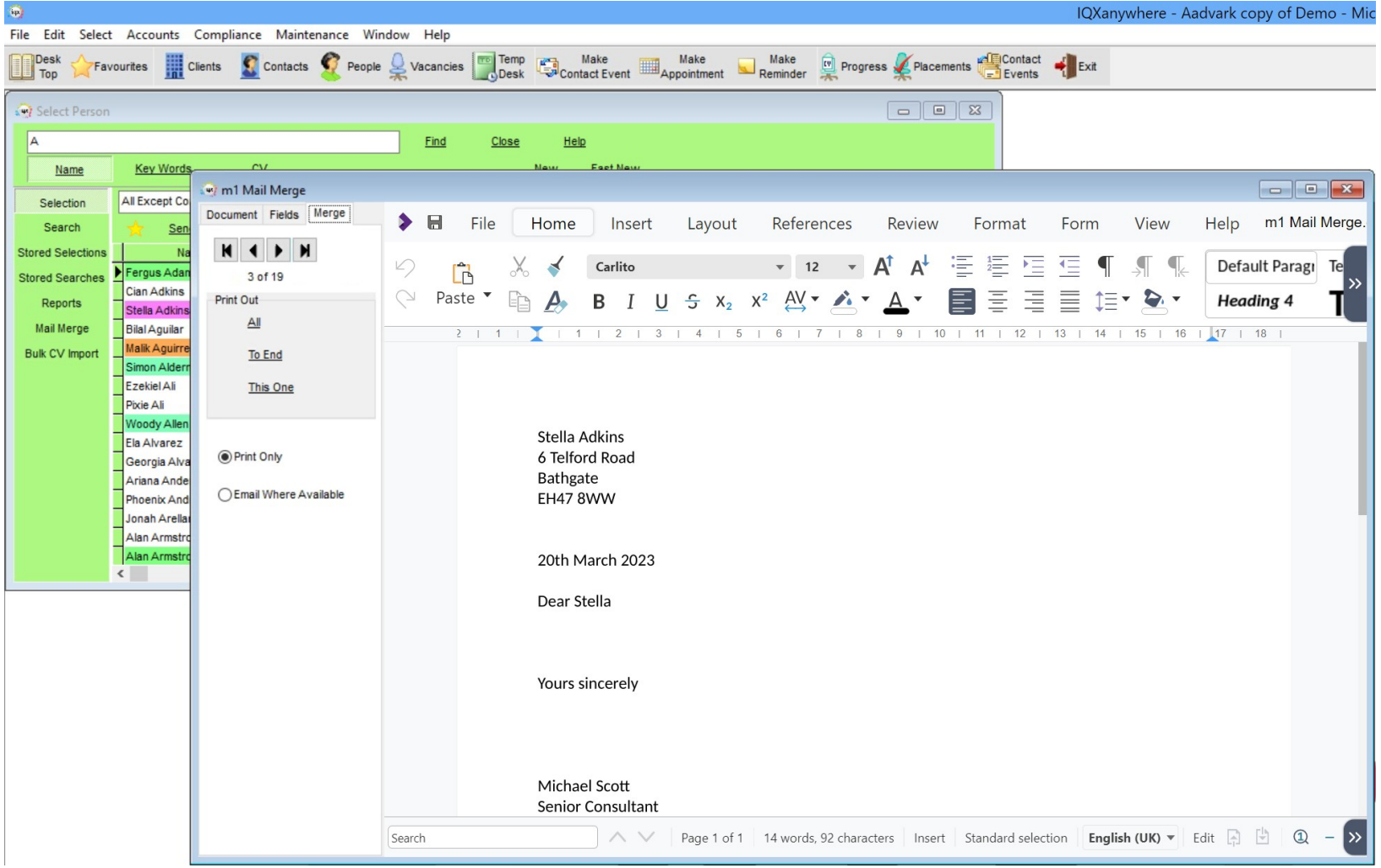

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Thank you!

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