

# 2020-08-24 - eXist Community Call

## Schedule

- Monday, August 24, 2020, 19:30-20:30 Central European
- `xs:dateTime("2020-08-24T19:30:00+02:00")`
- <https://www.timeanddate.com/worldclock/fixedtime.html?iso=20200824T1930&p1=37>

## Previous call's agenda

- <https://docs.google.com/document/d/1CnEvpGCOqZy7ZRaZLMQhVP3GB7jkNS6x-lu-yUKi4ug/edit>

## How to join the call

- <https://meet.jit.si/eXist-db>

## How to join the chatroom

- [Slack](#)

## Plans to attend

- Joe Wicentowski
- Adam Retter
- Charaf Eddine Cheraa
- Pieter Lamers (maybe, just maybe, as this time is very difficult with family business)
- Eduard Drenth, maybe, same reason as Pieter
- Dannes

## Regrets

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## Present

- Duncan
- Adam
- Joe
- Dannes
- Patrick
- Jo Calder
- John Reed
- Charaf

## Absent

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## Agenda

1. Notetaker selection (please type notes in “Notes” section below, not in the agenda section)
2. Introductions of new attendees (if necessary)
  - a.
3. Topics for discussion (please propose topics in the form “*Your initials: Topic*”)
  - a. Announcements
    - i.
  - b. Preparations and plans for upcoming releases:  
<https://github.com/eXist-db/exist/milestones>
    - i.
  - c. Outstanding Issues (please esp. note any hotfix-worthy issues)
    - i.
  - d. Special Topic: Fusion Studio demo from Evolved Binary (AR & Co).
    - i.
  - e. General Discussion
    - i.
  - f. Any Other Business
    - i.

## Minutes

### Chair

- JW

### Note Taker

- JW

## Notes

- Introductions
  - John Reed
    - New to eXist, trying to learn all I can about it - XRX, XForms, etc. Live in Alameda, CA. Interested in taking FAA aviation regulatory data and making it available via subscription.
  - Jo Calder
    - Trained as a computational linguist, now working in aeronautics, using XML. AIXM 5.
- Special Topic: Fusion Studio demo from Evolved Binary (AR & Co).
  - AR: Fusion Studio: An IDE and management tool for FusionDB Server that also works with eXist. Charaf has done a lot of the technical work on this.
    - Fusion Studio API: <https://github.com/evolvedbinary/fusion-studio-api>

- Fusion Studio Extension (for Theia):  
<https://github.com/evolvedbinary/fusion-studio-extension>
  - Fusion Studio: <https://github.com/evolvedbinary/fusion-studio>
- Had hoped to show new version today, but a bug means that can only show a sandboxed version today.
- Fusion Studio has 2 parts: API and application. The API is built into FusionDB, and in eXist it's a separate installation: fusion-studio-api-1.1.1.xar (to be published later today).
- Server pane:
  - Can add connections to FusionDB and eXist-db, browse db contents.
  - Right-click on resources > select Properties, edit ownership, permissions, etc.
  - Right-click on collections > create new documents. Newly created documents aren't saved until you hit save. (A placeholder icon indicates unsaved status.)
  - Can rename resources.
  - Can upload one, multiple folders, via file picker or drag-and-drop onto Server.
  - Spinner indicates when waiting for upload/load.
  - Can drag-and-drop database resources to move them to different collections. Hold "control" (on Windows; don't know about Mac) when dropping to make a copy.
  - Can right click and select copy, cut; then paste them into destination database locations.
  - Under Security, tab > Users, Groups. Can view, edit, add users and groups. Can set metadata about users.
  - Under Indexes, can see list of collections with indexes. An entry is also displayed when you browse to a collection that has an active index definition. Planned
  - Under RestXQ tab, can see all RestXQ endpoints and supported verbs (GET, PUT, etc.). Double-click on an endpoint to bring up the source module.
- Templates for XML files, XQuery (main, library, and RESTXQ) modules, XSLT, schematron. You're prompted to enter variables.
- Syntax highlighting for XML, XQuery.
- XQuery main modules can be evaluated, via Evaluation tab below editor window.
  - Serialization methods dropdown
  - Pretty printing checkbox
  - Results are shown 4 at a time. Fuller pagination to be added.
- Can be run as an Electron app or in a web browser. Singl
- Q: What library is this based on? Is language server being used?
  - A: Theia. With Theia's language server support for syntax highlighting, grammar.
- Q: Is language server code public? We have VSCode language server too.

- A: Grammar definition for XQuery is in GitHub repository. Language server is fully standard.
- Q: Has drag-and-drop upload been tested with large amounts of data?
  - A: Functional, integration tests are running: 2-3 versions of eXist-DB (5, 5.2, nightly) and FusionDB (1.0.0-ALPHA2). Hasn't been load tested. Zips resources, uploads them.
- Q: If upload complex folder hierarchy from Windows, then download it back to the local system, will the hierarchy be preserved?
  - A: Yes. Makes no difference whether you use Windows or Linux.
- Q: All communication done with Hallo hallo Hallo halloRestXQ?
  - A: Yes. Most is JSON with gzip compression.
- Q: Will there be an EXPath package template added?
  - A: If >1 person wants one, sure.
- Q: Planned features?
  - A: A kanban board with lots of issues. Suggestions welcome.
- Q: Is there a backup aspect?
  - A: Nothing in Fusion Studio is available for Backup. Could add a backup tab to the server pane to manage backups.
- Q: Special characters (beyond ASCII)? See <https://github.com/eXist-db/exist/issues/1824>.
  - A: Haven't tested this specifically.
- Q: Can it be exposed on a server?
  - A: Could. Would like to add some security controls, wrap this in a docker, and distribute it as an XQuery fiddle.
- Q: Content suggestion, function/syntax autocompletion?
  - A: Very basic. Will close XML tags, recognize via text matching. Want to improve syntax highlighting. Would like to build an XQuery debugger into FusionDB. Reece Dunn has a plugin for IntelliJ for XQuery - the best ever used. Supports eXist-db, FusionDB. Maybe we could borrow some of that.