Discussion Notes

- Offline Mode v1 focus was for CHW-type community outreach, away from the health facility
 - Regression in RefApp: Was not being maintained in RefApp and caching was having generalized performance impact so was turned off by default.
- ICRC Concerns that came up during O3 Offline Mode v1:
 - Caching: Security concern
 - Caching: Accidental data loss concern (if cache is cleared)
 - Workflow: Have to select patient to go offline in advance (ICRC had to add additional Fx in their distro to bulk-select relevant patients to go offline instead of individually by patient)
 - Unclear community direction / co-maintenance plan: Is community interest just in connection down-time at a health facility; or, should we have dedicated Offline-Mode App *separate* from the RefApp
 - e.g. something built on the Android FHIR SDK using same Form Builder / OMRS Forms (using FHIR SDC; would need work to generate this output from form builder).
- Other Orgs' CHW-esque needs:
 - MSF: Cmty-based Cervical CA Screening enter forms and record f/u appointment date
 - Ampath: Remote areas: download specific cohort who I'm visiting tomorrow; perform services; re-sync upon connection.
 - PIH: Need to serve this use case somehow.
- Why in RefApp instead of dedicated CHW-style app? Data sync a major concern.
 - Ampath: Incorporated into OpenMRS = complete package, rather than having another application + middleware that also needs data sync
 - PIH: Using Commcare ++, but integrating data into OMRS has not been easy. mUzima in a few cases but not as mature app as others. So if we had OMRS working in offline mode, especially to use forms that are already created, would be great. Not users asking, central team asking based on difficulty w/ other solutions.
 - MSF: Technical support needed to use another app (esp in OSS world) too much. On management side if we add new solution, more complicated than option of having everything in one package. FHIR offers promise to connect things so ideal to leverage existing options but still integration can be difficult esp for data sync back; data sync difficulties.
- Remaining big Cmty need: Connection downtime at facilities!
 - Ampath: Network disconnection during PoC app use be able to keep using, then sync data back to servers when up
 - ICRC: Ideally same thing as in DHIS2: Keeps everything even when downtime; don't have to select patient in advance to go offline.
- Next Steps together?
 - Do folks want to work together on Offline Mode for Community Outreach, within OpenMRS?
 - ICRC: Cmty outreach really urgent for our users.
 - PIH: we are interested in the outreach use case but won't be able to prioritize focusing on this work any time soon
 - Ampath: Could we focus on the issue of memory? Eg Device minimum requirements (eg RAM, disc)? Not yet specified in cmty. Have seen w/ Medic devices can hang if under-specc'd; requires frequent memory clearing.
 - MSF: Should clarify, what should be stored in local memory? Have we built logic of what should be stored offline?
 - MSF & Madiro: Would like to join forces and support some spikes with ICRC.
 - Ampath: also interested.
 - Should review approach and results of Bahmni Connect approach heavily used Chromium for offline web app use. Wiki; Talk thread
- Suggestion: Create squad; ICRC i.d. Squad leader. Added to Squad Dashboard :) Squad Leader to follow up with interested orgs!

What Use Case(s) does your organization have for Offline Mode? 9 responses

Don't lose form data during short internet outages - PIH

Review patient chart even if internet drops - RefApp / Grace

As a CHW, I want to capture patient data and sometimes book appointments/referrals when going in community outreach and follow-ups

- MSF

Connection downtime - RefApp / Grace

As a clinician, I want to keep entering data (and ideally retrieve critical ones) when OpenMRS server goes down - MSF

Clinicial staff can data collect without interruptions (by power and network). -- PIH 1. outreach work2. facility work where network doesn't reach3. unexpected server outages - PIH

ICRC - multi day offline data collection and 2 way synchronisation, with secured data at rest and in transit and mobile device management

Poor network coverage

What do you ALREADY KNOW about the O3 Offline Mode feature work that was done? 15 responses

> caching causing slowness how to maintain not fit for outreach maybe not fully tested targeted use case a lot of work done a lot of regressions security issues it doesnt work limited use case potential data loss forms and patient lists make it evolve sweet alert on offline poor geographical network

What brings you here to the Offline Mode discussion? 22 responses

it doesnt work to see what the real use connection downtime community outreach server outages holy offline device memory outreach help grail means chw use things many offline feature low internet speed cases are and how i can community visits specific use cases offline data collection cachingperformance slower

Discussion Attendees

Rugut Kibet Enock	Grace Potma (OpenMRS)	Salifu Njidda 🌋 Salifu Njidda	Michaël Bontyes
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