# FDC<sup>3</sup>

November 21st, 2017



## FDC3 Technical Members

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## Agenda

- Updates from Last Meeting
- App Verification Workflow
- Questions from last session:
  - Scope of Security Model (Authentication vs Authorization)

## Updates

- Demo on Github from last meeting on Github:
- https://github.com/FDC3/open-api-demo

## App Verification Model - Recap

- App identity is provided by the App Directory
- Connectivity is secured automatically
  - Runtime, adapters, and bus handle processing of security tokens
  - End points only know if they're in a secure state or not
- Open Issues
  - How do we ensure secure connectivity?
  - What happens if REM restarts?

### Proposal: Session Tokens

- Analogous to an auth cookie
- Issued per calling App
- Pair App Auth keys of Caller & Issuer, encrypt & stamp
- Both App Auth & Session tokens are sent on every message, generally, only Session is used

App 1 App 2 App **REM** App 1 App 2 Directory Runtime Runtime On start up, App1 is validated by REM. A1 Runtime receives an App Auth (AA) Token. A1 started by Runtime A1 initiates comm with A2, it's AA Token is applied by the A1 Runtime. A2 Runtime confirms the A1 AA Token A2 Runtime issues a Session Token for A1 & adds it to its Session Cache Message passed on to A2 A2 send message to A1. A2 Runtime appends its AA Token A1 Runtime confirms the A2 AA Token A1 Runtime issues a Session Token for A2 & adds it to its Session Cache Message passed on to A1 Secure communication between A1 & A2 App 1 App 2 App App 1 App 2 **REM** 

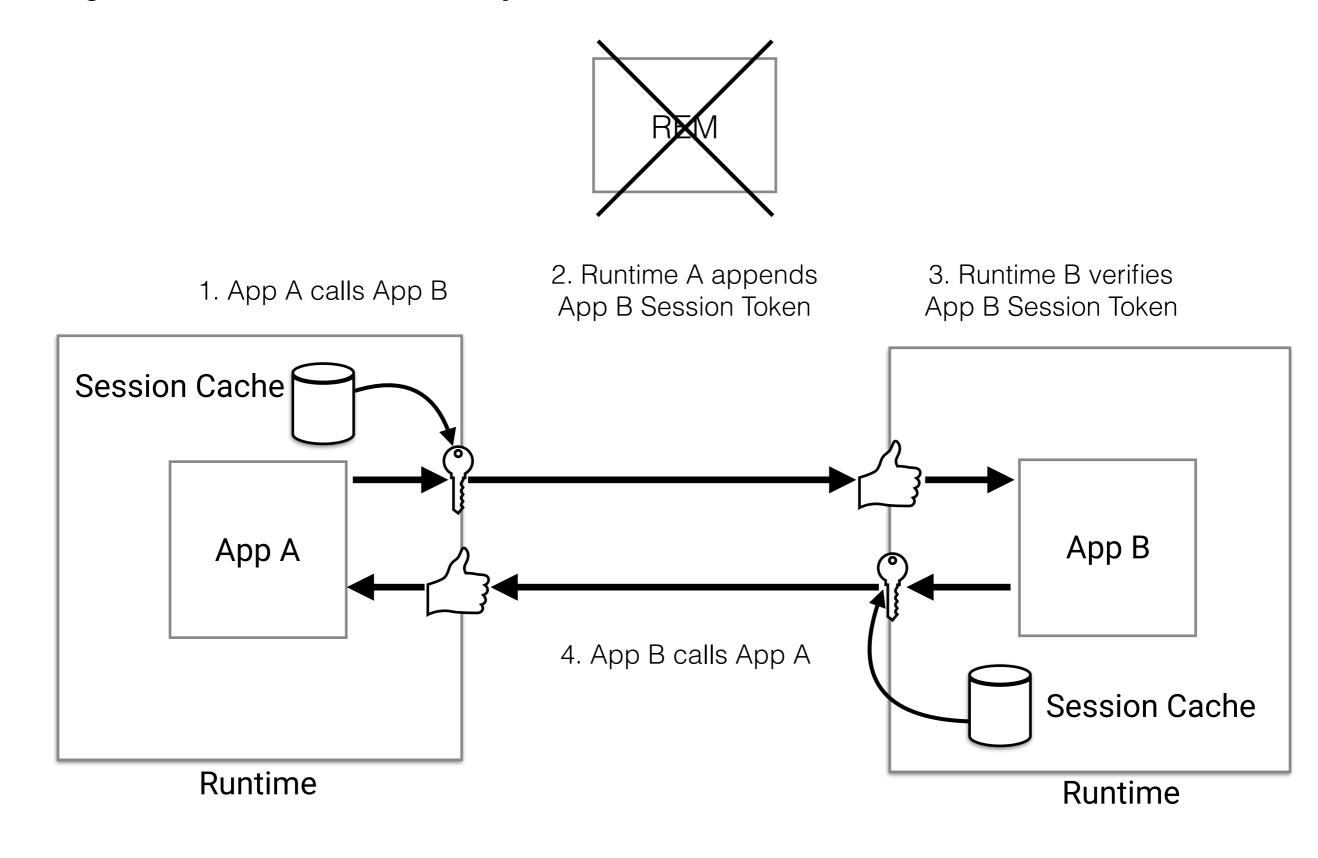
Runtime

Runtime

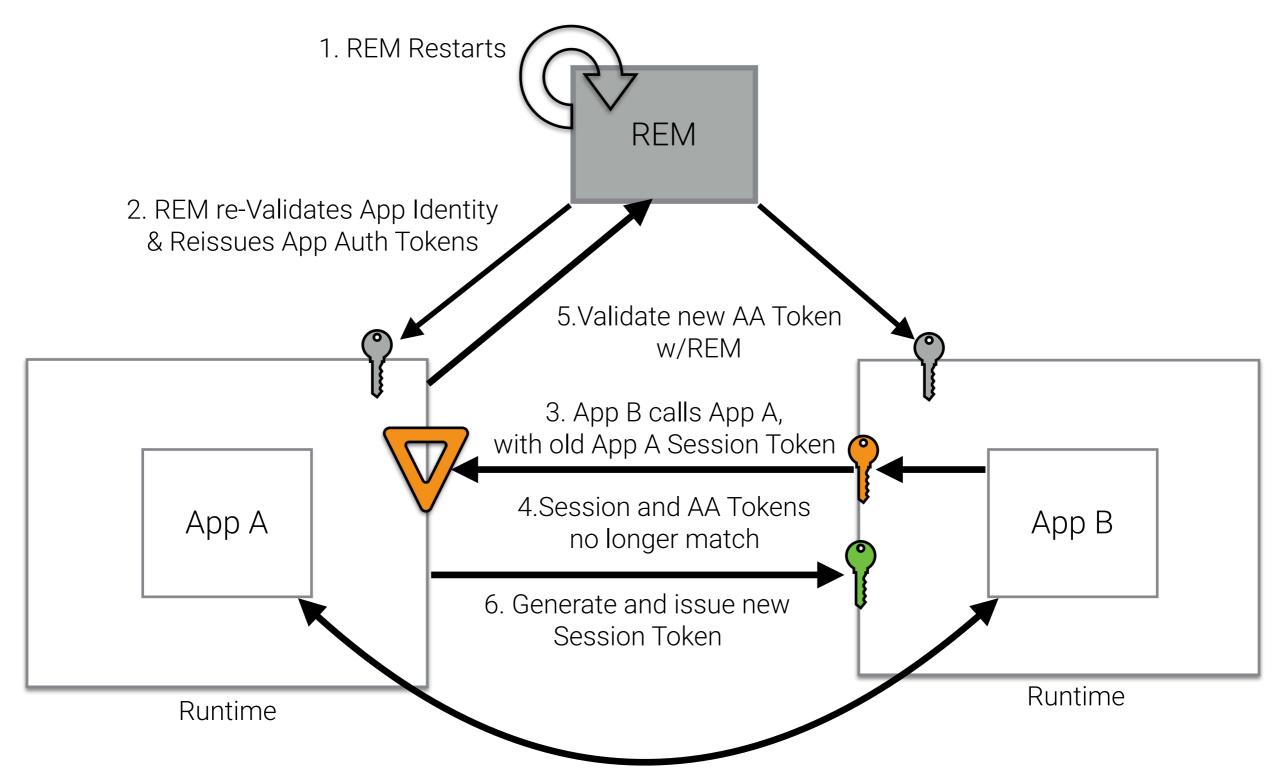
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Directory

#### **Existing communication is not disrupted if REM Goes Offline...**



#### Once Back Online, REM will invalidate Session Tokens and Re-validate Apps



## Scope of Security Model

- Scope of FDC3 is limited to verification of app identity
- Authorization is left to Desktop Owners and/or App Owners
  - Entitlements are highly individualized across apps and organizations
- Example: Sharing Symphony contact data
  - What apps can access the data?
  - Who can grant access?
  - What is the granularity?
  - Where are entitlements stored?

### **Next Steps**

- Feedback from WG on Session Token proposal
- Begin handshake implementation on OpenFin side
- Proposal for next session
  - Context: structure, resolution, and workflows

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