

**FINOS**

Fintech  
Open Source  
Foundation



# Open Source Collaboration with FDC3 1.1

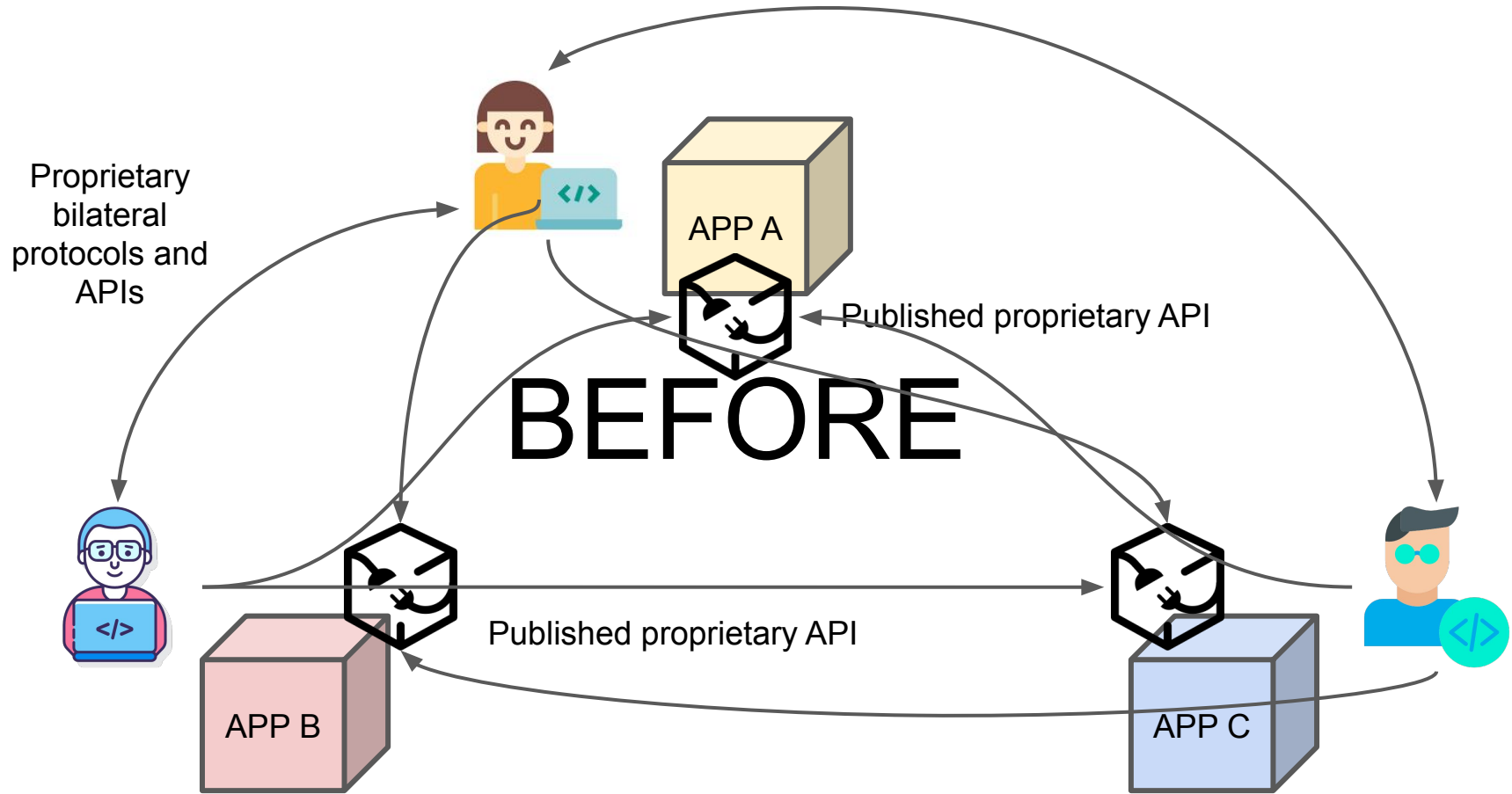
Host - James McLeod  
FINOS Director of Community

Presenter - Nick Kolba  
FDC3 Project Lead and Chair

April 2020



why FDC3?



**BEFORE**

Proprietary bilateral protocols and APIs

Published proprietary API

Published proprietary API

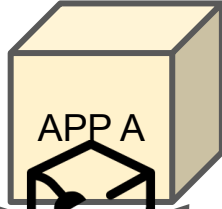
APP B

APP A

APP C

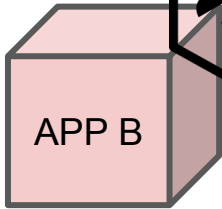
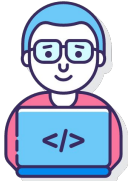


FDC3

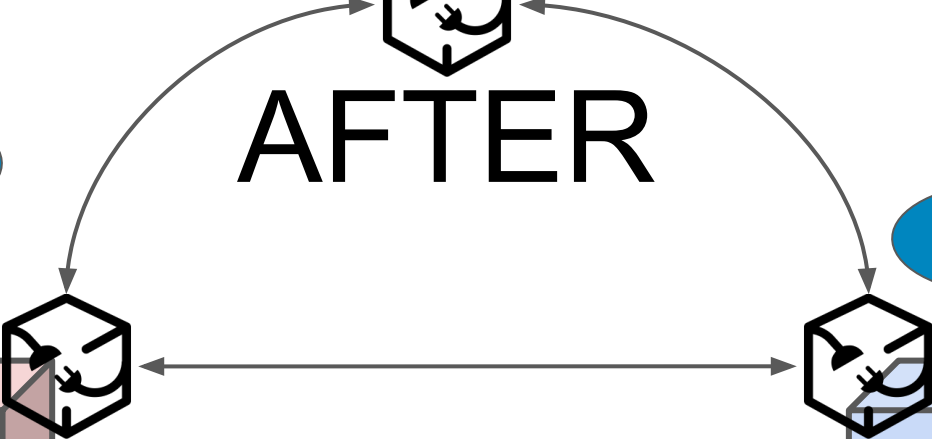
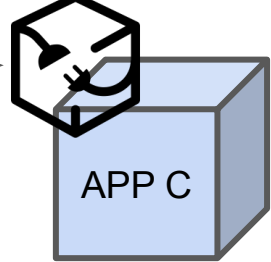
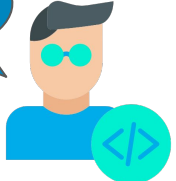


# AFTER

FDC3



FDC3





a brief history



OpenFin  
founds FDC3

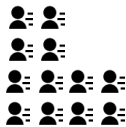


FDC3 is  
contributed to  
FINOS



FDC3 1.0  
standards are  
ratified

FDC3 1.0 is put into  
production by leading  
financial firms



**12** INITIAL  
PARTICIPANTS



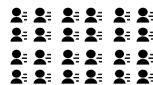
**4** STANDARDS  
WGs



fdc3.finos.org  
**LAUNCHED**

**FACTSET**

**J.P.Morgan**



**100+** MEMBER  
COMMUNITY



**1** SLIDE DECK



**40+** PARTICIPANT  
FIRMS



**10** CORE  
CONTRIBUTOR  
FIRMS



**FDC3  
FOUNDED**

OCT  
2017

**FINOS  
CONTRIBUTION**

MAY  
2018

**1.0  
RELEASED**

MAR  
2019

**1.0  
PRODUCTION**

NOV  
2019



# FDC3 1.1

<https://fdc3.finos.org/docs/next/fdc3-intro>



channels api



expanded context data



developer experience



# DesktopAgent

```
interface DesktopAgent {
  // apps
  open(name: string, context?: Context): Promise<void>;

  // context
  broadcast(context: Context): void;
  addContextListener(handler: ContextHandler): Listener;
  addContextListener(contextType: string, handler: ContextHandler): Listener;

  // intents
  findIntent(intent: string, context?: Context): Promise<AppIntent>;
  findIntentsByContext(context: Context): Promise<Array<AppIntent>>;
  raiseIntent(intent: string, context: Context, target?: string): Promise<IntentResol
  addIntentListener(intent: string, handler: ContextHandler): Listener;

  // channels
  getOrCreateChannel(channelId: string): Promise<Channel>;
  getSystemChannels(): Promise<Array<Channel>>;
  joinChannel(channelId: string) : Promise<void>;
  getCurrentChannel() : Promise<void>;
  leaveCurrentChannel() : Promise<void>;
}
```

# Channel

```
interface Channel {  
  // properties  
  id: string;  
  type: string;  
  displayMetadata?: DisplayMetadata;  
  
  // methods  
  broadcast(context: Context): void;  
  getCurrentContext(contextType?: string): Promise<Context|null>;  
  addContextListener(handler: ContextHandler): Listener;  
  addContextListener(contextType: string, handler: ContextHandler): Listener;  
}
```

<https://fdc3.finos.org/docs/next/api/ref/Channel>

- **fdc3.contact**
  - A person contact that can be engaged with through email, calling, messaging, CMS, etc.
  - [Financial Objects Specification](#)
  - [schema](#)
- **fd3.contactList**
  - A collection of contacts.
  - [Financial Objects Specification](#)
  - [schema](#)
- **fdc3.country**
  - A standard country entity.
  - [Financial Objects Specification](#)
  - [schema](#)
- **fdc3.instrument**
  - A financial instrument from any asset class.
  - [Financial Objects Specification](#)
  - [schema](#)
- **fdc3.instrumentList**
  - A collection of instruments.
  - [Financial Objects Specification](#)
  - [schema](#)
- **fdd3.organization**
  - A standard organization entity.
  - [Financial Objects Specification](#)
  - [schema](#)
- **fdc3.portfolio**
  - A collection of positions.
  - [Financial Objects Specification](#)
  - [schema](#)
- **fdc3.position**
  - [Financial Objects Specification](#)
  - [schema](#)



Context and Intents reference sections

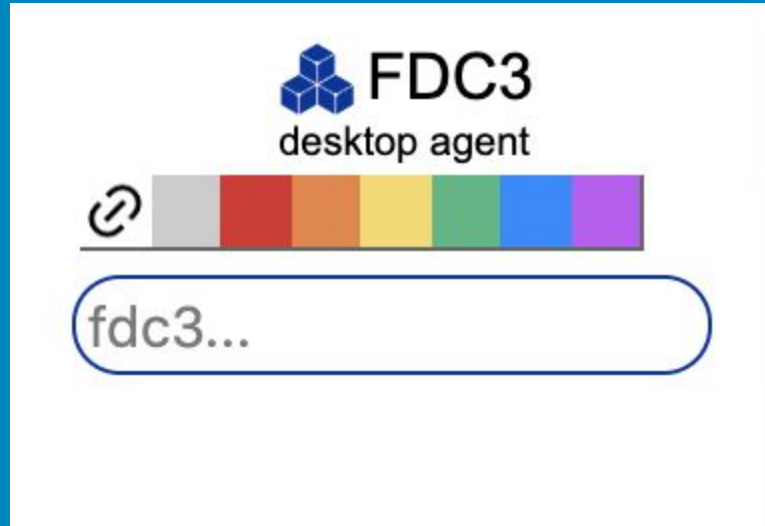


Context type filtering on APIs



Tooling projects

# Demo



<https://github.com/nkolba/desktop-agent>



# Lessons learned

open source in finance

# #1 Find a problem



#2 Convince people to care



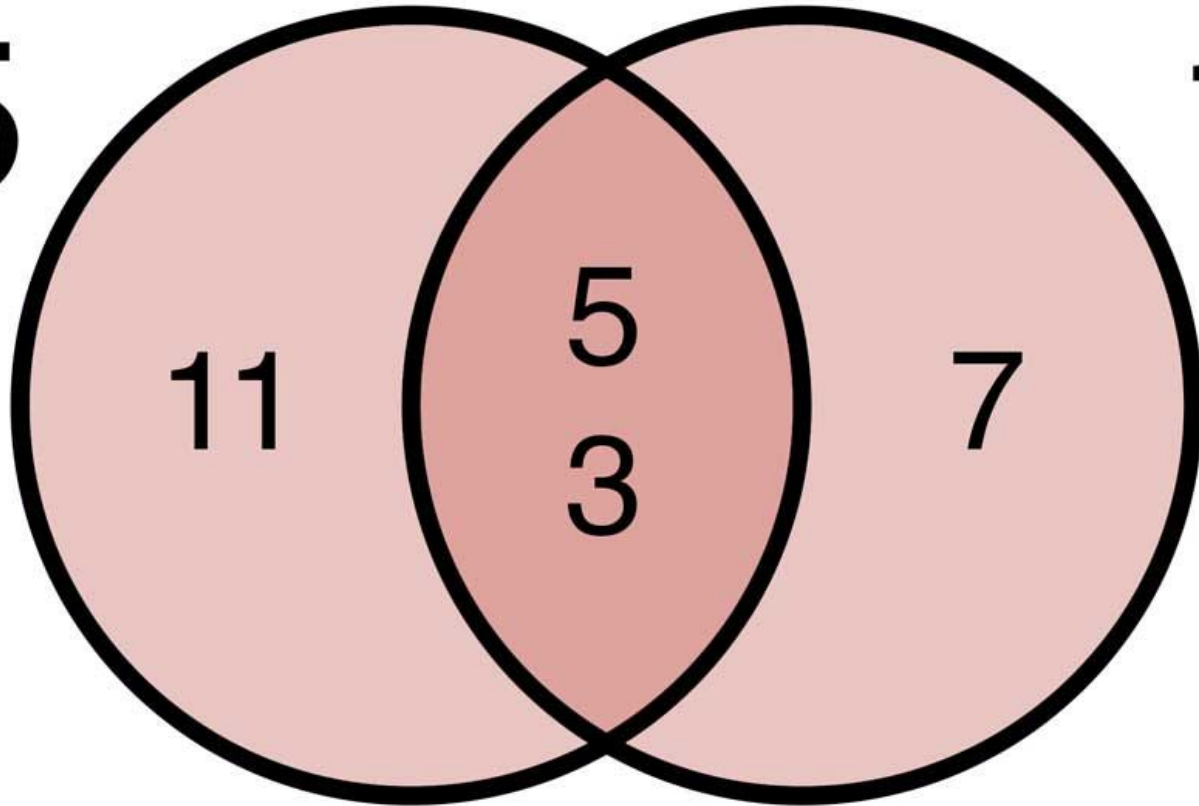


# #3 Ensure neutrality



#4 Find the least common denominator

165



105

# #5 Iterate





open source from inception



collaborative by definition



designed for adoption

end

