FINOS

Fintech
Open Source
Foundation

FDC³

Standards Working Group Meeting

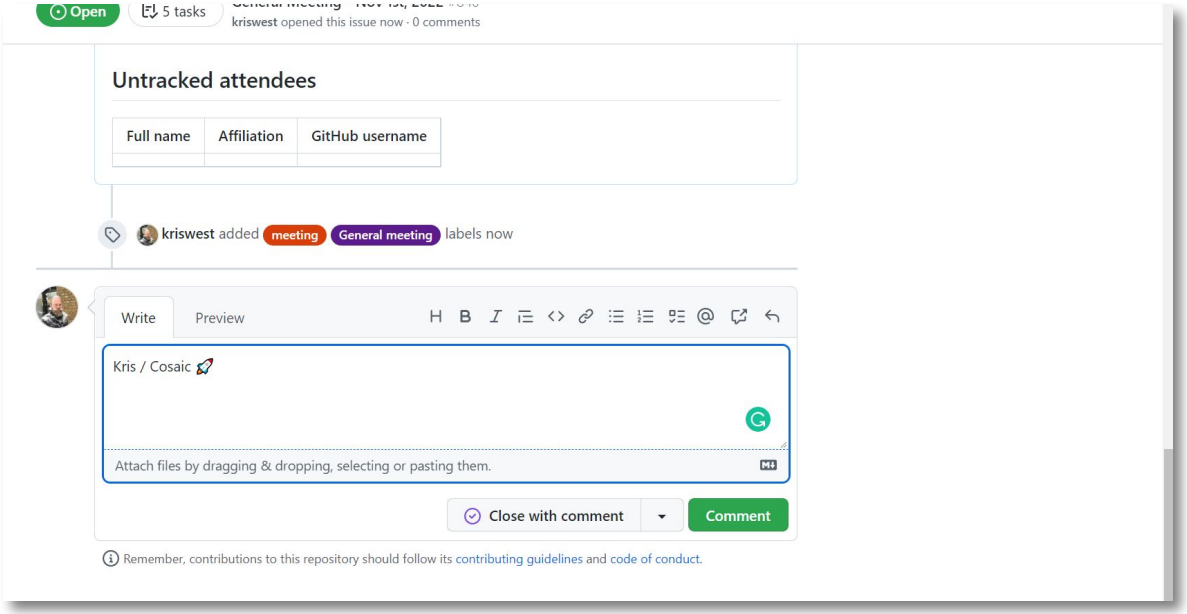
27th April 2023

Meeting notices

- FINOS Project leads are responsible for observing the FINOS guidelines for running project meetings. Project maintainers can find additional resources in the FINOS Maintainers Cheatsheet.
- All participants in FINOS project meetings are subject to the LF Antitrust Policy, the FINOS Community Code of Conduct and all other FINOS policies.
- FINOS meetings involve participation by industry competitors, and it is the intention of FINOS and the Linux Foundation to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of, and not participate in, any activities that are prohibited under applicable US state, federal or foreign antitrust and competition laws. Please contact legal@finos.org with any questions.
- **FINOS project meetings may be recorded for use solely by the FINOS team for administration purposes. In very limited instances, and with explicit approval, recordings may be made more widely available.**
    - **The recording of today's presentation section (but not the Q&A session) may be published and shared. Please hold your questions until the end of the session**

Please add your name and affiliation to agenda

Meeting agenda: https://github.com/finos/FDC3/issues/970



Announcements

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Save The Dates

See full list of upcoming events at finos.org/events and FINOS Community Calendar

HACKATHON - DESKTOP INTEROPERABILITY

IN NYC - IN PERSON

May 3-4 at BMO Offices NYC
Register your interest below:

HACKATHON - GLOBAL ACCESSIBILITY AWARENESS DAY

Virtual

May 15-18 with Discover
Register your interest below:

MEMBER MEETING London

14-15 June
London

Stay tuned for further details!

More Information

- FINOS Events (finos.org/hosted-events)
- FINOS Community Events (finos.org/featured-events)
- LF Events (events.linuxfoundation.org/)
- LF Training (training.linuxfoundation.org/)

FINOS Fintech Open Source Foundation

OS IN FINANCE MEETUP
FINOS STRATEGIC INITIATIVES

Join us to discover how you can contribute to and reap the rewards of FINOS' strategic initiatives on open regulation, open source readiness, and **desktop interoperability (FDC3).**

Register your interest below

1 May 2023

NYC at SYNECHRON

FINOS
Fintech
Open Source
Foundation

Interoperability & Regtech Hackathon

3-4 May 2023

NYC at BMO

REGISTER ››

FINOS Fintech Open Source Foundation

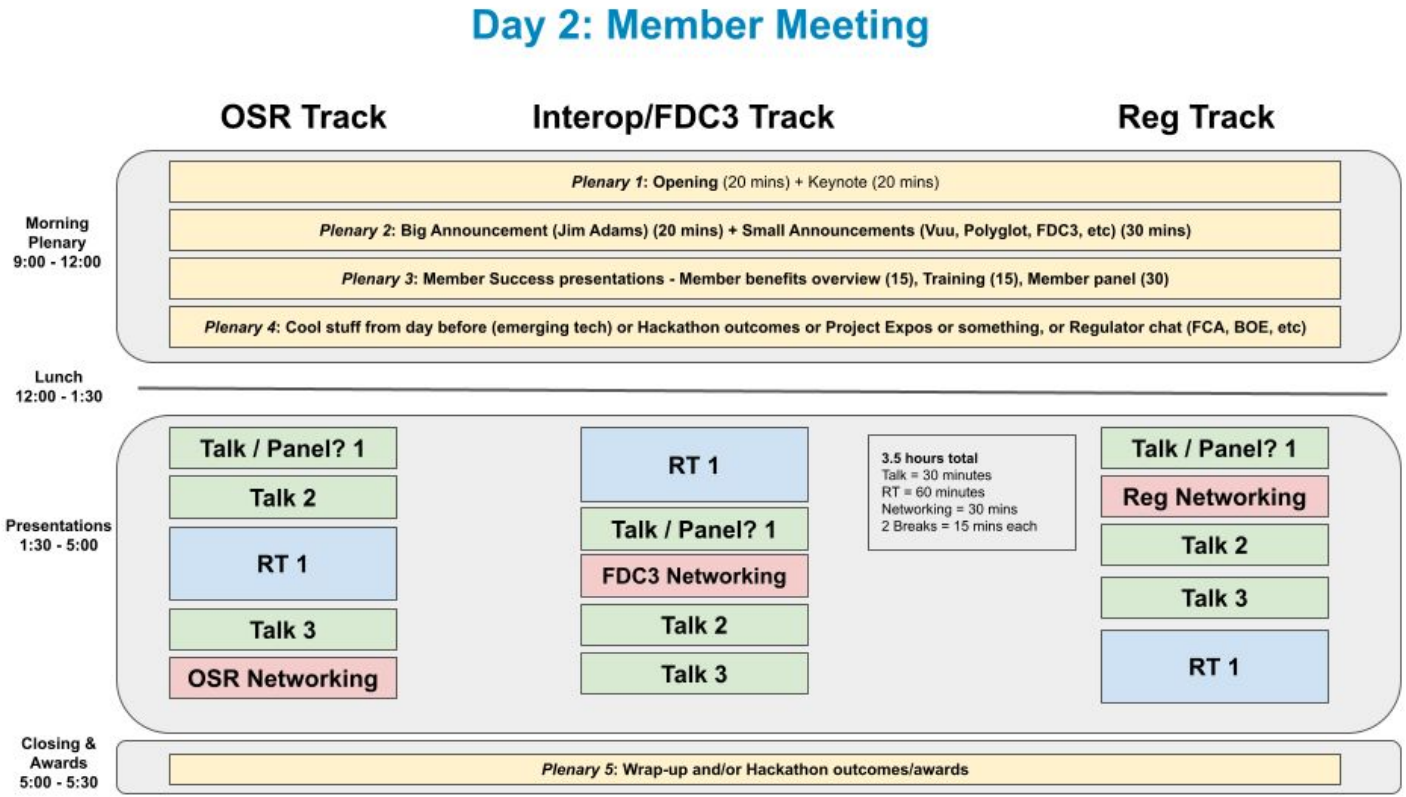
MEMBER MEETING & OPEN HOUSE

14-15 June 2023

London at JP Morgan

REGISTER ››

FINOS Members meeting



Recent FDC3 maintenance work

- Upgrade FDC3 website to docusaurus 2 + move hosting to netlify
  #762, #925, #938, #944, #945, #957
- Improved accessibility of FDC3 website homepage
  #921, #942, #943
- Updated project dependencies (quicktype, Node 18 etc.)
  #951, #965
  - Adjusted definition of Context object schema to better support extension
  - FDC3 2.0 npm module released
- Set up FINOS security scanning (CVE scanning & Semgrep + resolving vulnerable dependencies in website, project tooling, FDC3 workbench & FDC3 Explained)
  #808

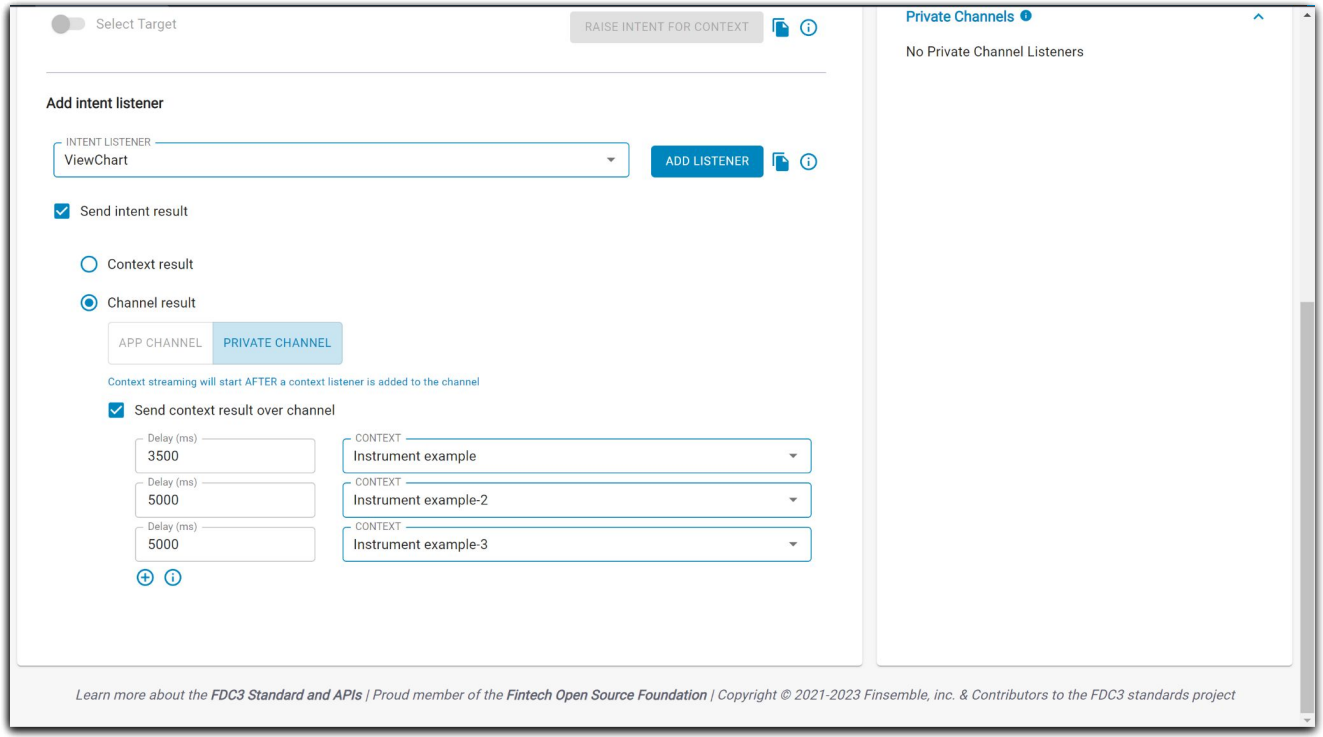
FDC3 Workbench update to 2.0 (in review)

Preview: https://deploy-preview-947--fdc3.netlify.app/toolbox/fdc3-workbench/

PR #947

New features (2.0 version):

- Switch between 1.2 and 2.0
- Additional app metadata
- TIghtened up overall layout
- Target raised intents (options gathered via fdc3.findIntentsByContext()
- More details on originatingAppMetadata & IntentResolutions
- Send & receive intent results: Context, Channel & PrivateChannel + set-up responses over the channel

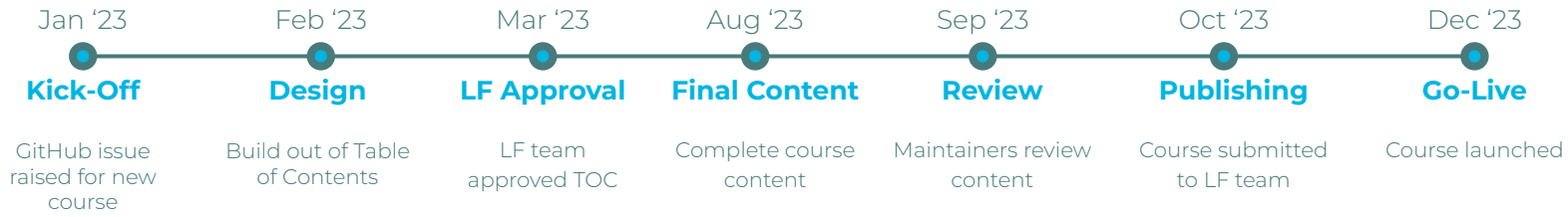


FDC3 Training & Certification update

Course Timeline(s)

Introduction to FDC3

Developing on FDC3



FDC3 2.1

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FDC3 2.1 PRs ready and/or merged

- Ensuring FDC3 API types use string rather than String #924
- Deprecating IntentMetadata.displayname #926
- Deprecating AppD name field and promoting title to required #928
- Context data and intents consolidated update branch 2.1 #936
- Desktop Agent Bridging #968

FDC3 2.1 PRs outstanding

- Actionable Notifications #387, #828
- Add vendor agnostic default window size and position settings to the App Directory app definition format #564
- Order/Trade/Position context types #644, #655, #656
- Allow an AppD application record to reference other apps that are *required* for it to run #674
- Add /intents and /contexts endpoints to the AppD API #719
- Upgrade exposure of originating app identity to a requirement (MUST) from recommended (SHOULD) #735

FDC3 2.1 PRs outstanding

- AppD v2 routes don't define error response samples #827
- App-specific context metadata #829
- Tighter definition for "otherConfig" in fdc3.chart context type #856
- Are you ready yet? Adding defined (or at least bounded) timeouts to the FDC3 Desktop Agent API #866
- Clarify differences between App and User Channel behaviour (in docs for FDC3 versions 1.1, 1.2, 2.0 and next) #871
- Clarify handling of malformed context objects by Desktop Agents #872
- Deprecate customConfig in appD records #900

Post-FDC3 2.1

- Proposal to add .NET interfaces and context declarations #931
- FDC3 for Web Browsers #896

FDC3 2.1: Desktop Agent Bridging

Proposed addition to the FDC3 Standard

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Discussion Group:
Desktop Agent Bridging

Desktop Agent Bridging

Purpose: To create bridges between FDC3 Desktop Agents (DAs), allowing apps running in differents DAs to interoperate with each other:

Status:

- Protocol drafting complete
- Check out the PR @ https://github.com/finos/FDC3/pull/968
- Implementation work started: https://backplane.finos.org/

Next steps:

- Propose inclusion in the Standard in FDC3 2.1
- Arrange a vote on inclusion

Discussion Group:
Desktop Agent Bridging

Desktop Agent Bridging

Documentation added to the website (see the preview)

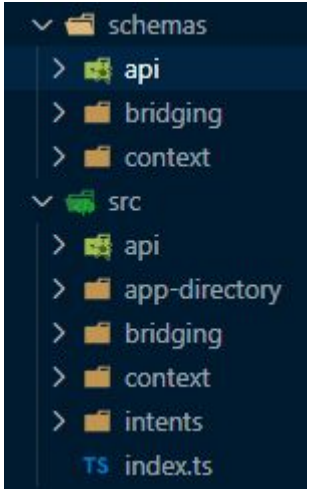
Marked as @experimental

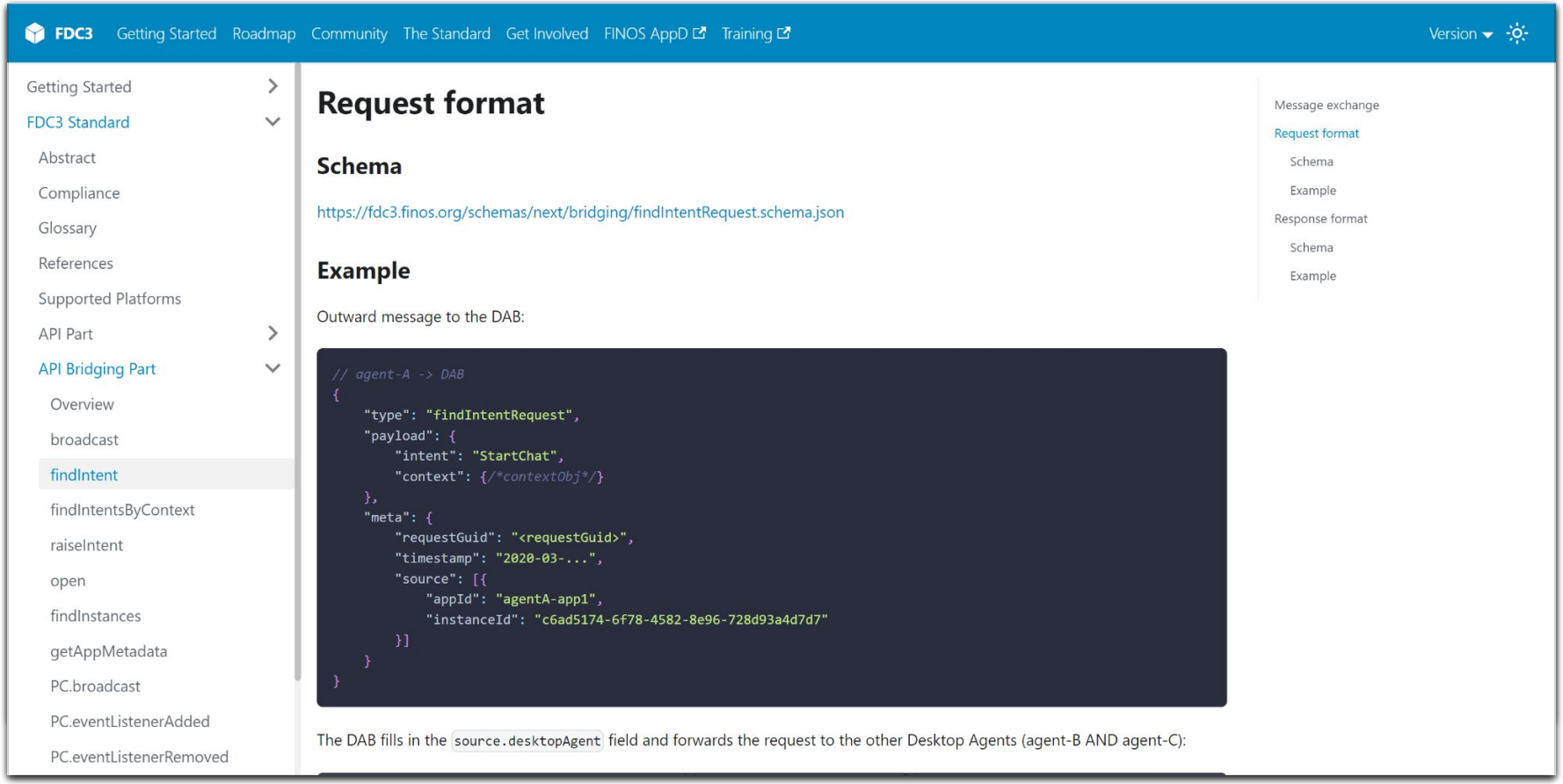
Created JSON Schemas for:

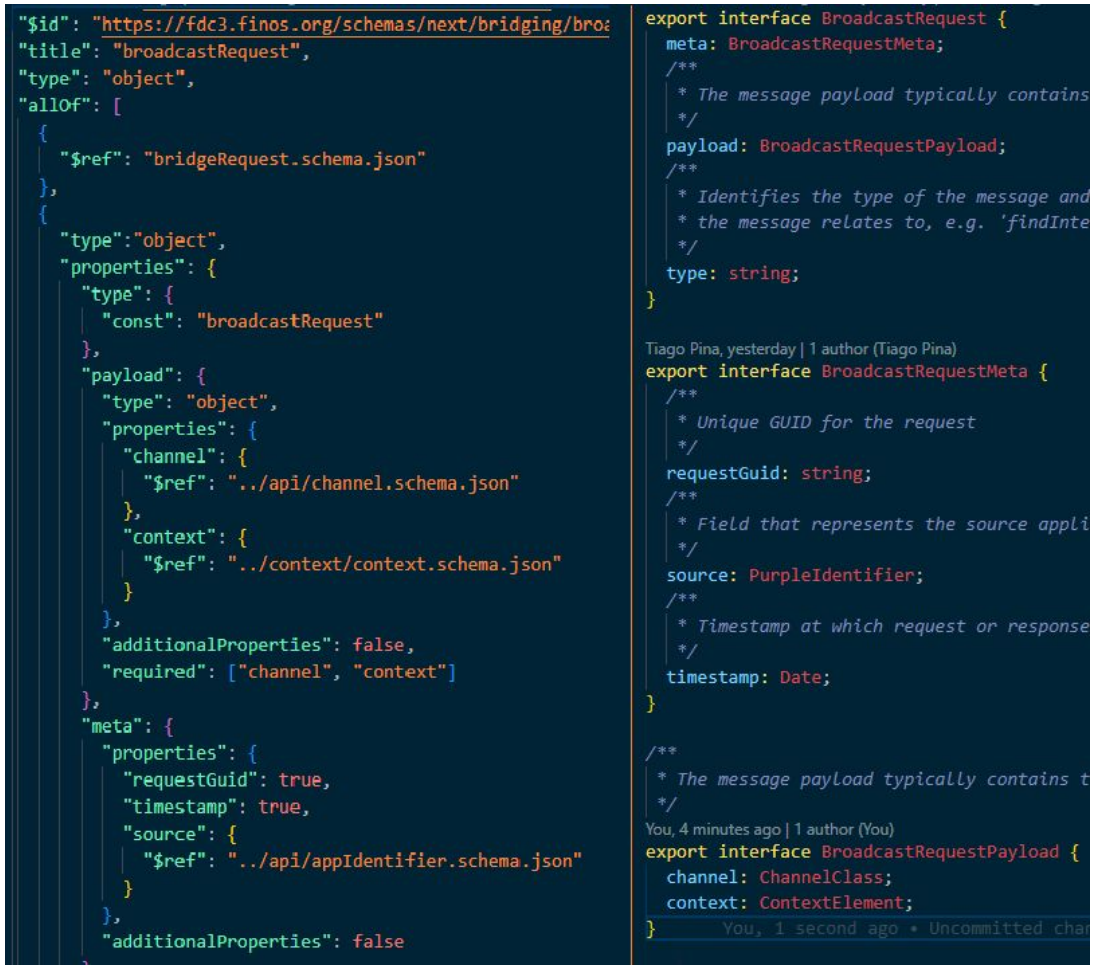
- All Bridging connect and interop messages
- API types

Reorganized schemas into a more maintainable structure

Generated TS types for Bridging




FDC3
Getting Started
Roadmap
Community
The Standard
Get Involved
FINOS AppD
Training
Version
Getting Started
FDC3 Standard
Abstract
Compliance
Glossary
References
Supported Platforms
API Part
API Bridging Part
Overview
broadcast
findIntent
findIntentsByContext
raiseIntent
open
findInstances
getAppMetadata
PC.broadcast
PC.eventListenerAdded
PC.eventListenerRemoved
Request format
Schema
https://fdc3.finos.org/schemas/next/bridging/findIntentRequest.schema.json
Example
Outward message to the DAB:
// agent-A -> DAB
{
"type": "findIntentRequest",
"payload": {
"intent": "StartChat",
"context": {/*contextObj*/}
},
"meta": {
"requestGuid": "<requestGuid>",
"timestamp": "2020-03-...",
"source": [{
"appId": "agentA-app1",
"instanceId": "c6ad5174-6f78-4582-8e96-728d93a4d7d7"
}]
}
}
The DAB fills in the source.desktopAgent field and forwards the request to the other Desktop Agents (agent-B AND agent-C):
Message exchange
Request format
Schema
Example
Response format
Schema
Example



```
"$id": "https://fdc3.finos.org/schemas/next/bridging/broa
"title": "broadcastRequest",
"type": "object",
"allOf": [
  {
    "$ref": "bridgeRequest.schema.json"
  },
  {
    "type":"object",
    "properties": {
      "type": {
        "const": "broadcastRequest"
      },
      "payload": {
        "type": "object",
        "properties": {
          "channel": {
            "$ref": "../api/channel.schema.json"
          },
          "context": {
            "$ref": "../context/context.schema.json"
          }
        },
        "additionalProperties": false,
        "required": ["channel", "context"]
      },
      "meta": {
        "properties": {
          "requestGuid": true,
          "timestamp": true,
          "source": {
            "$ref": "../api/appIdentifier.schema.json"
          }
        },
        "additionalProperties": false
```

```
export interface BroadcastRequest {
  meta: BroadcastRequestMeta;
  /**
   * The message payload typically contains
   */
  payload: BroadcastRequestPayload;
  /**
   * Identifies the type of the message and
   * the message relates to, e.g. 'findInte
   */
  type: string;
}

Tiago Pina, yesterday | 1 author (Tiago Pina)
export interface BroadcastRequestMeta {
  /**
   * Unique GUID for the request
   */
  requestGuid: string;
  /**
   * Field that represents the source appli
   */
  source: PurpleIdentifier;
  /**
   * Timestamp at which request or response
   */
  timestamp: Date;
}

/**
 * The message payload typically contains t
 */
You, 4 minutes ago | 1 author (You)
export interface BroadcastRequestPayload {
  channel: ChannelClass;
  context: ContextElement;
}       You, 1 second ago • Uncommitted char
```

JSONSchema & generated TypeScript sources to simplify (conformant) implementation

Discussion Group:
Desktop Agent Bridging

Added generated code for bridging to NPM module

```
import { BridgingTypes } from "@finos/fdc3";
const aMessage: BridgingTypes.BroadcastRequest

// or

import { BroadcastRequest } from "@finos/fdc3/dist/bridging/BridgingTypes";
const aMessage: BroadcastRequest
```

FDC3 2.1: Context Data & Intents

Additions proposed for 2.1

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Discussion Group:
Context Data & Intents

Context Data & Intents

- Defining a simplified Order object (#904)
  - Contributors are welcomed and encouraged
  - Ready to be turned into a PR
- Should we split Context and Intents outside of the Standard? (#940)
  - Remove reliance on a release schedule which is aligned to main APIs
  - Improve frequency of when new Context and Intents could be made available
- 2.1 Milestone PR's (#936)
  - Collection of Symphony chat capabilities
  - New contexts for Interaction and Transaction result

Context & Intents

Refining our approach to governance

Thurs 4th May @ 9am **EST** / 2pm **BST**

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Upcoming FDC3 meetings

- Tuesday 2nd May @ 10am **EST** / 3pm **BST**
  FDC3 General Meeting
- Thurs 4th May @ 9am **EST** / 2pm **BST**
  Context Data & Intents
- Thurs 4th May @ 11am **EST** / 4pm **BST**
  FDC3 for the Web
- Thu 18th May @ 11am **EST** / 4pm **BST**
  FDC3 for the Web
- Wed 24th May @ 9am **EST** / 2pm **BST**
  Desktop Agent Bridging
- Thu 25th May @ 10am **EST** / 3pm **BST**
  Standard WG Meeting

- Wed 3rd / Thur 4th May
  FDC3 Hackathon in NY
- 14/15th June
  FINOS Members Meeting & Open House

- For all meeting details see the FINOS Community Calendar or email help@finos.org to be added to future meeting invites

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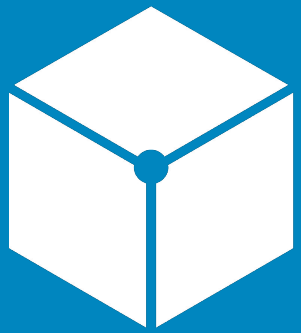

FDC³

Thank you!

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