FDC^3

December 12, 2017

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FDC3 Technical Members

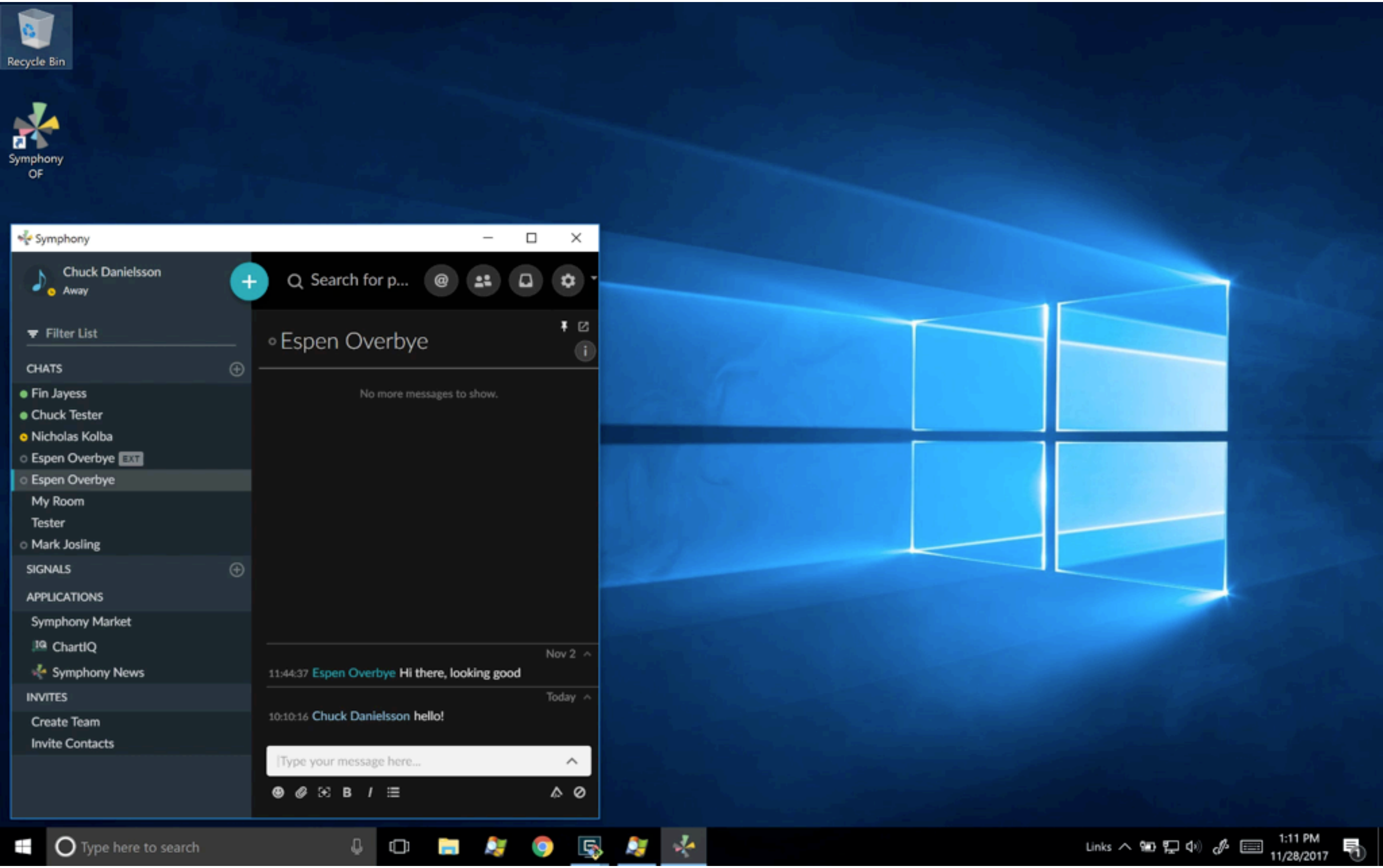
Chair (OpenFin)	Nick Kolba, Chuck Danielsson
Algomi	Sharif Elborgi, Usman Khan
AllianceBernstein	Dinesha Vittaldas
Barclays	Nikhil Doshi
BGC Partners	Alexei Samonov
ChartIQ	Terry Thorsen
Citadel	Chris McGuire, Tim Kolecke
Cloud9	Zeno Lee
Factset	Alan Cenkus, Dan Riley
JPM	Richard Roberts
Lord Abbett	Murugesan Kandasamy, Gurpreet Singh
Morgan Stanley	Peter Smulovics, Ian Alderson
RBCCM	Espen Skogen, Simon Carley
Thomson Reuters	Jorge Santos, Saori Fotenos
TP ICAP	Adrian Brown, Reid Philpot
UBS	Tom Sudgen
Wellington	Ben McBride, David Carlson

Agenda

- Updates from Last Meeting
- Context
    - Workflows
    - Proposed Structure
    - Resolution

Updates

- Symphony integration
    - Launching and context passing with external apps from Symphony messages
        - >ChartIQ?ibm
    - Follows Open API and App Registry patterns



No more messages to show.

Nov 2

11:44:37 Espen Overbye Hi there, looking good

Today

10:10:16 Chuck Danielsson hello!

Workflows - Symphony

- Inbound
  - Click contact in an external app and invoke a chat session
  - Select a list of contacts and create a chat room
- Outbound
  - Click into a chat in and send the context to an external app (e.g. Salesforce)
  - Send context from a cashtag to an external app

Proposed Structure

- To interoperate, Apps need to exchange commonly recognized context structures that can indicate both intent and topic.
- Context needs to be mappable to Apps based on supported intents and objects.
- Mapping between symbologies and service discovery both raise ambiguities that require end-user input

Proposed Structure

- Context Envelope
- Accepted Context Declaration
- Intents
- Resolvers

Context Envelope - Proposal

```
[
 {
    name: //display name for the context
    type: //type of context being transported
    primary: //bool [optional]
    id:{
        default://original entry
        //any number of key-value pairs, etc
    }
 }
]
```

Context Types

- Organization
- Security - a financial security
- Person - a person in association with an organization
- Contact - a sales, social, or other contact
- Sector - An industry classification
- Geo - a region or geocode location

Example: IBM as Organization

```
[
 {
    name:”International Business Machines”,
    type:”Organization”,
    id:{
        default:”ibm”
    }
 }
]
```

Example: IBM Bond as a Security

```
[
    {
        name:”IBM 6.25% of '19”,
        type:”Security”,
        class:”FI”,
        id:{
            default:”IBM 6.25% of '19”,
            CUSIP:”090241201”
        }

    }
]
```

Example: Person & Organization

```
[
 {
    name:”Virginia (Ginni) M. Rometty”,
    type:”Person”,
    id:{
        default:”Virginia Rometty”
    }
 },
 {
    name:”International Business Machines”,
    type:”Organization”,
    id:{
        default:”ibm”
    }
 }
]
```

Example: GEO

```
[
 {
    name:”United States of America”,
    type:”Geo”,
    id:{
        default:”USA”,
        ISO ALPHA-2:“US”,
        ISO ALPHA-3:”USA”,
    }
 }
]
```

Example: Contact

```
[
 {
    name:”Nick Kolba”,
    type:”Contact”,
    id:{
        default:”Nick Kolba”,
        email:“nick@openfin.co”,
        twitter:”nkolba”,
        phone:”9171234567”
    }
 }
]
```

Accepted Context

- Apps should be able to declare what type of contexts and intents they accept
- Support for:
  - linking managers
  - service discovery

Accepted Context Declaration

- Stored in App Registry
  - Context Types (plus wild card)
    - Matching Per type:
      - Identifiers
      - intents

Example

```
[
 {type:”Contact”,
  identifiers:[”email”,”fullname”],
  intents:[“StartChat”,”GetDetails”]
 }
]

[
 {type:”Security”,
  identifiers:[“CUSIP”,”ISIN”,”SEDOL”],
  intents:[“GetPrice”]
 }
]
```

Intents

- Indicates supported common verbs for an App
- Not full RPC
- Apps don’t need to enumerate every function
- Defined at the App Registry level
- Intents require Resolver services that can route the message and resolve ambiguity

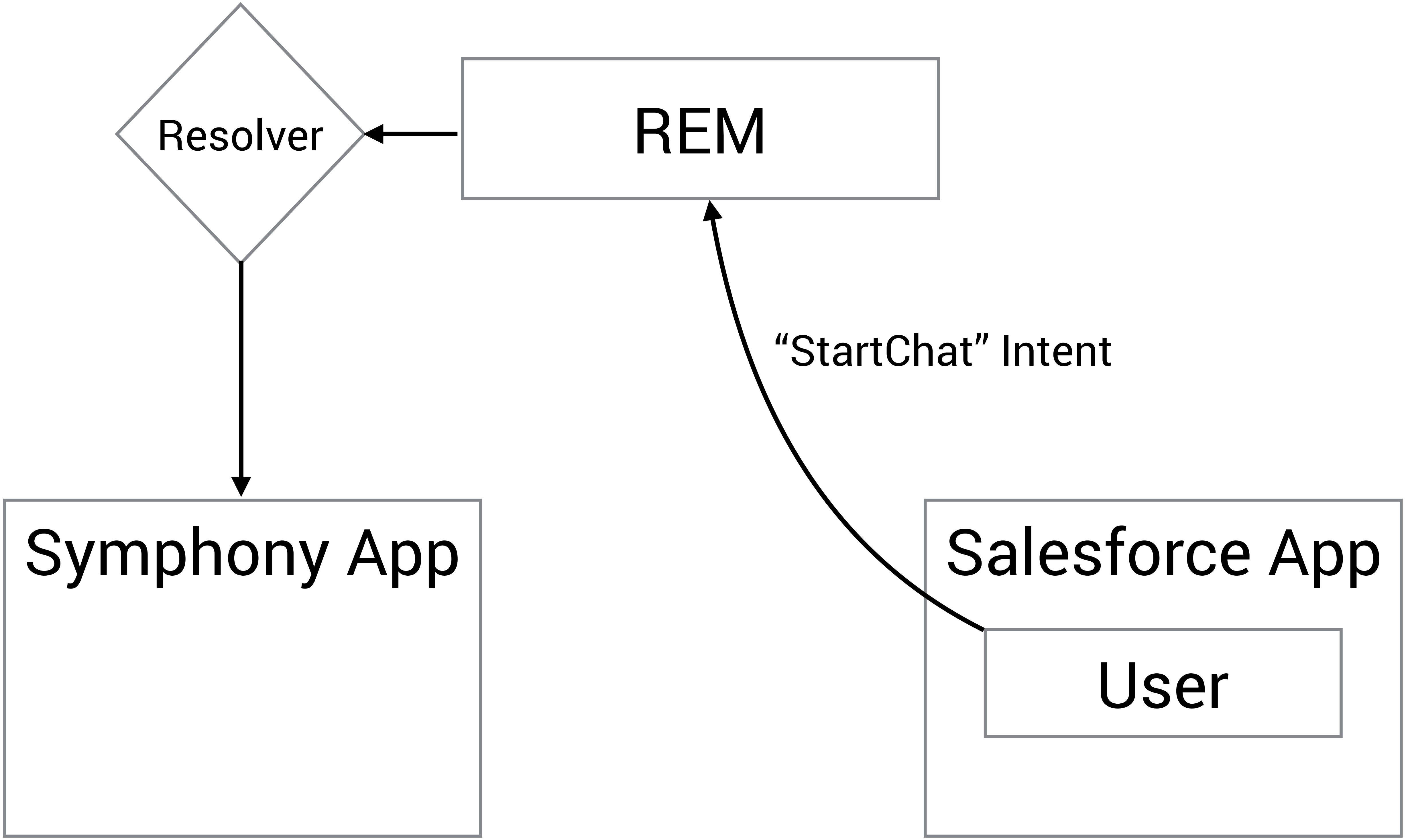
Launching By Intent - API Options

```
fdc.startIntent(“StartChat”,[
 {
    name:”Nick Kolba”,
    type:”Contact”,
    id:{
        default:”Nick Kolba”,
        email:“nick@openfin.co”,
        twitter:”nkolba”,
        phone:”9171234567”
    }
 }
]);
```

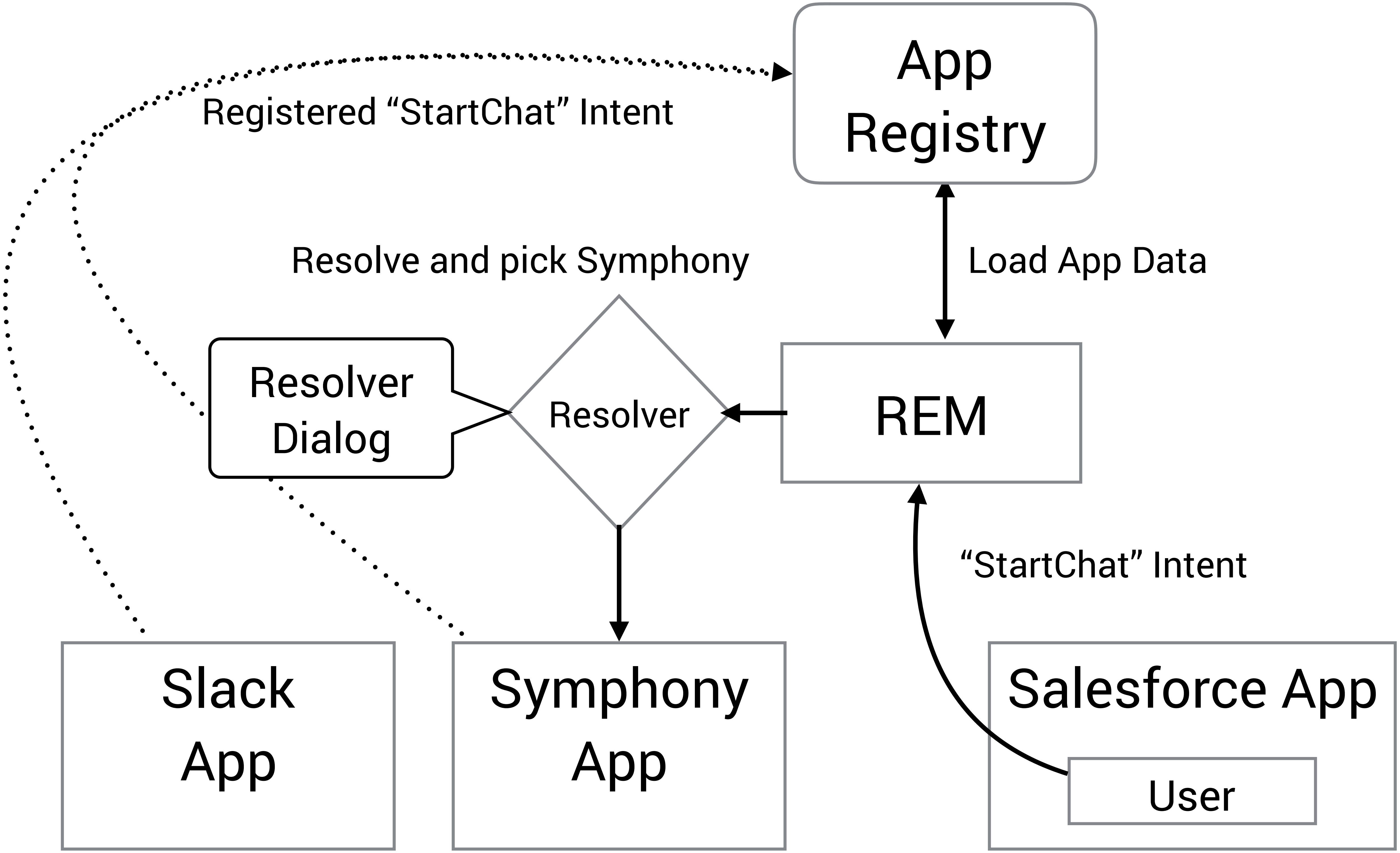
or…

```
fdc.open(“intent:StartChat,[…
```

Intent Resolution



Intent Resolution



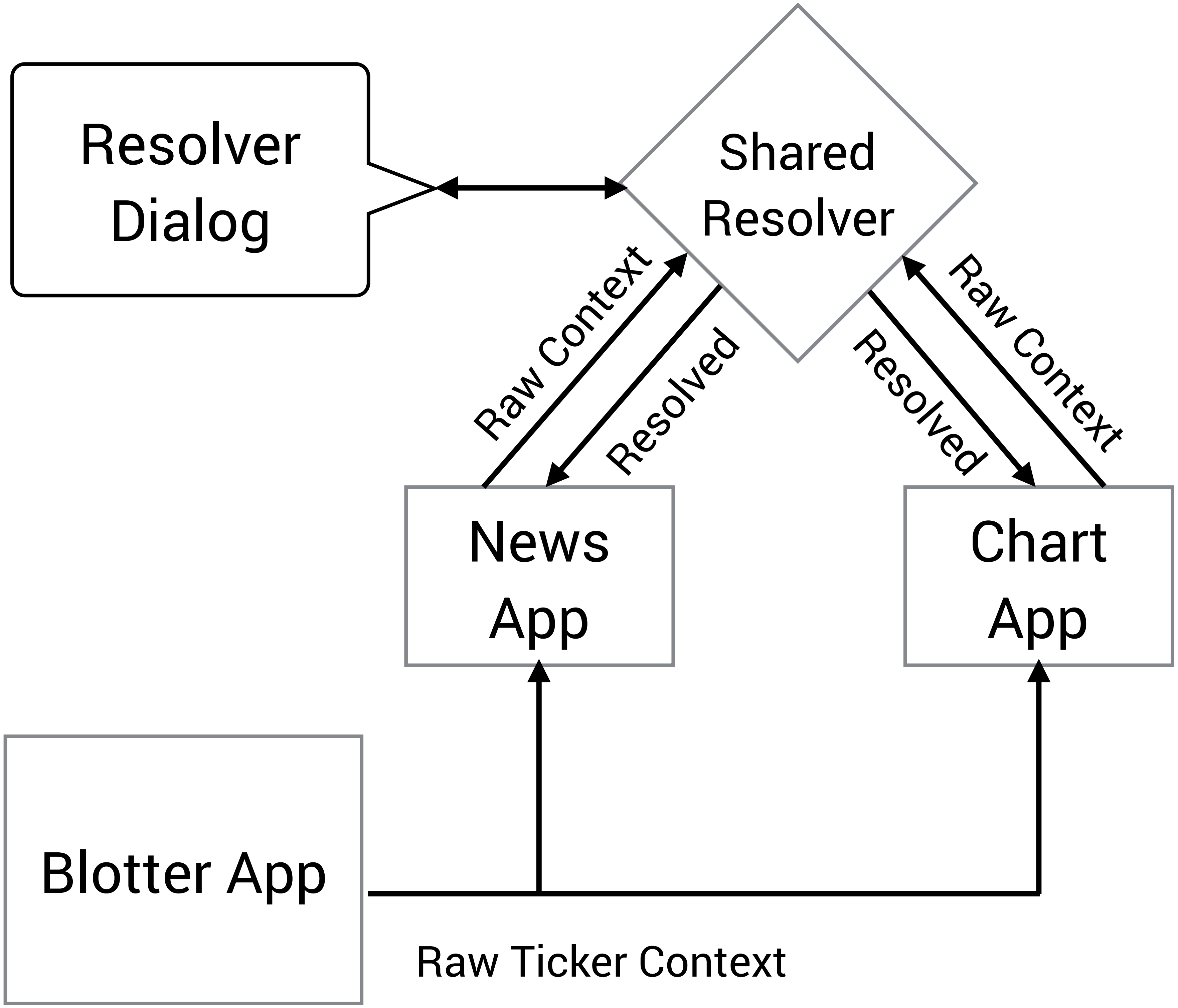
Some Proposed Intents

- GetPrice
- GetChart
- GetNews
- StartChat
- GetContact
- CreateRFQ

Proposed Resolution Workflow

- Context objects can be ambiguous and require mapping from one symbology to another
- Disambiguation often is up to the end user
- Apps may share symbology - and resolution logic

Ambiguous Resolution



Next Steps

- Collect more use cases
- Build MVP of “StartChat” workflow
- Revisit in next session after holidays

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