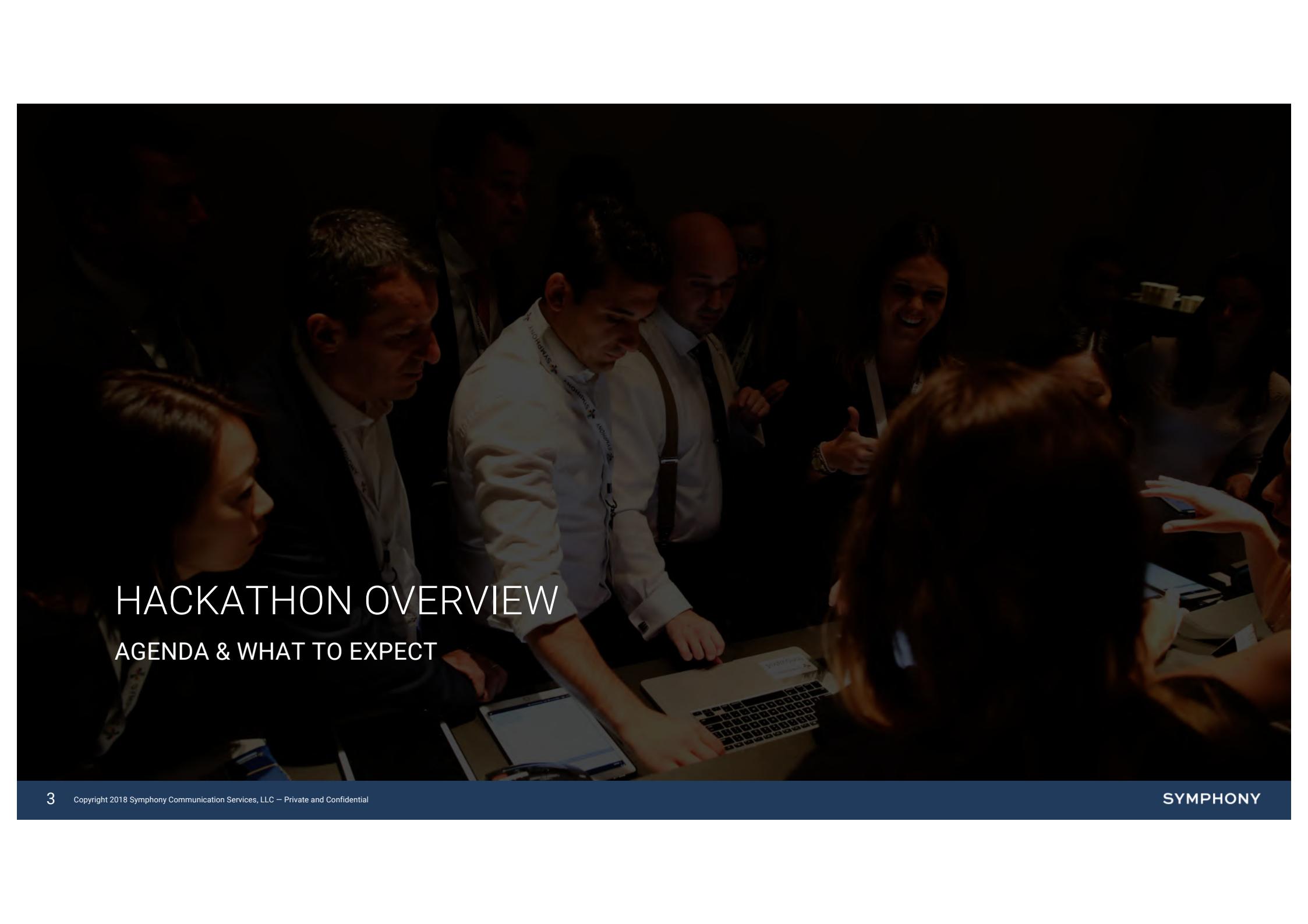


# Hackathon 2018

HONG KONG • JAPAN • SINGAPORE  
5 JUNE 2018

## I AGENDA

1. Hackathon overview
2. Hackathon awards
3. Symphony platform overview
4. Accessing the build environment
5. Best practices for building & getting started
6. Next steps
7. Q&A

A dark, low-light photograph showing a group of people, mostly men, gathered around a table. They are looking down at a laptop screen, which is partially visible. Some people are pointing at the screen or gesturing with their hands. The scene suggests a collaborative environment, likely a hackathon. The background is dark, making the subjects stand out.

# HACKATHON OVERVIEW

## AGENDA & WHAT TO EXPECT

## | AGENDA

8 AM Doors open

8 AM - 9 AM Breakfast

9 AM - 5 PM Hackathon

12 PM - 1 PM Lunch

5 PM - 6 PM Presentations

6 PM - 6:30 PM Awards

6:30 PM - 8 PM Cocktail hour

A photograph of two young children racing go-karts on a paved track. The child in the foreground is wearing a red helmet, goggles, and a dark suit, and is raising their right fist in triumph. The go-kart has a white star on its side. The child in the background is wearing a blue helmet and is looking forward. Their go-kart has the number '5' on it. They are both wearing racing suits and goggles. The background shows a dry, open landscape with mountains in the distance.

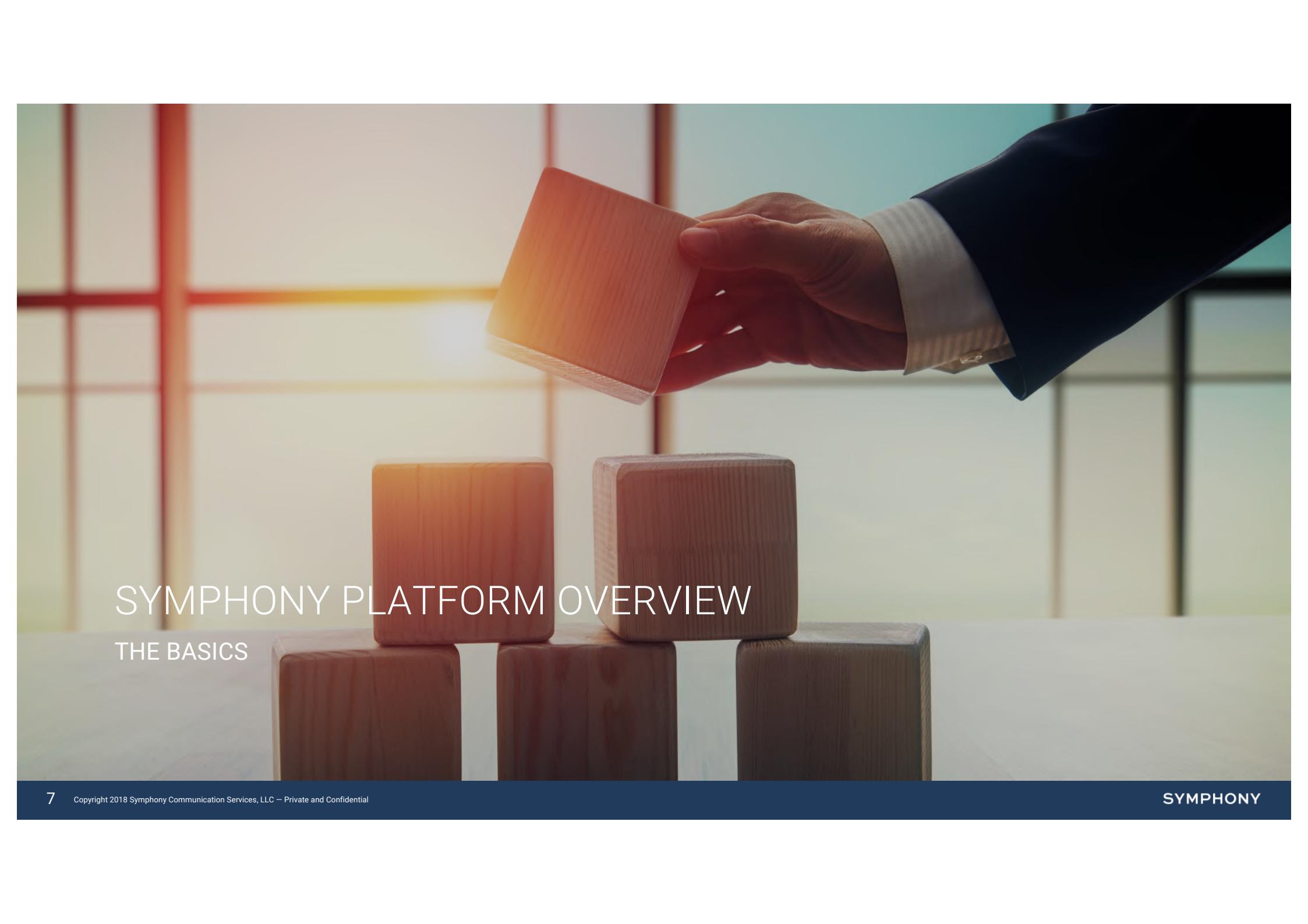
# HACKATHON AWARDS

## WIN A JABRA HEADSET

## I AWARD CATEGORIES

Two winners will be selected in the following categories:

1. **Most Cutting-Edge Development** for the most unique and technologically advanced project.
  1. Does your app or bot use Symphony APIs to enhance a workflow in a never-before-seen way?
  2. Is this the most original app or bot?
  3. Does your app or bot leverage cutting-edge technology such as AI or NLP?
2. **Most Impactful Automation Development** for the improvement of an existing business workflow using automation within Symphony in an innovative and compelling way.
  1. Does your app or bot streamline an inefficient process in a measurable way?
  2. Can your app or bot be used across multiple departments?
  3. Does your app or bot enhance someone's Symphony experience?

A photograph showing a person's hand in a dark suit jacket placing a single wooden block onto a stack of four other wooden blocks. The blocks are arranged in a staggered pattern. The background is blurred, showing what appears to be a window with a red frame. The lighting is warm and focused on the blocks.

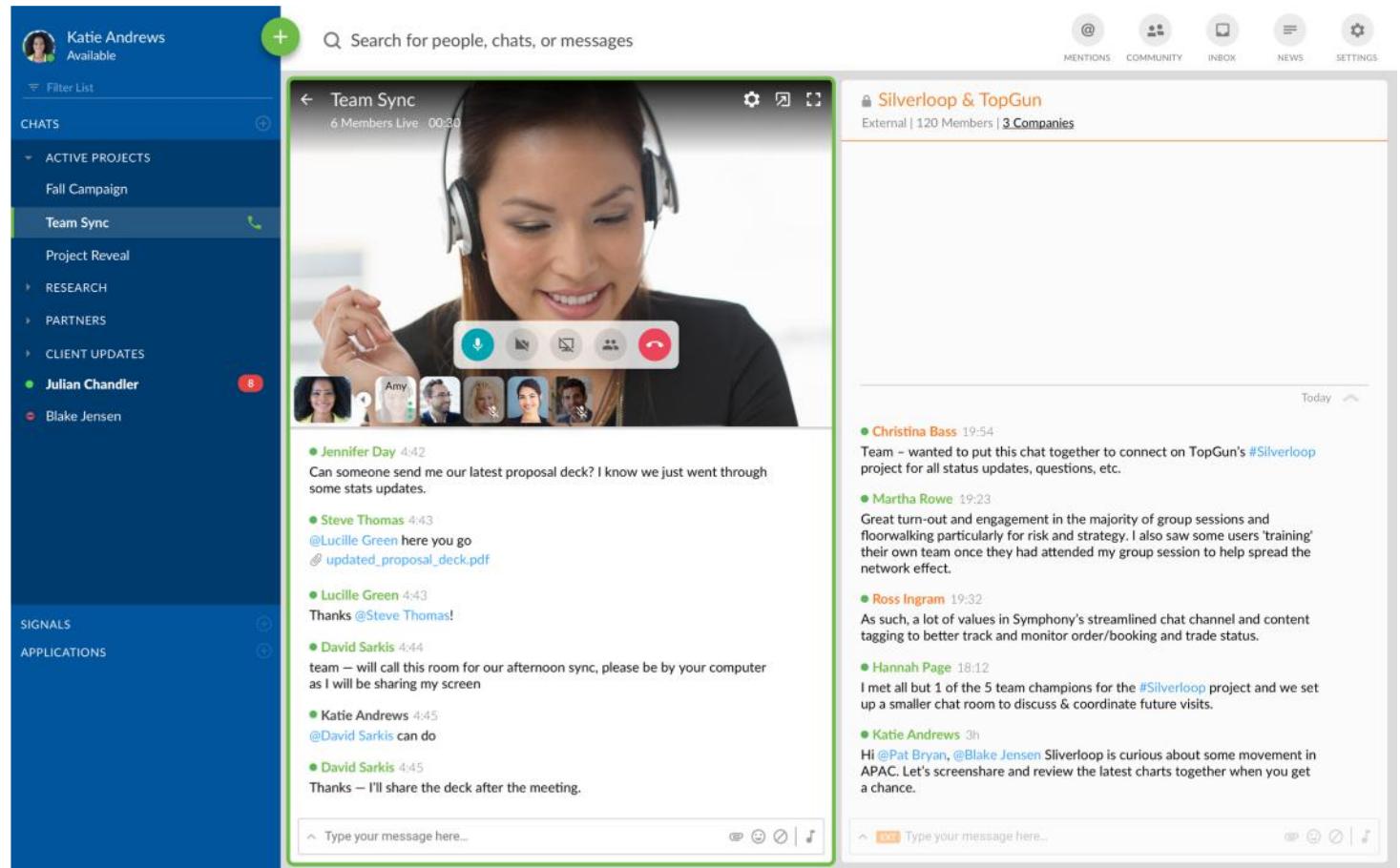
# SYMPHONY PLATFORM OVERVIEW

## THE BASICS

# THE UI

## Key Features:

- Plus Sign
- Left Hand Navigation
- Search
- Conversation Grid



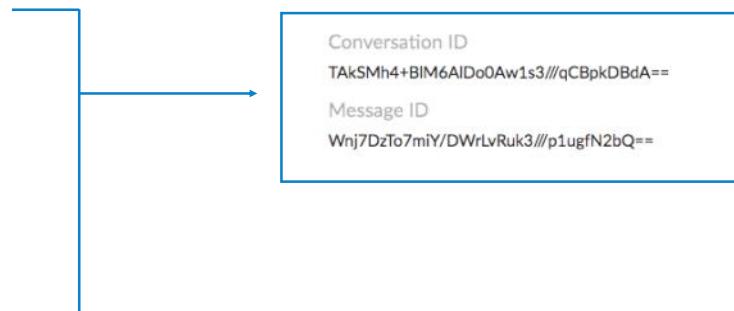
# CHAT ROOMS & IMS

## Conversation Types

- IM – This is referred to as 1:1
- Chat rooms – Can be internal or external

## Click on the Timestamp

- Conversation ID (Stream ID)
- Message Details (Message ID)



The screenshot shows a chat room interface. At the top, it says "Silverloop & TopGun" with a lock icon, "External | 120 Members | 3 Companies". On the right, there's a timestamp "Today" and a scroll arrow. The main area contains messages from four users:

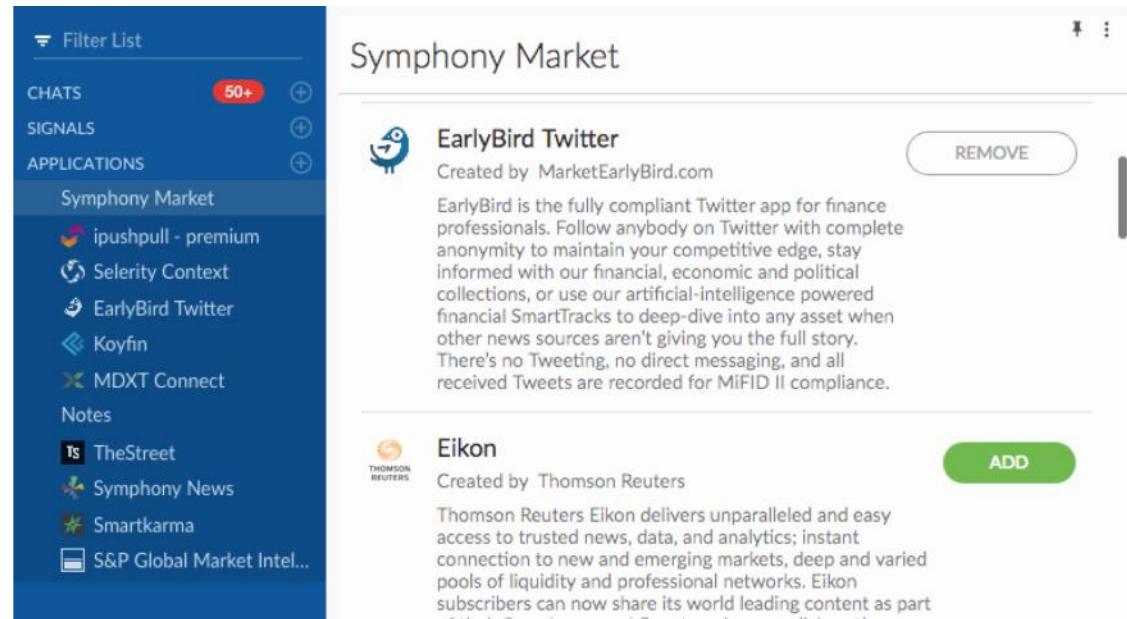
- Christina Basa 19:54: Team – wanted to put this chat together to connect on TopGun's #Silverloop project for all status updates, questions, etc.
- Martha Rowe 19:23: Great turn-out and engagement in the majority of group sessions and floorwalking particularly for risk and strategy. I also saw some users 'training' their own team once they had attended my group session to help spread the network effect.
- Ross Ingram 19:32: As such, a lot of values in Symphony's streamlined chat channel and content tagging to better track and monitor order/booking and trade status.
- Hannah Page 18:12: I met all but 1 of the 5 team champions for the #Silverloop project and we set up a smaller chat room to discuss & coordinate future visits.

At the bottom, there's a message input field with a placeholder "Type your message here..." and several small icons.

# APPLICATIONS

## Symphony Market

- Partner Applications
- Considered Extension Applications – Symphony provides a JS package to include in your front end



The screenshot shows the Symphony Market interface. On the left, there's a sidebar with a 'Filter List' section containing 'CHATS' (50+), 'SIGNALS', and 'APPLICATIONS'. Under 'APPLICATIONS', the 'Symphony Market' section is expanded, listing several apps: ipushpull - premium, Selerity Context, EarlyBird Twitter, Koyfin, MDXT Connect, Notes, TheStreet, Symphony News, Smartkarma, and S&P Global Market Intel... Each app has a small icon next to its name.

**Symphony Market**

**EarlyBird Twitter**  
Created by MarketEarlyBird.com REMOVE

EarlyBird is the fully compliant Twitter app for finance professionals. Follow anybody on Twitter with complete anonymity to maintain your competitive edge, stay informed with our financial, economic and political collections, or use our artificial-intelligence powered financial SmartTracks to deep-dive into any asset when other news sources aren't giving you the full story. There's no Tweeting, no direct messaging, and all received Tweets are recorded for MiFID II compliance.

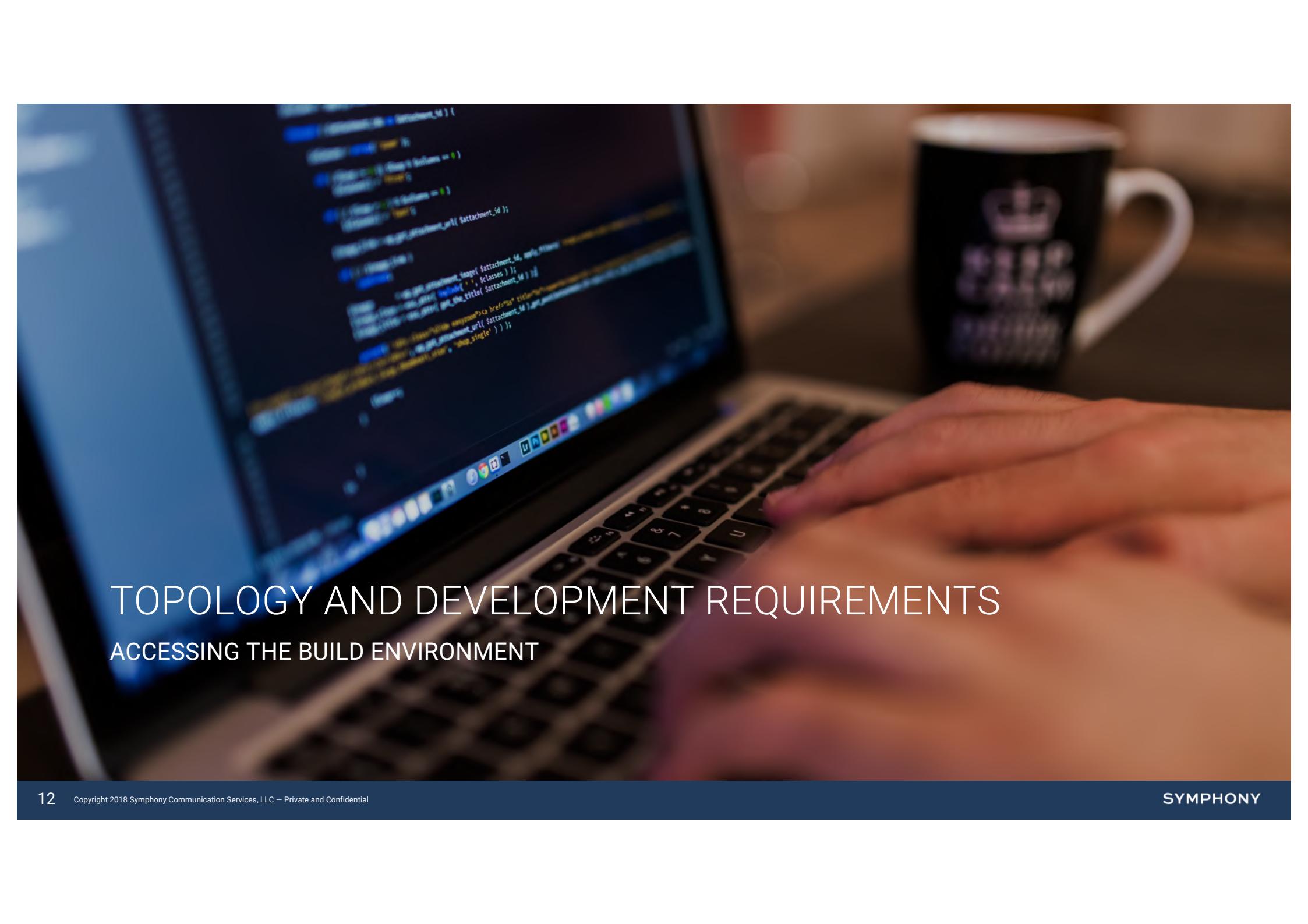
**Eikon**  
Created by Thomson Reuters ADD

Thomson Reuters Eikon delivers unparalleled and easy access to trusted news, data, and analytics; instant connection to new and emerging markets, deep and varied pools of liquidity and professional networks. Eikon subscribers can now share its world leading content as part

## I SPECIAL FEATURES

- @ Mentions – Assign or notify a person directly
- Community – Accept/Reject Connection Requests
- Inbox – Get a stream of all messages
- News – Find out what's new with Symphony
- Settings – Adjust display settings, alerts, permissions, and theme





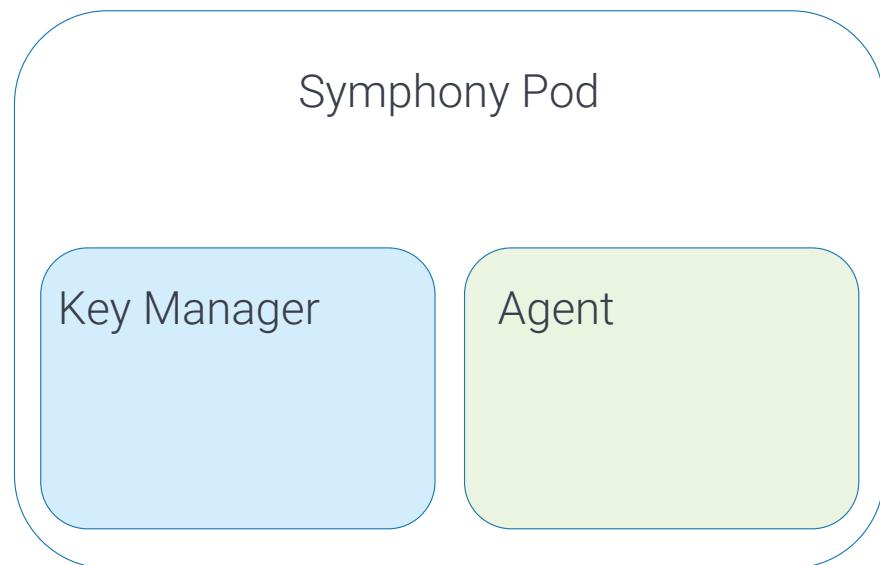
# TOPOLOGY AND DEVELOPMENT REQUIREMENTS

## ACCESSING THE BUILD ENVIRONMENT

## I SYMPHONY TOPOLOGY

Symphony Developers need to know:

- **Pod** - This is the main instance of the Symphony Software
- **Key Manager** - Provides the authorization to encrypt and decrypt messages
- **Agent** - Provides the Messaging APIs



# I DEVELOPMENT REQUIREMENTS

## Needed Before the Build:

- System Account
- User Certificate with a CN Matching the username of the System Account
- Symphony URL Information for the Hackathon Pod
  - Pod <https://develop2.symphony.com/>
  - Session authentication <https://develop2-api.symphony.com:8444/sessionauth/v1/authenticate>
  - Key Manager authentication <https://develop2-api.symphony.com:8444/keyauth/v1/authenticate>
  - Agent <https://develop2.symphony.com/>

Basic Information	
Username*	bot.user1
Display Name*	Bot User
Email*	bot.user1@example.com
Additional Information	
Division	Technology Division
Department	Symphony Bots
Company Name	Symphony Preview Pod (default)

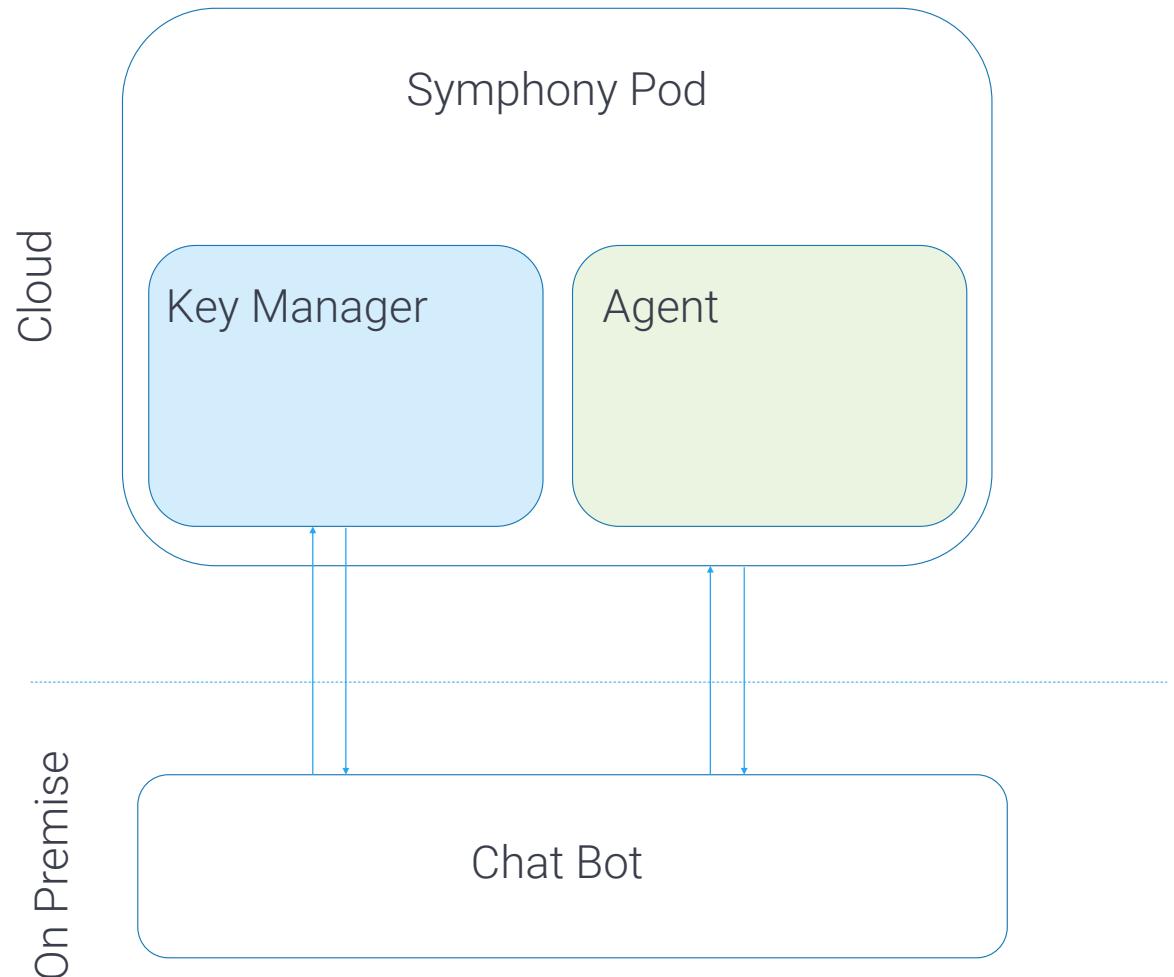
# I AUTHENTICATION BASICS

## Session Authentication

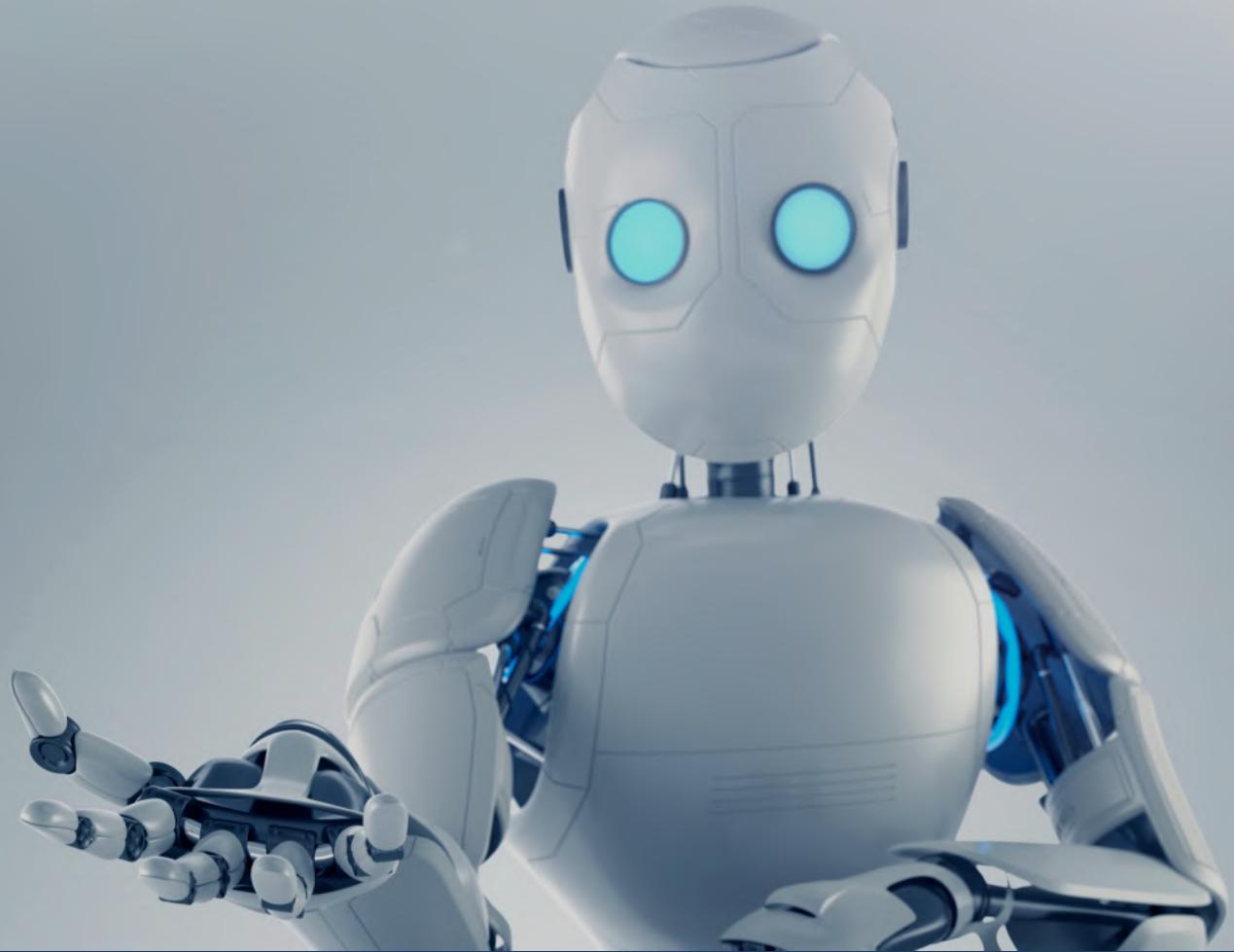
- Session url + /sessionauth/v1/authenticate

## Key Manager Authentication

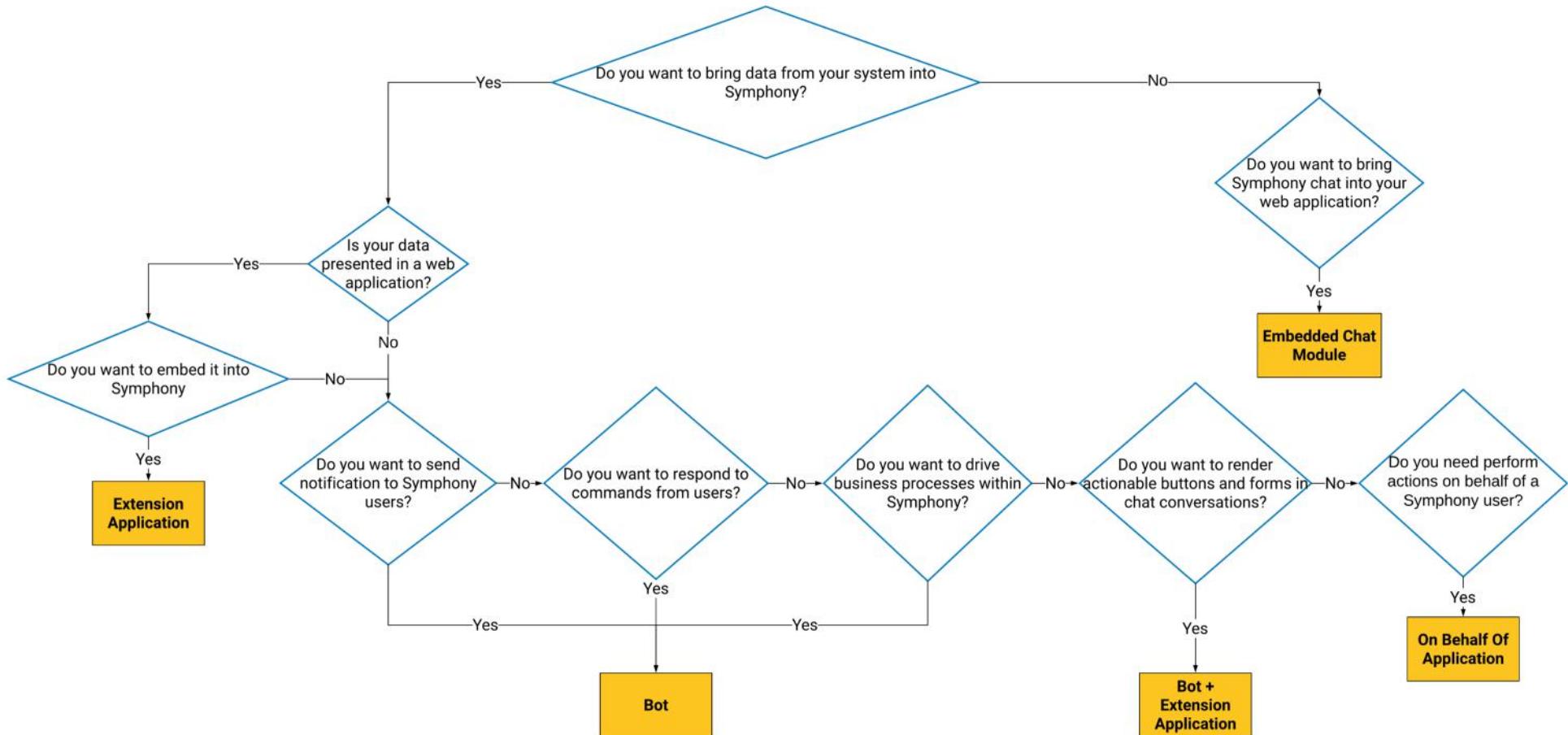
- KM url + /keyauth/v1/authenticate



START DEVELOPING  
CHAT BOTS



## I DETERMINING WHAT TO BUILD



## I PRE REQUIREMENTS

- Install npm and Yeoman Generator
- Install the Symphony Generator

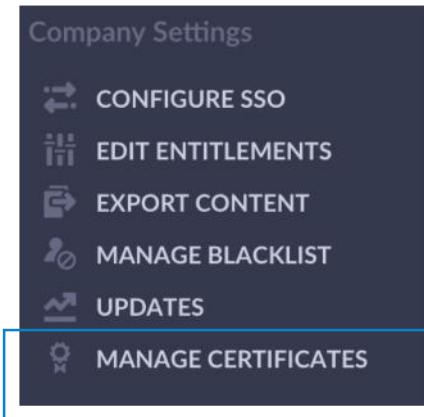
```
PS C:\Users\ivana.polim\Documents\demo> npm install -g generator-symphony --cli
```

- <https://symphony-developers.symphony.com/docs>

## I GENERATING A BOT

- Create and navigate to a working directory
  - Ex. mkdir test
- Invoke the Symphony Generator
- Follow all the steps in the Generator including generating of certificate. You will need to deploy this certificate to the Admin and Compliance portal.

```
> yo symphony
```



## I GENERATING A BOT (CONTINUED)

- Install dependencies
  - Ex. For Node.js you will have to run npm install
- Run the bot
  - Ex. For Node.js you will have to run npm start

## API CLIENTS

- We have API Client in Java, node.js, and .NET
  - Available in maven, npm and nuget
- All client use the same configuration
  - Clients can be used to add Symphony functionality to an existing project
  - To use in your company, it is key to find out if you have the Agent and KM running on premise.

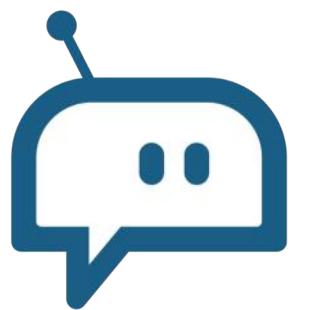
```
{  
    "sessionAuthHost": "develop2-api.symphony.com",  
    "sessionAuthPort": 8444,  
    "keyAuthHost": "develop2-api.symphony.com",  
    "keyAuthPort": 8444,  
    "podHost": "develop2.symphony.com",  
    "podPort": 443,  
    "agentHost": "develop2.symphony.com",  
    "agentPort": 443,  
    "botCertPath": "/Users/pf/Documents/sy-dev/Add-users-to-room/Certificates/",  
    "botCertName": "bot.user150-all.pem",  
    "botCertPassword": "changeit",  
    "botEmailAddress": "bot.user150@example.com",  
    "appCertPath": "",  
    "appCertName": "",  
    "appCertPassword": "",  
    "proxyURL": "",  
    "proxyUsername": "",  
    "proxyPassword": "",  
    "authTokenRefreshPeriod": "30"  
}
```

## I BOT EXAMPLES & IDEAS

Existing Symphony Chat Bots:

- **Google Translate Bot** - Translate chat and respond in real time
- **Help Desk Bot** - Migrate from a group email inbox to secure chat rooms to manage internal and external help desk scenarios
- **Message Suppression Bot** - Automatically and permanently suppress messages while maintaining a full record of the message in your audit trail
- **Research Distribution Bot** - Filter research to receive articles and reports from publications you trust

View more at [workflow.symphony.com](http://workflow.symphony.com)





## NEXT STEPS

### HOW TO PREPARE FOR THE HACKATHON

## I NEXT STEPS

1. After this Webinar you will receive an email with your credentials and the certificates for the Service account assigned to your team  
Log into your user account at: <https://develop2.symphony.com/>  
username: the email @ you registered with  
password: please use the password reset functionality
2. Be sure to log in and test your credentials *prior* to the Hackathon
3. Email [pf@symphony.com](mailto:pf@symphony.com) if you have any issues accessing your account
4. You will receive an email with event details and reminders a few days before the Hackathon on 5 June 2018
5. You can post questions about the Symphony clients and related matters on **stackoverflow** tagging it with **symphony-chat**

## I KEY INFO

- Pod <https://develop2.symphony.com/>
- Session authentication <https://develop2-api.symphony.com:8444/sessionauth/v1/authenticate>
- Key Manager <https://develop2-api.symphony.com:8444/keyauth/v1/authenticate>
- Agent <https://develop2.symphony.com/>
- Service Account username: bot.userXX for example bot.user99
- You will receive 3 files associated to your service account:
  - bot.userXX.p12
  - bot.user-cert.pem (the certificate only)
  - bot.user-key.pem (private key only, passphrase: *changeit*)

## GETTING HELP

- 1- Join the “Hackathon API Support room” on Develop2
- 2- You can post questions about the Symphony clients and related matters on **stackoverflow** tagging it with **symphony-chat**
- 3- Connect to “pf vilquin” on Symphony if you are externally enabled on Symphony

If everything else fails :

- 4- email [pf@symphony.com](mailto:pf@symphony.com) or [platformsolutions@symphony.com](mailto:platformsolutions@symphony.com)

The screenshot shows the Symphony web interface. At the top, there is a search bar with the query "hack". Below the search bar, there are sections for "Messages", "People", and "Rooms".  
**Messages:** A message states: "Narrow your results by using one of the following filters before your search terms." Below this are filters for "from: person", "in: room name", and "has: attachment".  
**People:** A list of three users: Hackett, Desirae (EXT), Andrew Hackett (Citi EXT), and Hackworth, Peter [Sec Div] (Goldman Sachs EXT).  
**Rooms:** A list of rooms, with "Hackathon API support room" highlighted and enclosed in a blue box. This room has 11 members and was created by PF (Develop 2).  
The main pane shows the "Hackathon API support room" with 11 members. It displays a message from PF (Develop 2) welcoming people to the room and another message from PF (Develop 2) asking people to join the room for support. The interface includes a sidebar with filter lists for CHATS, SIGNALS, and APPLICATIONS, and a bottom input field for typing messages.

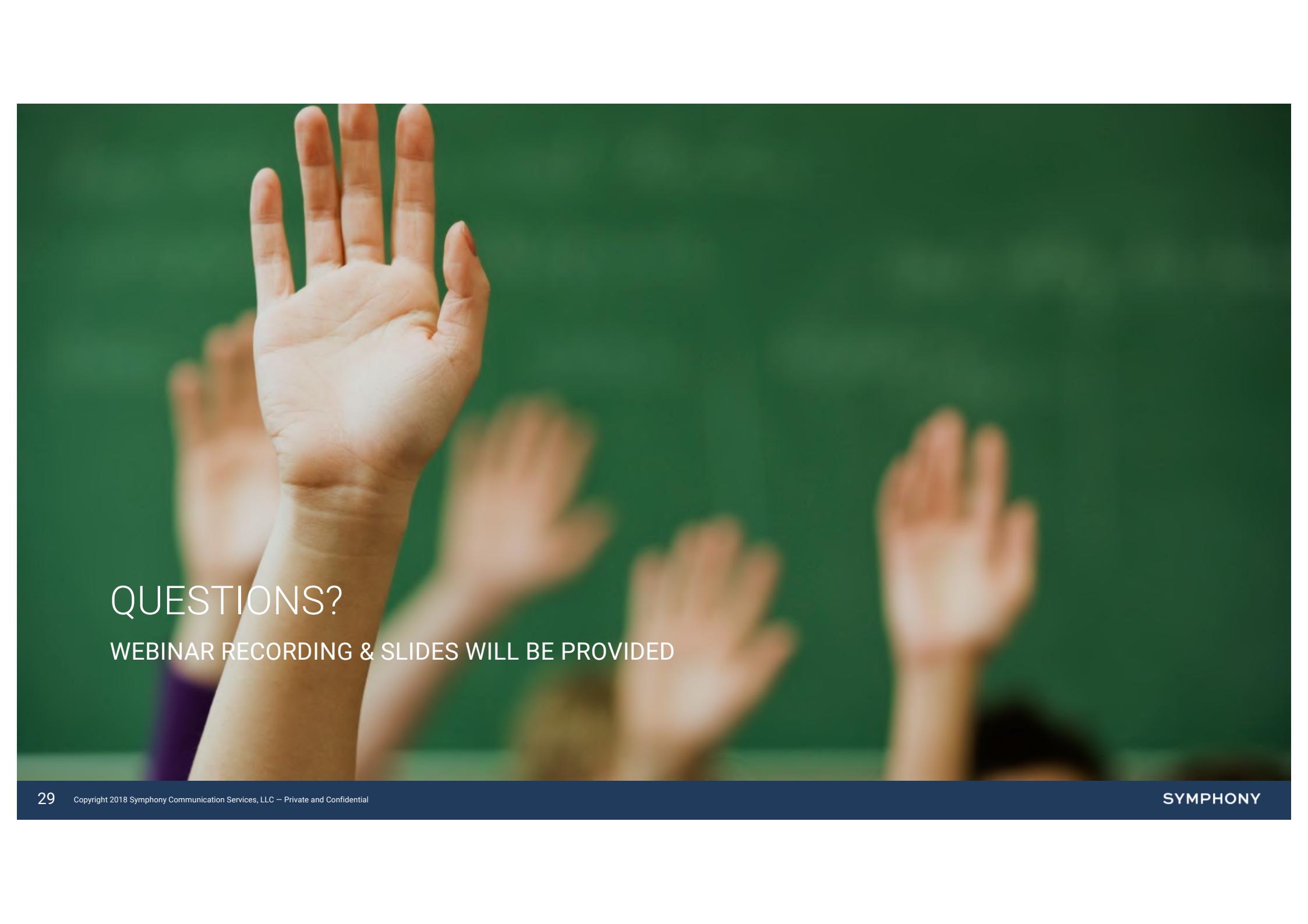
## I ADDITIONAL INFO

- Web RTC (audio/video/screensharing) has been enabled on the pod, so you can have remote team meetings too!
- You can also point the Android or iOS apps (free to download) to this pod
- Let us know if you would like also to use the new Electron Desktop client (MacOS, win 32, win64) - currently in BETA
- Otherwise you need chrome version 61 or above
- You have access to all APIs (REST, Extension, Integration, Embedded)

## I ADDITIONAL RESOURCES

- API docs: <https://developer-docs.symphony.com>
- Yaml: <https://github.com/symphonyoss/symphony-api-spec/tree/rc-current-r51>
- GitHub repos:
  - <https://github.com/symphonyoss> (python client and examples)
  - <https://github.com/symphonysa>
  - <https://github.com/symphonyplatformsolutions>
- SY clients (C#, Java, Node.js), bot generator, Getting Started: <https://symphony-developers.symphony.com/docs>
- How to test your MessageML and see it rendered in PresentationML or markdown (Mobile) without coding. Examples of complex formatting <https://renderer-tool.app.symphony.com/>

Note: This is a tool in beta, you may face a prompt about the certificate not trusted (make sure you enter https://) just go ahead and accept/trust the cert.
- Bot ideas/examples with demo & link to the repo: <https://workflow.symphony.com/#/>

A photograph showing several hands raised in the air, likely in a classroom or lecture hall setting. The hands are in sharp focus in the foreground, while others in the background are blurred.

QUESTIONS?

WEBINAR RECORDING & SLIDES WILL BE PROVIDED