

SYSPRO Bot

SYSPRO 8

Reference Guide

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SYSPRO Bot

Exploring

Where it fits in?

The **SYSPRO Bot** lets organizations expose certain SYSPRO business functions to their operators, customers and suppliers in an instant message/chat-like interface. This can either be through Bot channel contacts (e.g. Skype) or a simple web control on their website.

These business functions are exposed in natural conversations over everyday channels to which users already have access, letting them conveniently surface information and action functions normally performed in the SYSPRO core product, from anywhere, at any time.

The beneficial features of the **SYSPRO Bot** include:

Connecting People

The provision of digital citizens (Bots) across your organization, be they internal or supply chain focused, enable engaging connection points between stakeholders and the SYSPRO business solution.

Simplified Processes

With the application of Bots, you are now able to evaluate which of your repetitive processes can be 'trained' for the Bot to perform.

Constant Availability

The **SYSPRO Bot** is practically always available due to the Azure Bot framework's SLA of more than 99% uptime.

Natural Conversation Processing

The **SYSPRO Bot** uses natural language processing to create real-time conversations and information exchanges with users.

Improved Efficiencies

This emerging platform has unlimited potential for business applications, where it can include and analyze information from various sources to create efficiencies, improve processes and increase revenue, all with limited human intervention.

This results in being able to free up resources within your company to answer and even predict customer queries.

Extended Functionality

The **SYSPRO Bot** also allows custom skills to be acquired automatically, extending the Bot's functionality beyond the scope of ERP.

FOR EXAMPLE:

Custom skills such as leave applications can be handled by the **SYSPRO Bot**.

Proactive Messaging

The creation of rules via the **SYSPRO Bot** or **Rules Administrator** activates any of the trained skills which can trigger the Bot to initiate a conversation.

FOR EXAMPLE:

If you set a price alert on a stock code via the Bot, this creates a rule in the **SYSPRO Rules Engine**, which in turn initiates a Bot conversation when the alert is triggered.

Proactive messages are pushed to all signed in channels. Therefore if a user is signed in on both **Microsoft Teams** and **Skype**, they will receive the proactive message on both channels.

Development Expansion

The **SYSPRO Bot Software Development Kit** extends the **SYSPRO Bot** functionality beyond the standard skills provided by SYSPRO.

You can now easily create the functions (i.e. skills) that your organization requires without having to host a completely new bot.

These skills can then connect to SYSPRO business objects, external data sources and external applications.

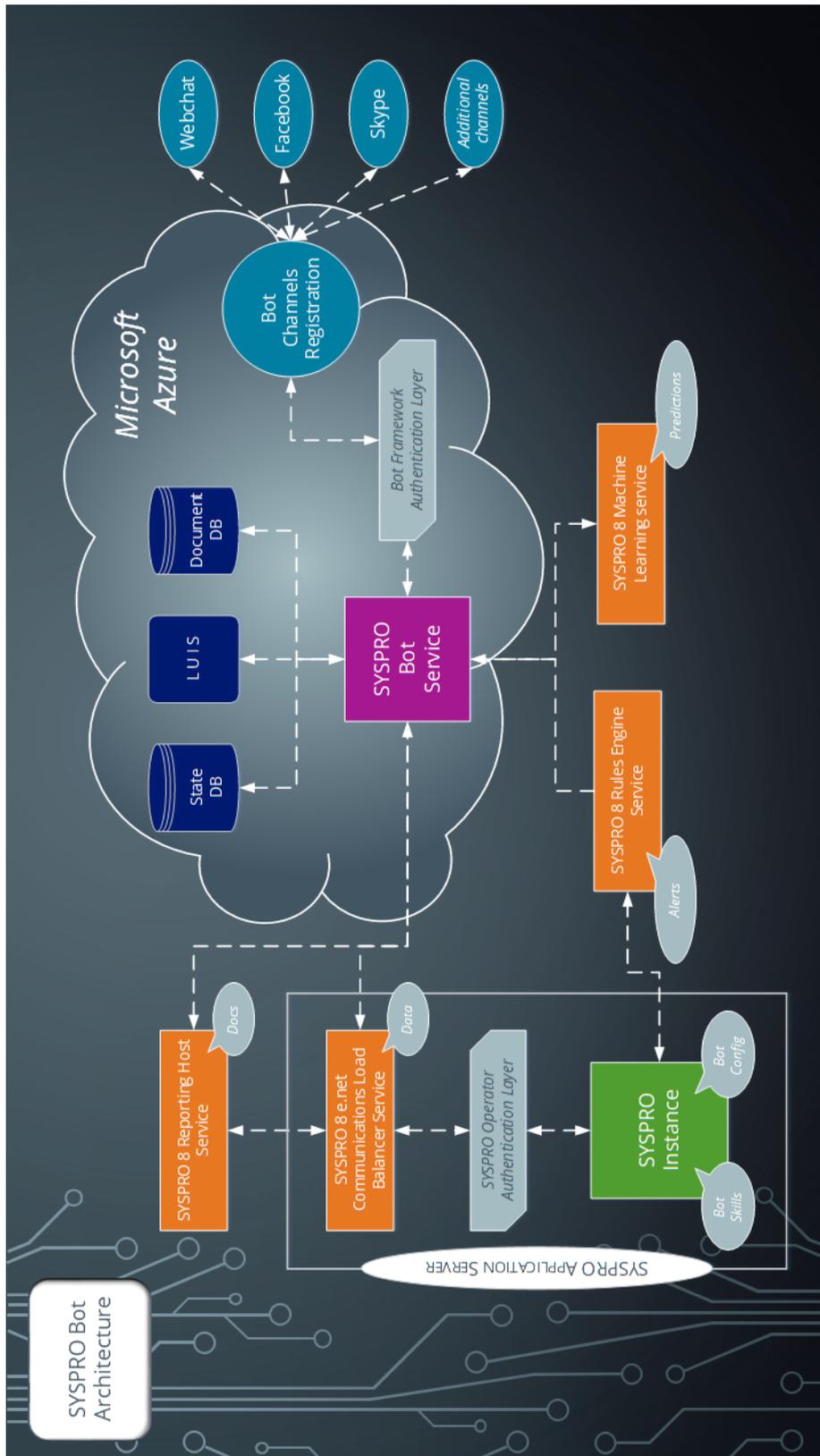
FOR EXAMPLE:

You can create a custom skill for employees to process their leave applications, which connects to your internal leave application system.



Resources will be made available on the **SYSPRO Learning Channel**.

SYSPRO Bot Architecture



Microsoft Azure

The **SYSPRO Bot** resources in **Microsoft Azure** include:

SYSPRO Bot Azure App Service

Acts as an IIS service and is the only **Microsoft Azure** resource in contact with the **SYSPRO 8 e.net Communications Load Balancer** service and **SYSPRO 8 Reporting Host Service**.

State Database

Stores the state of the conversation data.

LUIS

Language Understanding Intelligence Service (LUIS) interprets user phrases to analyze their intent.

Document Database

Contains documents to be accessed by users.

Bot Channel Registration

Handles all channel configurations and communication between the channel applications and the **SYSPRO Bot**.

FOR EXAMPLE:

A Skype message is sent to the **SYSPRO Bot** on a mobile device.

The message sends to the Skype server, and subsequently to the **SYSPRO Bot**, according to the channel configuration.

The **SYSPRO Bot** processes the message (using LUIS to understand the user's message intent).



This includes the Bot Framework Authentication to ensure that only configured channels can communicate with the **SYSPRO Bot Azure App Service**.

SYSPRO

SYSPRO Documents

Document requests, such as order acknowledgments or invoices, are communicated from the **SYSPRO Bot** directly to the **SYSPRO 8 Reporting Host Service**, using the SOAP port.



As this communication is coming from outside the App Server network, the SOAP ports need to be accessible from outside networks.

SYSPRO Data Communication

SYSPRO data requested by the **SYSPRO Bot** is communicated through the **SYSPRO 8 e.net Communications Load Balancer** service, using the SOAP port.



As this communication is coming from outside the App Server network, the SOAP ports need to be accessible from outside networks.

SYSPRO Instance

SYSPRO Bot settings that are configurable within the App Server include:

- Fixed menu
- Diagnostics
- Sign In page configuration
- Customization (menu options, menu layout and accessible skills)
- XML Inputs
- Email HTML templates
- Document formats

The **SYSPRO Bot** functions are stored on the App Server in the `..\Base\Bot\Skills` folder as `.dll` files. New and Custom skills can be added to this folder, and are then available within the **SYSPRO Bot** from the next new conversation.

Bot Alerts



This is only available from **SYSPRO 8 2019 R2**.

Rules that exist within the **SYSPRO Rules Engine** can trigger the **SYSPRO Bot** to start conversations. This can be via a message and even followed by an optional skill.

This is referred to as Proactive Messaging.

Bot Predictions



This is only available from **SYSPRO 8 2019 R2**.

Predictive functions (i.e. using the `Predictions` skill) are communicated directly between the **SYSPRO Bot** and the **SYSPRO 8 Machine Learning** service, as these access active AI Models.

Terminology

Anonymous user

A user that communicates with the **SYSPRO Bot** without signing in and being authenticated.

Azure Bot website

The Azure App service URL or endpoint where the **SYSPRO Bot** is hosted.

This address is provided by SYSPRO Cloud Services after the **SYSPRO Bot** cloud configuration is completed and must be configured in the **System Setup** program (**Artificial Intelligence** tab).

FOR EXAMPLE:

<https://sysproken.azurewebsites.net>

Blob

A Binary Large Object (BLOB) is a collection of binary data stored as a single entity in a database management system.

Blobs are typically images, audio or other multimedia objects, though sometimes binary executable code is stored as a blob.

Blob storage

This is a **Microsoft Azure** resource used by SYSPRO to store the binary data of PDF documents produced by **SYSPRO Reporting Services**. SYSPRO then provides the user with a direct link to that document.

This data is securely uploaded as binary, but easily retrieved by the accessing user utilizing the unique link provided in the reply message.

Bot

A bot (short for robot) is an automated program that runs over the Internet.

Some bots run automatically, while others only execute commands when they receive input. The **SYSPRO Bot** is the latter, as you need to sign in and enter a commonly-used phrase to start the conversation.

The **SYSPRO Bot** provides functionality over the SYSPRO ERP ecosystem. For the **SYSPRO Bot** to service user requests effectively, skills are used and are required to define specific pieces and areas of functionality.

Bot card

In certain instances the **SYSPRO Bot** responds to the user using predefined templates to provide the information in a certain format.

These templates are called cards and are part of the Microsoft Bot framework.

Bot channel

Users can communicate with the **SYSPRO Bot** via different client applications - also called channels (e.g. Skype, Webchat, Facebook).

Bot key

This is the field required by a Bot skill to perform its task or action. This can vary from 1 to many fields, depending on the task/action required by the Bot skill.

FOR EXAMPLE:

Posting a sales order with a quantity. The fields required by this skill are:

- Quantity
- Customer
- Stock code

Bot key field

These are the fields required to uniquely identify SYSPRO data entities and concepts. They are used by the **SYSPRO Bot** infrastructure to service user requests/interactions effectively.

FOR EXAMPLE:

The skill to provide a list of invoices requires a `Customer Code`. The Bot will ask the user for a customer and use the entered value to verify that a valid customer was entered.

Key fields utilize the defined search configuration to verify the validity of a phrase.



Search configuration is defined using the **Espresso Search Configuration** program.

Bot searches

This refers to the mechanism provided by the **SYSPRO Bot** framework to search for and find relevant information within the context of the current skill and conversation.

Bot searches assist in the selection of Bot key fields and will loop until a valid entry is entered, or until the conversation ends.

Bot skill

The **SYSPRO Bot** provides functionality over the SYSPRO ERP ecosystem. To service user requests effectively, skills are used by the **SYSPRO Bot** and are required to define specific pieces and areas of functionality.

A skill is an area of specific functionality provided for by the **SYSPRO Bot**.

FOR EXAMPLE:

- To query a customer, the **SYSPRO Bot** uses the `Customer.Query` skill.
- When the **SYSPRO Bot** is asked by the user to view a specific invoice, the SYSPRO Bot uses the `Invoice.ViewInvoice` skill.

Linguistics

The language structure, grammar and phonetics used by the **SYSPRO Bot** to interact with users.

The configurable linguistics architecture of the **SYSPRO Bot** allows for the random selection of multiple phrases.

Microsoft Azure

Microsoft Azure is a cloud computing service created by **Microsoft** to build, test, deploy, and manage applications and services through Microsoft-managed data centers.

It caters for:

- Software as a service (SaaS)
- Platform as a service (PaaS)
- Infrastructure as a service (IaaS)

In addition, **Microsoft Azure** supports different programming languages, tools and frameworks (including **Microsoft**-specific and third-party software and systems).

Utterance

When the user interacts with the **SYSPRO Bot**, they use phrases and sentences to indicate what action is required.

These sentences or phrases are called utterances.

XML input(s)

Applicable to SYSPRO business objects that require input options via a predefined XML structure.

Input options are specified using the relevant predefined XML structure associated with the business object. The values for the XML can be configured per business object based on user requirements.

Web chat

The web chat is a stock-standard chat interface that can be hosted on a website.

A web chat can be a web control, but not all web controls are necessarily web chats. The web chat is a form of interacting with the Bot (i.e. a channel).

Web control

A technical reference for functionality that can be hosted within a web browser.

Starting

Licensing

To use this feature, the following module(s) must be installed according to the terms of your software license agreement:

- e.net System Manager
- SYSPRO Ken the BOT

Prerequisites

Technology

The following technology prerequisites are applicable to using this feature:

- **SYSPRO 8 Bot Service**
- **SYSPRO 8 e.net Communications Load Balancer service**

The **SYSPRO Bot** requires access to this service's SOAP port (i.e. Net.TCP) in order to pick up the Bot skills and authenticate its conversations. Therefore, a valid endpoint must be configured in the **System Setup** program.



This requires exceptions in the App Server's firewall, as well as exceptions and routing information in the Company's DNS configuration.

- **SYSPRO 8 Reporting Host Service**

This is used by the **SYSPRO Bot** for document functions, therefore the service needs to be externally accessible.



This requires exceptions in the App Server's firewall, as well as exceptions and routing information in the Company's DNS configuration.

- **SYSPRO 8 Machine Learning service**

This *optional* prerequisite is used by the **SYSPRO Bot** for predictive functions as it accesses any active AI Models you have, therefore it is only required if you intend on using the **Predictions** skill.



This requires exceptions in the App Server's firewall, as well as exceptions and routing information in the Company's DNS configuration.

- **SYSPRO 8 Rules Data Service** and **SYSPRO 8 Rules Engine Service**

These *optional* prerequisites are used by the **SYSPRO Bot** for alert functions, therefore they are only required if you intend on using any of the alert skills (e.g. `Set Price Alert`, `My Alerts`, `Enable Alert Rule`, `Disable Alert Rule`, `Delete Alert Rule`).

Configuring

The following setup options must be configured to use this feature:

Setup Options

Artificial Intelligence

Setup Options > System Setup > Artificial Intelligence

- Bot
 - Azure Bot website
 - Fixed menu
 - Diagnostics
- Bot sign-in screen
 - Header image
 - Organization name
 - Organization website

Email/SMTP settings

Setup Options > Company > General



SMTP settings are required for the **SYSPRO Bot** to perform email functions.

- Method when emailing
- SMTP server IP address
- Outgoing email address
- Username
- Password
- Server port
- Use SSL

Reporting

Setup Options > System Setup > Reporting



Server-side Printing is required for the **SYSPRO Bot** to access documents.

- Reporting configuration

This must be defined as **Server-side reporting using SQL**.

- Reporting service

This must be configured correctly with an external facing endpoint.

Deploying

As the **SYSPRO Bot** makes use of **SYSPRO Cloud Services**, there are certain processes that need to take place in order to gain access to this feature:

1. Deployment
2. Configuration

SYSPRO Cloud Services Deployment

In order to attain a **SYSPRO Bot** Server, you first need to request a quote from **SYSPRO Cloud Services**.

After you accept the quote, you are requested to provide the following:

- Which channel(s) you require.
- The name and description of your Bot.
- An icon image for your Bot.



Only .png files are accepted, with a maximum size of 30kb.

- The SOAP port (i.e. endpoint) for your **SYSPRO 8 e.net Communications Load Balancer**.
- The `BaseDir` entry for the Bot to connect to.

Once this has been completed, **SYSPRO Cloud Services** then proceeds with the following actions:

- Deployment of the **SYSPRO Bot** Server to **Microsoft Azure**, with all the relevant resources.
- Configuration of your requested channels.
- Connection between the **SYSPRO Bot** Server and your exposed **SYSPRO 8 e.net Communications Load Balancer** endpoint.

Once this has been configured, **SYSPRO Cloud Services** will provide you with an Azure web address that lets SYSPRO know where the Bot is, as well as your chosen Bot channel contact URLs.

SYSPRO Bot Configuration

Most of the Bot Server and channel configuration is handled by **SYSPRO Cloud Services**. However, after the initial configuration is complete, the following steps are required to deploy the **SYSPRO Bot** at your company:

1. Capture the Azure web address (provided by **SYSPRO Cloud Services**) in the **AZURE BOT WEBSITE** field of the **Setup Options** program (*Setup Options > System Setup > Artificial Intelligence*).
2. You can further define the following customization for the **SYSPRO Bot**, if required:
 - Fixed menu
 - Diagnostics
 - Header image
 - Organization name
 - Organization website
3. Ensure that your **REPORTING CONFIGURATION** is defined as **Server-side reporting using SQL** in the **Reporting** tab of the **Setup Options** program.
4. Ensure that your **EMAIL/SMTP SETTINGS** are configured correctly (*Setup Options > Company > General*).
5. Add the web control (e.g. web chat) to your company website.

Or

Add the Bot as a contact in your required channel.

Restrictions and Limits

- **Multi-Factor Authentication** and **Single Sign-on** are not supported for the **SYSPRO Bot**.
- Only posting of automatic numbering keys is currently supported, however you can customize this in **Microsoft SQL Server** to allow for manual numbering.
- The **SYSPRO Bot** does not perform validation on non-SYSPRO key fields (i.e. price).
- Alpha-numeric values are not supported as the **SYSPRO Bot** only recognizes numeric values (i.e. 10 and not "ten").
- Currently, the **SYSPRO Bot** is only available in English.

Solving

System messages

Please just give me a second to get everything ready 😊

The Bot is refreshing the skills list.

Sorry, you have not been given access to skill: xxxx...

The user's operator does not have access for the requested skill.

Error: Unable to connect to the remote server

The **SYSPRO 8 e.net Communications Load Balancer** service is out of reach.

This could be due to the service or the App Server's firewall not running currently.

Oops! Something went wrong 😞 Technical Details: ...

This error occurs during a skill request. The skill failed to complete, but the conversation can continue.

Couldn't send. Retry

This is a mandatory time-out. The **SYSPRO Bot** might still be processing your previous request and will reply shortly.

Error: You are not licensed to use SYSPRO Ken the Bot

This error occurs if you attempt to use SYSPRO Ken the BOT without having the appropriate licensing in place.

To use this feature, the following module(s) must be installed according to the terms of your software license agreement:

- e.net System Manager
- SYSPRO Ken the BOT

FAQs

Interacting with the Bot

How do I cancel or exit a search?

At any time, you can send `Exit` and the **SYSPRO Bot** will end the conversation.

The next conversation will begin fresh.

How do I add the SYSPRO Bot to my website?

After deployment, **SYSPRO Cloud Services** will provide you with a Web Control embedded code.

This is a snippet of HTML code that you can inject anywhere on your website, in an appropriate location.

How do I use the SYSPRO Bot when using client-side reporting?

When using client-side reporting you are able to use most of the **SYSPRO Bot** functions, however printing documents is not available due to the fact that access to the **SYSPRO 8 Reporting Host Service** is required.

Customizing the Bot

How can I create my own skills or cards?

From **SYSPRO 8 2020 R1**, the **SYSPRO Bot Software Development Kit** extends the **SYSPRO Bot** functionality beyond the standard skills provided by SYSPRO.

You can now easily create the functions (i.e. skills) that your organization requires without having to host a completely new bot.

These skills can then connect to SYSPRO business objects, external data sources and external applications.

FOR EXAMPLE:

You can create a custom skill for employees to process their leave applications, which connects to your internal leave application system.



Resources will be made available on the **SYSPRO Learning Channel**.

How do I configure additional channels?

Please contact **SYSPRO Cloud Services** for a quote.

How do I configure document format settings for the SYSPRO Bot?

You can define the **SYSPRO Bot** format settings for the following document types:

- Order Acknowledgments
- Delivery notes
- Invoices
- Quotes
- Purchase Orders

From **SYSPRO 8 2020 R1**, you can define these formats using the **Espresso Custom Configuration** program (against the `SYSPROBotDocumentFormatOptionsParameter` entry located under the **XML Parameters** folder for default SYSPRO XML parameters).

These formats are configurable system-wide, by company, by role or by operator.



Prior to **SYSPRO 8 2020 R1**, you define these formats using the **System Setup** program (against the **BOT DOCUMENT FORMATS** located under the **Artificial Intelligence** tab).

How do I customize SYSPRO Bot skill access for roles and operators?

You can configure the **SYSPRO Bot** skills available (as well as the function buttons associated with each skill) at role or operator level using the **SYSPRO Bot Customization** program:

1. Open the **SYSPRO Bot Customization** program in **SYSPRO Avanti**.
2. Select the role or operator that you want to customize from the **Configuration Level** pane.
3. Indicate the **Access Level** required for the selected role or operator.
Select **List** to configure access against individual skills.
4. Within the **Allowed** column of the **Available Skills** pane, indicate which skills or function buttons the selected role or operator can access.
5. Save your configuration.

How do I customize SYSPRO Bot menu items for roles and operators?

You can customize the skills available on the **SYSPRO Bot** main menu for specific roles or operators using the **SYSPRO Bot Customization** program:

1. Open the **SYSPRO Bot Customization** program in **SYSPRO Avanti**.
2. Select the role or operator that you want to customize from the **Configuration Level** pane.
3. Indicate the **Access Level** required for the selected role or operator.
Select **List** to configure access against individual skills.
4. Within the **Main Menu** column of the **Available Skills** pane, indicate which skills must appear on the **SYSPRO Bot** main menu for the selected role or operator.



The **Main Menu** selection only applies to allowed skills.

5. Save your configuration.

How do I configure quote targets for the SYSPRO Bot?

You can select any of the following targets that the **SYSPRO Bot** must use when a user requests a quote:

- Customer
This target type enables users to enter the customer code or search for an existing customer, when requesting a quote.
- Contact
This target type enables users to enter the contact code or search for an existing contact, when requesting a quote.
- Prospect
This target type enables users to enter any name against the quote.

You can configure these using the **Espresso Custom Configuration** program (against the `SYSPROBotQuoteOptionsParameter` entry located under the **XML Parameters** folder for the default SYSPRO XML parameters).

These formats are configurable system-wide, by company, by role or by operator.

In addition, the `ShowLimitWarning` option lets you indicate whether the customer's minimum order value must also be displayed by the **SYSPRO Bot** when users request a quote for an existing customer. When enabled, the **SYSPRO Bot** displays a warning during quote entry indicating the customer's **Minimum order value** as defined in the **Customers** program.

How do I conduct additional LUIS training?

Additional training on the **SYSPRO Bot** language understanding is available from <http://www.luis.ai>, for contributor accounts added by SYSPRO Cloud Services.

Training options available include:

- Add new Intents
This is useful for custom developed skills or for linking to untrained SYSPRO skills.
- Add new Entities
These are the keyfields that the custom or SYSPRO skill requires.
- Add new Utterances
These are example phrases that users will send to the SYSPRO Bot requesting a skill to be executed.

After adding any new training data in the LUIS portal, you need to train the LUIS model with these new aspects:

1. From the LUIS portal, select the **Train** button from the **BUILD** menu to train the updated model:

Language Understanding My apps Docs Pricing Support About

SYSPROBot (v 8.0.0.0) DASHBOARD BUILD MANAGE Train Test Publish

App Assets

- Intents
- Entities

Improve app performance

- Review endpoint utterances
- Phrase lists
- Patterns

PREVIEW
Prebuilt Domains

Intents ?

+ Create new intent + Add prebuilt intent Search intents

<input type="checkbox"/> Name ^	Labeled Utterances
Customer.QuerySkill	26
Generic.FetchSkill	35
Invoice.ViewInvoice	6
Invoice.ViewInvoices	9
Job.CreateJob	13
Job.CreateNSJob	5
Job.QueryJob	6
None	2
Pricing.QueryPrice	9
Quotes.CreateQuote	8

2. Select the **Publish** button from the **PUBLISH** screen to publish the updated model:

Language Understanding My apps Docs Pricing Support About

SYSPROBot (v 8.0.0.0) DASHBOARD BUILD PUBLISH SETTINGS Train Test

Publish app ?

Select slot

Production

Published version: 0.1
Published date: Aug 30, 2018, 11:36:37 AM (Approximately 15 days(s) ago)

External services settings

- Enable Sentiment Analysis ?
- Enable Speech Priming ?

Using Security

All operators have access to the **SYSPRO Bot**, however, using skills you can define what access an operator is allowed when interacting with the Bot.

If no security configuration is defined, then access is denied for all skills other than the `Sign In` Skill.

The levels of security that apply are:

- 0 SYSPRO (i.e. shipped out with the release)
- 1 SYSTEM (i.e. system-wide)
- 2 Company (e.g. `EDU1`)
- 3 Role (e.g. `001`)
- 4 Operator (e.g. `ALAN`)

User Authentication

Bot users require their SYSPRO Operator code to sign in and authenticate themselves, and once verified an entry is added to the `BotOperatorMapping` table within your system-wide database.

This authentication is per user, per channel and users remain authenticated on the channel until they either sign out or manually get removed from the `BotOperatorMapping` table.



Users can remain authenticated on different channels at the same time.

If an authenticated user returns to a conversation after a long period of inactivity, the bot will welcome him with his SYSPRO Operator name and state which company he is logged in as.

This period is dependent on how busy the Bot has been and if the **Microsoft Azure** service has been defined as `Always on`.

FOR EXAMPLE:



SYSPRO Ken, 11:04 AM

Welcome back Alpha Industries You are currently logged into company EDU1

Authenticated Users

- The respective operator's functional role applies.
- The operator's business object access security applies.
- If the user is recognized by the **SYSPRO Bot** as a `Customer` or `Supplier`, then these related fields within the Bot are set as that customer or supplier code as defined in the **Operator Maintenance** program of SYSPRO.

These keys can't be overridden and will remain in context.

Unauthenticated Users

- An unauthenticated user (also known as an anonymous user) is able to view some, but not all of the **SYSPRO Bot** features.
- Unauthenticated users use the `_ _BOT` security which includes program access for business object calls.
- The `_ _BOT` entry in the system-wide **BotCustomization** table will be used to specify which skills this user has access to.

User Access

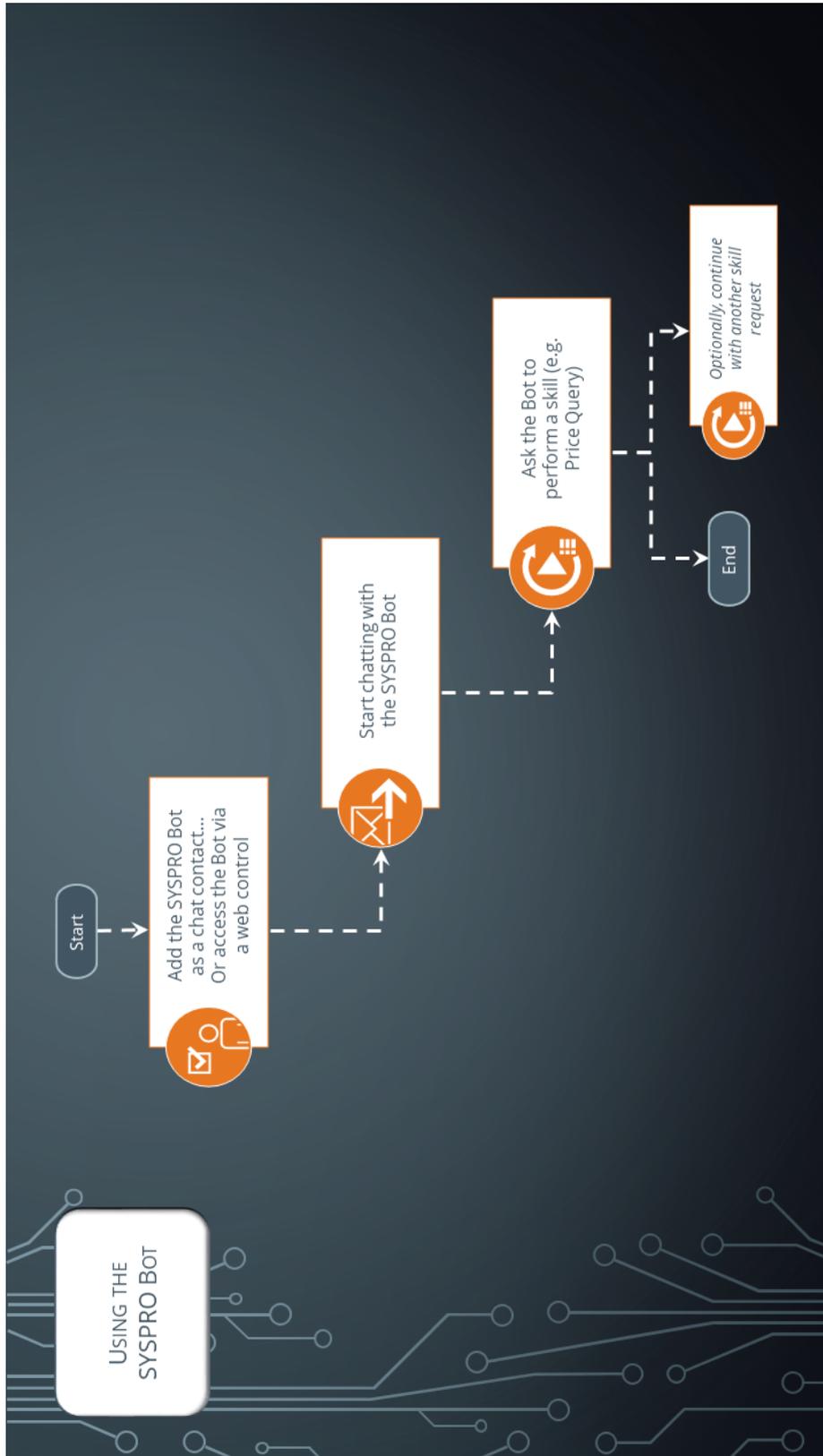
You can configure role or operator permissions and access using the **SYSPRO Bot Customization** program.



If you want to have a base control for all authenticated users and what they can access, then from a system-wide perspective you would add the customization for `Level 1 - SYSTEM`.



Process



Using the SYSPRO Bot

The following steps detail how to start using the **SYSPRO Bot**:

1. Add the **SYSPRO Bot** as a contact on your selected channel, or use the Web control.
2. Start a conversation with a greeting (e.g. 'hi').
 - The **SYSPRO Bot** will respond with either a menu listing or an open ended question (depending on your company's configuration preferences in SYSPRO).
3. Request a skill (e.g. 'Create sales order')
 - If the skill requires any unknown keys, it will ask you to enter these or select a value, and then continue to the next key.
 - Once all the keys has been acquired, the **SYSPRO Bot** will process the requested skill and provide an output.
 - If the skill fails, the Bot will advise you and provide an error description.

After a skill completes, the **SYSPRO Bot** is ready for the next skill to be requested.

If the next skill requires some of the same keys, they will be remembered. Any additional keys will be asked for in sequence and extra keys from the previous skill will be discarded. However, if the same skill is being called again, all keys are discarded.

Customization

Customization at the most granular (i.e. lowest) level supersedes all other customization.

FOR EXAMPLE:

Operator ALAN is given access to skills 1 and 5. However, system level access is granted to skills 1, 2 and 5.

Operator ALAN only has access to skills 1 and 5.

Sign In Page

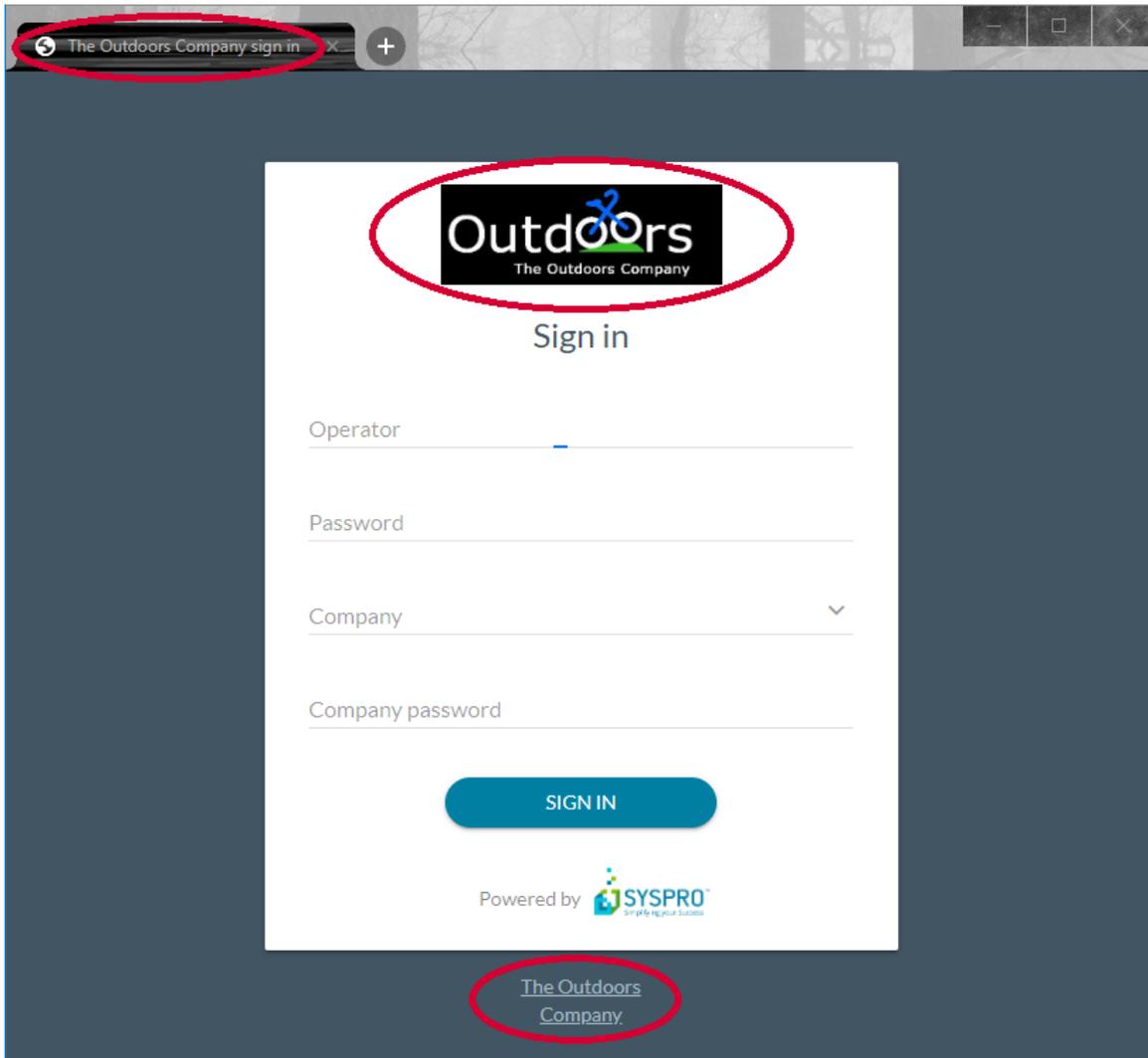
Each organization has their own instance of the **SYSPRO Bot** (i.e. their own sign in page). Therefore, the sign In page is both secure and brandable, as the following aspects are customizable:

- Header Image
- Organization Name
- Organization Website



This customization is possible from SYSPRO's **Setup Options** program at the **BOT SIGN-IN SCREEN** options within the **Artificial Intelligence** tab.

The following example depicts a typical sign in page, highlighting the areas where this customization reflects:



Bot Menu

The **SYSPRO Bot** menu can be customized in the **SYSPRO Bot Customization** program by the relevant level ID or to access particular skills.

Security types available when customizing access:

- **A** - All (i.e. access allowed for all skills)
- **N** - None (i.e. access denied for all skills)
- **L** - List (i.e. specified list of skills allowed)

Document Formats

The **SYSPRO Bot** can use its own document formats that are setup and created in the same manner in which other SRS report templates are created. These document formats can be applied against the source documents that are attached to the emails.

You can define the **SYSPRO Bot** format settings for the following document types:

- Order Acknowledgments
- Delivery notes
- Invoices
- Quotes
- Purchase Orders

From **SYSPRO 8 2020 R1**, you can define these formats using the **Espresso Custom Configuration** program (against the `SYSPROBotDocumentFormatOptionsParameter` entry located under the **XML Parameters** folder for default SYSPRO XML parameters).

These formats are configurable system-wide, by company, by role or by operator.



Prior to **SYSPRO 8 2020 R1**, you define these formats using the **System Setup** program (against the **BOT DOCUMENT FORMATS** located under the **Artificial Intelligence** tab).

If you indicate that the **Blob Storage Azure** option must be enabled when your Bot is configured by **SYSPRO Cloud Services**, the documents are then stored in **Microsoft Azure** blob storage. This allows the URL to your document to remain valid for longer, compared to the standard memory storage.

Emailing

The **SYSPRO Bot** uses SYSPRO's **EMAIL/SMTP SETTINGS** to email documents.

You can customize your HTML emailing template using **Microsoft SQL Server** and the customization can then be saved at system, company, role or operator level.



This customization is done on your system-wide database in the **EspDataStore** table, with the `StoreName` key defined as `SYSPROBotDocumentEmail`.

The key contains the following placeholders:

- {DocumentType}
- {DocumentNumber}
- {BotName}
- {CompanyImage}

The placeholders will then be populated with information based on the values. However, you can amend the email template that is sent out entirely.

Sample code

The following sample code provides an example of this type of customization:



This example shows customization that is only available from **SYSPRO 8 2019 R2**, due to it containing the `{BotService}` place holder.

```
<html>
<head>
  <META content="text/html; charset=windows-1252" http-equiv=Content-Type>
  <META name=GENERATOR content="MSHTML 8.00.7600.16490">
</head>
<body bgColor=white style="font-family: Arial Medium;">
  <div align="center">
    

  <table style="border: thin;" border="5" width="802">
    <tbody>
      <tr>
        <td align="left" style="padding-left: 70;">
          <p style="margin-top: 17px;"><span style="color: #425563; font-size: 16pt;text-align: left"><strong>Here's your new document:</strong></span>&nbsp;</p>
          <p style="margin-top: -10px; margin-bottom: 0px;">&nbsp;</p>
          <p style="margin-top: -10px; text-align: left;"><span style="color: #425563; font-size: 15pt;"><strong>{DocumentType}</strong><em> {DocumentNumber}</em></span>&nbsp;</p>
          <p>&nbsp;</p>
          <p style="text-align: left;margin-bottom: 0px;"><span style="color: #425563; font-size: 12pt;">Kind regards</span></p>
          <p style="text-align: left; margin-top: 0px;"><span style="color: #425563; font-size: 12pt;">{BotName}</span>&nbsp;</p>
          <p style="text-align: left;"></p>
          <p style="text-align: left;">&nbsp;</p>
        </td>
      </tr>
    </tbody>
  </table>

```

```

        </tr>
    </tbody>
</table>

</div>
</body>
</html>

```

Linguistics

The **SYSPRO Bot** contains phrases, which are customizable in **Microsoft SQL Server**.

Customization available:

- Edit existing phrases
- Remove existing phrases
- Add new phrases



This customization is done on your system-wide database in the **HrmLinguistics** table.

The standard phrases shipped with the **SYSPRO Bot** feature include the following:

Area	Existing Phrases
AnythingElse	<ul style="list-style-type: none"> ■ I hope you found this helpful... Anything else I can assist you with? ■ You're all set! Is there anything else I can help you with right now? ■ I hope that helped! What else can I assist you with? ■ Was this helpful or is there something else I can assist with?
MenuTitle	<ul style="list-style-type: none"> ■ Please see if any of these options match your requirements. ■ Which area do you need assistance in? ■ How can I assist?

Area	Existing Phrases
MessageOptions	<ul style="list-style-type: none"> ■ How can I help you today? If you're unsure of my capabilities, please type "menu" to see a list of options available. ■ I can assist you with various different tasks... For a list of all options, please type "options". ■ How can I help? For a list of options I can assist with, please type "options". ■ I'm here to help! If you are unsure of what to ask, type "menu" for a list of options I can assist with.
SearchPrompt	<ul style="list-style-type: none"> ■ Please advise the {0}? ■ Please supply the {0}? ■ Sure thing, what is the {0}? ■ I'll get right on that, please just advise the {0}? ■ What is the {0} you would like me to query? ■ No problem, just need the {0} please? ■ What is the {0}? ■ I'll need the {0} please.
FailedAnythingElse	<ul style="list-style-type: none"> ■ Sorry about that inconvenience... Anything else I can assist you with? ■ Is there something else I can assist with? ■ Is there anything else I can help you with right now? ■ What else can I assist you with?



There must always be at least 1 phrase per area.

Configurable XML

When the **SYSPRO Bot** asks you to input information, it only asks you for "key" information that is required to action a specific task.

FOR EXAMPLE:

When you ask the Bot to create a sales order.

However, as part of creating a sales order there may be additional information and values that you want to add as a standard, such as `Salesperson`. This is achievable by configuring XML inputs or parameters.



XML Parameters are customizable using SYSPRO's **Espresso Custom Configuration** program.

XML Input blobs are customizable using **Microsoft SQL Server**, from your system-wide database in the `EspDataStore` table.

Configurable XML Inputs:

- APSQRY XMLIn
- ARSQRY XMLIn
- CSHQRY XMLIn
- INVQPL XMLIn
- PORQ91 XMLIn
- PORTOI XMLIn
- QOTQRY XMLIn
- QOTSNS XMLIn
- QOTTQC XMLIn
- QOTTQI Add NonStocked XMLIn
- QOTTQI Add XMLIn
- QOTTQI Cancel XMLIn
- QOTTQI NonStocked XMLIn
- QOTTQI XMLIn
- RMATRH XMLIn
- RMATRL XMLIn
- SORQID XMLIn
- SORQPL XMLIn
- SORQRY XMLIn
- SORTOI Change XMLIn
- SORTOI XMLIn
- SORTOS XMLIn
- WIPQJS XMLIn
- WIPTJB NonStk XMLIn
- WIPTJB XMLIn

Configurable XML Parameters:

- PORTOI Parameter
- QOTSNS Parameter
- QOTTQC Parameter
- QOTTQI Add Parameter
- QOTTQI Cancel Parameter
- QOTTQI Parameter
- RMATRH Parameter
- RMATRL Parameter
- SORTOI Parameter
- SORTOS Parameter
- WIPTJB Parameter

Sample code

The following sample code provides an example of this type of customization, where the user will be prompted to enter the Customer PO number:

```
<SalesOrders>
  <Orders>
    <OrderHeader>
      <CustomerPoNumber>{Ask}</CustomerPoNumber>
      <OrderActionType>A</OrderActionType>
      <Customer>000010</Customer>
      <OrderDate>2006-11-04</OrderDate>
    </OrderHeader>
    <OrderDetails>
      <StockLine>
        <LineActionType>A</LineActionType>
        <StockCode>B100</StockCode>
        <OrderQty>5</OrderQty>
        <OrderUom>EA</OrderUom>
      </StockLine>
      <CommentLine>
        <LineActionType>A</LineActionType>
        <Comment>Added by Bot, please review</Comment>
        <AttachedLineNumber>1</AttachedLineNumber>
        <CommentType />
      </CommentLine>
    </OrderDetails>
  </Orders>
</SalesOrders>
```

Searches

The **SYSPRO Bot** search functionality uses the same configuration as SYSPRO's **Predictive Search**, unless it is customized to search on additional columns within a table or linked tables.



This customization is possible from SYSPRO's **Espresso Search Configuration** program.

Regardless of the configuration, the first 3 unique columns returned are displayed in the search results carousel.

If only one result is being returned by the search, then that key value will be selected and the search will exit.

When searching for a particular key field, you can either enter the key field's description, or type '*' to return the first 5 related records.

Hints and Tips

- Allowing the **SYSPRO Bot** to complete its current process before sending a new message assists in better performance.
- Sometimes the first message, after a period of time, can take a few seconds to process. This is most likely the Azure App Server starting up.
- When searching for a particular key field, typing '*' returns the first 5 records.
- If you get stuck in a search loop or want to cancel a skill while in a search, you can end the conversation at anytime, by entering `Exit` and the Bot will end the conversation.

Affected Programs

The following indicates areas in the product that may be affected by implementing this feature:

SYSPRO Bot Customization

This program lets you modify various permission aspects of the **SYSPRO Bot**.

Things you can do in this program include:

- Configure the SYSPRO Bot skills available at role or operator level
- Customize the action buttons associated with each SYSPRO Bot skill
- Customize the skills available on the SYSPRO Bot main menu for specific roles or operators



This program is accessed from the **Bot Role Customization** section of the **SYSPRO Avanti** program menu.

Referencing

Bot Channels

The following channels can be used to communicate with the **SYSPRO Bot**:

- **Web Chat**
- **Facebook Messenger**
- **Skype**
- **Microsoft Teams**
- **Skype for Business**
- **Telegram**
- **Kik**
- **GroupMe**

The user interface of each channel is noticeably different and the setup of these channels are controlled by **SYSPRO Cloud Services**, but some would require additional configuration from your side.

FOR EXAMPLE:

The **Facebook Messenger** channel requires configuration from the **SYSPRO Cloud Services** and from the customer's **Facebook** account, as both configurations require keys generated from the other configuration.

After channels are configured, you are supplied with a contact URL to add the Bot as a contact.

The following information can assist you in determining which channel(s) your company would or could make use of:

Web Chat



Additional Information: <https://docs.microsoft.com/en-us/azure/bot-service/bot-service-channel-connect-webchat?view=azure-bot-service-4.0>

Requirements	Checklist	Customer Requirements
N/A	<ul style="list-style-type: none"> ■ Bot Name ■ Bot Profile Picture ■ Bot Description ■ Requires web page for deployment ■ Requires minimal web development 	<ul style="list-style-type: none"> ■ Web browser ■ Access to page where web chat is hosted (could be public)

Facebook Messenger



Additional Information: <https://docs.microsoft.com/en-us/azure/bot-service/bot-service-channel-connect-facebook?view=azure-bot-service-4.0>

Requirements	Checklist	Customer Requirements
<ul style="list-style-type: none"> ■ Facebook page ■ Admin rights to Facebook page ■ Lengthy setup process by the page's admin 	<ul style="list-style-type: none"> ■ Bot Name ■ Bot Profile Picture ■ Bot Description ■ Facebook page ■ Admin account for Facebook page 	<ul style="list-style-type: none"> ■ Facebook account ■ Facebook Messenger app or web browser

Skype



Additional Information: <https://docs.microsoft.com/en-us/azure/bot-service/bot-service-channel-connect-skype?view=azure-bot-service-4.0>

Requirements	Checklist	Customer Requirements
N/A	<ul style="list-style-type: none"> ■ Bot Name ■ Bot Profile Picture ■ Bot Description ■ Requires contact to be supplied to customers 	<ul style="list-style-type: none"> ■ Skype Client App (Desktop, Mobile, etc.)

Microsoft Teams



Additional Information: <https://docs.microsoft.com/en-us/azure/bot-service/channel-connect-teams?view=azure-bot-service-4.0>

Requirements	Checklist	Customer Requirements
N/A	<ul style="list-style-type: none"> ■ Bot Name ■ Bot Profile Picture ■ Bot Description 	<ul style="list-style-type: none"> ■ Microsoft Teams App ■ Microsoft Teams accounts ■ Tenant-wide setting in Teams to allow sideload apps into Teams

Skype for Business



Additional Information: <https://docs.microsoft.com/en-us/azure/bot-service/bot-service-channel-connect-skypeforbusiness?view=azure-bot-service-4.0>

Requirements	Checklist	Customer Requirements
<ul style="list-style-type: none"> Skype for Business Online or Skype for Business Hybrid environment Skype for Business Online Connector Module Domain User account for the Bot Configuration conducted by Tenant Administrator of Skype for Business Online environment 	<ul style="list-style-type: none"> Bot Name Bot Profile Picture Bot Description Skype for Business Online Domain accounts Tenant Administrator 	<ul style="list-style-type: none"> Skype for Business App Access to Bot user account

Telegram



Additional Information: <https://docs.microsoft.com/en-us/azure/bot-service/bot-service-channel-connect-telegram?view=azure-bot-service-4.0>

Requirements	Checklist	Customer Requirements
<ul style="list-style-type: none"> Telegram account created for the Bot 	<ul style="list-style-type: none"> Bot Name Bot Profile Picture Bot Description Telegram account 	<ul style="list-style-type: none"> Telegram app

Kik



Additional Information: <https://docs.microsoft.com/en-us/azure/bot-service/bot-service-channel-connect-kik?view=azure-bot-service-4.0>

Requirements	Checklist	Customer Requirements
<ul style="list-style-type: none"> ■ Kik account created for the Bot ■ Kik mobile app 	<ul style="list-style-type: none"> ■ Bot Name ■ Bot Profile Picture ■ Bot Description ■ Kik account ■ Kik mobile app 	<ul style="list-style-type: none"> ■ Kik mobile app

GroupMe



Additional Information: <https://docs.microsoft.com/en-us/azure/bot-service/bot-service-channel-connect-groupme?view=azure-bot-service-4.0>

Requirements	Checklist	Customer Requirements
<ul style="list-style-type: none"> ■ GroupMe account created for the Bot 	<ul style="list-style-type: none"> ■ Bot Name ■ Bot Profile Picture ■ Bot Description ■ GroupMe account 	<ul style="list-style-type: none"> ■ G5roupMe account

SYSPRO Bot Components

Skills

The following table indicates all available skills, as well as the key fields required by the **SYSPRO Bot** to execute each skill.



The **Main Menu** column indicates whether or not the skill is included in the Main Menu by default (i.e. **N** indicates that the skill is not included by default).

Skill	Key Fields	Main Menu
Email Document (Admin.EmailDocument)	<ul style="list-style-type: none"> ■ DocumentNumber ■ DocumentType ■ DocumentUrl ■ EmailAddress 	N
Administration Menu (Admin.Menu)	None	Y
My Details (Admin.MyDetails)	None	N
Sign In (Admin.SignIn)	None	Y
Sign Out (Admin.SignOut)	None	N
Delete Alert Rule (Alert.DeleteRule)	<ul style="list-style-type: none"> ■ LevelId ■ LevelValue ■ RuleId 	N
Disable Alert Rule (Alert.DisableRule)	<ul style="list-style-type: none"> ■ LevelId ■ LevelValue ■ RuleId 	N
Enable Alert Rule (Alert.EnableRule)	<ul style="list-style-type: none"> ■ LevelId ■ LevelValue ■ RuleId 	N
Customer Query (Customer.QuerySkill)	<ul style="list-style-type: none"> ■ Customer 	Y

Skill	Key Fields	Main Menu
Statement Print (Document.ArStatement)	<ul style="list-style-type: none"> Customer 	N
Delivery Note (Document.DeliveryNote)	<ul style="list-style-type: none"> SalesOrder 	N
Delivery Note Reprint (Document.DeliveryNoteReprint)	<ul style="list-style-type: none"> SalesOrder 	N
Generate Invoice (Document.GenerateInvoice)	<ul style="list-style-type: none"> SalesOrder 	N
Reprint Invoice (Document.InvoiceReprint)	<ul style="list-style-type: none"> ARInvoice SalesOrder 	N
Order Acknowledgement (Document.OrdAck)	<ul style="list-style-type: none"> SalesOrder 	N
Order Acknowledgement Reprint (Document.OrdAckReprint)	<ul style="list-style-type: none"> SalesOrder 	N
Print Purchase Order (Document.PurchaseOrder)	<ul style="list-style-type: none"> PurchaseOrder 	N
Print Quote (Document.Quote)	<ul style="list-style-type: none"> Quote 	N
Reprint Quote (Document.QuoteReprint)	<ul style="list-style-type: none"> Quote 	N
Reprint Purchase Order (Document.ReprintPurchaseOrder)	<ul style="list-style-type: none"> PurchaseOrder 	N
Query Generic Fetch (Generic.FetchSkill)	<ul style="list-style-type: none"> KeyFieldName KeyFieldValue LuisQuery SearchFieldNames 	N
View Invoice (Invoice.ViewInvoice)	<ul style="list-style-type: none"> ARInvoice 	N

Skill	Key Fields	Main Menu
View Invoices (Invoice.ViewInvoices)	<ul style="list-style-type: none"> ■ Customer 	N
Create Job (Job.CreateJob)	<ul style="list-style-type: none"> ■ Quantity ■ StockCode 	N
Create Non-stocked Job (Job.CreateNSJob)	<ul style="list-style-type: none"> ■ Non-StockedCode ■ Quantity 	N
Jobs (Job.JobMenu)	None	Y
Query Job (Job.QueryJob)	<ul style="list-style-type: none"> ■ Job 	N
Query Job Materials (Job.QueryJobMaterials)	<ul style="list-style-type: none"> ■ Job 	N
Pricing (Pricing.PricingMenu)	None	Y
Price Query (Pricing.QueryPrice)	<ul style="list-style-type: none"> ■ Customer ■ Quantity ■ StockCode 	N
Standard Price Query (Pricing.QueryStandardPrice)	<ul style="list-style-type: none"> ■ StockCode 	N
Set Price Alert (Pricing.StandardPriceAlert)	<ul style="list-style-type: none"> ■ AlertFrequency ■ Price ■ PriceCode ■ StockCode 	N
Query Purchase Order (Purchase.QueryPurchaseOrder)	<ul style="list-style-type: none"> ■ PurchaseOrder 	N
Purchase Order Menu (PurchaseOrder.PurchaseOrderMenu)	None	Y
Quotes (Quote.QuoteMenu)	None	Y

Skill	Key Fields	Main Menu
Add Non-stocked Code (Quotes.AddNonStocked)	<ul style="list-style-type: none"> ■ Description ■ NewNonStockedCode ■ ProductClass 	N
Add Non-Stocked Quote Line (Quotes.AddNonStockedQuoteLine)	<ul style="list-style-type: none"> ■ NonStocked ■ Quantity ■ Quote 	N
Add Quote Line (Quotes.AddQuoteLine)	<ul style="list-style-type: none"> ■ Quantity ■ Quote ■ StockCode 	N
Cancel Quote (Quotes.CancelQuote)	<ul style="list-style-type: none"> ■ Quote ■ QuoteReason 	N
Create Non-Stocked Quote (Quotes.CreateNonStockedQuote)	<ul style="list-style-type: none"> ■ NonStocked ■ Quantity ■ QuoteTarget 	N
Create Quote (Quotes.CreateQuote)	<ul style="list-style-type: none"> ■ Quantity ■ QuoteTarget ■ StockCode 	N
Query Quote (Quotes.QueryQuote)	<ul style="list-style-type: none"> ■ Quote 	N
Add Quote Line Menu (Quotes.AddLineToQuoteMenuSkill)	<ul style="list-style-type: none"> ■ Quote 	N
Add Quote Comment Line (Quotes.AddQuoteCommentLine)	<ul style="list-style-type: none"> ■ Quote ■ Comment 	N
Change Quote Line (Quotes.ChangeQuoteLine)	<ul style="list-style-type: none"> ■ Quote ■ QuoteLine ■ QuoteChangeLineItem 	N
Confirm Quote (Quotes.ConfirmQuote)	<ul style="list-style-type: none"> ■ Quote 	N

Skill	Key Fields	Main Menu
Delete Quote Line (Quotes.DeleteQuoteLine)	<ul style="list-style-type: none"> ■ Quote ■ QuoteLine 	N
Requisitions (Requisitions.RequisitionMenu)	None	Y
Add Sales Order Line (SalesOrder.AddSalesOrderLine)	<ul style="list-style-type: none"> ■ Quantity ■ SalesOrder ■ StockCode 	N
Create Sales Order (SalesOrder.CreateSalesOrder)	<ul style="list-style-type: none"> ■ Customer ■ Quantity ■ StockCode 	N
Query Sales Order (SalesOrder.QuerySalesOrder)	<ul style="list-style-type: none"> ■ SalesOrder 	N
Sales (SalesOrder.SalesOrderMenu)	None	Y
My Alerts (Skill.Alerts.QueryMyAlerts)	None	Y
Bank Query (Skill.Bank.QueryBank)	<ul style="list-style-type: none"> ■ Bank 	Y
Create purchase order (Skill.CreatePurchaseOrderSkill)	<ul style="list-style-type: none"> ■ Quantity ■ Supplier ■ Warehouse ■ WarehouseStockCode 	N
Customer Quotes (Skill.CustomerQuotes)	<ul style="list-style-type: none"> ■ Customer 	N
Inventory Query (Skill.InventoryQuery)	<ul style="list-style-type: none"> ■ StockCode 	Y
Add Purchase Order Line (Skill.PurchaseOrder.AddPurchaseOrderLine)	<ul style="list-style-type: none"> ■ PurchaseOrder ■ Quantity ■ WarehouseStockCode 	N

Skill	Key Fields	Main Menu
Predictions (Skill.QueryMachineLearningModel)	<ul style="list-style-type: none"> ■ MLProject 	Y
Create Requisition (Skill.RequisitionCreateSkill)	<ul style="list-style-type: none"> ■ StockCode ■ Supplier ■ Warehouse 	N
Add Requisition line (Skill.RequisitionPostSkill)	<ul style="list-style-type: none"> ■ BotReqSearch ■ StockCode ■ Supplier ■ Warehouse 	N
Requisition Query (Skill.RequisitionQuery)	<ul style="list-style-type: none"> ■ BotReqLineSearch ■ BotReqSearch 	N
Requisition routing (Skill.RequisitionRouting)	<ul style="list-style-type: none"> ■ BotReqLineSearch ■ BotReqSearch ■ RequisitionUser ■ RouteNotation 	N
Create RMA (Skill.RMA.CreateRMA)	<ul style="list-style-type: none"> ■ Customer ■ Quantity ■ StockCode 	Y
RMA Query (Skill.RmaQuery)	<ul style="list-style-type: none"> ■ RmaNumber 	Y
Update Purchase Order Header (Skill.Skill.ChangePurchaseOrderHeader)	<ul style="list-style-type: none"> ■ POChangeItem ■ PurchaseOrder 	N
Supplier Invoices (Skill.SupplierInvoices)	<ul style="list-style-type: none"> ■ Supplier 	N
Supplier Query (Skill.SupplierQuery)	<ul style="list-style-type: none"> ■ Supplier 	Y
Supplier receipts (Skill.SupplierReceipts)	<ul style="list-style-type: none"> ■ Supplier 	N

Skill	Key Fields	Main Menu
Requisition Approval (Skill.SysproRequisitionApproval)	<ul style="list-style-type: none"> ■ BotReqLineSearch ■ BotReqSearch 	N
Purchase Order GRNs Detail Query (Skill.GrnsForPoDetailQuery)	None	N
Purchase Order GRNs Query (Skill.GrnsForPoQuery)	<ul style="list-style-type: none"> ■ PurchaseOrder 	N
PO Balance Query (Skill.POBalance)	<ul style="list-style-type: none"> ■ PurchaseOrder 	N
GRN Query (Skill.GrnQuery)	<ul style="list-style-type: none"> ■ SupplierGrn 	N
GL Query (Skill.GLQuery)	<ul style="list-style-type: none"> ■ GLCode 	N
GL Balance Summary Query (Skill.GLBalanceSummaryQuery)	<ul style="list-style-type: none"> ■ GLModule ■ GLModulePeriod 	N
General Ledger Menu (Skill.GeneralLedgerMenu)	None	Y

Cards

The following table indicates all available cards, as well as the key fields required by the **SYSPRO Bot** to produce each card.

Card	Key Fields
Bank Card (Card.Hero.BankCard)	<ul style="list-style-type: none"> Bank
Carousel Items Card (Card.CarouselItemsCard)	<ul style="list-style-type: none"> ItemType
Confirm Posting of Requisition Line (Card.Hero.ConfirmRequisitionPost)	None
Customer Card (Card.CustomerCard)	<ul style="list-style-type: none"> Customer
Customer Quotes (Card.Carousel.CustomerQuotesCard)	<ul style="list-style-type: none"> Customer
Document Download Card (Card.DocumentDownloadCard)	<ul style="list-style-type: none"> DocumentNumber DocumentType
Generic Fetch Card (Card.GenericFetch)	<ul style="list-style-type: none"> KeyFieldName KeyFieldValue LuisQuery SearchFieldNames
Inventory Query (Card.Receipt.InventoryQueryCard)	<ul style="list-style-type: none"> StockCode
Invoice Card (Card.InvoiceCard)	<ul style="list-style-type: none"> ARInvoice
Invoices Card (Card.InvoicesCard)	<ul style="list-style-type: none"> Customer
Job Card (Card.JobCard)	<ul style="list-style-type: none"> Job
Job Materials Card (Card.JobMaterialsCard)	<ul style="list-style-type: none"> Job

Card	Key Fields
Menu Card (Card.MenuCard)	<ul style="list-style-type: none"> MenuTitle
My Alerts Query Card (Card.MyAlertsQuery)	None
Non-Stocked Card (Card.NonStockedCard)	<ul style="list-style-type: none"> NonStocked
Price Query Card (Card.PriceQuery)	<ul style="list-style-type: none"> Customer Quantity StockCode
Purchase Order Card (Card.Receipt.Card.PurchaseOrder)	<ul style="list-style-type: none"> PurchaseOrder
Purchase Order Preview (Card.Receipt.PurchaseOrderPreview)	<ul style="list-style-type: none"> Quantity StockCode Supplier
Quote Card (Card.QuoteCard)	<ul style="list-style-type: none"> Quote
Requisition Approval (Card.Receipt.RequisitionApprovalReceiptCard)	<ul style="list-style-type: none"> BotReqLineSearch BotReqSearch
Requisition Hero Card (Card.Hero.RequisitionQuery)	<ul style="list-style-type: none"> BotReqLineSearch BotReqSearch
Requisition Post Result Card (Card.Hero.RequisitionPostResultCard)	None
RMA Query Card (Card.Receipt.RmaQueryCard)	<ul style="list-style-type: none"> RmaNumber
Requisition Route Result Card (Card.RequisitionRouteResultCard)	<ul style="list-style-type: none"> BotReqLineSearch BotReqSearch RequisitionUser
Sales Order Card (Card.SalesOrderCard)	<ul style="list-style-type: none"> SalesOrder

Card	Key Fields
Sales Order Preview Card (Card.SalesOrderPreviewCard)	<ul style="list-style-type: none"> ■ SalesOrder
Sales Order Line Preview Card (Card.SalesOrderLinePreviewCard)	<ul style="list-style-type: none"> ■ Quantity ■ SalesOrder ■ StockCode
Standard Price Query Card (Card.StandardPriceQuery)	<ul style="list-style-type: none"> ■ StockCode
Supplier Invoices (Card.Carousel.SupplierInvoicesCard)	<ul style="list-style-type: none"> ■ Supplier
Supplier Receipts (Card.Receipt.Card.Carousel.SupplierReceipts)	<ul style="list-style-type: none"> ■ Supplier
Supplier Query Receipt (Card.Receipt.SupplierQuery)	<ul style="list-style-type: none"> ■ Supplier

Custom Searches

The following table indicates all available custom searches:

Search Name	Key Field to Search
Search.AlertFrequencySearch	AlertFrequency
Search.QuoteTarget	QuoteTarget
Search.MLProject	MLProject
Search.POChangeItem	POChangeItem
Search.POPriceMethod	PricingMethod
Search.ReqLineSearch	BotReqLineSearch
Search.ReqSearch	BotReqSearch
Search.RuleIdSearch	RuleId
Search.QuoteChangeLine	QuoteChangeLineItem
Search.GLModuleSearch	GLModule
Search.GLModulePeriodSearch	GLModulePeriod

Language Understanding (LUIS)

LUIS (Language Understanding Intelligent System) is a machine learning-based service that is used to build natural language understanding into the **SYSPRO Bot**.

Designed to identify valuable information in conversations, LUIS interprets user goals (intents) and distills valuable information from sentences (entities), for a high quality, nuanced language model.

Trained Intents (skills)

The **SYSPRO Bot** is trained with the following intents (skills):

- Admin.MyDetails
- Admin.SignOut
- Alert.DeleteRule
- Alert.DisableRule
- Alert.EnableRule
- Customer.QuerySkill
- Document.ArStatement
- Generic.FetchSkill
- Greeting
- Invoice.ViewInvoice
- Invoice.ViewInvoices
- Job.CreateJob
- Job.CreateNSJob
- Job.QueryJob
- Pricing.QueryPrice
- Pricing.QueryStandardPrice
- Pricing.StandardPriceAlert
- Purchase.QueryPurchaseOrder
- Quote.QuoteMenu
- Quotes.AddNonStockedQuoteLine
- Quotes.AddQuoteLine
- Quotes.ConvertQuote
- Quotes.CreateQuote
- Quotes.QueryQuote
- SalesOrder.AddSalesOrderLine
- SalesOrder.CreateSalesOrder
- SalesOrder.QuerySalesOrder
- Skill.Alerts.QueryMyAlerts
- Skill.Bank.QueryBank
- Skill.Skill.ChangePurchaseOrderHeader
- Skill.CreatePurchaseOrderSkill
- Skill.InventoryQuery
- Skill.PurchaseOrder.AddPurchaseOrderLine

- Skill.RequisitionPostSkill
- Skill.RequisitionQuery
- Skill.RequisitionRouting
- Skill.RMA.CreateRMA
- Skill.RmaQuery
- Skill.SupplierInvoices
- Skill.SupplierQuery
- Skill.SupplierReceipts
- Skill.SysproRequisitionApproval

Trained Entities (keys)

The **SYSPRO Bot** is trained with the following entities (keys):

- ActivityType
- ARInvoice
- Bank
- BotReqLineSearch
- BotReqSearch
- Customer
- Job
- KeyFieldName
- KeyFieldValue
- Non-StockedCode
- NotificationReason
- POChangeItem
- PurchaseOrder
- Quantity
- Quantity_old
- Quote
- QuoteTarget
- ReqLine
- RequisitionNotation
- RequisitionStockPrice
- RequisitionStockQuantity
- RequisitionUser
- RmaNumber
- SalesOrder
- SearchFieldNames
- StockCode
- Subject
- Supplier
- Warehouse

Trained Utterances (phrases)

The **SYSPRO Bot** is trained with a multitude of different utterances (phrases), however to provide you with some examples, the following table covers a few of these.



Trained utterances can be used with any of the trained intents (skills).

Intent (Skill)	Utterances (Phrases)
Customer Query (Customer.QuerySkill)	<ul style="list-style-type: none"> ■ Customer ■ Customer 1 detail ■ Customer 1 record ■ Customer details ■ Customer query for 0000007 ■ Customer record ■ Customer record 1 ■ Detail for customer ■ Detail for customer 1 ■ How is customer 0000004 doing ■ I want to query customer 0000001 ■ Please give me details on customer 14 ■ Show me customer 3 ■ Show me customer ■ View customer ■ View customer 1 ■ View customer 1 details ■ View customer details ■ View details customer ■ View details customer 1 ■ View the customer ■ View the customer 1 ■ View the details of customer ■ View the details of customer 1

Intent (Skill)	Utterances (Phrases)
Query Generic Fetch (Generic.FetchSkill)	<ul style="list-style-type: none"> ■ About account all for account 5 ■ About area subarea for area id ■ About bank code for bank zz ■ About customer name for customer 1 ■ About job date for job 123 ■ About purchase order date for purchase order 10 ■ About purchaseorder total for purchaseorder abc123 ■ About stock code quantity for stock code b101 ■ About stockcode data for stockcode c100 ■ About stockcode date for stockcode rdg23f ■ About stockcode desc for stockcode b100 ■ About supplier data for supplier 1 ■ About warehouse all for warehouse value ■ Bank all for bank ee ■ Tell about anything part for anything value ■ Tell about something piece for something id ■ Tell me about account type all for account type 001 ■ Tell me about bank balance for bank id ■ Tell me about company address for company id ■ Tell me about product class balance for product class ba ■ Tell me about purchase order date for purchase order abc123 ■ Tell me about sales order total for sales order 50 ■ Tell me about stock code all for stock code a100 ■ Tell me about stock code quantity for stock code b100 ■ Tell me about stock code type for stock code sde1244 ■ Tell me all for customer 1 ■ Tell me area for bank bh ■ Tell me balance for account 7yd7 ■ Tell me customer limit for customer 55 ■ Tell me date for customer 4

Intent (Skill)	Utterances (Phrases)
	<ul style="list-style-type: none"> ■ Tell me date for purchaseorder 9803 ■ Tell me date for sales order 340 ■ Tell me eft for bank 1 ■ Tell me info for purchase order 88 ■ Tell me labor for stockcode r54o ■ Tell me limit for customer 1 ■ Tell me more about customer value for customer 1 ■ Tell me name for customer 9 ■ Tell me quantity for stock code d334 ■ Tell me serial for stockcode fg1 ■ Tell me transit for warehouse xyz ■ Tell me value for stock code 34yds
View Invoice (Invoice.ViewInvoice)	<ul style="list-style-type: none"> ■ Invoice ■ Invoice 1 ■ Invoice 100234 ■ Invoice 12 for customer 45 ■ Please show invoice 1234 for customer 4567 ■ Tell me about invoice 1
View Invoices (Invoice.ViewInvoices)	<ul style="list-style-type: none"> ■ Can I view invoices for customer 3 ■ Customer 1 invoices ■ Customer invoices ■ Invoices ■ Invoices customer 1 ■ Invoices for customer 1 ■ Show invoices for customer 1 ■ Tell about invoices ■ Tell me about invoices

Intent (Skill)	Utterances (Phrases)
Create Job (Job.CreateJob)	<ul style="list-style-type: none"> ■ Add a job for b100 ■ Add a job for b100 for a quantity of 5 ■ Add a job for b100 qty 10 ■ Add a job for b100 qty 3 ■ Can I please have a job for five a100 ■ Create job for a100 qty 3 ■ Create stocked job for b100 ■ I need a job for a200 ■ I want to create a job ■ Please create a job for 2 a100 ■ Please create me a job for b1200 ■ Please produce me a new job ■ Stocked job for a100
Create Non-stocked Job (Job.CreateNSJob)	<ul style="list-style-type: none"> ■ Add nonstocked job for gate qty 1 ■ Add nonstocked job for pen ■ Create a job for nonstocked item garden gate ■ Nonstocked job for ruler qty 3 ■ Please add non stocked job for gardengate
Query Job (Job.QueryJob)	<ul style="list-style-type: none"> ■ How is job 000452 doing ■ I want to query a job ■ Please tell me more about my job ■ Query job 676 ■ What is the status of job 000742 ■ What is the status of my job
None	<ul style="list-style-type: none"> ■ Details

Intent (Skill)	Utterances (Phrases)
Price Query (Pricing.QueryPrice)	<ul style="list-style-type: none"> ■ How much would I pay for 2 of a100 ■ I want to do a price query ■ Please can you give me the price of a100 ■ Price for a100 for customer 1 qty 100 ■ Price for a110 for customer 2 qty 1 ■ What is the price of a stock code? ■ What is the selling price of b100 ■ What's the price of a100 for customer 0000001 ■ What's the price of b100 for customer 0000001
Create Quote (Quotes.CreateQuote)	<ul style="list-style-type: none"> ■ Customer 0000001 would like a quote for 2 of a100 ■ Customer 0000001 would like a quote for 3 of a100 ■ I need a quote for 2 a100 please ■ I need a quote for customer 0000001 of 4 a100 please ■ Please can I get a quote for customer 0000001 for 12 b100 ■ Please can I get a quote of 3 b100 for customer 0000002 ■ Quote for customer 1 for stock code a100 ■ Quote for customer 2 for stock code b100

Intent (Skill)	Utterances (Phrases)
Create Sales Order (SalesOrder.CreateSalesOrder)	<ul style="list-style-type: none"> ■ Add a sales order for customer 1 stock code a100 qty 3 ■ Can I have a sales order for customer 1 for 11 b100 please ■ I need a new sales order ■ I need a new sales order for customer 0000005 ■ I want to create a new sales order ■ Please add a sales order for customer 1 for a100 for qty of 3 ■ Please add sales order for customer 1 for gf100 qty 1 ■ Please add sales order for customer 2 for a110 qty 2 ■ Please add sales order for customer 3 for b100 qty 5 ■ Please can I have a sales order for 3 b100 for customer 1 ■ Please can I have a sales order for customer 1 for 3 b100 ■ Please can I have a sales order pf 3 b100 for customer 1 ■ Please create an order for 3 b100 ■ Please produce a new sales order
Query Sales Order (SalesOrder.QuerySalesOrder)	<ul style="list-style-type: none"> ■ How is my sales order doing? ■ How is sales order 00123 doing? ■ I want to query a sales order ■ I want to query sales order 000452 please ■ Tell me more about sales order 5078 ■ What's the status of order 000235



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