

SYSPRO Bot

SYSPRO 8

Reference Guide

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SYSPRO Bot

Artificial Intelligence means customers deal with an intelligent and human-like chatbot that answers queries quickly.

Chatbots which answer and even predict customer queries automate customer service to free up resources in the business.

The (AI) web robot resides within the SYPRO ERP ecosystem and streamlines business functions through natural conversations with the BOT.

Exploring

Where does it fit in?

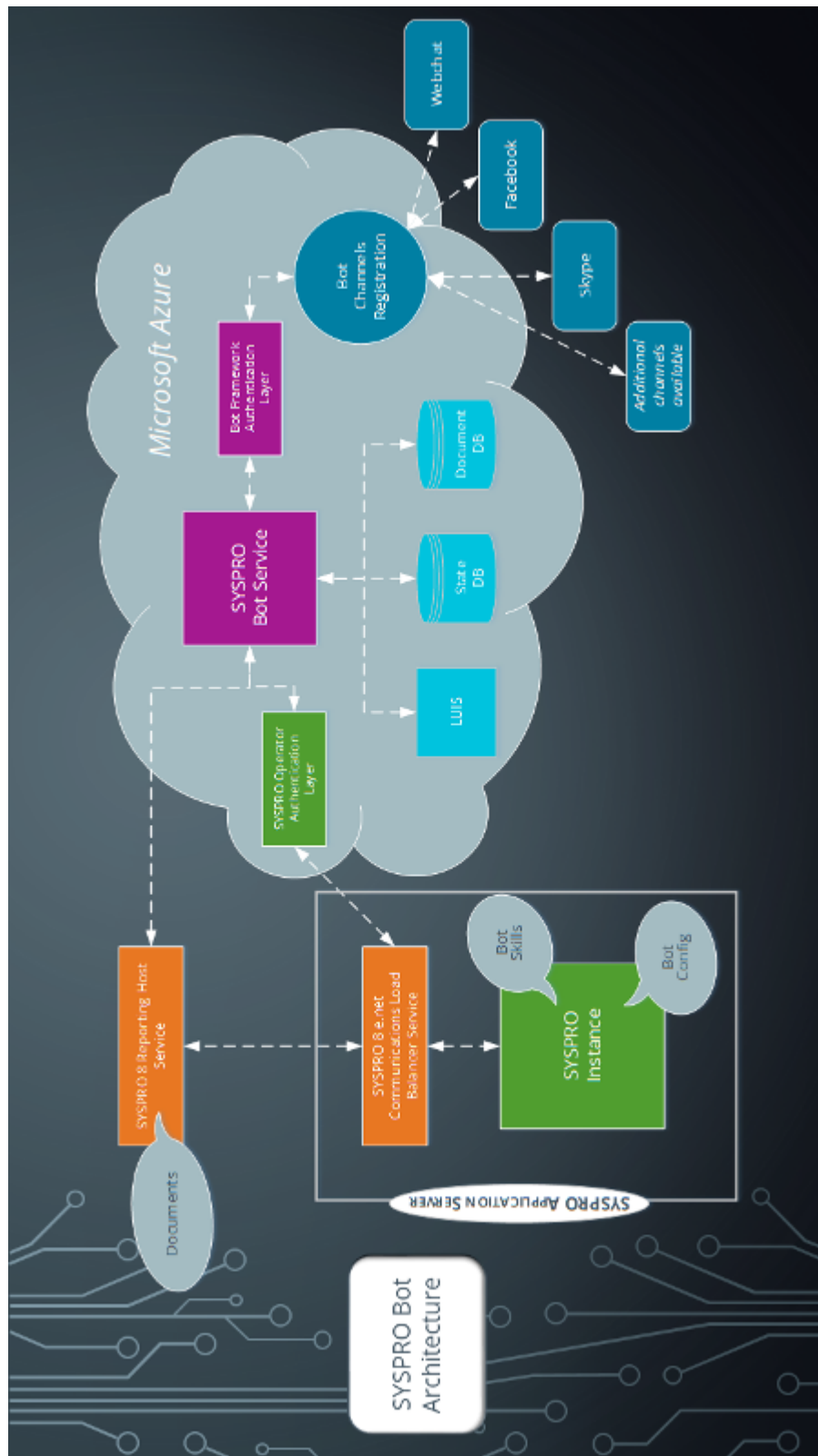
The **SYSPRO Bot** lets organizations expose certain SYSPRO business functions to their Operators, Customers and Suppliers. This can either be through Bot channel contacts (i.e. Skype) or a simple web control on their website.

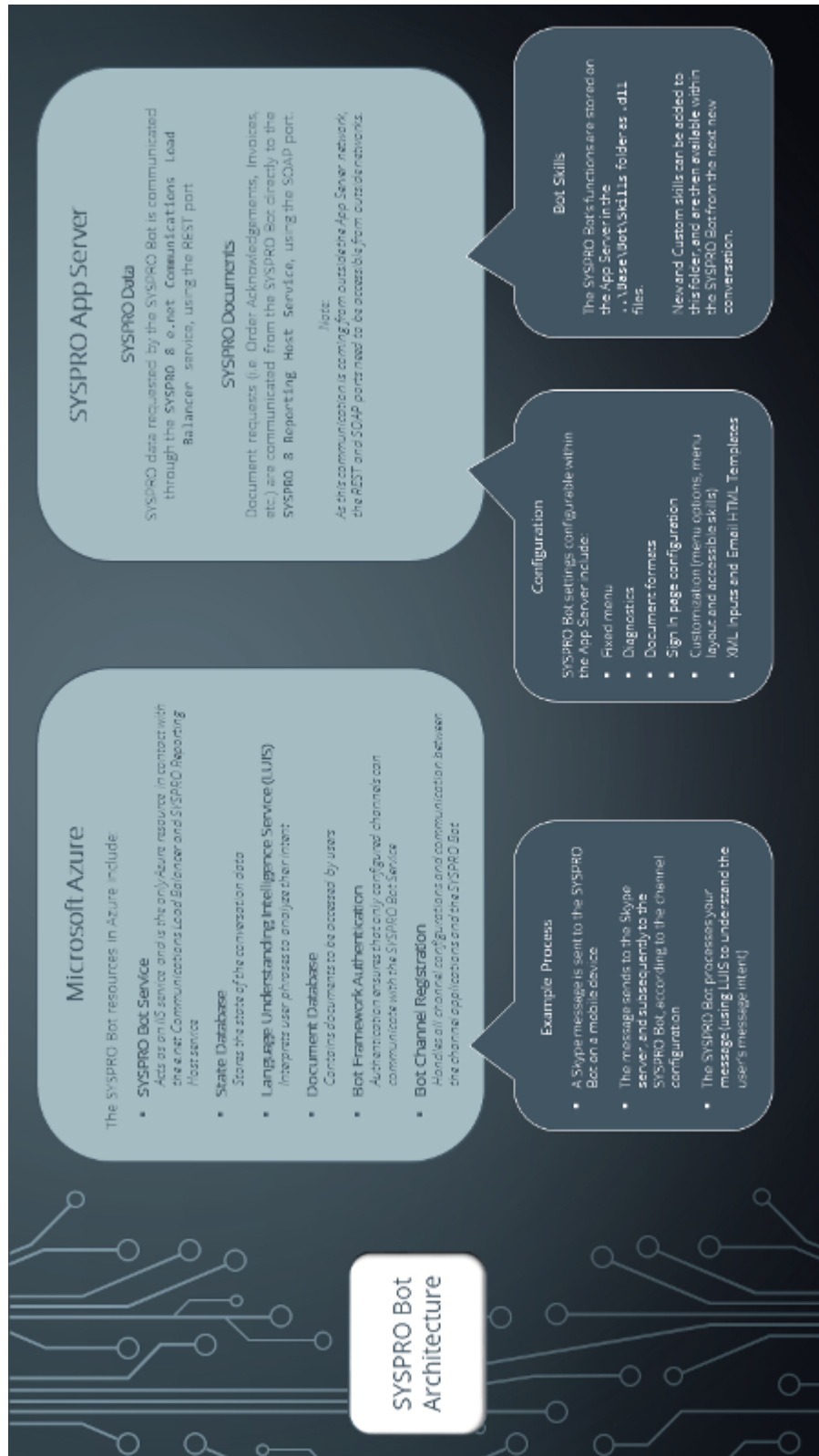
These business functions are exposed in natural conversations over everyday channels to which users already have access, letting them conveniently surface information and perform actions from anywhere, at any time.

The **SYSPRO Bot** also allows custom skills to be acquired automatically, extending the Bot's functionality beyond the scope of ERP (e.g. leave applications).



SYSPRO Bot Architecture







Terminology used

Anonymous User

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

Azure Bot Website

The internet address where the **SYSPRO Bot** is hosted in the Cloud. This address will be provided by SYSPRO Cloud Services after the **SYSPRO Bot** Cloud configuration is completed.

This field resides on the **Artificial Intelligence** tab of SYSPRO's **System Setup** program and the value must be the same as provided by SYSPRO Cloud Services.

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 type that SYSPRO uses to store the binary data of the PDF documents that SRS produces, and then provide the user with a directly link to that document.

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

Bot

A bot, which is short for "robot", is an automated program that runs over the Internet. Some bots run automatically, whilst others only execute commands when they receive input.

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 channel

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



Bot conversation or chat

A Bot conversation consists of the user's utterances and response messages from the **SYSPRO Bot**.

It must include a definitive start and end.

Bot conversation end

A Bot Conversation ends when either of the following are conversed to the **SYSPRO Bot**:

- Done
- Exit

The SYSPRO Bot will then respond with either:

- It's been a pleasure helping you
- Hope to chat soon... Bye.

Bot conversation start

A Bot Conversation starts when a user greets the SYSPRO Bot, which in turn responds by greeting an authenticated user or asking the user how to be of assistance.

Bot Key(s)

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 to be done by the Bot skill.

For example:

Posting a sales order with a quantity.

The fields then required by this skill are `quantity`, `customer` and `stock code`.

Bot Key field(s)

The field(s) required to uniquely identify SYSPRO data entities and concepts.

These 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 has been entered.



Bot Searches

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

Bot skill

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

A skill is an area of specific functionality that the **SYSPRO Bot** provides for.

For example:

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

Bot User

The person chatting to the **SYSPRO Bot** using any channel.

Card

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

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

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 for building, testing, deploying, and managing applications and services through Microsoft-managed data centers .

It provides the following:

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



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

Operator

The SYSPRO Operator that could be linked to a user.

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

Prerequisites

The following requirements are necessary for the feature to work:

-  This feature is only available from **SYSPRO 8 2018 R2** onwards.
 - Exposed **SYSPRO 8 e.net Communications Load Balancer** service (REST port).
The **SYSPRO Bot** requires access to this service's REST port in order to pick up the Bot skills and to authenticate its conversations.
 -  This requires exceptions in the App Server's firewall, as well as exceptions and routing information in the Company's DNS configuration.
 - Configured SMTP settings in SYSPRO's System Setup program.
This is used by the **SYSPRO Bot** for email functions.
 - SRS Server Side printing.
 - **SYSPRO Reporting Host Service** (externally accessible).
This is used by the **SYSPRO Bot** for document functions.
 -  This requires exceptions in the App Server's firewall, as well as exceptions and routing information in the Company's DNS configuration.

Restrictions and Limits

- The UI for the Skills and Menu management is in development and will be added with a future release of **SYSPRO 8**.
- The **SYSPRO Bot** SDK is currently in development and will be added with a future release of **SYSPRO 8**.
- Limited configuration using the **Espresso Custom Configuration** program.
- Modifications must be made in **Microsoft SQL Server** currently .
- The ability to publish certain Bot channels is currently in development and will be added with a future release of **SYSPRO 8** (i.e. publishing the **SYSPRO Bot** to the Skype's public directory).
- Only posting of automatic numbering keys is currently supported.



Deploying

Contact SYSPRO Cloud Services to request a quote for the **SYSPRO Bot** Server.

Once you have accepted the quote, SYSPRO Cloud Services actions the following:

- Deployment of the **SYSPRO Bot** Server to Azure, with all the relevant resources.
- Configuration of your requested channels.
- Connection between the **SYSPRO Bot** Server and the 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 and Bot channel contact URLs.

Configuring

Most of the Bot Server and channel configuration is handled by SYSPRO Cloud Services. However, after the initial configuration is complete, you must capture certain settings within SYSPRO:

SYSPRO Bot Configuration

Once you receive the Azure web address from SYSPRO Cloud Services, you need to capture the Bot configuration within the **Artificial Intelligence** tab of the **System Setup** program.

SYSPRO Reporting Services Configuration

Accessing documents from the **SYSPRO Bot** requires **Server-side Printing**.

For this reason, ensure that the following is configured within the **Reporting** tab of the **System Setup** program:

- **Server-side reporting using SQL.**
- The **Reporting Service** field within the **Server-side configuration** group must be entered correctly with an external facing endpoint.

Email Configuration

Email functions from the **SYSPRO Bot** require SMTP configuration.

Ensure that you configure the following for each company that requires access to emailing through the **SYSPRO Bot**:

- SMTP server IP address
- Outgoing email address
- Username



- Password
- Server port
- Use SSL



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: ...

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** 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.



FAQs

What is a conversation?

For the **SYSPRO Bot**, a conversation starts when the user greets the Bot.

It ends when the user selects **Done** (or sends 'Exit') and the **SYSPRO Bot** subsequently responds with *It's been a pleasure helping you or Hope to chat soon... Bye 😊*.

How do I cancel or exit a search?

At any time, you can send 'Exit' and the Bot will end the conversation. The next conversation will begin fresh.

How do Searches work?

Searches use the same configuration as SYSPRO's predictive search.

This can be configured to search on additional columns within the table or linked tables, however the first and second returned columns will be 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.

You can also search by entering the key field's description.

How can I create my own skills or cards?

A **SYSPRO Bot** SDK with a Visual Studio plug-in is currently in development. When it is released you can use C# to develop the following:

- Custom skills
- Cards
- Custom searches

Why do I have to click 'Sign In' twice?

The first **Sign In** button on the menu is the *option* to sign in and selecting this option or action calls the **Sign In** skill.

Once selected, it loads the sign in card on which you can sign in (this wording may differ depending on the channel in use - e.g. Skype refers to it as 'connect').

How do I configure additional channels?

Please contact SYSPRO Cloud Services for a quote.



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.

Using

User Authentication

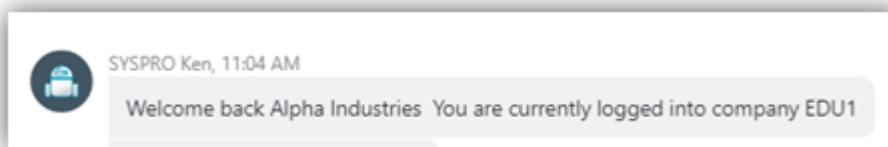
Users use their SYSPRO Operator code to sign in and authenticate themselves. This authentication is per user, per channel.

The user will remain authenticated on the channel until they either sign out or manually get removed from the system-wide database `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.

For example:



This period is dependent on how busy the Bot has been and if the Azure service has been set as always on.

Considerations

- Unauthenticated users will use `_BOT` security that includes program access for business object calls.
- Authenticated users make use of their respective Operator Functional Role and use the Operator Business Object access security.
- Operator's functional areas are not applied.
- If your operator is set as Customer or Supplier, then these related fields within the SYSPRO Bot will be set as the Customer or Supplier code against your operator.

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



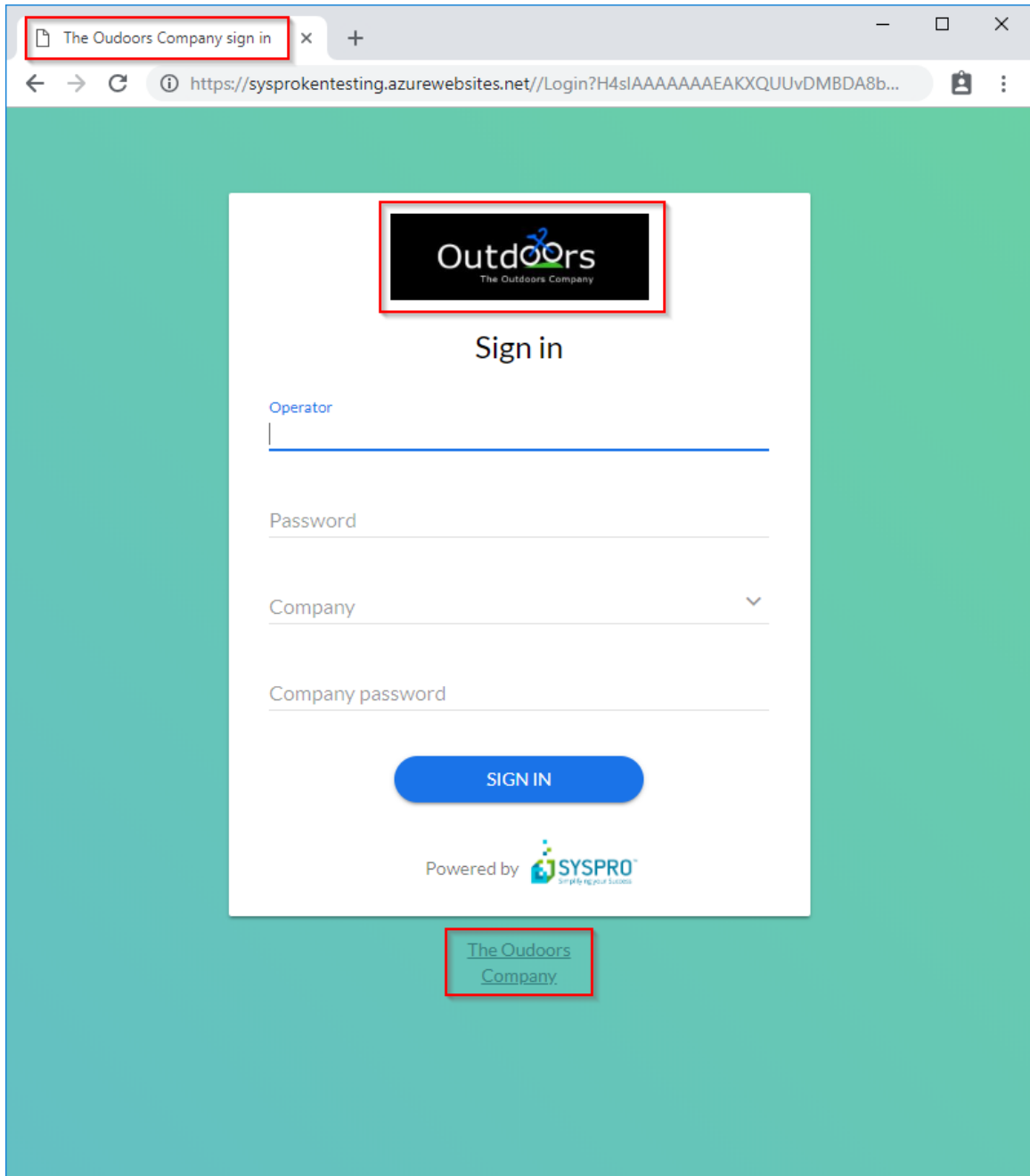
Customization

Authentication Page

The **SYSPRO Bot** secure sign in web page allows for the following customization from within SYSPRO's **System Setup** program (**Artificial Intelligence** tab):

- Header Image
- Organization Name
- Organization Website

The following example Webchat sign in page highlights the areas where this customization will reflect:




Bot Menus

The **SYSPRO Bot** menus can be customized by:

- System
- Company
- Role
- Operator



You can also customize access to skills from the menu.



The menus and skill access can be edited using **Microsoft SQL Server** on the system-wide database (BotCustomization table with the StoreName key of the XML to be edited).

The recommended customization for unauthenticated users is as follows:

(Saved as LevelId = 4 and LevelValue = "__BOT")

```
<Query>
  <CustomizationType>List</CustomizationType>
  <Skills>
    <Skill>
      <SkillName>Admin.SignIn</SkillName>
      <AddToMenu>True</AddToMenu>
    </Skill>
  </Skills>
</Query>
```

- The SkillName element must be the skill name.
- The AddToMenu element specifies if the skill should be added to the User's Main Menu.
- If no configuration is found, access will be given to all skills.

Document Formats

The **SYSPRO Bot** can use its own document formats which can be defined from within the **System Setup** program of SYSPRO.

- Documents require SRS Server side printing with an exposed SRS Host service port.

If you enable the **Blob Storage Azure** option when configuring your Bot, the documents are stored in Azure Blob storage. This allows the URL to your document to remain valid for longer, compared to the standard memory storage.

Emailing

You can customize your HTML emailing template using **Microsoft SQL Server**, on the system-wide database.

The EspDataStore table with the StoreName key of "SYSPROBotDocumentEmail" contains the used HTML template with the following placeholders:

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

Standard configuration example:

```

<html>
  <body>
    <div style='border-style:solid;border-width:5px;border-radius: 10px; padding-left: 10px;margin: 20px;
font-size: 18px;border-color: #0078d7;'>
      <p style='font-weight: bold; color: #0078d7;font-size: 36px;'>Attached please find:</p>
      <p style='font-size: 18px;'><u>{DocumentType}</u></p>
      <p style='font-size: 18px;'>{DocumentNumber}</p>
      <hr/>
    <div width=40%;>
      <p style='font-size: 18px;'>Kind Regards</p>
      <p style='font-size: 18px;'>{BotName}</p>
    </div>
  </body>
</html>

```

Linguistics

The **SYSPRO Bot** contains phrases, which are customizable in **Microsoft SQL Server** on your system-wide database (HrmLinguistics table).

Available customization:

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



There must always be at least 1 phrase per area.

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?
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?

Configurable XML Inputs

XML Parameters can be edited and saved using the **Espresso Custom Configuration** program in SYSPRO.

The XML inputs that are configurable include:

- ARSQRY XMLIn
- QOTQRY XMLIn
- QOTTQI Parameter
- QOTTQI XMLIn
- SORQID XMLIn
- SORQPL XMLIn
- SORQRY XMLIn
- SORTOI Change XMLIn
- SORTOI Parameter
- SORTOI XMLIn
- SORTOS Parameter
- SORTOS XMLIn

- WIPQJS XMLIn
- WIPTJB Parameter
- WIPTJB XMLIn

The XMLIn blobs can be edited using **Microsoft SQL Server** on the system-widatabase (EspDataStore table with the StoreName key of the XML to be edited).

For example:

```

<SalesOrders>
  <Orders>
    <OrderHeader>
      <CustomerPoNumber></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>

```



Available Bot Channels


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

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

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.


-  ■ Some channels also offers a publish option, where your Bot can be added from the public directory.
- Some channels also supply a web control.

With just a few lines of code, these controls can be added to your website and the conversations can then be hosted there.



Tasks

How do I use 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
 - If the same skill is being called again, all keys will be discarded

How do I conduct additional LUIS training?

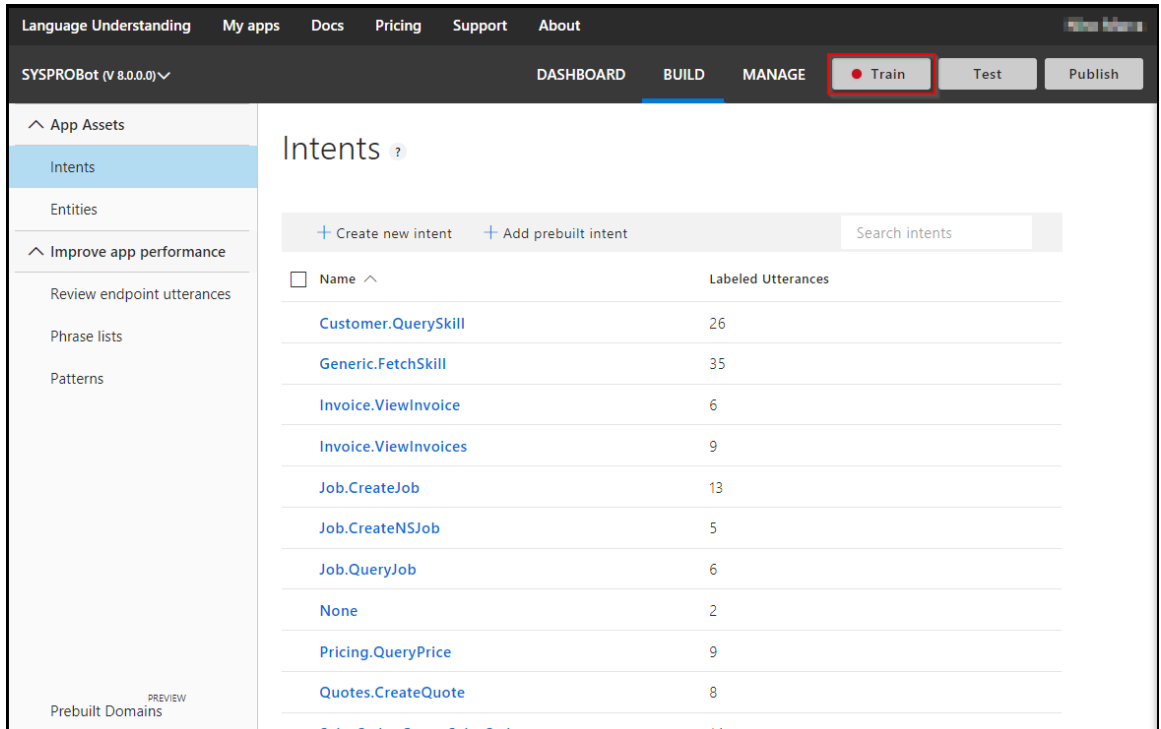
Additional training on the **SYSPRO Bot** language understanding is available from <http://www.luis.ai>, for contributor accounts added by SYSPRO Cloud Services.

Training options available include:

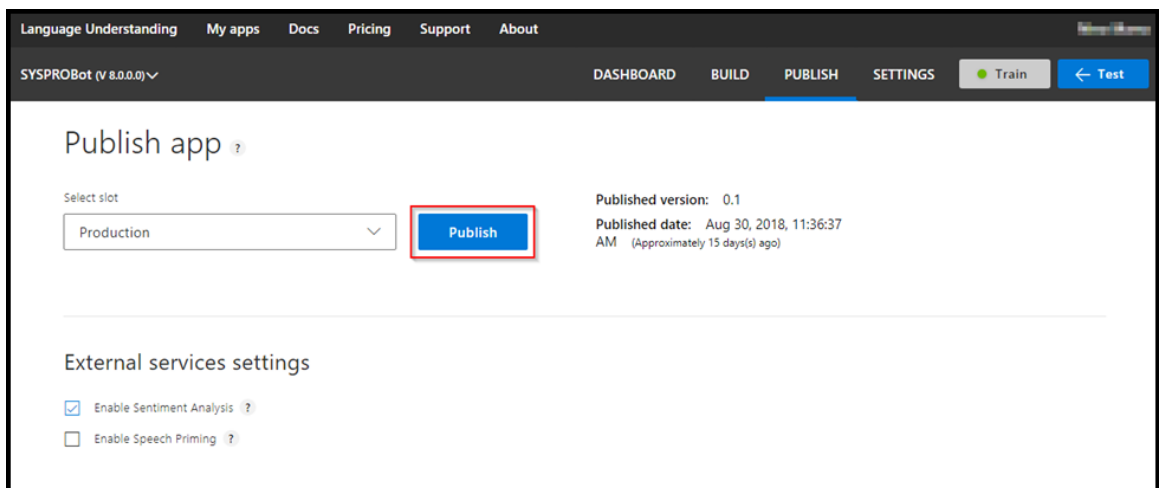
- Add new Intents
This is useful for custom developed skills or for linking to untrained SYSPRO skills.
- Add new Entities
These are the keyfields that the custom or SYSPRO skill requires.
- Add new Utterances
These are example phrases that users will send to the SYSPRO Bot requesting a skill to be executed.

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:



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





Hints and Tips

- Please wait for the **SYSPRO Bot** to complete its current process and respond, before sending a new message.
- If you experience a short delay (a few seconds) after sending your first message to the **SYSPRO Bot**, please be patient as this delay is most likely due to the Azure App Service starting up.
- When searching for a particular key field, typing '*' returns the first 5 records.
- No validation is done on non-SYSPRO key fields (i.e. quantities).

Referencing

SYSPRO Bot Components

Skills

The following skills are available:

Skill Description	Skill Name
Email Document	Admin.EmailDocument
Administration Menu	Admin.Menu
My Details	Admin.MyDetails
Sign In	Admin.SignIn
Sign Out	Admin.SignOut
Customer Query	Customer.QuerySkill
Delivery Note	Document.DeliveryNote
Delivery Note Reprint	Document.DeliveryNoteReprint
Generate Invoice	Document.GenerateInvoice
Reprint Invoice	Document.InvoiceReprint
Order Acknowledgement	Document.OrdAck
Order Acknowledgement Reprint	Document.OrdAckReprint
Query Generic Fetch	Generic.FetchSkill
View Invoice	Invoice.ViewInvoice
View Invoices	Invoice.ViewInvoices
Create Job	Job.CreateJob
Create Non-stocked Job	Job.CreateNSJob
Job Menu	Job.JobMenu
Query Job	Job.QueryJob
Query Job Materials	Job.QueryJobMaterials
Price Query	Pricing.QueryPrice

Skill Description	Skill Name
Create Quote	Quotes.CreateQuote
Query Quote	Quotes.QueryQuote
Add Sales Order Line	SalesOrder.AddSalesOrderLine
Create Sales Order	SalesOrder.CreateSalesOrder
Query Sales Order	SalesOrder.QuerySalesOrder
Sales Order Menu	SalesOrder.SalesOrderMenu

Skill Keyfields

The following keyfields are required by the various skills within the **SYSPRO Bot**:

Skill Description	Skill Name	Required keyfields
Email Document	Admin.EmailDocument	<ul style="list-style-type: none"> ■ DocumentType ■ DocumentNumber ■ DocumentUrl ■ Email
Administration Menu	Admin.Menu	<ul style="list-style-type: none"> ■ None
My Details	Admin.MyDetails	<ul style="list-style-type: none"> ■ None
Sign In	Admin.SignIn	<ul style="list-style-type: none"> ■ None
Sign Out	Admin.SignOut	<ul style="list-style-type: none"> ■ None
Customer Query	Customer.QuerySkill	<ul style="list-style-type: none"> ■ Customer
Delivery Note	Document.DeliveryNote	<ul style="list-style-type: none"> ■ SalesOrder
Delivery Note Reprint	Document.DeliveryNoteReprint	<ul style="list-style-type: none"> ■ SalesOrder
Generate Invoice	Document.GenerateInvoice	<ul style="list-style-type: none"> ■ SalesOrder
Reprint Invoice	Document.InvoiceReprint	<ul style="list-style-type: none"> ■ SalesOrder ■ ARInvoice
Order Acknowledgement	Document.OrdAck	<ul style="list-style-type: none"> ■ SalesOrder
Order Acknowledgement Reprint	Document.OrdAckReprint	<ul style="list-style-type: none"> ■ SalesOrder

Skill Description	Skill Name	Required keyfields
Query Generic Fetch	<code>Generic.FetchSkill</code>	<ul style="list-style-type: none"> ■ KeyFieldName ■ SearchFieldNames ■ LuisQuery ■ KeyFieldValue
View Invoice	<code>Invoice.ViewInvoice</code>	<ul style="list-style-type: none"> ■ ARInvoice
View Invoices	<code>Invoice.ViewInvoices</code>	<ul style="list-style-type: none"> ■ Customer
Create Job	<code>Job.CreateJob</code>	<ul style="list-style-type: none"> ■ StockCode ■ Quantity
Create Non-stocked Job	<code>Job.CreateNSJob</code>	<ul style="list-style-type: none"> ■ Non-StockedCode ■ Quantity
Job Menu	<code>Job.JobMenu</code>	<ul style="list-style-type: none"> ■ None
Query Job	<code>Job.QueryJob</code>	<ul style="list-style-type: none"> ■ Job
Query Job Materials	<code>Job.QueryJobMaterials</code>	<ul style="list-style-type: none"> ■ Job
Price Query	<code>Pricing.QueryPrice</code>	<ul style="list-style-type: none"> ■ Customer ■ StockCode ■ Quantity
Create Quote	<code>Quotes.CreateQuote</code>	<ul style="list-style-type: none"> ■ Customer ■ StockCode ■ Quantity ■ Warehouse
Query Quote	<code>Quotes.QueryQuote</code>	<ul style="list-style-type: none"> ■ Quote
Add Sales Order Line	<code>SalesOrder.AddSalesOrderLine</code>	<ul style="list-style-type: none"> ■ SalesOrder ■ StockCode ■ Quantity
Create Sales Order	<code>SalesOrder.CreateSalesOrder</code>	<ul style="list-style-type: none"> ■ Customer ■ StockCode ■ Quantity
Query Sales Order	<code>SalesOrder.QuerySalesOrder</code>	<ul style="list-style-type: none"> ■ SalesOrder
Sales Order Menu	<code>SalesOrder.SalesOrderMenu</code>	<ul style="list-style-type: none"> ■ None

Cards

The following cards are available:

Card Name	Card Description
Card.CustomerCard	Customer Card
Card.DocumentDownloadCard	Document Download Card
Card.GenericFetch	Generic Fetch Card
Card.InvoiceCard	Invoice Card
Card.InvoicesCard	Invoices Card
Card.JobCard	Job Card
Card.JobMaterialsCard	Job Materials Card
Card.MenuCard	Menu Card
Card.PriceQuery	Price Query Card
Card.QuoteCard	Quote Card
Card.SalesOrderCard	Sales Order Card

Card Keyfields

The following keyfields are required by the various cards within the **SYSPRO Bot**:

Card Name	Card Description	Required keyfields
Card.CustomerCard	Customer Card	<ul style="list-style-type: none"> ■ Customer
Card.DocumentDownloadCard	Document Download Card	<ul style="list-style-type: none"> ■ DocumentType ■ DocumentNumber
Card.GenericFetch	Generic Fetch Card	<ul style="list-style-type: none"> ■ KeyFieldName ■ SearchFieldNames ■ LuisQuery ■ KeyFieldValue
Card.InvoiceCard	Invoice Card	<ul style="list-style-type: none"> ■ ARInvoice
Card.InvoicesCard	Invoices Card	<ul style="list-style-type: none"> ■ Customer
Card.JobCard	Job Card	<ul style="list-style-type: none"> ■ Job
Card.JobMaterialsCard	Job Materials Card	<ul style="list-style-type: none"> ■ Job



Card Name	Card Description	Required keyfields
Card.MenuCard	Menu Card	■ MenuTitle
Card.PriceQuery	Price Query Card	■ Customer ■ StockCode ■ Quantity
Card.QuoteCard	Quote Card	■ Quote
Card.SalesOrderCard	Sales Order Card	■ SalesOrder



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

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

- `Customer.QuerySkill`
- `Generic.FetchSkill`
- `Invoice.ViewInvoice`
- `Invoice.ViewInvoices`
- `Job.CreateJob`
- `Job.CreateNSJob`
- `Job.QueryJob`
- `None`
- `Pricing.QueryPrice`
- `Quotes.CreateQuote`
- `SalesOrder.CreateSalesOrder`
- `SalesOrder.QuerySalesOrder`

Trained Entities

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

- `ARInvoice`
- `Customer`
- `Job`
- `KeyFieldName`
- `KeyFieldValue`
- `Non-StockedCode`
- `Quantity`
- `SalesOrder`
- `SearchFieldNames`
- `StockCode`

Trained Utterances

The **SYSPRO Bot** is trained with the following utterances (phrases):



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



Intent (Skill)	Utterances (Phrases)
	<ul style="list-style-type: none">■ 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■ 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



Intent (Skill)	Utterances (Phrases)
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
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



Intent (Skill)	Utterances (Phrases)
Query Job (Job.QueryJob)	<ul style="list-style-type: none">How is job 000452 doingI want to query a jobPlease tell me more about my jobQuery job 676What is the status of job 000742What is the status of my job
None	<ul style="list-style-type: none">Details
Price Query (Pricing.QueryPrice)	<ul style="list-style-type: none">How much would I pay for 2 of a100I want to do a price queryPlease can you give me the price of a100Price for a100 for customer 1 qty 100Price for a110 for customer 2 qty 1What is the price of a stock code?What is the selling price of b100What's the price of a100 for customer 0000001What'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 a100Customer 0000001 would like a quote for 3 of a100I need a quote for 2 a100 pleaseI need a quote for customer 0000001 of 4 a100 pleasePlease can I get a quote for customer 0000001 for 12 b100Please can I get a quote of 3 b100 for customer 0000002Quote for customer 1 for stock code a100Quote for customer 2 for stock code b100



Intent (Skill)	Utterances (Phrases)
<p>Create Sales Order</p> <pre>(SalesOrder.CreateSalesOrder)</pre>	<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
<p>Query Sales Order</p> <pre>(SalesOrder.QuerySalesOrder)</pre>	<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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