Get PeopleSoft Chatbots Production Ready In 5 Simple Steps

Alliance Virtual Conference: Session #7955
March 16, 2020
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About SpearMC

An Oracle Platinum Partner, we specialize in:

- PeopleSoft Hosting on Oracle Cloud Infrastructure
- PeopleSoft FSCM, HCM, SCM, Grants Healthcare Research
- PeopleSoft and Tools Training
- PUM Update & Testing Service
- PeopleSoft Managed Services
- PeopleSoft Reseller since 2008
- PTF and Test Automation
- Oracle Hyperion and PBCS
- Oracle Business Intelligence
Agenda

- Introduction to Conversational Interfaces
- PeopleSoft Chatbot Demo
- Chatbots Value Proposition
- Current State and Roadmap
- Deployment Process Overview
- Getting PeopleSoft Chatbots Production Ready
A Brief History of Conversational Interfaces

Eliza is a mock Rogerian psychotherapist. The original program was described by Joseph Weizenbaum in 1966. This implementation is by Robert Landeckner 2005.

Eliza: Is something troubling you?
You: Men are all alike.
Eliza: What is the connection, do you suppose?
You: They’re always humping us about something or other.
Eliza: Can you think of a specific example?
You: Well, my boyfriend made me come here.
Eliza: Is it important to you that your boyfriend made you come here?
You: He says I’m depressed much of the time.
Eliza: I am sorry to hear that you are depressed.
You: It’s true. I am unhappy.
Eliza: Can you explain what made you unhappy?
You: You have died of dysentery.

[Image of early telegraph and telephone equipment]
A *conversational interface* (CUI) is a user interface for computers that emulates a conversation with a real human.

Instead of the user having to learn (by navigating through a menu or entering the right information into the right field and clicking the right buttons), CUI’s provide opportunity for user to speak naturally and for the machine to learn.
Conversational Interface - Basic Flow

Interpretation of the Intent of the user using Natural Language Processing (NLP)

Matching to a Dialog Flow

Retrieve Data/Information

Translate Data back into Conversational Response
Example – Any internal group that answers repetitive questions

1. End User picks up the phone and calls for “Help”
2. Ask basic question
3. Make sure helper understands
4. Helper opens PeopleSoft and Navigates
5. Helper asks for required info (emplid, userid, name, etc.)
6. Helper responds with answer (repeat if incorrect)
7. End User wonders if they can get their last 10 minutes back
Changing Demographics & Expectations...

Currently, in addition to your Student Population, Millennials and Gen Z make up 1/3 of the Workforce. Within a decade they will make up over 50%.

Not only will employees and students accept functioning conversational interfaces, they will expect them.
PeopleSoft Chabot Demo
Chatbots Value Proposition

User Experience

- Interactive, engaging user experience, significantly improves user satisfaction thru positive feedback
- Single channel to accomplish multiple related tasks
- No need to know/remember system navigations

Training

- Natural conversational UI can cut down user training when rolling out new features

On-demand Assistance

- Question and Answer (FAQ) offers a virtual helpdesk capability reducing HR call volumes
PeopleSoft Chatbots – Current State

Absence
- AbsenceBalance
- CancelAbsence
- FutureBalance
- Submit RequestAbsence
- Review AbsenceRequest

Benefits
- AdminContactInfo
- DependentBeneficiary
- LifeEventInfo
- OpenEnrollmentInfo
- PlanCost
- PlanDetail
- PlanProvider
- BenefitSummary

Directory
- View profile
- View manager
- View direct reports
- View phone number
- View job code or position
- View contact details
- View email address

Payroll
- Paychecks
- Bank account information
- Employee's withholding
- Voluntary deductions
- Pay schedules
- Year-end forms
- Garnishments
- Payroll
- Contact information

Recruiting
- ApplicationStatus
- Submitting Applications
- SavedSearches
- SearchJobs
- General Questions
- ContactUs
- WhatCanYouDo
- AppNotification
- Announcement

Expenses
- Last 5 Reports
- Get Name
- Get Transaction Details
- Search Reports
- Send Notifications

Requisition
- Item Description Status
- Item ID Status
- Search Requisitions
- Requisition Status

System Requirements
- PeopleSoft HCM Update Image 9.2.031+
- PeopleSoft FSCM Update Image 9.2.033+
- PeopleSoft ELM Update Image 9.2.020+
- PeopleSoft CRM Update Image 9.2.018+
- PeopleTools version is 8.57.07+
PeopleSoft Digital Assistant - Roadmap

Seamless routing between skills

Digital Assistant routes requests to the right skill bots:
- Explicit routing – “Ask Banking Bot my savings balance”
- Implicit routing – “What’s my savings balance?”

Skill benefits
- Modularize functions
- Enable incremental development
- Simplify code management
- Improve non-sequitur handling
- Simplify versioning and LCM
- Enable segmented authorization

“I want to order a new laptop”

“What day do I start my new job?”

“Where’s my nearest location?”
FAQ on Delivered Chatbots

- Functional modular chatbots
- Need ODA Subscription
- No additional PeopleSoft licenses
- No additional servers or infrastructure requirements
- Simple installation process, setup time less than a day
- Accessed from within PeopleSoft application (default channel)
- Uses existing security framework
- Delivered tool kit to build new bots and extend delivered bots
Deployment Process Overview

PeopleSoft Setup
- Deploy WebSDK for PIA
- Setup Bot User
- Update IB Operations
- Update Firewall Rules
- Configure Chatbot Channel

ODA Setup
- Setup ODA Account
- Download and Clone Skill
- Update Connection Parameters
- Create Channel
- Train and Deploy
GETTING PEOPLESOFT CHATBOTS PRODUCTION READY
Chatbot Glossary

Channels

Utterances

Prompt

NLP

AI/ML to train chatbots to decipher user questions.

Intent

What user wants to achieve?

Entities

Provide info or update backend system.

Respond

Prompt for related information or tasks.

Chatbot (Skill)

What info provided or required to action?
Chabot Maintenance Process for ODA

1. Download Delivered Skill
2. Clone and Create Custom Version
3. Customize and Enhance Skill
4. Deploy and Use
5. Review Usage Insights

- Utterances
- Channels
- Intents and Entities
- Dialog Flow
- Question and Answers
# Getting PeopleSoft Chatbots Production Ready

1. **Utterances**
   - Different ways user say or ask for things
   - Enhance the delivered list with custom terminologies, additional variations, languages etc.

2. **Intents**
   - Conveys user’s intention (action) to accomplish
   - Extend delivered entities for custom usage
   - Increase the scope of delivered chatbots with additional intents

3. **Question and Answers**
   - Respond to general interest questions
   - Use Q&A feature to surface FAQs or other knowledge-base documents

4. **Dialog Flow**
   - Choreograph the interaction between a bot and user
   - Enhance the chatbots with blending custom intents and Q&A feature

5. **Channels**
   - Gateway for user’s interaction with Chatbot
   - Deploy PeopleSoft Chatbots on Channel in addition to standard “Web Channel”
WORKING WITH UTTERANCES
Enhancing Utterances

• Review delivered Intents and Utterances
• Add/Remove/Change utterances for delivered intents
  ✓ Variations in Utterances makes the chatbots flexible
  ✓ Anticipate the way your audience might speak
  ✓ Use different lengths of sentence
  ✓ Mix the grammar up
  ✓ Polarization, Punctuation variations

• Export/import utterance using flat file (Bulk Updates)
• Run Utterance Quality Report
• Add Auto-Complete Suggestions
• Train, Train, Train...
Reviewing Delivered Intents and Utterances

Description
- Conversation Name
- Dependent and Beneficiary
- Name
- GetDependentBeneficiary
- Description

Enable Intent
- If the intent corresponds with a question that can be answered with static text, add that text here. When you use this option, the conversation ends after the answer text is displayed.

Examples

Enter your example utterance here

Filter
- Are my children covered in vision
- Are my children covered under my dental plan
- Are my children covered under my plan
- Are my parents enrolled as beneficiaries
- Are my spouse and kids are covered under my benefit plan
- Give me a list of my beneficiaries

Auto-Complete Suggestions

Enter your suggestion here

There are currently no auto-complete suggestions defined for this intent.
Adding Utterances

**Examples**

1. Who are my nominees?
2. Who are my savings plan nominees?
3. My savings plan nominees
4. My benefit nominees

**Click Create button or Cancel**

You have 4 pending utterance entries that either need to be created or canceled.
### Intent and Utterance – Export/Import

For bulk updates,

1. Export Intent/Utterance list
2. Make changes in CSV file
3. Upload file to update Intent/Utterance list

<table>
<thead>
<tr>
<th>query</th>
<th>topintention</th>
<th>conversationName</th>
<th>answer</th>
<th>enable</th>
<th>nativeLanguage</th>
</tr>
</thead>
<tbody>
<tr>
<td>How are my beneficiaries allocated</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
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<td>en</td>
<td></td>
</tr>
<tr>
<td>Who is my beneficiary for my insurance</td>
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<td>Dependent and Beneficiary</td>
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<tr>
<td>Give me a list of my dependents</td>
<td>GetDependentBeneficiary</td>
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<tr>
<td>List my beneficiary</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
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<td></td>
</tr>
<tr>
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<td>TRUE</td>
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</tr>
<tr>
<td>Who is my dependent for my benefit plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
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<td>en</td>
<td></td>
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<tr>
<td>Are my spouse and kids are covered under my benefit plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
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<td></td>
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<tr>
<td>Who has been covered in my benefit plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
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<tr>
<td>my beneficiaries designation</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
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<td></td>
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<td>please tell me details of my dependent and beneficiary</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
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<tr>
<td>Is my spouse enrolled in life plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
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<tr>
<td>Are my parents enrolled as beneficiaries</td>
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<td>Tell me my dependent and beneficiary</td>
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<td></td>
</tr>
<tr>
<td>Are my children covered under my plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>If my children are covered under my plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
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<td></td>
</tr>
<tr>
<td>Is my parent enrolled in benefit plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>My Beneficiary Designations</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
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<td>en</td>
<td></td>
</tr>
<tr>
<td>Is my parent enrolled in medical</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>Tell me my dependents</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>How many beneficiaries have I enrolled</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>If my parent is enrolled in my benefit plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
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<td></td>
</tr>
<tr>
<td>Who are my beneficiaries</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>Is my son covered as dependent in medical?</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>Are my children covered in vision</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>is my child covered as dependent</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>Is my daughter covered as dependent in vision</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>Who are covered in my benefit plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
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<tr>
<td>Is my spouse a beneficiary in life plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
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<td>Are my children covered under my dental plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>my dependents</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>show me my dependents</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>show me my dependents and beneficiaries</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>list my beneficiaries</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>who are my dependents</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
<tr>
<td>Who will be covered on my plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
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<td>is my spouse covered in dental plan</td>
<td>GetDependentBeneficiary</td>
<td>Dependent and Beneficiary</td>
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<td>How many dependents have I enrolled</td>
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<td>TRUE</td>
<td>en</td>
<td></td>
</tr>
</tbody>
</table>
Enable Auto-Complete Suggestions

Auto-Complete Suggestions

Suggestions to Add

Enter your suggestion here

Suggestions in Ascending Order

Filter

Who are enrolled?
Who are my beneficiaries?
Who are my dependents?

Page 1 of 1 (1-3 of 3 items)

Who are enrolled?
Who are my dependents?
Who are my dependents?
Intent and Utterance – Export/Import

Train

Intent
- Trainer Ht
  A linguistics-based model.

- Trainer Tm
  A machine learning-based model.

Other
- Q&A
- Entity

Submit
Validating Utterance/Intent Match

**Description**
- Conversation Name *
- Dependant and Beneficiary
- Name *
- GetDependentBeneficiary
- Description

Answer:
If the intent corresponds with a question that can be answered with static text, add that text here. When you use an option, the conversation ends after the answer text is displayed.

**Enable Intent**

**English**

**Examples**
Uterances to Add
Enter your example utterance here

Uterances in Ascending Order

**Intent**
- GetDependentBeneficiary
- GetOpenEnrollmentInfo
- GetPlanDetail
- GetPlanProvider
- GetPlanCost
- EnterGreeting
- GetMainMenu
- GetContactInfo
- GetLifeEventInfo
- GetPlan
- UpdateBenefitSummary
- UnresolvedIntent

**Confidence**
- GetDependentBeneficiary: 89.1%
- GetOpenEnrollmentInfo: 62.7%
- GetPlanDetail: 52.7%
- GetAdminContactInfo: 46.8%
- GetLifeEventInfo: 37.3%
- GetPlanCost: 36.2%
- EnterGreeting: 35.6%
- GetMainMenu: 35.6%
- GetContactInfo: 34.5%
- GetPlanProvider: 33.3%
- UpdateBenefitSummary: 24.9%

**Try Out Intents/Q&A**
- who are enrolled?

**JSON**
- Add as English Example

**Who are enrolled?**
# Utterance Quality Report

## Similar Utterances

<table>
<thead>
<tr>
<th>Utterance</th>
<th>Expected Intent</th>
<th>Observed Intent</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tell me my beneficiaries</td>
<td>GetDependentBeneficiary</td>
<td>GetPlanDetail</td>
<td>1</td>
</tr>
<tr>
<td>If my parent is enrolled in my benefit plan</td>
<td>GetDependentBeneficiary</td>
<td>GetPlanDetail</td>
<td>1</td>
</tr>
<tr>
<td>Who is my dependent for my benefit plan</td>
<td>GetDependentBeneficiary</td>
<td>GetPlanDetail</td>
<td>1</td>
</tr>
<tr>
<td>Show me my dependents</td>
<td>GetDependentBeneficiary</td>
<td>GetPlanDetail</td>
<td>1</td>
</tr>
<tr>
<td>Give me a list of my dependents</td>
<td>GetDependentBeneficiary</td>
<td>GetPlanDetail</td>
<td>1</td>
</tr>
<tr>
<td>Are my spouse and kids are covered under my benefit plan</td>
<td>GetDependentBeneficiary</td>
<td>GetPlanDetail</td>
<td>1</td>
</tr>
<tr>
<td>my beneficiaries designation</td>
<td>GetDependentBeneficiary</td>
<td>GetPlanDetail</td>
<td>1</td>
</tr>
<tr>
<td>Is my spouse enrolled in life plan</td>
<td>GetDependentBeneficiary</td>
<td>GetPlanDetail</td>
<td>1</td>
</tr>
</tbody>
</table>

## Misclassified Utterances

- GetDependentBeneficiary
- GetPlanDetail
# Do’s and Don'ts for Conversational Design

<table>
<thead>
<tr>
<th><strong>DO</strong></th>
<th><strong>DON'T</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DO plan to add utterances until you get results you expect.</strong> Generally speaking, models perform well as you add more quality training utterances. The number of utterances you need depends on the model, the training data, and the level of accuracy that is realistic for your model.</td>
<td><strong>DON'T over-train individual intents.</strong> Don't add excessive training data to some intents to make them work &quot;perfectly&quot;. If intent resolution is not behaving as expected, evaluate your intent structure for overlap between intents. Intent resolution will NEVER be 100% accurate.</td>
</tr>
<tr>
<td><strong>DO use real world data.</strong> Using the actual language that your skill is most likely to encounter is critical. Fabricated utterances can only take you so far and will not prepare your skill for real-world engagement.</td>
<td><strong>DON'T use just keywords in training data.</strong> While it is acceptable to use single words/short phrases for training, the training data should have the same structure as the user's inputs. The fewer the words in utterances, the less successful classification will be.</td>
</tr>
<tr>
<td><strong>DO use whole sentences to train intents.</strong> While it's OK to use short training utterances, be sure to match the conversational style of your users as closely as possible.</td>
<td><strong>DON'T inadvertently skew intents.</strong> Be careful of words which add no specific meaning (e.g. &quot;please&quot; and &quot;thanks&quot;) or entity values within utterances as they can inadvertently skew intent resolution if they are heavily used in one intent but not in another.</td>
</tr>
<tr>
<td><strong>DO use similar numbers of utterances per intent.</strong> Some intents (e.g., &quot;hello&quot;, &quot;goodbye&quot;) may have fewer utterances in their training sets. However, ensure that your main intents have a similar number of utterances to avoid biasing your model.</td>
<td><strong>DON'T rely ONLY on intent resolution.</strong> Use entities to disambiguate common intents. If there's linguistic overlap between intents, consider using entities to disambiguate the user's intentions (and corresponding unique conversational path).</td>
</tr>
<tr>
<td><strong>DO handle small talk.</strong> Users will make requests that are not relevant to the skill's purpose, such as for jokes and weather reports. They may also do things like ask if the skill is human. Ensure that you have a small talk strategy and aggressively test how the skill responds at all steps of your conversational flow.</td>
<td><strong>DON'T overuse unresolvedIntent.</strong> Create &quot;out-of-scope&quot; intents for the things you know you don't know (that you may or may not enable the skill to do later).</td>
</tr>
<tr>
<td><strong>DO consider multiple intents for a single use case.</strong> Customers may express the same need in multiple ways, e.g. in terms of the solution they desire OR the symptom of their problem. Use multiple intents that all resolve to the same &quot;answer&quot;.</td>
<td><strong>DON'T ignore abusive interactions.</strong> Similar to small talk, have a plan for abuse. This plan may need to include measures to ensure any abusive input from the user is not reflected back by the skill, as well as provisions for immediate escalation.</td>
</tr>
</tbody>
</table>

WORKING WITH INTENTS & ENTITIES
Delivered Intents and Entities
Export/Import Entities

For bulk updates,
1. Export Entities list
2. Make changes in CSV file
3. Upload revised file

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>SUMM_UPD_FLAG</td>
<td>en:synonyms</td>
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<tr>
<td>2</td>
<td>SUMM_UPD_FLAG</td>
<td>Sammy Contributions:Contributions:deduction:contribution</td>
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<tr>
<td>3</td>
<td>SUMM_UPD_FLAG</td>
<td>fund allocation:funds:allocation</td>
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<tr>
<td>4</td>
<td>SUMM_UPD_FLAG</td>
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<tr>
<td>10</td>
<td>PLAN_CATEGORY</td>
<td>Health:Health Benefits:doctor</td>
</tr>
<tr>
<td>11</td>
<td>PLAN_CATEGORY</td>
<td>Death:Accidental Death:Life and Accidental Death:Life Insurance:Life or Death</td>
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<tr>
<td>12</td>
<td>PLAN_CATEGORY</td>
<td>Disability:Disability Insurance</td>
</tr>
<tr>
<td>13</td>
<td>PLAN CATEGORY</td>
<td>Savings</td>
</tr>
<tr>
<td>14</td>
<td>PLAN CATEGORY</td>
<td>Spend Acct:Spending Accounts</td>
</tr>
<tr>
<td>15</td>
<td>PLAN CATEGORY</td>
<td>Retirement</td>
</tr>
<tr>
<td>16</td>
<td>PLAN CATEGORY</td>
<td>Pension</td>
</tr>
<tr>
<td>17</td>
<td>PLAN CATEGORY</td>
<td>Vacation:Buy:Sell</td>
</tr>
<tr>
<td>18</td>
<td>PLAN CATEGORY</td>
<td>Simple Benefits</td>
</tr>
</tbody>
</table>
Answer Intent

Description

Conversation Name *
GetBenefitExpiry
Name *
GetBenefitExpiry
Description
Benefit Expiry Date

Answer

Employer sponsored benefits expire on the last calendar day of the month of termination. 
https://www.guardianlife.com/life-insurance/term-life-expiring

If your policy's term is coming to an end, you can just let the coverage expire and go without life insurance. That is an option that some people choose, especially if their children are mature and financially independent, and there are enough saved assets to take care of their spouse or partner. If your family still needs the financial protection of life insurance, however, you have three basic choices:

Enable intent

English

Examples

Utterances to Add
Enter your example utterance here

Utterances in Ascending Order
Answer Intent - Example

Employer sponsored benefits expire on the last calendar day of the month of termination: https://www.guardianlife.com/life-insurance/terms-life-expiring

If your policy's term is coming to an end, you can just let the coverage expire and go without life insurance. That is an option that some people choose, especially if their children are mature and financially independent, and there are enough saved assets to take care of their spouse or partner. If your family still needs the financial protection of life insurance, however, you have three basic choices:

1. Extend your current term policy
2. Convert your term policy to a permanent policy
3. Get a different life insurance policy

Wednesday, March 16, 2021, 7:56:32 PM
WORKING WITH QUESTION AND ANSWERS
3. Question and Answers

The Q&A framework enables your skill to answer general interest questions by returning one or more question and answer pairs. It's a way for you to use a skill to surface FAQs or other knowledge-base documents.

• Question and Answer created by importing data source file
• Supports multiple languages
• Ability to manually add/edit question and answers after file upload
• Used for answering Frequently Asked Questions

Note: PeopleSoft Chatbots do not have a Question-and-Answer library, customers can create their own.
<table>
<thead>
<tr>
<th>Category</th>
<th>Questions</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td>What is Medicare?</td>
<td>Medicare is our country’s health insurance program for people age 65 or older. Certain people younger than age 65 can qualify for Medicare, including those with disabilities and those who have permanent kidney failure.</td>
</tr>
<tr>
<td></td>
<td>What does Medicare mean?</td>
<td>Medicare is the federal health insurance program for:</td>
</tr>
<tr>
<td></td>
<td>Who is eligible for Medicare?</td>
<td>- People who are 65 or older</td>
</tr>
<tr>
<td></td>
<td>Who is covered in Medicare?</td>
<td>- Certain younger people with disabilities</td>
</tr>
<tr>
<td></td>
<td>What is Medicare eligibility?</td>
<td>- People with End-Stage Renal Disease (permanent kidney failure requiring dialysis or a transplant, sometimes called ESRD)</td>
</tr>
<tr>
<td></td>
<td>How does Medicare work?</td>
<td>The different parts of Medicare help cover specific services:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Medicare Part A (Hospital Insurance)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Part A covers inpatient hospital stays, care in a skilled nursing facility, hospice care, and some home health care.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Medicare Part B (Medical Insurance)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Part B covers certain doctors’ services, outpatient care, medical supplies, and preventive services.</td>
</tr>
<tr>
<td></td>
<td>What are the parts of Medicare?</td>
<td>Medicare Part D (prescription drug coverage)</td>
</tr>
<tr>
<td></td>
<td>What are the components of Medicare?</td>
<td>Helps cover the cost of prescription drugs (including many recommended shots or vaccines).</td>
</tr>
<tr>
<td></td>
<td>What does Medicare entail?</td>
<td>When you have other insurance, there’s more than one “payer” for your coverage.</td>
</tr>
<tr>
<td>Medicare</td>
<td>How does Medicare work with my other insurance?</td>
<td><a href="https://www.medicare.gov/supplements-other-insurance/how-medicare-works-with-other-insurance">https://www.medicare.gov/supplements-other-insurance/how-medicare-works-with-other-insurance</a></td>
</tr>
<tr>
<td></td>
<td>Does Insurance cover Medicare?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Are prescriptions covered in Original Medicare?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What drugs are covered in Medicare?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How are prescriptions covered in Medicare?</td>
<td>In most cases, yes. You can go to any doctor, health care provider, hospital, or facility that is enrolled in Medicare and accepting new Medicare patients.</td>
</tr>
</tbody>
</table>
Creating Q&A Source

Create Source
- Language: English
- Locale: Select source locale (optional)
- Name: Enter source name
- File: Select a CSV or compressed CSV file or drag it here
  - Uploading source file...
- Enabled

Create
**What is Medicare?**
- Alternative Questions (1)

**Categories:** Medicare

**Who is eligible for Medicare?**
- Alternative Questions (3)

**Categories:** Medicare

**What are the parts of Medicare?**
- Alternative Questions (2)

**Categories:** Medicare

**How does Medicare work with my other insurance?**
- Alternative Questions (1)

**Categories:** Medicare

**Are prescriptions covered in Original Medicare?**
- Alternative Questions (2)

**Categories:** Medicare

Answer Medicare is our country’s health insurance program for people age 65 or older. Certain people younger than age 65 can qualify for Medicare, too, including those with disabilities and those who have permanent kidney failure.

Answer Medicare is the federal health insurance program for - People who are 65 or older - Certain younger people with disabilities - People with End-Stage Renal Disease (permanent kidney failure requiring dialysis or a transplant), sometimes called ESRD ...

Answer The different parts of Medicare help cover specific services: Medicare Part A (Hospital Insurance), Part B (Medical Insurance) ...

Answer When you have other insurance, there’s more than one “payer” for your coverage. https://www.medicare.gov/supplements-other-insurance/how-medicare-works-with-other-insurance

Answer In most cases, yes. You can go to any doctor, health care provider, hospital, or facility that is enrolled in Medicare and accepting new Medicare patients.
Train Q&A Module

Train

Intent

- Trainer Hi: A linguistics-based model.
- Trainer Tm: A machine learning-based model.

Other

- Q&A
- Entity

Submit

Try Out Intents/Q&A

Intent

- Q&A

Rank

1. Who is eligible for Medicare?
2. What is Medicare?
3. What are the parts of Medicare?
4. Are prescriptions covered in Original Medicare?
5. How does Medicare work with my other insurance?

Add to Question

JSON

What is Medicare?
Q&A Example

What is Medicare?
Medicare is our country's health insurance program for people age 65 or older.

What are the parts of Medicare?
The different parts of Medicare help cover specific services:
- Medicare Part A (Hospital Insurance)
- Medicare Part B (Medical Insurance)
- Medicare Part C (Medicare Advantage)
- Medicare Part D (Prescription Drug Coverage)

View
4. WORKING WITH DIALOG FLOW
Dialog Flow - Sample

- The dialog flow definition is the model for the conversation, one that lets us choreograph the interaction between a skill and its users.

- OBotML - Digital Assistant's own implementation of YAML.
Chatbot Dialog Flow

• Customizing Messages and Wordings
• Refining Conversation Flow
• Adding QnA Capability
• Adding new intents and transitions
Custom Messages in Dialog Flow

Message Catalog

Message Set Number 17448
Description Absence Mgmt - Chatbot
Short Description Abs Bot

Messages

*Message Number 152
*Severity Message
*Message Text
Hello I am a virtual assistant to help you with your absence tasks and queries. Please note that I am a Chatbot. If anything goes wrong here, please contact a real person. You can call 206-555-1111 or email HR Support spearmc.com.
Before and After Dialog Flow Update

Unresolved intent responded with 3 options.

Unresolved intent updated to respond with 5 options.
Updates needed to the Dialog flow to add “Q&A” ability to the chatbot.

- Add qnaEnable: true to enable the router:

```javascript
intent:
  component: "System.Intent"
  properties:
  variable: "iResult"
  qnaEnable: true
```

- Set a transition action to the QnA state:

```javascript
transitions:
  actions:
    Balances: "startBalances"
    Transactions: "startTrans"
    Send Money: "startPayments"
    Track Spending: "startTrackSpending"
    Dispute: "startDate"
    unresolvedIntent: "unresolved"
    qna: "qna"
```

If the intent resolution is below the confidence threshold, then the skill triggers the qna action which the Dialog Engine to the qna state. In this case, the skill’s message includes the View Answers link only.

```javascript
qna:
  component: "System.QnA"
  transitions:
    actions:
      none: "unresolved"
      next: "intent"
  unresolved:
    component: "System.Output"
    properties:
      text: "Sorry I don’t understand that question!"
    transitions:
      return: "unresolved"
```
4. WORKING WITH INSIGHTS
Working with Insights
Working with Insights

Skills • SMC_Ext_PS_Ben_Asst_FAQ

- All Intents
- Answer Intents
- Transaction Intents

- GetPlanDetail
- GetPlanProvider
- GetPlanBeneficiary
- unresolvedIntent
- GetPlanCost
- GetLifeEventInfo
- ExitAssistant
- ExitGreeting
- GetBenefitDisplay

Conversations Count

0 2 4 6 8 10 12 14

- incomplete
- completed

GetDependentBeneficiary
GetBenefitExpiry
GetPlanProvider
GetLifeEventInfo
GetPlanDetail
GetPlanCost
unresolvedIntent

Most Popular Intents

- give my pension details
- show my benefits
- view plan
- benefit plans
- tell my benefit
- profit sharing plan
- give my plan
- benefit expiry
- taken pension plan
- profit sharing

my benefit plans
my savings plan
Working with Insights
## Working with Insights

### Conversations

<table>
<thead>
<tr>
<th>Intent</th>
<th>Outcome</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>GetDependentBeneficiary</td>
<td>Inprogress</td>
<td>13 minutes ago</td>
</tr>
<tr>
<td>GetDependentBeneficiary</td>
<td>Inprogress</td>
<td>14 minutes ago</td>
</tr>
<tr>
<td>GetDependentBeneficiary</td>
<td>Inprogress</td>
<td>14 minutes ago</td>
</tr>
<tr>
<td>GetDependentBeneficiary</td>
<td>Inprogress</td>
<td>14 minutes ago</td>
</tr>
<tr>
<td>GetPlanProvider</td>
<td>Inprogress</td>
<td>14 minutes ago</td>
</tr>
<tr>
<td>GetPlanProvider</td>
<td>Inprogress</td>
<td>14 minutes ago</td>
</tr>
<tr>
<td>GetPlanProvider</td>
<td>Inprogress</td>
<td>14 minutes ago</td>
</tr>
<tr>
<td>GetPlanProvider</td>
<td>Inprogress</td>
<td>15 minutes ago</td>
</tr>
</tbody>
</table>

#### User Messages

- **Is my daughter covered as dependent in vision**
  - Skill response: Your dependents enrolled in Vision plan Enhanced Vision Plan are...
  - View Conversation
- **How many beneficiaries have I enrolled**
  - Skill response: Person Name - Robert Channing Person Name - Jason Channing
  - View Conversation
- **If my children are covered under my plan**
  - Skill response: Person Name - Robert Channing Person Name - Jason Channing
  - View Conversation
- **Are my spouse and kids are covered under my benefit plan**
  - Skill response: Person Name - Robert Channing Person Name - Jason Channing
  - View Conversation
- **Give me a list of my beneficiaries**
  - Skill response: Person Name - Robert Channing Person Name - Jason Channing
  - View Conversation
- **What's my group number for Accidental Death Insurance**
  - Skill response: Your AD and D plan Flat **K** KOD&B provider is...
  - View Conversation
- **I want group number of supplemental life provider**
  - Skill response: Your Supplemental Life plan Suppl Group Life **K** provider is...
  - View Conversation
- **What is the phone number of my benefit plan provider**
  - Skill response: Please select a benefit plan category for your enrolled benefit plans...
  - View Conversation
- **I have a question on life insurance provider**
  - Skill response: Your Life plan Basic Life provider is...
  - View Conversation
- **I want to see my dental provider**
  - Skill response: Your Dental plan Enhanced Dental Plan provider is...
  - View Conversation

### Details for selected conversation

1. **StartFromSkill**
2. **initFlow**
3. **setUser**
4. **setUserName**
5. **GetMessageData**
6. **doLastActionCommit**
7. **startOver**
8. **intent**
9. **doGetSettingOption**
10. **resolvePlanType**

---

[Oracle Partner] [Gartner Education Reseller] [Gartner Representative Vendor]
Q&A Insights

4 Total Questions

3 Answer Categories

4 Answered Questions

- No of questions that had clicks: 3
- No of questions that had no clicks: 1
- Average answers per question: 5
- Average clicks per question: 0.75
- Average time taken: 0.09 Seconds

How are my Q&As being used?

- What is Medicare?
- How does Medicare work with my other insurance?
- What are the parts of Medicare?
- Who is eligible for Medicare?
- Are prescriptions covered in Original Medicare?
Working with Insights

Intent Classification

- Benefit Expiration? (unresolvedIntent) 36.56
- GetBenefitExpiry 36.56

You can add examples only if the skill is in Draft status. Click here to create a new draft version of the skill.
5. EXPANDING CHATBOT CHANNELS
ODA Channels

- Oracle Web *(Default for PeopleSoft)*
- Text-Only Channels: Twilio/SMS *(Supported for PeopleSoft)*
- Slack
- Microsoft Teams
- Facebook Messenger
- Cortana
- Oracle Android
- Oracle iOS
- Webhooks
Chabot Maintenance Process for ODA

1. Download Delivered Skill
2. Clone and Create Custom version
3. Customize and Enhance Skill
4. Deploy and Use
5. Review Usage Insights

- Utterances
- Intents and Entities
- Channels
- Question and Answers
- Dialog Flow
QUESTIONS?
## Oracle Digital Assistant Pricing

<table>
<thead>
<tr>
<th>Product</th>
<th>Monthly Subscription</th>
<th>Metric</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Digital Assistant Platform for Oracle SaaS - Hosted Employees</td>
<td>$3.00</td>
<td>Hosted Employee</td>
<td>1000</td>
</tr>
<tr>
<td>Oracle Digital Assistant Platform for Oracle SaaS - Hosted Named User</td>
<td>$5.00</td>
<td>Hosted Named User</td>
<td>500</td>
</tr>
<tr>
<td>Oracle Digital Assistant Platform for SaaS - 1,000 Sessions</td>
<td>$275.00</td>
<td>1,000 Sessions</td>
<td>20</td>
</tr>
</tbody>
</table>
References

- PeopleSoft Chatbots Homepage
- Oracle Digital Assistant Homepage
- PeopleSoft Chatbot Integration Framework Video Feature Overview
SESSION SURVEYS

1. Open the HEUG Events App on your phone, tablet, or laptop
2. Click on this session in your schedule
3. Then click the “Resources” button and “Survey”
   You will be required to login once with your Eventsential username and password.
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