

ORACLE

Oracle Digital Assistant overview

Program Agenda

- 1 About Oracle Digital Assistant
- 2 Skills
- 3 Digital Assistant
- 4 Channels
- 5 Extending SaaS skills

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- 1 **About Oracle Digital Assistant**
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Oracle Digital Assistant

” A concierge bot that combines individual chatbots into a unified user experience

In their early days, chatbots solved simple business problems

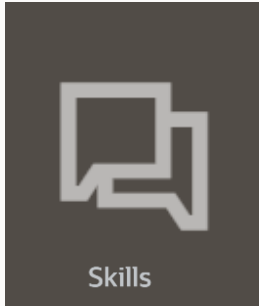
- Customer service automation
- Automation of structured processes
- Self-service

Today, digital assistants are user oriented

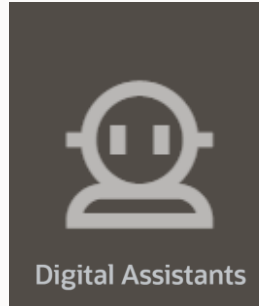
- Assist users with various related or unrelated tasks
- Conversations are context aware
- Assistants learn about the user

Oracle Digital Assistant is what users expect from chatbots

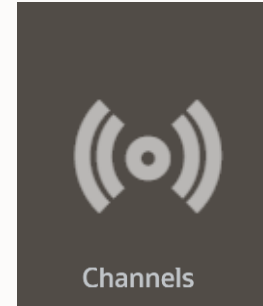
Oracle Digital Assistant building blocks



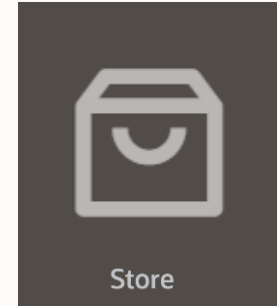
- Individual chatbots
- Reusable
- Conversational AI and ML



- Routing assistant
- Invokes skills
- Routes user messages

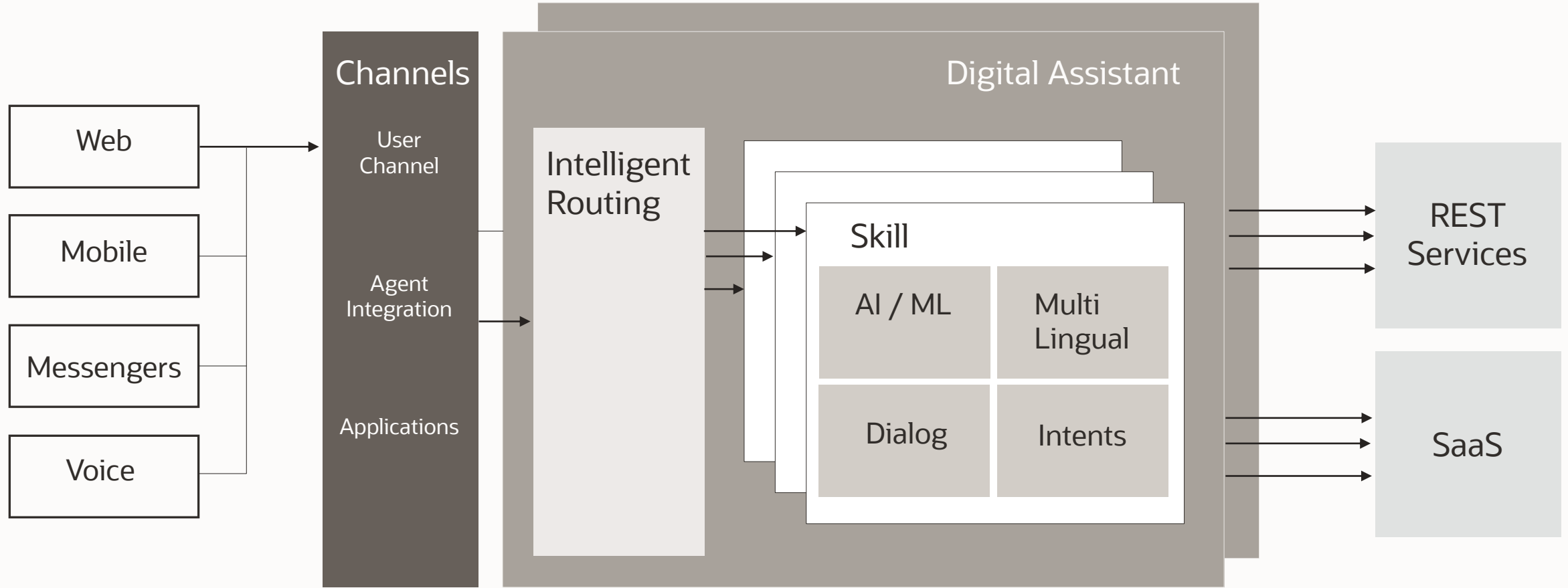


- Messenger connectivity
- Webhook
- Native channels



- Skill store
- Like App Store
 - Contains skills from Oracle SaaS

Oracle Digital Assistant



OCI Compute

OCI OKE

OCI Functions

OCI API Gateway

OCI Vault Secrets

OCI Object Storage

OCI Email Delivery

OCI AI Services

And many more



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Skills

Individual chatbots

- Exposed through Digital Assistant
 - Skill as a conversation module
- Can also be used stand-alone

Use natural language processing (NLP)

- Intent resolution
 - Regular intents
 - Answer intents (FAQ)
- Entity extraction

Conversation flows

- Visual conversation designer
 - Uses components and templates

Skills are intelligent and reusable conversation modules in Oracle Digital Assistant



Skill features (1/5)

Intent builder

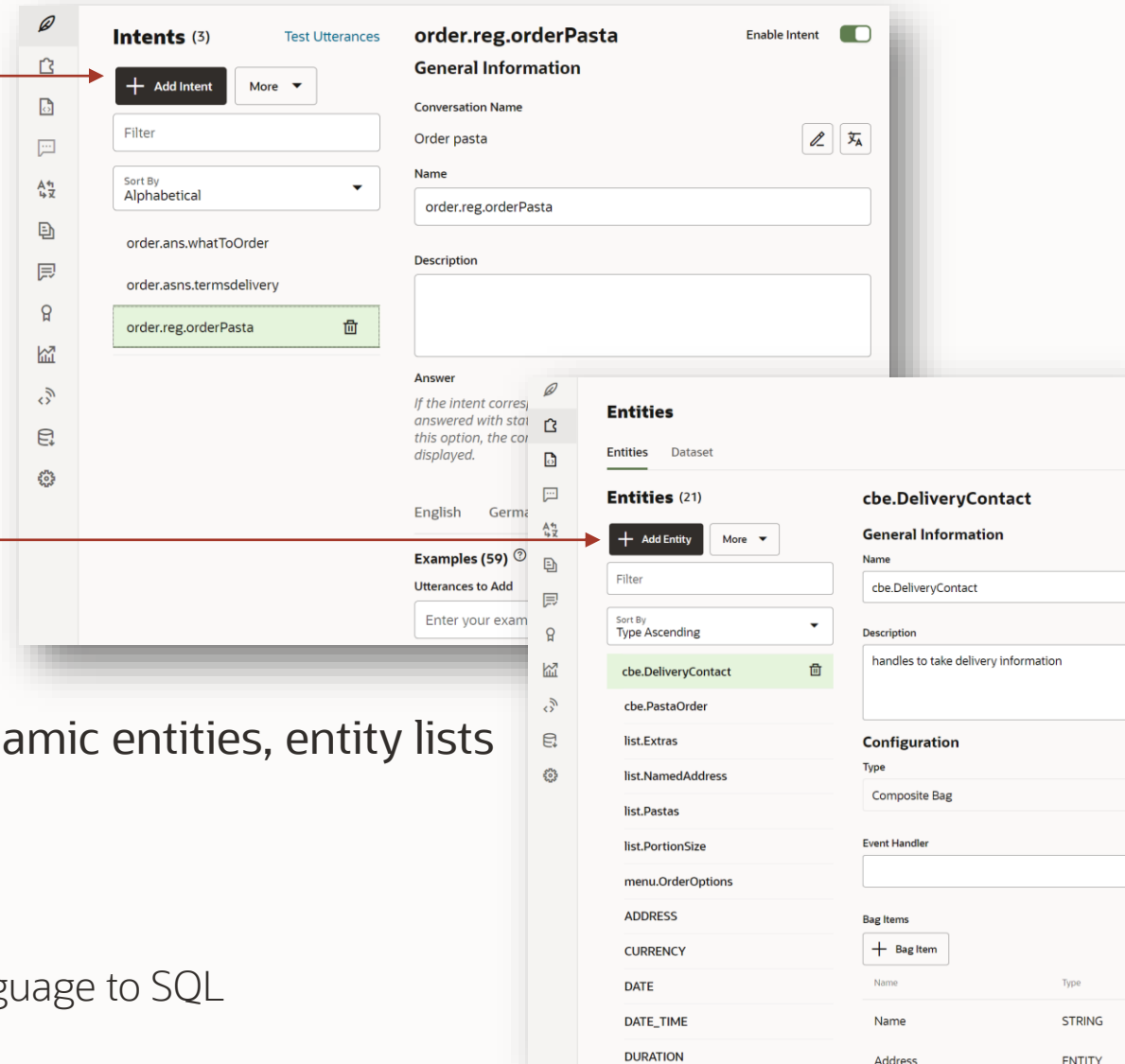
- Create intents and utterances
- Utterance tester

Data manufacturing

- Crowd sourcing of utterances

Entities

- System entities
- Custom entities
 - Value list, regular expression, dynamic entities, entity lists
 - Composite bag entities
 - Entity event handler
 - Query entities
 - SQL Dialog that converts natural language to SQL



Skill features (2/5)

Visual conversation designer

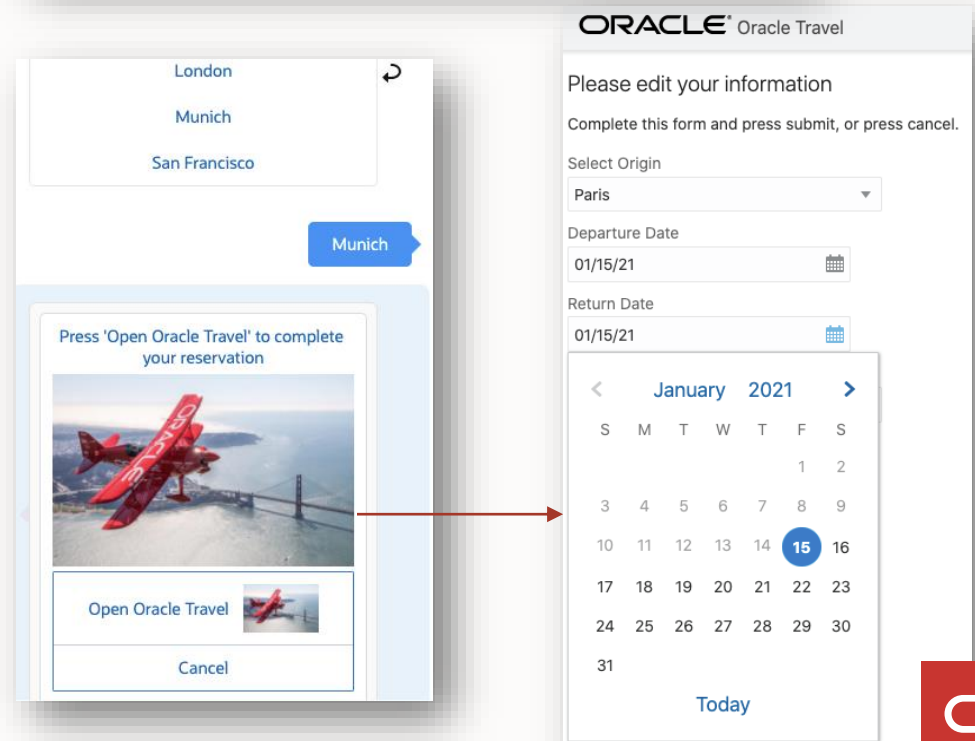
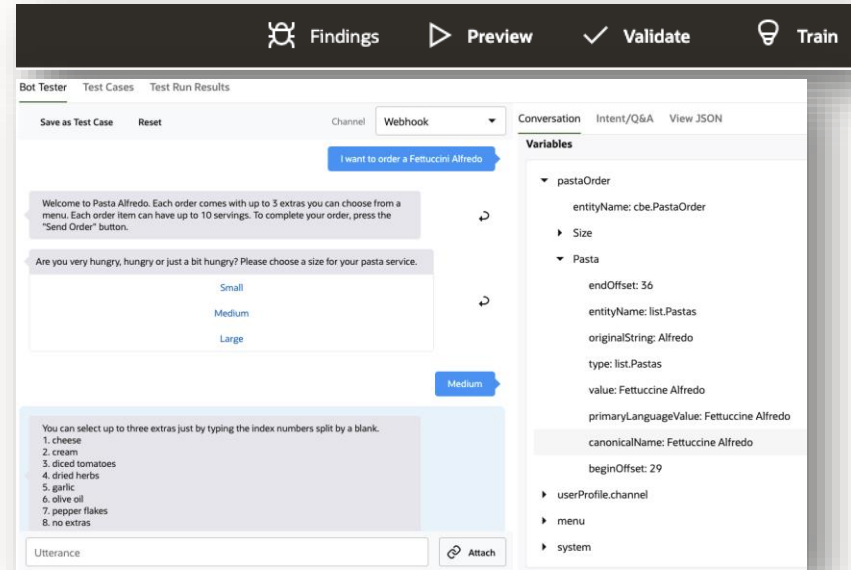
- Built-in components
- Custom components

Embedded conversation tester

- Simulates different messengers
- Records test cases

Structured data input

- Integrating web forms



Skill features (3/5)

Multi Language support

- Resource bundles, native NLU, translation service

Insights

- Monitors the runtime performance of your skill
- Provides visual clues about how your customers work within a skill

Built-in OAuth2 security feature

- 2-legged and 3-legged authorization
- Security components
- Allow you to configure all states in a dialog flow to require authorization or individual states

Language

Language Mode

Natively-Supported

Primary Language

English

Languages Added for This Skill

English

German

+ Add Language

Delete Language

Arabic

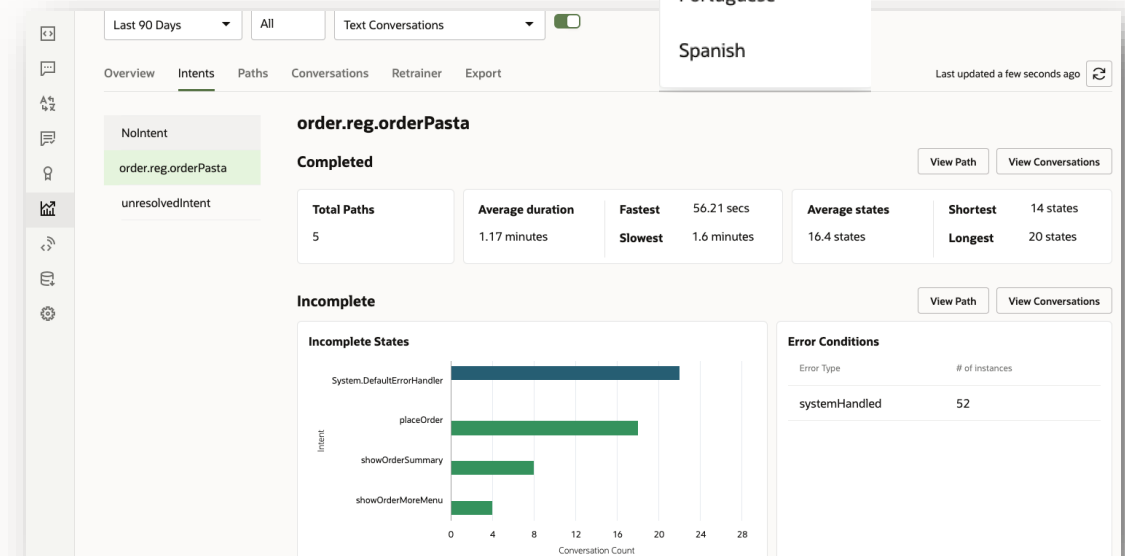
Dutch

French

Italian

Portuguese

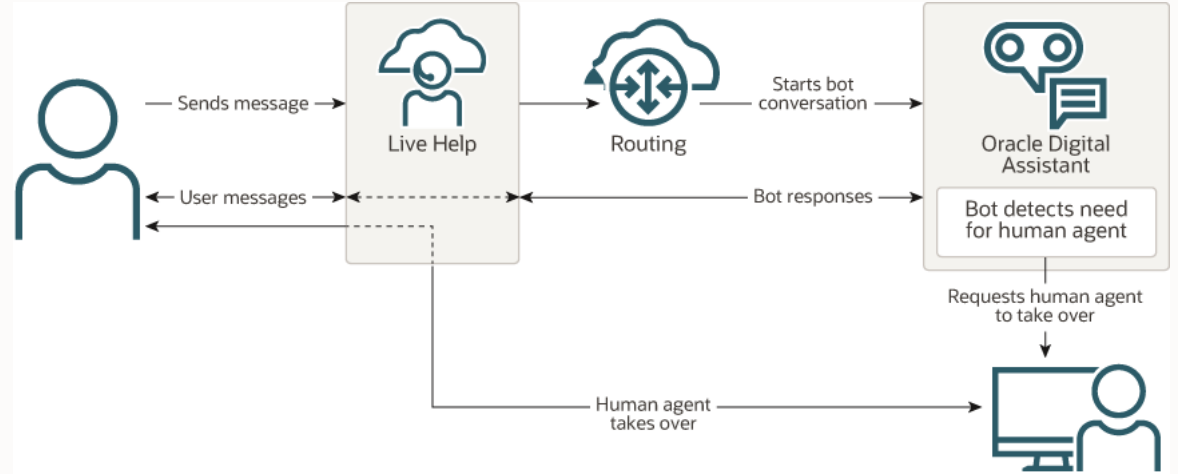
Spanish



Skill features (4/5)

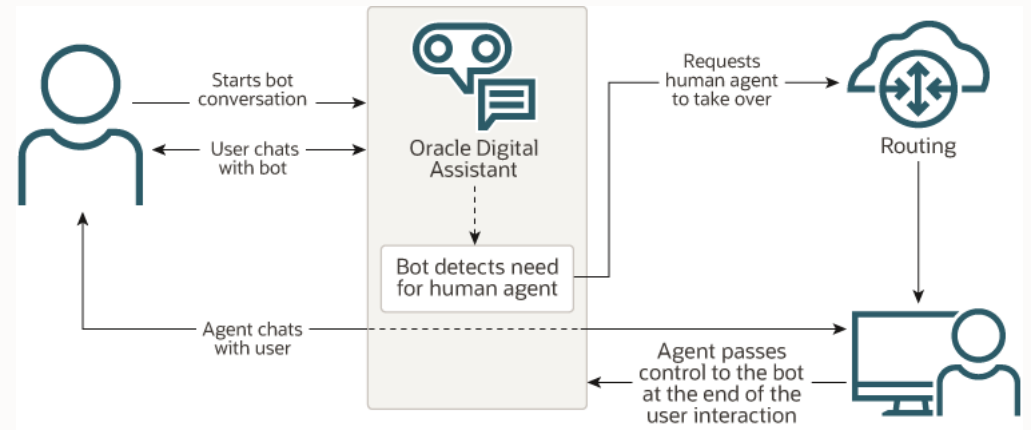
Human agent integration

- B2B, B2C and others
- Digital assistant as an agent
- Digital assistant to front a call center



Intelligent Advisor integration

Knowledge Search integration



Skill features (5/5)

Knowledge

- Automatically import FAQ's from existing knowledge sources
- PDF, HTML and URL
- Intents and utterances are generated

Events

- Digital assistant to start user conversation
- E.g. calendar system triggers bot to remind user of an appointment

Skill lifecycle management

- Versioning
- Cloning

New Knowledge Document [Close]

Name ⓘ
Enter a name. This name will prefix the answer intent names. Required

Language
English

Select URL to a HTML page or upload a file in PDF or HTML format

PDF HTML URL

Drag and Drop
Select a file or drop one here.

Selected PDF file:

I acknowledge that this uploaded file may be temporarily stored in Digital Assistant's storage while questions and answers are being extracted from the file.

Create

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Digital Assistant

A single front end to multiple skills

- Exposes multiple skills to a single bot solution
- Routing assistant

Intelligently routes user messages

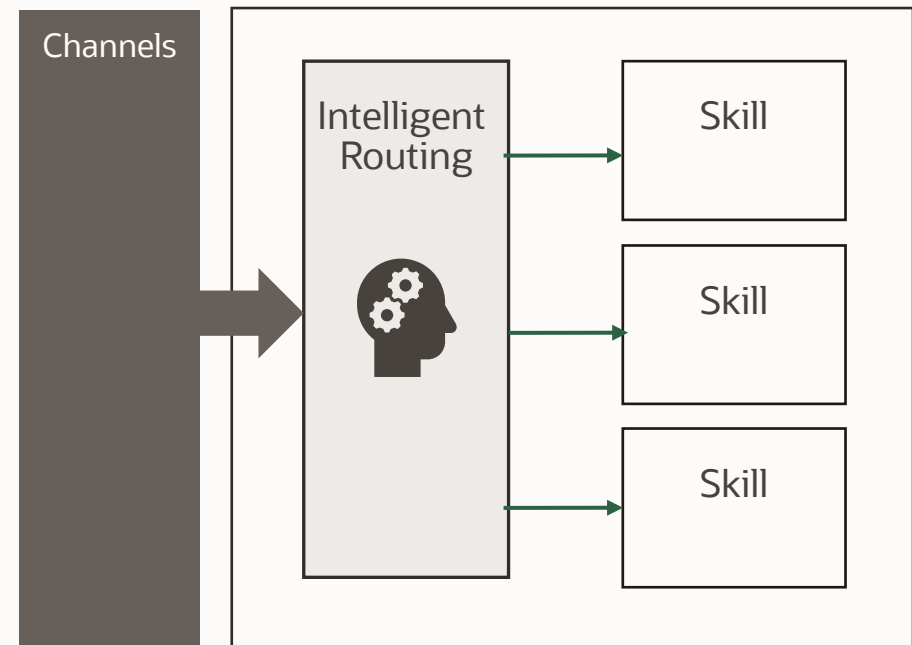
- NLP and rule-based routing
- Configurable
- System intents

Helps to disambiguate user requests

- Auto-generated dialogs

Non-sequitur request handling

Digital assistants orchestrate individual skills into a uniform chatbot solution



Digital assistant features (1/2)

Skill catalog

- Find and add skills

Implicit and explicit skill invocation

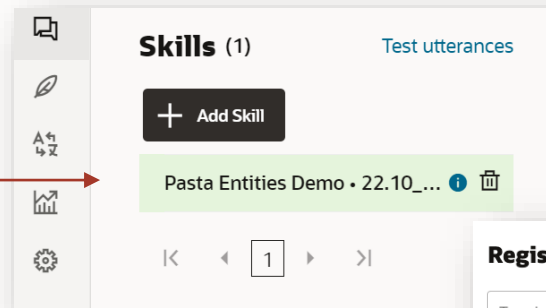
- Skills associated with invocation name

System intents

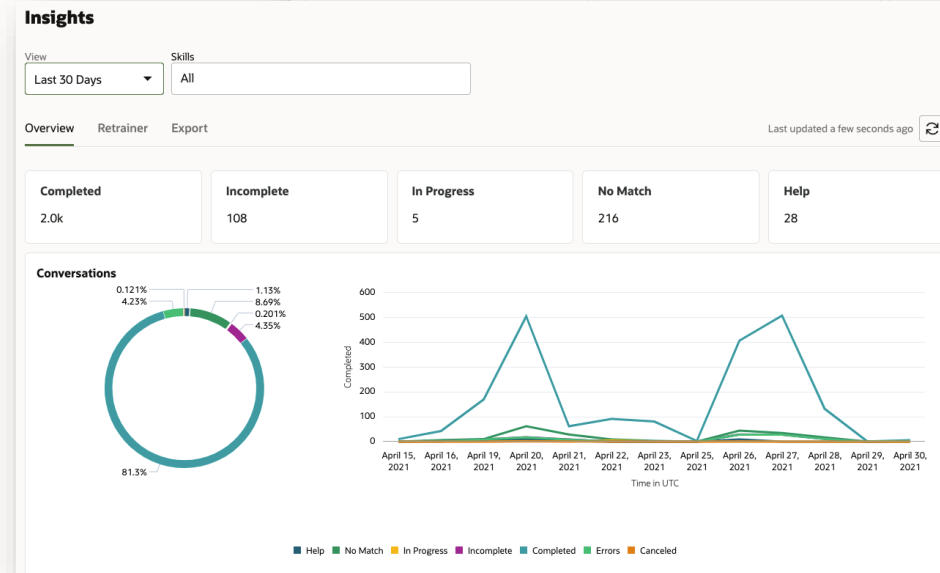
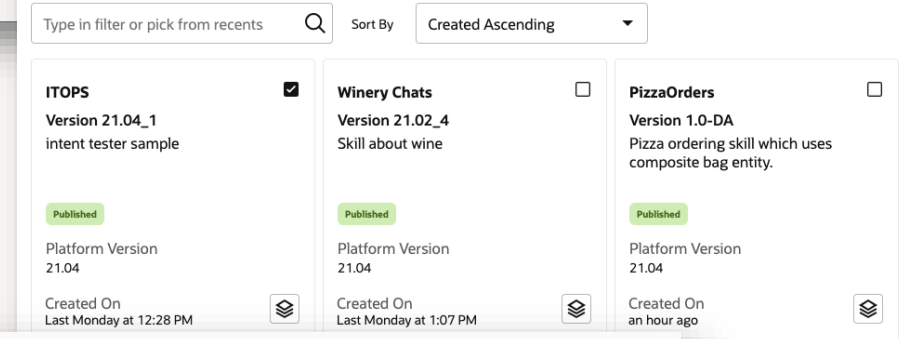
- Handles general digital assistant requests
 - Help, exit

Insights

- Analytics about digital assistant performance
- Retrainer



Register or Unregister Skills by Clicking Checkbox



Digital assistant features (2/2)

Utterance tester

- Test how digital assistant resolves user messages to skills and intents
- Create test suites for batch testing
 - Regression testing

Conversation tester

- Test user conversations in digital assistant
 - Simulate different messengers
 - Multi-language testing
 - Non sequitur routing
 - Record test cases for batch testing

The image displays four overlapping screenshots of a digital assistant interface:

- Digital Assistant - Multilingual Food Skills (2):** Shows a list of skills including "MultiLingual Winery Chats" and "Part 3 Multilingual Pasta". A red box highlights the "Test utterances" button.
- Utterance Tester:** A form for testing user input. It includes fields for "Initial Context" (Any skills), "Language Tag" (Auto), and "Utterance" (I want to order pasta). Buttons for "Reset" and "Test" are at the bottom.
- Routing Results:** Shows the result of a test. The "Router response" is "Skill Pasta Alfredo" and the "Intent" is "order.reg.orderPasta". A "View JSON" button is present.
- Candidate Skills:** Shows a list of candidate skills with their confidence scores. "Skill Part3MultilingualPasta Alfredo-21.02_4" has a score of 100. Other skills like "MultiLingualWineryChats-21.02_5" and "Skill unresolvedIntent" have scores of 0. A "View JSON" button is also present.

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Channels

User channel

- 3rd party and custom messenger integration
 - Facebook, Microsoft Teams (with group chats and SSO), Slack, SMS
 - Web, iOS, Android

Agent integration

- Live agent transfer
- DA as Agent
 - Agent channels available for B2B and B2C

Applications/Events

- Allows applications to trigger a bot-user conversation

The screenshot displays the Oracle CX Developer tool interface. On the left, a dark sidebar menu is open, showing a hierarchy: 'Development' (with a dropdown arrow), 'Skills', 'Digital Assistants', and 'Channels' (highlighted). The main content area has a top navigation bar with tabs for 'Users', 'Agent Integrations', 'DA as Agent', 'Applications', and 'Events'. Below this, the 'Channels (0)' section is visible, featuring a '+ Add Channel' button. The form for creating a channel includes a 'Name' field (labeled 'Channel name' and marked 'Required'), a 'Description' field (labeled 'Optional short description for this channel'), and a 'Channel Type' dropdown menu. The dropdown menu is currently set to 'Facebook Messenger' and lists other options: 'Webhook', 'Twilio SMS', 'Slack', 'Microsoft Teams', 'Cortana', 'Oracle iOS', and 'Oracle Android'. A green 'Create' button is located at the bottom right of the form.

About user channels

Native channels

- Transform incoming and outgoing messages
- No custom development needed
- Zero-downtime during skill/digital assistant updates

Webhook channel

- Standard callback mechanism
- Custom adapter to connect Messenger for which there is no native channel
- Supported by SDK

User channels are configurable adapters that allow digital assistants to support different types of messengers without code changes



Support for speech

Allows users to talk and listen to a bot

Speech recognition added to Oracle Messengers

- Oracle Android SDK
- Oracle iOS SDK
- Oracle Web SDK

Other options requiring Webhook as a channel

- Alexa, Google Home
- Twilio Voice API



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Extending SaaS skills

Skill Store

- Displays SaaS skill for download
- Skill that loaded from the Skill Store can be extended
 - Customization to a business
 - Can be rebased to new versions of base skill

What you can customize

- Intents and entities
- Dialog flow
- Resource bundles
- Custom component service
- Skill settings

