**Dialog Flow**

Dialogflow is a natural language understanding platform

Dialogflow makes it easy to design and integrate a conversational user interface into your web application, bot, mobile app, device, interactive voice response system, and so on

Although its NLP ability is very limited, it is still better than most of the products on the market.

Depending on requirements of your chatbot, building an agent being capable of parsing flexible user inputs still require decent amount of human effort

By using this you can provide new and engaging ways for users to interact with your product

* It can analyze multiple types of input from customers, including text or audio inputs
* And it can respond to your customers in a couple of ways, like text or with synthetic speech

TYPES OF DIALOGFLOW:

Dialogflow provides two different virtual services

1. Dialogflow CX

Provides an advanced agent type suitable for large or very complex agents

1. Dialogflow ES

Provides an advanced agent type suitable for small and simple agents

The following documentation is common to both CX and ES

1. Editions

Detailed comparison of editions and agent types

1. Support

Support options, FAQ, troubleshooting, etc…

1. Resources

Pricing, quotas, release notes, etc….

Agent Assist:

* Dialogflow CX and ES provide virtual agent services for chatbots and contact centers.
* If you have a contact center that employs human agents, you can use [Agent Assist](https://cloud.google.com/agent-assist/docs) to help your human agents.
* Agent Assist provides real-time suggestions for human agents while they are in conversations with end-user customers.
* The Agent Assist API is implemented as an extension of the Dialogflow ES API.
* When browsing the Dialogflow ES API, you will see these additional types and methods.
* If you are only using a Dialogflow virtual agent, you can ignore these extensions

Uses for Dialogflow:

Dialogflow can be used for a variety of applications, including:

* Customer service artificial intelligence ([AI](https://searchenterpriseai.techtarget.com/definition/AI-Artificial-Intelligence)) agents- Interfaces can be programmed to answer questions, access orders, make appointments and take requests.
* [Conversational commerce](https://searchcustomerexperience.techtarget.com/definition/conversational-commerce-voice-commerce)- Bots can help customers make self-service purchases or schedule deliveries.
* Internet of things ([IoT](https://internetofthingsagenda.techtarget.com/definition/Internet-of-Things-IoT)) - Dialogflow can be applied to IoT devices to make them better at understanding context and responding with precision.

Benefits of Dialogflow:

A few benefits of using Dialogflow are:

* Is user-friendly and intuitive with an integrated code editor and [serverless](https://searchitoperations.techtarget.com/definition/serverless-computing) application structure.
* Offers its integrations in over 20 different languages, with differentiation amongst the types of services offered for each.
* Software development kits ([SDK](https://whatis.techtarget.com/definition/software-developers-kit-SDK)) are offered for multiple different devices such as mobile devices, cars, [wearables](https://searchmobilecomputing.techtarget.com/definition/wearable-technology), speakers and other smart devices.
* Incorporates Google features such as machine learning and speech-to-text translation.
* Actions can be built for multiple AI assistants, including Google Assistant, Alexa Cortana and Facebook Messenger.
* Dialogflow enterprise edition is offered through the Google Cloud Platform ([GCP](https://searchcloudcomputing.techtarget.com/definition/Google-Cloud-Platform)), which is targeted toward “natural and rich” interactions between the business and their customers and experiences at a larger scale required for larger organizations.
* Can perform [sentiment analysis](https://searchbusinessanalytics.techtarget.com/definition/opinion-mining-sentiment-mining) for user queries.

Dialogflow uses ML to understand what your customers want and provide the most useful response and best part thanks to Dialogflow and to end solution

The following table provides a detailed comparison between agent types:

|  |  |  |
| --- | --- | --- |
| **Category** | **ES agent** | **CX agent** |
| Editions | Dialogflow Trial Edition, Dialogflow Essentials Edition | Dialogflow CX Edition |
| Agent building blocks | Flat structure of [intents](https://cloud.google.com/dialogflow/docs/intents-overview) | Graph structure of [flows](https://cloud.google.com/dialogflow/cx/docs/concept/flow) and [pages](https://cloud.google.com/dialogflow/cx/docs/concept/page) |
| Conversation control | Linear conversation paths that simulate nonlinear paths using [intents](https://cloud.google.com/dialogflow/docs/intents-overview) as nodes and [contexts](https://cloud.google.com/dialogflow/docs/contexts-overview) to control paths | State machine model with explicit conversation control using [pages](https://cloud.google.com/dialogflow/cx/docs/concept/page) as nodes and [state handlers](https://cloud.google.com/dialogflow/cx/docs/concept/handler) to control paths |
| Console user experience | Mostly text forms | Visual graphs showing conversation paths and text forms for configurations |
| Intent reusability | [Intents](https://cloud.google.com/dialogflow/docs/intents-overview) are coupled with fulfillment, events, and responses; specific to a conversation state, so difficult to reuse | [Intents](https://cloud.google.com/dialogflow/cx/docs/concept/intent) are simplified to remove this coupling and made highly reusable |
| Webhook error handling | Errors quietly ignored by agent, passed to API caller if present | Explicit [error event handling built-in](https://cloud.google.com/dialogflow/cx/docs/concept/handler#event-built-in) to your agent |
| Event handling | Invoked [events](https://cloud.google.com/dialogflow/docs/events-overview) trigger intent matches | [Events handlers](https://cloud.google.com/dialogflow/cx/docs/concept/handler#event) are first-class types with powerful controls |
| Conditional response messages | Requires webhook calls | Can be configured statically [in fulfillment](https://cloud.google.com/dialogflow/cx/docs/concept/fulfillment#cond), with static [conditions for a route](https://cloud.google.com/dialogflow/cx/docs/concept/handler#route), or with [webhooks](https://cloud.google.com/dialogflow/cx/docs/concept/webhook) calls |
| Parameter scope | Can be scoped to [intent](https://cloud.google.com/dialogflow/docs/intents-actions-parameters), [context](https://cloud.google.com/dialogflow/docs/contexts-input-output#param), or [event](https://cloud.google.com/dialogflow/docs/events-overview#param) | Can be scoped to [intent](https://cloud.google.com/dialogflow/cx/docs/concept/parameter#intent), [form](https://cloud.google.com/dialogflow/cx/docs/concept/parameter#form), or [session](https://cloud.google.com/dialogflow/cx/docs/concept/parameter#session) |
| Agents per project | 1 | 100 |
| Recommended agent size | Up to medium size agents | Up to very large |
| Recommended agent complexity | Up to moderately complex agents | Up to highly complex |
| Learning curve to design a simple agent | Basic | Moderate |
| Learning curve to design a complex agent | High | Moderate |
| Pricing and quotas | Granular | Simplified |

Edition Comparison:

1. Dialogflow Trail Edition

It offers limited quota and support by community and e-mail

1. Dialogflow ES Edition

The Essentials Edition offers production-ready quotas and support from Google Cloud support

1. Dialogflow CX(Customer Experience) Edition

The CX Edition offers production-ready quotas and support from Google Cloud support

### Key features for Dialogflow CX:

##### Visual flow builder

##### Omnichannel implementation

##### Advanced AI

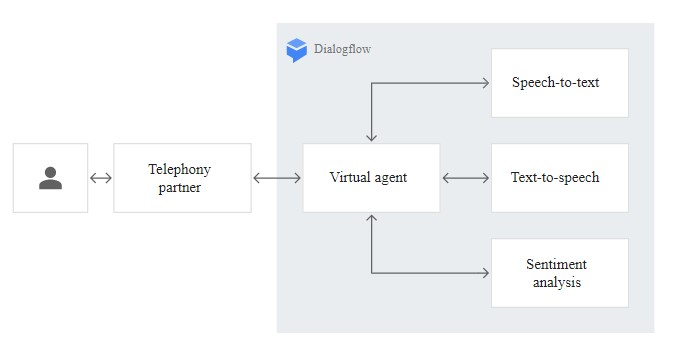
##### State-based data models

##### End-to-end management

Use cases:

1. Voicebots for customer service

Give customers 24/7 access to immediate conversational self-service, with seamless handoffs to human agents for more complex issues by building virtual agents and interactive voice response (IVR) that can perform tasks such as scheduling appointments, answering common questions, or assisting a customer with simple requests.



1. Chatbots for B2C conversations

Connect with your customers on their preferred platform, at any time, from anywhere in the world. Whether your customers want to ask common questions or access specific information, text virtual agents offer an instant and satisfying experience for customers who want quick and accurate responses.

