

The W3C Voice Interaction Community Group



About the W3C Voice Interaction Community Group

- A [Community Group](#) of the [World Wide Web Consortium](#)
- <https://www.w3.org/community/voiceinteraction/>
- Started in 2017
- 44 current members
- 4 Co-chairs
- Goals:
 - develop new use cases for voice interaction
 - develop requirements for applications such as virtual assistants
 - explore areas for possible standardization
 - Produce reports that may be input to the W3C standards process
- Topics:
 - **interoperability for intelligent personal assistants**
 - **discovery of virtual assistants with specific expertise, for example a way to find a virtual assistant that can supply weather information**
 - standard formats for statistical language models for speech recognizers
 - standard representations for references to common concepts such as time
 - work on dialogue management or 'workflow' languages

Current Specifications

- Architecture (Version 1.3)
Components of conversational systems and their functions
<https://w3c.github.io/voiceinteraction/voice%20interaction%20drafts/paArchitecture/paArchitecture-1-3.htm>
- Interfaces between components:
How components communicate
<https://w3c.github.io/voiceinteraction/voice%20interaction%20drafts/paInterfaces/paInterfaces.htm>
- Architecture Requirements
<https://w3c.github.io/voiceinteraction/voice%20interaction%20drafts/paRequirements/paRequirements.htm>
- JSON Representation of Semantic Information;
A common format for natural language results
<https://w3c.github.io/voiceinteraction/voice%20interaction%20drafts/emmaJSON.htm>

The Web and current intelligent personal assistants

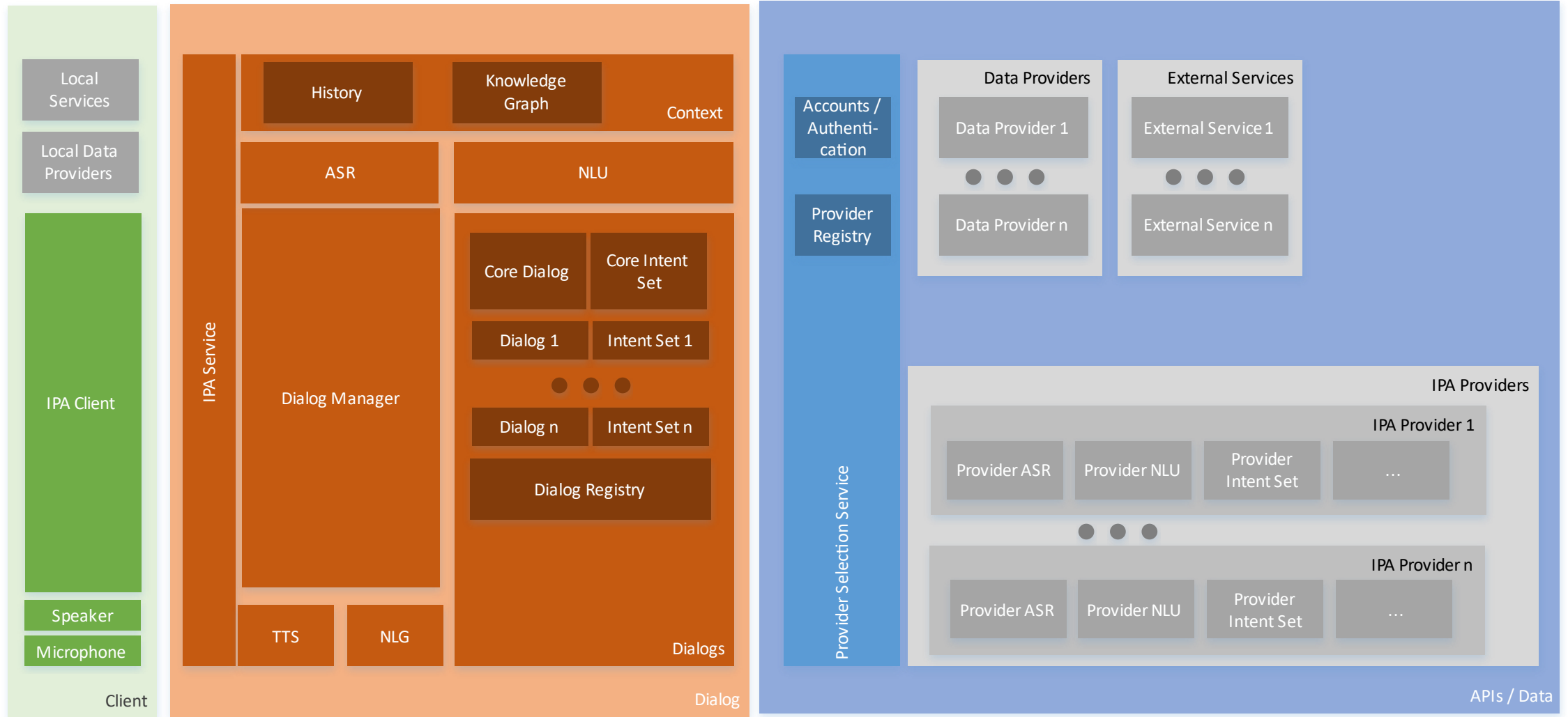
The Web

- Content can run on any browser (HTML, CSS, Javascript)
- A web page can transfer to any other web page (HTTP(S), DNS)
- Opportunity for innovation in components like browsers and search engines

Intelligent personal assistants

- Content can only run on the platform it was developed for
- Applications can only transfer to other approved applications on the platform it was developed for
- No opportunity for innovation in search or platform

Intelligent Personal Assistant Architecture



Device?

Browser?

Search Engine/DNS?

Websites?

High level interfaces

