Cloud data flow diagrams

A data flow diagram (DFD) shows how data is processed within a system based on inputs and outputs. Visual symbols are used to represent the flow of information, data sources and destinations, and where data is stored. There are two main types of notation used for data flow diagrams: Yourdon-Coad and Gane-Sarson, both named after their creators.

There are four main elements of all data flow diagrams: entity, process, data store and data flow.

- External Entity is known as actors, sources or sinks, and terminators, external entities produce and consume data that flows between the entity and the system being diagrammed. These data flows are the inputs and outputs of the DFD.
- Process is an activity that changes or transforms data flows. In Gane-Sarson notation, a rectangular box is used and may be labeled with a
 reference number, location of where in the system the process occurs and a short title that describes its function.
- Data Store is a data store which does not generate any operations but simply holds data for later access. Input flows to a data store include information or operations that change the stored data. Output flows would be data retrieved from the store.
- Data Flow is a movement of data between external entities, processes and data stores is represented with an arrow symbol, which indicates
 the direction of flow.

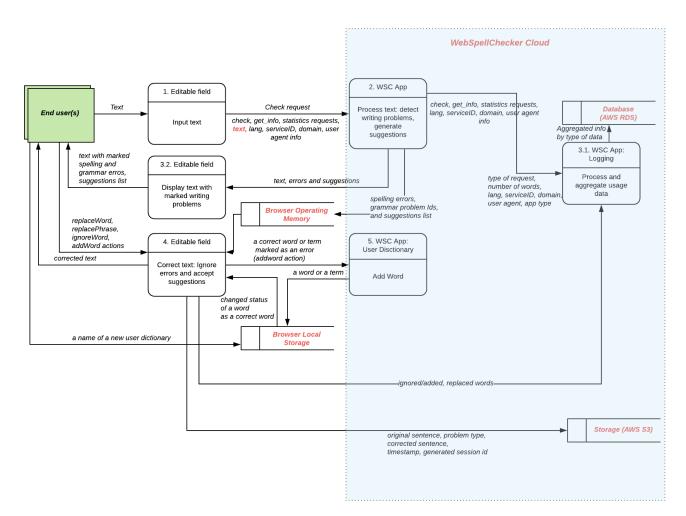
1. Data flow diagram for cloud free users



Used Conditions:

- DFD notation: Gane-Sarson
- DFD level: 2
- Type: Cloud Free
- Products: SpellCheckAsYouType (SCAYT) and WebSpellChecker Dialog (WSC) plugins for CKEditor 4, WProofreader plugin for WordPress
- Versions: v5.5.7+

The next diagram represents the data flow between client sessions for end users who are using the free version of the WebSpellChecker Cloud services.



2. Data flow diagram for Cloud Paid users



Used Conditions:

• DFD notation: Gane-Sarson

• DFD level: 2

• Type: Cloud Paid

 Products: Applicable for all types on integrations of the WProofreader, SpellCheckAsYouType (SCAYT) and WebSpellChecker Dialog (WSC) products.

• Versions: v5.5.7+

The next diagram represents the data flow between client sessions for end users who are using the paid version of the WebSpellChecker Cloud services.

WebSpellChecker Cloud check, get_info, statistics requests, lang, serviceID, domain, user agent Database (AWS RDS) 2. WSC App info 1. Editable field Aggregated info Text Check request Process text: detect End user(s) writing problems, check, get_info, statistics requests, text, lang, serviceID, domain, user Input text suggestions Logging agent info type of request, number of words, lang, serviceID, dom Process and Text with marked aggregate usage spelling and 3.2. Editable field data suggestions list Text, errors and suggestions user agent, app type Display text with marked writing spelling errors problems grammar problem Ids, and suggestions list Browser Operating replaceWord. Custom ignoreWord, Dictionaries 5. WSC App: 4. Editable field a correct word or term addWord actions User Disctionary Corrected text (addword action) Correct text: Ignore errors and accept suggestions a word or a term **User Dictionaries** Add Word list of wods saved in a spesified (textual wordlist) user dictionary changed status of a word as a correct word list of wods from a custom dictionary **Browser Local** a name of a new user dictionary Storage a list of words saved in 6. WSC App: a new user dictionary with User Dictionary words from browser local storage (if any) Create Dictionary ignored/added, replaced words Storage (AWS S3) original sentence, problem type, corrected sentence. timestamp, generated session id