

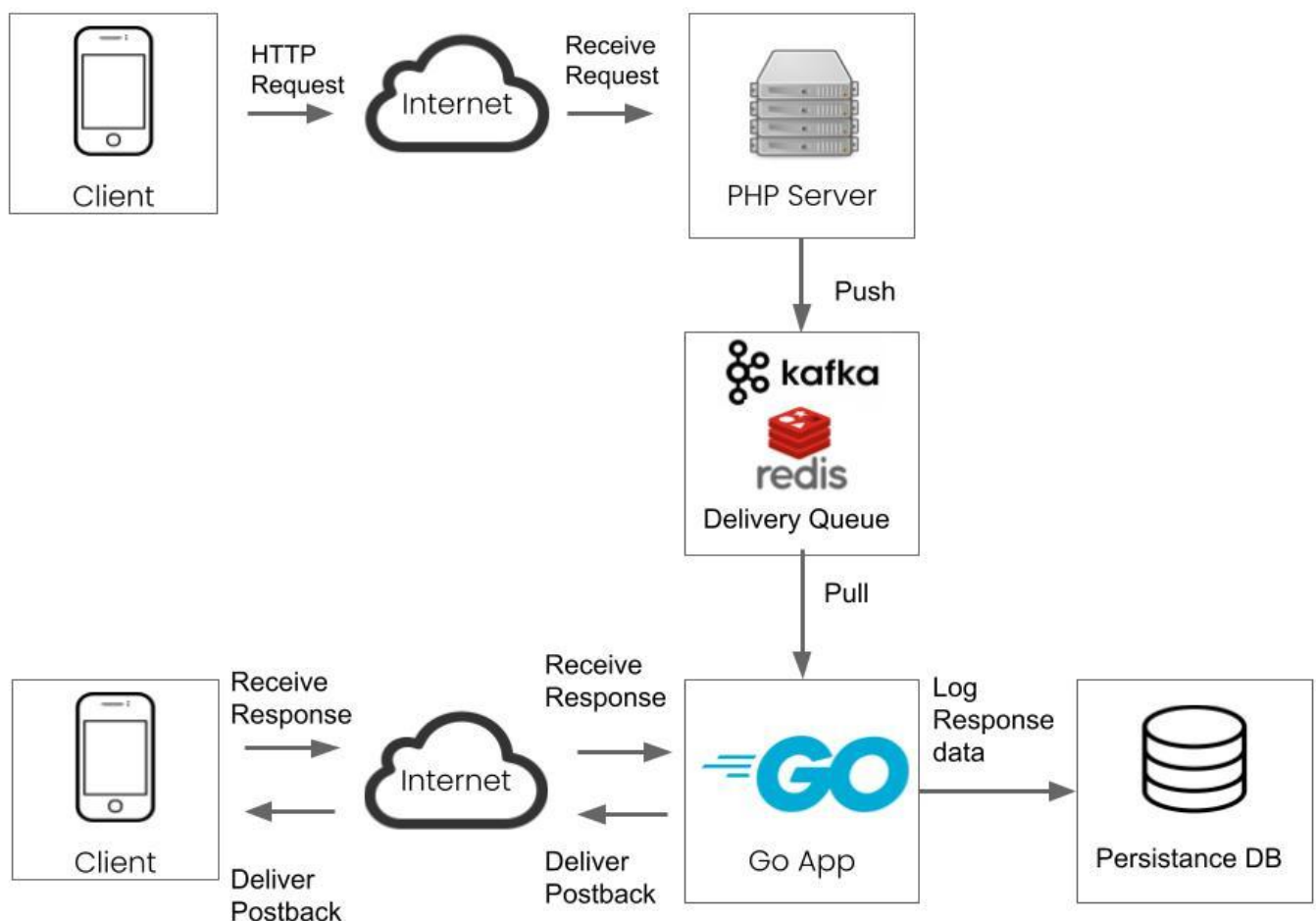
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## General architecture

There are three main parts:

- PHP server
- Delivery Queue
- Go App

The process starts with a remote client. This client sends a REST HTTP request to the PHP Server. The server pushes a postback object on a Delivery Queue (Apache) for each data object on the request. In parallel, there is a Golang App that pools the Queue to pull postback objects. For each pull, it delivers the postback object to the given HTTP endpoint. Then the response is stored in a persistent database (log text file).



Both the Delivery Queue and Go App can be monitored to troubleshoot the system.

## PHP documentation

### Instructions

- The main php service is "ingest.php" file.
- To change apache kafka's ip modify the constant `BROKER_ADDRESS`

### Configuration

- PHP version: 7.4
- XAMPP 3.3.0 to manage the server

### Install dependencies

- `composer require nmred/kafka-php`

## Apache Kafka server (Windows 10)

### Instructions

- To start the service execute the following commands in the same order:  
**`.\zookeeper-server-start.bat ..\..\config\zookeeper.properties`**  
**`.\kafka-server-start.bat ..\..\config\server.properties`**

### Configuration:

- Apache Kafka: 3.2.0 (install release from apache kafka web page to use)

## GO documentation

### Instructions

- The main go service is "main.go" file.
- To change configurations such as logs or apache kafka change the constants values
- Logs can be found on "logs\_file"

### Configuration:

- Golang version: 1.18

### Install dependencies

- `include "github.com/segmentio/kafka-go" // external`