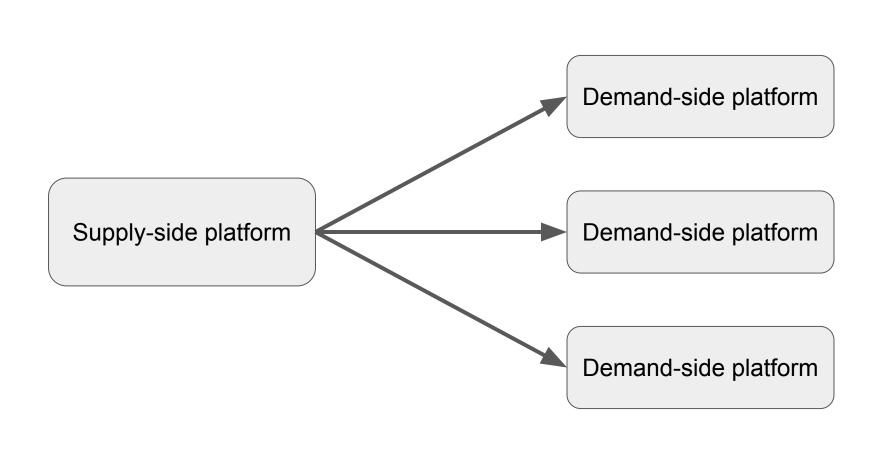
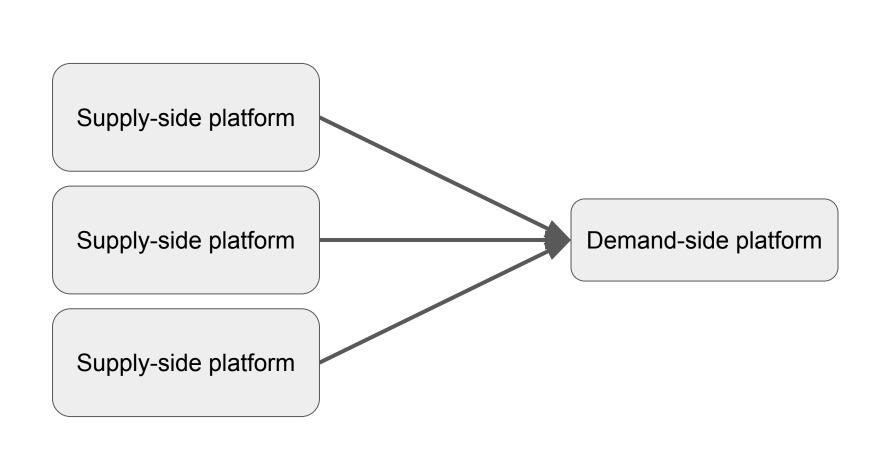
INTEGRATION TEST FRAMEWORK FOR G4 DSP

Ilya Medvedev

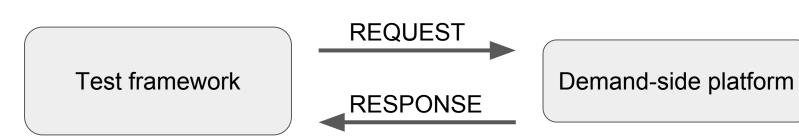




Supply-side platform

RESPONSE

Demand-side platform



- 1. Create request
- 2. Send request from AppNexus
- 3. Test response

```
cerateRequest() {
    request = new Request();
sendRequest(String sspName) {
    requester = getRequester(sspName);
    response = requester.send(request);
testResponse() {
    If (response.isNoBid()) {
        throw new NoBidResponseException(response);
```

- 1. Create request with American IP address
- 2. Send request from AppNexus
- 3. Test response

```
cerateRequest() {
    request = new Request();
sendRequest(String sspName) {
    requester = getRequester(sspName);
    response = requester.send(request);
testResponse() {
    If (response.isNoBid()) {
        throw new NoBidResponseException(response);
```

```
cerateRequest() {
     request = new Request();
cerateRequestWithIpAddress(String country) {
     request = new Request()
          .setIP(geolp.getIp(country));
sendRequest(String sspName) {
     requester = getRequester(sspName);
     response = requester.send(request);
testResponse() {
     If (response.isNoBid()) {
          throw new NoBidResponseException(response);
```

- 1. Create request with Verizon mobile carrier
- 2. Send request from AppNexus
- 3. Test response

```
cerateRequest() {
     request = new Request();
cerateRequestWithIpAddress(String country) {
     request = new Request()
          .setIP(geolp.getIp(country));
sendRequest(String sspName) {
     requester = getRequester(sspName);
     response = requester.send(request);
testResponse() {
     If (response.isNoBid()) {
          throw new NoBidResponseException(response);
```

```
cerateRequest() {
      request = new Request();
cerateRequestWithIpAddress(String country) {
      request = new Request()
             .setIP(geolp.getIp(country));
cerateRequestWithMobileCarrier(String carrier)) {
      request = new Request()
             .setMobileCarrier(carrier);
sendRequest(String sspName) {
      requester = getRequester(sspName);
      response = requester.send(request);
testResponse() {
      If (response.isNoBid()) {
             throw new NoBidResponseException(response);
```

<pre>cerateRequest() { request = new Request(); }</pre>	<pre>cerateRequestWithIpAddress(String country) { request = new Request() .setIP(geolp.getIp(country));</pre>	cerateRequestWithMobileCarrier(String carrier)) { request = new Request() .setMobileCarrier(carrier);
sendRequest(String sspName) { requester = getRequester	}	}
(sspName);	sendRequest(String sspName) { requester = getRequester	sendRequest(String sspName) { requester = getRequester
response = requester.send (request);	(sspName);	(sspName);
}	response = requester.send (request);	response = requester.send (request);
testResponse() { If (response.isNoBid()) {	}	}
throw new NoBidResponseException(response); }	testResponse() { If (response.isNoBid()) { throw new	testResponse() { If (response.isNoBid()) { throw new
}	NoBidResponseException(response); }	NoBidResponseException(response); }
	}	}

- 1. Create request
- 2. Send request from AppNexus
- 3. Test response

```
class RequestCreator {
    Context context;

    RequestCreator(Context context) {
        this.context = context;
    }
}
```

<dependency> <groupId>info.cukes</groupId> <artifactId>cucumber-picocontainer</artifactId> <version>\${dependency.cucmber.version}</version> </dependency>

```
class RequestCreator {
    Context context;

    RequestCreator(Context context) {
        this.context = context;
    }
}
```

```
cerateRequest() {
     request = new Request();
     context.setValue(Context.REQUEST, request);
cerateRequestWithIpAddress(String country) {
     request = new Request()
           .setIP(geolp.getlp(country));
     context.setValue(Context.REQUEST, request);
cerateRequestWithMobileCarrier(String carrier)) {
     request = new Request()
           .setMobileCarrier(carrier);
     context.setValue(Context.REQUEST, request);
```

```
class RequestSender {
    Context context;

    RequestSender(Context context) {
        this.context = context;
    }
}
```

```
sendRequest(String sspName) {
    request = context.getValue(Context.REQUEST);
    requester = getRequester(sspName);
    response = requester.send(request);
```

context.setValue(Context.RESPONSE, response);

```
class RequestTester {
    Context context;

    RequestTester(Context context) {
        this.context = context;
    }
}
```

```
testResponse() {
    response = context.getValue(Context.RESPONSE);

If (response.isNoBid()) {
        throw new NoBidResponseException(response);
    }
}
```

```
public class Context {
    public static final Context<Request> REQUEST = new Context<>();
    public static final Context<Response> RESPONSE = new Context<>();
    private final Map<Context, Object> context = new HashMap<>();
    public <Value> Context setValue(final Context<Value> context, Value value) {
        context.put(context, value);
        return this;
    public <Value> Value getValue(final Context<Value> context) {
        return (Value) context.get(context)
```

```
cerateRequest() {
     request = new Request();
     context.setValue(Context.REQUEST, request);
cerateRequestWithIpAddress(String country) {
     request = new Request()
           .setIP(geolp.getlp(country));
     context.setValue(Context.REQUEST, request);
cerateRequestWithMobileCarrier(String carrier)) {
     request = new Request()
           .setMobileCarrier(carrier);
     context.setValue(Context.REQUEST, request);
```

```
sendRequest(String sspName) {
    request = context.getValue(Context.REQUEST);
    requester = getRequester(sspName);
    response = requester.send(request);
```

context.setValue(Context.RESPONSE, response);

```
testResponse() {
    response = context.getValue(Context.RESPONSE);

If (response.isNoBid()) {
        throw new NoBidResponseException(response);
    }
}
```

```
public class SharedBrowser {
    private static final Browser BROWSER = new Browser();
    static {
        final ShutdownHook shutdownHook = new ShutdownHook(BROWSER);
        Runtime.getRuntime()
            .addShutdownHook(shutdownHook);
```

```
public class ShutdownHook extends Thread {
    private final Closeable closeable;
    ShutdownHook(final Closeable closeable) {
        this.closeable = closeable;
    void run() {
        closeable.close();
```

Questions?