Enabling Data Integration (Form and Case Forwarding)

This feature requires a CommCare Software Plan

This feature (API Access) is only available to CommCare users with a Standard Plan or higher. For more details, see the CommCare Software Plan page.

Setting up Data Forwarding

You can configure your project to forward any incoming forms and/or cases to a specified URL. To do so, in CommCare HQ navigate to Project Settings and then to Data Forwarding. It will look something like this:
What to have your server expect

Data will be forwarded, and the contents of what is forwarded will be in the body of the HTTP POST. This does not use HTML form-style parameters.

In the examples below, we'll show you what HTTP Headers and POST body to expect. All newlines and indentation is for clarity only below; in the actual post any newline + indentation will be a single space.

Forward Form
You get the complete form (one POST per form)

In addition to the form there will be an extra header 'received-on' that is the time the form was received by CommCare HQ.

**Example HTTP Request to your server**

**QUERYSTRING**

app_id: db9f874f0219444ee7848ddd023e292e

**HEADERS**

Accept-Encoding: identity
Host: requestb.in
Total-Route-Time: 0
Content-Type: text/xml
X-Request-Id: 42863ab1-1dfb-49cb-b0ed-33f924f6cd3b
Received-On: 2015-04-17T20:14:34.046462Z
Connection: close
Via: 1.1 vegur

**RAW BODY**

```xml
<?xml version='1.0' ?>
<data uiVersion="1"
    version="10"
    name="Untitled Form"
    xmlns:jrm="http://dev.commcarehq.org/jr/xforms"
    xmlns="http://openrosa.org/formdesigner/B9C4EB51-A7CC-49B5-B7D5-10E9F10B450B">
    <question1>Trees</question1>
    <n0:case case_id="b0916685-7247-4c44-b712-633d3d64e0c0"
        date_modified="2015-04-17T16:04:54.950-04"
        user_id="d0e472a6b36b3ee5059222b12b8c1b"
        xmlns:n0="http://commcarehq.org/case/transaction/v2"/>
    <n0:owner_id>d0e472a6b36b3ee5059222b12b8c1b</n0:owner_id>
    <n0:case_name>Trees</n0:case_name>
    <n0:case_type>mscase</n0:case_type>
    <n0:create/>
</n0:case>
<n1:meta xmlns:n1="http://openrosa.org/jr/xforms">
    <n1:deviceID>990005013558458</n1:deviceID>
    <n1:timeStart>2015-04-17T16:04:23.833-04</n1:timeStart>
    <n1:timeEnd>2015-04-17T16:04:54.950-04</n1:timeEnd>
    <n1:username>danny</n1:username>
    <n1:user_id>d0e472a6b36b3ee5059222b12b8c1b</n1:user_id>
    <n1:instanceID>afcb3026-c4b3-463f-85ec-0cb9a2737fc5</n1:instanceID>
</n1:meta>
</data>
```

**Forward Cases**

You get a case block representing the latest state of any cases affected by the form (one POST per case).

When you turn on case forwarding, every time a case changes on HQ, it will forward the case in its entirety to your URL (not just the last change). We expect that you will receive the case, look to see if there's a case with the same id already in your system, and then either create or update the case with all the information given. If the case has been closed, we will send the case with just a close block.

The URL you set up to deal with the in-coming information can expect to receive one case block at a time, in the format specified below (XML or JSON).

In addition to the case there will be an extra header 'server-modified-on' that is the last time the case was modified in CommCare HQ.

**Example HTTP Request to your server**

**HEADERS**
Forward Form Stub

You get a timestamp (GMT), the form’s id, and the ids of any affected cases

This works especially well in conjunction with our Data APIs; you can get notified of a change using Form Stub Forwarding and then use the Data APIs to look up the form and cases affected, either right away or at a later date.

Example HTTP Request to your server

HEADERS
Host: requestb.in
Accept-Encoding: identity
Via: 1.1 vegur
Received-On: 2015-04-17T20:14:34.046462Z
X-Request-Id: 244433bd-85d8-4444-8cea-a56fcc30d6b2
Total-Route-Time: 0
Content-Length: 151
Connection: close
Connect-Time: 2
Content-Type: text/xml

RAW BODY

```json
{
  "received_on": "2015-04-17T20:14:34.046462Z",
  "form_id": "afcb3026-c4b3-463f-85ec-0cb9a2737fc5",
  "case_ids": ["b0916685-7247-4c44-b712-633d3d64e0c0"]
}
```

Forward App Schema Changes

Description

You get notified of the app id whenever an app change is saved and the "build id" whenever a new version is built.

Example HTTP Request to your server

HEADERS

Host: requestb.in
Accept-Encoding: identity
Via: 1.1 vegur
X-Request-Id: 9f211dd8-19d0-49be-980d-3c7f879336a5
Total-Route-Time: 0
Content-Length: 32
Connection: close
Connect-Time: 0
Content-Type: text/xml

RAW BODY

193b28e58f335f165cb3e2bbe02b3ed8