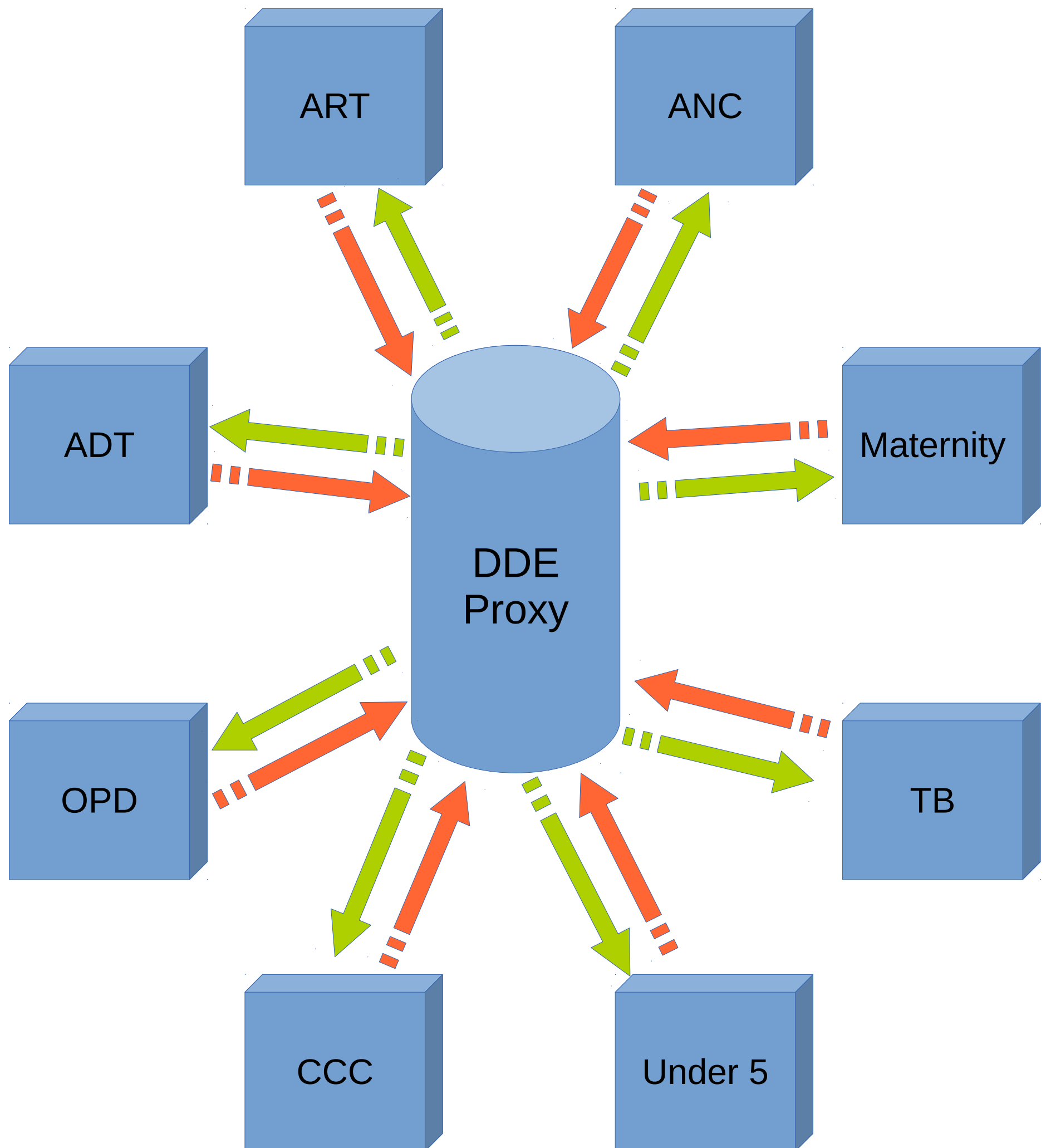


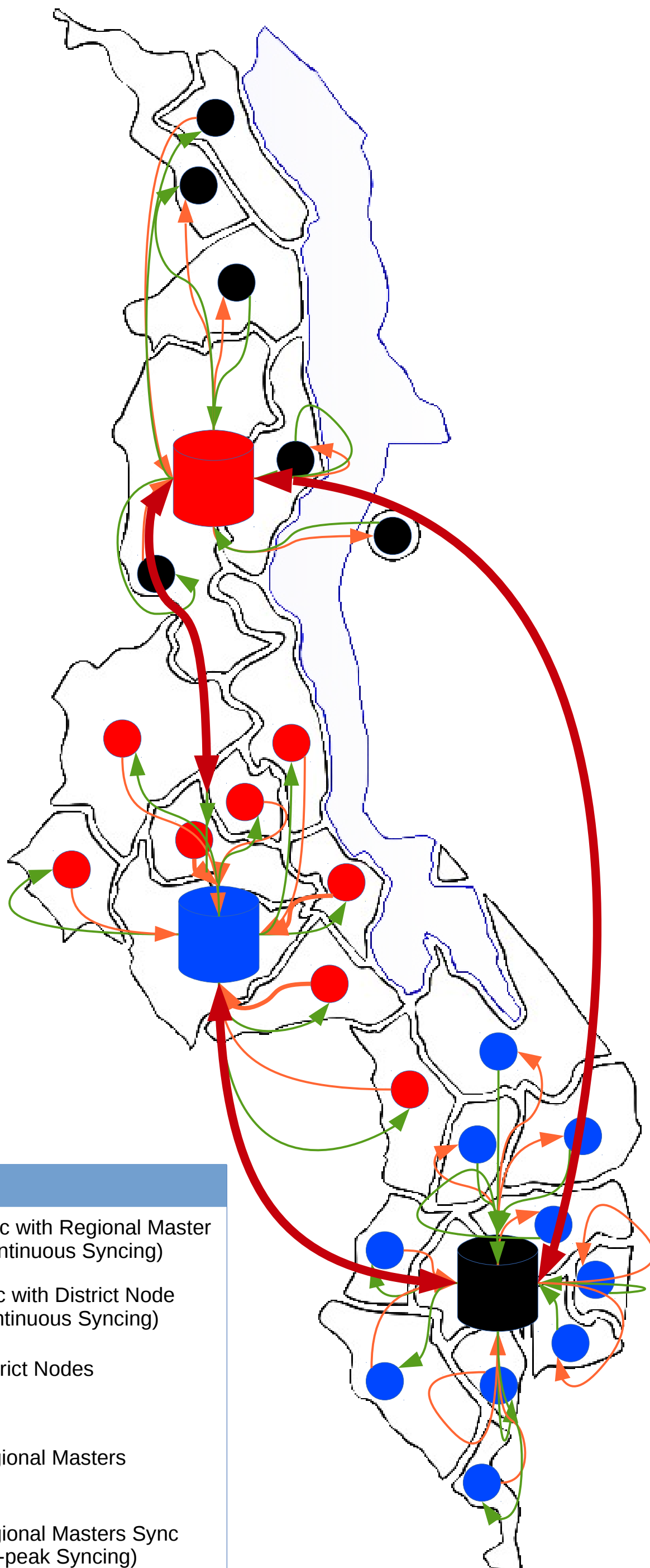
Demographics Data Exchange Design Document

Global Proxy View




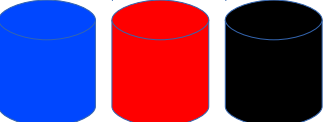



Demographics Data Exchange Design Document

National and Regional Master/Proxy Nodes Distribution

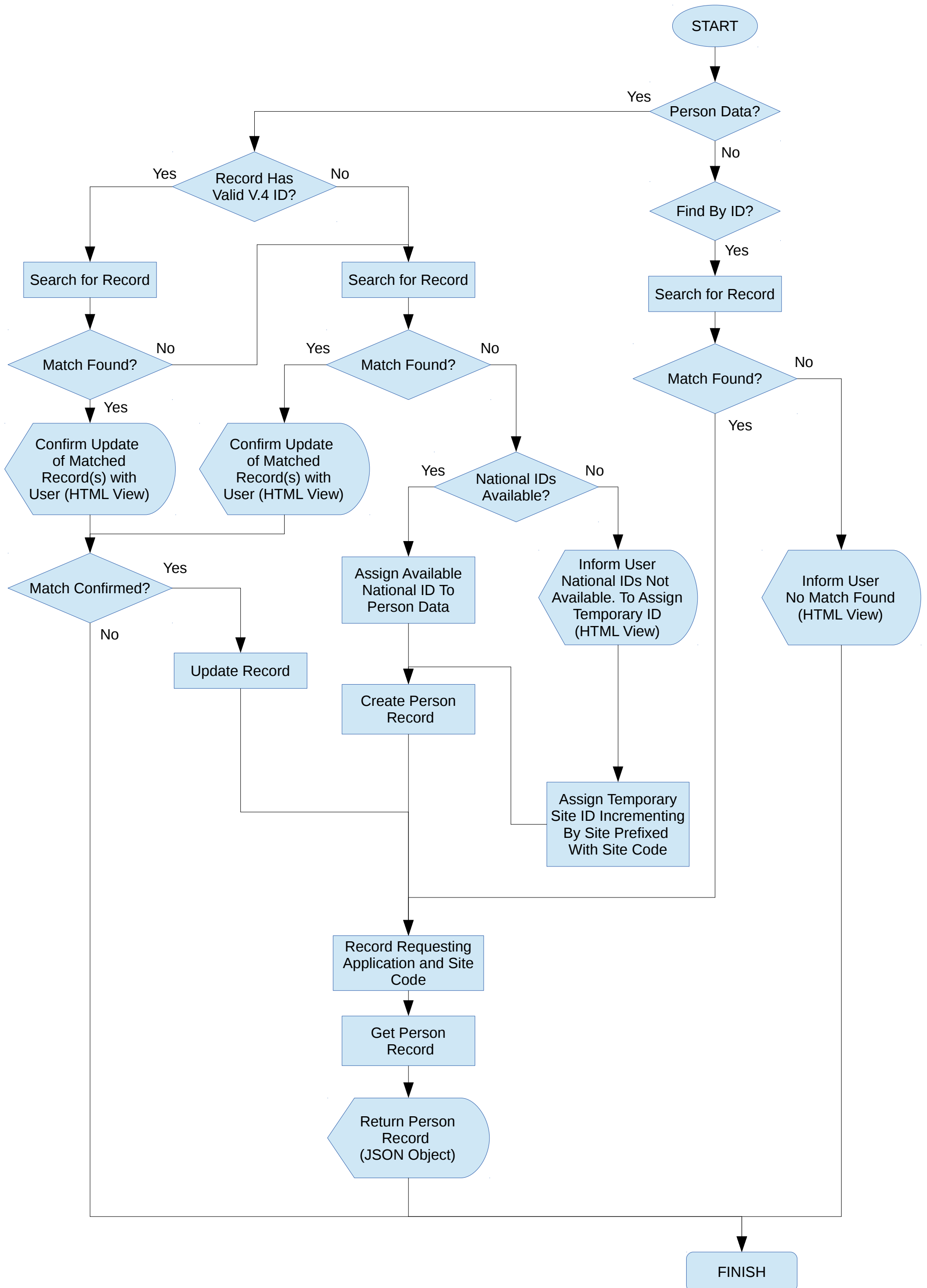


Legend

-  Sync with Regional Master (Continuous Syncing)
-  Sync with District Node (Continuous Syncing)
-  District Nodes
-  Regional Masters
-  Regional Masters Sync (Off-peak Syncing)

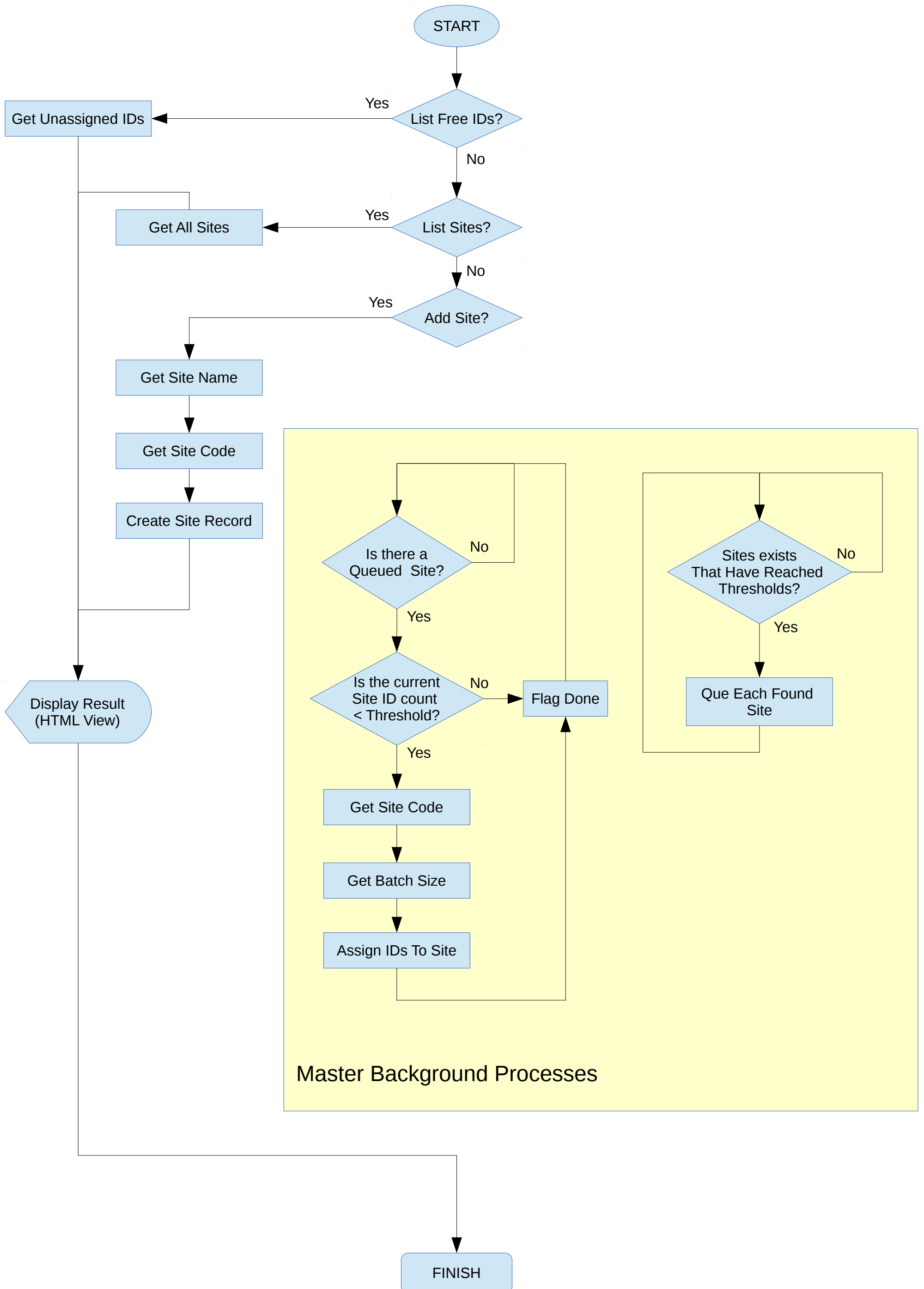
Demographics Data Exchange Design Document

DDE Proxy Server Person Management Flow Diagram



Demographics Data Exchange Design Document

DDE Master Server Identifier Management Flow Diagram



Demographics Data Exchange Design Document

DDE Classes

Person

- names:{
 family_name:String,
 given_name:String
}
- gender:String
- birthdate:String
- birthdate_estimated:Integer
- attributes:{
 citizenship:String,
 occupation:String,
 cell_phone_number:String,
 home_phone_number:String,
 race:String
}

- patient:{
 Identifiers:{}
}
- addresses:{
 current_residence:String,
 current_village:String,
 current_ta:String,
 current_district:String,
 home_village:String,
 home_ta:String,
 home_district:String
}
- patient_assigned:Boolean
- assigned_site:String

Utils::Person

~ match_confirmed:JSON
~ matches_found:Array(JSON)

+ process_person_data(JSON):JSON
- person_has_v4_id(JSON):BOOLEAN
- search_for_record_by_params(
 first_name:String,
 last_name:String,
 gender:String,
 date_of_birth:String(OPTIONAL),
 home_t_a:String(OPTIONAL),
 home_district:String(OPTIONAL)
):Array(JSON)
- confirm_person_to_update(JSON):Array(JSON)
- create_person(JSON):BOOLEAN
- update_person(JSON):BOOLEAN
- get_person(npid:String):JSON
+ search_by_npid(npid:String):Array(JSON)

Npid

- national_id:String
- assigned:BOOLEAN
- site_code:String

- region:String

Footprint

- npid:String
- application:String
- site_code:String

RequestsQue

- site_code:String
- region:String
- threshold:Integer
- request_processed:Boolean

Utils::Proxy

+ check_if_npids_available():BOOLEAN
+ assign_npid_to_person(JSON):JSON
+ assign_temporary_npid(JSON):JSON
+ get_unassigned_npids():Array(JSON)
+ request_for_npids(
 site:String,
 site_code:String
):BOOLEAN

Utils::Master

+ assign_npids_to_site(
 site:String, quantity:Integer
):BOOLEAN
+ add_site(site:String, site_code:String,
 region:String, threshold:Integer
):BOOLEAN
+ get_unassigned_npids():Array(JSON)
+ get_all_sites():Array(JSON)
+ que_site(
 site:String, site_code:String,
 threshold:Integer, region:String
):BOOLEAN
+ check_site_thresholds():BOOLEAN
+ process_queued_sites():BOOLEAN
+ assign_npids_to_region(
 region:String, quantity:Integer
):BOOLEAN

Site

- name:String
- description:String
- site_code:String

- threshold:Integer
- region:String

Utils::Footprint

+ log_application_and_site(json:JSON):Array(JSON)

JSON Object Definition

```
{  
  "npid":"","  
  "application":"","  
  "site_code":"","  
  "names":  
    {  
      "family_name":"","  
      "given_name":"","  
    },  
  "gender":"M",  
  "attributes":{  
    "occupation":"","  
    "cell_phone_number":"","  
  },  
  "birthdate":"YYYY-MM-DD",  
  "patient":{  
    "identifiers":{  
      "other_identifier":"","  
    }  
  },  
  "birthdate_estimated":"0",  
  "addresses":{  
    "current_residence": null,  
    "current_village": null,  
    "current_ta": null,  
    "current_district": null,  
    "home_village": null,  
    "home_ta": null,  
    "home_district": null  
  }  
}
```

Note:

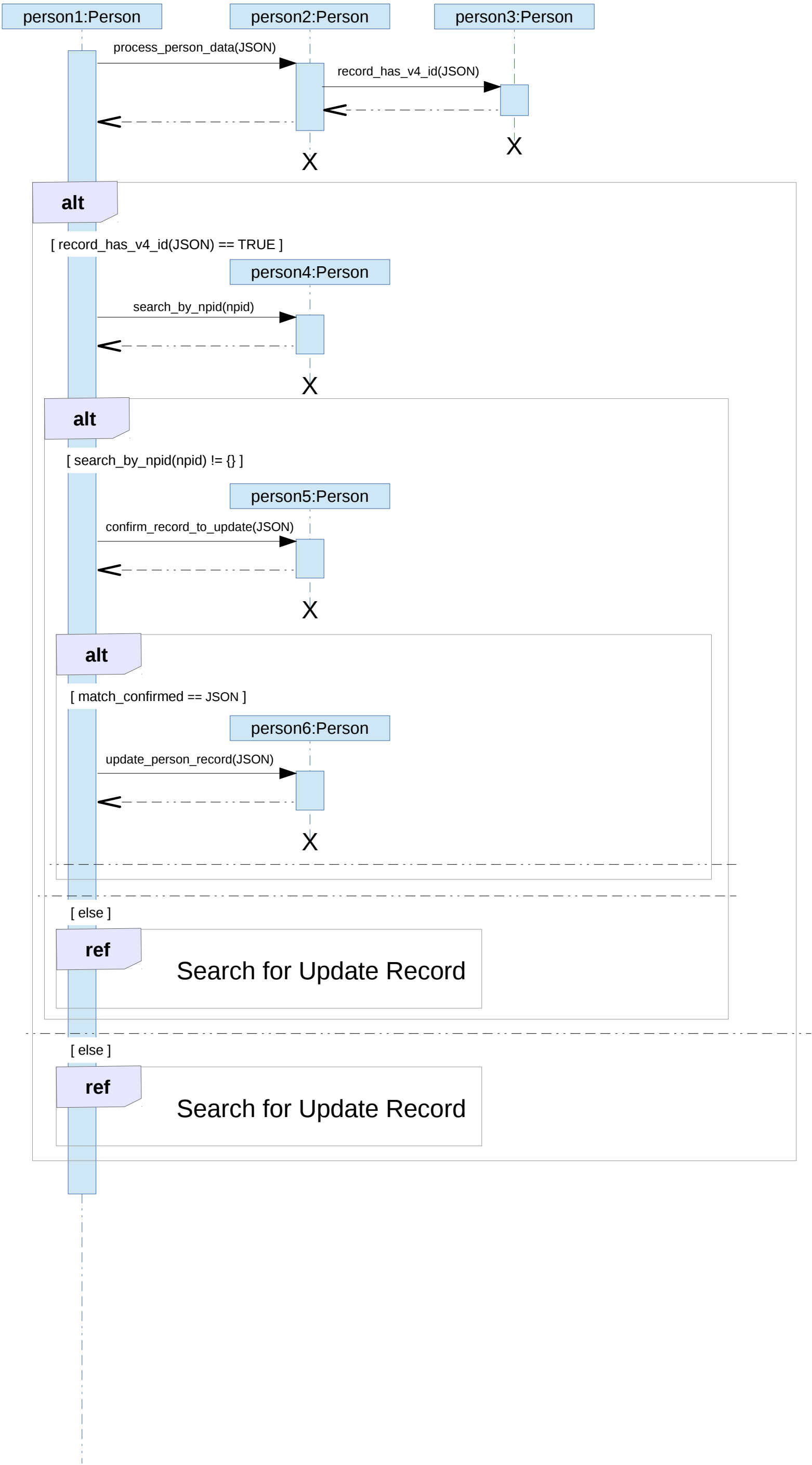
All missing fields
Can be left empty
And ignored when
Working with the
JSON Objects
Passed.

Legend

Class Name	Constituent Class
Class Methods	
OPTIONAL	Parameter is optional
+	Method/Attribute Public
-	Method/Attribute Private
JSON	JSON Object Type (Associative Array)
Array(Type)	Array collection of data type 'Type'

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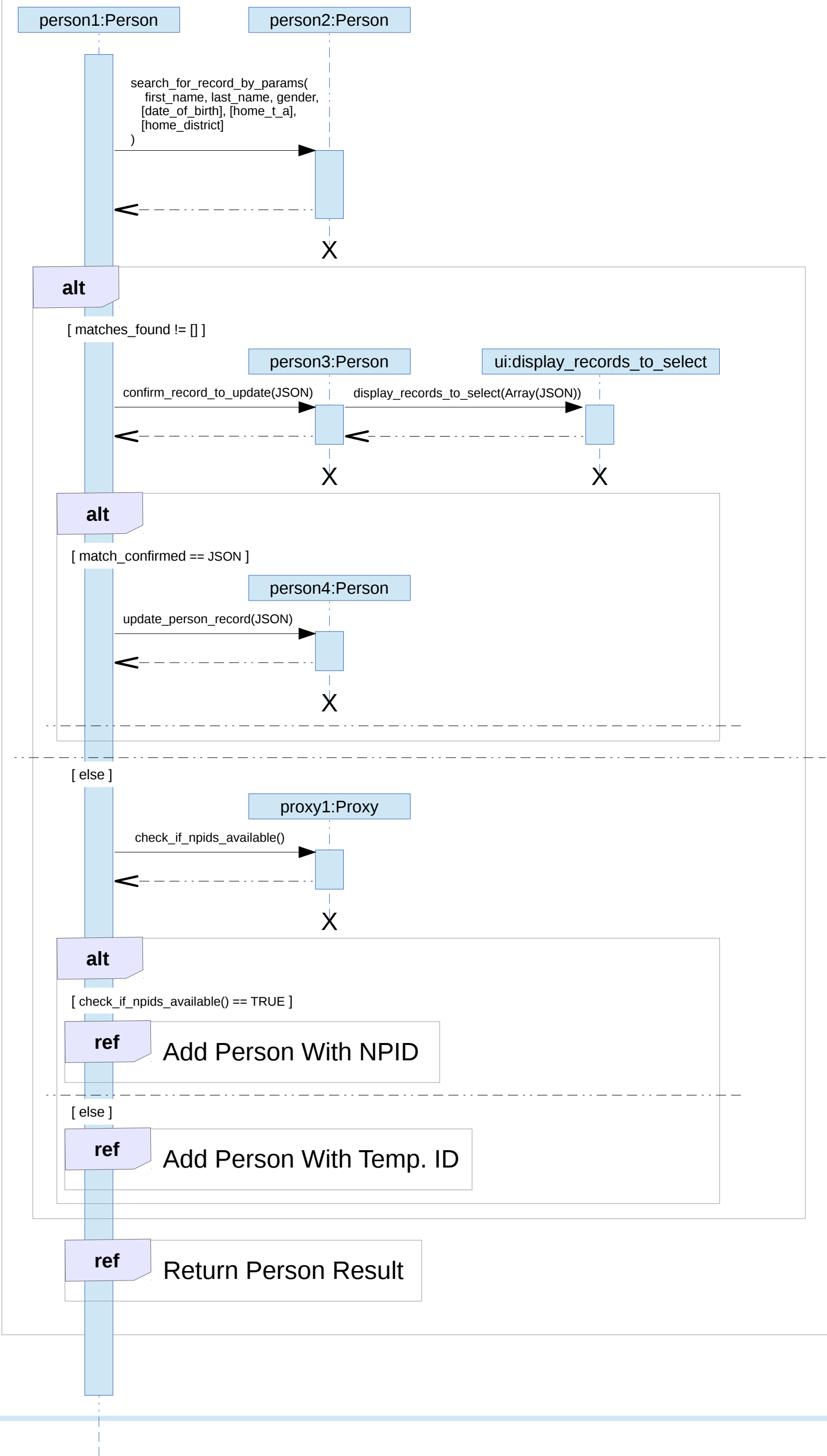
DDE Person Management Class Sequence Diagram



Demographics Data Exchange Design Document

DDE Person Management Class Sequence Diagram (cont'd)

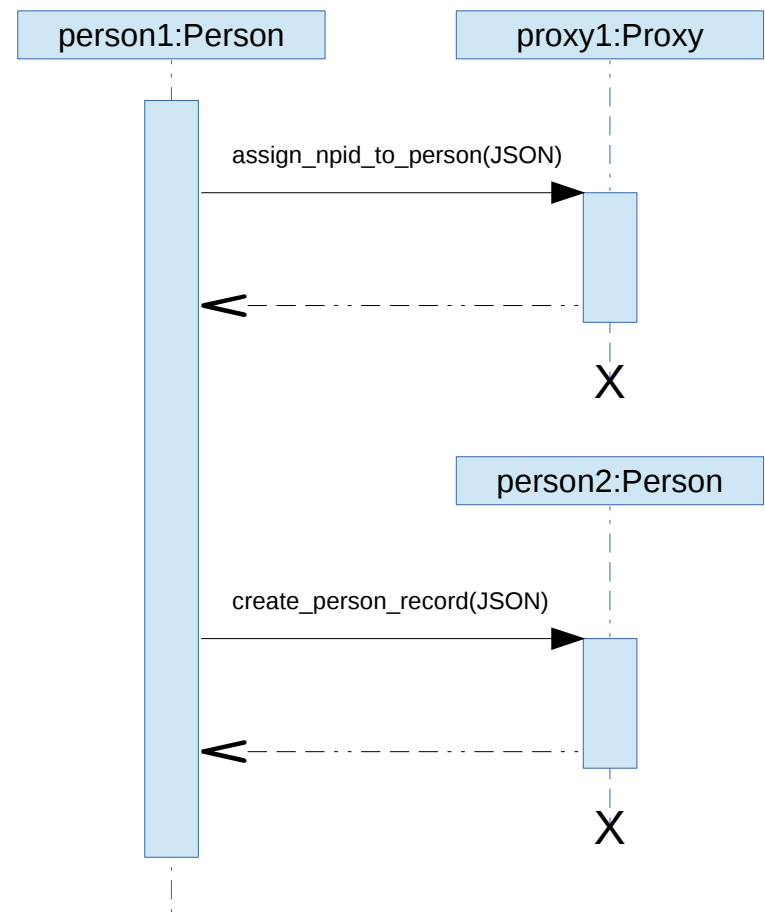
Search for Update Record



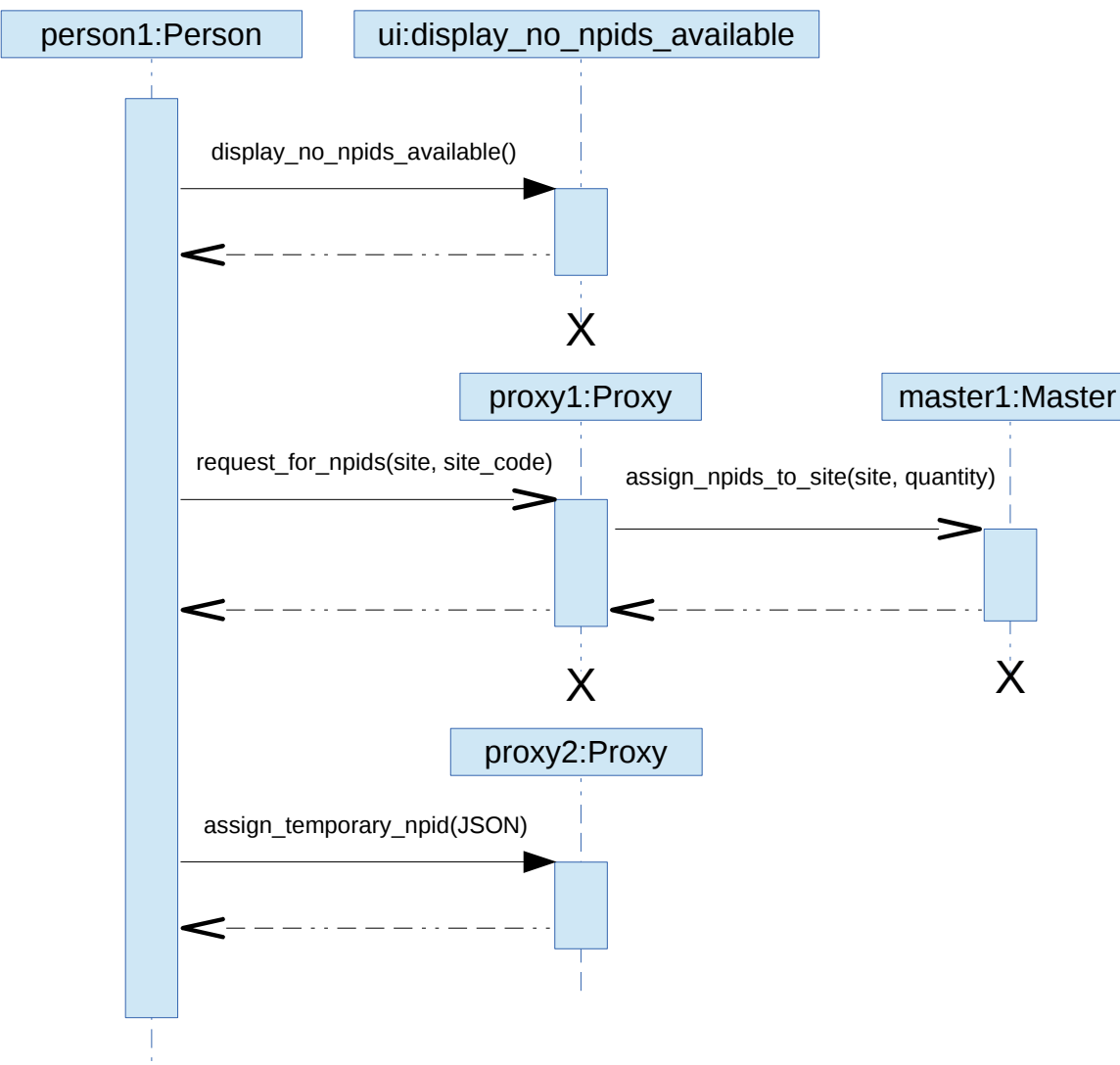
Demographics Data Exchange Design Document

DDE Person Management Class Sequence Diagram (cont'd)

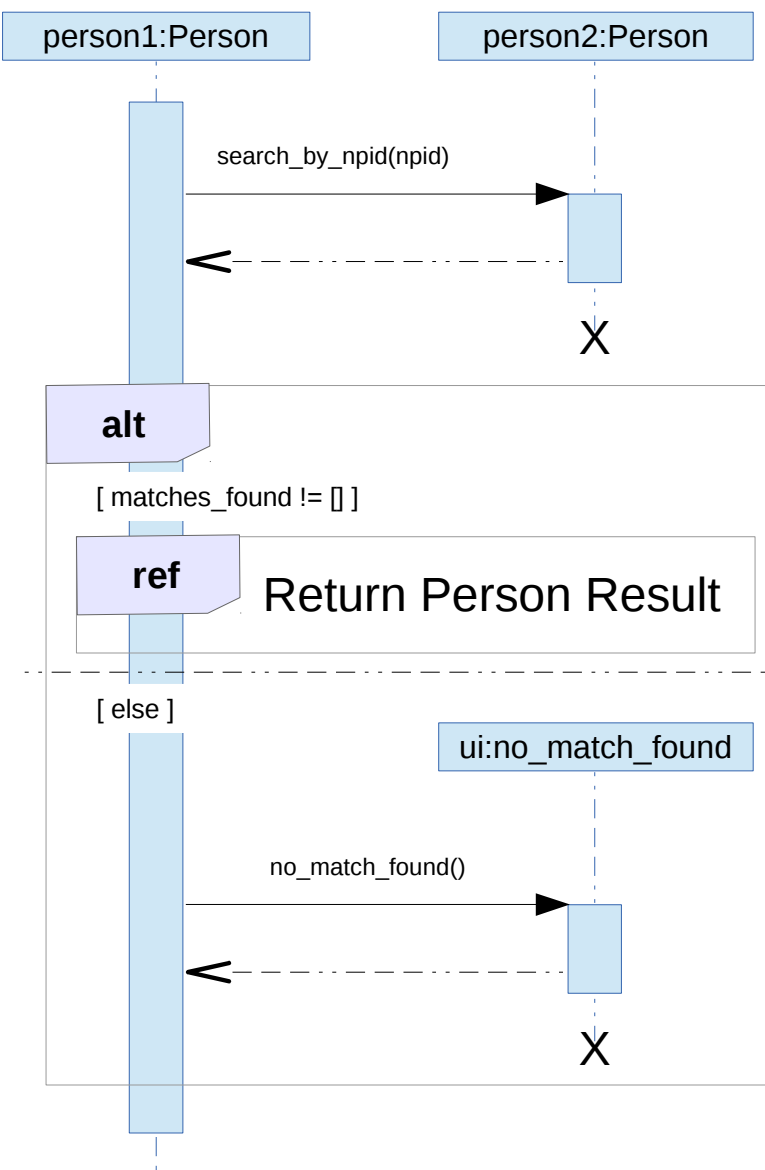
Add Person With NPID



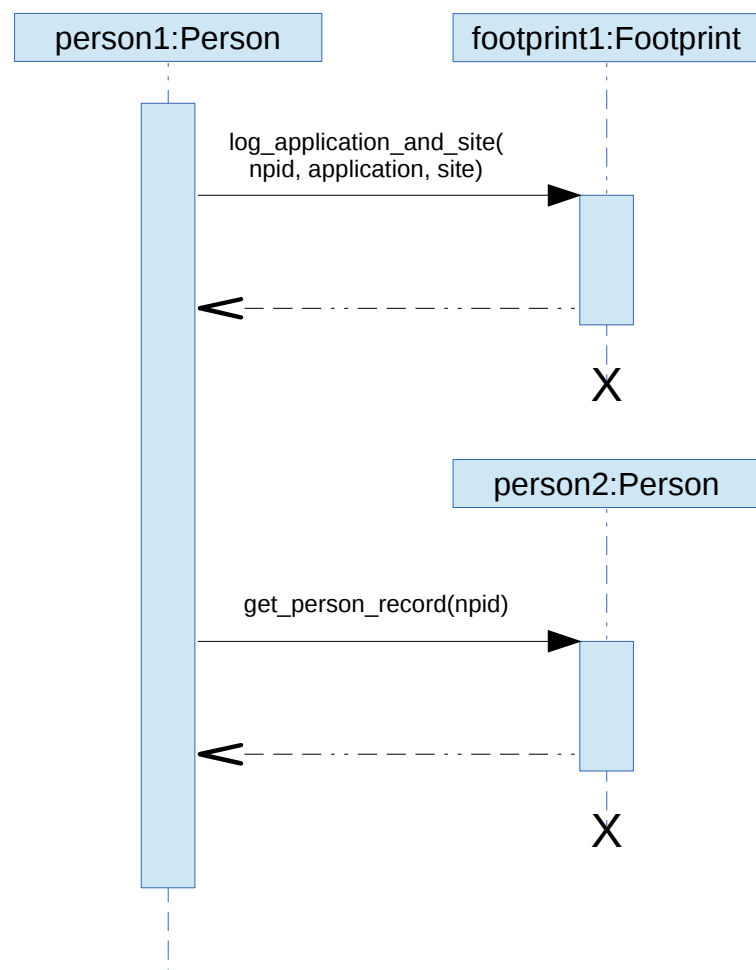
Add Person With Temp. ID



Search for Person by NPID



Return Person Result



Demographics Data Exchange Design Document

DDE Person Management Class Views

ui:display_records_to_select(Array(JSON))


Select Patient From The Following List

First Name: Test

Last Name: Test

Age: Age

National ID: NPID



Home Village: Village

Home T/A: T/A

Home District: District

First Name Last Name, NPID, Gender, Age, Home T/A

First Name Last Name, NPID, Gender, Age, Home T/A

First Name Last Name, NPID, Gender, Age, Home T/A

Test Test, NPID, Gender, Age, Home T/A

First Name Last Name, NPID, Gender, Age, Home T/A

First Name Last Name, NPID, Gender, Age, Home T/A

Cancel

Select Patient

ui:no_match_found()

Sorry! No Match Found!

OK

ui:display_no_ids_available()

No National IDs Are Available Now.

Patient Will Be given A Temporary ID For Replacement Later.

OK