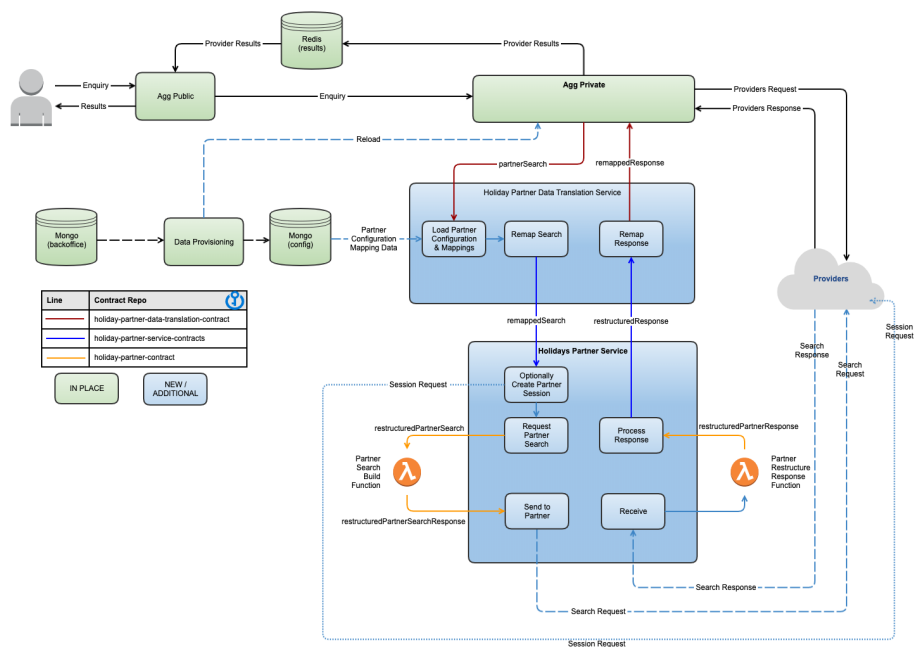


Holiday Partner Services

Holiday partner services is split into four separate components: Aggregation integration, Holiday Partner Data Translation Service, Holiday Partner Service and a lambda for each integrated partner. The lambdas can contain up the three functions: session management, search restructure and response restructure. Each layer of these services performs a distinct process and attempts to minimise the total amount of code required to build out a partner integration. Below is a short summary of the roles of each of these activities:

| Service/Code | Description/Role |
|--|--|
| Aggregation Integration | Agg will determine the number of unique requests that will be sent to a partner for a given enquiry. Where the partner is configured for Holiday Partner Services it will then institute a call to Data Translation Service for each of these. |
| Holiday Partner Data Translation Service | Data Translation will convert partner data values to and from TSM values based upon entries in the translationMap collection. |
| Holiday Partner Service | This service orchestrates calls to the restructure lambda functions and to the partner endpoints. |
| Partner Lambda(s) | A single lambda per partner that can contain a search restructure and a response restructure function. |



High Level Requirements

- Service code to be developed and ran under JDK 1.9
- Lambda code written under JDK 1.8 (AWS runtime restriction)
- Contracts with aggregation have to be written under JDK 1.7
- Decouple Holidays Partners from Aggregation
- Provide all existing debug information for aggregation from new services
- Individual partner changes should be isolated from other partners to allow for independent testing and release.

Solution outline

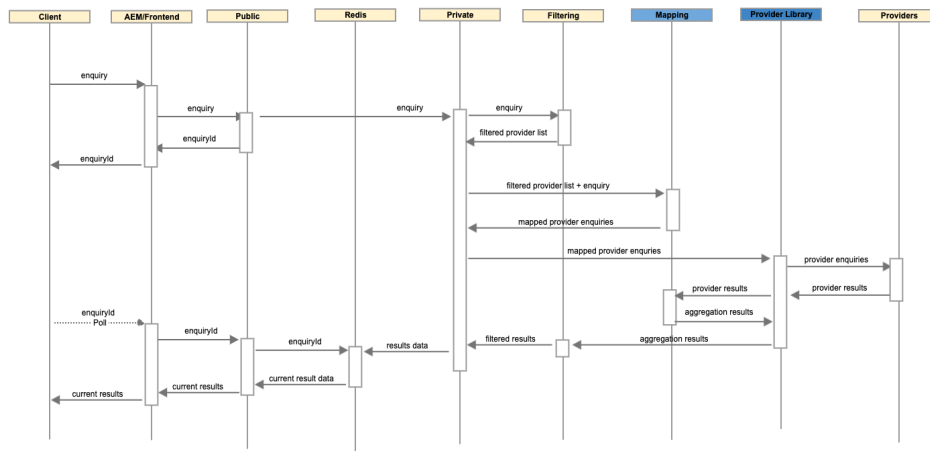
- Add a new service to perform data translation between TSM data and Partner data values. This service operates on data structures that are standardised across partners and provides in-place data remapping. It uses existing translation map data from the back office.
- Add a new service to provide http call management (orchestration) to partner lambdas and partner endpoints.
- Each partner, configured for execution with the Holiday Partner Service, requires a lambda with search and response processing functions. These partners will be configured in the back-office as http providerMode and will have the lambda URL added to the providerChannelConfiguration.

Details

| ID | Item | Area | Team | Notes |
|----|--|-------------|---------|---|
| 1 | Agg Private Partners Adapter | Aggregation | Partner | Enhance the aggregation engine to send partner enquiries with a providerMode of "http" to the Holiday Partner Data Translation Service. |
| 2 | Holiday Partner Data Translation Service | Service | Partner | Establish a service that provides generic data transformation from partner mapping look-up data (maps /dictionaries). |
| 3 | Holiday Partner Service | Service | Partner | Establish a service that manages https calls to partner lambdas and partner endpoints. |
| 4 | Partner Lambda | Lambda | Partner | The lambda contains two functions: search - structurally reformat a tsm search in a partner search, structurally reformat a partner response into a tsm result. |
| 5 | Mapping Data Integration | Back-Office | Partner | Ensure the current data provision and task deployment mechanisms are sufficient to run the Holiday Partner Data Translation Service. |

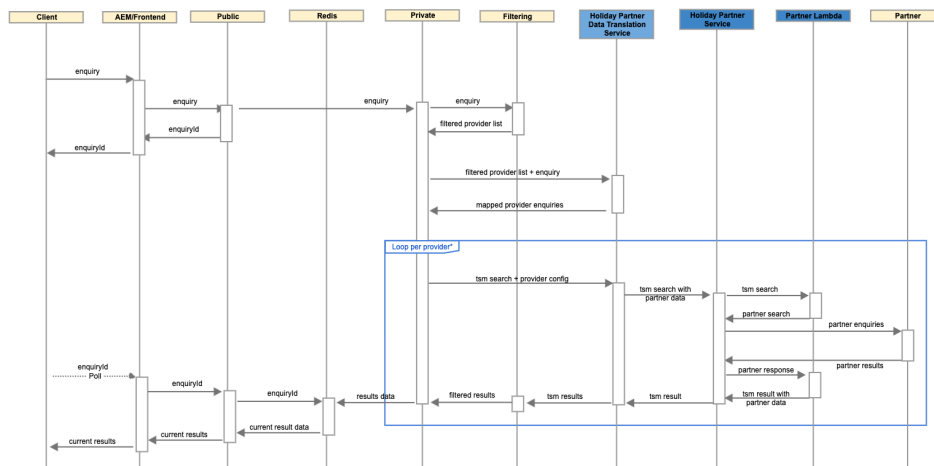
Sequence diagram for existing aggregation engine operation against provider code libraries.

Sequence Diagram



Sequence Diagram for calls using holiday partner service

Sequence Diagram



* The provider list is actually a set of, potentially, multiple calls based on provider configuration. This is to support examples where a single search for us is a multiple set of searches on the provider side: e.g. if the provider doesn't support days either side on a single call.

Epics

| Key | Summary | T | Created | Updated | Due | Assignee | Reporter | P | Status | Resolution |
|------------|---|---|--------------|--------------|-----|------------|-----------------|---|---------|------------|
| TRAVL-8137 | PRIVATE AGG - Holiday Partner Service Integration | ⚡ | Aug 12, 2019 | Sep 13, 2019 | | Unassigned | Colin Nwachukwu | = | BACKLOG | Unresolved |

| | | | | | | | | | |
|------------|----------------------------|---|--------------|--------------|------------|-----------------|---|---------|------------|
| TRAVL-8136 | VERY - Partner Integration |  | Aug 12, 2019 | Sep 13, 2019 | Unassigned | Colin Nwachukwu |  | BACKLOG | Unresolved |
| TRAVL-7114 | Holiday Partner Service |  | Jun 05, 2019 | Nov 15, 2019 | Unassigned | Colin Nwachukwu |  | BACKLOG | Unresolved |

3 issues