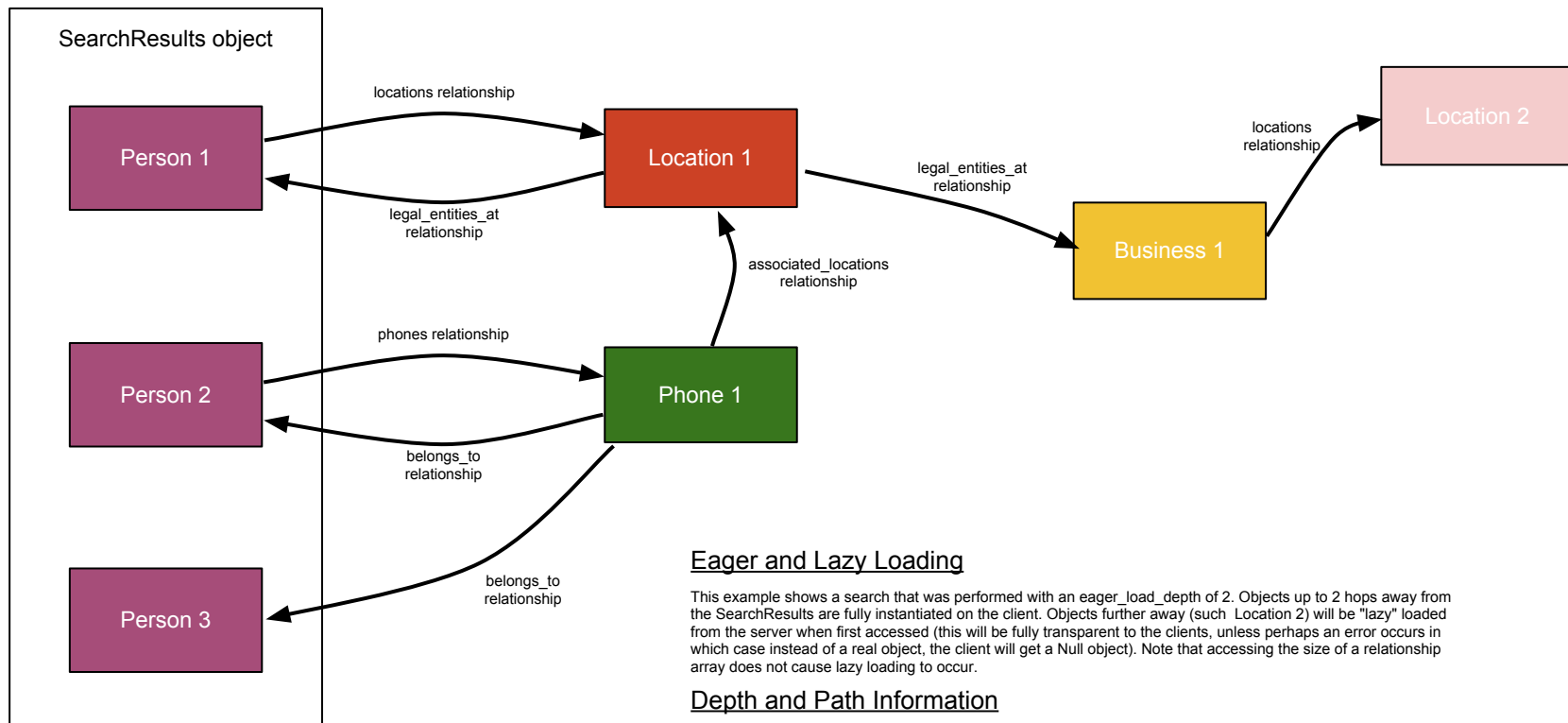


WP::SAL Entities and Graph Overview

There are five classes: WP::SAL::Person, WP::SAL::Business, WP::SAL::Location, WP::SAL::Phone and WP::SAL::Null. These are all subclasses of the generic entity class WP::SAL::Entity.

This diagram shows an example object graph, with objects connected via various relationships.

This example shows a search that was performed with an `eager_load_depth` of 2. Objects up to 2 hops away from the SearchResults are fully instantiated on the client. Objects further away (such as the Location on the right) will be loaded from the server when first accessed (this will be fully transparent to the clients, unless perhaps an error occurs).



Eager and Lazy Loading

This example shows a search that was performed with an `eager_load_depth` of 2. Objects up to 2 hops away from the SearchResults are fully instantiated on the client. Objects further away (such as Location 2) will be "lazy" loaded from the server when first accessed (this will be fully transparent to the clients, unless perhaps an error occurs in which case instead of a real object, the client will get a Null object). Note that accessing the size of a relationship array does not cause lazy loading to occur.

Depth and Path Information

Every object has a depth, which depends on the path taken to the object, starting at the SearchResults.

For example, if the first element of the SearchResults is accessed (this is Person 1), it will have a depth of 0. If the locations link is followed, the Location 1 object has depth 1. Now if the legal_entities_at link is followed back to Person 1, this new Person 1 object has depth 2. Not these every different path to an entity results in a different object instance.

Relationships

Each relationship is a field on the parent object which contains an array of one or more target objects. For example, Location 1 has a field called 'legal_entities_at' which contains (in this case) 2 elements, one of type Person and one of type Business.

Relationship Fields

Relationships contain information about the relationship. For example, when the relationship was valid or the name given by this person to this phone number. These relationship fields are exposed on the target object. For example, if you access Location 1 by following the link from Person 1, the relationship fields on Location 1 will describe that person's relationship with the location.

If you later access Location 1 from Phone 1, the relationship fields will describe Phone 1's relationship with Location 1.

Null

Null Entity

The Null entity is a special entity that may be returned if a lazy load operation fails.

Full semantics of this are still to be defined.