IPAACA - Feature #467

Feature # 466 (New): IPAACA v3

v3: Linked IU events / Batch updates on the IU [event] level

2016-02-16 14:45 - Ramin Yaghoubzadeh

Status:	New	**Start date:**	2016-02-16
Priority:	Normal	**Due date:**	
Assignee:		**% Done:**	0%
Category:		**Estimated time:**	0.00 hour
Target version:			

Description

Similarly to the batch payload updates introduced in v2, v3 ought to provide a means of coordinating several IU events in a single indivisible transaction.

A possible, and important, use case would be the publication of linked sets of IUs in a single shot.

This will most certainly involve support on the protocol level (note that #462 will entail a new protocol version, anyway).

History

#1 - 2016-02-22 15:11 - Hendrik Buschmeier

Linked IU events should consist of updates to payload, links or metadata as well as of new IUs being added. My initial proposal for a protobuf-WireSchema for such a 'transaction' is as follows:

```
message Transaction {

  // Protocol specific fields
  optional string protocol_version = 1 [default = "3.0"];
  optional string auth_token = 2 [default = ""];

  repeated IU new_ius = 3;
  repeated IUUpdate updates = 4;
}
```

Two open questions:

- Is an ordering of the individual items in an transaction assumed? If yes, an additional layer of abstraction over TransactionItems might be necessary, e.g.:

  ```
  message Transaction {

    // Protocol specific fields
    optional string protocol_version = 1 [default = "3.0"];
    optional string auth_token = 2 [default = ""];

    repeated TransactionItem items = 3;
  }

  message TransactionItem {
    optional IU iu = 1;
    optional IUUpdate update = 2
  }
  ```

- What happens if one of the updates fails?

#2 - 2016-02-22 16:17 - Hendrik Buschmeier

I created a branch ipaaca3-dev (available here) that contains a first proposal for how the protobuf messages for ipaaca3 could look like (see commit:39a14c1d).