



Circulation state diagram

States

- CANCELLED: the loan is cancelled for some reason (the item is missing, the request was deleted before checkout, etc.).
- DISPUTED: the loan has a special state due to the activity of the patron (overdue, lost, invoiced, etc.). This box is greyed because these states still have to be clarified.
- ITEM_AT_DESK: the item is at the pick-up library desk, ready to be borrowed by the patron.
- ITEM_IN_TRANSIT: the item is in transit from one library to another library, in order to be either checked out or returned.
- ITEM_ON_LOAN: the item is currently borrowed by a patron.
- ITEM_RETURNED: the item is returned and the loan came full circle.
- PENDING: the request exist on one document or one item.

Action

- **checkin**: return the item from the patron to one library
In case of another request (from another "loan" entity) on this item, the current loan is closed (status "ITEM_RETURNED") and the loan of the request sees its "PENDING" status become automatically validated.
- **checkout**: the item is checked out for the patron.
- **delete**: the "loan" entity is deleted, or more probably anonymised and injected in a loan history file.
- **delivery_receive**: the requested item is received at the right pickup library.
- **extend**: the checkout duration is extended.
- **house_receive**: the returned item is received at its owning library.
- **request**: the document or the item is requested for one patron.
- **validate**: the request is validated, and the item is then either directly available for pickup or sent to its pickup library.

Action parameters

parameters for all action:

- transaction_date,
- transaction_library_pid,
- user_pid: staff or patron identifier
- item_pid

action specific parameters:

- **checkin**: return_date
- **checkout**: patron_id, start_date, due_date
- **extend**: due_date
- **request**: patron_pid, expired_date
- **validate**: patron_pid
- **delivery_receive**: patron_pid
- **house_receive**:
- **delete**:

Consortium model terminolgy

The current consortial model has 3 levels:

1. Organisation: network of libraries (such as: universities)
2. library: library (for now, with only one loan desk)
3. Location : physical on_shelf location of items (stores, free_access_zone...)

Consortial variables used by the circulation:

- transaction_library: library/library that performs the transaction
- item_library: library owning the item
- pickup_library: library chosen by the patron for pickup