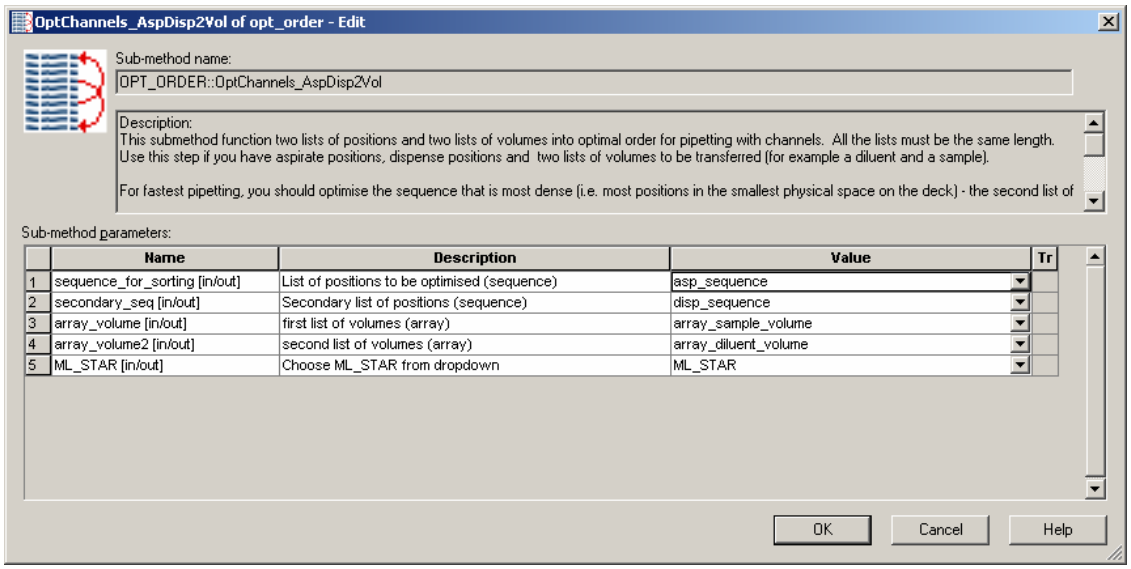
opt_order Libraries

- Library for sorting lists of positions and volumes (sequences and arrays) into optimal order for pipetting with 1ml channels.
- All the sorted lists must be the same length.
- All positions must be accessible by all channels
- For fastest pipetting, you should optimise the sequence that is most dense (i.e. most positions in the smallest physical space on the deck) – any extra lists of positions and volumes will be sorted so that they stay matched up.
- Works with tubes and all plate types (including 384/1536) and repeated positions.
- Dependent only on standard libraries - no installs required
- First sorts positions into stripes in y with increasing x. Then sorts each stripe so that each position is at least 9mm away from the next. Sorting process continues until all positions have been sorted.
- opt_order_5ml Library
    - Version for sequence and array sorting where separating distance is 18mm rather than 9mm. Suitable for 5ml channels and 1ml channels on a thin arm.
    - Identical functions to opt_order library

OptChannels_AspDisp2Vol

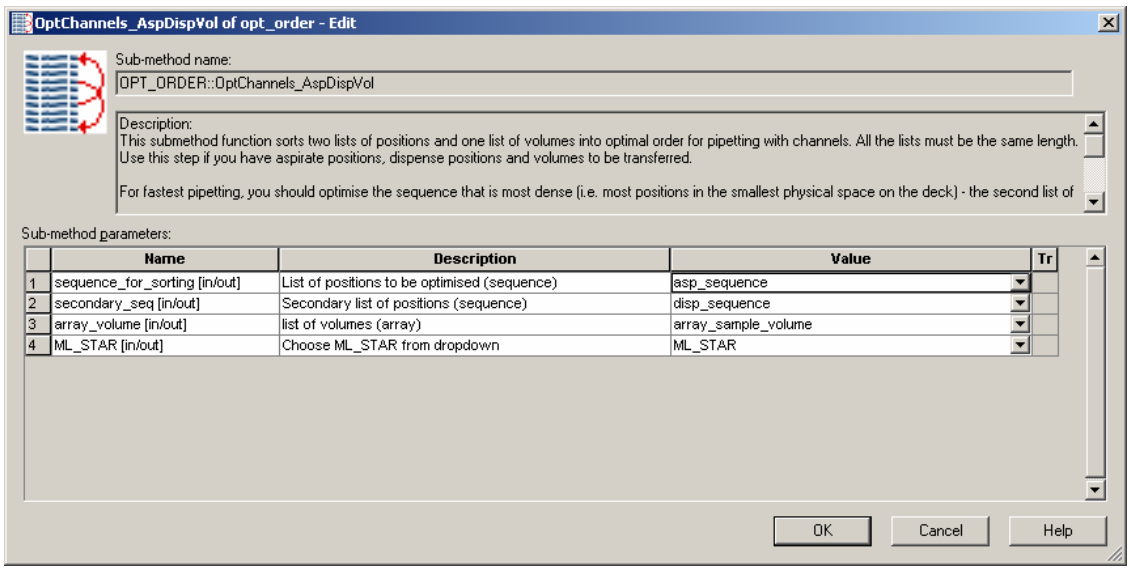
Sorts two lists of positions and two lists of volumes into optimal order for pipetting with channels.



Use this step if you have aspirate positions, dispense positions and
two lists of volumes to be transferred (for example normalization with aspirate positions, dispense positions, diluent volumes and a sample volumes defined in a worklist).

OptChannels_AspDispVol

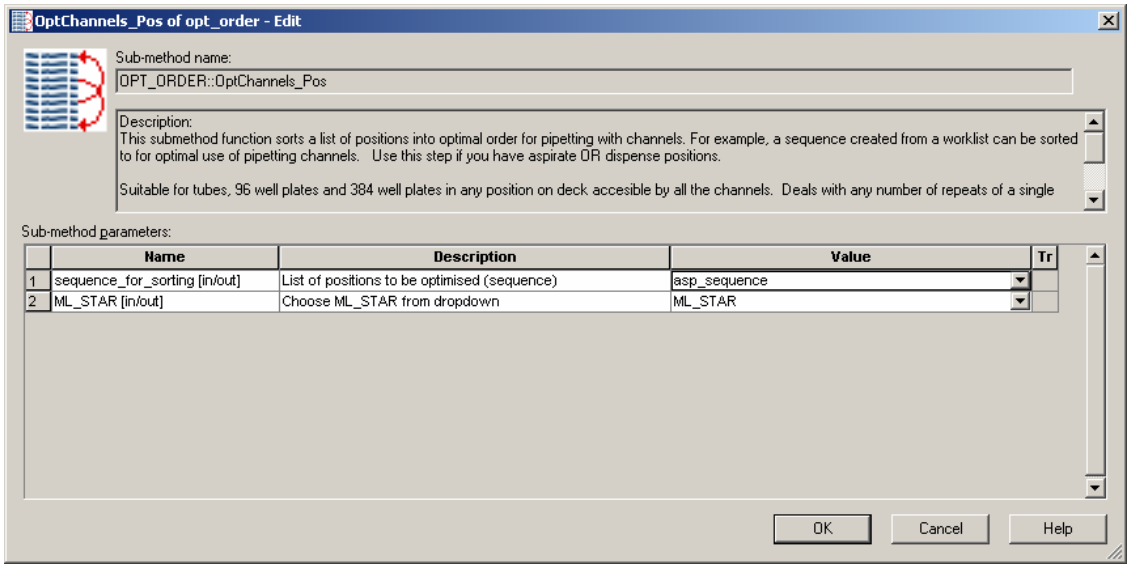
Sorts two lists of positions and one list of volumes into optimal order for pipetting with channels.



Use this step if you have aspirate positions, dispense positions and volumes to be transferred (for example, cherry picking with aspirate positions, dispense positions and volumes defined in a worklist).

OptChannels_Pos

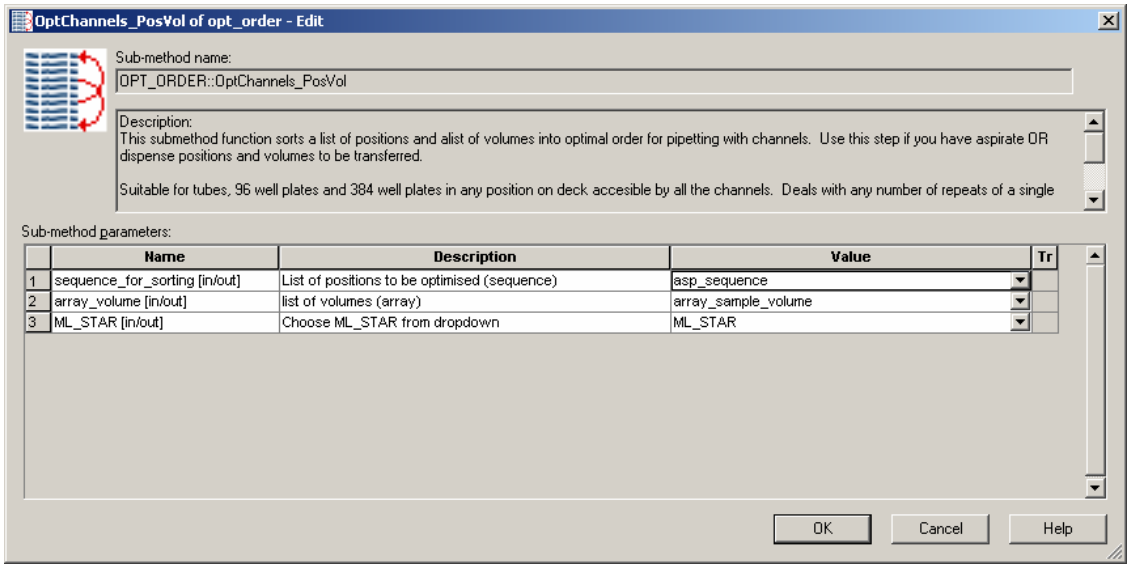
Sorts a list of positions into optimal order for pipetting with channels.



Use this version if you have aspirate OR dispense positions (for example, cherry picking where only the aspirate position is defined in the worklist).

OptChannels_PosVol

Sorts a list of positions and a list of volumes into optimal order for pipetting with channels.



Use this version if you have aspirate OR dispense positions and volumes (for example, cherry picking where only the aspirate position and volume is defined in the worklist).