PRM server REST interfaces.

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## CRUD 接口

|  |  |  |
| --- | --- | --- |
| path | /user | |
| CRUD | POST, GET, PUT, PATCH, DELETE | |
| Example | POST | curl –i -X POST -H 'Content-Type: application/json;charset=UTF-8' -d '{"username":"  davidw","passwd":"1234","name":"David Wang","dept":"DEV","role":"admin","enable":1}' '<http://localhost:8080/user>' |
| GET | curl -i -X GET -H 'Accept: application/json;charset=UTF-8' 'http://localhost:8080/user/1' |
| PATCH | curl –i -X PATCH -H 'Content-Type: application/json;charset=UTF-8' -d '{"enable”:0}’ 'http://localhost:8080/user/1' |
| PUT | curl –i -X PUT -H 'Content-Type: application/json;charset=UTF-8' -d '{"username":"joez", "passwd":"1234","name":"Joe Zhang","dept":"DEV","role":"admin","enable":1}' 'http://localhost:8080/user/1' |
| Searches | findByName | curl -i -X GET -H 'Accept: application/json;charset=UTF-8' 'http://localhost:8080/user/search/findByName?name=Joe+Zhang' |
| findByUsername | curl -i -X GET -H 'Accept: application/json;charset=UTF-8' 'http://localhost:8080/user/search/findByUsername?username=joez' |
| findByRole | curl -i -X GET -H 'Accept: application/json;charset=UTF-8' 'http://localhost:8080/user/search/findByRole?role=admin' |
| findByDept | curl -i -X GET -H 'Accept: application/json;charset=UTF-8' 'http://localhost:8080/user/search/findByDept?dept=DEV' |

### User

|  |  |  |
| --- | --- | --- |
| path | /line | |
| CRUD | POST, GET, PUT, PATCH, DELETE | |
| Searches | findByEnable | /line/search/findByEnable?enable=1 |
| findByCode | /line/search/findByCode?code= |
| findByName | /line/search/findByName?name= |

### Line

### Equipment

|  |  |  |
| --- | --- | --- |
| path | /equipment | |
| CRUD | POST, GET, PUT, PATCH, DELETE | |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/equipment/1' | |
| searches | findByLidAndType | ‘/equipment/search/findByLidAndType?lid=&type=’ |
| findByCode | /equipment/search/findByCode?code= |
| findByName | /workorder/search/findByName?name= |

### EquipmentGate

|  |  |  |
| --- | --- | --- |
| path | /equipmentgate | |
| CRUD | POST, GET, PUT, PATCH, DELETE | |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/ equipmentgate/1' | |
| searches | findByLidAndType | ‘/equipmentgate/search/findByLidAndType?lid=&type=’ |
| findByEidAndType | ‘/equipmentgate/search/findByEidAndType?eid=&type=’ |

### WeighingRoom

|  |  |
| --- | --- |
| path | /weighingroom |
| CRUD | POST, GET, PUT, PATCH, DELETE |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/weighingroom/1' |

### Bom

|  |  |  |
| --- | --- | --- |
| path | /bom | |
| CRUD | POST, GET, PUT, PATCH, DELETE | |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/bom/1' | |
| searches | findByPid | /workorder/search/findByPid?pid= |

### BomItem

|  |  |  |
| --- | --- | --- |
| path | /bomitem | |
| CRUD | POST, GET, PUT, PATCH, DELETE | |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/bomitem/1' | |
| searches | findByPid | /bomitem/search/findByPid?pid= |

### Material

|  |  |  |
| --- | --- | --- |
| path | /material | |
| CRUD | POST, GET, PUT, PATCH, DELETE | |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/material/1' | |
| searches | findByCode | /material/search/findByCode?code= |

### ProcessFlow

|  |  |  |
| --- | --- | --- |
| path | /processflow | |
| CRUD | POST, GET, PUT, PATCH, DELETE | |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/processflow/1' | |
| searches | findByBid | /workorder/search/findByBid?bid= |

### ProcessFlowItem

|  |  |
| --- | --- |
| path | /processflowitem |
| CRUD | POST, GET, PUT, PATCH, DELETE |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/processflowitem/1' |

### Product

|  |  |
| --- | --- |
| path | /product |
| CRUD | POST, GET, PUT, PATCH, DELETE |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/product/1' |

### Schedule

|  |  |
| --- | --- |
| path | /schedule |
| CRUD | POST, GET, PUT, PATCH, DELETE |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/schedule/1' |

### WorkOrder

|  |  |  |
| --- | --- | --- |
| path | /workorder | |
| CRUD | GET | |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/workorder/1' | |
| searches | findByCode | /workorder/search/findByCode?code= |
| findByDate | /workorder/search/findByDate?date=2343224 |

### WorkOrderMaterial

|  |  |  |
| --- | --- | --- |
| path | /workordermaterial | |
| CRUD | GET | |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/workordermaterial/1' | |
| searches | findByWid | /workordermaterial/search/findByWid?wid= |
| findByWidAndMid | ‘/workordermaterial/search/findByWidAndMid?wid=&mid=’ |

### WorkOrderContainer

|  |  |  |
| --- | --- | --- |
| path | /workordercontainer | |
| CRUD | GET | |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/workordercontainer/1' | |
| searches | findByWid | /workordercontainer/search/findByWid?wid= |
| findByWidAndMid | ‘/workordercontainer/search/findByWidAndMid?wid=&mid=’ |
| findByWidAndMidAndSequence | ‘/workordercontainer/search/findByWidAndMidAndSequence?wid=&mid=&sequence=’ |

### StoreMaterial

|  |  |  |
| --- | --- | --- |
| path | /storematerial | |
| CRUD | POST, GET, PATCH, PUT | |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/storematerial/1' | |
| searches | findByRidOrderBySignedDateDesc | /storematerial/search/findByRidOrderBySignedDateDesc?rid= |

### WorkOrderLog

|  |  |  |
| --- | --- | --- |
| path | /workorderlog | |
| CRUD | GET | |
| example | curl –i -X GET -H 'Accept: application/json;charset=UTF-8' '/storematerial/1' | |
| searches | findByWidAndMidAndSequence | ‘/storematerial/search/findByWidAndMidAndSequence?wid=&mid=&sequence=’ |
| searches | findByWidAndMid | ‘/storematerial/search/findByWidAndMid?wid=&mid=’ |
| searches | findByWid | ‘/storematerial/search/findByWid?wid=’ |

## Complex interfaces

### WorkOrder (创建工单)

工单创建的同时会根据bom 和 bomitem创建一组所需的物料及相关信息，并存储到WorkOrderMaterail。

|  |  |
| --- | --- |
| path | /workorders?uid |
| CRUD | POST |
| example | curl –i -X POST -H 'Content-Type: application/json;charset=UTF-8' -d '{"fid": 2, "code": "ddd",…….}' '/workorders?uid=' |

### WorkOrderContainer(创建料桶)

创建料桶的同时会更新所属WorkOrderMaterial的actTotal(累计毛重)，actQuantity(累计净重) 和 containerQty (累计桶数)

|  |  |
| --- | --- |
| path | /workordercontainers?uid |
| CRUD | POST |
| example | curl –i -X POST -H 'Content-Type: application/json;charset=UTF-8' -d '{"wid": 1, "sequence": 2, "quantity": 12.3,…….}' '/workordercontainers?uid=' |

### WorkOrder (更新状态)

DB中的status 必须是0才能允许操作这个API。

已审更新: 会同时更新WorkOrder状态，同时更新工单下所有的WorkOrderMaterial状态为已审

已复、完成更新: 会更新 WorkOrder， WorkOrderMaterial 和 WorkOrderContainer。

|  |  |
| --- | --- |
| path | /workorders/{id}?uid  id: workorder ID |
| CRUD | PATCH |
| Supported status values are:  1 (已审), 3 (已复), 9 (完成) |
| example | curl –i -X PATCH -H 'Content-Type: application/json;charset=UTF-8' -d '{"status": 1}' '/workorders/1?uid=' |

### WorkOrder(状态之外更新)

递交的内容不能有status, 而且DB中的status 必须是0(已审之前)才能允许操作这个API。

|  |  |
| --- | --- |
| path | /workorders/{id}  id: workorder ID |
| CRUD | PATCH |
| example | curl –i -X PATCH -H 'Content-Type: application/json;charset=UTF-8' -d '{"quantity": 1200}' '/workorders/1' |

### WorkOrderContainer (更新状态)

如果某一物料的所有料桶状态都是请求的状态后，自动更新所属WorkOrderMaterial的状态为请求状态。同时所属的工单下的所有物料也都是请求状态了，那么也将自动更新所属WorkOrder的状态为请求状态。

|  |  |
| --- | --- |
| path | /workordercontainers/{id}?uid  id: workordercontainer ID |
| CRUD | PATCH |
| Supported status values are:  4 (已领), 5 (已投) |
| example | curl –i -X PATCH -H 'Content-Type: application/json;charset=UTF-8' -d '{"status": 1}' '/workordercontainers/1?uid=' |

### WokrOrderMaterial (更新已配状态)

如果所有的物料状态都已是已配，然后会更新所属WorkOrder的状态为已配， 能允许输入的状态不能大于2（2 已配，1已审），DB中的状态也必须是不能大于1（已审）。

|  |  |
| --- | --- |
| path | /workordermaterials/{id}?uid  id: workordermaterial ID |
| CRUD | PATCH |
| Supported status values are:  2 (已配) |
| example | curl –i -X PATCH -H 'Content-Type: application/json;charset=UTF-8' -d '{"status": 1}' '/ workordermaterials/1?uid=' |

### BomItem(工单物料用量预估)

|  |  |
| --- | --- |
| path | /bomitems/{bid}?quantity  bid: bom ID |
| CRUD | PATCH |
| Supported status values are:  2 (已配) |
| example | curl –i -X PATCH -H 'Content-Type: application/json;charset=UTF-8' -d '{"status": 1}' '/bomitems/1?quantity=' |

## Reports

### WorkOrderContainer (统计物料在各个设备口上的总毛/净重)

|  |  |
| --- | --- |
| path | ‘/report/workordercontainer?wid=&gid=’  和  ‘/report/workordercontainer?wid=&gid=&status=’  wid: workorder ID  gid: equipmentGate ID |
| CRUD | GET |
| example | curl –i -X GET -H 'Content-Type: application/json;charset=UTF-8' -d '{"status": 1}' '/report/workordercontainer?wid=1&gid=2&status=2' |