API Documentation

Staging/Test Details

The base endpoint used for staging is `https://apiamp.labsavvy.com`

Authorization

All requests placed to the LS platform need to have a Bearer token set in the Headers of the request that is being executed.

OAuth - Retrieve JWT access token

To retrieve a fresh access token the API provides an endpoint where we can exchange the clients credentials by a recently generated access token. The following cURL command illustrates how this can be achieved.

Command

```
curl --location --request POST 'https://apiamp.labsavvy.com/oauth/token' \
    --header 'accept: application/json' \
    --header 'content-type: application/x-www-form-urlencoded' \
    --data-urlencode 'grant_type=client_credentials' \
    --data-urlencode 'client_id=mhp' \
    --data-urlencode 'client_secret=rW6w68pLpwaRkpgu'
```

Sample Output

```
{
    "access_token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJzdWIiOiIxMjM0NTY3ODkwIiwibmFtZSI6IkpvaG4gRG9lIiwiaWF0Ijo
xNTE2MjM5MDIyfQ.SflKxwRJSMeKKF2QT4fwpMeJf36POk6yJV_adQssw5c",
    "refresh_token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJzdWIiOiIxMjM0NTY3ODkwIiwibmFtZSI6IkpvaG4gRG9lIiwiaWF0Ijo
xNTE2MjM5MDIyfQ.SflKxwRJSMeKKF2QT4fwpMeJf36POk6yJV_adQssw5c",
    "token_type": "Bearer"
}
```

Sample cURL request with the Authorization Header

Command

```
curl --location --request GET 'https://apiamp.labsavvy.com/partners/1234/documents/result/6789 \
    --header 'Authorization: Bearer <jwt-access-token>'
```

Variables

- `<jwt-access-token>` - The access token retrieved from LS

Create an Order using a Package ID

Description

This endpoint creates an Order and (possibly) a Client on LabSavvy

Endpoint

```
POST /partners/<partner-id>/orders
```

Variables

- `<partner-id>` - MHP's Partner ID

Payload

This request requires a JSON object to be present in the HTTP body.

- `client._id` - The existing client ID to create the order for. If present nothing else from the `client` is required. If it's not present all remaining fields will need to be populated.
- `client.name.first` - Required, Clients first name
- `client.name.last` - Required, Clients last name
- `client.dob` - Required, Clients date of birth in ISO format
- `client.gender` - Required, Clients gender. Either `male` of `female`
- `client.address.street` - Required, Clients street name
- `client.address.city` - Required, Clients city
- `client.address.state` - Required, Clients state. Two letter state code.
- `client.address.zip` - Required, Clients zip code
- `lab_order.package_id` - Required, Package ID to use to create the Lab Order for

Sample output

```
{
      client_id: "12345",
      lab_order_id: "67890"
}
```

Create an Order using order codes

Description

This endpoint creates an Order and (possibly) a Client on LabSavvy

Endpoint

`POST /partners/<partner-id>/custom-order`

Variables

- `<partner-id>` - MHP's Partner ID

Payload

This request requires a JSON object to be present in the HTTP body.

- `client._id` - The existing client ID to create the order for. If present nothing else from the `client` is required. If it's not present all remaining fields will need to be populated.
- `client.name.first` - Required, Clients first name
- `client.name.last` - Required, Clients last name
- `client.dob` - Required, Clients date of birth in ISO format
- `client.gender` - Required, Clients gender. Either `male` of `female`
- `client.address.street` - Required, Clients street name
- `client.address.city` - Required, Clients city
- `client.address.state` - Required, Clients state. Two letter state code.
- `client.address.zip` - Required, Clients zip code
- `lab_order.name` - Required, Name to be set on the Lab Order
- `lab_order.codes` - Required, Laboratory order codes
- `lab_order.project_id` - Optional, The partner's project ID. If not set the default project will be used.

Sample output

```
{
      client_id: "12345",
      lab_order_id: "67890"
}
```

PDF Retrieval

Description

This endpoint is intended to return all available Req.Forms and Result Reports for a given Lab Order ID. The return value needs to be an Array since we might have more than one document for a given type.

Endpoint

`GET /partners/<partner-id>/documents/<document-type>/<lab-order-id>/`

Variables

- `<partner-id>` - MHP's Partner ID
- `<document-type>` - The type of document to be returned. Possible values are `order` or `result`.
- `<lab-order-id>` - The lab order ID to retrieve the latest results from

Sample output

```
{
    "docs": [
        {
            "url": "https://example.com/order-document.pdf"
        }
    ]
}
```

PDF Result Retrieval

Description

This endpoint is intended to return the latest Result Report for a given Lab Order ID. The return value will be a JSON string that contains the base64 representation of the PDF.

Endpoint

```
GET /partners/<partner-id>/results/pdf/<lab-order-id>/
```

Variables

- `<partner-id>` - MHP's Partner ID
- `<lab-order-id>` - The lab order ID to retrieve the latest results from

Sample output

```
{
   "docs": [
       {
           "url": "https://example.com/order-document.pdf"
       }
   ]
}
```

Latest Result retrieval

Description

This endpoint is intended to serve a lab order's **latest released results** for a specific lab order

Endpoint

```
GET /partners/<partner-id>/results/<lab-order-id>
```

Variables

- `<partner-id>` - MHP's Partner ID
- `<lab-order-id>` - The lab order ID to retrieve the latest results from

Sample output

```
{
    "released": {
        "by": "5ef5bd07e3fa82001ad082d6",
        "date": "2021-05-12T15:33:54.623Z"
    },
    "status": "final",
    "patient_notes": [
        "FASTING:YES",
        "",
        "FASTING: YES"
    ],
    "viewed": null,
    "_id": "604632faed3f5900107508e4",
    "date": "2021-03-08T14:21:46.890Z",
    "lab_details": [
        {
            "details": [
                "Quest Diagnostics-Teterboro, One Malcolm Ave, Teterboro, NJ 07608-1011",
                "Lawrence Tsao MD"
            ],
            "_id": "604632faed3f5900107508e2",
            "lab_id": "QTE"
        },
        {
            "details": [
                "Quest Diagnostics-Horsham, 900 Business Center Drive, Horsham, PA 19044-3432",
                "Andrew S Edelman, MD PhD"
            ],
            "_id": "604632faed3f5900107508e3",
```

```
                        "lab_id": "QHO"
                }
        ],
        "panels": [
                {
                        "notes": [],
                        "_id": "604632faed3f5900107508e5",
                        "category_id": "5efa0d4f09e7a1001ae1a9b7",
                        "panel_name": "Completed Package Category",
                        "panel_type": "group",
                        "tests": [
                                {
                                        "value": "2.05",
                                        "indicator": "normal",
                                        "status": "normal",
                                        "notes": [
                                            "=> REVISED: Change in test result(s)",
                                            "PLEASE DISREGARD PREVIOUSLY REPORTED INFORMATION BELOW:",
                                            "(The information below was originally reported on 03/05/2021 at 9:17
AM)",
                                            "TSH                             3.05                    "
                                        ],
                                        "import_status": "correction",
                                        "_id": "604632faed3f5900107508df",
                                        "units": "mIU/L",
                                        "abnormal_code": null,
                                        "name": "TSH",
                                        "order_code": "899",
                                        "result_code": "55080400",
                                        "ref_range": "0.40-4.50",
                                        "lab_code": "QTE",
                                        "reference_id": "5b5a087c60f0320027dde55a",
                                        "compendium_id": "5d923327bd6a21001acb3268"
                                }
                        ]
                },
                {
                        "notes": [],
                        "_id": "604632faed3f5900107508e7",
                        "category_id": null,
                        "panel_type": "individual",
                        "tests": [
                                {
                                        "value": "<2.0",
                                        "indicator": "normal",
                                        "status": "normal",
                                        "notes": [
                                            "The total PSA value from this assay system is ",
                                            "standardized against the WHO standard. The test ",
                                            "result will be approximately 20% lower when compared ",
                                            "to the equimolar-standardized total PSA (Beckman ",
                                            "Coulter). Comparison of serial PSA results should be ",
                                            "interpreted with this fact in mind.",
```

```
                        " ",
                        "This test was performed using the Siemens ",
                        "chemiluminescent method. Values obtained from ",
                        "different assay methods cannot be used",
                        "interchangeably. PSA levels, regardless of",
                        "value, should not be interpreted as absolute",
                        "evidence of the presence or absence of disease."
                    ],
                    "import_status": "final",
                    "_id": "604632faed3f5900107508e1",
                    "units": "ng/mL",
                    "abnormal_code": null,
                    "name": "PSA, TOTAL",
                    "order_code": "5363",
                    "result_code": "55064920",
                    "ref_range": "< OR = 4.0",
                    "lab_code": "QHO",
                    "reference_id": "5b5a087d60f0320027dde583",
                    "compendium_id": "5d923327bd6a21001acb327e"
                }
            ]
        }
    ],
    "result_documents": [
        {
            "_id": "6046218f79120900109cdaea",
            "order_short_id": "2F2251001017CE20A",
            "results_report_pdf_id": "6046218f79120900109cdae9"
        },
        {
            "_id": "60463ba6ed3f590010750d35",
            "order_short_id": "2f2251001017ce20a",
            "results_report_pdf_id": "60463ba6ed3f590010750d34"
        }
    ],
    "collect_date": "20210305090300",
    "received_date": "20210305090400",
    "report_date": "20210308141715",
    "reprint_date": "",
    "priority_code": "",
    "import_id": "604631eced3f5900107508af"
}
```