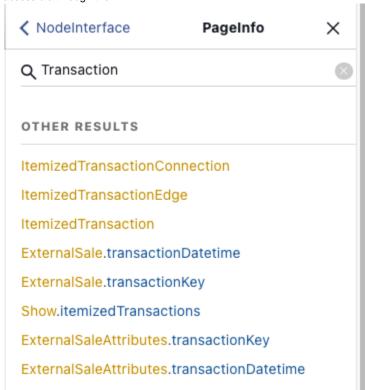
# Transaction Read Specific Examples

- Query Definitions:
- Pagnation (Paging)
- getTransactions
- getShows
- getTransactionsForShow
  - Series Execution Process
- · getShows Limitation to Wide Date Range

The query is useful in displaying the number of Transactions per Show......

## Query Definitions:

**Docs:** section for GraphiQL located on the upper right side of the api-browser. Use the search field to learn more about the data that is accessible through the API.



## Pagnation (Paging)

The process of separating content into discrete pages.

#### Paginating through collections nested within paginated collections is not recommended

A paged collection nested in another paged collection that returns an object that has more than one page of data cannot be properly paged. The nested collection's parent should be queried directly so that the collection that requires paging can be properly paged at the

Example: The sample query below selects 4 collections, three of them nested:

- organization
  - accounts collection Can be paged because it is the first collection
    - tours collection nested, but will there will only be 1 tour for Venues
      - shows collection may need paging depending on arguments
        - · itemizedTransactions collection most likely needs paging use seperate query

To retrieve all the transactions for a particular show make a separate query for only that show and page through the transactions

- show(uuid: \$showUuid)
  - · itemizedTransactions collection

getTransactions

#### Query

```
query getTransactions($pageSize: Int!, $startDate: Date!, $endDate:
Date!) {
 organization {
    name
    accounts(first: $pageSize) {
      pageInfo {
        endCursor
        hasNextPage
      nodes {
        name
        uuid
        externalId
        tours(first: 1) {
          nodes {
            shows(first: $pageSize, sortDirection: DESCENDING,
showsOverlap: {start: $startDate, end: $endDate}) {
              pageInfo {
                hasNextPage
                endCursor
              nodes {
                uuid
                externalId
                state
                showDate
                showEndDate
                currencyFormat {
                  code
```

```
itemizedTransactions(first: $pageSize) {
        pageInfo {
          hasNextPage
           endCursor
        }
        nodes {
          artistName
           cardholderName
           device
           itemName
          unitPriceAmount
           size
          refundedQuantity
           soldQuantity
          netSoldAmount
           orderId
           orderType
           paymentTimestamp
           staffName
           standName
           tenderType
           totalDiscountAmount
           totalRefundedAmount
      }
    }
  }
}
```

## **Variables**

```
{
   "pageSize": 10,
   "startDate": "2019-05-01",
   "endDate": "2019-09-30"
}
```

1 Shows older than January 1, 2019 may have a null orderld

## Response

```
"data": {
   "organization": {
     "name": "My Org",
     "accounts": {
       "pageInfo": {
         "endCursor": "MTA=",
         "hasNextPage": true
       },
       "nodes": [
           "name": "My Amphitheater",
           "externalId": null,
           "tours": {
             "nodes": [
              {
                "shows": {
                  "pageInfo": {
                    "hasNextPage": true,
                    "endCursor": "MTA="
                  },
                  "nodes": [
                      "externalId": null,
                      "state": "DONE",
                      "showDate": "2019-10-18",
                      "showEndDate": "2019-10-18",
                      "currencyFormat": {
                       "code": "USD"
                      },
                      "itemizedTransactions": {
                        "pageInfo": {
                         "hasNextPage": true,
                         "endCursor": "MTA4NzU1NThfOTA2MjEy"
                       },
                        "nodes": [
                           "artistName": "Artist Name",
                           "cardholderName": "EIVGhNkLyUL34oB",
                           "device": "atVenu Register YYY",
                           "itemName": "Shirt",
                           "unitPriceAmount": "0.35e2",
                           "size": "M",
                           "refundedQuantity": 0,
                           "soldQuantity": 1,
                           "netSoldAmount": "0.35e2",
                           "orderId": "ZZZZZZ",
```

## getShows

Fetching all transactions for every show in every account of an organization.

The query is limited to one night of shows.

If you are interested in last night's shows - use yesterday's date for the start and end in the example provided below.

## Assumptions

- The organization has many accounts (more than the page size)
- Each account only has one tour each (less than the page size)
- We are only interested in last night (less than the page size)
- Each show has many transactions (more than the page size)

#### Query

Gather the list of yesterday's shows from all of the accounts under an organization.

```
query getShows($pageSize: Int, $range: DateRange, $accountsCursor:
String) {
 organization {
    accounts(first: $pageSize, after: $accountsCursor) {
      pageInfo {
        hasNextPage
        endCursor
      accountNodes: nodes {
        name
        uuid
        externalId
        tours(first: 1) {
          tourNodes: nodes{
            uuid
            shows(first: $pageSize, showsOverlap: $range) {
              pageInfo {
                hasNextPage
                \verb"endCursor"
              showNodes: nodes {
                showDate
                showEndDate
                uuid
                externalId
          }
       }
```

## Variables

In this example, yesterday is June 15, 2019

```
{
   "pageSize": 20,
   "range": {"start": "2019-06-15", "end": "2019-06-15"},
   "accountsCursor": null
}
```

## Response

```
"data": {
  "organization": {
    "accounts": {
      "pageInfo": {
        "hasNextPage": true,
        "endCursor": "MjA="
      },
      "accountNodes": [
       # ...
          "name": "Amphitheater A",
          "uuid": "acct_AAAAA-AAAA-AAAA-AAAA-AAAAAAA",
          "externalId": "CustomVenueID-A",
          "tours": {
            "tourNodes": [
                "uuid": "tour_AAAAA-AAAA-AAAA-AAAA-AAAAAAA",
                "shows": {
                  "pageInfo": {
                    "hasNextPage": false,
                    "endCursor": "MQ=="
                  },
                  "showNodes": [
                      "showDate": "2019-06-15",
                      "showEndDate": "2019-06-15",
                      "uuid": "show_AAAAA-AAAA-AAAA-AAAA-00000001",
                      "externalId": "CustomShowID-A-1"
        },
          "name": "Amphitheater B",
          "uuid": "acct_BBBBB-BBBB-BBBB-BBBBBBBB",
          "externalId": "CustomVenueID-B",
          "tours": {
            "tourNodes": [
                "uuid": "tour BBBBB-BBBB-BBBB-BBBBBBBB",
                "shows": {
                  "pageInfo": {
                    "hasNextPage": false,
                    "endCursor": null
                  "showNodes": []
```

```
}
  },
    "name": "Amphitheater C",
    "uuid": "acct_CCCCC-CCCC-CCCC-CCCCCCCC",
    "externalId": "CustomVenueID-C",
    "tours": {
      "tourNodes": [
          "uuid": "tour_6400ad7d-41cc-46c0-837f-ed48d673507b",
          "shows": {
            "pageInfo": {
              "hasNextPage": false,
              "endCursor": "MQ=="
            },
            "showNodes": [
                "showDate": "2019-06-14",
                "showEndDate": "2019-06-15",
                "uuid": "show_CCCCC-CCCC-CCCC-CCCC-0000001",
                "externalId": "CustomShowID-C-1"
              },
                "showDate": "2019-06-15",
                "showEndDate": "2019-06-16",
                "uuid": "show_CCCCC-CCCC-CCCC-CCCC-00000002",
                "externalId": "CustomShowID-C-2"
            ]
      ]
  },
]
```

getTransactionsForShow

## Query

Lists itemized sales Transactions per Show.

```
query getTransactionsForShow($pageSize: Int, $showUuid: UUID!,
$transactionsCursor: String) {
    showNode: node(uuid: $showUuid) {
        ...on Show {
        itemizedTransactions(first: $pageSize, after:
$transactionsCursor) {
        pageInfo {
            hasNextPage
            endCursor
        }
        transactionNodes: nodes {
            orderId
            # ... additional fields
        }
     }
    }
}
```

## **Variables**

```
{
   "pageSize": 200,
   "showUuid": "show_AAAAA-AAAA-AAAA-AAAA-00000001",
   "transactionsCursor": null
}
```

Response

```
"data": {
  "showNode": {
    "itemizedTransactions": {
      "pageInfo": {
        "hasNextPage": true,
        "endCursor": "ODQ1MTc0N182OTY1MDE="
      },
      "transactionNodes": [
          "orderId": "0ec2d3",
          # ...
          "orderId": "c01381",
          # ...
          "orderId": "c01381",
          # ...
        # ...
      1
```

#### **Series Execution Process**

- execute getShows to retrieve the list of accounts and shows
- Do
  - for each account in data.organization.accounts.accountNodes
  - Do
    - for the first tour in account.tours.tourNodes
      - for each show in tour.shows.showNodes
        - set showUuid in getTransactionsForShow variables to show.uuid
        - Do
          - execute getTransactionsForShow to get the list of transactions for a show
          - process the list of transactions contained in data.showNode.itemizedTransactions.transactionNodes
          - set transactionsCursor in getTransactionsForShow variables to data.showNode.pageInfo.endCursor
        - While data.showNode.itemizedTransactions.pageInfo.hasNextPage === true
  - set accountsCursor in getShows variables to data.organization.accounts.pageInfo.endCursor
- While data.organization.accounts.pageInfo.hasNextPage

getShows Limitation to Wide Date Range

Show queries are limited to a maximum page size of 20 Accounts per query. Review the Process below if you are interested in the shows across a wide date range.

### **Assumptions**

## Same as above except:

• Many Shows per Tour (more than the page size)

#### **Process**

• Use the process above with the assumption that most Accounts will have less shows than the page size for a given date range. Ensure for each Tour that `tour.shows.pageInfo.hasNextPage` === false. If it is true, then process that Tour separately by querying the Tour node directly.

## Alternatively:

• If the process above is of the assumption that there will be more Shows than the page size than query only Tours initially for each Account. And then for each Tour, query the Shows, followed by a query for each Show's itemized Transactions.