Session Viewer

Tutorial

OVERVIEW

Here at Travolutionary, we believe in technical transparency and self-serviceable platforms.
In light of these principles, we have developed a Session Viewer tool.
This tool allows users to view, save and analyze any activity made in a session, including requests/responses to and from Travolutionary API, and also requests/responses to and from supplier APIs.

Any booking related activity is saved in XML/JSON format into a file, and the file is dumped to the session.

The tool offers 4 main functions:
1. Viewing a specific session by a Session ID
2. Viewing a session associated with a specific Segment ID
3. Viewing a session made by a specific user
4. Inspecting failed booking transactions

The tool can be accessed through a designated URL: **logs.travolutionary.com** using the user's login credentials (username & password).
Alternatively, while you are logged to the B2B/Back-Office system and using one of our services, press Alt+S simultaneously on any page and login with your B2B credentials to access the session data of the current active session.

GETTING STARTED

All Travolutionary users can use our session viewer tool and browse sessions for a comprehensive inspection of the services data. The tool's viewing privileges are user-role based:

1. <u>Regular user</u> - any user of the system, which is not a root user. See root user definition below. Regular users will have access only to their own sessions.
2. <u>Root user</u> - a user that is defined directly under the main company node (folder) on its company hierarchy.
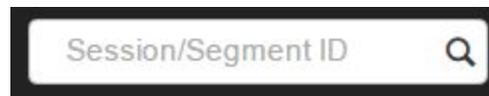

For a root user, there are two utilities to begin with:
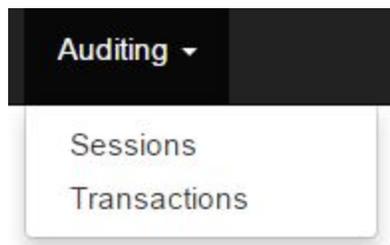
1. <u>Auditing → Sessions</u>.
   This utility can be used for the following purposes:

- Viewing a specific session by a Session ID
- Viewing a session associated with a specific Segment ID
- Viewing a session made by a specific user

| 1/3/2017 | 📅 | Prod | ▼ | api_user@mytravelagency.com |

📁 Sessions

📁 **Level up ..**
D20170103T150827/
D20170103T150828/
D20170103T150829/
D20170103T150830/
D20170103T150831/
D20170103T150832/
D20170103T150833/
D20170103T150834/
D20170103T150835/
D20170103T150836/
D20170103T150837/
D20170103T150838/
D20170103T150839/
D20170103T150840/
D20170103T150841/
D20170103T150842/

2. <u>Auditing →Transactions</u>
   This utility can be used for inspecting failed booking transactions.

Drag a column header and drop it here to group by that column

	Time	AffId	User Name	Code
▸	07/01/2017 19:50	173	▮ttravel@gmail.com	E4100
▸	07/01/2017 15:37	173	▮q@hotmail.com	E3000
▸	07/01/2017 01:19	173	▮rsionsbycassie@gmail.com	E1000, E3000
▸	07/01/2017 00:52	173	▮k@rickscruises.com	E3000
▸	07/01/2017 00:30	173	▮e@travelgurus.ca	E3000

THE SESSION ID

Travolutionary API is a session-based service. Any search performed in the system must carry its own Session ID (there are however some special cases, which we will not detail here). The Session stores any activity made, including internal and external calls to and from Travolutionary API.

The Session ID is comprised of four distinguished numeric and alphanumeric parts: the '*Affiliate ID*' (represents the client ID as is set-up on our system), the '*User ID*', the '*Date-Time stamp*' (in GMT time) and a '*Unique Identifier*':

For example, let's take a look at the following Session ID:

/22/44900/D20161128T070703/de46867f36c14f1597d88ed5a5705655/

Affiliate ID	22
User ID	44900
Date-Time stamp (In GMT - formatted as DYYYYMMDDTHHMMSS)	D20161128T070703 ● Date - D ● YYYY - 2016 ● MM - 11 ● DD - 28 ● Time - T ● HH - 07 ● MM - 07 ● DD - 03
Unique Identifier	de46867f36c14f1597d88ed5a5705655

Browsing for Action Types by Segment ID

The Travolutionary system distributes a unique numeric ID for each and every type of order made through its Hotels, Flights, Cars, Activities and Transfers services. Future services will also distribute reservation IDs by this method.

The unique ID represents a system sequential order number (Order ID), and its respective Segment ID. Each Order ID can be coupled with one or more segments. When it comes to following-up on your orders, it is preferable to focus on the Segment ID level.
The tool allows the user to run a query for the actions made on single segment:

User name	Time	Type	Session Seq	Session
▉vin@medtechtravel.com	12/27/2016 1:44:35 AM	HotelsBook	112	Open
▉in@medtechtravel.com	12/27/2016 5:27:39 AM	HotelsBookInfo	1	Open
▉vin@medtechtravel.com	1/3/2017 11:53:53 PM	HotelsCancelSegment	1	Open

Searching by Segment ID allows the user to inquire which action types were made for a given segment. In the figure above, we see that there were three different action types on Segment ID 1880727.

HotelsBook - this action type represents the Booking process in its entirety.
HotelsBookInfo - this action type represents a Check Status process, executed on the segment.
HotelsCancelSegment - this action type represents a Cancel process, executed on the segment.

For each action type we can recognize the user who performed the action by the *'User name'*, and the timestamp (formatted in GMT time) for that the action, and the session where the action took place in.

Failed Booking Transactions

Date	Contains service errors	Session Id	
1/12/2017	Error codes csv		Filter

Q Tracing

Drag a column header and drop it here to group by that column

	Time	Affld	User Name	Code
▶	1/12/2017 4:23 AM	173	ssa@kingdommagic.com	E3000
▶	1/12/2017 4:10 AM	173	avarro@gmail.com	E1000
▶	1/12/2017 2:12 AM	173	ttle@sasktel.netca	E4050
▶	1/12/2017 1:26 AM	173	tle@sasktel.netca	E4000
▶	1/12/2017 12:46 AM	173	otvl@comcast.net	I0600	E4500

Session

4:10:31.8343	686.77s	0.00s	109 Seq	0.98 Kb	🖈 Mark 🏳 Save 👁 View		HotelBookRequest
4:10:31.8968	686.83s	0.06s	109 Seq	1.05 Kb	🖈 Mark 🏳 Save 👁 View		HotelPackagesMarkups
4:10:31.8968	686.83s	0.06s	109 Seq	1.05 Kb	🖈 Mark 🏳 Save 👁 View		HotelPackagesMarkups
4:10:31.8968	686.83s	0.06s	109 Seq	1.05 Kb	🖈 Mark 🏳 Save 👁 View		HotelPackagesMarkups
4:10:31.9905	686.92s	0.16s	109 Seq	854 b	🖈 Mark 🏳 Save 👁 View	AMD	AMD-PackageDetailsRequest
4:10:33.2718	688.20s	1.44s	109 Seq	2.57 Kb	🖈 Mark 🏳 Save 👁 View	AMD	AMD-PackageDetailsResponse
4:10:33.3343	688.27s	1.50s	109 Seq	821 b	🖈 Mark 🏳 Save 👁 View	AMD	AMD-CxlPolicyRequest
4:10:34.5999	689.53s	2.77s	109 Seq	2.5 Kb	🖈 Mark 🏳 Save 👁 View	AMD	AMD-CxlPolicyResponse
4:10:34.9905	689.92s	3.16s	109 Seq	939 b	🖈 Mark 🏳 Save 👁 View	AMD	AMD-BookRequest
4:10:35.1625	690.09s	3.33s	109 Seq	1.2 Kb	🖈 Mark 🏳 Save 👁 View	AMD	AMD-BookRequest
4:10:35.1625	690.09s	3.33s	109 Seq	1.24 Kb	🖈 Mark 🏳 Save 👁 View	AMD	AMD-BookResponse
4:10:39.0473	693.98s	7.21s	109 Seq	455 b	🖈 Mark 🏳 Save 👁 View	AMD	AMD-BookResponse
4:10:39.0473	693.98s	7.21s	109 Seq	167 b	🖈 Mark 🏳 Save 👁 View		OrderBookResponse
4:10:39.0473	693.98s	7.21s	109 Seq	194 b	🖈 Mark 🏳 Save 👁 View		OrderBookResponseErrors

The **Failed Booking Transactions** section allows you to inspect any failed booking attempts on a specific date, and to review in depth any errors which may have occurred during the activity. You can access this section by choosing "Transactions" from the Auditing menu.
The figure above depicts the entire section page, which is divided into two parts:

1. The left side of the screen shows *the failed bookings rows*, organized in a table. It enables you to query and filter the table by any column header.
2. The right side of the screen shows the *partial session view*. For the row chosen on the right, it details the session's activities, starting from the booking step, the dumps (files) in XML/JSON formats and timestamps, and allows you to use the action buttons: View, Save and Mark for each activity.

Each utility is explained in detail later on..

The failed booking transactions table

	Time	AffId	User Name	Code
▸	1/12/2017 4:23 AM	173	███ssa@kingdommagic.com	E3000
▸	1/12/2017 4:10 AM	173	███avarro@gmail.com	E1000
▸	1/12/2017 2:12 AM	173	███ttle@sasktel.netca	E4050
▸	1/12/2017 1:26 AM	173	███tle@sasktel.netca	E4000
▸	1/12/2017 12:46 AM	173	███otvl@comcast.net	I0600 | E4500

Drag a column header and drop it here to group by that column

The data displayed in the table (to the left) can be filtered by the following criteria:

Date	Focuses on failed booking transactions made on a specific date.
Contains service errors	Represents the ErrorCode identificator. For example, E4050.
Session Id	Filters a specific session to get its booking steps and ErrorCode. By choosing and clicking on a failed booking attempt session (represented by one table row on the left side of the screen), a partial view of the session logs will appear to the right of the table, specifically the booking step logs.

The data displayed for each session is organized by two sets of table columns - the tracing columns and the booking flow method name columns.

The main table is set to the tracing columns which are arranged by the following headers:

Time	Represents the action date & time.
AffId (stands for Affiliate ID)	The unique numeric ID for your affiliate in our system.
User Name	The user who initiated the booking request.
ErrorCode	Travolutionary's Error Code for the failed booking attempt, which occurred during the session. There might be several Error Codes in a single session.

There are two main types of errors displayed in the system: a *Supplier Error* and a *Service Error*.

1. A *Supplier Error* is a warning or a supplier service fault message. It is originated on the supplier's system in response to a booking request sent by a Travolutionary user. The supplier error might be caused by a supplier service rule, an internal error in the supplier's infrastructure, a communication timeout, etc..

2. A *Service Error* is a translated error message returned from Travolutionary system, based on a supplier error, or based on an internal logic (for example, price change captured during the booking attempt). In order to simplify the error handling process for clients and prevent overloading with too many errors to handle, we made translations to suppliers errors.

   For example, a supplier might return an error code for sold-out status as "err1234", while other suppliers might return it as "err6789". In such case, both suppliers error messages will be translated to a single error returning from Travolutionary system.

Below are some of the most frequent error codes you should be aware of:

Error Code	Description
E4100	No availability from the supplier. Try to book a different package.
E1100	Something in your request did not pass our validation. See detailed error message for more info i.e. check for 2 letters valid State (for US only), check for credit card details, etc.
E3000	Credit card issue such as incorrect credit card type/number/cvv, etc., or the credit card company did not authorize the card.
E4050	Error with supplier which is handled on our side, hence you can try re-booking this package again.
E4060	Contact the supplier to refill your credit or deposit funds to prevent such errors.

For more information about ErrorCodes, please inquire it onour ErrorCodes library article:
https://carsolize.zendesk.com/hc/en-us/articles/201758989-Error-library-Error-handling

Querying Data from the Failed Transactions Table

In order to query columns by headers and groups by columns, you can drag any column header and drop it on the sorting space above the columns area:

In case there are several users who have been experiencing technical errors while attempting to send booking requests, the tool also offers filtering by column. You can efficiently filter these errors by their user names, or by the error codes correlated to the issue they have experienced.

The Booking Flow - Method Name Columns

To the left of each table row, you will find a black triangle (caret) which upon click opens a sub-table for detailing the second set of columns.

The booking flow method name columns provide you with insightful details about the booking processes, the supplier accounts, and the Errors for each of the booking activities.

Name	Represents the method names in the booking flow, in a consecutive manner (from beginning to end).
SuppId *Supplier ID*	The ID for a given supplier by the booking request was sent to. For the latest hotel suppliers list, please visit: https://carsolize.zendesk.com/hc/en-us/articles/202321379-Hotel-Suppliers
AccId *Account ID*	Account (Contract) ID on Travolutionary system which was used for this booking attempt. This is the supplier contract ID through which the failed booking attempt was made.
SuppDuration *Supplier Duration*	Please ignore.
Errors *Error Codes*	All the errors that were logged during the booking process.

The full Session ID is also displayed under the sub-table (Session id).

THE PARTIAL SESSION VIEWER

The partial session viewer, which is set to the right side of the Transactions section, displays the activities made from the moment of the booking request was sent by the user.
An Activity can be defined as an incoming request to Travolutionary, an outgoing request to a supplier, an incoming response from supplier and an outgoing response from Travolutionary to the client.
You can View, Mark and Save any activity, including internal system dumps.

A session logdump is structured from the below columns.

The table describes the main columns of the session logdump viewer:

Date Time Stamp (GMT)	The timestamped occurrence of a sent request or a received response.
Total Time Passed (in milliseconds)	The time passed from the last logged action.

Time Passed from Sequence (seconds)	The time passed from the beginning of the sequence.
Sequence Number	Each call to our API is given a sequential identifier in the session.
Dump Inspection Actions	_Mark_ - Marking entries enables you to visually differentiate and couple each log with its initiatory or subsequent log entry _Save_ - Download the XML file for a specific log _View_ - View the XML file for a specific log
File Name	This is the name of the XML file as it was written to our system.

The full session view is similar to the partial session view, and extends it even more by displaying activities made from the moment the user sent the Search request to Travolutionary system (opposed to the Partial Session View, which displays activities from the moment the user sent a Book request to Travolutionary).

Sessions

📁Level up ..

17:21:49.9998	**0.00s**	**0.00s**	**1 Seq**	**442 b**	✈ Mark	💾 Save	👁 View		**Hotels Service Search Request**
17:21:50.0154	0.02s	0.02s	1 Seq	569 b	✈ Mark	💾 Save	👁 View	**DTW**	DTW-customer
17:21:50.0154	0.02s	0.02s	1 Seq	376 b	✈ Mark	💾 Save	👁 View	**EXP**	EXP-SearchRequest
17:21:50.0154	0.02s	0.02s	1 Seq	407 b	✈ Mark	💾 Save	👁 View	**GTA**	GTA-t_Request
17:21:50.0154	0.02s	0.02s	1 Seq	557 b	✈ Mark	💾 Save	👁 View	**HBS**	HBS-HotelValuedAvailRQ
17:21:50.0154	0.02s	0.02s	1 Seq	217 b	✈ Mark	💾 Save	👁 View	**HP2**	HP2-SearchFormRequest
17:21:50.0154	0.02s	0.02s	1 Seq	417 b	✈ Mark	💾 Save	👁 View	**MIK**	MIK-citySearchRequest
17:21:50.0313	0.03s	0.03s	1 Seq	496 b	✈ Mark	💾 Save	👁 View	**B2B**	B2B-SearchRequest
17:21:50.0313	0.03s	0.03s	1 Seq	629 b	✈ Mark	💾 Save	👁 View	**TRC**	TRC-SearchRequest
17:21:50.0779	0.08s	0.08s	1 Seq	10.97 Kb	✈ Mark	💾 Save	👁 View	**DTW**	DTW-resultType
17:21:50.0935	0.09s	0.09s	1 Seq	530 b	✈ Mark	💾 Save	👁 View	**LOH**	LOH-SearchRequest
17:21:50.1404	0.14s	0.14s	1 Seq	1.88 Kb	✈ Mark	💾 Save	👁 View	**HBS**	HBS-HotelValuedAvailRS
17:21:50.156	0.16s	0.16s	1 Seq	1.24 Kb	✈ Mark	💾 Save	👁 View	**LOH**	LOH-SearchResponse
17:21:50.1716	0.17s	0.17s	1 Seq	2.78 Kb	✈ Mark	💾 Save	👁 View	**TRC**	TRC-SearchResponse
17:21:50.2029	0.20s	0.20s	1 Seq	153 b	✈ Mark	💾 Save	👁 View	**B2B**	B2B-SearchResponse
17:21:50.2185	0.22s	0.22s	1 Seq	4.42 Kb	✈ Mark	💾 Save	👁 View	**EXP**	EXP-SearchResponse
17:21:50.6163	0.62s	0.62s	1 Seq	3.02 Kb	✈ Mark	💾 Save	👁 View	**MIK**	MIK-citySearchResponse
17:21:50.6788	0.68s	0.68s	1 Seq	28.01 Kb	✈ Mark	💾 Save	👁 View	**HP2**	HP2-SearchResponse
17:21:53.8703	3.87s	3.87s	1 Seq	1.69 Kb	✈ Mark	💾 Save	👁 View	**GTA**	GTA-t_Response
17:21:53.9015	**3.90s**	**3.90s**	**1 Seq**	**178 b**	✈ Mark	💾 Save	👁 View		**Hotel Search Result Summary**
17:21:53.9015	*3.90s*	*3.90s*	*1 Seq*	*340 b*	✈ Mark	💾 Save	👁 View		*Search Currency Conversion Rates*

AUDITING SESSIONS

Sessions can be accessed by each user who initiated any kind of service activity via the B2B system or the API. You can access the sessions audit inspector by choosing "Sessions" from the Auditing menu.

The inspector allows you to filter the users by two different parameters:
Date - the date on which an action was made by a certain user.
Environment - the system environment in which the action was made - a production environment (Prod) or a test environment (Test).

The list comprises of all users who have accessed and used the services, and it enlists each user ID with its respective username.

D20161118T000040/

📂 Sessions

📂 Sessions

📁Level up ..
D20161118T000001/
D20161118T000008/
D20161118T000009/
D20161118T000010/
D20161118T000014/
D20161118T000016/
D20161118T000018/
D20161118T000026/
D20161118T000032/
D20161118T000040/
D20161118T000041/
D20161118T000043/

📁Level up ..
b52462770b184eb692ac32864b8a3b98/

By choosing a user, the inspector will display all the user's sessions for the selected date and environment, enveloped within hyperlinked timestamps.
By choosing a specific time, a list of session unique identifiers will appear.
Clicking on a unique identifier will display the full logdump of the session.