



Leveraging Demurrage Transactions for Rail Car Tracking

By

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DATE: 29TH JULY 2013



QUALITY MATTERS

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Agenda

- Basics of Demurrage Transaction
- Rail Car Booking Process
- Empty Rail Car Visibility
- Integrations with Demurrage Transactions & Tracking Events
- Planning Restrictions
- Reporting Options

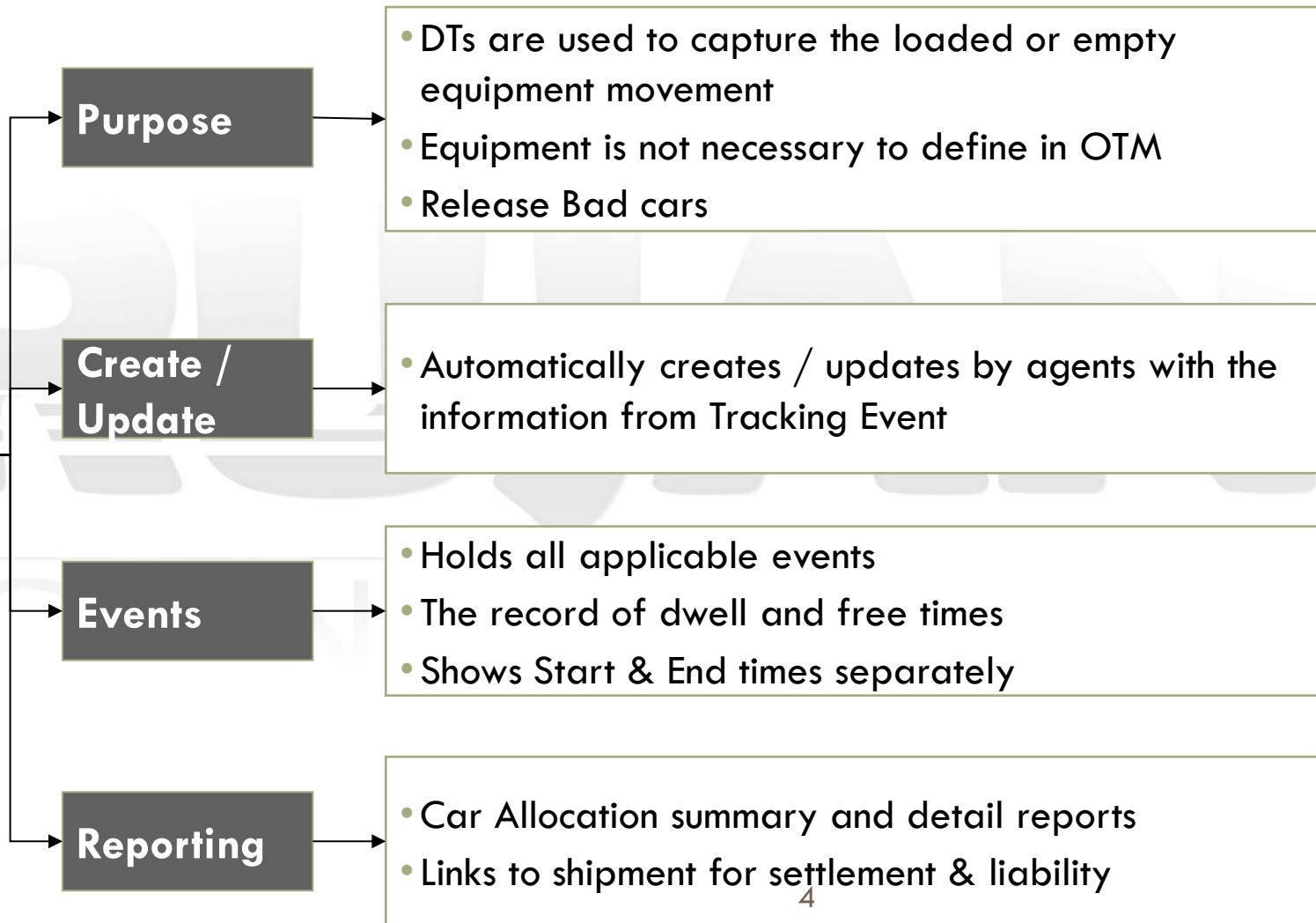
Agenda

- **Basics of Demurrage Transaction**
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Demurrage Transaction – Basics



Demurrage Transaction (DT)



Demurrage Process Flow



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Rail Car Booking Process

- Following steps perform before rail car ordering process:
 - Shipments forecast
 - Estimating rail cars by day / week and by Location
 - Negotiations with Rail Carriers
 - Placing required Rail Car orders with carrier via their web portal, etc
 - Store the final negotiated rail cars by day / week by location in OTM or outside of OTM
-

Rail Car Booking Process contd...

- Negotiated final list of ordered rail cars

Date	Dest. Location	Confirmed Cars
22-Jul	Chicago	30
22-Jul	Milwaukee	25
23-Jul	Racine	15
25-Jul	Chicago	20

- We don't have any visibility of these rail cars start date, arrival, where they are & car marks

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Empty Rail Car Visibility

- 
- A person is sitting cross-legged on a set of railroad tracks in a desert-like environment. They are holding a laptop computer in their lap. The tracks stretch far into the distance under a clear sky. The background shows utility poles and a flat landscape.
- Without a shipment / equipment in OTM
 - ▣ How to capture the empty rail car movement?
 - ▣ How to release Bad Cars to rail carriers?
 - ▣ How to capture the events for empty rail cars?

Empty Rail Car Visibility contd...

- Prior to OTM 6.3
 - We may need to create equipment and/or SAW shipment
 - Capture events either on Equipment / Shipment
 - Release Equipment / Shipment for bad cars



Empty Rail Car Visibility contd...

□ What's New in OTM 6.3?

- ▣ Demurrage Transaction and Events will replace them

- ▣ No need of creating equipment SAW shipment



- ▣ Capture the events (Web / EDI) on Demurrage Transaction

- ▣ Release the bad cars by sending Demurrage Transaction object

Empty Rail Car Visibility - Sample



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Tracking Event XML

Transmission	
TransmissionHeader	
TransmissionBody	
GLogXMLElement	
ShipmentStatus	
RailInfo	
CarrierScac	BNSF
EventCity	DALLAS
EventState	TX
EventCountry	USA
StatusCodeGid	
Gid	
DomainName	SRUJAN
Xid	6006
TimeZoneGid	
Gid	
Xid	CST
EventDt	
GLogDate	20130722093500
SStatusSEquipment	
EquipmentInitial	BNSF
EquipmentNumber	11224
EquipmentInitialNumber	BNSF11224
SSStop	
SSLocation	
EventCity	DALLAS
EventState	TX
EventCountry	USA
ResponsiblePartyGid	
Gid	
Xid	CARRIER

**Reporting
By Whom?**

What?

When?

Who?

Where?

Tracking Event Agent

Agent Header

1 of 1 [New](#) [Finished](#) [Action](#)

Agent Header **Actions** **Error Handler**

- [-] **Top**
- [-] **MATCH DEMURRAGE TRANSACTION**
- [-] **IF: CAR IS LOADED**
 - CREATE/UPDATE DEMURRAGE TRANSACTION**
 - ELSE**
 - CREATE/UPDATE DEMURRAGE TRANSACTION**
 - ENDIF**
 - LOG: SRUJAN Team Testing - DT Created / Matched**
 - IF: \$STATUS_CODE_GID=6006**
 - (TRACKING EVENT TO DEMURRAGE TRANSACTION) SET STATUS: CAR VISIBILITY_ARRIVAL AT ORIGIN**
 - (TRACKING EVENT TO DEMURRAGE TRANSACTION) SET INTERNAL STATUS: DT_TRANSACTION_STARTED**
 - ELSEIF: \$STATUS_CODE_GID=6009**
 - (TRACKING EVENT TO DEMURRAGE TRANSACTION) SET STATUS: CAR VISIBILITY_CONST PLACEMENT AT ORIGIN**
 - ELSEIF: \$STATUS_CODE_GID=R**
 - (TRACKING EVENT TO DEMURRAGE TRANSACTION) SET STATUS: CAR VISIBILITY_JUNCTION RECEIVED**
 - ELSEIF: \$STATUS_CODE_GID=J**
 - (TRACKING EVENT TO DEMURRAGE TRANSACTION) SET STATUS: CAR VISIBILITY_JUNCTION DELIVERED**
 - ELSEIF: \$STATUS_CODE_GID=6005**
 - (TRACKING EVENT TO DEMURRAGE TRANSACTION) SET STATUS: CAR VISIBILITY_ARRIVED AT DESTINATION**
 - ELSEIF: \$STATUS_CODE_GID=6009**
 - (TRACKING EVENT TO DEMURRAGE TRANSACTION) SET STATUS: CAR VISIBILITY_CONST PLACEMENT AT DEST**
 - ELSEIF: \$STATUS_CODE_GID=6007**
 - (TRACKING EVENT TO DEMURRAGE TRANSACTION) SET STATUS: CAR VISIBILITY_ACTUAL PLACEMENT AT DEST**
 - (TRACKING EVENT TO DEMURRAGE TRANSACTION) SET INTERNAL STATUS: DT_TRANSACTION_ENDED**
 - ENDIF**

[Top](#) [Error Handler](#)

Demurrage Transaction - Origin

Demurrage Transaction

1 of 1 [New](#) [Finished](#) [Actions](#)

Header	Events	Line Items	Remarks	Shipment Info
Demurrage Transaction ID 92		* Reporting SCAC BNSF		
Location				
Location ID		Time Zone		
City	DALLAS	Province Code	TX	Country USA
Constructive Placement Location				
Location ID		Time Zone		
City		Province Code		Country
Equipment Information				
Equipment Initial	BNSF	Equipment Number	313622	Equipment Initial/Number BNSF313622
Equipment ID		Equipment Type ID		Equipment Reference Number Qualifier ID
Chassis Initial		Chassis Number		
Statuses				
Status Type	Status Value			
CAR VISIBILITY	CAR VISIBILITY_ARRIVAL AT ORIGIN			
DT_APPROVAL	DT_APPROVAL_NOT_APPROVED			
DT_SETTLEMENT	DT_SETTLEMENT_NOT_STARTED			
DT_TRANSACTION	DT_TRANSACTION_STARTED			

[Top](#) [Events](#)

Demurrage Transaction – Jct.

Demurrage Transaction

1 of 1 [New](#) [Finished](#) [Actions](#)

[Header](#) [Events](#) [Line Items](#) [Remarks](#) [Shipment Info](#)

Demurrage Transaction ID

92

* Reporting SCAC

BNSF

[-] Location

Location ID

Time Zone

City

Province Code

Country

OKLAHOMA CITY

OK

USA

[-] Constructive Placement Location

Location ID

Time Zone

City

Province Code

Country

[-] Equipment Information

Equipment Initial

Equipment Number

Equipment Initial/Number

BNSF

313622

BNSF313622

Equipment ID

Equipment Type ID

Statuses

Chassis Initial

Chassis Number

Status Type

Status Value

CAR VISIBILITY

CAR VISIBILITY_JUNCTION RECEIVED

DT_APPROVAL

DT_APPROVAL_NOT_APPROVED

DT_SETTLEMENT

DT_SETTLEMENT_NOT_STARTED

DT_TRANSACTION

DT_TRANSACTION_NOT_STARTED

Demurrage Transaction – Dest.

Demurrage Transaction

1 of 1 [New](#) [Finished](#) [Actions](#)

[Header](#) [Events](#) [Line Items](#) [Remarks](#) [Shipment Info](#)

Demurrage Transaction ID

92

* Reporting SCAC

BNSF

Location

Location ID

Time Zone

City

Province Code

Country

CHICAGO

IL

USA

Constructive Placement Location

Location ID

Time Zone

City

Province Code

Country

Equipment Information

Equipment Initial

Equipment Number

Equipment Initial/Number

BNSF

313622

BNSF313622

Equipment ID

Equipment Type ID

[Statuses](#)

Chassis Initial

Chassis Number

Status Type

Status Value

CAR VISIBILITY

CAR VISIBILITY_ACTUAL PLACEMENT AT DEST

DT_APPROVAL

DT_APPROVAL_NOT_APPROVED

DT_SETTLEMENT

DT_SETTLEMENT_NOT_STARTED

DT_TRANSACTION

DT_TRANSACTION_ENDED

[Top](#) [Events](#)

Demurrage Transaction Events

Demurrage Transaction

1 of 1 [New](#) [Finished](#) [Actions](#)

[Header](#) [Events](#) [Line Items](#) [Remarks](#) [Shipment Info](#)

+ Start Event Details

+ End Event Details

- Deemed/Actual End State Information

Activity Type

End Date

- Event Date & Time Information

* Event Status Code ID

* Event Date/Time

Save

6006	2013-07-22 09:35 America/Vancouver	
6009	2013-07-23 03:22 America/Vancouver	
R	2013-07-24 06:11 America/Vancouver	
J	2013-07-24 07:18 America/Vancouver	
6005	2013-07-25 07:03 America/Vancouver	
6009	2013-07-25 15:40 America/Vancouver	
6007	2013-07-25 16:40 America/Vancouver	

[Top](#) [Line Items](#)

Demurrage Transaction Outbound

Demurrage Transaction Total Found: 1

Pages 1 | Selected Page: 1 Total: 1

✓	ID	Reporting SCAC	Location ID	City	State	Constructive Plac
✓	92	BNSF		DALLAS	TX	

New View Edit Delete Actions

Actions

- Calculate Charges
- Change Reference Numbers
- Recalculate Charges
- Set Event Status
- Utilities
 - Change External Status
 - Mark for Purge
 - Send Interface Transmission**

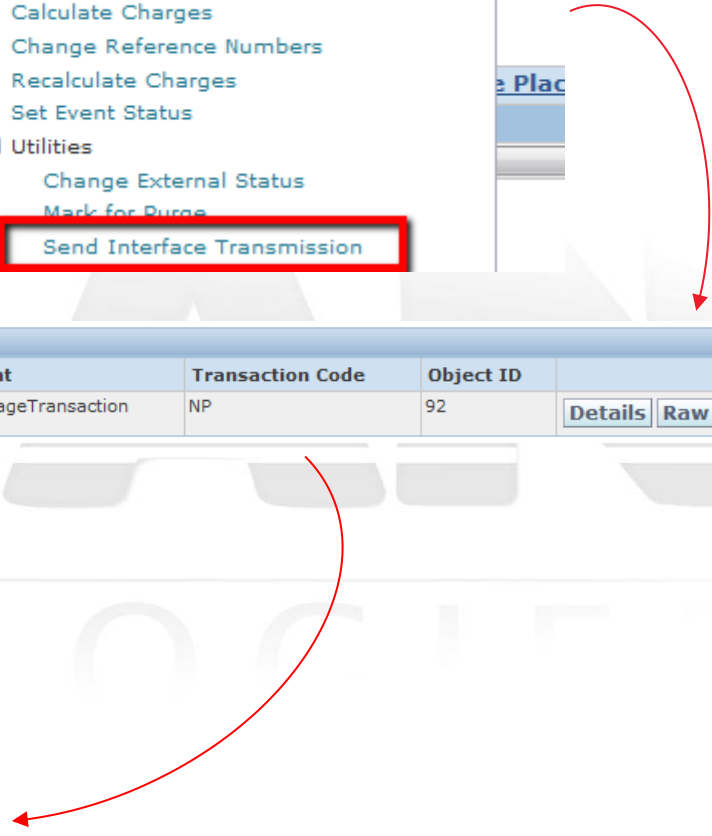
transmission

- TransmissionHeader
- TransmissionBody
 - GLogXMLElement
 - DemurrageTransaction
 - xmlns http://xmlns.oracle.com/apps/otm
 - ReportingScac BNSF
 - DmCity DALLAS
 - DmState TX
 - DmCountry USA
 - EquipmentInitial CEFX
 - EquipmentNum... 313622
 - StartEventStatusCodeGid
 - StartScacGid BNSF
 - StartCity DALLAS
 - StartState TX
 - StartCountry USA
 - DmEventDate4
 - Bs StatusCode4Gid
 - Is SystemGener... N
 - MarkedForPurge N
 - ModeType R
 - DemurrageTransactionEvent
 - DemurrageTransactionStatus (4)

StatusTypeGid	StatusValueGid
1	<ul style="list-style-type: none"> StatusTypeGid Gid <ul style="list-style-type: none"> DomainName SRUJAN Xid CAR VISIBILITY_ARRIVAL AT ORIGIN
2	StatusValueGid
3	StatusValueGid

Transactions

ID	Status	Element	Transaction Code	Object ID	
13267	OUTBOUND	DemurrageTransaction	NP	92	Details Raw XML



Agenda

□ Basics of Demurrage Transaction

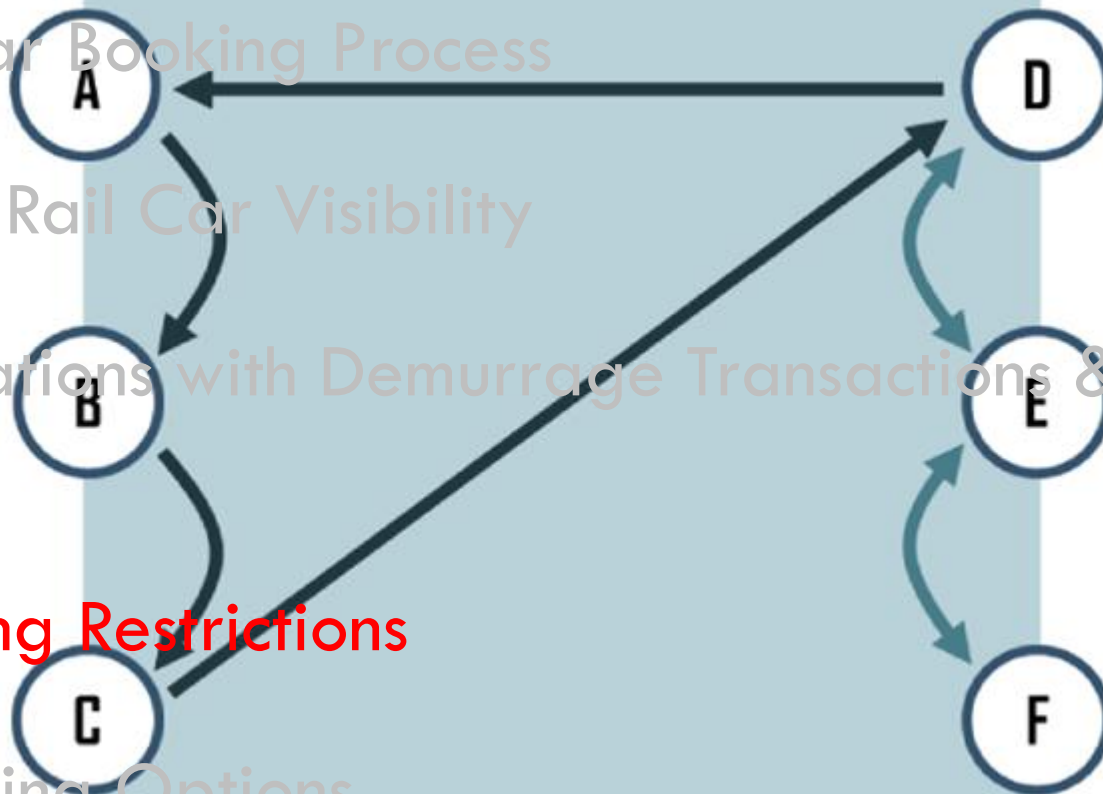
□ Rail Car Booking Process

□ Empty Rail Car Visibility

□ Integrations with Demurrage Transactions & Tracking Events

□ **Planning Restrictions**

□ Reporting Options



Planning – Location Capacity

- Restrict expected rail cars by location by day/week using location capacity

Location Capacity Group			
* Location Capacity Group ID	* Effective Date	* Expiration Date	Save
<input type="text"/>	<input type="text"/>	<input type="text"/>	
24 HR 8-5 OPEN	2013-07-01 05:36:00	2013-07-31 05:36:00	

Location Capacity Group

1 of 1 [New](#)

Location Capacity Group ID	Location Capacity Group Name
24 HR 8-5 OPEN	24 HR 8-5 OPEN

Location Capacity ID	Perspective	Mode Profile ID	Servprov Profile ID
24 HR 8-5 OPEN			

Location Capacity

1 of 1 [New](#)

Location Capacity Detail

Activity ID	Capacity Type	Capacity Allocation Rule	Time Bucket Duration
PICKUP	SHIPMENT	ALL BUCKETS	1D 0M
Maximum Quantity	Target Quantity	Below Target Penalty	Above Target Penalty
2	2		

Planning – Carrier Commitment


- Restrict expected rail cars by location by day/week using Carrier Commitment

Commitment Count

1 of 1 [New](#) [Actions](#)

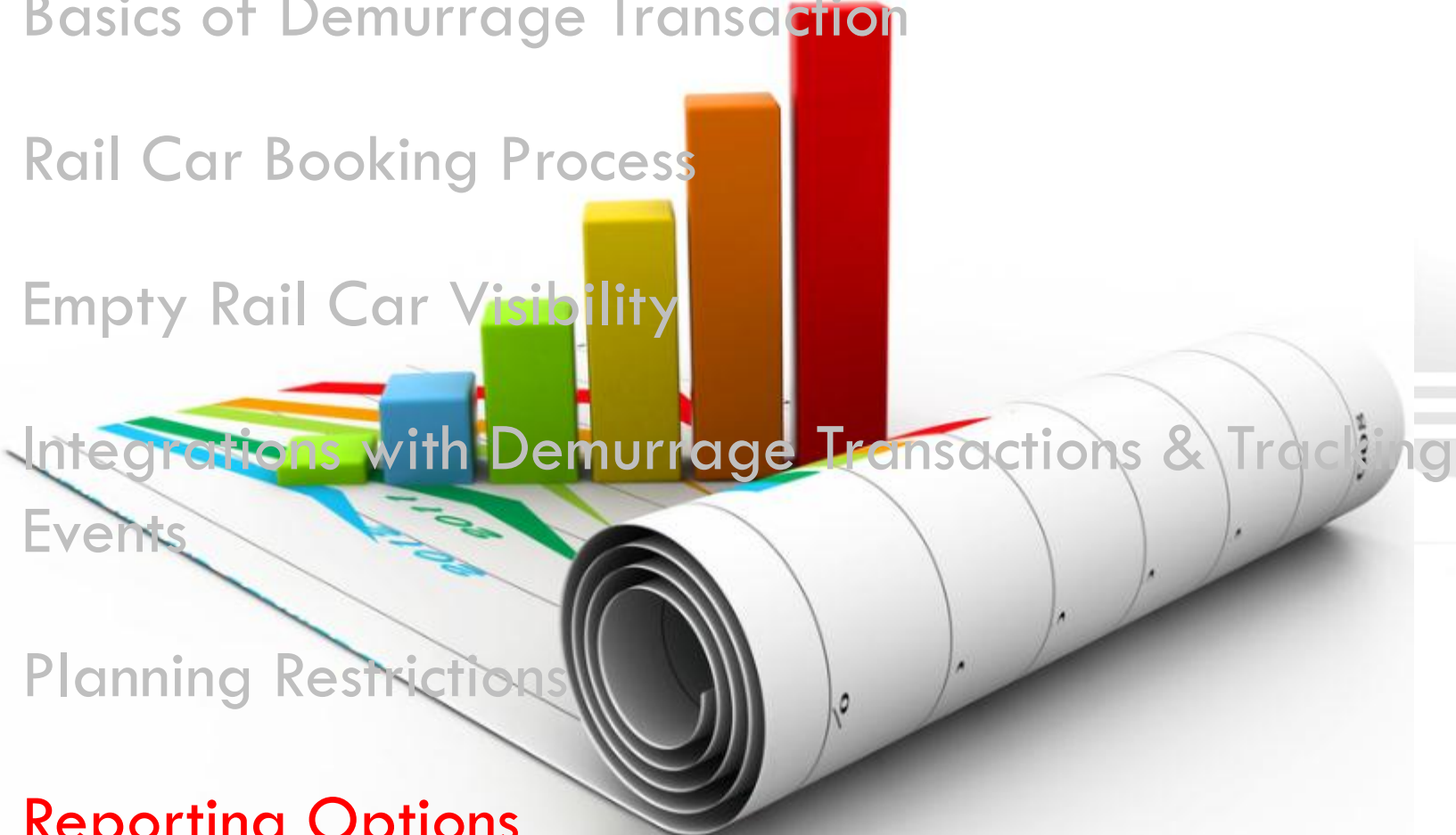
Commitment Count ID CARRIER_COMMITMENT_1	Capacity Group ID CAPACITY_GROUP_1	Commitment Lane Object Type SHIPMENT	Lane ID 283
Effective Date 2013-07-22	Expiration Date 2013-07-22	Per	Primary Count Type SHIPMENT

Records

Record 	Number of Shipments 30	Record 	Mileage	Record 
Record 	Total Volume	Record 	Monetary	Record 
Record 	Equipment Group Profile		Equipment Group Profile Count	Record 

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- 

Reports – Cars Allocation Summary

- Summary of cars allocation by date and location

Date	Dest. Location	Confirmed Cars	Intransit	Rcvd.	Bad Cars	Loaded / Shipped	Rail Orders / Shmts	Available Cars
22-Jul	Chicago	30	29	0	0	0	30	-1
22-Jul	Milwaukee	25	0	25	0	0	25	0
23-Jul	Racine	15	0	15	1	14	20	-6
25-Jul	Chicago	20	0	25	0	15	15	10

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