SparkSQL Cheatsheet

Table of Contents

[Select an Array Element 1](#_Toc448988435)

[Strings 1](#_Toc448988436)

[Concatenate strings 1](#_Toc448988437)

[Substring 1](#_Toc448988438)

[Timestamps 2](#_Toc448988439)

[Convert string to timestamp 2](#_Toc448988440)

# Select an Array Element

df.printSchema()

## root

## |-- stuff: array (nullable = true)

## | |-- element: struct (containsNull = true)

## | | |-- a: long (nullable = true)

## | | |-- b: long (nullable = true)

## | | |-- c: long (nullable = true)

sqlContext.sql("SELECT stuff[0].a FROM df").show()

## +---+

## |\_c0|

## +---+

## | 1|

## +---+

# Strings

## Concatenate strings

CONCAT(SUBSTR(smfPayloadData.timestamp.asOf,1,10), ' ',

SUBSTR(smfPayloadData.timestamp.asOf, 12, 8)) as test

## Substring

SUBSTR(smfPayloadData.timestamp.asOf,1,10)

output: “2016-03-01”

# Timestamps

## Convert string to timestamp

shipment\_carr = sqlContext.sql('''

SELECT smfPayloadData.paired.shipmentId,

smfPayloadData.paired.shipper,

smfPayloadData.paired.carrier,

smfPayloadData.timestamp.asOf as dest\_arr\_utc,

to\_utc\_timestamp('2016-03-01 00:00:00','UTC') as example\_timestamp

FROM mapped

where smfPayloadData.events.DeliveryLocationArrival is not null

and smfPayloadData.timestamp.asOf >= to\_utc\_timestamp('2016-03-01 00:00:00','UTC')

and smfPayloadData.timestamp.asOf < to\_utc\_timestamp('2016-03-02 00:00:00','UTC')

limit 1

''')

printResultsAsJson(shipment\_carr)

output:

{

**"example\_timestamp": "2016-03-01 00:00:00.0"**,

"carrier": "SCNN",

"shipper": "PG",

"dest\_arr\_utc": "2016-03-01T23:51:00.000Z",

"shipmentId": "Jackie will add"

}