NDC Implementation Forum Geneva 2018

Payment POC

13 – 15 November 2018
About MAUREVA

Offering Innovative and Integrated Cloud-based Solutions to Airlines

- 20+ years of experience in Airline software development
- 13+ years of experience as an operation center providing outsourced services to Airlines.
- 50+ airline customers.
- More than 200 employees.
- 2 offices in the Indian Ocean (Mauritius, Reunion Island)
- 2 new offices to open in 2019 (Canada, South Korea)
- IATA strategic partner
- Certifications and compliance
  - ISO 9001:2015
  - ISAE 3402 / SSAE 18 (SOC 1 Type 2 report)
  - PCI DSS compliance
  - GDPR compliance
About MAUREVA

Our software solutions

SERVICES SOLUTIONS

Revenue Accounting Outsourced Services
Training & Consulting

FUTURE...
Q1 2019
MAUREVA CUSTOMERS

50 + Clients

- Maureva customers
- MARGO customers
- Maureva offices
- New offices (2019)
Introduction – the need expressed

• September 2017 Payment workshop with airlines - need expressed:

  “Ability for airline to share payment pages so that the customer can be redirected to use the payment method that the airline offers. This gives the airline an option to have a consistent approach for all the other FOP.”

  and

  “…think through the process flow with the experience of the customer in mind. And also, how to handle payment failure.”
Introduction – POC in a nutshell

• Paul is ready to pay for his order. The OTA redirects him to a 3rd party payment page where he can submit his payment details. In a few seconds he receives confirmation of successful payment and a confirmed order.

• The implementation of payment redirection includes interaction with players outside the NDC standard scope.

• The purpose is to obtain implementation findings of payment redirection in an NDC context and provide feedback on data requirements / gaps in schemas.
The POC
The POC - Players

• **Maureva:**
  • POC coordination with Travel Agent Portal, PSP, Airline
  • Solution provider for Air Austral
  • Solution provider for Travel Agent Portal
  • Coordination of technical Integration

• **Air Austral**
  • Airline partner

• **Ingenico:**
  • PSP
**The POC - Timelines**

**Sept – Oct 2017:**
- Airlines workshop
- Opportunity articulated
- Redirection to address payment needs

**March 2018:**
- Initiation & Pre-planning
- Players identified
- High level scope described
- Rough timelines estimated

**June-July 2018:**
- Refine scope and Technical setup
- PSP sandbox setup
- Schema version earmarked
- Sprints defined
- PSP requirements confirmed
- Schema version selected

**Aug 2018:**
- Sprint 1 delivery
- Coding for Travel Agency Portal (TAP) redirection to PSP hosted page
- Presentation of POC at Imp Forum Madrid
- Input from live NDC implementers

**Sep - Oct 2018:**
- Sprint 2 delivery
- TAP redirects customer to PSP hosted page
- Complete transaction – PNR, Ticket issuance
- Report findings AIRTechZone

**Nov 2018:**
- POC Demo at Imp Forum
- Present findings
- Capture input from live implementers
- Submit schema change request(s)
- Input to Implementation Guide
- Plan POC next steps
OTA redirects customer to the airline’s PSP hosted page to enter her payment details – happy flow

Airline’s merchant ID is used for the transaction

Single form of payment

Independent prototype

Development based on 17.2 schema, OrderCreateRQ, OrderViewRS

Schema gaps analysis done on 18.2 schema
<table>
<thead>
<tr>
<th>Workflow 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01 # Passenger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 # Destination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03 # Date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>04 # Preferences</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Origin</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>One way</td>
</tr>
<tr>
<td>Departure</td>
<td>RUN</td>
</tr>
<tr>
<td>Arrival</td>
<td></td>
</tr>
<tr>
<td>Departure Date</td>
<td>Outward *</td>
</tr>
<tr>
<td>Arrival Date</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>Economy</td>
</tr>
<tr>
<td>Carrier</td>
<td>Air Austral</td>
</tr>
<tr>
<td>Traveler</td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td></td>
</tr>
</tbody>
</table>
The OTA

- OTA has the option to redirect within the tab or to a separate tab, automatically or user-driven (as and when payer is ready to pay)

- This POC redirects within same tab and keeps the session
Multiple FOPs / Split payment scenarios

• Not supported in this POC

• If paying with >1FOP, possibly separate URLs may be created – this depends on PSP capabilities
Payment host page capture

- Allows an airline to expand its supported FOPs to those agreed with the PSP

- Implementation can present card types dynamically - hosted page only shows the cards the airlines wishes, or based on the card type the payer chooses to use
The POC – findings and considerations

Payment host page capture

• Payment time limit may have a direct correlation to the time of the hosted capture page

• For Ingenico the hosted timeout time is fixed (60min)
Requirements (gaps)

1. Ability for airline to indicate that Payment Cards (as well as other FOPs) are supported AND, if used, a redirection mechanism will be used (i.e. Seller should not send CC details in payment payload).
2. Ability for the customer to indicate the form of payment intended to be used (for surcharge calculation)
3. Redirection URL from airline to OTA
4. OTA’s return URL to instruct the PSP to return after payment capture
5. Payment confirmation details in OrderViewRS
6. Codeset for accepted forms of payment, error messages
DISCLAIMER

This is just a mock-up

Necessary CRs to be created/updated and then reviewed, modified and approved by the respective groups.
The POC – schema mock-up – AirShoppingRS

DISCLAIMER

This is just a mock-up

Necessary CRs to be created/updated and then reviewed, modified and approved by the respective groups
The POC – schema mock-up – OrderCreateRQ

DISCLAIMER

This is just a mock-up

Necessary CRs to be created/updated and then reviewed, modified and approved by the respective groups.
DISCLAIMER

This is just a mock-up

Necessary CRs to be created/updated and then reviewed, modified and approved by the respective groups
• Agree parameters of redirection URL with PSP
• Be aware of PSP services impacting the prices, e.g. currency exchange, calculation of surcharges
• Decisions to cover payment failures for seamless user experience - stay on payment capture page or redirect to OTA
Submit findings to Payment Subgroup (19 Nov, AMS)

POC Phase 2

Handling alternate Flows

• Change in price e.g. new FOP, taxes, surcharges
• Flows for all PSP errors
• Processing payment for the same order
• Error messages
Opportunities

• Demonstrates a way an airline may expand their accepted FOP

• Demonstrates a way to implement alternate FOP

• Tangible input on payment redirection for Standards Groups
Questions ?
end