

Oracle® Hospitality Suite8 EFT Tokenization Guide



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Preface

Audience

EFT Tokenization Guide is intended for system administrators, support and users familiar with the Suite8 and POS8 modules.

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

<https://support.oracle.com>

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received and any associated log files
- Screen shots of each step you take

Documentation

Oracle Hospitality product documentation is available on the Oracle Help Center at <http://docs.oracle.com/en/industries/hospitality/>

Revision History

Date	Description of Change
August 2018	<ul style="list-style-type: none">• Initial publication
March 2019	<ul style="list-style-type: none">• Release 8.14.0.0
July 2019	<ul style="list-style-type: none">• Update for terminology changes
June 2020	<ul style="list-style-type: none">• Updated the release version

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EFT Tokenization

Introduction

EFT token handling is available to support the integration with **Oracle Payment Interface (OPI)** which is a payment card processing interface that integrates with the Oracle Hospitality Point-of-Sale (POS) and the Oracle Hospitality PMS systems.

OPI defines a standard interface that partner payment service providers can implement to provide credit card processing functionality to Oracle Hospitality OPERA and Suite8 PMS, POS systems and also Oracle Retail Point of Sale (POS) Systems.

With activation of the new feature no credit card number will be stored in Suite8 anymore. Instead of this, a credit card number will be replaced with a **token ID**. Only the last 4 digits of the credit card number will be stored for informational purposes in the known credit card number fields all over the Suite8 application. All EFT transaction requests will only contain the token ID.

NOTE:

The tokenization functionality supports the integration with OPI only. It is not intended to use token handling with other legacy EFT Interfaces to vendor who might support token handling.

Feature Availability

The functionality is only available with the activated global setting **Enable Credit Card Tokenization under Setup > Configuration > Global Settings > Interfaces > 2 Interfaces (IFC8) > Credit Card Interface**.

Prerequisites

Suite8 Version 8.14.5.0 or higher.

2 Configuration

User Right to Enable the Feature

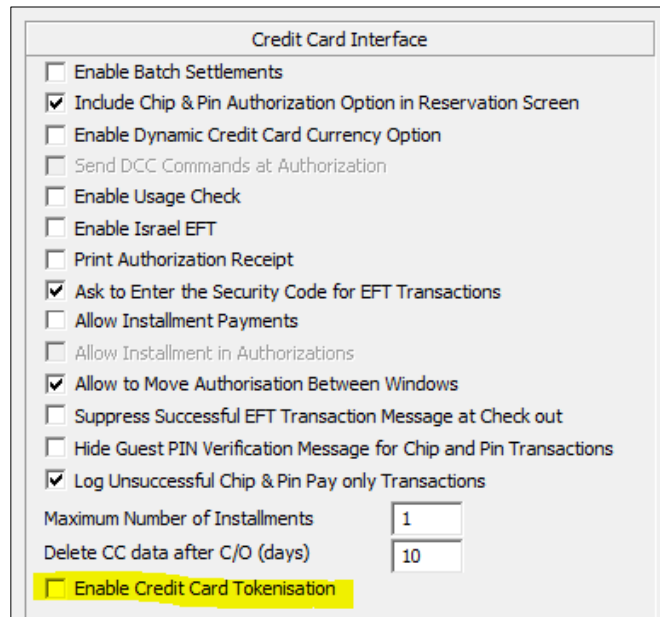
Activate the user rights under **Setup > Configuration > User Rights > Configuration > Global Settings** security related to enable the activation of the guest de-identification.

 **NOTE:**

This user right is not only required for this specific feature but also for other items in configuration.

Global Settings

1. Activate the setting Enable Credit Card Tokenization under Global Settings > **Interface > 2 Interfaces (IFC8) > Credit Card Interface**.



Credit Card Interface

- Enable Batch Settlements
- Include Chip & Pin Authorization Option in Reservation Screen
- Enable Dynamic Credit Card Currency Option
- Send DCC Commands at Authorization
- Enable Usage Check
- Enable Israel EFT
- Print Authorization Receipt
- Ask to Enter the Security Code for EFT Transactions
- Allow Installment Payments
- Allow Installment in Authorizations
- Allow to Move Authorisation Between Windows
- Suppress Successful EFT Transaction Message at Check out
- Hide Guest PIN Verification Message for Chip and Pin Transactions
- Log Unsuccessful Chip & Pin Pay only Transactions

Maximum Number of Installments

Delete CC data after C/O (days)

Enable Credit Card Tokenisation

2. As soon as you have activated the setting, another fields come up.
3. Configure the connection to the OPI token proxy service which is typically installed with the OPI service on a PC On-premise.
Suite8 PMS always sends a token ID request through this connection whenever a credit card number is entered into the credit card number field in the Suite8

application (card not present) or a credit card is received from external systems (CRS). It is also used to request token ID when the bulk tokenization function is executed.

Parameter Name	Value	Description
Token Server URL	https:// <i>IP Address of PC OPI is installed on</i> :5012 /TokenOPERA	URL of the OPI on-premise Token Proxy Service Values displayed in black font are hardcoded values.
Version	3.2	This is a hardcoded value.
Timeout	30	The timeout time waiting for response from OPI Token Proxy. Enter the value in seconds.
Chain Code	EU	As defined in OPI configuration
Max Requests	50	The number of credit cards to be sent in one bulk tokenization request. Enter a value between 1 and 50
Property Code	EU	As defined in OPI configuration

Example:

Token Server URL	<input type="text"/>		
Version	<input type="text" value="3.2"/>	Time out	<input type="text" value="30"/>
Chain Code	<input type="text" value="EU"/>	Max Requests	<input type="text" value="50"/>
Property code	<input type="text" value="EU"/>		

3

Bulk Credit Card Tokenization

OPI Certificates

Certificates are created within OPI application. They are required for secure connection between PMS and OPI for the HTTPS connection. Server and Client certificates need to be installed on all Suite8 workstations that run.

1. The bulk tokenization process.
2. Token request for card not present credit card (manually entered by user or received by external system).

 **NOTE:**

Related certificates (a .cer and a .pfx) have to be delivered by OPI installer.

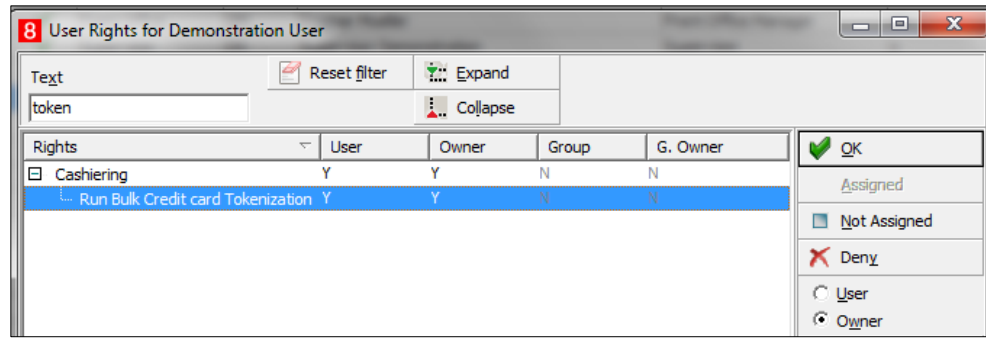
The Bulk credit card tokenization process

Once the Tokenization is active, the bulk credit card tokenization process is used to exchange all credit card numbers within the Suite8 Database with a token. This deletes all credit card numbers from the system; only token ID's are stored representing the credit card number in further EFT Interface transactions.

Before Suite8 starts working with the tokenization functionality this bulk tokenization process should be executed.

User right to execute the bulk tokenization process

Go to **Setup > Configuration > Users > User Definition > Rights > Cashiering > Move Postings** and activate the user right **Run bulk Credit card Tokenization**.

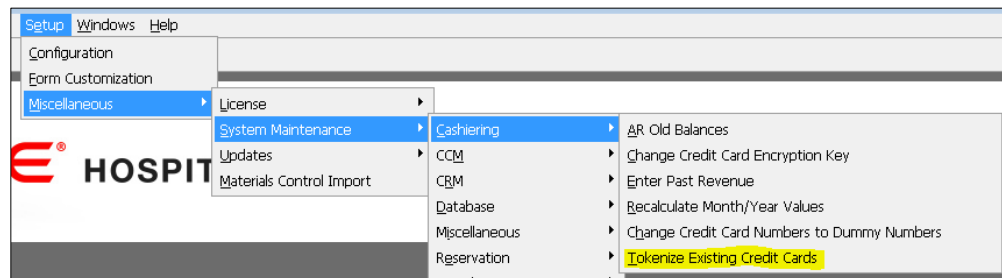


NOTE:

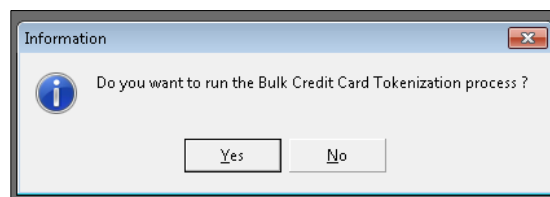
The user right is only available if the global setting is activated.

Run the bulk tokenization process

1. Go to **Setup > Miscellaneous > System Maintenance > Cashiering** and select **Tokenize Existing Credit Cards** to replace all existing credit cards with token ID's.



2. A new window opens:



3. Select **Yes** to start the process and all existing credit card numbers stored in the Suite8 database are exchanged with a token ID. The process sends out a request message to OPI containing max 50 credit card numbers (depending on the defined values in global settings) & Expiry Date and expects a response message with a token ID. In case a credit card does not receive a token ID, the existing credit card is masked automatically and stored without a token ID. A credit card which is already expired retrieves no token ID but is also masked automatically and stored without a token ID.

 **NOTE:**

After the successful replacement of credit card numbers with token ID's the process should **NOT** be executed again.


4. Go to user rights and deny the user right **Run bulk Credit card Tokenization** as this process should only be executed at time of activation of EFT tokenization handling.

4

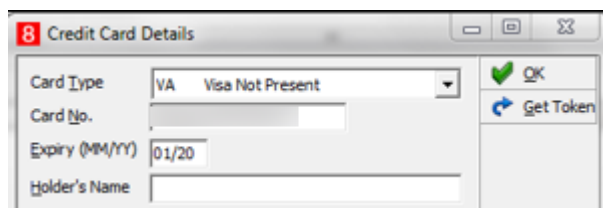
Reservation

Entering a credit card into Reservation (Card not present)

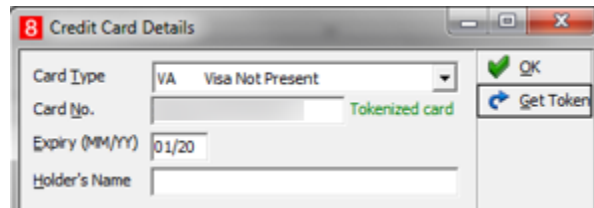
1. Go to **Reservation** and **edit** the credit card.
2. Click the new option **Get Token** to request a token ID for the entered credit card number. This button is visible once the **Enable Credit Card tokenization** Parameter is active.



3. You can still enter a not present credit card number and expiry date in the **Add Credit Card** section.



4. When you click the **OK** or the **Get Token** button after entering the credit card number a get token request is sent out to the OPI Token Proxy service.
5. The OPI token proxy service connects with the Token Server (of the EFT vendor or Token server vendor).
6. In corresponding response message, Suite8 receives a token ID and a masked number with only the last 4 digits of the credit card number in the response message. This masked number is stored in the credit card number field as well as in the database to identify the credit card being used without showing the full number.



7. When you click **OK** the token ID and the masked credit card number is stored in the Suite8 database.
8. Both values, the masked credit card number and the token ID are stored encrypted.
9. In addition, a notification shows that this credit card number is a tokenized card.

 **NOTE:**

The token ID is currently not visible to a user. The Card Type is not changed in this form and even the response message contains a different card type. Here the user's choice is overwritten. So it is important that the user selects the correct Payment type/card type prior to entering the credit card number

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EFT IFC8 Interface with OPI

Card present transactions

The new IFC8 attribute **CardId** is used to receive the token ID in EFT transactions for **CpAuthor**, **CpSettl** or **CpPayOnly** action when the credit card is present and the card is entered into EMV device by the guest.

In addition instead of the full credit card number only the last 4 digits of the credit card number is received in the response message. This masked number is stored in the credit card number field of the application as well as in the database to enable the users to identify the credit card being used without showing the full number.

Example for a card present authorization

1. The request is sent without card details:

```
<CpAuthor xmlns="x-schema:CpAuthorSchema_O" GuestNum="1011" GuestName="Token2"
GuestFormattedname="Timo Token2" SequenceNum="02412" TotalAmount="50,00"
GuestArrival="170825" GuestDeparture="170825" RequestType="4" WSNum="MBOESEL-DE"
MerchantId="EU|EU" CardType="VA"/>
```

2. The following response is received with token ID and masked credit card number:

```
<CpAuthor xmlns="x-schema:CpAuthorSchema_I" PrinterPort="0"
CreditcardNum="FidCryptAB|qnTGaSMtmBWTxlNqF2lC/Q==du5IiIXReXBjQkMjvugX/cNgyVTiK4cd
5miEioPdrIM=" ExpyDate="1812" CardId="1645270703010266" GuestNum="1011"
SequenceNum="02412" TotalAmount="50,00" WSNum="MBOESEL-DE" CardType="VA"
AnswerStat="OK"
ClearText="FidCryptAB|Q40Yin4jii0CpXr4XWuWXw==4FvQaVfZw6L8ytvX7+tBmmxTqKQ7j11EYP4O
+S4TLgY3ILlBB5c27SIS6L1kc9Li5cBO5KiR7n15IYb/G6480xsxRaVbJQ6nXCKTlps/XVzYIJuxM/Rqp8
8oizqz+m+yTLAgc21+qDudIi+csGFaa3sdbUMa5IrMq20nIVN2uRDFNgCw+cplMGL4KiF0vBLC2ZM3PqN/
AdHfOyOpcGu7vrPtD1fXbW9EVypzxdXzJi2UvW9DTpHSB/4QWTN6jeILjZvTirbpoZF0NX//fx+v4aqAr
UNWipVPFNa9pItm+bpKlRVmaMOLKf+ViviZn4hUT7CMI5JG1Tyw06h01Tv1guNq2LWGaiCLqbfObMnrHhg
jEKA94lmp/eoY5x6WrOzC0L+VK38naMgakh9ixeGStQrCtCJTtuCsTRRk21kOht4911QMjPuVxTGCuTsbR
wzWG9yl0Eevcd0boyv1wHV2AwZnzvW7gkRl+6ntoYpV14RSc6thQF+jDu/Fh9v8gBQ3mHLAY8kpFmhVcE3
qp7x5M2zA7qKRN7Tl5FEHJ8DFBmF4cm53KCGgDm2r4mbhnHoQ/j5eApKRMydRGyklrHmw7xF+kA1PblyWQ
umrXF2Urrj+uU1uTRkpUlWJq+HF31nbk6Z4OfhHEHewngxW9knKoWIY+zRxEsNmswo6nzbY5X+rTU/x9Wys
APwL+7aFAJG70Buq3gUOXNe7k48a9q1UBjCOdM5dzVuWSbZG7uC5Whkp38YKD7qe6hTVP3yxReGENIT+U
Q/ISGvnsjL0eNKhUiuxnGD/rmHSsURPfQT/+4V85SS4kg7ILncNvxobmy2hP4A3yBN1/BFO+Aw59bWpLck
EJgH7vGIKLTxvaLPXSCQBkdkZ+ja0hd3FCTN/7HwYfz5otIAzVGFJEBJVMV6Q=="
AuthNum="101899"/>
```

3. The following string shows the masked credit card number being received together with the token ID.

```
<CpAuthor xmlns="x-schema:CpAuthorSchema_I" AnswerStat="OK" PrinterPort="0"
ClearText=" Merchant Copy Merchant ID : 1234XXXXXX12345 Terminal ID :
12XXX678 TransType : AUTH Card No. : XXXXXXXXXXXXXXXX Exp Date : XX/XX Card
Type : VISA Time : 11/1XXXX 02:29 Trace No. : XXXXX RRN :
000XXXX2916 Auth Code : XXXXX AMOUNT : $XXXXX Signature
: _____ I agree to the terms of my credit agreement. Customer
Copy Merchant ID : 1234XXXXXX12345 Terminal ID : 12XXX678 TransType : AUTH Card
No. : XXXXXXXXXXXXXXXX Exp Date : XX/XX Card Type : VISA Time : 11/1XXXX
02:29 Trace No. : XXXXX RRN : 000XXXX2916 Auth Code : XXXXX AMOUNT :
$XXXXX Approved with Signature I agree to the terms of my credit agreement."
GuestNum="1011" SequenceNum="02412" WSNum="MBOESEL-DE" CardId="1645270703010266"
CardType="VA" CreditcardNum="XXXXXXXXXXXX0266" ExpyDate="1812"
AuthNum="101899"></CpAuthor>
```

4. In the following transactions related to this reservation and credit card only the token ID is sent out in requests. The masked credit card number is not sent!

Example for an additional authorization

```
<CpAuthor xmlns="x-schema:CpAuthorSchema_O" GuestNum="1011" GuestName="Token2"
GuestFormattedname="Timo Token2" SequenceNum="02413" TotalAmount="110,00"
GuestArrival="170825" GuestDeparture="170825" RequestType="4" WSNum="MBOESEL-DE"
MerchantId="EU|EU" ExpyDate="1812" CardId="1645270703010266" SecondAuth="60,00"
AuthNum="101899" CardType="VA"/>
```

Example for a settlement:

```
<CpSettl xmlns="x-schema:CpSettlSchema_O" ExpyDate="1812"
CardId="1645270703010266" GuestNum="1011" AuthNum="101899" GuestName="Token2"
GuestFormattedname="Timo Token2" SequenceNum="02414" TotalAmount="110,00"
GuestArrival="170825" GuestDeparture="170825" RequestType="4" WSNum="MBOESEL-DE"
CardType="VA" MerchantId="EU|EU" CurrencyAvailableFlag="N"
CurrencyRate="0,0000000" ForeignTotal="0,00"/>
```

Card not present transactions

Transactions for credit cards which are not present (e.g. Deposit payments, authorizations or settlements for credit cards which have been entered manually in the PMS) also contain only the token ID instead of the credit card number.

```
<CcAuthor xmlns="x-schema:CcAuthorSchema_O" ExpyDate="1905"
CardId="45391053399718652" GuestNum="9122" GuestName="Kurth"
GuestFormattedname="Esther Kurth" SequenceNum="02478" TotalAmount="202,00"
GuestArrival="171204" GuestDeparture="171204" RequestType="4" WSNum="MBOESEL-DE"
CardType="VAS" MerchantId="EU|EU"/>
```

The corresponding response messages do not contain any token ID or credit card number by default.

```
<CcAuthor xmlns="x-schema:CcAuthorSchema_I" AnswerStat="OK"
ClearText="FidCryptAB|+6pmxvpgQtA687u/XseMdw==UEqw/52S0sPBr9F6zAAXS2TwPxNwkv4YBsg3
RncdxNXdiGnLluQov5o5drV5BXjWVb9LP+tv7F1SEWEYLN7gfc/h4KWFybov9HB54ayubRKvXdnTISc9mz
9HGv7MBkuykWR+LAdDxyxDG4s00S81VLioLVfueOp9KpoBSNYQPtEpP+Xz4u02qTIDCVfj9R9qyE03zZ2A
6eJGQ1DzBRex38jXg9dD3P5UW83koHrOESCBmJCa9MR3ua3WEs0Dx9yPLnwc6ZbW6GCFSS7BexI8d4VWSj
jZuYJ8JNeOivDKrxDUX++qQG1lKCKW0FL4MBGsPEGnzZEDigNLxJlRdWw9C5Dj+ilLejQ41w5MCTZjRUIA
O+qkS0Jfrt4Ut5xN8yjyiQ61sr7fxxBN7iPMDA5/okCngXPu86bOdLJHRiewQgDDBYIVP9QDTnVJvkU9z
PXs0s2A6HGB5bwjA11QCWCpKn904vG/eXH5scScuF2ROzZH2UjT9WY6UpIdG6Sj8RNqzPnZOD8qA0b1PUU
b2HSe2JS/e9K7NmLhuwPYZNOIKd53X2CO5sxyNDjMAbs9w/rQEeI1BsXFXLfp3MEmt+cCV7JvUUtQWcNe8
h4loqqbh/GMBw4/Yx4hJ09L0n9wXQbiiDeRaMHMt4e42pzBlQHufFErPmJe6VDeom8MRfte+HMWCsSsAJv
hRxeNriiTdViH6EcDNnHJxDQmaXnkNANGMYJ0JuZsStC0d8G+P/qgVaDxLhkVrXmDCDqjz5JI PmS6r7HKu
xqPIGEz3E/P6JBf51FQXDRHo9NnRC1C31tsJfw2CQ3N5GD+otqj31Pqcxkf0j1cFaZd8YDJvsLOaezBK32
mpFOLrOfX/P9SZGNZ14ET+tN18eLb9m50W//fBFbgIyUx40w7aCa5N8ZY/Xrjg==" PrinterPort="0"
AuthNum="349272" GuestNum="9122" SequenceNum="02478" WSNum="MBOESEL-DE"
TotalAmount="202,00"/>
```

```
<CcAuthor xmlns="x-schema:CcAuthorSchema_I" AnswerStat="OK" PrinterPort="0"
ClearText=" Merchant Copy Merchant ID : 1234XXXXXXXX12345 Terminal ID :
12XXX678 TransType : AUTH Card No. : XXXXXXXXXXXXXXXXXXXX Exp Date : XX/XX Card
Type : null Time : 12/0XXXX 12:31 Trace No. : XXXXXX RRN :
000XXXX3158 Auth Code : XXXXXX AMOUNT : $XXXXX Signature
: _____ I agree to the terms of my credit agreement. Customer
Copy Merchant ID : 1234XXXXXXXX12345 Terminal ID : 12XXX678 TransType : AUTH Card
No. : XXXXXXXXXXXXXXXXXXXX Exp Date : XX/XX Card Type : null Time : 12/0XXXX
12:31 Trace No. : XXXXXX RRN : 000XXXX3158 Auth Code : XXXXXX AMOUNT :
$XXXXX Approved with Signature I agree to the terms of my credit agreement."
GuestNum="9122" SequenceNum="02478" WSNum="MBOESEL-DE"
AuthNum="349272"></CcAuthor>
```

Example for a settlement:

```
<CcSettl xmlns="x-schema:CcSettlSchema_O" ExpyDate="1905"
CardId="45391053399718652" GuestNum="9122" GuestFormattedname="Esther Kurth"
AuthNum="349272" GuestName="Kurth" SequenceNum="02479" TotalAmount="202,00"
GuestArrival="171204" GuestDeparture="171204" RequestType="4" WSNum="MBOESEL-DE"
MerchantId="EU|EU" CardType="VAS" CurrencyAvailableFlag="N"
CurrencyRate="0,0000000" ForeignTotal="0,00"/>
```

```
<CcSettl xmlns="x-schema:CcSettlSchema_I" AnswerStat="OK" PrinterPort="0"
ClearText="FidCryptAB|WxfIWmMNEyEenbvQelFemQ==UEVbeQ5tOUIzsvy32PIJlQ4C68+m7xYmsCmV
5evIuqUNbs88sN3AiGgwd6wJ2K2Xelq1+/7mvFY6qqjRWRj7ggZVujBS8LpN9joLZEUsfZhlPSW2e0EFjr
WDNgaFpwh8jrvENDAcGvSfvGPgckmjJdsUKhcM6moCVvHyeImIokJ4AGe/SAaPChsIb12Zyht4qetT3Xvq
bdgmNUKkrrUGJB/qykBTqqA3ax6eyS5xDALcg/zbkZ7ON7S1Dh7MzKwLUQwmTLcL51Pab8SjxUhOakd4/8
SJO8DmfYwffaJS/Pybcn6C0t0q5C9gJ6uJH3De4WqdsKNK8zk8cwen/hyGCK50bhivEra6d/hhbjjCnF77
oE8wHrN7MkbZyWCpDeR3/Ldpo5zvfcAP7PCPc7nmGb+pUv4wGF9DM8aDldq8jSV8zbOo3QcLJkwrizW1Jc
rxzfZUtagqsnPlrmOrCA/89RLLE6EO4cACxJYjHdo7eF+WCnzCFFwKgW0LbU1vt03WyBGaz/y56wMsNg097Z
tsEwACE67X+2J1WcLntXsSZIN0uKFZp/Lm8MuBncYWr9owP/KmSTmpc33Ew3fQ6MALiICwGuJbh94OtODa
fVEEE9t/8RSUVD0rdbZdJ14919f+DrKbWpY+higHA23BA2wqT7AbzDwBZJX3StrdxissqRhKvSjMdp+4rn
V/2SM9OfGodro7G0asY2Ij75RHQ8cmH11Kr00M3tkYgTCNa/LQ0vWcvclvlbeGZm3tlgUssssCi13Js+rB
rNmexqd2d30JdkDwizcQUJ3PSzxydhHLceKgVr6Q6wdDN4+8DQIOV+BD03Je6dFiLjh9qBr+zgnINr+fG
yMFOdsf18varHt8UD7BMzacwaXmrUrLpOb4EKDimaxtIvBYOizZ2RPZEn0q14g=="
TransNum="000036123159" GuestNum="9122" SequenceNum="02479" WSNum="MBOESEL-DE"
TotalAmount="202,00"/>
```



```
<CcSettl xmlns="x-schema:CcSettlSchema_I" AnswerStat="OK" PrinterPort="0"
ClearText="      Merchant CopyMerchant ID : 1234XXXXXX12345Terminal ID :
12XXX678TransType : SALECard No. : XXXXXXXXXXXXXXXXXXXXExp Date : XX/XXCard
Type : nullTime      : 12/0XXX 12:31Trace No. : XXXXXRRN      :
000XXXX3159Auth Code : XXXXXAMOUNT      : $XXXXXSignature
:_____I agree to the terms of mycredit agreement. Customer
CopyMerchant ID : 1234XXXXXX12345Terminal ID : 12XXX678TransType : SALECard
No. : XXXXXXXXXXXXXXXXXXXXExp Date : XX/XXCard Type : nullTime      : 12/0XXX
12:31Trace No. : XXXXXRRN      : 000XXXX3159Auth Code : XXXXXAMOUNT      :
$XXXXXApproved with SignatureI agree to the terms of mycredit agreement."
GuestNum="9122" SequenceNum="02479" WSNNum="MBOESEL-DE"
TransNum="000036123159"></CcSettl>
```

6

Suite8 Online Interface

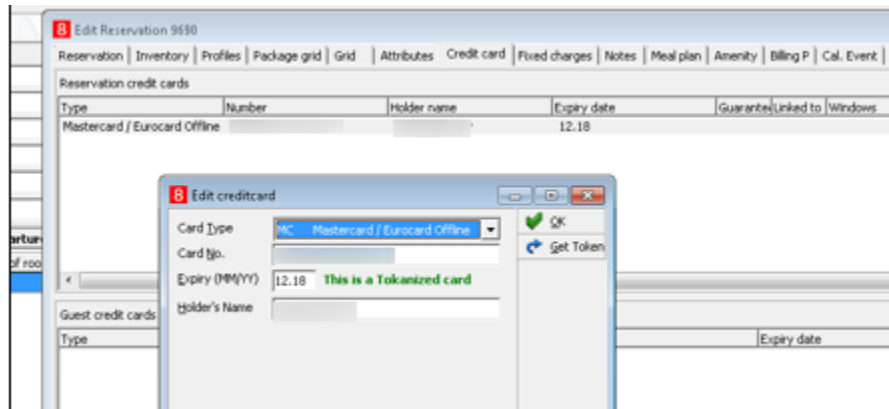
With the active EFT tokenization all credit card numbers within messages from Online Interface are replaced with a token ID through the OPI token Proxy Service.

Example:

The new reservation with the credit card number via Online IFC:

```
<Guarantee GuaranteeType="GuaranteeToCreditCard">  
  <GuaranteesAccepted>  
    <GuaranteeAccepted>  
      <PaymentCard CardType="1" CardCode="MC" CardNumber="5266850134970843"  
        ExpireDate="2018-12">  
        <CardHolderName>  
          <![CDATA[Andrea Lehner]]>  
        </CardHolderName>  
      </PaymentCard>  
    </GuaranteeAccepted>  
  </GuaranteesAccepted>  
</Guarantee>
```

The related reservation in Suite8 shows the masked credit card number and notes that this card is tokenized.



7

Authorization Reversal and RRN Number Handling

Global Settings

Adding Global Setting parameter to **2Interface (IFC8) tab – Credit Card Interface**

1. Define Auth Code option.
2. Enable/disable handling of RRN Number.

Credit Card Interface

- Enable Batch Settlements
- Include Chip & Pin Authorization Option in Reservation Screen
- Enable Dynamic Credit Card Currency Option
- Send DCC Commands at Authorization
- Enable Usage Check
- Enable Israel EFT
- Print Authorization Receipt
- Ask to Enter the Security Code for EFT Transactions
- Allow Installment Payments
- Allow Installment in Authorizations
- Allow to Move Authorisation Between Windows
- Suppress Successful EFT Transaction Message at Check out
- Hide Guest PIN Verification Message for Chip and Pin Transactions
- Log Unsuccessful Chip & Pin Pay only Transactions

Maximum Number of Installments:

Delete CC data after C/O (days):

Send Auth Code option:

Send RRN in Authorization/Settlements

Enable Credit Card Tokenisation

Token Server URL:

User Name: Version:

Password: Time out:

Chain Code: Max Requests:

Property code:

Send Auth Code option

Defines if PMS sends the **Last Received Authorization code** or the **first received Authorization code** (from initial Authorization) in all following transactions (add. Authorizations, Settlements).

Send RRN in Authorization/Settlements

Enable this parameter when RRN number is sent in outgoing transaction message

Define to send **Original RRN** (from initial Authorization response) or **Last Received RRN** (from last Authorization response) in all following outgoing transaction messages.

Send RRN number in IFC Messages

Suite8 sends out RRN number in AuthNum attribute for all Cp and Cc messages.

If RRN Number is available it is sent in the AuthNum attribute together with AuthCode value separated by '|' character.

Format will be: [AuthNum] | [RRN]

Sample message

Add. Authorization Request outgoing from PMS to IFC:

```
[09.06/10:02:01]#0/0 -> TCP (Idx:1/WS:10.165.120.100[50840])<CpAuthor xmlns="x-
schema:CpAuthorSchema_O" TotalAmount="160,00" ExpyDate="2212"
CardId="4929263009781018" SecondAuth="10,00" AuthNum="A1235|001236"
StartDate="171122" Cryptogram="12345678" GuestNum="9705" GuestName="Singer"
GuestFormattedname="Anne Marie Singer" SequenceNum="02562" WSNNum="MBOESEL-DE"/>
```

Incoming response from IFC to PMS:

```
[09.06/10:02:24]#1/0 <- TCP (Idx:1/WS:10.165.120.100[50840])<CpAuthor xmlns="x-
schema:CpAuthorSchema_I" AnswerStat="OK"
ClearText="FidCryptAB|jTRS26D2ENp5xMFKC0NspQ==+fYD0YWjC0ZPESyFWayUxg=="
RequestType="0"
CreditcardNum="FidCryptAB|sk60ZQN9oDBJcFxrCdVQSQ==kg11363tCx6L30l74RWuFejrkoj61oQ0
rGUl0erU4vQ=" ExpyDate="2212" CardId="4929263009781018" AuthNum="A1236|001237"
CardType="VA" Cryptogram="12345678" GuestNum="9705" PaymentMethod="16"
SequenceNum="02562" PrinterPort="0" WSNNum="MBOESEL-DE" PathId="1"
TotalAmount="160,00"/>
```

Settlement request outgoing from PMS to IFC

```
[09.06/10:04:40]#0/0 -> TCP{Idx:1/WS:10.165.120.100[50840]}<CpSettl xmlns="x-
schema:CpSettlSchema_O" AuthNum="A1235|001236" ExpyDate="2212"
CardId="4929263009781018" TotalAmount="20,00" GuestNum="9705" GuestName="Singer"
GuestFormattedname="Anne Marie Singer" SequenceNum="02563" Date="180906"
Time="100201" WSNuM="MBOESEL-DE"/>
```

Reservation – Credit Card Grid

Enhanced the Authorization/Settlement grid in Reservation – Credit Card tab:

- Added further columns
- Option to now show all transactions for all credit cards for all folio windows , successful and failed transactions
- Filter transactions by Billing Window
- Show history
- Show all cards
- Show approvals only, show settlements only, show both

Show all cards and history for all Billing windows

Approvals														Refresh	
Transaction Type	Card	Code	Auth RRN	Amount	Addl. Auth. A	Time	TransID	Window	Valid Until	Result	IFC Message	Intal Auth	User	Terminal	Billing Window
Settlement	X0000000000007539	A1235		90,00	0,00	27.09.20...	T5682	2		successful	Settleme...		Demonst...	MBOESEL	
Approval	X0000000000007539	0	2704	250,00	50,00	27.09.20...		2		failed	Authoriza...		Demonstr...	MBOESEL	
Approval	X0000000000001678	A1236	2703	170,00	57,80	27.09.20...		1		successful	Authoriz...		Demonstr...	MBOESEL	
Approval	X0000000000007539	A1235	2702	200,00	0,00	27.09.20...		2		successful	Authoriza...		Demonstr...	MBOESEL	
Approval	X0000000000001678	A1234	2701	112,20	0,00	27.09.20...		1		successful	Authoriza...	x	Demonstr...	MBOESEL	

Show all cards and history for Billing Window 1

Approvals														Refresh	
Transaction Type	Card	Code	Auth RRN	Amount	Addl. Auth. A	Time	TransID	Window	Valid Until	Result	IFC Message	Intal Auth	User	Terminal	Billing Window
Approval	X0000000000001678	A1236	2703	170,00	57,80	27.09.20...		1		successful	Authoriz...		Demonst...	MBOESEL	1
Approval	X0000000000001678	A1234	2701	112,20	0,00	27.09.20...		1		successful	Authoriza...	x	Demonstr...	MBOESEL	

Show all cards and history for Billing Window 2

Approvals														Refresh
Transaction Type	Card	Code	Auth RRN	Amount	Addl. Auth. Aq	Time	TransID	Window	Valid Untl	Result	IFC Message	Intal Auth	User	Terminal
Settlement	XXXXXXXXXXXXXXXX7539	A1235		90,00	0,00	27.09.20...	T5682	2		successful	Settleme...	Demonstr...	MBOESEL-	MBOESEL-
Approval	XXXXXXXXXXXXXXXX7539	0	2704	250,00	50,00	27.09.20...		2		failed	Authoriza...	Demonstr...	MBOESEL-	MBOESEL-
Approval	XXXXXXXXXXXXXXXX7539	A1235	2702	200,00	0,00	27.09.20...		2		successful	Authoriza...	Demonstr...	MBOESEL-	MBOESEL-

Billing Window: 2

History
 All cards

Approvals
 Settlements
 Both

Show all Authorization transactions for all cards for Billing Window 2

Approvals														Refresh
Transaction Type	Card	Code	Auth RRN	Amount	Addl. Auth. Aq	Time	TransID	Window	Valid Untl	Result	IFC Message	Intal Auth	User	Terminal
Approval	XXXXXXXXXXXXXXXX7539	0	2704	250,00	50,00	27.09.20...		2		failed	Authoriza...	Demonstr...	MBOESEL-	MBOESEL-
Approval	XXXXXXXXXXXXXXXX7539	A1235	2702	200,00	0,00	27.09.20...		2		successful	Authoriza...	Demonstr...	MBOESEL-	MBOESEL-

Billing Window: 2

History
 All cards

Approvals
 Settlements
 Both

Choose Card by clicking on Credit card listed in Reservation Credit Card grid

Reservation credit cards														
Type	Number	Holder name	Expiry date	Guarante(Linked to)	Windows									
Mastercard Online	XXXXXXXXXXXXXXXX7539		12.20		2									
Visa Card Online	XXXXXXXXXXXXXXXX1678		12.20		1									

Buttons: Add, Edit, Delete, Guarantee, Approval, Guest link, Windows

Guest credit cards													
Type	Number	Holder name	Expiry date										

Buttons: Add (1), Edit (2), Delete (3), To Res (4)

Approvals														Refresh
Transaction Type	Card	Code	Auth RRN	Amount	Addl. Auth. Aq	Time	TransID	Window	Valid Untl	Result	IFC Message	Intal Auth	User	Terminal
Approval	XXXXXXXXXXXXXXXX1678	A1236	2703	170,00	57,80	27.09.20...		1		successful	Authoriz...	Demonstr...	MBOESEL-	MBOESEL-

Billing Window: [dropdown]
 History
 All cards

XCAP table changes

To enhance the Grid we added related fields to XCAP table

20	XCAP_RRNNUMBER	VARCHAR2(30 BYTE)	Yes	(null)	20 Stores RRN Number received from EFT
21	XCAP_INITIALAUTH	NUMBER(1,0)	Yes	(null)	21. Initial Authorization
22	XCAP_ADDLAUTHAMOUNT	NUMBER(30,2)	Yes	(null)	22 Authorization Top up amount
23	XCAP_IFCMESSAGE	VARCHAR2(200 BYTE)	Yes	(null)	23 Clear text received from EFT
24	XCAP_SUCCESSTATUS	NUMBER(1,0)	No	1	24 Success status 1.Success 2. Failed
25	XCAP_XCED_ID	NUMBER(30,0)	Yes	(null)	25 User ID
26	XCAP_TERMINAL	VARCHAR2(60 BYTE)	Yes	(null)	26 Terminal/Workstation name

For successful Authorizations/Settlements/payments PMS stores fix message in XCAP_IFCMESSAGE

XCAP_RRNNU...	XCAP_INITIAL...	XCAP_ADDLAU...	XCAP_IFCMESSAGE	XCAP_S...
5552	1	250	Manual Authorization OK	1
(null)	(null)	(null)	Settlement OK	1
(null)	(null)	(null)	Settlement OK	1
(null)	(null)	(null)	Settlement OK	1
5551	...	0	0 Authorization OK	1

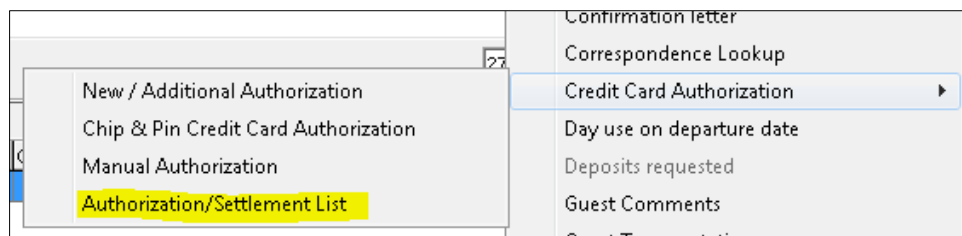
As to provide status message to display in the Credit card tab of a reservation.

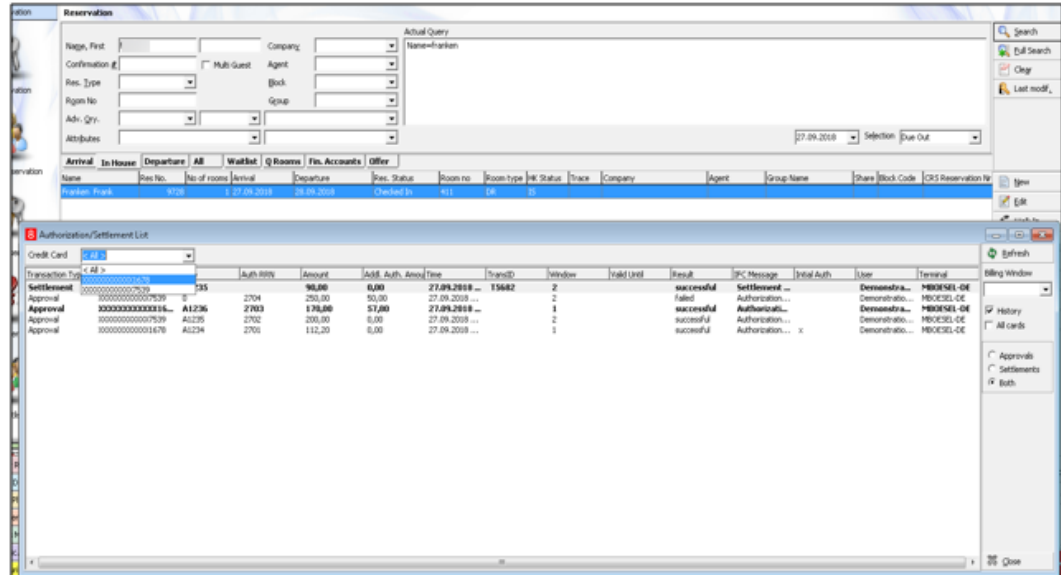
Currently this message text is fix and cannot be changed.

For failed transactions PMS stores message from IFC ClearText (if available) in XCAP_IFCMESSAGE

XCAP_ADDLAU...	XCAP...	XCAP_IFCMESSAGE	XCAP_SUCC...
(null)	(null)	Settlement OK	1
50	0	Authorization failed no connection	2
57,8	0	Authorization OK	1
0	0	Authorization OK	1

Added option to open the Authorization/Settlements grid on reservation level via Reservations grid - Options – Credit Card Authorization – Authorization/Settlement List

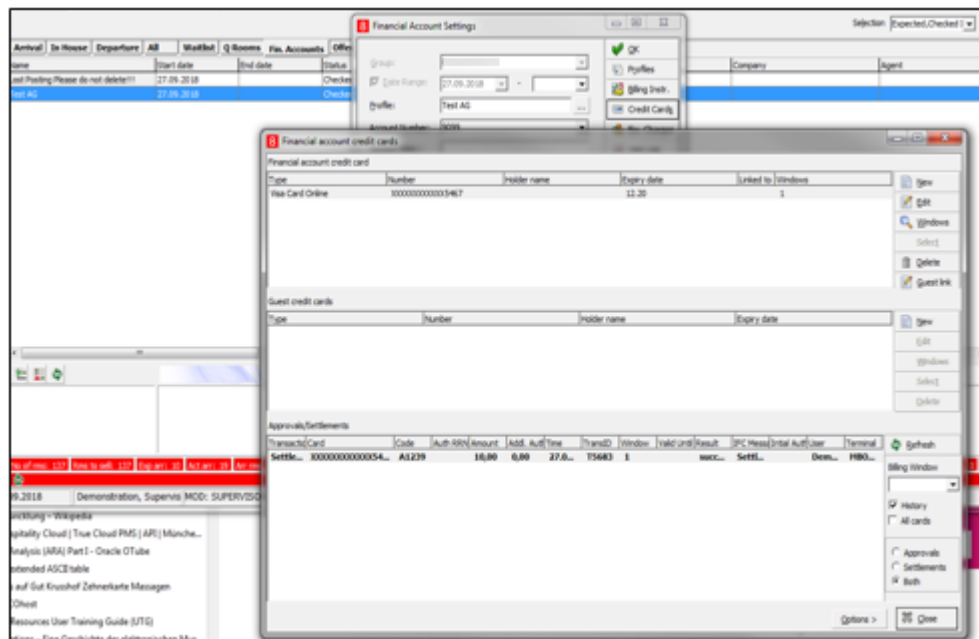




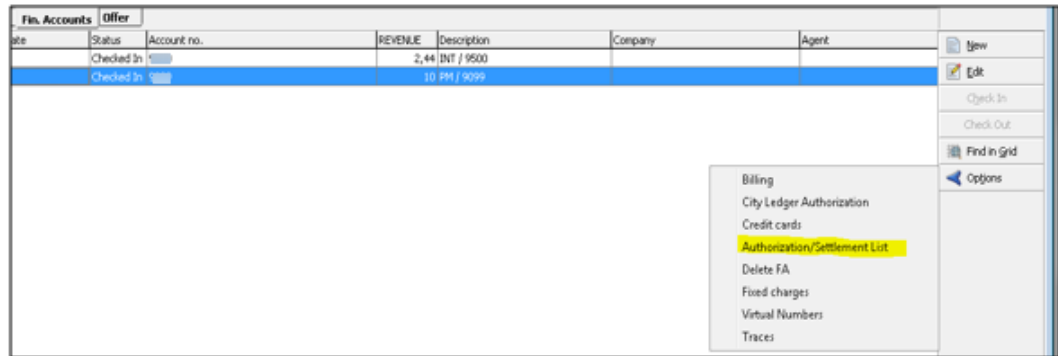
It offers the same filter options than the grid within Reservations – Credit cards. It is possible to filter by credit card.

Same is available for Financial Accounts.

To access the list, navigate to **In house guests Financial Account** tab – **Financial Account Settings (Edit) - Credit Cards** button



In house guests - Financial Accounts tab – Options



Manual Authorization screen

If Payment Partner supports handing out RRN Number for manual Authorization (e.g. via Phone) it is possible to add this RRN number into Manual Authorization screen together with the manual Authorization code.

8

Appendix

Reporting

Reporting stays untouched, it does not matter that "xxxxx" is overwritten by "xxxxx" - and ensures once more that under no circumstance a clear number is presented to the user.

Offline Credit Card Type

This is used for credit card numbers, which are not sent to an EFT system through EFT Interface. This is usually used in case EFT Interface is not operating or it is not intended to send transaction to EFT System.

Suite8 Code = free definable 3 letter code

Send to Interface = unticked – no message sent to IFC.

Online/Present Credit Card Type

This is used for credit cards which are **present** at front desk. You or the guest is able to enter the credit card into EMV Device at time of authorization payment.

PMS Code = free definable 3-letter code

IFC Credit card type = 2-letter code as setup in OPI (e.g. VA for VISA)

Chip & Pin only = active for Chip&Pin transaction

Authorization rule

- Authorization Type = At check-in- will use CpAuthor messages to IFC8
- Settlement type = Online- will use CpSettl messages to IFC8

Not Present Card Type

This is used for credit cards which are **not present** (like card provided by phone, letter, mail, fax, external system) = card is not able to be entered into the pin pad by you or a guest. The card number needs to be entered directly into related field in Suite8.

PMS Code = 2-letter code as setup in OPI (e.g. VA for VISA)

Send to Interface = ticked

Chip & Pin Only = unticked

Authorization rule

- Authorization Type = At check in- will use CcAuthor messages to IFC8
- Settlement type = On line- will use CcSettl messages to IFC8

Debit Card Type

This is used for card types where the authorization is not allowed, usually for Debit cards, Maestro, Girocard, V-Pay, any Mobile Payment card type (AliPay, PayPal) etc...

PMS Code = 2-letter code – freely definable

IFC Credit card type = 2-letter code as setup in OPI (e.g. MD for Maestro Debit)

Chip & Pin only = active for Chip&Pin transaction

Authorization rule

- Authorization Type = No Authorization
- Settlement type = Online- will use CpPayOnly messages to IFC8