Oracle® Hospitality Suite8 EFT Tokenization Guide Release 8.13.7 E99205-01

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Preface 2

Contents

| Pı | reface | 5 |
|----|--|----------|
| | Audience | 5 |
| | Customer Support | 5 |
| | Documentation | 5 |
| | Revision History | 5 |
| 1 | EFT Tokenization | 6 |
| | Introduction | 6 |
| | Feature Availability | 6 |
| | Prerequisites | 6 |
| 2 | Configuration | 7 |
| | User Right to Enable the Feature | |
| | Global Settings | |
| 3 | Bulk Credit card tokenization | <u> </u> |
| | OPI Certificates | |
| | The Bulk credit card tokenization process | |
| | User right to execute the bulk tokenization process | |
| | Run the bulk tokenization process | 9 |
| 4 | Reservation | 11 |
| | Entering a credit card into Reservation (Card not present) | |
| 5 | EFT IFC8 Interface with OPI | 13 |
| | Card present transactions | 13 |
| | Example for a card present authorization | 13 |
| | Example for an additional authorization | 14 |
| | Example for a settlement: | 14 |
| | Card not present transactions | 14 |
| | Example for a settlement: | 14 |
| 6 | Suite8 Online Interface | 16 |
| 7 | Appendix | 17 |
| | Reporting | |
| | Offline Credit Card Type | |
| | Online/Present Credit Card Type | |
| | Not Present Card Type | |
| | Debit Card Type | 19 |

Preface

Audience

This 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 | Initial publication |
| March, 2019 | • Release 8.14.0.0 |
| June, 2020 | • Updated the release version |

EFT Tokenization 5

1 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.

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 8.13.7 and higher.

6 EFT Tokenization

2 Configuration

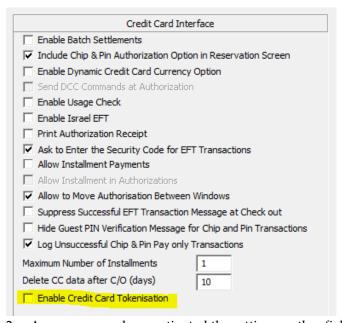
User Right to Enable the Feature

Activate the user rights under Setup > Configuration > User Rights > Configuration > Global settings security related to enable the activation of the guest anonymization.

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**.



- 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 will always send a token ID request through this connection whenever a credit card number is being entered into the credit card number field within 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 will be executed.

| Parameter Name | Value | Description | |
|------------------|---|---|--|
| Token Server URL | https://IP Address of PC OPI is installed on: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. | |

Configuration 7

| 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 | https://10.165.71.77:5012/TokenOPERA | | | |
|------------------|--------------------------------------|--|--------------|----|
| Version | 3.2 | | Time out | 30 |
| Chain Code | EU | | Max Requests | 50 |
| Property code | EU | | | |

8 Configuration

3 Bulk Credit card tokenization

OPI Certificates

Certificates will be created within OPI application. They will be required for secure connection between PMS and OPI for the HTTPS connection. Server and Client certificates will 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

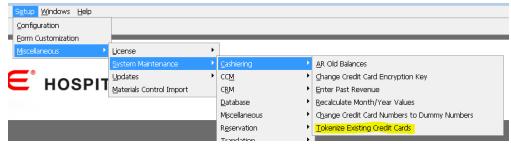
Go to Setup > Configuration > Users > User Definition > Rights > Cashiering > Move Postings and activate the user right Run bulk Credit card Tokenization.



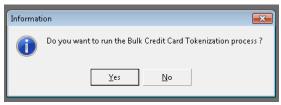
Note: The user right is only available if the global setting is activated.

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 will open:



3. Select **Yes** to start the process and all existing credit card numbers stored in the Suite8 database will be exchanged with a token ID. The process will send 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 will not receive a token ID, the existing credit card will be masked automatically and stored without a token ID. A credit card which is already expired retrieves no token ID but will be 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.

10 Bulk Credit card tokenization

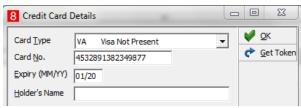
4 Reservation

Entering a credit card into Reservation (Card not present)

- 1. Go to Reservation and edit the credit card.
- Press 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 pressing the **OK** or the **Get Token** button after entering the credit card number a get token request will be 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 will be 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. By pressing **OK** the token ID and the masked credit card number will be stored in the Suite8 database.
- 8. Both values the masked credit card number and the token ID will be stored encrypted.
- 9. In addition a notification will be shown that this credit card number is a tokenized card.

Reservation 11

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

12 Reservation

5 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"/>

The response received with token ID and masked credit card number:

<CpAuthor xmlns="x-schema:CpAuthorSchema_I" PrinterPort="0"</pre> CreditcardNum="FidCryptAB|qnTGaSMTmBWTxlNqF2lC/Q==du5IiIXReXBJqKMjyugX/cNgyVTiK4cd5mi EioPdrIM=" ExpyDate="1812" CardId="1645270703010266" GuestNum="1011" SequenceNum="02412" TotalAmount="50,00" WSNum="MBOESEL-DE" CardType="VA" AnswerStat="OK" $Clear Text = "FidCryptAB \mid Q4OYin4jil0CpXr4XWuWXw = 4FvQaVfZw6L8ytvX7 + tBmmxTqKQ7jl1EYP4O + 54TLgRyft + 2FvQaVfZw6L8ytvX7 + 2FvQaVfZw6L8ytvX7$ Y3ILIBB5c27SIS6L1kc9Li5cBO5KiR7n15IYb/G648OxsxRaVbJQ6nXCKTlps/XVzYIJuxM/Rqp88oizqz+m+yTLAgc 21+qDudIi+csGFaa3sdbUMa5IrMq20nIVN2uRDFNgCw+cplMGL4KiF0vBLC2ZM3PqN/AdHfOyOpcGu7vrPtD 1fXbW9BVypzxgdXzJi2UvW9DTpHSB/4QWTN6jeILjZvTirbpoZF0NX//fx+V4aqArUNWipVPFNa9pItM+bpKlR VmaMOLKf+ViviZn4hUT7CMI5JGlTyw06h0lTv1guNq2LWGaiCLqbfObMNrHhgjEKA94lmp/eoY5x6WrOzC0 wZnzvW7gkRl+6ntoYpV14RSc6thQF+jDu/Fh9v8gBQ3mHLAY8kpFmhVcE3qp7x5M2zA7qKRN7Tl5FEHJ8DFB mF4cm53KCGgDm2r4mbhnHoQ/j5eApKRMYdRGyklrHmw7xF+kA1PblyWQumrXF2Urj+uU1uTRkpUlWJq+ HF31nbk6Z4OfhhEHewngxW9knKoWIY+zRxEsNmswo6nzbY5X+rTU/x9WYsAPwL+7aFAJG70Buq3gUOxNe7AFAJG70AFAJG70Buq3gUOxNe7AFAJG70Buq3gUOxNe7AFAJG70Buq3gUOxNe7AFAJG70Buq3k48a9q1UBjCOdM5dzVuWSbZG7uC5Whkp38YKD7qe6hTVPH3yxReGENIT+UQ/ISGvnsjL0eNKhUiuxnGD/rSynchologian and the state of the control of the controlmHSsURPfQT/+4V85SS4kg7ILncNvxoBmy2hP4A3yBN1/BFO+Aw59bWplckEJgH7vGIKLTxvaLPXSCQBkkdK Z+ja0hd3FCTN/7HwYfz5otIAzVGFJEBJVMV6Q==" AuthNum="101899"/>

3. Below string better shows the masked credit card number being received together with the token ID.

4. In the following transactions related to this reservation and credit card only the token ID will be sent out in requests. The masked credit card number will not be 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="0,00000000" 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) will also only contain 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/52S0sPBr9F6zAAXS2TwPxNWkv4YBsg3RNcdx
NXdiGnL1uQov5o5drV5BXjWVb9LP+tV7F1SEWEYLN7gfc/h4KWFybov9HB54ayubRkvXdnTISc9mz9HGV7M
BkuykwR+LAdDxyxDG4sO0S8IVLioLVfueOp9KpoBSNYQPtEpP+Xz4uO2qTIDCvFj9R9qyE03zZ2A6eJGQ1Dz
BRex38jXg9dD3P5UW83koHrOESCbMjCa9MR3ua3WEs0Dx9yPLnwc6ZbW6GCFSs7Bexl8d4VWSjjZuYJ8JNeO
ivDKrxDUX++qQG1lKCKW0FL4MBGsPEGnzZEDigNLxJlRdWw9C5Dj+ilLejQ41w5MCTZjRUIAO+qkS0Jfrt4U
t5xN8yjyiQ6lsr7fxxBN7iPMDA5/okCcngXPu86bOdLJHRiewQgDDBYIVP9QDTnVJvkU9zPXs0s2A6HGB5bWj
A11QCWCpKn904vG/eXH5scScuF2ROzZH2UjT9WY6UpIdG6Sj8RNqZPnZOD8qA0b1PUUb2HSe2JS/e9K7Nm
LhuwPYZNOIKd53X2CO5sxyNDjMAbs9w/rQEeI1BsXFXLfp3MEmt+cCV7JvUUtQWcNe8h41oqqbh/GMBw4/
Yx4hJ09L0n9wXQbiiDeRaMHMt4e42pzBlQHufFErPmJe6VDeom8MRfte+HMWCsSsAJvhRxeNriiTdViH6EcD
NnHJxDQmaXnkNAngMYJ0JuZsStC0d8G+P/qgVaDxLhkVrXmDCDqjz5JIPmS6r7HKuxqPIGEzdE/P6JBf5IfQX
dRHo9NnRC1C31tsJfw2CQ3N5GD+otqj31Pqcxkf0j1cFaZd8YDJvsLOaezBK32mpFOLrOfX/P9SZGNZI4ET+tN1
8eLb9m50W//fBFbgIyUx40w7aCa5N8ZY/Xrjg=" PrinterPort="0" AuthNum="349272" GuestNum="9122"
SequenceNum="02478" WSNum="MBOESEL-DE" TotalAmount="202,00"/>

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"

14 EFT IFC8 Interface with OPI

WSNum="MBOESEL-DE" MerchantId="EU|EU" CardType="VAS" CurrencyAvailableFlag="N" CurrencyRate="0,00000000" ForeignTotal="0,00"/>

<CcSettl xmlns="x-schema:CcSettlSchema_I" AnswerStat="OK" PrinterPort="0"
ClearText="FidCryptAB|WxfIWmMNEyEenbvQelFemQ==UEVbeQ5tOUIzsvy32PIJlQ4C68+m7xYmsCMv5evI uqUNbs88sN3AiGgwd6wJ2K2Xelq1+/7mvFY6qqjRWRj7ggZVujBS8LpN9joLZEUsfZh1PSW2e0EFjrWDNgaFp wh8jrVPNDAcGv5fvGPgckmjJdsUKhcM6moCVvHyeImIOkJ4AGe/SAaPChsIb12Zyht4qetT3XvqbdgMNUKKr rUGJB/qykBTqqA3ax6eyS5xDALcg/zbkZ7ON7S1Dh7MZKwLUQwmTLcL5lPab8SjxUhOakd4/8SJO8DmfYwffa JS/Pybcn6C0t0q5C9gI6uJH3De4WqdsKNK8zk8cwEn/hyGCK50bhivEra6d/hhbjjCnF77oE8wHrN7MkbZyWCp DeR3/Ldpo5zvfcAP7PCPc7nmGb+pUv4wGF9DM8aD1dq8jSV8zbOo3QcLJkwrizW1JcrxfZUtagqsnP1rmOrCA/89RIL6EO4cACxJYjHdo7eF+WCnzCFFwKgW0LbU1vt03WyBGAz/y56wMsNg097ZtsEwACE67X+2J1WcLntXsS ZIN0uKFZp/Lm8MuBncYWr9owP/KmSTMpc33Ew3fQ6MALiICwGuJbh94OtODafVEEE9t/8RSUVD0rdbZdJ14 919f+DrKbWpY+higHA23BA2wqT7AbzDwBZJX3StrdxiSSqRhKvSJmDp+4rnV/2SM9OFGodro7G0asY2IJ75RH Q8oMh1lKrO0M3tkYgTCNa/LQ0vWcvclvlbeGZm3tlgUssssCi13Js+rBrNMenxqD2d3OJDkDwizcQUJ3PSzxydh HLceKgVr6Q6wdDN4+8DQ10V+BD03Je6dFiLjh9qBr+zgnlNr+FgyMFoDsfl8vaRHt8UD7BMzacwaXmrUrLpOb 4EKDimaxtlvBYOizZ2RPZEn0q14g==" TransNum="000036123159" GuestNum="9122" SequenceNum="02479" WSNum="MBOESEL-DE" TotalAmount="202,00"/>

6 Suite8 Online Interface

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

Example:

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

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



16 Suite8 Online Interface

7 Appendix

Reporting

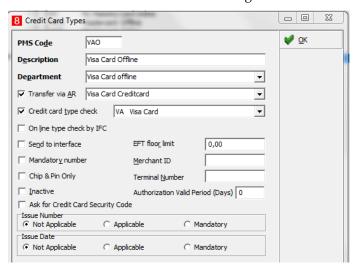
Reporting stays untouched, it does not matter that "xxxxx" is overwritten by "xxxxx" - and ensures once more that under no circumstance a clear number is presented to the user.

Offline Credit Card Type

This is used for credit card numbers which will not be 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:

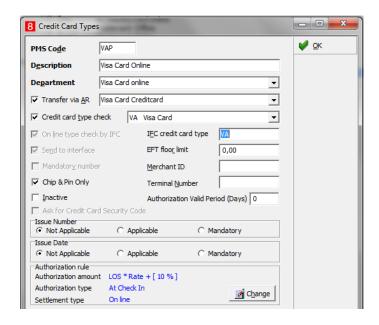
- Authorization Type = At check-in

- will use CpAuthor messages to IFC8

- Settlement type = Online

- will use CpSettl messages to IFC8

Appendix 17



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.

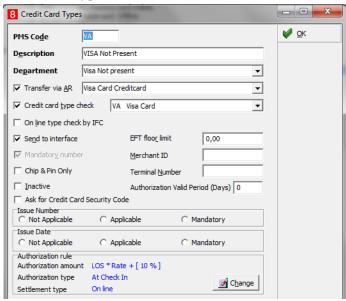
PMS Code = 2-letter code as setup in OPI (e.g. VA for VISA)

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



18 Appendix

Debit Card Type

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

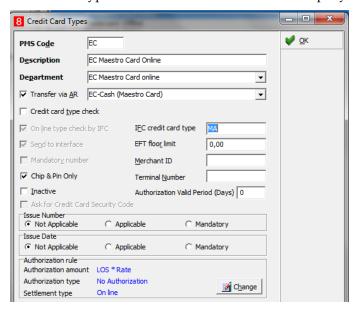
PMS Code = 2-letter code – freely definable

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



Appendix 19