E-Fidelity

ONLINE Integration Guide

29/07/2019

Ref. Version 1.75.1

Index

Index 2
E-Fidelity operation 5
Limitations and Best practices 5
Card codes 5
Codes prizes, vouchers, coupons, Gift cards 5
Sales transmission 5
Customer base 6
Access references 6
Accessing the Web Service 6
Direct access Link to the Web area 7
Parameters accepted in the direct access link to the Web area 7
Direct Access Link to the customer card 7
Parameters accepted in direct access links to features 7
Interaction via Web Service 9
General Information 9
CheckUser 9
CheckSale 9
StoreSale 9
GetCodaUtilita 10
RicercaCard 10
CouponByCards 10
RewardsByCards 10
Transmission of sales data without a card 10
Input parameters 11
Request authentication parameters [ClientInfo] 11
Sale Data [Scontrino] 11
Sale Lines [RigaScontrino] 12
Output: Operations Queue 12
Queue of operations to perform [CodaOperazioni] 15
Operations [Operazioni] 15
Operation Types [TipoOperazione] 16
Attachment [Allegato] 17

Sale change [ModificaScontrino] 17
Sale line change [RigaScontrinoModifica] 17
User Info [InfoUtente] 18
User data update [AggiornamentoAnagrafica] 18
User Data [Anagrafica] 18
Card substitution [SostituzioneCard] 19
Coupon Data [DatiCoupon] 19
Rewards [Premi] 20
Reward [Premio] 21
Coupons 21
Coupon 21
InfoUtente Error Codes 21
Product Management in the database 24
Coupon Support with free codes 24
Coding Free Coupon Codes 24
How to transmit the code 25
Workflow Example 25
Limitations 25
Use cases 26
New card 26
What happens on ERP: 26
Use cases: COUPONS 27
Coupon emission on receipt 27
What happens on ERP: 27
Premade Coupon Emission (coupon to be activated) 27
What happens on ERP: 27
Premade Coupon Emission (active coupon) 27
What happens on ERP: 27
Redeem Coupon 27
What happens on the ERP: 27
Use case: PRIZES 28
Reservation/Prize withdrawal 28
Prize withdrawal: what happens on the ERP: 28
Problem unloading inventory stock (in the case of products already sold inside the store): 28

Special cases: 28
Product returned: 28
Products booked: 28
Miscellaneous 29
Barcode coding 29
Change Log 30
Version 1.75.1 30

E-Fidelity operation

The E-Fidelity system is a system that allows you to manage:

1. Loyalty Cards
2. assigning a score against a sale
3. use of points for prizes or discount vouchers
4. management of micromarketing initiatives
5. Gift card Management

The service is available through two access points:

- **Web Service**: The services allow the management of the calculation of the scoring and redemption of prizes, coupons and gift cards, to be directly recalled during the sales process.
- **Web Area**: Operating and Management web area accessible in optimized mode for the sales operator and full mode for the loyalty card manager

Limitations and Best practices

Card codes

1. For the same card circuit, it is not possible to use card codes of different lengths.
2. It is recommended that you make the length of your card code configurable to E-Fidelity in your system

Codes prizes, vouchers, coupons, Gift cards

All objects usable by end customer (prizes, coupons, gift cards, voucher purchases) are encoded within E-Fidelity with a 9-digit code (different code length is available).
E-Fidelity uses confidential codes and distributes the list of code directly from Web Service.
The codes within E-Fidelity can be reused for which you need to take into account the cancellation and variation records that are present within the update.

Sales transmission

- During the sale it is mandatory to perform the validation of the sale through the method "CheckSale" then call "StoreSale".
  After the call to CheckSale the system returns the count in preview of the calculated points and any operations to be performed on the lines of the sale in order to apply promotions or to exploit coupons and vouchers. It is recommended that you show a visual preview to the user of what is happening to the sales data.

- It is recommended for statistical purposes to send all registered sales, even those that occurred without passing the card code. See the dedicated section for details.

- During online interaction with E-Fidelity It is recommended to provide a time-out system between Client and server (5 seconds recommended).
  In the event of a time-out it is advisable to continue with the offline sale and then retransmit the

data, only by invoking The StoreSale method, when the connection is available again. The points will be correctly calculated by the server.
If the connection is unavailable, you will not be Able to:

- Calculate in real time the score of the sale
- Use coupons, vouchers, gift cards
- Take advantage of offers reserved for cardholders

- In exceptional cases it is possible to retransmit the same sale several times without worrying about generating a duplicate sale: E-Fidelity system checks the uniqueness of the receipt ID.

- The system can rely on an external database to complete data coming from the ERP

- In E-Fidelity, you can configure the sales line types on which to calculate the score. All lines whose sales type is not present among those enabled will not be used to calculate the score or the total of the receipt.
  Examples of sales types enabled by default are:
  - **L**(Free sale)
  - **L-**(Return)
  - **Lr**(Free sale, booked product withdrawal)
  - **Ls**(Free sale, booked product activation). In the case of suspended sales, you must correctly manage the amounts sent to the server to avoid assigning twice the score.

Customer base

- Data is centrally managed by E-Fidelity: All the modifications entered through the Web interface will be available for download by the ERP.
- There is no mechanism to upload via Web Service the customer data changes. The E-Fidelity system acts as a master, the ERP must function as a read-only slave and all modifications of the data managed by E-Fidelity must be directed directly on the Web page.
- It is advisable to always make available the access key to the customer card directly in the screens of interaction between user and customer data (customer card, sale at the bank)

Access references

Accessing the Web Service

The service descriptor (test environment) is available from the address

http://test.efidelity.it/ws_loyalmanager/LoyalManagerService.svc?wsdl

Direct access Link to the Web area

The following link allows access to the E-Fidelity Web area by verifying the credentials entered in the string query parameters

Example:

http://test.efidelity.it/L/LM.aspx?US=xxx&PW=xxx

Parameters accepted in the direct access link to the Web area

- **US** username (Required)
- **PW** password (Required)

Direct Access Link to the customer card

The following link allows the Autologin with direct access to the functionality in "sale operator" mode. In this mode you will have direct access to the customer card in a page optimized for the embed in a WebView. There is no navigation menu on this page.

It is advisable to insert a direct access button in your software from both the sales screen and the customer data screen.

example:

http://test.efidelity.it/L/IN.aspx?US=xxx&PW=xxx&CC=00000002&PO=COD_POSTAZIONE&OP=COD_OPERATORE

Parameters accepted in direct access links to features

- **US** username (mandatory)
- **PW** password (mandatory)
- **CC** card code (optional)
- **PO** station (optional)
- **OP** operator (optional)
- **PR** reward code to book (optional)
- **CL** user identification code (optional)
- **VL** Euro value of the Gift Card to be created (optional)

For direct access to functions use the **TG** parameter

- Supported Code types:
    - **TG=7** : Card activation, in the case of a card not active (passed in the *CC* parameter) The system opens the page containing the data entry form of the customer.

      Other optional parameters: operator code (**OP**) and station code (**PO**), which created the card activated.

- **TG=8** : Direct access to the premium booking page, together with the TG parameter, value the information related to the Card code (parameter **CC**) and Code of the prize (parameter **PR**).

  Other optional parameters: operator code (**OP**) and station code (**PO**)

- **TG=10** : opens the GIFT CARD management page where the user can create or activate a gift card. It's possible to pre-set the gift card value via the VL parameter (e.g. VL=10 initializes the Gift Card with a value of 10 €)
  Attention! It's mandatory to set a card code when opening the URL (e.g. CC=999999999 or CC=customercardcode)

  Other parameters are optional: operator code (**OP**) and station code (**PO**) will be saved as the station and the operator that has activated the Gift Card

- **TG=11 :** virtual card activation**.** The system searches the first non-active card and redirects the user to the activation form

  Other parameters are optional: operator code (**OP**) and station code (**PO**) will be saved as the station and the operator that has activated the card

General Information

There are 4 points of communication between the management and LoyalManager during the sales process.

1. Start Sale/user identification
   CheckUser(ClientInfo): CodaOperazioni
2. Presale
   CheckSale(ClientInfo, Scontrino) : CodaOperazioni
3. Closing Sale
   StoreSale(ClientInfo, Scontrino) : CodaOperazioni
4. Sales independent Operation Queue Manager [optional]
   GetCodaUtilita(ClientInfo) : CodaOperazioni

Other methods:

1. **RicercaCard(String Username, String Password, String ValoreRicercato, Int32 TipoRicerca)**
2. **CouponByCards(ClientInfo) : Coupons**
3. **RewardsByCards(ClientInfo): Premi**

CheckUser

This operation allows the ERP to be connected to a customer through card code or fiscal code for the active cards.

The card activation procedure is activated when the CheckUser is running on a non-active card. The user is redirected to the activation page and invited to fill out the form with the customer's personal data.

CheckSale

The CheckSale operation is performed after the insertion of all the products for sale. In the CheckSale phase you have the valorisation of the sales score, application of discounts deriving from coupons/vouchers/Gift cards or offers for cardholders, accumulation of any additional points. In the case of prize withdrawal, the CheckSale displays a sales score value of zero and enhances the receipt with any contribution to be paid.

The operation returns summary sales data with scoring and total sales data. At this stage you can still change the products for sale.

CheckSale is always called for customers with cards, optionally (can be activated by ERP) for sales of customers no card.

StoreSale

The StoreSale represents the operation of closing the sale that does nothing but confirm and save the data relating to the receipt calculated in the CheckSale phase.

GetCodaUtilita

The method allows you to download the information contained in the queue of operations in moments not related to the sale and card pass from management.

In the "*ClientInfo*" input object, in the "*codename*" property, you can use the special card code "NO card" that corresponds to code **999999999**.

To enable the system to manage this queue's data download mode, you must configure a parameter in the BackOffice area of E-Fidelity.

The parameter is in the section:

Config > category: Selling > Set the parameter to 1 "load independent queue from sales"

To date only the update of the prizes and coupon database is available.

RicercaCard

The method searches for the card data based on the search criteria passed as a parameter.

The parameters of "ValoreRicercato" and "TipoRicerca" should be set with the data in the table:

	ValoreRicercato	TipoRicerca
Search by health code	Customer's health code	1

The method returns an operations queue with an "AggiornamentoAnagrafica" object containing the list of resulting search data.

In case of card data not found, the queue is returned with a problem type operation.

CouponByCards

The method searches the list of coupons usable by the customer. The method takes input from a Client Info object and returns a list of coupons that the customer can use.

RewardsByCards

The method searches the list of prizes that the customer can request based on his/her balance points. The method takes input from a Client Info object and returns a list of prizes that the customer can use.

Transmission of sales data without a card

For statistical purposes it is advisable to transmit to the Web Service of E-Fidelity all registered sales, even those not associated with any card code.
To send the sales without card you can use a special card code "NO CARD" that has associated a special code composed of all 9.

NO CARD code: 999999999

Typically, the length of the NO CARD code saved inside E-Fidelity is 9 digits even if the card circuit uses a different card code length, excluding prefix.
If it is not possible to send a NO card code of a length other than that of the other cards, it is necessary to request the administrators of E-Fidelity to vary the NO card code.

Input parameters

Each interaction with the system consists of 2 parts:

1. Authentication part: Performed by ClientInfo object
1. Part of data: carried out by the Scontrino object

Request authentication parameters [ClientInfo]

Object that contains all the information about the client that is interacting with the server.

Parameter Name	Description	Type	Required
Username	Service Access Username	String	Yes
Password	Access Password to the service	String	Yes
IdPuntoVendita	Store Id. Unique within the system	String	No
CodiceCassa	Cash ID. Unique within the store	String	No
DataOra	Date/time of operation format YYYY-MM-dd hh:mm:ss	DateTime	Yes
CodiceOperatore	Operator performing the operation	String	No
CodiceCarta	Loyalty Card Code	String	Yes
IdCliente	Customer ID (for use as an alternative to the card code)	String	No
Ritrasmissione	Value that indicates whether the receipt has already been entered (retransmit value "1") or not (retransmit value "0")	Int	No

Sale Data [Scontrino]

General data of the sale

Parameter Name	Description	Type	Required
IdScontrino	Unique identifier of the sale inside the shop.	String	No
LordoScontrino	Total of the sale before the discount	Decimal	Yes
ScontoRigaVendita	Sum of total discount applied on sales lines	Decimal	Yes
ScontoScontrino	Any discount applied on the total of the sale	Decimal	Yes
NettoScontrino	Total of the sale net of any discount applied on the total and sales lines (amount paid by the customer)	Decimal	Yes
RigheScontrino	List containing the sale lines	RigaScontrino[]	Yes
PuntiBonusMalus	Number of whole points to sum/subtract to customer points balance	Int	No

Sale Lines [RigaScontrino]

Parameter Name	Description	Type	Required
NumeroRiga	Sequence number of the sale line	Int	Yes
CodiceProdotto	Product Code	String	Yes
NomeProdotto	Product Name	String	No
LordoArticolo	Total selling price gross of any discounts	Decimal	Yes
ScontoArticolo	Amount of any discount applied on the line	Decimal	Yes
NettoArticolo	Total sales price net of any discount (amount actually paid by the customer)	Decimal	Yes
Quantita	Quantity	Int	Yes
DittaProduttrice	Manufacturer's Code (code that identifies the producer)	String	No
Categoria1	Product Category 1	String	No
Categoria2	Product Category 2	String	No
Categoria3	Product Category 3	String	No
TipoProdotto	Product Type	String	Yes
QuotaCliente	Amount paid by the patient in the case of drugs	String	No
TipoRigaVendita	Type of sale **Attention!** The system may impose restrictions on the types of sales enabled for points accumulation and bids. The types of sales enabled by default are: - **L**: Free Sale - **L-**: Return of a product - **Lr**: Free sale, booked product withdrawal - **Ls**: FREE sale, booked product activation The default-enabled sales types for offers are: - **L:** Free Sale The types of sales enabled can be configured in the E-Fidelity platform.	String	Yes
Raggruppamento	Group of rows (number of the prescription in case of drugs)	String	No
InOfferta	1: Indicates whether the product on the line has already been applied an offer 0: Indicates that no offer has been applied to the product	Int	Yes
TipoPrezzoAlternativo	Typology of any alternative price applied to the product	String	Yes

Output: Operations Queue

For each call made by the management at LoyalManager, LM responds with a queue of operations. The operations queue is a list of proposed or mandatory operations (both software-type and "human" that the client must perform)

If the operation is blocking (i.e. the operation is mandatory and requires user intervention), after the operation (ed. Closing the browser), the management remakes the same call to the system. If the operation was done correctly, it will no longer be in the operations queue.

Examples of operations:

Use case	Condition	What happens on ERP	Content response	Operation Type	Blocking
Card Not activated	The card is valid and exists in the system but has never been activated	Opens browser window with optimized page.		ApriUrl	Yes
Remind the client that...		Pop-up or window that shows the user a simple text		MostraTesto	
Coupon print on the receipt	The customer is entitled to a one-to-one coupon	The coupon Is sent to print	BMP/JPEG	StampaScontrino	
The customer has a coupon to use		The ERP proposes to the operator to ask the user if the customer wants to use the coupon		MostraTesto / ApriUrl	
Give a pre-printed coupon to the customer -TO Activate		Open Web page where it is said to activate and deliver a pre-printed coupon to the customer.		ApriUrl	Yes
Give a pre-printed coupon to the customer – already active		Pop-up or window that tells the user to deliver a pre-printed coupon to the customer.		MostraTesto	
Ask some questions to the customer		Web page with a questionnaire to fill out		ApriUrl	
Customer must withdraw a prize		Pop-up or window that shows the user a simple text.		MostraTesto	
Problem with the E-Fidelity application	The E-Fidelity system detects that there is a problem with the data passed (card not active during the sale, multiple prizes withdrawal...)	The ERP must show the warning message and exit the function, to give the user the opportunity to edit the sale.		Problema	
Edit Sale		Apply discounts or coupons to the sale.		ModificaScontrino	
Update user Data		Updates the data from the Web application.		Aggiornaanagrafica	
System error	The e-Fidelity system detects that there is a system error (internal error, login error...)	Perform error notification operations		Error	
Balance points	The ERP wants to know the	Show data within the sale screen		InfoUtente (object always returned to	

	customer's points balance	every interaction with System)

Queue of operations to perform [CodaOperazioni]

The operations queue always includes the customer information and a non-pre-defined length queue of operations to perform.

Parameter name	Description	Type
InfoUtente	Loyalty Card Customer Data	InfoUtente
Operazioni	Queue of operations to run	Operazione[]

Operations [Operazioni]

Parameter Name	Description	Type	Mandatory
IdOperazione	Operation Id	Int	Yes
IdCliente	The Id of the customer that is referenced by the operation to be executed	Int	Yes
NomeOperazione	The name of the operation to perform	String	Yes
TipoOperazione	The type of operation to perform in text format. Depending on the type of operation present some objects of the operation will be valued, other null. See the legend for details	String	Yes
OrdineOperazione	Order of operations to be carried out	Int	Yes
Bloccante	Indicates whether the operation should be blocking for the Client. After completing the blocking operation, you must make the same call to the system to receive an updated queue of operations	Boolean	Yes
Allegato	File attached to the operation	Attachment	No
Url	Absolute address of a Web page including http://	String	No
Testo		String	No
TestoHtml		String	No
ModificheScontrino		ModificaScontrino[]	No
AggiornamentoAnagraficaElenco		AggiornamentoAnagrafica[]	No
StornoGiacenza		StornoGiacenza	No
SostituzioneCard		SostituzioneCard	No

Operation Types [TipoOperazione]

Operation Type	Description	Objects used	User interaction
ApriUrl	The system must open a browser to view the URL in the dedicated object	Url	Yes
ModificaScontrino	The system must change the sales lines according to the rules sent	ModificheScontrino	No
MostraTesto	The system must show a popup or similar window that requires user confirmation	Testo o TestoHtml	Yes
VisualizzaMessaggio	The system displays an informational message in a dedicated area without requiring user confirmations.	TestoHtml	Optional
StampaScontrino	The system must print on the receipt the image in the Annex	Allegato	No
StampaContenuto	The system prints on the default printer (if any) the content	Testo o TestoHtml o Allegato	No
AggiornaAnagrafica	The system must update the customer's personal data	AggiornamentoAnagrafica	No
SostituzioneCard	The system informs the ERP that an old card code has been replaced with a new	SostituzioneCard	No
Problema	The system must show details on the problem and interrupt the operation it is performing to give the operator the means to apply corrective actions	Testo o TestoHtml	Yes
ErroreSistema	Notification of system failure	Testo o TestoHtml	Yes
AggiornamentoBancaDati	The system receives the attachment of the database's export file. The name of the returned file is fixed: AGGBD.seq	Allegato	No
AttivaCard	The system must open the URL in the given object to enable the card to be activated. Before opening the URL the system must ask for confirmation of the aperture showing the text in the field "text". If the user does not confirm the system does not	Testo e Url	Yes

	have to "hook" the card number to the sale		
StornoGiacenza	The system must update the inventory of the product contained in the item StornoGiacenza	StornoGiacenza	No
DatiCoupon	The system returns all data about the coupon to be issued. Data can be used for generating a graphics file or can be used with printers that do not support the graphics format	DatiCoupon	No

Attachment [Allegato]

Parameter Name	Description	Type
NomeFile	Original file name	String
DescrizioneFile	Textual description of the file	String
FileAllegato	Attached File	Byte[]
MimeType	MIME type of the image	String
Dimensione	File size in bytes	int

Sale change [ModificaScontrino]

Parameter Name	Description	Type
TipoModifica	Type of change to make (Edit/insert/delete)	String
RigaScontrinoModifica	Line of sale to be processed. In the case of modification, the system returns a line similar to that passed in input with the price/discount/quantity values appropriately modified.	RigaScontrinoModifica

Sale line change [RigaScontrinoModifica]

Parameter Name	Description	Type
NumeroRiga	Sequence number of sale line	Int
CodiceProdotto	Product code	String
NomeProdotto	Product name	String
LordoArticolo	Unit sales price gross of any discounts	Decimal
ScontoArticolo	Amount of any discount applied on the line	Decimal
NettoArticolo	Unit sales price net of any discount (amount actually paid by the customer)	Decimal
Quantita	Quantity	Int
DittaProduttrice	Manufacturer's Code	String
Categoria1	Value identical to the Categoria1 value received in input	String
Categoria2	Value identical to the Categoria2 value received in input	String
Categoria3	Value identical to the Categoria3 value received in input	String

TipoProdotto	Product Type	String
QuotaCliente	Customer fee	String
TipoRigaVendita	Sales Type Code	String
Raggruppamento	Group of rows (example medications prescribed in the same recipe)	String
InOfferta	1: Indicates whether the product offer has already been applied 0: Indicates that no offer has been applied to the product	Int
TipoPrezzoAlternativo	Typology of any alternative price applied to the product	String

User Info [InfoUtente]

Parameter Name	Description	Type
IdUtente	System-Assigned User Id	String
CodiceCarta	User's Fidelity Card code	String
SaldoPuntiAttuale	Current campaign balance points	int
PuntiAggiuntiviVendita	Extra points earned in the sale	int
PuntiVendita	Points earned in the sale	int
SaldoPuntiNuovo	New points balance	int
CodiceErrore	Error code	Int
DescrizioneErrore	Error description	String
DescrizioneCliente	Customer's surname and name	String
PuntiBonusMalus	Value of bonus/malus bonus points entered	int
SaldoPuntiVecchiaCampagna	Balance points accumulated in the old campaign still usable to redeem prizes of the old campaign. The field is valued only in case there is a balance for usable points accumulated during the old campaign. Usually after the expiration of a campaign there is a period in which the customer accumulates the points for the new campaign but can still use the old balance to redeem prizes. In case the value of the field is -1, it means that the campaign points balance is not available, so it is not necessary to manage the double information new/old balance	Int

User data update [AggiornamentoAnagrafica]

Parameter Name	Description	Type
IdAggiornamentoAnagrafica	User data update identification	Int
IdAnagrafica	Identification of the user to be modified	Int
TipoModifica	Type of change to make (Edit/insert/delete)	String
Anagrafica	User Data	Anagrafica

User Data [Anagrafica]

Field name	Value	Type	Length

IdAnagrafica	Unique Id of system-assigned user data	Int	
CodiceCarta	Loyalty Card Code	String	
CodiceFiscale	Customer tax code	String	
Nome	Name	String	
Cognome	Surname	String	
DataNascita	Date of birth in yyyy-MM-DD format	String	10
Sesso	Sex	String	1
Indirizzo	Address	String	
Cap	Postal Code	String	
Localita	City	String	
Provincia	Province	String	
Telefono	Telephone	String	
Cellulare	Mobile Phone	String	
Email	Email	String	
StatoAnagrafica	State of user data (active/inactive/...)	String	
DataUltimaModifica	Date of last modification made on data in YYYY-MM-DD format	String	10
PartitaIva	Customer VAT Code	String	11

N.B.: As regards the deactivation of the card, the card must be dropped from the customer on the ERP when the Data status is "deactivated"

Card substitution [SostituzioneCard]

Parameter Name	Description	Type
CodiceNuovaCard	Code of the new card being replaced	String
CodiceVecchiaCard	Card Code replaced	String

Coupon Data [DatiCoupon]

Parameter Name	Description	Type
CodiceCoupon	Coupon code to be used during redemption of the discount	String
Slogan	Slogan associated with Coupon	String
Avvertenze	Information in textual format on the use of the coupon (e.g. coupon only valid on cosmetics)	String
DataInizioValidita	Date of validity of the coupon. From this date onwards you can use the coupon code	String in mm/dd/YYYY format
DataFineValidita	End date of validity of the coupon. Up to this date including you can use coupon code	String in mm/dd/YYYY format
Tipologia	Coupon Type: 0: Coupon entitles you to a discount in% 1: Coupon entitles you to a value discount 2: Informative coupon. This type of coupon does not entitle you to any advantage	Int

	3: Coupon entitles you to a multi-valued discount. For example, €20 discount every €50 spending.	
Valore	Value of the discount to which the coupon entitles; The value is to be treated in different ways according to the coupon type. 1. Type 0: The figure indicates the percentage of discount (e.g. 20% discount) 2. Type 1: The figure indicates the absolute value of the discount (e.g. €20.44 discount) 3. Type 2: In case of information coupon the value will always be at 0 as this type of coupon does not entitle you to economic advantages 4. Type 4: The figure indicates the value of the discount to be multiplied to the number of times the total of the receipt exceeds the value of the maximum amount. For example, the advantage to which the coupon entitles is "€2 discount every €10 spending." In this case the response of the message will be valued: 1. Type: 4 2. Value: 2.00 3. Sogliascontomultiplo: 10.00	Decimal
SogliaScontoMultiplo	Only applicable in the case of type 4 coupons. Indicates every how many euros of spending the discount is applied.	Decimal
ImportoMinimo	Minimum amount for which the coupon can be used for sale	Decimal
BeneficiarioCard	In case the data is present it indicates the card code of the customer to whom the coupon is destined. In case the data is not present the coupon is to the bearer.	String
BeneficiarioNome	In case the data is present it indicates the name of the customer to whom the coupon is intended. In case the data is not present the coupon is to the bearer.	String
BeneficiarioCognome	In case the data is present indicates the surname of the customer to whom the coupon is intended. In case the data is not present the coupon is to the bearer.	String

Rewards [Premi]

Parameter Name	Description	Type
Errore	Error description (User not found, Credentials error…)	String
Info	Object that reports the user information	InfoUtente
ElencoPremiRitirabili	List of prizes the user can collect	Premio[]

Reward [Premio]

Parameter Name	Description	Type
Nome	Prize description	String
PuntiConContributo	Points needed to book the prize in case of paid contribution	Int
Punti	Score needed to book the prize	Int
Contributo	Financial contribution to withdraw the prize	Decimal
CodicePremio	Unique prize code	String
ValoreBuono	Discount value associated with prize voucher	Decimal
Prenotazione	Indicates whether the prize is withdrawable with reservation (true) or without reservation (false)	Boolean
CampagnaPremi	Name of the campaign to which the prize refers	String

Coupons

Parameter Name	Description	Type
Errore	Error description (User not found, Credentials error…)	String
Info	Object that reports the user information	InfoUtente
ElencoCouponAttivi	List of coupons that can be used by the customer	Coupon[]

Coupon

Parameter Name	Description	Type
Codice	Coupon Code	String
DataFineValidita	End date of coupon validity	String
DataInizioValidita	Start date of coupon validity	String
DescrizioneUtilizzo	Description on discount application rules	String
Slogan	Slogan associated with coupon	String
Titolo	Title of the initiative associated with the coupon	String

InfoUtente Error Codes

Below is the list of error codes that the application can answer in case of anomalies:

Code	Description
0	No Error
1	Access Denied
99	Internal Error
100	No Error
101	Incorrect Header Attributes
102	Mandatory Header Parameters not complete

103	Customer not found
104	Sales ID or non-unique receipt Id
105	Error in one of the receipt lines
106	Customer Inactive
107	Circuit not existing
108	No Formula defined for this circuit
109	Pharmacy not assigned to any circuit
110	No active campaign for this circuit
111	Error. You are withdrawing a prize with a different contribution value than the booking.
112	Error. Use only a voucher purchase and a Coupon in the same sale.
113	Error. Use only a good buy in a sale.
114	Error. Use only a Coupon in a sale.
115	Attention: It is not possible to include a voucher and a Gift Card in the same sale. Make two separate sales.
116	Error. Use only a Gift Card in a sale.
117	Error. No products for sale have been included. The object of the initiative is not applicable.
198	Invalid operation
199	Internal Error
200	No error
201	Wrong row attributes
202	Incomplete Required Row parameters
203	Non-matching contribution value
204	Not enough points for prize withdrawal
205	Non-Withdrawable prize (Master card)
206	Could not continue. Book or withdraw a prize by putting in the sale the only prize
207	attention!! Not enough points to withdraw the prize without a contribution. The customer has the balance necessary for the withdrawal with contribution. Change the amount with the value of the contribution and continue
217	It is no longer possible to book a prize of the campaign Passed\n points have expired
218	The selected prize is no longer present in the catalogue. Could not continue.
219	Error. Reservation/withdrawal of a prize only to the cards activated in pharmacy! Could not continue.
299	Internal Error
301	Wrong attributes
302	File error
401	Coupon Usable in future date
402	Coupon Expired
403	Coupon not usable by customer
404	Coupon already used
405	Coupon does not check the conditions of applicability per the products for sale
406	Coupon not applicable. Minimum amount of expenditure not reached
407	Coupon not applicable to any product for sale.
408	Gift card with exhausted residue. Remove for sale.
409	Gift card not active.

410	Voucher/non-withdrawable prize from a customer without a card.
411	Voucher/non- withdrawable prize. Insufficient points balance.
413	Good non-withdrawable. The voucher is no longer present in the catalogue.
414	Not usable by a customer of another pharmacy.
415	Coupon with multi-value discount not applicable. Not reached the threshold that allows the definition of the discount

Product Management in the database

Products subject to Marketing activities, prizes or vouchers are placed in a file with a particular record format. The ERP must deal with decoding the file and saving the rewards as products of its own database. The coding takes place on free product codes (to be verified according to the market)

The products interested in the coding operation are:

- Prizes (Grouping code 7003)
- Voucher Purchase (code grouping 7002)
- Gift Card (code grouping 7004)
- Coupon (code grouping 7002)

The download of the product list file takes place on the occasion of:

- Create/Edit a prize
- Creating/Modifying a voucher
- Create/Edit a Gift Card
- Create/Edit a Coupon
- Forcing download database from Web platform

At the first useful operation (e.g. CheckUser or CheckSale) efidelity makes the list of codes available to the ERP.

Coupon Support with free codes

Normally the coupons are encoded within the application as confidential product codes. The code is automatically attributed to the coupons created and distributed through the database update.

However, you can also use free coupon code that is not encoded as product codes but as alphanumeric strings of up to 25 digits.

Coding Free Coupon Codes

Free coupon codes are alphanumeric strings encoded as follows:

2-DIGIT ALPHABETICAL PREFIX + INTEGER

Valid examples of codes are:

EF1234FR123383483483489AA37237237

The prefix is parametric. An installation can only use a coupon prefix.

How to transmit the code

In the CheckSale and StoreSale phase it is not possible to send the free coupon code as the product code but it is necessary to send in the path the fictitious product code 888888888 (9 times the number 8 or other product code) and enter in the name of the product the item "COUPON **XXXXX**" replacing in place of **XXXXX** the coupon code free.

Workflow Example

1. The customer wants to redeem the coupon EF000123 which entitles you to €5 discount
2. The Pharmacist reads the customer card code
3. The pharmacist adds the coupon code EF000123 in the ERP sale window
4. The ERP recognizes the coupon prefix EF and adds the coupon in the sale lines as a product with these characteristics:
   - Product Code: 888888888
   - Name: COUPON EF000123
   - Quantity: 1
   - Price: 0
   - Degrassi code: 7002
5. The ERP makes the CheckSale call with sale data
6. Efidelity, if the coupon is valid, answers with a ModificaScontrino operation to set the price of the coupon (e.g. -5€).

Limitations

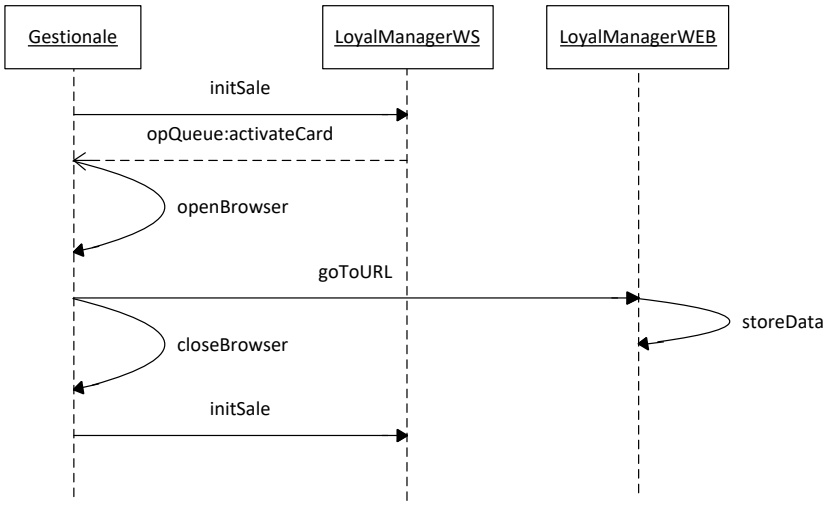
You can enter only one free coupon code per sale. In case there are multiple more sale lines with the same code the Web Service responds error.

Use cases

New card

What happens on ERP:

1. The operator reads the new loyalty card – The ERP recognizes that the barcode bed is a card code and calls the service. The cards must have already been inserted into the system and are in a ***non-active*** State.
2. The service recognizes that the number is valid and that the loyalty card is not active. Responds to the ERP with the blocking operation goToURL with the address of the activation page.
3. The ERP opens in the browser the Web page indicated. The operator inserts the necessary fields for the activation of the paper and confirms.
4. After the web page has been closed, the ERP invokes the service to check that the activation has been successful. If the activation has been successful in the queue there will be a series of operations including the ***AggiornaAnagrafica*** that will contain all the customer's details. Otherwise the service responds again with the goToURL operation for activation.



Use cases: COUPONS

Coupon emission on receipt

What happens on ERP:

1. The operator reads the loyalty card and inserts some lines in the sale.
2. In the pre-sale phase, the ERP passes the lines to Efidelity.
3. The service returns to the ERP a JPEG or the text already formatted for printing on the receipt.
4. The ERP sends the coupon (text or JPEG) to the printer.

Premade Coupon Emission (coupon to be activated)

What happens on ERP:

1. The operator reads the loyalty card and inserts some lines in the sale.
2. In the pre-sale phase, the ERP passes the lines to Efidelity.
3. The service returns a text to the pharmacist inviting him to give the customer a pre-printed coupon. The coupon must be activated, and the operator is sent to the sales screen.
4. The operator takes the coupon and places it in the sale
5. The service enables the coupon to the customer in the subject.

Premade Coupon Emission (active coupon)

What happens on ERP:

1. The operator reads the loyalty card and inserts some lines in the sale.
2. In the pre-sale phase, the ERP passes the lines to Efidelity.
3. The service returns a text to the pharmacist inviting him to give the customer a pre-printed coupon.
4. The coupon is already active and no activity is required

Redeem Coupon

What happens on the ERP:

1. The operator reads the loyalty card number and adds some products to the sale.
2. The operator reads the Coupon and inserts it as a line of the sale
3. The sale is sent to LM with CheckSale call
4. LoyalManager checks the validity of the coupon.
    1. If VALID: LM returns the rows of the receipt to be edited
    2. If NOT VALID: LM Returns an error condition with the reason why the coupon is not valid. The operator must remove the coupon from the sale in order to continue.
    (**Alternative**: The system could return to the system a queue of operations that forces the system to remove the coupon from the lines of the receipt and to notify the customer problem)

Use case: PRIZES

Reservation/Prize withdrawal

The withdrawal phases of a prize are normally 2:

1. Booking the prize
2. Withdrawal of the prize

The two phases can take place simultaneously (e.g. product already present in the pharmacy).

The booking phase takes place via browser from the customer's card and results in the printing of a "booking voucher".

The withdrawal phase is done through the sale on the ERP. In case of sale on the ERP without reservation, the system assumes that the prize has been reserved and withdrawn at the same time.

Prize withdrawal: what happens on the ERP:

1. The operator reads the loyalty card
2. The operator places on sale the code of the reserved prize.
3. The prize code is sent to LM
4. LoyalManager checks the correctness of the operation (prize code, customer points, contribution etc...)
5. LM modifies the track of the receipt indicating any contribution to be paid.
6. The ERP Prints the receipt and delivers the prize.

Problem unloading inventory stock (in the case of products already sold inside the store):

Solution 1: LM receives the prize code. LM Activates all the controls and modify the track of the receipt by returning to the management the correct code with the correct price for issuing the receipt and unloading the stock (suggested)

Special cases:

Product returned:

In the sale is passed the product with negative amount. The system provides the recalculation of points.

Products booked:

In case of products booked, the crediting of the points will be at the withdrawal of the product (even in case of partial advance by the customer)

Miscellaneous

Barcode coding

Coupons can start with a prefix

Loyalty cards can start with a prefix if this is useful to ERP software to recognize the code as a loyalty card (%%, ++).

For printing you can use the format code128

Change Log

Version 1.75.1

First edition in English