Ashrait PC as a Web Service

> Preface
> This is a brief and partial translation of the Web service documentation to assist non Hebrew readers implementing Ashrait PC as a Web Service. For all legal and contractual purposes only the Hebrew documentation counts.

1.   General description

1. Ashrait Web is a new version of Ashrait PC that provides a web service with no installation required at the merchant premises.

2. The main purpose of this Web Service (WS) module is to receive then send credit card authorization requests messages to the acquiring credit cards companies, relay their response messages to the merchant, and return a transaction record following a positive authorization answer.

3. The WS offer the following functions:

i.   Authorization request that will accept the payment details, validate them and transmit them to the relevant Credit Card company and if OK, shall return an encrypted transaction record to the caller.

ii.   Transaction deposit that will accept any amount of transaction records and will deposit them in the main computer.

iii.   Deposit inquiry

4. The WS is written in C# under Visual Studio.NET 2003.

5. The testing environment URL is:

https://online2.premiumfs.co.il/premium/Service.asmx

premiumUserName = user1
premiumPassword = 11111-22222-33333-44444-55555
premiumCashierNum = 01
merchantNumber = 0963185013

for the **HKeva** function use:
premiumUserName = userHK
premiumCashierNum = 05

Transaction performed in the testing environment will not be transmitted to the acquirer.

Important!
requests for approval movements will be passed to the credit companies for debit contingent in the number of terminal and not in the address (the number of test terminal must be under than million).
In the second address usually situated a version of software that including

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the last changes before will be inserted to the use of the customers.

Note that our servers configuration require installation of SOAPAction in content header and not in the URL.

Need to define specific in content type "text/xml".

NOTE: These examples refer to the function "AuthCreditCardFull" that is a basic function, To get more options, recommended to use the function "AuthCreditCardFull**Ex".**

```
 Example how to connect to Premium Web-Service

Create Web Reference to address (Test Server)    .1
https://online2.premiumfs.co.il/premium/service.asmx

Increase to the caption .1
  [Imports [project_name].premiumService   [VB.Net
  [#using [project_name].premiumService; [C

:To call the service you need to add

    [VB.Net]

Dim premiumWebService = New PremiumService()

Dim TransactionRecord As String
Dim ResultRecord As String

Dim Results

TransactionRecord = ""
ResultRecord = ""

Results = premiumWebService.AuthCreditCardFull (
[premiumUserName],[premiumUserPassword],
[premiumCashierNum], [merchantNumber], "20090601", "1640",
"", "", "458045804580", "1111", "100", "", "01", "1", "1",
"", "50", "", "", "", "", "", "", "", "4", "", "", "", "",
"", "4580", "" , "",TransactionRecord , ResultRecord)


 NOTE: The variables in Green you need to get from G.B Premium
```

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```
[#C]

PremiumService premiumWebService = new PremiumService();

    string req_out_TransactionRecord = "";
    string req_out_ResultRecord = "";

int Results = premiumWebService.AuthCreditCardFull ( [premiumUserName],
[premiumUserPassword], [premiumCashierNum], [merchantNumber],
"20090601", "1640", "", "", "458045804580", "1111", "100", "", "01",
"1", "1", "", "51", "", "", "", "", "", "", "", "4", "", "", "", "", "",
"4580", "" , "",
out req_out_TransactionRecord, out req_out_ResultRecord);



    NOTE: The variables in Green you need to get from G.B Premium
```

]PHP]PHP5 sample how to use in SOAP for the function **GetDateAndTime**.

```php
<?php
function pfs($params)
{
// כתובת ה WSDL
$url = "https://online2.premiumfs.co.il/premium/service.asmx?WSDL";
$c = new SoapClient($url);

// קריאה לפונקציה
$res= $c->__call("AuthCreditCardFull", array($params));

return $res ;
}

// פרמטרים
$params = array(
'premiumUserName'=>'user1',
'premiumPassword'=>'11111-22222-33333-44444-55555',
'premiumCashierNum'=>'01',
'merchantNumber'=>'0963185013',
'transactionDate_yyyyMMdd'=>'20100909',
'transactionTime_HHmm'=>'1640',
'uniqueTransactionNumber_SixDigits'=>'',
'track2'=>'',
'cardNum'=>'4580000000000000',
'expDate_YYMM'=>'1111',
'amount'=>'100',
'cochavAmount'=>'',
'transactionType'=>'01',
'creditTerms'=>'1',
'currency'=>'1',
```

```php
'authNum'=>'',
'code'=>'51',
'firstAmount'=>'',
'nonFirstAmount'=>'',
'numOfPayment'=>'',
'sapakMutav'=>'',
'sapakMutavNo'=>'',
'uniqNum'=>'',
'clubCode'=>'',
'paramJ'=>'4',
'addData'=>'',
'eci'=>'',
'cvv2'=>'',
'id'=>'',
'cavvUcaf'=>'',
'last4Digits'=>'0000',
'transactionCurrency'=>'',
'transactionAmount'=>''
);

$r = pfs($params);
var_dump($r);
?>
```

[Example how to deal with web service errors you can find in this link:[6VB

http://www.aspfree.com/c/a/VB.NET/Calling-a-Web-Service-using-VB6-with-SOAP-30/2/

http://www.aspfree.com/c/a/VB.NET/Calling-a-Web-Service-using-VB6-with-SOAP-30/3/

:SOAP Adress
https://online2.premiumfs.co.il/premium/service.asmx?WSDL

For more information call: 03-5559055

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2. Information Security

Complying with best practice methods of Information security, Ashrait WEB consists of:

HTPPS (SSL protected communication with the Web Service)

Connecting from a Permanent IP

Make use of a Merchant number, Username, Password, and a Cashier number

The transaction record is returned to the merchant encrypted.

The sensitive data at the WEB Service resides in a protected zone.

3. Availability

Several matters have been taken in order to provide service continuity:

Usage of Cluster Servers

Continues replication to a DRP site.

BGP (dual) internet access from 2 different internet providers on the same URL.

Protection against DOS threat.

4. The Functions

4.1. *AuthCreditCardFull*

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This function is intended to authorize the credit card transaction **and return a transaction record** to the merchant following a positive authorization response. The merchant may save the returned records in his DB for future deposit.

The function's properties are:

Public int AuthCreditCardFull(
    string premiumUserName,
    string premiumPassword,
    string premiumCashierNum,
    string merchantNumber,
    string transactionDate_yyyyMMdd,
    string transactionTime_HHmm,
    string uniqueTransactionNumber_SixDigits,
    string track2,
    string cardNum,
    string expDate_YYMM,
    string amount,
    string cochavAmount,
    string transactionType,
    string creditTerms,
    string currency,
    string authNum,
    string code,
    string firstAmount,
    string nonFirstAmount,
    string numOfPayment,
    string sapakMutav,
    string sapakMutavNo,
    string uniqNum,
    string clubCode,
    string paramJ,
    string addData,
    string eci,
    string cvv2,
    string id,
    string cavvUcaf,
    string last4Digits,
    string transactionCurrency,
    string transactionAmount,
    out string TransactionRecord,
    out string ResultRecord)

The main parameters description is as follows:
All parameters must be supplied. For optional provide blank string -""

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Input Parameters

- **PremiumUserName** – get from G.B Premium.
- **PremiumPassword** – get from G.B Premium.
- **PremiumCashierNum** - get from G.B Premium.
- **MerchantNumber** (10 digits)
- **TransactionDate_yyyyMMdd** and **TransactionTime_Hmm** date and time of the transaction. For example: 20061023 and 1234.
  UniqueTransactionNumberForTransactionDate_SixDigits (optional) – six unique digits to identify this transaction.
  This number must be unique in any business date
  Trake2 (optional) – the magnetic stripe on the Card. May be omitted for "Card not Present" (or MOTO) transactions.
- **CardNum** (optional) – Number of credit card (up to 19 digits). Used for "Card not Present" (or MOTO) transactions.
- **ExpDateYYMM** – expiration date of the credit card in format YYMM
  For example: 1207.
- **Amount** –authorization request amount (up to 8 digits without decimal point (.) before cents)
- **CochavAmount –** (Optional), the discount Amount for Points or stars.
- **TransactionType** –
- '01'- for debit
- '51' for credit (refund).
- **CreditTerms -**
- '1' – standard credit,
- '2' – Isra/AMEX Credit, Visa "Adif" (including Diners and Leumicard,
- '3' - Debit Immediate,
- '4' – Differed (Club),
- '5' – Supper Credit,
- '6' – Credit/Credit in fix installments,
- '8' – Installments.
- '9' - Differed Installments (Club)
- **Currency** – Currency used in the authorization (one digit : '0' – ISO Foreign currency,
- '1' - shekel,
- '2' – dollar,
- 4 - $ installments,
- 8- Index installments
- **AuthNum** – (optional), The Authorization number (up to 7 digits) that was assigned by the Issuer on the pre authorization request.

- **Code -** transaction Code,
- **'00'** – card present,
- '01' – Self service (card present),

- '02' – Self Service (card present) at Petrol Station,
- '50' – MOTO (Card not present),
- '51' – Signature only (Customer present when Card not present) .

Optional Input Parameters

- **FirstAmount** for Installments
- **NonFirstAmount** for Installments
- **NumOfPayment** Num of Installments (on CreditTerms 8 or 9 may contain the number of installments after the first one, on CreditTerms 5 or 6 may contain the total number of installments including the first one.
- **SapakMutav** An indicator for Rav-Sapak/Rav-Mutav method.
- '0' – normal,
- '1' - Rav-Sapak,
- '2' – Rav-Mutav. The merchant needs the acquirer's consent to
- work in this configuration.
- **SapakMutavNo** the leading **MerchantNumber** when in Rav-Sapak method or the account number of the Mutav in Rav-Mutav method.
-
- **UniqNum** up to 19 Alphanumeric for the use of the merchant. This field is recorded in **ResultRecord** but is not transferred to the Credit Company. You can send only: English\Hebrew letters, [space], = , / (any other sign return error 300)

- **ClubCode –** (when CreditTerms = 4), 1 digit, 1-6 for Isracart, AMEX, Leumicard, 1-9 for C.A.L or Diners. The values need to be settled between the merchant and the acquirer.

- **ParamJ** – Operation Code (op-code):

    1 – Avoid submitting an Authorization Request. If the terminal risk management requires authorization request only **ResultRecord** is returned, otherwise, both **ResultRecord** and **TransactionRecord** is returned.

    2 – Transaction Check only. The terminal risk management process is performed and returns only **ResultRecord**.

    3 – Transaction Check only plus request for net <u>Ceiling amount</u>. The terminal risk management process is performed and returns only **ResultRecord**. The <u>Ceiling amount</u> is returned in the Transaction amount field.

    In above Cases the Status field in **ResultRecord** may contain error code or advisory code. Advisory codes (like 041-047) that explain the need for on-line authorization.

    4 – standard action**.** Perform terminal risk management and if needed submit an Authorization Request. **ResultRecord** is returned and if authorized (off-line or on-line) **TransactionRecord** is returned too.

    5 – Pre Authorization Request. Perform terminal risk management and if needed submit an Authorization Request. **ResultRecord** is returned and no **TransactionRecord** is returned.

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6 – Instruction to force submitting an Authorization Request. Perform terminal risk management and submit an Authorization Request. **ResultRecord** is returned and if authorized (on-line) **TransactionRecord** is returned too.

- **AddData**- - Additional data, up to 8 digits. Need special parameter authorization.
- **ECI** one digit indication of the usage of 3D secure (see appendix 3)

- **CVV2** – up to 4 digits from the back (or front for AMEX) of credit card for secondary card authentication)
- **Id** – Israeli ID number up to 9 digits or passport number for tourist.
- **CavvUcaf** - the result of operating the 3D secure method, originally 20 bytes after conversion to base 64
- **Last4Digits** – last 4 digits of the card number as seen visually on the card.
- **TransactionCurrency** – The currency of the transaction (numeric ISO code according to the convention with the Acquirer)
- **TransactionAmount** – The amount of the transaction (when using foreign currency ISO code).

Output parameters:

- **TransactionRecord** – Returned upon an authorized transaction. The record is encrypted and contains up to 300 bytes.
    In the case of a pre authorization request or when the transaction was not authorized, an empty string "" is returned.

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–   **ResultRecord** – a record that contains response information for the transaction (see appendix 1).

Return code
An Integer that contains the status of the operation (see Appendix 2)

Remarks:
    a. *All amounts are in 100th of an Israeli Shekel with no decimal point.*
    b. *In the case where the acquirer requires CVV2 and the merchant can't provide it he may enter the field with the following values:*
            0 – merchant did not supply CVV2.
            2 –CVV2 is unreadable on card
            9 – Card doesn't have CVV2.
    The acquirer will consider this when responding the authorization request and may still authorize is. If not, the response will be discussed in Appendix 1.

Appendix 1 – Result Record

Field Number	Filed name	From Position	Num of Characters	Remarks
1-	Status	1	3	See Appendix 2

2-	display & print instruction of " *Additional data* " field	4	1	0 – non 1 – Display & print in NIS 2 –Display only in NIS 3 – Print only in NIS 4 – Display & print in USD 5 – Display & print in EURO
3-	Card Number	5	19	Zero left padded
4-	Brand	24	1	0 – PL,1 – MC, 2 – Visa, 3 - Maestro
5-	Acquirer	25	1	1 – Isracart, 2 – C.A.L (ICC), 3 – Diners, 4 – AMEX, 6 - Leumicard
6-	Service Code	26	3	
7-	Parameter J	29	1	As in the input parameter
8-	Card Validity Date	30	4	MMYY
9-	CC response regarding ID	34	1	0 – ID missing, 1-valid,2 - not valid,3-not validated.
10-	CC response regarding CVV2	35	1	In relation to field 1 0- CVV2 missing,1-valid,2 - not valid,3-not validated.
11-	Transaction amount	36	8	In 100th of NIS without decimal point
12-	Additional data	44	8	Any data that the CC returns in accordance with filed # 2.
13-	Amount in points/stars	52	8	If inserted in the input parameter
14-	Issuer	60	1	1 – Isracart, 2 – C.A.L (ICC), 3 – Diners, 4 – AMEX, 5 - JCB, 6 - Leumicard
15-	Transaction type	61	2	00-card blocked,01-regular, 02-authorized debit, 03-forced off-line(un authorized), 51- credit (refund),52-canceled, 53-authorized credit
16-	Credit Terms	63	1	As in the input parameter
17-	UCAF/CAVV	64	1	the issuer response to the value supplied in the input parameter
18-	Currency	65	1	As entered
19-	Code	66	2	As entered
20-	Club Code	68	1	As entered
21-	Go On Line reason	69	1	"" – offline, 1-random, 2-ceiling, 3-PIN, 4-Service Code, 5-Pre Auth, 6-Block suspicious, 7-ZFL, 8-J6
22-	Authorizing Body	70	1	1-SHVA, 2-CC, 3-referal, 4-None
23-	Authorization number	71	7	Alphanumeric, needs to be referenced only if field 1 is 000.
24-	First Amount	78	8	As entered

25-	Non first Amount	86	8	As entered
26-	Num Of Payments	94	8	As entered
27-	File number	96	2	Automatic
28-	Unique Transaction Number	98	6	As entered or Automatic
29-	Card Name	104	15	
30-	Foreign Card	119	1	"" – Local, 1- Foreign
31-	UniqNum	120	19	As entered
32-	Terminator	139	2	CR/LF

The total length of this message is 140 bytes long.

Appendix 2 – return (status) codes

000	-	authorized.
001	-	Blocked card.
002	-	Stolen card.
003	-	Referral to credit company.
004	-	Refuse.

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005	-	Counterfeit.
006	-	CVV2 or ID is wrong.
007	-	ECI or CAVV/UCAF is wrong
008	-	Error while building Access key into Block list file.
009	-	Communication Error between Web server and Credit Card Company.
010	-	Program stopped by operator or unable to open COM PORT (WINDOWS)
011	-	No authorization for ISO Foreign Currency.
012	-	No authorization for brand with ISO Currency Code
013	-	Unauthorized Load/Unload operation.
014	-	Unsupported card.
015	–	Entered number does not mach magnetic stripe.
016	-	Additional data existence does not mach terminal authorizations.
017	–	Need to supply last 4 digits
019	-	INT_IN record shorter than 16 bytes.
020	-	No input file (INT_IN)
021	-	Negative file is absence or outdated, do transmit or else go ON-LINE.
022	-	No parameters or vectors file exist.
023	-	Dates file (DATA) missing
024	-	Init file (START) missing
025	-	Negative file too old (dates) , call SHVA
026	-	Negative file too old (generations , call SHVA
027		When no magnetic strip, need to define the transaction as , '50' – MOTO (Card not present), '51' – Signature only (Customer present when Card not present).
028	-	No leading Merchant Number when working as SapakMutav=1
029	-	No Mutav account Number when working as SapakMutav=2
030	-	SapakMutavNo entered for non SapakMutav terminal
032	-	Terminal has old transaction records, call SHVA
033	-	Bad card
034	-	Unauthorized card or transaction, on this terminal
035	-	Card not authorized for this credit terms.
036	-	Obsolete card
037	-	Installments miscalculation
038	-	Over ceiling for debit immediate card, go online
039	-	Wrong check digit
040	-	SapakMutavNo entered for non SapakMutav terminal
041	-	Above ceiling when op-code was remain offline (J1,J2,J3)
042	-	Block suspicious when op-code was remain offline (J1,J2,J3)
043	-	Random on line when op-code was remain offline (J1,J2,J3)
044	-	Terminal not authorized for pre authorization.
045	-	Terminal not authorized for forced authorization
046	-	Need authorization when op-code was remain offline (J1,J2,J3)
051	-	Invalid car number
052	-	Odometer not supplied
053	-	Fuel/gas parameters for non petrol station terminal
057	-	Missing ID
058	-	Missing CVV2
059	-	Missing ID and CVV2

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061	-	Card number Missing or in both Trak2 and CardNum
062	-	invalid TransactionType.
063	-	Invalid Code
064	-	Invalid CreditTerms
065	-	Invalid currency
066	-	FirstAmount or NonFirstAmount entered for non installments CreditTerms
067	-	NumOfPayment entered for non installments CreditTerms
068	-	Can't link to Index or Dollar for non installments CreditTerms
069	-	Magnetic stripe too short
079	-	ISO currency code not in table
080	-	Invalid CrediteTerms for ClubCode.
090	-	Cancel transaction not allowed, instead perform load transaction
091	-	Cancel transaction not allowed, instead perform unload transaction
092	-	Cancel transaction not allowed, instead perform refund transaction
099	-	Tran file is unavailable.
101	-	Terminal is not authorized by acquirer
106	-	Terminal is not authorized for debit immediate transactions
107	-	Amount more than 8 digits, need to split
108	-	Terminal is not authorized to force offline transactions
109	-	Terminal is not authorized to handle cards with for 587 service code
110	-	Terminal is not authorized for debit immediate cards
111	-	Terminal is not authorized for Installments transactions
112	-	Terminal is not authorized for Installments transactions when card not present
113	-	Terminal is not authorized for MOTO transactions
114	-	Terminal is not authorized for signature only transactions
115	-	Terminal is not authorized for foreign currency transactions or the transaction was refused
116	-	Terminal is not authorized for club code transactions
117	-	Terminal is not authorized for stars/points/miles discounted transactions
118	-	Terminal is not authorized for Isracredit transactions
119	-	Terminal is not authorized for AMEX credit (refund) transactions
120	-	Terminal is not authorized for Dollar linked transactions
121	-	Terminal is not authorized for INDEX linked transactions
122	-	Terminal is not authorized for INDEX linked transactions for foreign cards
123	-	Terminal is not authorized for stars/points/miles discounted transactions for the given credit terms.
124	-	Terminal is not authorized for credit (refund) with installments for Isracart card
125	-	Terminal is not authorized for credit (refund) with installments for AMEX card
126	-	Terminal is not authorized for the given club code
127	-	Terminal is authorized for debit immediate transactions to debit immediate cards only
128	-	Terminal is not authorized for VISA cards beginning with 3
129	-	Terminal is not authorized for credit (refund) transactions above ceiling
130	-	The card is not authorized for a club code transaction
131	-	The card is not authorized for a stars/points/miles discounted transaction

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132	-	The card is not authorized for a foreign currency transaction
133	-	The card is not valid for this terminal
134	-	Invalid card
135	-	The card is not authorized for a foreign currency transaction)vector1(
136	-	Invalid card (vector20)
137	-	Invalid card (vector21)
138	-	This card is not authorized by Isracart for installments transaction
139	-	Number of installments too big
140	-	Visa & Diners cards are not authorized for installments and club transaction
141	-	Invalid card (vector5)
142	-	Invalid card (service code not in vector 6)
143	-	Invalid card (vector 7)
144	-	Invalid card (service code not in vector12)
145	-	Invalid card (service code not in vector13)
146	-	Debit immediate card is not authorized for credit (refund) transaction
147	-	The card is not authorized for installment transaction (vector31)
148	-	The card is not authorized for card not present transaction (vector31)
149	-	The card is not authorized for card not present transaction (vector31)
150	-	Unauthorized credit terms for debit immediate card
151	-	Unauthorized credit terms for foreign card
152	-	Bad club code.
153	-	The card is not authorized for credit (refund) transaction (vector21)
154	-	The card is not authorized for debit immediate transaction (vector21)
155	-	Below minimal amount for credit (refund) transaction
156	-	Bad NumOfPayments
157	-	The card is not authorized for regular or credit (refund) transaction(ceiling 0)
158	-	The card is not authorized for card not present transaction (ceiling 0)
159	-	The card is not authorized for debit immediate transaction (ceiling 0)
160	-	The card is not authorized for card not present transaction (ceiling 0)
161	-	The card is not authorized for refund transaction (ceiling 0)
162	-	The card is not authorized for installment transaction (ceiling 0)
163	-	The foreign AMEX card is not authorized for installment transaction
164	-	The foreign JCB card is authorized for regular transaction only
165	-	Discount Amount in stars/points/miles exceeds transaction amount
166	-	Invalid loyalty card for terminal
167	-	A stars/points/miles transaction is not allowed in USD
168	-	The card is not authorized for a foreign(USD) currency transaction with the given credit terms.
169	-	Invalid credit (refund) transaction with other then regular credit terms code
170	-	Discount amount in stars/points/miles exceeds permission
171	-	A forced off line transaction is not allowed for debit immediate card
172	-	Failed to cancel the transaction
173	-	Duplicate transaction
174	-	Terminal is not authorized for an INDEX linked transaction for the given credit terms
175	-	Terminal is not authorized for an Dollar linked transaction for the given credit terms
176	-	Invalid card (vector1)

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177	-	Invalid credit terms for self service in petrol station
178	-	A credit (refund) transaction is not allowed in stars/points/miles
179	-	A credit (refund) transaction is not allowed in foreign currency
180	-	A card not present transaction is not allowed for a loyalty card
200	-	Application Error - Invalid data
250	-	Name, Password, or Merchant number is wrong
255	-	Exception
256	-	Unique Transaction Number is wrong (not unique for the given date)
257	-	Insufficient data received
260	-	One or more of the input fields are wrong (usually not numeric).
280	-	Timeout
298	-	Attempt to use production terminal in the test environment
300	-	Call G.B Premium.

4.2 **AuthCreditCardFullEx**

This function is expanded to the function AuthCreditCardFull and all the data that include in section 4.1 is valid also to this function including this addition.

string isUseRetry – variable (0/1) that send for double transaction check (double transaction – trying to pay with the same card the same amount in the sam day) .

1 – not allow double transaction (in case of double transaction return the data for the first executed transaction).

0 – allow double transaction.

string track2 – magnetic stripe \ use in keys by sending string [GUID] + "K".
sample for transaction with key: **K527ccca8-cdd9-46a8-97b7-9e5d6197d270**
if sending data in this field, the parameter "cardNum" and "expDate_YYMM" must sending empty
"".

Output parameters:

out string ValueEx1 – return the transaction time in structure MMddyyyyhhmmss.

out string ValueEx2 – return "0" or "1" for double transaction.
        0 – not double transaction or enable double transaction (isUseRetry = "0").
        1- double transaction (return the data for the first executed transaction).

```
out string ValueEx3 – if there is not transaction with key return "".
if the transaction execute with key the answer return in structure:
XXX – answer status function "RetainerCreditCardStorage"
CCCC – 4 last digit on the credit card.
MMYY – exp. Date.

Information that is returned for proper key (0) to the CC that last 4
digit are 4580 and exp.date 06 / 12, Return as : 00045800612

If the key is incorrect ,return the last 4 digit and exp.date as 0000, for
example:0045800000.

out string ValueEx4 - For future use, return "".
out string ValueEx5 - For future use, return "".
```

        Other variables are the same in function "AuthCreditCardFull".

```
Comments:
* Server of the tests does not know to identify double deals because he keep
  only the 4 last digit from the CC.
* Server of the tests return only the 4 last digit from CC and 9999 for key
  transaction.
* transaction in the keys - when get an error in the key, the function returns
  300, the reason of the error from the key receive from the value valueex3.
```

The function's properties are:
[C#]

```
public int AuthCreditCardFullEx(
        string isUseRetry,
        string premiumUserName,
        string premiumPassword,
        string premiumCashierNum,
        string merchantNumber,
        string transactionDate_yyyyMMdd,
        string transactionTime_HHmm,
        string uniqueTransactionNumber_SixDigits,
```

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```
string track2,
string cardNum,
string expDate_YYMM,
string amount,
string cochavAmount,
string transactionType,
string creditTerms,
string currency,
string authNum,
string code,
string firstAmount,
string nonFirstAmount,
string numOfPayment,
string sapakMutav,
string sapakMutavNo,
string uniqNum,
string clubCode,
string paramJ,
string addData,
string eci,
string cvv2,
string id,
string cavvUcaf,
string last4Digits,
string transactionCurrency,
string transactionAmount,
out string TransactionRecord,
out string ResultRecord,
out string ValueEx1,
out string ValueEx2,
out string ValueEx3,
out string ValueEx4,
out string ValueEx5)
```

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4.3 RemoveTransactionByVoucherIds

This function enables cancel until 100 transaction that were done, as long as was not out deposit for them,

The identification is executed by: User (G.B Premium), password (G.B Premium), terminal, cashier.

variable voucherids - till 100 voucher numbers, separated with commas and without spaces.

Possibilities of response (for every vaucher number that is sent):

0 - O.K (canceled the transaction)

1 - impossible to cancel (possible reasons : Was carried out deposit for last debit / was carried out an action of cancellation / do not exist a voucher number)

2 - got accepted an error – turn to G.B Premium.

3 – voucher number is incorrect.

300 - Identification of incorrect user

301 - were sent more than 100 voucher number / were not sent a voucher number.

* The information is returned as separated string in the commas as parallel response to the voucher numbers that were sent for cancellation.

The function's properties are:
[C#]

```
public int RemoveLastTransaction(
        string premiumUserName,
        string premiumPassword,
        string premiumCashierNum,
        string merchantNumber)
```

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4.3.1 RestoreAuthCreditCardFullResultByVoucherId

This function restore the ResultRecord (Int_Ot) that received from AuthCreditCardFull and AuthCreditCardFullEx functions by voucher number.

NOTE: only one voucher can send for every request in structure **FFCCCNNN**.

Possibilities of response:
0 – O.K
1 – voucher doesn't exist.
2 – error – can't get voucher data .
3 – wrong voucher number.
300 – error : Identification of incorrect user.
ResultRecord – if o.k (0), return INT_OT else return empty ""
If O.K : the function return date and time in structure **MMddyyyyhhmmss** in position 139 (length 14) additional to the INT_OT**.**

The function's properties are:
[C#]

```csharp
public int RestoreAuthCreditCardFullResultByVoucherId(
        string premiumUserName,
        string premiumPassword,
        string premiumCashierNum,
        string merchantNumber,
        string voucherId,
        out string ResultRecord)
```

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4.4 RetainerCreditCardStorage

This function serves to the storage and get credit cards for customers who works with retainer.

Possibility to use:
* ADD – saving credit card and exp.date and get key (GUID).
* GET - to sending key (GUID) and get credit card number and exp.date.
* DEL - a deletion of credit card by sending key (GUID).

• Use in this function need special authorizations from G.B Premium.
• Keys that in use type (GUID) in length 36, number of CC in length 19 digits.

Possibilities of response:
0 – o.k, saved / accepted / successfully erased CC data.
1 - error : Did not succeed to save / receive / erase CC data.
2 – incorrect CC number.
3 - incorrect exp.date.
4 - incorrect key (guid)
5 - do not exist a CC for key
6 - type of not working action
9 - does not exist a table for company
300 - Identification of incorrect user.

Values that are sent:
premiumUsername - user name
premiumPassword - password
premiumCashierNum - cashier number
merchantNumber - terminal number
actionType - values " add"|"Get"|"Del " only, type of action : ADD / GET / deletion of CC details .
CardOrKey - number of CC (19 characters of nils to left) for an action of saving / key for extraction .
expDate MMYY – CC exp.date - send only in the event of ADD in the structure MMYY.

Data of output:
ResultKey - returns GUID for saving action, in any other case returns as empty.
ResultCard - returns a number of CC for GET, in any other case returns as empty.
ResultExpDate - returns exp.date for GET, in any other case returns as empty.
ValueEx1 - For future use.
ValueEx2 - For future use.
ValueEx3 - For future use.

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Information about way to saving CC :
- **in case of exists number of CC and Exp.date identical in the system, returns a key that already exists and not adds the information that is sent.**
- **in case of exists a number of identical CC and Exp.date different - erases the old CC and save a new CC and returns a new key**
- **in case of new CC - save details of CC that is sent and returns a key GUID.**

The function's properties are:
[C#]

```csharp
public int RetainerCreditCardStorage(
        string premiumUserName,
        string premiumPassword,
        string premiumCashierNum,
        string merchantNumber,
        string actionType,
        string cardOrKey,
        string expDate_MMYY,
        out string ResultKey,
        out string ResultCard,
        out string ResultExpDate,
        out string ValueEx1,
        out string ValueEx2,
        out string ValueEx3)
```

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4.4 HKeva_ManageCustomer

This function serves to manage customer file who works with retainer system.

Possibility to use:

* ADD – add new customer into the retainer system.

* EDIT - edit customer details in the retainer system

* INFO – get information of customer from the retainer system.

• Use in this function need special authorizations from G.B Premium.

To create debit for customer after use this function, need to define the transactions in the function HKeva_ManageTrans.

Possibilities of response:

0 – o.k / accepted .

1 - error : incorrect user.

2 – error : incorrect action type.

3 - error : action failed.

4 - error : double customer number (for ADD).

5 - error : didn't found match for the customer identification (customer_number).

6 – updating field didn't send (for EDIT).

9 - error : does not exist a table for company

300 - error : Identification of incorrect user.

Values that are sent:

premiumUsername - user name

premiumPassword - password

premiumCashierNum - cashier number

merchantNumber - terminal number

actionType - values "ADD"|"EDIT"|"INFO" only, type of action : ADD / EDIT / get customer information.

customer_number – number \ customer identification (unique). This field can't be edit.

This parameters are optional (send null "" if not in use)

For "EDIT" – possible to send value only to the parameter that we want to edit, to saving the old value send it NULL "".

register_date_ddmmyyyy – registratin date – if send null "" , get the reception time date.

identity - id / passport number.

firstname

lastname

tel - phone number**.**

mobile – mobile phone number.

city

address

zipcode

email

customernote – free text, till 150 characters.

customermoreinfo - more info, till 250 characters.

status - possiblitys 1- active, 2- not active (if send null, get 1- active)

paramEx1 - not in use.

paramEx2 - not in use.
paramEx3 - not in use.

Data of output:
ResultMsg - returns user data, in case of error returns details about the error.
For "INFO" action return XML in structure :

```xml
<?xml version="1.0" encoding="utf-8" ?>
  <DATA>
    <CUSTOMER_INFO>
      <CUSTOMER_NUMBER>{ user Identification }</CUSTOMER_NUMBER>
      <REGISTER_DATE>{registration date}</REGISTER_DATE>
      <IDENTITY>{id}</IDENTITY>
      <FIRST_NAME>{ first name }</FIRST_NAME>
      <LAST_NAME>{last name}</LAST_NAME>
      <TEL>{phone number}</TEL>
      <MOBILE>{mobile phone number}</MOBILE>
      <CITY>{city}</CITY>
      <ADDRESS>{address}</ADDRESS>
      <ZIPCODE>{zipcode}</ZIPCODE>
      <EMAIL>{e-mail}</EMAIL>
      <CUSTOMER_NOTE>{note}</CUSTOMER_NOTE>
      <CUSTOMER_MORE_INFO>{more info}</CUSTOMER_MORE_INFO>
      <STATUS>{status: 0 | 1}</STATUS>
    </CUSTOMER_INFO>
  </DATA>
```

ValueEx1 – return warning as XML (warning did not stop the tranaction).
The XML structure:

```xml
<?xml version="1.0" encoding="utf-8" ?>
  <DATA>
    <ALERT>
      <CODE>101</CODE>
      <CUSTOMER_NUMBER>12345</CUSTOMER_NUMBER>
    </ALERT>
    ...
  </DATA>
```

Warning code (parameter "CODE")
101 – id existing in the system.
102 – phone number existing in the system.
103 – mobile phone number existing in the system.
104 – address & city existing in the system.
105 – e-mail existing in the system.

CUSTOMER_NUMBER – the Identification user number where the data existing for him.

ValueEx2 - For future use.
ValueEx3 - For future use.

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The function's properties are:

[C#]

```csharp
public int HKeva_ManageCustomer(
        string premiumUserName,
        string premiumPassword,
        string premiumCashierNum,
        string merchantNumber,
        string actionType,
        string customerNumber,
        string registerDate_DDMMYYYY,
        string identity,
        string firstName,
        string lastName,
        string tel,
        string mobile,
        string city,
        string address,
        string zipcode,
        string email,
        string customerNote,
        string customerMoreInfo,
        string status,
        string paramEx1,
        string paramEx2,
        string paramEx3,
        out string ResultMsg,
        out string ValueEx1,
        out string ValueEx2,
        out string ValueEx3
        )
```

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4.4 HKeva_ManageTrans

This function serves to manage customer file who works with retainer system.

Possibility to use:

* **ADD** – add new retainer for customer.
* **EDIT** - edit retainer details.
* **INFO** – get information of retainer from system.

• Use in this function need special authorizations from G.B Premium.
To create record for the retainer, first must to create the customer in the function "HKeva_ManageCustomer".

Possibilities of response:

0 – o.k / accepted .
1 - error : incorrect user.
2 – error : incorrect action type.
3 - error : action failed.
4 - error : double retainer record (for ADD).
5 - error : didn't found match for the customer identification (customer_number)**.**
6 – erroe : updating field didn't send (for EDIT).
7 – error : the parameter "transld" is not compatible to any record.
9 - error : does'nt exist a table for company
10 – error : missing data for "ADD" action (look " ResultMsg")
300 - error : Identification of incorrect user.

Values that are sent:
premiumUsername - user name
premiumPassword - password
premiumCashierNum - cashier number
merchantNumber - terminal number
actionType - values "ADD"|"EDIT"|"INFO" only,
            type of action : ADD / EDIT / get customer information.
customer_number – number \ customer identification (unique). <u>This field can't be edit.</u>

*For "EDIT" – possible to send value only to the parameter that we want to edit, to
  saving the old value send it NULL "".

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*for "INFO" send this parameters empty:

cardNumber – credit card number.
expDate_YYMM - expire date.
identity - id.
amount - amount to charge in agorot (1 nis = 100 agorot)
uniqNum - note that display in the reports of g.b premium (19 characters)
cardOwnerName - card holder full name.
authNum - authorization number (if existing)
authNumExp_DDMMYYYY – authorization expire date- if null get the value of the transaction date.
transactionType - value 01 for transaction \ value 51 for credit (refund).
paramJ – value 4 for transaction \ value 5 for authorization only.
Currency – 1 – ₪ \ 2 - $ \ 0 - ISO
currency_iso – currency code (only for ISO)
startDate_DDMMYYYY – date for the first transaction.
endDate_DDMMYYYY - date for the last transaction. If NULL insert the value 12122099
transactionDay_DD – transaction day – in structure 00.
                        Value 01-28 for transaction\ credit (refund) day in the month.
                        Value 99 for the last day in the month.

transMonth_1 – execution January. 1 – execute \ 0 – don't execute. NULL = 1
…
transMonth_12 - execution December. 1 – execute \ 0 – don't execute. NULL = 1

status – possibility: 1- active , 0 – not active. NULL=1
paramEx1 - **For future use**.
paramEx2 - **For future use**.
paramEx3 - **For future use**.

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Data of output:

ResultMsg - returns user data, in case of error returns details about the error.
For "INFO" action return XML in structure :

```xml
<?xml version="1.0" encoding="utf-8" ?>
- <DATA>
    - <CUSTOMER_INFO>
          <TRANS_ID>TRANS_ID</TRANS_ID>
          <CUSTOMER_NUMBER>CUSTOMER_NUMBER</CUSTOMER_NUMBER>
          <ADD_DATETIME>DATETIME</ADD_DATETIME>
          <LAST_ACTION_DATE>DATE</LAST_ACTION_DATE>
          <CARD_NUMBER>CARD_NUMBER (last 4 dig)</CARD_NUMBER>
          <CARD_DATE_YYMM>CARD_DATE_YYMM</CARD_DATE_YYMM>
          <IDENTITY>IDENTITY</IDENTITY>
          <AMOUNT_BY_AGOROT>AMOUNT_BY_AGOROT</AMOUNT_BY_AGOROT>
          <USER_DATA>USER_DATA</USER_DATA>
          <CARD_OWNER_NAME>CARD_OWNER_NAME</CARD_OWNER_NAME>
          <AUTH_NUM>AUTH_NUM</AUTH_NUM>
          <AUTH_EXP_DATE>DATE</AUTH_EXP_DATE>
          <TRANSACTION_TYPE>{01 | 51}</TRANSACTION_TYPE>
          <PARAM_J>{4 | 5}</PARAM_J>
          <CURRENCY>{0 | 1 | 2}</CURRENCY>
          <CURRENCY_ISO>ISO CODE</CURRENCY_ISO>
          <START_DATE>DATE</START_DATE>
          <END_DATE>DATE</END_DATE>
          <TRANSACTION_DAY>{01-28 OR 99}</TRANSACTION_DAY>
          <IS_TRANS_MONTH_1>{0 | 1}</IS_TRANS_MONTH_1>
          <IS_TRANS_MONTH_2>{0 | 1}</IS_TRANS_MONTH_2>
          <IS_TRANS_MONTH_3>{0 | 1}</IS_TRANS_MONTH_3>
          <IS_TRANS_MONTH_4>{0 | 1}</IS_TRANS_MONTH_4>
          <IS_TRANS_MONTH_5>{0 | 1}</IS_TRANS_MONTH_5>
          <IS_TRANS_MONTH_6>{0 | 1}</IS_TRANS_MONTH_6>
          <IS_TRANS_MONTH_7>{0 | 1}</IS_TRANS_MONTH_7>
          <IS_TRANS_MONTH_8>{0 | 1}</IS_TRANS_MONTH_8>
          <IS_TRANS_MONTH_9>{0 | 1}</IS_TRANS_MONTH_9>
          <IS_TRANS_MONTH_10>{0 | 1}</IS_TRANS_MONTH_10>
          <IS_TRANS_MONTH_11>{0 | 1}</IS_TRANS_MONTH_11>
          <IS_TRANS_MONTH_12>{0 | 1}</IS_TRANS_MONTH_12>
          <STATUS>{0 | 1}</STATUS>
    </CUSTOMER_INFO>
</DATA>
```

ValueEx1 - **For future use**.

ValueEx2 – return the Identification of the retainer record (for ADD)

ValueEx3 - **For future use**.

The function's properties are:

[C#]

```csharp
public int HKeva_ManageTrans(
        string premiumUserName,
        string premiumPassword,
        string premiumCashierNum,
        string merchantNumber,
        string actionType,
        string transId,
        string customerNumber,
        string cardNumber,
        string expDate_YYMM,
        string identity,
        string amount,
        string uniqNum,
        string cardOwnerName,
        string authNum,
        string authNumExp_DDMMYYYY,
        string transactionType,
        string paramJ,
        string currency,
        string currency_iso,
        string startDate_DDMMYYYY,
        string endDate_DDMMYYYY,
        string transactionDay_DD,
        string transMonth_1,
        string transMonth_2,
        string transMonth_3,
        string transMonth_4,
        string transMonth_5,
        string transMonth_6,
        string transMonth_7,
        string transMonth_8,
        string transMonth_9,
        string transMonth_10,
        string transMonth_11,
        string transMonth_12,
        string status,
        string paramEx1,
        string paramEx2,
        string paramEx3,
        out string ResultMsg,
        out string ValueEx1,
        out string ValueEx2,
        out string ValueEx3 )
```

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