1. Tại quầy – Tạo giao dịch



**Step 3:** Gọi Service để lấy thông tin khách hàng:

* Gọi Service1.getCustomerFromDienLuc() → Gọi Service EVNHCM\_SVC.LVBService.BankRequest(makh, madiemthu, BankID)
* Return:
  + dt[khachhang]
    - Makh, tenkh, diachikh, madl, masothuekh
  + dt[hoadon]
    - mahd, sotien, mota, tungay, denngay, giabieu, hoadonid, soho, magiaodich, DNTT, tiendien, tienthue, thuesuat, kyhieuhd, seryhd, HDDT, NCC

**Step 13:** Gọi Service để lấy thông tin tài khoản điện lực

* Gọi Service Service1.getCustAccFromFlexCube\_Acc(Account\_No)

**Step 15:** Lấy thông tin tài khoản điện lực

* dt[Account]
  + Select from table: sttm\_cust\_account c
  + Column: c.CUST\_AC\_NO, c.AC\_DESC, c.ACY\_AVL\_BAL, c.BRANCH\_CODE, BRANCH\_NAME, c.CUST\_NO
  + Where: c.CR\_GL like '4211%' OR C.cust\_no in ( select B.WALKIN\_CUSTOMER from sttm\_branch b where B.RECORD\_STAT = 'O') and c.RECORD\_STAT = 'O' and c.CUST\_AC\_NO = '" + Account\_No + "'
* sCIF = dt.Rows[0]["CUST\_NO"].ToString();
* dt[Customer]
  + Select from table: sttm\_customer " + DB\_Link + "s left join sttm\_cust\_personal p on s.customer\_no = p.customer\_no
  + Where: s.CUSTOMER\_NO = '" + sCIF + "' and record\_stat = 'O'

**Step 20:** Gọi Service để lấy thông tin tài khoản khách hàng

* Gọi Service Service1.getCustAccFromFlexCube(Customer\_No)

**Step 22:** Lấy thông tin tài khoản khách hàng:

* dt[customer]:
  + Select from table: sttm\_customer s left join sttm\_cust\_personal p on s.customer\_no = p.customer\_no
  + Column: s.CUSTOMER\_NO,s.CUSTOMER\_NAME1, s.UNIQUE\_ID\_VALUE,s.UDF\_1 NGAY\_CAP,s.UDF\_2 NOI\_CAP, P.TELEPHONE, s.ADDRESS\_LINE1 || s.ADDRESS\_LINE2 || s.ADDRESS\_LINE3 || s.ADDRESS\_LINE4 ADDRESS
  + Where: s.CUSTOMER\_NO = '" + Customer\_No + "' and record\_stat = 'O'
* dt[account]:
  + Select from table: sttm\_cust\_account c
  + Column: c.CUST\_AC\_NO,c.AC\_DESC,c.BRANCH\_CODE, ACY\_AVL\_BAL
  + Where: c.ACCOUNT\_CLASS IN ('V0CN30', 'V0TKCN') OR c.CR\_GL LIKE '4211%' OR c.cust\_no IN (SELECT B.WALKIN\_CUSTOMER FROM sttm\_branch b WHERE B.RECORD\_STAT = 'O')) AND c.RECORD\_STAT = 'O' AND c.CUST\_NO ='" + Customer\_No + "' " AND c.ACCOUNT\_CLASS IN ('V0CN30', 'V0CD26', 'V0CD45', 'V0CNTN', 'V0DNTN', 'V0ID44', 'VMWALK', 'V0TKCN') AND c.CCY = 'VND'"

**Step 28:** Gọi Service tạo giao dịch

* Gọi Service Service1.importTransaction()

**Step 30:** Lưu thông tin giao dịch

* Lấy số hóa đơn trong hệ thống, thêm hóa đơn vào database

Package: pkg\_EVN\_HCM.dlf\_getMaGiaoDich

Parameter:

p\_Maker\_ID  
 p\_HoaDon\_Info xmltype

Variables:

v\_Rcd\_HD  
 v\_Home\_Branch  
 v\_Sign  
 v\_Year  
 v\_Min\_ID  
 v\_Max\_ID  
 v\_current\_id  
 v\_Rcd\_Err  
 v\_Sys\_Date

* For r in xmltable('/HoaDon/HD\_Info')
  + if r.HDDT = 1
    - Insert into DLTBD\_HOADON\_INFO
      * Column: MAHD, MAKH, SOTIEN, MOTA, TUNGAY, DENNGAY, GIABIEU, HOADONID, SOHO, NGAYGIO, MAGIAODICH, BANKID, DAINHD, TRN\_CHANEL, YEAR, HOADON\_ID, DNTT, TIENDIEN, TIENTHUE, THUESUAT, KYHIEUHD, SERYHD, HDDT
      * Values: r.MAHD, trim(r.MAKH), r.SOTIEN, r.MOTA, r.TUNGAY, r.DENNGAY, r.GIABIEU, r.HOADONID, r.SOHO, v\_Sys\_Date, r.MaGiaoDich, c\_Bank\_ID, '1', c\_Chanel\_TELLER, v\_Year, SUBSTR(r.MaGiaoDich,1,8), r.DNTT, r.TIENDIEN, r.TIENTHUE, r.THUESUAT, r.KYHIEUHD, r.SERYHD,r.HDDT
      * Returning: rowid, MAHD, MAKH, SOTIEN, HOADONID, MAGIAODICH

into v\_Rcd\_HD.row\_id, v\_Rcd\_HD.MAHD, v\_Rcd\_HD.MAKH, v\_Rcd\_HD.SOTIEN, v\_Rcd\_HD.HOADONID, v\_Rcd\_HD.MAGIAODICH;

* + if r.MaHD like '%2'
    - Insert into DLTBD\_HOADON\_INFO
      * Column: MAHD, MAKH, SOTIEN, MOTA, TUNGAY, DENNGAY, GIABIEU, HOADONID, SOHO, NGAYGIO, BANKID, DAINHD, TRN\_CHANEL, DNTT, TIENDIEN, TIENTHUE, THUESUAT, KYHIEUHD, SERYHD, HDDT
      * Values: r.MAHD, trim(r.MAKH), r.SOTIEN,r.MOTA, r.TUNGAY,r.DENNGAY,r.GIABIEU,r.HOADONID,r.SOHO, v\_Sys\_Date, c\_Bank\_ID, '1', c\_Chanel\_TELLER, r.DNTT, r.TIENDIEN, r.TIENTHUE, r.THUESUAT, r.KYHIEUHD, r.SERYHD, r.HDDT
      * Returning: rowid, MAHD, MAKH, SOTIEN, HOADONID

into v\_Rcd\_HD.row\_id, v\_Rcd\_HD.MAHD, v\_Rcd\_HD.MAKH, v\_Rcd\_HD.SOTIEN, v\_Rcd\_HD.HOADONID;

* + Else
    - Insert into DLTBD\_HOADON\_INFO
      * Column: MAHD, MAKH, SOTIEN, MOTA, TUNGAY, DENNGAY, GIABIEU, HOADONID, SOHO, NGAYGIO, MAGIAODICH, BANKID,DAINHD, TRN\_CHANEL, YEAR, HOADON\_ID, DNTT, TIENDIEN, TIENTHUE, THUESUAT, KYHIEUHD, SERYHD, HDDT
      * Value: r.MAHD, trim(r.MAKH), r.SOTIEN,r.MOTA, r.TUNGAY,r.DENNGAY,r.GIABIEU,r.HOADONID,r.SOHO, v\_Sys\_Date, lpad(v\_Rcd\_HD.HOADON\_ID,10, '0') || v\_Sign, c\_Bank\_ID, '1', c\_Chanel\_TELLER, v\_Year, v\_Rcd\_HD.HOADON\_ID, r.DNTT,r.TIENDIEN, r.TIENTHUE, r.THUESUAT, r.KYHIEUHD, r.SERYHD, r.HDDT
      * Returning: rowid, MAHD, MAKH, SOTIEN, HOADONID, MAGIAODICH

into v\_Rcd\_HD.row\_id, v\_Rcd\_HD.MAHD, v\_Rcd\_HD.MAKH, v\_Rcd\_HD.SOTIEN, v\_Rcd\_HD.HOADONID, v\_Rcd\_HD.MAGIAODICH;

Return: v\_Rcd\_HD;

* Gọi package pkg\_EVN\_HCM.DLP\_importTransaction

Parameters:

p\_Maker\_ID  
 p\_Trn\_Desc  
 p\_KhachHang\_Info  
 p\_HoaDon\_Info  
 p\_HachToan\_Info  
 p\_Trn\_ID  
 p\_Err\_String

Variables:

v\_Home\_Branch  
 v\_Trn\_Dt  
 v\_Check  
 v\_Current\_ID  
 v\_Min\_ID  
 v\_Max\_ID  
 V\_Branch\_Code  
 V\_BRANCH  
 V\_COUNT

* Insert into DATBD\_TRANSACTION
  + Column: TRANSACTION\_ID, TRN\_BRN, TRN\_DESC, TRN\_DT, VALUE\_DT, TRN\_CODE, MODULE, EVENT\_CODE, RECORD\_STATUS, MAKER\_ID, MAKER\_DT, APP\_TYPE, LAST\_EVENT\_SEQ\_NO, XREF, COMMON\_USER
  + Vaulues: p\_Trn\_ID, v\_Home\_Branch, p\_Trn\_Desc, v\_Trn\_Dt, trunc(sysdate), 'LIQUID', 'DL', 'INIT', 'O', p\_Maker\_ID, sysdate, 'DOM\_WEB', 1, 'EBK'||loadESBMsgId(), c\_Common\_User
* For r in xmltable ('/Transaction/Post\_Info')
  + IF r.Ac\_No IS NULL //TH giao dịch TM
    - Insert into DLTBD\_TRANSACTION\_POST
    - Column: TRANSACTION\_ID, AC\_NO, AC\_CCY, AC\_BRANCH, CUST\_GL, DRCR\_IND, AMOUNT, AMOUNT\_TAG, TRN\_CODE, EVENT, EVENT\_SEQ\_NO
    - Values: p\_Trn\_ID, '101100001','VND', v\_Home\_Branch, 'G', R.DrCr\_Ind, R.Amount, R.Amount\_Tag,'LIQUID','INIT', 1
  + Else //TH giao dịch CK
    - Select from table STTM\_CUST\_ACCOUNT
      * Column: BRANCH\_CODE INTO V\_BRANCH
      * Where: CUST\_AC\_NO = R.AC\_NO AND RECORD\_STAT = 'O' AND AUTH\_STAT ='A';
    - Insert into table DLTBD\_TRANSACTION\_POST
      * Columns: TRANSACTION\_ID, AC\_NO, AC\_CCY, AC\_BRANCH, CUST\_GL, DRCR\_IND, AMOUNT, AMOUNT\_TAG, TRN\_CODE, EVENT, EVENT\_SEQ\_NO
      * Values: p\_Trn\_ID, r.Ac\_No,'VND', V\_BRANCH, 'A', R.DrCr\_Ind, R.Amount, R.Amount\_Tag, 'LIQUID','INIT', 1
* For r in xmltable (' /KhachHang')
  + Update table DLTB\_CUSTOMER\_INFO
    - Set: TENKH = r.TENKH,  
      DIACHIKH = r.DIACHIKH,  
      MADL = r.MADL  
      MASOTHUEKH = r.MASOTHUE  
      PHIEN = r.PHIEN  
      LOTRINH = r.LOTRINH  
      SOGHICSCMIS = r.SOGHICSCMIS  
      DANHSO = r.DANHSO  
      SOCONGTO = r.SOCONGTO  
      NGANHNGHE = r.NGANHNGHE
    - Where: MAKH = r.MAKH;
  + Nếu update ko được
    - Insert into table DLTB\_CUSTOMER\_INFO
      * Columns: MAKH, TENKH, DIACHIKH, MADL, MASOTHUEKH, PHIEN, LOTRINH, SOGHICSCMIS, DANHSO, SOCONGTO, NGANHNGHE
      * Values: trim(r.MAKH), r.TENKH, r.DIACHIKH, r.MADL, r.MASOTHUE, r.PHIEN, r.LOTRINH, r.SOGHICSCMIS, r.DANHSO, r.SOCONGTO, r.NGANHNGHE
* For r in xmltable (' /HoaDon/HD\_Info')
  + Update table DLTBD\_HOADON\_INFO h
    - Set: H.TRN\_ID = p\_Trn\_ID
    - Where: rowid = r.row\_id;

1. Duyệt đơn  
   

**Step 2:** Gọi Service lấy list giao dịch cần duyệt

* Gọi Service1. getTransactionsToAuth()

**Step 4:** Select list giao dịch cần duyệt

* Select from table: DATBD\_TRANSACTION d, STTM\_DATES" + DB\_Link + " e "
  + Columns: d.\*, NCC, TRN\_CODE\_NAME
  + Where: D.TRN\_BRN = '" + Branch\_Code + "'

and D.EVENT\_CODE = 'INIT'   
and d.MODULE in ('DL', 'EVNHCM', 'EVNCPC', 'EVNSPC', 'EVNHNI','EVNNPC')   
and d.TRN\_CODE = 'LIQUID'   
and D.CHECKER\_ID is null   
and D.RECORD\_STATUS = 'O'   
and D.AUTH\_STATUS is null   
and D.TRN\_DT = E.TODAY   
and D.TRN\_BRN = E.BRANCH\_CODE   
and D.MAKER\_DT >= SYSDATE - " + sDATE

* + Order by: D.TRANSACTION\_ID DESC
  + Return: dt

NCC = case d.MODULE WHEN 'DL' THEN 'EVNHCM' ELSE d.MODULE END

TRN\_CODE\_NAME = decode (( select ac\_no from dltbd\_transaction\_post where transaction\_id = d.transaction\_id and drcr\_ind = 'D' and event\_seq\_no =1), '101100001', 'Tiền mặt', 'Chuyển khoản')

**Step 8:** Gọi Service lấy chi tiết giao dịch

* Gọi Service1.getTransactionDetail(Trn\_ID)

**Step 10:** Select chi tiết giao dịch

* Select from table DATBD\_TRANSACTION d, DLTBD\_TRANSACTION\_POST p
  + Columns: p.\*, d.MAKER\_ID, d.TRN\_DT, d.TRN\_BRN, d.TRN\_CODE, d.MODULE, NAME
  + Where: to\_char(d.TRANSACTION\_ID) = " + Trn\_ID + "   
    and d.RECORD\_STATUS = 'O'   
    and NVL(p.TRN\_STATUS,'O') <> 'C'   
    and d.TRANSACTION\_ID = p.TRANSACTION\_ID   
    and d.LAST\_EVENT\_SEQ\_NO = p.EVENT\_SEQ\_NO
  + Order by: d.TRANSACTION\_ID

NAME = SELECT NAME FROM ASTB\_USER WHERE USERNAME = d.MAKER\_ID

**Step 14:** Gọi Service duyệt giao dịch

* Gọi Service1.authTransaction()

**Step 16 + 18:**

Gọipkg\_EVN\_HCM.DLP\_authTransaction

Parameter:

p\_Checker\_ID  
p\_Trn\_ID  
p\_NgayGio  
p\_Err\_String

Constant:

c\_DB\_Link  
 c\_txn\_code  
 c\_Function\_Name

Variable:

v\_Home\_Branch  
 v\_Trn\_Desc  
 v\_Maker\_ID  
 v\_Rcd\_Err  
 v\_Value\_Date  
 v\_Last\_Event\_Seq\_No  
 v\_MSGID  
 v\_Rcd\_Trn

1. Get Transaction to Authorize

* Update table DATBD\_TRANSACTION d
  + Set: d.AUTH\_STATUS = 'A',  
     d.CHECKER\_DT = sysdate,  
     d.CHECKER\_ID = p\_Checker\_ID
  + Where: D.TRANSACTION\_ID = p\_Trn\_ID   
     and D.TRN\_BRN = v\_Home\_Branch   
     and D.EVENT\_CODE = 'INIT'  
     and D.RECORD\_STATUS = 'O'   
     and D.AUTH\_STATUS is null   
     and D.CHECKER\_ID is null
* Select from table DATBD\_TRANSACTION d
  + Columns: d.TRN\_DESC, d.MAKER\_ID, d.LAST\_EVENT\_SEQ\_NO
  + Where: D.TRANSACTION\_ID = p\_Trn\_ID   
     and D.TRN\_BRN = v\_Home\_Branch   
     and D.EVENT\_CODE = 'INIT'  
     and D.RECORD\_STATUS = 'O'   
     and D.AUTH\_STATUS is null   
     and D.CHECKER\_ID is null
  + Returning into: v\_Trn\_Desc, v\_Maker\_ID, v\_Last\_Event\_Seq\_No

1. Process authorize

Variable:

v\_lc\_SQL\_CMD  
 v\_lc\_Trn\_Ref\_No  
 v\_lc\_source\_code

v\_lc\_Cr\_Ac\_No  
 v\_lc\_Cr\_Ac\_Branch  
 v\_lc\_Cr\_Ac\_Ccy  
 v\_lc\_Cr\_Amount

v\_lc\_Db\_Ac\_No  
 v\_lc\_Db\_Ac\_Branch

v\_lc\_Db\_Ac\_Ccy  
 v\_lc\_DB\_Amount

* Get post info

//Tài khoản ghi nợ

* + Select from table DLTBD\_TRANSACTION\_POST p
    - Columns: P.AC\_NO,P.AC\_BRANCH,P.AC\_CCY,P.AMOUNT
    - Returning into: v\_lc\_Db\_Ac\_No,v\_lc\_Db\_Ac\_Branch, v\_lc\_Db\_Ac\_Ccy, v\_lc\_DB\_Amount

//Tài khoản ghi có

* + Select from table DLTBD\_TRANSACTION\_POST p
    - Columns: P.AC\_NO,P.AC\_BRANCH,P.AC\_CCY,P.AMOUNT
    - Returning into v\_lc\_Cr\_Ac\_No,v\_lc\_Cr\_Ac\_Branch, v\_lc\_Cr\_Ac\_Ccy, v\_lc\_Cr\_Amount
* Post to CoreBanking
  + if v\_lc\_Db\_Ac\_No like '1011%' //TM

v\_lc\_source\_code := 'THCK';

v\_lc\_SQL\_CMD:= 'select '|| '''' || v\_lc\_Cr\_Ac\_No || '''' || ','

|| '''' || v\_lc\_Cr\_Ac\_Branch || '''' || ','  
 || '''' || v\_lc\_Db\_Ac\_No || '''' || ','  
 || '''' || v\_lc\_Db\_Ac\_Branch || '''' || ',';

v\_lc\_SQL\_CMD:= v\_lc\_SQL\_CMD || '''' || v\_lc\_Db\_Ac\_Ccy || '''' || ','

|| v\_lc\_DB\_Amount || ','

|| '''' || v\_Trn\_Desc || '''' || ','

|| '''' || v\_lc\_source\_code || '''' || ','

|| '''' || c\_txn\_code || '''' || ','

|| '''' || upper(v\_Maker\_ID) || '''' || ','

|| '''' || c\_Common\_User || '''' || ' '

|| 'from dual '

|| 'where rownum = 1 ';

* + else //CK

v\_lc\_source\_code := 'CKCK';

v\_lc\_SQL\_CMD:= 'select '|| '''' || v\_lc\_Db\_Ac\_No || '''' || ','

|| '''' || v\_lc\_Db\_Ac\_Branch || '''' || ','

|| '''' || v\_lc\_Cr\_Ac\_No || '''' || ','

|| '''' || v\_lc\_Cr\_Ac\_Branch || '''' || ',';

v\_lc\_SQL\_CMD:= v\_lc\_SQL\_CMD || '''' || v\_lc\_Db\_Ac\_Ccy || '''' || ','

|| v\_lc\_DB\_Amount || ','

|| '''' || v\_Trn\_Desc || '''' || ','

|| '''' || v\_lc\_source\_code || '''' || ','

|| '''' || c\_txn\_code || '''' || ','

|| '''' || null || '''' || ','

|| '''' ||c\_Common\_User || '''' || ' '

|| 'from dual '

|| 'where rownum = 1 ';

* Gọi package ebank.PKG\_CORE\_SWITCH.PR\_RT\_TRANSFER\_V3 post to CoreBanking
* If substr(v\_Rcd\_Err.MESSAGE,3,2) <> '00'
  + if (substr(v\_Rcd\_Err.MESSAGE,3,2) = '80' or substr(v\_Rcd\_Err.MESSAGE,3,2) = '90' or substr(v\_Rcd\_Err.MESSAGE,3,2) = '91')
    - Update table: DLTBD\_TRANSACTION\_POST p
      * Set: P.TRN\_STATUS = 'S',  
         P.POST\_DATE = sysdate,  
         P.CORE\_TRN\_DT = (select today from sttm\_dates where branch\_code = v\_Home\_Branch)
    - Update table: DLTBD\_HOADON\_INFO b
      * Set: B.NGAYGIO = to\_date(p\_NgayGio, 'mm/dd/yyyy hh:mi:ss am')  
         B.Time\_Out = v\_Rcd\_Trn.XREF
    - v\_Rcd\_Err.ERROR\_CODE := '1'||substr(p\_Err\_String,3,2);
    - v\_Rcd\_Err.ERROR\_TYPE := pkg\_Dom\_Util.c\_gl\_Debug\_Msg;
  + else
    - v\_Rcd\_Err.ERROR\_CODE := '0099';
    - v\_Rcd\_Err.ERROR\_TYPE := pkg\_Dom\_Util.c\_gl\_Sys\_Err;
* else
  + update table: datbd\_transaction d
    - Set: d.AUTH\_STATUS = 'A',  
       d.CHECKER\_DT = sysdate,  
       d.CHECKER\_ID = p\_Checker\_ID  
       d.RECORD\_STATUS = 'O'  
       d.CORE\_REF\_NO = v\_lc\_Trn\_Ref\_No
  + Update table: DLTBD\_TRANSACTION\_POST p
    - Set: P.TRN\_STATUS = 'S'  
       P.POST\_DATE = sysdate  
       P.CORE\_REF\_NO = v\_lc\_Trn\_Ref\_No  
       P.CORE\_TRN\_DT = (select today from sttm\_dates where branch\_code = v\_Home\_Branch
  + Update table: DLTBD\_HOADON\_INFO b
    - Set: B.NGAYGIO = to\_date (p\_NgayGio , 'mm/dd/yyyy hh:mi:ss am')

**Step 19:** Gọi Service gạch nợ:

* Gọi LVBService.BankRequest()

**Step 24:** Update Database đã gạch nợ

* Update table: DLTBD\_HOADON\_INFO
* Nếu EVN return gạch nợ thành công
  + Update Column: TRANGTHAIGD, TRANGTHAIHUYGD, NGAYGIO
  + Value: TRANGTHAIGD = 0, TRANGTHAIHUYGD = 9, NGAYGIO = Date.Now()
* Nếu EVN return False
  + Update Column: TRANGTHAIGD, TRANGTHAIHUYGD
  + Value: TRANGTHAIGD = 1, TRANGTHAIHUYGD = 9
* Nếu xảy ra Exception
  + Update Column: TRANGTHAIGD, TRANGTHAIHUYGD, NGAYGIO
  + Value: TRANGTHAIGD = 2, TRANGTHAIHUYGD = 9, NGAYGIO = Date.Now()

1. Gạch nợ bổ sung



**Step 2:** Gọi Service lấy hóa đơn cần gạch nợ bổ sung

* Gọi Service1.getHoaDonGachNoBoSung(Branch\_code, Checker\_ID)

**Step 4:** Select hóa đơn cần gạch nợ bổ sung

* Select from table DLTBD\_HOADON\_INFO b
  + Columns: b.MAKH, b.MAHD, b.HOADONID, b.SOTIEN, b.NGAYGIO, b.TRANGTHAIGD, t.MAKER\_ID, t.TRN\_BRN, t.TRANSACTION\_ID, t.module, module\_name

**Step 8:** Gọi Service gạch nợ bổ sung

* Gọi Service1.GachNoBoSungAll() → LVBService.BankRequest()

**Step 14:** Update trạng thái giao dịch

* Update table: DLTBD\_HOADON\_INFO
* Nếu EVN return gạch nợ thành công
  + Update Column: TRANGTHAIGD, TRANGTHAIHUYGD, NGAYGIO
  + Value: TRANGTHAIGD = 0, TRANGTHAIHUYGD = 9, NGAYGIO = Date.Now()
* Nếu EVN return False
  + Update Column: TRANGTHAIGD, TRANGTHAIHUYGD
  + Value: TRANGTHAIGD = 1, TRANGTHAIHUYGD = 9
* Nếu xảy ra Exception
  + Update Column: TRANGTHAIGD, TRANGTHAIHUYGD, NGAYGIO
  + Value: TRANGTHAIGD = 2, TRANGTHAIHUYGD = 9, NGAYGIO = Date.Now()

1. Đăng ký thu tự động



**Step 2:** Gọi Service lấy thông tin khách hàng

* Gọi Service1.getCustomerFromDienLuc(sMaKH, sMaDiemThu, sNCC)

→ Gọi EVNHCM\_SVC.LVBService.BankRequest(MaKH, MaDiemThu, BankID)

* Return:
  + dt[khachhang]
    - Makh, tenkh, diachikh, madl, masothuekh
  + dt[hoadon]
    - mahd, sotien, mota, tungay, denngay, giabieu, hoadonid, soho, magiaodich, DNTT, tiendien, tienthue, thuesuat, kyhieuhd, seryhd, HDDT, NCC

**Step 8:** Gọi Service check auto regist

* Gọi Service1.CheckAutoRegisterToCreat(String MaKH, String MaDL)

**Step 10:** Check auto regist

* Select \* from
  + Select from DLTBD\_MN\_AUTO\_REGISTER R
    - Columns: R.\*
    - Where: RECORD\_STAT <> 'C'  
       and (Close\_DT is null or Close\_DT>= sysdate
  + Union all select from DLTBD\_MB\_AUTO\_REGISTER R
    - Columns: R.\*
    - Where: RECORD\_STAT <> 'C'  
       and (Close\_DT is null or Close\_DT>= sysdate
  + Union all select from DLTBD\_AUTO\_REGISTER R
    - Columns: R.\*
    - Where: RECORD\_STAT <> 'C'  
       and (Close\_DT is null or Close\_DT>= sysdate
  + Union all select from DLTBD\_HN\_AUTO\_REGISTER R
    - Columns: R.\*
    - Where: RECORD\_STAT <> 'C'  
       and (Close\_DT is null or Close\_DT>= sysdate
  + Union all select from DLTBD\_MT\_AUTO\_REGISTER R
    - Columns: R.\*
    - Where: RECORD\_STAT <> 'C'  
       and (Close\_DT is null or Close\_DT>= sysdate

**Step 14:** Gọi Service lấy thông tin tài khoản khách hàng

* Gọi Service Service1.getCustAccFromFlexCube(Customer\_No)

**Step 16:** Lấy thông tin tài khoản khách hàng

* dt[customer]:
  + Select from table: sttm\_customer s left join sttm\_cust\_personal p on s.customer\_no = p.customer\_no
  + Column: s.CUSTOMER\_NO,s.CUSTOMER\_NAME1, s.UNIQUE\_ID\_VALUE,s.UDF\_1 NGAY\_CAP,s.UDF\_2 NOI\_CAP, P.TELEPHONE, s.ADDRESS\_LINE1 || s.ADDRESS\_LINE2 || s.ADDRESS\_LINE3 || s.ADDRESS\_LINE4 ADDRESS
  + Where: s.CUSTOMER\_NO = '" + Customer\_No + "' and record\_stat = 'O'
* dt[account]:
  + Select from table: sttm\_cust\_account c
  + Column: c.CUST\_AC\_NO,c.AC\_DESC,c.BRANCH\_CODE, ACY\_AVL\_BAL
  + Where: c.ACCOUNT\_CLASS IN ('V0CN30', 'V0TKCN') OR c.CR\_GL LIKE '4211%' OR c.cust\_no IN (SELECT B.WALKIN\_CUSTOMER FROM sttm\_branch b WHERE B.RECORD\_STAT = 'O')) AND c.RECORD\_STAT = 'O' AND c.CUST\_NO ='" + Customer\_No + "' " AND c.ACCOUNT\_CLASS IN ('V0CN30', 'V0CD26', 'V0CD45', 'V0CNTN', 'V0DNTN', 'V0ID44', 'VMWALK', 'V0TKCN') AND c.CCY = 'VND'"

**Step 20:** Gọi Service thêm đăng ký thu tự động

* Gọi Service1. ImportAutoRegister()

**Step 22:** Thêm đăng ký thu tự động

Package: pkg\_EVN\_HCM.DLP\_IMPORTAUTOREGISTER

Parameter:

p\_MAKER\_ID  
p\_MAKH  
p\_AC\_NO  
p\_PAY\_DT  
p\_RECEIVE\_SMS  
p\_RECEIVE\_EMAIL  
p\_PHONE  
p\_EMAIL  
p\_REG\_BRANCH  
p\_REG\_DATE  
p\_CLOSE\_DATE  
p\_PRINT\_BILL  
p\_KHACHHANG\_INFO xmltype  
p\_Err\_String

Variable:

v\_Home\_Branch  
v\_Count

* Insert into table DLTBD\_AUTO\_REGISTER
  + Columns: MAKH, CIF, AC\_NO, PAY\_DT, RECEIVE\_SMS, RECEIVE\_EMAIL, PHONE, EMAIL, REG\_BRANCH, REG\_DT, CLOSE\_DT, MAKER\_ID, MAKER\_DT, RECORD\_STAT, LAST\_AUDIT\_VER, PRINT\_BILL
  + Values: upper(p\_MAKH), p\_CIF, p\_AC\_NO, p\_PAY\_DT, p\_RECEIVE\_SMS, p\_RECEIVE\_EMAIL, p\_PHONE, p\_EMAIL, p\_REG\_BRANCH, to\_date(NVL(p\_REG\_DATE, sysdate), 'dd/mm/yyyy'), to\_date(p\_CLOSE\_DATE, 'dd/mm/yyyy'), p\_MAKER\_ID, SYSDATE, 'I', 0, p\_PRINT\_BILL
* Insert into table DLTBD\_AUTO\_REGISTER\_HIST
  + Columns: MAKH, CIF, AC\_NO, PAY\_DT, RECEIVE\_SMS, RECEIVE\_EMAIL, PHONE, EMAIL, REG\_BRANCH, REG\_DT, CLOSE\_DT, MAKER\_ID, MAKER\_DT, RECORD\_STAT, AUDIT\_VER, PRINT\_BILL
  + Values: upper(p\_MAKH), p\_CIF, p\_AC\_NO, p\_PAY\_DT, p\_RECEIVE\_SMS, p\_RECEIVE\_EMAIL, p\_PHONE, p\_EMAIL, p\_REG\_BRANCH, to\_date(NVL(p\_REG\_DATE, sysdate), 'dd/mm/yyyy'), to\_date(p\_CLOSE\_DATE, 'dd/mm/yyyy'), p\_MAKER\_ID, SYSDATE, 'I', 0, p\_PRINT\_BILL
* For r in xmltable (' /KhachHang')
  + Update table DLTB\_CUSTOMER\_INFO
    - Set: TENKH = r.TENKH

, DIACHIKH = r.DIACHIKH

, MADL = r.MADL

, MASOTHUEKH = r.MASOTHUE

, PHIEN = r.PHIEN

, LOTRINH = r.LOTRINH

, SOGHICSCMIS = r.SOGHICSCMIS

, DANHSO = r.DANHSO

, SOCONGTO = r.SOCONGTO

, NGANHNGHE = r.NGANHNGHE

* + Nếu ko update được
    - Insert into table DLTB\_CUSTOMER\_INFO
    - Columns: MAKH, TENKH, DIACHIKH, MADL, MASOTHUEKH, PHIEN, LOTRINH, SOGHICSCMIS, DANHSO, SOCONGTO, NGANHNGHE
    - Values: trim(r.MAKH), r.TENKH, r.DIACHIKH, r.MADL, r.MASOTHUE, r.PHIEN, r.LOTRINH, r.SOGHICSCMIS, r.DANHSO, r.SOCONGTO, r.NGANHNGHE

1. Duyệt đăng ký thu tự động



**Step 2:** Gọi Service lấy list đăng ký

* Gọi Service1. getData4AuthAutoRegist(Checker\_ID, Checker\_BranchID)

**Step 4:** Select list đăng ký

* Select from: DLTBD\_AUTO\_REGISTER A
  + Columns: A.ROWID ROW\_ID, A.\*, RECORD\_STAT\_DESC, 'EVNHCM' NCC
  + Where: A.CHECKER\_ID IS NULL  
     AND (A.RECORD\_STAT = 'I' OR RECORD\_STAT='C')  
     AND A.MAKER\_ID <> '" + Checker\_ID + "'  
     AND EXISTS(SELECT 1 FROM LVBSMS.ASTB\_USER U WHERE U.USERNAME = A.MAKER\_ID AND U.HOME\_BRANCH = '" + Checker\_BranchID + "')
* Union all Select from DLTBD\_MT\_AUTO\_REGISTER
  + Columns: A.ROWID ROW\_ID, A.\*, RECORD\_STAT\_DESC, 'EVNCPC' NCC
  + Where: A.CHECKER\_ID IS NULL  
     AND (A.RECORD\_STAT = 'I' OR RECORD\_STAT='C')  
     AND A.MAKER\_ID <> '" + Checker\_ID + "'  
     AND EXISTS(SELECT 1 FROM LVBSMS.ASTB\_USER U WHERE U.USERNAME = A.MAKER\_ID AND U.HOME\_BRANCH = '" + Checker\_BranchID + "')
* Union all Select from DLTBD\_MB\_AUTO\_REGISTER
  + Columns: A.ROWID ROW\_ID, A.\*, RECORD\_STAT\_DESC, 'EVNCPC' NCC
  + Where: A.CHECKER\_ID IS NULL  
     AND (A.RECORD\_STAT = 'I' OR RECORD\_STAT='C')  
     AND A.MAKER\_ID <> '" + Checker\_ID + "'  
     AND EXISTS(SELECT 1 FROM LVBSMS.ASTB\_USER U WHERE U.USERNAME = A.MAKER\_ID AND U.HOME\_BRANCH = '" + Checker\_BranchID + "')
* Union all Select from DLTBD\_HN\_AUTO\_REGISTER
  + Columns: A.ROWID ROW\_ID, A.\*, RECORD\_STAT\_DESC, 'EVNCPC' NCC
  + Where: A.CHECKER\_ID IS NULL  
     AND (A.RECORD\_STAT = 'I' OR RECORD\_STAT='C')  
     AND A.MAKER\_ID <> '" + Checker\_ID + "'  
     AND EXISTS(SELECT 1 FROM LVBSMS.ASTB\_USER U WHERE U.USERNAME = A.MAKER\_ID AND U.HOME\_BRANCH = '" + Checker\_BranchID + "')
* Union all Select from DLTBD\_MN\_AUTO\_REGISTER
  + Columns: A.ROWID ROW\_ID, A.\*, RECORD\_STAT\_DESC, 'EVNCPC' NCC
  + Where: A.CHECKER\_ID IS NULL  
     AND (A.RECORD\_STAT = 'I' OR RECORD\_STAT='C')  
     AND A.MAKER\_ID <> '" + Checker\_ID + "'  
     AND EXISTS(SELECT 1 FROM LVBSMS.ASTB\_USER U WHERE U.USERNAME = A.MAKER\_ID AND U.HOME\_BRANCH = '" + Checker\_BranchID + "')

RECORD\_STAT\_DESC = DECODE(NVL(LAST\_AUDIT\_VER,0), 0, 'Tạo mới','Chỉnh sửa'), 'Đóng')

**Step 8:** Gọi Service duyệt đăng ký

* Gọi Service1.authAutoRegistAll(MaKH, Checker\_ID, NCC)

**Step 10:**

Package:pkg\_EVN\_HCM.DLP\_authAutoRegist

Parameters:

p\_MaKH,  
p\_Checker\_ID,  
p\_Err\_String

Variables:

c\_Function\_Name   
v\_Home\_Branch  
v\_Status  
v\_Rcd\_Err

* Update table DLTBD\_AUTO\_REGISTER A
  + Set: A.CHECKER\_DT = sysdate,  
     A.CHECKER\_ID = p\_Checker\_ID,  
     A.RECORD\_STAT = DECODE( A.RECORD\_STAT, 'I', 'O', RECORD\_STAT)
  + Where: A.MAKH = p\_MaKH  
     and A.MAKER\_ID <> p\_Checker\_ID

1. Hạch toán hóa đơn tự động



**Step 2:** Gọi Service lấy list khách hàng đã đăng ký thanh toán tự động

* Gọi Service1.getCustomerForAutoPay(pay\_day, branch\_code, maxRow.ToString(), PageNum)

**Step 4:** Select list khách hàng

* Select \* from Select List\_KH.\*, rownum as Rn
  + From Select pay\_list.\*, ACY\_AVL\_BAL
    - From Pay\_list

Pay\_list = Select A.\*, 'EVNHCM' NCC, HDDT  
 From DLTBD\_AUTO\_REGISTER A  
 Where A.REG\_BRANCH = '" + reg\_branch + @"'  
 and A.RECORD\_STAT = 'O'  
 and A.CHECKER\_ID is not null  
 and trunc(sysdate) between trunc(NVL(A.REG\_DT, sysdate)) and NVL(trunc(A.CLOSE\_DT), to\_date('09/09/2099', 'dd/mm/yyyy'))  
 and case when A.PAY\_DT >   
 to\_number(to\_char(LAST\_DAY(to\_date('" + pay\_day +   
 @"','dd/mm/yyyy')),'dd'))   
 then LAST\_DAY(to\_date('" + pay\_day + @"','dd/mm/yyyy'))

else to\_date(lpad(A.PAY\_DT,2,'0') || '/' || substr('" + pay\_day + @"',4,7),'dd/mm/yyyy')

end

between

DECODE(to\_char(to\_date('" + pay\_day +   
 @"','dd/mm/yyyy'),'D'),'2', to\_date('" + pay\_day +   
 @"','dd/mm/yyyy')-1 , to\_date('" + pay\_day +   
 @"','dd/mm/yyyy') )   
 and to\_date('" + pay\_day + @"','dd/mm/yyyy')

* Union all Select pay\_list.\*, ACY\_AVL\_BAL
  + From Pay\_list
* Pay\_list = Select A.\*, ' EVNCPC' NCC, HDDT  
   From DLTBD\_MT\_AUTO\_REGISTER A  
   Where A.REG\_BRANCH = '" + reg\_branch + @"'  
   and A.RECORD\_STAT = 'O'  
   and A.CHECKER\_ID is not null  
   and trunc(sysdate) between trunc(NVL(A.REG\_DT, sysdate)) and NVL(trunc(A.CLOSE\_DT), to\_date('09/09/2099', 'dd/mm/yyyy'))  
   and case when A.PAY\_DT >   
   to\_number(to\_char(LAST\_DAY(to\_date('" + pay\_day +   
   @"','dd/mm/yyyy')),'dd'))   
   then LAST\_DAY(to\_date('" + pay\_day + @"','dd/mm/yyyy'))

else to\_date(lpad(A.PAY\_DT,2,'0') || '/' || substr('" + pay\_day + @"',4,7),'dd/mm/yyyy')

end

between

DECODE(to\_char(to\_date('" + pay\_day +   
 @"','dd/mm/yyyy'),'D'),'2', to\_date('" + pay\_day +   
 @"','dd/mm/yyyy')-1 , to\_date('" + pay\_day +   
 @"','dd/mm/yyyy') )   
 and to\_date('" + pay\_day + @"','dd/mm/yyyy')

* Union all Select pay\_list.\*, ACY\_AVL\_BAL
  + From Pay\_list
* Pay\_list = Select A.\*, ' EVNCPC' NCC, HDDT  
   From DLTBD\_MB\_AUTO\_REGISTER A  
   Where A.REG\_BRANCH = '" + reg\_branch + @"'  
   and A.RECORD\_STAT = 'O'  
   and A.CHECKER\_ID is not null  
   and trunc(sysdate) between trunc(NVL(A.REG\_DT, sysdate)) and NVL(trunc(A.CLOSE\_DT), to\_date('09/09/2099', 'dd/mm/yyyy'))  
   and case when A.PAY\_DT >   
   to\_number(to\_char(LAST\_DAY(to\_date('" + pay\_day +   
   @"','dd/mm/yyyy')),'dd'))   
   then LAST\_DAY(to\_date('" + pay\_day + @"','dd/mm/yyyy'))

else to\_date(lpad(A.PAY\_DT,2,'0') || '/' || substr('" + pay\_day + @"',4,7),'dd/mm/yyyy')

end

between

DECODE(to\_char(to\_date('" + pay\_day +   
 @"','dd/mm/yyyy'),'D'),'2', to\_date('" + pay\_day +   
 @"','dd/mm/yyyy')-1 , to\_date('" + pay\_day +   
 @"','dd/mm/yyyy') )   
 and to\_date('" + pay\_day + @"','dd/mm/yyyy')

* Union all Select pay\_list.\*, ACY\_AVL\_BAL
  + From Pay\_list
* Pay\_list = Select A.\*, ' EVNCPC' NCC, HDDT  
   From DLTBD\_HN\_AUTO\_REGISTER A  
   Where A.REG\_BRANCH = '" + reg\_branch + @"'  
   and A.RECORD\_STAT = 'O'  
   and A.CHECKER\_ID is not null  
   and trunc(sysdate) between trunc(NVL(A.REG\_DT, sysdate)) and NVL(trunc(A.CLOSE\_DT), to\_date('09/09/2099', 'dd/mm/yyyy'))  
   and case when A.PAY\_DT >   
   to\_number(to\_char(LAST\_DAY(to\_date('" + pay\_day +   
   @"','dd/mm/yyyy')),'dd'))   
   then LAST\_DAY(to\_date('" + pay\_day + @"','dd/mm/yyyy'))

else to\_date(lpad(A.PAY\_DT,2,'0') || '/' || substr('" + pay\_day + @"',4,7),'dd/mm/yyyy')

end

between

DECODE(to\_char(to\_date('" + pay\_day +   
 @"','dd/mm/yyyy'),'D'),'2', to\_date('" + pay\_day +   
 @"','dd/mm/yyyy')-1 , to\_date('" + pay\_day +   
 @"','dd/mm/yyyy') )   
 and to\_date('" + pay\_day + @"','dd/mm/yyyy')

* Union all Select pay\_list.\*, ACY\_AVL\_BAL
  + From Pay\_list
* Pay\_list = Select A.\*, ' EVNCPC' NCC, HDDT  
   From DLTBD\_MN\_AUTO\_REGISTER A  
   Where A.REG\_BRANCH = '" + reg\_branch + @"'  
   and A.RECORD\_STAT = 'O'  
   and A.CHECKER\_ID is not null  
   and trunc(sysdate) between trunc(NVL(A.REG\_DT, sysdate)) and NVL(trunc(A.CLOSE\_DT), to\_date('09/09/2099', 'dd/mm/yyyy'))  
   and case when A.PAY\_DT >   
   to\_number(to\_char(LAST\_DAY(to\_date('" + pay\_day +   
   @"','dd/mm/yyyy')),'dd'))   
   then LAST\_DAY(to\_date('" + pay\_day + @"','dd/mm/yyyy'))

else to\_date(lpad(A.PAY\_DT,2,'0') || '/' || substr('" + pay\_day + @"',4,7),'dd/mm/yyyy')

end

between

DECODE(to\_char(to\_date('" + pay\_day +   
 @"','dd/mm/yyyy'),'D'),'2', to\_date('" + pay\_day +   
 @"','dd/mm/yyyy')-1 , to\_date('" + pay\_day +   
 @"','dd/mm/yyyy') )   
 and to\_date('" + pay\_day + @"','dd/mm/yyyy')

ACY\_AVL\_BAL = SELECT ACY\_AVL\_BAL - nvl(min\_balance,0)  
 FROM XMLTABLE (  
 '/FCUBS\_BODY/Get\_Account\_List\_IO/ACCOUNT\_LIST/ACCOUNT'  
 PASSING xmltype (   
 ebank.pkg\_core\_switch.  
 loadValBal (pay\_list.AC\_NO, 1, 1))  
 COLUMNS ACY\_AVL\_BAL VARCHAR2 (200) PATH 'ACY\_AVL\_BAL',  
 min\_balance VARCHAR2 (200) PATH 'MIN\_BALANCE')

HDDT = case when TRIM(A.PRINT\_BILL) = '1' AND SUBSTR(MAKH, 0, 4) = 'PE01' then '1' else '0' end

**Step 7:** Gọi Service lấy thông tin khách hàng

1. Nếu NCC là EVNHCM:

* Gọi Service Service1.getCustomerFromDienLuc\_getBill(MaKH,MaDiemThu,NCC)

→ EVNHCM\_SVC.LVBService.BankRequest(MaKH, MaDiemThu, BankID)

* Return:
  + dt[khachhang]
    - Makh, tenkh, diachikh, madl, masothuekh
  + dt[hoadon]
    - mahd, sotien, mota, tungay, denngay, giabieu, hoadonid, soho, magiaodich, DNTT, tiendien, tienthue, thuesuat, kyhieuhd, seryhd, HDDT, NCC

**Step 16:** Gọi Service tạo giao dịch

* Gọi Service Service1.importTransaction\_Auto()

**Step 18:** Lấy số hóa đơn trong hệ thống

* Lấy số hóa đơn trong hệ thống, thêm hóa đơn vào database

Package: pkg\_EVN\_HCM.dlf\_getMaGiaoDich\_auto

Parameter:

p\_Maker\_ID  
 p\_HoaDon\_Info xmltype

Variables:

v\_Rcd\_HD  
 v\_Home\_Branch  
 v\_Sign  
 v\_Year  
 v\_Min\_ID  
 v\_Max\_ID  
 v\_current\_id

v\_MaGiaoDich  
 v\_Rcd\_Err  
 v\_Sys\_Date

* For r in xmltable('/HoaDon/HD\_Info')
  + If r.DAINHD = '1'
    - If r.HDDT = 1
      * Insert into DLTBD\_HOADON\_INFO
      * Columns: MAHD, MAKH, SOTIEN, MOTA, TUNGAY, DENNGAY, GIABIEU, HOADONID, SOHO, NGAYGIO, MAGIAODICH, BANKID,DAINHD,TRN\_CHANEL,YEAR,HOADON\_ID,DNTT,TIENDIEN, TIENTHUE, THUESUAT, KYHIEUHD, SERYHD, HDDT
      * Values: r.MAHD, trim(r.MAKH), r.SOTIEN,r.MOTA, r.TUNGAY,r.DENNGAY,r.GIABIEU,r.HOADONID,r.SOHO, v\_Sys\_Date, r.MaGiaoDich, c\_Bank\_ID, '0', c\_Chanel\_AUTO, v\_Year, SUBSTR(r.MaGiaoDich,1,8), r.DNTT,r.TIENDIEN, r.TIENTHUE, r.THUESUAT, r.KYHIEUHD, r.SERYHD, r.HDDT
      * Return: rowid, MAHD,MAKH,SOTIEN,HOADONID,MAGIAODICH
      * Into: v\_Rcd\_HD.row\_id, v\_Rcd\_HD.MAHD, v\_Rcd\_HD.MAKH, v\_Rcd\_HD.SOTIEN, v\_Rcd\_HD.HOADONID, v\_Rcd\_HD.MAGIAODICH
    - Else If r.MaHD like '%2' //HD phat
      * Insert into DLTBD\_HOADON\_INFO
      * Columns: MAHD, MAKH, SOTIEN, MOTA, TUNGAY, DENNGAY, GIABIEU, HOADONID, SOHO, NGAYGIO, BANKID,DAINHD, TRN\_CHANEL, DNTT, TIENDIEN, TIENTHUE, THUESUAT, KYHIEUHD, SERYHD, HDDT
      * Values: r.MAHD, trim(r.MAKH), r.SOTIEN,r.MOTA, r.TUNGAY,r.DENNGAY,r.GIABIEU,r.HOADONID,r.SOHO, v\_Sys\_Date, c\_Bank\_ID, '0', c\_Chanel\_AUTO, r.DNTT,r.TIENDIEN, r.TIENTHUE, r.THUESUAT, r.KYHIEUHD, r.SERYHD, r.HDDT
      * Return: rowid, MAHD, MAKH, SOTIEN, HOADONID
      * Values: v\_Rcd\_HD.row\_id, v\_Rcd\_HD.MAHD, v\_Rcd\_HD.MAKH, v\_Rcd\_HD.SOTIEN, v\_Rcd\_HD.HOADONID;
    - Else
      * Select from dual
        + Columns: LVBSMS.SEQ\_PG\_030002.NEXTVAL
        + Into: v\_Rcd\_HD.HOADON\_ID
      * Insert into DLTBD\_HOADON\_INFO
      * Columns: MAHD, MAKH, SOTIEN, MOTA, TUNGAY, DENNGAY, GIABIEU, HOADONID, SOHO, NGAYGIO, MAGIAODICH, BANKID,DAINHD, TRN\_CHANEL, YEAR, HOADON\_ID, DNTT, TIENDIEN, TIENTHUE, THUESUAT, KYHIEUHD, SERYHD, HDDT
      * Values: r.MAHD, trim(r.MAKH), r.SOTIEN,r.MOTA, r.TUNGAY,r.DENNGAY,r.GIABIEU,r.HOADONID,r.SOHO, v\_Sys\_Date, lpad(v\_Rcd\_HD.HOADON\_ID,10, '0') || v\_Sign, c\_Bank\_ID, '0', c\_Chanel\_AUTO, v\_Year, v\_Rcd\_HD.HOADON\_ID, r.DNTT,r.TIENDIEN, r.TIENTHUE, r.THUESUAT, r.KYHIEUHD, r.SERYHD, r.HDDT
      * Return: rowid, MAHD,MAKH,SOTIEN,HOADONID,MAGIAODICH
      * Into: v\_Rcd\_HD.row\_id, v\_Rcd\_HD.MAHD, v\_Rcd\_HD.MAKH, v\_Rcd\_HD.SOTIEN, v\_Rcd\_HD.HOADONID, v\_Rcd\_HD.MAGIAODICH;
  + Else //Khong in hoa don
    - Select from dual
      * Columns: EBANK.SEQ\_PG\_030002.NEXTVAL
      * Into v\_Rcd\_HD.HOADON\_ID

Return: v\_Rcd\_HD;

**Step 20:** Lưu thông tin giao dịch

Gọi package pkg\_EVN\_HCM.DLP\_importTransaction\_auto

Parameters:

p\_Maker\_ID  
 p\_Trn\_Desc  
 p\_KhachHang\_Info  
 p\_HoaDon\_Info  
 p\_HachToan\_Info  
 p\_Trn\_ID  
 p\_Err\_String

Constants:

c\_txn\_code  
 c\_source\_code

Variables:

v\_SQL\_CMD  
 v\_Home\_Branch  
 v\_Trn\_Ref\_No  
 v\_Trn\_Dt  
 v\_Check  
 v\_Amount  
 v\_Cr\_Ac\_No  
 v\_Cr\_Ac\_Branch  
 v\_Db\_Ac\_No  
 v\_Db\_Ac\_Branch  
 v\_CCY  
 V\_BRANCH  
 V\_COUNT

* p\_Trn\_ID := pkg\_Global\_Dom\_Application.get\_Dom\_Transaction\_ID();
* Insert into: DATBD\_TRANSACTION
  + Columns: TRANSACTION\_ID, TRN\_BRN, TRN\_DESC, TRN\_DT, VALUE\_DT, TRN\_CODE, MODULE, EVENT\_CODE, RECORD\_STATUS, MAKER\_ID, MAKER\_DT, APP\_TYPE, LAST\_EVENT\_SEQ\_NO, XREF, COMMON\_USER
  + Values: p\_Trn\_ID, v\_Home\_Branch, p\_Trn\_Desc, v\_Trn\_Dt, trunc(sysdate), 'AUTO\_LIQUID', 'DL', 'INIT', 'O', p\_Maker\_ID, sysdate, 'DOM\_WEB', 1 ,'EBK'||loadESBMsgId(), c\_Common\_User
* For r in xmltable ('/Transaction/Post\_Info')
  + SELECT COUNT(\*) INTO V\_COUNT
    - FROM STTM\_CUST\_ACCOUNT
    - WHERE CUST\_AC\_NO = R.AC\_NO
    - AND RECORD\_STAT = 'O' AND AUTH\_STAT ='A'
  + If V\_COUNT >0
    - SELECT BRANCH\_CODE INTO V\_BRANCH FROM STTM\_CUST\_ACCOUNT
  + Insert into DLTBD\_TRANSACTION\_POST
    - Columns: TRANSACTION\_ID, AC\_NO, AC\_CCY, AC\_BRANCH, CUST\_GL, DRCR\_IND, AMOUNT, AMOUNT\_TAG, TRN\_CODE, EVENT, EVENT\_SEQ\_NO
    - Values: p\_Trn\_ID, r.Ac\_No, 'VND', V\_BRANCH, 'A', R.DrCr\_Ind, R.Amount, R.Amount\_Tag, 'AUTO\_LIQUID', 'INIT',1
* For r in xmltable ('/ KhachHang\_Info')
  + Update: DLTB\_CUSTOMER\_INFO
  + Set: TENKH = r.TENKH,  
     DIACHIKH = r.DIACHIKH,  
     MADL = r.MADL,  
     MASOTHUEKH = r.MASOTHUE,  
     PHIEN = r.PHIEN,  
     LOTRINH = r.LOTRINH,  
     SOGHICSCMIS = r.SOGHICSCMIS,  
     DANHSO = r.DANHSO,  
     SOCONGTO = r.SOCONGTO,  
     NGANHNGHE = r.NGANHNGHE
  + Nếu không update được:
    - Insert into DLTB\_CUSTOMER\_INFO
      * Columns: MAKH, TENKH, DIACHIKH, MADL, MASOTHUEKH, PHIEN, LOTRINH, SOGHICSCMIS, DANHSO, SOCONGTO, NGANHNGHE
      * Values: trim(r.MAKH), r.TENKH, r.DIACHIKH, r.MADL, r.MASOTHUE, r.PHIEN, r.LOTRINH, r.SOGHICSCMIS, r.DANHSO, r.SOCONGTO, r.NGANHNGHE
* For r in xmltable ('/HoaDon\_Info')
  + Update DLTBD\_HOADON\_INFO
    - Set: H.TRN\_ID = p\_Trn\_ID

1. Duyệt hóa đơn thu tự động



**Step 2**: Gọi Service load list giao dịch chờ duyệt

* Gọi Service1.getTransactionsToAuth\_Auto(checkerID)

**Step 4:** Select list giao dịch chờ duyệt

* Select from DATBD\_TRANSACTION d, "STTM\_DATES" + DB\_Link + " e "
  + Columns: d.\*, (case d.MODULE WHEN 'DL' THEN 'EVNHCM' ELSE d.MODULE END) NCC
  + Where: D.TRN\_BRN = '" + Branch\_Code + "' "   
     and D.EVENT\_CODE = 'INIT'   
     and d.MODULE in ('DL', 'EVNHCM', 'EVNCPC', 'EVNSPC', 'EVNHNI', 'EVNNPC')   
     and d.TRN\_CODE = 'AUTO\_LIQUID'   
     and D.CHECKER\_ID is null   
     and D.RECORD\_STATUS = 'O'   
     and D.AUTH\_STATUS is null   
     and D.TRN\_DT = E.TODAY   
     and D.TRN\_BRN = E.BRANCH\_CODE   
     and D.MAKER\_DT >= SYSDATE - " + sDATE
  + order by D.TRANSACTION\_ID DESC"
* Return: dt\

**Step 8:** Gọi Service duyệt giao dịch

* Gọi Service1.authTransaction(Checker\_ID, Trn\_ID, sMaDL)

**Step 11+13:**

Gọipkg\_EVN\_HCM.DLP\_authTransaction

Parameter:

p\_Checker\_ID  
p\_Trn\_ID  
p\_NgayGio  
p\_Err\_String

Constant:

c\_DB\_Link  
 c\_txn\_code  
 c\_Function\_Name

Variable:

v\_Home\_Branch  
 v\_Trn\_Desc  
 v\_Maker\_ID  
 v\_Rcd\_Err  
 v\_Value\_Date  
 v\_Last\_Event\_Seq\_No  
 v\_MSGID  
 v\_Rcd\_Trn

1. Get Transaction to Authorize

* Update table DATBD\_TRANSACTION d
  + Set: d.AUTH\_STATUS = 'A',  
     d.CHECKER\_DT = sysdate,  
     d.CHECKER\_ID = p\_Checker\_ID
* Select from table DATBD\_TRANSACTION d
  + Columns: d.TRN\_DESC, d.MAKER\_ID, d.LAST\_EVENT\_SEQ\_NO
  + Returning into: v\_Trn\_Desc, v\_Maker\_ID, v\_Last\_Event\_Seq\_No
* Where: D.TRANSACTION\_ID = p\_Trn\_ID

and D.TRN\_BRN = v\_Home\_Branch   
and D.EVENT\_CODE = 'INIT'  
and D.RECORD\_STATUS = 'O'   
and D.AUTH\_STATUS is null   
and D.CHECKER\_ID is null

1. Process authorize

Variable:

v\_lc\_SQL\_CMD  
 v\_lc\_Trn\_Ref\_No  
 v\_lc\_source\_code

v\_lc\_Cr\_Ac\_No  
 v\_lc\_Cr\_Ac\_Branch  
 v\_lc\_Cr\_Ac\_Ccy  
 v\_lc\_Cr\_Amount

v\_lc\_Db\_Ac\_No  
 v\_lc\_Db\_Ac\_Branch

v\_lc\_Db\_Ac\_Ccy  
 v\_lc\_DB\_Amount

* Get post info

//Tài khoản ghi nợ

* + Select from table DLTBD\_TRANSACTION\_POST p
    - Columns: P.AC\_NO,P.AC\_BRANCH,P.AC\_CCY,P.AMOUNT
    - Returning into: v\_lc\_Db\_Ac\_No,v\_lc\_Db\_Ac\_Branch, v\_lc\_Db\_Ac\_Ccy, v\_lc\_DB\_Amount

//Tài khoản ghi có

* + Select from table DLTBD\_TRANSACTION\_POST p
    - Columns: P.AC\_NO,P.AC\_BRANCH,P.AC\_CCY,P.AMOUNT
    - Returning into v\_lc\_Cr\_Ac\_No,v\_lc\_Cr\_Ac\_Branch, v\_lc\_Cr\_Ac\_Ccy, v\_lc\_Cr\_Amount
* Post to CoreBanking
  + if v\_lc\_Db\_Ac\_No like '1011%' //TM

v\_lc\_source\_code := 'THCK';

v\_lc\_SQL\_CMD:= 'select '|| '''' || v\_lc\_Cr\_Ac\_No || '''' || ','

|| '''' || v\_lc\_Cr\_Ac\_Branch || '''' || ','  
 || '''' || v\_lc\_Db\_Ac\_No || '''' || ','  
 || '''' || v\_lc\_Db\_Ac\_Branch || '''' || ',';

v\_lc\_SQL\_CMD:= v\_lc\_SQL\_CMD || '''' || v\_lc\_Db\_Ac\_Ccy || '''' || ','

|| v\_lc\_DB\_Amount || ','

|| '''' || v\_Trn\_Desc || '''' || ','

|| '''' || v\_lc\_source\_code || '''' || ','

|| '''' || c\_txn\_code || '''' || ','

|| '''' || upper(v\_Maker\_ID) || '''' || ','

|| '''' || c\_Common\_User || '''' || ' '

|| 'from dual '

|| 'where rownum = 1 ';

* + else //CK

v\_lc\_source\_code := 'CKCK';

v\_lc\_SQL\_CMD:= 'select '|| '''' || v\_lc\_Db\_Ac\_No || '''' || ','

|| '''' || v\_lc\_Db\_Ac\_Branch || '''' || ','

|| '''' || v\_lc\_Cr\_Ac\_No || '''' || ','

|| '''' || v\_lc\_Cr\_Ac\_Branch || '''' || ',';

v\_lc\_SQL\_CMD:= v\_lc\_SQL\_CMD || '''' || v\_lc\_Db\_Ac\_Ccy || '''' || ','

|| v\_lc\_DB\_Amount || ','

|| '''' || v\_Trn\_Desc || '''' || ','

|| '''' || v\_lc\_source\_code || '''' || ','

|| '''' || c\_txn\_code || '''' || ','

|| '''' || null || '''' || ','

|| '''' ||c\_Common\_User || '''' || ' '

|| 'from dual '

|| 'where rownum = 1 ';

* Gọi package ebank.PKG\_CORE\_SWITCH.PR\_RT\_TRANSFER\_V3(v\_lc\_SQL\_CMD, v\_Home\_Branch,v\_Value\_Date,0,v\_lc\_Trn\_Ref\_No, v\_Rcd\_Err.MESSAGE ,v\_MSGID,v\_Rcd\_Trn.XREF) post to CoreBanking
* If substr(v\_Rcd\_Err.MESSAGE,3,2) <> '00'
  + if (substr(v\_Rcd\_Err.MESSAGE,3,2) = '80' or substr(v\_Rcd\_Err.MESSAGE,3,2) = '90' or substr(v\_Rcd\_Err.MESSAGE,3,2) = '91')
    - Update table: DLTBD\_TRANSACTION\_POST p
      * Set: P.TRN\_STATUS = 'S',  
         P.POST\_DATE = sysdate,  
         P.CORE\_TRN\_DT = (select today from sttm\_dates where branch\_code = v\_Home\_Branch)
    - Update table: DLTBD\_HOADON\_INFO b
      * Set: B.NGAYGIO = to\_date(p\_NgayGio, 'mm/dd/yyyy hh:mi:ss am')  
         B.Time\_Out = v\_Rcd\_Trn.XREF
    - v\_Rcd\_Err.ERROR\_CODE := '1'||substr(p\_Err\_String,3,2);
    - v\_Rcd\_Err.ERROR\_TYPE := pkg\_Dom\_Util.c\_gl\_Debug\_Msg;
  + else
    - v\_Rcd\_Err.ERROR\_CODE := '0099';
    - v\_Rcd\_Err.ERROR\_TYPE := pkg\_Dom\_Util.c\_gl\_Sys\_Err;
* else
  + update table: datbd\_transaction d
    - Set: d.AUTH\_STATUS = 'A',  
       d.CHECKER\_DT = sysdate,  
       d.CHECKER\_ID = p\_Checker\_ID  
       d.RECORD\_STATUS = 'O'  
       d.CORE\_REF\_NO = v\_lc\_Trn\_Ref\_No
  + Update table: DLTBD\_TRANSACTION\_POST p
    - Set: P.TRN\_STATUS = 'S'  
       P.POST\_DATE = sysdate  
       P.CORE\_REF\_NO = v\_lc\_Trn\_Ref\_No  
       P.CORE\_TRN\_DT = (select today from sttm\_dates where branch\_code = v\_Home\_Branch)
  + Update table: DLTBD\_HOADON\_INFO b
    - Set: B.NGAYGIO = to\_date (p\_NgayGio , 'mm/dd/yyyy hh:mi:ss am')

**Step 19:** Gọi Service gạch nợ:

* Gọi LVBService.BankRequest()

**Step 24:** Update Database đã gạch nợ

* Update table: DLTBD\_HOADON\_INFO
* Nếu EVN return gạch nợ thành công
  + Update Column: TRANGTHAIGD, TRANGTHAIHUYGD, NGAYGIO
  + Value: TRANGTHAIGD = 0, TRANGTHAIHUYGD = 9, NGAYGIO = Date.Now()
* Nếu EVN return False
  + Update Column: TRANGTHAIGD, TRANGTHAIHUYGD
  + Value: TRANGTHAIGD = 1, TRANGTHAIHUYGD = 9
* Nếu xảy ra Exception
  + Update Column: TRANGTHAIGD, TRANGTHAIHUYGD, NGAYGIO
  + Value: TRANGTHAIGD = 2, TRANGTHAIHUYGD = 9, NGAYGIO = Date.Now()

1. Upload file/Truy vấn/Tạo batch

**Step :** Gọi Service Upload file

* Gọi Service1.UploadFile(MakerID, Upload\_ProductID, FileName)

**Step:** Upload file

* Gọi package pkg\_EVN\_Upload\_Payment.Fn\_Upload\_File  
  return: l\_Save\_Name\_Result

Parameter:

p\_Maker\_ID  
 p\_Product\_ID  
 p\_FileName  
 p\_Batch\_No   
Variable:

v\_Home\_Branch  
 v\_Rcd\_Err  
 v\_Rcd\_Upload\_Mater

1. Validate data input

v\_lc\_count number;

* Select count(\*) into v\_lc\_count
  + From DLTB\_BILL\_UPLOAD\_MASTER u
  + Where u.UPLOAD\_FILENAME = p\_FileName  
     and u.RECORD\_STAT = 'O';
* If v\_lc\_count > 0
  + v\_Rcd\_Err.ERROR\_CODE := '9001';
  + v\_Rcd\_Err.MESSAGE := 'Tên file đã tồn tại trong hệ thống. FileName is ' || p\_FileName || '.';
  + goto Final\_Process;
* select count(\*) into v\_lc\_count
  + From DLTM\_UPLOAD\_PRODUCT p
  + Where PRODUCT\_ID = p\_Product\_ID;
* If v\_lc\_count = 0
  + v\_Rcd\_Err.ERROR\_CODE := '9901';
  + v\_Rcd\_Err.MESSAGE := 'Sản phẩm không tồn tại. PRODUCT\_ID is ' || p\_Product\_ID || '.';
  + goto Final\_Process;

1. Get Settle Account

* select Home\_Branch into v\_Home\_Branch from ASTB\_USER u where u.USERNAME = p\_Maker\_ID and u.RECORD\_STATUS <> 'C' and rownum = 1;
* Select from DLTM\_UPLOAD\_SETTLE\_ACCOUNT p
  + Columns: AC\_NO, AC\_CCY, AC\_BRANCH, AC\_OWNER, decode(AC\_OWNER, null, 'G','A')
  + Into v\_Rcd\_Upload\_Mater.SETTLE\_AC\_NO, v\_Rcd\_Upload\_Mater.SETTLE\_AC\_CCY, v\_Rcd\_Upload\_Mater.SETTLE\_AC\_BRN, v\_Rcd\_Upload\_Mater.SETTLE\_AC\_OWNER, v\_Rcd\_Upload\_Mater.SETTLE\_AC\_CUST\_GL
  + Where: BRANCH\_CODE = v\_Home\_Branch;
* Exception
  + when no\_data\_found
    - Insert into DLTM\_UPLOAD\_SETTLE\_ACCOUNT
      * Columns: BRANCH\_CODE, AC\_NO, AC\_CCY , AC\_BRANCH, AC\_OWNER
      * Values: v\_Home\_Branch,'459900018','VND',v\_Home\_Branch, ''
  + when Too\_Many\_Rows
    - v\_Rcd\_Err.ERROR\_CODE := '9902'
    - v\_Rcd\_Err.MESSAGE := 'Có nhiều hơn 1 tài khoản ghi nợ cho mỗi chi nhánh có Branch\_Code is ' || v\_Home\_Branch || '.';
    - goto Final\_Process;

1. Process

* v\_Rcd\_Upload\_Mater.BATCH\_NO := generate\_Batch\_No;  
  v\_Rcd\_Upload\_Mater.UPLOAD\_DATE := TRUNC(SYSDATE);  
  v\_Rcd\_Upload\_Mater.BRANCH\_CODE := v\_Home\_Branch;  
  v\_Rcd\_Upload\_Mater.PRODUCT\_ID := p\_Product\_ID;  
  v\_Rcd\_Upload\_Mater.UPLOAD\_FILENAME := p\_FileName;  
  v\_Rcd\_Upload\_Mater.AUTH\_STAT := 'U';  
  v\_Rcd\_Upload\_Mater.RECORD\_STAT := 'O';  
  v\_Rcd\_Upload\_Mater.MAKER\_ID := p\_Maker\_ID;  
  v\_Rcd\_Upload\_Mater.MAKER\_DT := SYSDATE;  
  v\_Rcd\_Upload\_Mater.LAST\_BILL\_ESR := 0;
* Insert into DLTB\_BILL\_UPLOAD\_MASTER
  + Values: v\_Rcd\_Upload\_Mater
  + Returning BATCH\_NO into p\_Batch\_No;
  + v\_Rcd\_Err.ERROR\_CODE := '0000';
  + v\_Rcd\_Err.MESSAGE := 'Upload File thành công. Product\_ID, Branch\_Code is ' || p\_Product\_ID || ', ' || v\_Home\_Branch || '.';
* Exception:
  + v\_Rcd\_Err.ERROR\_CODE := '9999';
  + v\_Rcd\_Err.MESSAGE := 'Lỗi hệ thống: ' || sqlerrm|| chr(10) || 'Error At: ' || DBMS\_UTILITY.format\_error\_backtrace;
* Return: v\_Rcd\_Err

**Step :** Gọi Service Add Bills

* Gọi Service1. AddBills(MakerID, BatchNo, dt\_bill)

**Step :** Add bills

Gọi pkg\_EVN\_Upload\_Payment.Fn\_Add\_Bills

Parameter:

p\_Maker\_ID  
p\_Batch\_No  
p\_Bill\_List

Variable:

v\_Home\_Branch  
 v\_Rcd\_Err  
 v\_Rcd\_Upload\_Mater

* Select M.\* into v\_Rcd\_Upload\_Mater
  + From DLTB\_BILL\_UPLOAD\_MASTER M
  + Where: BATCH\_NO = p\_Batch\_No  
     and MAKER\_ID = p\_Maker\_ID  
     and RECORD\_STAT = 'O'  
     and AUTH\_STAT = 'U'

v\_add\_Bills number(6) :=0;

* For r in xmltable(bill\_list)
  + v\_add\_Bills := v\_add\_Bills + 1;
  + if R.TOTAL\_BILL\_AMOUNT = 0 or R.NBR\_OF\_BILL = 0
    - p\_Rcd\_Err.ERROR\_CODE := '9003';
    - p\_Rcd\_Err.MESSAGE := 'Thêm hóa đơn bị lỗi. Do số tiền bằng 0 hoặc không có hoá đơn. (TOTAL\_BILL\_AMOUNT = 0 or NBR\_OF\_BILL = 0). BATCH\_NO, Bill\_ESR is ' || p\_Rcd\_Upload\_Mater.BATCH\_NO || ', ' || v\_add\_Bills || '.';
    - exit;
  + Update table DLTB\_BILL\_UPLOAD\_DETAILS d
    - Set: d.SOTIEN = R.SOTIEN  
       d.MADL = R.MADL  
       D.PAYMENT\_INFO\_NEW = R.PAYMENT\_INFO.getStringVal()  
       d.TOTAL\_BILL\_AMOUNT = R.TOTAL\_BILL\_AMOUNT  
       d.NBR\_OF\_BILL = R.NBR\_OF\_BILL;
    - Where d.BATCH\_NO = p\_Rcd\_Upload\_Mater.BATCH\_NO  
       d.MAKH = R.MAKH  
       d.RECORD\_STAT = 'O'
  + if sql%rowcount = 0
    - insert into DLTB\_BILL\_UPLOAD\_DETAILS
      * Columns: BATCH\_NO, BILL\_ENTRY\_SR, RECORD\_STAT, PROCESS\_STAT, MAKH, SOTIEN, MADL, PAYMENT\_INFO\_NEW, TOTAL\_BILL\_AMOUNT, NBR\_OF\_BILL, SETTLE\_AMOUNT
      * Values: p\_Rcd\_Upload\_Mater.BATCH\_NO, p\_Rcd\_Upload\_Mater.LAST\_BILL\_ESR + 1, 'O', 'I', R.MAKH, R.SOTIEN, R.MADL, R.PAYMENT\_INFO.getStringVal(), R.TOTAL\_BILL\_AMOUNT, R.NBR\_OF\_BILL, 0
      * Returning BILL\_ENTRY\_SR into   
         p\_Rcd\_Upload\_Mater.LAST\_BILL\_ESR;
* if v\_add\_Bills = 0
  + p\_Rcd\_Err.ERROR\_CODE := '9004';
  + p\_Rcd\_Err.MESSAGE := 'Không có hoá đơn nào được thêm vào. BATCH\_NO is ' || p\_Rcd\_Upload\_Mater.BATCH\_NO || '.';
* if v\_add\_Bills > 0
  + Update
    - Select LAST\_BILL\_ESR
      * From DLTB\_BILL\_UPLOAD\_MASTER m
      * Where BATCH\_NO = p\_Batch\_No  
         and MAKER\_ID = p\_Maker\_ID   
         and RECORD\_STAT = 'O'  
         and AUTH\_STAT = 'U'
    - Set LAST\_BILL\_ESR = v\_Rcd\_Upload\_Mater.LAST\_BILL\_ESR;
  + v\_Rcd\_Err.ERROR\_CODE := '0000';
  + v\_Rcd\_Err.MESSAGE := 'Thêm hoá đơn thành công. Batch\_No, Branch\_Code is ' || p\_Batch\_No || ', ' || v\_Home\_Branch || '.';
* Exception
  + when no\_data\_found
    - v\_Rcd\_Err.ERROR\_CODE := '9002';
    - v\_Rcd\_Err.MESSAGE := 'Hoá đơn không sẵn sàng để thêm vào. BATCH\_NO, Branch\_Code is ' || p\_Batch\_No || ', ' || v\_Home\_Branch || '.';
  + when others
    - rollback;
    - v\_Rcd\_Err.ERROR\_CODE := '9999';
    - v\_Rcd\_Err.MESSAGE := 'System Error: ' || sqlerrm|| chr(10) || 'Error At: ' || DBMS\_UTILITY.format\_error\_backtrace;