Integration between Visma Business and Visma.net AutoPay

This document will explain the basics of the integration between Visma Business version 12.xx/11.xx/10.xx and Visma.net AutoPay.
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Before you start

Prerequisites:
- A valid TOS (terms of service) between company and Visma for using Visma.net AutoPay
- Visma Business license should include an article called "Visma.Net AutoPay activation". This might differ in the different countries where Visma Business licensing is done!

In license, article no. 406004 often is shown behind the ID below:

- Bank agreement between company and bank, giving AutoPay authority from customer to send the payments and receive settlements and incoming payments to their bank connection.
- Bank send e-mail to AutoPay-central to confirm that agreement is activated at their side. Autopay Central activate bank account and an e-mail is sent to the customer admin to inform.
- "Visma Business Services Host" service is running.
- "Visma On Premises Gateway" service (OPG) is installed and running on same app-server as Visma Business. The username and password to the "Customer Administrator" at Visma.net is entered. This also works if OPG is installed on another machine - in this case make sure OPG is not limited to 'local installation' (when running installer, or later, via config)
- "Visma Business Host for OD MessageQueue" service is installed and running on same app-server as Visma Business. Message queue also require that the service VBS is "up and running". (See section "Visma.BusinessHost.MessageQueue.exe - the "motor" for automation).

An installation with Visma Business, OPG and the MessageQueue installed on the same application-server will ensure the simplest and fault-proof case.
**Installation/setup of Visma Business Message Queue**

The installation of Visma Business Message Queue is a part of standard “Visma Business Product Line” installation. For validating, or entering login credentials to Visma Business Service, go to the Visma Business program folder and run the program “Visma.BusinessHost.MessageQueue.exe” as administrator. Select “Credentials” under the “Service” menu. The VBS username is often the “system” user in Visma Business. (In version 10.xx only username is visualized).

![Image of Visma Business Message Queue setup](image)

**Activating Visma.net AutoPay**

Activate Visma.net AutoPay for the company, from the “Settings > Companies” tab.

![Image of Visma.net AutoPay setup](image)
Integrate Visma Business with Visma.net AutoPay

“Enable Visma.net” processing in Visma Business
(Named “Setup Visma.net message queue” in pre 12.00 versions)

The “Enable Visma.net” processing can be run from either the “System information” table (for handling multiple companies at the same time) or the “Company data” table.

The processing will connect (export/update) Visma Business companies to the “same” Visma.net company (company with the same organisation no.). If the Visma.net company already exists, its details will be updated if needed. Otherwise, a new Visma.net company will be created once you have successfully exported.

Note! For older version than 11.10.0 this setup must be run from Application server!

In these versions the registration (mapping) of the tunnel and queue in ODP was handled by this process, and the hostname of the machine was used (the queue name has the server's hostname as part of it). This is a one-time operation as long as you don't change your server.

This machine also needs to have the MessageQueue service running locally. Since they should always be 'online', they should be running on the server - the same machine which also has VBS (Business Host) running, since MessageQueue is reliant on it to actually do something when it receives the notifications.

The “Enable Visma.net” processing handles solely exporting of companies, while in older versions (pre 11.10), it was also used for registering the message queue (from ver 11.10, registering of the message queue occurs when the MessageQueue service starts - at each start-up).

This will open up the following dialog:
Status information:

- **Connection to Visma.net** - signals if OPG installation is up and running and can be reached, since it is required for most of the Visma.net integrations (Visma.net Autopay, Visma.net AutoReport).
- **Message Queue Registration** - shows status of the queue used by the Visma.net Autopay and Visma.net AutoReport integrations. This queue is unique for each Visma Business instance and required for receiving and processing automatic notifications (messages).
- **OPG Certificate uploaded** - shows status of whether for the current Visma Business instance the OPG certificate (local and dependant on the OPG installation) has been successfully been uploaded to Visma.net (ODP). The certificate is required for other integrations.

Integration setup:

- **OPG address** - can be configured in the “On Premise Gateway address” column in the “System information” table. Defines the URL pointing to Visma OnPremises Gateway, using the following syntax:
  
  http://[ServerAddress]:[Port]/OPGatewayService/

  Note! It is not recommended to use IP address as a server name. It is possible to point to a server using only a server name or a full server address with domain

Possible actions:

- **“Export/update companies”** - creates or updates Visma.net companies based on the selected Visma Business companies from the list. Success status can be observed for each company in the Status field, after exporting.
  
  Observations: After export is done, the signing key required for Visma.net Autopay integration is also placed in the correct field in Visma Business. Also, the CompanyID from Visma.net is also written in Visma Business, in the Company table, after this process is completed.

- **“Upload OPG Certificate”** - this is a one-time per instance process required for some Visma.net integrations - it is not company dependant.

Additional info - pre 11.xx versions

If running on older versions that 11.xx the connection can only be run for one company at time, and only from the **“Company data”** table. Ensure that OPG address and licence key in Visma Business that appear below is correct and push “OK” button:
Result after exporting companies

In Visma.net, “Settings” tab - “Companies” - “Integrated companies” the system present the ERP client in Visma Business and same company in Visma.Net with status = linked.
Setup inside Visma Business

Additional prerequisite for pre 11.x versions

From version 11.xx of Visma Business, the value in column “Visma.net AutoPay Signing Key” will be fetched and filled in automatically in Visma Business when running the company export to Visma.net. On version 10.xx you had to switch to the “Administration>Companies” tab and copy the value in “Signing Key” into Visma Business.

In the “Company Data” table the values in the two columns below must be identical with values in company info for same company in Visma.Net:

- “Visma.net AutoPay Signing Key” SQL name “ApSigKey”
- “Company number” SQL name “BsNo”

Setup of “Bank partner”

In the “Bank partner” table a row with “Bank system” = “95 [Visma.net AutoPay]” must be added:

“Bank partner” columns:
- “Chargeable bank account no.” - can both be BBAN and IBAN
- “GL ledger bank account” - General ledger bank account used
● “EFT processing” - the option “Generate batch/vouchers for settlement from EFT system” must be marked. Also possible to select option for “Automatically updated batch from Visma.net AutoPay”

**Setup for import of incoming payments**

If the company also have an agreement with the bank for receiving incoming payments, a service will download new transactions to the correct company in Visma Business. To get these payments correctly posted and matched against the open customer entries, the transactions must be “interpreted” by Visma Business. This is handled by the user through definitions in the “Factoring Company” table by giving correct values in “Factoring ID”, the length of customer no. and in invoice no.

Make a new row and define correct values. **IMPORTANT VALUES TO SET**:

- Length in Customer no = 10
- Length in CID reference/invoice no = 9
- Start position in CID for Customer no = 10
- Start position in CID for Invoice no = 1

**IMPORTANT ! Factoring ID = 10;1** (format is start-position customer no; start-position invoice no.)

---

**NB! For column “Payment processing” we only consider the following parameters:**

- [ ] CID code generating
- [ ] No leading zeros in customer/supp. no.
- [ ] Length digit
- [ ] Finnish CID calculation
- [ ] Invoice No first
- [ ] Use customer no as CID
- [ ] Use invoice no as CID

**Payment suggestion**
- [ ] Remit if gro no

**Processing when importing from EFT system**
- [ ] Prepayment
- [ ] Update bank account
- [ ] Generate batch/vouchers for settlement

**Control EFT system at payment**
- [ ] Control CID when importing
- [ ] Control if invoice no is in the CID field
- [ ] Only show CID sum
The result of a correct setup will find open customer entries based on match with CID or invoice no. from the VIP-file from Autopay (incoming payments) and make postings like this:

<table>
<thead>
<tr>
<th>Voucher no.</th>
<th>Voucher date</th>
<th>Voucher type</th>
<th>Text type</th>
<th>Debit account</th>
<th>Credit account</th>
<th>Amount</th>
<th>CID code</th>
</tr>
</thead>
<tbody>
<tr>
<td>310014</td>
<td>24.03.2015</td>
<td>1</td>
<td>BankRef:79745046</td>
<td>10005</td>
<td>20 000,00</td>
<td>00:0001:99000000100055</td>
<td></td>
</tr>
<tr>
<td>310014</td>
<td>24.03.2015</td>
<td>1</td>
<td>BankRef:79745046</td>
<td>10006</td>
<td>22 500,00</td>
<td>00:0002:00000000100069</td>
<td></td>
</tr>
<tr>
<td>310014</td>
<td>24.03.2015</td>
<td>1</td>
<td>BankRef:79745046</td>
<td>2380</td>
<td>42 500,00</td>
<td>00:0003:00000000100069</td>
<td></td>
</tr>
</tbody>
</table>
Setup inside Visma.net AutoPay

Assigning AutoPay roles

Roles for Visma.net AutoPay (e.g. accountant, approver or administrator) must be assigned to users. Re-login after assigning roles, in order to update AutoPay information in ODP.

Creating Bank agreement

Ensure correct company (above in right corner) and go to tab AutoPay. Choose subtab “Agreements” and press “New”. In the example below, two bank agreements are made for two different bank accounts.

When entering an agreement, information like the ones below is summed up. You also enter number of approvers and email addresses for notifications etc. Some columns only appear for some banks, because of the bank requirements!
1. Define Currency and ERP currency for bank account
2. Define “Debtor name” and person in contact e-mail list for messages from Autopay
3. Mark option “active” for downloading from bank and for outgoing payments
Use of Visma Business integration to Visma.net AutoPay

Export of outgoing payments

When a payment suggestion (remember to use the bankpartner (95)) is made for Visma.net Autopay, one or multiple rows in the table “Payment lines” are created.

These payment lines are connected to a common payment number in the “Payment” table. They all have status “1 [Estimate]” and are ready for uploading by the user.

An upload response will appear when uploading. From ver. 11.00 the user are redirected directly to Visma.net Autopay log-on site.
The status of the payment and payment lines are changed to “8 [Transferred to EFT system, not to bank]”.

NB! In tabs with purpose to show all payment lines with status “Not settled”, remember to modify the selection to this tab so the Payment line status “8” (transferred to EFT system, not to bank) is included.

From the moment the OK-button is pushed, the transactions are exported to Visma.net.Autopay, for approving. From this action is taken, Autopay will take care of all the transaction handling for the payment lines and push the payments to the different banks with correct receivers.

An automated service will monitor changes in Visma.net Autopay and update the payment line in Visma Business with statuses like “settled, rejected or cancelled”. If status “settled”, the system will generate the batch/vouchers in journal entry to the correct company and match the correct open supplier entries.

Tab “Approval” in Visma.net Autopay
The payment line we uploaded to Autopay are now presented in the tab “Approval” at the same company in Visma.net Autopay. “Approve” the batch with your payment(s) or cancel if regret.

Tab “Overview” in Visma.net Autopay
Relevant information as: “created on, ref/payment no. , status, number of transactions, due dates and amount in batch” are listed. This table will after a while contain a lot of batches/rows with different payment numbers.

Use the advanced search functionality to find your target!
If one or several of the transactions from payment suggestion is deficient, Visma.net will set the total batch to status “Cancelled”. Based on the information that make the cancellations, the user have to do necessary changes before making new payment suggestion.

When the payment lines are settled in the bank, the background service “message queue” will update the payment line status automatically to: “settled”.

A status change to “settled” will automatically call the function “Create batch” and the journal entry will be automatically updated with the correct debit account and the credit bank account (fetched from bankpartner). The affected open supplier entries are matched.
Important settings for correct payments

ISO code in “Country” table
Suppliers belong to different countries, as above with New Orleans Company Inc. It’s important that ISO code in country table just have two characters (NOT three!)

<table>
<thead>
<tr>
<th>Country no.</th>
<th>ISO code</th>
<th>Name</th>
<th>Language no.</th>
<th>Currency no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>US</td>
<td>United States</td>
<td>44</td>
<td>1</td>
</tr>
</tbody>
</table>

Supplier information
Remember to enter BIC/Swiftcode and IBAN no. on relevant (EURO) suppliers when making SEPA payments is the target.

International payments to the USA
Bank information values have to be entered in these field son the supplier:
● Column “Bank Filial” for FedWire (USA)
● Column “Swift Address 1” for Bank name
● Column “Swift Address 2” for Bank address
**Days without payments**

To take control of payments with due dates falling into the week-end and non-process dates in bank, Visma Business have settings that will adjust the debit date if wanted. The purpose is that due date of open supplier entries will be handled properly and the reconciliation of bank will be correct.

In the table “Company data” and column “Days without payments” you can mark the days without processing in bank. Choose whether you want payment dates before or after the payment free days:

![Days without payments settings](image)

In table “voucher types” and column “Voucher type processing” mark the option “Move payment to workday” on the relevant voucher types:

![Voucher type processing settings](image)

**Payment description from column “Extra text” (unstructured payments)**

When description of payment is entered in column “Extra text” instead of using columns for CID or invoice no. the option on bankpartner below have to be set:

![Payment line settings](image)
Handling of bank fee/charges

Below the relevant and legal EFT bank fee codes are listed (copied from helpfile):

The EFT VAT code for the supplier is used to set up the processing of bank fees when performing a remittance. The following values are valid:

<table>
<thead>
<tr>
<th>Value</th>
<th>Domestic</th>
<th>International</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. &amp;Standard</td>
<td>OUR</td>
<td>BEN</td>
</tr>
<tr>
<td>1. Pays all fees</td>
<td>OUR</td>
<td>OUR</td>
</tr>
<tr>
<td>2. Domestic fee OUR BEN</td>
<td>OUR</td>
<td>BEN</td>
</tr>
<tr>
<td>3. International fee BEN OUR</td>
<td>BEN</td>
<td>OUR</td>
</tr>
<tr>
<td>4. No fee BEN BEN</td>
<td>BEN</td>
<td>BEN</td>
</tr>
</tbody>
</table>

The value in the EBF avg.kode field will be copied from the associate to the voucher lines and then transferred to open supplier entries. When you generate a payment proposal, the value will be transferred to the “International costs” field in the Betalingslinje table and taken into account in connection with remittancing. If the payment line has the value “0. Default” in the EBF avg.kode field and Bank Partner has a value from 1-4 in the Std. EBF avg.kode field, the value of bank partner will apply.

Visma.net AutoPay and Visma AutoPay will copy the tekst field from Tekst table into Utenl. omk. field in Betalingslinje table. If text does not exist, or Numerisk omkostningskode is selected in EBF-behandling, the numeric value from EBF avg.kode will be copied instead.

Those of them that are used must be entered as “Text type 130” in the text table at the companies language no.

<table>
<thead>
<tr>
<th>Text</th>
<th>Free text</th>
<th>Payment terms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Put the correct “EFT bank fee code” permanent at the supplier, at the bankpartner or directly at the voucher line.
Below we have manually entered the result of chargebearer that was produced in Pain001-file based on the value in column “Foreign cost” (that is a result of value from “EFT bank fee code” entered at the voucher line).

**Recommendation**

A request should be done to the bank, asking them to send a monthly invoice of all fees connected to your payments!

<table>
<thead>
<tr>
<th>Line no.</th>
<th>Currency no.</th>
<th>Amount in currency</th>
<th>Amount</th>
<th>Paym. line status</th>
<th>Sup. no.</th>
<th>Estimate date</th>
<th>Debit date</th>
<th>Actual amount</th>
<th>Foreign cost</th>
<th>Charge bearer result in Pain001-file</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>999</td>
<td>-1 000.00</td>
<td>-8 750.00</td>
<td>Transferred to EFT</td>
<td>51011</td>
<td>08.05.2017</td>
<td>08.05.2017</td>
<td>-8 750.00</td>
<td>0</td>
<td>SHAR</td>
</tr>
<tr>
<td>2</td>
<td>999</td>
<td>-1 100.00</td>
<td>-9 625.00</td>
<td>Transferred to EFT</td>
<td>51011</td>
<td>08.05.2017</td>
<td>08.05.2017</td>
<td>-9 625.00</td>
<td>1</td>
<td>DEBT</td>
</tr>
<tr>
<td>3</td>
<td>999</td>
<td>-1 200.00</td>
<td>-10 500.00</td>
<td>Transferred to EFT</td>
<td>51011</td>
<td>08.05.2017</td>
<td>08.05.2017</td>
<td>-10 500.00</td>
<td>2</td>
<td>SHAR</td>
</tr>
<tr>
<td>4</td>
<td>999</td>
<td>-1 300.00</td>
<td>-11 375.00</td>
<td>Transferred to EFT</td>
<td>51011</td>
<td>08.05.2017</td>
<td>08.05.2017</td>
<td>-11 375.00</td>
<td>3</td>
<td>DEBT</td>
</tr>
<tr>
<td>5</td>
<td>999</td>
<td>-1 400.00</td>
<td>-12 250.00</td>
<td>Transferred to EFT</td>
<td>51011</td>
<td>08.05.2017</td>
<td>08.05.2017</td>
<td>-12 250.00</td>
<td>4</td>
<td>CRED</td>
</tr>
<tr>
<td>6</td>
<td>47</td>
<td>-2 000.00</td>
<td>-2 000.00</td>
<td>Transferred to EFT</td>
<td>51001</td>
<td>08.05.2017</td>
<td>23.05.2017</td>
<td>-2 000.00</td>
<td>0</td>
<td>SHAR</td>
</tr>
<tr>
<td>7</td>
<td>47</td>
<td>-2 000.00</td>
<td>-2 000.00</td>
<td>Transferred to EFT</td>
<td>51001</td>
<td>08.05.2017</td>
<td>23.05.2017</td>
<td>-2 000.00</td>
<td>1</td>
<td>DEBT</td>
</tr>
<tr>
<td>8</td>
<td>47</td>
<td>-2 000.00</td>
<td>-2 000.00</td>
<td>Transferred to EFT</td>
<td>51001</td>
<td>08.05.2017</td>
<td>23.05.2017</td>
<td>-2 000.00</td>
<td>2</td>
<td>SHAR</td>
</tr>
<tr>
<td>9</td>
<td>47</td>
<td>-2 000.00</td>
<td>-2 000.00</td>
<td>Transferred to EFT</td>
<td>51001</td>
<td>08.05.2017</td>
<td>23.05.2017</td>
<td>-2 000.00</td>
<td>3</td>
<td>DEBT</td>
</tr>
<tr>
<td>10</td>
<td>47</td>
<td>-2 000.00</td>
<td>-2 000.00</td>
<td>Transferred to EFT</td>
<td>51001</td>
<td>08.05.2017</td>
<td>23.05.2017</td>
<td>-2 000.00</td>
<td>4</td>
<td>CRED</td>
</tr>
</tbody>
</table>
Autopay - Logs

On “ProgramData” on the application server (as the example shows below) logs are created for the traffic between Visma Business and Visma.net Autopay. These logs might be at local/client computer if transactions are manually downloaded, and NOT fetched automatically by service “Message queue”

When exporting payments from Visma Business to Autopay the following "log" files are created:

<table>
<thead>
<tr>
<th>Name</th>
<th>Date modified</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>up_response_20160429_080653.txt</td>
<td>29.04.2016 08:06</td>
<td>Text Document</td>
</tr>
<tr>
<td>out_payment_VismaOutgoingPayment11_20160429_080652.xml</td>
<td>29.04.2016 08:06</td>
<td>XML File</td>
</tr>
<tr>
<td>up_request_20160429_080652.txt</td>
<td>29.04.2016 08:06</td>
<td>Text Document</td>
</tr>
</tbody>
</table>

When status changes happens at exported payments in Visma.net Autopay the payment lines in Visma Business are updated by message queue service and the following extensions are created:

<table>
<thead>
<tr>
<th>Name</th>
<th>Date modified</th>
<th>Type</th>
</tr>
</thead>
</table>

For incoming payments, updated by message queue service, the following extensions are created:

<table>
<thead>
<tr>
<th>Name</th>
<th>Date modified</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>incoming_payment_25_20150330_153500.xml</td>
<td>30.03.2015 15:35</td>
<td>XML File</td>
</tr>
</tbody>
</table>

The automation between Visma.net Autopay and Visma Business is based on the Microsoft service for message queuing. An allocated and “private” Visma.Business.queue is created for handling the traffic between the systems.

In the structure below (directed from Control panel\Computer management\Services and applications\Services) the visma.business.queue appear in the Private queues of Message queuing. This queue is unique for each Visma Business instance and required for receiving and processing automatic notifications (messages).

When is the queue created and registered?

- For Visma Business 11.10 onwards: Creation of the queue is automatic and handled entirely by the Visma.BusinessHost.MessageQueue service at start-up. At each restart or start-up phase, the service checks connectivity, creates a new queue if necessary and registers the queue towards Visma.net, so that the Visma.net integrated services can communicate with the Visma Business instance.
- For pre 11.10 versions: Creation and registration of the queue is done in the “Setup Visma.net MessageQueue” dialog. Check above notes.

Queue name formats:

- In pre 11.10 versions, the queue names contained only “visma.business.queue”.
- 11.10 onwards: Queue follow the pattern “vbus-[GUID]” where the GUID is a unique character string. This is added in order to avoid queue name collisions in Visma.net.
Flow when receiving a notification from a Visma.net service

1. The Visma.net service sends a notification (message) for a certain Visma.net company
2. Because the Visma Business company is linked to a certain Visma.net company, the notification is directed to the queue associated with the VB instance which handles that company
3. Notification arrives on the local machine on OPG side and is moved/translated by OPG on the Visma Business private queue
4. The Visma Business Message Queue service listens for changes on the local private queue (vbus-[GUID] name format) mentioned in 3)
5. The Visma Business Message Queue calls VBS depending on what message it picks up and tries to handle - most of the time trigger running of some VB processings
6. VBS via the underlying Vbus.exe process triggers logic which download incoming files, update statuses etc.

Troubleshooting, if Message Queue don’t run properly

Before beginning, the services VBS and On Premise Gateway should have status running. At Visma Business folder on application server, set focus on the file below and right-click and choose “Run as administrator”.

![Image](image1)

The menu below appear:

![Image](image2)

Choose “Install” and enter password to VBS username:

![Image](image3)

Validation is given when saving:

![Image](image4)

Status “Running” is set in the right corner:
From now the message queue will listen to relevant changes and update the payment rows in Visma Business automatically with correct status. It will also listen for incoming payments to import.

For further testing, a payment can be exported to Visma.net Autopay, and be cancelled by the user. This action will be caught by message queue and you can see in the console above that MQ is responding after a while. Look also into the choice “View log files”. **It may take some time, so don’t worry if status change isn’t reported immediately this first time!**